MALAYSIAN PLANT COLLECTORS AND COLLECTIONS

BEING A

CYCLOPAEDIA

OF

BOTANICAL EXPLORATION

IN

MALAYSIA

AND A GUIDE TO THE CONCERNED LITERATURE UP TO THE YEAR 1950

BY

M. J. VAN STEENIS-KRUSEMAN

WITH 3 MAPS AND C. 200 ILLUSTRATIONS

WITH

SOME INTRODUCTORY CHAPTERS

BY

C. G. G. J. VAN STEENIS

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Dedicated to the memory
of G. A. PRITZEL and A. LASÈGUE

PREFACE

This first volume of the 'Flora Malesiana' is above all, a link with the Past. It is also like an array of mosaic fragments, forged and shifted by the strange ways of Fate, some large, others small, some hard and solid, others weak and crumbling in the hand of Time, some precious and glittering, others dull and inconspicuous, but none of them insignificant, and all adding to the foundations of Malaysian botany.

The fragments, scattered as they were, have been unearthed from likely as well as the most unlikely sources by the untiring efforts, the unceasing searchings of Mrs VAN STEENIS-KRUSEMAN; and on looking at her results we confidently conclude that very little, if anything, can have escaped her meticulous scrutiny.

These fragments have, ultimately, been very ably arranged in such a way, that every single one of them has been given its place in the foundation of the grand building that is being constructed by our generation in order that it may yield comfort and joy to posterity.

When reflecting upon the efforts and the work of these explorers—men and women—and meditating upon one's own modest achievements of the same nature, we are facing the question: What is it that induces a man to give up a life of comfort, security and leisure to roam through foreign countries in search of plants, animals and other products of Nature; to endure the hardships of hot climates, the perils of mountaineering, tropical diseases, and the threat of ferocious or venomous animals; to prefer the company of unknown and sometimes hostile peoples to that of his family and countrymen: toiling at a task promising little fame and less pecuniary reward? What is it?

Quite probably it is the longing for individual freedom, to follow a primitive, indomitable call of the wild, to be confronted with the grandeur of unspoilt nature, to regain a 'Paradise Lost', to satisfy an 'insatiable curiosity' like the elephant's child in KIPLING's famous story, and to approach Nature with the eyes of an artist, a pioneer, and a conqueror. The exploring naturalist is in company of those who, in the words of CERVANTES, find happiness on the road sooner than in the tavern.

To have opened the opulent treasure-house of Malaysian botanical exploration, to have shown us its contents, neatly arranged and carefully labelled in a most attractive way, is the invaluable merit of the author of this book, who, guided and inspired by her husband, has contrived to arrive at a result which is unrivalled in Tropical Botany and which reminds us of a work of similar quality: C. A. BACKER's 'Verklarend Woordenboek'. Like that, it is not a dull enumeration of facts. It might also be compared to the best type of fiction, were it not better still, were it not reality. The book lies on our desk as a testimony of the best of human endeavour, and it commands our admiration written as it is in 'the spirit of reverence for every witness of good-will through the ages'. Whatever may happen to the countries it deals with in the years—many years—to come, it not only reveals the greatness of a period now concluded, but no less it imperatively presents material to our posterity which cannot be neglected with impunity.

There are things in the life of mankind which are beyond any controversies of the moment, above racial discrimination, unaffected by the vicissitudes of human contest. To these belongs Science, which lifts its devotees beyond the level of selfish and clashing passions, to that of the common passion of utter disinterestedness, where Science and Art meet in search of Truth which, according to KEATS, is identical with Beauty.

This Flora is a work of Science and Art. Moreover, once finished, it will be of the highest practical value. Its basis has been laid by representatives of many nations, its actual scope is following the limits imposed by Nature rather than those made by man. This implies that it covers more territory than is ruled by a single Government.

Of the countries involved, Indonesia is by far the most important, firstly because it controls much the larger part of the Flora's domain; and secondly because the initiative was taken there. Accordingly, the necessary financial support is being provided by the Government of the Republic of Indonesia though whole-hearted support is received from neighbouring countries and beyond. Recently, Indonesia has gained Home-Rule in the fullest sense. It has taken its fate in its own hands and, though every opportunity is granted to it to profit by the co-operation of countries of riper experience in this field, it will henceforth have to decide upon its own actions and consequently itself determine its position among the nations.

In the period elapsed since the preparation of the Flora started, the Indonesian Government has shown a full understanding of its responsibilities regarding this work. It is true that this part of the world was somewhat behind in comparison with some other tropical countries. But the

actual condition seems worse than it actually is. So much preparatory work has been done in this field by the combined efforts of collectors and botanists from all parts of the world who felt enticed to study the natural riches of these wonderful islands, that it will be possible to make Indonesia, together with the Philippines, Malaya and New Guinea—the area known among botanists by the name of Malaysia—the first tropical region with a complete and modern flora, as far as completeness can be achieved in a matter like this.

This possibility can be achieved through the co-ordinating activity of the research institutes in Java. In these institutes, now entrusted to her unconditionally, Indonesia possesses a scientific organization of first rank. The maintenance and extension of this organization provides Indonesia with an outstanding means of gaining and increasing international goodwill and appreciation.

A tropical country which is so fortunate as to have the disposal of a well-based, critical Flora, is a privileged country because it has a full and trustworthy inventory of the most valuable and most precious asset, Nature has endowed it with; its wealth of plants and plant-products, children of the heat-spending Sun and the moist fertile Earth.

Consequently, the 'Flora Malesiana' is not a project to be delayed or neglected, not even under pressure of very serious internal difficulties. Far from it. Even if we disregard the academical side of the matter, which might (rashly) be regarded as a superfluous luxury in unsettled times; even if we do not stress the point that the study of Nature is an essential of civilization; even if we compare only in passing the actual situation to the time after the French Revolution, when science was officially promoted and France lived through one of its scientifically and culturally most fertile periods; even then there remains the very real fact that the knowledge of the flora may not be neglected, least of all in a tropical country, without very soon and very seriously and lastingly impairing the economics of the country, and weakening its competitive power in the world. And still, we do not know the extent and the wealth of our resources until they are properly identified and neatly shelved before our eyes, and a sound and accessible knowledge of our assets to-day is more urgent than ever before. May those who are first of all interested in material returns, realize that all expenses made for the 'Flora Malesiana' are repaid many times if the work done leads to the discovery of a new crop, a valuable timber, a better medicine, the timely recognition of a dangerous weed, fresh industrial raw materials, or whatever botanical potentialities still are in store. The 'Flora Malesiana' will compile and survey all that has been found and it will add new discovery. The present first volume is an excellent introduction to it.

A work like the 'Flora Malesiana' is a lengthy and slow-growing process. This volume demonstrates convincingly that it takes centuries of preparation, of collecting and describing, of comparing and sorting. And when it, at long last, has arrived at the stage when composition may be started—for any premature composing is inexorably condemned to failure since all things of lasting value only mature slowly—we may be sure that the last phase is reached and that the completion is, comparatively speaking, near.

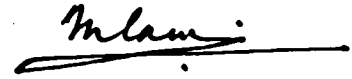
The 'Flora Malesiana' has now reached that composing phase: in fact composing has started and its first results have everywhere met with a well deserved success. This is stimulating for the Editor and encouraging for the Government.

This is why I wish to congratulate the Government of Indonesia on its wisdom in supporting the publication of this great work. This is why I wish that, even in the admittedly difficult years to come, the wise policy of accepting this inheritance in a truly scientific and impartial spirit and of welcoming support from foreign experts whenever desirable will prevail; also the wisdom of promoting and developing this project on a basis of international co-operation and exchange to the best of its power and ability.

In addition, I wish to extend my hearty congratulations to the general Editor, Dr C. G. G. J. VAN STEENIS, who withadmirable perseverance started and led the organization of this enormous task in a most competent way. May he live to see it completed!

We may be confident that the Government of Indonesia not only realizes that this 'Flora' is an indispensable key to the welfare of its peoples, but that, in general, their prosperity to a very considerable extent depends upon the quality of scientific research at universities and institutes.

The Indonesian Government and its world-famous 'Botanic Garden of Indonesia' (Kebun Raya Indonesia, formerly called 's-Lands Plantentuin) are to be congratulated with this excellent introduction into the world of Science.



(H. J. LAM)

Director, Rijksherbarium, Leyden, Netherlands

GENERAL PART

CHAPTER I. INTRODUCTION

a. AIM AND HISTORY OF THIS CYCLOPAEDIA

As long ago as 1926–27, during my last two years at Utrecht University, when studying the taxonomy and distribution of the Malaysian *Bignoniaceae* (Thesis 1927), I felt the need for a reference work in localizing inadequately labelled specimens. Material collected in the 19th century, especially that of BLUME, KORTHALS, JUNGHUHN, ZIPELIUS,[1] MOTLEY, HORSFIELD, *etc.* bear scant notes. Either these collectors did not realize the future value of full data or their notes were not mounted on the sheets in the herbarium and were often subsequently lost. I have also observed a tendency in some authors of tropical plant species in that period to underrate the importance of the locality because of their belief that tropical plants occurred everywhere in the tropics, *i.e.* were ubiquitous in the plant-geographical sense. Sometimes the collectors were natives accompanying expeditions, who did not make notes, *e.g.* JAHERI, ACHMAD, *etc.*

Hence, it is often very difficult to trace the exact origin of specimens. KORTHALS's plants, for example, are mostly labelled merely: 'Borneo'. This botanist, however, described the parts of Borneo in which he collected and an extensive printed record of his travels is in existence.

Sometimes the opposite is the case and the label bears only a local geographical name which can hardly be traced on modern maps. Such obscure localities, however, can often be found with the help of the accounts of their journeys, published or prepared by the collectors themselves.

There are, for example, excellent reports by TEYSMANN, KORTHALS, BLUME, ZOLLINGER, *etc.* but the majority of these are written in Dutch and many were published in rather rare Malaysian journals. Experience has shown that if one has the time and patience to study these reports, it is sometimes possible to discover useful data concerning plants referred to in them. Additional field notes can then be added to the label.

In this cyclopaedia references will be found to all such reports which have come to our knowledge and under each entry the daily itinerary has been extracted. The dates mentioned by the collectors on the labels are not always in accordance with those given in the printed reports; these minor discrepancies are, however, comparatively rare.

Being a Dutchman I have had good opportunities for getting further 'inside' information but, in most cases, such routine work not properly a part of botanical research proved to be laborious and time consuming. The attempt to discover exact localities is justified and desirable because distributional data increase greatly in value in proportion to their precision and so advance taxonomy and phytogeography.

For New Guinea, my teacher of my student days, Dr A. A. PULLE, had already drawn my attention to WICHMANN's extensive critical report on the history of New Guinean expeditions,[2] which has proved a very valuable source of information.

For the greater part of Malaysia, however, the original literature has not been previously edited for consultation. The information is concealed in an ocean of publications dealing with all kinds of sciences, such as anthropology, zoology, geography, topography, history, forestry, ethnography, and even belles-lettres, and especially in published or unpublished, official or unofficial reports.

When in Dec. 1927 I was appointed to the Staff of the Herbarium at Buitenzorg, I came across a valuable survey written by the former Director of the Botanic Gardens at Singapore, Mr I. H. BURKILL, entitled *Collectors, collections and collecting places in the Malay Peninsula*, published in 1927,[3] which appeared very useful in localizing and dating specimens from the Malay Peninsula. At that time, I envied the Singapore botanists for having such a trustworthy guide and regarded this booklet as a model for a similar, urgently needed, future publication on the existing collections of the whole of Malaysia.

In 1935 I began the task of systematically compiling data, the sources being taxonomic literature as well as the Buitenzorg Herbarium itself. These handwritten notes were not extensive and dealt mostly only with the localities, name of the collector, and date. I continued the work mainly in my spare time and more or less haphazard. Provisionally I included only the more important collections and collectors and hesitated to add detail. At the same time I also inserted some references to literature. At the end of 1936 about 500 collectors were listed in this way.

In January to April 1937, when I was collecting in North Sumatra (Gajo Lands), Mrs VAN STEENIS decided to arrange these notes, to type them out and to complete them, and since then she has devoted much time to this task.

From the first I have insisted in making the work as complete as possible, because a Cyclopaedia like this is practically final. This meant that we had also to include the names of collectors who contributed but little to Malaysian collections.

As far as *literature* was concerned it implied that all essential publications dealing with travels and excursions had to be mentioned. In the summary of an excursion dates and localities had to be arranged in chronological order to enable the reader to trace on the map the routes taken by former collectors.

As to *area*, the whole of Malaysia had to be covered by the Cyclopaedia; that means the whole of Indonesia, the Malay Peninsula, Christmas Island (Indian Ocean), the Colonies of Sarawak, British North Borneo and Brunei, Portuguese Timor, the Philippines, and the whole of New Guinea. As the flora of the Bismarck Archipelago is essentially Papuan it also had to be incorporated.

At last a satisfactory plan for arranging the en-

(1) The ample notes of ZIPELIUS are almost all kept separately from his herbarium sheets in the Rijksherbarium; this undesirable situation dates back probably to BLUME's time.

(2) Nova Guinea vols 1–2[2].

(3) Gard. Bull. Str. Settlem. 4, 1927, p. 113–202.

tries was devised and the notes already collected were arranged accordingly.

It has been found that this more or less uniform scheme for all collectors, whether they have made large collections or small ones, requires a relatively large space for the citation of the latter, but this could not be avoided. When few data were known the scheme adopted has been simplified.

On the other hand these small collections are often made by representatives of other branches of science such as foresters, agriculturists, zoologists, entomologists, geologists, topographers, geographers, ethnographers, anthropologists, civil servants and private persons, and their contributions are as welcome as those of professional collectors, for they show a worthy enthusiasm for and delight in botany.

This work commemorates all the collectors who have furthered botanical science in Malaysia. C. A. BACKER, in his cyclopaedia of scientific names of Malaysian plants[1] was attracted by the same idea. He regrets the little care taken of the memory and graves of distinguished men and he calls attention to the physicist and botanist M. VAN MARUM, a celebrated Dutch scholar, whose tomb-stone in the Netherlands was only saved at the last moment. Even less attention is paid to the memory of former workers in Malaysia, where men are so easily forgotten in a tropical country, where luxuriant nature tends to overgrow and erase the remains of former centuries. It gives great satisfaction to rescue meritorious men from oblivion, to dig their names out of the archives and present them to our generation. It is good to remember them, to know how they lived, what they expected of life, what they have accomplished and how they worked, for they all loved science, admired plants and desired to live among the wonderful tropical vegetation. Botanists who handle the specimens collected by these pioneers will honour them by naming plants after them and will give their work all due credit.

I am rather sorry that in most cases Mrs VAN STEENIS has refrained from expressing personal appreciation and did not include anecdotes in the cyclopaedia, for she has told me several that she has found in old books and MSS, which would have added flavour to this historical work.

I remember her astonishment in reading ROBERT BROWN's diary during FLINDERS's Voyage to Australia, in the British Museum, consisting only of data on the weather, his physical condition, his diet, and his drinks. And the remarkable letter by an Englishman, Mr J. E. GRAY, in the De Candollean archives at Geneva, who wrote that in his later years BROWN had for a long time the unique privilege of nominating foreign members of the Royal Society, and that he prided himself upon the fact that outside Great Britain scientists speaking about him raised their hats before pronouncing his name. The same GRAY told that BROWN seldom gave information on scientific matters to visitors, but that he listened himself the more; if his turn came to give information he waved it away starting a lot of spicy jokes.

In the Paris archives are letters from ANDRÉ THOUIN, who wrote some piquant and poetic words on his thoughts while sleeping in the bed of a Dutch princess—alone—while on his tour of scientific robbery for the French Republic through the conquered countries.

There is some fun in reading BANKS & SOLANDER's human arguments when having a stay in West Java during their expedition, seeking to regain their health and vitality in having the company of Javanese women and being nursed by them.

This book should be of some use to historians and, moreover, to future travellers, officers of the Civil Service, *etc.*, as it furnishes keys to former travels in the islands or regions which they intend to visit or where they themselves reside. The lists in Chapter 4 will give them a review of previous research in each island or part thereof, and a guide to its literature.

The development of Malaysia was of course preceded and accompanied by wide-spread and intensive exploration of unknown country, which supplied new data to all branches of science. Most of the explorers were either plant collectors or were accompanied by them. This cyclopaedia furnishes therefore, besides an almost complete history of the development of Malaysian botany, a first key to the literature of the history of the natural sciences in Malaysia.

However, it is beyond the aim and scope of this work to write a history of Malaysian botany. For a condensed account of the literature the reader is referred to the Encyclopaedia of the Netherlands East Indies in which BOERLAGE in the 1st edition, and Prof. PULLE and the present writer in the 2nd edition, have compiled data.[2] Further to SIRKS's *Indisch Natuuronderzoek* and specially to DE WIT's essay in volume 4 of this Flora.

From 1938 onwards, Mrs VAN STEENIS explored the sea of literature, for which our card-indices proved to be indispensable. She worked through the very rich general scientific library at Buitenzorg and gradually extended her search to the libraries of the Secretariate General at Buitenzorg, of the 'Kon. Natuurkundige Vereeniging' at Batavia (Royal Natural Science Society of the Netherlands Indies), and that of the Batavian Society for Arts & Sciences.

By about June 1940 the text (written in Dutch) approached completion, but there remained a long list of desiderata for additional information, both published and unpublished and not available in Indonesia.

We had intended to go on leave in June 1940, and planned to complete the work in Europe, where in that year the 7th International Botanical Congress was to be held at Stockholm. The outbreak of World War II prevented this. It was then decided that Mrs VAN STEENIS should start the

(1) Verklarend Woordenboek *etc.*, 1936.

(2) 'Encyclopaedie van Nederlandsch Oost-Indië', 2nd ed., vol. 1, 1917, p. 392–403; suppl. vol. 6, 1931, p. 800–809.

translation into English, and that we would try to get additional information by means of a questionnaire accompanied by a mimeographed sample treatment of her work. Unfortunately, the war spread over the whole world, and few answers were received. Notwithstanding this, the translation proceeded and the list of desiderata was carefully kept for future use. On August 1st, 1942, Mrs VAN STEENIS was appointed to the staff of the Herbarium of the Botanic Gardens to proceed with and to finish her work.

After World War II the work slowed down for about a year. In the meantime, the Government, in recognition of the value of the compilation, generously granted her an opportunity to consult libraries and archives in England, France, Switzerland, and the U.S.A. which enabled her to conclude the work. In addition, she had access to similar sources in the Netherlands, which yielded many unpublished data for completing the biographies.

There are still some cases in which she has not been able to locate a collection or disentangle the confusion. However, these cases are fortunately very few.

Though she sometimes wondered whether it had been wise to start this work—a not unusual problem troubling authors of similar works—she never halted, even when the struggle with numerous contradictions menaced her peace of mind. Though she often found pleasure in the work when some Gordian knot was satisfactorily cut, it is unlikely that she will ever again contemplate a work of similar magnitude, but this cyclopaedia *had* to be undertaken because it is an essential part of the Flora Malesiana.

The compilation of lists and keys, the insertion of numerous cross-references and the index aim at a high degree of efficiency in practice, and they will be, it seems to me, of great value. My colleagues and I have often consulted the MS. and tested the text, and found it both reliable and exhaustive.

We all are greatly indebted to her for having completed this laborious task which required the patience of an angel, the tenacity of a bulldog, the precision of a chronometer, and the enthusiasm of an artist.

C. G. G. J. VAN STEENIS

May 1943/Nov. 1949.

b. THE CYCLOPAEDIA AS PART OF THE FLORA MALESIANA

This cyclopaedia forms a part of the Flora Malesiana but it may also be used as an independent work, as it provides data of interest to others than botanists.

In the majority of Floras, the account of the collectors and collections occupies only a small portion of the introductory pages and little more than 'large' collections is discussed (*e.g. Flora Brasiliensis, Flora Indica, &c*). The present Flora Malesiana appears in print comparatively late, and what met the demands of systematic botany half a century or more ago, is not now satisfactory. Collectors have increased in number to such an extent that a list of their activities and results requires a separate volume.

We are convinced that the cyclopaedia will be found useful to those collaborating in writing the Flora and to all other botanists desiring accuracy in the geographical aspects of their work. It will also facilitate the interpretation of inadequate labels in the herbaria.

Though the region covered by Flora Malesiana is very large, its vegetation is from a plant-geographical point of view homogeneous within reasonable limits. In Chapter 3 of this book, the delimitation of 'Malesia' as a plant-geographical unit and its division into smaller areas has been discussed.

The bio-geographical concept 'Malaysia' (in Latin, German, Italian, &c.: 'Malesia') was used as a vague circumscription by French scientific explorers for the archipelago, but as far as I am aware the Swiss botanist H. ZOLLINGER, on the occasion of the appearance of MIQUEL's *Flora Indiae Batavae*, writing a paper[1] entitled (translated): *On the understanding and delimitation of a Flora Malesiana*, was the first to define 'Malesia' on a plant-geographical basis. He showed that the delimitation of MIQUEL's Flora was not founded on a critical phytogeographical basis. He showed further that within the Malaysian tropics a strictly defined biogeographical unit not coinciding with political borders can be designated which he called (in Latin) 'Malesia'. Though the name is derived from 'Malay' which is the common language originally centering in West Malaysia, it includes the Philippine Archipelago and New Guinea. And although on etymological grounds the merit of the term 'Malesia' can be disputed[2] it has now a tradition of nearly a century in scientific literature, and has been universally accepted. It has been agreed to restrict the word 'Malay' when used as a geographical concept in botanical publications to the Malay Peninsula.[3]

In plant geography the term *Further India* is used for Siam, Burma and Indo-China; the same area may also (perhaps better) be termed the *Indo-Chinese Peninsula*. This and the *Deccan Peninsula* form the two huge triangular extensions of Southern Asia.

The scope, design and aim of the Flora Malesiana in general have been discussed in the Introductory chapter of volume 4 of this series.

(1) Natuurk. Tijdschr. N.I. 13, 1857, p. 293–322; translated in Vierteljahrschr. Naturf. Ges. Zürich 2, 1857, p. 318–349, with map; *cf.* also H. J. LAM, Blumea Suppl. 1, facing p. 176. A slightly different map Z. produced in PETERM. Mitt. 1858, ii, p. 56–63.

(2) As well as some other terms, *e.g.* 'Sunda Islands' (Îles de la Sonde) which is, properly speaking, derived from the Sundaic language or people, and these are confined to West Java.

(3) Gard. Bull. Str. Settlem. 9, 1937, p. 187–189.

c. WHO IS A COLLECTOR?

A fine collection is the result of many unsuccessful excursions.

(after W. J. HOOKER)

It was not easy to decide what conditions had to be fulfilled before considering the entry of a collector's name. We made it a rule to admit any new name even if, when we first got the reference, the collector or collection seemed negligible. This was often of much advantage, because the collector frequently proved to be 'larger' than we had imagined at first. Interest in botany is mostly a lifelong predilection and, though many interested persons are not inclined to collect and make herbarium specimens, they are wont to offer at intervals finds of special interest to scientific institutes where these specimens are prepared, identified, preserved, and filed for future use.

So, if it was known with certainty that a person collected, his name was entered, even if only a few specimens are extant. We have also inserted some explorers' names when we expected that they had collected although we had failed to trace cited specimens. These directives may seem rather arbitrary, but seemed the most appropriate to meet the difficulties. We hope we have made the best possible choice in the circumstances.

Nearly all Malaysian agricultural, veterinary, pharmaceutical, medical, private or official scientists have forwarded plants for identification and advice to the Herbaria. Very often, however, the samples were offered at long intervals, or consisted of a single weed. In the course of time these individually small accessions sometimes accumulated to several dozens to the name of one person or experimental station—which often was the intermediary between the collector and the Herbarium—; the localities and dates then, as a rule, were remote and the collections wholly accidental. These plants were very often common weeds, and unimportant for the progress of botanical knowledge. They rarely furnish new data, taxonomically or geographically. The entry of their collector requires much more space than seems proportional to the intrinsic value of the specimens. Despite this drawback, they have been inserted in accordance with our method if they came to our knowledge.

d. PRIVATE COLLECTIONS OF MALAYSIAN PLANTS

Fortunately, and in contrast to zoological and entomological specimens, botanical collections of Malaysian plants are mostly deposited in public institutes. In the course of years several originally private collections were presented to and inserted in institutional herbaria. Only a few experimental stations, *viz* at Medan-Deli, Pasoeroean, and the Forest Research Institute at Buitenzorg, have (or had) private collections, and the larger part of these are represented as duplicate specimens at Buitenzorg. Of private collections in the Malay Peninsula and the Philippines we have hardly any data.

Private persons possessing herbaria were few, *e.g.* LÖRZING, E. DE VRIES (*Pteridophyta*), COERT, POSTHUMUS (mainly *Pteridophyta*), HOLSTVOOGD, COPELAND, BROOKS, VAN DER MEER & DEN HOED, and others. Most of these collections are also present as duplicates in a Government Herbarium, and part of them were recently donated and incorporated into official botanical institutes; it seemed therefore advisable to make entries for private collections. Moreover, these private collectors often discovered novelties and rare species and several selected plants are already deposited in the Herbarium as a duplicate.

So, all private collections which came to our notice have been entered into this cyclopaedia.

e. WHY ONLY PHANEROGAMS AND PTERIDOPHYTES?

The collectors and collections here considered are chiefly limited to flowering plants including—with a lesser degree of completeness—ferns and fern allies.

Though the Cryptogams are botanically as important, interesting and diversified as Phanerogams, it cannot be denied that the 'higher' plants attract most of the attention of the layman; they constitute the plant cover of the Earth and determine the physiognomy of the vegetation. Moreover, they are much better known and the literature about them is richer and less intricate than that of Cryptogams. Species identification of the latter frequently requires laboratory research. To the mind of the general public, useful plants are predominantly found among Phanerogams. These reasons may seem unscientific and trivial but have effect in practice.

Though series II–V of Flora Malesiana will be devoted to Cryptogams we have refrained from giving an account of collections of Cryptogams only.

Cryptogamic botany is an independent branch of botany with its own literature, methods of plant preservation, and specialized methods of research. Its literature is rather scattered and relatively less complete at Buitenzorg.

In addition cryptogamic botanists often show little interest in plant geography (except for bryologists), and consequently in the exact localization of their specimens. The distribution of tropical *Fungi*, for example, seems to be almost universal

and more or less agrees with the theory of BEYERINCK that 'every plant is anywhere'. Among Cryptogams the number of genera and families with a restricted area of distribution is, indeed, astonishingly small.

Collections of ferns and fern allies are included. Though their spores are as small as those of Fungi, they have areas of distribution and affinities which are essentially similar to those of Phanerogams. *Bryophyta* seem to constitute a transitional stage as the area of their genera is mostly world-wide; however, they seem closer to Phanerogams in distributional behaviour than *Fungi* or *Algae*.

We have gained the impression that the activity of most collectors of Cryptogams has also extended to ferns and Phanerogams. The majority of collectors of cryptogams are, therefore, already inserted. This was checked with the work of LINDAU & SYDOW, *Thesaurus literaturae mycologicae* (vol. 4, p. 22–30) which contains an alphabetical list of biographies of mycologists and collectors of *Fungi* and Lichens. With few exceptions we found most Malaysian fungologists already mentioned in our cyclopaedia.

If we came across cryptogamologists whom we suspected to have contributed to phanerogamic collections, we have included their names, not wishing to omit any which ought to have been entered.

f. COLLECTORS AND COLLECTIONS OF FOSSIL PLANTS EXCLUDED

As early as the first half of the last century fossil plants had been collected, for example by JUNGHUHN, in Java and Sumatra. Since then a large number of Malaysian fossils have been described.

A valuable list was compiled[1] by the late Dr O. POSTHUMUS who himself did research on Malaysian fossil plants and joined a palaeontological expedition in Djambi (1925).

He also made a very useful list[2] of fossil Malaysian plants arranged according to families.

The Flora Malesiana will deal only with the living flora and it seemed out of place to cite collections of fossils. Moreover, most collectors of fossil plants have also collected living plants and are, therefore, included in the Cyclopaedia. Here the main additions, since POSTHUMUS's list was published, are added as an appendix to this chapter.

Identification of fossils is relatively little advanced—an argument in favour of omitting them. Fossil plants may originate from ancient or recent periods. An example of a curiously wrong identification is the 'occurrence' of *Dalbergia junghuhniana* and *Carpolithes radiatus* HEER in Sumatra. M. SANDERS (Thesis, Amsterdam 1934, p. ix) has demonstrated that these fossils represented scales of fossil fishes!

An enumeration of more recent fossils only, and really established facts which could add to a better understanding of the living flora seemed of greater value. It was proved by KRÄUSEL (*l.c.* Appendix) for example that in South Sumatra the composition of the forests has remained the same at least since the Upper Miocene. Ironwood (*Eusideroxylon zwageri*) has been found fossil in Billiton,[3] where it is now extinct.

It is peculiar that *Dryobalanops spp.*, now only known from Sumatra & Borneo, formerly grew profusely in West Java where the genus is now only found in a fossil state, its silicified wood being used for road paving.

R. DICKERSON described[4] a subfossil mountain flora from the silicified tuff of the Baguio Plateau in the Luzon Mountain Province, which consisted of *Vaccinium, Clethra, Machilus, Elaeocarpus & Ardisia*, belonging to a flora type which still exists there at present.

I myself described some subfossil mountain plants from Mt Papandajan in West Java; Miss E. POLAK mentioned those from Mt Diëng and in addition studied the subfossil peatflora of the swamp forests of Sumatra and Borneo.

(1) Bull. Jard. Bot. Buit. sér. 3, vol. 10, 1929, p. 374–384.
(2) Leidsche Geol. Meded. 5, 1931, p. 485–508.
(3) Billiton, Gedenkboek 1857–1927, vol. 2.
(4) Philip. Journ. Sci. 23, 1923, p. 430.

Appendix: *Supplementary list of literature on fossil Malaysian plants, incl. peat.*

BROUWER, H. A., in Jaarb. Mijnwezen 1923, and *ibid.* 1925, Verh. 1e ged. 1926, p. 143, 146.

HUSTEDT, F., Die Fossile Diatomeenflora in den Ablagerungen des Tobasees auf Sumatra (Arch. f. Hydrobiol. Suppl. Bd 14, 1935, p. 143–192).

JONGMANS, W. J. & GOTHAN W., Die palaeobotanische Ergebnisse der Djambi Expedition 1925 (Jaarboek Mijnwezen Ned. Ind. 59, 1930, Verhand. 2e ged. 1935, p. 71–201, 58 Taf.).

JONGMANS, W. J. & GOTHAN, W., Die Permokarbonische Flora auf Sumatra (Act. Acad. Sc. Nov. Lync. 138, II. Sess. Roma 1935, 4°).

JONGMANS, W. J., Comp. Rend. IIme Congr. Int. Avanc. et Stratigr. Carb. 1937–38, p. 345–362.

KOORDERS, S. H., Iets over een vindplaats van fossiele planten bij Sonder in de Minahassa (Tijdschr. K.N.A.G. 12, 1895, p. 395–398).

KRÄUSEL, R., Verhand. Geol.-Mijnbouwk. Gen. Geol. ser. 12, 1929, p. 335–378.

MUSPER, K. A. F. R., Fundorte und stratigraphisches Lager neuer Aufsammlungen tertiärer Landpflanzen, besonders Kiezelholzreste auf Sumatra und Java (De Ingenieur in Indië 4, 1938, sect. V, p. 169–181).

MUSPER, K. A. F. R., Kritische Beobachtungen über Herkunft und genaueres Alter der aus dem Tertiär Nied. Indiens beschriebenen Hölzer (Natuurk. Tijdschr. Ned. Ind. 99, 1939, p. 1–21).

POLAK, B., Torf und Moor in Niederländisches Indien (Verh. Kon. Akad. Wet. A'dam 30, *no* 3, 1933, p. 1–85, 10 fig.).

POLAK, B., Veenonderzoek in Nederlandsch Indië. 1. Stand en exposé der vraagstukken (Landbouw 17, 1941, p. 1033–1062, 10 fig.).

POLAK, B. & HARDON, H., De chemische samenstelling van enkele venen in Nederlandsch Indië (Landbouw 17, 1941, p. 1083–1092).

POLAK, B., The rawah Lakbok (South Priangan, Java). Investigation into the composition of an eutrophic, topogenous bog (Chuo Noozi Sikenzyoo, Contr. *no* 8, 1943, 44 pp.).

POLAK, B., De Rawa Lakbok, een eutroof laagveen op Java (Landbouw 21, 1949, p. 177–222, w. summary).

REINHOLD, TH., Fossil diatoms of the Neogene of Java (Verh. Geol.-Mijnbouwk. Gen. Geol. ser. 12, 1937, p. M39–M47).

ROGGEVEEN, P. M., Mesozoisches Koniferenholz, *Protocupressinoxylon malayense n.sp.* von der Insel Soegi im Riouw Archipel, N.O. Indien (Proc. Kon. Akad. Wet. A'dam 35, 1932, p. 580).

RUTTEN, L. M. R., Over het voorkomen van Halimeda in oud-Miocene kustriffen van Oost Borneo (Versl. Kon. Akad. Wet. A'dam Wis- & Natuurk. Afd. 28, 1920, p. 1124–1126, 1 fig.).

SCHUBERT, R., Beitr. z. fossile Foraminiferenfauna von Celebes (Jahrb. k.k. Geol. Reichsanst. Wien 62, 1912, p. 127–150, *Halimeda*).

STEENIS, C. G. G. J. VAN, Fossiele plantenbladafdrukken op den G. Papandajan (De Trop. Natuur 21, 1932, p. 188–191).

STEENIS, C. G. G. J. VAN, Tertiary fossil wood from the Islands Soemba and Soembawa and its genetic plant-geographical significance (Chron. Nat. 103, 1947, p. 237–239).

g. CORRECTION OF ERRORS AND MISTAKES

As a matter of fact, there is hardly a monographical paper dealing with Malaysian plants without errors made in the citation or copying of dates of collecting, names of localities, names of collectors or localization of records.

The wrong and inadequate citation of collectors and localities is by no means restricted to publications on tropical plants. This appears clearly from an article by H. G. SIMMONDS on arctic localities,[1] which endorses our views.

This never ending array of mistakes—mostly of trivial nature—is often caused by illegible writing of labels, bad copying by the monographers, or mistakes made during the printing of the paper. Botanists have not only the creation of fictitious new species and genera to their credit but also of collectors!

A case in point is that of the collector 'UNU ULTRAI' who, according to LAUTERBACH[2] collected in the Moluccas. This name came into being through careless reading of the labels on which was indicated 'Ex herb. Univ. Ultraj.' meaning that the sheets had been distributed by the Utrecht Herbarium. DURAND is cited[3] to have collected in Java; DURAND was, however, only referred on the label for the numbering of the genera in accordance with his Index Generum, &c. (1888).

On labels of Pteridophytes collected by SCHWARTZ, the fern specialist VAN ALDERWERELT VAN ROSENBURGH wrongly wrote SWARTZ.

The celebrated Filippino collector G. EDAÑO is sometimes wrongly written G. E. DANO.

An intentional temporary pseudonym is J. AMANN (see KURZ).

A most careful botanist may fall a victim to his conscientious procedure. Thus, in his work on the *Mapanieae*, my late colleague H. UITTIEN was aiming at accuracy when intentionally misreading and miscopying the original labels of the German Sumatra collector 'GRASHOFF' whose name he spelled consistently as 'GRESHOFF'. Apparently, he supposed that the name was wrongly spelt on *all* labels, and that some family relation existed between GRASHOFF and the well-known former Director of the Colonial Institute in Holland, M. GRESHOFF, who worked at Buitenzorg in TREUB's time.

In general, these mistakes in taxonomic works are *lapsus calami* and so numerous, that no attempt has been made to mention all, though, when compiling this cyclopaedia, slightly differing names often caused confusion. To mention and to discuss all these mistakes would have demanded a disproportionate amount of space. The solution of these questions is not always discussed; often an examination of cited specimens in the Herbarium solved the problem. Special cases, *e.g.* the identification of SULPIZ KURZ with J. AMANN (not to be confused with the two old botanists of that name, and the later collector J. AMAND!) are, of course, mentioned.

A special source of trouble was that of collectors' names differing only in their Christian name(s), the more so as the initials are often erroneously cited.

An attempt was always made to establish the correct name. If this remained unsolved, a note was added pointing out the uncertainty.

h. ERRONEOUSLY LOCALIZED PLANTS AS SOURCES OF ERRORS, AND HOW TO CORRECT THESE

For many reasons a great many of erroneous localizations slipped into Malaysian botanical literature. As this cyclopaedia is intended to assist writers on Malaysian plants, it is necessary to analyse the origin of the mistakes.

1. Geography. An excellent Atlas of the Netherlands E. Indies[4] now supplies a very welcome opportunity for localizing many little known places.

(1) Über Standorts- und Verbreitungsangaben (Bot. Jahrb. 40, 1908, p. 173–184).

(2) Bot. Jahrb. 50, 1913, p. 311, 322.

(3) Rec. Trav. Bot. néerl. 40, 1943, p. 162.

(4) 'Atlas van tropisch Nederland', 1938.

Moreover, in 1923, a new list of the more important geographical names of the N.E.I.[1] appeared, which corrects and completes a similar list of 1906, edited by the Royal Netherlands Geographical Society. The new list contains approximately 26.000 names. The spelling of these names often differs from that used in former atlases but is generally identical with that used in the new atlas. The atlas does not refer to older names which are often used in botanical literature.

A difficulty for taxonomists not acquainted with the former administrative divisions in the N.E.I. is that the names (*e.g.* on the labels of the Forest Research Institute, Buitenzorg) are often in accordance with those divisions: 'Timor and Dependencies' comprised the Lesser Sunda Islands (with the exception of Bali and Lombok); the majority of the Moluccas (including Tanimbar Islands) and Dutch New Guinea fall under 'Amboina Residency', *etc.*

The spelling of Malaysian geographical names has suffered from many changes in the course of time. Partly they are official rectifications, but one often feels inclined to think that some collectors preferred their personal spelling of names, which often makes the itineraries real puzzles. For example, the names of 'kampongs' *etc.* given by C. BOCK in his book on Borneo rarely agree with those of SCHWANER who visited the same region! Every explorer in little-known regions coins geographical names, which later explorers often reject or ignore; this has happened especially in New Guinea.[2] With regard to the latter island there is still another difficulty, *viz* the change of the administration of the NE. part from German to English. In consequence many names were altered.

Germans were often mistaken in the spelling of names. BACKER[3] says: 'JUNGHUHN often confused, as so many Germans did, sharp with soft consonants, p with b, t with d, k with g. He wrote Klaga instead glagah, Andjol instead of Antjol, Toeroedjoe instead of Droedjoe, Bakoe instead of Pakoe, Djelibon instead of Tjiliwoeng, Djandi instead of Tjandi, Babakgoan instead of Babakoan, *etc.*

In the 'Itinerary' or 'Collecting localities', set out for most collectors, the geographical names are generally spelled as done by that collector. As far as possible, misspelled or obsolete names, which might give difficulties for a precise localization, are followed by the right name between brackets. This is not done when the spellings differ only slightly, *e.g.* Macassar and Makassar.

The names of islands, rivers, *etc.* are often abbreviated. The principal abbreviations are prefixes (indications) and are listed in the special part.

(1) 'Lijst van de voornaamste aardrijkskundige namen in den Nederlandsch-Indischen Archipel.' Weltevreden, Java, 1923.

(2) On this subject *cf.* WICHMANN 'Entdeckungsgeschichte von Neu-Guinea' (Nova Guinea vol. 1, p. vii–ix) and A. TISSOT VAN PATOT (Tijdschr. K.N.A.G. 1931, p. 1035 *seq.*).

(3) Handboek Flora Java pt 2, 1928, p. 134, footnote.

As to the *phonetic value* of a diphthong or triphthong unusual in the English language the following information is given:

aoe or *au* (*e.g.* in laoet, or by non-Dutch authors written 'laut' = sea or lake) is pronounced as *ou* in count.

oe or *u* (*e.g.* in goenoeng, or by non-Dutch authors written 'gunong' or 'gunung') is pronounced as *oo* in foot.

For several names in Malaysia there are special English names, such as Bencoolen for Benkoelen, Moluccas for Molukken, *etc.*

2. Inadequately labelled plants. The handwriting of collectors is sometimes illegible, or only the plant name is given without his signature. It is important to know whether the sheet concerned is authentic —eventually the type specimen—or not.

Some facsimile samples of handwriting frequently occurring on labels are reproduced at the end of the first part of this book; this may be found helpful in a number of cases.

Some difficulties, often experienced when tracing the locality and date of collecting, were pointed out in a digest on BRETSCHNEIDER's work on the history of European botanical collections in China.[4] Thus attention is drawn to the fact that LINNÉ, notwithstanding his geniality, was hardly interested in the country of origin of his plants, nor in the collector, and so gave only vague indications of localities, for example America, Africa, Asia, or Orient. His concept of India included East as well as West India, and China too! Moreover, the indications on many labels of older herbaria are often inaccurate, and even in the 20th century, the labelling of botanical collections in the important botanical institutions of Europe was often done with great carelessness. In this manner the collections of JOHN REEVES and of his son JOHN RUSSELL REEVES at Kew, were both labelled 'REEVES, China', without date.

The interchange of labels in the Rijksherbarium at Leyden will be discussed below.

A search through an extensive, often non-botanical, literature may be necessary when localizing specimens. If, for example, we read on a label 'Java, ZOLL. 324, in montosis Prabakti, 2–4000 ped.', we know from experience that the specimen was found on Mt Perbakti (E. side of Mt Salak) in West Java, and was collected there in 1848.

Foreign botanists cannot be expected to check the exact localities of Mt Prabakti *etc.*, being burdened already with the compilation of distributional lists; they simply have not the time to spare for this tedious work.

On the other hand, distributional data are indispensable for a real insight into the distribution of plants. Peculiar cases may occur, and a careful observer will meet with strange mistakes.

Plants found in 'Banda' and 'Madura', both localities in India, were attributed respectively to the flora of the Moluccas and that of Madoera Island (near E. Java).

(4) Beitr. z. Bot. Centr.-Bl. 9, 1900, p. 28.

In a manuscript offered for publication a plant species from Sarawak was said to have been collected by a Mr 'HOSENO', which appeared to be the well-known collector CHARLES HOSE tow hose name 'no' (number) was appended.

In the same manuscript I found a plant quoted as occurring in Atchin (northern Sumatra)—new spelling 'Atjé'—collected by VAN HULSTIJN in a locality named Taliaboe. It was soon detected that this plant was collected in P. Taliaboe (Soela Islands, Moluccas) by a native collector of the Botanic Gardens at Buitenzorg named ATJE who attended the expedition of Dr P. VAN HULSTIJN; the specimens are labelled 'ATJÉ (Exp. VAN HULSTIJN) *no* . . .'.

The citation of authors' and collectors' names is often confused. Sometimes this is caused by a change of name, such as *e.g.* SULPIZ KURZ who —for reasons best known to himself (see entry)— called himself JOHANN AMANN (AMMANN or AMMAN, as cited by some authors); or the distinguished Father of Australian Botany, FERDINAND MUELLER, who in 1871, became a 'Freiherr' and was then called FERDINAND VON MUELLER. In the first period of his life he is quoted F. MUELLER, but later on he signed himself F.v.M., which seem the adequate initials to use in the Flora Malesiana.

Inadequate labelling may be easily corrected when it is known in which island(s) the collector has worked. VALCKENIER SURINGAR, in his monograph on Malaysian *Cyperus*[1] cites R. H. C. C. SCHEFFER as having collected in Borneo at a place called 'Moeara baroe'. On the labels, probably, only 'Moeara baroe' was written and SURINGAR saw on some map that a place 'Moeara baroe' occurred in Borneo; thus, he believed the plants to have originated in Borneo, though SCHEFFER only collected in Java.

MIQUEL sometimes wrongly localized plants in his *Flora Indiae Batavae;* H. ZOLLINGER pointed this out in a critical review.[2] In vol. 1, *l.c.* p. 130, the Lampongs are placed in Celebes; on p. 242, Tjikoja is localized in the Lampongs, Bandoeng, whereas it is situated on the west border of the Res. Batavia-Bantam.

Even men who have never collected in the tropics are sometimes quoted as collectors, *e.g.* MIQUEL and PRESL.

A locality which has not been located is 'Andor'. Two grasses bear that indication on the original label: *Asthenochloa tenera* and *Dendrocalamus strictus*. In the case of the latter 'Andor' is mentioned to be a native name, but in the former apparently a locality is meant. MERRILL says: 'Originally described from Andor, a locality which I have been unable to locate; perhaps Ind. or. (*India orientalis*) is intended.' The type specimen of the former was said to come from the Philippines, but according to MERRILL 'Andor' is apparently not a Philippine locality. On the type-specimen at Berlin of *Chrysopogon tener* NEES *herb.*, 'Andor' is not mentioned, but next to the name in NEES's handwriting is written in another hand 'Südliche Strandgebirge'. The STEUDEL specimen at Paris could not be found. I have suggested[3] that 'Andor' was miswritten for 'Condor' an island S of Indochina, but this also does not solve the question.

3. Plant geography as a check on wrongly localized specimens. The above-mentioned case (ATJÉ-VAN HULSTIJN) may be serious with a view to later phytogeographical conclusions which, of course, are an important result of taxonomy. For an exact understanding and eventual interpretation, distributional data must be as reliable as possible. Each collector is responsible for his labels. An inexact label can *never* be corrected with absolute certainty!

One of the most telling instances of erroneous labelling of plants is that of the northern Atlantic marine *Algae* of the MURRAY collection, at Kew, which were labelled as found in the Arabian Sea; this remarkable geographical distribution induced BØRGESEN to make some (wrong) plant-geographical speculations.

MIQUEL—though no collector himself—caused many errors by an uncritical copying of records. In *Flora Indiae Batavae* some *Acanthaceae* are assumed to occur in Malaysia on account of the name of the original locality which resembles a locality in Malaysia: *Calophanes* (*Dysochoriste*) *littoralis* is recorded from 'Madura', and *Stenosiphonium confertum* and *Adhatoda ramosissima* are said to occur in 'Bouton'. All are confined to the Deccan Peninsula. This confusing of Madura with 'Madoera' Island may give rise to ecological errors as appears from the record of *Hydrocotyle javanica* for that island.[4] This plant is, actually, typical of moist conditions, but Madoera is a very dry island. The collector (SAULIÈRE) found the specimen at Madura of the Deccan Peninsula.

Serious consequences of erroneous records resulted from the collection of GAUDICHAUD, with possibly other collectors, in the Paris Herbarium. Timorese plants and plants from Réunion (= Bourbon) and Madagascar have been mixed, which resulted in a score of African species attributed to the Timorese flora, mostly by DECAISNE.[5] It was claimed (*l.c.* p. 381; repr. p. 53) that a species of *Colea* (*Bign.*) occurred in Timor. Unfortunately I included this in my revision of the Malaysian *Bignoniaceae*. PERRIER DE LA BÂTHIE, in his revision of the Madagascarian *Bignoniaceae* rightly stated[6] that the original specimen in herbarium DE JUSSIEU was 'indiqué par erreur comme provenant de Timor' and was collected by POIVRE in Madagascar.

The genus *Noronhia* (*Oleac.*) is mentioned by

(1) Het geslacht Cyperus' *etc.*, 1898, p. 149, 166.

(2) Natuurk. Tijdschr. N.I. 13, 1857, p. 303, footnote 3.

(3) Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1933, p. 114–116.

(4) Blumea 2, 1936, p. 128.

(5) Nouv. Ann. Mus. Paris 3, 1834; repr. 'Herb. Timor. Descr.', 1835.

(6) Ann. Mus. Col. Marseille 46, 1938, p. 28.

DECAISNE from Madagascar and Timor; the latter record is wrong.

In addition, the following plants were collected in Mauritius (Île de France), Réunion (Bourbon) or Madagascar, and are wrongly cited to occur in Timor:

Myonima ovata DECAISNE (*Rub.*).
Grangeria borbonica LAMK (*Rosac.*).
Fernelia buxifolia LAMK *var. timorensis* DECNE.
Senacia undulata LAMK.
Olea emarginata VAHL.
Senecio appendiculatus LESS.
Urera acuminata GAUD.
Pouzolzia laevigata GAUD.

These plants were still included in the Timor records in the appendix to FORBES's book.[1]

There are probably other errors from this same source, *e.g. Astragalus pterostylis* DC., mentioned by MIQUEL from Timor.

From Java similar records exist, and it seems that in LESCHENAULT's collection some sheets have been confused. *Ambora ficus* TUL. = *Tambourissa ficus* (TUL.) A.DC. is cited from Java by MIQUEL, but this Monimiaceous genus is only known from Madagascar, Mauritius, Réunion, and the Comores. PERKINS[2] rightly assumes that the record is caused by mistake or interchange of labels.

An interesting case in which a wrongly labelled collection could be placed is that of KEULEMANS's alleged to have come from 'Prinseneiland', an islet off SW. Java, and preserved in the Rijksherbarium, Leyden. In 1948, one sheet of this collection was found to be an *Ouratea*, a genus not occurring in Java, which appeared to belong to an African-American section of the genus; finally it was identified with a local-endemic species of Ilha do Principe, an island of the St Thomé group, off W. Africa. Another sheet, of an *Adenia*, also proved to belong to a W. African species, the only one known from the same island. The collector was found to be Mr J. G. KEULEMANS, a well-known draughtsman of birds.[3]

A critical re-examination of alleged localities accompanied by extensive botanizing is often tiresome, frequently impossible and rarely accomplished. An endeavour was made to trace RUMPHIAN plants, successively by J. G. BOERLAGE and C. B. ROBINSON.

Phytogeographical arguments alone are not sufficient proof of aberrant localities. Once a label is erroneously mounted on a sheet, in most cases it will remain a puzzle forever, and survive in literature as 'doubtful'.

In the *Orchidaceae* the original locality is often unknown or wrongly cited, these plants being often cultivated far from their native habitat. One may purchase typical 'larat' orchids at Makassar, while they originate in New Guinea and the Moluccas. Amateurs who are not interested in plant geography may be led into error for this reason.

It is sometimes possible to detect errors if one is sufficiently acquainted with the general principles of plant distribution in Malaysia; these principles, however, should be carefully applied.

Some typical examples will be sufficient for illustration.

DANSER apparently doubted the Diëng locality (Central Java) for *Polygonum plebeium*[4] which was found by JUNGHUHN there as the first record for Java. Numerous mountain plants typical for East Java have their western boundary in Central Java on the Diëng Plateau, or even further westwards on Mt Papandajan[5] or Mt Tjeremai, where in December 1940 I found *Koordersiochloa javanica*, a characteristic East Javan mountain grass. So *Polygonum plebeium* on the Diëng was by no means aberrant and, as was expected, the Diëng locality was later redetected.[6]

The following examples are illustrative of the reverse.

KORTHALS collected (Herb. Leyden) *Homalium tomentosum* BTH. (*Flacourt.*) in the Padang Lowlands.[7] This species is, however, a typical representative of the monsoon flora and has not been found between Tenasserim and Krawang (Batavia). This floral type is absent in the huge ombrogenic area on the Sunda shelf which comprises Borneo, the Malay Peninsula, Sumatra and the neighbouring islands. Most probably, KORTHALS's specimen originated from Java.

4. Interchange of labels and wrongly labelled plants. In the Buitenzorg Herbarium, I found a specimen of *Eriophorum comosum* WALL. mounted together with another *Cyperaceous* species said to have been collected by TEYSMANN in the Karimata Islands.[8] Though the species occurs in SE. Asia and the locality is not at variance with a floristic-plant-geographical point of view, I doubt its genuineness. Probably, some mixing occurred in mounting the specimen, or old paper may have been used.

KANITZ[9] mentions *Laurembergia coccinea* from Brazil; it was said to have been collected by, or preserved in the herbarium of, a certain Mr SCHOTT. The genus is confined, however, to the palaeotropics and the species only occurs on Sumatran and Javan mountains. The cited locality is highly doubtful.

The same applies to a specimen of *Pinus merkusii* quoted by MIQUEL[10] to occur in SE. Borneo on account of a KORTHALS specimen. As the species is known in Malaysia only from the northern half of Sumatra and the northern Philippine islands (Luzon and Mindoro), some years ago the D.E.I. For-

(1) Wanderings 1885, p. 497 *seq.*
(2) Gatt. Monim., 1925, p. 45.
(3) Bull. Bot. Gard. Buit. ser. 3, vol. 18, 1950, p. 466–468.
(4) Bull. Jard. Bot. Buit. sér, 3, vol. 8, 1927, p. 141–142.
(5) De Trop. Natuur 19, 1930, p. 90.
(6) De Trop. Natuur 21, 1932, p. 162–164.
(7) Bull. Jard. Bot. Buit. sér. 3, vol. 7, 1925, p. 348.
(8) Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1934, p. 200.
(9) Flora Brasiliensis 13², 1882, p. 375.
(10) Flora Indiae Batavae 2, 1859, p. 1069; MERRILL, Bibl. Enum. Born. Pl. 1921, p. 32.

est Service made a special search for it, but only succeeded in collecting *Dacrydium;* MIQUEL cannot possibly have confused the two. Most probably some exchange of labels or a mistake in mounting the specimens caused this error. *Pinus* certainly does not occur in Borneo!

In the Buitenzorg Herbarium is a sheet of the Siamese *Selaginella ostenfeldii* HIERON., identified by ALSTON,[1] of which the label reads 'Mt Bongkok, 4 Sept. 1870, SCHEFFER 61'. This is, it seems, an accidental error by interchange of labels. The specimen may have been collected by J. E. TEYSMANN on his trip to Siam; the latter mentions collecting a *Selaginella* at Kan-Boeri in 1862.[2]

MIQUEL described a new species, *Scheuchzeria asiatica*, from ' ? Java' based on a KORTHALS sheet in the Leyden Herbarium.[3] This is certainly an error as was already pointed out in HEGI.[4] This monotypic genus is restricted, in its recent distribution, to temperate Europe and Asia. The material in the Rijksherbarium represents true *Scheuchzeria palustris*. The error probably originated by mixing plants from Europe with those from Malaysia; during mounting old paper may have been used on which a new species of *Scheuchzeria* was left mounted. Absolute certainty cannot be reached, but some error cannot be denied.[5]

Even Japanese plants are sometimes said to be Malaysian. Formerly plant collections were often made or purchased by one person both in Malaysia and in Japan. Clearly, these plants were easily mixed or interchanged, especially so when they were distributed afterwards. An example of this kind is found in the collection of ZOLLINGER who was generally so admirably precise. *Lithospermum zollingeri* was described by DECANDOLLE[6] on ZOLLINGER 352, and erroneously assigned to the Java flora. This is one of these Japanese plants, as ZOLLINGER noted himself in the copy of the 'Prodromus' present in the Buitenzorg Library. On the sheet ZOLLINGER 352 in the Buitenzorg Herbarium, ZOLLINGER has Japan as the original country.[7] ZOLLINGER is, probably, not responsible for this mistake which may have originated accidentally during transit or mounting at Geneva.

From ZOLLINGER's own notes we now know with certainty that *Lithospermum zollingeri* is native of Japan; without these notes the problem would be difficult to solve as there are indeed a few species and genera indigenous both in Japan and in Malaysia (disjunct areas), *e.g. Mitrastemon kawasasakii, Cladopus, Viscum liquidambaricola* (Java, Tonkin, Formosa), and *Petrosavia sakuraii*. So *Lithospermum zollingeri* might have been erroneously placed in this small category of plant-geographical types.

It is known that ZOLLINGER received from the Botanic Gardens a number of plants (different sets on different dates) collected by a certain GÖRING and others to be named and distributed. These collections were neglected[13] and apparently badly labelled. One set came into the hands of TURCZANINOW, and he described several species of which it is not known whether they came from Japan or Malaysia.

JUNGHUHN described in a Netherlands Indian periodical a number of plants from Japan.[8] Among them is the genus *Hornera* (*l.c.* p. 314) of which the identity is still uncertain. The type sheet is not yet located and the collector is unknown to me. Is it GÖRING?

HASSKARL also possessed a large herbarium in which many Japanese plants were incorporated; however, mistakes in locating his plants have not been encountered hitherto.

Several botanists have collected plants in the Botanic Gardens at Buitenzorg. These Gardens contain a great number of exotic plants, that is, non-indigenous species. This has given rise to erroneous records, specimens taken from cultivated exotics in the Gardens being later erroneously considered native in Java.

ZIPELIUS's plants from New Guinea have been mis-labelled to some extent, and plants which he collected either in the Botanic Gardens at Buitenzorg or in the neighbourhood of Buitenzorg, Java, are now claimed to have been collected by him in New Guinea. *Lonicera chinensis* WATS. (*L. repens* ZIP. *ms. ex* MIQ.) is an example. The specimens are in fact *L. japonica* THUNB. and it has been ascertained that they were taken from plants cultivated in the Buitenzorg Botanic Gardens.[9]

BLUME mentioned in his Catalogue (1823) and in his 'Bijdragen' (1825–26) many species as occurring in Malaysia because they were cultivated in the Botanic Gardens at Buitenzorg. Sometimes such species were wrongly filed with the Javan flora there. Sometimes the labels of the type specimens provide the native country of these plants. Thus it is doubtful whether *Biophytum fruticosum* BL. described from the Bot. Gardens, Buitenzorg,[10] has ever been cultivated there; the type sheet at Leyden shows that it was collected by REINWARDT in Celebes, where it has been recently rediscovered.[11]

The record of *Viburnum zippelii* MIQ. from New Guinea[12] is a similar mistake. *Viburnum* has never been found since in this island, and the record is probably wrong.

Among ZOLLINGER's plants, too, several origi-

(1) Bull. Jard. Bot. Buit. sér. 3, 13, 1935, p. 442.
(2) Natuurk. Tijdschr. N.I. 25, 1862, p. 204.
(3) Flora Indiae Batavae 3, 1855, p. 243; *l.c.* 4, 1860, p. 35.
(4) Ill. Flora Mittel-Europa's 1, 1935, p. 213.
(5) Bull. Jard. Bot. Buit. sér. 3, 13, 1935, p. 289 *seq.*
(6) Prodr. 10, 1846, p. 587.
(7) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1934, p. 177.
(8) In HOEVEN & DE VRIESE, Tijdschr. Nat. Geschied. & Phys. 7, 1840.
(9) *cf.* Journ. Arnold Arb. 27, 1946, p. 451; Blumea 6, 1948, p. 243.
(10) Bijdr. pt 5, 1825, p. 242.
(11) Bull. Bot. Gard. Buit. ser. 3, vol. 18, 1950, p. 454–455.
(12) Flora Indiae Batavae 2, 1856, p. 122.
(13) ZOLLINGER, Syst. Verz. 1, 1854, p. viii–ix.

nated from the Botanic Gardens, Buitenzorg, and were later erroneously cited for Java.

Other collectors who have plants cultivated in the Botanic Gardens in their collections are FORBES, who included a new species of *Elaeocarpus* from Celebes, ZOLLINGER, and WARBURG who collected the only Malaysian specimen (WARBURG *no* 1994) of *Hiptage obtusifolia* DC. (*Malpighiaceae*) which no doubt was found in the Botanic Gardens, Buitenzorg.

On the strength of a FORBES label, *Heynea trijuga* ROXB. is claimed to occur in Java; this species, however, is only indigenous in Sumatra; FORBES's specimens were, in all probability, taken from cultivated plants at Buitenzorg. The same applies to the Indian plant *Reinwardtia trigyna* PLANCH. which he collected from specimens cultivated near the Cinchona estates of Tjinjiroean, Preanger, West Java.

In his treatment of the geographical distribution of the *Coniferae*, ENGLER[1] mentions the occurrence of *Pinus insularis* in Timor, a most aberrant and, doubtless, a wrong record, the source of which is not known to me.

The type of *Paramapania parvibractea* (CLARKE) UITT. is said to have been collected by GIULIANETTI on Mt Scratchley (Owen Stanley Range) in Papua at 12.200 feet, *i.e.* in the subalpine zone.[2] This species has often since been collected, but always in the hills and lowland country. To one acquainted with the altitudinal distribution of Malaysian plants, it is certain that the specimen could not have been collected at the stated altitude and was most probably collected 'en route', being subsequently sent to Kew and there labelled '12.200 feet' together with the subalpine plants from Mt Scratchley.

A similar mistake in noting the altitude was made at the Buitenzorg Herbarium in a batch of plants collected by the late Dr A. RANT on Mt Lawoe in East Java. RANT started at Sarangan situated at 1433 m alt. and from there made trips up the mountain to the crater which is situated at about 2200 m, and then to the summit. On all his original labels he wrote 'Sarangan 1433 m' and on those collected near the crater he put 'Lawoe krater'. In the Herbarium, the altitude of 1433 m was also added to the crater-plants which were presented together with the other Lawoe plants, so for a long time several highland plants of Java were suspected to occur at their lower limit at Sarangan. As this was most peculiar, I suspected an error and detected the wrong labelling *a posteriori;* Dr RANT himself confirmed this.[3]

On the other hand, a correctly noted altitude may warn the taxonomist to be careful. This is shown, for example, by the case of *Astelia novoguineensis* KRAUSE. *Astelia* is a purely microtherm genus only known from subalpine altitudes above 3000 m. The occurrence of a new species *A. novoguineensis* at only 850–1500 m was highly suspicious. The plant proved to be a member of the *Philydraceae*.[4]

There are more instances in which collectors climbing a mountain and collecting 'en route', label all plants gathered during a day's trip, *e.g.* '2000–3000 m alt.' This is by no means sufficient proof that all these plants occur throughout this altitudinal zone.[5]

'Pasaoeran' situated in the western extremity of Java, was misread or intentionally altered by KOSTER[6] to 'Pasoeroean', a locality in East Java 900 km away with entirely different climatic conditions.

Two other aberrant Malaysian botanical records remain very doubtful. Both concern European plants and there is a testimonial of the genuineness of each by the collector.

Linaria alpina is said to have been collected by HULLETT in the Malay Peninsula, and RIDLEY[7] wrote: 'I have seen two specimens collected by Mr HULLETT, who got them as he told me, on the rocks of the stream below the camp on Padang Batu'. RIDLEY failed to find it there himself. Mr HULLETT collected only in the Malayan region and had no European collections. No species of this type of *Linaria* is known from tropical Asia, and there is no possibility that this plant could have got to such an isolated spot on Mt Ophir by human agency. Though all facts point to a genuine locality I believe that confusion has been caused by the repeated use of old paper, and I also doubt whether Mr HULLETT remembered actually finding the plant. If the future proves the locality to be genuine plant-geography as a science must start anew.

The alleged collecting of *Elisma natans* on Diëng Plateau (Central Java) by Miss KLEINHOONTE is an identical case. The species is known from Europe and extends to Central Russia. The collector, who used grey drying-paper brought from Holland on her trip to Java, says she remembers quite well collecting the plant, but as she was never in the tropics before and all was new to her, I still refuse to allow the genuineness of the locality. A frail plant like this could have easily remained attached to grey blotting-paper, and an attempt to rediscover the plant on Diëng was fruitless.[8] Miss KLEINHOONTE will, I hope, understand that I submit to phytogeographical laws.

The examples given above mostly refer to aberrant localities outside the known area of distribution. There are, however, also data which would seem to fill in gaps between discontinuous areas. I mention the following examples.

An illustrative case is that of the monotypic *Phi-*

(1) Die Natürl. Pfl.-Fam. ed. 2, 13, 1926, p. 197.

(2) UITTIEN in Rec. Trav. Bot. néerl. 33, 1936, p. 144.

(3) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1935, p. 290.

(4) SKOTTSBERG, ENGL. Bot. Jahrb. 65, 1932, p. 260.

(5) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1935, p. 290–291.

(6) Blumea 1, 1935, p. 388.

(7) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1934, p. 252.

(8) *cf.* De Trop. Natuur 24, 1935, p. 54–56.

lydrum lanuginosum BANKS. This is known from SE. Asia as far SE as Singapore and then is again found in SE. New Guinea and Queensland.[1] Prof. C. SKOTTSBERG, who revised the family, cites[2] Manila and Java as localities which clearly diminish the enormous discontinuity between Singapore and Queensland. However, both localities in 'aquatic India' are based on wrongly localized specimens. The Manila locality is based on a specimen of CUMING, which originated from the Malay Peninsula as was shown by E. D. MERRILL.[3] The Java specimen belonged to the 'Reliquiae Hillebrandianae'; no date or precise locality is given. I suspected that it would have been cultivated in the Botanic Gardens, Buitenzorg, but no mention of it is made in any of the Garden catalogues. In the Herbarium at Buitenzorg, the Java collections are so extensive that the species would be represented if indigenous. It is absent. We are compelled to suggest that the specimen was incorrectly labelled, and it seems highly desirable that some botanist should study the Malaysian collections of HILLEBRAND in order to establish whether other detectable cases of mislabelling occur.

Another example of mislabelling which, if correct, would be acceptable in filling up a gap in a discontinuous distribution is that of *Hydnocarpus heterophylla*. According to SLEUMER[4] the distribution of this species shows a gap between West Java and Celebes. He mentions only one specimen in this discontinuity, *viz* one said to have been collected by FORBES in *SE.* Java, according to E. G. BAKER.[5] Now FORBES himself says in his interesting report[6] that he *exclusively* collected in the *western* part of Java (Residencies of Banten (= Bantam), Batavia, Buitenzorg, and Priangan (= Preanger). Therefore, the frequent reference on the labels to SE. Java is a mistake; instead of *SE.* Java should be read *SW.* Java! On several labels of FORBES I found the indication: *E Java misit;* the latin word '*E*' (= from) may have been taken by a clerk for E = East.

Statice billardierii GIRARD was described[7] on a plant said to have been collected at Kajeli, Boeroe Island, by J. J. DE LA BILLARDIÈRE on the voyage in the 'Recherche' and the 'Espérance' in search of LA PÉROUSE (1791–94). The expedition sailed *via* Teneriffe, Cape of Good Hope, St Paul, to Australia, New Caledonia, and *via* the Bismarck Archipelago to East Malaysia, where they touched at Kajeli, Boeroe Isl., Sept. 18–20, 1793.

The examination of the co-type kindly put at my disposal by Dr CH. BAEHNI, of Geneva, proved that the specimen matched the South African *St. equisetina* BOISS. *var. depauperata* BOISS. which is very closely allied to *St. scabra* THUNB.[8] The specimen was apparently incorrectly labelled, and must have been mixed with the Boeroe plants. GIRARD probably did not recognize it as belonging to a S. African species because of the presumably huge floristic disjunction.

H. N. RIDLEY and particularly E. D. MERRILL have both admirably contributed to the correct localization of species and specimens, respectively credited to P. Penang[9] and to the Philippines.[10]

MERRILL who made extensive studies in this respect says (*l.c.*) in his critical article dealing with 'Genera and species erroneously credited to the Philippine flora': "It is very doubtful if any single area of similar size anywhere has had erroneously credited to it so many species of plants as have been enumerated as Philippine, but which do not occur in the Archipelago. The sources of error in crediting extra-Philippine species to the Archipelago are several; and it is practically impossible to-day absolutely to eliminate all such sources of error in our current investigations. *Ca* 2500 species have been credited to the Archipelago on erroneous identifications, and by the citation of wrongly labelled herbarium material. While *inaccurate identifications account for the great bulk of the species that have in the past been erroneously credited to the Philippines* in botanical literature, a *considerable number have been admitted due to inaccurate or misleading labels on herbarium material, or through the accidental mixing of labels and specimens.* Here may be well considered those errors due to the inadvertent interchange of labels, such mixtures being not uncommon in large herbaria. The chief Philippine collection in which mixed labels occur

(1) This discontinuity of water and swamp-plants between Asia and Australia is by no means rare. There are several similar cases known of plants showing this discontinuity and of which only very few isolated localities in Malaysia are known, and of which collections are very rare,

Name of plant:	Asia	In Malaysia only found in:	Australia
Aldrovanda vesiculosa	+	Timor	+
Eriocaulon setaceum	+	S. Sumatra, Banka, W. Java	+
Najas marina	+	Bali (Lake Batoer)	?
Tenagocharis latifolia	+	Batavia, Madoera	?
Caldesia oligococca	+	Batavia, Djatiroto, Talaud	+

(2) Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1933, p. 112.

(3) Philip. Journ. Sci. C. Bot. 10, 1915, p. 188.

(4) ENGL. Bot. Jahrb. 69, 1938, p. 19.

(5) Journ. Bot. 1924–1926, Suppl. p. 1–149.

(6) 'Wanderings' *etc.*, 1885.

(7) Ann. Sci. Nat. sér. 3, vol. 2, 1844, p. 325; MIQUEL, Fl. Ind. Bat. 2, 1859, p. 995.

(8) Fl. Mal. I, 4^2, 1949, p. 112.

(9) Journ. Str. Br. Roy. As. Soc. *no* 25, 1894, p. 163 *seq.*

(10) Philip. Journ. Sci. C. Bot. vol. 10, 1915, p. 171 *seq.*

is that secured by the naturalists of the 'Malaspina Expedition', including material collected and prepared by both HAENKE and NÉE. A number of specimens cited by CAVANILLES, LAGASCA and PRESL as Philippine, from NÉE's and HAENKE's collections, certainly never originated in the Archipelago, and the Philippine records are due to erroneously labelled specimens. Most of these species are described in CAVANILLES's 'Icones' and PRESL's 'Reliquiae Haenkeanae'."

I will quote below MERRILL's careful reasoning which is illustrative both of his energy and his admirable knowledge of literature and flora, as well as of the difficulties with which tropical botany has to struggle before it can make real progress. Fortunately, for Indonesia or the Malay Peninsula no such important sources of error have come to my knowledge.

5. Intentional falsification of labels. This is rare in Malaysia, but was done, for example, by THOMAS LOBB who—as will be shown below—purposely falsified labels to extract more money from his employers: the VEITCH concern.

KOORDERS was seriously mistaken when he stated that JUNGHUHN accused BLUME of intentionally falsifying labels. BLUME may have had an unsympathetic character, and JUNGHUHN may have hated him—the latter being a proud, difficult man himself—but KOORDERS in his admiration for JUNGHUHN overshot the mark in his zeal to raise JUNGHUHN above BLUME, when charging the latter with dishonestly altering JUNGHUHN's labels. KOORDERS, unfortunately, misunderstood the meaning of JUNGHUHN's acid remark, cited by him in the 'Gedenkboek Franz Junghuhn' (1910, p. 239) which runs as follows (translated): "We regret, however, that an indomitable mania to connect the little word 'Blume' with plant names, has induced him (*i.e.* Blume) to use methods which cannot all be regarded as fair and innocent. In his earlier cited papers there are several traces, even indisputable proof, that for this purpose he intentionally attempted to obscure discoveries of other botanists, pretended not to know them, altered names of plants and, if these tricks were impossible, antedated his own combinations by 15 to 25 years."[1]

JUNGHUHN's charge is serious enough but he does not allege that BLUME intentionally falsified labels, or claimed as his own, plants found by JUNGHUHN. KOORDERS's support for his own unfounded assumption is entirely unsatisfactory. KOORDERS found in the Leyden Herbarium 4 sheets of *Smithia conferta* SM. On one of the sheets was only one label on which was written in the handwriting of BLUME: *Smithia conferta* SM. *Herb. Lugd. Bat.–Java.* Both BLUME and MIQUEL had signed the label and both neglected to place before their name 'det.'. KOORDERS concludes that this is proof of BLUME's 'methods', to which JUNGHUHN referred in the above citation. However, KOORDERS's demonstration is inadequate, arbitrary and wrong. In the first place, KOORDERS himself, in his article in the 'Gedenkboek' stresses the undeniable fact that JUNGHUHN's collections were badly labelled and that the administration of his collections at Leyden was even worse. This warrants the conclusion that it is not at all certain that sheets and labels *as they are now mounted* originally belonged together. Secondly, BLUME's name is here not attached to a plant name. By the 'changing of names' JUNGHUHN meant actually that his (J.'s) provisional names were often altered by BLUME as they were not in accordance with taxonomy or nomenclature and had to be transferred to other genera (in new combinations of BLUME). Thirdly, why charge BLUME with the intention of claiming to have collected a plant, solely on account of his signature on a label, and not MIQUEL, who did the same thing on the same label? It seems to me that KOORDERS intentionally accused BLUME of a scientific crime (being purposely dishonest) on unconvincing circumstantial evidence. KOORDERS seems to have been unaware of the historical fact that JUNGHUHN's collection has never been in the hands of BLUME; it was indeed at Leyden, but under the care of W. H. DE VRIESE!

A. WICHMANN criticized A. B. MEYER, and accused him of intentionally falsifying the reports of his expeditions. In the next paragraph this accusation is cited and attention is drawn to the fact that several of MEYER's plants are recorded from localities where they cannot have grown.

Another case of intentionally falsified labels is that of a certain 'PETRUS MOLHUYSEN' who made a herbarium in East Java, mainly Lawang, which is now in the Herbarium of the Agricultural College at Wageningen, Holland. Some dozens of species are said to have been collected in East Java, which doubtless came from other places. Nobody can give any information about this name MOLHUYSEN. The sheets are well-labelled and well-identified. Plants indigenous in other continents are mixed in this collection. Fortunately hitherto only one record was made in literature. ADELBERT[2] mentions *Schwenckia americana* L. as occurring in Java on the basis of a MOLHUYSEN record at the Agricultural College at Wageningen (*Herb. Vadense*). As he remarks, it is very unlikely that this species and a number of others were really collected in Java in a wild state. I suspected that the plants originated in the private garden of Mr M. BUYSMAN at Nongkodjadjar, above Lawang, but of 15 exotics which we tried none could be found in the catalogue of this garden issued in 1916.[3]

6. Malaysian botanical collections in which errors occur. The following notes on mislabelled collections should be consulted by botanists working on the Malaysian flora; names of collectors are alphabetically arranged:

(1) Java, 2nd Dutch ed., vol. 1, 1853, p. 181–186.

(2) Blumea vol. 6, 1938, p. 333.

(3) 'Verkoop Catalogus van M. Buysman. Lyst van planten in pot verkrijgbaar bij M. Buysman. Nongko Djadjar by Lawang.' Printed by v. DORP, Semarang–Soerabaja 828. 2–16, 15 pp. (in libr. C. A. BACKER.)

H. H. Bartlett and C. D. Larue had a collection made by native collectors in Sumatra East Coast in 1918. The field work was done by two Malays, *viz* GALOENGI and RAMAT *alias* BIDIN SIRAIT HOLBOENG. The former collected *nos* 1–70 in Asahan and *nos* 71–338 in the Karo Lands. The latter collected *nos* 1–165 in Asahan. The collection was sent to Dr MERRILL, at Manila, but at the Bureau of Science the two collections were thrown together and renumbered, without maintaining correspondence between the original and the new numbers. GALOENGI's collection was renumbered 1–330 and BIDIN's 331–495. A few plants collected by BARTLETT himself near Balige, Lake Toba, were included as *nos* 496–502. Numerous mistakes were made in transferring the data, so botanists who intend to cite the specimens are urged to follow the data of the original hand-written labels. The set sent to U.S. Nat. Herb. Washington lacks the original labels and the Karo Land (mountain) plants are labelled incorrectly as from Asahan (lowland!).

C. L. Blume described a large number of Javan plants on specimens which he had not collected himself, but which he found in the collections made by REINWARDT, KUHL & VAN HASSELT, ZIPELIUS, *etc.* Apparently some of the field notes were mislaid in these collections, as the habitat data BLUME cites are often entirely wrong. To illustrate this BACKER mentioned a few instances.[1]

P. F. A. Colfs. A. H. G. ALSTON[2] says that several species of *Selaginella* have been recorded by VAN ALDERWERELT VAN ROSENBURGH as collected in Soembawa by COLFS, but the majority appear to be Bornean species and were, no doubt, collected in that island. As COLFS never visited Borneo, they must have been collected by someone else. The mistake must be due to an interchange of labels.

Ph. Commerson, see SONNERAT.

H. Cuming's collection, 1836–40, is—according to MERRILL[3]—a noteworthy source of error. He says: "The source of error in CUMING's collection was that the entire collection was distributed with printed labels bearing the data 'Ins. Philippinae 1841', although between 400 and 500 numbers did not originate in the Philippines at all. Some of the ferns between *nos* 1 and 434 were not from the Philippines; *nos* 2052, 2053 to 2058, and 2252 to 2443, inclusive, were from Malacca, Singapore, and Sumatra; while *nos* 2444 to 2464, inclusive, were from St Helena. In distributing his material into sets, CUMING apparently planned to arrange his collections in natural groups before numbering his specimens. Thus the vascular and cellular cryptogams, the *Orchidaceae*, *Loranthaceae*, and *Ficus* were segregated and for the most part numbered in sequence. This plan was not followed out, however, and most of the collection was numbered by localities. To illustrate his method of arranging his duplicates for distribution, it is only necessary to cite a few cases. CUMING's numbers 435 to 667 were from Calawan, Province of Laguna, Luzon. In distributing this material he completed the label on each set of duplicates only for the first one for the locality; thus 435 would be indicated as from Calawan, or from the Province of Laguna, Luzon. No other labels were completed until all the plants from that locality were distributed. The first label for a new locality, *i.e.* 678 from the Province of Tayabas, Luzon, was filled out, but no others until another change of locality, which was 695, the Island of Corregidor. It was expected that the subscribers to the sets would complete the labels as to the localities before distributing the plants into herbaria; but this seems rarely to have been done. It is then not surprising that specimens from this old CUMING collection still continued to be cited as Philippine although they may not have originated in the Archipelago. So far as the labels show, in many herbaria, practically the entire CUMING collection is Philippine, and the average working botanist cannot be expected to know all the minute details regarding the labelling of each set of exsiccata that he has to handle."

MERRILL gives (*l.c.* p. 183) a list of the sets of numbers by which CUMING's collections can be localized.

G. Finlayson made good collections in the various parts of the Malay Peninsula he visited. Many of his plants were sent to the E.I.C.'s Herbarium and were finally distributed when that Herbarium was broken up. Unfortunately many specimens do not appear to have been adequately labelled, and those cited in books as coming from Penang may have come from Cochinchina.[4]

H. O. Forbes. Numerous specimens which are said to have been collected in SE. Java were really collected in SW. or at least West Java (Bantam, Batavia, Buitenzorg or Priangan Res.). Moreover, in FORBES's collections some plants cultivated in Java which he collected either in the Botanic Gardens at Buitenzorg, or on estates in Priangan Residency, are inserted (*cf.* also p. xxiia).

Ch. Gaudichaud-Beaupré's specimen of *Piper manillanum* MIQ. labelled 'Manille, GAUDICHAUD, 1836' by DECANDOLLE, was probably from Singapore or Penang Island, according to MERRILL.[5]

GAUDICHAUD's plants from Timor were apparently mixed with a herbarium made in Madagascar, the Comores, Réunion, and Mauritius, as among the account of his Timor plants by DECAISNE,[6] numerous genera and species are credited to Timor which have certainly not been collected there. A list of the principal errors is given in paragraph 3 of this chapter (*cf.* p. xviii–xix).

Ph. Fr. W. Göring, was a pharmaceutical chem-

(1) Blumea 6, 1948, p. 303, footnote.

(2) Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1935, p. 432.

(3) Philip. Journ. Sci. C. Bot., vol. 10, 1915, p. 182.

(4) RIDLEY in Journ. Str. Br. Roy. As. Soc. *no* 25, 1894, p. 164–165; for other references see *sub* FINLAYSON in the Alphabetical list, Special Part of this book.

(5) Enum. Philip. Fl. Pl. 2, 1923, p. 17–18.

(6) in Nouv. Ann. Mus. Paris 3, 1834; reprint. 'Herb. Timor. Descr.', 1835.

ist at Batavia between 1844 and 1850. His collections are cited in the series of articles by TURCZANINOW in Bull. Soc. Nat. Moscou under the title 'Animadversiones ... *etc.*' He also collected in Japan. It seems that his plants are badly labelled, so that specimens may either come from Japan or Java. Several *Verbenaceae* are described by TURCZANINOW[1] but neither LAM nor BAKHUIZEN VAN DEN BRINK *Sr* in their later monographs have been able to 'place' the species. The mixing occurred mostly in his 2nd collection cited GÖRING II (or GÖRING 2 or GÖRING 11) as is indicated by the '*??*' which T. himself adds to the descriptions. Of *Hibiscus platystegius* TURCZ. says '*Java aut insulae adjacentes*' and hence suggests that GÖRING could have collected also in islands neighbouring Java. This is again stressed in '*Sapindus e Java aut Sumatra, Göring II n.* 38'[2] and in the description of *Ciccus microbotrys* (Java aut Sumatra, Göring 11, no 411).[3] The plants of GÖRING can only be 'placed' if the material is properly identified, and compared with the geographical distribution. If a species collected by GÖRING is known from both Java, Sumatra and Japan it is very unlikely that its place of origin will ever be deduced. TURCZANINOW has rendered Malaysian botany little service in buying and describing these GÖRING sets.

It is possible that JUNGHUHN described some Japanese plants from these sets; the origin of several of these specimens is still unknown.[4] GÖRING sets were partly distributed by ZOLLINGER.

Th. Haenke, see NÉE.

J. C. van Hasselt, see H. KUHL.

J. K. Hasskarl's herbarium contains numerous species collected in the Botanic Gardens at Buitenzorg from cultivated specimens. Several of them were later wrongly assigned to the Malaysian flora. HASSKARL did not bother much about native names and native countries; his main aim was to distinguish species and genera; he neglected plant geography.

W. Hillebrand collected plants in Java and Sumatra on a journey to the Pacific. His collections at Berlin are said to include 889 *nos* from Java and, in addition, 397 *nos* from plants cultivated in the Botanic Gardens, Buitenzorg.

The collection is inadequately localized and for phytogeographical purposes the data must be handled with the greatest precaution (*cf. Philydrum lanuginosum*, p. xxi–xxii).

W. Jack. RIDLEY[5] says of JACK's collections, his untimely death, and the fire of the ill-fated vessel 'Fame', when JACK's manuscripts and the greater part of his collections were destroyed: "Most of the plants which were described by JACK from Penang and those that were sent by him to WALLICH have been rediscovered of late years, but a few have escaped recent collectors, and it is possible that some of which were distributed by WALLICH as from Penang were really collected in Sumatra."

Fr. Junghuhn. His herbarium came—after some difficulties with BLUME, DE VRIESE, and MIQUEL—into the possession of the Leyden State Herbarium. Most of JUNGHUHN's collections were already described in 'Plantae Junghuhnianae' edited by MIQUEL. Evidently there remained many badly labelled or unlabelled specimens. KOORDERS wrote an article on these plants which he found in the Leyden Herbarium.[6]

Some of his plants have been confused: *e.g. Osmelia maingayi* (*Flac.*) is mentioned as collected by JUNGHUHN in Java. As it has never been found again in the latter island, VAN SLOOTEN[7] assumes that interchange of labels may have caused an error. The species is only known from Central Sumatra and the Malay Peninsula. On a plant-geographical basis it could also occur in Java. JUNGHUHN had the habit of sometimes putting as many data on a label as he knew, and I found labels where both Java and Sumatra were mentioned together, *e.g.* on a sheet of *Sophora tomentosa* L. (Kew Herb.). He wished to indicate in this manner that he had found the species in both islands, but thus he obscured the exact origin of the specimen.

J. G. Keulemans, Prinseneiland, SW. Java. In the Rijksherbarium, Leyden, a small collection of J. G. KEULEMANS, the celebrated draughtsman of birds, is preserved which has been labelled as collected in 'Prinseneiland', off the coast of SW. Java. It has been shown that this collection was made in Ilha do Principe, off W. Africa (St Thomé group).[8] *cf.* p. xix.

P. W. Korthals's collections are badly labelled and I assume that the mixing of labels referred to under 'Leyden Herbarium' took place in MIQUEL's time; the cases of *Pinus merkusii* in Borneo, and those of *Scheuchzeria palustris* and *Homalium tomentosum* in Sumatra are illustrative.

We cite the following remark of MERRILL:[9] "If the list of species known only from Borneo and Sumatra be examined it will be noted that a high percentage of them are credited to both areas only on the basis of specimens collected by KORTHALS. He collected in both Borneo, and Sumatra, and doubtless did secure the same species in both islands in some cases. It is strongly suspected that some of the Bornean records based on KORTHALS's material are really due to erroneously labelled specimens!"

MIQUEL[10] records *Melissa parviflora* from Java and Borneo; the latter locality was probably also

(1) Bull. Soc. Nat. Moscou 1863, part 2, p. 205–217.

(2) Bull. Soc. Nat. Mosc. 31, 1858, 404.

(3) *Ibid.* 32, 1859, 269.

(4) in HOEVEN & DE VRIESE, Tijdschr. Natuurl. Geschied. & Physiol. 7, 1840.

(5) Journ. Str. Br. Roy. As. Soc. *no* 25, 1894, p. 164.

(6) in JUNGHUHN Gedenkboek 1809–1909, 1910, p. 229–240, 3 figs.

(7) Bull. Jard. Bot. Buit. sér. 3, vol. 7, 1925, p. 387.

(8) VAN OOSTSTROOM & VAN STEENIS, Bull. Bot. Gard. Buit. ser. 3, vol. 18, 1950, p. 466–468.

(9) Bibliogr. Enum. Born. Pl. 1921, p. 11.

(10) Fl. Ind. Bat. 2, 1859, p. 969.

based on a KORTHALS specimen in the Leyden Herbarium. *Melissa parviflora* belongs to a distributional type of mountain plants which is not likely to occur in Borneo, except on Mt Kinabalu.

It is certain that MIQUEL was not responsible for the confusion of KORTHALS's labels. He himself, in studying the *Araliaceae*,[1] did not know whether *Paratropia tomentosa* collected by KORTHALS came from Java or Sumatra. This is to be wholly ascribed to inadequate labelling on KORTHALS's part. In the same work MIQUEL records *Aralidium pinnatifidum* from 'sylv. mont. Pengalengan' (Java), but the genus is extra-Javan, occurring in Sumatra and Borneo.

H. Kuhl & J. C. van Hasselt. BLUME erroneously credited[2] several South African ferns to Java. Probably, they were collected by KUHL and VAN HASSELT at the Cape during their journey to Java. These are *Blechnum paniculatum* SW. (= *Lomaria auriculata* DESV., *Blechnum blumei* MOORE), *Mohria caffrorum* DESV. (*Cheilanthes fuscata* BL.), *Pellaea pteroides* PRANTL (= *Cheilanthes pteroides* SW.), *Cheilanthes hirta* SW., *Ch. multifida* SW., *Asplenium adiantum-nigrum* L. (= *A. humile* BL.), *Hemitelia capensis* R.BR. and *Todea barbara* MOORE (= *T. africana* WILLD.) which are all native in South Africa, and have not not been collected in Java.

In the Rijksherbarium, Leyden, there is also a specimen of *Pteris arguta* AIT. of KUHL and VAN HASSELT, said to have been collected in Java; this species is only known from Portugal, Morocco, and the Canary Islands, where KUHL and VAN HASSELT collected on their voyage to Java.

H. Kunstler was a collector employed by the Royal Botanic Gardens, Calcutta, mainly in Perak, Malay Peninsula, from 1880 to 1886. Many of his plants are labelled 'KING's Collector'. Some of his Kinta collections were mislabelled at Calcutta 'Larut' and some of his 1886 collections were made in the State of Selangor, but mislabelled 'Perak'.[3]

L. Th. Leschenault de la Tour collected in Java, Madoera Island, and Timor. A Monimiaceous plant, *Amboraficus* TUL. = *Tambourissa ficus* (TUL.) A.DC. is cited by MIQUEL as having been collected by him in Java, but this species is endemic in Madagascar, Mauritius, Réunion, and the Comores; PERKINS therefore suggested[4] that this record must be due to confusion of labels (in the Paris Herbarium). *cf.* GAUDICHAUD.

Leyden Rijksherbarium. In the memorial volume of 'Mededeelingen' 62–69 (1931), on the occasion of the 100th anniversary, the conservator (now Professor) Dr W. A. GODDIJN writes:[5] "in recent time frequently interchange of labels and sheets has been found in type specimens, *e.g.* of BLUME. This confusion must date back from the period before 1870."

In the same volume Dr J. W. C. GOEDHART writes[6] on the re-arrangement of the old collections by Dr J. P. LOTSY and himself in the beginning of this century: "the herbarium proper was stored in portfolios. A considerable number of sheets was not mounted but stored in grey covers, so that a loss or interchange of labels could easily take place and must have taken place frequently."

Th. Lobb made a collection of dried specimens which has been distributed to various herbaria. Unfortunately, many of these were either not at all, or wrongly, localized and as he collected not only in Penang and Singapore but also in Java, Borneo, and the Philippine Islands, some of his plants quoted in books as 'Penang, LOBB', were really collected elsewhere in Malaysia.[7]

In MERRILL's opinion:[8] "LOBB purposely falsified his labels to get more money from the VEITCH concern for which he explored."

In 'Hortus Veitchii' 1906, p. 41, there are references which point to the same direction.

The following excellent account is copied from MERRILL:[9]

"While the erroneous citation of a considerable number of CUMING's plants as Philippine was due to the fact that he distributed the entire collection with Philippine labels, only certain labels being filled out as to localities as explained previously, the case presented by the collections of THOMAS LOBB is decidedly different. LOBB was a professional orchid collector, who visited Singapore, Java, Borneo, and Luzon. In connection with his search for living orchids, LOBB also made a general botanical collection, preparing from one to several duplicates of each species secured. It has been found that a certain specimen labelled in the Kew herbarium, for instance, as originating in Luzon, may be represented in other herbaria by a duplicate labelled 'Java', or 'Borneo', or 'Singapore'.

"VIDAL[10] clearly indicates the doubt that existed in his mind as to the propriety of admitting as Philippine those species that were credited to the Archipelago solely on the basis of specimens collected by LOBB and labelled 'Luzon': '(Las plantas de) LOBB son pocas en número por haber explorado dicho viajero principalmente Borneo, Malaca y el archipiélago malayano. Come se observa más adelante, al citarlas en la lista de revisión, sus localidades son poco seguras, sin duda por haberse confundido con las remitidas desde los paises vecinos al Archipiélago; Come se ha indicado ya, las localidades de las plantas de LOBB no merecen entere confianza asi toda especie con solo ejemplares de este colector queda algo dudosa para nuestra flora'."

"The mixture of labels in LOBB's collection can be explained only on the assumption that it was deliberate in order to obscure the regions from which

(1) Ann. Mus. Bot. Lugd. Bat. 1, 1863, p. 23.
(2) POSTHUMUS, Verh. Kon. Akad. Wet. A'dam sect. II, *no* 5, 1937, p. 4.—BACKER & POSTHUMUS, Varenflora voor Java, 1939, p. 144, footnote.
(3) *cf.* BURKILL in Gard. Bull. Str. Settl. 4, 1927, p. 126.
(4) Gatt. Monim. 1925, p. 45.
(5) *l.c. no* 62b, p. 12, *alinea* 3.
(6) In 'bijlage' (= appendix) 5, p. 50.
(7) RIDLEY, Journ. Str. Br. Roy. As. Soc. *no* 25, 1894, p. 166.
(8) Enum. Philip. Fl.Pl. 4, 1926, p. 76.
(9) Philip. Journ. Sci. C. Bot. 10, 1915, p. 184 *seq.*
(10) Rev. Pl. Vasc. Filip., 1886, p. 9, 173.

he may have secured valuable commercial orchids; this statement does not necessarily infer that LOBB himself was responsible for the mixture. It has been assumed that the set of LOBB's plants deposited in the Kew herbarium are correctly labelled, but this is certainly not the case. In a number of cases species have been ascribed to the Philippines solely on the basis of LOBB's specimens labelled 'Luzon', and the Philippine flora has thus been enriched by such species as *Loranthus retusus* JACK, *Eurycoma longifolia* JACK, *Archytaea vahlii* CHOISY, *Leucopogon malayanus* JACK, *Embelia myrtillus* KURZ, *Fagraea ligustrina* BLUME, *Anisophyllea disticha* HOOK., and *Ilex lobbiana* ROLFE. Of these genera *Eurycoma*, *Archytaea*, and *Anisophyllea* have no known representatives in the Philippines, and none of the species enumerated above have ever been collected in the Philippines since they were accredited to the Archipelago by the manifestly erroneous labelling of LOBB's specimens. On the other hand, specimens that LOBB certainly collected in Luzon have been described as new species and accredited to other regions. As an example may be cited *Antidesma lobbianum* MUELL.-ARG., much better *A. rostratum var. lobbianum* TUL., as originally described, which was credited to Java, with the citation of LOBB 460, this specimen in the Paris herbarium appearing as Javan; in the Kew herbarium the same number of LOBB's collection is labelled Luzon. The species, or variety, has never been found in Java,[1] but has been collected several times in the vicinity of Manila. It is very similar to the Philippine *Antidesma rostratum* TUL., and I believe it to be merely a form or variety of TULASNE's species. It was probably separated from *Antidesma rostratum* by TULASNE merely because *A. rostratum* was Philippine, and the variety *lobbianum* TUL., was supposed by him to have originated in Java. *Hydrangea lobbii* MAX. was credited by MAXIMOWICZ[2] to Java on the basis of his specimen of LOBB's collection so labelled; the Kew specimen of the same collection is labelled Luzon, and this is certainly correct, as the species is common and widely distributed in the mountains of the northern Philippines, but has never been found outside of the Archipelago. *Clethra lancifolia* TURCZ. was based[3] on CUMING 855 from Luzon, with the citation of LOBB 449 from Singapore. LOBB's specimen was certainly from Luzon, as the species is quite unknown from Singapore, but is a common endemic species in the mountains of the Philippines."

"It is evident that species that are credited to Luzon, Borneo, Singapore, or Java, solely on the authority of LOBB's specimens so labelled, should not be adopted as belonging to the floras of the respective islands without in each case a critical consideration of the floras of the other three islands involved."

"While it is, of course, quite impossible to prove absolutely that the species enumerated below actually do not occur in the Philippines, at least there is no botanical material extant, that we know certainly to be from the Philippines, representing any species of the entire list, except *Neptunia oleracea* LOUR., *Eranthemum crenulatum* NEES, and *Clerodendron villosum* BLUME. All the evidence at present available leads me to exclude all the species enumerated below, with these 3 exceptions. The present list of species excluded on account of erroneous or insufficient labels comprises 74 species, and of the list, the following genera have no known representatives in the Archipelago: *Bouteloua* (including *Eutriana*), *Polyschistes* (*Pentarraphis*), *Phylydrum*, *Arundina*, *Bromheadia*, *Sebastiana*, *Eurycoma*, *Archytaea*, *Ionidium*, *Anisophyllea*, *Baeckea*, *Rhodamnia*, *Kibessia*, *Anplectrum*, *Marumia*, *Pternandra*, *Allomorpha*, *Badusa*, *Pharetranthus* (*Pterobium*), and *Tristicha*."[4]

TURCZANINOW[5] described number 364 of LOBB's collection as *Drosera lobbiana* TURCZ. and stated that it came from Singapore. L. DIELS, however, in his monograph of the *Droseraceae*[6] locates LOBB 364 in Moulmein, and refers the species to *D. peltata* J.SM.

A. C. Maingay made extensive collections of plants in Malacca, Penang, and Singapore. After his death his collections were bequeathed to Kew. Some of the species said to have been collected by him in Penang have been rediscovered since but some of those which have not been met with again have perhaps been wrongly localized as his labels often had no localities marked on them, acc. to RIDLEY.[7]

A. B. Meyer has been much criticized by WICHMANN[8] and by STRESEMANN.[9] It is true that he contradicts himself on several occasions, and several of his reports seem to be faked. For example MEYER says he crossed W. New Guinea from Jerakobe (Geelvink Bay) to Jakati (MacCluer Gulf), which is denied by WICHMANN,[10] though NIERMEYER[11] thinks the supposition to be unproved. WICHMANN says (in Nova Guinea *l.c.*):

"Seit Jahren ist es bereits bekannt das MEYER naturwissenschaftliche Objekte mit falschen Etiketten versehen hat, eine Tatsache, die für die aus Neu-Guinea stammenden oder stammen sollenden aufs neue Bestätigung findet. Kein Naturforscher wird fürderhin das Recht haben sich auf irgend eine Angabe MEYERS zu berufen, wie denn alle, die von diesem und seinen Untergebenen verfassten

(1) See J. J. SMITH in KOORD. & VALETON, Bijdr. Boomsoorten Java 12, 1910, p. 290.
(2) Mém. Acad. Pétersb. VII, 10, 1867, p. 15.
(3) Bull. Soc. Nat. Mosc. 36, 1836, p. 231.
(4) This list still holds with the exception of *Bromheadia* of which a new species has since been described from the Philippines by AMES & QUISUMBING.
(5) Bull. Soc. Nat. Moscou 27, II, 1854, p. 343.
(6) Pflanzenreich Heft 26, 1906, p. 111.
(7) Journ. Str. Br. Roy. As. Soc. *no* 25, 1894, p. 167.
(8) Ind. Gids 10², 1888, p. 1393; Nova Guinea 2, p. 167–178.
(9) Journ. f. Ornith. 87, 1939, p. 305.
(10) PETERM. Mitt. 1904, Lit. Ber. *no* 771.
(11) Tijdschr. K.N.A.G. 1905, p. 499.

Abhandlungen kaum mehr als den Wert von Makulatur besitzen, so lange nicht eine Nachprüfung der Sammlungen stattgefunden hat, mit denen sie sich beschäftigten."

As BACKER[1] had already mentioned, in OLIVER's list on MEYER's New Guinea plants[2] 5 plants typical for the beach flora are recorded to have been collected on the Olifantsgebergte ('Elephant's mountain').

'P. Molhuysen' made a collection in E. Java in the years 1902–1912. This collection contains quite a number of plants from all parts of the world, neatly labelled and named, which by no possibility can have grown in Java. Apparently they have been intentionally falsified. The collection is in the Herbarium of the Agricultural College, Wageningen, Holland, with some duplicates in the Indian Institute, Amsterdam, and perhaps elsewhere (*cf.* p. xxiii).

L. Neé and Th. Haenke were two botanists accompanying the 'Malaspina' expedition, 1789–1794.

MERRILL has made an extensive study[3] on the collections of this expedition, which were such an important source of confusion in the Philippine flora. The following report is copied.

"The Malaspina Expedition, 1789–1794, proceeded from Spain to the east coast of South America, around Cape Horn, and northward along the coast to a point north of Sitka, Alaska, thence southward to Acapulco. From Acapulco the ships proceeded to Manila via Mulgrave (= Milne) Island (Marshall Islands) and Guam; from Manila southward to the southern point on New Zealand, thence to Sydney and from Sydney to Callao, Peru, via the Tonga Islands. From Callao the expedition proceeded around Cape Horn to Spain. Botanical collections were made at all, or at most points, where stops were made. COLMEIRO[4] is authority for the statement that the collection of NÉE alone comprised over 10.000 species, of which 4.000 new."

"It is most peculiar that the collections of both botanists connected with the Malaspina Expedition, LUIS NÉE and THADDEUS HAENKE, should contain many erroneously labelled specimens. Comparatively few of NÉE's specimens have been cited in botanical literature, as the collection had not been available except to a few botanists in Madrid. A very few species were described by NÉE himself, some by LAGASCA, and a considerable number by CAVANILLES. HAENKE's material, now mostly at Vienna, Prague, Berlin and St Louis, has been more generally available to botanists than has that of NÉE. Among comparatively few Philippine or presumed Philippine forms considered by these botanists a relatively high percentage was erroneously accredited to the Archipelago; on the other hand, some forms manifestly originating in the Philippines were accredited to Mexico, California, and South America. This statement holds true for the collections of both NÉE and HAENKE. For example, *Ophioglossum pendulum* LINNÉ is credited by CAVANILLES[5] to South America 'in Regno Quitensi', but the species does not occur in America, its range being from India to Malaya and Polynesia; NÉE's specimen undoubtedly originated in the Philippines or in Guam. *Alloteropsis distachya* PRESL[6] 'Hab. ad Monte-Rey in California' is *Axonopus semialatus* HOOK. *f.* (*Panicum semialatum* R.BR.), which does not occur anywhere in America, but which is abundant in the Philippines, and extends from Africa through tropical Asia and Malaya to tropical Australia; HAENKE's specimen on which the California reference was based was undoubtedly from the Philippines. *Polypodium irregulare* PRESL[7] 'Hab. in Mexico' is the Philippine *Tectaria* (*Aspidium*) *irregularis* COPEL., a species that is originated in the Philippines, certainly not in Mexico. *Malaspinaea laurifolia* PRESL 'Habitat in regionibus occidentalibus Mexici' is the Indo-Malayan *Aegiceras corniculatum* (LINNÉ) BLANCO; HAENKE's specimen certainly never originated in Mexico, but was either from the Philippines or Guam. Just how many more similar cases there are in PRESL's 'Reliquiae Haenkeanae' can be determined only by a careful study and comparison of his types."

"It seems, however, that comparatively few Philippine plants were erroneously credited to various parts of America by PRESL and by CAVANILLES. In contrast, at least 35 species based on material from various parts of America were indicated as Philippine by HAENKE, CAVANILLES, and LAGASCA; and it is probable that the list will be somewhat extended by a critical study of PRESL's types. A few specimens manifestly originating in Australia, collections of NÉE, have been cited as Philippine, such as *Chloris dolichostachya* LAG. and perhaps some of CAVANILLES's species of *Aristida*."

J. C. (or J. K.) Ploem's collections are not, or obscurely, labelled, and must be handled with caution. He was a medical man, and it seems certain that he collected in Singapore and Java, possibly also in Banka. He came to Java in 1852 and was later stationed on the N. slope of Mt Gedeh, near Sindanglaja, where he did most of his collecting. He probably got—for his own information—duplicates from other collectors (*e.g.* TEYSMANN!) which he inserted in his herbarium, sometimes without mentioning the source and native habitat. Recently I saw a still unlabelled collection of PLOEM's in the Leyden Herbarium, all *Cyperaceae*, stamped 'Sumbawa'. Several could certainly not have been collected there, and as the stamp 'Sumbawa, Ploem' was certainly put on afterwards, I do not believe they came from that island at all. In several herbaria duplicates under his name are preserved. If plants of PLOEM are found in aberrant localities, these can, I think, be discarded and the plants should be enumerated among the specimens *sine loco*.

(1) Verkl. Woordenb., 1936.
(2) Journ. Linn. Soc. Bot. 15, 1877, p. 29–30.
(3) Philip. Journ. Sci. C. Bot. 10, 1915, p. 180–182.
(4) La botánico y los botánicos de la peninsula hispano-lusitana, 1858, p. 182.
(5) Icon. 6, 1801, p. 73.
(6) Rel. Haenk. 1, 1830, p. 343.
(7) Rel. Haenk. 1, 1825, p. 25, *t.* 4, f. 3.

UITTIEN[1] records *Mapania javana* for East Java exclusively on account of a PLOEM specimen. This is certainly wrong, the specimen most probably having come from West Java.

ALSTON[2] mentions that the Javan specimen labelled 'Salak Dr PLOEM' of *Selaginella hieronymi* v.A.v.R. seems to be an exact duplicate of specimens collected in Misoöl Island (W. Papua) by TEYSMANN. As no one else has collected it, it seems probable that the labels have become mixed.

H. N. Ridley's collection from East Java, July 1915, mostly from Tosari (Mt Tengger, ± 1800–2000 m alt.) has given rise to some confusion. On a label of *Thoracostachyum bancanum*—an extra-Javan species—at Kew, RIDLEY himself wrote: 'mixed in mounting with *Cyperus*, Poespo Road, Tosari'. It is absolutely impossible that this lowland plant occurs on Mt Tengger. I do not hesitate to say that it did not come from Java.[3]

J. G. F. Riedel was held in severe contempt by WICHMANN,[4] who described him as of one feather with A. B. MEYER. The fact that he employed Indonesians for collecting plants—many of which are not labelled—points to the possibility of inexact data, which is rather important as some plants in his collections are said to have come from Celebes, Timor, Tanimbar, Boeroe and Billiton, and even—according to BACKER—from Borneo. As yet I have no proof that WICHMANN's suspicion of the localization and labelling of RIEDEL's plants is justified.

Rev. Father **B. Scortechini**, a missionary who came to Taiping from Australia in 1882, put many misspelt Malayan names upon his labels, and a great many sheets were unnumbered and unlocalized. In several places his Christian name is wrongly given as BERTOLD.[5]

P. Sonnerat joined the 2nd Moluccan expedition of POIVRE. WARBURG[6] says that the number of his Moluccan plants is very small and that the plants labelled 'Java' possibly came from the Moluccas. To our knowledge SONNERAT never visited Java. Several plants attributed to COMMERSON were probably originally collected by SONNERAT, as his herbarium was at least in part incorporated in COMMERSON's as was shown by C. B. ROBINSON.[7]

Occasionally plants collected by SONNERAT in the Philippines were credited to COMMERSON who never visited the Philippine Archipelago (ROBINSON, *l.c.*).

COMMERSON visited Java and was at Batavia from Sept. 28 to Oct. 15, 1768. It is possible that COMMERSON's plants were thought to have been collected by SONNERAT.

There is obviously some confusion with the collections here which cannot easily be disentangled.

F. A. C. Waitz's collection seems to contain erroneous labelling. H. UITTIEN[8] mentions the occurrence in Java of the Sumatran *Thoracostachyum bancanum*. This is certainly a case of an error in labelling by WAITZ, or a subsequent mixing of labels and material in the Leyden herbarium.[9]

Hypolytrum capitulatum VALCK.SUR. is only known from a TEYSMANN collection in W. Borneo, and from a non-localized unnumbered specimen of WAITZ in Leyden Rijksherbarium.

It is quite possible that WAITZ received duplicates from TEYSMANN for his private use; TEYSMANN collected in Borneo as late as 1874, and WAITZ finally settled at Batavia in 1873.

O. Warburg. Among WARBURG's Java plants several species only cultivated in Java were included among his numbers. As the duplicates are scantily annotated it is possible that their origin is not always accurately indicated.

A. Zipelius. Several of ZIPELIUS's plants have been described by MIQUEL[10] from New Guinea, sometimes as questionable, *e.g. Lonicera chinensis* and *Viburnum zippelii*. The genus *Lonicera* certainly does not occur there and the *Viburnum* was never re-collected in New Guinea, the genus extending eastwards only as far as Boeroe Island. HALLIER[11] mentions that on the latter is attached a printed label of ZIPELIUS, New Guinea.

Labels printed 'New Guinea' may have been used for specimens *not* collected in New Guinea but in other places visited *en route* or erroneously attached to plants collected in Java or Timor, or collections may have been mixed after Z.'s untimely death. They were most probably derived from cultivated plants in the Bot. Gardens, Buitenzorg.

H. Zollinger's herbarium contains, in addition to the extensive collections made by himself, a number of plants which he collected in the Botanic Gardens, Buitenzorg, or which he obtained from other sources (see also *sub* GÖRING). Though he himself was very accurate, and knew his plants quite well, it seems that sometimes mistakes crept into the sets of duplicates , especially with regard to Japanese plants which were distributed by him. (*cf.* p. xxiv–xxv).

(1) Rec. Trav. Bot. néerl. 33, 1936, p. 287.
(2) Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1935, p. 442.
(3) *cf.* UITTIEN in Rec. Trav. Bot. néerl. 33, 1936, p. 138.
(4) *cf.* Ind. Gids. 18², 1896, p. 1418 *seq.*
(5) *cf.* BURKILL in Gard. Bull. Str. Settl. 4, 1927, p. 131.
(6) Rumphius Gedenkboek 1902, p. 65.
(7) Philip. Journ. Sci. C. Bot. 4, 1909, p. 683.
(8) Rec. Trav. Bot. néerl. 33, 1936, p. 137.
(9) I found this species recently in the Danoe swamp, W. Java.
(10) Flora Indiae Batavae, *passim.*
(11) Meded. 's Rijks Herb. *no* 14, 1921, p. 36.

i. LIST OF WORKS PRINCIPALLY CONTAINING ILLUSTRATIONS OF MALAYSIAN PLANTS, AND OF COLLECTIONS OF DRAWINGS AND PHOTOGRAPHS

1. Illustrated works. The modern guide to illustrations of plants is the 'Index Londinensis' (1929–1941, 6 vols + 2 suppl.) one of those admirable and indispensable works which botanical science owes to Kew, containing references to all essential figures drawn of plants.

Of Malaysian plants quite a number have been figured, the figures being scattered throughout literature. However, there are some works which have aimed specially at illustration. The principal ones are chronologically enumerated below. Those containing coloured plates are indicated by an asterisk.

RUMPHIUS, G. E., *Herbarium Amboinense.* Amstelodami 1741–1755, 7 vols folio (Auctuarium included), containing 517 plates.

An unequalled masterpiece of work of the blind 'Plinius indicus'. The information on useful plants is often still up to date. The final interpretation of the species mentioned by RUMPHIUS was made by E. D. MERRILL (Bur. Sci. Publ. 9, 1917, 595 pp., with map).

BLUME, C. L., *Tabellen en platen voor de Javaansche Orchideën.* Batavia 1825, folio.

Contains 15 plates on which 73 species are depicted. Whereas most copies contain 15 plates, that of the Botanical Museum at Berlin-Dahlem has 16 plates (78 species figured) (*cf.* R. MANSFELD in FEDDE Repert. 39, 1936, p. 318).

*BREDA, J. G. S. VAN, *Genera et species Orchidearum et Asclepiadearum quas in itinere per Insulam Javam* collegerunt G. KUHL & J. C. VAN HASSELT. Gandavi 1827, folio, containing 15 coloured plates.

*BLUME, C. L., *Flora Javae.* Amstelodami 1828–1858, 4 vols folio; suppl. 'Planches inédites' (± 1863).

DANSER wrote a critical article on the dates of its appearance (Blumea 3, 1939, p. 203–211). The work was edited in fascicles which were intended to be bound in several volumes. It was printed at Brussels; owing to the rebellion of 1830 the issue was interrupted. The work contains figures of Javan *Rafflesiaceae, Balsamifluae, Dipterocarpaceae, Myricaceae, Chloranthaceae, Magnoliaceae, Fagaceae, Annonaceae, Loranthaceae, Orchidaceae, Ericaceae,* and *Pteridophyta.* The *Orchidaceae* cover a separate volume of series II, edited in 1858. There is a supplement of 23 'planches inédites' without text offered for sale in Holland since about 1863.

The supplement excluded, the work contains 309 plates including 94 ferns and fern allies, and 71 orchids. Most plates are beautiful and hand-coloured. There is also an uncoloured edition.

*BLUME, C. L., *Collection des orchidées les plus remarquables de l'Archipel Indien et du Japon.* Amsterdam 1858, 66 pl., many coloured.

This is the Flora Javae *nova series.*

*BLUME, C. L., *Rumphia,* sive commentationes *etc.* Amstelodami 1835–1848, 4 vols folio.

Contains 210 beautiful plates of Malaysian plants.

*BENNETT J. J. and R. BROWN, *Plantae javanicae rariores.* Londini 1838–1852, folio, containing 50 plates of which 47 coloured.

Beautiful plates, mostly figuring Javan plants collected by TH. HORSFIELD. The original pencil drawings, by J. and C. CURTIS, for this book are preserved in the Bot. Dept Library of the Brit. Mus. at London.

*KORTHALS, P., *Kruidkunde,* in TEMMINCK, Verhandelingen. Leiden 1839–1844, 1 vol. folio, with 70 mostly hand-coloured plates of the standard type of the Flora Javae.

Plants mostly from Borneo and Sumatra.

BLUME, C. L., *Museum Botanicum Lugduno-Batavum etc.* Lugd. Bat. 1849–1856, 2 vols 8°, 56 plates.

*HOOLA VAN NOOTEN, Mrs B., *Fleurs, fruits et feuillages choisis . . . de l'Ile de Java.* Bruxelles 1st ed. 1863, according to PRITZEL containing 36 pl.; 2nd ed. 1866, 40 pl.; 3rd ed. 1880; large folio.

Beautifully coloured plates of useful plants (mostly fruits) and ornamentals.

*MIQUEL, F. A. W., *Choix des plantes rares ou nouvelles cultivées et dessinées dans le jardin botanique de Buitenzorg.* La Haye 1863, large folio, 26 pl.

Contains 26 beautiful, coloured plates of plants cultivated in the Botanic Gardens at Buitenzorg.

*MIQUEL, F. A. W., *Annales Musei botanici Lugduno-Batavi.* Amstelodami-Lipsiae 1863–1869, 4 vols folio, 40 pl.

Few but beautiful, coloured plates of Malaysian plants. Apparently some of the plates BLUME intended for his Flora Javae but left unpublished are reproduced in this work.

The exact dates of publication were published by T. NAKAI (Journ. Arn. Arbor. 6, 1925, p. 211–213).

MIQUEL, F. A. W., *Illustrations de la flore de l'Archipel Indien.* Amsterdam-Leipzig 1870–1871, 4°, 37 pl.

The work was published in 3 parts and contains quite a number of figures of interesting plants.

*BLANCO, *Flora de Filipinas.* 3rd ed. 1877–1883, with 473 coloured plates.

BECCARI, O., *Malesia.* Genova 1877–1890, 3 vols 4°, containing 137 plates.

GRESHOFF, M., *Schetsen van Indische nuttige planten.* 1894–1900, 5 parts folio, extra Bull. Kolon. Mus. Haarlem, 50 pl.

Plates of Malaysian useful plants, with large descriptions and many notes (in Dutch).

Oost-Indische planten- en cultuurgewassen. Drawings concerning colonial products; for educational use. Published by the Colonial Museum at Haarlem, 1895–1904, together 84 pl. fol.

Icones Bogorienses, Leiden 1897–1910, 8°. A serial of which 16 parts (4 vols) are published, in all 200

non-coloured plates, to which various authors (BOERLAGE, J. J. SMITH, TH. VALETON, *etc.*) contributed.

Important contributions to *Annonaceae*, *Rubiaceae*, *Orchidaceae*. Many plants new described. The work was edited at Buitenzorg (printed at Leyden) under the direction of the Keeper of the Herbarium.

SMITH, J. J., *Die Orchideen von Java*. Figurenatlas. Leiden 1908–1914, 6 parts, 8°, 483 plates containing analyses of flowers of Javan orchids.

The work was continued as 'Nachträge' (supplements) accompanied by plates too (Bull. Jard. Bot. Buit. sér. 3, vol. 5, 1922, *t.* 18–37 figuring 69 plants; *l.c.* 6, 1924, pl. 1–25 figuring 96 plants and *l.c.* 9, 1927, pl. 2–8 figuring 30 plants).

Nova Guinea. Botanical volumes 8, 12, 14 and 18 appeared in parts at intervals between 1911 and 1936, in Holland, edited by Prof. Dr A. PULLE. 4°. Will be continued.

Contains numerous plates, *e.g.* of *Ericaceae*, *Orchidaceae*, *Sapotaceae*, *Rubiaceae*.

KOORDERS, S. H., *Atlas der Baumarten von Java*. Leiden 1913–1918, 4 vols 8°.

In all 400 plates of Javanese arboreous plants, mostly trees, which were treated in the 13-volume work KOORDERS & VALETON 'Bijdragen tot de kennis der boomsoorten van Java' (Add. cogn. flor. arbor. javan.) 1894–1914.

KOORDERS, S. H., *Exkursionsflora von Java. Atlas*. Jena 1913–1937, vol. 4 of the whole work, 7 parts, 8°, containing 1313 figs.

The atlas was edited by FISCHER in Jena; in general the plates are bad and not trustworthy, which is very unfortunate.

KOORDERS, S. H., *Supplement op het eerste overzicht der flora van N.O. Celebes*. Batavia 8°. Vol. 2 of the work published in 1922, containing 127 plates.

SCHLECHTER, R., *Figurenatlas zu den Orchidaceen von Deutsch Neu-Guinea* (FEDDE Repert. Beihefte vol. 21, Heft 1–14, 1923–1928).

1440 Figures of flower analysis of Papuan orchids.

BACKER, C. A. & D. F. VAN SLOOTEN, *Geïllustreerd handboek van de Javaansche Theeonkruiden*. Batavia 1924. 8°.

Handbook of weeds occurring in tea plantations in Java, containing descriptions of 240 plants. Each plant is excellently figured.

BACKER, C. A., *Onkruidflora der Javasche suikerrietgronden*. Pasoeroean 1928–1934, 8°.

A work similar to the above, dealing with the weeds growing on sugar-cane fields. In all 753 plants are described and each plant was to have a page plate drawing, the plates constituting a separate volume or atlas. This atlas appeared in parts; up till April 1942 15 parts had appeared (March 1928–Oct. 1941) representing 480 species.

SMITH J. J., *Icones orchideacearum malayensium* (Bull. Jard. Bot. Buit. sér. 3, Suppl. vol. 2–3, 1930–1949).

In all 7 parts (176 *tab.*) appeared, on which numerous species of Malaysian orchids are figured. These analyses belong to non-Javan species described by SMITH in Bull. Jard. Bot. Buitenzorg.

OCHSE, J. J. & R. C. BAKHUIZEN VAN DEN BRINK, *Indische Groenten*. Batavia 1931 (also English edition), 8°.

Contains 463 text-figures of Malaysian vegetables.

*OCHSE, J. J. & R. C. BAKHUIZEN VAN DEN BRINK, *Vruchten en vruchtenteelt in Nederlandsch Indië*. Batavia 1931, 8°.

Contains 57 full page coloured plates of Malaysian fruits.

*BRUGGEMAN, M. L. A., *Indisch tuinboek*. Amsterdam 1939, 8°, 2nd ed. 1948.

Indonesian garden book containing 292 coloured figures.

CORNER, E. J. H., *Wayside trees of Malaya*. 1940, 2 vols 8°.

The 2nd volume is an atlas of beautiful photographs.

KORIBA, K., *Illustrated common medicinal plants of the Southern Regions*. In Japanese. Penang 1942, small 8°. 700 plates, index.

2. Collections of non-published drawings and photographs. *Album botanique et horticole*. T. DE RIJK of Soerabaya forwarded an album bearing the cited title, containing drawings of *wild and cultivated plants from the Dutch East Indies*, to the International Exposition at Amsterdam, 1883. The drawings were provided with French manuscript text. (*cf.* Catalogus der Tentoonstelling p. 128).

*ANONYMOUS, Collection of large beautifully coloured plates mostly of *Bornean plants collected by Nieuwenhuis* after specimens cultivated in the Botanic Gardens, Buitenzorg. Probably drawn about the year 1900; preserved at Buitenzorg.

*BERNECKER, A., *A collection of 60 framed plates*, draughtsman BERNECKER, owned by the late Governor General Baron SLOET VAN DE BEELE, was exposed at the International Exposition at Amsterdam, 1883 (list of names *etc.* in 'Catalogus der Tentoonstelling' p. 126–128); now in Herb. Leyden.

BIK, A. J., numerous drawings made during REINWARDT's voyage to the eastern part *of the Malay Archipelago* in 1821–1822, were brought back to Holland. Many of the originals are still in the Leyden Herbarium.

*BURBIDGE, F. W., 40 plates + 115 original sketches, some coloured, *made in Borneo, of Orchids, Pitcher-plants, etc.*. In the Bot. Dept Library of the Brit. Mus. (purch. 1886).

CAMELLUS, *cf.* KAMEL.

*DESCHAMPS, L. A., *Water-colour sketches of Javan scenery, plants and animals*, in the Bot. Dept Library Brit. Mus. London.

DESCHAMPS, L. A., *Plates of Javan plants*, in the Bot. Dept Brit. Museum (Nat. Hist.), 270 folio pencil drawings, made between 1794 and 1798. Very few are coloured. The species have been identified by Dr C. G. G. J. VAN STEENIS & Dr C. A. BACKER *a.* 1947.

FORBES H. O., 26 *Original drawings of Sumatran and Javan Plants*, made by himself during his travels in the Eastern Archipelago. In the Bot. Dept Library Brit. Mus. London (acq. 1884).

*GROL(L)MAN, made *coloured plates of orchids.* According to J. J. SMITH (*in litt. dd.* June 14, 1934) they are preserved at Buitenzorg or Leyden.

HORSFIELD, TH., 33 *Original pen-and-ink sketches* showing dissections of the new or doubtful genera, 1814–1851, that accompanied his collection with his MS. list of Javanese plants, are in the Bot. Dept Library Brit. Mus. London.

KAMEL, G. J., *Descriptiones fruticum et arborum Luzonis.*

This volume of pen-and-ink drawings with autograph descriptions is in the Bot. Dept Library Brit. Mus. London.

KAMEL, G. J., *Herbarium aliarumque stirpium in insula Luzone Philippinarum* primaria nascentium icones ab auctore delineatae ineditae. 260 *tab.* at Louvain, Belgium.

A syllabus was published in RAY, Hist. Plant., vol. 3.

*KORTHALS, P. W., numerous, > 899, coloured plates of *plants from Java and Sumatra West Coast* in Herb. Leyden.

*KUHL. H. & J. C. VAN HASSELT, *Manuscript descriptions of several Javan plants accompanied by coloured drawings* (some of which reproduced by BLUME) by VAN RAALTEN, BIK and KEULTJENS. One volume in the library at Buitenzorg. Removed by the Japanese Army to Batavia in about 1944; found back in 1950.

I. MERCADO, The original illustrations in colour were not reproduced when the MS. of 'Libro de medicinas *etc.*' (1880) was published (*cf.* MERRILL, Species Blancoanae, 1918, p. 11).

*NOROÑA, F. DE, *Icones ineditae* 110 *plantarum javanicarum.*

Sets of this collection of plates are at Paris, Berlin and in the British Museum, London.

The original set (now presumably at Paris), was made by a Dutch draughtsman during NOROÑA's stay in Java (1786–87). J. HOOIJMAN had the first copy made before NOROÑA's departure; a second copy was evidently made at 'Het Marineschool' (Naval School) at Semarang in 1792, and a third one in 1796 at the same school (see details on p. 338*b*).

The copies of 1792 and 1796 are probably respectively at Berlin and in the British Museum; these are identical but differ from that extant at Paris. Several plates present in the Paris copy are absent from the above-mentioned copies, but some which are present in these are absent from the Paris copy.

The first copy, of J. HOOIJMAN, may have got lost, at least no present location is known.

A MS.account of the plates in drawn by Dr VAN STEENIS.

*NORTH, MARIANNE, Several paintings of *plants and scenes from Borneo, Singapore and Java.* Made in 1872–1885.

In the gallery of her Paintings of plants and their homes, Royal Gardens, Kew (*cf.* Catalogue, London 1886, 4th ed.); many misspellings of geographical names!

REINWARDT, C. G. C., *Drawings from Java* with Herb. REICHENBACH in Herb. Vienna. Probably made by the draughtsmen A. PAYEN, A. J. and J. F. BIK.

*RIDLEY, H. N., > 1000 drawings of *orchids etc.*, many coloured, at Kew.

*ROXBURGH, W. (probably *Jr*), 14 Water-colour drawings of *Malayan plants*, with one of a *Cycas* from the Moluccas in Bot. Dept Library Brit. Mus. London.

*SAN THOMAS, Frey ALBERTO DE, '*Virtudes de algunas plantas, folhas, frutas, cascas e raizes de diferentes arvores e arbustos da Ilha de Timor*' (MS. *c.* 1750). In Arquivo Historico Colonial Lisboa; accompanied by hand-water-coloured plates.

*SMITH, CHRISTOPHER, 183 Original water-colour drawings of *Plants from the Straits Settlements.* In the Bot. Dept Library Brit. Mus. London (acq. 1885).

*SPANOGHE, J. B., > 70 *Plates of Timor and Javan plants* present at Leyden. The partly coloured plates were intended to illustrate his 'Prodromus florae timorensis' (Linnaea 15, 1841); as the reproduction would have been too expensive, they remained inedited. At Leyden several plates are lacking.

*STEENIS, C. G. G. J. VAN, *c.* 450 *Javan mountain plants*, coloured, on 57 plates, intended to be published. Draughtsmen AMIR HAMZAH and TOHA.

The figures were made after plants collected by VAN STEENIS who, on most of the collecting trips, was accompanied by the draughtsmen. The accompanying text runs along the lines of similar books of the European Alps, and is nearly finished. This expensive edition is not yet published for lack of funds. The book is to be entitled 'Javan mountain plants in colours'.

STEENIS, C. G. G. J. VAN, *c.* 170 *Photographs of mostly Javan plants and vegetation types;* all nature photographs.

They were selected from about 5000 photographs of plants, made mainly by the author, C. N. A. DE VOOGD and W. M. DOCTERS VAN LEEUWEN. The book was promised to the D.E.I. Natural History Society; it was to be named 'Botanizing with the camera'. The text is partly ready. The photographs were compiled about the year 1939; they will be used for the 2nd volume of this flora.

VER HUELL, Q. M. R., many unpublished *pencil drawings* in Herb. Leyden. They were made for MIQUEL.

VOOGD, C. N. A. DE, *c.* 125 small *pen-portraits of common Javan weeds.*

Intended for use by schools, and aiming at introducing friends of nature newly arriving in Java, with the most common weeds. The drawings were made by DE VOOGD himself with the aid of Indonesian artists, and are his private property; they were made about the year 1939. This popular booklet is now in the press (1949).

*WITSEN, N., *Plantae Javanicae pictae* ex Java Transmissae anno MDCC. Curâ et sumtibus NICOLAI WITSEN consulis Amstelaedamis. In Libr. Teyler, Haarlem.

This collection, containing 232 large folio coloured plates of Javan plants, was drawn under the supervision of WITSEN, a wealthy Amsterdam burgomaster. According to an inscription in the bound

volume, present in the Teyler Museum at Haarlem, the plants were identified once more in 1758; a manuscript list of the names of the figured plants is bound with the collection. According to LUBACH (Arch. Mus. Teyler, 1, 1868, p. 140–143) the man who wrote the list was certainly no botanist, there being many mistakes in the spelling. BURMAN who made the above-mentioned inscription gave no information as to the scientist who classified the plants. The annotations on the plates are written in 3 different hand-writings, one of which is evidently a 17th century one, and one of the remaining certainly BURMAN's.

ZIPELIUS, A. After his death his drawings bearing upon *the flora of New Guinea, Timor, Banda, Amboina, and Celebes, etc.* were forwarded to BLUME, together with his manuscripts (1852). Though the original intention was that the latter should publish ZIPELIUS's botanical inheritance, nothing of the kind resulted. Some drawings are still preserved at Leyden. Some were published in 'Rumphia' and 'Flora Javae' *Suppl.* '*Pl. inedit.*'

j. ANNOTATED LIST OF LITERATURE FOR THE USE OF BOTANISTS AND EXPLORERS IN MALAYSIA

As a matter of fact exploration in Malaysia is often undertaken without a previous bibliographic preparation. Foresters and agriculturists beyond the reach of the few large libraries in Malaysia are often unaware of the literature concerning the pre-existing knowledge of remote parts of the Archipelago. A most illustrative example of this was that of a botanic exploration in the Aroe and Tanimbar Islands by the Forest Service at Buitenzorg, specially aiming at getting samples and seeds of species of *Eucalyptus*. The explorer was given no time to study literature beforehand and the result was that he did not find *Eucalyptus;* unfortunately, he did not visit the only island in the Aroe Archipelago from which the occurrence of *Eucalyptus* was mentioned in literature. This is of course working on inefficient lines of research wich should be avoided at all costs. As the present work gives a key to the botanical exploration, which is easily consulted by the special lists prepared for this aim, it seems useful to enumerate (besides) some general important botanical works for additional use. These have been copied partly from a provisional list published previously in Chronica Botanica (5, 1939).

Bibliographies of the botany of Malaysia and surrounding countries

Most of these valuable works were compiled by MERRILL; the following are worth mentioning:

MERRILL, E. D., *Index to Philippine literature* 1–6 (Philip. Journ. Sci. C. Bot. 2, 1907, p. 241–250, 345–349, 437–439; *l.c.* 3, 1908, p. 87–94; *l.c.* 4, 1909, p. 677–685; *l.c.* 5, 1910, p. 259–266).

MERRILL, E. D., *A contribution to the bibliography of the botany of Borneo* (Sarawak Mus. Journ. 2, 1915, p. 99–136), supplemented in MERRILL, E. D., *A bibliographic enumeration of Bornean plants* (Special *no* of Journ. Str. Br. Roy. As. Soc. 1921, p. 2–6).

MERRILL, E. D., *An enumeration of Philippine flowering plants* vol. 4, 1926, p. 155–239.

MERRILL, E. D., *Polynesian botanical bibliography*, 1773–1935 (Bull. Bern. P. Bish. Mus. *no* 144, 1937).

MERRILL, E. D. & E. H. WALKER, *A bibliography of Eastern Asiatic Botany* (Arn. Arbor. Harv. Univers. 1938).

A catalogue of scientific literature pertaining to the Natural Resources of Great East Asia (compiled by the Department of Education of Dai Nippon, 1942 onwards).

The New Guinea volume was published in 1942, that on the Malay Peninsula in 1943.

An annotated bibliography of the SW. Pacific & adjacent areas. Vol. I (1944) The Neth. & Br. East Indies, the Philippine Islands; vol. II Malaya, Thailand, Indochina, the China coast and the Jap. empire. Allied Geogr. Sect. SW. Pacific Area (*non vidi*).

MERRILL, E. D., *A botanical bibliography of the islands of the Pacific* (Contrib. U.S. Nat. Herb. 30, pt 1, 1947; with *A subject index* by E. H. WALKER).

Interpretation of pioneer botany

MERRILL has done admirable work in the interpretation of old botanic works which are of basic importance for the naming of Malaysian plants, *viz* of RUMPHIUS,[1] BLANCO,[2] BURMAN,[3] LOUREIRO[4] and HOUTTUYN.[5]

References: (1) *An interpretation of Rumphius's Herbarium Amboinense.* Manila 1917 (Bur. Sci. Publ. 9, 595 pp., w. map).

(2) *Species Blancoanae.* Manila 1918 (Bur. Sci. Publ. 12, 423 pp., w. map).

(3) *A review of the new species of plants proposed by N. L. Burman in his Flora Indica* (Philip. Journ. Sci. 19, 1921, p. 329–388).

(4) *A commentary on Loureiro's Flora cochinchinensis* (Trans. Amer. Philosoph. Soc. N.S. 24, 1935, 445 pp.).

(5) *A critical consideration of Houttuyn's new genera and species* 1773–1783 (Journ. Arn. Arbor. 19, 1938, p. 291–375).

Additional notes on Houttuyn's binomials (*l.c.* 20, 1939, p. 264–268).

Guide for exploration

C. N. A. DE VOOGD, Z. SALVERDA and C. G. G. J. VAN STEENIS published a pocketbook in Dutch (Buitenzorg 1940) called '*Wenken voor de rimboe*' (Hints for the jungle) in which practical camping is described.

Further the reader is referred to Chapter II of this Cyclopaedia.

Topography

In the year 1938 a large well-prepared modern Atlas appeared, covering the area of Indonesia ('*Atlas van tropisch Nederland*'). The new spelling (1923) is used. The work was compiled by the Roy. Dutch Geogr. Society, and edited by the Topographical Service in Java. Geological and plant-geographical maps are included.

Botanic terms

The best work is still the glossary by JACKSON.[1] Quite a number of editions appeared, the old ones being equally good and much cheaper than the rather expensive new editions. A very useful botanical vocabulary was compiled recently by C. A. BACKER.[2]

References: (1) JACKSON, B. D., *A glossary of botanic terms* with their derivation and accent. 1st ed. 1900, 4th ed. 1928.

(2) BACKER, C. A., Dutch-English taxonomic-botanical vocabulary. Rijksherbarium, Leiden 1949, 225 pp. (stencilled).

History of botany in Malaysia

In the 1st edition of the 'Encyclopaedie van Nederlandsch Oost-Indië' J. G. BOERLAGE compiled a summary on *the history of botany and botanical literature in the Dutch East Indies* (without date, vol. 1, p. 270–279). This was revised by Dr A. PULLE in the 2nd edition of the same encyclopaedia (vol. 1, 1917, p. 392–403), and supplemented by C. G. G. J. VAN STEENIS (vol. 6, 1931, p. 800–809). Most of the taxonomical literature is included in these articles.

In the 'Rumphius Gedenkboek' (1902) O. WARBURG has compiled much information about the history and botany of the Moluccas.

A very useful book is further the doctorate thesis of Prof. Dr M. J. SIRKS, *Natuuronderzoek in Nederlandsch Indië*, Amsterdam 1915.

In vol. 4 of 'Flora Malesiana' DE WIT wrote an up to date *Short history of the phytography of Malaysian vascular plants* (1949, p. lxxi–clxi.)

Etymological dictionary of scientific plant names

BACKER compiled a voluminous work[1] in which the scientific names of all Indonesian and Netherlands plants are explained (incl. synonyms). There are about 20.000 entries; *c.* 2000 plant names are derived from personal names and a short biographical note is given of each of these persons. Many mistakes made in previous works (WITTSTEIN *etc.*) are corrected.

References: (1) BACKER, C. A., *Verklarend woordenboek van wetenschappelijke plantennamen* (Dict. of scient. plant names). Groningen 1936, 664 pp.

Botanical research in the Royal Botanic Gardens of Indonesia at Buitenzorg

On the occasion of the quinquagenary of the Foreigners' (or so-called Treub Laboratory) at Buitenzorg a review was compiled of the botanical research done in this laboratory mostly on general botany. The introduction by K. W. DAMMERMAN is followed by annotated bibliographies in various branches of botany.[1]

References: (1) Ann. Jard. Bot. Buit. 45, 1935–38.

Vegetation types

The present author has published[1] a preliminary account of the various vegetation types of Malaysia, together with short discussions of the relations between climate and flora, and soil and flora in Java. A scheme of the types of vegetation is given, and the distribution of the main types is shown on a coloured map.

Vol. 2 of this Flora will represent an enlarged treatment of the same subject.

References: STEENIS, C. G. G. J. VAN, *Maleische vegetatieschetsen* (Sketches of Malaysian vegetation) (Tijdschr. K.N.A.G. 52, 1935, p. 25–67, 171–203, 363–398, 1 col. vegetation map).

Origin of the Malaysian mountain flora

A series of 3 papers on the dispersal, origin, altitudinal zones, *etc.* of Malaysian mountain plants has been published by the author.[1] A list is given of all the representatives of genera of which no species are known to occur below 1000 m altitude. A discussion of the past climates of Malaysia is also included.

References: (1) STEENIS, C. G. G. J. VAN, *On the origin of the Malaysian mountain flora* I–III (Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1934, p. 135–162, 289–417; and *l.c.* 14, 1936, p. 56–72).

Peat, bogs and swamps

Pioneer research work on peat formation in Malaysia has been carried out by Miss POLAK. She has shown[2] that bogs ('Hochmoore') occur in the forested lowland and in (eutrophic) swamps in the mountains.

Much information on waterplants is incorporated in VAN STEENIS's study[1] on the plants collected in Sumatra, Java and Bali by the German Limnological Sunda Expedition.

References: (1) STEENIS, C. G. G. J. VAN, *Die Pteridophyten und Phanerogamen der Deutschen Limnologischen Sunda Expedition* (Arch. f. Hydrobiol. Suppl. vol. 11, 1932, p. 231–387, 8 figs, tables, pl. 27–63).

(2) POLAK, B., *Über Torf und Moor in Niederländisches Indien* (Verh. Kon. Akad. Wetensch. Amsterdam sect. II, vol. 30, 1933, 84 pp.).

Local ecology of mountain flora

DOCTERS VAN LEEUWEN has written[2] a valuable illustrated book on the ecology and biology of the summits of Mts Pangrango and Gedeh in West Java (altitude 2400/3000 m); it deals with both animals and plants, and contains chapters on dispersal, physiognomy, floral biology, *etc.*

W. H. BROWN wrote a valuable book[1] on similar problems in the Philippine mountain flora.

References: (1) BROWN, W. H., *The vegetation of Philippine mountains.* The relation between environment and physical types at different altitudes (Bur. Sci. Publ. Manila 13, 1919, 434 pp. 41 pl.).

(2) DOCTERS VAN LEEUWEN, W. M., *Biology of plants and animals occurring in the higher parts of Mt Pangrango-Gedeh,* West Java (Verh. Kon. Akad. Wetensch. Amsterdam sect. II, 31, 1933, 278 pp., 66 fig., 30 pl.).

The Krakatau problem

BACKER,[1] ERNST,[2] and DOCTERS VAN LEEUWEN[3] have written important publications on the Krakatau problem, dealing with the origin and succession stages of the new flora, the evidence for and against absolute sterilization, *etc.*

References: (1) BACKER, C. A., *The problem of Krakatau* as seen by a botanist. Weltevreden 1929, 299 pp.

(2) ERNST, A., *Das biologische Krakatauproblem* (Vierteljahrschr. Naturf. Ges. Zürich 79, 1934, 187 pp.).

(3) DOCTERS VAN LEEUWEN, W. M., *Krakatau, 1883 to 1933. Botany.* (Ann. Jard. Bot. Buit. 46/47, 1936, 506 pp., 35 pl.).

The flora of craters

VON FABER has published[1] an illustrated book on the flora of craters; it deals especially with the ecology of Javan crater plants.

References: (1) FABER, F. C. VON, *Die Kraterpflanzen Java's.* Weltevreden 1927, 119 pp., 18 pl.

Useful plants

In 1927 the second edition of the Dutch-written work of HEYNE 'Useful plants of the Dutch East Indies' appeared.[2]

This is one of the most critical and informative books on Malaysian plants. Unfortunately it is not illustrated.

No botanical descriptions are given, though the arrangement is a systematic one. A technological classification of the uses of plants is attempted, and the work is completed by an extensive and useful index of native names.

As it is out of print, a new unaltered edition will soon be published.

A work comparable to HEYNE's, is that of BURKILL[5] for the Malay Peninsula. The information in this important work is arranged alphabetically.

OCHSE and BAKHUIZEN VAN DEN BRINK have compiled a comprehensive account of native vegetables[3] of which there is also an English edition. Most of the species are figured; of each species a botanical description is given, together with information about its use.

The same authors have compiled a work on a selection of Malaysian fruits,[4] of which there is also an English edition. Each kind is accompanied by one or more finely coloured plates. In all fifty-one kinds are represented; each plate is accompanied by a botanical description.

In the Philippines W. H. BROWN has written many articles on Philippine useful plants. These have been published and have been reprinted in 3 volumes.[1]

References: (1) BROWN, W. H., *Minor products of Philippine forests* (Philip. Forestry Bull. 22, 1920/21, 3 vols).

(2) HEYNE, K., *De nuttige planten van Nederlandsch-Indië* (The useful plants of the Dutch East Indies). Ed. 2, Weltevreden 1927, 3 vols, ccxi + 1662 pp.

(3) OCHSE, J. J. & R. C. BAKHUIZEN VAN DEN BRINK, *Indische Groenten* (Vegetables of the Dutch East Indies). Batavia-C. 1931, xxxv + 1003 pp.—Also English edition.

(4) OCHSE, J. J. & R. C. BAKHUIZEN VAN DEN BRINK, *Vruchten en vruchtenteelt in Nederlandsch-Indië* (Fruit and fruit culture in the Dutch East Indies). Batavia-C. 1931, ix + 181 pp., 57 col. pl.—Also English edition.

(5) BURKILL, I. H., *A dictionary of the economic products of the Malay Peninsula.* London 1935, 2 vols, xi + 2402 pp.

Weed Floras

A weed Flora of the tea and cinchona plantations of Java was published by BACKER & VAN SLOOTEN in 1924, comprising 240 species.[1] A description and full-page figure is given of each species. General introduction, relation to climate, keys for determination. In the years 1928–1934 BACKER wrote[2] a voluminous work on the weed flora of the sugar-cane fields of Java, comprising 753 species; the atlas is not yet completed. The treatment is similar to that of the weed Flora of the tea plantations, but still more elaborated. This book is in fact a critical key to a large number of Javan lowland weeds.

References: (1) BACKER, C. A. & D. F. VAN SLOOTEN, *Geïllustreerd handboek der Javaansche thee-onkruiden* (Illustr. handbook of the weed flora of Javan tea plantations). Batavia 1924, 300 pp., 240 pl.

(2) BACKER, C. A., *Onkruidflora der Javasche suikerrietgronden* (Weed Flora of Javan sugar-cane fields). Soerabaja, 1928–1941, 82 + 907 pp. + Atlas.

Horticulture

In 1930 a new Catalogue of the Botanic Gardens, Buitenzorg, appeared,[1] followed in 1938 by a supplementary index. About 10.000 plant species are represented by about 20.000 specimens. The generic and specific names are arranged alphabetically.

A valuable illustrated book on orchids and orchid culture has been written by DAKKUS.[2] It is semi-popular and already in its 3rd edition.

A fine work is that of BRUGGEMAN[3] on garden plants, in which 314 plants are represented by very good coloured illustrations.

A very good horticultural journal is the *M.A.H.A. Magazine,* of which 11 volumes (1927–1941) have been published; edited in the Malay Peninsula.

In Java a special—popular—Orchid journal was

published, '*De Orchidee*' (vol. 1, 1932–→). In the Malay Peninsula and in the Philippines similar journals devoted to orchids are issued.

References: (1) DAKKUS, P. M. W., *An alphabetical list of plants cultivated in the Botanic Gardens, Buitenzorg* (Bull. Jard. Bot. Buit. sér. 3, Suppl. 1, 1930, xx + 305 pp).

(2) DAKKUS, P. M. W., *Orchideeën*, welke in Ned.-Indië gekweekt kunnen worden (Orchids which can be cultivated in the Dutch East Indies). Ed. 3, Bandoeng 1935, 367 pp., 184 fig.

(3) BRUGGEMAN, M. L. A., *Indisch tuinboek* (Indonesian garden book). Amsterdam 1939, 314 pp., 292 col. fig.; 2nd ed. 1948.

Flora of Indonesia

There is a large number of taxonomic revisions, but the areas taken into consideration and the method of treatment are not always conform, and unfortunately they have been published in various journals. An important series of revisions has been published by the Herbarium of the Botanic Gardens, Buitenzorg, Java, in the 'Bulletin du Jardin Botanique de Buitenzorg' (since 1940 'Bulletin of the Botanic Gardens'), 3rd series, onwards from volume 5 (1923–*hodie*), *e.g.* of the *Alangiaceae*, *Bignoniaceae*, *Bombacaceae*, *Burseraceae*, *Combretaceae*, *Dipterocarpaceae* (partly), *Ebenaceae*, *Flacourtiaceae*, *Gnetaceae*, *Loganiaceae*, *Loranthaceae*, *Nepenthaceae*, *Polygonaceae*, *Sapotaceae*, *Styracaceae*, *Verbenaceae*, *etc.*

A similar series is published in the journal 'Blumea' issued by the Rijksherbarium, Leyden, Holland, *e.g.* part of the *Compositae*, *Coniferae* (partly), *Convolvulaceae*, *Cornaceae*, *Umbelliferae* (1934–*hodie*).

Still others are found in the 'Receuil des Travaux Botaniques néerlandaises' issued by the Roy. Netherlands Botanical Society (*e.g. Melastomataceae*), the 'Proceedings of the Kon. Akademie v. Wetenschappen', *etc.*. Some have been printed privately serving for inaugural dissertations mainly emanating from the Botanical Museum and Herbarium of Utrecht University.

References to these contributions will be inserted under the respective families in an alphabetical list to be printed in volume 4 of the present Flora.

Flora of Sumatra

Sumatra originally belonged to the territory of the English, and it was under RAFFLES's governorship that JACK published his *Malayan Miscellanies*, in which several new plants were described.[1]

The oldest—now obsolete—compilation is by MIQUEL.[2] BOERLAGE[3] published the scarce botanical results of the Central Sumatra Expedition 1877–79, and KOORDERS his equally scant results of the Central Sumatra Expedition 1891.[4]

RIDLEY wrote[6] a paper on plants collected by him in Sumatra East Coast Residency and one on the plants of Kerintji (Korinchi) Peak[5] collected by KLOSS *c.s.*, one on Bencoolen plants[8] and one on the flora of the Mentaw(a)i Islands.[9]

In recent time MERRILL[14, 15, 17] has written some valuable contributions; J. J. SMITH gave an enumeration of all orchids known from the island,[11] not yet including the CARR collection, which was published by CARR himself.[12]

In the British Museum FORBES's collections of S. Sumatra were worked out.[7] On his trips to South Sumatra[13] and extreme North Sumatra[16] VAN STEENIS gave general reports. BARTLETT published an account of the Sumatran plants collected in the Batak region.[10]

References: (1) JACK, W., *Malayan miscellanies.* Bencoolen 1820–22, 2 vols.

(2) MIQUEL, F. A. W., *Sumatra* (Fl. Ind. Bat. Suppl. 1, 1860; reprint. 1862).

(3) BOERLAGE, J. G., *Flora*, in VETH, Midden-Sumatra 4, pt 2, 1884, p. 16–50, pl. 1–2.

(4) KOORDERS, S. H., in IJZERMAN, *Dwars door Sumatra*, 1895, p. 507–536; and KOORDERS-SCHUMACHER, Syst. Verzeichnis II. Abt. Sumatra, 1910.

(5) RIDLEY, H. N., *c.s., Results of an expedition to Korinchi Peak*, Sumatra, Botany (Journ. Fed. Mal. St. Mus. 8, pt 4, 1917, p. 1–145, pl. 1–4).

(6) RIDLEY, H. N., *A botanical excursion to North Sumatra* (Journ. Mal. Br. Roy. As. Soc. 1, 1923, p. 46–113).

(7) RENDLE, A. B., *c.s., Dr. H. O. Forbes' Malayan plants* (Journ. Bot. 62, 1924, Suppl. p. 1–48; *l.c.* 63, 1925, Suppl. p. 49–136; *l.c.* 64, 1926, Suppl. p. 137–149).

(8) RIDLEY, H. N., *Plants from Bencoolen, Sumatra.* Collected by Mr C. J. BROOKS (Kew Bull. 1925, p. 76–94).

(9) RIDLEY, H. N., *The flora of the Mentawi Islands* (Kew Bull. 1926, p. 57–94).

(10) BARTLETT, H. H., *Sumatran plants collected in Asahan and Karoland* with notes on their vernacular names (Pap. Michig. Acad. Sci. Arts & Lett. 6, 1926, p. 1–66).

(11) SMITH, J. J., *An enumeration of the Orchidaceae of Sumatra and neighbouring islands* (FEDDE Repert. 32, 1933, p. 129–386).

(12) CARR, C. E., *Some Malayan Orchids* IV (Journ. Mal. Br. Roy. As. Soc. 11, 1933, p. 66–109, i–iv, pl. 1–13).

(13) STEENIS, C. G. G. J. VAN, *Results of a botanical trip to the Ranau region, S. Sumatra* (Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1933, p. 1–56).

(14) MERRILL, E. D., *An enumeration of plants collected in Sumatra by W. N. & C. M. Bangham* (Contrib. Arn. Arbor. 8, 1934, 178 pp., 14 pl.).

(15) MERRILL, E. D., *New Sumatran plants* (4 papers published in Papers Michigan Acad. Sci. Arts & Lett. vols 19, 20, 23 and 24, 1934, 1937–1938).

(16) STEENIS, C. G. G. J. VAN, *Exploraties in de Gajoelanden. Algemeene resultaten der Losir Expeditie* 1937 (Tijdschr. K.N.A.G. 55, 1938, p. 728–801).

(17) MERRILL, E. D., *Botanical results of the George Vanderbilt Sumatran expedition 1939* (Not. Nat. Acad. Nat. Sci. Philadelphia *no* 47, 1940, 9 pp.).

Flora of the Malay Peninsula

RIDLEY published his 5-volume 'Flora of the Malay Peninsula' in 1922–1925.[3] For critical studies

of Malay Peninsular plants one ought still to consult the 5-volume standard work by KING & GAMBLE,[1] and RIDLEY's earlier work on Peninsular Monocotyledons.[2]

A valuable addition to the flora of the Peninsula is the book written by CORNER on 'Wayside Trees',[5] which supplements in several respects RIDLEY's rather uncritical flora. HENDERSON wrote a valuable review of 'Limestone plants in the Malay Peninsula'.[4] In the 'Gardens' Bulletin', edited by the Botanic Gardens, Singapore, SYMINGTON, CORNER, FURTADO, HOLTTUM and HENDERSON contributed to a better knowledge of *Moraceae*, *Araceae*, *Palmae*, *Dipterocarpaceae*, *Pteridophyta*, and *Eugenia*.

This Gardens' Bulletin is indispensable for an up to date knowledge of the Malayan Flora. In the same Bulletin (1927) appeared the valuable compilation of BURKILL on 'Collectors, collections and collecting places in the Malay Peninsula', which has been of so much use for the present Cyclopaedia.

The Conservator of Forests, SYMINGTON, wrote a revision of the *Dipterocarpaceae* of the Malay Peninsula.[6]

References: (1) KING, G., & J. S. GAMBLE, *Materials for a flora of the Malay Peninsula* (Journ. Asiat. Soc. Beng. vol. 58→, 1889–1915).

(2) RIDLEY, H. N., *Materials for a flora of the Malay Peninsula*, Monocotyledons (1907–08).

(3) RIDLEY, H. N., *The flora of the Malay Peninsula*. London 1922–1925, 5 vols, 2846 pp.

(4) HENDERSON, M. R., *The flora of the limestone hills of the Malay Peninsula* (Journ. Mal. Br. Roy. As. Soc. 17, 1939, p. 13–87, pl. 3–12).

(5) CORNER, E. J. H., *Wayside trees of Malaya*. 1940, 2 vols, 8°.

(6) SYMINGTON, C. F., *Foresters' manual of Dipterocarps* (Malayan Forest Rec. *no* 16, Kuala Lumpur, 1943, xliii + 244 pp., 114 fig.).

Flora of Java

About 1890 TREUB suggested that a flora of Javan arboreous plants should be written, which resulted in the 13-volume *Bijdragen tot de kennis der boomsoorten van Java*.[1] This work was completed with an *Atlas der Baumarten von Java*, by KOORDERS.

It still represents a very good and original contribution to the Java flora, dealing with *c.* 1000 arboreous plants; the botanical part is written by TH. VALETON (and in later volumes also by Dr J. J. SMITH), the ecological and distributional notes were written by Dr KOORDERS, who organized the collecting of the material on which the work is based.

In 1911 S. H. KOORDERS—who was charged to write a mountain Flora of Java—compiled a Flora of Java which was completed in 3 vols in 1912. The work is uncritical and practically worthless.[5] BACKER wrote critical notes on its contents which KOORDERS unsuccessfully tried to contradict. Later a 4th volume, an atlas, was published; this was never completed.

KOORDERS wrote also a Flora of the Nature Reserve Tjibodas (above the mountain garden), which was completed by R. C. BAKHUIZEN VAN DEN BRINK after KOORDERS's death.[7] The work can only be used by botanists who possess knowledge of tropical plants.

SMITH wrote a very good book and several additional papers on the orchids of Java.[2] Fortunately he later gave a key for identification of the genera (Blumea 1, 1934, p. 194–215).

BACKER started[3] with one volume of a Flora of Batavia (1907); he published the 1st volume of his 'Schoolflora' in 1911,[4] and then compiled the weed Floras,[9–10] mentioned above; still later he began a new work in 1924/28, a handbook to the Flora of Java.[8] Three parts have appeared, dealing with a large number of the Monocotyledons, and together covering *c.* 500 pages. This work has been discontinued, and BACKER *c.s.* is now engaged in preparing a complete concise Flora of Java comparable to the old School-Flora. Owing to the war an emergency mimeographed edition in 25 copies was prepared at Leyden Herbarium. Hitherto (1949) 10 parts have appeared.[12]

In June 1939 an elaborate monograph of the fern flora of Java appeared,[11] comprising 515 species. This illustrated work contains full keys to the genera and species, with elaborate specific descriptions and details of distribution. It is a modern successor of RACIBORSKI's 40 years' old pioneer work.

HOCHREUTINER described several Java plants which were collected during his stay of some years in that island.[6]

Recently a concise school-flora was written[13] by C. G. G. J. VAN STEENIS *c.s.* It contains descriptions of and keys to a select number of *c.* 500 common species.

References: (1) KOORDERS, S. H. & TH. VALETON, *Bijdragen tot de kennis der boomsoorten van Java*. Batavia and 's-Gravenhage, 1894–1914, 13 vols.

KOORDERS, S. H., *Atlas der Baumarten von Java*. Leyden 1913–1918, 4 vols.

(2) SMITH, J. J., *Die Orchideen von Java*. Leiden 1905 = vol. 6 of the 'Flore de Buitenzorg', with atlas (1908–14). Afterwards completed by 7 'Nachträge' (in Bull. Dépt Agr. Ind. Néerl. *no* 13, 1907 and *l.c.* 43, 1910; in Bull. Jard. Bot. Buit. sér. 2, vol. 9, 1913; *l.c.* 14, 1914 and 26, 1918; and in *l.c.* sér. 3, 1921 and 9, 1927).

(3) BACKER, C. A., *Flora van Batavia* (1907).

(4) BACKER, C. A., *Schoolflora voor Java*. Weltevreden 1911.

(5) KOORDERS, S. H., *Exkursionsflora von Java*. Jena 1911–1912, 3 vols + 1 vol. atlas (1913–37).

(6) HOCHREUTINER, B. P. G., *Plantae Hochreutineranae* (Ann. Cons. & Jard. Bot. Genève 15/16, 1912, p. 145–247; Candollea 2, 1925, p. 317–513; *l.c.* 5, 1934, p. 175–341; *l.c.* 6, 1934–1936, p. 399–488).

(7) KOORDERS, S. H., *Flora von Tjibodas*. Batavia 1918. A manuscript, 'Beiträge und Verbesserungen zur Flora von Tjibodas', was prepared by C. G. G. J. VAN STEENIS in April 1933.

(8) BACKER, C. A., *Handboek voor de flora van Java*. 1924–1928, publ. Dept of Agriculture, Buitenzorg.

(9) BACKER, C. A. & D. F. VAN SLOOTEN, *Geïllustreerd handboek der Javaansche thee-onkruiden* (Illustr. handbook of the weed flora of Javan tea plantations). Batavia 1924.

(10) BACKER, C. A., *Onkruidflora der Javasche suikerrietgronden* (Weed Flora of Javan sugar-cane fields). Soerabaja 1928–34. Atlas not yet completed.

(11) BACKER, C. A. & O. POSTHUMUS, *Varenflora voor Java* (Fern Flora for Java). Buitenzorg 1939, 370 pp., 90 fig.

(12) BACKER, C. A., *c.s.*, *Beknopte Flora van Java* (nooduitgave), parts 1–10 (1940–1949).—Mimeographed emergency edition. In Dutch.

(13) STEENIS, C. G. G. J. VAN, G. DEN HOED, S. BLOEMBERGEN & P. J. EYMA †, *Flora voor de Scholen in Indonesië*. Batavia 1949. Small 8°, 407 pp. 46 fig.

Flora of the Lesser Sunda Islands

In FORBES, Wanderings *etc.*, a list is given[1] of the plants occurring in Timor, taking into consideration the older catalogues of DECAISNE and SPANOGHE.

The plants of ELBERT's Sunda Expedition were sent to Leyden, where they were worked out by HALLIER.[2]

Other contributions to the flora of some of these islands are given by VON MALM[4] and Mrs RENSCH[3] who worked out the collection made by RENSCH Sunda-Expedition.

A complete enumeration of the Pteridophyta was compiled by O. POSTHUMUS.[5]

References: (1) *Prodromus Florae Timorensis*, compiled in the Bot. Dept Brit. Mus. (in H. O. FORBES, A naturalist's wanderings *etc.*, London 1885, App. VI, p. 497–523).

(2) HALLIER, H., *Botanische Ergebnisse* (in ELBERT, Die Sunda Expedition *etc.* vol. 1, 1911, and in Meded. 's Rijks Herb. Leiden *no* 14, 1912, p. 1–42).

(3) RENSCH, I., *Farne und Bärlappe der Sunda-Expedition Rensch* (Hedwigia 74, 1934, p. 224–256, *t.* 7).

(4) MALM, J. VON, *Die Phanerogamenflora der Kleinen Sunda-Inseln und ihre Beziehungen.* Ein Beitrag zur RENSCHEN Sunda-Expedition. Dr's thesis, Berlin 1933/34 (FEDDE Repert. 34, 1934, 253–307).

(5) POSTHUMUS, O., *The ferns of the Lesser Sunda Islands* (Ann. Jard. Bot. Buit. 1943 (*hors série*), p. 35–113).

Flora of Borneo

Two very useful bibliographic enumerations were published by MERRILL in 1915[4] and 1921.[6]

The results of the HALLIER *f.*[5] and HUB. WINKLER[2] expeditions were included in the latter one.

Large and very valuable accounts of the flora of Mt Kinabalu were written by STAPF[1] and Miss GIBBS.[3] Many important studies were made by MERRILL,[7, 8, 9, 12, 13] based on collections made by MJÖBERG, CLEMENS, WOOD, ELMER and others. The results of the South Borneo expedition by HANS WINKLER (1924–25) are gradually appearing in a series of the Hamburg botanical journal.[10]

The general results of the Central Borneo expedition by ENDERT represent a valuable contribution.[11] RIDLEY, AIRY SHAW and others described numerous Bornean plants in the Kew Bulletin,[14] mainly from Sarawak and Br. N. Borneo.

CHRISTENSEN & HOLTTUM[16] studied the Pteridophytes of Mt Kinabalu; CARR[17] published an account of *Orchidaceae* of the same massif.

As to the islands bordering Borneo MERRILL[9] gave an account of the flora of Banguey Island and VAN STEENIS a general view on the flora of the Natuna Islands.[15]

Recently MASAMUNE made a not very successful attempt to give a new enumeration of Bornean Phanerogams[18] and Pteridophytes.[19]

References: (1) STAPF, O., *On the flora of Mount Kinabalu, in North Borneo* (Trans. Linn. Soc. Bot. 4, 1894, p. 69–263, pl. 11–20).

(2) WINKLER, HUB., *Beiträge zur Kenntnis der Flora und Pflanzengeographie von Borneo* (ENGL. Bot. Jahrb. 44, 1909, p. 497–571; *l.c.* 48, 1912, p. 87–118; *l.c.* 49, 1913, p. 349–380; *l.c.* 50, suppl., 1914, p. 188–208, pl. 3–5).

(3) GIBBS, L. S., *A contribution to the flora and plant formations of Mount Kinabalu and the highlands of British North Borneo* (Journ. Linn. Soc. Bot. Lond. 42, 1914, p. 1–240, pl. 1–8).

(4) MERRILL, E. D., *A contribution to the bibliography of the botany of Borneo* (Sarawak Mus. Journ. 2, 1915, p. 99–136).

(5) HALLIER, H., *Beiträge zur Flora von Borneo* (Beih. z. Bot. Centr. Bl. 2, Abt. 34, 1916, p. 20–53).

(6) MERRILL, E. D., *A bibliographic enumeration of Bornean plants* (special number of Journ. Str. Br. Roy. As. Soc. 1921, 637 pp.).

(7) MERRILL, E. D., *New or noteworthy Bornean plants* I–III (Journ. Str. Br. Roy. As. Soc. *no* 85, 1922, p. 151–201; *l.c. no* 86, 1922, p. 312–342; 87, 1923, p. 22–45).

(8) MERRILL, E. D., *Additions to our knowledge of the Bornean flora* I–II (Philip. Journ. Sci. 21, 1922, p. 515–534; *l.c.* 30, 1926, p. 79–88).

(9) MERRILL, E. D., *The flora of Banguey Island* (Philip. Journ. Sci. 29, 1926, p. 341–427, 1 map); *cf.* also *l.c.* 24, 1924, p. 113–116.

(10) IRMSCHER, E., and others, *Beiträge zur Flora von Borneo* (in Mitth. Inst. Allg. Bot. Hamburg vol. 7→, 1927→).

(11) ENDERT, F. H., in *Midden-Oost Borneo expeditie 1925*. Batavia 1927.

(12) MERRILL, E. D., *A collection of plants from Sarawak* (Sarawak Mus. Journ. 3, 1928, p. 513–*peditie* 557).

(13) MERRILL, E. D., *Plantae Elmerianae borneenses* (Univ. Calif. Publ. Bot. 15, 1929, 316 pp.).

(14) RIDLEY, H. N., H. K. AIRY SHAW, *c.s.*, *Additions to the flora of Borneo* and other Malay Islands (Kew Bull. 1930–46).

(15) STEENIS, C. G. G. J. VAN, *Botanical results of a trip to the Anambas & Natoena Islands* (Bull. Jard. Bot. Buit. sér. 3, vol. 12, 1931/32, p. 151–211, 11 fig.).

(16) CHRISTENSEN, C. & R. E. HOLTTUM, *The*

ferns of Mt Kinabalu (Gard. Bull. Str. Settlem. 7, 1934, p. 191–324, pl. 51–62), *cf.* also *Additions* by COPELAND in Philip. Journ. Sci. 56, 1935, p. 471–481, pl. 1–10).

(17) CARR, C. E., *Two collections of Orchids from Br. N. Borneo*, pt I (Gard. Bull. Str. Settlem. 8, 1935, p. 165–240).

(18) MASAMUNE, G., *Enumeratio Phanerogamarum.* Taihoku 1942.

(19) MASAMUNE, G., *Enumeratio Pteridophytarum.* Taihoku 1945.

Flora of the Philippines

MERRILL's invaluable 'Enumeration' appeared in 1923–1926;[2] its author contemplates a second edition. A most handy and generally useful local flora, is that written by MERRILL on the flora of Manila and environs.[1]

Many Philippine plants were described in ELMER's Leaflets of Philippine Botany (*nos* 1–10, 1907–1939), and in the Philippine Journal of Science (especially in the vols 1–41, 1906–1930) by MERRILL, C. B. ROBINSON, QUISUMBING, and others.

References: (1) MERRILL, E. D., *A flora of Manila.* Manila 1912 (Bur. Sci. Publ. *no* 5).

(2) MERRILL, E. D., *An enumeration of Philippine flowering plants.* Manila 1923–1926, 4 vols.

Flora of Celebes

On the flora of Celebes, which shows peculiar affinities and which is certainly very rich and varied, few compilations and reports are published. The most comprehensive work is still that by KOORDERS[2] on the Minahassa (NE. Peninsula); it is uncritical and apparently done in a hurry. Many species are referred to wrong genera.

In 1925 SCHLECHTER[3] gave an enumeration of Celebes orchids, together with a short itinerary of his journey in that island.

J. J. SMITH wrote several additions, *e.g.* pertaining to the expeditions of KAUDERN and KJELLBERG; mentioned under the collectors concerned.

Of the SARASIN and KJELLBERG collections only few families have been examined and published (Orchids, *Begonia, etc.*).

KJELLBERG's work on the Pteridophytes[4] supplements the older compilation by CHRIST.[1] Recently LAM, *c.s.*[5] contributed to the knowledge of the Celebes flora and its historical phytogeography.[6]

References: (1) CHRIST, H., *Die Farnflora von Celebes* (Ann. Jard. Bot. Buit. 15, 1898, p. 73–186).

(2) KOORDERS, S. H., *Enumeratio specierum phanerogamarum Minahassae* (in Versl. eener botanische dienstreis door de Minahassa, Meded. 's Lands Pl. Tuin. *no* 19, 1898, p. 253–645).

For the several scattered supplements to this enumeration, see the literature mentioned *sub* KOORDERS in the Alphabetical list of Collectors (Special Part).

(3) SCHLECHTER, R., *Die Orchidaceen der Insel Celebes* (FEDDE Repert. 21, 1925, p. 113–212).

(4) KJELLBERG, G. K. & C. CHRISTENSEN, *Pteridophyta celebenses Kjellbergianae* (ENGL. Bot. Jahrb. 66, 1933, p. 39–70).

(5) LAM, H. J., *Contributions to our knowledge of the flora of Celebes* (coll. C. MONOD DE FROIDEVILLE) and of some other Malaysian islands (Blumea 5, 1945, p. 554–599).

(6) LAM, H. J., *Notes on the historical phytogeography of Celebes* (Blumea, 5, 1945, p. 600–640).

Flora of the Moluccas

The earliest and most valuable basis of our knowledge of the Moluccan Flora is RUMPHIUS's 'Herbarium Amboinense'. Various keys for correlating his plants with modern botany were proposed of which MERRILL's is the last and most successful one.[6]

The Botany of the Challenger Expedition was worked out by HEMSLEY *c.s.*[1] In a paper on the Papuan Flora WARBURG[2] described plants from Ceram Laoet (= Gèsèr), the Aroe and Kai Islands. *Orchidaceae* were described by J. J. SMITH in various papers.[3, 5, 7]

An account of Amboina Pteridophytes was given by VAN ALDERWERELT VAN ROSENBURGH.[4]

Recently LAM & HOLTHUIS[8] published a first contribution on the Flora of Talaud and Morotai.

References: (1) HEMSLEY, W. B., *The botany of the Southeastern Moluccas* (in Rep. on the scient. results of the voyage of H. M. S. CHALLENGER during the years 1873–76, Botany, vol. 1, pt 3, 1885, p. 101–226).

(2) WARBURG, O., *Beiträge zur Kenntnis der papuanischen Flora* (ENGL. Bot. Jahrb. 13, 1891, p. 230–455).

(3) SMITH, J. J., *Die Orchideen von Ambon.* Batavia 1905, publ. Dept of Agriculture, Buitenzorg.

(4) ALDERWERELT VAN ROSENBURGH, C. R. W. K. VAN, *The Amboina Pteridophytes collected by C. B. Robinson* (Philip. Journ. Sci. C. Bot. 11, 1916, p. 101–123, pl. 5–6).

(5) SMITH, J. J., *The Amboina Orchidaceae collected by C. B. Robinson* (Philip. Journ. Sci. C. Bot. 12, 1917, p. 249–262).

(6) MERRILL, E. D., *An interpretation of Rumphius's Herbarium Amboinense* (Bur. Sci. Publ. 9, 1917, 595 pp., map).

(7) SMITH J. J., *Orchidaceae buruenses*, and *Orchidaceae seranenses* (resp. in Bull. Jard. Bot. Buit., sér. 3, vol. 9, 1928, p. 439–481, and in *l.c.* 10, 1928, p. 85–172).

(8) HOLTHUIS, L. B. & H. J. LAM, *A first contribution to our knowledge of the flora of the Talaud Islands and Morotai* (Blumea 5, 1942, p. 93–256). Consists of a general and a systematic part.

Flora of New Guinea

The rather complicated bibliography of New Guinea and neighbouring islands falls historically into three parts coinciding with the former political administration.

Of the western half the oldest compilation is that by SCHEFFER;[2] many Papuasian species were included in BECCARI's 'Malesia'.

Subsequently VALETON[8] gave an emended enumeration in 1907. Shortly afterwards and in connexion with a number of expeditions which were made in this part, a new serial 'Nova Guinea' was inaugurated to embody the results.[9]

Arfak Peninsula in the NW is dealt with in the book by Miss GIBBS,[13] and in the recent series by KANEHIRA & HATUSIMA *c.s.*[18]

Very important contributions on the collections of the 3rd Archbold Expedition were published by MERRILL & Miss PERRY *c.s.*[17]

An important paper on the flora of Mt Carstenz in SW. Guinea was prepared by RIDLEY *c.s.*[12]

Of the NE. part including the Bismarcks the contributions are mostly made and published by Germans. SCHUMANN & LAUTERBACH[4, 7] made the start of an extremely important series of contributions by various botanists, mostly of the Berlin-Dahlem Museum under the leadership of DIELS.[10]

A separate work is that of SCHLECHTER[11] on the *Orchidaceae;* he was also one of the most profuse contributors to the series.[10] Botanical publication on SE. New Guinea was started by F. VON MUELLER in a serial,[1] an important paper on the Papuan highland plants and in numerous scattered notes. After his death he was succeeded by HEMSLEY,[6] F. M. BAILEY and by C. T. WHITE[14] *c.s.*

FORBES's Papuan plants were elaborated at the British Museum by RENDLE *c.s.*[15]

An instructive book is that of LANE-POOLE.[16]

Numerous contributions were made by WHITE, MERRILL & Miss PERRY on the results of the 1st and 2nd Archbold Expedition.[17]

One of the few larger studies dealing with the whole of the New Guinean flora is that of WARBURG.[5]

We may conclude by mentioning a report on the Pteridophytes of the Admiralty Islands.[19]

References: (1) MUELLER, F. VON, *Descriptive notes on Papuan plants* I–IX. Melbourne, 1875–1890.

(2) SCHEFFER, R. H. C. C., *Enumération des plantes de la Nouvelle-Guinée* (Ann. Jard. Bot. Buit. 1, 1876, p. 1–60).

(3) MUELLER, F. VON, *Records of observations on Sir William MacGregor's highland plants* from New Guinea 1889 (Transact. Roy. Soc. Victoria 1[2], 1889, p. 1–45).

Author of numerous other small papers on Papuan plants, scattered in partly obscure periodicals.

(4) SCHUMANN, K., *Die Flora von Kaiser Wilhelmsland* (Beih. z.d. Nachr. Kais. Wilh. Land 1889, p. 1–37).

(5) WARBURG, O., *Beiträge zur papuanischen Flora* (ENGL. Bot. Jahrb. 13, 1891, p. 230–454).

(6) HEMSLEY, W. B., *c.s., Flora of British New Guinea* (Kew Bull. 1899, p. 95–126).

(7) SCHUMANN, K., & C. LAUTERBACH, *Die Flora der deutschen Schutzgebiete in der Südsee* (1901); *Nachträge* (1905).

(8) VALETON, TH., *Plantae papuanae* (Bull. Dép. Agr. Ind. Néerl. *no* 10, 1907, 72 pp.).

(9) *Nova Guinea,* Botanical volumes, 8, 12, 14, 18 (1911–1936).

(10) LAUTERBACH, C., L. DIELS, *etc., Beiträge zur Flora Papuasiens* (ENGL. Bot. Jahrb. onwards from vol. 49, 1912).

(11) SCHLECHTER, R., *Die Orchideen von Deutsch-Neu-Guinea* (FEDDE Repert. Beih. 1, 1914, lxvi + 1079 pp.). With atlas (*l.c.* Beih. vol. 21, 1923–28).

(12) RIDLEY, H. N., *c.s., Report on the Botany of the Wollaston Expedition* (Trans. Linn. Soc. Lond. 2nd ser. 9, 1916, p. 1–264).

(13) GIBBS, L. S., *Dutch North West New Guinea:* Contribution to the phytography and flora of Mt Arfak. London 1917.

(14) WHITE, C. T. in Proc. Roy. Soc. Queensland vol. 34, 1922, p. 5–65; *l.c.* 38, 1927, p. 225–261, 19 fig.; *l.c.* 39, 1928, p. 61–70; *l.c.* 43, 1931 (1932), p. 49; *l.c.* 45, 1933 (1934), p. 27–28, pl. 3; Journ. Arn. Arbor. 10, 1929; and in other periodicals.

(15) RENDLE, A. B., *c.s., Dr H. O. Forbes' New Guinea plants* (Journ. Bot. 61, 1923, p. 53–55 and suppl. p. 1–64).

(16) LANE-POOLE, C. E., *The forest resources of the territories of Papua and New Guinea.* Parliam. Commonw. Australia 1925.

(17) *Botanical results of the Arnold Arboretum and Archbold expeditions* (coll. BRASS) (mainly in Journ. Arn. Arbor. 10, 1929; 14, 1933; 20, 1939; *etc.;* Brittonia several volumes). Treatments by WHITE, MERRILL, PERRY, ALLEN, SMITH, KOBUSKI, *etc.*

(18) KANEHIRA, R. & S. HATUSIMA, series of contributions in Tokyo Bot. Magaz. vol. 52–57, 1938–43. NW. New Guinea collection, mostly Mt Arfak.

(19) WAGNER, W. H. & D. F. GRETHER, *The Pteridophytes of the Admiralty Islands* (Univ. Cal. Publ. Bot. 23, 1948, p. 17–110, pl. 5–25).

Preservation of Nature

In recent years several important publications on this subject have appeared. In 1929 DAMMERMAN[1] prepared a general survey of the nature reserves. Afterwards voluminous illustrated annual reports were issued by the Society for Nature Preservation.[2]

Specially the last voluminous report, called 'Drie jaren Indisch Natuurleven' (Three years of Indian nature life) is very interesting, beautifully illustrated and up to date. A second 'Album' was published in 1937,[3] which was partly translated into English.[4]

References: (1) DAMMERMAN, K. W., *Preservation of wild life and nature reserves in the Netherlands Indies.* Bandoeng 1929, 91 pp.

(2) *Verslagen van de Ned.-Ind. Vereeniging tot Natuurbescherming* (Yearly reports of the Netherlands Indian Society for Nature Preservation). 1929–1939, 5 reports.

(3) Albumserie II: *Natuur in Indië.* 1937.

(4) *Nature Protection in the Netherlands Indies.* Batavia 1939. In English, translated from the Album mentioned above.

Vernacular names

Those of the Philippines are incorporated in E. D. MERRILL's *Enumeration of Philippine flowering plants* (vol. 4, 1926, p. 22–34).

For the Malay Peninsula an index of native

names of useful plants is given in the '*Dictionary of economic products of the Malay Peninsula*' by I. H. BURKILL (vol. 2, 1935, p. 2309–2402).

For Indonesia the following books can be consulted:

(1) FILET, G. J., *De inlandsche plantennamen.* Batavia 1859, 280 pp. (*cf.* also Nat. Tijdschr. N.I. 19, 1859).

The 2nd revised edition was called '*Plantkundig woordenboek voor Ned. Indië*'. Amsterdam 1888, 348 pp.

(2) BACKER, C. A., *Schoolflora voor Java.* Batavia, 1911.

(3) CLERCQ, F. S. A. DE, & M. GRESHOFF, *Nieuw plantkundig woordenboek voor Ned. Indië.* Amsterdam 1909; 2nd ed. by A. PULLE in 1927.

(4) HEYNE, K., *De nuttige planten van Ned. Indië.* ed. 2, 1927, p. lvi–ccxli.

(5) BACKER, C. A., *Onkruidflora der Javasche suikerrietgronden.* Soerabaja 1928–34.

(6) OCHSE, J. J., & R. C. BAKHUIZEN VAN DEN BRINK, *Indische groenten* (Vegetables of the Dutch East Indies). Batavia-C. 1931.

Zoocecidia

DOCTERS VAN LEEUWEN has given a comprehensive illustrated account of the *Zoocecidia* of the Dutch East Indies,[1] supplemented in 1941.[2]

References: (1) DOCTERS VAN LEEUWEN, W. M., *The Zoocecidia of the Netherlands Indies.* Weltevreden 1926, 601 pp., 1088 fig.

(2) DOCTERS VAN LEEUWEN, W. M., Supplement I (Ned. Kruidk. Archief 57, 1941, p. 122–251).

Arboreous plants

Most of the contributions on the tree flora are to be found in the 'Philippine Forestry Bulletin', 'Mededeelingen van het Boschbouwproefstation' Buitenzorg, and in the contributions of the Forest Research Institute at Kepong (Kuala Lumpur). Outstanding books are:

(1) KOORDERS, S. H., & TH. VALETON, *Bijdragen tot de kennis der boomsoorten van Java.* Batavia and 's-Gravenhage 1894–1914, 13 vols.

(2) KOORDERS, S. H., *Atlas der Baumarten von Java.* Leiden 1913–18, 4 vols.

(3) MOLL, J. W., & H. H. JANSSONIUS, *Mikrographie des Holzes der auf Java vorkommende Baumarten* (Anatomy of Javan trees). Leiden 1906–36, 6 vols + index.

(4) ENDERT, F. H., *Geslachtstabellen voor Nederlandsch-Indische boomsoorten naar vegetatieve kenmerken* (Key for determination of West Malaysian tree genera on the basis of vegetative characters only). Wageningen 1928, Dr's thesis (also in Meded. Proefstat. Boschw. Buitenzorg 20, 1928).

(5) CORNER, E. J. H., *Wayside trees of Malaya.* 1940, 2 vols. This book gives much critical original information and many peculiar ecological observations.

Pteridophyta

Various large contributions have been written on the ferns and fern allies of Malaysia. Besides the large volumes mentioned below, there is a host of scattered articles.

(1) RACIBORSKI, M., *Die Pteridophyten der Flora von Buitenzorg.* Leiden 1898.

(2) ALDERWERELT VAN ROSENBURGH, C. R. W. K. VAN, *Malayan ferns.* Batavia 1908.

(3) ALDERWERELT VAN ROSENBURGH, C. R. W. K. VAN, *Malayan fern allies.* Batavia 1915.

(4) ALDERWERELT VAN ROSENBURGH, C. R. W. K. VAN, *Malayan ferns and fern allies.* Supplement. Batavia 1917.

(5) RIDLEY, H. N., *The ferns of the Malay Peninsula* (Journ. Mal. Br. Roy. As. Soc. 4, 1926, p. 1–121).

(6) HOLTTUM, R. E. & C. CHRISTENSEN, *The ferns of Mt Kinabalu* (Gard. Bull. Str. Settlem. 7, 1934, p. 191–324).

(7) BACKER, C. A. & O. POSTHUMUS, *Varenflora voor Java* (with bibliography). Buitenzorg 1939.

(8) KJELLBERG, G. & C. CHRISTENSEN, *Pteridophyta celebenses Kjellbergianae* (ENGL. Bot. Jahrb. 66, 1933, p. 39–70).

(9) POSTHUMUS, O., *The Ferns of the Lesser Sunda Islands* (Ann. Jard. Bot. Buit. 1943, *hors série*, p. 35–113).

(10) RENSCH, I., *Farne und Bärlappe der Sunda Expedition Rensch* (Hedwigia 74, 1934, p. 224–256).

(11) WAGNER, W. H. & D. F. GRETHER, *The Pteridophytes of the Admiralty Islands* (Univ. Cal. Publ. Bot. 23, 1948, p. 17–110).

(12) COPELAND, E. B., *The Polypodiaceae of the Philippine Islands* (Govt Lab. Publ. 28, 1905, p. 1–793), and very numerous other papers.

(13) BRAUSE, G., *Neue Farne Papuasiens etc.* (ENGL. Bot. Jahrb. 49, 1913, p. 1–59).

(14) BRAUSE, G., *Bearbeitung etc.* (*ibid.* 56, 1920, p. 31–250).

k. NOMENCLATURE OF ALTITUDINAL ZONES

The nomenclature of mountain zones and vegetation must be, of course, in accordance with the terminology used in Europe.

In a study on mountain plants of Malaysia I have tried[1] to make an analysis of the altitudinal zones and I have found that in general there are markedly narrow transitions. In the same place I have proposed a new nomenclature which slightly differs from and emends that given by JUNGHUHN. It is the following:

4600–5000 m	*Nival zone* (eternal snow).
4100–5000	**Alpine zone** (treeless).
2400–4100	**Subalpine zone** (forested, with open spots specially above 3600 m, from 3000 m upwards often shrubby or mossy forest).
1000–2400	**Montane zone.**
1000–1500	*Submontane subzone.*
500–1000	*Colline subzone.*
0–1000	**Tropical zone.**

One suspects that these rounded figures are approximate, but this is not the case; it is the outcome of the statistics of contours of *c.* 800 mountain plants, in which both lower and upper contours are used, that is of 1600 figures in all.

The principal zones are: *tropical, montane, subalpine* and *alpine*, corresponding to the figures 1000, 2400, 4000 m, which are easily remembered. If these terms were universally used, it would be of much convenience for uniformity in papers on Malaysian botany.

As a matter of fact the cultivation of crops fits well with the figures found for the indigenous flora.[2]

References: (1) Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1935, p. 307–329.

(2) *Ibid.* p. 343–346.

I. THE ETYMOLOGICAL USE OF VERNACULAR NAMES FOR MALAYSIAN PLANTS

Already ROXBURGH, more than a century ago, says: "I have observed that the eagerness to get native or vulgar names for plants is directly proportioned to the ignorance of the inquirer: those who know nothing about the plants and who are unable to discriminate them under any names being always loud in their call for native or local names."

WALLICH[1] made the following comment: "The natives of the country . . . had not even a name for it (*Panax pseudoginseng*) . . . although in ordinary cases they are so fertile and inventive, and so utterly to be distrusted in matters connected with the nomenclature of the productions of their country."

WILLIAM JACK remarked:[2] 'LESCHENAULT's native names of Ceylon and the S. Deccan Peninsula are frequently not to be depended on; from his total want of knowledge of the Tamil language he was led to mark down the answers to his signs or queries as the names; whereas the natives mostly told him 'I don 't know' or 'I cannot tell', or 'I don't understand', 'there is none', or made some such reply, which he fancied were the names of the plants."

The same occurs in Malaysia where a lack of knowledge of native languages and local dialects is very often the reason of the untrustworthiness of the native names if they are *collected in a haphazard way without knowledge of the language.*

Also in Holland the number of local native names is several times as large as the number of native plants, and there only two languages are spoken in addition to some dialects. In Malaysia there are more than 150 languages and possibly about 500 dialects; the number of plants is about 30.000.

One can imagine that the number of vernacular names is a *mer à boire* specially as the records include numerous wrong ones.

Numerous plants have each dozens of native names; but on the other hand very different plants are sometimes indicated by the same vernacular name. This may cause a lot of confusion. Moreover, only few natives are the 'authors' or 'curators' of the native names, though—in giving information—natives mostly pretend to know the names, on account of the fact that they tend to satisfy the queries of the explorer. Many of the native names must for this reason be defined as 'names which are given by a fantast to a faithful-believing fool'.[3]

BACKER, to prove this thesis, asked[4] in East Java once the name of a plant (*Alangium chinense* HARMS) to 10 passers-by. He got 7 different names, of which two were mentioned twice; one man said he did not know the name.

None of these names were known to have been used elsewhere.

I myself (1936) could show that newly introduced plants at once get local names, specially if the people are interested in the plants (medicinal, food plant), and these soon become naturalized.

The degeneration of foreign words for plants can sometimes lead to peculiar confusion, which is demonstrated by the following event, which took place in 1937. In the rubber estate Simo (Solo) the 'smoking-house' burned down.

When the policecame the coolies were questioned what had been done to the fire. They said: 'We have put 'benzien' on it". Now, 'benzien' is the common name for gasoline called in Dutch 'benzine' and the police suspected rattening. The administrator was called and could give satisfactory evidence in explaining that the name 'benzien' used by the coolies was the common local name for the green-manure *Centrosema pubescens* of which the specific epithet *pubescens* was degenerated into '*benzien*'. The green-manure was used fresh to put upon the fire in order to develop much smoke.

According to BECCARI[5] the Lundu and Sadomak Dyaks in Sarawak call *Rafflesia* 'boea pakma', evidently a corruption of 'patma' or 'padma', the sacred lotus of the Hindus. He continues: "This is, no doubt, one of the many traces of the ancient faith once professed by the Dyaks, who have preserved the memory of the emblematic flower, transferring its name to that of an other plant conspicuous for its size and singular appearance."

"In Java and Sumatra *Rafflesia* is known as 'patma', but there the fact is not surprising, for the prevalence of Hinduism in these lands is a matter of not very remote history."

I do not doubt the genuineness of the name, but the idea of transfer of the name I do not approve of, as both in Sumatra and Java lotus is still cultivated on a large scale locally, and BECCARI men-

(1) Pl. As. Rar. 2, p. 31.

(2) HOOK. Comp. Bot. Mag. 1, p. 227.

(3) BACKER, Verkl. Woordenboek, 1936, p. iii.

(4) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 16, 1939, p. 179.

(5) Wanderings 1904, p. 10.

tions its occurrence also in Sarawak. ENDERT found Hindu relics far inland in E. Borneo (1925), and I assume the Sanskrit name was imported by the Hindus themselves for *Rafflesia*.

R. C. BAKHUIZEN VAN DEN BRINK gave notes on the native names of orchids[1] of Java. Among the vernacular names current in Borneo & Natuna Islands the general name for orchid is 'boenga laoe' (boenga = flower). 'Laoe' is derived from the name LOW (Sir HUGH) who in West Borneo collected as a professional for the VEITCH concern, and whose eagerness to get orchids—perhaps sustained by the price he gave for them—impressed the Dyak to the effect that his name is commemorated forever in Bornean jungles.

Another peculiar etymology WARBURG[2] mentions for *Carica papaya* L. In Constantinhafen *Carica* seems to have been imported by MIKLUCHO-MACLAY and the natives call the papaya 'Banana of Maclay'. This man seems to have had such influence that 'maclay' has there the same meaning as 'blanda' (meaning Dutchman) in Java.

At Matupi (Neu Pommern) the native name for papaya is 'taback' (tobacco); better instructed people call it 'mamme apple' (which seems derived from the Brasilian vernacular 'Mamaya'). The word 'taback' WARBURG suspects to be derived from some misunderstanding between a native going to a ship bringing products, the captain giving back something, and leaving him the choice between a 'papaya' and tobacco. Tobacco itself is called by these natives 'tabacko'.

Besides LOW and MACLAY, there is possibly a personal name in Java reproduced in a vernacular one, *viz* that for *Lantana camara* L. often called 'saliara'.

BACKER[3] mentions that *Lantana* was cultivated at Buitenzorg and elsewhere as an ornamental in the fifties. However, its Napoleonic career came apparently from the desire of the Dutch Civil Service to import another hedge-plant for the population. For this *Lantana* was introduced from Singapore, hence the name 'kajoe (= wood) Singapore'. The Assistant Resident of Krawang, named DE SERIÈRE, had for a great deal the responsibility of this undertaking and naturally the plant was afterwards called 'salijara' or 'salijèrè' according to BACKER.

COHEN STUART[4] is, however, convinced that this is wrong, 'saliara' ('njaliara') being a good Sundanese word for 'dispersal' which is apt for this rapidly spreading plant. COHEN STUART found also that the species must have been in Java already about 1856 and is mentioned by MIQUEL as a cultivated plant. CORDES in his book on Javan teak forests mentions its introduction by a certain Mr MARSHALL near Bodja about 1855.

In the same journal[5] J. VAN BAALEN spends some notes on the introduction of *Lantana* in East Java where at Banjoewangi the native name 'selingeran' occurs, which is derived from ZOLLINGER, who lived in East Java for quite a number of years; he probably introduced the plant from the Buitenzorg Botanic Gardens.

The separating of chaff from wheat will be very difficult and will require a lifetime's work of some botanist who is well acquainted with both native names and native tongues. Of course there is some value in native names.

DANSER[6] sifted for instance the native names given to *Loranthaceae*.

On the whole it seems worthwhile to note and to publish native names, if one remains well aware of the relative importance which ought to be attributed to these names.

For explorers the advice is given to look always for trustworthy natives who know the forest; often these are old men, experienced hunters, and suchlike. Practice shows that only very few men in a settlement are trustworthy in this respect; these picked men are often used—after having been tested—by the Forest Service for whose aims native names of trees are indispensable. At Buitenzorg the Forest Research Institute has edited many mimeographed lists of vernacular names of trees.

F. H. ENDERT has made some etymological remarks on the origin of native names in relation to the use or properties of the plants.

Of special ethnobotanical interest are those vernacular names which have been introduced from foreign countries.

Numerous names in Java seem to have been derived from the Sanskrit. Plant names in the Philippines of introduced species are often of Spanish-Portuguese, of Mexican or Aztek origin, and MERRILL has used the etymology of plant names in the discussion on pre-Columbian plant introduction. Also Polynesian-derived names are known in the Philippines.

ALTONA in Java made an extensive use of etymological derivation from the Sanskrit in his arguments in favour of historical Hindu-import of teak into Java.

R. C. BAKHUIZEN VAN DEN BRINK tried to prove that the name 'kambodja' for *Plumeria acuminata* AIT., the common temple flower, is of Sanskrit origin and not Mexican.

Prof. H. H. BARTLETT wrote an interesting paper on the geographic distribution, migration and dialectical mutation of certain plant names in Malaysia.

H. HALLIER—in the later years of his career—inclined wholly to etymological botany; his papers —however—are hardly readable, controllable and understandable.

In Java numerous foreign names have been assimilated, specially in food plants (often of Dutch origin), medicinal, poisonous and charm plants (often Chinese, Ceylonese and Arab).

Of late years L. VAN DER PIJL in Java and C. F. SYMINGTON in the Malay Peninsula have made

(1) Blumea Suppl. 1, p. 38–51.
(2) ENGL. Bot. Jahrb. 13, 1891, p. 385.
(3) De Trop. Natuur 2, 1913, p. 27.
(4) De Thee 5, 1924, p. 109–114.
(5) De Thee 6, 1925, p. 61.
(6) Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1935, p. 487–496.

proposals to arrive at a rationalisation and codification of vernaculars.

Outside general catalogues mentioned in chapter I j. the following more important literature citations belong to etymological Malaysian botany:

ALTONA, TH., *Djati en Hindoes* (Tectona 17, 1924, p. 865–902 and *l.c.* 18, 1926, p. 939–1011).

BAKHUIZEN VAN DEN BRINK, R. C., *De Indische flora en hare eerste Amerikaansche indringsters* (Nat. Tijdschr. N.I. 93, 1933, p. 48 *seq.*).

BARTLETT, H. H., *Sumatran plants collected in Asahan and Karoland, with notes on their vernacular names* (Pap. Michigan Acad. Arts & Lett. 6, 1926, p. 1–67).

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BOERLAGE, J. G., *Ternataansche plantennamen* (Teysmannia 2, 1891, p. 18–24).

DAMMERMAN, K. W., *Soembaneesche dieren- en plantennamen* (Tijdsch. Ind. Taal-, Land- en Volkenkunde 66, 1926, p. 205–240).

ENDERT, F. H., *Inlandsche plantennamen I–II* (Trop. Natuur 16, 1927, p. 37–44, 137–142).

HALLIER, H., *Vom Bilsenkraut und Sonnengott. Eine sprachgeschichtliche Weltumsegelung.* Oegstgeest (Selbstverlag) 1925.

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HILDEBRAND, F. H., *Over de waarde van boomnamen en die van de hoeroegroep in het bijzonder* (Het Bosch 4, 1936, p. 29).

KEITH, H. G., *A preliminary list of North Borneo plant names* (North Borneo Forest Records *no* 2, 1938), and *Additions.*

KOORDERS, S. H., *Plantkundig woordenboek voor de boomen van Java met korte aanteekeningen over de bruikbaarheid van het hout.* Batavia 1894.

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SCHEFFER, R. H. C. C., *On Sundanese vernacular names* (Journ. Bot. 9, 1871, p. 358–360).

SCHEFFER, R. H. C. C., *Inlandsche plantennamen* (Tijdschr. Ind. Taal-, Land- en Volkenkunde 25, 1879, p. 319–328).

STEENIS, C. G. G. J. VAN, *Over de kennis van de eigenschappen der planten bij natuurvolken* (Nat. Tijdschr. N.I. 96, 1936, p. 122–138, specially p. 123–134).

SYMINGTON, C. F., *Rationalisation of vernacular nomenclature in Malaya* (Empire Forestry Journal 16, 1937, p. 177–183).

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VETH, P. J., *Balische planten en plantennamen* (Tijdschr. Ned. Ind. 3rd ser. vol. 42, 1870, p. 442–453).

WATSON, W. G., *Malayan plant names* (Malayan For. Rec. 3, 1928, p. 17–277).

WOLFF VAN WESTEROODE, W. DE, *Inlandsche plantennamen* (Teysmannia 4, 1893, p. 23–30).

C. G. G. J. VAN STEENIS

CHAPTER II. THE TECHNIQUE OF PLANT COLLECTING AND PRESERVATION IN THE TROPICS[1]

A scientific explorer is a busy man in the field all the day round.

In this chapter some selected directions will be given for all who intend to collect botanically in the Malaysian region. It is hoped that the experience of many, contained in the following pages, may serve in some cases to prevent disappointment which, subsequently, is too often irreparable. The list of literature at the end shows how many pages have been devoted to the subject. The reason why I venture to add to the bibliography by writing these hints is in the first place the need of having together both the history and the technique of collecting in a volume, which we assume will be used by all future explorers. In the second place a detailed pamphlet on the subjects, treated here, has as yet not come to our knowledge. Thirdly, several detailed notes on field work, which I think of importance, I found lacking in most guides.

It is clear that there are all gradations between haphazard collecting and full-aimed scientific exploration. As many 'unsuccessful' trips result in a good collection, so things which originally were picked from pure curiosity and laid between the pages of a novel during a journey, or weeds collected near a railway station during a stop, may not be without value, provided they are labelled.

It is natural that the method of preserving material differs widely; it must be adapted to local circumstances and opportunity. It depends substantially on the aim set by the collector. He may want the name of a plant or specimen for a study of ethnography, zoology, entomology or geology. In these cases the specimen is merely the means of getting its name. Amateur people often have the queerest ideas about identification of plants and sometimes think that mere loose leaves are sufficient, and are disappointed if the botanist cannot help. I hope a right understanding of what must be fulfilled in order to enable the botanist to find the plant name will add to a growing mutual appreciation and co-operation.

It is stressed here that every plant collected and properly labelled will add to our knowledge of the Malaysian flora, and though it must be admitted that the more experienced a collector is and the more knowledge he has of the flora, the more valuable the collection will be, every collection is welcome.

The information offered here is divided into the following paragraphs:

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1. General remarks on making trips, camp life and dangers encountered in executing field work

Making collecting trips in the Malaysian tropics is, generally, for most botanists a recurrent pleasure. Directions for these trips are of course very varied depending on the duration of the trip, the degree in which the country is known or unknown, the methods of transport (walking, by boat, by car, *etc.*), the aim set for the trip (traversing country by one-day (shifting) camps or making a base camp with tolerable accommodation for a longer stay), and last, but not least, the personal preference and experience of the explorer. There are no two explorers agreeing wholly in equipment and measures taken to meet circumstances. For these reasons the remarks given below are rather general and are not free from personal taste.

No hard and fast rule can be laid down to cover all situations, and each person will work out a scheme to fit his needs for any particular case. The rules for travelling, living, or camping out are much the same for all countries: Learn all you can before starting; keep the itinerary flexible to allow for unpredictable changes; keep the luggage as light as possible and confine it to bare essentials; limit the party to the personnel actually needed, especially for long trips; get into touch with persons acquainted with the local situation; get one's physical condition checked before any extended trip; by all means learn something of the language of the country; and lastly, know thoroughly and comply strictly with the customs of the people encountered. The successful explorer will leave behind all prejudices and will accept the new people he encounters on a basis of equality. Anyone accustomed to punctual transportation schedules must be prepared for disappointments, and for this reason the itinerary should be planned for alternative modes of travel, depending upon circumstances or emergencies (ARCHER, 1945).

General information on exploration is given by ARCHER (1945), BECK VON MANNAGETTA (1902), DAMMER (1894), GÜNTHER (1917), GUITON (1905),

(1) With pen-drawings by Mr P. GROENHART, figures 9–11 by Mr F. HUYSMANS.

HILLHOUSE (1876), NEUMAYER (1875), RIBBE, TAPPENBECK (1904), DE VRIESE, WINKLER (1912).

Dangers encountered in executing field work in Malaysia.

In temperate countries the dangers connected with field work in Malaysia are often much exaggerated, specially the work in the virgin or primary forest. Usually, the primary forest is easy to go through, for its undergrowth is generally sparse: animal life is rare, and zoologically it is a 'green desert'. Of big game there are only very few kinds that live as terrestrial animals in the forest; and they are exceedingly shy. Animal life gathers round the forest borders and in the canopy but avoids the interior of the high forest. It is the 'jungle' or secondary growth, which generally is the transition between inhabited and uninhabited country, that is difficult to penetrate and that abounds in animal life. In contradistinction to big game in the open steppes of other places of the world, which may attack men, forest animals try to hide or escape. Hunting here is tiresome and consists mostly of trying to locate and follow the way the game has fled. I have been rather often in the forest in various places in West Malaysia, but I have seen very little of animal life. The only large animal, of which one must be aware in crossing rivers in the lowland is the *crocodile*. The country abounds in *snakes*; most of them are harmless and it is only by accident, if one touches them, that they may attack.

Smaller animals which can be disagreeable, though hardly dangerous for a normal healthy person, are *bees* and *wasps*. Their sting can indeed be painful, and even produce fever. Still less dangerous animals are *leeches* (patjet) and *sandflies* (agas). If one cures the itching places with ammonia or iodine nothing is to be feared. Leeches are put away from the skin by using a cigarette or tobacco-juice; they are *not* torn off: alternatively, they may be kept away by smearing one's boots with soft carbolic soap.

It is the smallest of creatures which are the most dangerous, such as the parasite of malaria transmitted by stings of *Anopheles mosquitos*, the *amoebas* of *dysentery*, the *bacteria* of *dysentery*, *typhoid fever*, and *tropical typhus*, *cholera*, *etc.* (see paragraphs 2–3).

Dangerous plants are exceedingly rare. There are some stinging nettles mostly belonging to the *Urticaceae*, either herbs or arborescent, but they are merely painful. Other plants, *e.g. Mucuna* and bamboo possess stiff hairs which irritate the skin and may be a nuisance; rubbing one's hands through one's own hairs is the best way to get rid of them. The only really dangerous plants are those yielding the poisonous resin of some *Anacardiaceae*, comparable to poison-ivy.[1] These plants belong to several genera: *Gluta*, *Semecarpus*, *Melanorrhoea*, *etc.*, and are all arborescent. The dangerous sap darkens or blackens when dried. One may suffer for a very long time from the consequences of the sap on the skin. The only effective remedy is washing the affected place every two days in a weak solution of tannin crystals in water.

Danger for life in the field is encountered by losing one's path or orientation, and going alone in the field. In practice a botanist is always accompanied by at least 2 carriers, acquainted with forest life, selected from the local population.



Fig. 1. Carrier file in Central Celebes mountain heath (EYMA)

Going alone is generally strongly inadvisable: one can have an accident and be unable to walk, or get high fever by an outbreak of malaria, or one may simply get lost. Botanical field work is no sport; it is scientific work in the field. Beware of sportsmanlike achievements; there is no sense in them and they are beside the point. Specially on prolonged trips it is a necessity to keep fit and healthy. See that little wounds are immediately cared for, and avoid being injured. This is equally important for yourself as for your companions. A man unable to walk during an expedition may cause his comrades to suffer.

LORENTZ's fall in descending Mt Wilhelmina caused the death of one of his Dyak carriers. Never leave anybody of your personnel alone in the forest: no carrier will ever pretend to be ill and remain behind if he feels well. As a leader you must always think of your responsibility and take care for reserve food; trips are often over time. Take special care in *des*cending mountains; in unknown country it is far more difficult to choose the right spur or ridge than in *as*cending.

On volcanic slopes the rock is often less to be trusted than the solid rock in Europe.

Near craters avoid small valleys and depres-

(1) It is known that the smoke of fires made of Anacardiaceous wood carries the poison and may cause the death of man.



Fig. 2. Rest in a pine savannah forest, N. Sumatra. Carrier load consisting of a small tin with rice, Schweinfurth tin, a bundle of clothes of carrier, tighed together between thin bamboo laths with rattan.

sions: there may be local 'death valleys' containing gases. They can mostly be recognized by bleeched bones of small animals, and by absence of plants. Do not forget to take a guide. Keep the carrier train together; appoint one of the men as the responsible leader (fig. 1).

On ridges and in mossy forest be aware that the moss-covered rootsystem of the vegetation often conceals pits and holes in which one can easily injure one's leg.

Do make as many preliminary preparations as possible with regard to available maps; do collect specially local information. Try to get the best guide; and, for carrying the equipment, select preferably people who are more or less acquainted with forest work. Try to get their confidence. At first they will often say that it is impossible to reach the summit of a mountain or whatever your goal is. This is never true, but merely intended as an introduction. Once they understand that you are decided to make the trip, they will accompany you. If you are just, once the deal is made, they will keep to it. Be helpful, but strict; this assures their honest co-operation and the success of the trip. Do not try to convince them that your aims are not directed to practical results other than the collecting of plant material; it is impossible.

Planning

Making clear arrangements and giving well-defined instructions are important. Calculate the food you must take with you, keeping in mind that the normal carrier can take daily a load of 18–20 kg excluding his own personal equipment of about 3–5 kg in cross-country trips (fig. 2). Be careful not to divide these loads yourself; appoint one of the men in charge and let him settle this with the carriers. Distribute vital things over several tins or carriers, as a tin or a load may be accidentally lost. Keep one personal servant for cooking your food and carrying light things (vasculum, camera, water flask, *etc.*).

In planning trips local information is more valuable than planning with the aid of maps.

Vegetation and topography are sometimes such that the daily progress is only a few km, whereas you may have anticipated a progress of 15–20 km, as the crow flies. Deeply cut mountain systems, limestone country, and swamp forest are sometimes very obstructive.

In following the natural roads through the forest, *i.e.* the streams, you may get easy transport of heavy loads, but the traverse over land, though up and down, may be much more direct and rapid. Owing to his field work the botanist will generally never be much ahead of the carrier train.

Camp-life

Avoid camping along river beds, for there may be unexpected floods. Take care of rotten tree trunks or epiphyte-laden trees in the canopy over the tent, for they may fall in heavy rain or local squalls. Choose a place that will not be flooded by a sudden shower (fig. 3).

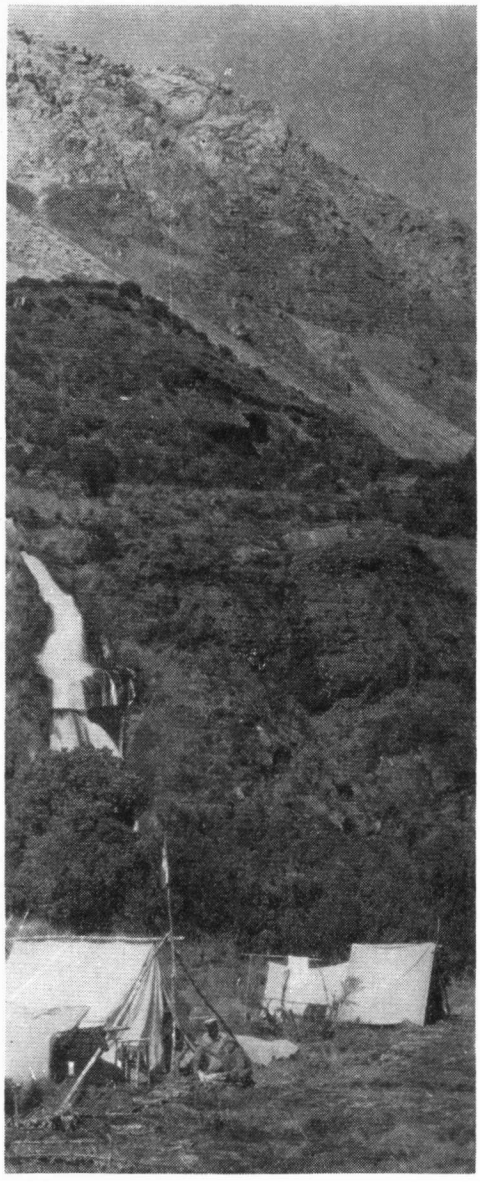


Fig. 3. Collecting camp near timberline at base of Mt Wilhelmina, Central Range, W. New Guinea, at *c.* 3750 m alt. *Courtesy Archbold Expeditions.*

Do not camp on the wrong side of the stream if you have to traverse it the next morning; there may be a flood then which will bar the way. An open spot with natural drainage is preferable. Look for a place in the neighbourhood with water, at least enough for cooking rice. You cannot depend on rain coming, or gathering water from *Nepenthes* pitchers, from liana stems, bamboo internodes, or squeezing wet soaken moss, which could be used in emergency cases.

If a site is approved of, make camp immediately, and make it fit for daily domestic life (fire wood, water, bedding, cooking place, setting tent and other shelters). If no rain is coming, go on collecting round the camp but not later than 15.00 hours. There must be time for making food, taking leisure, and preparing the collection. Go early to bed and be ready to start at sunrise. The best hours for collecting are usually from 6.00 till 12.00.

Do not forget to take leisure days on prolonged trips; they can be filled with mending things, or washing equipment and clothes. Yourself and your companions need it. Leisure days do not necessarily lead to laziness; invent light work for the carriers, or give them eventually orders to collect plants or to cut trees, to make samples of cryptogams, or to collect insects and the like. There is always plenty to do in these minor jobs, and for yourself, in writing letters, working out observations, and making notes in your diary for a later report.

2. Food and medicine

This is another paragraph in which only a very few hints can be given, as so much depends on personal taste and experience, local custom, available funds, opportunity, duration of the trip, *etc.*

Food

Nobody and no party can live from the forest products in a tropical country. Essential food has to be brought along. Such vegetables, as palm cabbage (the growing point of palms, pandans), and the products of fishing and hunting are insufficient. Foods which deserve notice in addition to rice are: *salted fish*, *dried meat* (dèng-dèng), or *corned beef*, *sardines*, *ketjap* (*soja*), *dried fruits*, *toast*, *chocolate*, *cocoa*, *egg powder*, *powder milk*, *evaporated milk*, or *condensed milk*, *butter*, *coffee*, *tea*, *maggi*, *sugar*, *cheese*, *biscuit*, *peanuts* or *peanut-butter*, some *red pepper* and *onions*, and *kadjang idju* (small beans of *Phaseolus radiatus* L.). Of the latter soup can be made; they are specially taken for their vitamin-B contents (against 'beri beri' avitaminosis). '*Marmite*' is also excellent against the same dangerous disease; alternatively, *vitamin pills* are used.

It is customary in Malaysia that on several-day trips and expeditions, food for the carriers is provided by the leader. *Rice* is generally the most acceptable main food, though in Celebes and the Lesser Sunda Islands it is *corn*, and in the Moluc-

cas and New Guinea *sago* that are the common native staple foods. In addition to rice (sun-dried in soldered tins on expeditions), *dried salted fish* (*ikan grè*), *green peas* (*kadjang idju*), *native tobacco* and/or *cigarettes*, *salt*, *coconut-oil*, *coffee*, and *sugar* are advisable. For sleeping carriers prefer a 'fly'; in the mountains they mostly need a blanket.

3. Equipment for camping; clothes

Equipment for camping. A tent is one of the important parts of the equipment. Those made of canvas are the most advisable, as they are the most durable; there must be a floor of canvas too, which is more agreeable than a rubber floor which is cold and liable to crack. A canvas tent for 4 persons

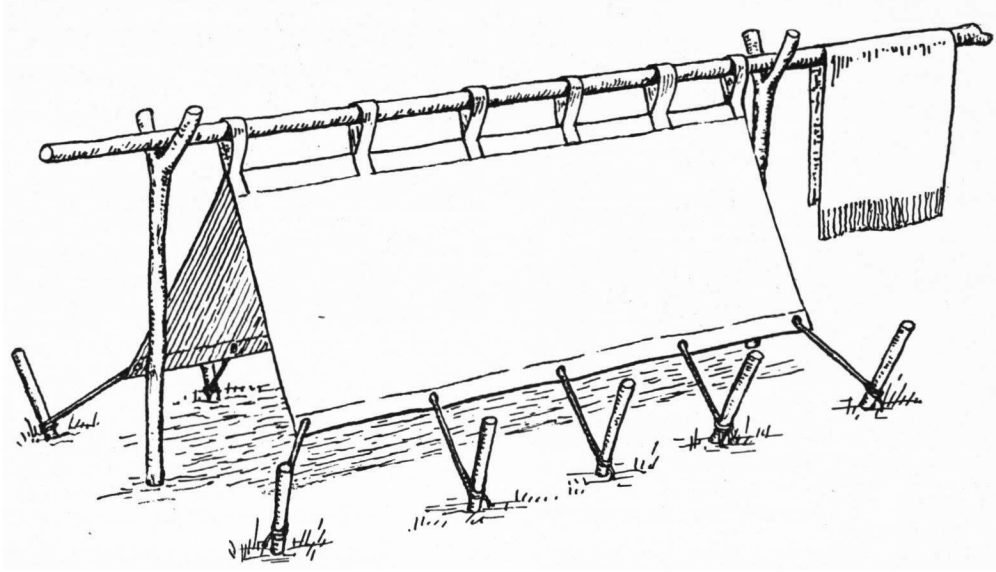


Fig. 4. Model of a fly. Measurements depending on need and aims.

Medicine

It is very difficult to give directions, as the stock of medicine depends on taste, personal knowledge, and appreciation. The general experience is that in camp life one always takes too many things along, and generally one ends with using only a minimum. The minimum of medicine for a first-aid kit is *norit* (activated carbon powder), some *brandy*, *peppermint*, *aspirin*, *quinine* (*atebrin*), *iodine* (or *mercurochrom*), *ammonia* (for stings), *common soda* (and/or *ichthyol ointment*), some *alcohol*, *formalin*, *salicyl* (alcoholic solution), *vaselin*, *adhesive tape*, some *mosquito-repellent*, some *cough-medicine*, some *oil* (*kaju putih*, *seréh*, or *coconut oil*), *talc powder*, and *gauze bandage*. Taking care of hands and feet is important; washing with soap and hot water and using talcum powder afterwards is excellent. Walking with bare feet is strongly to be discouraged (both because of thorns and of hook-worm).

A more extensive list is given by DE VOOGD & SALVERDA (1940, p. 44–48). Many strong medicines like sulfa-compounds, yatren, penicillin, *etc.* are not suitable for administering without consultation with a doctor. As I understand that the use of the above-mentioned substances is well-known I refrain from giving further particulars.

weighs, when dry, *c.* 13 kg, or when wet *c.* 18 kg. This is a disadvantage as compared with a tent of lawn with a double roof. The setting up of the latter, however, cannot be left to carriers, and in general it proves very delicate. When handled well lawn has the advantage of being very light and quick drying. Soldiers use mostly oilcloth but this cannot be folded without cracking and can only be used for setting up a 'fly' or shelter.

Tents are sometimes made of tarpaulin; if the soaking and drying with boiled linseed-oil has been carried out well, these tents are useful, but in prolonged use they will leak. In setting up a tent it is advisable to hang it over a horizontal pole cut from the forest; its roof-line must be provided with straps (fig. 4).

It is further advised to have mosquito-net doors on each end of the tent.

A tent must sometimes be packed when it is still wet; as soon as possible (*e.g.* during a rest), it must be dried thoroughly. Well-handled canvas tents remain intact for years instead of months. For the carriers I always use a fly of tarpaulin (fig. 4) which they prefer; at night a wood-fire is lit at each end. For scientific work makeshift camps, consisting of a framework of poles and a roof of palm leaves tied with vines are not advisable.

Bedding. Personally I never use a camp-bed; it

adds to the luggage and is cold sleeping, an experience I have in common with many people (fig. 5). A thick mat of ferns, grasses or sedges under the tent-floor and a thin mattress or blanket on it I found the most convenient.

Other equipment and clothes. Clothes, cigarettes, note-books, flashlight, medicine, some candles, matches, blanket, *etc.* are always packed in a tin, size appr. 50 cm high, 35 cm sq. diameter. These watertight tins are prepared from galvanized iron of which the margins are both soldered and riveted. Kerosene-tins are also very convenient, but too small. The best lamp is a pressure kerosene lamp 'Baby-petromax' (with reserve lamp-wicks!). A pressure kerosene stove ('Primus') is convenient, specially in the rainy season.

Always keep a set of dry clothes for changing into after returning; and use preferably the half-dried clothes next day.

During daily field work raincoats are hardly of use; an 'anorak' is excellent against cold, and moist winds in the mountains. The best plan is to have few clothes during field work. A short, light shoulder cape may be convenient during a heavy shower. Personally I never used one.

A hat also is a thing of personal preference. I do not believe in the myths of sun-strokes. Formerly the army had waterproof wide-brimmed, bamboo hats which were useful in shading off the light (fig. 6). Sun-glasses are inconvenient during collecting.

I always used rather heavy leather shoes and puttees. Stockings are good for very short, light trips but give little protection; they get full of adhering prickly fruits, cannot stand rattan hooks, are insufficient against leeches, *etc.* Both socks and stockings must be of defatted wool or of cotton.

As to trousers it is generally not advisable to wear shorts, and definitely not so in grassy areas. Trousers can be fitted in the puttees. With shorts the knees get easily bruised or cut during field work. Short sleeves are similarly not advisable.

A woollen of flannel abdominal belt is always used in mountain camps. Zip-fastened clothes must be washed while the zips are closed!

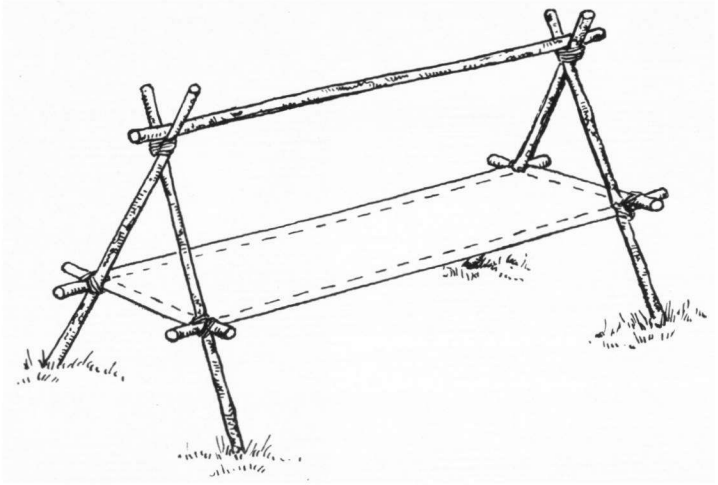


Fig. 5. Model of a very simple camp-bed, in transport consisting only of a rectangular canvas sheet with broad seams, through which poles can be pushed. Measurements appr. 200 by 50 cm.

4. Scientific equipment

A botanist's equipment in the tropics is not very different from that in other countries. Moreover, it depends on the character of the trip (known or unknown country, one day's trip, shifting or 'trek'-camp, exploration from base camp, *etc.*).

Vasculum. It is of a larger size than in Europe and should be white, to avoid heating. It can be replaced by one or more baskets covered inside and out by leaves.

At Singapore English botanists mostly use a big book (portfolio) with stout cloth wrapper and about 30 pages of tough absorbent paper: plants are put inside in the field, with the appertaining numbered label, and thus pressed together as the band fastened at the end of the wrapper is thrown over the shoulder (fig. 7). With this 'book-collector' plants are not mixed and loose flowers are better preserved:[1] it may be rough, however, on delicate plants.

Note-book, soft black pencils, and *labels. Penknife* and *bush knife. Hand-lens* 6 to 10 × magn. All small utensils are provided with a bit of coloured string against losing them. *Forceps,* for flower dissection and taking out splinters. *Tubes with alcohol* for preservation of special or delicate

(1) The model figured and described by BECK VON MANNAGETTA (1902) is too intricately constructed.

flowers, or cryptogams. *Paper bags* for cryptogams, fruits and seeds; different sizes. Topographic *map* of the country. *Centimetre-rule.*

Plant trowel for subterranean parts: can be replaced by the bush knife. For trips in the mountains and many-day trips it is advisable to take in addition a *compass.* A small one will suffice.

Binoculars are used in the forest for looking at flowers and fruit of trees but are not absolutely necessary.

Bush knife. If sharp, handy for many purposes, also for collecting big plants, used for cutting trails, and for marking trees to find the trail on the return journey.

Thermometer, specially in the mountains, also for temperatures of thermal waters and in craters.

Hydrochloric acid. A small drop-flask is handy; used in recognizing limestone in rock; 5% solution sufficient.

Anaeroid barometer. Handy in unknown or unmapped country. Each individual instrument must be tested either in an observatory or in measured, marked places. In ascending it always indicates too low an altitude (often 100–200 metres), in descending mostly too high altitudes, through the inertia of the mechanism. Mechanism delicate; good ones are expensive.

Small hammer, nails, wire, pliers.

Formalin in concentrated solution (40%) or tablets.

In general it is advisable to bring all primary equipment (tins, paper for driers, alcohol, *etc.*) and not to depend on local sources.

For the conservation of plants the utensils are mentioned in paragraph 8–9, those for photography in paragraph 13.

5. How to collect, how much and what parts of the plant?

A priori it is, of course, necessary to collect whole plants, that is, leafy stems with flowers, fruit, and subterranean parts. In practice this is rarely realised, and often falls completely out of possibility even with the best equipment, *e.g.* in trees, palms, cycads, lianas, tree ferns, *etc.* This is one of the reasons, why on field labels and *a fortiori* in botanical description sizes, shape, subterranean parts, wood structure, bark characters, *etc.* of these plants are not or meagerly mentioned and used.

The first rule for collecting is that *when it is possible to collect a whole plant this opportunity must not be missed. At least a specimen with flowers is necessary*, and is, generally, sufficient for later identification, but this is no reason for omitting to look for fruiting specimens too.

The second rule is that fruiting specimens are, generally, of inferior value if compared with flowering ones, and in many cases specimens in-fruit-only are insufficient for later specific identification.

The third rule is that it is preferable to collect little but well, rather than much and incomplete.

If a plant is in the sterile state, look for others with flowers. Do collect it *only* if it has importance for a special aim (dominating a vegetation, being medicinal or having other use) but realize that you have a good chance that the specimen will be never named accurately, save in very few cases where special or conspicuous vegetative characters will permit identification.

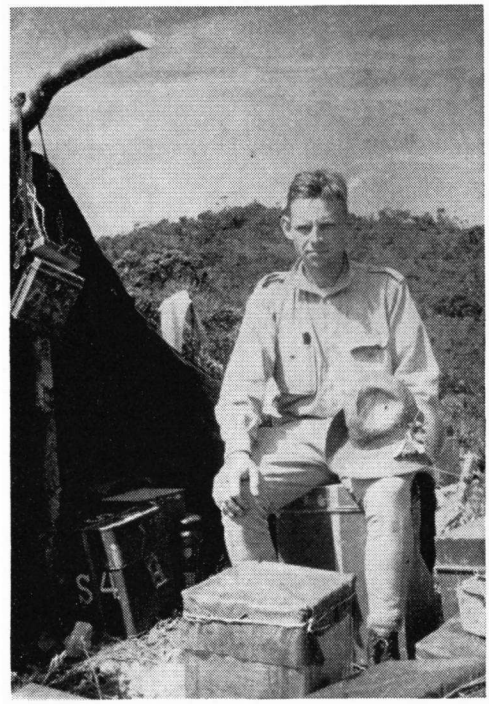


Fig. 6. Camping with tins, left upper for camera, left lower (marked S 4) 18 L kerosene tin for private belongings, front *ditto* with rice, serving as chair a Schweinfurth tin as described in this chapter; bamboo hat.

Much depends on the available time, opportunity and equipment, in the field, but that is another story.

For the big plants mentioned above *a rough sketch* or notes on the habit of the whole plant may be of considerable aid for subsequent herbarium research work. In trees and shrubs it is often necessary to collect the flush of new leaves, the characters of which are sometimes important; moreover, caducous stipules and bracts can often be found on the young parts only! The mode of growth (gradual or in flushes) is of interest too. A specimen of a tree or a shrub must consist of a twig with at least 3 leaves in order to study the phyllotaxis. Though it is often difficult to obtain leaves of trees from the crown, one must avoid in the first place those from suckers, for such leaves have often another shape, texture and margin and an aberrant size if compared with leaves of flowering twigs.

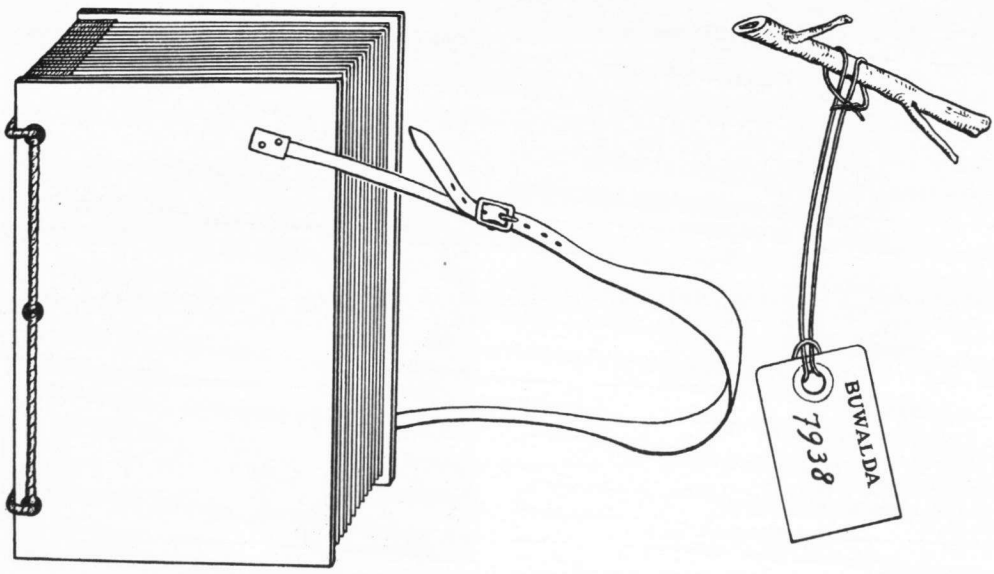


Fig. 7. Book-collector. Stout cloth wrapper, strap of canvas, with broadened central part. In the back of the book narrow strips of cardboard are inserted providing space for holding plants. Measurements 50 by 30 cm. — Fig. 8. Model of a number label attached to a specimen. Measurements 3 by 2 cm.

In lianas there is often a dimorphism in the leaves (*Ficus*, *Piper*, some *Melastomataceae*, *Cucurbitaceae*, *Vitaceae*, *Passifloraceae*).

Alphabetically arranged list of select families with notes on importance of complete collecting

In certain groups specific identification depends on particular structures, and, in the following list of families, I have endeavoured to indicate the special material needed for identification, as well as some cautionary notes. Sterile material in some of these families may be merely a worthless addition to the file of *indeterminatae:* in others, fruiting material is either essential or highly desirable for accurate identification.

It is assumed, in this list, that flowering material is in all cases essential and that sterile material is, generally, worthless; this is not specially stressed but accepted *a priori*. It is further assumed that herbs are collected as whole plants (exceptions are herbaceous twiners, and big plants like *Scitamineae*, *Araceae*, *etc.*).

If in the list it is said 'fruiting material worthless', it is meant that it cannot be identified unless flowers are present at the same time.

Acanthaceae. Flowers often drop easily after collecting. Fruits important.
Amaranthaceae. Ripe fruits!
Amaryllidaceae. Do not forget subterranean parts.
Annonaceae. Fruiting material only hardly of value. Flowers may open early and then grow considerably before and during anthesis.
Araceae. Fruiting material worthless. Morphological structure of plant important.
Araliaceae. Preferably fruit in addition to flowers.
Asclepiadaceae. Ditto; fruiting material worthless.
Balanophoraceae. Sometimes dioecious! Tuber surface important.
Balsaminaceae. Fruit desired.
Begoniaceae. Ripe fruit much desired.
Bryophyta. Fertile material is preferable.
Burseraceae. Fruit important.
Caprifoliaceae. Ripe fruit in *Viburnum* desired.
Casuarinaceae. Male flowers, ripe fruits.
Compositae. Ripe fruits.
Convolvulaceae. Ripe fruits.
Cruciferae. Ripe fruits.
Cucurbitaceae. Often dioecious. Ripe fruits.
Cycadaceae. Tip of female carpel.
Cyperaceae. Ripe fruit and subterranean parts necessary. Too young inflorescences alone hardly of value.
Dilleniaceae. Ripe fruits.
Dioscoreaceae. Tuber, sometimes bulbils.
Dipterocarpaceae. Ripe fruits.
Ebenaceae. Dioecious. Ripe fruit with calyx.
Elaeocarpaceae. Ripe fruits advisable.
Epacridaceae. Ripe fruits.
Ericaceae. Without flowers worthless.
Euphorbiaceae. Dioecious. Ripe fruit.
Fagaceae. Male flowers and ripe fruits. Sterile worthless.
Gesneriaceae. In fruiting state mostly worthless, but fruits desired in addition to flowering material.
Gnetaceae. Ripe fruit.
Gramineae. Subterranean parts and stolons; inflo-

rescence not too young. Sterile material worthless.

For bamboos: At least one internode at medium height of culm, including a *complete* culm-sheath (with tip); flowering material rare.

Lauraceae. Sterile material worthless.

Leguminosae. If possible pods.

Liliaceae. Subterranean parts.

Loranthaceae. Fruiting or sterile generally worthless. Note host plant.

Malvaceae. Fruits.

Melastomataceae. Sterile material worthless. Fruit.

Meliaceae. Sterile material worthless.

Menispermaceae. Sterile material worthless.

Moraceae. Often dioecious. Fruits.

Musaceae. Axis of inflorescence. Fruits.

Myristicaceae. Sterile material worthless. Dioecious. Fruit.

Myrsinaceae. Sterile or fruiting material worthless.

Myrtaceae. Fruits. Sterile material worthless.

Nepenthaceae. Flowers not very important, at least not essential. Pitchers of stembase and rosettes of little importance; look for pitchers on full-grown leaves.

Nymphaeaceae. Ripe fruit.

Orchidaceae. Sterile or fruiting material worthless. Flowers to be put in liquid if possible.

Orobanchaceae. Ripe fruits.

Palmae. Erect. One complete leaf with sheath. Sheath of inflorescence, both flowers and fruit with calyx. Sketch of shape, surface of stem, and note on approx. sizes. *cf.* TAMMES & BLOEMBERGEN (1940), L. H. BAILEY (1946).

Climbing. Tip of stem with 2 nodes and complete leaf incl. sheath and flagellum. Fruits. *cf.* FURTADO (1937). Motor-gloves are convenient for collecting rattans.

Pandanaceae. Dioecious. Ripe fruit more necessary than flowers. Habit sketch. Stem-width and leaf-tip important.

Piperaceae. Fruits.

Polygonaceae. Fruits.

Potamogetonaceae. Fruits.

Pteridophyta. Take fertile (spore-bearing) material; fronds must be attached to rootstock. Leaves are often dimorphous. In tree ferns complete petiole is essential.

Rafflesiaceae. Dioecious.

Ranunculaceae. Fruits.

Rosaceae. Fruits.

Rubiaceae. Ripe fruit. Sterile material generally worthless.

Santalaceae. Fruits.

Sapindaceae. Fruits. Sterile material worthless.

Sapotaceae. Fruits.

Solanaceae. Fruits.

Styracaceae. Fruits.

Symplocaceae. Fruits.

Umbelliferae. Fruits. Radical leaves if any.

Zingiberaceae. Subterranean parts, inflorescence in liquid.

6. Collecting and dispatching living plants, seeds, &c.

It is often advisable to collect fruits, seeds, root-stocks, cuttings, *etc.* for transplantation and cultivation in tropical botanical gardens and in greenhouses in temperate regions.

Experience has taught that very often the method of dispatch may nullify the trouble taken by the explorer. Even at the present moment there are difficulties connected with this dispatch, which still leads to disappointment both for the collector and the receiver. This matter led to many con-

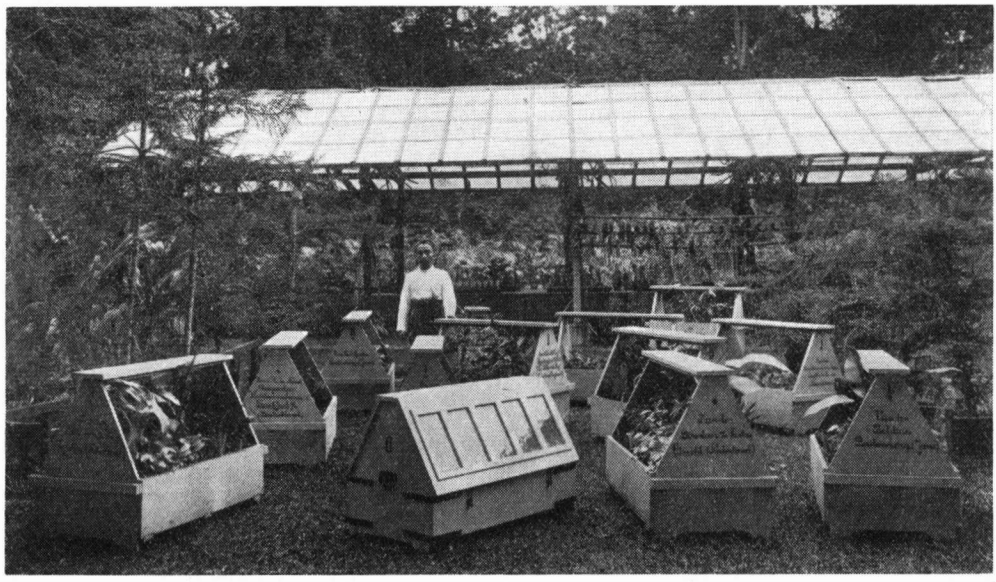


Fig. 9. Wardian cases in various stages of packing for dispatch at Buitenzorg.

troversies between the Botanic Gardens at Leyden and Buitenzorg in the 19th century.

Some of the difficulties result from a wrong choice of objects by the explorer; others are connected with ignorance of the tolerance of the collected plant species. Sometimes also the equipment of the explorer is inadequate.

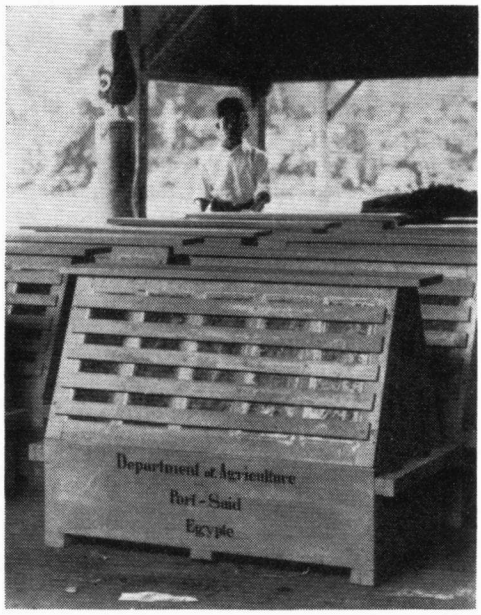


Fig. 10. Wardian cases ready for dispatch. Botanic Gardens, Buitenzorg.

Most explorers will not be able to carry *Wardian cases* in the field, or even to a base-camp, though these miniature greenhouses are still the unsurpassed means of dispatching living, rooted plants (fig. 9–10). The method can with some trouble be imitated by primitive means. *cf.* ELLIS (1775), DE VRIESE (1840, 1855), WARD (1835, 1842), WIGMAN (1903).

Over small distances and dispatch of a few days the most excellent means of packing living plants is in baskets (fig. 11) or in the folded fleshy sheaths of banana leaves (vernacular name *gěděbòg*). This is ideal, even for water plants. Avoid the use of wood-wool and sawdust, but use instead eventually *peat-dust*, *peat moss*, *crushed coconut fibre*, *moss*, or *cork-powder*.

For *herbs* without tuber or root-stock it is preferable to collect seeds instead of plants. Seedlings must generally not be brought into the light at once; they must be gradually accustomed to it.

Cuttings and stems of plants which can be propagated vegetatively are sometimes sealed at both ends with wax or vaseline. Though leaves are mostly removed from the cuttings or plants, it is advisable to cut of each leaf $\pm$ 2/3 of its surface and leave $\pm$ 1/3 for keeping intact the plant's physiological balance.

Tubers (bulbs and rootstocks) are preferably taken when the individual specimen is not in flower, preferably even when the plant has flowered.

Epiphytic orchids ought to be wrapped tightly with the roots round (not: *in*) masses of moss, treefern root-bark, fern roots, coconut fibre, or other debris not liable to easy attack by mould. This clump must be kept dry to the touch. Orchids packed thus must not be dispatched in tins, but rather in open, ventilated crates made of bamboo, wood, lianas, or in baskets. Leaves must preferably not touch each other; open spaces can be filled by coconut-fibre; *cf.* WIGMAN.

Seeds and *fruits* must generally be ripe, clean and dry and dispatched then. In particular cases, such as large, thin-coated seeds, it is preferable to pack them in moist peat, moss, turf, cork-dust, without earth, in closed tins. The addition of coarse charcoal is very favourable against mould-growth, and acts as disinfectant.

Seeds of waterplants are dispatched in water in waxed glass tubes placed in bamboo or wooden cases.

Dispatch must be executed at the earliest convenience by the most rapid way, as seeds of many forest plants loose their germinative power very soon. Generally plants sent to temperate countries must not be dispatched before May.

In Indonesia there is freedom of charge for liner transport by K.P.M. for botanical specimens forwarded to the Botanic Gardens of Indonesia (or 'Kebun Raya Indonesia') at Bogor (Buitenzorg).

Seeds in dry capsules, pods, *etc.* are preferably kept in their natural envelope, not to be replaced by an artificial one.

All pulpy seed must be thoroughly washed and dried.

Excellent notes on the subject are written by BURBIDGE (1877, p. 39–42) and ARCHER (1945).

7. The importance of field labels

In order to save time it is convenient to have printed field or herbarium labels (fig. 12). Notes put down on the field label may add considerably to the value of the specimen, provided that they give intelligent information on characters which disappear after collecting. These notes add to the picture which the herbarium botanist tries to make subsequently of the living plant. In the past century the importance of field labels in the herbarium was often not recognized or brought into practice, and old herbarium specimens suffer very often from inadequate information. *cf.* MERRILL (1916, 1921, 1926, 1934).

To the *morphological data* belong among others the habit and height of the plant (in case of trees also diameter, occurrence of buttresses and other root formations, structure of stem-base, length of clear bole, bark sap), subterranean organs, life-form and architecture of the plant, colour of flowers and fruit, dimensions of fleshy parts, scent of flower, taste of fruit and sap, and other peculiarities which will disappear in drying. Further notes must be made on the habitat and the frequency of

the plant, and in the case of trees and shrubs also of their regeneration and seasonal resumption of growth.

Native uses or local importance of plants should be recorded; even brief notes, such as 'grazed by stock', 'roots eaten raw by natives', 'fruits eaten by birds', 'important lumber tree locally', 'controlling erosion in sandy places', *etc.* add value to the specimens. Strangely enough, most plant collectors never bother to gather such information, perhaps for lack of interest or time, or because they have not learned the local language or dialect. Any collector in a distant region should feel duty-bound to secure all possible information on the economic uses of plants.

Vernacular names. Making notes of native names of plants is exceedingly difficult for those not in command of native languages as these names are transmitted phonetically. There are several reasons for taking the utmost care in incorporating them on the field label, as is more amply treated on p. xlii *seq.* As everywhere else in the world, native names are often very local, and have little scientific value.

The collector must never trust his memory, and his notes must be written down as soon as possible, even if he does not make short notes in the field. The Singapore botanists label in the field, which is of course the best method; further information is then added as soon as possible on the label remaining in the field-book. Labelling in the field costs time which can sometimes be used more efficiently, specially in the rainy season when few collecting hours are available each day.

I myself make in the field few notes in a pocket-book, but I have always worked out the daily harvest in the same afternoon and evening.

As to putting down the contents of or for the definite labels one can, as is done by the Singapore botanists, do this in the field, though it may be impossible in rainy weather.

A second method is to have numbered labels in label-noteblocks, each label in duplicate, and to use carbon paper for the copy. Notes are written with a hard pencil in the camp or tent. This method is a rather time-consuming one.

My own method is to sort and number plants in camp after each trip. *cf.* ARCHER, 1945. My notes are written down in a thick exercise-book. At the heading of each trip or day-series I note the general features of the trip, altitude, date, name or circumscription of the locality(ties), *etc.* which data are valid for the whole or that part of the trip. As far as possible plants are numbered in the sequence of collecting (for later recollection). After each number I write the scientific name of the family on the even pages; on the odd pages I put the name of the genus and species, as far as I am acquainted with, and then follow the vital notes on characters which will disappear in drying. If a plant shows peculiar characters, and there is time left, I take some measurements and draw a provisional description. The blank parts of the even pages are further left for diary and additional notes, *e.g.* photographs taken, drawings made, flowers preserved in liquid, *etc.* Definite labels are written later in the herbarium (fig. 12) and drawn from this 'collector-book', a combination of number-book and diary (fig. 13). I have found this convenient and satisfactory.

The exercise-books are later bound into volumes and fit in a library. These volumes may serve for

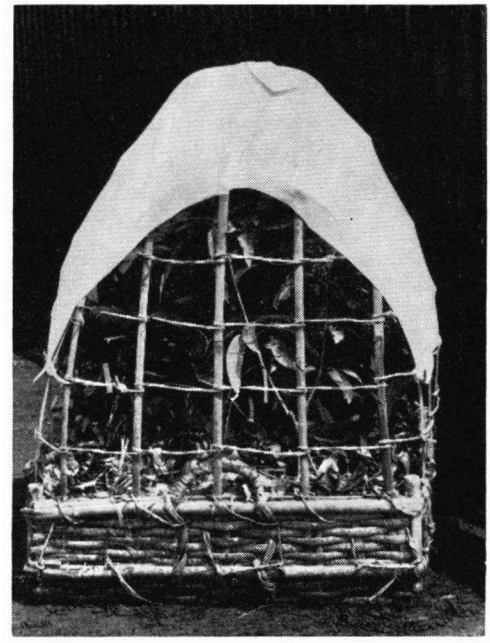


Fig. 11. Dispatching living plants over short distances; low bamboo-plaited basket in which living plants (in separate earth-filled baskets) are tightly packed; cover of cloth; diameter *c.* 60 cm sq. Instead of bamboo also wooden boxes can be used. Buitenzorg Botanic Gardens.

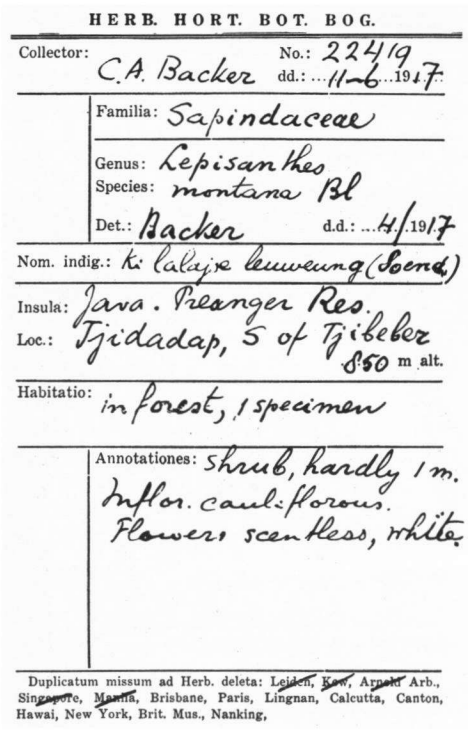
reports, and data do not disappear as loose labels in a herbarium. Subsequent identifications keep this diary up to date.

Collections are never numbered independently; all follow the one consecutive order. Beginners especially do not understand the hopelessness of separately numbered collections all starting with number 1. *cf.* CLARKE (1893), VAN STEENIS (1935).

Measurements, altitudes *etc.* are in the metric system.

The reproduction in fig. 13 is a sample of this method. In practice notes are unfortunately often more scant, and as a matter of fact less ample notes are sometimes sufficient, depending on the experience of the collector. But the fact remains that notes on the living plant are *never* superfluous, and every collector must be aware that no data are allowed to be added afterwards from memory as these can never be trusted wholly, even if they are made by the most experienced field botanist.

Collectors are often laymen and amateurs, and


HERB. HORT. BOT. BOG.

Collector: C.A. Backer No.: 22419 dd.: 11-6 1917

Familia: Sapindaceae

Genus: Lepisanthes
Species: montana Bl

Det.: Backer d.d.: 4/1917

Nom. indig.: K. lalajar leuweung (Soend.)

Insula: Java. Preanger Res.
Loc.: Tjidadap, S of Tjibeber 850 m alt.

Habitatio: in forest, 1 specimen

Annotationes: Shrub, hardly 1 m. Inflor. caul-florous. Flowers scentless, white.

Duplicatum missum ad Herb. deleta: Leiden, Kew, Arnold Arb., Singapore, Manila, Brisbane, Paris, Lingnan, Calcutta, Canton, Hawai, New York, Brit. Mus., Nanking,

Fig. 12. Model of a field label used at Buitenzorg (= Bogor), size 18 by 11 cm.

they are sometimes not acquainted with technical terms of parts of the plant; they should not hesitate, however, to describe in their own manner the parts or what they take for them. The herbarium botanist will appreciate these attemps and will generally be able to understand their meaning.

One must of course train oneself and use common sense. With an uprooted herb it is not necessary to describe the root system; if dry capsules are present it is not necessary to note 'fruit a dry capsule'; if leaves are decussate it is not necessary to note 'leaves opposite'. But if the inflorescence is sticky this character may disappear in the herbarium, and so, also, such features as the sliminess of bracts, the colour of sap, the scent of flowers, and the taste of a fruit. Fleshy fruits are very often difficult to study in the herbarium; therefore make sections in two directions in the field and make eventually a rough drawing of their outline and structure. Unripe seeds often turn mouldy inside the fruit during drying, and are useless.

Local information. Try to find out whether the native people know anything about the use of the plant and its vernacular name. They are generally very eager to help, and they may furnish valuable information. If they are ignorant, however, they will give from inborn courtesy a fictitious answer. If you find the same plant another day, try to corroborate the prior information. Remember they are ignorant of your aims, and do not know that what you write down is final, and hardly liable to later criticism.

Field hints. Botanists are exigent people. They are eager to know the habit and characters of the whole plant. Try to get complete specimens, that is with both flowers and fruit. Try to look for juvenile specimens; they sometimes show aberrant characters in habit and leaf shape. If you find a peculiar looking sterile plant, point it out to your native companions and promise them a cigarette if they find a mature plant. Do not let them collect it themselves, for they often bring only fragments. If a tree is sterile but there are many fallen fruits below it, mention this on the label and do *not* pretend that you have actually collected them on the tree. *Do not mix materials from different trees;* several species may grow together. *It is forbidden to mix specimens from different remote localities, and specially those collected on different days, under the same number. Never mix under one collecting number materials of dioecious plants;* if you are convinced that they belong together mark this as an observation on the identity but not as a certainty. Do not trust your memory! If a plant seems worthy of cultivation, either as a ground cover, for reafforestation, for ornamental purpose, or as a food plant, try to collect ripe seeds; put these in a paper packet under the same number.

Try to take as little earth as possible with the collected material in the vasculum. In the case of large leaves, either compound or simple, fold these and do not break or cut them.

The total number of specimens needed for each field number depends on various circumstances, facilities, equipment, and aim of the collection. For scientific collecting in unknown unexplored Malaysian country 12 sets are advisable. If the collecting is done with the aim of getting record material for local research, an experienced collector will be content with less specimens. In most cases copious material is advisable.

In prolonged trips the total daily collection in the primary forest will not exceed an average of approximately 20–25 numbers. However, if the vegetation is very varied (forest, open slope, grassy river bottom, swamp, *etc.*), the total may be much greater. The season yielding the best results is difficult to indicate. Generally a change in season (dry to wet, or the reverse) is advantageous. A dry spell during the wet season (*e.g.* N of the equator in Jan.–Febr.) is a great stimulant for many plants to get into bloom. There are, however, many exceptions in which plants begin to bloom either in the midst of the dry season or late in the wet season.

In tall primary forest the crowns of trees can rarely be examined and often hardly be seen. Experienced collectors watch the forest floor for fallen flowers or fruits. Sometimes the buzzing of bees or the odor from the flowers will serve as a clue that a certain tree is in bloom. Field-glasses often aid in spotting flowering and fruiting trees, epiphytes and lianas. Next to the difficulty in locating flowering or fruiting crowns in the canopy is the

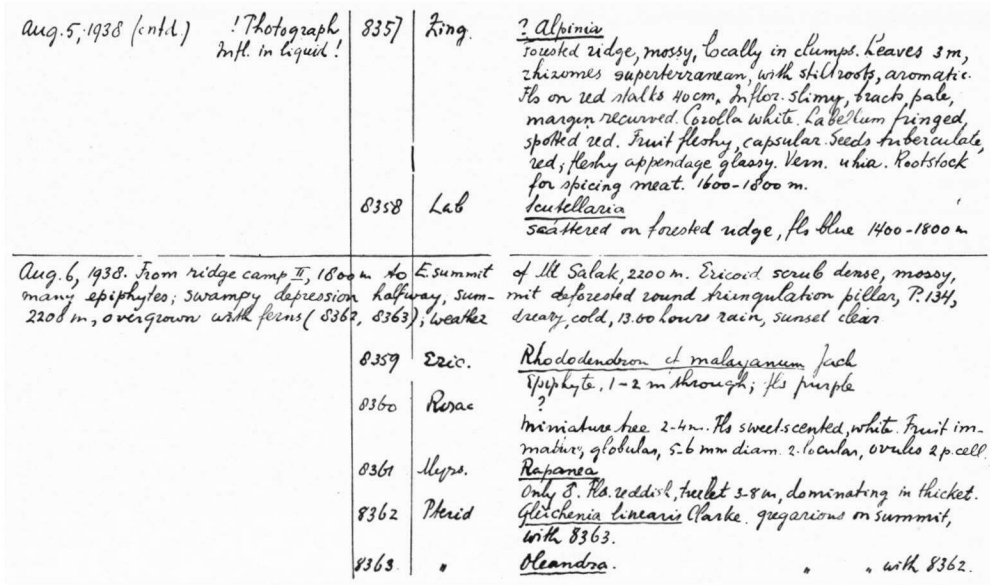


Fig. 13. Model of 2 pages of a 'collector-book', a combination of a field number-book and diary, × 2/5.

trouble of collecting material afterward. Felling the tree or relying upon the help of natives experienced in tree climbing are the methods for collecting. CORNER (1940) made use of trained monkeys in Malaya, but this excellent and efficient way will be limited to exceptional opportunities.

For forest exploration and plotting rather detailed methods have been worked out; for this specialized work separate designs have been made for labelling and recording. Labels, approaching in the number of details Dutch tax-papers are used by the Forest Research Institute at Buitenzorg (fig. 14). I refer for particulars to ANONYMOUS (1933), CURRAN (1940), ENDERT (1921), and LANE-POOLE (1925).

8. Drying plants in the field

The way in which this can be done depends much on facilities and equipment. If the base camp is a house or hut, and pots with charcoal are available, the matter is simple. A boy is put in charge and instructed to turn the parcels. In the field charcoal is mostly not available and one is forced to use a wood fire, which is less convenient. In the mountains and in dry regions the specimens contain less moisture and can be dried in the sun, provided the paper is changed regularly.

In all these cases the paper, used to absorb the moisture (the 'driers') consists either of yellow Chinese paper or of old non-glazed newspaper. The size of this is mostly about 35 by 50 cm which suits the sheet-size of most herbaria (at Buitenzorg 29 by 43 cm). Not more than 5–10 numbers (with duplicates) are pressed between two firm, plaited frames of bamboo lattice (sasak)[1] which are fastened along the edges with either wire, cord, lianas, or bamboo (fig. 15).

After the plants have been numbered, at least one specimen of a set has been provided with a small label (2 by 3 cm) on which the name of the collector and the field number are printed or written with soft, black pencil (fig. 8). Then the specimens are put between the paper, each number getting a wrapper. The parcels are placed above and round the fire[2] on a scaffolding of poles; heat radiation is sufficient within about 1/2–3/4 m distance (fig. 16). The trick is to avoid burning the parcels and to turn them regularly.

A special boy should attend the fire, preferably by day and night.

After 1 1/2–2 days most plants can be dry if the fires have been well-cared for and the drying-paper changed frequently, especially the first day. After the specimens have wilted, pressure is gradually increased. A dried specimen is stiff and does not feel cool against the lips. On board ship the linen-room is excellent for drying plants.

Big fruits can often not be fitted in the press or herbarium; they are labelled and dried separately. It is advisable to put detached fruits in paper bags, to avoid mixing and disintegration.

Very fleshy plants are put into boiling water for some minutes in order to kill the tissues and promote the rate of drying.

In the U.S.A. a new device is now being put into

(1) These are cheaper and lighter than wire-work lattice presses.

(2) Preferably of coarse charcoal.

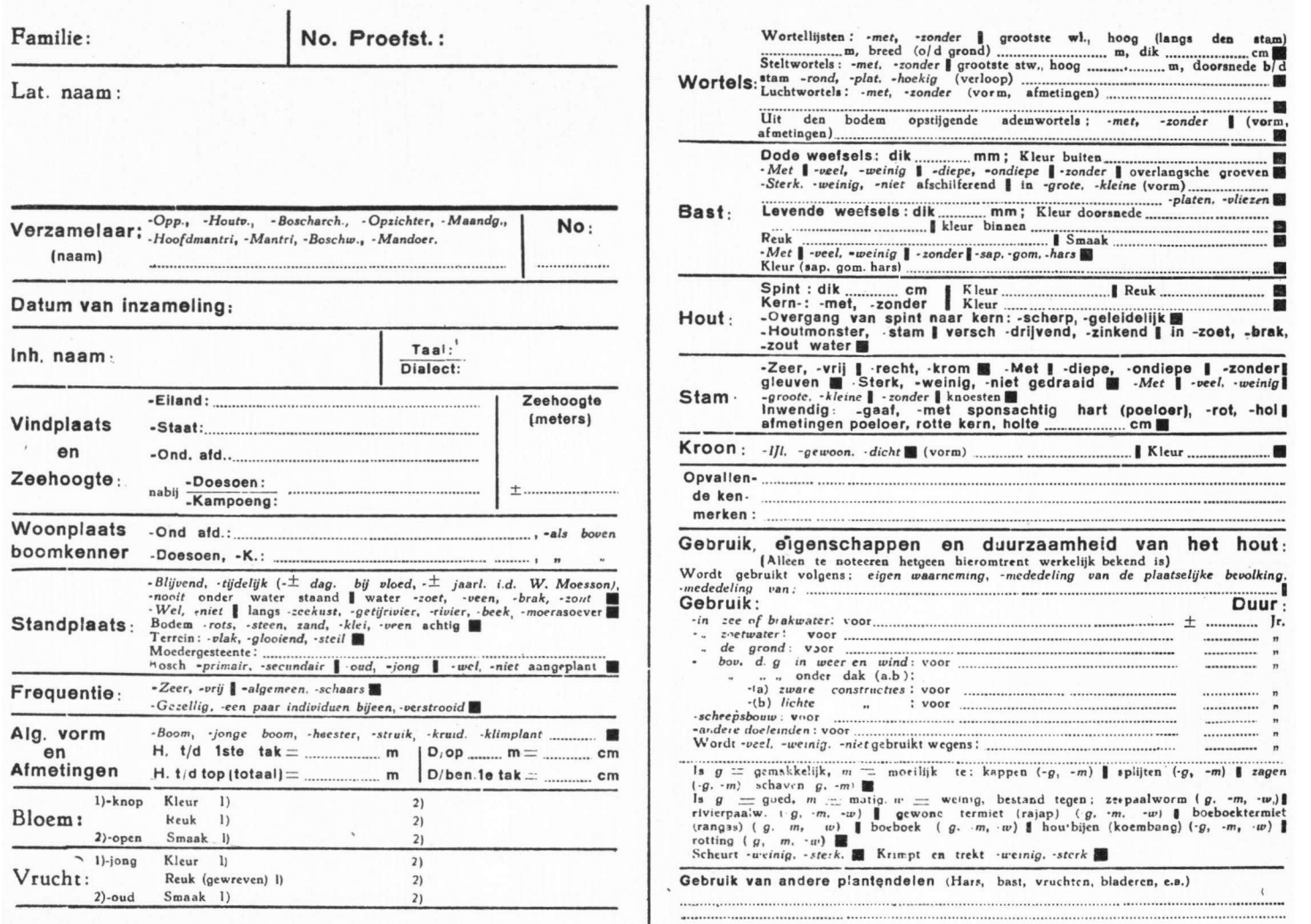


Fig. 14. Model of label used for forest exploration by the Forest Service in Indonesia.

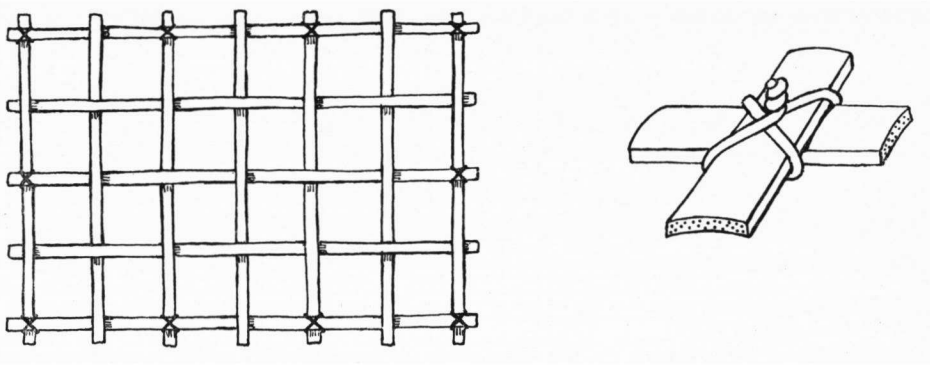


Fig. 15. Model of a 'sasak' (of bamboo); right: detail of fastening the laths by wire or thread. Measurements 45 by 35 cm.

practice in which specimens are pressed between double-faced corrugated cardboards which accelerate drying by promoting ventilation. These form rather big packets which are placed vertically above a fire or stove. The rapid ventilation through the corrugated board gives rapid drying, and fine specimens. A fixed base camp is needed and transport is very bulky. The advantage is that there is no changing of paper. The latest innovation is to use corrugated aluminium sheets as substitutes for the corrugated cardboard ventilators (BELLER, N.Y.).

Rapid drying is necessary to avoid overaccumulation of half-dried material in the camp. After plants have been thoroughly dried, the parcels are sealed in tough paraffined or bituminized paper,[1] labelled, addressed and dispatched as soon as possible.[2] As a precaution against insect infection and mould, a few tablets of formalin are added, a strong insect- and mould-killing substance, *cf.* PENZIG (1894); paradichlorbenzene is excellent against insects; sulphur and naphthaline are insufficient.

A better way of drying plants in the field is the use of an *oven*, of which two kinds are suitable.

A simple oven was used and described by KAJEWSKI (1933): heat is derived from a pressure kerosene stove ('Primus') and hot air is circulated in the space between two rectangular galvanized iron boxes of different size. There is no proper control of the temperature inside the tins.

An improved method is to use a double tin in which the space between the walls is filled with water. This double walled tin is also heated by a pressure kerosene stove, but the temperature inside the tin cannot rise above 100 centigrades.

Both methods are preferable to drying by heat derived from a wood fire, they are economic and clean and independent of a supply of dry wood.

(1) Preferably parcels are sewn in gunny sacking.

(2) With the indication: '*Dried Botanical Material for Scientific Study. No Commercial Value.*' In Indonesia K.P.M.-liners give free transport for botanical specimens forwarded to the Botanic Gardens (Kebun Raya Indonesia) at Bogor or Buitenzorg.

The apparatus adds, however, to the luggage, but is most useful in a fixed camp.

The drying of plants in the field, described above, is convenient on short trips near inhabited country. In remote places the manual labour connected with drying is most time-consuming, and another method, the wet or Schweinfurth method is used. It is described in the following paragraph.

9. The wet or Schweinfurth method. Advantages and disadvantages

For collecting in wet parts of Africa the celebrated explorer G. SCHWEINFURTH (1875; see also SCHENCK, 1888), devised a new method for preserving plants meeting the demands of long expeditions with many trek-bivouacs in wet climates. Since, this method has been accepted in Malaysia by the Indonesian Forest Service, by all big Dutch expeditions in the West and East Indies, and by the Botanic Gardens of Indonesia at Buitenzorg.

The procedure is to place the freshly collected, and labelled, material in a galvanized-iron tin, to press it firmly between bamboo-lattices (sasak), and then to saturate it with just enough alcohol (denatured or not), so that no free alcohol lies at the bottom of the tin. The tin is then sealed and its contents are protected against insects, mould, and evaporation. Such sealed tins can stand for months, and even a year, without deterioration. Finally the tins are unpacked in the Herbarium and the material is easily dried in the sun. The great advantages of this method are conspicuous *viz:*

(1) It saves much time and trouble in camp, and is a clean rapid procedure.

(2) Safety of collection, specially in 'shifting camps', which are sometimes rough and ready.

(3) On the outward voyage the tins are used for storing food and other equipment. During the progress of the field work the contents are gradually substituted by preserved herbarium material.

(4) The tins, if well-made, need no packing and the address to which they are to be sent is painted on the outside.

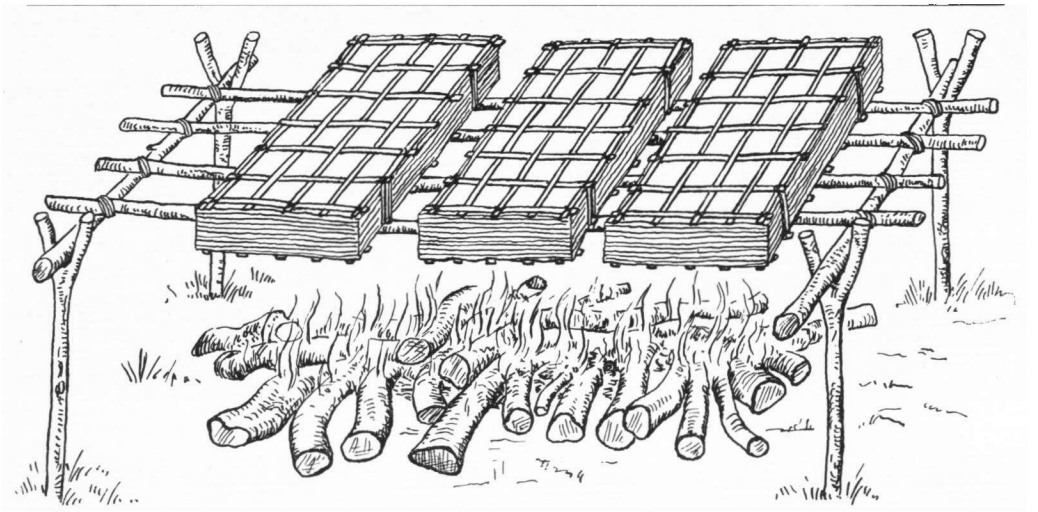


Fig. 16. Drying bundles over a wood fire; additional bundles may be placed against the upright poles.

(5) These tins can be used in the tent for desks, tanks, *etc.*

(6) During subsequent unpacking at leisure in the Herbarium, flowers *etc.* are still wet and, though pressed, can be preserved in liquid.

(7) There is no trouble in finding, collecting and storing firewood.

(8) One person is saved, as no boy charged with drying plants is necessary.

(9) No wooden boxes need to be used for dispatching the collection; this is a great advantage as it saves money, labour and trouble in getting planks in remote places.

(10) Sealed tins can stand rain on the homeward voyage.

(11) The specimens are killed so quickly in the alcohol that, whereas normal drying often causes leaves, leaflets and flowers to fall off, as in the *Santalaceae*, some *Euphorbiaceae*, *Araliaceae*, *Leguminosae*, *etc.*, the alcohol specimens keep intact.

Disadvantages are:

(1) That these tins take relatively more space on the outward voyage (though on the return voyage the ultimate bulk is the same or smaller than with dried material).

(2) The load to be carried is heavier than with dried material as the water in the plants and the alcohol is, properly speaking, superfluous to bring home.

(3) The herbarium specimens are less showy.

In cases where no base camp of long duration is made, my experience is that the advantages of the wet method far exceed its disadvantages, for, on the other hand the disadvantages of the drying method are not to be ignored. I am citing here Dr MERRILL's experience[1] on a trip to Mt Halcon, Mindoro, Philippine Islands: "Above 4500 feet the rain did not cease day and night. As a result much of the collecting was accomplished in the wet, and all specimens were of necessity dried by means of fire. Material once dried could only with difficulty be preserved, and constant alertness was needed to protect our collections against moisture when we were in camp, while packing and moving in the pouring rain, and as we were fording streams. The material secured by Mr Merritt was prepared under scarcely more favorable circumstances."

It is possible to replace the alcohol partly or wholly by formalin but it appears that formalin, after some months, may be converted into acetic acid probably by the vegetable material; the acid corrodes the inside of the tins and leads eventually to leakage, entrance of spore-infected air, and moulding of the specimens. For the making of tins I devised in 1936 a model which has still proved satisfactory (fig. 17–18). It is adapted to the size of the herbarium sheets. These tins have separate covers; they are both soldered and riveted along the seams. The latter is essential against leakage and gives strength. The seams are broad. Below the upper margin a strong wire is eventually inserted to give the top strength. Two wire handles are fastened (soldered and riveted) on the sides of the tin, enabling carriers to fasten them into loads. The tin is painted inside and outside with aluminium paint. The address is written in paint on the outside. Each tin is numbered, and its cover has a corresponding number. A coloured band is painted over the tin and cover to assure that it is always closed in the same way. Sealing is done by broad strips of very thin, tough, 'Kraft' paper, on top of which a strip of coarse cotton is placed, and on top of this again, a strip of thick 'Kraft' paper. These three layers may be replaced by one good broad strip of adhesive tape (which is more expensive but more rapid in handling). For sealing-glue normal sago or starch is used. Experience shows that, with rough transport by ship, filled tins

(1) Philip. Journ. Sci. 2, C. Bot. 1907, p. 252.

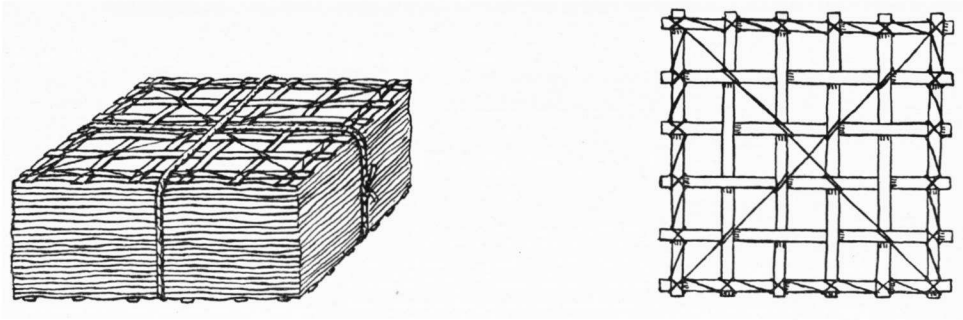


Fig. 17. Bundle ready to be soaked by alcohol and to be stored in the Schweinfurth box; the thin bamboo laths of the 'sasak' are tied together. Measurements 33 cm on both sides.

can last for about a year without damage to the specimens. The size of these tins is: height about 45 cm, diameter 35 cm sq. The latter size fits with the breadth of the herbarium sheet size, and as plants are folded it is easy to fit them later on, while still wet, to the length of the herbarium sheets. The alcohol to be added is for one tin about 2 L 96% or 2½ L denatured alcohol.[1] If a tin is gradually filled during 2–3 days collecting alcohol vapour escapes before the final sealing and another ½ L is added. Loose fruits and the like are stored with the other material in the tins.

A carrier is able to take 2 of these tins on the way back, each weighing about 11 kg when full. They may eventually be deposited in a marked place in the forest, and left for the return journey.

The number of specimens which can be stored in a tin depends on the size of the plants. Strongly pressed, the number is sometimes 50 when small plants are concerned, with about 5–10 duplicates.

But it also depends on the skill of the botanist. As little paper must be used as possible, and so all specimens of one number are put into one or eventually two covers; the numbers, not the specimens, need to be separated by paper and can be piled on each other. Thick parts must be placed along the margins and packed as tightly as possible so as to keep the bundles level (fig. 17). After having been in alcohol for a day or two, the bundles shrink slightly in tightly packed bundles.

Sasaks and paper cut at the exact size are prepared before the trip. In general 5 pairs of filled sasaks (fig. 17) are put into one tin, with about 150 covers of newspaper 33 cm sq. The parcels are laid *horizontally* in the tin. Others prefer bundles between rectangular sasaks or corrugated cardboard 43 by 33 cm (fig. 15) inserted *vertically*.

10. Making a herbarium

In making of a herbarium one uses for mounting paper strong rather stiff sheets preferably devoid of wood pulp. The more wood pulp there is in the paper, the earlier it decays, specially under tropical conditions. With small strips of glue-paper or linen[2] the specimens are mounted: very bulky parts can be sewn on the paper.

In some English herbaria, *e.g.* at Kew, where specimens are very often consulted by foreign visitors and material is often handled, the specimens are glued on the paper. For this purpose a glass plate is covered with glue and the specimen is laid on it; after that the specimen is pressed on the sheet. This method prevents the removing of parts of the specimens ('kleptotypes') and makes the sheets stiff, but it is not easy to handle such specimens for honest research.

An intermediate method is to glue some coarse parts on the sheet, preferably the main stem or rootstock, and to add some additional strips.

At Utrecht Herbarium there was a time when all the specimens were sewn on the paper, and this necessitated placing each sheet in a separate cover to prevent the threads from damaging other specimens. The method, thus, involved much paper, and money, as well as space in the herbarium, and it was less easy for handling and consultation of the sheets.

Another method is to sew on a bulky part of the specimen, as a root-stock or stem, and to fix the rest with glue-strips. But sewing is slow and costly, and nowadays there are such ideal substances for glueing that sewing can be dispensed with.

The size of the sheets depends on preference and custom; those at Buitenzorg, Singapore, Manila, and many European herbaria, *etc.* are appr. 29 by 43 cm. Leyden has a large size and Utrecht still larger. For some groups *e.g.* rattans and other palms, this large size is even too small; for such plants one specimen must be cut into parts and mounted on several sheets. *cf.* BAILEY 1946.

The label is mounted in the left lower corner to ensure as little thumb-handling and covering of dust as possible and to keep it clean. Subsequently identification labels are glued near to it.

In mounting specimens care should be taken so that they are not always placed in the central

(1) With the water contained by the plants the final strength is about 40%.

(2) Excellent is the coated linen of Nashua Coated Paper Co, Nashua, N.H., U.S.A., used in the Arnold Arboretum.

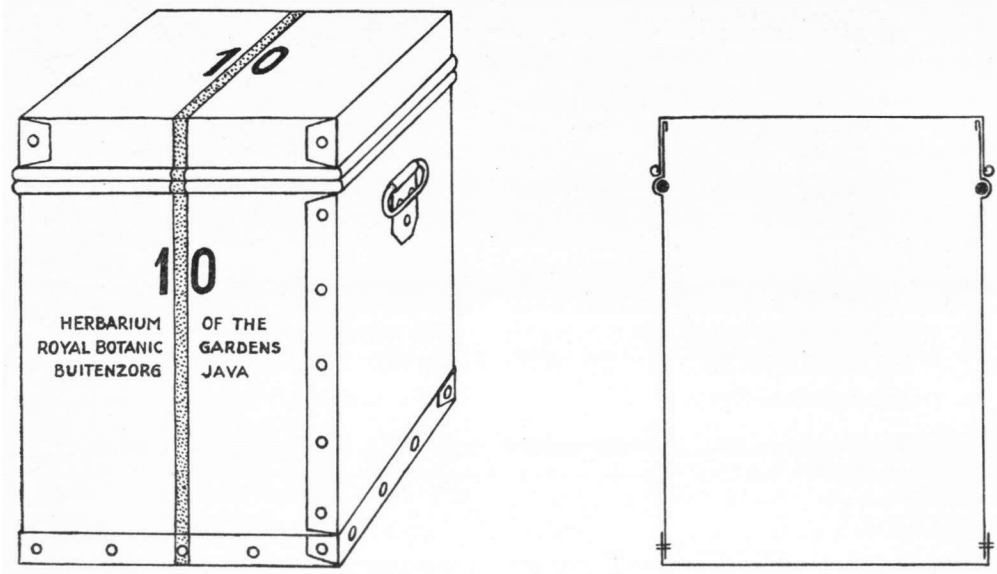


Fig. 18. Schweinfurth box (model used at Buitenzorg), with address, number and painted ribbon; mark riveting along seams. Right: section through box; measurements: 45 cm high, 35 cm on both sides.

part of the sheet, thus causing lens-shaped packets. The place where the thick parts of the specimen are put must be varied and generally come in the corners or along the margin.

Labels must be pasted with good glue which can stand drying: otherwise they may loosen, as is unfortunately the case with some of the historic old specimens of the Sloane Herbarium in the British Museum. In this old herbarium the inadvisable method was used of pasting more than one collection on one sheet, which is, even when they are considered to belong to the same species, strongly to be discouraged. Loose parts (seeds, flowers, fruits, loosened buds or leaves) are put in small paper packets which are glued on the sheet in a convenient place. The packets should be constructed so that these parts can be taken out without breaking them. They are for this reason often put in a folded paper, which is inserted in the envelope.

On the sheets are also to be glued sketches made of dissected parts belonging to the sheet and eventually references to literature and other annotations. *cf.* GLEASON (1933). Type or other descriptions of species can be glued on separate sheets and inserted in the herbarium, in the attempt to combine the library with the herbarium, in order to save time in having only one unit to consult.

The use of paperclips and needles is not advisable; they rust away. Notes and references are glued to the sheet.

Separate collections. Big parts of plants and large fruits, unsuited for insertion in the herbarium, wood and bark samples, pieces of lianas, *etc.* are kept in separate cupboards.

Fumigating or poisoning the herbarium.

Before inserting specimens in the herbarium they must be fumigated either with carbon bisulphide vapour in special cases or in containers, preferably outside the building.[1] Another method is to add crystals of paradichlorbenzene. *cf.* GATES (1935). Sulphur (ENDERT, 1922) and naphthalin are insufficient. All these substances evaporate and must be replaced from time to time.

Another more definite method is required in the tropics *viz* that of soaking dry specimens before mounting in alcoholic solution of corrosive sublimate[2] for some minutes; a square, flat photographic dish or porcelain basin can be used for this. For holding the specimens a wooden or bamboo pair of tweezers is used. The specimens are again dried in the sun in a press or under slight pressure. It has appeared that this method is the best one; after half a year $HgCl_2$ turns into HgCl which is equally poisonous to insects. Poisoned specimens are marked 'subl.'

A complete Herbarium and Museum may contain the following files:

(a) *Herbarium proper of mounted sheets.*

The existence of additional or accessory separate collections (under headings b–g) must be marked on the main sheet. In consulting the main sheet one must be able to see what parts of the spec-

(1) At Geneva the container can be brought under low pressure after which carbon bisulphide is admitted. *cf.* also ANONYMOUS 1937, 1938.

(2) 250 gr in 5 L alcohol, hence 5%. In using a saturated solution a whitish bloom may come on the specimens.

imen are represented and whether drawings exist in separate files. For references and descriptions see paragraph 10–11.

(b) *Dry collection consisting of wood samples, bark samples, lianas, big or thick fruits, root formations, etc.*

This collection can be put in cupboards or in glass show-cases as in a museum. It must be dust-proof as far as possible. Sometimes these objects are packed in transparent paper or other plastic.

The objects must be either poisoned with corrosive sublimate or paradichlorbenzene must be added in small boxes against insect damage. Labels must be fastened to the objects or so arranged that their interchange is impossible.

(c) *Liquid collection; parts preserved in liquid (alcohol or formalin) in tubes or flasks.*

Tubes and flasks need a well-fitting cover, either as an ebonite screw top or plate-glass glued with a mixture of paraffin and wax (paraffin alone being too brittle) or a glass stopper with cut and etched surface. The stoppers should not protrude beyond the width of the tubes as this may cause trouble later when dispatching them. Mostly corks are used but in ageing cork decays through the alcohol vapour in the tube. All such corks should be waxed.

Formalin is generally cheaper and does not evaporate so soon: its disadvantage is that it partly changes with age into acetic or other acids. Formalin-material is also unpleasant to handle. A liquid collection must be inspected twice a year. For a method in natural color preservation *cf.* ADRIANO (1933), KONING (1902).

(d) *Seed collection. Tubes in which seeds are preserved for comparison.*

This collection is of value only if it is large. It is used merely as a routine help if an institute often gets samples to identify consisting of seeds only. For this aim it can be of considerable value.

(e) *Ethnobotanical collection. Vegetable utensils, useful plants and other products.*

For this collection I refer to the indications under (b). Origin *etc.* of the objects must be carefully noted on the labels. Labels must be fastened to the objects.

(f) *Collection of photographs, in series of personalia, plants, close-ups of plants, vegetation types, institutes and gardens.*

Photographs are preferably not inserted on sheets in the herbarium. In sublimatised collections they fade rather rapidly and in other collections the substances evaporating from the herbarium material may attack the photograph as well.

(g) *Collection of plant drawings either coloured or uncoloured.*

The same remarks made under (f) are applied to the iconotheca.

11. Administration of a herbarium

In arranging herbarium sheets in the bigger herbaria there are two main methods *viz* the *alphabetic system* and the *systematic* one. With the first method all covers are arranged alphabetically under families, genera, species, varieties, *etc.* This is automatic work and can be accomplished by half-skilled personnel; *cf.* MILLSPAUGH (1925).

The other, systematic, method is much more intricate since it is done either according to BENTHAM & HOOKER's Genera Plantarum, or the catalogues of DURAND or DALLA TORRE & HARMS in connexion with the Index Kewensis. Before inserting a cover, one always must look into one of these books and put the number of the genus on it. This is the key to its place in the herbarium rooms. The advantage is that allied genera come next to each other, which facilitates searching in the collections, and to some degree facilitates work in the herbarium provided that working places are present there. Disadvantages are that for looking up a plant one has always to consult a book; secondly the many nomenclatural and taxonomic changes in generic names make it not very easy to consult these books.

At Berlin-Dahlem plants belonging to families which had been revised in the 'Pflanzenreich' were arranged according to the sequence adopted in these monographs. This puts allied species close to each other, but makes it difficult to insert later described species, and necessitates the consultation of special books for each family and the checking of the affinity of new species.

This perfected systematic arrangement is very time-consuming, and for me it is questionable whether in practice it is worth the trouble.

In inserting covers for the first time one must always use one of the generic indexes mentioned above, if a genus is not represented in the collection already; the generic name must be checked preferably with DALLA TORRE & HARMS or eventually by the less handy but more up to date compilation by LEMÉE, 'Dictionnaire descriptif'. Many generic names have been changed, and several are now assigned to other families. This must be noted in the copy of the book. For example one is free to insert *Pentaphylax* in *Theaceae* or *Pentaphylacaceae*, provided one can find the specimens with the least trouble.

A herbarium is, properly speaking, a card index which everybody must be able to consult in the most convenient way. Therefore it is advisable to insert, in cases of name change, a cross reference by means of a slip on a blank sheet as reproduced in fig. 19. *This can be used for name changes in all ranks.* In arranging specimens belonging to the species and taxa of lower rank it is advisable, in larger herbaria, to arrange these geographically.

The degree of differentiating geographical units varies according to the needs of each herbarium.

Type and authentic collections are in most herbaria marked with a red label on which is printed 'type', usually with a prefix marking the kind of type. At Kew and other herbaria type specimens are put into special, thick, red-margined covers facilitating recognition and selection, and providing a special protection. In other herbaria, for example at Washington, types are filed separately.

Reference sheets. Dr MERRILL has at Harvard and elsewhere made propaganda for inserting literature in the herbarium, and copies, photostat-copies or carbon-copies, of descriptions, references, plates, original diagnoses, *etc.* which facilitates work in the herbarium, introducing thereby the library element in the herbarium. In many cases this is very handy and saves the trouble of going into the library to locate references, but the method is really serviceable only when the record is reasonably complete. In herbaria where the method has scarcely been employed, it can be introduced now only at great costs and an immense amount of labour.

In general there must be *one herbarium file*, but in some cases of standard herbaria which have served as the basis for a classic, *e.g.* DE CANDOLLE's Prodromus, LAMARCK's Encyclopédie, *etc.* the keeping of such a herbarium in its original arrangement and state is highly desirable and essential, as appears from the case of BURMAN's herbarium of which the types have been distributed (often not under their original names) in the big Geneva collections. These sheets have been marked by a stamp on the sheet, but they cannot now be extracted save at great labour.

For inserting special herbarium-sheets which need not be kept separate, but which on the other hand do need particular recognition, it is advisable to put the sheets in separate covers of a special colour or provide them with a special strip of coloured paper on to which the name of the herbarium is printed and insert them as such; in this way they are well marked. This latter method has been followed with the Herbarium of KOORDERS at Buitenzorg.

Listing collections. There are few herbaria in the world where a complete card index exists of the preserved collections. This is, of course hardly necessary, since an orderly herbarium is itself a card index.

On the other hand I have pointed to the value of listing special big collections, but not along the line of WALLICH's List in which a quantity of material from various localities is taken together.

The listing of these special collections has two aims, *viz:*

(1) It is a fact that many duplicates are distributed before they have been named critically, sometimes they are unnamed. If there are many sets these duplicates can easily be named subsequently when the numbers are cited in literature. There are about 10 mostly unnamed sets of CARR's New Guinea collection in different herbaria of the world; there is no numbered list, and for proper inserting work there must be therefore at least ten persons busy in provisionally identifying this collection to prepare it for being inserted in these ten herbaria. If one person had been doing the time-consuming job of provisional naming and had made a list, all other 9 herbaria could have copied these identifications by mere mechanical work.

(2) Big collections are sometimes made in special countries, but the results are often never published or never published as a whole. If one wants to visit some place or island, it is easy to have at hand lists of former collections. At Buitenzorg many of these lists are kept up to date and belong to the equipment of those concerned with renaming and inserting specimens. Too little profit is derived from the existence at Buitenzorg of this unique collection of up to date lists of Malaysian plants, and all institutes which have received duplicates of Malaysian collections are invited to send requests to Buitenzorg for naming their indeterminates by means of collectors's numbers.

Name changes. In herbarium administration, as pictured above, the changing of a name or the change of an identification of a sheet is of course connected with the change of name in all pertaining files; the above-mentioned reference labels should be used in case of such name changes (fig. 19).

Further, newly appearing taxonomic work must be digested. The publication of a new monograph or revision brings about the necessity of bringing up to date names represented in the herbarium with literature. This is not done in many herbaria, but it would keep the collection up to date, and is of great importance. It cannot be left to routine clerks.

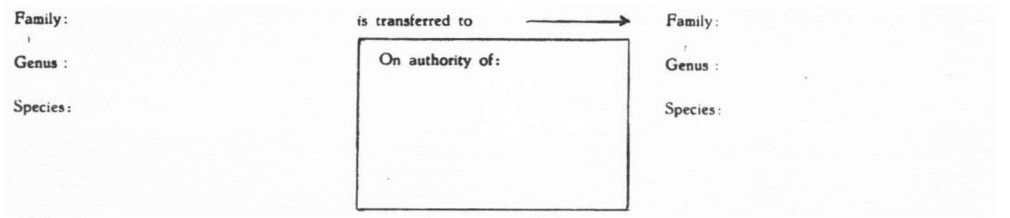


Fig. 19. Model of herbarium cross-reference for name changes, as used at Buitenzorg, × 1/2.

12. Policy of distributing duplicates

It cannot be stressed enough that the distribution of duplicate specimens is of immense value for the promotion of tropical plant science.

For each tropical country the set of scientific centres where collections have been accumulated is a different one. For Malaysian botany the following are the most important: *Brisbane, Manila, Buitenzorg, Singapore, Leyden, Kew, British Museum, Berlin-Dahlem, Harvard.* Additional ones are the world herbaria at *Geneva, Paris, New York, Washington, Michigan,* and *Berkeley.* It is partly for the safety of the results of explorers that a wide distribution is a necessity. This has been recently demonstrated by the destruction of the Manila Herbarium:[1] through the great care Dr MERRILL had always taken with regard to generous distribution of duplicates, and the diligence with which this was executed, the destruction of the Bureau of Science did not mean the destruction of the sources of the knowledge of the Philippine flora. This wise policy for the protection of scientific property of mankind is recommended to all important herbaria.

The sad counterpart of Manila has been Berlin-Dahlem where very large, important collections were left undistributed for a long period, *e.g.* some of Malaysia collected by the SARASINS, WARBURG, LEDERMANN, SCHLECHTER and others. Whatever the motives may have been for this policy, the result of it has proved to be disastrous under abnormal world conditions.

There is another point connected with the distribution of duplicates. If in the tropics herbaria are not very well preserved and looked after, the climate and humidity seem to have a bad effect on the state of the specimens: they seem to decay. Dr CHATTERJEE compared specimens of the same collection, preserved partly in England and partly at Calcutta.[2] It appeared that the Calcutta specimens had lost their structure, or at least the elasticity of the tissues which become apparent in boiling them up. This is very serious! The microclimate of a herbarium must be dry and moderately warm, besides being dust-proof.

Preservation of specimens in metal boxes seems to be far better than preservation in wooden cupboards. During a time when the air is very dry the boxes must be opened. Of the tropical Malaysian herbaria those at Buitenzorg and Singapore are both situated in ever-wet conditions; Manila is liable to a periodically dry period.

Further, collections remain drier and in better preservation if the roof of the herbarium building is covered with corrugated iron, which is less apt to leak compared with tiled roofs.

It seems to me that herbaria, moreover, are drier if they possess a basement consisting of pillars on the foundation so that there is a ventilated space or room between the foundation and the first floor. This room can be closed by strong wire-netting. Further, the second floor is drier than the first.

It is desirable that duplicate specimens have full labels; at Buitenzorg this was, unfortunately, not always done in the past.

Sometimes big collections have been sent to institutes where no diligence has been exercised in distributing duplicates. In some cases this has led to the misfortune of these collections and decades of unique field collecting by prominent collectors being lost, as in the case of DELAVAY's immense Chinese collections at Paris, which after the death of FRANCHET gradually disappeared through neglect and were for the most part silently consumed by insects. The results were disastrous as is communicated by Cox (1945).

Free exchange. Some institutes are very formal about the number of duplicate specimens distributed by them and those received in exchange. Such are counted and balanced to the last number. I call this method of balancing formal, because the correspondance in figures says nothing about the intrinsic value of the collections. A well-labelled set from the interior of Celebes is of immensely more scientific value than ten times this number of equally well-labelled specimens consisting of weeds from waste places and secondary growth from the neighbourhood of Manila or Batavia. Therefore, the counting of specimens is often beside the point. The balancing in such cases is verifying pennies while going wrong in pounds.

Moreover, the herbaria in the great scientific centres of the world, which are nearly all situated in the temperate regions of mainly the Northern hemisphere, have generally little to offer in the way of exchange. From a scientific standpoint it is the duty of all tropical herbaria to add to the collections at Kew, Paris, Berlin, New York and Washington. And to do this in 'free exchange', a policy introduced by Dr MERRILL and meaning that one gives what one is able to give irrespective of figures and balance, is justified from the standpoint of both science and practice. It is wise to make great assemblages in different parts of the world to ensure, (1) as many safe deposits as possible, (2) to stir up interest in tropical plants, and (3) to enable pensioned, tropical, and experienced veterans to continue work in one of these centres.

The rich collections assembled in tropical centres must be brought to the notice of the workers and visitors of the big world herbaria. This is the duty of tropical assembling places, and besides a duty it is a great privilege, because tropical botany will, for at least half a century to come, not only be mostly dependent on but will also benefit from contributions of the great scientific centres in the temperate regions of the globe.

13. Photographical documentation

For those field botanists and collectors who do not possess the ability of making clear and rapid sketches of habitat, landscape, and individual plants, it is necessary to illustrate their trips by photographic documentation. Besides, this docu-

(1) Shared by that of Sandakan.
(2) Journ. Ind. Bot. Soc. 28, 1949, p. 13.

mentation may be important for later information to geologists, pedologists, and geographers.

The most beautiful photographs are made on big glass plates 13 by 18 cm, but this is mostly impossible *pecuniae causa*. This method adds substantially to the luggage, and can only be accomplished in exceptional cases. Nowadays work is mostly accomplished with small roll-film packs, Leica or otherwise. Personally I find these a little too small, and HENDERSON, CORNER, ARCHER, EYMA, BUWALDA and myself have found a Rolleicord or Rolleiflex camera 6 by 6 cm excellent and adequate. Enlargements of these to 18 by 18 cm do not give any loss of sharpness. An exposure meter is advised, and a tripod for making photographs for long exposures with small diaphragm in the forest. For full sunshine I have a lens-hood. Formerly I used a weak yellow filter but good colour-sensitive roll-films are now easily to be had.

I have no experience with colour photography, a disadvantage is that no prints can be made of these. The best hours for photography are in the morning till about 9.30 and in the afternoon onwards of 16.00 hours when the light is oblique. In photographing forest types, scrub, or individual plants in the forest, it is very essential to have even light; direct sunshine gives an indistinct, spotted picture. Rather dull, dreary weather is best for taking photographs in the forest. The same principle is valid for taking close-ups of plants. Camera, roll-films, exposure meter, *etc.* I take in the field always in a small tin fitting them, and ensuring safe going in rainy weather. *cf.* GRIFFITH (1935), PENDLETON (1935), VAN STEENIS (1936, 1938), DE VRIJ (1930).

14. Selected literature on plant collecting and technique, preservation methods, field work, camping equipment, herbarium methods, &c.

The following list of literature does not aim at being complete or exhaustive but is merely derived from the author's card-file and intended for further references to the subjects treated in the foregoing paragraphs. A rather full list is to be found in the Bradley Bibliography. The information in many of these references is now obsolete, as techniques have been improved, and it is up to the reader to separate chaff from wheat.

Much information is hidden in travel books and floras, either in the text or in special chapters, some of which are mentioned here.

ADRIANO, F. T. & E. YOUZON (1933): Natural color preservation of Philippine plant materials for Museum or exhibition purposes (Nat. & Appl. Sci. Bull. 3, p. 121–125).

ANONYMOUS: Admiralty Manual.

ANONYMOUS (1872): Handleiding voor het verzamelen en conserveeren van botanische voorwerpen ten dienste van 's-Lands Plantentuin. Batavia. (Probably revised later editions of TEYSMANN's original article on collecting and conservation of botanical objects for the Botanic Gardens at Buitenzorg.)

ANONYMOUS (1873): Korte handleiding voor het verzamelen en drogen van herbarium en houtsoorten. Batavia. (Probably compiled by SCHEFFER: short manual for collecting and drying of herbarium and wood samples.)

ANONYMOUS (1881): in VETH, Midden-Sumatra Expeditie vol. I, 2, p. 245–278.

ANONYMOUS (1894): Hints on reconnaissance for explorers in unsurveyed countries (Journ. Str. Br. Roy. Asiat. Soc. 26, p. 207–218).

ANONYMOUS (1909): Instructions for collectors: No. 10. Plants (British Museum (Nat. Hist.)). 4th ed. London. 10 pp. *cf.* RENDLE.

ANONYMOUS (1910): Handleiding voor het maken van herbarium ten behoeve van het Departement van Landbouw te Buitenzorg. Buitenzorg. (Probably by J. J. SMITH. Guide for making a herbarium for the Bot. Gardens at Buitenzorg.)

ANONYMOUS (19 .): Technique of collecting plants (BRADLEY Bibl. vol. 1, p. 35–37, 520–521; *l.c.* vol. 5, p. viii).

ANONYMOUS (1930): Kampeeren (camping methods) (Med. Ned. Ind. Ver. v. Bergsport 1, p. 14–17).

ANONYMOUS (1933): Instructie voor het verzamelen van gegevens over de boschgesteldheid in de Buitengewesten. Buitenzorg. (Edited by the Forest Service of the Neth. Indies, compiled by F. H. ENDERT. Instruction for collecting data on the forests in the Outer Provinces.)

ANONYMOUS (1935): Hints to scientific travellers. Edited by the Roy. Geogr. Soc. (rep. in T.K.N.A.G. 1935, p. 288–289). 11th ed. 1938.

ANONYMOUS (1937): Fumigation of herbaria with HCN (Kew Bull. 1937, p. 572–574).

ANONYMOUS (1938): Herbarium specimens and gas poisoning (Kew Bull. 1938, p. 397–398).

ARCHER, W. A. (1945): Collecting data and specimens for study of economic plants (U.S. Dept of Agriculture, Miscell. Publ. no. 568. Washington 1945, p. 1–52).

BACKER, C. A. (1911): Wenken voor het aanleggen van een herbarium (in: Schoolflora v. Java. Weltevreden (Java), p. clxvii–clxx). (Hints for making a herbarium.)

BAILEY, F. M. (1899): Collection, preservation and identification of plants (The Queensland Flora p. xxv–xxxviii).

BAILEY, L. H. (1946): The Palm Herbarium with remarks on certain taxonomic practices (Gentes Herbarium 7, pt 2, p. 151–180, fig. 39–55).

BECK VON MANNAGETTA, Frh. (1902): Hilfsbuch für Pflanzensammler. Leipzig (ENGELMANN), 36 pp. 12 Textabb.

BENTHAM, G. (1861): Collection, preservation and determination of plants (Flora of Hongkong, introduction p. xxxiv–xxxviii).

BENTHAM, G.: Outlines of Botany with special reference to local Floras. 4th ed. London, no date, p. l–lii.

BLUM, I. (1894): Formol als Conservierungsflüssigkeit (Ber. Senckenberg. Naturf. Ges. 1894, 12 pp.).

BROUWER, H. A. & N. WING EASTON: The Netherlands East Indies (in: BROUWER, Practical Hints to scientific travellers 1, 1925, 1–38).

BURBIDGE, F. W. (1877): Cultivated plants, their propagation and improvement. London. (Sending of living material see p. 39–42.)

BIJLMER, H. J. T. (1938): Hoe gaat men op expeditie naar Nieuw Guinee? (Tijdschr. K.N.A.G. 55, p. 110–113). (How does one make an expedition to New Guinea?)

CARUEL, T. (1877): Della conservatione degli erbari (Malpighia 1).

CLARKE, C. B. (1893): Collectors' numbers (Journ. Bot. 31, p. 135–138).

COLIJN, H. A. (1937): Naar de eeuwige sneeuw van tropisch Nederland (hints for jungle travelling p. 45–67).

CORNER, E. J. H. (1940): Botanical monkeys (M.A.H.A. Mag. 10, p. 147–149; and Zoo life, Bull. Zool. Soc. London 1, 1946, 89–93).

COX, E. H. M. (1945): The technique of plant introduction (in: Cox, Plant Hunting in China, London, p. 214–221).

CURRAN, H. M. (1940): Some helpful hints while in the forest (Philip. Journ. Forestry 3, p. 169–175).

DAMMER, UDO (1894): Anleitung für Pflanzensammler. Stuttgart.

DIELS, L. (1931): Herbarien und Sammler (Med. Rijksherb. Leiden *no* 663, p. 1–4).

ELLIS, J. (1775): Anweisung wie man Saamen und Pflanzen aus Ostindien frisch und grünend über See bringen kann. Leipzig.

ENDERT, F. H. (1921): Handleiding voor het verzamelen van herbarium, houtmonsters en gegevens uit de praktijk in het belang van de botanische en houttechnische boschexploratie in de buitenbezittingen (Tectona 14, p. 908). 2nd ed. Buitenzorg 1924. (Manual for collecting herbarium, wood samples and data for forest exploration.)

ENDERT, F. H. (1922): Zwavel als goedkoop conserveeringsmiddel voor herbarium (Tectona 15, p. 890–894). (Sulphur, a cheap desinfectant for a herbarium.)

ENGLISH, J. L. (1882): The preservation of the larger Fungi and wild flowers in their natural conditions, by a new process.

EWART, A. J. (1933): On the preservation of Fungi (Ann. Bot. 47, p. 579–584).

FRESHFIELD, D. W. & W. J. L. WHARTON (1889): Hints to travellers, scientific and general. London.

FURTADO, C. X. (1940): collecting of rattans (Gard. Bull. Str. Settlem. 9, 1937, p. 156; *ditto* of *Licuala* in *l.c.* 11, p. 32).

GALLOWAY, B. T. (1924): How to collect, label, and pack living plant material for long distance shipment. U.S. Dept Agric. Dept Circular 323. 11 pp.

GATES, F. C. (1935): Paradichlorbenzene, an effective herbarium insecticide (Science 81, p. 438–439).

GILS, G. E. VAN (1940): Waterbestendig beschrijfbaar papier (De Bergcultures 1940, p. 852–854). (Water-resistant writing paper.)

GLEASON, H. A. (1933): Annotations on herbarium sheets (Rhodora 35, p. 41–43).

GRAHAM, S. A. & E. C. O'ROKE (1943): On your own: how to take care of yourself in wild country. Univ. Minnesota, Minneapolis, 150 pp. Illustr.

GRAY, ASA (1879): Structural botany. London, 6th ed. Chapt. X, sect. IV, p. 379–384.

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CHAPTER III. THE DELIMITATION OF MALAYSIA AND ITS MAIN PLANT GEOGRAPHICAL DIVISIONS

Introduction

Plant geographical demarcations are sharp for one single genus, one species, &c. but the general picture is far from clear. This is quite natural as the present vegetation represents only the outcome of continuous plant-migration and subsequent floras in past aeons. Everywhere progressive elements thrive together with relics. The localities of the latter are but rarely connected by phyto-palaeontological localities proving their former occurrence and migration and, possibly, elucidating their present disjunct distribution.

An example from the Malaysian lowland is *Dryobalanops*, a camphor-producing genus of *Dipterocarpaceae* consisting of 7 species and occupying a coherent area in Central Sumatra, the Malay Peninsula and Borneo (Fl. Mal. I, 4, p. lv, fig. 44). In the Late Tertiary Period it thrived in the adjoining parts of S. Sumatra and W. Java, where now large quantities of silicified timber of unquestioned identity testify of its formerly frequent occurrence where it is at present entirely extinct.

In N. Sumatra I found on the high mountains communities of the sedge *Schoenoxiphium kobresioideum* KÜK. with great numbers of *Ericaceae*, the latter so well represented numerically that they strongly suggest a recent development. *Schoenoxiphium* is, however, according to Dr KÜKENTHAL, the 'missing link' between the African *Schoenoxiphium* and the Asiatic *Kobresia;* the N. Sumatran species is the first of its genus outside Africa.

The segregation of the present mixed Malaysian flora could be accomplished by determining in each genus its centre(s) of development in order to evaluate the present distribution in Malaysia in respect to the whole generic area. In combining the figures of the several genera, the laws governing the past and present distribution (*genetical or historical plant geographical method*) of the Malaysian flora might be traced. Small groups are particularly suited to this method.

Another way to analyse and demarcate the Malaysian flora is the *floristic* or *quantitative method* by which the single groups are not valued individually. Its sole purpose is to trace demarcation lines where the botanical 'melting-pot' shows a more or less abrupt change, or, a threshold in its composition.

In following the latter method here *I have adopted the genus as the unit* for distribution or, in some cases, a well-marked subgenus or section. To study the distribution of the species would be impossible, their known synonymy and acknowledged area being generally far less reliable than those of the genera.

Similar attempts have been made formerly for local areas based on special collections, *e.g.* by WARBURG for the Papuan flora (1891), by STAPF for the Kinabalu flora (1894), and by MERRILL for the Philippine flora (1923).

Biological lines have been drawn in and around Malaysia by the dozens based on zoological, palaeontological, or botanical arguments. Similar lines have been derived from palaeogeographical, climatological, and geological sources or combinations of these. The lines are partly of a *connecting*, partly of a *dividing* character. Several efforts have been made both by zoologists and botanists to co-ordinate the lines. Striving towards a synthesis, botanists often derived their conclusions from a small or at any rate limited group of related plants and tried to make their results agree with one of the more than two dozens of theories proposed for Malaysian geology. HALLIER's work is both the most daring and the least sustained by facts, MERRILL's the best provided with basic material. It is striking that though MERRILL's botanical results distinctly show the overwhelming West Malaysian character of the Philippine flora, he prefers to put his results into the frame of a geologic division of the Malaysian Archipelago in two continental shelf-areas separated by an unstable region.

As the various natural sciences mentioned above show different aims and means, it seemed to me that the first object of Malaysian plant geography must be to sift and analyse the botanical facts themselves and to synthesize the major botanical features, without binding them to some geological or otherwise non-botanical theory.

Malaysian botany has its own problems. An example is the different degree of alliance between the floras of different altitude: *the mountain flora of Java* is nearly identical with that of most of Sumatra but very different from the Bornean mountain flora. The *lowland floras of Sumatra and Borneo* are practically identical, however, but widely different from the present Javan flora. The lowland flora of the Philippines is closely allied to that of Borneo, but the upland flora of N. Luzon shows a remarkable set of E. Asiatic genera and species. The lowland flora of New Guinea is essentially Malaysian but the summit flora has produced a unique Australian-Subantarctic element.

Types of generic distribution

The present study is based on several years of research in the Buitenzorg Herbarium, on literature, and on accumulated herbarium material. Many unpublished data have been used, especially those from the numerous large collections made in the years 1930–1940. I am of opinion that, though unexpected, the outcome is both clear and well founded. Some predictions founded on my results have already proved to be correct, which gives them marked support.

The results are based on figures derived from more than 2100 distribution maps of all genera of Phanerogams native in Malaysia.

For each genus I have tried to locate the centre(s) of specific development. This has led to an arrangement of these genera in 5 types which gave the following figures:

Types of generic distribution of Malaysian phanerogams:	Number of genera:	Percentage of total:
TYPE 1. Occurring in Asia, Australia, and Malaysia; no distinct centre in the paleo-tropics	602	27.7
TYPE 2. Centre of specific distribution clearly in Asia; absent or scarcely represented in Australia	574	26.3
TYPE 3. Centre of development in Malaysia, and some outposts in surrounding regions	580	26.6
TYPE 3a. Genera known only from one island or island group in Malaysia (endemic genera)	296 } 876	13.8 } 40.4
TYPE 4. Centre of development in Australia; absent or scarcely represented in Asia	94	4.3
TYPE 5. Centre of development in the Pacific-Subantarctic region	32	1.4
Total	2178	100.1

Though the census was made in 1945 and, therefore, the ultimate figures will be slightly different, they are so well pronounced that their essential tendency may be seen as final.

A first characteristic is the high percentage of type 1 which could be termed the '*Indo-Australian basic flora stock*'.

Another remarkable feature is the great number of Asiatic genera absent from or only just reaching the Australian continent, which shows that the old opinion of HOOKER & THOMSON, MIQUEL, and ZOLLINGER of the close alliance between the Malaysian and the Asiatic floras holds.

The high percentage of genera entirely confined to Malaysia (type 3a) or centering in Malaysia (type 3) together comprising 40 % of the total proves that the Malaysian region is worthy of the rank of a separate plant geographical province on an equal footing with that of SE. Asia.

The endemic genera are far from being equally distributed over the island groups, and certain islands are much richer than others. The grouping of the endemic genera is shown on a map (fig. 20).

The Australian resp. Pacific elements play, measured by figures, a very unimportant role in the general picture. Their number was formerly much overestimated owing to the occurrence of some conspicuous plants such as *Araucaria*, *Eucalyptus*, *Casuarina*, *Banksia*, *Grevillea*, and *Acacia*. This was specially suggested for the New Guinean flora, and has even made a geologist declare that the New Guinean flora possessed essentially an Australian character. Our knowledge of the Papuan flora is still incomplete but there is no reason to assume that it is more incomplete as regards the Australian element than as regards the Asiatic-Malaysian one.

Phytogeographical delimitation of Malaysia

A most important point is the *delimitation of the region* we have defined as the Malaysian region, and accepted as a natural plant geographic unit. It has 4 contacts or 'bridges' with the adjacent floral regions, *viz* with Asia in the Malay Peninsula and in the Philippine Islands, with the Pacific islands in the Bismarcks and Solomons, and with Australia in the island of New Guinea.

Is there any abrupt demarcation in the generic composition or is the change in the flora gradual?

1. *The Malay Peninsula.* Though the NW. frontier of Malaysia is situated on the isthmian land-connection with continental Asia in the Indo-Chinese Peninsula, the Malay Peninsula has up to the north, approximately near the line Alor Star–Singora (that is a little north of the political border), a typical Malayan flora intimately allied to the floras of Sumatra and Borneo but differing strongly from that of Indo-China. On the other hand, the immediate neighbourhood of the latter has not appreciably enriched the Malay Peninsular flora with continental elements if compared with the Sunda Islands. The figures are: the Malay Peninsula has *36* Asiatic genera not found elsewhere in Malaysia, Sumatra *18*, Java *21*, and Borneo *10*. Conversely, the Malay Peninsula shows *196* Malaysian genera which are absent from continental Asia, or have only a stray record in Ceylon, Pegu

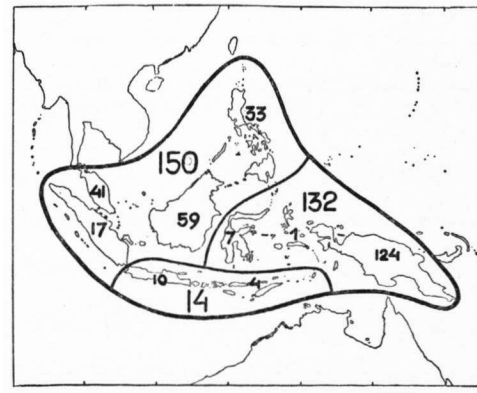


Fig. 20. Number of endemic genera of Phanerogams in the several islands and island groups of Malaysia, according to a census made in 1945.

or Siam. The close connection between the floras of Sumatra and Borneo when matched with the flora of the Malay Peninsula is illustrated by the fact that the islands together possess only *62* Malaysian genera which have as yet not been found in the Malay Peninsula. To the 'generic pressure' from the Malaysian side towards Asia must be added the endemic genera of Malaysian affinity found in Sumatra (*17*), the Peninsula (*41*), and Borneo (*59*), that is *117* in all.

The total of Malaysian genera on the Malaysian side of the NW. frontier becomes thus 196 + 62 + 117 = *375* genera.

On the continental side of the frontier are about 200 Asiatic genera, recorded from Burma, Siam or Indo-China which have not been found in Malaysia.

The '*demarcation-knot*' Malaysia ←→ SE. Asia amounts therefore to 375 + 200 = *ca 575*. In other words: *575 genera respect the demarcation Alor Star–Singgora.—cf.* fig. 21.

I employed the same method for the other Malaysian frontiers. The magnitude of the 'demarcation-knots' is a means of measuring quantitatively the borders and 'knots', both of the Malaysian frontiers and the divisions inside the Malaysian flora. *Knots of equal magnitude delimit districts or provinces of equal standing*, and indicate the standing of the enclosed area.

2. *Philippines.* An analysis of the Philippine flora according to this method shows the occurrence of *32* genera of type 2 (Asiatic genera) in the Philippines (among these 23 are found only in Luzon and 21 genera are mountain plants!) which are not recorded from other parts of Malaysia. This is about

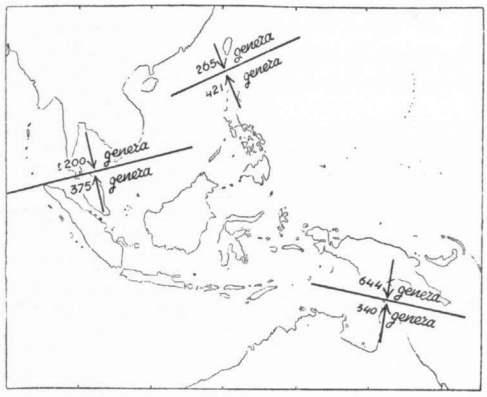


Fig. 21. The 3 principal floristic 'demarcation knots' of the Malaysian flora.

of the same order as the figures found for Borneo, the Malay Peninsula, and Sumatra. It confirms the essentially Malaysian character of the Philippine flora. In the Philippines occur *388* Malaysian genera which have never been found in Formosa or the adjacent parts of China. The Philippines possess *33* endemic genera. Of the 1185 genera known from Formosa, *265* are not found in the Philippines. The 'demarcation-knot' Philippines←→Asia is thus 388 + 33 + 265 = *686*. This is slightly larger than in the Malay Peninsula, but still of approximately the same rank.—*cf.* fig. 21.

3. *New Guinea.* For the island of New Guinea compared with Queensland the figures are as follows. In New Guinea *175* Asiatic genera have their

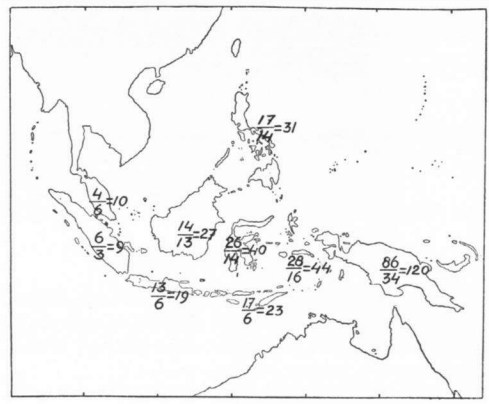


Fig. 22. Numbers of eastern-centred genera in the Archipelago; above the hyphen: Australian genera, below it: Pacific-Subantarctic genera.

most eastern distribution; further the areas of *345* Malaysian genera[1] end here and, in addition, there are *124* endemic genera which is a total of *644* genera. In Queensland and North Australia about *340* Australian genera; absent in New Guinea or other parts of Malaysia, occur. The total of the 'demarcation-knot' in Torres Straits is thus *984*. This is markedly larger than the figures pertaining to the Malay Peninsula and the Philippines. Here is, apparently, one of the main demarcations of the Palaeotropic plant world.—*cf.* fig. 21.

The analysis of eastern genera, Australian, Pacific or Subantarctic (types 4 and 5) in Malaysia shows that New Guinea possesses 40 of those which are restricted to Australia and Malaysia. Of these, 16 are confined to savannahs, 13 to the forest, 10 to the high mountain summits, and 1 to the mangrove swamps.

New Guinea has certainly the largest number of eastern genera in Malaysia but not many more than elsewhere in the Archipelago, as may be concluded from the map reproduced in fig. 22, which shows a rather gradual decrease of eastern genera towards the west. It seems natural that New Guinea with its enormous and varied land surface and geographic situation should harbour most of them.

4. *Bismarcks, Solomons, and New Hebrides.* Here I cannot find figures of the magnitude of the other 'knots'. This is partly due to the backward state

(1) Of some genera which are, in New Guinea, richly developed, *e.g. Saurauia, Medinilla, Rhododendron, Polyalthia, Cyrtandra, etc.* with dozens of species, a stray species sometimes occurs in N. Queensland.

of knowledge of these floras (both as regards collecting and literature), but the main cause is that the Micronesian and Melanesian floras are poor, and without a distinct character in any degree comparable with that of the floras of Asia and Australia. They are mainly derivatives from the Malaysian flora.

The demarcation of Flora Malesiana against these island groups is artificial, and we know it. For practical reasons we have refrained from including these floras in the present one.

These statistics show that Malaysia, as we accept it, is a natural unit, well-demarcated at its frontiers except towards Micronesia and Melanesia. The Indo-Asiatic flora rather abruptly ends in New Guinea. On account of a few facts but with a remarkably clear insight, ZOLLINGER had, already in 1857, come to the same conclusion.

Inner divisions of the Malaysian flora

In 1845 EARLE propounded his 'bank' or 'shelf' theory; he distinguished the western shallow sea covering the Asiatic continental shelf, or *Sunda shelf*, from a similar shallow submerged extension of the Australian and New Guinean land, or *Sahul shelf;* these were separated by a non-continental central part.

A year later SAL. MÜLLER, apparently quite independently, proposed on zoological arguments a division of the Archipelago into two parts through the Makassar Straits.

In 1857 ZOLLINGER extended this line northwards between Celebes and Mindanao; towards the south he did not extend the line somewhere between the Lesser Sunda Islands, but east of them. He was followed in this by MIQUEL, in 1859.

In 1863 WALLACE proposed the boundary called 'Line of Wallace' by HUXLEY, which line has been so amply discussed up till the present time. WALLACE seems to have founded this line independently of ZOLLINGER; nowhere did I find any mention made of the Swiss's work.

NIERMEIJER,[1] in a historical review of Wallace's Line, has shown that WALLACE himself changed his views on the subject, and finally did not take it too seriously.

Much later, MERRILL & DICKERSON projected a northern continuation of WALLACE's line along the W. side of the Philippines, between Palawan and Mindoro, and recently v. MALM shifted WALLACE's Line in its southern extremity between Bali and Lombok towards the east between Flores and Timor. The different courses of the Line of WALLACE are indicated on the map reproduced in fig. 23.

In using the method of the 'generic demarcation-knots' we may first calculate the importance of Sunda Straits and Java Sea between Java and Sumatra-Borneo. In 1933, I tried[2] to draw a comparison between these floras. The flora of Java appeared to be very poor in relation to that of the other islands: 3 (small) families and 111 genera—several of which show an abundant specific development in Sumatra and Borneo—are absent from Java. On the other hand Java possesses many genera which are absent from Sumatra and Borneo. The climate cannot be held responsible for this differ-

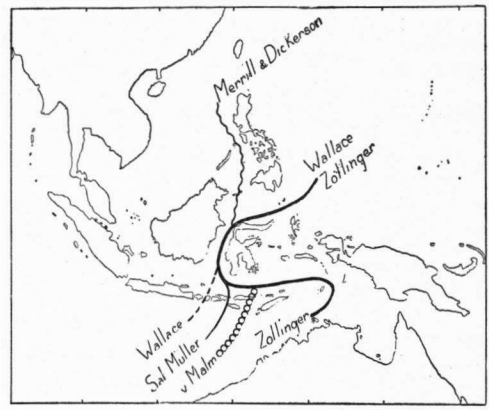


Fig. 23. Various courses of the dividing line between East and West Malaysia: all have Makassar Straits in common, that of MERRILL & DICKERSON is a deviation only in the north, those of SAL. MÜLLER (the oldest line) and v. MALM are deviations in the S. end only. The line accepted here is that of ZOLLINGER.

ence as West Java does not differ in climate from South Sumatra. The genera occurring in Java but not in Sumatra and Borneo, however, belong mostly to plants bound to a two-seasoned climate. Most of them belong to type 1 or 2; they occur in the monsoon forests of Burma, Siam, and Indo-China, are absent from the wet central part of West Malaysia, but reappear in Java, the Philippines, Celebes, and the Lesser Sunda Islands. This disjunction is doubtless climatic. It remains a telling fact that the monsoon plants are even in Timor mainly Asiatic, without any appreciable or significant admixture of Australian drought plants.

In any case, the generic 'demarcation-knot' of Sunda Straits and Java Sea is at least *200*, which agrees with the importance the zoologist VAN KAMPEN attached to Sunda Straits.

I have not been able to trace a knot of this rank between the other parts of West Malaysia: Sumatra, Mal. Peninsula, Borneo, and the Philippines.

There is, between Java and the Lesser Sunda Islands, very little basic difference: the flora of the latter is characteristically a depauperized Javan flora without appreciable admixture of Australian elements. I had formerly found this for the mountain flora.[3] A characteristic of both Java and the Lesser Sunda Islands is the low percentage of endemic genera (*cf.* fig. 20).

(1) Tijdschr. Kon. Ned. Aardr. Gen. 14, 1897, p. 758–769.

(2) Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1933, p. 23–28.

(3) Bull. Jard. Bot. Buit. sér. 3, vol. 14, 1936, p. 56–72.

Java and the Lesser Sunda Islands form together a separate province of Malaysia, a view already held a century ago by ZOLLINGER and MIQUEL.

Turning to other parts of Malaysia, Makassar Straits proves still to be a very important line of demarcation. No less than *297* genera of Phanerogams occur in Borneo but not east of Makassar

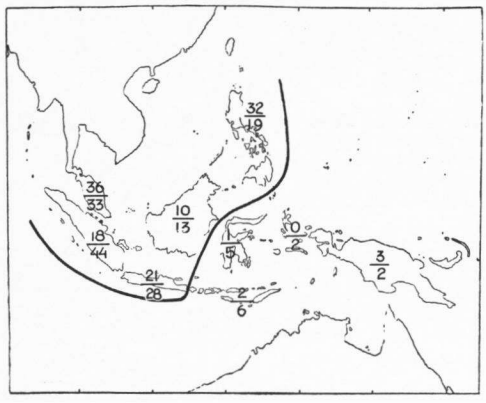


Fig. 24. Numbers of Asiatic-centred genera which are known to occur in Malaysia only in 1 island (figure above the hyphen) or 2 islands (figure below the hyphen), illustrating intensity of 'Asiatic influence' in the Malaysian flora.

Straits. The number of eastern genera occurring in Celebes but not in Borneo is much less well marked (*cf.* fig. 22), the total number of eastern genera being much smaller than that of western genera.

For the northern extension of the Makassar Straits demarcation line there is a choice between the line separating Celebes from Mindanao (ZOLLINGER, WALLACE) or the 'corrected line' between Palawan and Mindoro (MERRILL & DICKERSON).

In the first place, the large number of Asiatic genera which occur in only one or two islands in W. Malaysia indicates a remarkably sharp demarcation, and is to some degree a good measure for 'Asiatic influence'; it clearly supports the original course of Wallace's Line. This is demonstrated on the map reproduced in fig. 24.

Secondly, on comparing the number of western and eastern elements according to the scheme reproduced in fig. 25, where A + A′ is opposed to B + B′, it appears that 110 + 71 = 181 genera find their eastern border E of the Philippines, but only 9 + 34 = 43 find their western border W of the Philippines. This is further evidence that the original Line of Wallace is substantially more important than the corrected line.

Thirdly, it must be considered that typical West Malaysian genera and families show a large specific development in the Philippine Islands closely connected with the development in Borneo, as shown by MERRILL in 1923 in his valuable study on the distribution of *Dipterocarpaceae*.

From these arguments it can only be concluded that the 'demarcation-knot' in the N. part of Malaysia agrees with the original Line of Wallace. There are no botanical but only geological arguments for keeping the Philippines apart from West Malaysia.

Having thus established by the quantitative method of 'demarcation-knots' the borders of the Malaysian flora against the adjacent areas of the Indian and Australian floras, and the main divisions within its boundaries (a *West Malaysian*, *East Malaysian*, and *South Malaysian province* (fig. 20), it remained to divide the provinces into districts. The tentative result is reproduced in fig. 26 where the thickness of the lines indicates their phytogeographical value.

Contradiction between geology and phytogeography

The interpretation of the floristic divisions involves much discussion and explanation:

1°. When geological maps are examined there is a discrepancy between botanical delimitation and that of the shelves, *viz* in Torres Straits, Sunda Straits and the Java Sea, which are botanically very important demarcations. The Philippines—though situated outside the continental shelf—have a West Malaysian flora.

The great importance of Torres Straits was pointed out already by WARBURG (1891). Accepting geological arguments as decisive, LAM, in 1934 and 1935, has advanced an explanation on the basis of WEGENER's theory, and made the bold specula-

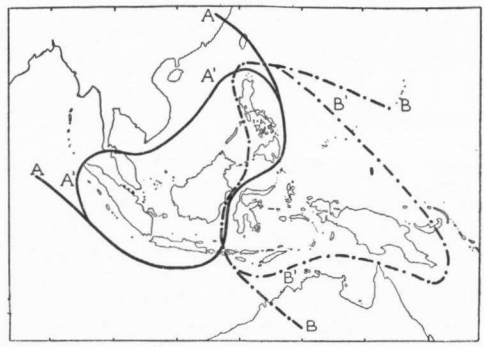


Fig. 25. Comparison of the character of the Philippine flora by contrasting A (Asiatic-centred genera of type 2) and A′ (West Malaysian-centred genera of type 3) against B (Australian and Subantarctic genera of types 4 & 5) and B′ (East Malaysian genera of type 3).

tion that Australia and New Guinea with their originally poor Subantarctic flora, had drifted together from the Subantarctic regions towards the NW and so had come, in the Upper Tertiary, into contact with the Malaysian tropical plant world.[1] The Malaysian vegetation, then, overwhelmed this original

(1) Blumea 1, 1934, p. 115–159; in: KLEIN, Nieuw Guinee 1, 1935, p. 192–198.

Subantarctic flora and its remnants could only survive on the high mountains of New Guinea.

This certainly contradicts the opinion of HOOKER, BENTHAM, and DIELS who in their analyses have shown that the Australian flora is mainly an (early) derivative of Asiatic stock. Moreover, the flora of South Australia should show, according to LAM's hypothesis, a far more pronounced Subantarctic character than is actually the case. Further arguments against it are the large number of Asiatic genera in New Guinea which are not further distributed, and the occurrence of ancient forms of nearly all Asiatic families in New Guinea. Both arguments are against a very young contact and development; indeed, they point in the reverse direction. Dr LAM himself admitted to me that he has abandoned his theory and, to a large extent, the view that plant geography must be tied to some geological theory.[1]

The botanical facts remain a challenge to geologists. The disagreement about fundamental principles in geology in general, and about the geological structure of the SW. Pacific in particular, has made me reserve my comment till the 3rd vol. of Series I of the 'Flora Malesiana'.

2°. A similar difficulty arises concerning the demarcation line of the South Malaysian province through Sunda Straits and the Java Sea. This demarcation line runs across the Sunda shelf. Several explanations of the poverty of the flora of the South Malaysian province have been offered: the huge anthropogenic destruction in the islands, powerful volcanic activity in the Tertiary, and the former island-character of what is now the island of Java. I myself have advanced a desiccation-period during the Pleistocene Ice Age as the decisive factor and this is sustained by some palaeontological and floristical arguments. This would also explain the occurrence of a monsoon forest flora in Java and the Lesser Sunda Islands.

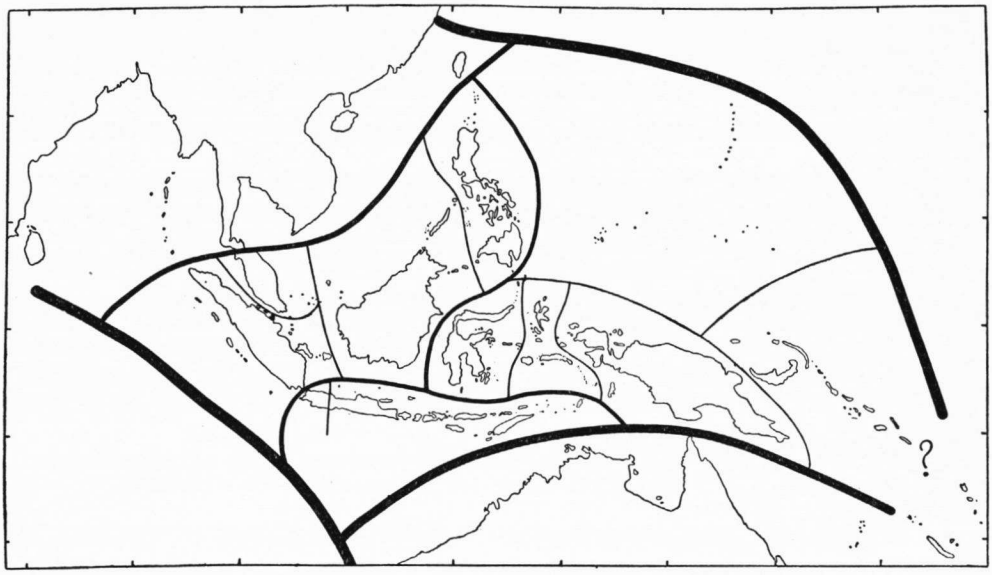


Fig. 26. Floristic phytogeographical division of the Archipelago, as based on the distribution of genera of Phanerogams. The hierarchy of the divisions, regions, provinces, and districts is indicated by decreasing boldness of delimitating lines.

3°. A third important plant geographical fact seems to be in disagreement with geology, *viz* the overwhelming West Malaysian character of the Philippine flora, as the Philippines, with the exception of Palawan and the adjacent islands S of Mindoro Straits, do not belong to the continental shelf area.

These major features of Malaysian plant distribution induced me to reconsider the question whether the shelf areas, which are now rather neatly delimited, in reality had been situated in this manner during the past geological periods, *i.e.* whether the Asiatic and Australian continents have always been so essentially separated as they are now. Judging from the beautiful new bathymetric maps of the Malaysian waters I think there are some arguments, especially in Eastern Malaysia for the possibility of a gradual disintegration of continental areas but the isobaths between 200 and 1000 m are incomplete. I would appreciate the judgment of geomorphologists on this point and I strongly recommend a reconsideration of the problem.

(1) Blumea 3, 1938, p. 147–148.

C. G. G. J. VAN STEENIS

CHAPTER IV. CHRONOLOGY OF THE COLLECTIONS

being a key to the history of botanical exploration of Malaysia

The chronology consists of three parts. The first one gives an enumeration of the collectors and visitors who possibly collected (and who published literature concerning the Malaysian region) for each separate geographical unit; it is accompanied by a map (facing p. c) on which these units are delineated.

The second part is an enumeration of voyages and larger expeditions (mostly known under a special name) during which collections were made or probably made in the Malaysian region.

The third part is an enumeration of early explorers in a wide sense up to the year 1840. If the year is not exactly known it is inserted at the earliest possible place: thus Mr SANDERS (*c.* 1820) is placed before Mr DONOVAN (1820). Collectors who have collected in the same year are arranged alphabetically.

a. GEOGRAPHICALLY ARRANGED SURVEY

This chapter is meant as a geographical-chronological key to the collectors, collections, and literature mentioned in the cyclopaedia. A planned visit to, or a longer stay in some part of Malaysia, will urge the person in question to make a historical study of the exploration of that part. He wishes to know who visited and worked there, and published on it.

There is no single published record or bibliography recording the chronology of exploration in all the branches of natural sciences, geography and ethnography. Though the present list aims at being reasonably complete for botanical exploration only, the author hopes it will give a fairly good working basis in the fields of zoology, geography and ethnography, as there have been a great number of zoologists, geographers and ethnographers who have contributed small collections which have all been included.

By the use of this list it will be relatively easy to build up a picture of the history of botanical exploration of each separate part of Malaysia, as the collectors are cited chronologically, and the cyclopaedia proper will yield detailed information under the collector's names.

For this aim Malaysia has been divided into nine major regions which must not be regarded as plant geographical ones, but mainly as useful artificial units. Each of these divisions is subdivided, and where possible the activities of the collectors have been segregated to as many subdivisions as possible.

Small islands adjacent to larger ones were taken together with the latter.

Of some obscure collections only scant data as to their place of origin are available, in which case the respective collectors are inserted under 'Malaysia General', 'Sumatra General', *etc.*. A good atlas or extensive maps is indispensable; for Indonesia the 'Atlas van tropisch Nederland' (1938) can be recommended.

Before consulting this survey, the reader is recommended to make a close study of the map and the accompanying list of divisions and subdivisions printed below.

The sequence of these divisions is from W. towards E. Each main division has been divided into the main land (except in the Moluccas & Lesser Sunda Islands) and the surrounding islands. The subdivisions of the main land have been arranged from W towards E and/or from N towards S. The surrounding islands have been arranged subsequently in a circular or other utilitarian way. Thus: Division I, Sumatra, is divided into subdivisions 1–9 of the main land, followed by subdivisions 10–22 consisting of islands or island groups. In the Moluccas and Lesser Sunda Islands the divisions consist of islands or island groups in the absence of an island or peninsula representing the main body of the division. For the Borneo division it has been found useful to divide Borneo proper into political units, as the history of the exploration is in harmony with those.

In the geographical survey Christian names have been omitted save in case where there is more than one person with the same family name.

Enumeration of geographical units (*cf. map facing p. c*)

I. *Sumatra and neighbouring islands*

1. Atjeh, incl. Gajoe and Alas Lands.
2. Tapanoeli.
3. Sumatra West Coast.
4. Sumatra East Coast, incl. Siak, Bengkalis, P. Berhala, *etc.*
5. Indragiri.
6. Djambi.
7. Benkoelen (incl. P. Tikoes or Rat Island).
8. Palembang.
9. Lampong Districts.
10. P. Weh, P. Bras, *etc.*
11. P. Simaloer, Lasia and Babi.
12. Banjak Islands.
13. Nias and Hinako Islands.
14. P. Morsala.
15. Batoe Islands *etc.*
16. Mentawai Islands: P. Siberoet and Sipo(e)ra.
17. Pagaï (or Nassau) Islands.
18. P. Enggano *etc.*
19. Islands in Sunda Straits: Krakatau group *etc.* (*not* those near Java).
20. Banka, P. Lepar, P. Liat.
21. Billiton, P. Mendanau, *etc.*
22. Riouw-Lingga Archipelago.

II. *Malay Peninsula and neighbouring islands*

1. Perlis.
2. Kedah.
3. Prov. Wellesley.
4. Perak.
5. Dindings.
6. Kelantan.
7. Trengganu.
8. Pahang.
9. Selangor.
10. Negri Sembilan.
11. Malacca.
12. Johore.
13. Langkawi Islands.
14. P. Penang (or Prince of Wales' Island).
15. Singapore *etc.*
16. P. Tioman *etc.* (E of the Peninsula).

III. *Java and neighbouring islands* (for Krakatau see I, 19)

1. West Java.
2. Central Java.
3. East Java.
4. Islands near SW. Bantam: Prinsen, Meeuwen and Trouwers Island.
5. Christmas Island.
6. Noesa Kambangan.
7. P. Sempoe.
8. Noesa Baroeng.
9. Kangean Archipelago.
10. Sapoedi Islands.
11. Madoera and neighbouring islets.
12. P. Bawean.
13. Karimoendjawa Archipelago.
14. Islands in the Bay of Batavia, incl. Duizend Islands.
15. Islands in the Bay of Bantam, P. Merak and P. Babi.

IV. *Lesser Sunda Islands etc.*

1. Bali and Noesa Penida.
2. Lombok.
3. Soembawa and adjacent islets.
4. Soemba.
5. Flores, P. Komodo, P. Papagaran Besar, P. Badjo.
6. Sawoe.
7. P. Roti, P. Semaoe, *etc.*
8. Solor, Adonara, and Lomblen.
9. Alor and Pantar.
10. West Timor (incl. Portug. enclave).
11. East Timor (Portuguese).
12. Wetar. } Zuidwester Islands
13. Roma and Kisar. } Zuidwester Islands
14. Leti Islands. } Zuidwester Islands
15. Damar Islands. } Zuidwester Islands
16. Babar Islands. } Zuidooster Islands
17. Tanimbar Islands (or Timor laoet). } Zuidooster Islands

V. *Borneo and neighbouring islands*

1. Northwest Borneo: Sarawak and Brunei.
2. West Borneo.
3. South and Southeast Borneo.
4. East and Northeast Borneo (from Balikpapan to the north).
5. British North Borneo.
6. Balambangan, Banguey and Mangsi Islands.
7. Labuan.
8. Anambas and Natoena Islands.
9. Tambelan Islands *etc.*
10. Karimata Islands.
11. Salemboe and Laoet ketjil Islands.
12. P. Laoet, P. Seboekoe.
13. P. Noenoekan, Tarakan, Mandoel, *etc.*

VI. *Philippine Islands*

1. Balabac Island.
2. Palawan, Dumaran, *etc.*
3. Calamianes: Culion, Busuanga and Calamian
4. Mindoro.
5. Batanes Islands.
6. Babuyan Islands.
7. Luzon.
8. Polillo.
9. Marinduque.
10. Catanduanes.
11. Sibuyan, Tablas and Romblon.
12. Masbate and Ticao.
13. Samar.
14. Leyte and Biliran.
15. Bohol.
16. Cebu.
17. Negros and Siquijor Island.
18. Panay, Guimaras and Cuyo.
19. Cagayan group.
20. Cagayan Sulu group.
21. Sulu Islands.
22. Basilan and Malamaui Island.
23. Mindanao, Dinagat and Siargao Island, *etc.*

VII. *Celebes and neighbouring islands*

1. North Peninsula.
2. Central Celebes.
3. Southwest Peninsula.
4. Southeast Peninsula.
5. Banggai or East Peninsula.
6. Spermonde Archipelago, P. Tanakeke, *etc.*
7. Paternoster and Postiljon Islands.
8. Saleijer (= Salajar) group (incl. P. Tanah djampea *etc.*).
9. Kabaëna.
10. P. Moena.
11. P. Boeton.
12. Toekangbesi Islands and P. Binongko.
13. P. Wowoni.
14. Banggai Archipelago.
15. Schildpad Islands.
16. P. Lembeh, Talise, *etc.*, near the Minahassa.
17. Sangihe Islands.

VIII. *Moluccas*

1. Talaud and Nenoesa Islands, Miangas.
2. P. Morotai and P. Raoe.

3. Halmaheira, Loloda Islands and P. Moeor.
4. P. Ternate, Tidore and Makian.
5. P. Batjan, Kasiroeta, *etc.*, and Kajoa Islands.
6. Obi Islands, P. Pisang, *etc.*
7. Soela Islands.
8. Boeroe.
9. Islands W of Ceram.
10. Ceram.
11. Ambon.
12. Oeliassers: P. Saparoea, Haroekoe, Noesa Laoet, *etc.*
13. Lucipara Islands.
14. Banda group.
15. P. Gèsèr (or Ceram laoet).
16. Gorong Islands.
17. Watoebéla Islands.
18. Kai Islands.

IX. *New Guinea and neighbouring islands* (incl. *Bismarck Archipelago*, but not the Louisiades and the Solomons)

1. Vogelkop = Dutch West New Guinea.
2. Dutch North New Guinea.
3. Dutch South New Guinea.
4. Papua.
5. Mandated Territory of New Guinea (former Kaiser-Wilhelmsland).
6. D'Entrecasteaux Islands (incl. Fergusson, Goodenough and Normanby Island).
7. Trobriand Islands (Kiriwina *etc.*).
8. New Britain (former Neu Pommern). } Bismarck Archipelago
9. Duke of York Island (former Neu Lauenburg) and Mioko. } Bismarck Archipelago
10. New Ireland (former Neu Mecklenburg), Nusa Island, Tanga Islands, *etc.* } Bismarck Archipelago
11. New Hanover (former Neu Hannover). } Bismarck Archipelago
12. St Matthias group, Tench Island. } Bismarck Archipelago
13. Admiralty, Purdy and Hermit Islands, and Matty (Wuvulu). } Bismarck Archipelago
14. Schouten and Padaido Islands.
15. P. Japen and Koeroedoe.
16. Noemfoor.
17. Mios Noem.
18. Mapia (or St Davids) Islands.
19. Islands near the coast in Geelvink Bay.
20. Ajoe Islands (incl. P. Pani or Asia Island).
21. P. Waigeo(e) *etc.* } Papua Islands
22. P. Gebe, Fau and Gag. } Papua Islands
23. P. Kofiau *etc.* } Papua Islands
24. Batanta group. } Papua Islands
25. Salawati. } Papua Islands
26. Misoöl group. } Papua Islands
27. Aroe Islands.
28. Frederik Hendrik Island.
29. Islets in Torres Strait: Thursday Island *etc.*

MALAYSIA—General

VAN DEN BRINK (. . . .), JAEGER (16 . .), TEN RHYNE (*c.* 167 .), CLEYER (1686–97), DIARD (1818–63), K. PETERS (betw. 1828–30), VON RICHTHOFEN (1860–61), SCHOTTMÜLLER (1860–62), VON MARTENS (1860–63), W. L. DE STURLER (1864–68), NAUMANN (*c.* 1870), J. C. HOBSON (*c.* 1874), RIMANN (*c.* 1880), VORDERMAN (*c.* 1880–1902), ROEBELEN (1884–85), LINDEN (*c.* 1886), BÜTTIKOFER (1893–94), LAYARD (before 1900), STRETTELL (before 1900), RIMESTADT (*c.* 1900), K. HEYNE (1906–27), Mrs D. C. ROBERTS (*c.* 1930), JENSMA (1936).

I. SUMATRA

General

MARCO POLO (1292), KAEMPFER (1688), GARCIN (172 .), MARSDEN (1771–79), WENNERBERG (before 1786), FORREST (1792), PARK (*c.* 1793), F. B. HAMILTON (1798), PRINCE (18 . .), J. ARNOLD (1818), J. POTTS (1821), I. STEWART (betw. 1825–27), VOIGT (183 ., or 184 .), C. A. A. v. HÜGEL (1833), TESCHEMACHER (*c.* 1840), CUMING (1840), VON ROSENBERG (1840–45), LOBB (1855), HILLEBRAND (1865–66), BICKMORE (1866), FÖRSTERMANN (betw. 1880–86), C., F. & J. PRATT (19 . .), WATERSTREDT (1901–04), ABBOTT (1901–05), MAASS (before 1904), CHAFFANJON (*c.* 1904), GRASHOFF (? 1905–13), PLASSCHAERT (1913–15), MJÖBERG (1919–21), VERDOORN (1930), SNETHLAGE (1932), BRUES (1936 or 1937).

1. Atjeh (incl. Gajoe & Alas Lands)

SNELL (. . . .), DAMPIER (1688), FORREST (1776), RAFFELS (1819), G. BENNETT (1833), HINDS *etc.* (1841), DE VOOGT (after 1876), KESSLITZ (1886), SVOBODA (1886), KOORDERS (1890), HELDT (*c.* 1897), GIESENHAGEN (1899), PRINGGO ATMODJO (1904), HOLTEN (1906 *etc.*), LAMSTER (191 .), ROOS (191 .), F.R.I. Buitenzorg (1913–*hodie*), VAN ZON (1914), EMONDT (1914–15), THEUNISSEN (1915), F. C. VAN HEURN (1916–22), RUTGERS (1917), BERNARD (1918), FROIDEMONT (1918), TERHAAR (1918), BADINGS & BROEKHUIS (1918–19), LUYTJES (1921–22), ENDERT (1922), JAPING (1923, 1927), J. W. GONGGRIJP (1924), JOCHEMS (1924), PALM (1924), FAIRCHILD (1926), SWART (1926), ANONYMOUS (1928), OCHSE (*c.* 1929), JESWIET (1929), V. E. VAN STRAELEN (1929), ANONYMOUS (193 .), STRUGNELL (1930), FREY-WYSSLING (1930–31), NAINGGOLAN (1931), BANGHAM & BANGHAM-MASTERS (1932), NIKOLA (1932), VAN STEENIS (1934, 1937), SCHEEPENS (1936), GALL (1937), BÜNNING (1938–39), RIPLEY & ULMER (1939), ASDA(T) (1941).

2. Tapanoeli

CH. MILLER (1772), JACK (1820), HORNER (1838), JUNGHUHN (1840–42), JAMES (1854–55), TEYSMANN

(1856), STIJMAN (1861–64), MODIGLIANI (1886, 1890–91), OUWEHAND (1895–97), VAN OPHUYSEN (*c.* 1896), PRINGGO ATMODJO (1904), K. J. M. WINKLER (1910–13), PALMER VAN DEN BROEK (1912), PLASSCHAERT (1913), F.R.I. Buitenzorg (1913–*hodie*), SPERNA WEILAND (*c.* 1915), FUNKE (1915), THEUNISSEN (1916–17), DE VOGEL (1917), RUTGERS (1918), SCHNEPPER (1919–25), LÖRZING (1920), ENDERT (1922), ANONYMOUS (1926–27), YATES (1926–27), VAN DER MEER MOHR (1926–29), RAHMAT SI BOEEA (1928–1936), ANONYMOUS (1929), RUTTNER (1929), V. E. VAN STRAELEN (1929), VAN DEN KOPPEL (1930), KRUKOFF (1930), POLAK (1930), FREY-WYSSLING (1930–31), HUITEMA (1931), HEUSSER (*c.* 1932), BANGHAM & BANGHAM-MASTERS (1932), KLEINHOONTE (1932), KRUKOFF (1932), Ir MÜLLER (1937), BÜNNING (1938–39), G. A. L. DE HAAN (1938–40), DAMES (1939), POSTHUMUS (1939), VAN DER VOORT (1939), SURBECK (1941).

3. Sumatra West Coast

TEN RHYNE (1679–80), GRIMM (1680), SIBERG (1778), CH. CAMPBELL (*c.* 1800), TEN BRUMMELER (18 . .), PIEPERS (18 . .), HORSFIELD (1818), KORTHALS (1833–35), S. MÜLLER (1833–35, 1838), HORNER (1838), VON ROSENBERG (1845–56), STEINMETZ (1852), TEYSMANN (1855–56), DIEPENHORST (1855–60), LUDEKING (*c.* 1859), WILTENS (1859), STIJMAN (1861–64), HANCOCK (1862), CORDES (*c.* 1865), ANONYMOUS (1870), HERINGA (1870), E. NETSCHER (187 .), VAN GILS (1873), A. L. VAN HASSELT *etc.* (1877–78), BECCARI (1878), BOCK (1878–79), CURTIS (betw. 1880–82), BURCK (1883), KESSLITZ (1886), MODIGLIANI (1886, 1891), M. W. C. WEBER (1888), TIRTOATMODJO (1890), KOORDERS (1891), MICHOLITZ (1891–92), HALLIER (1893), SCHIFFNER (1894), MASSART (1894–95), FAIRCHILD (1896), MÖLLER (1897), STORM VAN 'S GRAVESANDE (1897–1905), VAN ROMBURGH (1898), SCHIMPER (1898–99), GIESENHAGEN (1899), H. O. MAYR (19 . .), HULSHOF POL (1901), ANONYMOUS (1903), SCHILD (betw. 1904–27), ROUYER (1905), ERNST (1906), WICHERS (before 1907), KLEIWEG DE ZWAAN (1907) SCHLECHTER (1907), ROTHERT (1909), DOCTERS VAN LEEUWEN (191 .), HOOYKAAS (191 .), COUPERUS (1910), HAM (1910), BLAAUW (1912), CH. G. MATTHEW (1912–13), VAN BRAAM (1913), GRASHOFF (1913), LAMBACH (1913), F.R.I. Buitenzorg (1913–*hodie*), E. R. JACOBSON (1913–15, 1917–32), KLOSS (1914), PLASSCHAERT (1914), VERSLUYS (1915–18), HAGERUP (1916–17), SLUITER (1917), BÜNNEMEIJER (1917–18, 1920), GROENEVELDT (betw. 1917–32), W. A. HORST (1918), DE KOCK (1918), VERSCHUUR (1918), SCHNEPPER (1919–25), DAKKUS (1920), DOCTERS VAN LEEUWEN (1920), SOHNS (1920), ARRHENIUS (1921), ROSENSTINGL (*c.* 1922), HEIDE (1923), STOMPS (1923), THEUNISSEN (1923), DE BOER (1924), VAN DER PLOEG (before 1925), GOEBEL (1925), YATES (1927–1928), KARTA (1928), VON GUTTENBERG (1929), RUTTNER (1929), STEEMANN NIELSEN (1929), V. E. VAN STRAELEN (1929), TERUYA (1929), TROLL (1929), ULTÉE (1929, ? 1933), ARENS (1930), FREY-WYSSLING (1930–31), STOUTJESDIJK (1931, 1934), KLEINHOONTE (1932), KEUCHENIUS (1932–40), HOLTTUM (1933), LATIF (1933–36), KOERNICKE (1934), WALANDAUW (1934), BURRET (1939), POSTHUMUS (1939), VAN DER VOORT (1939), YAMAMOTO (1939).

4. Sumatra East Coast, (incl. Siak, Bengkalis, P. Berhala, *etc.*)

ALBERS (. . . .), LAURENS (. . . .), J. ARNOLD (*c.* 1818), TEYSMANN (after 1850), MOHNIKE (1863), KEHDING (before 1882), HAGEN (*c.* 1883), KESSLITZ (1885), SCHERER (1887), KOORDERS (1891), SCHIFFNER (1894), JAHERI (1895), HELDT (*c.* 1897), KRAUSE (*c.* 1897), G. SCHNEIDER (1897–98), VAN ROMBURGH (1899), GIESENHAGEN (1900), SCHLECHTER (1901), VRIENS (1905), KLEIWEG DE ZWAAN (1907), MORIN (1907), MOSZKOWSKI (1907), BALLOT (1909), SCHLECHTER (1910), HEIDEMAN (*c.* 1910–11), PALMER VAN DEN BROEK (1912), EISSES (1913), D. H. CAMPBELL (1913–14), F.R.I. Buitenzorg (1913–*hodie*), VAN ZON (1914–15), SURBECK (1914–17), LÖRZING (1914–41), DJADOEK (*c.* 1915), ROESIL (1915), SLUITER (1915–17), HAGERUP (1916–17), P. VAN HARREVELD (1917), LESGER (1917–18), H. H. BARTLETT's collectors (1918), BERNARD (1918), BRUINIER (1918–19), GALOENGI (1918–39), BEGUIN (1919), RUTGERS (1919), SOHNS (1919–20), DOCTERS VAN LEEUWEN (1919–21), PALM (1920–26), YATES (*c.* 1921), E. M. M. BURKILL (1921), NUR (1921), RIDLEY (1921), STADTMILLER (1921), JOCHEMS (1921–35), ENDERT (1922), L. J. TOXOPEUS (1922), MORAUX-BAAS BECKING (1922–28), HEIDE (1923), STOMPS (1923), WINCKEL (1923), YATES (1923–27), ANONYMOUS (1924), HOLTTUM (1924), BAKHUIZEN VAN DEN BRINK Jr (1925), GOEBEL (1925), JESWIET (1925), FAIRCHILD (1926), H. H. BARTLETT (1926–27), BOEDIJN (1926–27), VAN DER MEER MOHR (1926–39), HIEMSTRA (*c.* 1927), BOOBERG (1927), SCHRÖTER (1927), ULTÉE (1927), BEUMÉE (1927–28), BURGEFF (1928), HAMEL (1928), LAYCOCK (1928), ARENS (1928–29), J. KUYPER (1928–29), RAHMAT SI BOEEA (1928–36), VON GUTTENBERG (1929), E. R. JACOBSON (1929), STEEMANN NIELSEN (1929), V. E. VAN STRAELEN (1929), TROLL (1929), STRUGNELL (1929–30, 1934 or 1935), W. DE MOL (*c.* 1930), POLAK (1930), SYMINGTON (1930), FREY-WYSSLING (1930–31), D'ANGREMOND (1931), CARR (1931), HUITEMA (1931), BANGHAM & BANGHAM-MASTERS (1931–32), HEUSSER (*c.* 1932), KLEINHOONTE (1932), KRUKOFF (1932), KOERNICKE (1933), K. W. MÜLLER (1933), FROWEIN (1934), KOERNICKE (1934), LUNDQUIST (1934), VAN DER WEIJ (1934–*hodie*), VAN BODEGOM (1935), J. H. DE HAAN (1935), VAN HELL (1935–38), SPOEL (1936), C. W. FRANCK (1938), KEERS (1938), KERLING (1938), BÜNNING (1938–39), BATTEN POOLL (1939), BURRET (1939), POSTHUMUS (1939), VAN DER VOORT (1939), YAMAMOTO (1939), RODERKERK (1940–41), SAUBERT (1941).

5. Indragiri

MOTLEY (1854), CURTIS (betw. 1880–82), G. SCHNEIDER (1898), ABBOTT (1901), CURTIS (1901), SCHLECHTER (1901), BURCHARD (1906–07), F.R.I. Buitenzorg (1913–*hodie*), PLASSCHAERT (1914), DOMMES (1918), LATIF (1932), LUNDQUIST (1934), BUWALDA (1939), POLAK (1940).

6. Djambi

A. L. VAN HASSELT (1878), HULSHOF POL (1901), HOLTEN (*c.* 1906), GROOTINGS (1910), F.R.I. Buitenzorg (1913–*hodie*), POSTHUMUS & SAIMOENDT (1925), STEUP (1927), T. G. E. HOEDT (1929), VAN HEMERT (1930), VAN BODEGOM (1931), RUTTEN-KOOISTRA (1938), TÄNZER (1940).

7. Benkoelen (Bencoolen) (incl. P. Tikoes or Rat Island)

DAMPIER (1690), CH. MILLER (1770–72), FORREST (1776), ROXBURGH Jr (1802–04), B. HEYNE (1812), HORSFIELD (1818), RAFFLES (1818–24), JACK (1819–22), KORTHALS (1836), DE VRIESE (*c.* 1861), VAN OPHUIZEN (1861), VON MARTENS (1862), BECCARI (1878), FORBES (1881), KESSLITZ (1885–86), RAEDT VAN OLDENBARNEVELT (1887), KOORDERS (1891), GIESENHAGEN (1899), HOLTEN (*c.* 1906), SCHLECHTER (1907), OTTOLANDER (1911–17), C. J. BROOKS (1912–23), F.R.I. Buitenzorg (1913–*hodie*), P. J. S. CRAMER (1915), KOENS (1915), WESTENENK (1915–18), AJOEB (1916), SLOT (1917), BAKKER (1918), JAHN (1919), BOUMAN-HOUTMAN (1922–24), SCHNEPPER (1925 or 1926), SCHRÖTER (1927), ULTÉE (? 1927, 1929, ? 1933), BALLY (1928), RUTTNER (1929), VAN STEENIS (1929), SCHWARZENBACH (*c.* 1930), VAN DER PIJL (1931), DE VOOGD (1931–33), GOENAWAN (1932), HOLTTUM (1933), SCHÄFER (1934–38), RAPPARD (1935–37), BÜNNING (1938–39), BURRET (1939), VAN 'T WOUDT (1939), RODERKERK (1940–41).

8. Palembang

HORSFIELD (1812–13), PRAETORIUS (1830–32), MOHNIKE (1848, 1862), J. M. VAN LEER (1852), TEYSMANN (1857), GERSEN (*c.* 1860), WALLACE (1861), VON MARTENS (1862), A. L. v. HASSELT (1878), J. C. PLOEM (1878), FORBES (1880–81), BUURMAN VAN VREEDEN (1892), FLEISCHER (1899), GIESENHAGEN (1899), MASSINK (1900), RIJN VAN ALKEMADE (19 . .), VOLZ (1901–02), KISSLING (*c.* 1902), H. P. KUYPER (1905), GUTTELING (1908), GANZ (*c.* 1910), F.R.I. Buitenzorg (1913–*hodie*), GRASHOFF (1914–16), PFEIFFER (1914, 1918), LAMBACH (1916), DUMAS (1917), ENDERT (1917–21), CASTILLO & VALDERRAMA (1920), THORENAAR (1920–24), MEINDERSMA (1922), DE VOOGD (1927–33), LAYCOCK (*c.* 1928), HUITEMA (1929), RUTTNER (1929), V. E. VAN STRAELEN (1929), BAL (1930), VAN HEMERT (1930), POLAK (1930), VON BANDAT (*c.* 1931), SZEMIAN (1931), KROL (1932), VAN HEUSDEN (1933–35), BASRI (1934), BÜNNING (1938–39), RUTTEN-KOOISTRA (1938–39), VAN DER VOORT (1938, 1941), BURRET (1939), ANONYMOUS (1940), BUWALDA (1940), J. A. C. HOLLE (1940), VERBOOM (1947).

9. Lampong Districts

SPARRMAN (1767), STAUNTON (1793), HOMBRON *etc.* (1839), ZOLLINGER (1845), JUCH (185 .), SEEMANN (1851), TEYSMANN (1857–58), A. L. H. NAGEL (1860–61), MOHNIKE (1862), G. KING (*c.* 1879), FORBES (1880–81), VORDERMAN (1883), H. LAURENS (189 .), VAN ROMBURGH (1898), BRAUTIGAM (1900), BACKER (1906), PULLE (1906), KOERNICKE (1906–07), SCHLECHTER (1907), ELBERT (1908), VAN ANDEL (1912), F.R.I. Buitenzorg (1913–*hodie*), GUSDORF (1913–14), P. J. S. CRAMER (1915), IBOET (1921), DIRKS (1922), KEUCHENIUS (1926–32), BERNARD (1927), POSTHUMUS (1927), T. G. E. HOEDT (1927–32), ENGLES-JULIUS (1929), ULTÉE (1930, ? 1933), IDENBURG (1931), SZEMIAN (1931), WITKAMP (1933), VAN HEUSDEN (1933–35), ANONYMOUS (1934), L. J. TOXOPEUS (1934), LIEFTINCK (1934–39), BRINKGREVE (1936), HEUBEL (1938), BÜNNING (1938–39), VAN DER VOORT (1939), DIJKMAN (1940–41), ROSIER (1940–41).

10. P. Weh, P. Bras, *etc.*

TEYSMANN (1856), VORDERMAN (1874–75), LEHMANN (1889–90), KOORDERS (1890), SCHIMPER (1898–99), KRUG (19 . .), BUITENDIJK (1914), BACKER (1916), BEUMÉE (1921), K. G. HACKENBERG (*c.* 1923), BAKHUIZEN VAN DEN BRINK Jr (1923), BAKHUIZEN VAN DEN BRINK Sr (1925, 1926), FAIRCHILD (1926), MARCOVITCH (1926), RENSCH (1927), VAN STEENIS (1927, 1933, 1934), VAN SLOOTEN (1928), JESWIET (1929), V. E. VAN STRAELEN (1929), BACKHUYS (1930), POSTHUMUS (1932), KOERNICKE (1933–34), DE WILDE (1946).

11. P. Simaloer, Lasia & Babi

VON ROSENBERG (1855), KRAEMER (1906), BRUYN (1913), HERWAARDEN (1913), E. R. JACOBSON (1913), F.R.I. Buitenzorg (1913–*hodie*), PFEIFFER (1915, 1918), ACHMAD (1917–20), C. P. HARMSEN (1919), BÜNNING (1938–39).

12. Banjak Islands

VON ROSENBERG (1853), BÜNNING (1938–39).

13. P. Nias & Hinako Islands

JACK (1820–21), VON ROSENBERG (1854–55), KESSLITZ (1886), MODIGLIANI (1886), RAAP (1897), SCHIMPER (1898–99), KLEIWEG DE ZWAAN (1910), L. S. A. M. VON RÖMER (1910–11), F.R.I. Buitenzorg (1913–*hodie*), HAGERUP (1916–17), BÜNNING (1938–39), BATTEN POOLL (1939).

14. P. Morsala

JACK (1820), HORNER (1835), SCHWENK (1855), F.R.I. Buitenzorg (1913–*hodie*), PLASSCHAERT (1914), THEUNISSEN (1916), ENDERT (1922), BATTEN POOLL (1939).

15. Batoe Islands *etc.*

HORNER (1837), RAAP (1896–97), F. DE VOS (19 . .), ANONYMOUS (1930).

16. Mentawai Islands (P. Siberoet & Sipo(e)ra)

VON ROSENBERG (1847–52), MODIGLIANI (1894), MAASS (1897), SCHIMPER (1898–99), LETT (1908), HOOYKAAS (191 .), HANSEN (1911–12), F.R.I. Buitenzorg (1913–*hodie*), PLASSCHAERT (1914), HAGERUP (1916–17), VERSCHUUR (1918), IBOET (1924), KLOSS (1924), TROLL (1929), BATTEN POOLL (1939).

17. Pagai (or Nassau) Islands

DAMPIER (1688), ABBOTT (1902), KLOSS (1902), HOOYKAAS (191 .), HANSEN (1911–12), F.R.I. Buitenzorg (1913–*hodie*), HAGERUP (1916–17), LOEB (1926), STEEMANN NIELSEN (1929).

18. P. Enggano *etc.*

CH. MILLER (1771), VON ROSENBERG (1852), MODIGLIANI (1894), F.R.I. Buitenzorg (1913–*hodie*), WESTENENK (1918), GROENEVELDT (1932), RAPPARD (1935), LÜTJEHARMS (1936).

19. Islands in Sunda Straits: Krakatau group *etc.* (not those near Java)

NELSON (1780), J. C. VAN HASSELT (1823), FORSTEN (183 .), TEYSMANN (1857, ? 1860), STRUBELL (1889), BURCK (1896), NOLTHENIUS (1896), BOERLAGE (1896–97), CLAUTRIAU (1897), PENZIG (1897), RACIBORSKI (1897), GOLENKIN (1905), TH. VALETON (1905), D. H. CAMPBELL (1906), PULLE (1906), J. J. SMITH (1906), BACKER (1906, 1908), ERNST (1906, 1931), E. R. JACOBSON (1908), DOCTERS VAN LEEUWEN (1919–32), CHRISTOPHERSEN (1929), JESWIET (1929), SKOTTSBERG (1929), VAN DER PIJL (1930), ENDERT (1931), BOEDIJN (1932–34), KOERNICKE (1933).

20. Banka, P. Lepar, P. Liat

HORSFIELD (1812–13), MOHNIKE (1847, 1862), HUGUENIN (185 .), C. DE GROOT (1851), D. F. SCHAAP (1852), ANONYMOUS (1855), AKKERINGA (1855–186 .), LINDGREEN (*c.* 1857), KURZ (1857–58), TEYSMANN (1857, 1869–71, 1872), ALTHEER (1858–60), BOSSCHER (186 .), VAN DIEST (*c.* 1860), WALLACE (1861), VON MARTENS (1862), DEISSNER (before 1864), RULOFFS (before 1864), J. A. BUDDINGH (1865–68), CROOCKEWIT (1870), SLINGERLANDT (1870), TOOROP (1870–71), J. C. PLOEM (1878), JESPERSEN (*c.* 188 .–189 .), TENISON-WOODS (1883), POSEWITZ (1885), BERKHOUT (1886), SVOBODA (1886), MEETER (1888), VORDERMAN (189 .), KOBUS (prob. 1890), HALLIER (1893), J. A. SCHUURMAN (*c.* 1897–98), HAM (1907), F.R.I. Buitenzorg (1913–*hodie*), GRASHOFF (1914), BÜNNEMEIJER (1917), D. BURGER (1926), M. HOEKSTRA (1926–31), H. A. L. DE LEEUW (1927), W. A. HORST (1927–29), ANONYMOUS (1928), VAN HEMERT (1930), HUITEMA (1932), VAN DER VECHT (1932, 1941), HARDON (1935), HETHARIA (1939), COERT (1941).

21. Billiton, P. Mendanau, *etc.*

HUGUENIN (185 .), CROOCKEWIT (1850–51), C. DE GROOT (1866), CH. ECOMA VERSTEGE (1871–74), ANONYMOUS (1871–98), TEYSMANN (1875), RIEDEL (1876), VORDERMAN (1888, 1900), BEGEMANS (1898), ERMELING (1899), BRAUTIGAM (19 . .), SCHLECHTER (1901), HAM (1907), VAN ROSSUM (1911), F.R.I. Buitenzorg (1913–*hodie*), D. BURGER (1926), H. A. L. DE LEEUW (1928).

22. Riouw-Lingga Archipelago

CHRISTOPH. SMITH (1796), JACK (1819), WILTENS (185 . or 186 .), J. H. WAHLBE(E)HM (1852–61), E. NETSCHER (1852–62), MOTLEY (1854), TEYSMANN (1862, 1872), KUNSTLER (1880), TENISON-WOODS (1883), G. SCHNEIDER (189 .), HULLETT (1893), RIDLEY (1896), VAN ROMBURGH (1899), SCHLECHTER (1901), KLOSS (1905–07), SAHEB (191 .), F.R.I. Buitenzorg (1913–*hodie*), BÜNNEMEIJER (1919), DAMMERMAN (1923), LATIF (1932), BUWALDA (1938), STEUP (1938–42), POLAK (1940).

II. MALAY PENINSULA

General

BOSWELL (. . .), LEMANN (. . .), MILLER (. . .), GROOS (18 . .), FINLAYSON (1821–22), WALLICH (1822), OXLEY (1831–57), WHITE (*c.* 1841), W. T. LEWIS (1844–45), LOBB (1845–54), W. BOXALL (*c.* 186 .), G. F. HOSE (187 .–190 .), MIKLUCHO-MACLAY (1874–75), MURTON (1876–81), W. W. ROBINSON (*c.* 1877), H. LOW (1877–89), KEHDING (1878–? 88), W. FOX (*c.* 1878–1910), MARCHE (1879), JAMIE (*c.* 1879–83), R. BOXALL (*c.* 1880), CANTLEY (1881–88), TENISON-WOODS (1884), CURTIS (1884–1902), TASSIM DAUD (1886–95), MAT (1888–97), GOODENOUGH (1888–1901), RIDLEY (1889–1921), NANSON (189 .–190 .), KELSALL (1891–93), HR. V. STEVENS (*c.* 1892), H. C. HILL (1900), A. T. A. RITCHIE (19 . .), HANIFF (1900–28), NAPIER (190 .), AHMED BIN HASSAN (1901– . .), ARDEN (1902), V. KNIGHT (1902–22), BURN-MURDOCH (1903–13), BORGES (1903–24), KLOSS (betw. 1903–31), G. F. & G. HOSE (1904), CH. G. MATTHEW (1904–13), H. C. ROBINSON (1904–25), KOERNICKE (1906–07), MAIN (1906–10), KEUN (1906–17), WERNER (1907), MEAD (1907–16, 1928–40), DRUCE (1908), HUB. WINKLER (1908), SENN (1910–11), J. W. ANDERSON (1910–17), MILLSPAUGH (1911 or 1912), E. M. M. BURKILL (1912–25), I. H. BURKILL (1912–25), NUR (1913– . .), D. H. CAMPBELL (1913–14), WATSON (1913–41), F. T. BROOKS (1914), MILSUM (1914– . .), CUBITT (1914–29), FEDDERSEN (1916– . .), VESTERDAL (1916 onwards), SEIMUND (1916–25), CH. F. BAKER (1917), FOXWORTHY (1918–32), Conserv. of Forests series (1918–*hodie*), CHIPP (1919–21), FURTADO (1919–*hodie*), PERRY (1920), SOUTH (1920), SANDERSON (1920–26), BEST (1921–29), DOLMAN 1922– . .), KIAH (*c.* 1922–38), HOLTTUM (1922–

hodie), C. W. FRANCK (1923–37), SANDS (1924), NGADIMAN (1924–38), TERUYA (1924–45), STRUGNELL (1924–*hodie*), ARNOT (1925–41), JAGOE (1926–41), SYMINGTON (1927–41), HENDERSON (1927–*hodie*), BANFIELD (1928–32), SPARE (1929–41), CORNER (1929–45), GRIEVE (1935– . .), KOSTERMANS (1938), HASSIN (1938– . .), WOLFE (1938–*hodie*), FOGH (1939– . .), NAUEN (1940–41).

1. Perlis

RIDLEY (1910), A. F. G. KERR (1919), CORNER (1929, 1936), WATSON (1936), KIAH (1939).

2. Kedah

JONES (. . . .), TORÉN (1751), KOENIG (1778–79), FINLAYSON (1821–22), J. LOW (1836), LOBB (1845), MIKLUCHO-MACLAY (1875), MURTON (1876, 1879), R. BOXALL (*c.* 1880), H. LOW (1880– . .), KESSLITZ (1885), G. SCHNEIDER (189 .), CURTIS (1892), RIDLEY (1893–1910), I. H. N. EVANS (19 . .), WATSON (19 . .–37), CURTIS (1901), W. FOX (1904), HANIFF (1910–25), L. M. BELL & HANIFF (1911), I. H. BURKILL (1913, 1918), KLOSS (1915), H. C. ROBINSON (1915), V. G. BELL (192 .), FLIPPANCE (1922–25), I. H. BURKILL (1924), SCHEBESTA (1924), HOLTTUM (1925, 1933), BEST (1929), DOLMAN (1929), HENDERSON (1929), CORNER (1936), J. A. BAKER (1937–41), HENDERSON (1938), KIAH (1938), WOLFE (1938), SPARE (1940), NAUEN (1940–41).

3. Prov. Wellesley

MARCHE (1879), KUNSTLER (1881), CANTLEY (1885), KESSLITZ (1885), CURTIS (1885– . .), G. F. HOSE (1894), RIDLEY (1895–1906), BURN-MURDOCH (1903–10), F. T. BROOKS (1914), I. H. BURKILL (1922, 1924), HANIFF (1924).

4. Perak

BURGERS (. . . .), GOLDHAM (. . . .), PANTLING (. . . .), MURTON (1877), H. LOW (1877, 1881), KEHDING (1878–88), ? G. KING (1879), MARCHE (1879), DAY (188 .), KUNSTLER (1880–86), L. WRAY Jr (1881–1908), DENISON (1883), TENISON-WOODS (1883–84), ELPHINSTONE (*c.* 1884), MORGAN (1884), SCORTECHINI (1884–86), CANTLEY (1885), CURTIS (1885–1901), C. WRAY (1888), HERVEY (*c.* 1889), RIDLEY (1891–1921), MACHADO (1892–93), STEPHENS (1895–1909), BARNARD (1896– . .), ROBERTSON-GLASGOW (1898), W. FOX (1899), YAPP (1899–90), DERRY (1899–1902), H. C. HILL (1900), E. DESCHAMPS (1900–01), NAPIER (190 .), AHMED BIN HASSAN (19 . .), SCHLECHTER (1901), VENNING (1901 or 1902), G. HOSE & G. F. HOSE (1904), HOSSEUS (1904), BURN-MURDOCH (1904–12), BLAND (1905), CH. G. MATTHEW (1906–13), H. C. ROBINSON (1908–09), KLOSS (1908–17), FLEISCHER (1909), S. HOBSON (1909), F. R. LONG (1909), HANIFF (1909–25), J. W. ANDERSON (1911), I. H. BURKILL (1913–24), SHEFFIELD (1914), E. S. HOSE (1917– . .), NUR (1917 *etc.*), SEIMUND (1918, 1925), FOXWORTHY (1918–32), HENDERSON (1921–38), HOLTTUM (1922–46), BAZELL (1923), A. F. G. KERR (1923), SCHEBESTA (1924), MILLS (1925– . .), DOLMAN (1926), BANFIELD (1928–32), SPARE (1929–41), STRUGNELL (1930), E. F. ALLEN (193 .–194 .), SYMINGTON (1931–37), ARNOT (1933), GRIEVE (1935– . .), CORNER (1936), SOPER (1936– . .), FOENANDER (1938–41), BURRET (1939), BATTEN POOLL (1939–40), NAUEN (1940–41).

5. Dindings

DAMPIER (1689), FINLAYSON (1822), SCORTECHINI (1884), SVOBODA (1886), CURTIS (1888–94), A. TH. BRYANT (1890), RIDLEY (1892– . .), H. C. HILL (1900), WOLFERSTAN (1900), BURN-MURDOCH (1903–12), I. H. BURKILL (1914), STRUGNELL (1931), SYMINGTON (1931), ARNOT (1935).

6. Kelantan

RIDLEY (1889), GWYNNE-VAUGHAN (1899), SKEAT (1899), YAPP (1899), GIMLETTE (1903–21), MACGILL (1904–13), RIDLEY (1917), J. JUPP (1922), NUR (1922), HANIFF & NUR (1923), FOXWORTHY & NUR (1924), NGADIMAN (1924), HENDERSON (1927, 1929), SYMINGTON (1934), WITKAMP (1935), CORNER (1937), ? WOLFE (1945– . .).

7. Trengganu

RIDLEY (1889), HR. V. STEVENS (1890), SKEAT (1899), YAPP (1899), ROSTADOS (1904), HOLTTUM (1925), SYMINGTON (1931), CORNER (1937), KIAH (1937), MOYSEY (1937), WATSON (1937).

8. Pahang

MIKLUCHO-MACLAY (1875), TENISON-WOODS (1884), DURNFORD (1889), HAVILAND (1890), RIDLEY (1890–1910), KELSALL (1891), MAT (1892), BECHER (1893), W. FOX (1893), MACHADO (1896–1903), BUTTER (1899), W. D. BARNES (1900), H. C. HILL (1900), WATERSTREDT (190 ., 1910–12), CURTIS (1902), PENNEY (1902), CRADDOCK (1902–03), L. WRAY Jr (1905), H. C. ROBINSON (1905–25), KLOSS (1911), NEAL (1911–24), BURN-MURDOCH (1909–1913), I. H. N. EVANS (1917, 1923), (CARR 192 .–32), SEIMUND (1921), FOXWORTHY (1922–23), HANIFF & NUR (1922–24), HENDERSON (1923–31), FOENANDER (1923–37), BEST (1924), I. H. BURKILL (1924), NGADIMAN (1924), ANONYMOUS (1925), HOLTTUM (1928–31), KIAH (1930, 1934), DOLMAN (1931), CORNER (1932–37), SYMINGTON (1934–38), C. W. FRANCK (1937), BURRET (1939), BATTEN POOLL (1939–40).

9. Selangor

KOENIG (1778–79), CANTLEY (1881–88), SWETTENHAM (1883), TENISON-WOODS (1884), KUNSTLER (1886), GOODENOUGH (1888–1901), RIDLEY (1889, 1896–1915), KELSALL (1891), FLEISCHER (1898), H. C. HILL (1900), G. F. HOSE (1904), BURN-MURDOCH (1904–12), ENGLER (1905), H. C. ROBINSON (1905–13), HUB. WINKLER (1908), KAWAKAMI (1911), CH. G. MATTHEW (1911–13), HASIM (1912), KLOSS (1912–21), I. H. BURKILL (1913–22), F. T.

BROOKS (1914), FOXWORTHY (1918–32), FERGUSON-DAVIE (1921), HUME (1921), E. G. SMITH (1922), HOLTTUM (1922, 1939), BEST (1923), NUR (1923 *etc.*), DÄNIKER (1926), ARNOT (1927), BANFIELD (1928–32), C. W. FRANCK (1929, 1937), STRUGNELL (1930), TANAKA (1935), VESTERDAL (1935), SYMINGTON (1935–38), CORNER (1936), FOENANDER (1937–38), ADDISON (1939), DENNY (1940–41).

10. Negri Sembilan

HANDOVER (. . .), ALVINS (1884–85), GOODENOUGH (1888–1901), CURTIS (1890), RIDLEY (1898–1917), MOORHOUSE (1903–05), KINSEY (1905–28), ERNST (1906), HUB. WINKLER (1908), BURN-MURDOCH (1909–12), CLERK (1910–20), I. H. BURKILL (1915–18), G. WILLIAMS (1915–18), FOXWORTHY (1918), HOLTTUM (1922), NUR (1923), CORNER (1930, 1936), SYMINGTON (1936), C. W. FRANCK (1937), MONOD DE FROIDEVILLE (1946).

11. Malacca

DAMPIER (1689), J. CUNNINGHAM (*c.* 1700), GARCIN (172 .), SONNERAT (betw. 1774–81), FORREST (1776), KOENIG (1778–79), RAFFLES (1810–11), ROESTEL (before 1812), WIGHT (*c.* 1819), J. POTTS (1821), FINLAYSON (1822), BUSSEUIL (1824), BAUME (1830), NORRIS (183 .–4 .), MOXON (after 1832), C. A. A. VON HÜGEL (*c.* 1833, 1835), A. DELESSERT (1834–35), GAUDICHAUD (1837), CUMING (1839–40), WESTERHOUT (184 .), HINDS *etc.* (1841), GRIFFITH (1841–42, 1845), YVAN (1843), LOBB (1845), MACGILLIVRAY (1845), NINGHUL (1845), N. J. ANDERSSON (1853), WALLACE (1854), JAGOR (1858), MAINGAY (1862–68), STOLICZKA (1869), PINWILL (*c.* 1877), KEHDING (1878–88), G. KING (1879), MONTANO (1879), CANTLEY (1881–88), HERVEY (1882–94), E. D. BELL (1883), HULLETT (1883, 1888), TENISON-WOODS (1883–84), ALVINS (1884–85), WHITEHEAD (1884–85), KESSLITZ (1885), DERRY (1885–93), SVOBODA (1886), GOODENOUGH (1888–1901), RIDLEY (1889–1917), HOLMBERG (1891), FEILDING (1892), CURTIS (1892–1901), LANGLASSÉ (1894), H. C. HILL (1900), SCHLECHTER (1901), BURN-MURDOCH (1903–12), CH. G. MATTHEW (1904), HOSSEUS (1905), ERNST (1906), KOERNICKE (1907), I. H. BURKILL (1914–24), HOLTTUM (1922), CORNER (1936), SYMINGTON (1938), BATTEN POOLL (1939–40).

12. Johore

KEIR (*c.* 1699), DAUD (18 . .), FARQUHAR (*c.* 1818), NEWBOLD (1833), NORRIS (betw. 1836–47), CUMING (1840), OXLEY (1840, 1848), GRIFFITH (1842), J. MACGILLIVRAY (1845), WALLACE (1854), MAINGAY (1864, 1867), WAWRA (1869, 1873), MIKLUCHO-MACLAY (1874–75), HERVEY (1876–1892), BURBIDGE (1877), MURTON (1877), KEHDING (betw. 1878–88), HILL (1879), G. KING (1879), HULLETT (1879–89), KUNSTLER (1880), CANTLEY (1882), WHITEHEAD (1885), SVOBODA (1886), DERRY (1890), NANSON (189 .–190 .), LAKE (1891–93), RIDLEY (1891–1915), FEILDING (1892), KELSALL (1892), MAT (1892), NONGCHI (1892), GIESENHAGEN (1899), PEARS (1899), KANEHIRA (19 . .), KLOSS (19 . .), MACHADO (1900), CURTIS (1901), M. JENSEN (1901), SCHLECHTER (1901), ERNST (1906), LEDOUX (1910– . .), JEPPESEN (1910–35), DOWN (1911), CH. G. MATTHEW (1911–13), CASTLEWOOD (before 1912), I. H. BURKILL (1913, 1924), WATSON (1913– . .), VESTERDAL (1916– . .), BEST (1922), NUR (1922), KIAH (1922, 1936), HOLTTUM (1922–37), C. W. FRANCK (1923–24), HAY (1924), TERUYA (1924– . .), HANIFF (1925), CORNER (1929–41), SPARE (1929–41), VERDOORN (1930), CARR (1932), J. A. BAKER (1934), MOYSEY (*c.* 1935–37), NGADIMAN (1936), SYMINGTON (1938), BURRET (1939), FURTADO (1939), HENDERSON (1939), WOLFE (1945– . .).

13. Langkawi Islands

CURTIS (1888–1901), RIDLEY (1897, 1911), HANIFF (1900–21), W. FOX (1904–05), H.C. ROBINSON (1911, 1916–17), SEIMUND (1916–17), NUR (1921), HOLTTUM (1925), DOLMAN (1929), A. F. G. KERR (1932), HENDERSON (1934), SYMINGTON (1938), BATTEN POOLL (1939–40).

14. P. Penang (or Prince of Wales' Island)

PRINCE (18 . .), W. E. PHILLIPS (betw. 1800–24), W. HUNTER (1802), ROXBURGH Jr (1802), CHRISTOPH. SMITH (1805–06), RAFFLES (1805–10, 1818–19), ANONYMOUS (1808), TH. EVANS's collector (1808), JACK (1819), J. POTTS (1821), FINLAYSON (1821–22), WALLICH (1822), PORTER (1822–34), DALHOUSIE (betw. 1829–32), BAUME (1830), G. W. WALKER (1830–37), NORRIS (183 .–4 .), OXLEY (1831– . .), A. DELESSERT (*c.* 1835), C. A. A. VON HÜGEL (1835), GAUDICHAUD (1837), HINDS *etc.* (1841), YVAN (1843), GRIFFITH (1845), W. T. LEWIS (1845), LOBB (1845), DIDRICHSEN (1846), RINK (1846), SCHOMBURGK (1857), LORRAIN (previous to 1858), OLDHAM (1861), MAINGAY (1862–68), STOLICZKA (1869), WAWRA VON FERNSEE (1873), KUNTZE (1875), MURTON (1876–77), G. KING (1879), MARCHE (1879), MACNAIR (1879–82), HULLETT (betw. 1879–9 .), DAY (188 .), KUNSTLER (1881–83), TENISON-WOODS (1883), MORGAN (1884), CURTIS (1884–1901), KESSLITZ (1885), WARBURG (1885 or '86), SVOBODA (1886), MACTIER (before 1888), SCHIFFMANN (1888), WATERSTREDT, (1889), RIDLEY (1889–1911), HANIFF (1890–1928), J. H. VEITCH (1892), WOOLDRIDGE (*c.* 1893), SCHIFFNER (1893), FAIRCHILD (1896), MÖLLER (1897), FLEISCHER (1898), G. SCHNEIDER (1898), W. FOX (1899), GIESENHAGEN (1899), FLIPPANCE (19 . .), H. C. HILL (1900), PREYER (1900), RACIBORSKI (1900), E. DESCHAMPS (1900–1901), HASHIM (1900–08), SCHLECHTER (1901, 1906, 1910), HOCHREUTINER (1903), USTERI (1903), BURN-MURDOCH (1903–12), HUNGER (*c.* 1904), HALLIER (1904), CH. G. MATTHEW (1904–13), ERNST (1906), MORIN (1907), WERNER (1907), STEPHENSON (before 1912), HASHIM (*c.* 1912), BURKILL (1913, 1920, 1922), FLIPPANCE (betw. 1919–38), DOCTERS VAN LEEUWEN (1920), HOLTTUM (1922, 1926, 1933), DÄNIKER (1926), FOXWORTHY (1931), SYMINGTON (1931, 1934), CORNER (1936), KIMURA (1937), NAUEN (1940–41).

15. Singapore *etc.*

DAUD (18 . .), PRINCE (18 . .), JACK (1819), RAFFLES (1819), J. POTTS (1821), FINLAYSON (1822), WALLICH (1822), BUSSEUIL (1824), BAUME (1830), G. W. WALKER (1830–37), G. BENNETT (1833), A. DELESSERT (1835), C. A. A. VON HÜGEL (1835), CUMING (1836, 1839–40), GAUDICHAUD (1837), G. T. LAY (1837), HOMBRON *etc.* (1839), HINDS *etc.* (1840, 1841), LIAUTAUD (1841), WILKES U.S. Expl. Exp. (1842), YVAN (1843), H. LOW (1844–45), J. MACGILLIVRAY (1845), LOBB (1845–52), OXLEY (1845–57), DIDRICHSEN (1846), MONTIGNY (1847), ZOLLINGER (1848), SEEMANN (1850–51), MOTLEY (1852), N. J. ANDERSSON (1853), WALLAGE (1854 or '56), BUTTERWORTH (before 1855), JAGOR (1857), SCHOMBURGK (1857), JELINEK (1858), SEMPER (1858), SCHOTTMÜLLER (1860, 1862), WICHURA (1860, 1862), PORTE (betw. 1860–65), TH. ANDERSON (1861), TEYSMANN (1862), MAINGAY (1862–68), KURZ (1863), BECCARI (betw. 1865–78), J. C. PLOEM (1867 or '70), STOLICZKA (1869), WAWRA VON FERNSEE (1869, 1872–73), HULLETT (187 .–1889), A. B. MEYER (1872), KUNTZE (1875), STEERE (1875), AHMED BIN HADJI OMAR (after 1875), MURTON (1875–81), BURBIDGE (1877, ? 1878), KEHDING (1878– . .), ALMQUIST (1879), AUGUSTINOVICZ (1879), G. KING (1879), MARCHE (1879), KUNSTLER (1880–81), CANTLEY (1880–88), TENISON-WOODS (1883), WHITEHEAD (1884–86), KESSLITZ (1885–86), BALANSA (1886), SCORTECHINI (1886), SVOBODA (1886, 1888), WARBURG (1887), KASTAWI BIN JALIL (1887–1920), TSCHIRCH (1888–89), STRUBELL (1889), TASSIM DAUD (1889–95), RIDLEY (1889–19 . .), ISAAC (*c.* 189 .–1918), PICTET (1890), RADDE (1890), BARBEY (1891), J. H. VEITCH (1892), SCHIFFNER (1893), LANGLASSÉ (1894), S. MAYER (*c.* 1895–96), HOLTERMANN (1895–96), HALLIER (1896, 1904), MÖLLER (1897), FAIRCHILD (1897, 1900), FLEISCHER (1898), ROBERTSON-GLASGOW (1898), G. SCHNEIDER (1898), GIESENHAGEN (1899), VAN ROMBURGH (1899), H. C. HILL (1900), PREYER (1900), RACIBORSKI (1900), M. JENSEN (1901), AHMED BIN HASSAN (1901– . .), SCHLECHTER (1901, 1906–07, 1910), VOLZ (1902), ELLIS (*c.* 1903), HOCHREUTINER (1903), SARGENT (1903), BURN-MURDOCH (1903–12), HOSSEUS (1904–06), CH. G. MATTHEW (1904–13), ENGLER (1905), ERNST (1906), MORIN (1907), KOERNICKE (1907, 1933), DRUCE (1908), HUB. WINKLER (1908), H. M. CURRAN (1910), PALMER (1910), KAWAKAMI (1911), BURKILL (1912–25), NUR (1913–*hodie*), CH. F. BAKER (1917), YATES (1917), DESMUKH (1918–21), SUBRAMANIAN (1918–32), DOCTERS VAN LEEUWEN (1919, 1920), CHIPP (1919–20), LIM (1920), LENNON (1921–35), KIAH (betw. 1922–38), HOLTTUM (1922–*hodie*), BACKER (1924, 1928, 1929), NGADIMAN (1924–38), HENDERSON (1924–*hodie*), JESWIET (1929), CORNER (1929–41), A. W. H. HAMILTON (*c.* 1930), KRUKOFF (1931), KOERNICKE (1933), TANAKA (1935), YAMAMOTO (1935), COERT (1937), KIMURA (1937), VAN SLOOTEN (1938), ADDISON (1938–*hodie*), BURRET (1939), OHWI (194 .), DONK (1945–46).

16. P. Tioman *etc.* (E of the Peninsula)

KAEMPFER (1690), SONNERAT (1771), KOENIG (1778), RIDLEY (1889), NANSON (189 .–190 .), FEILDING (1892), I. H. BURKILL (1915), H. C. ROBINSON & KNIGHT (1915), KLOSS (1916), HENDERSON (1927, 1929, 1934), CORNER (1932, 1935).

III. JAVA

(for Krakatau, see I, 19)

General

VAN DEN BRINK (. . . .), DALZELL (. . . .), RENGERS (. . . .), SCHIERBRAND (. . . .), SCHMIDT (. . . .), STATHOUDER (. . . .), TORRANCE (. . . .), DRAKE (1580), BASTER (17 . .), PRYON (17 . .), STIER (17 . .), GARCIN (172 .), KLEYNHOFF (1757–58), RICHTER (1773), WENNERBERG (before 1786), J. C. G. VAN DEN BOSCH (18 . .), BURGER (18 . .), VON RÖMER (18 . .), SLYUNIN (18 . .), TROTHA (18 . .), VACHELL (18 . .), W. KERR (*c.* 1805), RAFFLES (1811–16), J. ARNOLD (1815), MACKLOT (1826–27, 1831), KORTHALS (1831–33), C. A. A. VON HÜGEL (1833), PEITSCH (before 1835), SPANOGHE (1836), HOFFMANNSEGG (*c.* 1837), G. J. A. KOLLMANN (*c.* 1838), KINDER (DE CAMARECQ) (*c.* 1839– . .), A. MACLEAY (prob. before 1840), ANONYMOUS (before 1842), TEXTOR (1842), GOERING (*c.* 1844), E. DELESSERT (betw. 1844–47), HANCE (after 1844), FRIEDMANN (1846), SPRÉE (*c.* 1847), MONTIGNY (1847–55), A. THOMSON (1847–62), STEENSTRA TOUSSAINT (*c.* 185 .), HENSHALL (*c.* 1850), DOLESCHALL (1853–56), ANONYMOUS (before 1854), HORSBURGH (1856), GRONEMAN (1858–1912), W. BOXALL (*c.* 186 .), DE VRIJ (1860–66), SCHOTTMÜLLER (1861), HANCOCK (? 1862), HOOLA VAN NOOTEN (1863), VON MARTENS (1863), HILLEBRAND (1865–66), GREINER (1866), HUTTON (1866–68), D. S. HOEDT (1867), MIJER (1868), K. F. HOLLE (1870–71), LIGTVOET (1874–1900), JESPERSEN (*c.* 188 .–189 .), KIST (1883, 1894), DOUBROWINE (1885), H. MAYR (1886), LEHMANN (1887, 1890), VAN MULLEM (1888–1931), STAHL (1889–90), G. SCHNEIDER (189 .), KRASNOW (1892), W. G. BOORSMA (1892–1922), POULSEN (1894–95), HOLTERMANN (1895–96), ? LAUTERBACH (1896), MOQUETTE (1896– ? 1906), NAWASCHIN (1899), FLEISCHER (1899–1902), Frau Prof. MEYER (before 1900), TROMP DE HAAS (before 1900), KAMERLING (19 . .), KANEHIRA (19 . .), ROEPKE (19 . .), PREYER (1900), PALLA (1900–01), BOERRIGTER (1901), DIERCKX (1901–02), WATERSTREDT (1901–04, 1910–12), ANONYMOUS (before 1903), HEINRICHER (1903–04), CHAFFANJON (*c.* 1904), A. JOHN (1904), RAMALEY (1904), E. STEIN (1907), H. P. KUYPER (1907–08), A. R. SCHOUTEN (betw. 1908–32), SENN (1910–11), NEYTZEL DE WILDE (1911), GEHRMANN (1911–12), BRIGHAM (1912), DOPOSCHEG-UHLAR (1913), F.R.I. Buitenzorg (1913–*hodie*), CAMMERLOHER

(1914), PORSCH(1914), QUICH or QUICK (1914), BEUMÉE & others (1914–35), VAN DEN BRUG (1915), DAMMERBOER (1918), VAN OYE (1919–21), H. J. JOOSTEN (1921), G. J. SCHEEPMAKER (1924–38),

1. West Java

VAN BENNEKOM (. . . .), DANNE (. . . .), HEERING (. . . .), KLEI (. . . .), BONTIUS (1627–31), SEBA (last decades 17th century), KAEMPFER (1689–90, 1692–93), DAMPIER (1700, 1710), J. CUNNINGHAM (*c.* 1701), VAN RIEBEECK (1711–13), OSBECK (1751–52), DONATI (*c.* 1760), CARTERET (1768), COMMERSON (1768), BANKS & SOLANDER (1770), COOK (1770), J. C. M. RADERMACHER (*c.* 177 .), THUNBERG (1775, 1777), HORNSTEDT (1783–84), NOROÑA (1786), STAUNTON (1793), L. A. DESCHAMPS (1793–1802), DE LA BILLARDIÈRE *etc.* (1794–95), LAHAIE (1794–97), HORSFIELD (1802–18), LESCHENAULT (betw. 1803–06), REINWARDT (1817–22), KUHL (1820–21), J. C. VAN HASSELT (1820–23), SPANOGHE (182 .–31), BLUME (1822–26), MAUREVERT (*c.* 1823), PARKS (1823), ZIPELIUS (1823–28), WAITZ (betw. 1823–55), HOOPER (*c.* 1824), KENT (1824), MACKLOT (1826–27, 1831), S. MÜLLER, (1826–27, 1831–33), BÉLANGER (1828), P. A. LESSON *etc.* (1828), REYNAUD (1828), MILLETT (1831), KORTHALS (1831–33, 1836), VAN OORT (prob. *c.* 1833), G. BENNETT (1833), A. DELESSERT (1835), CALLERY (*c.* 1835), HORNER (1836), JUNGHUHN (1837–59), FORSTEN (1838–40), HOMBRON *etc.* (1839), J. H. VAN DEN BOSCH (*c.* 1840), VAN GESKER (1840–49), HASSKARL (1841–43, 1855), E. MEYER (1842), ZOLLINGER (1842–48, 1855), TEYSMANN (1842–7 .), FORTUNE (1843), MOHNIKE (1844–46 and possibly later), NAGEL (before 1845), J. MACGILLIVRAY (1845), LOBB (1845–46), DIDRICHSEN (1846), WINTER (before 1847), ANONYMOUS (1850), BOACHIE (185 .–6 .), BINNENDIJK (betw. 1850–83), J. C. PLOEM (1852–81), N. J. ANDERSSON (1853), MORROW (1853, 1854), MOTLEY (1854), HOCHSTETTER (1858), JAGOR (1858), JELINEK (1858), DE VRIESE (1858), KURZ (1859–63), Houtsoorten Gedeh (*c.* 1860), EDELING (*c.* 1860–70), TH. ANDERSON (1861), WALLACE (1861), WICHURA *etc.* (1861), BOOTH (1862–64), PIEPERS (betw. 1863–94), HILLEBRAND (1865–66), WINTER(S)BOTTOM (before 1868), SCHEFFER (1868–80), WAWRA VON FERNSEE (1869, 1873), VAN GORKOM (1869–74), BECCARI (1872, 1874, 1878), HOUTER (1873), E. PLOEM (1874), MIKLUCHO-MACLAY (1874–76), E. J. KERKHOVEN (1874–77), KUNTZE (1875), DE LA SAVINIERRE (1877–79), OTTOLANDER (1878–81), FORBES (1878–82), ARSIN (1879), G. KING (1879), CURTIS (betw. 1880–82), VORDERMAN (betw. 1880–1902), TREUB (1880–1909), TENISON-WOODS (1883), SOLMS-LAUBACH (1883–84), KESSLITZ (1885–86), GOEBEL (1885–86, 1924–25), J. MEYER (1885–87), BALANSA (1886), WARBURG (1886), SVOBODA (1886–87), BOERLAGE (1888), CURNOW (1888), M. W. C. WEBER (1888), ANONYMOUS (1888–89), GUPPY (1888–89), TSCHIRCH (1888–89), G. H. H. KARSTEN (1888–90), STRUBELL (1889), SCHIMPER (1889–90), LEFÈBRE (1889–93), AMORIE VAN DER HOEVEN (*c.* 1890), LAUTERBACH (1890), PICTET (1890), RADDE (1890), VISCHER (before 1925), BALLY (1926), MARCOVITCH (1926), LAYCOCK (1929), OGATA (1931), BRUES (1936 or 1937), BÜNNING (1938–39), DONK (1939–41), OPHOF (1940–41), BOTMA (1947).

RIDLEY (1890, 1915), BURCK (1890–91), DE MONCHY (1890–91), F. A. F. C. WENT (1890–96), VAN ROMBURGH (1890–1903), KOORDERS (1890–1919), PA IDAN (189 .– . .), BARBEY (1891), GRESHOFF (1891), J. W. H. ADÈR (1891–97), J. J. SMITH (1891–1924), J. H. VEITCH (1892), COLLETT (1893), SCHIFFNER (1893–94), HALLIER (1893–96), COUPERUS (1893–97), HULLETT (1894), L. NAGEL (1894), MASSART (1894–95), KESSLER (1894–99), GILTAY (1895–96), P. HARTMAN (before 1896), RAAP (1896), CLAUTRIAU (1896–97), PENZIG (1896–97), RACIBORSKI (1896–97), BOERLAGE (1896–1900), LOTSY (1896–1900), SAPIIN (1896–1932), FAIRCHILD (1896, 1900, 1926, 1940), A. E. KERKHOVEN (1897), MÖLLER (1897), SERRURIER (1897), MOLISCH (1897–98), NYMAN (1897–1900), KNUTH (1898–99), FLEISCHER (1898–02, 1909–11), VAUPEL (before 1899), DIHM (1899), PERNOD (1899), GIESENHAGEN (1899–1900), WOUTERS (1899–1906), SCHRÖTER (1899, 1927), A. W. P. ZIMMERMANN (*c.* 1900), BUITENDIJK (19 . .), DJAJÅ ÅTMADJA (19 . .), J. F. K. HANSEN (19 . .), TEN OEVER (19 . .), HOOGKAMER (1900), MULLER DE MONTIGNY (1900), WESTPALM VAN HOORN (1900), SOEGANDIREDJO (1900, 1909), VAN ANDEL (1900–02), HJ. JENSEN (1900–12), SPIRE (*c.* 1901), STUHLMANN (1901), VOLKENS (1901–02), BUSSE (1902), VOLZ (1902), K. A. R. BOSSCHA (1902–10), TH. VALETON (1902–19), D. G. J. M. BOIS (1903), SARGENT (1903), SCHOUTE (1903), USTERI (1903), HANS WINKLER (1903–04), HOCHREUTINER (1903–05), BACKER (1903–22), BAKHUIZEN VAN DEN BRINK Sr (1903–34), DETMER (*c.* 1904), GOLENKIN (1904–05), MOLHUYSEN (1905), ENGLER (1905–06), ERNST (1905–06), VAN ALDERWERELT VAN ROSENBURGH (1905–22), PULLE (1906), DEISTEL (1906–07), KOERNICKE (1906–07), SCHLECHTER (1906–07, 1910), D. H. CAMPBELL (1906, 1914), WOLFF (1906–18), BERNARD (1906–28), BEGUIN (1906–37), P. VAN HARREVELD (1907), MORIN (1907), VON HÖHNEL (1907–08), O. VAN VUUREN (1907–16), RANT (1907–37), E. R. JACOBSON (1908), HUB. WINKLER (1908), ZEYLSTRA (1908–09), HOLTEN (1908–17), HARTMANN (before 1909), PALMER (1909), ROTHERT (1909), MIEHE (1909–10), HAM (before 1910), HALKEMA (1910), J. KUYPER (1910), NOERKAS (1910, 1912), DUYFJES (*c.* 1910–14), OTTENS (191 .–192 .), DOCTERS VAN LEEUWEN (1910–32), KAWAKAMI (1911), LECOMTE & FINET (1911), MILLSPAUGH (1911), BLAAUW (1911–12), BRIGHAM (1912), CH. G. MATTHEW (1912), SCHOLTE (1912), OVERDIJKINK (1912–13), SCHWARTZ (1912–21), M. C. L. LANG (*c.* 1913), AMDJAH (1913), GUSDORF (1913), KOENS (1913), MONTERIE (1913), SCHULTE (1913), VILMORIN (1913), GLEASON (1913–14), F. R.I. Buitenzorg (1913–*hodie*), J. BOSSCHA (1914), BREMEKAMP (1914), LÖRZING (1914), PISCICELLI (1914), BOLDINGH (1914–17), BEUMÉE & others (1914–35), AARTS (1915), C. J. BROOKS (1915), E. B. COPELAND (1915), FRIJLINCK (1915), LEBER (1915), DE VISSER SMITS (1915), WERKMAN (1915), SLUITER

(1915–17), SIHAJA (1915–20), S. E. BOORSMA (*c.* 1916), DAUBANTON (1916), DENKER (1916), LEEFMANS (1916), RISCH-LODER (1916), VAN WELSEM (1916–18), WEEHUIZEN (1916–19), W. C. VAN HEURN (1916–32), WINCKEL (1916–33), BARENDS (1917), C. BUDDINGH (1917), DE JONGH (1917), TH. VALETON Jr (1917), YATES (1917), E. J. WIND (1917–18), KEUCHENIUS (1917–26), L. G. DEN BERGER (1918), REYNVAAN (1918), ZWAARDEMAKER (1918), DE BOER (1918–19), VAN DER HEGGE ZIJNEN (1918–19), A. M. DE VRIES (1918–22), NONGNONG (1918–31), KALSHOVEN (1918–36), ENGLES-JULIUS (1919), NAKAI (1919), ROCK (1919), W. A. HORST (1919–20), DE LA RIVIÈRE (1919–20), FR. KRAMER (1919–23), LAM (1919–33), VAN SLOOTEN (1919–40), GARRETSEN (1920), VAN DER MEER MOHR (1920), SEIFRIZ (1920), VERMEULEN (1920), WURTH (1920), BAKHUIZEN VAN DEN BRINK Jr (1920–25), ARRHENIUS (1921), J. R. HARMSEN (1921), VEERMAN (1921), GÄUMANN (1921–22), DAKKUS (1921–24), ANONYMOUS (1922), VAN BAALEN (1922), Miss BIK (1922), I. H. BURKILL (1922), HEIDE (1922), PARAVICINI (1922), PHILIPP (1922), RIJCKEVORSEL (1922), ULTÉE (1922), VELDERS (1922), WISSE (1922–27), VAN DER GOOT (1923), P. VAN HARREVELD (1923), STOMPS (1923), VAN DER VEEN (1923), TANAKA (1923, 1944), F. C. VAN HEURN (1923–29), RESVOLL (1923–24), OCHSE (*c.* 1924), D'ARNAUD GERKENS (1924), BRASCAMP (1924), HANS WINKLER (1924–25), BRUGGEMAN (1924–31), DE VOOGD (1924–41), SAIMOENDT (1925), DANSER (1925–29), POSTHUMUS (1925, 1939–41), DÄNIKER (1926), HOLTTUM (1926), ROUPPERT (1926), JESWIET (1926, 1929), VAN BREEMEN (1927), BURGEFF (1927), VAN DER HEGGE ZIJNEN (1927), A. RADERMACHER (1927), THORENAAR (1927, 1935), YATES (1927–28), W. A. VISSER (1927–31), VAN WOERDEN (1927–39), COERT (1927–40), VAN STEENIS (1927–50), VAN DER PIJL (1927–*hodie*), GEERTS-RONNER (1928), RÜMKE (1928), V. E. VAN STRAELEN (1928), FERWERDA (1928–29), RUTTNER (1928–29), J. ADÈR (1928–30), J. OLIVIER (1928–31), DEN DOOP (1928, 1937), HOLSTVOOGD (1928–41), SPRUIT (1928–41), BLOKZEYL (1929), CHRISTOPHERSEN (1929), MAITLAND (1929), RUTTNER (1929), SKOTTSBERG (1929), STIGTER-DE VOS T.N.K. (1929), WELTER (1929), STEHN (1929–3 .), F. W. WENT (1929–32), COSTER (1929–36), BOEDIJN (1929–41), VAN DER VECHT (1929–41), ERNST (1930), F. ECOMA VERSTEGE (1930), VERDOORN (1930), VAN DER ZIJL (1930), BLUM (1930–31), ENDERT (1930–31), VELDHUIS (1930–34 or later), POLAK (1930–31, 1939–40), VAN HEETEREN (1930–41), B. A. HAGEN & BRUGGEMAN (1931), VAN BENTHEM JUTTING (1931), BOOBERG (1931), KIMAH (1931), BIJHOUWER (1931–38), LIEFTINCK (1931–41), CLEMENS (1932), KLEINHOONTE (1932), H. C. C. A. A. VOS (1932), HOEKS (1932–34), F. H. HILDEBRAND (1932–39), HOOGERWERF (1932–39), E. R. JACOBSON (1932–42), ANONYMOUS (1933), KOERNICKE (1933), STORTENBEKER (1933), P. F. FRANCK (1933, 1938), APPELMAN (1933–34), DAMMERMAN (1933–34), BARTELS (1933–38), P. H. W. DE LEEUW (*c.* 1934), VAN AMEROM (1934), HEUBEL (1934), G. K. W. VOIGT (1934–35), ALTMANN (1934, 1937), B. J. KARSTEN (betw. 1934–38), P. N. HACKENBERG (1934–41), DUPONT (1935), J. H. DE HAAN (1935), HARDON (1935), MIDDELAER (1935), WITKAMP (1935, 1940), CAYAUX (1936), HEYN (1936), KLUIT (1936), LÜTJEHARMS (1936), RIJKEBÜSCH (1936–38), ROSIER (1936–41), EYMA (1937), KIMURA (1937), STOKEY (1937), SORGDRAGER (1937 onwards), BUWALDA (1937, 1941), HARDERS (1938), LOOGEN (1938), RODWAY (1938), BURRET (1939), HELLENDOORN-VAN SCHOUWENBURG (1939), SAITO (1939), YAMAMOTO (1939), FERMAN (1939–41), DEN HOED & VAN DER MEER (1939–*hodie*), P. VAN DER MEER (1939–*hodie*), POPTA (1939–*hodie*), VOOREN (1939–41), W. VAN LEEUWEN (*c.* 1940), SAUVEUR (1940), LANJOUW (1940), JONCHEERE (1940–41), BLOEMBERGEN (1941), H. C. D. DE WIT (1941), OHWI (1942 or later), DE WILDE (1946).

2. Central Java

HART (. . . .), LOHMAN (. . . .), THUNBERG (1777), L. A. DESCHAMPS (1793–1802), DE LA BILLARDIÈRE *etc.* (1794), LESCHENAULT (1803–06), HORSFIELD (1804–19), REINWARDT (1817, 1822), WAITZ (betw. 1823–55), BLUME (1824–25), JUNGHUHN (1835–47), SPANOGHE (1837–38), HOMBRON *etc.* (1839), VAN GESKER (184 .), HASSKARL (1842 *etc.*), MOHNIKE (1844–46), J. C. PLOEM (*c.* 1852–53), TEYSMANN (1853–59), CORDES (after 1857), JAGOR (1858), WICHURA *etc.* (1861), STIJMAN (1867), KUNTZE (1875), OTTOLANDER (1878–82), G. F. J. BLEY (betw. 1878–19 . .), SEUBERT (1879), VORDERMAN (betw. 1880–1902), TENISON-WOODS (1883), REES (1884), KOORDERS (1885–1919), KESSLITZ (1886), WHITEHEAD (1886), WARBURG (1887), OUDEMANS (1888), G. H. H. KARSTEN (1889), STRUBELL (1889), SCHIMPER (1889–90), BENECKE (1889–94), DE BRUYN PRINCE (189 .), BRUINSMA (1890), RADDE (1890), DE MONCHY (1892 with F. A. F. C. WENT, 1897), COLLETT (1893), CLAUTRIAU (1896–97), RACIBORSKI (1897–1900), J. J. SMITH (1899), WOLFF VAN WESTERROODE (*c.* 1900), ANONYMOUS (19 . .), MOUSSET (19 . .), L. NAGEL (19 . .), ROELOFSEN (19 . .), GIESENHAGEN (1900), NAUTA (1900), HJ. JENSEN (1900–12), FAIRCHILD (1900, 1926), LÖRZING (190 .–14), STUHLMANN (1901), VOLZ (1902), BÜSGEN (1902–03), E. R. JACOBSON (1902, 1904), D. G. J. M. BOIS (1903), BUSSE (1903), HANS WINKLER (1903–04), HOCHREUTINER (1904), MACGILLIVRAY (1904), KOERNICKE (1906–07), BUYSMAN (1907), DEISTEL (1907), VON GRAEVENITZ (1907), MORIN (1907), VAN HARDENBERG (1910), KOBUS (1910), DOCTERS VAN LEEUWEN (1910–32), WIRIOSAPOETRO (before 1911), L. TH. MAYER (*c.* 1911), DENKER (1911), KAWAKAMI (1911), VAN MAANEN (1911), BACKER (1911–29), RIJCK VAN DER GRACHT (*c.* 1912), BLAAUW (1912), HAGEDOORN & JESWIET (1912), DE JONGH (1912), JESWIET (1912, 1925), RIJCKEVORSEL (1913–30), F.R.I. Buitenzorg (1913–*hodie*), VAN DER GOOT (1914–17), BEUMÉE & others (1914–31), P. VAN HARREVELD (1915), SLUITER (1915), BIRKHOFF (*c.* 1916), L. G. DEN BERGER (1916), S. E. BOORSMA (1916), KOENS (1916), WURTH (1916), VAN STRATEN (1916–18), DE VISSER SMITS (1916–19), BÜNNEMEIJER (1917), SYBRANDI (1917), WINCKEL (1917), BLOKHUIS (1917–21), A. CRAMER (1917–41), HEMKEN (1918), SOERADJI

(1918), D. BURGER (1918–24), OOSTEN (1919), DE LA RIVIÈRE (1919–20), DE BOER (1919, 1927), BALLY (1920), MEINDERSMA (1920), VAN SLOOTEN (1920–37), COERT (1920–40), KALSHOVEN (1921, 1933), E. C. L. JANSEN (1922), LEEFMANS (1922 *etc.*), LAM (1922–31), STOMPS (1923), KULESCHA (1923–25), HOUWING (1923–27), KIEVITS (1923–31), DORGELO (1924), 'KIRIMAN' (1924), VAN DER MEER MOHR (1924), BEGUIN (1924–27), DE VOOGD (1924–38), VERSLUYS (1925), BOOGERD (1926), HOMMES (1926), BRASCAMP (1927), RENSCH (1927), SCHRÖTER (1927), THORENAAR (1927), F. H. HILDEBRAND (1927–39), J. H. DE HAAN (1928), PRILLWITZ (1928), V. E. VAN STRAELEN (1928), RUTTNER (1928–29), VAN STEENIS (1928–40), F. BLOK, (*c.* 1929), BRUGGEMAN (1929), CHRISTOPHERSEN (1929), SCHOL-SCHWARZ (1929), BRINKMAN (1929–37), ANONYMOUS (1930), DRESCHER (1930), ERNST (1930), POLAK (1930), ULTÉE (1930), VERDOORN (1930), BOOBERG (1930, 1940), VAN HEETEREN (1930–41), R. BRINK (1931), ENDERT (1931, 1932), BIJHOUWER (1931–38), GEUL (1932), KLEINHOONTE (1932), KOOPER (1932), LOOGEN (1932–41), P. F. FRANCK (1933), KOERNICKE (1933–34), O'HEME (1933–35), APPELMAN (1934), BOLLE (1934), THUNG & KERLING (1934), B. J. KARSTEN (betw. 1934–38), LÜTJEHARMS (1936), OSTENDORF (1937), RIJKEBÜSCH (1937), P. N. HACKENBERG (1938), KLOPPENBURG (1938), RODWAY (1938), ALTMANN (1938–41), BETREM (1939), J. J. SCHUURMAN (1939), H. C. C. A. A. VOS (1939), YAMAMOTO (1939), HOFSTEE (1940–41), HOOGERWERF (1941).

3. East Java

ANONYMOUS (. . .), CEPHAS (. . .), HERTLING (. . .), LAWICK (. . .), LAHAIE (1793–94), DE LA BILLARDIÈRE *etc.* (1793–94), L. A. DESCHAMPS (1793–1802), OEDAM (18 . .), LESCHENAULT (1803–06), HORSFIELD (1805–15), REINWARDT (1817, 1821–22), PERROTTET (1819), WAITZ (betw. 1823–55), BUSSEUIL (1824), DUMONT D'URVILLE (1824), BAUME (1831), JUNGHUHN (1838–44), VAN GESKER (184 .), MOHNIKE (? 184 .), J. MACGILLIVRAY (1844–45), ZOLLINGER (1844–46, 1856–59), TEYSMANN (1854–59), VAN LEEUWEN (before 1855), JAGOR (1858), E. NETSCHER (1859), VAN LAREN (*c.* 1860), WALLACE (1861), WICHURA *etc.* (1861), KUNTZE (1875), VORDERMAN (betw. 1880–1902), TENISON-WOODS (1883), OTTOLANDER (1883–1908), KESSLITZ (1886), WHITEHEAD (1886), SVOBODA (1887), WARBURG (1887), KOORDERS (1888–1919), ARENDSEN HEIN (1889), SCHIMPER (1889–90), LAUTERBACH (1890), PICTET (1890), F. A. F. C. WENT (1890–96), KOBUS (1891–1910), COLLETT (1893), MASSART (1894), COLLARD (1895), DE VOGEL (1895–99), J. J. SMITH (1896), CLAUTRIAU (1896–97), HARVEY (1897), DE MONCHY (1897), SCHAAP (1897), VAN DER LOO (1898), TH. VALETON (1899–1917), COSTER (19 . .), GISIUS (19 . .–4 .), LOTSY (1900), MOUSSET (190 .–191 .), HJ. JENSEN (1900–12), MOLHUYSEN (1902–12), BUSSE (1903), HANS WINKLER (1903–04), GOLENKIN (1905), HOCHREUTINER (1905), CONNELL (1905–07), WURTH (1905–22), ENGLER (1906), ERNST (1906), PULLE (1906), SPAAN (1906), KOERNICKE (1906–07), DEISTEL (1907), MORIN (1907), ELBERT (1907–08), BUYSMAN (1907–19), HUB. WINKLER (1908), ZEYLSTRA (1908), DE GRIENDT (1909), ROTHERT (1909), QUARLES DE QUARLES (before 1910), WEERT VAN VELZEN (before 1911), KAWAKAMI (1911), DOCTERS VAN LEEUWEN (1911–29), VERMOESEN (*c.* 1912), BLAAUW (1912), VAN DER GOOT (1912–14), BACKER (1912–31), ULTÉE (1912–32), DE KONING (1913), THULL (1913), VILMORIN (1913), LEEFMANS (1913 or 1914), HAGEDOORN & JESWIET (1913–14), BREMEKAMP (1913–20), HARREVELD-LAKO (1913–26), JESWIET (1913–29), F.R.I. Buitenzorg (1913–*hodie*), LÖRZING (1914), P. VAN HARREVELD (1914–2 .), BEUMÉE & others (1914–34), J. VAN HARREVELD (1915), ISMAIL (1915), RIDLEY (1915), COUVREUR (1916), SLUITER (1916), VAN WELSEM (1916–18), ARENS (1916–21), E. R. JACOBSON (1916, 1917, 1936), COERT (1916–41), FR. WEBER (1917), WINCKEL (1917), KALSHOVEN (1917–19), DE MEYIER (1917–19), BLOKHUIS (1918), DE BOER (1918), W. A. HORST (1918), L. C. DEN BERGER (1918, 1920), WISSE (1918–22), DE LA RIVIÈRE (1919–20), THORENAAR (1919–20, 1927), VAN OOSTEN (1919–31), HAAGEN (*c.* 1920), METSELAAR (*c.* 1920), BECKING (1920), SEIFRIZ (1920), SCHWEIZER (1920 onwards), DOCTERS VAN LEEUWEN-REYNVAAN (1920–21), KREULEN (1920–21), TOLLENS (before 1921), IRSAN (1921), SOHNS (1921), STOUTJESDIJK (1921), FR. KRAMER (1922), PARAVICINI (1922), DORGELO (1922–25), RANT (1922–33), BOVIEN (1923), REILINGH (1923), STOMPS (1923), C. W. FRANCK (1923–24, 1930), ETTY (1923, 1930–31), KOOPER (1923–33), A. M. CRAMER (1924), DAMMERMAN (1924), VAN ITERSON (1924), DE VOOGD (1924–27), ERKELENS (1925), VAN DER ZIJL (1925), VAN BREEMEN (1925–26), BOOBERG (1925–36), POSTHUMUS (1925–39), ROUPPERT (1926), SASTRODIRDJO (1926), SOEDJONOSASTRO (1926), BARKMEYER-DE VRIES (1926–27), EGB. DE VRIES (1926–27), FAIRCHILD (1926, 1940), BRASCAMP (1927), JANSZ (1927), KREKE (1927), LOOS (1927), VAN DER MEER MOHR (1927), DU RIETZ (1927), DU RIETZ & BACKER (1927), SCHRÖTER (1927), VORSTMAN (1927), WETHMAR (1927–28), DANSER (1927–29), DILLEWIJN (1927–29), GEERTS-RONNER (1927–29), BOLLE (1927–33), A. RADERMACHER (1927–34), GANDRUP (*c.* 1928), ANONYMOUS (1928), GEERTS (1928), G. J. HARMSEN (1928), HAZELHOFF (1928), J. H. L. JOOSTEN (1928), A. VAN LEER (1928), POLMAN (1928), V. E. VAN STRAELEN (1928), VERHOEF (1928), RUTTNER (1928–29), RÜMKE (1928–30), CLASON (1928–36), VAN STEENIS (1928–40), VAN SLOOTEN (1928–41), J. KOOPMAN (*c.* 1929–30), ANONYMOUS (1929), D. BURGER (1929), CHRISTOPHERSEN (1929), VAN DER PIJL (1929), STEEMANN NIELSEN (1929), VIETS (1929), SKOTTSBERG (1929, 1938), T. G. E. HOEDT (193 .), ANONYMOUS (1930), ERNST (1930), KOOPAL (1930), OTKEN-VAN LAKERVELD (1930), J. J. RICHARD (1930), DE ROY VAN ZUYDEWYN (1930), W. THOMSON (1930), VERDOORN (1930), KEERS (1930–32), ALTMANN (1930–36), H. J. TOXOPEUS (1930–37), GROENHART (1930–40), HOFSTEE (1930–41), POLAK (after 1930), BAKKER (1931), DANIELS (1931), HEUBEL (1931), LAM (1931), SCHMUZIGER (1931), ASLOERI (1931–33), BOEDIJN

(1931, 1935), BIJHOUWER (1931–38), LOGGERS (1931–41), COELINGH (1932), KLEINHOONTE (1932), HEYNING (1932–33), W. DE JONG (1933), ENGLES-JULIUS (1934), KOERNICKE (1934), LEDEBOER (1934), W. H. DE KRAMER (1934–36), B. J. KARSTEN (betw. 1934–38), BROCX (1935), P. F. FRANCK (1935), GEUL (1935), VAN DER VEEN (1935–39), VAN AMEROM (1935–41), HOOGERWERF (1935–41), LÜTJEHARMS (1936), WITKAMP (1937), F. H. HILDEBRAND (1937–38), W. C. VAN HEURN (1937–39), HEYN (1937–40), 'S JACOB (1938), KOSTERMANS (1938), SWART (1938), BURRET (1939), YAMAMOTO (1939), LOOGEN (1939–41), APPELMAN (1940), DIAKONOFF (1940), POPTA (1940), SCHUSTER (1940), BUWALDA (1941), LEENART (1941), RAPPARD (1941), JONCHEERE (1941–42), WEHLBURG (before 1942–43), G. DE GROOT (1942–43), RAPPARD (1948–49).

4. Islands near SW. Bantam (Prinsen, Meeuwen & Trouwers Island)

OSBECK (1752), SPARRMAN (1766), CARTERET (1768), BANKS & SOLANDER (1770), NELSON (1780), AMDJAH (1913), F.R.I. Buitenzorg (1913–*hodie*), L. G. DEN BERGER (1921), ENDERT (1931), HOOGERWERF (1939).

5. Christmas Island

DAMPIER (1688), SEMPER (1858), MACLEAR (1886–87), Officers EGERIA (1887), LISTER (1887), RIDLEY (1890, 1904), KEYSER (*c.* 1896), LEACH (1897), CH. W. ANDREWS (1897–98), KLOSS (1923).

6. Noesa Kambangan

LEEFTROODE (. . . .), L. A. DESCHAMPS (1797), REINWARDT (1819), C. M. BAUMHAUER (1824), BLUME (1824), MOHNIKE (*c.* 184 .), VAN GESKER (184 .), JUNGHUHN (1847), TEYSMANN (1853), VAN WIJCK (*c.* 1854), E. JACOBSON (1867), SCHEFFER (1871), HAAK (1883–87), G. H. H. KARSTEN (1889), SCHIMPER (1889–90), RACIBORSKI (189 .), G. SCHNEIDER (189 .), KOORDERS (1891, 1898, 1900, 1901), DE MONCHY (1897), HJ. JENSEN (19 . .), HOCHREUTINER (1904), DETMER (1905), ERNST (1906), J. J. SMITH (1906), MORIN (1907), TH. VALETON (1907), AMDJAH (1909), ROTHERT (1909), KORNASSI (1910, 1912), BLAAUW (1912), BACKER (1912, 1915, 1921), F.R.I. Buitenzorg (1913–*hodie*), SLUITER (1915), PH. B. M. VAN STRAELEN (1918), MEINDERSMA (1920), WOLFF VON WÜLFING (1921), FAIRCHILD (1926), BEUMÉE (1928), BECKER-DE LA RIVIÈRE (1928, 1930), BRUGGEMAN (1929), BLUM (1931), BOEDIJN (1931), DOCTERS VAN LEEUWEN (1932), KLEINHOONTE (1932), KOSTERMANS (1938), VAN WOERDEN (1938).

7. P. Sempoe

F. W. WENT & BEGEMANN (1928), COERT (1930).

8. Noesa Baroeng

ZOLLINGER (1845), KOORDERS (1889), ULTÉE (*c.* 1913), BREMEKAMP (*c.* 1916), HOOGERWERF (1939).

9. Kangean Archipelago

WEBER-VAN BOSSE (1900), SALVERDA (1911), DOMMERS (1913, 1919–22), F.R.I. Buitenzorg (1913–*hodie*), SCHELFHORST (1914), BACKER (1919), BEGUIN (1919), MAHLMEISTER (1919), REILINGH (1919), H. A. L. DE LEEUW (1923), DE BOER (1938), VAN DOORN (1940).

10. Sapoedi Islands

KORTHALS (1836), VORDERMAN (1892).

11. Madoera and neighbouring islets

GARCIN (172 .), DE LA BILLARDIÈRE *etc.* (1793), L. A. DESCHAMPS (1796), LESCHENAULT (betw. 1803–06), HORSFIELD (1807), REINWARDT (1817, 1822), PERROTTET (1819), BUSSEUIL (1824), BAUME (1831), KORTHALS (1837), J. MACGILLIVRAY (1844), ZOLLINGER (1858), TEYSMANN (1859), DE VRIESE (1859), TOBIAS (1865), VORDERMAN (1894), HOCHREUTINER (1905), VAN DER GRACHT (1906), BACKER (betw. 1915–28), BREMEKAMP (1917), DORGELO (1922, 1924), RANT (1924), JESWIET (1925), VAN SLOOTEN (1928), GEERTS-RONNER (1928–29), CHRISTOPHERSEN (1929), COERT (1929, 1933, 1938, 1941), BEUMÉE (1931), VAN DER GOOT (1931), HUIDEKOPER (1931), ANONYMOUS (1932–36), HOFSTEE (1937–39), FAIRCHILD (1940).

12. P. Bawean

TEYSMANN (18 . .), VORDERMAN (1891), SCHLECHTER (1901, 1910), DORGELO (1924), KARTA (1928), POSTHUMUS (1928, 1933), COERT (1930, 1937, 1938), BUWALDA (1937), F.R.I. Buitenzorg (1937).

13. Karimoendjawa Archipelago

TEYSMANN (1854), KOORDERS (1886), SCHLECHTER (1910), DAMMERMAN (1926), KARTA (1930).

14. Islands in the Bay of Batavia (incl. Duizend Islands)

KAEMPFER (1689–1693), J. CUNNINGHAM (*c.* 1701), DAMPIER (1710), CARTERET (1768), BANKS & SOLANDER (1770), HORNSTEDT (1783), REINWARDT (betw. 1817–22), TEYSMANN (2nd half 19th century), WARBURG (1886), KOORDERS (after 1888), GRESHOFF (1889), STRUBELL (1889), SCHIMPER (1889–90), MÖLLER (1897), NYMAN (1897), KNUTH (1899), J. J. SMITH (1899, 1906), TH. VALETON (*c.* 1905), ERNST (1906), PULLE (1906), BACKER (1906, 1920–21), ARNOLDI (1909), ROTHERT (1909), W. G. BOORSMA (1911), LEEFMANS (*c.* 1920), BOSCHMA (1921), VAN SLOOTEN (1921, 1932), LAM (1923, 1931), STOMPS (1923), DOCTERS VAN LEEUWEN (1924), BAKHUIZEN VAN DEN BRINK Sr (1927), BEUMÉE (1927, 1931, 1933), CHRISTOPHERSEN (1929), RUTTNER (1929), BLUM (1930), ERNST (1930), HILDEBRAND (1930), VAN STEENIS (1930–40), KLEINHOONTE (1932), VAN LUMMEL (1932), KOERNICKE (1933), BOEDIJN (1934), HOUWINK (1935), HOOGERWERF (1935–36), KIMURA (1937), KOSTERMANS (1938), WESTENBERG (1938), P. VAN DER MEER (1939–48), DEN HOED (1948).

15. Islands in the Bay of Bantam, P. Merak and P. Babi

BÉLANGER (1828), TEYSMANN (after 1842), PENZIG (1897), RACIBORSKI (1897), J. J. SMITH (1906), DOCTERS VAN LEEUWEN (1928), HOOGERWERF (1936), KOSTERMANS (1938), VAN STEENIS (1939).

IV. LESSER SUNDA ISLANDS

General

D. S. HOEDT (*Zuidwester* and *Zuidooster Isls*, betw. 1863–66), FAIRCHILD (1900, 1940), WATERSTREDT (1901–04), LAYCOCK (1929).

1. Bali and Noesa Penida

HORSFIELD (1806), SPANOGHE (183.), ZOLLINGER (1845, 1846, 1856, 1857), TEYSMANN (1854), WALLACE (1856), VAN BLOEMEN WAANDERS (1857), W. F. A. ZIMMERMANN (*c.* 1860), BINNENDIJK (? 1866), KESSLITZ (1886), SVOBODA (1887), FAIRCHILD (1900), STRESEMANN (1911), ARENS (1912), CH. B. ROBINSON (1913), F.R.I. Buitenzorg (1913–*hodie*), VAN DEN AKKER (1914), P. J. S. CRAMER (1918), DOCTERS VAN LEEUWEN (1918), MAIER (1918), BECKING (1920), VERMEULEN (1921), HEYTING (1925), VAN DER PAARDT (1926), TER LAAG (*c.* 1927), RENSCH-MAIER (1927), DILLEWIJN & DEMANDT (1929), JESWIET (1929), RUTTNER (1929), V. E. VAN STRAELEN (1929), ERNST (1930), KLEINHOONTE (1932), ANONYMOUS (1933), DE VOOGD (1933–36), POSTHUMUS (1933, 1937–38), KOERNICKE (1934), VAN STEENIS (1936), KIMURA (1937), WECK (*c.* 1938), JAAG (1938), RODWAY (1938), VAN DER PIJL (1939), YAMAMOTO (1939), FAIRCHILD (1940).

2. Lombok

J. MACGILLIVRAY (1845), ZOLLINGER (1846), WALLACE (1856), KESSLITZ (1886), KOORDERS (1894), VORDERMAN (1894), A. H. EVERETT (1896), WEBER-VAN BOSSE (1899), FAIRCHILD (1900), ERNST (1906), ELBERT (1909), KAWAKAMI (1911), F.R.I. Buitenzorg (1913–*hodie*), L. J. TOXOPEUS (1921), TENGWALL (1925), RENSCH-MAIER (1927), V. E. VAN STRAELEN (1929), ANONYMOUS (1933), DE VOOGD (1933–36), VAN DER VEEN (1936), BLOEMBERGEN (1939), BOTMA (1947).

3. Soembawa and adjacent islets

REINWARDT (1821), SPANOGHE (1831), FORSTEN (1842), ZOLLINGER (1847), BECCARI (1874), COLFS (1879–81), SVOBODA (1887), WARBURG (1888), M. W. C. WEBER (1889), WEBER-VAN BOSSE (1899–1900), ERNST (1906), ELBERT (1909), F.R.I. Buitenzorg (1913–*hodie*), P. VAN HARREVELD (1920), RENSCH-MAIER (1927), V. E. VAN STRAELEN (1929), ANONYMOUS (1930), POSTHUMUS (1932), DE VOOGD (1933–36), JAAG (1938), BLOEMBERGEN (1939), VAN DER PIJL (1941).

4. Soemba

TEYSMANN (1873), F.R.I. Buitenzorg (1913–*hodie*), F. M. LANG (1922–23), DAMMERMAN (1925), IBOET (1925), ANONYMOUS (1930 *etc.*), POSTHUMUS (1932), DE VOOGD (1933–36), GREVENSTUK (1938), JAAG (1938), BLOEMBERGEN (1939), P. HOEKSTRA (*c.* 1940), MONOD DE FROIDEVILLE (1949).

5. Flores, P. Komodo, P. Papagaran Besar, P. Badjo

LANDON (1679), ZOLLINGER (1847), SEMMELINK (*c.* 1863), VON MARTENS (1863), COLFS (1880), M. W. C. WEBER (1888–89), A. H. EVERETT (1896), WEBER-VAN BOSSE (1900), DINGEMAN (1907, *P. Komodo*), ELBERT (1910), F.R.I. Buitenzorg (1913–*hodie*), ANONYMOUS (1918, 1934, 1935, 1936), W. A. HORST (1921), SANT (1924), KNAAP (1926), RENSCH-MAIER (1927), FÖRSTER (1928), J. K. DE JONG (1929, 1937), W. C. VAN HEURN (1930), POSTHUMUS (1932), DE VOOGD (1933–36, *P. Komodo* 1936), SOEHANDA (1937, also *P. Komodo etc.*), JAAG (1938), BLOEMBERGEN (1939), WINCKEL-SWEEP (1939), SIHOMBING (1940), VAN DER PIJL (1941, also *P. Komodo*).

6. Sawoe

BANKS & SOLANDER (1770), A. H. EVERETT (1896), WEBER-VAN BOSSE (1899), HEYLIGERS (1917–19), PROPPE (1924), BLOEMBERGEN (1939).

7. P. Roti, P. Semaoe, *etc.*

REINWARDT (1821), SPANOGHE (1831–36), WALLACE (1859), TEYSMANN (1873), WEBER-VAN BOSSE (1900), AARS (1905–17), F.R.I. Buitenzorg (1913–*hodie*), DE VOOGD (1935), VAN DER PIJL (1941).

8. Solor, Adonara and Lomblen

REINWARDT (1821), VON MARTENS (1863), KLUPPEL (*c.* 1872), TEYSMANN (1873), COLFS (1880), WEBER-VAN BOSSE (1899–1900).

9. Alor and Pantar

GAUDICHAUD *etc.* (1818), REINWARDT (1821), TEYSMANN (1873), COLFS (1880), MAIER (1909–10), F.R.I. Buitenzorg (1913–*hodie*), PELT (*c.* 1924), BOUMAN-HOUTMAN (1928–31), JAAG (1938), VAN WOERDEN (1938), C. DU BOIS (1938–39).

Timor—General

FATUMASSE (. . . .), HOME (1843), HUTTON (1868), WALLIS (*c.* 1870), ? CURTIS (betw. 1880–82), A. H. EVERETT (1896), FLOOD (*c.* 1900), E. G. SMITH (19 . .), FAIRCHILD (1900), WEBER-VAN BOSSE (1900), ANONYMOUS (*c.* 1935).

10. West Timor (Dutch part, incl. Portug. enclave)

JACOB VAN WIJCKERSLOOT (16 . .), DAMPIER (1699), NELSON (1789), CHRISTOPH. SMITH (1792), WILES (1792), RIEDLÉ (1801), LESCHENAULT *etc.* (1801, 1803), BAUER (1803), R. BROWN (1803), GOOD (1803), GAUDICHAUD *etc.* (1818), A. CUNNINGHAM (1818–19), REINWARDT (1821), MACKLOT (1828), ZIPELIUS (1828), S. MÜLLER (1828–29), SPANOGHE (1831–36), F. D. BENNETT (1836), HOMBRON *etc.* (1840), J. MACGILLIVRAY (1843), WALLACE (1857,

1859), DE VRIESE (1859), TEYSMANN (1859, 1871, 1873), W. F. A. ZIMMERMANN (*c.* 1860), VON MARTENS (1862–63), RIEDEL (187 .), GRAMBERG (1871), BECCARI (1872, 1874), SISO (1874–75), NAUMANN (1875), ZEYE (1875), DE VOOGT (after 1876), COLFS (1880), H. J. WIGMAN (1904), DJIBJA (1907), F.R.I. Buitenzorg (1913–*hodie*), JONKER (1916), TALAKUA (192 .), PROPPE (*c.* 1924), GROENEVELDT (1924), DE GRIJP (1924, 1935–37), BOUMAN-HOUTMAN (1926–31), WALSH-HELD (1928–29), STRAUB (1930), G. H. W. STEIN (1932), ANONYMOUS (1934–35), DE VOOGD (1934–35), JAAG (1938), J. H. KOSTER (1938–39), BLOEMBERGEN (1939), M. IDRIS (1940), VAN DER PIJL (1941), MEIJER DREES (*c.* 1946–47), MONOD DE FROIDEVILLE (1949).

11. East Timor (Portuguese)

DAMPIER (1699–1700), POIVRE (1755), GAUDICHAUD *etc.* (1818), DE VRIESE (1859), TEYSMANN (1859, 1871, 1873), W. F. A. ZIMMERMANN (*c.* 1860), WALLACE (1861), VON MARTENS (1862), BECCARI (1872), DA SILVA (*c.* 188 .), FORBES (1882–83), NEWTON (1896–97), H. J. WIGMAN (1904), A. O. DE CASTRO (1909–11), DÄNIKER (1926), WALSH-HELD (1929), ALFARO-CARDOSO (1930), G. H. W. STEIN (1932), JAAG (1938), CINATTI (1946–47), MEIJER DREES (*c.* 1946–47).

12. Wetar

RIEDEL (1880–84), TREUB (1893), LEON (*c.* 1908), ELBERT (1910), F.R.I. Buitenzorg (1913–*hodie*), BLOEMBERGEN (1939).

13. Roma and Kisar

REINWARDT (1821), RIEDEL (1880–84), TREUB (1893), WEBER-VAN BOSSE (1900), F.R.I. Buitenzorg (1913–*hodie*), BLOEMBERGEN (1939).

14. Leti Islands

RIEDEL (1880–84), TREUB (1893), FAIRCHILD (1900).

15. Damar Islands

BERNSTEIN (1863), RIEDEL (1880–84), TREUB (1893), WEBER-VAN BOSSE (1900).

16. Babar Islands

RIEDEL (1880–84), TREUB (1893).

17. Tanimbar Islands (or Timor laoet)

RIEDEL (1880), FORBES (1882), MICHOLITZ (1891), TREUB (1893), PEREIRA (*c.* 1896), GEILL (1900), LEON (*c.* 1908), H. J. WIGMAN (1909), DU PUY (*c.* 1912), F.R.I. Buitenzorg (1938), BUWALDA (1938).

V. BORNEO

General

DURNFORD (. . .), HOOPER (. . .), PUASA (. . .), LANDON (169 .), ANONYMOUS (*c.* 1700), DE BRUYN KOPS (18 . .), GELDER (18 . .), G. T. LAY (1837), A. MACLEAY (prob. before 1840), W. F. A. ZIMMERMANN (*c.* 1860), W. BOXALL (186 .), SCHOTTMÜLLER (1862), H. S. LOW (1865), PROUT (*c.* 1866), R. BOXALL (188 .), KÄRNBACH (1892, 1894), HOLTERMANN (1895–96), CHAFFANJON (*c.* 1904), BARTSCH (*c.* 1908), WATERSTREDT (1910–12), GUGGITZ (*c.* 1914), TERUYA (betw. 1924–4 .).

General, Indonesian part

ZWAGER (*c.* 186 .), BINNENDIJK (? 1866), DUMONT (1912), VAN HEUTZ Jr (? 1915), SELIMAN Hout- en Land Expl. Mij (1916).

1. Northwest Borneo (Sarawak and Brunei)

BIGGS (. . .), GIBSON (. . .), KALONG (. . .), MICHOLITZ (. . .), FORREST (1776), GOODENOUGH (18 . .), MAXWELL (18 . .), KELSALL (18 . .), J. BROOKE (1839–63), H. LOW (1845–*c.* 77), LOBB (1849), MOTLEY (1851–54), SP. ST JOHN (1851–58), WALLACE (1854–56), BECCARI (1865–68), COLLINGWOOD (1866), MARTIN (1866–69), BURBIDGE (1877–78), BURKE (1880), CURTIS (betw. 1880–82), G. F. HOSE (1881–1908), TENISON-WOODS (1884), CH. HOSE (1884–1907), DEARE (before 1885), KESSLITZ (1885), HULLETT (*c.* 1885, *c.* 1890), FÖRSTERMANN (1886), WHITEHEAD (1886), A. H. EVERETT (1888–*c.* 94), PICTET (1890), SITAM (189 .–19 . .), WATERSTREDT (1890–1900), HAVILAND (1891–95), CH. HOSE (betw. 1891–98), KOO (1891–1927), E. BARTLETT (*c.* 1893), RIDLEY (1893–1905), H. V. STEVENS (1897), SHELFORD (1897–1905), ZAINAL (19 . .), J. BIN OMAR (19 . .–38), SCHLECHTER (1901, 1906–07), G. HOSE (*c.* 1903), HEWITT (1905–08), DAVIS (1906), C. J. BROOKS (*c.* 1907–12), FOXWORTHY (1908), LEWIS (1908), YOUNG (before 1908), PARNELL (1909–11), MOULTON (1909–20), CLEMENT (1910), Sarawak Museum collector (*c.* 1910–15), SAHEB (1911– . .), H. H. EVERETT (*c.* 1912), J. W. ANDERSON (1912), GREENE (1912), PERHAM (1912), ANONYMOUS (1913–14), D. H. CAMPBELL (1913–14), MARSHALL (1913–14), RICKETS (1918–38), MEAD (1919–26), YATES (*c.* 1921), MJÖBERG (1922–24), W. H. SMITH (1924), D. D. WOOD (1924), EGON (1924–25), ANONYMOUS (1925–28), CLEMENS (1929), BANK's collector (1931), DURANT (1932), RICHARDS (1932), SPURWAY (1932), SYNGE (1932), WATSON (1935), FLEMMICH (1936–41), HANADA (1938), SYMINGTON (1938).

2. West Borneo

G. MÜLLER (1822–24), HENRICI (1830–32), HOMBRON *etc.* (1839), MOHNIKE (1851–54), VAN ECK (1852), CROOCKEWIT (1854–56), C. C. HARDENBERG (1858), DE VRIESE (1860), VON MARTENS (1863),

VAN DER HORST (1865–66), MARTIN (1866–69), BECCARI (1867), STRIKWERDA (1867), A. L. H. NAGEL (1868), VAN HOUTEN (1872–74), SALIM BIN ABDULLA MOETAHAR (1874), TEYSMANN (1874–75), KATER (1875–77), PRYER (betw. 1877–99), TEUSCHER (1882–83), TOOROP (*c.* 1886), GIJSBERTS (1886–87), CHAPER (*c.* 1890), TROMP (1890–96), HALLIER (1893–94), NIEUWENHUIS (1893–1900), LANGLASSÉ (1894), MOLENGRAAFF (1894), JAHERI (1896–97), LEDRU (1897), AMDJAH (1898–99), SAKARAN (1898–99), ROMBURGH (1899), ZUROWETZ (1905 onwards), LEON (*c.* 1908), ANONYMOUS (*c.* 1909), F.R.I. Buitenzorg (1913–*hodie*), LAMSTER (1916), DE NEVE (1916, 1925), GRAVENHORST (1916–17), BECKING (1920), DAKKUS (1924–25), HANS WINKLER (1924–25), BIANCHI (1927), LUYTJES (1927), P. H. W. DE LEEUW (1928), ANONYMOUS (1929, 1935), KUBOTA (1929), SCHUITEMAKER (1929–32), COOMANS DE RUITER (1929–34), PAATH (193 .), B. A. HAGEN (1930), POLAK (1930, 1940), MONDI (1931), G. A. DE MOL *etc.* (1931–32), MAHASAN (1932), HEYTING (1934), DUNSELMAN (1935–38), M. J. F. KOOPMAN (1937), VAN ZIJLL DE JONG (1937–41), ENDERT (1938), YAMAMOTO (1939), WESTENBERG (1940), CHARIDJIE KASOEMA (1941), SCHROO (1941).

3. South and Southeast Borneo

VAN BOEKHOLZ (*c.* 1817–18), G. MÜLLER (1825), HENRICI (1833–34), HORNER (1836), KORTHALS (1836), S. MÜLLER (1836), HOMBRON *etc.* (1839), SCHWANER (1843–48), CROOCKEWIT (1851), C. DE GROOT (1852–55), MOTLEY (1854–59), ANONYMOUS (1865), BOCK (1879–80), POSEWITZ (*c.* 1880), GRABOWSKY (1881–84), KNAPPERT (*c.* 1884), VAN ASSEN & AHN (1894), VAN ROMBURGH (1899), WEBER-VAN BOSSE (1899), GROOTINGS (1902), L. A. VAN RIJN (1904), HUB. WINKLER (1908), NEIJS (191 .), KAWAKAMI (1911), TE WECHEL (1911), C. VAN NOUHUYS (1912, 1919), PFEIFFER (1913), F.R.I. Buitenzorg (1913–*hodie*), PISCICELLI (1914), LABOHM (1916–20), DELMAAR (1917–25), DACHLAN (betw. 1918–39), K. G. HACKENBERG (1923), MEEGAN (1923), LEEFMANS (1924), VAN DER LAAN (1924–27), ULTÉE (1925), HILDEBRAND (1925, 1928), MJÖBERG (1926), ENDERT (1928), VAN SLOOTEN (1928), VERHOEF (1928–29), V. E. VAN STRAELEN (1929), C. W. FRANCK (1930), GANDRUP (1930), BOUMAN-HOUTMAN (1931–33), DE BOER (1935–36), OBU (1936), VAN LOENEN (1938), VAN WIJK (1938), POLAK (1939), YAMAMOTO (1939), BUWALDA (1940), WESTENBERG (1940), LEENART (1941), SIJPKENS (*c.* 1947).

4. East and Northeast Borneo (from Balikpapan to the north)

ANONYMOUS (. . . .), G. MÜLLER (1825), DE GRAAF (1852), C. DE GROOT (1852–55), BOCK (1879–80), TROMP (1884), HULSHOF POL (1894–96), JAHERI (1896–97), NIEUWENHUIS (1896–1900), AMDJAH (1898–99), SAKARAN (1898–99), SALUZ (1904–05), WITKAMP (1905–28), HUB. WINKLER (1908), RUTTEN (1910–14), AMDJAH (1912), F.R.I. Buitenzorg (1913–*hodie*), PFEIFFER (1915–16), PLASSCHAERT (1916), W. C. VAN GELDER (1918–19), WOLLAND (*c.* 1919), BEGUIN (1920), KIEVIT (192 .), ENDERT (1925), MJÖBERG (1925–26), HILLMAN (1927), SPOEL (1927), V. E. VAN STRAELEN (1929), POSTHUMUS (1930), LUNDQUIST (1933), DE BOER (1935–36), COERT (1936), AËT (1937), HOEKS (1938), RAMALI (1941).

5. British North Borneo

HENEPAI (. . . .), H. LOW (1848–*c.* 77), LOBB (1856), SP. ST JOHN (1858), COLLINGWOOD (1866), BURBIDGE (1877–78), P. C. M. VEITCH (1877–78), PRYER (betw. 1877–99), MONTANO (1880), H. WALKER (*c.* 1883), M. FRASER (1883–85), TENISON-WOODS (1884), WHITEHEAD (1885–88), CREAGH (1888–95), WATERSTREDT (1890–1900, *c.* 1908), HAVILAND (1892), DENNYS (1897), RIDLEY (1897), DUMAS (*c.* 19 . .), DOMINGO (19 . .), ZEANO (19 . .), SCHLECHTER (1901), A. LITTLE (before 1906), DARE (*c.* 1906), FRANCIS (*c.* 1910), FOXWORTHY (1910), GIBBS (1910), BINSTEAD (1913), MOULTON (1913), CH. F. BAKER (1915), FOXWORTHY & VILLAMIL (1915 or 1916), TOPPING (1915), CLEMENS (1915–17), HASLAM (1916), VILLAMIL (*c.* 1917), YATES (1917), AGAMA (1917–19), D. D. WOOD (1917–24), Forest Department Br. N. Borneo (1918–*hodie*), CASTILLO (1918), W. O. JUPP (1919), DAMIT (192 .), EVANGELISTA (192 .), OROLFO (192 .), OSMAN (192 .), CASTRO & MELEGRITO (1920), RAMOS (1920), TAHA (betw. 1920–29), ELMER (1921–22), RYCROFT (*c.* 1923), Mrs BATESON (1923), ENRIQUEZ (1925), CABILING (1925– . .), SALES (1925– . .), KEITH (1925–*hodie*), AGULLANA (1926– . .), KLOSS (1927–28), HOLTTUM (1931), CLEMENS (1931–33), FURTADO (1932), CARR (1933), EDWARDS (1934), GRISWOLD (1937), SYMINGTON (1938), YAMAMOTO (1939), J. WEEDA (1947).

6. Balambangan, Banguey and Mangsi Islands

FORREST (1774–76), WILKES U.S. Expl. Exp. (1842) J. BROOKE (1845), M. FRASER (1883–85), WATERSTREDT (betw. 1890–1900), D. D. WOOD (1922–23), RYCROFT (*c.* 1923), CASTRO & MELEGRITO (before 1926), KLOSS (1927).

7. Labuan

H. LOW (1848–*c.* 77), LOBB (1849), MOTLEY (1851–54), JAGOR (1858 or 1859), COLLINGWOOD (1866), BECCARI (1867), BURBIDGE (1877–78), ALMQUIST (1879), TREACHER (*c.* 1880), TENISON-WOODS (1884), KESSLITZ (1885), WHITEHEAD (1885–87), CREAGH (betw. 1888–95), WATERSTREDT (1890–1900), RIDLEY (1897, 1915), MICHOLITZ (before 1899), SCHLECHTER (1901), E. D. MERRILL (1902), USTERI (1902).

8. Anambas and Natoena Islands

BUSSEUIL (1824), BAUME (1831), MICHOLITZ (1892), A. H. EVERETT (1893), E. S. HOSE (1894), A. L. VAN

HASSELT (1894–96), VAN BRAAM (1913), BÜNNEMEIJER (1919), HENDERSON (1928), VAN STEENIS (1928).

9. Tambelan Islands *etc.*

LANGLASSÉ (1894), PEREIRA (before 1895).

10. Karimata Islands

TEYSMANN (1875), MONDI (1931).

11. Salemboe and Laoet ketjil Islands

J. D. F. HARDENBERG & DELSMAN (1930).

12. P. Laoet

HOMBRON *etc.* (1839), F.R.I. Buitenzorg (1913–*hodie*), LABOHM (betw. 1916–20), DACHLAN (betw. 1918–39), ENDERT (1928), HILDEBRAND (1928), VAN SLOOTEN (1928), VERHOEF (1928–29).

13. P. Noenoekan, Tarakan, Mandoel, *etc.*

F.R.I. Buitenzorg (1913–*hodie*).

VI. PHILIPPINE ISLANDS

General

BEHR (. . .), A. H. BRAUN (. . .), A. A. CLARKE (. . .), DENSLOW (. . .), DISDON (. . .), EDEN (. . .), LEDESMA (. . .), W. SCHULTZE (. . .), CANDI (1588), MERCADO (*c.* 1670–98), KAMEL (*c.* 1700), NOROÑA (*c.* 1786), CUELLAR (*c.* 1786–91), VALDEZ (18 . .), BLANCO (1805–45), ? LLANOS (1829 onwards), ANONYMOUS (1829–35), CUMING (1836–39), LIAUTAUD (betw. 1839–43), I. S. DE BARANDA (*c.* 1842), JORDANA (2nd half 19th century), NAVES (2nd half 19th century), WEYRICH (1852), MONTIGNY (1855), BARTHE (1857), R. GARCIA (1858–1902), JAGOR (1859–60), PORTE (betw. 1860–65), W. BOXALL (186 .), J. G. VEITCH (1861–62), WALLIS (1870–71), FERNANDEZ-VILLAR (*c.* 1870–95), VIDAL Y SOLER *etc.* (1871–89), J. S. DE BARANDA (previous to 1874), ANDREA (*c.* 1875), QUADRAS (after 1876), MARCHE (1879–85), W. BOXALL (*c.* 1880), ROEBELEN (*c.* 1880–82), FÖRSTERMANN (betw. 1880–86), GUERRERO (betw. 1881–19 . .), MICHOLITZ (1884–85), WORCESTER (1898), PIERCE (prob. 19 . .), BOLSTER (19 . .), CONOVER (19 . .), FAIRCHILD (1900), FISCHER (19 . .– . .), Forestry Bureau Manila (1900–*hodie*), AHERN *etc.* (1901–14), SCRIBNER (*c.* 1902), WHITFORD (1903–12), E. B. COPELAND (1904– . .), FOXWORTHY (1906–17), Bur. of Science Manila (1906–193 .), BARTSCH (1907–09), BARRETT (1910–14), CH. F. BAKER (191 .–27), K. W. JOHN (before 1911), PIPER (*c.* 1911), BONA (1911–12), GRAFF (1911–14), ESKRIDGE (1911–15), GATES (1912–15), TAMESIS (1912– . .), TAYLOR (1912–27), D. H. CAMPBELL (1914), OCTUBRE (1915), SANDKUHL (1915–16), YATES (1915–20), SABLAYA (*c.* 1916), TEODORO (*c.* 1916), AGAMA (before 1917), SANTOS (1917– . .), SAJOR (1917– . .), KIENHOLZ (1923, southern islands), F. L. STEVENS (prob. 1930–31), H. H. BARTLETT (1935), Phil. Nat. Herbarium (*c.* 1935–*hodie*), CHINTE (1937), LANDS (194 .), R. A. COPELAND (*c.* 1945), SIGAFOOS (*c.* 1945).

1. Balabac Island

STEERE (1874), MONTANO (1880–81), MARCHE (1884), WATERSTREDT (betw. 1890–1900), A. H. EVERETT (*c.* 1891), MANGUBAT (1906), E. D. MERRILL (1906), EDAÑO (1927), RAMOS (1927).

2. Palawan, Dumaran, *etc.*

VIDAL (187 . or 188 .), STEERE (1874, 1887), MONTANO (1880–81), MAESO (*c.* 1883), MARCHE (1883), WHITEHEAD (1887), A. H. EVERETT (*c.* 189 .), WATERSTREDT (betw. 1890–1900), MIGUEL (19 . .), E. D. MERRILL (1903, 1913, 1922), BERMEJOS (1905–06), H. M. CURRAN (1906), FOXWORTHY (1906), ELMER (1911), DANAO (1914), R. C. MACGREGOR (1925), RAMOS (1927), EDAÑO (1927, 1929, 1947), ALSACID (1938), EBALO (1940), T. H. EDWARDS (1947).

3. Calamianes (Culion, Busuanga and Calamian)

MONTANO (1880–81), MARCHE (1884), E. D. MERRILL (1902–03), W. H. BROWN (1923), H. W. WADE (*c.* 1923), HERRE (1923).

4. Mindoro

HICKMAN (. . .), DAMPIER (1687), CUMING (1837), KESSLITZ (1886), STEERE (1888), A. H. EVERETT (1894), LYON (betw. 1902–16), R. GARCIA (1903), E. D. MERRILL (1903–06), R. C. MACGREGOR (1905), HUTCHINSON (1906), MANGUBAT (1906), MEARNS (1906), MERRITT (1906), ROSENBLUTH (1908), RAMOS (1921), KIENHOLZ (1924), W. H. LAMBERT (1945), M. CELESTINO (*c.* 1947), EDAÑO (*c.* 1947).

5. Batanes Islands

PRAUTCH (19 . .), FENIX (1907), R. C. MACGREGOR (1907), MEARNS (1907), RAMOS (1930).

6. Babuyan Islands

MOSELEY (1875), PEÑAS (19 . .), PRAUTCH (19 . .), FENIX (1907), R. C. MACGREGOR (1907), MEARNS (1907), ELMER (1912), EDAÑO (1930), H. H. BARTLETT (1935).

7. Luzon

BOETTCHER (. . .), GREGORY (. . .), HAIGHT (. . .), C. L. HALL (. . .), MARAVE (. . .), DAMPIER (1687), KAMEL (*c.* 1700), POIVRE (1751–55),

PROVOST (*c.* 1770), SONNERAT (1771), NOROÑA (1786), CARAGUAL (*c.* 1787), DE LA MARTINIÈRE (1787), HAENKE *etc.* (1792), NÉE (1792), AZAOLA (18 . .), W. KERR (1805), BLANCO (1805–45), CHAMISSO (1817–18), CHORIS (1817–18), PERROTTET (1819–20), BUSSEUIL (1824), ESCHSCHOLZ (1825–26), I. STEWART (betw. 1825–27), ANONYMOUS (1829), MERTENS (1829), BAUME (1830), G. BENNETT (1830), W. W. WOOD (*c.* 183 .), MEYEN (1831), C. A. A. VON HÜGEL (1834), CALLERY (*c.* 1835–50), GAUDICHAUD (1836), CUMING (1836–38), LECLANCHER (184 .), HINDS *etc.* (1840), LIAUTAUD (1841), I. S. DE BARANDA (*c.* 1842), WILKES U.S. Expl. Exp. (1842), E. DELESSERT (betw. 1844–47), FORTUNE (*c.* 1845), DIDRICHSEN (1846), LOBB (*c.* 1848–49), RODBERTUS (*c.* 1850), N. J. ANDERSSON (1853), HOCHSTETTER (1858), JELINEK (1858), SEMPER (betw. 1858–65), W. F. A. ZIMMERMANN (*c.* 1860), SCHOTTMÜLLER (1861), WICHURA (1861), WEISS (*c.* 1870), WALLIS (187 .), A. B. MEYER (1871–72), VIDAL (1871–89), MIKLUCHO-MACLAY (1873, 1883), STEERE (1874–75, 1888), MOSELEY (1875), MARCHE (1879–81, 1883–85), ROTHDAU(S)CHER (*c.* 1879–83), MONTANO (1880–81), SCHADENBERG (1882), TENISON-WOODS (1884, 1886), KESSLITZ (1885–86), SVOBODA (1887), CURNOW (previous to 1888), WARBURG (1888), LOHER (1889–1915), LANGLASSÉ (1894–95), A. H. EVERETT (1895), WHITEHEAD (1895–96), AGUILAR (19 . .), CUZNER (19 . .), KRYSHTOFOVICH (19 . .), LABITAG (19 . .), PRAY (19 . .), SANDKUHL (19 . .), TABAT (19 . .), YODER (19 . .), FRANCISCO (1901), D. T. MERRILL (1901), QUADRAS (1901), AHERN (1901–02), SCRIBNER (1902), USTERI (1902–03), J. W. RITCHIE (1902–07), LYON (1902–16), E. D. MERRILL (1902–23), WARE (*c.* 1903), WICKLE (*c.* 1903), HUNT (1903), MAULE (*c.* 1903–04), P. T. BARNES (1903–04), BORDEN (1903–04), HALLIER (1903–04), R. S. WILLIAMS (1903–04), KLEMME (1903–06), WHITFORD (1903–12), E. B. COPELAND (1903–17), TOPPING (1903–22), ELMER (1903–27), LEIBERG (*c.* 1904), PARKER (*c.* 1904), BATH (1904), POND (1904), R. MEYER (1904–05), RAMOS (1904–29), ALBERTO (*c.* 1905), MEARNS (*c.* 1906–07), W. R. SHAW (1906–22), KASTALSKY (before 1907), KRAEMER (1907), CH. G. MATTHEW (1907), REYES (1907), SCHLECHTER (1907), CH. B. ROBINSON (1908–11, 1913), LILLES (1909), MERRITT (1909), ZSCHOKKE (1909), R. C. MACGREGOR (1909–15), H. M. CURRAN (1909, 1935), VANOVERBERGH (1910–17), CH. F. BAKER (191 .–27), HOLMAN (*c.* 1911), MILLSPAUGH (1911), W. H. BROWN (1911–37), SEVRENS (*c.* 1912), BONA (1912–13), SANCHEZ (1912–13), GATES (1912–15), GLEASON (1913), JARCK (before 1915), WESTER (1915–17), C. SULIT (1915–34), LETE (*c.* 1916–17), YATES (1916–17), EDAÑO (1916–*hodie*), FENIX (1916, 1938), ADDURU (1917), QUISUMBING (1917–*hodie*), HITCHCOCK (1920), TAYLOR (1922), MACCLURE (*c.* 1925), LOPEZ & WELLS (1925), BURGEFF (1928), STEEMANN NIELSEN (1929), ERNST (1930), M. D. SULIT (1931– . .), A. W. DAY (*c.* 1934), WHITING (*c.* 1934), KARGANILLA (1934), GUTIERREZ (1934 onwards), SYMINGTON (1935), COERT (1936), KIMURA (1937), TANAKA (1937 or 1938), FAIRCHILD (1939–40), ROGERSON (194 .), M. CELESTINO (*c.* 1947), CONVOCAR (*c.* 1947), R. B. FOX (*c.* 1947), ALSACID (1947–48).

8. Polillo

HAGGER (1904), LOHER (betw. 1908–15), LEIBERG (1909), R. C. MACGREGOR (1909), CH. B. ROBINSON (1909).

9. Marinduque

MARCHE (1881, 1883), STEERE (1888).

10. Catanduanes

MARCHE (1881), RAMOS (1927).

11. Sibuyan, Tablas and Romblon

HALLIER (1904), ELMER (1910).

12. Masbate and Ticao

CUMING (1837), I. S. DE BARANDA (*c.* 1842), STEERE (1888), E. D. MERRILL (1903), P. T. BARNES (*c.* 1903–04), W. W. CLARK (1904), HALLIER (1904), ROSENBLUTH (1909).

13. Samar

CUMING (1837), JAGOR (1860), STEERE (1888), IRELAND (prob. 19 . .), E. D. MERRILL (1906), BARTSCH (1908), ELMER (1910), FENIX (1916), FLORES (1916), RAMOS (1916), GLASSMAN (1945), GRETHER & WAGNER (1945), A. P. CASTRO (*c.* 1947).

14. Leyte and Biliran

CUMING (1837), TESCHEMACHER (*c.* 1840), JAGOR (1860), SEMPER (1862), NAVARO (before 1885), STEERE (1888), ELMER (1906), R. C. MACGREGOR (1913 or 1914), WENZEL (1913–29), FAIRCHILD (1940), GLASSMAN (1945).

15. Bohol

CUMING (1837), SEMPER (1862), STEERE (1875, 1888), R. C. MACGREGOR (1906), WESTER (1915–17).

16. Cebu

CUMING (1837), SEMPER (1862), MOSELEY (1875), STEERE (1875, 1888), USTERI (1902–03), BARROW (*c.* 1903), HALLIER (1904), R. C. MACGREGOR (1906), ELMER (1909, 1912), SANCHEZ (191 .), WESTER (1915–17), KIMURA (1937), FAIRCHILD (1940).

17. Negros and Siquijor Island

CUMING (1837), STEERE (1875, 1888), SCHADENBERG (1881), BURGESS (19 . .), CH. S. BANKS (1902), H. LONG (*c.* 1903), USTERI (1903), E. B. COPELAND (1903–04), MUÑOZ (1904), WHITFORD (1906), ELMER (1908), H. D. EVERETT (1908), ESKRIDGE (191 .), E. D. MERRILL (1910), H. M. CURRAN (1933), FAIRCHILD (1940), EDAÑO (*c.* 1947).

18. Panay, Guimaras and Cuyo

SONNERAT (1772), CUMING (1837), MOSELEY (1874), STEERE (1874–75, 1887–88), MONTANO (betw. 1879–81), SCHADENBERG (1881), YODER (19 . .), SCRIBNER (1902), J. W. RITCHIE (*c.* 1903), USTERI (1903), E. B. COPELAND (1903–04), GAMMILL (*c.* 1904), VERGARA (before 1915), R. C. MACGREGOR (1918).

19. Cagayan group

No collections known.

20. Cagayan Sulu group

FORREST (1774), TENISON-WOODS (1884), E. D. MERRILL (1906).

21. Sulu Islands

PROVOST (*c.* 1770), SONNERAT (1772), FORREST (1774), HOMBRON *etc.* (1839), WILKES U.S. Expl. Exp. (1842), YVAN (1844), SP. ST JOHN (1848 *etc.*), W. F. A. ZIMMERMANN (*c.* 1860), BURBIDGE (1878), MONTANO (1879–80), SCHADENBERG (1881), MARCHE (1884), TENISON-WOODS (1884), WARBURG (1888), WEBER-VAN BOSSE (1899), ANTONIO (19 . .), WENDOVER (19 . .), R. S. WILLIAMS (1905), RAMOS (1924).

22. Basilan and Malamaui Islands

YVAN (1844), SEMPER (1859–60), STEERE (1874, 1887), MOSELEY (1875), MARCHE (1884), SVOBODA (1887), WARBURG (1888), ALMAGRO (19 . .), MANALO (19 . .), PRAY (19 . .), REILLO (19 . .), DE VORE & HOOVER (1903), HALLIER (1904), DANAO (1914), YATES (1917), EBALO (1941).

23. Mindanao, Dinagat, Siargao Island, *etc.*

ALGA (. . . .), ALLEN (. . . .), HARPST (. . . .), OBACH (. . . .), DRAKE (1579), DAMPIER (1686–87, *c.* 1705), POIVRE (1755), CARTERET (1767), PROVOST (*c.* 1770), SONNERAT (1772), FORREST (1775–76), HAENKE *etc.* (1792), PERROTTET (1819), CUMING (1837), G. T. LAY (1837), HOMBRON *etc.* (1839), WILKES U.S. Expl. Exp. (1842), SP. ST JOHN (1848 *etc.*), SEMPER (1859–60, 1862, 1864), SCHOTTMÜLLER (1861), WICHURA (1861), VIDAL (1872), STEERE (1874, 1887), MOSELEY (1874–75), MIKLUCHO-MACLAY (1878), MONTANO (1880–81), SCHADENBERG (1882), KESSLITZ (1886), SVOBODA (1887), WARBURG (1888), WHITEHEAD (1895–96), AGUILAR (19 . .), BOLSTER (19 . .), HOSOKAWA (19 . .), REILLO (19 . .), DE VEYRA (19 . .), QUADRAS (*c.* 1901), SHERMAN (1901–02), AHERN (1901–02), DE VORE & HOOVER (1903), HALLIER (1904), R. S. WILLIAMS (1905), BLACK (1905–06), CLEMENS (1905–07), MEARNS (1906), HUTCHINSON (1906–07), LOHER (betw. 1908–15), ELMER (1909, 1912), SANCHEZ (191 .), PIPER (*c.* 1911–12), E. D. MERRILL (1911), CH. M. WEBER (1911), MIRANDA (1912), TAYLOR (betw. 1912–26), GLEASON (1913), WENZEL (*c.* 1913–29), FERRARIS (1914), WESTER (1915–17), FENIX (1916), RAMOS (1916, 1931), YATES (1917), EDDINGFIELD (*c.* 1919), ELUMIR (1921), STADTMILLER (1921), H. M. CURRAN (1933), KANEHIRA (before 1934), A. W. DAY (*c.* 1934), TANAKA (1937 or 1938), ZWICKEY (1938), FAIRCHILD (1940), EDAÑO (1947), JEPPESEN (1947).

VII. CELEBES

General

DAMPIER (1687), FORREST (1792), LEPONT (before 1859), WATERSTREDT (1901–04), ANONYMOUS (1912), LAYCOCK (*c.* 1930), VAN DER VECHT (1930), KANEHIRA (*c.* 1932), H. CURRAN (1940), KIMURA (1943–45).

1. North Peninsula

REINWARDT (1821), P. A. LESSON *etc.* (1828), ? HORNER (1837), FORSTEN (1840–42), RIEDEL (betw. (1853–75), A. J. F. JANSEN (1854–57), TEYSMANN (1859), DE VRIESE (1859), WALLACE (1859, 1861), W. F. A. ZIMMERMANN (*c.* 1860), VON MARTENS (1862), VON ROSENBERG (1863–64), BICKMORE (1865–66), PELENKAHOE (1865–66), A. B. MEYER (1870–73), BECCARI (1873), TEYSMANN (1876), DE VOOGT (after 1876), DE LA SAVINIERRE (1876–77), CURTIS (betw. 1880–82), HICKSON (1885–86), KESSLITZ (1886), WARBURG (1888), G. H. H. KARSTEN (1889), STRUBELL (1889), SARASIN (1893–95), KOORDERS (1894–95), WAWARUNTU (*c.* 1895), CH. HOSE (1895), VORDERMAN (*c.* 1897), JELLESMA (*c.* 1899), WEBER-VAN BOSSE (1899), HEES (*c.* 1900), J. J. SMITH (1900), BEHAGHEL (1901), ROTHERT (1909), SCHLECHTER (1909), STEFFENS (1910–11), F.R.I. Buitenzorg (1913–*hodie*), VAN ANDEL (1916), VAN AERENSBERGEN (1917), KAUDERN (1917–18), BEGUIN (1920), P. VAN HARREVELD (1921), BOESVELD (1923), KNIJFF (1923–24), LAM (1926), ANONYMOUS (1928–29), HERRE (1929), STEEMANN NIELSEN (1929), V. E. VAN STRAELEN (1929), STEUP (1929–34), HEINRICH (1930–31), TERUYA (1931), REYNE (1932), WISSE (1932), KOERNICKE (1934), VERHOEF (1935), NIJENHUIS (1936), BRUES (1937), FAIRCHILD (1940), EGB. DE VRIES (1940).

2. Central Celebes

VON ROSENBERG (1863), M. W. C. WEBER (1888), SARASIN (1895, 1902), LE COCQ D'ARMANDVILLE (1908), AMAD (1909), NOERKAS (1912), F.R.I. Buitenzorg (1913–*hodie*), RACHMAT (1913), KAUDERN (1918–19), KRUYT (1920–22), HOORNSTRA (1925–35), VAN DER GOOT (1926), ANONYMOUS (1928–29), PESIK (1928–33), KJELLBERG (1929), V. E. VAN STRAELEN (1929), POSTHUMUS (1930), HIRSCHMAN (1932–33), UNO (1933), EYMA (1937–38), MAMAHIT (1938–41), BLOEMBERGEN (1939), VAN DER VLIES (1940).

3. Southwest Peninsula

ANONYMOUS (. . . .), CARTERET (1767–68), ZIPELIUS (1828), G. T. LAY (1837), HOMBRON *etc.* (1839), HINDS *etc.* (1840), ZOLLINGER (1847), WALLACE (1856–57, 1861), TEYSMANN (1859, 1873, 1877), W. F. A. ZIMMERMANN (*c.* 1860), WICHURA (1861),

TOLSON (before 1862), VON MARTENS (1862–63), GERSEN (1868–69), A. B. MEYER (1870–73), BECCARI (1873–74), TEYSMANN (1876), CURTIS (betw. 1880–82), FOERSTERMANN (betw. 1880–86), SIMON THOMAS (1884), KESSLITZ (1886), SVOBODA (1887), WARBURG (1888), M. W. C. WEBER (1888–89), RADDE (1891), SARASIN (1894–96, 1902–03), A. H. EVERETT (1895), FRUHSTORFER (1895), VORDERMAN (1897), WEBER-VAN BOSSE (1899), ROOKMAKER (? 19 . .), E. G. SMITH (19 . .), J. J. SMITH (1900), FAIRCHILD (1900, 1940), ERNST (1906), CHAUFEPIÉ (before 1907), WARNIER (*c.* 1908), ABENDANON (1909), COOL (1909), SCHLECHTER (1909), BRAUTIGAM (1909–13), KAWAKAMI (1911), NOERKAS (1912), ANONYMOUS (1912), RACHMAT (1913), CH. B. ROBINSON (1913), F.R.I. Buitenzorg (1913–*hodie*), PISCICELLI (1914), OOSTENBROEK (1918), BÜNNEMEIJER (1921), GAÜMANN (1921), VAN DEN KOPPEL (1922), MORTENSEN (1922), WALANGITANG (1922–23), LEEFMANS (1924, 1925), KNIJFF (1925), BOUMAN-HOUTMAN (1925–26), TENGWALL (1927), V. E. VAN STRAELEN (1929), RANT (1929, 1931), KJELLBERG (1929–30), ERNST (1930), SCHAEPMAN (1930), HEINRICH (1930–31), POSTHUMUS (1930, 1932, 1939), TERUYA (1931), VAN ZIJLL DE JONG (1932–36), KOERNICKE (1934), ENDERT (1935), RIJKEBÜSCH (1935), COERT (1936), L. J. TOXOPEUS (1936), STEUP (1936–37), BRUES (1937), DIRKS (1937), DUTRIEUX (1937), VAN STEENIS (1937), EYMA (1937–38), MONOD DE FROIDEVILLE (1937–39), BUWALDA (1938), JAAG (1938), VAN DER PIJL (1939), YAMAMOTO (1939), VAAS (1940), JUTA (1941), FR. WIT (1941), WADA (1945).

4. Southeast Peninsula

BECCARI (1874), SARASIN (1894, 1896, 1903), AMAD (1909), ELBERT (1909), F.R.I. Buitenzorg (1913–*hodie*), BRUINIER (1916), PELLO (1916), DE BOER (*c.* 1922), VAN DEN KOPPEL (1922), KJELLBERG (1929), HEINRICH (1931–32), ENDERT (1935), MONOD DE FROIDEVILLE (1937–39), VAN DER PIJL (1939).

5. Banggai or East Peninsula

VON ROSENBERG (1863), F.R.I. Buitenzorg (1913–*hodie*), KAUDERN (1919–20), VAN DEN KOPPEL (1923), EYMA (1938).

6. Spermonde Archipelago

No collections known.

7. Paternoster and Postiljon Islands

WEBER-VAN BOSSE (1899).

8. Saleijer group (incl. P. Tanahdjampea, *etc.*)

? REINWARDT (*c.* 1820), ZOLLINGER (1847), TEYSMANN (1877), M. W. C. WEBER (1889, 1899), A. H. EVERETT (1895–96), WEBER-VAN BOSSE (1899), C. A. KROESEN (1904), DOCTERS VAN LEEUWEN (1913), F.R.I. Buitenzorg (1913–*hodie*), GÄUMANN (1921), MONOD DE FROIDEVILLE (1937–39).

9. Kabaëna

BECCARI (1874), WEBER-VAN BOSSE (1899), ELBERT (1909), DE BOER (*c.* 1922).

10. P. Moena

DE LA BILLARDIÈRE (1793), BECCARI (1874), ELBERT (1909), HAM (*c.* 1912), F.R.I. Buitenzorg (1913–*hodie*), BURGHARDT (1922–23), KJELLBERG (1929), MONOD DE FROIDEVILLE (1937–39).

11. P. Boeton

DAMPIER (1687, 1710), COMMERSON (1768), DE LA BILLARDIÈRE (1793), ZIPELIUS (1828), RADDE (1890), SARASIN (1894), ELBERT (1909), CH. B. ROBINSON (1913), F.R.I. Buitenzorg (1913–*hodie*), BEVERSLUIS (1920), KAUDERN (1920), DE BOER (1921), VAN DEN KOPPEL (1922), KJELLBERG (1929), ENDERT (1935), MONOD DE FROIDEVILLE (1937–39), BUWALDA (1938), VAN DER PIJL (1939).

12. Toekangbesi Islands and P. Binongko

WEBER-VAN BOSSE (1899), ELBERT (1909)

13. P. Wowoni

FAIRCHILD (1940).

14. Banggai Archipelago

D. W. HORST (1899), KAUDERN (1920).

15. Schildpad Islands

VON ROSENBERG (1864), A. B. MEYER (1871).

16. P. Lembeh, Talise, *etc.* near the Minahassa

HICKSON (1885–86), F.R.I. Buitenzorg (1913–*hodie*), STEUP (1932), FAIRCHILD (1940).

17. Sangihe Islands

D. S. HOEDT (betw. 1863–66), A. B. MEYER (1871), HICKSON (1885), CH. HOSE (1895), VORDERMAN (1897), M. W. C. WEBER (1899), WEBER-VAN BOSSE (1899), LEEFMANS (1924), LAM (1926), STEEMANN NIELSEN (1929), TAMMES (1930), FAIRCHILD (1940), ANONYMOUS (1941).

VIII. MOLUCCAS

General

RUMPF (*c.* 1662–70), CHRISTOPH. SMITH (1796–1805), A. J. BIK (1824), D. S. HOEDT (1863–70), WILTENS (1865), DE FRETES (1865–68), VAN DER CRAB (1865–69), HUTTON (1866–68), TENISON-WOODS (188 .), CURTIS (betw. 1880–82), BEVERSLUIS (1925–28), H. CURRAN (1940).

1. Talaud and Nenoesa Islands, Miangas

DAMPIER (1687), FORREST (1775), HICKSON (1885), WATERSTREDT (betw. 1890–1900), CH. HOSE (1895), WEBER-VAN BOSSE (1899), LEEFMANS (1924), LAM (1926), TAMMES (1930), FAIRCHILD (1940).

2. P. Morotai and P. Raoe

BERNSTEIN (1861–62), LINDEN (1886), F.R.I. Buitenzorg (1913–*hodie*), LAM (1926), ANANG (1938), FAIRCHILD (1940).

3. Halmaheira, Loloda Islands, and P. Moeor

SONNERAT (1772), BEEN (18 . .), CHRISTOPH. SMITH (1801), REINWARDT (1821), WALLACE (1858, 1860), TEYSMANN (1860, 1871), BERNSTEIN (1861–62), VON MARTENS (1862), BICKMORE (1865), VON ROSENBERG (1868, 1870), FREYTAG (*c.* 1883), LINDEN (1886), M. W. C. WEBER (1890), VORDERMAN (1897) LAURENS (1910), F.R.I. Buitenzorg (1913–*hodie*), DEMMENI (before 1919), ANONYMOUS (1919), BEGUIN (1920–23), V. E. VAN STRAELEN (1929), HEINRICH (1931), NEDI (1937), G. A. L. DE HAAN (1937–38, 1948–*hodie*), ANANG (1938), H. CURRAN (1940), FAIRCHILD (1940).

4. P. Ternate, Tidore, and Makian

DRAKE (1579), CHRISTOPH. SMITH (1796), REINWARDT (1821), G. T. LAY (1837), HOMBRON *etc.* (1839), FORSTEN (1841), C. F. A. SCHNEIDER (1850), WALLACE (1858–61), W. F. A. ZIMMERMANN (*c.* 1860), TEYSMANN (1860, 1871, 1876), BERNSTEIN (1860–63), VON MARTENS (1862), BICKMORE (1865), VON ROSENBERG (1868), A. B. MEYER (1873), BECCARI (1873–76), MOSELEY (1874), BALFOUR (*c.* 1875), VAN DER MEER (1875), STEERE (1875), VAN MUSSCHENBROEK (*c.* 1876), FREYTAG (*c.* 1883), ANONYMOUS (1884), LINDEN (1886), SVOBODA (1887), VORDERMAN (1897), ATASRIP (1899), WEBER-VAN BOSSE (1899), J. J. SMITH (1900), WATERSTREDT (1901–04), F.R.I. Buitenzorg (1913–*hodie*), BEGUIN (1920–23), LAM (1926), V. E. VAN STRAELEN (1929), KOERNICKE (1934), G. A. L. DE HAAN (1937–38), ANANG (1938), FAIRCHILD (1940).

5. P. Batjan, Kasiroeta, *etc.* and Kajoa Islands

DAMPIER (*c.* 1706), FORREST (1774), WALLACE (1858–60), VAN DER CRAB (186 .), TEYSMANN (1860), BERNSTEIN (1861–62), VON MARTENS (1862), DE FRETES (1865–68), VON ROSENBERG (1870), LINDEN (1886), SVOBODA (1887), WARBURG (1888), STRUBELL (1889), VORDERMAN (1897), WEBER-VAN BOSSE (1899), J. J. SMITH (1900), F.R.I. Buitenzorg (1913–*hodie*), PALMER VAN DEN BROEK (1916), ROEPKE (1929), HEINRICH (1931), KOERNICKE (1934), EDWARDS VAN MUYEN (1935), G. A. L. DE HAAN (1937), NEDI (1937), WAARS (1937), FAIRCHILD (1940), H. J. TOXOPEUS (1940).

6. Obi Islands, P. Pisang, *etc.*

GAUDICHAUD *etc.* (1818), BENSBACH (1889), ATASRIP (1899), F.R.I. Buitenzorg (1913–*hodie*).

7. Soela Islands

TEYSMANN (1876), D. W. HORST (1899), ATJE(H) (1913–14), SAÄNAM (1913–14), F.R.I. Buitenzorg (1913–*hodie*), BLOEMBERGEN (1939).

8. Boeroe

COMMERSON (1768), DE LA BILLARDIÈRE *etc.* (1793), LAHAIE (1793), DUMONT D'URVILLE *etc.* (1823), P. A. LESSON *etc.* (1828), HINDS *etc.* (1840), W. F. A. ZIMMERMANN (*c.* 1860), TEYSMANN (1860, 1871, 1876), WALLACE (1861), VON MARTENS (1862), BICKMORE (1865), DE FRETES (1865–68), BINNENDIJK (1866), BECCARI (1872), FORBES (1880), RIEDEL (188 .), WARBURG (1888), G. H. H. KARSTEN (1889), K. MARTIN (1892), VORDERMAN (1897), J. J. SMITH (1900), C., F. & J. PRATT (19 . .), LEON (*c.* 1908), SCHLECHTER (1909), STRESEMANN (1912), F.R.I. Buitenzorg (1913–*hodie*), A. H. JANSEN (1914), DEMMENI (before 1919), L. J. TOXOPEUS (1921–22), RANT (1931), KOERNICKE (1934), OERSIPUNY (1936–41), FAIRCHILD (1940).

9. Islands W of Ceram

BECCARI (1872), K. MARTIN (1892), WEBER-VAN BOSSE (1899), RUTTEN (1918).

10. Ceram

DAMPIER (1700), PROVOST (*c.* 1770), CHRISTOPH. SMITH (1797), HOMBRON *etc.* (1839), FORSTEN (1842), C. F. A. SCHNEIDER (1849–50), WALLACE (1859–60), VON ROSENBERG (1859–61), W. F. A. ZIMMERMANN (*c.* 1860), TEYSMANN (1860, 1876), VON MARTENS (1862), BICKMORE (1865), BINNENDIJK (1866), BECCARI (1872, 1873, 1878), LACH DE BÈRE (after 1880), G. H. H. KARSTEN (1889), STRUBELL (1889), K. MARTIN (1892), TREUB (1893), VAN GENT (1896), ANONYMOUS (1896), VORDERMAN (1897), WEBER-VAN BOSSE (1899), FAIRCHILD (1900), C., F. & J. PRATT (19 . .), LEON (*c.* 1908), STRESEMANN (1911), ANONYMOUS (1911–12), F.R.I. Buitenzorg (1913–*hodie*), KORNASSI (1917–18), RUTTEN (1917–19), RUINEN (before 1919), SACHSE (*c.* 1919), KIEVIT (192 .), BOGER (1927), VAN MUL-

LEM (1928), RANT (1929), KOERNICKE (1934), Z. SALVERDA (1935, 1940), EYMA (1937–38), BUWALDA (1938), ANONYMOUS (1939), FR. WIT (1941).

11. Ambon

HURDT (1680), SIPMAN (1698), SCHILLING (*c.* 1791), DE LA BILLARDIÈRE *etc.* (1792), LAHAIE (1792), CHRISTOPH. SMITH (1797), ANONYMOUS (18 . .), Capt. ANDERSON (before 1814), REINWARDT (1821), DUMONT D'URVILLE *etc.* (1823), R. P. LESSON (1823), P. A. LESSON *etc.* (1827–28), ZIPELIUS (1828), HOMBRON *etc.* (1839), BARCLAY (1840), HINDS *etc.* (1840), FORSTEN (1842), CLEERENS (1847), C. F. A. SCHNEIDER (1849), MOHNIKE (1854–60), DOLESCHALL (1856–59), DALENBERG (1857), WALLACE (1857–60), W. F. A. ZIMMERMANN (*c.* 1860), TEYSMANN (1860, 1871, 1876), D. S. HOEDT (1861), VON MARTENS (1862), BICKMORE (1865), BINNENDIJK (1866), PELENKAHOE (1869), BECCARI (1872–76, 1878), MOSELEY (1874), NAUMANN (1875), STEERE (1875), BOTTER (1877–78), BLAKE (1880), LACH DE BÈRE (after 1880), FORBES (1882), VAN AART (1885), WARBURG (1888), G. H. H. KARSTEN (1889), STRUBELL (1889), MICHOLITZ (189 .), RADDE (1890), M. W. C. WEBER (1890), K. MARTIN (1891–92), TREUB (1893), VORDERMAN (1897), NYMAN (1898), LAUTERBACH (1899), WEBER-VAN BOSSE (1899–1900), VAN OLDENBORGH (before 1900), BOERLAGE & SMITH (1900), FAIRCHILD (1900), GEILL (1900), LUX (1900), J. J. SMITH (1900), SCHLECHTER (1901, 1909), F.R.I. Buitenzorg (1913–*hodie*), CH. B. ROBINSON (1913), SAÄNAM (1914), RUTTEN (1917–18), DEMMENI (before 1919), BOESVELD (1921), HJ. JENSEN (1922), MORTENSEN (1922), C. J. BROOKS (1923, ? 1924), DOCTERS VAN LEEUWEN (1926), RANT (1929, 1931), V. E. VAN STRAELEN (1929), TROLL (1929), KOERNICKE (1934), EDWARDS VAN MUYEN (1935), EYMA (1937–38), BUWALDA (1938), VAN DER PIJL (1939), FAIRCHILD (1940), H. J. TOXOPEUS (1940), FR. WIT (1941), DE WILJES-HISSINK (1947–48).

12. Oeliassers (P. Saparoea, Haroekoe, Noesa Laoet, *etc.*)

CHRISTOPH. SMITH (1797 *etc.*), REINWARDT (1821), D. S. HOEDT (186 .), TEYSMANN (1860), BICKMORE (1865), BECCARI (1872–73), FORBES (1882), STRUBELL (1889), K. MARTIN (1891–92), TREUB (1893), VORDERMAN (1897), WEBER-VAN BOSSE (1899), F.R.I. Buitenzorg (1913–*hodie*), TROLL (1929), KOERNICKE (1934), EYMA (1938), VAN DER PIJL (1939).

13. Lucipara Islands

WEBER-VAN BOSSE (1899).

14. Banda Group

ANONYMOUS (= prob. PEITSCH) (. . . .), CHRISTOPH. SMITH (1797), ROXBURGH Jr (1802–03), REINWARDT (1821), A. J. BIK (1824), ZIPELIUS (1828), PEITSCH (*c.* 1832), HOMBRON *etc.* (1839), FORSTEN (1842), MOHNIKE (1854), OXLEY (before 1857), WALLACE (1857, 1859), TEYSMANN (1859, 1871), W. F. A. ZIMMERMANN (*c.* 1860), VON MARTENS (1862), BICKMORE (1865), DE FRETES (1865–68), BECCARI (1872), MOSELEY (1874), WARBURG (1888), MICHOLITZ (1891), TREUB (1893), VORDERMAN (1897), NYMAN (1898), ATASRIP (1899), LAUTERBACH (1899), WEBER-VAN BOSSE (1899), FAIRCHILD (1900), J. J. SMITH (1900), SCHLECHTER (1901, 1909), F.R.I. Buitenzorg (1913–*hodie*), LAM (1921), MORTENSEN (1922), V. E. VAN STRAELEN (1929), KOERNICKE (1934), HOOGERWERF (1938).

15. P. Geser (or Ceram Laoet)

A. J. BIK (1824), BECCARI (1872), WARBURG (1888), TREUB (1893), VORDERMAN (1897), WEBER-VAN BOSSE (1899), ROTHERT (1909), BUWALDA (1938).

16. Gorong Islands

A. J. BIK (1824), WALLACE (1860), VON ROSENBERG (1865), BECCARI (1873).

17. Watoebela Islands

WALLACE (1860), VON ROSENBERG (1865), RIEDEL (1880), WEBER-VAN BOSSE (1899).

18. Kai Islands

A. J. BIK (1824), WALLACE (1857), VON ROSENBERG (1865), BECCARI (1873), MOSELEY (1874), RIEDEL (1880), JAHERI (1888), WARBURG (1889), TREUB (1893), WEBER-VAN BOSSE (1899), VAN DEN BERG (19 . .), FAIRCHILD (19 . .), MERTON (1908), J. ROUX (1908), H. J. WIGMAN (1909), HJ. JENSEN (1922), MORTENSEN (1922), WEBER (1922), ANONYMOUS (1927, 1939).

IX. NEW GUINEA
(incl. Bismarck Archipelago, but not the Louisiades and Solomons)

General

LOUDON (. . . .), DAMPIER (*c.* 1705), LINDEN (1886), PEREIRA (*c.* 1896), MURPHY (19 . .), C., F. & J. PRATT (19 . .), WATERSTREDT (1901–04), ANONYMOUS (*c.* 1904), KANEHIRA (*c.* 1932), A. V. SMYTH (194 .).

General, Dutch New Guinea

S. MÜLLER (1828), VON ROSENBERG (1858), VAN OLDENBORGH (1882), BENSBACH (*c.* 1889), DUMAS (betw. 1899–1912), D. W. HORST (before 1900), ANONYMOUS (*c.* 1900), W. C. MEYER (*c.* 1900), LAYCOCK (*c.* 1930).

General, British New Guinea

PARHAM (. . . .), MORESBY (betw. 1871–74), STEELE (189 .), S. G. ROBERTS (*c.* 1900), T. H. WELLS (before 1914), A. WADE (*c.* 1927), FROGGATT (193 .), RUSSELL (1942–43).

1. Vogelkop (Dutch West New Guinea)

DAMPIER (1700), FORREST (1775), DUMONT D'URVILLE *etc.* (1824), P. A. LESSON *etc.* (1827), MACKLOT (1828), ZIPELIUS (1828), HOMBRON *etc.* (1839), HINDS *etc.* (1840), C. F. A. SCHNEIDER (1850), WALLACE (1858), W. F. A. ZIMMERMANN (*c.* 1860), VON ROSENBERG (1868–70), TEYSMANN (1871), D'ALBERTIS (1872), BECCARI (1872, 1875–76), A. B. MEYER (1873), MIKLUCHO-MACLAY (1874), NAUMANN (1875), SWAAN (1875), WARBURG (1888), MICHOLITZ (1890 or 1891), BURKE (1891), TREUB (1893), MEIJWES (1898), WEBER-VAN BOSSE (1899), FAIRCHILD (1900), JAHERI (1901), ATASRIP (1903), DJIBJA (1903), VAN OOSTERZEE (1904), J. W. R. KOCH (1904–05), W. DEN BERGER (1905–06), F. J. F. VAN HASSELT (betw. 1905–29), PRATT (1907–08), COENEN (1909–10), DEMMENI (1909–11), GJELLERUP (1912), GIBBS (1913–14), F.R.I. Buitenzorg (1913–*hodie*), E. MAYR (1928), HERRE (1929), STEEMANN NIELSEN (1929), V. E. VAN STRAELEN (1929), G. H. W. STEIN (1931), Z. SALVERDA (1936–37), WESTERMANN (1937), CROCKET (1937–38), INOKUMA (1939), KANEHIRA & HATUSIMA (1940), WENTHOLT (1940), AËT (1941), DJAMHARI & MAIN (1948), KOSTERMANS (1948), PLEYTE (1948).

2. Dutch North New Guinea

R. P. LESSON (1823–24), HINDS *etc.* (1840), TEYSMANN (1871), BECCARI (1875), MOSELEY (1875), ATASRIP (1903), DJIBJA (1903), PRATT (1907), DEMMENI (1909–11), SCHULTZE JENA (1910), MOSZKOWSKI (1910–11), GJELLERUP (1910–12), JANOWSKI (1912–14), L. A. C. M. DOORMAN (1912–15), THOMSEN (1913–15), F.R.I. Buitenzorg (1913–*hodie*), FEUILLETAU DE BRUYN (1914), GIBBS (1914), PALMER VAN DEN BROEK (1915), LAM (1920–21), WIRZ (1921–26), DOCTERS VAN LEEUWEN (1926), CH. C. F. M. LE ROUX (1926), E. MAYR (1928), G. H. W. STEIN (1931), WENTHOLT (1932–39), CHEESMAN (1936), MEIJER DREES (1938), BRASS *etc.* (1938–39), ANANG (1939), INOKUMA (1939), VAN EECHOUD (1939–40), KANEHIRA & HATUSIMA (1940), BAIM (1945), SIGAFOOS (1945).

3. Dutch South New Guinea

BANKS & SOLANDER (1770), MACKLOT (1828), ZIPELIUS (1828), JAHERI (1901), H. J. WIGMAN (1904, 1909), J. W. R. KOCH (1904–05), DJIBJA (1907), VERSTEEG (1907), BRANDERHORST (1907–10), LORENTZ & HABBEMA (1909), J. W. VAN NOUHUYS (1909), L. S. A. M. VON RÖMER (1909–10), WOLLASTON (1910–11), DE KOCK (1910–12), COCQ D'ARMANDVILLE (1911–12), DU PUY (*c.* 1912), COENEN (1912), KLOSS (1912–13), PULLE (1912–13), SITANALA (1913), VERSTEEG (1913), F.R.I. Buitenzorg (1913–*hodie*), KIEVIT (192 .), VERTENTEN (1921–23), VERSCHUEREN (1933–36), WISSEL (1936), ANONYMOUS (1938), WITKAMP (1938), EYMA (1939), ANTA (1940–41), AËT (1941).

4. Papua

Miss ARMIT (18 . .), MACGILLIVRAY (betw. 1845–59), MACFARLANE (1871–85), ORKNIE (1873), LAWES (1874–82), W. J. MACLEAY (1875), REEDY (1875), D'ALBERTIS (1875–77), GOLDIE (1876–82), HUNSTEIN (? 1878–84), MIKLUCHO-MACLAY (1880–81), CHALMERS (*c.* 1880–87), FINSCH (1882, 1885), W. E. ARMIT (1883– . .), GILL (*c.* 1884), BRIDGE (1884–85), C. STEWART (1884–86), EDELFELT (1884–9 .), BÄUERLEN (1885), BERNAYS (1885), J. W. POTTS (1885), STRACHAN (1885), FORBES (1885–87), C. H. HARTMANN (1885–87), BELGRAVE (*c.* 1887), BEVAN (1887), CUTHBERTSON (1887), SAYER (1887), BELFORD (1887–91), BURKE (1888–97), W. MACGREGOR (1888–98), CAMERON (*c.* 1889), LORIA (1889–96), GIULIANETTI (1889–97), LIX (*c.* 1890), GUISE (1891), W. ANDERSON (1893), MICHOLITZ (1893–98), C. KING (*c.* 1893–1918), KENNEDY (1894), TRYON (1895), FITZGERALD (1895–96), ENGLISH (1897), MUSGRAVE (1897), BAILEY (1898), F. H. BROWN (1898), LAMINGTON (1898), CHAMPION (1898–1944), MACDONALD (1899), LE HUNTE (1899–1903), BARTON (1899–1907), COWLEY (19 . .), GORS (*c.* 1900), PRATT (1902–03, 1908–11), TURNER (1902–38), SELIGMANN (1904), MACKAY (1906), MONEY (1906), P. CH. SHAW (1907 onwards), SCHLENCKER (1908–09), BOYD (1909), LOHER (1910), M. S. C. SMITH (1910–11), J. B. CLARK (1916), CHINNERY (1917), C. T. WHITE (1918), LANE-POOLE (1922–23), LAMBTON (1923–36), BRASS (1925–26, 1933–34, 1936–37), JESWIET (1929), WIRZ (1930), CHEESMAN (1933–34), VERSCHUEREN (1933–36), CARR (1935–36), BATTEN POOL (1940).

5. Mandated Territory of New Guinea (former Kaiser-Wilhelmsland)

HERZOG (. . . .), MIKLUCHO-MACLAY (1871–83), HANSEMANN (188 . or 189 .), FINSCH (1885), HUNSTEIN (1885–88), MENTZEL (1886), HOLLRUNG (1886–87), C. SCHRADER (1886–87), KUBARY (1886–95), SCHMIELE (1886–95), KÄRNBACH (1887–91, 1893–95), RUECKER (*c.* 1888), KOTZE & HUNSTEIN (1888), BURKE (1888–89), HELLWIG (1888–89), REICHE (before 1889), WARBURG (1889), WEINLAND (1889–91), LAUTERBACH (1890–91), Capt. SCHNEIDER (*c.* 1890–91), MICHOLITZ (1893), B. HAGEN (1893–95), G. BAMLER (1894–1910), LAUTERBACH & KERSTING & TAPPENBECK (1896), BIRO (1896–1901), TAPPENBECK (1898), KLINK (1898–99), NYMAN (1898–99), RODATZ (1898–99), LAUTERBACH (1899), LEWANDOWSKY (1899), KEMPF (prob. 19 . .), SCHLECHTER (1901–02), FLEISCHER (1903), ZAHN (1904–05), RECHINGER (1905), WERNER (1905–07), GRAEFFE (1906–07), HUNZIKER (*c.* 1907), SCHLECHTER (1907–09), NEUHAUSS (1908–10), SCHLAGINHAUFEN (1909), TURNWALD (1909), KEYSSER (1909–16), SCHULTZE JENA (1910), Mrs BAMLER (1911), GEHRMANN (1912), G. WEBER (1912), LEDERMANN (1912–13), WIESENTHAL (1912–13), MAILÄNDER (1913), BRADTKE (1917), LANE-POOLE (1923–24), BRYCE (*c.* 1924), E. MAYR (1928–29), HERRE (1929), CLEMENS (1935–4 .), BLACKWOOD (1936–38), KANEHIRA (1937), LANDS (or LANDO) (194 .), REEDER (1943–44), BAIM (1944), MACANALAN (1944), ROGERS (1944), New Guinea FORCES (1944–45), L. S. SMITH (1944–45), C. T. WHITE (1944–45), SAWYER (1945).

6. D'Entrecasteaux Islands (incl. Fergusson, Goodenough and Normanby Island)

GOLDIE (1882), W. MACGREGOR (1888–98), G. BROWN (1890), LORIA & GIULIANETTI (1890), MICHOLITZ (1894), LE HUNTE (1899, 1901), BURCHAM (1944).

7. Trobriand Islands (Kiriwina *etc.*)

LORIA & GIULIANETTI (1890), W. MACGREGOR (1890–98), G. BROWN (1897), LE HUNTE (1899), SELIGMANN (1904).

Bismarck Archipelago—General

G. BROWN (betw. 1875–97), BIRO (1900), SCHOEDE (1910), M. BRAUN (*c.* 1913–14), BRADTKE (*c.* 1916).

8. New Britain (former Neu Pommern)

DAMPIER (1700), W. F. A. ZIMMERMANN (*c.* 1860), A. VON HÜGEL (1875), NAUMANN (1875), WALTER (1875), FINSCH (1880, 1884), R. PARKINSON (1882–1900), BETCHE (1883), KUBARY (1885), SCHMIELE (1886–93), HUNSTEIN (1888), PFEIL (1888–89), LAUTERBACH (1890), MICHOLITZ (1893), DAHL (1896–97), LAUTERBACH (1898), NYMAN (1899), SCHLECHTER (1901–02), RECHINGER (1905), KRAEMER (1906, 1909), HUNZIKER (*c.* 1907), PEUCKER (1907), SCHLECHTER (1907), RUDOLPH (1907–10), TURNWALD (*c.* 1909), PEEKEL (1910), G. WEBER (1912–13), M. BRAUN (*c.* 1913–14), GOODBY (*c.* 1915), LANE-POOLE (1924), HERRE (1929), G. BATESON (1931), WATERHOUSE (1934), ANONYMOUS* (1935–40), BLACKWOOD (1937), KANEHIRA (1937), BURCHAM (1944).

9. Duke of York Island (former Neu Lauenburg) and Mioko

A. VON HÜGEL (1875), WALTER (1875), DUFF (before 1878), FINSCH (1880, 1884–85), BETCHE (1883), WARBURG (1889), MICHOLITZ (1893), DAHL (1896), NYMAN (1899), SCHLECHTER (1902), FLEISCHER (1903), M. BRAUN (*c.* 1913–14), BRADTKE (*c.* 1916).

10. New Ireland (former Neu Mecklenburg), Nusa Island *etc.*, Tanga Islands

CARTERET (1767), COMMERSON (1768), DE LA BILLARDIÈRE (1792), LAHAIE (1792), DUMONT D'URVILLE *etc.* (1823), P. A. LESSON *etc.* (1827), BARCLAY (1840), HINDS (1840), W. F. A. ZIMMERMANN (*c.* 1860), NAUMANN (1875), FINSCH (1880, 1884), PFEIL (1888–89), WARBURG (1889), LAUTERBACH (1890), KÄRNBACH (1893), SCHMIELE (1893), MICHOLITZ (1893–94), SCHLECHTER (1901–02), STEPHAN (1907–08), PENLOUP (1908), SAPPER (1908), SCHLAGINHAUFEN (1908), KRAEMER (1908–09), PEEKEL (1908–38), TURNWALD (*c.* 1909), LANE-POOLE (1924), GEE (1937), KANEHIRA (1937).

11. New Hanover (former Neu Hannover)

ENDE (. . .), NAUMANN (1875), PFEIL (1888–89), LAUTERBACH (189 .), LANE-POOLE (1924).

12. St Matthias group, Tench Island

R. PARKINSON (1905).

13. Admiralty, Purdy and Hermit Islands, and Matty (Wuvulu)

DE LA BILLARDIÈRE (1792), MOSELEY (1875), MIKLUCHO-MACLAY (1876, 1879, 1883), HOLLRUNG (1887), KÄRNBACH (1888), KRAEMER (1906), BOGEN (194 .), GRETHER & WAGNER (1944–46).

14. Schouten and Padaido Islands

C. F. A. SCHNEIDER (1850), VON ROSENBERG (1869), A. B. MEYER (1873), BECCARI (1875), F.R.I. Buitenzorg (1913–*hodie*), GIBBS (1914), FEUILLETAU DE BRUYN (1915), LAYCOCK (*c.* 1930), CROCKET (1937), IDJAN (1939), VAN DIJK (1939), BRITTON (1944–45), GRETHER & WAGNER (1945), BOTMA (1947).

15. P. Japen and Koeroedoe

BARCLAY (1840), HINDS *etc.* (1840), C. F. A. SCHNEIDER (1850), VON ROSENBERG (1869), TEYSMANN (1871), A. B. MEYER (1873), BECCARI (1875), JANOWSKI (1913), F.R.I. Buitenzorg (1913–*hodie*), V. E. VAN STRAELEN (1929), LAYCOCK (*c.* 1930), G. H. W. STEIN (1931), DE LASSACQUÈRE (1931–32), CHEESMAN (*c.* 1936), AËT (1939), VAN DIJK (1939).

16. Noemfoor

VON ROSENBERG (1869), A. B. MEYER (1873), D. W. HORST (1896), G. H. W. STEIN (1931).

17. Mios Noem

VON ROSENBERG (1869), BECCARI (1875), F.R.I. Buitenzorg (1913–*hodie*), G. H. W. STEIN (1931), VAN DIJK (1939).

18. Mapia (or St Davids) Island

MIKLUCHO-MACLAY (1876), KUBARY (1884).

19. Islands near the coast in Geelvink Bay

C. F. A. SCHNEIDER (1850), WALLACE (1858), TEYSMANN (1871), D'ALBERTIS (1872), BECCARI (1872, 1876), VAN BALEN (1905), GIBBS (1914), CROCKET (1937).

20. Ajoe Islands (incl. P. Pani or Asia Island)

FORREST (1775).

21. P. Waigeo(e) *etc.*

FORREST (1774–75), DE LA BILLARDIÈRE (1793), LAHAIE (1793), GAUDICHAUD *etc.* (1818–19), DUMONT D'URVILLE *etc.* (1823), TEYSMANN (2nd half 19th century), VON ROSENBERG (1860), WALLACE

(1860), BERNSTEIN (1863), BECCARI (1875–76), WEBER-VAN BOSSE (1899), WATERSTREDT (1902), BROUWER (1915), HERRE (1929), G. H. W. STEIN (1931), CHEESMAN (*c.* 1936).

22. P. Gebe, Fau and Gag

PROVOST (*c.* 1770), SONNERAT (1772), FORREST (1774), C. F. A. SCHNEIDER (1850), WALLACE (1860), BERNSTEIN (1863–64), TEYSMANN (1871), MIKLUCHO-MACLAY (1876), WEBER-VAN BOSSE (1899).

23. P. Kofiau *etc.*

BECCARI (1875), WEBER-VAN BOSSE (1899).

24. Batanta group

DAMPIER (1700), VON ROSENBERG (1860, 1869), BERNSTEIN (1864–65), BECCARI (1872, 1875).

25. Salawati

VON ROSENBERG (1860, 1869, 1870), BERNSTEIN (1864), D. S. HOEDT (*c.* 1868), TEYSMANN (1871), D'ALBERTIS (1872), BECCARI (1872, 1875), BROUWER (1915).

26. Misoöl group

FORREST (1775), VON ROSENBERG (1860), D. S. HOEDT (*c.* 1868), BECCARI (1876), TEYSMANN (1876), WEBER-VAN BOSSE (1899), F.R.I. Buitenzorg (1913–*hodie*), V. E. VAN STRAELEN (1929), CROCKET (1937), DJAMHARI & MAIN (1948), PLEYTE (1948).

27. Aroe Islands

A. J. BIK (1824), HOMBRON *etc.* (1839), WALLACE (1857), VON ROSENBERG (1865), EIBERGEN (before 1868), D. S. HOEDT (1870), BECCARI (1873), MOSELEY (1874), RIEDEL (1880), WARBURG (1889), TREUB (1893), WEBER-VAN BOSSE (1899), FAIRCHILD (1900), VAN KAMPEN (1907), MERTON (1908), J. ROUX (1908), ARNOLDI (1909), ROTHERT (1909), H. J. WIGMAN (1909), F.R.I. Buitenzorg (1913–*hodie*), HJ. JENSEN (1922), MORTENSEN (1922), V. E. VAN STRAELEN (1929), TROLL (1929), BUWALDA (1938), J. D. F. HARDENBERG (1938).

28. Frederik Hendrik Island

ZIPELIUS (1828), J. W. R. KOCH (1904), BRANDERHORST (1907–08), DUMAS (1910), WIRZ (1925).

29. Islets in Torres Strait: Thursday Island *etc.*

DENT (. . . .), KNIGHT (18 . .), HOMBRON *etc.* (1840), J. MACGILLIVRAY (? 1845, 1849, 1859), MILNE (1859), GILL (1872), MACFARLANE (1874–76), W. J. MACLEAY (1875), GOLDIE (1876–77), C. H. HARTMANN (188 .), MIKLUCHO-MACLAY (1880), COPPINGER (1881), FINSCH (1881–82), EDELFELT (1884), J. W. POTTS (1885), DOUGLAS (1888), LORIA & GIULIANETTI (1889, 1891), LAUTERBACH (1890), MICHOLITZ (1891), COWLEY (1893), BAILEY (1898), J. W. R. KOCH (1904), DJIBJA (1907), STEEMANN NIELSEN (1929), POSTHUMUS (1935).

b. VOYAGES AND EXPEDITIONS CHRONOLOGICALLY

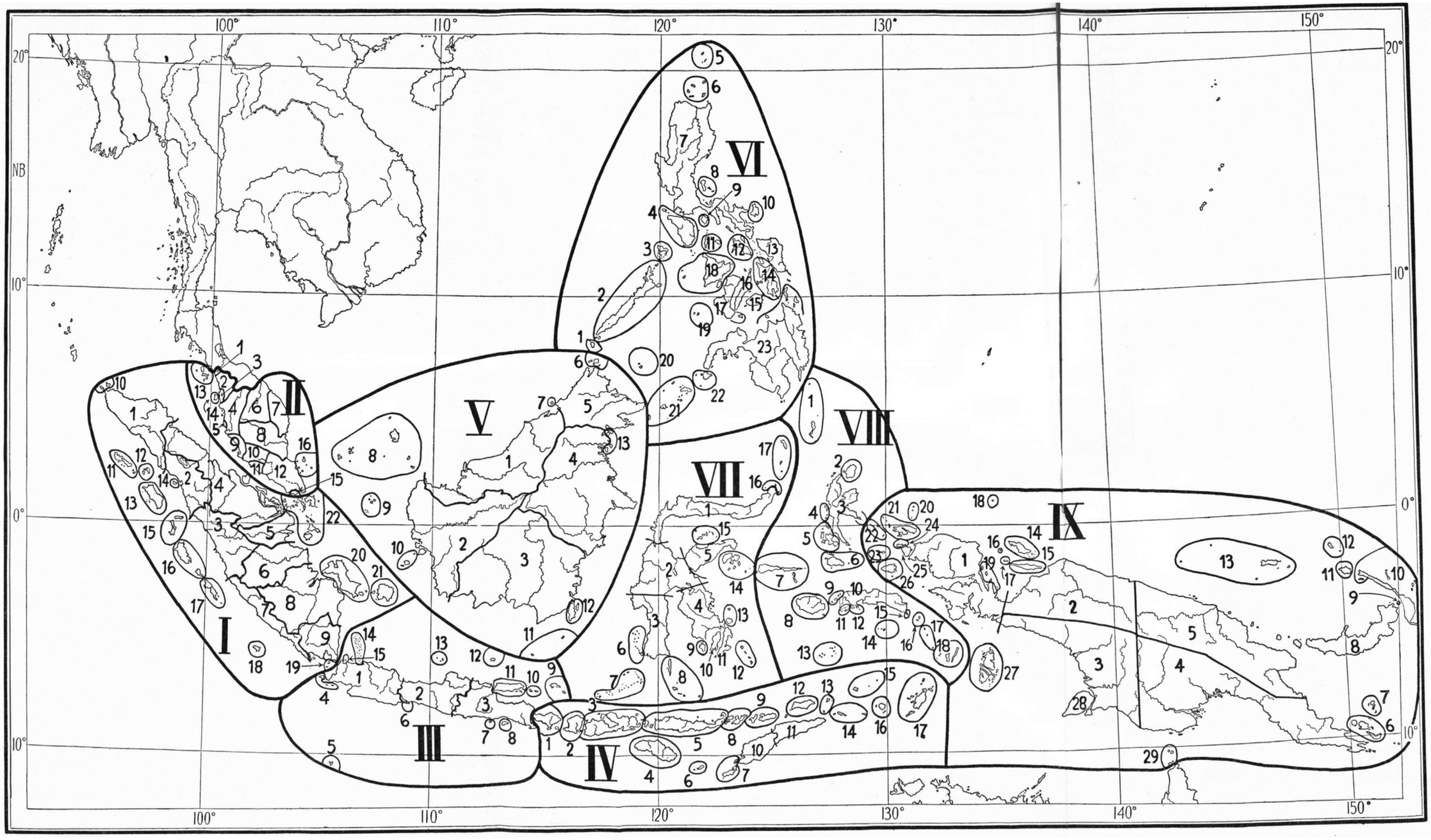
This is a chronological enumeration of voyages of discovery and exploring expeditions in which collections were (or were possibly) made, and which operated in the Malaysian region. Only those expeditions have been considered which had, or became known by, a definite name, and were attended by more than one person. Individual enterprises are, therefore, not included though they often lasted longer or yielded infinitely more results for Malaysian collections than many official expeditions, for example the innumerable trips, made by ZOLLINGER, JUNGHUHN, TEYSMANN, BECCARI, R. C. MACGREGOR, WARBURG, SCHLECHTER, *etc.*, on which detailed data can be found in the Special Part.

Part of the individual enterprises are enumerated in the next chapter, that is, those which were made before 1840.

Long-range planned exploration lasted sometimes for some decades, for example that of the 'Natuurkundige Commissie' (1820–50), the 'Militaire Exploratie' (of New Guinea) (1907–15), *etc.*; these have not been treated as 'expeditions'.

The number of expeditions made by different nationalities range as follows: English 34, Dutch 20, German 19, French 19, American 13, Russian 7, Australian 6, Swedish 5, Austrian 5, Danish 3, Swiss 2, Spanish 1, and 6 combined ones, *viz* German-Dutch 2, American-Dutch 2, Anglo-Dutch 1, Swedish-Dutch 1.—Total 140.

These figures probably do not give the proper sequence as to the importance of the botanical materia] brought home. Properly spoken the number of sheets ought to have been calculated as quite a number of expeditions have hardly assembled collections. This we have not considered worthwhile, as even these totals would not yield a clear picture. For example Australia has only six named expeditions to its credit, but a multitude of Australian individual explorers added considerably to the collections. U.S.A. officials made large collections in the Philippines, the British officials in Borneo and the Malay Peninsula, and the Dutch in the Netherlands Indies.



Map 1. Belonging to the 'Enumeration of geographical units' on pages LXXVI–LXXVIII. The divisions are wholly artificial.

Years:	*Name of ship(s) and (or) of the expedition:*	*Name of commander(s) or scientific leader:*	*Name of chief botanical collector(s):*
1577–80	'Pelican' (*Engl.*)	Sir Fr. Drake	Sir Fr. Drake
1586–88	'Desire, Content & Hugh Callant' (*Engl.*)	Thomas Candi	Thomas Candi
1699–01	'Roebuck' (*Engl.*)	W. Dampier	W. Dampier
1703–07	'St George & Fame' (*Engl.*)	W. Funnel	W. Dampier (? coll.)
1708–11	'Duke & Dutchess' (*Engl.*)	W. Rogers	W. Dampier (? coll.)
1750–52	'Gothic Lion' (*Swed. E.I.C.*)	?	O. Torén
1750–52	'Prince Charles' (*Swed. E.I.C.*)	?	P. Osbeck
1765–67	'Iter in Chinam' (*Swedish*)	C. G. Ekeberg	A. Sparrman
1766–69	'Boudeuse & Étoile' (*French*)	L. A. de Bougainville	Ph. Commerson
1766–69	'Swallow, Dolphin & Prince Frederick' (*Engl.*)	S. Wallis & Ph. Carteret	Ph. Carteret (?coll.)
1768–71	Cook's 1st Voyage in the 'Endeavour' (*Engl.*)	J. Cook	Sir J. Banks and D. C. Solander
1769–..	'Étoile du Matin & Vigilant' (*French*)	Etchévery & Trémigon	S. Provost
1771–72	'2nd Moluccan Expedition' (*French*)	S. Provost	P. Sonnerat
1774–76	'Tartar-Galley' (*Engl.*)	Th. Forrest	Th. Forrest
1776–80	Cook's 3rd Voyage in the 'Resolution & Discovery' (*Engl.*)	J. Cook, later J. King	D. Nelson *etc.*
1785–88	'Boussole & Astrolabe' (*French*)	J. F. de G. la Pérouse	de B. la Martinière & Collignon
1787–89	'Bounty' (*Engl.*)	W. Bligh	D. Nelson *etc.*
1789–94	'Malaspina Expedition' in the 'Descubierta & Atrevida' (*Span.*)	A. Malaspina *etc.*	Th. Haenke *etc.*
1791–93	'Providence' (*Engl.*)	W. Bligh	Christoph. Smith, J. Wiles
1791–94	'Recherche & Espérance' (*French*)	A. R. J. Bruny d'Entrecasteaux, later d'Auribeau	J. J. H. de la Billardière *etc.*
1800–04	'Naturaliste & Géographe' (*French*)	Th. N. Baudin	L. Th. Leschenault de la Tour *etc.*
1801–05	'Investigator' (later successively 'Porpoise' and 'Cumberland' (*Engl.*)	M. Flinders	R. Brown *etc.*
1815–18	'Ruri(c)k' (*Russ.*)	O. von Kotzebue	A. von Chamisso *etc.*
1817–20	'Uranie & Physicienne' (*French*)	L. Cl. D. de Freycinet	Ch. Gaudichaud-Beaupré *etc.*
1818–19	West Coast Voyages in the 'Mermaid' (*Engl.*)	P. P. King	A. Cunningham
1819–21	'Rhône & Durance' (*French*)	Philibert	G. S. Perrottet
1822–25	'Coquille' (*French*)	L. I. Duperrey	J. S. C. Dumont d'Urville *etc.*
1823–26	'Predpriiatii' or 'Predpriyatie' (*Russ.*)	O. von Kotzebue	J. F. Eschscholz
1824–26	'Thétis & Espérance (*French*)	Baron de Bougainville	F. L. Busseuil
1825–27	'Krotky' (*Russ.*)	Baron F. P. Wrangel	I. Stewar(d)t
1826–29	'Astrolabe' (*French*)	J. S. C. Dumont d'Urville	P. A. Lesson *etc.*
1826–29	'Senjawin' or 'Seniavin' (*Russ.*)	Fr. Lütke	K. H. Mertens
1827–28	'Chevrette' (*French*)	M. Fabré	A. A. M. Reynaud
1828	'Triton & Iris' (*Dutch*)	H. C. Macklot	A. Zipelius
1828–30	'Hagemeister's Exp.' (*Russ.*)	Hagemeister	K. Peters
1830–32	'Prinzess Louise' (*German*)	W. Wendt	F. J. F. Meyen
1830–32	'Favorite' (*French*)	la Place	J. Baume *etc.*
1833–36	'Tuscan' (*Engl.*)	F. R. Stavers	F. D. Bennett
1835–42	'Sulphur' (*Engl.*)	Sir E. Belcher	R. B. Hinds & G. W. Barclay
1836–37	'Bonite' (*French*)	M. Vaillant	Ch. Gaudichaud-Beaupré *etc.*
1836–37	'Himmaleh' (*Amer.*)	A. V. Fraser	G. T. Lay

Years:	*Name of ship(s) and (or) of the expedition:*	*Name of commander(s) or scientific leader:*	*Name of chief botanical collector(s):*
1837–40	'Astrolabe & Zélée' (*French*)	J. S. C. DUMONT D'URVILLE	J. B. HOMBRON *etc.*
1838–39	'Royalist' (*Engl.*)	Sir J. BROOKE	Sir J. BROOKE
1838–42	'WILKES U.S. Exploring Expedition' in the 'Peacock & Porpoise' (*Amer.*)	CH. WILKES	W. RICH, W. D. BRACKENRIDGE, CH. PICKERING
1839–43	'Danaïde' (*French*)	J. DU CAMPE DE ROSAMEL	A. P. J. LIAUTAUD
1841–44	'Favorite' (*French*)	PAGE	LÉCLANCHER
1842–46	'Fly & Bramble' (*Engl.*)	F. P. BLACKWOOD	J. MACGILLIVRAY *etc.*
1843–46	'Samarang' (*Engl.*)	Sir E. BELCHER	? E. BELCHER or A. ADAMS
1845–47	'Galathea' (*Danish*)	ST. A. BILLE	D. F. DIDRICHSEN *etc.*
1845–51	'Herald' (*Engl.*)	H. KELLET	B. SEEMANN
1846–50	'Bayonnaise' (*French*)	JURIEN-LAGRAVIÈRE	LÉCLANCHER
1846–50	'Rattlesnake' (*Engl.*)	O. STANLEY	J. MACGILLIVRAY
1851–53	'Eugenie' (*Swed.*)	C. A. VIRGIN	N. J. ANDERSSON
1852	'Pallas & Vostok (Fearless)' (*Russ.*)	PUTIATIN	H. WEYRICH (at least in Philippines)
1852–55	PERRY's Expedition to Japan in the 'Mississippi', 'Vandalia', *etc.* (*Amer.*)	M. C. PERRY	J. MORROW
1852–61	'Herald' (*Engl.*)	DENHAM	J. MACGILLIVRAY, W. G. MILNE
c. 1857	'Sybille' (*French*)	?	BARTHE
1857–59	'Novara' (*Austrian*)	B. VON WÜLLERSTORF-URBAIR	A. JELINEK *etc.*
1859–62	'Preussische Exp. nach Ost-Asien' (Prussian exp. to East-Asia) in the 'Thetis & Arkona' (*German*)	?	M. E. WICHURA *etc.*
1866–67	'Rifleman & Serpent' (*Engl.*)	?	C. COLLINGWOOD (collected in Malaysia?)
1868–71	'Donau & Friedrich' (*Austrian*)	?	H. RITTER WAWRA VON FERNSEE *etc.*
1868–71	'Medusa' (*German*)	?	F. C. NAUMANN (? coll.)
1872–73	'Voyage with the Princes PH. & A. VON SACHSEN-COBURG-GOTHA (*Austrian*)	?	H. RITTER WAWRA VON FERNSEE
1872–76	'Challenger' (*Engl.*)	Sir G. NARES	H. N. MOSELEY *etc.*
1874–76	'Gazelle' (*German*)	G. E. G. FREIHERR VON SCHLEINITZ	F. C. NAUMANN
1875	'Chevert' Exp. (*Austral.*)	Sir W. J. MACLEAY	J. (or P.) REEDY
1877–78	'Midden-Sumatra Exp.' (Centr. Sumatra Exp.) (*Dutch*)	J. SCHOUW SANTVOORT & A. L. VAN HASSELT	A. L. VAN HASSELT *etc.*
1878–79	'Vega' (*Swed.*)	Baron N. A. E. VON NORDENSKIÖLD	E. B. ALMQUIST
1878–82	'Alert' (*Engl.*)	Sir G. NARES	R. W. COPPINGER
1883	'Argus' Exp. (*Austral.*)	W. E. (DE M.) ARMIT	W. E. (DE M.) ARMIT
1884	'Melbourne Age' Exp. (*Austral.*)	J. STRACHAN	STEWART
1884–87	'Nautilus" (*Austrian*)	K. SPITZLER	R. KESSLITZ
1885	'Bonito' Exp. (*Austral.*)	H. C. EVERILL	W. BÄUERLEN, S. A. BERNAYS
1886–87	'Exp. of the German New Guinea Company' (*German*)	C. SCHRADER	H. M. HOLLRUNG
1886–87	'Flying Fish' (*Engl.*)	J. F. L. P. MACLEAR	J. F. L. P. MACLEAR
1886–88	'Aurora' (*Austrian*)	FR. MÜLLER	W. SVOBODA
1887	'Egeria' (*Engl.*)	P. ALDRICH	J. J. LISTER *etc.*
1887	'Exp. of the Vict. Br. Roy. Geogr. Soc. Australasia' to New Guinea (*Austral.*)	W. R. CUTHBERTSON	W. A. SAYER

Years:	*Name of ship(s) and (or) of the expedition:*	*Name of commander(s) or scientific leader:*	*Name of chief botanical collector(s):*
1888	'WERTHEIM Exp.' to the Kai Islands (*Dutch*)	C. J. M. WERTHEIM	JAHERI *etc.*
1889	'Exp. to Owen Stanley Range' (*Engl.*)	Sir W. MACGREGOR	Sir W. MACGREGOR
1890	'Gogol Exp.' in German New Guinea (*German*)	C. A. G. LAUTERBACH	C. A. G. LAUTERBACH *etc.*
1890–91	'Tamara' (*Russian*)	?	G. F. R. RADDE
1891	'IJZERMAN Exp. to Centr. Sumatra' (*Dutch*)	J. IJZERMAN	S. H. KOORDERS
1893–94	'Borneo Exp.' (*Dutch*)	Distr. Officer Upper Kapoeas	J. G. HALLIER *etc.*
1893–96	'1st SARASIN Exp.' to Celebes (*Swiss*)	—	K. F. & P. B. SARASIN
1896	'Kaiser-Wilhelmsland Exp.' and '1st Ramu Exp.' (*German*)	C. A. G. LAUTERBACH	C. A. G. LAUTERBACH *etc.*
1896–97	'NIEUWENHUIS Exp.' to Borneo (*Dutch*)	A. W. NIEUWENHUIS	JAHERI
1897	'Expedition to Owen Stanley and Wharton Range' (*Engl.*)	Sir W. MACGREGOR	A. GIULIANETTI, A. C. ENGLISH, *etc.*
1898	'2nd Ramu Exp.' (*German*)	E. TAPPENBECK	E. TAPPENBECK *etc.*
1898–99	'Valdivia' (*German*)	C. CHUN	A. F. W. SCHIMPER
1898–1900	'2nd NIEUWENHUIS Exp.' to Borneo (*Dutch*)	A. W. NIEUWENHUIS	AMDJAH, SAKARAN
1899	'SKEAT Exp.' in Siam and Mal. Peninsula (*Engl.*)	W. W. SKEAT	R. H. YAPP *etc.*
1899–1900	'Siboga' (*Dutch*)	G. F. TYDEMAN (Cdr), M. W. C. WEBER (scient. leader)	A. WEBER-VAN BOSSE, M. W. C. WEBER
1899–1900	'3rd Ramu Exp.' (*German*)	C. A. G. LAUTERBACH	H. KLINK *etc.*
1902–03	'2nd SARASIN Exp.' to Celebes (*Swiss*)	—	K. F. & P. B. SARASIN
1903	'WICHMANN Exp.' to Dutch New Guinea (*Dutch*)	C. E. A. WICHMANN	ATASRIP, DJIBJA
1904	'DANIELS Ethnographical Exp.' to New Guinea (*Engl.*)	?	CH. G. SELIGMANN
1904–05	'Zuidwest Nieuw-Guinea Exp.' (Southwest N. G. Exp.) (*Dutch*)	R. POSTHUMUS MEYJES & E. J. DE ROCHEMONT	J. W. R. KOCH
1906–07	'Planet' (*German*)	?	A. F. KRAEMER
1907	'1st LORENTZ Exp.' to New Guinea (*Dutch*)	H. A. LORENTZ	G. M. VERSTEEG *etc.*
1907–08	'SELENKA Exp.' (*German*)	?	J. ELBERT
1907–09	'Deutsche (German) Marine Exp.', partly in the 'Planet' (*German*)	E. STEPHAN, later A. F. KRAEMER	O. SCHLAGINHAUFEN *etc.*
1909–10	'Frankfurter Sunda Exp.' (*German*)	J. ELBERT	J. ELBERT *etc.*
1909–10	'OWEN BRYANT Exp.' to Java (*Amer.*)	O. BRYANT	W. PALMER
1909–10	'2nd LORENTZ Exp.' to New Guinea (*Dutch*)	H. A. LORENTZ	L. S. A. M. VON RÖMER *etc.*
1910	'German-Dutch boundary delimitation Exp. in North New Guinea' (*German-Dutch*)	L. SCHULTZE-JENA	L. SCHULTZE-JENA, K. GJELLERUP, *etc.*
1910–11	'Mimika Exp.' (*Engl.*)	W. GOODFELLOW	A. F. R. WOLLASTON (? coll.)
1910–11	'Kikori Exp.' (*Austral.*)	M. ST. C. SMITH	?
1910–12	'Zweite Freiburger Molukken Exp. (*German*)	K. DENINGER	E. STRESEMANN
1912	'NE. Borneo Expedition' (*Anglo-Dutch*)	P. VAN GENDEREN STORT	AMDJAH
1912–13	'FRANSSEN HERDERSCHEE Exp.' to Dutch New Guinea (*Dutch*)	A. FRANSSEN HERDERSCHEE	A. A. PULLE *etc.*
1912–13	'Kaiserin Augusta-Fluss' or 'Sepik Exp.' (*German*)	A. STOLLÉ	C. L. LEDERMANN
1912–13	'WOLLASTON Exp.' in Dutch New Guinea (*Engl.*)	A. F. R. WOLLASTON	C. B. KLOSS
1913	'Gogol-Ramu Exp.' in Kaiser-Wilhelmsland (*German*)	M. BRAUN	K. GEHRMANN (?coll.

Years:	*Name of ship(s) and (or) of the expedition:*	*Name of commander(s) or scientific leader:*	*Name of chief botanical collector(s):*
1914	'Korinchi Exp.' (*Engl.*)	H. C. ROBINSON	C. B. KLOSS
1917–19	'RUTTEN Exp.' to Ceram (*Dutch*)	L. M. R. RUTTEN	L. M. R. RUTTEN, C. J. RUTTEN-PEKELHARING
1920–21	'VAN OVEREEM Exp.' to Dutch New Guinea (*Dutch*)	VAN OVEREEM	H. J. LAM
1921–22	'Boeroe Exp.' of the Roy. Dutch Geogr. Soc. (*Dutch*)	L. J. TOXOPEUS (of zool.-bot. section)	L. J. TOXOPEUS
1922	'MORTENSEN Exp.' to the Kai Islands (*Danish*)	Dr O. TH. MORTENSEN	HJ. JENSEN *etc.*
1924–25	'Exp. to Centr. Borneo' (*German-Dutch*)	HANS WINKLER	HANS WINKLER *etc.*
1925	'Midden-Oost Borneo Exp.' (*Dutch*)	D. W. BUYS	F. H. ENDERT
1925–26	'Arnold Arboretum Exp.' in Papua (*Amer.*)	—	L. J. BRASS
1926	'ALLISON V. ARMOUR Exp.' (*Amer.*)	—	D. G. FAIRCHILD
1926	'STIRLING Exp.' to New Guinea (*Amer.-Dutch*)	STIRLING, later W. M. DOCTERS VAN LEEUWEN	W. M. DOCTERS VAN LEEUWEN
1927	'RENSCH Sunda Exp.' to the Lesser Sunda Islands (*German*)	B. RENSCH	I. RENSCH-MAIER
1928–29	'CRANE Exp.' (*Amer.*)	?	A. W. HERRE
1928–29	'Deutsche limnologische (German limnol.) Sunda Exp.' (*German*)	A. THIENEMANN	FR. RUTTNER
1928–30	'Dana' (*Danish*)	? J. SCHMIDT	E. STEEMANN NIELSEN
1932	'Oxford Exp.' to Sarawak (*Engl.*)	E. BANKS; in effect T. H. HARRISSON	P. W. RICHARDS *etc.*
1933–34	'1st ARCHBOLD Exp.', in Papua (*Amer.*)	R. ARCHBOLD	L. J. BRASS
1936	'COLIJN Exp.' to Dutch New Guinea (*Dutch*)	A. H. COLIJN	F. J. WISSEL
1936–37	'2nd ARCHBOLD Exp.', in Papua (*Amer.*)	R. ARCHBOLD	L. J. BRASS
1937	'Asiatic Primate Exp.' (mostly operating in non-Malaysian region) (*Amer.*)	H. J. COOLIDGE	J. A. GRISWOLD
1937	'Losir N. Sumatra Exp.' (*Dutch*)	C. G. G. J. VAN STEENIS	C. G. G. J. VAN STEENIS
1937–38	'DENISON CROCKET South Pacific Exp.' in the 'Chiva' (*Amer.*)	F. E. CROCKET	F. E. CROCKET *etc.* (no bot. coll. extant)
1938–39	'3rd ARCHBOLD Exp.', in Dutch New Guinea (*Amer.-Dutch*)	R. ARCHBOLD	L. J. BRASS, CHR. VERSTEEGH, *etc.*
1939	'GEORGE VANDERBILT Sumatra Exp.' (*Amer.*)	G. VANDERBILT	S. D. RIPLEY
1939	'Exp. of the Roy. Dutch Geogr. Soc. to the Wissel Lakes, Dutch New Guinea' (*Dutch*)	C. C. F. M. LE ROUX	P. J. EYMA
1940	'Cruise of the Chêng Ho' (*Amer.*)	—	D. G. FAIRCHILD
1948	'BERGMAN Exp.' to Misoöl *etc.* (*Swedish-Dutch*)	S. BERGMAN	D. R. PLEYTE *etc.*

c. EARLY EXPLORERS IN MALAYSIA UP TO 1840

Many of the individuals cited below cannot be regarded as important collectors from a botanical point of view; they have only historical value. Of some it is not known with certainty that they made any 'collection'. Of others the 'collection' consisted merely of fragments brought home for curiosity's sake (as is often the habit of non-professional collectors). Of still others the collections were destroyed or lost later (RUMPHIUS, DESCHAMPS, *etc.*). For particulars the reader is referred to the entries in the cyclopaedia proper.

In the list below, the cited year is the *first* or the *only* year of activity known to the present author. Of some persons the date of arrival in Malaysia has been cited in the absence of precise data when collecting started.

The collectors of the expeditions mentioned in § *b.* are included.

1292 MARCO POLO (*Ital.*).
1588 TH. CANDI (*Engl.*).
16.. E. JACOB VAN WIJCKERSLOOT (*Dutch*).
1627 J. BONTIUS (*Dutch*).
c. 1662 G. E. RUMPF or RUMPHIUS (*German by birth, in Dutch employ*).
After 1663 H. DE JA(E)GER (*Dutch*).
c. 1670 I. MERCADO (*born in the P.I., probably Span.*).
c. 1678 H. N. GRIMM (*Swedish*).
1679 S. LANDON (*?* *Brit.*).
c. 1680 W. TEN RHYNE (*Dutch*).
1680 A. HURDT (*Dutch*).
After 1680 A. SEBA (*German by birth, living in Holland*).
c. 1681 COPS (*Dutch*).
c. 1688 A. CLEYER (*German, in Dutch employ*).
1688 E. KAEMPFER (*German*).
1691 D. DE HAAS (*Dutch*).
1698 J. PH. SIPMAN (*German, in Dutch employ*).
c. 1699 G. J. KAMEL (*Austrian*).
c. 1699 W. KEIR (*?* *Brit.*).
1699 W. DAMPIER (*Engl.*).
c. 1700 A. CHASTELEYN (*Dutch*).
1701 J. CUNNINGHAM (*Scotch*).
1703 A. VAN RIEBEECK (*Dutch*).
172. L. GARCIN (*French, emigrated to Switzerland*).
Before 1731 D. A. STIER (*German*).
1751 P. OSBECK (*Swedish*).
1751 P. POIVRE (*French*).
1751 O. TORÉN (*Swedish*).
c. 1757 CHR. KLEYNHOFF (*German, in Dutch employ*).
c. 1760 V. DONATI (*Ital.*).
1766 A. SPARRMAN (*Swedish*).
1767 PH. CARTERET (*French*).
Before 1768 PRYON (*?* *Swiss or French*).
1768 PH. COMMERSON (*French*).
c. 1770 S. PROVOST (*French*).
1770 Sir J. BANKS (*Engl.*).
1770 J. COOK (*Engl.*).
1770 CH. MILLER (*Engl.*).
1770 S. PARKINSON (*Scotch*).
1770 D. C. SOLANDER (*Swedish*).
1771 W. MARSDEN (*Irish*).
1771 F. SONNERAT (*French*).
1773 RICHTER (*?*).
1775 C. P. THUNBERG (*Swedish*).
c. 1776 J. C. M. RADERMACHER (*Dutch*).
c. 1777 D. WENNERBERG (*Swedish*).
1778 J. G. KOENIG (*Baltic*).
1778 SIBERG (*?*).
1783 CL. FR. HORNSTEDT (*Swedish*).
1786 J. DE CUELLAR (*Span.*).
c. 1787 G. DE CARAGUAL (*?* *Span.*).
1787 DE B. LA MARTINIÈRE (*French*).
1787 F. NOROÑA (*Span.*).
1789 D. NELSON (*?* *Brit.*).
c. 1791 J. A. SCHILLING (*?* *Dutch*).
1792 J. J. H. DE LA BILLARDIÈRE (*French*).
1792 TH. HAENKE (*Czech*).
1792 LAHAIE (*French*).
1792 L. NÉE (*born in France*).
1792 A. PINEDA (*Span.*).
1792 CH. A. G. RICHE (*French*).
1792 CHRISTOPH. SMITH (*Brit.*).
1792 L. VENTENAT (*French*).
1792 J. WILES (*Brit.*).
c. 1793 M. PARK (*Scotch*).
1793 L. A. DESCHAMPS (*French*).
1793 J. HAXTON (*?* *Brit.*).
1793 Sir G. L. STAUNTON (*Irish*).
c. 1798 F. B. HAMILTON (*Scotch*).
c. 1800 CH. CAMPBELL (*Engl.*).
1800 W. E. PHILLIPS (*Brit.*).
1801 A. GUICHENOT (*French*).
1801 L. TH. LESCHENAULT DE LA TOUR (*French*).
1801 A. RIEDLÉ (*French*).
1801 A. SAUTIER (*French*).
1802 TH. HORSFIELD (*American*).
1802 W. HUNTER (*Scotch*).
1802 W. ROXBURGH Jr (*Scotch*).
1803 F. BAUER (*Austrian*).
1803 R. BROWN (*Scotch*).
1803 P. GOOD (*Scotch*).
1805 F. M. BLANCO (*Span.*).
1805 W. KERR (*?* *Brit.*).
1805 Sir TH. ST. B. RAFFLES (*Engl.*).
1808 TH. EVANS's collector (*?* *Brit.*).
1812 B. HEYNE (*German*).
Before 1814 Capt. ANDERSON (*Brit.*).
1815 J. ARNOLD (*Engl.*).
1815 Q. M. R. VER HUELL (*Dutch*).
1816 W. KENT (*Dutch*).
1817 J. VAN BOEKHOLZ (*Dutch*).
1817 A. VON CHAMISSO (*French, emigrated to Germany*).
1817 L. J. Y. CHORIS (*Russian*).
1817 J. HOOPER (*?* *Brit.*).
1817 C. G. C. REINWARDT (*German, in Dutch employ*).

c. 1818 W. FARQUHAR (*? Scotch*).
1818 A. CUNNINGHAM (*Engl.*).
1818 P. DIARD (*French, in Engl. and Dutch employ*).
1818 L. I. DUPERREY (*French*).
1818 J. P. GAIMARD (*French*).
1818 CH. GAUDICHAUD-BEAUPRÉ (*French*).
c. 1819 WIGHT (*Engl.*).
1819 W. JACK (*Scotch*).
1819 G. S. PERROTTET (*French*).
1819 J. PRINCE (*? Brit.*).
c. 182 . BURGER (*? Dutch*).
c. 1820 DAUD or DAWOOD (*native Malay Peninsula*).
1820 J. C. VAN HASSELT (*Dutch*).
1820 H. KUHL (*German, in Dutch employ*).
1821 G. FINLAYSON (*Scotch*).
1821 J. POTTS (*Engl.*).
c. 1822 J. B. SPANOGHE (*born in Madras, in Dutch employ*).
1822 C.L.BLUME(*German, in Dutch employ*).
1822 G. MÜLLER (*German, in Dutch employ*).
1822 G. PORTER (*? Brit*).
1822 N. WALLICH (*Danish*).
1823 J. S. C. DUMONT D'URVILLE (*French*).
1823 J. F. ESCHSCHOLZ (*Baltic*).
1823 R. P. LESSON (*French*).
1823 M(E)AUREVERT (*? French*).
1823 J. D. PARKS (*? Brit.*).
1823 F. A. C. WAITZ (*German, in Dutch employ*).
1823 A. ZIPELIUS (*German, in Dutch employ*).
1824 F. L. BUSSEUIL (*French*).
c. 1826 I. STEWAR(D)T (*member of a Russian exp.*).
1826 H. CHR. MACKLOT (*German*).
1826 S. MÜLLER (*German*).
1827 P. A. LESSON (*French*).
1827 J. R. C. QUOI (*French*).
1828 CH. P. BÉLANGER (*French*).
1828 A. A. M. REYNAUD (*French*).
1828 K. PETERS (*member of a Russian exp.*).
1829 ANONYMOUS (*prob. Span.*).
1829 CHR. Countess of DALHOUSIE (born BROWN) (*Scotch*).
1829 A. LLANOS (*Span.*).
1829 K. H. MERTENS (*German*).
c. 183 . W. W. WOOD (*Amer.*).
1830 J. BAUME (*French*).
1830 G. BENNETT (*Engl.*).
1830 A. H. HENRICI (*? Dutch*).
1830 CHR. FR. E. PRAETORIUS (*German, in Dutch employ*).
1830 G. W. WALKER (*Engl.*).
1831 P. W. KORTHALS (*Dutch*).
1831 CH. MILLETT (*? Brit.*).
1831 TH. OXLEY (*Engl.*).
1831 J. E. TEYSMANN (*Dutch*).
1832 J. B. WESTERHOUT (*Dutch*).
After 1832 Capt. MOXON (*? Brit.*).
c. 1833 P. VAN OORT (*Dutch*).
1833 C. A. A. VON HÜGEL (*German by birth, later Austrian*).
1833 TH. J. NEWBOLD (*Engl.*).
1834 A. DELESSERT (*French*).
Before 1835 PEITSCH (*German or Dutch*).
1835 J. M. M. CALLERY (*French*).
1835 L. HORNER (*Swiss*).
1835 F. W. JUNGHUHN (*German, in Dutch employ*).
Before 1836 J. VACHELL (*? Brit*).
1836 F. D. BENNETT (*Engl.*).
1836 D. H. R. VAN GELDER (*Dutch*).
1836 J. LOW (*? Brit.*).
1836 Sir W. NORRIS (*Engl.*).
c. 1837 G. T. LAY (*? Brit.*).
c. 1837 NAGEL (*? German*).
1838 E. A. FORSTEN (*Dutch*).
1838 G. J. A. KOLLMANN (*German, in Dutch employ*).
c. 1839 A. KINDER (DE CAMARECQ) (*?*).
1839 Sir J. BROOKE (*Engl.*).
1839 E. J. F. LE GUILLOU (*French*).
1839 J. B. HOMBRON (*French*).
1839 H. JACQUINOT (*French*).
1839 A. P. J. LIAUTAUD (*French*).
Before 1840 WINTER (*? German*).
1840 G. W. BARCLAY (*Scotch*).
1840 R. B. HINDS (*? Brit.*).
1840 J. PIEROT (*Dutch*).
1840 A. SINCLAIR (*Engl.*).

CHAPTER V. DESIDERATA FOR FUTURE EXPLORATION

Malaysia has in common with other tropical countries of enormous area an inexhaustible botanical wealth. It can never be expected to be 'combed' and searched to a degree comparable with most temperate countries. The very rich biosphere abounds in climbers, epiphytes and lofty trees, often beyond the reach of the collector. Rare species are found only by pure luck, and our knowledge will, therefore, remain fragmentary, even within half a century to come.[1]

All that we can expect in the present stage is an approximate picture of the overall structure of the Malaysian flora up to the standard of the Floras of British India and Ceylon. Hitherto there has been hardly any guide for the planning of future research, and several years ago it appeared to me that the haphazard way of exploration should be substituted by planned exploration (§ c–d, map 3).

For this purpose a survey of desiderata had to be made, and I came to the conclusion that there were 2 categories of desirable exploration, *viz:*

(1) *Routine extensive collecting work in relatively neglected islands or parts of those.*

(2) *Intensive local collecting in selected places.*

a. ROUTINE EXTENSIVE COLLECTING WORK

For routine extensive collecting work we must have an insight into the parts of Malaysia which have been relatively neglected by botanical exploration.

MERRILL[2] gave many years ago an idea which parts of the Philippine Islands had been explored up till 1915 by mapping places visited and routes taken by former explorers.

In the Malay Peninsula BURKILL[3] gave a rather accurate idea of the *collecting intensity* or *density* performed there.

This cyclopaedia furnishes an excellent opportunity for getting more accurate figures for the whole of Malaysia.

Mrs VAN STEENIS has disapproved of the idea of extracting the figures, which I have the privilege to use here, as she thinks most estimates are too rough, several factors obscuring a real insight into the exact density of collecting of the native flora. To a certain degree she is right, but on the other hand no better data are available than those which she has collected.

Among the obscuring factors three are prominent, *viz:*

(1) *All specimens are included.* This means that weeds and cultigens are included and occupy a variable and sometimes too prominent place in the calculation. If we imagine that in Boeroe Island, Moluccas, several collections had been made along the coast and near the harbour at Kajeli—a common port of call between West Malaysia and the Moluccas—the several collections might run into hundreds, even to a thousand, but these collections together would give us no idea about the character and composition of the native flora of Boeroe. One thousand numbers collected in the interior of Boeroe in primary vegetation would be of essentially more intrinsic value.

It is true, of course, that in *all* islands a certain percentage will consist of weeds, aliens, and common, wide-spread, secondary-growth species, but in this case the percentage in Boeroe might be very much higher than elsewhere.

Java is far ahead of other islands in exploration, but the figures include an enormous number of weeds collected in the cultivated areas which nowadays predominate in the island.

(2) *Local exploration.* In the second place some islands have been visited repeatedly only in one or a few sections, and the total collections are representative only for a small part of the surface occupied by the island. For instance in Ambon many collections have been made in the mostly secondary-growth areas of the southern Leytimor Peninsula, but the big forested surface of the northern Hitoe Peninsula is hardly explored, save for one trail up Mt Salhoetoe. Ambon collections, therefore, though fair in numbers, give only a poor idea about the native flora of the island. The same can be said of the southwestern part of Borneo where practically no collector has set foot.

(3) *Varying richness in flora of different islands.* In the survey no discrimination can be made according to the relative richness of the floras of different islands calculated *pro* 100 sq.km. Some islands are essentially richer and botanically more important than are others. Such variations can be discerned from the figures given elsewhere in this introduction on the distribution of the endemic genera (p. lxxi). Topography plays an important role in this respect: the more varied the conditions, specially in altitude and soil types, the richer the flora will be. Further there are statistical data pointing to the fact that the richness of small and of large islands are not immediately fit for comparison.

As there can be made no discrimination as to quality of material it is clear that the figures which will be obtained are far from presenting a real picture of the degree of exploration; they represent only a rough sketch.

For the calculations the density *pro* 100 sq.km is reached by dividing the total surface in hundreds of sq.km by the total amount of numbers approximately collected.

In this calculation of course only 'collecting numbers' have been taken into consideration, not separate 'specimens' or duplicate specimens, and no regard has been paid whether collections or parts of these are lost, such as those which were preserved at Berlin-Dahlem.

There is of course a *minimum area* for the size of a representative collection. It is clear that, for example, in unit III 7, P. Sempoe, a forested hilly

(1) Flora Malesiana I, 4, p. xii, lvi.
(2) Philip. J.Sc. 10, 1915, Bot. p. 159–169, map.
(3) Gard. Bull. Str. Settl. 4, 1927, p. 113–202.

island near the S. coast of Java covering *c.* 7 sq.km, a total of 7 collecting numbers would give a collecting density of 100. Collecting density 100 is high for a big island, but is entirely insufficient for a small island. A representative set for P. Sempoe should consist of at least 300 numbers.

On the other hand a coral island of low elevation and larger size is, generally, less rich in species, which belong mainly to the rather monotonous wide-spread beach flora. For such an island a set of 100 collecting numbers would be sufficient for a representative collection.

This idea of a minimum collection is difficult to enter into the calculations. In the survey I have indicated the desirability of further collecting work notwithstanding that the figures may, in small islands, point to the contrary.

It is of course difficult to make comparisons with other parts of the world on which similar large Floras have been written, as I do not know any comparable calculations of collecting density. However, if we consider the surface covered by the 'Flora of British India', which will be approximately of the order of 5.000.000 sq.km, the collecting density could not have been very much greater in that area at the time the Flora was written than is the average collecting density in Malaysia now, that is about 16 or 20 collecting numbers *pro* 100 sq.km, notwithstanding that only about 2.000 new species or new records have been added to the total of *c.* 14.000 since the Indian Flora was written. A conformable percentage for the Flora Malesiana would be most flattering to its relative completeness.

The division of the Archipelago used here is the artificial one figured on map 1 facing p. c and enumerated on pp. lxxvi–lxxviii. This division has no other importance than that of convenience. It is unfortunate that some of the units distinguished are rather large, and that figures for some big islands, *e.g.* Java, Sumatra, and Borneo, cannot be specified for smaller districts.

b. SURVEY OF BOTANICAL COLLECTING DENSITY IN MALAYSIA[1] (*map 2*)

ISLANDS (or ISLAND GROUPS)	*Surface in sq.km*	*Numbers collected*	*Density index*[2]
I. SUMATRA & NEIGHBOURING ISLANDS			
1. Atjeh,[3] incl. Gajoe & Alas Lands	53.292	5.300	10
2. Tapanoeli Residency	39.077	6.500	17
3. West Coast Residency	49.778	18.750	38
4. East Coast Residency, incl. Siak, Bengkalis, P. Berhala, *&c.*	94.583	22.000	23
5. Indragiri Residency	20.846	2.200	10
6. Djambi Residency	44.923	1.000	2
7. Benkoelen (incl. P. Tikoes = Rat Island)	26.249	5.000	4
8. Palembang Residency	86.356	6.900	8
9. Lampong Districts	28.783	2.600	9
10. P. Weh, P. Bras, *&c.*	219	450	225
11. P. Simaloer, Lasia & Babi	1.845	1.900	105
12. Banjak Islands	318	—	0
13. Nias & Hinako Islands	4.064	250	6
14. P. Morsala	74	250	390
15. Batoe Islands *&c.*	1.201	500	42
16. Mentawai Islands: Siberoet & Sipo(e)ra	3.900	1.150	29
17. Pagai (or Nassau) **Islands**	1.330	200	15
18. Enggano *&c.*	457	750	163
19. Islands in Sunda Straits: Krakatau group *&c.* (not those near Java)	127	900	692
20. Banka, P. Lepar, P. Liat	11.941	7.000	59
21. Billiton, P. Mendanau, *&c.*	4.833	800	17
22. Riouw-Lingga Archipelago	5.316	3.500	66
Total:	479.513	87.900	18

(1) Many figures for the areas of the units could not be traced in literature by Dr R. W. VAN BEMMELEN and were obtained through the kind help of Mr F. J. ORMELING and Mr H. T. H. VERSTAPPEN of the Geographical Institute, Topographical Service, Batavia. One of the main sources has been: '*Tabel van de resultaten eener, met behulp van den planimeter, verrichte meting van den vlakken inhoud der Nederlandsche bezittingen in Oost-Indië*'. Batavia, Landsdrukkerij, 1895.

(2) This is the average of numbers collected *pro* 100 sq.km.

(3) Units which need further exploration have been printed in bold type.

ISLANDS (or ISLAND GROUPS)	*Surface in sq.km*	*Numbers collected*	*Density index*[2]
II. MALAY PENINSULA[1]			
1. **Perlis**[3]	803	1.400	175
2. **Kedah**	9.428	11.200	119
3. Wellesley	750	1.250	167
4. Perak	20.670	39.200	189
5. Dindings			
6. **Kelantan**	14.892	10.230	69
7. **Trengganu**	13.079	8.125	62
8. Pahang	35.794	48.950	137
9. Selangor	8.184	10.700	130
10. Negri Sembilan	6.682	9.250	138
11. Malacca	1.657	7.150	420
12. Johore	18.985	25.050	132
13. Langkawi Islands	± 650	2.200	338
14. Penang	285	6.850	2.446
15. Singapore Island *&c.*	570	7.400	1.291
16. P. Tioman *&c.*	± 175	2.100	1.235
Total:	132.604	191.055	145
III. JAVA & NEIGHBOURING ISLANDS (for Krakatau see I, 19)			
1. West Java	39.830	132.000	332
2. Central Java	41.492	38.000	92
3. East Java	44.301	62.000	140
4. **Islands near SW. Bantam** (Prinsen, Meeuwen & Trouwers Island)	133	300	230
5. **Christmas Island**	155	600	400
6. Noesa Kambangan	121	2.500	2.083
7. **P. Sempoe**	7	42	600
8. **Noesa Baroeng**	56	200	357
9. Kangean Archipelago	667	4.350	649
10. Sapoedi Islands	159	80	50
11. Madoera & neighbouring islets	5.298	3.700	70
12. P. Bawean	199	800	400
13. Karimoendjawa Archipelago	43	650	1.625
14. Islands in the Bay of Batavia, incl. 1000 Islands	5	2.000	40.000
15. Islands in the Bay of Bantam (P. Merak & Babi)	8	300	3.750
Total:	132.474	247.522	187

(1) The figures for the Malay Peninsula are very rough approximations except the total which is rather accurate. Many big series (those of the Conservator of Forests, Singapore Field series, and RIDLEY's collections) have been made throughout the Peninsula, and their specification into the provinces had to be done in a rough way by estimation. The figures for the areas were obtained by the courtesy of the Chief Surveyor, Singapore, through the kind intermediary of Mr M. R. HENDERSON.

(2) This is the average of numbers collected *pro* 100 sq.km.

(3) Units which are in need of further exploration have been printed in bold type.

ISLANDS (or ISLAND GROUPS)		*Surface in sq.km*	*Numbers collected*	*Density index*
IV. LESSER SUNDA ISLANDS				
1. Bali & Noesa Penida		5.770	3.350	58
2. Lombok		4.715	3.650	74
3. Soembawa & adjacent islets		15.450	2.750	18
4. Soemba		11.150	1.500	14
5. Flores, P. Komodo, P. Papagaran besar, P. Badjo		±15.000	2.600	17
6. P. Sawoe		440	125	28
7. P. Roti, P. Semaoe, *&c.*		1.630	200	12
8. Solor, Adonara & Lomblen		2.015	125	6
9. Alor & Pantar		2.885	1.450	50
10. West Timor (Dutch part incl. Portug. enclave)		14.710	4.650	32
11. East Timor (Portuguese part)		13.380	1.575	12
12. Wetar	Zuidwester Islands	3.500	800	23
13. Roma & Kisar	Zuidwester Islands	345	125	36
14. Leti Islands	Zuidwester Islands	755	50	7
15. Damar Islands	Zuidwester Islands	285	50	18
16. Babar Islands	Zuidooster Islands	775	50	6
17. Tanimbar Islands (Timor laoet)	Zuidooster Islands	5.820	1.500	26
	Total:	98.625	24.545	25
V. BORNEO & NEIGHBOURING ISLANDS				
1. Northwest Borneo: Sarawak & Brunei		±117.815	24.800	21
2. West Borneo		146.360	10.900	7
3. South & Southeast Borneo		±194.730	11.100	5
4. East & Northeast Borneo (from Balikpapan to the N)		±194.730	11.800	6
5. British North Borneo		± 78.545	27.250	35
6. Balambangan, Banguey & Mangsi Islands		± 600	700	116
7. Labuan		90	2.300	2.500
8. Anambas & Natoena Islands		2.480	1.550	62
9. Tambelan Islands		70	100	143
10. Karimata Islands		210	250	119
11. Salemboe & Laoet ketjil Islands		± 75	10	13
12. P. Laoet		2.340	275	12
13. P. Noenoekan, Tarakan, Mandoel, *&c.*		1.130	525	46
	Total:	739.175	91.550	12
VI. PHILIPPINE ISLANDS[1]				
1. Balabac Island		± 370	590	159
2. Palawan, Dumaran, *&c.*		11.655	7.100	61
3. Calamianes (Culion, Busuanga, Calamian)		± 1.535	890	59
4. Mindoro		9.815	2.500	26
5. Batanes Islands		± 225	1.500	682
6. Babuyan Islands		± 480	1.500	313
7. Luzon		105.705	104.960	99
8. Polillo		690	1.600	232
9. Marinduque		± 850	700	82
10. Catanduanes		1.460	700	50
11. Sibuyan		± 1.135	2.800	255
12. Masbate & Ticao		± 3.390	1.400	41
13. Samar		13.270	1.700	13
14. Leyte & Biliran		7.250	11.800	164
15. Bohol		3.975	1.200	30
16. Cebu		4.700	2.800	60
17. Negros & Siquijor Island		12.700	2.100	17
18. Panay, Guimaras and Cuyo		11.520	2.200	19
19. Cagayan group		± 45	700	1.556
20. Cagayan Sulu group		± 95	550	579
21. Sulu Islands		± 1.935	2.500	132
22. Basilan & Malamaui Island		± 1.250	2.300	184
23. Mindanao, Dinagat, Siargao Island, *&c.*		95.585	26.000	27
	Total:	290.235	180.090	62

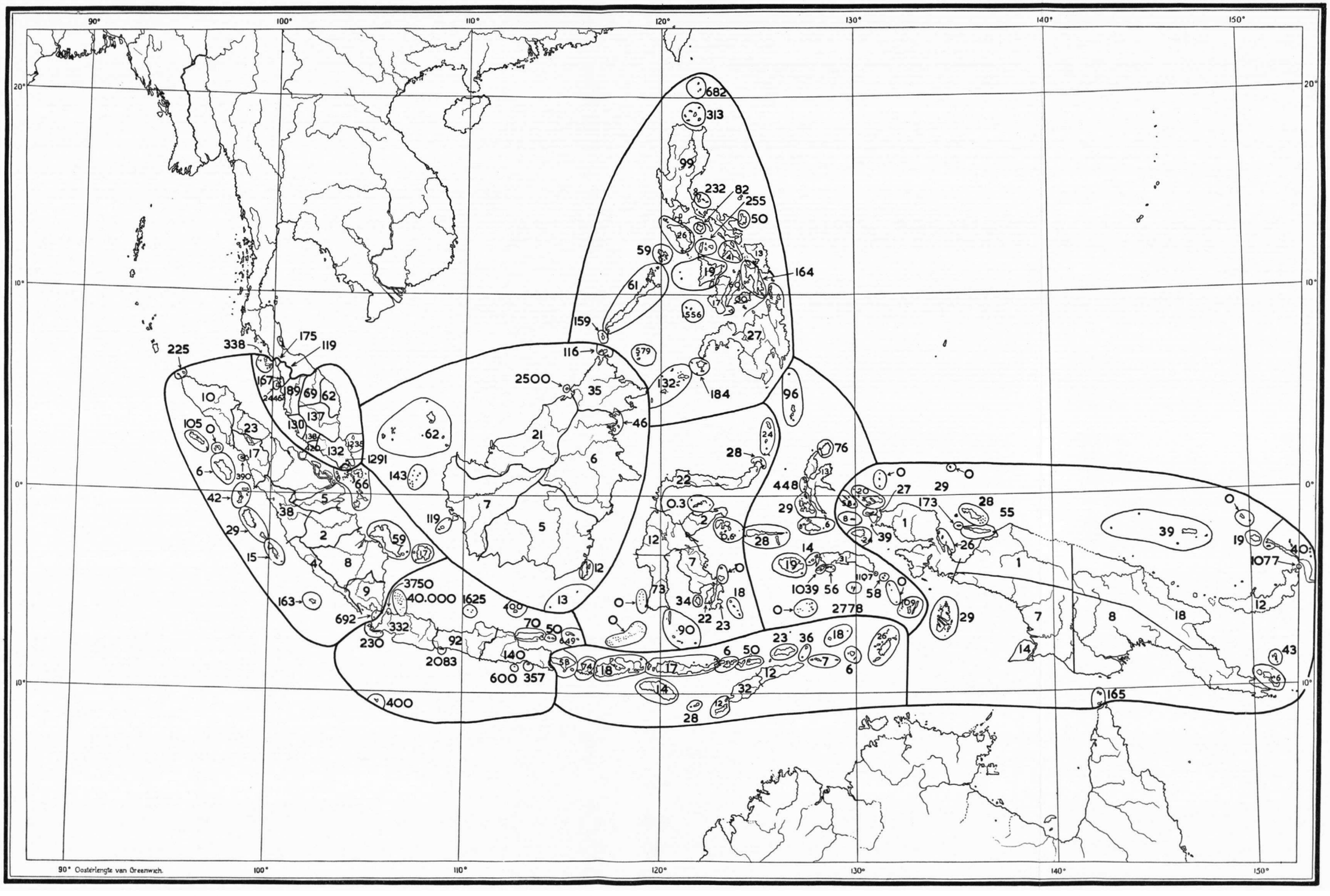
(1) It is difficult for me to indicate the units in the Philippines which deserve to be explored extensively.

ISLANDS (or ISLAND GROUPS)	*Surface in sq.km*	*Numbers collected*	*Density index*[2]
VII. CELEBES & NEIGHBOURING ISLANDS			
1. North Peninsula[3] **(incl. Minahassa)**	± 39.675	8.580	22
2. Central Celebes	± 48.150	5.975	12
3. Southwest Peninsula	± 16.200	11.800	73
4. Southeast Peninsula	± 30.600	2.250	7
5. Banggai or East Peninsula	± 32.800	600	2
6. Spermonde Archipelago	45	—	0
7. Paternoster and Postiljon Islands	90	—	0
8. Saleijer group (incl. P. Tanahdjampea *&c.*)	1.050	950	90
9. Kabaëna	865	300	34
10. P. Moena	2.960	650	22
11. P. Boeton	4.479	1.050	23
12. Toekangbesi Islands & P. Binongko	445	80	18
13. P. Wowoni	690	—	0
14. Banggai Archipelago	3.080	20	0.6
15. Schildpad Islands	740	25	0.3
16. P. Lembeh, Talise, *&c.* (near Minahassa)	180	50	28
17. Sangihe Islands	830	200	24
Total:	182.870	32.530	18
VIII. MOLUCCAS			
1. Talaud and Nanoesa Islands, Miangas	1.215	1.150	96
2. P. Morotai & P. Raoe	2.060	1.600	76
3. Halmaheira & P. Moeor	19.090	2.400	13
4. P. Ternate, Tidore & Makian	290	1.300	448
5. Batjan, Kasiroeta *&c.* and Kajoa Islands	3.400	1.000	29
6. Obi Islands, P. Pisang, *&c.*	2.760	175	6
7. Soela Islands	4.840	1.375	28
8. Boeroe	9.320	1.800	19
9. Islands W of Ceram	355	50	14
10. Ceram	17.440	5.350	31
11. Ambon[1]	760	7.900	1.039
12. Oeliassers (P. Saparoea, Haroekoe, Noesa Laoet, *&c.*)	315	175	56
13. Lucipara Islands	5	—	0
14. Banda group	45	1.250	2.778
15. P. Gèsèr (Ceram laoet)	30	350	1.107
16. Gorong Islands	130	75	58
17. Watoebela Islands	65	—	0
18. Kai Islands	1.455	1.575	109
Total:	63.575	27.525	43

(1) Exploration is needed for the Hitoe Peninsula, Leytimor being sufficiently explored.
(2) This is the average of numbers collected *pro* 100 sq.km.
(3) Units which are in need of further exploration have been printed in bold type.

ISLANDS (or ISLAND GROUPS)	*Surface in sq.km*	*Numbers collected*	*Density index*[1]
IX. NEW GUINEA AND NEIGHBOURING ISLANDS (incl. Bismarck Archipelago, but not the Louisiades and the Solomons).			
1. Vogelkop[2] (= Dutch West New Guinea)	± 932.000	12.550	1
2. Dutch North New Guinea	±1.385.000	15.600	1
3. Dutch South New Guinea	± 165.000	11.350	7
4. Papua (Territory of –)	234.490	18.300	8
5. Territory of British New Guinea (= former Kaiser-Wilhelmsland)	± 180.500	32.150	18
6. D'Entrecasteaux Islands (incl. Fergusson, Goodenough and Normanby Island)	± 3.150	200	6
7. Trobriand Islands (Kiriwina *&c.*)	± 460	200	43
8. New Britain (= former Neu Pommern)	± 33.700	3.950	12
9. Duke of York Island (Neu Lauenburg) & Mioko	65	700	1.077
10. New Ireland (= former Neu Mecklenburg), Nusa Island, Tanga Islands, *&c.*	7.800	3.100	40
11. New Hanover (= Neu Hannover)	1.600	300	19
12. St Matthias group, Tench Island	550	—	0
13. Admiralty, Purdy & Hermit Islands, and Matty (Wuvulu)	2.050	800	39
14. Schouten & Padaido Islands	3.390	950	28
15. P. Jap(p)en and Koeroedoe	2.400	1.325	55
16. Noemfoor	260	75	29
17. Mios Noem	135	225	173
18. Mapia (or St Davids Island)	50	—	0
19. Islands near the coast in the Geelvink Bay	390	100	26
20. Ajoe Islands (incl. P. Pani or Asia Island)	± 30	—	0
21. P. Waigeo(e) *&c.*	3.580	700	20
22. P. Gebe, Fau and Gag	300	175	58
23. P. Kofiau *&c.*	300	25	8
24. Batanta group	470	125	27
25. Salawatti	325	125	39
26. Misoöl group	1.875	450	24
27. Aroe Islands	8.255	2.400	29
28. Frederik Hendrik Island	11.530	75	0.6
29. Islets in Torres Strait: Thursday Island, *&c.*	± 500	825	165
Total:	2.980.155	106.775	3.6
RECAPITULATION:			
1. Sumatra	479.513	87.900	18
2. Malay Peninsula	132.604	191.055	145
3. Java	132.474	247.522	187
4. Lesser Sunda Islands	98.625	24.545	25
5. Borneo	739.175	91.550	12
6. Philippine Islands	290.235	180.090	62
7. Celebes	182.870	32.530	18
8. Moluccas	63.575	27.525	43
9. New Guinea	2.980.155	106.775	3.6
Approximate grand total:	5.099.226	989.492	19

(1) This is the average of numbers collected *pro* 100 sq.km.
(2) Units which are in need of further exploration have been printed in bold type.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c. OBJECTIVES FOR FUTURE EXTENSIVE COLLECTING WORK *map 3)*

In the survey the names of those units which need extensive exploration have been printed in bold type. The urgency can easily be derived from their low density index representing the number of specimens collected *pro* 100 sq.km. The ideal will be at least 100 numbers *pro* 100 sq.km on the average over the whole of Malaysia, but this will not be realized within a century to come. A glance at the survey indicates clearly which objectives are the most urgent and which have less claims to priority.

(1) In **Sumatra** there are some former residencies, *e.g.* Atjeh, Indragiri, Djambi, Palembang and several islands or island groups, *e.g. P. Weh* (Sabang) and *P. Bras, Banjak Islands, Nias, Pagai* (or Nassau) *Islands*, in which no or hardly any representative collection has been made.[1]

(2) In the **Malay Peninsula** some districts have been neglected hitherto, *e.g. Perlis, Kedah, Wellesley, Dindings, Kelantan, Trengganu*, but relatively speaking the Malay Peninsular flora is fairly well represented by collections.

(3) In **Java** collecting activity ranges foremost within Malaysia though it must not be forgotten that a big percentage of the collections has not been made in primary vegetation. Central and East Java are distinctly behind as compared with West Java. In Java the lowland and hill flora of the most eastern and the most western parts need to be further explored, that is some forested districts of *SW. Bantam* in West Java, some forested parts in *South Priangan*, and further the whole area of *S. Java from Popoh Bay eastward including the large Blambangan or Poerwo Peninsula.* The latter is unexplored save for some numbers gathered by KOORDERS.

The flora of the islands adjacent to Java has been neglected as far as some larger islands on the ocean side are concerned: *e.g. islands near SW. Bantam, Christmas Island, Noesa Kambangan, P. Sempoe* and *Noesa Baroeng.*

(4) In the **Lesser Sunda Islands** some islands have been less well explored than others *e.g. Soemba* and *Soembawa, P. Sawoe, P. Roti, Semaoe, Solor, Adonara, Lomblen, Portuguese Timor*, and the groups E and N of that island *viz Wetar, Roma, Kisar, Leti, Damar* and *Babar Islands*, which are botanically practically unknown, both floristically and as to their vegetation.

(5) In **Borneo** the British parts have been best explored. *The great richness of the Bornean flora will make every expedition into the interior worthwhile.* The exploration of the forest-clad, extensive mountainous central ranges will be expensive and difficult, and will require a great deal of planning and preparation, with prior aerial survey.

Some islands adjacent to Borneo deserve attention, *e.g.* the botanically practically unknown *Tambelan Islands, Karimata, Salemboe, P. Laoet*, and *Noenoekan.* In the latter islands the arboreous flora has only received reconnaissance.

(6) The **Philippine Islands** have been relatively well explored. I have unfortunately little information about desiderata.

In 1915[2] MERRILL gave a survey which showed that already at that time, exploration had been attacking various districts distributed over the whole archipelago; since then big additional collections have been made, but a revised survey was never published. The figures point to a relatively advanced state of exploration.

(7) **Celebes and neighbouring islands** need careful consideration for further collecting work. Of the main land the *central part*, the *neck*, the *E. Peninsula* (or *Banggai Peninsula*), and the *SE. Peninsula* have been badly neglected hitherto. Of the adjacent islands there are some which deserve great attention *e.g. P. Kabaëna* (with a mountain of 1500 m), *Boeton, Wowoni* and the *Banggai Archipelago;* some islands near NE. Celebes and *Sangihe* are not or insufficiently explored.

(8) Turning our attention to the **Moluccas** some figures in the survey appear rather fictitious *e.g.* those of Ambon and Banda. Banda is practically deforested and the plants known from there are mostly worthless weeds. Ambon seems to be well-explored but the collections refer practically only to the deforested southern peninsula, whereas the forested northern or *Hitoe Peninsula* is practically unknown. The Moluccas in general are poorly explored and appear to be in the same stage as New Guinea, specially *Boeroe, Halmaheira, Batjan, Obi, Lucipara Islands, P. Gèsèr, Gorong Islands, Watoebela Islands.*

(9) **New Guinea** is probably the richest plant reservoir of the whole of Malaysia and though rather numerous expeditions have penetrated in several places into the interior, big areas are unexplored, and there will be a continuous stream of novelties in the coming decades. It is specially the middle mountain forests which yield an enormous number of new species. Big sections of the interior are still scarcely known or entirely unknown, specially in West New Guinea, *e.g. the western part of the Vogelkop* (Bird's Head), the *SW. Peninsula*, the *Carstensz* massive, *etc.* Big expeditions are highly desirable. Besides, many adjacent islands, some of considerable extent, are botanically unknown, *e.g. Noemfoor, Mios Noem, Mapia, islands in the Geelvink Bay, Ajoe Islands, Waigeo(e), P. Gebe, P. Kofiau, Batanta, Salawatti, Misoöl, Frederik Hendrik Island, St Matthias group, New*

(1) Collections in P. Weh hitherto consist mostly of common harbour weeds.

(2) Philip. Journ. Sci. C. Bot. 10, 1915, p. 159–169, map.

Hanover, Duke of York Island, Trobriand Islands, D'Entrecasteaux Islands. Specially the latter islands deserve attention as the family of *Dipterocarpaceae* seems to reach in these islands its easternmost localities.

I expect that only through many planned and co-ordinated explorations can the Papuasian unit be explored within the coming 50 years to a collecting density comparable with that of the present stage of the Philippine Islands.

With regard to the richness and botanical importance of the region, botanists of the future generations must stimulate this research, for it deserves a high degree of priority. Phytogeographically New Guinea is a keystone in Pacific botany.

d. OBJECTIVES FOR FUTURE INTENSIVE LOCAL COLLECTING WORK IN SELECTED PLACES (*map 3*)

Intensive local collecting in selected places is a more refined aim or stage of botanical exploration as compared with extensive exploration. It emanates from the general experience that many plants show preference for a limited number of habitats, and some are even particular and exhibit a narrow range of tolerance.

We do not know all factors governing plant distribution, but the picture resulting from all these factors is rather well shown by the plant-geographical analysis. I will illustrate this with some examples representing 4 categories:

(1) If we had at our disposal 2000 numbers representing different species from West Java, from habitats ranging from 1–3000 m, we might consider this as a fair representation of the whole of the Javanese flora. The conclusion would be wrong, as some thousand other species of the monsoon-forest vegetation type, which are limited to the subhumid or semi-arid (periodically dry and wet) areas of Central and East Java, would be practically absent from this collection. The exclusive occurrence of these plants is clearly derived from the *climatic conditions*, which, in the everwet areas of West Java, are widely different from those in the seasonal climate of many parts of Central and East Java.

(2) Another example: if we made a big collection of forest plants including trees, shrubs and herbs in the great forests of Borneo, and we used boats for transport, we would have a good chance of missing other vegetation types, *e.g.* the heath forest of the sandy soils (padangs) which are distributed not rarely in Borneo, but are mostly of local occurrence and occupy a limited space. This heath forest, consisting of dwarf trees and shrubs, contains numerous elements which fail to occur in the tall forest.

One can dispute what is the underlying factor for the occurrence of heath forest, geological or edaphical, since the quartz sand of the padangs is derived from sandstone; most padangs are poor remnants of thick sandstone sheets which formerly covered a big surface of Bornean soil. Let us assume for the present that this is an example of *edaphic factors* determining the occurrence of a deviating vegetation type.

(3) A third example can more clearly demonstrate the *geological factor*. In Celebes there are two regions which are of volcanic origin, *viz* the extreme SW. corner and the extreme NE. corner. The mountain flora of these massives does not show much speciality in botanical affinity other than that expected from distance *versus* proximity, *viz* the SW. peninsula with Java and Lesser Sunda Islands mountain flora, and the NE. corner with its own surrounding regions. However, the central mountains of Celebes, consisting of old igneous and sedimentary rocks, show an entirely different picture; characteristic elements are found there which point to Mt Kinabalu in the W and to New Guinea in the E. In this W–E directed botanical affinity Central Celebes, including the Latimodjong Range which is situated only a few hundred kilometres from the S. volcano (Mt Bonthain), is a stepping stone belonging to a flora which in Malaysia has hitherto been found only on igneous rock. This flora is spread from New Zealand and Tasmania over SE. Australia, Papua, the Moluccas, Philippines, and Celebes to Mt Kinabalu and the Malay Peninsula and can be traced as far as northernmost Sumatra where several typical elements popularly speaking 'cling' to this type of rock (*Oreobolus, Centrolepis, Monostachya, Patersonia, etc.*).

Thus gneiss and serpentine rocks and the soils which are derived from them have sometimes a special flora in the Moluccas. The limestone flora can be arranged under this heading as HENDERSON has shown in the Malay Peninsula. All these occurrences seem 'geological.'

(4) A fourth category of localities which cause a locally different flora can be derived from the *topography of the country:* swift running streams have plants (rheophytes) which do not occur above flood mark and can be exceedingly local; swamps can be hidden in the forest and give a fresh supply of records not noted in the forest; waterfalls, lofty peaks, ridges, cliffs, landslides, solfatara, *etc.* have their own local floras.

The four factors mentioned above, namely *climatic, edaphic, geological,* and *topographic,* cause the plant cover to represent a mosaic in which the species are crowded into their special ecological niches, a mosaic of different vegetation types shifted again by the activity of man in many places.

Besides, there may be places which, from the phytogeographical standpoint, are more promising than others. Various types of distribution

have meeting points, or 'junctions', where sets of area contours are either in close proximity or intersect. These junctions, thresholds, nodal points, or whatever they may be called, obviously represent places which are of special epiontological importance. They may coincide with former or present barriers to plant distribution, or with borderlines of ancient plant refuges. Invasion tracks stand in close connexion with former or present dispersal opportunity, and the manifestation of the western, northern and eastern dispersal pressure has been canalized in accordance with the changing conditions of the distribution of land and sea (palaeogeography) of the Malaysian archipelago in geological time. The same holds for the internal dispersal pressure of autochthonous Malaysian elements, which have used the same ways and opportunities for escape or emigration in the opposite direction to the inward flow. It is clear that knowledge of plant geography may add considerably to planned exploration. The spotting of localities which are promising botanically is therefore connected with an insight into the distribution of these factors on Malaysian soil, and the field botanist planning expeditions should carefully take into consideration promising places, and give these priority, because intensive collecting will yield a relative high percentage of novelties and important new records in contradistinction to extensive routine collecting work. He should gather information about 'aberrant places' and study pedological, geographical and geological maps, and, once on the spot, add information obtained locally.

Every expedition and trip is of course limited by time, money and opportunity, but the botanical explorer should never fail to visit as many different habitats as possible within the area covered by the trip.[1] It is advisable, as soon as a certain habitat ceases to yield many fresh species to shift attention, or even camp, to another place. Again, it is infinitely more fruitful to have areas locally explored by an initiated field botanist with botanical field knowledge than by a person chosen at random, who will never be so ambitious as the former.

Experience teaches further that single interesting species collected by chance can often give a valuable hint to an interesting locality. Rare and interesting plants never come alone, on account of the fact that plants grow together and belong together in plant societies. The exploration of the non-volcanic Ceram peaks came more or less by surprise through a small chance collection made by the ornithologist Dr E. STRESEMANN in 1912, in which scraps of *Myosotis*, *Euphrasia*, *Epilobium*, *etc.* were represented, types which are exceedingly scarce in Malaysia. EYMA's collection in Ceram later proved the abundance of evidence in favour of the thesis. A similar discovery arose from a chance remark on the nature of the mountain scenery in the extreme N. Sumatra by the prominent topographer A. O. CLEMENTS, which indicated that these highlands consist for their major part of non-volcanic rock as opposed to the information published on all maps at that time. That remark made it at once clear that mountain heaths above 3000 m alt. on non-volcanic massives should have a highly interesting flora. And this proved true.

It must be admitted that the viewpoints and outlook developed above only gradually appeared to me in true significance during the thirties, and I regret that they have not always been the guiding principle for my own trips. Age and opportunity will not give me much chance to perform many more large expeditions, though I will, for ten years to come, always be willing to make a trip, provided that it will be directed by the guiding principles discussed above.

Some desiderata for desired future exploration may conclude this discussion:

Sumatra.

(1) *P. Weh.* On P. Weh (with Sabang as main harbour), a small islet at the N. corner of Sumatra, it is said that solfatara occur at sealevel. It would be very interesting to know what plants in the lowland act as solfatara plants.

(2) *Gajo & Alas Lands.* Ascent of some more mountains consisting of non-volcanic rock in the area S of Takengon, W of Blang Kedjeren and Kota Tjané, *e.g. Mt Bandahara, Mt Peperkison, Mt Abong Abong*, and many unnamed and unmapped peaks and ridges, all reaching over 2500 m alt.

(2*a*) *Ascent of Mt Kliötön*, on the S. border of Lake Tawar (Lake of Takengon) which is said to be a limestone mountain, which would be rather unique for its altitude of 2800 m.

Malay Peninsula.

(3) *G. Tahan & G. Kerbau.* Both are non-volcanic and though only attaining about 2400 m should be searched in the summit zone (in ravines on rocks and swampy depressions) for sedges, grasses and small herbs, specially focussing attention on cushion plants known from Mt Kinabalu and Mt Losir. These small plants easily escape attention.

(4) *Perlis & Kedah.* Intensive collecting and a good report are wanted on the heaths and grasslands adjoining the Setul heaths over the Siamese border. Special attention should be paid to fire-resisting woody plants, geophytes, ephemeral herbs, grasses, sedges and herbaceous plants in general. Driest part in the peninsula.

Java.

(5) *Christmas Island.* In view of its isolated position Christmas Island with its steep limestone rocks on igneous foundation might yield peculiar plants. Curiously few endemic species have been described from this oceanic islet.

(1) An exception is local research in primary, mixed, non-inundated forest in which there is no end of novelties in a sometimes very restricted seemingly monotonous area.

(6) *South Kediri & South Malang, extreme SE. Java.* The forests, mostly on limestone rock soils under partly seasonal climatic conditions in South Malang from Popoh eastward along the S. coast of Java including the Watangan Range (low alt.) to Pasirian have yielded already some rare plants to ZOLLINGER (*Vernonia zollingeriana, Gynura carnosula*). A local exploration of this area is promising.

(7) *P. Sempoe, SE. Java.* Some of these peculiar plants are found also on the island P. Sempoe; this island is botanical *terra incognita*, and adjoins the latter area.

(8) *Djember area, SE. Java.* Seasonal swamp forests in the area E of Loemadjang, S of Mt Jang, and W of Mt Idjen are highly important; HORSFIELD detected in such forest the monotypic genus *Tetradia* which has been found there, since that time, only once.

(9) *Southwest & southeast of Djember, SE. Java.* From Poeger with Mt Watangan eastward a similar area as under *nos* 5–6 is found; it contains one of the easternmost localities of the genus *Rafflesia*. The hills consist mostly of limestone rock under seasonal climatic conditions.

Lesser Sunda Islands.

(10) *Mt Fatamailau, Port. Timor*, is the highest mountain of Timor consisting of non-volcanic, probably limestone rock; my thesis that the Lesser Sunda Islands flora consists mainly of Malaysian types without an appreciable additional eastern element should be corroborated. A first reconnaissance by Mr R. CINATTI revealed a highly interesting *Eucalyptus* forest on this summit.

Borneo.

(11) *SE. Borneo savannahs.* Some very rare grasses have been collected by chance in extensive grassy areas in the SE. corner of Borneo which is the driest part of the island. A botanical exploration of this area is needed.

Philippines.

(12) *Mt Pulog, NW. Luzon.* It seems that botanical collecting in the summit area of this peak, which forms part of a big range in the Benguet Province, has been too scarce. *Potentilla &c.* have been described only in passing, from collections made subsequent to MERRILL's 'Enumeration'. Both SE. elements (Papuan affinity) and N. elements (Formosan–Japano–Chinese elements) can be expected from this highest massive in the Philippines, specially in the heaths and grassland areas.

Celebes.

(13) *Limestone rocks Maros-Pangkadjene, SW. Celebes.*

TEYSMANN found some interesting plants in this calcareous district of extensive raised limestone cliffs, *e.g. Aponogeton loriae* (aquatic) and many other interesting plants from edaphically dry localities.

Moluccas.

(14) *Kaoe Palatmada, W. Boeroe*, 2429 m alt. Not a single plant is known from this highest mountain of Boeroe, though it is a stepping-stone between the mountain floras of Ceram and Central Celebes.

(15) *Steppes of NE. Boeroe.* There are extensive grasslands and savannahs; already several rare grasses have been recorded from a chance collection made in the *Melaleuca* savannahs.

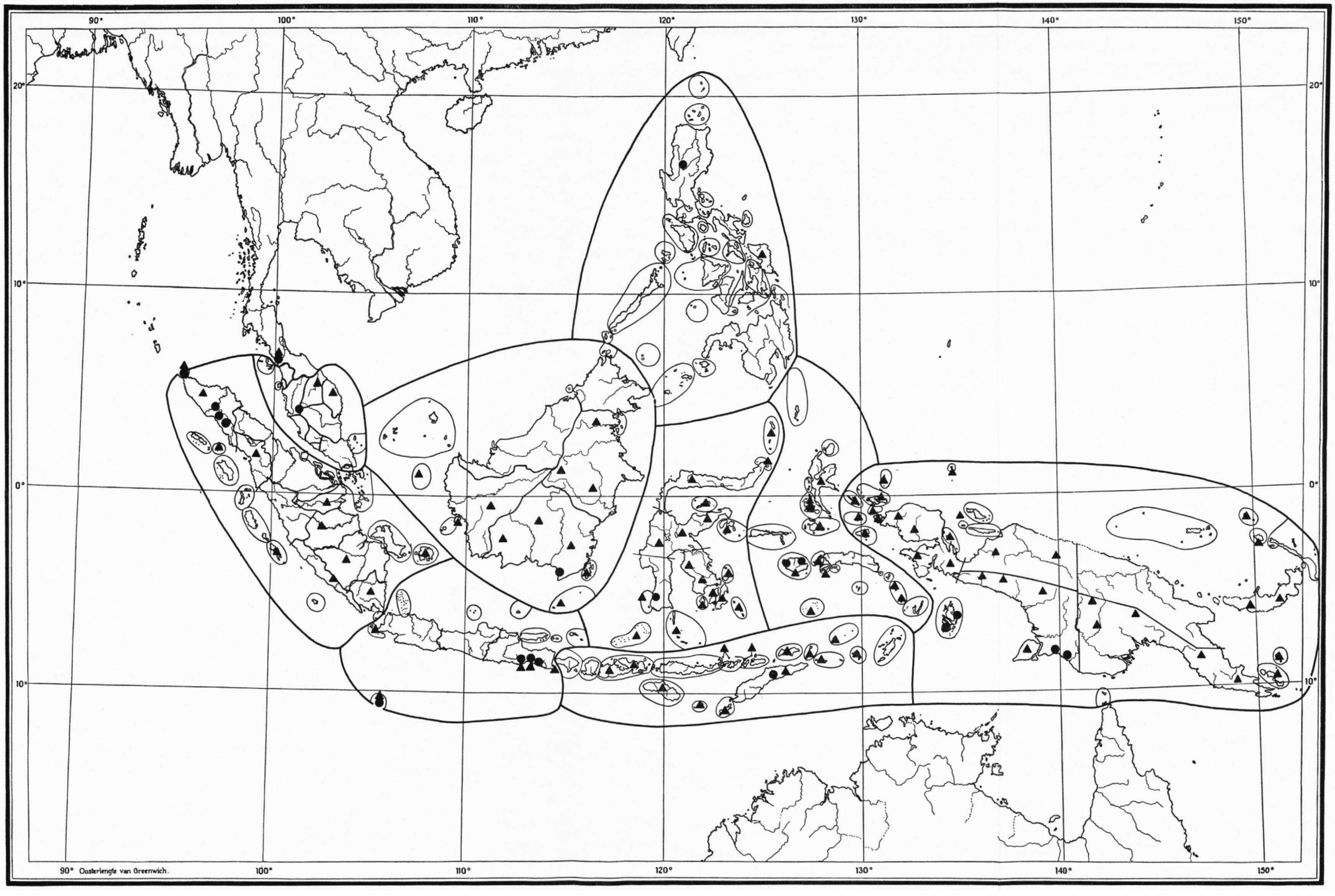
(16) *Mt Sibela in S. Batjan, c.* 2100 m alt. On the summit of this mountain there is the single record of *Libocedrus* outside New Guinea; only sterile material has been collected; the summit ridge may contain an interesting Papuan flora.

New Guinea.

(17) *Trangan and Mariri, Aroe Islands.* BECCARI, and recently BUWALDA have found a remarkable savannah vegetation in Trangan, southernmost island of the Aroe group; dozens of remarkable plants mostly known from N. Australia have been collected, and many more can be expected, *e.g.* in *Myrtaceae, Proteaceae, etc.* From Mariri, islets E of Aroe, *Eucalyptus* has been recorded in non-botanical literature; similar savannahs can be expected there.

(18) *Okaba-Merauke savannahs and flats.* In Southern Dutch New Guinea a savannah flora similar to that of the Moresby, Fly, and Wassi Kussa areas occurs. During the wet season these flats are partly inundated and part of the year they are dry and dusty. Savannahs of phyllodine *Acacia, Proteaceae, Myrtaceae, etc.* occur. Australian ephemerals and geophytes! On salty flats near the sea halophile plants occur.

C. G. G. J. VAN STEENIS



Map 3. Indicating localities for future botanical exploration, the triangles those for extensive field work (representative collections), the dots for intensive field work.

CHAPTER VI. IMPORTANT SOURCES OF INFORMATION USED IN COMPILING THE LIST OF COLLECTORS

a. SURVEY OF SOURCES GIVING DATA ON COLLECTORS, COLLECTIONS AND TRAVELS

(geographically and chronologically arranged)

Only sources which yield data on *several* collectors are enumerated below. A travel account of a collector which deals exclusively with his own journey will be found under his name in the Cyclopaedia. When literature on a special part of Malaysia is required, it will be found by consulting Chapt. IVa and accordingly the entries in the Cyclopaedia proper of the names mentioned.

General

1. *Published sources*

SÉGUIER, J. F., *Bibliotheca botanica.* 2nd ed., Lugd. Bat. 1760.
List of botanists and their publications.

Histoire générale des voyages, ou nouvelle collection de toutes les relations de voyages par mer et par terre, qui ont été publiées jusqu'à présent dans les différentes langues de toutes les nations connues. La Haye 1763, revised ed. vol. 17.
With maps, figures of animals and plants, *etc.*

HALLER, A. VON, *Bibliotheca botanica etc.* Tiguri 1771–72, 2 vols.
Contains data on early botanists and collectors.

HAWKESWORTH, J., *Account of the voyages for making discoveries in the Southern Hemisphere, etc.* 1773.—French transl., Amsterdam and Rotterdam 1774, 4 vols.
Dealing with the voyages of BYRON, CARTERET, WALLIS, and with COOK's 1st voyage.

SPRENGEL, K., *Historia rei herbariae.* Amstelodami (Leipzig) 1807–08, 2 vols.
A historical work containing data on many early collectors.

SPRENGEL, K., *Geschichte der Botanik.* Altenburg & Leipzig, 1817–18, 2 vols.
cf. especially vol. 2, p. 67–79, 190, 328–332, 341–344.

LASÈGUE, A., *Musée botanique de M. Benjamin Delessert.* Notices sur les collections de plantes et la bibliothèque qui le composent; contenant en outre des documents sur les principaux herbiers d'Europe et l'exposé des voyages entrepris dans l'intérêt de la Botanique. Paris 1845.
An excellent work which was of great assistance when preparing the list of collectors.

LASÈGUE, A., *Uebersicht der Länder oder Gegenden und der bekanntesten Reisenden*, welche deren Vegetation untersucht haben (Flora N.R. 4, 1846, p. 49–64).
This paper might be a translation from a French one. It is not identical with the lists given in the former item, and it contains many mistakes. KUHL & VAN HASSELT are mentioned for example as collectors in Sumatra, whereas they collected in Java only.

COLMEIRO, MIGUEL, *La botánica y los botánicos de la península hispano-lusitana.* Estudios bibliográficos y biográficos. Obra premiada por la bibliotheca nacional. Madrid 1858.
Bibliography of the Malaysian region *etc.*, *cf.* p. 25–59, 102–107; biographical data *cf.* p. 145–206.

MURRAY, A., *The book of the Royal Horticultural Society 1862–1863.* London 1863.
Gives some data on the collectors R. FORTUNE, J. D. PARKS, and J. POTTS.

LINDEMANN, E., *Kurze Nachrichten ueber den Bestand meines Herbariums* (Bull. Soc. Nat. Moscou 36^1, 1863, p. 233–253; *l.c.* 46^2, 1872, p. 56–101; *l.c.* 60^4, 1884, p. 265–312; *l.c.* 61^1, 1885, p. 37–92).
An enumeration of all collectors who contributed to this Herbarium with brief biographies and data on their travels; includes several explorers of Malaysia.
Contains plants of CHAMISSO, ESCHSCHOLZ, MERTENS, ZOLLINGER, REINWARDT, N. ANDERSSON, THUNBERG, O. KUNTZE (principal contributors underlined!).

KREUTZER, K. J., *Das Herbar.* Anweisung zum Sammlen, Trocknen und Aufbewahren der Gewächse nebst geschichtlichen Bemerkungen über Herbare. Wien 1864.
With appendix (p. 151 *seq.*): a survey of the more important herbaria, collections, collectors, and literature concerned.

JESSEN, K. F. W., *Botanik der Gegenwart und Vorzeit* in Culturhistorischer Entwickelung. Ein Beitrag zur Geschichte der Abendländischen Völker. Leipzig 1864 (in 1865 according to PRITZEL, Thes. Lit. Bot., 1872). Re-published by the Chron. Bot. Co., Waltham, Mass., U.S.A., 1948, in Pallas series).
A concise general history of botany; the more important voyages of discovery during which natural history collections were made are enumerated in tabular form (new edit. p. 464–472).

SALOMON, C., *Verzeichnis der botanischen Autoren* für Botaniker, Freunde der Pflanzenkunde und Gärtnerei (Beil. Heft Gartenflora 1870); *Nachtrag zum Verzeichnis etc.* (*l.c.* 1873).
Some biographical data are given.

PRITZEL, G. A., *Thesaurus literaturae botanicae* omnium gentium inde a rerum botanicarum initiis ad nostra usque tempora, quindecim millia operum recenses. ed. 2. Lipsiae 1872/77. (*cf.* also O. KUNTZE in Rev. Gen. Plant. 1, 1891, p. cxxii–cxlvi.)
Excellent bibliography of botany.

JUST'S *botanischer Jahresberichte.* 1873→.

VERNE, JULES, *Histoire générale des grands voyages et des grands voyageurs.* 'Les grands navigateurs du XVIIIe siècle.' 'Les voyageurs du XIXe siècle.' Paris *c.* 1879, with ill. & maps.

WARMING, E., *Den Danske botaniske Literatur* fra de aeldste tider til 1880 (Bot. Tidskr. Kjøbenh. 12, 1880/81, p. 42–131, 158–247).
Contains biographical data and bibliographies of Danish botanists.

CANDOLLE, ALPH. DE, *La Phytographie* ou l'Art de décrire les végétaux considérés sous différents points de vue. Paris 1880.
Includes an alphabetical enumeration of authors and collectors with indication of the herbaria in which there collections are preserved (p. 391–462).

DENNYS, N. B., *A contribution to Malayan bibliography* (Journ. Str. Br. Roy. As. Soc. *no* 5, 1880, p. 69–123 and *l.c. no* 6, 1880, p. 225–272).
Deals with the Malay Peninsula and Indonesia.

JACKSON, B. D., *Guide to the literature of botany,* being a classified selection of botanical works, including nearly 6000 titles not given in PRITZEL'S 'Thesaurus'. London 1881.
Contains some 9000 entries, including some corrections and emendations to PRITZEL. Does not pretend bibliographical completeness, but is an excellent selection.

SALOMON, C., *Nomenclator der Gefässkryptogamen* oder alphabetische Aufzählung der Gattungen *etc.* Leipzig 1883.
Includes a list of authors and collectors with some biographical data.

HERDER, F. VON, *Catalogus systematicus bibliothecae Horti imperialis botanici petropolitani* (New edition, Petersburg 1886).

Bibliography for Australia, Malaysia, Melanesia, and Polynesia (Australas. Assoc. Advanc. Sci. Rep. 2, 1890, p. 296–311); and *Supplementary Bibliography etc.* (*l.c.* 4, 1892, p. 240–249).

BAY, J. CHR., *Tillaeg til 'Den Danske botaniske literatur* fra de aeldste tider til 1880', sammenstillet af EUG. WARMING (Bot. Tidskr. 17, 1890, p. 315–329; *l.c.* 18, 1892, p. 95–103).

SHERBORN, C. D., *A bibliography of Malaya* from Jan. 1888 up to June 1894 (Journ. Str. Br. Roy. As. Soc. *no* 22, 1890, p. 349–428; *l.c.* 24, 1891, p. 121–164; *l.c.* 26, 1894, p. 219–266; *l.c.* 27, 1894, p. 135–175; *l.c.* 28, 1896, p. 33–74).
Deals with the Malay Peninsula and Indonesia.

BRITTEN, J. & G. S. BOULGER, *A biographical index* of deceased Irish and British botanists. London 1893, 1st suppl. 1899; 2nd. ed. 1931 by RENDLE. Also in Journ. Bot. vol. 26, 27, 28, 29, 36, 37, 41, 42 and 46, between 1888 and 1908.

BRETSCHNEIDER, E., *On some old collections of Chinese plants* (Journ. Bot. 32, 1894, p. 292–299).
Includes data on the collectors J. POTTS, J. D. PARKS, R. FORTUNE.

Dictionnaire biographique des naturalistes, continuant toutes les notabilités contemporaires, avec leur portrait, leurs noms, prénoms et pseudonymes, le lieu et la date de leur naissance, leur famille, leurs débuts, leurs fonctions successives, leurs grades et titres, leurs œuvres, leurs écrits et les indications bibliographiques qui s'y rapportent, les traits caractéristiques de leur talent, les renseignements sur leurs travaux, découvertes, inventions, *etc. etc.* Paris 1895 → (*non vidi*).

SACCARDO, P., *La botanica in Italia.* 1895, 1901, 2 vols (in Mem. R. Istit. Veneto di Sci., Lett. ed Arti, vol. 25 *no* 4 and vol. 26, *no* 6).
The 2nd volume gives several data on herbaria and their contents, *etc.*

BRETSCHNEIDER, E., *History of European botanical discoveries in China.* London 1898, 2 vols. Reprinted in 1935.
Deals with numerous collectors who also made small collections in the Malaysian region.

SYDOW, P., *Deutscher Botaniker-Kalender* für 1899. Berlin.
On collections, herbaria, *etc.*

SACCARDO, P., *La iconoteca dei botanici* del r. istituto botanico di Padova (Malpighia 13, 1899, p. 89–123).

SHERBORN, CH. D., C. DAVIES & B. B. WOODWARD, *Dates of publication* of the zoological and botanical portions of some French voyages (Ann. & Mag. Nat. Hist. ser. 7, 1901, p. 388–392).
Pertains to the voyages of BÉLANGER, DUMONT D'URVILLE, DUPERREY, FREYCINET, and others.

International catalogue of scientific literature (1901 →), London 1902

URBAN, I., *Notae biographicae peregrinatorum Indiae occidentalis botanicorum* (Symbolae Antillanae 3, 1902/03, p. 14–158).
Includes collectors who collected in the Malaysian region also.

WITTROCK, V. B., *Catalogus illustratus Iconotheca Botanicae* I–II (Stockholm, Acta Horti Berg. vol. 3, *nos* 2–3, 1903–05, 150 *t.*).

BUCKLAND, C. E., *Dictionary of Indian biography*. London 1906.

MAGNIN, A., *Prodrome d'une histoire des botanistes Lyonnais* (Ann. Soc. Bot. Lyon 31, 1906, p. 1–72; *l.c.* 32, 1907, p. 1–68).
The first part of this paper includes biographic data on POIVRE, SONNERAT and COMMERSON.

MILNER, J. D., *Catalogue of portraits of botanists* exhibited in the Museums of the Royal Botanic Gardens. London 1906.
Contains the biographies of those botanists whose portraits are in the Museum at Kew.

URBAN, I., *Vitae itineraque collectorum botanicorum* (MARTIUS, Flor. Bras. 1, *pars* 1, 1906, p. 2–154).
Includes collectors who collected in the Malaysian region also.

VEITCH, J. H., *Hortus Veitchii:* a history of the rise and progress of the nurseries of Messrs. JAMES VEITCH and Sons, together with an account of the botanical collectors employed by them and a list of the most remarkable of their introductions. London 1906.

MAIDEN, J. H., *A century of botanical endeavour in South Australia* (Journ. Austr. Assoc. Adv. Sci., Adelaide Meeting 1907).
Biographical notes on p. 15–23.

MAIDEN, J. H., *Records of Australian botanists.* (a) General. (b) New South Wales (Journ. & Proc. Roy. Soc. N.S.W. 42, 1908, p. 60–132).
Includes data on French expeditions, *etc.*

MAIDEN, J. H., *Records of Queensland botanists* (Journ. Austr. Assoc. Adv. Sci., Brisbane Meeting 1909, p. 373–383).

MAIDEN, J. H., *Records of Western Australian botanists* (Journ. W. Austr. Nat. Hist. Soc. 1909, p. 5–27).

MAIDEN, J. H., *Records of Tasmanian botanists* (Journ. Roy. Soc. Tasmania 1909).

MAIDEN, J. H., *Records of the earlier French botanists* as regards Australian plants (Journ. & Proc. Roy. Soc. N.S.W. 44, 1910, p. 123–155, 11 portr.).

MAIDEN, J. H., *Records of Australian botanists* (1st supplement) (Rep. Australas. Assoc. Advanc. Sci. 13, 1911, p. 224–243, 4 portr.).

CHRISTENSEN, C., *Den Danske botaniske litteratur* 1880–1911. København 1913.

OLIVER, FR. W., *Makers of British botany:* a collection of biographies by living botanists. Cambridge 1913, ill.

LINDAU & SYDOW, *Thesaurus literaturae mycologicae et lichenologicae.* Biographien (Index in vol. 4, 1915, p. 22–30).

BRITTEN, J., *Some early Cape botanists and collectors* (Journ. Linn. Soc. Bot. Lond. 45, 1920, p. 29–51, pl. 4).
Includes data on FR. MASSON, C. THUNBERG, W. ROXBURGH, J. WILES, D. NELSON and R. BROWN.

MAIDEN, J. H., *Records of Australian botanists* (2nd supplement) (Journ. Roy. Soc. N.S.W. 55, 1921, p. 150–169, pl. 8–9).

CHRISTENSEN, C., *Den Danske botaniks historie*, med tilhørende Bibliografi. København 1924–26, 2 vols.
Includes biographical data on some collectors in the Malaysian region.

KROK, TH. O. B. N., *Bibliotheca botanica suecana.* Uppsala 1925.
Deals with Swedish botanists and botanical collectors.

LEE, I., *Early explorers in Australia.* London 1925. Principally deals with A. CUNNINGHAM's voyage, of which a complete diary from his MS. journal, for example from his visit to Timor in 1818, is included.
Gives data on W. DAMPIER, J. COOK, TH. OXLEY, and also on Capt. KING. A fine book!

BERG, L. S., *Russian discoveries in the Pacific.* In the Pacific Russian scientific investigations (publ. by the Acad. Sci. Union Sovj. Soc. Republ. 1926, p. 1–26, 2 pl.).
Historical notes on various voyages; includes some botanical expeditions.

KOMAROV, V. L., *Botany.* On the Pacific Russian scientific investigations (publ. by the Acad. Sci. Union Sovj. Soc. Republ. 1926, p. 121–136, 1 portr.).
A historical account of Russian botanical exploration, with a bibliography.

Index Biologorum. Berlin 1928.

VERDUYN DEN BOER, J. H., *Botanists at the Cape* I. Biographical notices of Cape botanists with 21 portraits. Cape Town 1929.
Includes data on the collector C. P. THUNBERG, and portraits of A. VON CHAMISSO.

CHEVALIER, AUG., *L'œuvre des voyageurs-naturalistes et du Jardin des Plantes* depuis sa fondation jusqu'à la révolution (Rev. Bot. Appl. Agric. Colon. 10, 1930, p. 463–498).
Contains data on BAUDIN's voyage 1800–04.

International address book of botanists. Being a directory of individuals and scientific institutions,

universities, societies, *etc.*, in all parts of the world interested in the study of botany. London 1931.

Curtis's Botanical Magazine Dedications 1827–1927. Portraits and biographical notes compiled by E. NELMES & W. CUTHBERTSON. London 1931.

FOURNIER, P., *Voyages et découvertes scientifiques des missionaires naturalistes français* à travers le monde pendant cinq siècles XVe, XXe siècles. 1932, with ill.

Contains many data on botanical collectors, for example on CALLERY and POIVRE.

ROBERTS, F. M., *Western travellers to China.* 1932.

Includes notes on some botanical explorers; not important for collectors of the Malaysian region.

SKOTTSBERG, C., *Notes on collections from the Pacific region* (Proc. 5th Pac. Sci. Congr. 1, 1933, App. 2, pt 2, p. 438–472).

LACROIX, A., *Notice historique* sur les membres et correspondants de l'Académie des sciences ayant travaillé dans les colonies françaises des Mascareignes et de Madagascar au XVIIIe siècle et au début du XIXe (Paris, Acad. de Sci. 1934, 118 pp.).

Contains numerous data on French collectors who operated also in the Malaysian region.

Chronica Botanica. 1935 →

HORN, W. & I. KAHLE, *Ueber entomologische Sammlungen, Entomologen und Entomo-Museologie.* Ein Beitrag zur Geschichte der Entomologie (Entomol. Beihefte II–IV, Berl. Dahl. 1935–37, iv + 536 pp.).

MERRILL, E. D. & E. H. WALKER: *A bibliography of Eastern Asiatic botany* (Arn. Arbor. Harv. Univers. 1938).

STEENIS, C. G. G. J. VAN, *Recent progress and prospects in the study of the Malaysian Flora* (Chron. Bot. 4, 1938, p. 392–397).

Deals with the Malaysian region, including the Philippines *etc.*

American men of science. New York 1938 (and earlier editions).

COX, E. H. M., *Plant collectors of Eastern Asia.* 1939, with ill.

The story of the discovery of many of our most famous garden plants.

PRAIN, D. & I. H. BURKILL, *A retrospect* (in 'An account of the genus Dioscorea in the East pt II. The species which twine to the right *etc.*' in Ann. Roy. Bot. Gard. Calcutta 14, 1939, p. 451–479).

Includes data on voyages, botanic gardens, and collectors, in Eastern Asia and Malaysia.

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6. Philippine Islands (VI on map 1)

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Annex I. More important collectors in New Guinea (p. 145–147).—Annex II. More important literature on the botany of New Guinea (p. 147–159).

ROUX, C. C. F. M. LE, *De exploratie* (–1934) (in W. C. KLEIN, Nieuw Guinee, vol. 1, 1935, p. 18–154).
To be used in addition to WICHMANN, Entdeckungsgeschichte (see above); data till 1934.

A catalogue of scientific literature pertaining to the natural resources of Great East Asia. I. *New Guinea* (transl. of the Japanese title). Compiled by the Dept of Education Dai Nippon 1942.

b. REPORTS, PAPERS, AND OTHER INFORMATION PERTAINING TO HERBARIA WHERE MALAYSIAN COLLECTIONS ARE PRESERVED

1. General

DON, D., *An account of the Lambertian Herbarium* (in A. B. LAMBERT, A description of the genus Pinus, 2, 1837, App. p. 13–24).
Includes plants from Sir G. STAUNTON and from RAFFLES (Sumatra).

On the *sale of the Lambert Herbarium cf.* HOOK. Lond. Journ. Bot. 1, 1842, p. 394–396.

Advertisement of Lambert sale (Athenaeum 1842, p. 44).
The copy of this catalogue in the British Museum is provided with the names of the purchasers.

LASÈGUE, A., *Musée botanique de M. Benj. Delessert.* Notices sur les collections de plantes et la bibliothèque qui le composent; contenant en outre des documents sur les principaux herbiers d'Europe et l'exposé des voyages entrepris dans l'intérêt de la Botanique. Paris 1845.
Includes a survey of the more important European herbaria, and of the collections they contain.

Catalogue of the valuable botanical library and herbarium of the late Robert Graham (1846, copy in the Bot. Dept Brit. Mus.).
Contained plants from WALLICH's Herb. E.I.C. and from Lady DALHOUSIE.

A catalogue of the valuable and extensive collection of dried plants, the property of the late WM. GOURLIE, Esq., of Glasgow (1858, copy in Bot. Dept Brit. Mus.).
Plants collected by CUMING, LORRAINE and others.

LINDEMANN, E., *Kurze Nachrichten ueber den Bestand meines Herbariums* (Bull. Soc. Nat. Moscou 36^1, 1863, p. 233–253; 46^2, 1872, p. 56–101; 60^4, 1884, p. 265–312; 61^1, 1885, p. 37–92).
An enumeration of all collectors who contributed to this herbarium with brief biographies and data on their travels, including several explorers of Malaysia. Contains plants of CHAMISSO, ESCHSCHOLZ, MERTENS, ZOLLINGER, REINWARDT, N. ANDERSSON, THUNBERG, O. KUNTZE (principal contributors underlined!).

KREUTZER, Dr K. J., *Das Herbar. Anweisung zum Sammlen, Trocknen und Aufbewahren der Gewächse* nebst geschichtlichen Bemerkungen über Herbare. Wien 1864.
An appendix gives a survey of the more important herbaria, collections, collectors, and literature concerned.

The Herbaria and botanical libraries of the United States (Bull. Torr. Bot. Club 6–12, 1876–85).

CANDOLLE, ALPH. DE, *La Phytographie* ou l'Art de décrire les végétaux considérés sous différents points de vue. Paris 1880.
Includes an alphabetic enumeration of authors and collectors with indication of the herbaria in which their authentic specimens are preserved.

HERDER, F. VON, *Biographische Notizen* über einige in den Plantae Raddeanae genannte Sammler und Autoren (ENGL. Bot. Jahrb. 9, 1888, p. 429–456).
Includes some data on the location of the collections *etc.* of some Russian explorers who visited also Malaysia.

SYDOW, P., *Deutscher Botaniker-Kalender für 1899.* Berlin.
On collections, herbaria, *etc.* Useful booklet giving much information on the location of collections.

LIPSKY, W. H., *Botanical establishments of Europe and N. Africa, and ditto of Madrid, Lissabon and Kew* (3 prts, 1901, 1903, and 1906, published as a special vol. of Acta Horti Petrop.).
No detailed information on collectors.

MERRILL, E. D., *Botanical work in the Philippines* (Bull. Philip. Bur. Agr. *no* 4, 1903, 53 pp.).
Besides a survey of the herbaria at Manila (p. 33–35), the author gives one of the Philippine collections in Europe and the U.S.A. (p. 37–41).

MERRILL, F. J. H., *Natural History museums of the United States and Canada.* Albany 1903 (N.Y. State Mus. Bull. *no* 62).
Scarcely includes any detailed information on botanical collections.

Herbarium News (Chron. Bot. 4, 1938 onwards).

SHERBORN, CH. D., *Where is the . . . collection?* Cambridge Univers. Press 1940.
Almost entirely on zoological and fossil collections.

Short notes on botanical collections lost or damaged as a result of war conditions (Chron. Bot. 9, 1945, p. 189–190).

ALSTON, A. H. G., *Report on the state of taxonomic botany and botanical collections in some areas of Germany since 1939* (Brit. Intell. Obj. Sub-Committee final report *no* 1520, item *no* 22, 1946, 191 pp.).
Gives details on the present state and location of part of the German herbaria.

2. Special

Adelaide, Australia

Herb. University Adelaide.

The large orchid herbarium of R. S. ROGERS, including several New Guinea specimens, was given to this Herbarium.

Amsterdam, Holland

Herb. Indisch Instituut (former Koloniaal Instituut).

This Institute, which in 1913 was incorporated with the Colonial Museum at Haarlem, owns a herbarium, though the Museum is the chief division. Lists of accessions are published in Tijdschr. Ned. Mij t. Bevord. Nijverheid (–1891), Bull. Kolon. Mus. Haarlem (–1913), and in the Jaarverslag Kolon. Inst. Amsterdam (1913–*hodie*).

Herb. Amsterdam University.

Includes the collections of Prof. Dr TH. J. STOMPS made on his trip to the D.E.I.

Antwerp, Belgium

Herb. Mus. van Heurck.

HEURCK, HENRI VAN, *Observationes botanicae et descriptiones plantarum novarum Herbarii van Heurckiana.* Anvers, Berlin, 1870–71, 2 fasc.

For principal collections in the Herbarium see p. 12–20.

HEURCK, HENRI VAN, *Musée botanique du Dr. Henri van Heurck* (Congr. Intern. d. Bot. et d'Horticulture d'Anvers 1885, p. 357–360).

Includes plants from Herb. SIEBER, REICHENBACH, VAN HEURCK, GRIFFITH, WALLICH, *etc.*

Autun, France

Herb. Mus. Soc. d'Histoire Naturelle.

GILLOT, L., *Note sur les collections botaniques du Musée d'histoire naturelle d'Autun* (Compt. Rend. Congr. Soc. Sav. Paris 1911, 11 pp.) (*non vidi*).

This reference could not be found in the cited Compt. Rend.!

CHATEAU, E., *L'Herbier Ch. Ozanon et les collections botaniques de la Société d'Histoire naturelle d'Autun* (*l.c.* p. 55–58).

No Malaysian collections are mentioned.

Basel, Switzerland

Herb. Basel University.

BINZ, A., *Die Herbarien des Botanischen Anstalts Basel* (Verh. Naturf. Ges. Basel 1908, p. 137–155).

This herbarium is of little importance for the study of Malaysian plants. In 1908 part of CHRIST's herbarium was incorporated (Conifers, *Cyperaceae, Juncaceae, Algae, etc.*). His fern collection was transferred to Herb. BONAPARTE (*Paris*).

Batavia, Java

Though in former times, both the 'Bataviaasch Genootschap voor Kunsten en Wetenschappen' (Batavian Society for Arts and Sciences), and the 'Koninklijke Natuurkundige Vereeniging' (Royal Natural Science Society) had Natural History musea, nothing is known to us about herbarium collections in the former institution; as regards the latter, no herbarium collections were found when the Museum was liquidated in 1900 (*cf.* Nat. Tijdschr. N.I. 60, 1901, p. 461–462, + App.). Many persons forwarded dried material of plants to the Kon. Nat. Ver. (*cf.* scattered reports in the Natuurkundig Tijdschr. Ned. Ind.), but probably all of it was forwarded to Buitenzorg (*Herb. Bog.*) for identification.

Of the still older Natural History Museum established by J. C. M. RADERMACHER, we came across a comment that practically nothing remained as early as 1837 (*cf.* Alg. Konst- en Letterbode 1837^2, p. 277).

Berkeley, Cal., U.S.A.

Herb. Univ. of California.

No special papers on the Herbarium at Berkeley are known to us. It incorporates important Malaysian collections.

Berlin, Germany

Herb. Berlin-Dahlem (Berolinense).

URBAN, I., *Geschichte des Königl. botanischen Gartens u.d. Königl. Herbariums zu Berlin* nebst einer Darstellung des augenblicklichen Zustandes dieser Institute (Jahrb. Kgl. Bot. Gart. u. Mus. Berl. 1–4, 1881–86).

URBAN, I., *Der Königliche Botanische Garten und das Botanische Museum zu Berlin in den Jahren 1878–1891* (ENGL. Bot. Jahrb. 14, 1892, Beibl. p. 9–65).

URBAN, I., *Geschichte des Königlichen Botanischen Museums zu Berlin-Dahlem (1815–1913)* nebst Aufzählung seiner Sammlungen. Dresden 1917 (also in Beih. Bot. Centr. Bl. 34^1, 1917, p. 1–457).

Reports in Notizbl. Berl.-Dahlem.

The Herb. WILLDENOW which is not inserted in the General Herbarium contains but few Malaysian plants.

The Herb. BERNHARDI was presented in 1889, it contained plants of HASSKARL (*cf.* ENGL. Bot. Jahrb. 14, 1892, Beibl. p. 37).

Since Dec. 1936 the 'Ausserrheinische' Herbarium (herbarium exclusive of the Rhine region) of the Nat. Hist. Soc. for 'Preuss. Rheinlande und Westfalen' at Bonn, is incorporated in the herbarium of the Botanical Museum Berlin-Dahlem. It contained plants of GRIFFITH, VON RÖMER (Java, probably not collected himself), and JUNGHUHN (*cf.* Notizbl. Berl. Dahl. 13, 1937, p. 543). For literature see *sub* BONN.

AMES, O., *Destruction of the Schlechter Herbarium by bombing* (Amer. Orchid Soc. Bull. 13, 1944, p. 105–106) (*non vidi*).

During the last war most of the botanical collections of this Herbarium have been destroyed. (Chron. Bot. 9, 1945, p. 189). Fortunately the Chicago Nat. Hist. Mus. obtained 15.800 photographs of type specimens from Berlin. Later information from the Komarov Botanical Institute to Dr E. D. MERRILL runs as follows: 'Part of the Berlin Herbarium had been removed and saved. Still, it has not been settled yet what is practically safe. Many plants were stored in the basement of the Herbarium (mostly duplicates) and they are untouched as well.'

cf. also Biologia 1, 1947, p. 10.

ALSTON, A. H. G., *Report on the state of taxonomic botany and botanical collections in some areas of Germany since 1939* (Brit. Intell. Obj. Sub-Committee final report *no* 1520, item *no* 22, 1946, 191 pp.) p. 4.

Gives details on the Berlin collections which are safe, those that are definitely lost and the part which has been removed by Soviet authorities to an unknown destination.

SLEUMER, H., *The Botanical Gardens and Museum at Berlin-Dahlem* (Kew Bull. 1949, p. 172–175).

Report dated 1.11.48; gives details on the families which have been saved, those of which the types and co-types have been saved, *etc.*

Berne, Switzerland

Herb. Berne University.

Jahresber. Bot. Gart. Bern, from 1903 onwards.

The phanerogams of the Herb. DUBY incorporated. They contain Java plants of TSCHIRCH, TH. WURTH, ZOLLINGER; also Malaysian plants with Herb. SHUTTLEWORTH. The Herbarium of cryptogams of E. GÄUMANN was presented in 1918.

RYTZ, W., *Die Herbarien des Botanischen Instituts der Universität Bern* (Schweiz) (Mitt. Naturf. Ges. Bern (1922) 1923, p. 57–88).

Bonn, Germany

Herb. Naturhist. Ver. Rheinl. u. Westf. (Nat. Hist. Soc.).

WIRTGEN, F., *Die botanischen Sammlungen des naturhistorischen Vereins* des preussischen Rheinlandes und Westfalen (Sitz. Ber. Ver. preuss. Rheinl. u. Westfalen 1907, 1908, p. 47–51).

The *herbarium outside the Rhine region* is incorporated in the Herb. Berl. since Dec. 1936. It contained plants of GRIFFITH, VON RÖMER and JUNGHUHN (*cf.* Notizbl. Berl. Dahl. 13, 1937, p. 543).

Boston, Mass., U.S.A.

The Herbarium of the Boston Nat. Hist. Soc. was transferred to the GRAY Herb. (Cambridge, Mass.) on Oct. 2, 1941.

Breslau, Germany

Herb. Breslau University.

GÖPPERT, H. R., *Über Botanischen Museen*, insbesondere über das an der Universität Breslau. Reyn'schen Buchhandlung 1856.—Supplemented in Bot. Zeit. 15, 1856, p. 478–479.

Contains some Malaysian collections.

COHN, F. & A. ENGLER, *Das botanische Museum der Universität Breslau.* Breslau 1888.

No details on the collections are given.

The Herbarium was evacuated to the country during World War II; in 1947 the collections were brought back to Breslau (Wroclaw), but were not yet checked in Febr. 1948 (information received from Dr M. KOSTYNIUK); coll. LAUTERBACH intact (*cf.* Flora Malesiana Bull. *no* 3, Apr. 1948, p. 60–61).

Brisbane, Australia

Queensland Herbarium.

Though several reports of the Botanic Garden, of the Dept of Agriculture (colonial botanist), and of the Govt botanist were consulted, the harvest of information was rather poor. The herbarium must certainly be rich in specimens from E. New Guinea, especially in collections presented after the death of F. VON MUELLER at Melbourne.

Information was received from the Government Botanist Mr C. T. WHITE.

Brussels, Belgium

Herb. Jardin botanique (Botanic Garden).

BOMMER, J. E., *Notice sur le Jardin botanique de Bruxelles* (Bull. Soc. Bot. Roy. Belg. 9, 1870, p. 418–455).

Deals with the purchase of the herbarium of MARTIUS. Though his herbarium excels in Brazilian

specimens, it contains Asiatic species too. No detailed list of the contents is given (for that *cf.* EICHLER, Das Herbarium Martii, München 1869).

The *herbarium of J. Decaisne* and his MSS came to Brussels.

Herb. Brussels University.

It contains the herbarium of J. MASSART.

Budapest, Hungary

Herb. Hungarian National Museum.

The *private herbarium of Cardinal Haynald* came to Budapest (*cf.* Bot. Centr. Bl. 37[1], 1889, p. 382).

It contains Malaysian plants too, for in 1883 a collection was sent from Buitenzorg to Prof. MAIER at Vienna, destined for Card. HAYNALD (*cf.* Versl. Pl. Tuin Buitenzorg for 1883, p. 13).

During World War II the Museum at Budapest was utterly destroyed, but the University Herbarium has remained uninjured (information from the Komarov Bot. Inst. to Dr E. D. MERRILL).

Buitenzorg, Java

Herb. Bogoriense (Bogor = Buitenzorg).

Versl. v. h. beheer en den Staat der Nederl. bezittingen en Koloniën etc. (Kolon. Verslag).

Reports for the years previous to 1868. The report on the Buitenzorg Botanic Garden for 1850 was reprinted in Nat. Tijdschr. N.I. 1, 1850, p. 431 *seq.*

Natuurkundig Tijdschr. v. Ned. Indië (Nat. Tijdschrift N.I.) since 1850.

The older volumes of this periodical give reports on the sessions of the 'Natuurkundige Vereeniging', in which scattered data on received herbarium material, which was forwarded to Buitenzorg.

Verslagen (reports) *omtrent den staat van 's Lands Plantentuin te Buitenzorg.* 1868–1929.

For most years a detailed account of the acquisitions of the Herbarium is given. From 1930 onwards the published reports were discontinued.

BURCK, W., *Het herbarium en Museum van 's Lands Plantentuin te Buitenzorg.* Batavia 1892.

He cites some of the more important collectors, without detailed information.

KOORDERS, S. H., *Systematisches Verzeichnis* der zum Herbar Koorders gehörenden, in Niederländisch Ostindien, besonders in den Jahren 1888–1903 gesammelten Phanerogamen und Pteridophyten nach den Original-Einsammlungsnotizen und Bestimmungs-Etiketten unter der Leitung von Dr S. H. KOORDERS zusammengestellt und herausgegeben von Frau A. KOORDERS-SCHUMACHER. Buitenzorg 1910–14.

This herbarium is at Buitenzorg, incorporated in the Herb. generale; the covers are provided with special labels. Many duplicates have been distributed.

Many numerical lists, as far as possible kept up to date for the Latin names, of collections are preserved in the Herbarium.

In 1928 the local Herbarium of the branch of the Botanic Garden at Sibolangit (Sumatra East Coast) was incorporated in the Buitenzorg Herbarium.; in 1950 that of J. A. LÖRZING.

Herb. Forest Research Institute (Herb. F.R.I. = Boschbouwproefstation).

The present author was working for several weeks in this institute to make a detailed survey of the contents of its herbarium. The plants are numbered in series (*cf. sub* Forest Research Inst.), accounts of which are kept. Chief contributors were the employees of the D.E.I. Forest Service.

The herbarium of the Museum for Economic Botany was incorporated about 1934.

Duplicates of the collections are in *Herb. Bog.*

Caen, France

Herb. Caen.

LIGNIER, O. and various others, *Liste des plantes vasculaires, que renferme l'Herbier général de l'Université et de la ville de Caen.* Herbarium LENORMAND (Bull. Soc. Linn. Normand. sér. 5, vol. 5, 1901 (1902), p. 132–188; *l.c.* vol. 6, 1902 (1903), p. 359–420; *l.c.* vol. 7, 1903 (1904), p. 138–237; *l.c.* vol. 8, 1904 (1905), p. 191–248; *l.c.* vol. 10, 1906 (1907) p. 10–80; sér. 6, vol. 1, 1907 (1909), p. 26–52; *l.c.* vol. 2, 1908/09 (1910), p. 37–92, 140–213; *l.c.* vol. 3, 1908/09 (1910), p. 103–148; *l.c.* vol. 4, 1910/11 (1913), p. 125–160; *l.c.* vol. 5, 1912 (1913), p. 38–64; *l.c.* vol. 6, 1913, p. 141–173; *l.c.* vol. 7, 1914, p. 169–199; *l.c.* vol. 9, 1916 (1919), p. 83–113.

Evidently this detailed list was discontinued.

HOUARD, E., *Répertoire des herbiers et des collections* de l'Institut botanique et de la Galérie botanique de Caen (*l.c.* sér. 7, vol. 11, 1919 (1920), p. 85–89).

It contains at least part of the Herb. LENORMAND and Herb. DUMONT D'URVILLE.

As a result of war conditions both the Botanical Garden and Museum at Caen have been completely destroyed; all collections are lost (Chron. Bot. 9, 1945, p. 180).

BIGOT, A., *La destruction des collections et des Bibliothèques scientif. de Caen* (Bull. Soc. Linn. Norm. Suppl. vol. (1945), 1945, p. 1–75).

According to this paper some collections are saved.

Calcutta, India

Herb. Botanic Gardens.

GRIFFITH, W., *Report on the Hon'able Company's Botanic Gardens*, Calcutta, pt VI Herbarium Department. Calcutta 1843.
Contains nothing of importance for the Malaysian region.

THOMSON, TH., *Notes on the herbarium of the Calcutta Botanic Garden*, with special reference to the completion of the Flora indica (Journ. Asiat. Soc. Bengal 25, (1856) 1857, p. 405–418; and in HOOK. Journ. Bot. & Kew Gard. Misc. 9, 1857, p. 10–14, 33–41.

Annual Reports Gard. Calcutta 1870 onwards, and some earlier in SEEMANN Journ. Bot.

NARAYANASWAMI, V., *Provenance of early Malayan plant collections* (Journ. & Proc. As. Soc. Bengal N.S. 27, 1931, *no* 3, issued July 1933).
Deals with collections of Sir G. KING, H. KUNSTLER, B. SCORTECHINI, and LEONARD WRAY, in the Calcutta Herbarium.

Herb. East India Company, *cf. sub* London, *Herb. Linnean Society;* since 1913/14 at *Kew.*

Cambridge, England

Herb. Cambridge University.

GILMOUR, J. S. L. & T. C. TUTIN, *A list of the more important collections in the University Herbarium, Cambridge.* Cambridge Univers. Press 1933.
It includes the private herbarium of JOHN LINDLEY (except orchids which are at Kew), and several Malaysian duplicates.

Cambridge, Mass., U.S.A.

The herbaria of Harvard University are:

Gray Herbarium.

BARNES, C. R., *The Gray Herbarium of Harvard University* (COULTER's Bot. Gaz. 11, 1886, p. 151–153).

Originally this herbarium contained specially material of American plants. Since ± 1937 the collections of non-woody plants and ferns received by the Arnold Arboretum, are transferred to this herbarium.
On Oct. 2, 1941, the *Herbarium of the Boston Nat. Hist. Society* was transferred to the GRAY Herbarium.
Lists of accessions were consulted by the present author.

Herb. Arnold Arboretum (Jamaica Plain, Mass.).

Reports in the Journ. Arn. Arboretum.

MERRILL, E. D., *Recent accessions at the Arnold Arboretum* (Harv. Alumni Bull. of May 26, 1939).
Originally confined to Eurasian material; at present specialized in woody plants.

Several lists of the more important acquired collections are present and were consulted by the author.

Oakes Ames Orchid Herbarium.

Specially confined to orchids; was presented by O. AMES in 1938.

Farlow Herbarium.

Specially cellular cryptogams; since ± 1937 the collections of Cryptogams received by the Arnold Arboretum are transferred to this Herbarium.

Charkow, *cf.* Kharkov

Chicago, Ill., U.S.A.

Herb. Chicago Natural History Museum (former FIELD Museum Natural History).

Accessions are given in the *reports* of this museum since 1903.

The *Herbarium of the University of Chicago* was deposited with the FIELD Museum in 1907, and presented to the same institute in 1932.

Coimbra, Portugal

Herb. Coimbra University.

HENRIQUES, J. A., *O Museo botanico da universidade e as colleccoes de productos de Macau e Timor* (O Inst. Coimbra 30, 1882, ser. 2, p. 60–65) (*non vidi*).

Copenhagen, Denmark

Herb. Copenhagen University (Mus. Havniense).

DIDRICHSEN, F., *Plantas nonnullas musei Universitatis havniensis descripsit* (Vidensk. Medd. naturh. för i. Kjöbenh. 1853, p. 86–89; *l.c.* 1854, p. 182–200; *l.c.* 1857, p. 123–151).

OSTENFELD, C. H., *Botanisk Have gennem 50 Aar*, 1874–1924. Kjøbenhavn 1924.
cf. General Herbarium, p. 68–72.

Dr H. MØLHOLM HANSEN prepared a report for our use on the contents of the Herbarium as far as Malaysian collections are concerned.

Dehra Dun, India

Herb. Forest Research Institute.

PARKER, R. N., *The Herbarium of the Forest Research Institute* (For. Bull. *no* 73, 1931).

Includes duplicates presented by E. D. MERRILL (when at Manila, in California, and in New York) of plants from the Philippines, Borneo and Sumatra.

Edinburgh, Scotland

Herb. Royal Botanic Garden.

In 1839 the *Herb. Bot. Society* was united with that of the Royal Garden (*cf.* Transact. & Proc. Bot. Soc. Edinb. 22, 1902, p. 195 *seq.*).

Lists of acquisitions in vols 5–17 of the Transact. Bot. Soc. Edinburgh.

A list of the principal collectors in the Malaysian region represented in the Herbarium was prepared for our use by Dr J. M. COWAN.

Florence, Italy

Herb. Florence.

PARLATORE, Ph., *Les collections botaniques du Musée de Physique et d'Histoire Naturelle de Florence*. 1874.

The Herb. WEBB is *not* inserted in the General Herbarium; it contains Malaysian plants too.

MARTELLI, U., *Le collezioni di G. E. Rumpf* acquistate dal Granduca Cosimo III de Medici, una volta esistenti nel Museo di Fisica e Storia Naturale di Firenze *etc.*. Firenze 1903.

The Florence Herbarium includes the herbaria of O. BECCARI and U. MARTELLI.

Frankfurt a.M., Germany

Herb. Senckenb. Naturf. Ges. (Nat. Hist. Soc.).

Ber. Senckenbergische Naturf. Ges. Frankfurt a.M. 1868–1914.

In 1914 the herbarium of this Society was presented to the *University of Frankfurt*.

The city was almost completely destroyed during the last war (Chron. Bot. 9, 1945, p. 190).

About nine tenths of the Herbarium of the Senckenberg Museum has been destroyed (*cf.* A. H. G. ALSTON, Report on the state of taxonomic botany and botanical collections in some areas of Germany since 1939, Brit. Intell. Obj. Sub-Committee final rep. *no* 1520, item *no* 22, 1946, p. 6).

Geneva, Switzerland

Herbaria of Geneva University.

DRAKE DEL CASTILLO, E., *Visite aux herbiers De Candolle, Delessert, Boissier et Burnat*. Rapport (Bull. Soc. Bot. France 41, 1895, p. clxxxiii–cxcvii).

HOCHREUTINER, B. P. G., *Conservatoire et Jardin botanique* (extr. du Compte-Rendu de l'administration municipale de la ville de Genève pendant l'année . . . 1932 onwards; by CH. BAEHNI from 1943 onwards).

HOCHREUTINER, B. P. G., *Organisation des grands herbiers de Genève*, commentaires et directives (Candollea 9, 1942/43, p. 1–13).

Herbarium generale = Herb. Delessert.

Herb. Boissier.

Inauguration de l'Herbier Boissier. Genève 1919, 17 pp.

HOCHREUTINER, B. P. G., *Les collections d'Edmond Boissier et l'Herbier Boissier* (Arch. d. Sci. phys. et nat. 20, 1938, p. 225–230).

Includes the herbaria of E. BOISSIER and of W. BARBEY (Herb. BARBEY-BOISSIER), the latter including many herbaria collected in the whole world, specially of cellular cryptogams (*e.g.* DUBY and STEPHANI). In 1918 presented to the University. It contains plants of GRIFFITH.

Herb. De Candolle.

BRIQUET, J., *L'Herbier et la bibliothèque De Candolle* (Verh. Schweiz. Naturf. Ges. 102. Jahresvers. Schaffhausen 1921, p. 147).

This paper gives a survey—though rather superficial—of the collections in the Herb. DE CANDOLLE.

After the death of AUG. DE CANDOLLE in 1920, the herbarium came into the possession of the Municipality of Geneva.

A MS. Catalogue of the Herb. DE CANDOLLE, kept up to 1921, is in the 'Conservatoire et Jardin Botanique'; it was sent on loan to the present author.

Herb. Delessert.

Ueber das Cabinet des Herrn Benj. Delessert zu Paris *etc.* (Flora 24^2, 1841, p. 564–576).

LASÈGUE, A., *Musée botanique de M. Benj. Delessert etc.*. Paris 1845.

BRIQUET, J., *Notice sur l'état actuel de l'herbier Delessert et du Jardin botanique de Genève* (Bull. Herb. Boiss. 4, 1896, p. 97–110).

In the first period of its existence the herbarium was at Paris; in 1869 the DELESSERT family presented it to the municipality of Geneva.

It contains some originally private collections, *e.g.* Herb. LEMONNIER (incl. COMMERSON plants), Herb. BURMAN and Herb. A. B. LAMBERT.

Annuaires du Conservatoire et des Jardins botaniques de Genève. 1897–1922.

Reports in Candollea 1923–29, vol. 1–3.

Genoa, Italy

Herb. Genoa University.

PENZIG, O., *L'istituto botanico Hanbury* della R. Università di Genova. Genova 1892, 14 pp., *t.* 1–7.

Includes Herb. DE NOTARIS; Herb. WILKOMM, purchased in ± 1892; dupl. from Herb. Buitenzorg (Bog.) ± 1350 species of Java plants.

Herb. Municipality.

PICCONI, A., *Brevi notizie interno ad erbari posseduti dal municipio di Genova* (nel Museo pedagogico) (Atti Soc. ligustica 6, 1897, p. 215–220) (*non vidi*).

Groningen, Holland

Herb. Groningen University.

MOLL, J. W., *Het herbarium van den Hortus Botanicus der Rijks-Universiteit te Groningen;* korte beschrijving en aanwijzingen voor het gebruik. Groningen 1918.

Deals with the herbarium of the University of Groningen, which contains several duplicates from Pasoeroean and Buitenzorg.

Lists of acquisitions were consulted by the present author.

Haarlem, Holland

Herb. Koloniaal Museum.

cf. sub Amsterdam, Herb. Indisch Instituut.

Hamburg, Germany

Herb. Inst. für allg. Botanik (general botany).

LIERAU, M., *Das botanische Museum und botanische Laboratorium für Warenkunde zu Hamburg* (Bot. Centr. Bl. 38, 1889, p. 431–435, 476–479, 521–523, 558–561).

On the contents of the herbarium *cf.* p. 523 and 558–559.

VOIGT, A., *Die botanische Institute der freien und Hansestadt Hamburg.* 1897.

Reports on the 'Botanische Staatsinstitute' and later of the *'Institut für allg. Botanik'* in Jahrb. Hamb. Wiss. Anstalten up till 1915.

The original herbarium of the Botanic Garden was of no importance as to Malaysian collections. The herbarium of the Museum and Laboratory for 'Warenkunde' which contained some Malaysian collections, is incorporated in the 'Institut f. allg. Botanik' (Inst. for General Botany) since 1912, whereas the museum was incorporated in the 'Institut f. angewandte Botanik' (Inst. for Applied Botany). The collections are saved for the greater part (*cf.* Biologia, 1, 1947, p. 10).

ALSTON, A. H. G., *Report on the state of taxonomic botany and botanical collections in some areas of Germany since 1929* (Brit. Intell. Obj. Sub-Committee final report *no* 1520, item *no* 22, 1946, 191 pp.) p. 8–8a.

Gives details on the fate of the collections, most of which are intact. The part which was evacuated to Leipsic has been removed by the Soviet authorities to an unknown destination.

Jamaica Plain, Mass., U.S.A.

Herb. Arnold Arboretum (of Harvard University).
cf. sub Cambridge, Mass.

Kepong, Selangor, Mal. Peninsula

Herb. Forest Research Institute.
cf. sub Kuala Lumpur.

Kew, Surrey, England

Herb. Royal Botanic Gardens.

HOOKER, J. D., *Catalogue of the plants distributed at the Roy. Gard. Kew* . . . from the herbaria of GRIFFITH, FALCONER and HELFER. London 1865 (printed for private distribution).

JACKSON, B. D., *A list of the collectors* whose plants are in the Herbarium of the Royal Botanic Gardens, Kew, to 31st December, 1899 (Kew Bull. 1901, p. 1–80).

Gives an alphabetical and geographical list.

Reports of the Kew Herbarium in the Kew Bull., and some earlier in SEEMANN Journ. Bot.

The foundation of the Kew herbarium is formed by the private collections of BENTHAM and HOOKER.

Kharkov, U.S.S.R.

Herb. Kharkov University.

TURCZANINOW, N., *Animadversiones ad primam et secundum partem herbarii Turczaninowiani,* nunc universitatis Caesareae Charkowiensis (Bull. Soc. Imp. d. Nat. Mosc. 1854–1858, 1863).

TURCZANINOW evidently had the disposition of sets of CUMING, GOERING, HORSFIELD, DE LA BILLARDIÈRE, LOBB, and ZOLLINGER.

His herbarium was sold to the University of Kharkov (*cf.* ENGL. Bot. Jahrb. 9, 1888, p. 455).

The Siberian part of the TURCZANINOW Herbarium was removed to Leningrad during the war. The general Kharkov herbarium was confiscated and supposedly moved to Germany (Chron. Bot. 9, 1945, p. 190).

The non-Siberian part was indeed taken away by the Germans, but was found later on. Early in 1946 it was in the Botanical Institute of the Ukranian Academy of Sciences at *Kiev* (information from the Komarov Bot. Inst. to Dr E. D. MERRILL).

TURCZANINOW, N., *Catalogus plantarum herbarii Universitatis* Caesareae Charkowiensis. Pars I. Continens ordines in primo volumine prodromi systematis naturalis Candolleani insertos ab initio ad Malvaceas, cum animadversionibus et descrip-

tionibus generum et specierum novarum. 1855. (*non vidi*)

A systematic enumeration of 420 genera, and 3815 species, including many from eastern Asia.

TURCZANINOW, N., *Appendix prima* ad primam partem catalogi plantarum herbarii Universitatis Caesareae Charkowiensis. 1857. (*non vidi*)

Kiel, Germany

Herb. Kiel University.

SCHELLENBERG, G., *Die Sammlungen des Kieler Universitätsherbars* (Beih. Bot. Centr. Bl. 38, Abt. 2, 1921, p. 389–398).

During World War II the bulk of the Herbarium was saved from the bombed building and is now stored in the attic of the Zoological Institute (*cf.* A. H. G. ALSTON, Report on the state of taxonomic botany and botanical collections in some areas of Germany since 1939. Brit. Intell. Obj. Sub-Committee final rep. *no* 1520, item *no* 22, 1946, p. 10–11).

Kiev, U.S.S.R.

The Herbarium at Kiev was confiscated during the last war, and supposedly moved to Germany (Chron. Bot. 9, 1945, p. 190). It was taken to Poznan (*cf.* A. H. G. ALSTON, Report on the state of taxonomic botany and botanical collections in some areas of Germany since 1939, Brit. Intell. Obj. Sub-Committee final rep. *no* 1520, item *no* 22, 1946, p. 5). Any Malaysian specimens?

Early in 1946 the non-Siberian part of the TURCZANINOW Herbarium (*cf. sub* Kharkov) was in the Bot. Inst. of the Ukranian Academy of Science.

Kuala Lumpur, Selangor, Mal. Peninsula

Herb. Federated Malay States Museum.

Indefinitely on loan to *Herb. Singapore* (*cf.* HENDERSON in Gard. Bull. Str. Settlem, 4, 1928, p. 212)

Herb. Forest Research Institute, Kepong.

Annual Reports on Forest Administr. in the Fed. Mal. Stat. for 1901–34.

Annual Reports on Forest Administr. in the Str. Settlem. for 1902–38.

Annual Reports on Forest Administr. in Malaya, incl. Brunei, for 1935–38.

Annual Reports of the Conservator, Research, F.M.S. For. Res. Inst. Kepong, 1934–38.

Lost about a quarter of its herbarium during the unsettled period following the Japanese capitulation in August 1945.

Kuching, Sarawak, NW. Borneo

Herb. Sarawak Museum.

Reports of the Sarawak Museum since 1901.

Dupl. from Sarawak were occasionally sent to U.S. Nat. Herb. Wash., Leyden, and certainly to many other herbaria; mostly material collected by HAVILAND, HOSE, *etc.*. There are large sets at Kew and Singapore.

Leningrad, U.S.S.R.

HERDER, F. VON, *Die in St. Petersburg befindlichen Herbarien und botanischen Museen* (Bot. Centr. Bl. 55, 1893, p. 257–269, 289–298).

Gives a survey of the contents of the herbaria of the Botanical Cabinet of the Medical Academy (no Malaysian collections mentioned), the Academy of Science, and the Botanic Garden.

Herb. Academy of Science.

A historical sketch of the progress of botany in Russia with a detailed account of the Russian botanical collections and collectors by Mr BONGARD, the superintendent of the Imp. Acad.'s herbarium at St. Petersburg (in Rec. d. Act. d. Pétersb. 1834; Engl. transl. in HOOK. Comp. Bot. Magaz. 1, 1835, p. 177–186).

Not of interest for the Malaysian region.

RUPRECHT, F. J., *Zur Geschichte der Museen der Kaiserl. Akademie der Wissenschaften.* Botanik (Bull. Acad. Sci. St Pétersb. 7, 1864, Suppl. 2, p. 1–10).

Contains notes on the Eastern Asiatic collections. It includes plants from PETIVER, SLOANE, PLUKENET, THUNBERG, VON CHAMISSO, ZOLLINGER, H. MERTENS, *etc.*

RUPRECHT, F. J., *Materïaly dlïa istorïï Imperatorskoï Akademii Nauk po chasti botaniki* (History of the Imp. Acad. of Sciences, sect. of botany) (Zapisk. Akad. Nauk St Petersb. 1, 1865, Suppl. 3, p. 1–35) (publication in Russian of former paper).

Contains data on the collections from eastern Asia.

Herb. Botanic Gardens (Komarov Institute of Botany).

FISCHER, Dr VON, *A brief account of the Imperial Botanic Garden at St. Petersburg* (HOOK. Comp. Bot. Magaz. N.S. 1845, p. 23–33).

Contains only few data on the contents of the Herbarium.

REGEL, E., *Das 50-jährige Jubiläum und die Geschichte des Kaiserlichen Botanischen Gartens in St. Petersburg* (Gartenflora 22, 1873, p. 131–147).

A free extract from a Russian paper by TRAUTVETTER (in Act. Hort. Petrop. 2, 1873, p. 145–296, (1–8), 1 map).

Gives data on the contents of the herbarium and on botanical collectors.

LIPSKY, W. H., *Gerbarīĭ Imperatorskago S. Petersburgskago Botanicheskago* Sada k kontsu ego 75-lĭetnīago sushchestvovaniīa (1823–1898) (Herbarium of the St Petersburg Bot. Gard. to the end of its 75 years existence). 1898; 2nd ed. 1908.

This work in Russian contains: (1) a general description of the Herbarium, (2) an alphabetical enumeration of all collections (name of collectors, region, date, number of genera and number of specimens), and (3) the distribution of collections in geographical order (for the Malaysian region *cf.* p. 191–192). The title of the 2nd corrected and enlarged edition varies slightly.

FISCHER VON WALDHEIM, A. A., & others, *Istoricheskiĭ ocherk Imperatorskago S.-Petersburgskago Botanicheskago* Sada za posliednie 25-lĭetie ego s 1873 po 1898g (Hist. sketch of the Imp. St Petersb. Bot. Gard. from 1873–1898). 1899.

This work in Russian consists of articles by various authors. It includes descriptions of the Herbarium and of collections (*cf.* p. 67–148), and a survey of the publishing activity of the Garden with biographies of various botanists and bibliographies of their works, some concerning eastern Asia.

The Herb. LEDEBOUR (Dorpat) is incorporated in the Herb. Bot. Gard. (purch. 1857), as is the Herb. FISCHER, and the Herb. TRAUTVETTER (1889).

Leyden, Holland

's Rijksherbarium (State Herb., Herb. Lugdunum Batavum).

GODDIJN, W. A., *'s Rijks Herbarium* (l'Herbier de l'État) 1830–1930 (Meded. 's Rijks Herb. Leiden *nos* 62 a–b, 1931; with co-operation of J. W. C. GOEDHART).

A small French survey (5 pp.) and a more detailed Dutch one (53 pp.).

LAM, H. J., *The Rijksherbarium during the war* (Blumea 5, 1945, p. 426–436).

The Herbarium is intact; part of the material on loan in foreign countries (*e.g.* Germany) may be lost.

Verslagen 's Rijksherbarium (reports State Herbarium) Leiden.

For the years 1862–74, 1907–10, and since 1933. The report for the year 1909/10 was published in the Meded. Rijks Herb. *no* 6, 1910.

Lists of contributors to the collections (mentioning year and island) were consulted by the present author.

Liege, Belgium

Herb. Liege University.

ROY, A. LE, *Notice sur le Jardin botanique de Liège* et sur les collections qui s'y rattachent (Compt. Rend. Fêtes jubil. Univ. Liège 1867) (*non vidi;* evidently no detailed information).

MORREN, CH., *Notice sur les collections de l'Université de Liège.* 1885.

Does not give any detailed information.

London, England

Herb. British Museum.

PETIVER, J., *An abstract of what collections I have received, etc.* (in Musei Petiveriani 1695–1703, p. 43–47, 94–96; 1702, p. 63).

Several of the oldest collectors in the Malaysian region are mentioned, whose plants nowadays are preserved in the British Museum with Herb. PETIVER and SLOANE.

WOODWARD, B. B., *The libraries.* In the 'History of the collections contained in the Natural History Department of the British Museum' 1, 1904, p. 3–76.

The lists of MSS and drawings (p. 53) are annotated with important particulars.

MURRAY, G. & J. BRITTEN, *The Department of Botany.* In 'The History of the collections contained in the Natural History Department of the British Museum' 1, 1904, p. 79–193.

Gives a chronical account, as well as an alphabetical list of more important accessions.

Reports of the British Museum in Journ. Bot. 2, 1864 onward.

The Brit. Museum Herbarium contains several originally private collections, *e.g.* those of SLOANE, BANKS, R. BROWN, RAY, SHUTTLEWORTH, LAMBERT, HAMPE, VEITCH, Col. BEDDOME, N. B. WARD, R. WIGHT, *etc.*

Hanbury Herbarium.

HOLMES, E. M., *Catalogue of the Hanbury herbarium in the museum of the Pharmaceutical Society of Great Britain.* 1892.

It contains some specimens of Java plants from S. BINNENDIJK, and Dr J. E. DE VRIJ, and a Sumatra plant from W. H. DE VRIESE; also some from the Malay Peninsula.

HOLMES, E. M., *The Museum Report:* a descriptive list of the donations for the year 1893–94. Pharmac. Soc. of Gr. Britain. London 1895.

Includes some plants sent by H. N. RIDLEY and L. WRAY from the Malay Peninsula.

Herb. Horticultural Society.

A catalogue of all the valuable collections of dried plants which have been formed by the travellers employed by the Hort. Soc. of London during the last forty years (1856). *cf.* also Gard. Chron. 1856, p. 68.

This society sold its herbarium in 1856. In the Bot. Dept Brit. Museum is a copy of the Catalogue of the sale to which affixed an indication of the purchasers (*cf.* Journ. Bot. 32, 1894, p. 298 *seq.*).

Herb. Royal Botanic Gardens, Kew, Surrey.
cf. sub Kew.

Herb. Linnean Society.

WALLICH, N., *List of plants in the East-India-Company's Museum of the Botanic Garden at Calcutta.* London 1828, folio.
A numerical list of dried specimens of plants collected under the superintendence of doctor WALLICH.
Each plant with locality and collector.

The herbarium of the E.I.C. was distributed by WALLICH (see there), the principal set went to the Herb. Linn. Soc. in 1832. The latter was presented to Kew in 1913/14 (incl. plants of B. HEYNE, F. BUCHANAN HAMILTON, WIGHT, ROXBURGH, FINLAYSON, and later additions from HORSFIELD and others).

A catalogue of a portion of the Natural History collections of the Linnean Society of London. 1863. (Copy in Bot. Dept Brit. Mus.).

JACKSON, B. D., *Index to the Linnean herbarium*, with indication of the types of species marked by CARL VON LINNÉ (Proc. Linn. Soc. Lond. 124, 1912, Suppl. p. 1–152).
Mentions Eastern Asiatic specimens in this herbarium, important data on the collection and a list of collectors in Eastern Asia with historical and biographical data.

JACKSON, B. D., *Notes on a catalogue of the Linnean herbarium* (Proc. Linn. Soc. Lond. 134, 1922, p. 1–38).
Supplementary to the preceding entry; list of literature concerning the collections in the herbarium.

SAVAGE, SP., *A catalogue of the Linnean herbarium* (ed. by the Linn. Soc.). London 1945, 225 pp.
A recompilation on a more detailed basis of JACKSON's catalogue. With specimens of handwriting.

Donations in Transact. Linn. Soc., vol. 10–21.

The main Herbaria now in this Society's keeping are: the Smithian Herbarium (of Sir JAMES EDWARD SMITH, first president of the Society) which has many plants collected in the East Indies (at present Mr SP. SAVAGE is at work on a Catalogue of this Herbarium), and the British Herbarium.

Lund, Sweden

Herb. Lund University.

RETZ, A. J., *Observationes botanicae*, fasc. 1–6, 1779–1791.
Includes plants from KOENIG and WENNERBERG.

AGARDH *f.*, Prof., in Trans. Bot. Soc. Edinb. 13, 1878, p. 192–194.
Was already used by ALPH. DE CANDOLLE in 'La Phytographie' (1880).

ARESCHOUG, F. W. C., *Lunds universitetets Botaniska institution*, 1872–1897. Lund 1897.
Only one Malaysian collection mentioned, that of HJ. MÖLLER.

FISCHER, C. E. C., *The Koenig collection in the Lund Herbarium* (Kew Bull. 1932, p. 49–76).

Lyons, France

Herb. Lyons University.

LECOMTE, H., *Les dernières publications et les collections botaniques du Prince Roland Bonaparte*, membre de l'Académie (Compt. Rend. Acad. Sci. Paris 181, 1925, p. 753–755).
His small collection of phanerogams went to the Faculty of Science at Lyons. It includes at least SCHLECHTER plants.

BEAUVERIE, J., *Les herbiers et collections du Laboratoire de Botanique de la Faculté des Sciences de Lyon* (Congr. Soc. Sav. 1935, 1936, Paris) (*non vidi*).

Madrid, Spain

Herb. Botanic Gardens.

COLMEIRO, M., *Bosquejo historico y estadistico del Jardin botanico de Madrid.* 1875.
ALPH. DE CANDOLLE already made use of it when compiling his 'La Phytographie *etc.*' (1880).

WILLKOMM, M., *Die botanischen Gärten von Madrid und Valencia* (Flora N.R. 9, 1851, p. 129–135).
Deals also with the Herb. Madrid. It contains the plants collected by NÉE during the 'Malaspina' expedition, and 5 packages of Philippine plants collected from 1830 to 1835 by an unknown collector (according to MERRILL in Bull. Philip. Bur. Agr. *no* 4, 1903, p. 38); COLMEIRO credited the material to BLANCO and LLANOS, which statement is evidently wrong.

Herb. Escorial (de la escuela special de montes).

Contains the Philippine collections made by BARANDA, and by Don J. G. VALDES.

Herb. Museo Ultramarino.

Contains the herbarium of D. RAMON JORDANA, and a set of duplicates of VIDAL's most valuable Philippine collection.

Manchester, England

Herb. Victoria University.

A brief account of the General Herbarium formed by James Cosmo Melvill, 1867–1904, upon the occasion of its presentation to Victoria University, Manchester. Manchester-London 1904.

Contains some collections from the Malaysian region, amongst which a few not represented elsewhere.

BAILEY, CH., *On the contents of a Herbarium of British and foreign plants* for presentation to the Victoria University, Manchester (Manchest. Mem. 61, 1917, *no* 5, 18 pp.).

The herbarium contains 271 sheets from Java and Sumatra (in the paper inserted under China!). No collector of these plants is mentioned.

Manila, Philippines

MERRILL, E. D., *Herbaria in Manila.* In 'Botanical work in the Philippines' (Bull. Philip. Bur. Agr. *no* 4, 1903, p. 33–35).

Herb. Ateneo Municipal.

Contains the herbarium formed by REGINO GARCIA; of no historical and little scientific value.

Herb. Bureau of Science, Manila, later Philippine National Herbarium.

MERRILL, E. D., *The botanical work accomplished since the American occupation.* In 'Botanical work in the Philippines' (Bull. Philip. Agr. *no* 4, 1903, p. 41–43).

MERRILL, E. D., *The Philippine Bureau of Science* (Proc. 1st Pan-Pac. Sci. Conf. 1, 1921, p. 241–242).

MERRILL, E. D., *Historical sketch of Philippine botany*, the period from 1898 to 1923 (in Enum. Philip. Fl.Pl. vol. 4, 1926, p. 53–56).

Reports of the Chief of the Bur. of Forestry, Philippines, 1900–04.

Reports of the Bureau of Forestry, Philip. Islands, 1901–1906.

Reports Bureau of Govt Lab. (later of *Science*), Manila, since 1901.

Reports of the Director of Forestry, Philip. Islands, since 1905 (1905–08 *non vidi*).

Contains the collections of various employees of the Bureau of Science and of the Bureau of Forestry, and of several private collectors.

Duplicates of the Bur. Sci. Herbarium are in U.S. Nat. Herb. Washington, and mostly at Kew, Cambridge (Harv. Univers.), N.Y. Bot. Gard., St Louis Bot. Gard., Cornell and Yale Schools (at least this was the original intention of MERRILL). Also many dupl. in Herb. FIELD Mus. Chicago, Paris, Leyden, Geneva, Leningrad, Singapore, Calcutta, Buitenzorg, Sydney, *etc.*

The Bureau of Science, including all collections, was destroyed completely during the reoccupation of Manila. It contained more than 300.000 mounted specimens. Thanks to Dr MERRILL's wise and liberal policy of large-scale distribution, many specimens, often isotypes, are safe and available today in other herbaria (Chron. Bot. 9, 1945, p. 190–191).

Collecting work has been resumed after the war.

Herb. College San José.

Collection made by Dr LEON GUERRERO, material packed in boxes, in 1903 inaccessible; also plants collected by A. LOHER.

The Herbarium at the Convent of the Church of Guadeloupe, near Manila, was destroyed by fire on Febr. 19, 1899. It contained the herbaria of NAVES and FERNANDEZ-VILLAR.

The Herbarium of the Spanish Forestry Bureau was injured by the earthquake of 1880 and by a typhoon of 1883, and on Sept. 27, 1897 destroyed by fire. It contained the collection of VIDAL, and a partial set of CUMING's plants.

Medan, Sumatra

Herb. Deli Experiment Station.

Contributors to this small local herbarium for internal use are members of the staff of this Experiment Station and some Indonesians.

It was founded in 1915 by L. P. DE BUSSY, to get a knowledge of the vegetation and revegetation of the fallow tobacco lands (*cf.* Meded. Deli Proefstation ser. 3, *no* 59, 1929, p. 21). As far as is known it is still intact.

Melbourne, Australia

National Herbarium.

MUELLER, F. VON, *The Melbourne Herbarium* (Gard. Chron. ser. 3, vol. 4, 1888, p. 211–212).

The paper makes no mention of New Guinea collections.

TOVEY, J. B., *Remarks on the National Herbarium of Melbourne* (Vict. Naturalist 24, 1908, p. 146–147).

The former private herbarium of F. VON MUELLER is incorporated; Herb. SONDER (Hamburg) was purchased. At least in 1908 the collections from Papua and Polynesia were kept separate for easy reference.

Many of the older collections from E. New Guinea were sent to VON MUELLER, and will be preserved in this herbarium. Also plants from BECCARI, WALLICH, R. BROWN, THUNBERG, *etc.*

Monaco, Monaco

Here was, and probably still is, a herbarium which was cited by HALLIER *f.* to contain a number of Malaysian duplicates. As far as the information goes these were duplicates from his own herbarium which included specimens from the Buitenzorg Botanic Garden too (*cf.* for example Bull. Herb. BOISS. 6, 1898, p. 605).

Montpellier, France

Herb. Montpellier University.

BAILLON, H., *Note sur l'herbier de Cambassèdes* (Bull. Soc. Bot. France 10, 1863, p. 563–565).
Bequeathed to Herb. Montpellier.

FLAHAULT, CH., *Université de Montpellier. L'Institut de Botanique.* Montpellier 1890.
For the contents of the Herbarium see p. 14–19.

FLAHAULT, CH., *Université de Montpellier. L'Institut de Botanique depuis sa création 1889–92.*
No new acquisitions of the Malaysian region.

Moscow, U.S.S.R.

Herb. Moscow University.

GOROSCHANKINE, J. N., *Mémoire sur l'état des Herbiers de l'Université* de Moscou et de la Société impériale des Naturalistes de Moscou. Moscou 1884 (Bull. Soc. Imp. d. Natur. 59, 1884,[1] p. 290–303).
The Herbarium of the Imp. Hort. Soc. Moscow was presented to the University in 1880, that of the Imp. Nat. Hist. Soc. in 1884.

NAZAROV, M. I., *Herbarium vivum Universitatis Mosquensis* (Bull. Jard. Bot. U.R.S.S. 25, 1926, p. 266–314; in Russian).

Münster, Germany

Herb. Münster University.

TOBLER, E., *Die botanischen Sammlungen der Universität Münster* (Sitz. Ber. Naturhist. Ver. Preuss. Rheinl. u. Westfalen 1908, Bonn 1909, E, p. 86–91).
No Malaysian collections mentioned.

Munich, Germany

Herb. Munich University.

MARTIUS, K. FR. PH. VON, *Das königliche Herbarium zu München.* München 1850 (Münch. Gelehrt. Anz. 31, 1850, *nos* 89–93, p. 717–719, 720–728, 729–736, 737–743, 744–747). Engl. transl. by N. WALLICH in HOOK. Lond. Journ. Bot. & Kew Gard. Misc. 3, 1851, p. 65–74, 102–111.
The herbarium contains duplicates of the E.I.C. Herbarium distributed by WALLICH, plants of Dr KOLLMANN, Baron C. VON HÜGEL, and other Malaysian plants with Herb. ZUCCARINI.

The herbaria are in good condition (*cf.* Biologia 1, 1947, p. 2).

The Herbarium is replaced, after evacuation, and available for study (*cf.* A. H. G. ALSTON, Report on the state of taxonomic botany and botanical collections in some areas of Germany since 1939, Brit. Intell. Obj. Sub-Committee final report *no* 1520, item *no* 22, 1946, p. 11–12).

New York, N.Y., U.S.A.

Herb. Columbia University.

BRITTON, N. L., *Columbia College Herbaria* (COULTER'S Bot. Gaz. 11, 1886, p. 9–11).
Includes Herb. TORREY, MEISNER (rich in Asiatic species), CHAPMAN, *etc.*

UNDERWOOD, L. M., *The Department of Botany and its relation to the N.Y. Bot. Garden* (Columb. Univers. Quarterly 5, 1903, p. 278–292, ill.).
The herbarium of this university is deposited on what amounts to permanent loan in Herb. N.Y. Bot. Garden.

Herb. New York Botanical Garden.

UNDERWOOD, L. M., *The Department of Botany and its relation to the N.Y. Bot. Gard.* (Columbia Univers. Quarterly 5, 1903, p. 278–292, ill.).
The material of the Columbia University (see *sub* Columbia) is deposited since 1898 on what amounts to permanent loan in the Herb. N.Y. Bot. Garden.

BRITTON, N. L., *The herbarium of the late Dr Otto Kuntze* (Journ. N.Y. Bot. Gard. 9, 1908, p. 19–21).
Purchased after his death by New York Botanical Garden.

BRITTON, N. L., *The Britton Herbarium* (Journ. N.Y. Bot. Gard. 36, 1935, p. 25).
The general herbarium of the N.Y. Bot. Gard. (phanerogams) will be called 'BRITTON Herbarium'.
The TORREY Herb. of the Columbia Univers. is incorporated.

MOLDENKE, H. N., *Important collections in the Herbarium* (New York Botanical Garden) (Journ. N.Y. Bot. Gard. 42, 1941, p. 38–39).

Reports in the Journ. N.Y. Bot. Garden vol. 1 onwards.

In 1945 the *Herbarium of Princetown University* (New Jersey Sci. Dept) was deposited in N.Y. Bot. Garden.

A card index of the acquisitions, made by G. L. WITTROCK, was consulted by the present author.

Oxford, England

Herb. Oxford University.

cf. HOOK. Journ. Bot. & Kew Gard. Misc. 6, 1854, p. 247–252, 279–284.

SCHÖNLAND, S., *Der botanische Garten, das botanische Institut, das botanische Museum, die Herbarien und die botanische Bibliothek der Universität Oxford* (Bot. Centr. Bl. 25, 1886, p. 187–193).

Only plants of importance for us is a collection of WALLICH's East Indian plants.

DRUCE, G. C., *An account of the herbarium of the University of Oxford.* Oxford 1897, 20 pp.

Mentions a very few Eastern Asiatic collections. Preface by S. H. VINES.

The Herb. FIELDING is incorporated.

VINES, S. H. & G. C. DRUCE, *ditto*, pt II. Oxford 1919, p. 21–55.

The herbarium of the Imp. Forestry Institute of this university contains, as far as could be derived from some of its reports, practically exclusively duplicate plants presented by other institutions.

Paris, France

Herb. Muséum d'Histoire Naturelle (Natural History Museum).

DELEUZE, J. P. F., *Histoire et description du Muséum Royal d'Histoire Naturelle.* Paris 1823, 2 vols.

The paper was already used by ALPH. DE CANDOLLE when compiling his 'Phytographie' (1880).

LECOMTE, H., *Historique des collections de botanique du Muséum d'Histoire naturelle de Paris* (Rev. Scient. Paris sér. 5, vol. 7, 1907, p. 673–680, 716–721).

Inauguration de l'Herbier COSSON-DURAND (in Revue scientif. 8 âout 1908).

LECOMTE, H., *Notice sur S.A. le Prince Roland Bonaparte* (Bull. Soc. Bot. France 71, 1924, p. 1041–1047, pl. 1–9 + portr.).

His fern herbarium includes the herbaria of CHRIST (1908) and LUERSSEN (1910).

LECOMTE, H., *Les dernières publications et les collections botaniques du Prince R. Bonaparte*, membre de l'Académie (Compt. Rend. Acad. Sci. Paris 181, 1925, p. 753–755).

His collection of ferns was bequeathed to the Natural History Museum, Paris. It is not inserted in the General Herbarium. For the contents of this collection BONAPARTE, Notes Ptéridologiques 1915–25, was consulted.

Accessions in Bull. Mus. Hist. Nat. Paris vol. 1–*hodie.*

In this herbarium several originally private collections are incorporated, besides BONAPARTE, those of FRANQUEVILLE (with Herb. COSSON), FRANCHET, MOQUIN-TANDON, LENORMAND, BORY DE ST VINCENT, LÉVEILLÉ, MONTAGNE, GAY, JAUBERT, RICHARD, JUSSIEU, MÉRAT, MAIRE, BING, DESVAUX, *etc.*

Rapports annuelles sur le fonctionnement du Service de botanique du Mus. d'Hist. Nat. de Paris.

In the reports for 1909–13, 1910–14 mention is made of duplicates received from Buitenzorg and Manila.

Pasoeroean, Java

Herb. Experiment Station Java Sugar Industry.

Though this herbarium existed already long before C. A. BACKER was on the staff, its main accessions were in the latter period, especially of plants collected by himself and by O. POSTHUMUS.

Though it contains plants from outside Java, its purpose is for internal use; duplicates of important plants were sent to Herb. Bog. (Buitenzorg).

In the forties duplicates were presented by C. A. BACKER to Herb. Leyden, Groningen, and Buitenzorg.

Lists of the contents of the Herbarium were consulted by the present author.

The library and archives in the main building were destroyed by extremists, but the herbarium is intact.

Penang, W. of the Malay Peninsula

Herb. Penang.

The herbarium was built up by CH. CURTIS and was incorporated into that of the Singapore Botanic Gardens in 1910.

Perak, Malay Peninsula

cf. sub Taiping.

Petrograd, U.S.S.R.

cf. sub Leningrad.

Philadelphia, Penn., U.S.A.

Herb. Academy of Natural Sciences.

REDFIELD, J. H., The herbaria and botanical libraries of the United States. V. *Herbarium of the Academy of Natural Sciences of Philadelphia* (Bull. Torr. Bot. Club N.Y. 8, *no* 4, 1881, p. 42–44; transl. in Bot. Centr. Bl. 1881^2, p. 248–250).

Includes plants from PICKERING of the Orient (1844/45), and WALLICH plants.

BARNHART, J. H., *Brief sketches of some col-*

lectors of specimens in the Barton Herbarium (Bartonia 9, 1926, p. 35–42).

Includes plants from TH. HORSFIELD (Malaysia or America?). The herbarium has been deposited by the American Philos. Soc. at the Academy of Sci. of Philadelphia.

Pisa, Italy

Herb. Pisa University.

SAVI, G., *Notizie per servire alla storia del giardino e museo della I. e R. Universita di Pisa.* Pisa 1828.

CARUEL, TH., *L'orto e il museo botanico dell' Università di Pisa.* Pisa 1874, 14 pp.

No particulars on Malaysian collections.

SAVELLI, M., *La vendita dell' erbario di Guiseppe Raddi* (Boll. Soc. Bot. Ital. Firenze 1918, p. 3–8).

± 7000 plants, for example from New Holland and East India, bought by the Italian Government for the University of Pisa in 1830.

Prague (Praha), Czecho-Slovakia

Herb. German University.

WETTSTEIN, R. VON, *Der botanische Garten und das botanische Institut der k.k. deutsch. Universität in Prag* (Oesterr. Bot. Zeitschr. 49, 1899, p. 41–51, 92–98; reprinted in Wien 1899).

Includes coll. SCHIFFNER from Java and Sumatra, and collection HAENKE from the 'Malaspina' Expedition.

The Herbarium was not destroyed in the 2nd world war. The HAENKE collection seems to be safe.

Rome, Italy

Herb. Rome University.

According to BACKER (Verkl. Woordenb., 1936), the herbarium of V. CESATI is preserved at Rome.

St Louis, Missouri, U.S.A.

Herb. Missouri Botanical Garden.

GREENMAN, J. M. (Anonymous), *Early collections in the Garden Herbarium* (Missouri Bot. Gard. Bull. 7, 1919, p. 29–35, pl. 8–11).

Ann. Rep. Missouri Bot. Garden 1890–1912.

Contains collections of BERNHARDI, HAENKE, ROTTLER, *etc.*

St Petersburg, Russia

cf. sub Leningrad.

Sandakan, Br. N. Borneo

Herb. Forest Department.

Annual reports of the Forestry Dept Br. N. Borneo (only few seen by the present author).

The Forest Department was founded in 1915. From 1918–29 the first set was sent to Dr E. D. MERRILL (at first to Manila, since 1924 to Berkeley, Cal.).

From 1930 onwards the 1st set went to Kew and duplicates to Singapore and Kepong, one set being retained by the Forest Department.

The entire herbarium of the Forest Department (consisting of some 13.000 odd mounted sheets incl. many type specimens) was destroyed by the Japanese. Collecting has been resumed with a new series of numbers beginning with A 1 (information of the Conservator of Forests H. G. KEITH). In July 1948, 1432 numbers had been collected.

Sarawak, Borneo

cf. sub Kuching.

Sibolangit, Sumatra

cf. sub Buitenzorg.

Singapore, S of the Malay Peninsula

Herb. Singapore Botanic Gardens.

Short summary of the state of the herbarium at that moment, in Ann. Rep. Bot. Gard. Str. Settlements for 1889, 1890, p. 7–8.

RIDLEY, H. N., *The Herbarium* (of the Singapore Botanic Gardens) (Agr. Bull. Fed. Mal. Stat. 6, 1907, p. 330–333, 1 photo).

Annual reports on the Botanic Gardens, Straits Settlements, up to 1939 (up to 1900 including the reports on the Forests in the Straits Settlements).

The Singapore Botanic Gardens during 1941–46 (Gard. Bull. Singap. 11, 1947, p. 263–265).

The Herbarium remained intact.

The Penang Herbarium was incorporated in 1910.

As late as Jan. 1942, notwithstanding the war, additional information was given by Messrs HOLTTUM and FURTADO on collections in the Herbarium.

Dupl. to U.S. Nat. Herb. Washington, Buitenzorg, *etc.*

Stockholm, Sweden

Herb. Royal Academy of Sciences.

WITTROCK, V. B., *Ueber das Bergian'sche Herbarium* (Bot. Centr. Bl. 47, 1891, p. 231–233).

Herb. State Museum.

AGARDH *f.*, Prof., in Trans. Bot. Soc. Edinb. 13, 1878, p. 192–194.

This source of information was already used by ALPH. DE CANDOLLE, when compiling his 'Phytographie' (1880).

LINDMAN, C. A. M., *A Linnean Herbarium in the Natural History Museum in Stockholm* (Ark. f. Bot. 7, 1907, *no* 3, 57 pp.).

Sydney, Australia

National Herb. of New South Wales.

Assembly N.S.W. Reports Bot. Gard. *etc.* for 1897–1923.

Information *in litt.* was given by the Curator R. H. ANDERSON.

Taihoku, Formosa (Taiwan)

Herb. Taihoku University.

SASAKI, S., *A catalogue of the government herbarium* (Rep. Dept Forestry Taihoku, *no* 9, 1930).
Includes several duplicates from the Philippines, probably received from Manila, as they include specimens from the Bureau of Science, the Forestry Bureau, and of private American collectors.

Taiping, Perak, Malay Peninsula

Herb. Perak Museum.

Report in Perak Mus. Not. 2, 1897, p. 69–80 (for the year 1895); *l.c.* 2, 1898, p. 125–138 (for 1896).

Report of the Perak Museum incl. herb. in Journ. Fed. Mal. Stat. Mus. vol. 1 (for the years 1903–1904).

The herbarium was transferred to Herb. Singapore Botanic Gardens on indefinite loan in 1926.

Tiflis, U.S.S.R.

Herb. Museum Caucasicum.

RADDE, G., *Die Herbarien des kaukasischen Museums.* Vol. 2 Museum caucasicum, Tiflis 1901, 201 pp., 12 portr. *etc.*
Mentions RADDE's collection made in the Malaysian region (*l.c.* p. 5). No other collections from that region mentioned.

Tjibodas, Java

Herb. Mountain Garden Tjibodas.

The Laboratory of the Mountain Garden at Tjibodas (branch of the Buitenzorg Botanic Gardens) contained a local herbarium of duplicates from Herb. Bog. (Buitenzorg) intended for use by scientific workers who temporarily stayed there.
In June 1946 the building was set on fire by extremists, and was burned out totally.

Material for a new herbarium has been collected by the curator and his Indonesian assistants.

Turin (Torino), Italy

Herb. Turin University.

MATTIROLO, O., *Nuovi materiali scientifici pervenuti in dono al R. Istituto botanico di Torino* 1903–10 (Bull. Soc. Bot. Ital. Firenze 1911, p. 30–37).
Contains 14 ferns from Java, from Herb. BONAPARTE; no other Malaysian collections mentioned.

Uppsala, Sweden

Botanical Museum.

A *report on the Botanic Garden*, transl. in Trans. Bot. Soc. Edinb. 13, 1878, p. 192 *seq.*

FRIES, TH. M., *Om et Linneanskt herbarium i Sverige* (Bot. Notiser 1887, Heft 3, p. 141); *cf.* also Bot. Centr. Bl. 1887^3, p. 402.
No Malaysian collections mentioned.

JUEL, H. O., *Plantae Thunbergianae.* Ein Verzeichnis der von C. P. THUNBERG in Südafrika, Indien und Japan gesammelten und der in seinen Schriften beschriebenen oder erwähnten Pflanzen, sowie von den Exemplaren derselben, die im Herbarium Thunbergianum in Upsala aufbewahrt sind. Uppsala 1918, p. 1–462.

Utrecht, Holland

Herb. Utrecht University.

An Index of the collections of this Herbarium was consulted by the present author.

Vienna (Wien), Austria

WETTSTEIN, A. VON, *Die botanischen Anstalten Wiens im Jahre 1894.* Wien 1894, 85 pp., 11 pl. (Festschr. Oesterr. Bot. Zeitschr.).
For the Nat. Hist. Mus. Herbarium *cf.* p. 55–78; for that of the Zoological-Botanical Society *cf.* p. 79–81.

Herb. k.k. Naturhistorische Hofmuseum Wien (Nat. Hist. Mus. Vienna).

BECK, DR G. RITTER VON, *Geschichte des Wieners Herbariums* (d. bot. Abt. d. k.k. naturhist. Hofmus. in Wien) (Bot. Centr. Bl. 33, 1888, p. 249–251, 280–283, 312–314, 378–380; *l.c.* 34, 1888, p. 28–31, 86–87, 147–151).

FRITSCH, K., *Das botanische Museum und der botanische Garten der k.k. Univ. Wien.* Wien 1894.
Gives no detailed data on the collections.

KEISSLER, K. VON & K. RECHINGER, *Verzeichnis der im Orchideenherbare von Reichenbach fil. enthal-*

tenen Sammlungen (Ann. k.k. Hofmus. Wien 30, 1916, p. 12–23); *cf.* also *l.c.* 4, 1889, Notizen p. 103–105).

This private herbarium which contained many Malaysian orchids was bequeathed to Vienna in 1889; no access to this collection was allowed before 25 years later.

SMITH, J. J., *Notizen aus Reichenbachs Herbar* I–III (Bull. Jard. Bot. Buit. sér. 3, vol. 8, 1927, p. 353–369; *l.c.* 9, 1928, p. 482–492; *l.c.* 11, 1930, p. 19–27).

AMES, O., *The Reichenbachian Herbarium* (Amer. Orchid Soc. Bull. 1, 1933, p. 98–99 + portr.).

Gives no detailed information.

Annual reports in the Ann. k.k. naturhist. Hofmus. Wien.

During the 2nd world war the Herbarium has been sent to a safe place, and afterwards was brought back. Unfortunately the collections of the Monocotyledons were nearly completely lost during the fire in the house where they had been stored (information from the Komarov Bot. Inst. to Dr E. D. MERRILL).

Whether these Monocotyledons included REICHENBACH *f.*'s orchid herbarium is not known to me, but it is likely.

Herb. zool.-bot. Gesellschaft (society).

REICHART, H. W., *Über das Herbar des Vereins* (Verh. zool.-bot. Ver. Wien 5, 1855, p. 49–52, 109–111).

Evidently European material only. During the war it has been destroyed almost entirely (*cf.* Science 102, 1945, p. 193).

Wageningen, Holland

Herb. Wageningen Agric. College (Herb. Vadense).

Information *in litt.* was given by Dr J. G. B. BEUMÉE.

The Herbarium includes the Malaysian collection made by JESWIET.

Washington, D.C., U.S.A.

U.S. National Herbarium.

COULTER's Bot. Gaz. 11, 1886, p. 153–156.

Includes the material of the WILKES U.S. Exploring Expedition (1838–42); duplicates were received from Petersburg (= Leningrad), Kew, *etc.*

Ann. Rep. Smith. Inst. Washington for 1846 and onwards.

Reports on the U.S. Nat. Herb. 1858, onwards.

In 1858 the Smithsonian Institution became curator of the collections of Natural History *etc.* of the Government. At that time the plants of the WILKES U.S. Expl. Exp. were in the possession of the Smith. Inst. (Patent Office). A report on the condition of the combined herbaria in 1858 is published in the cited Reports for that year, p. 52–56; in 1868 the collection was transferred to the Dept of Agriculture; in 1885 a partly herbarium in custody of Dept of fossil plants of the U.S. Nat. Museum; in 1895 all collections in U.S. National Herbarium.

A card index of the contents of the Herbarium was consulted by the present author.

Zürich, Switzerland

Herb. Botanischer Garten und Botanisches Museum der Universität (Bot. Gard. and Mus. of the University).

Der botanische Garten und das botanische Museum der Universität Zürich. By H. SCHINZ, 1895–1907.

Reports in the Mitt. Bot. Mus. Zürich.

Information *in litt.* was given by Prof. A. U. DÄNIKER.

Herb. Polytechnische Hochschule (Polytechnical College).

JÄGGI, J., *Das botanische Museum des Schweizerischen Polytechnikums zu Zürich* (Bot. Centr. Bl. 24, 1885, p. 344–348, 379–384; *l.c.* 25, 1885, p. 26–28, 92–95).

c. SELECT LIST OF ORIGINALLY PRIVATE HERBARIA AND THEIR PRESENT LOCATION

AMES, OAKES AMES Herbarium, Cambridge, Mass., U.S.A.
BABINGTON, Herb. Cambridge, England.
BAKER, Ch. F., Herb. Manila, Luzon, Philippines.
BANKS, J., Herb. Brit. Museum, London.
BARBEY, Herb. BOISSIER, Geneva, Switzerland.
BARTON, Acad. Nat. Sci. Philadelphia, Penn., U.S.A.
BECCARI, Herb. Florence, Italy.
BEDDOME, Col., Herb. Brit. Museum, London.
BENTHAM, Herb. Kew, England.
BERNHARDI, Herb. Berlin.
BING, Herb. Paris.
BINSTEAD, Herb. Kew (mosses), England.
BOISSIER, Herb. BOISSIER, Geneva, Switzerland.
BONAPARTE, Prince R., Herb. Lyons (phanerogams) and Herb. Paris (pteridophytes), France.
BORY DE ST VINCENT, Herb. Paris (in 1924 excl. *Marsiliaceae*, *cf.* Bull. Mus. Hist. Nat. Paris 30, 1924).
BRITTON, Herb. New York Bot. Garden, U.S.A.

BROWN, R., Herb. Brit. Museum; dupl. at Kew, Edinburgh, Berlin and Linn. Soc. London.
BUCHTEIN, O., U.S. Nat. Herb. Washington (incl. Philip. plants!).
BURMAN, N. L., Herb. DELESS. (Geneva); Ceylon plants in Herb. Leyden too.
BURMAN, J., contributed Cape and Java plants to Herb. Linn. Soc. London.
BURNAT, Herb. Geneva, Switzerland.
CAMBASSÈDES, Herb. Montpellier, France.
CANDOLLE, DE, Herb. DE CANDOLLE, Geneva, Switzerland.
CESATI, Herb. Rome, Italy.
CHRIST, Herb. Basel (partially), Switzerland; pteridophytes in Herb. BONAPARTE (= Paris).
CHRISTENSEN, Herb. Brit. Museum, London.
COPELAND, Pteridophyte Herbarium, still private, Berkeley, Cal., U.S.A.
COSSON, Herb. Paris; dupl. at Kew, England.
CUNNINGHAM, A., Herb. Kew, England.
DECAISNE, Herb. Brussels, Belgium.
DELESSERT, Herb. DELESSERT, Geneva, Switzerland.
DESVAUX, Herb. Paris.
DIXON, Herb. Brit. Mus., London.
DUBY, Herb. BOISSIER (mosses), Geneva; Herb. Univ. Berne (phanerogams), Herb. Univ. Strassbourg (*Algae* and *Fungi*).
DUNAL, Herb. Montpellier, France.
East India Company, best set at present in Herb. Kew (before 1913/14 it was in Herb. Linn. Soc. London).
FARLOW, FARLOW Herb., Cambridge, Mass., U.S.A.
FIELDING, Herb. Oxford, England.
FISCHER, Herb. Bot. Gard. Leningrad.
FLEISCHER, FARLOW Herb. (mosses), Cambridge, Mass., U.S.A.
FRANCHET, Herb. Paris.
FRANQUEVILLE, with Herb. COSSON in Herb. Paris.
GAERTNER, C. F., ? Tübingen, Germany.
GAMBLE, Herb. Kew, London.
GAY, CL., Herb. Paris.
GAY, J., Herb. Kew, England.
GODEFFROY, Herb. Hamburg, Germany.
GRAY, A., GRAY Herb., Cambridge, Mass., U.S.A.
GRISEBACH, Herb. Göttingen, Germany.
HAMPE, Herb. Brit. Museum (mosses and hepatics), London.
HAYNALD, Card., Herb. Budapest, Hungary.
HEURCK, H. VAN, Herb. Antwerp (Mus. v. HEURCK), Belgium.
HOHENACKER, Herb. Bot. Gard. Leningrad.
HOOKER, J. D. & W. J., Herb. Kew, England.
JAUBERT, Herb. Paris.
JUSSIEU, DE, Herb. Paris.
KICKX, several specimens in Herb. Caen, France.
LAMARCK, DE, Herb. Paris.
LAMBERT, mainly in Herb. DELESS. (Geneva), and in Brit. Museum; also dupl. at Oxford and Cambridge, England.
LEDEBOUR, Herb. Bot. Gard. Leningrad.
LEMANN, Herb. Cambridge, England.
LEMONNIER, Herb. DELESS., Geneva, Switzerland.
LENORMAND, Herb. Caen, Herb. Paris, *etc.*
LINDEMANN, at least partly in Herb. Moscow and Bot. Gard. Leningrad.
LINDLEY, Herb. Cambridge, England; Herb. Kew (orchids), England.
MARTELLI, Herb. Florence, Italy.
MARTIUS, VON, Herb. Brussels, Belgium.
MEIS(S)NER, Columbia University = N.Y. Bot. Garden, New York, U.S.A.
MONTAGNE, Herb. Paris.
MOQUIN-TANDON, Herb. Paris.
NEES VON ESENBECK, Herb. Bot. Gard. and Acad. Sci. Leningrad, and with Herb. Baron ZSCHOCK in Austria.
Neu Guinea Kompagnie, Herb. Berlin.
PALLAS, *cf. sub* LAMBERT. Included BANKS & SOLANDER, and THUNBERG plants.
PETIVER, Herb. Brit. Museum, London (with Herb. SLOANE).
PLUKENET, Herb. Brit. Museum, London (with Herb. SLOANE).
PULTENEY, Herb. Linn. Soc. London.
RAY, Herb. Brit. Museum, London.
REICHENBACH *f.*, Herb. Nat. Hist. Mus. Vienna, Austria.
RICHARD, Herb. Paris.
ROSENSTOCK, Herb. Berlin; also in Herb. N.Y. Bot. Garden, New York.
ROTH, Herb. Berlin.
ROYEN, VAN, Herb. Leyden, Holland.
SHUTTLEWORTH, Herb. Brit. Museum, London; 200 parcels of dupl. in Herb. Berne, Switzerland.
SLOANE, Herb. Brit. Museum, London.
SMITH, DONNELL, U.S. Nat. Herb. Washington.
SONDER, Herb. Melbourne, Australia.
SPRENGEL, Herb. Berlin.
STEUDEL, Herb. Caen, France.
TRAUTVETTER, Herb. Bot. Gard. Leningrad.
TURCZANINOW, Herb. Kharkov, U.S.S.R.
VEITCH, general Herb. at Kew; at least partly in Herb. Brit. Museum, London.
WARD, N. B., Herb. Brit. Museum, London.
WEBB, Herb. Florence, Italy.
WIGHT, R., Herb. Kew and 1000 in Brit. Museum, London, with WARD Herbarium.
WIGAND, ? Marburg, Germany.
WILLDENOW, Herb. Berlin.
WILLKOMM, Herb. Univ. Genoa, Italy.
ZSCHOCK, Baron, in Austria.
ZUCCARINI, Herb. Munich, Germany.

ACKNOWLEDGEMENTS

As this Cyclopaedia is essentially a compilation from the literature and records in the archives of herbaria and libraries, it is natural that my thoughts turn in the first place to those who have so kindly placed their books, card indices, manuscripts, and other data, at my disposal.

Everybody, who has occupied himself with similar studies, will know the difficulty in obtaining information by means of correspondence, as staffs are usually overtasked, and have hardly time to spare for the looking up of details.

It was a very fortunate circumstance that I was in a position to visit several institutes personally, and to consult their libraries and archives.

This could not have been done without the support of the Treub Fund of the Botanic Gardens at Buitenzorg (as far as Batavian libraries are concerned), and especially of the Netherlands Indian and later Indonesian Governments, which paid the expenses of visits to libraries in Holland and foreign countries.

The greater part of the work was performed at Buitenzorg, onwards from 1937. In the very rich Central Library ('Bibliotheca') of the Department of Agriculture and Industry (later the Department of Economic Affairs, and now the Ministry of Prosperity), a subdivision of the Botanic Gardens, I had the unfailing assistance of the late Asst Librarian Miss M. C. VAN IJSSELDIJK and the Indonesian chief clerk PARTAÄTMADJA, and also the sympathy of the Library Commission, which resulted in the acquisition of several of the books required.

At Buitenzorg I had further access to the Library of the Secretariate General. At Batavia I consulted mainly the libraries of the 'Koninklijke Natuurkundige Vereeniging' (Royal Natural Science Society) and the 'Bataviaasch Genootschap voor Kunsten en Wetenschappen' (Batavian Society for Arts and Sciences). The latter two are especially rich in ancient travel accounts.

Through the kind intermediary of Mr R. E. HOLTTUM, then Director of the Singapore Botanic Gardens, several books were borrowed from that Garden and from the Raffles Museum.

The archives of the Buitenzorg Herbarium, data on TEYSMANN, ZOLLINGER, and others, collected by Dr D. F. VAN SLOOTEN, and the records and reports of the Forest Research Institute could be studied in detail, while numerous biographical data on Forestry personnel could be derived from a card index in the Head Office of the Dutch East Indies Forestry Service.

It was unfortunate that numerous inquiries were dispatched in November 1941, as most of these had to be rewritten after the war. At the time, only the reply from the Singapore Botanic Gardens was received. A special word of appreciation is in place here for the Secretary of the National Herbarium at Washington, D.C., Mr A. WETMORE, from whom the reply with detailed facts on the OWEN BRYANT Expedition was received at the earliest possibility in 1946.

As there was certainly a big chance of the MS. being destroyed during the Japanese occupation of Java, it was lucky that, on the proposal of Dr D. F. VAN SLOOTEN, Mr NARUSAWA gave me an appointment in the Herbarium in August 1942, and that the late Prof. R. KANEHIRA, who from 1943 till 1945 was in charge of the Buitenzorg Herbarium and Library, also displayed a large interest in the work, and facilitated its progress during camp years. Mid-1946, when still in Java, the larger part of the Cyclopaedia was in its ultimate shape. What remained to be done was the consultation of periodicals, books, and archives not present in Java. The Department of Economic Affairs at Batavia granted the opportunity of visiting foreign countries, and in July 1946 I left Java.

In Holland many final data were found in the very rich library of Teyler Museum at Haarlem; the second librarian, Mr R. LORENTZ, on many occasions gave his assistance in looking up small details required at a time when private circumstances prevented me from coming to Haarlem myself.

In November 1946 a prolific use was made of the libraries and archives of Kew Herbarium and the British Museum. As well as to the librarian of Kew, Mr MARSHALL and his assistants, I owe many thanks to Mr I. H. BURKILL for the use of his card index, and to Mr H. K. AIRY SHAW who, amongst others, gave essential help with papers written in Russian.

In the British Museum books and manuscripts were still in process of rearrangement after the war, a fact which made the material assistance of Dr A. H. G. ALSTON, a keen historian himself, of extraordinary value, although I felt slightly embarrassed the first moment I sat down behind an immense pile of folios he had put on my desk in advance!

Only on the last afternoon of our stay in England Mr W. T. STEARN, Librarian of the Royal Horticultural Society, succeeded in unearthing some diaries of old collectors of the Society, as all valuable papers were still in the evacuation cases. As he himself was then staying in the buildings of the Society, I was kindly permitted to consult the MS. diaries after closing-time.

In the U.S.A., which I visited from December 1946 till February 1947, numerous data were supplied by the very well-stocked and well-catalogued libraries. A great help was the Union Catalogue in the Widener Library, Cambridge, Mass., and the printed Union List of Periodicals, the consultation of which saved much time. During the stay at Cambridge ample use was made of the libraries of Harvard University, *viz* of the Widener and Houghton libraries and those of the Arnold Arboretum, Jamaica Plain, Mass., where the sympathetic librarians, Miss L. SCHWARTEN and Mr ASMOUS, were of great help; further those of the Gray and Farlow Herbaria, the Museum for Comparative Zoology, the Law School, and the Peabody Museum should be mentioned. In some of the Herbaria lists of accessions were consulted. The personal contact with Dr MERRILL and with our old friends, Dr FRANS and Mrs VERDOORN, added much to the success of our trip. Dr VERDOORN took great pains to make our tour as profitable as possi-

ble, and Dr MERRILL later forwarded to me all the information he could lay hands on.

At Washington, D.C., Dr E. H. WALKER took much trouble for my convenience, and I was able to consult the card index of the collections of the U.S. National Herbarium, Smithsonian Institution, and a list of ex-service men who collected in the Pacific, prepared by himself. In the Library of the Department of Agriculture we had the liberal assistance of the Librarian Dr RALPH R. SHAW in our search for several Philippine periodicals and reports. In the Library of Congress some very obscure German periodicals were located.

Of the utmost importance at New York was the consultation of J. H. BARNHART's card index of botanists in which several collectors in the Malaysian region had been included. Besides, Mr G. L. WITTROCK had a private index of the collections of the New York Herbarium, which yielded some new data.

During the six weeks we passed in the United States we had ample opportunity for admiring the ready help given to us by the Americans whom we met.

Finally, in April 1949, the libraries and herbaria at Brussels, Paris and Geneva were visited, where respectively Dr W. ROBIJNS, Dr J. LEANDRI, Dr CH. BAEHNI and Mlle N. DUBUGNON spared no pains to give their whole-hearted assistance.

The centuries-old manuscripts, letters, and other documents preserved in the Herbarium and Central Library of the 'Jardin des Plantes', and those in the 'Archives Nationales' at Paris, will excite every lover of history, and it was a real pleasure to be able to rescue from oblivion a number of data connected with botanical exploration and collecting in Malaysia. The 'Bibliothèque Nationale' at Paris was also visited; some unique portraits were located in the files of the Academy of Sciences ('Institut de France'), and permission was granted for their reproduction.

At Geneva the neat files of the 'Conservatoire Botanique' were examined. Several interesting data were found in a file 'Notices Biographiques', brought together by ALPH. DECANDOLLE. On the way home one afternoon was spent at Basel where Dr M. GEIGER-HUBER introduced us to the Keeper of the Herbarium who gave us data on SARASIN's Celebes collection.

During the stay of over three years in Holland the Library of the Ministry of Overseas Territories (formerly the Colonial Office) was repeatedly consulted, and much help was received from the librarian, Mr C. DAMEN. Other libraries at The Hague, yielding additional data, have been those of the 'Koninklijk Instituut voor Taal-, Land- & Volkenkunde' (Roy. Institute for Languages, Geography & Ethnography), the Ministry of the Navy, and the 'Koninklijke Bibliotheek' (Royal Library).

If the desired literature was not present in the library of the Rijksherbarium at Leyden, the librarian Mr H. J. VAN DER HEE did his utmost to obtain it elsewhere in Holland.

The archives of the Rijksherbarium at Leyden and the 'Stamboeken' (registers) of the Ministry of Overseas Territories (the older ones being preserved in the 'Rijksarchief') at The Hague were consulted. Numerous biographical details of more recent officials of the D.E.I. Government were found besides in the files of the 'Indische Pensioenfondsen' (Neth. Indian Pension Fund) where Mr VAN DER VECHT produced cards at such a pace that I could hardly keep up with him.

Data were kindly put at our disposal by the offices at The Hague of the B.P.M. (Batavian Oil Co.) and the B.E.N.I.S.O. (Board of Sugar-cane Industry).

If archives and literature could not be examined, or did not yield adequate information, letters were written to private persons and to institutes. Of special value was the information given by the late Dr K. G. BOOBERG (on the contents of the Herbarium of the Sugar-cane Research Station at Pasoeroean, E. Java), by Mr C. T. WHITE, Mr R. H. ANDERSON and Mr L. J. BRASS (on Australian collectors in Papua and the Territory of New Guinea), by Mr R. E. HOLTTUM, Dr C. X. FURTADO and Mr J. WYATT-SMITH (on collectors and collections in the Malay Peninsula), by Mr H. MØLHOLM HANSEN (on Danish collectors), by Dr J. M. COWAN (on Malaysian collections in the Edinburgh Herbarium), by Dr R. PICHI-SERMOLLI (on Italian collectors), by the Missionary Research Library at New York, and by the 'Nederlandsch Zendingsgenootschap' at Oegstgeest, Holland (on missionaries who collected, and the pertaining literature). Among those who, on many occasions, supplied miscellaneous information, the names of Dr C. A. BACKER, Dr E. D. MERRILL, Mrs W. S. S. VAN DER FEEN-VAN BENTHEM JUTTING, and Dr H. ENGEL must certainly be mentioned; the latter has assembled a valuable and extensive card index, relating mainly to travel and zoology.

There remain to be mentioned the photographs, the assembly of which was started about 1939 by Dr VAN STEENIS. On his insistance they were inserted, and consequently he undertook the correspondence necessary to collect them from the various sources. A special word of thanks is in place here for the 'Institut de France', the Conservatoire Botanique de Genève, the Bergianska Trädgarden and Dr E. QUISUMBING of Manila, for their material contributions.

A tedious aftermath of writing is the ultimate reading of proofs, and I want to express my sincere gratitude to Dr H. C. D. DE WIT and Dr VAN STEENIS who never failed to assist me in this task. Mr E. J. H. CORNER's help with the English language of the introduction is greatly appreciated.

As it is impossible to mention by name all who have rendered service in one way or another, suffice it to say that very numerous, yet unnamed, co-operators have played their part in making this cyclopaedia as complete as it has been in my power to accomplish.

M. J. VAN STEENIS-KRUSEMAN

Buitenzorg, February 1950.

FACSIMILE HANDWRITINGS

SOME SAMPLES OF FACSIMILE HANDWRITINGS

The identification of handwritings on herbarium labels is in many cases important for the establishment of the origin of specimens, particularly in those cases, where the signature of the writer is absent.

In many instances labels were written by the collectors themselves, in other cases, however, European botanists or clerks wrote either the original labels or those of the duplicate specimens, or both.

Seventy alphabetically arranged facsimiles—the majority traced by kind assistance of Miss Dr J. TH. KOSTER—are reproduced here, 4/5 natural size. This is by no means a complete set of manuscript samples found on labels accompanying Malaysian specimens, but they are, together, a choice of the most frequently recurring handwritings.

The majority of the names entered here are those of collectors or botanists treated in this Cyclopaedia, and details about their life and work may be found there. A few exceptions are listed here:

Burman, N. L. (1733, Amsterdam; 1793, Amsterdam), physician, assistant of his father J. BURMAN in 1769, since 1777 successor to him as Professor of Botany at Amsterdam, author of the 'Flora Indica'.

Buse, L. H. (1819, Haarlem, Netherlands; 1888, Renkum, Netherlands), lawyer-botanist, who worked mostly on grasses and mosses, especially those collected by JUNGHUHN, REINWARDT, *etc.*; co-operator in MIQUEL's 'Plantae Junghuhnianae'.

Clarke, CH. B. (1832, Andover, Hants, England; 1906, Kew), lawyer-botanist, who made big botanical collections in India; co-operator in the 'Flora of British India', specialist in *Cyperaceae* and *Gesneraceae*.

Decaisne, J. (1807, Brussels; 1882, Paris), painter, later assistant at the 'Muséum d'Histoire Naturelle' at Paris, since 1848 professor at the 'Jardin des Plantes', author of numerous works including an enumeration of Timorese plants.

Diels, L. (1874, Hamburg; 1945, Berlin-Dahlem), brilliant German botanist, late Director of the Botanical Garden and Museum at Berlin-Dahlem, author of many important publications on the flora of China, W. Australia, and Ecuador, on *Menispermaceae*, *Droseraceae*, *etc.*, and on phytogeography.

Miquel, F. A. W. (1811, Neuenhaus, Hanover; 1871, Utrecht), studied and remained in Holland, professor at Utrecht University, author of numerous botanical works, among which the 'Flora Indiae Batavae'.

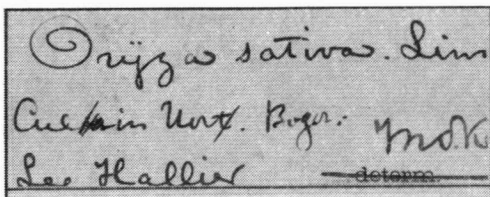
Mueller, F. von (1825, Rostock; 1896, Melbourne), originally a pharmaceutical chemist, who settled at Adelaide, later Director of the Botanical Gardens at Melbourne, co-author of the 'Flora Australienses', one of the most eminent botanists Australia ever had.

Ooststroom, S. J. van (1906, Rotterdam; x), senior botanist in the Rijksherbarium at Leyden, Holland, editor of Netherlands Floras, revisor of Malaysian *Convolvulaceae*, author of several papers on the history of botany.

Perry, Miss M. L. Botanist in the Arnold Arboretum of Harvard University, for a long time working together with Dr MERRILL, co-author of a revision of Bornean *Eugenia* and an important series of contributions on the Papuan flora.

Roxburgh, W. (1751, Craigie, Scotland; 1815, Edinburgh), physician, in 1776 entering the service of the E.I.C., 1793—1814 Director of the Botanic Gardens at Calcutta, author of the 'Flora Indica', which appeared posthumously through the care of CAREY.

Smeets, J. H., from 1856 to 1887 assistant at the Rijksherbarium, Leyden, wrote numerous labels of the Leyden collections and also those of duplicate material distributed by the Rijksherbarium.



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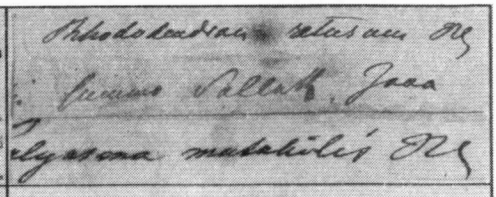

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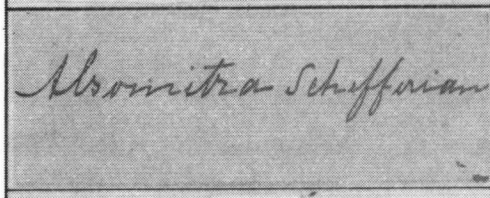

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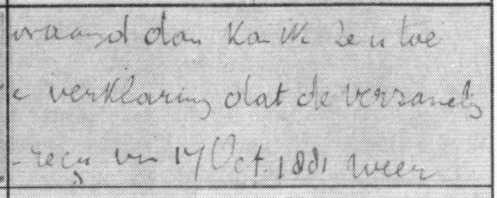

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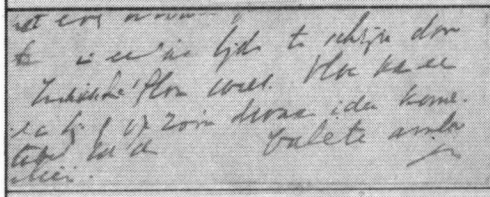

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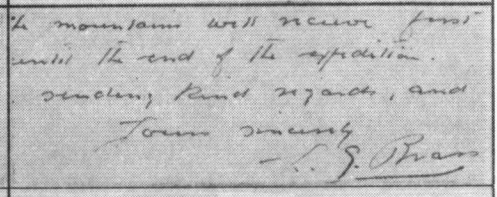

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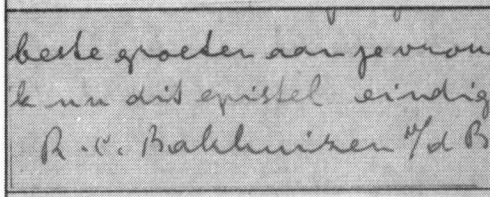

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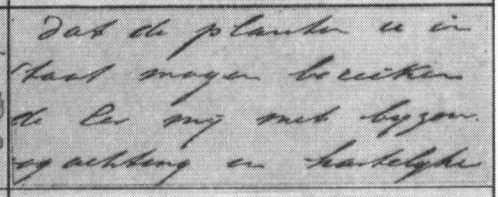

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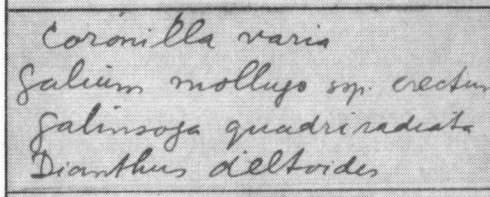

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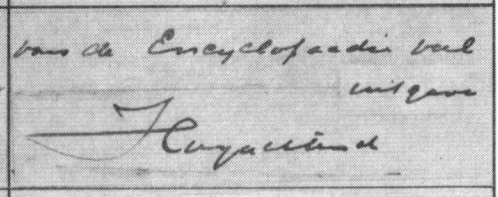

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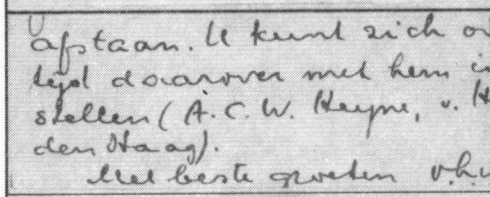

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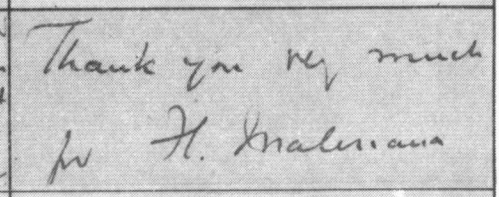

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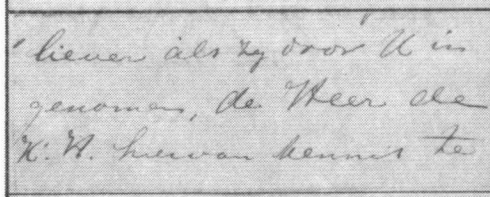

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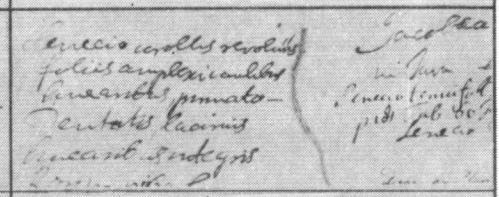

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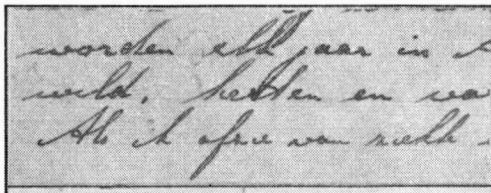

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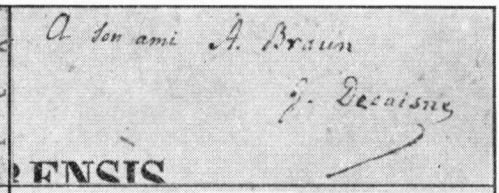

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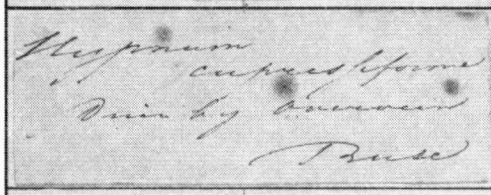

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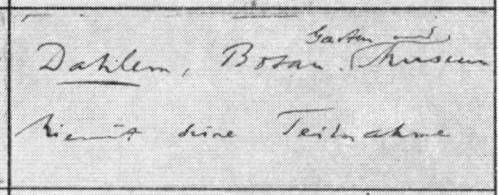

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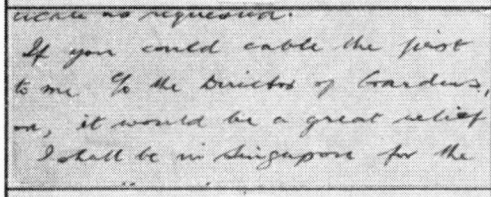

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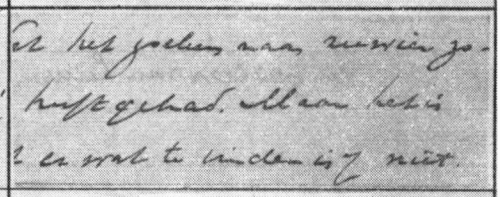

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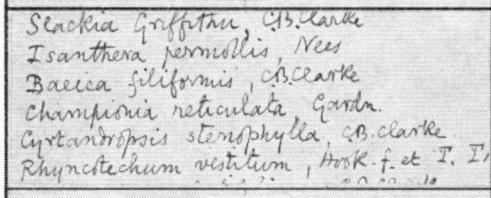

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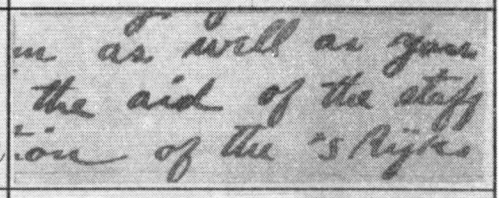

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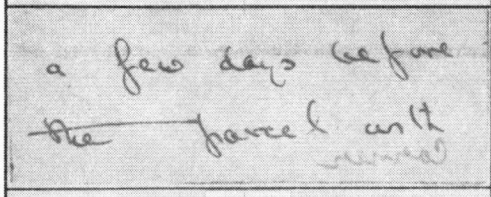

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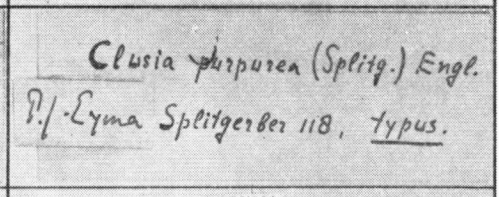

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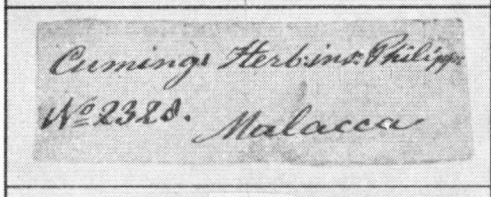

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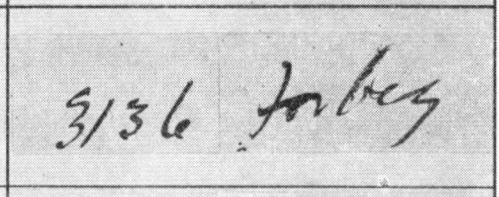

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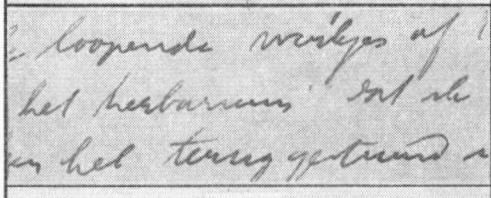

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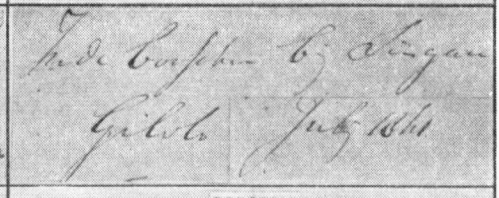

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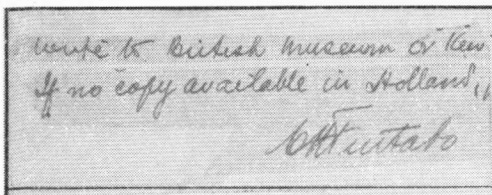

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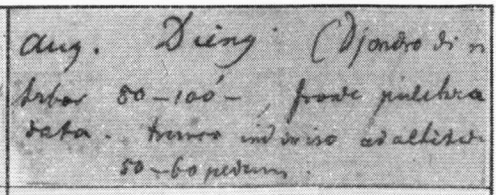

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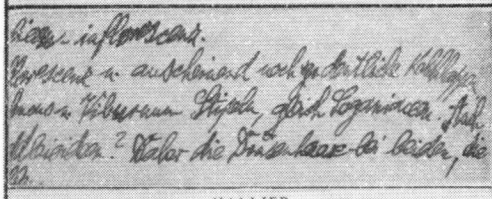

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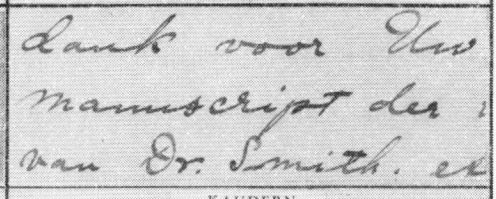

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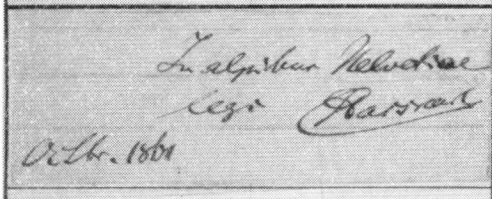

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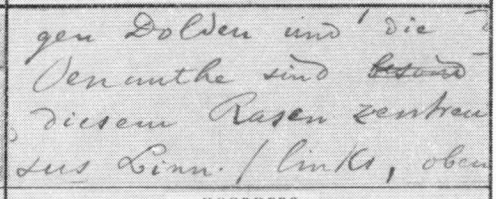

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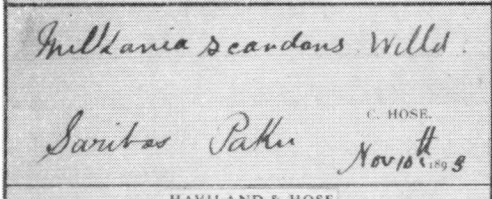

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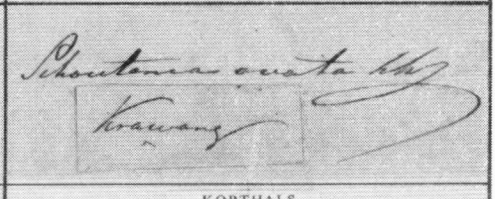

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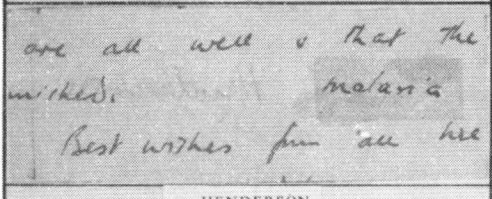

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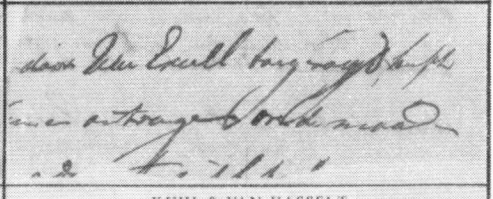

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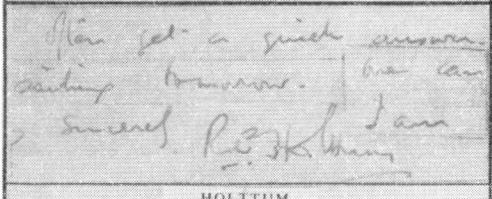

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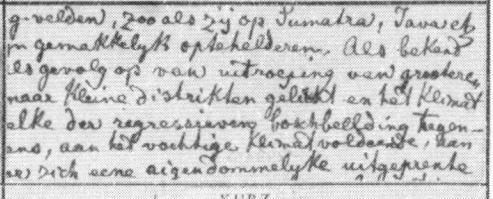

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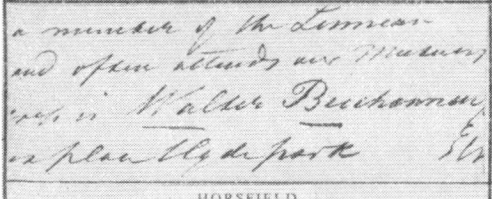
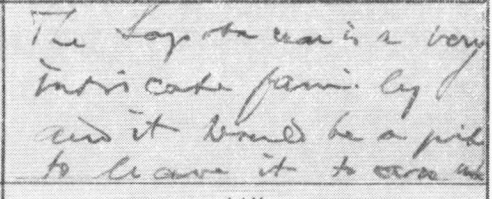


HORSFIELD



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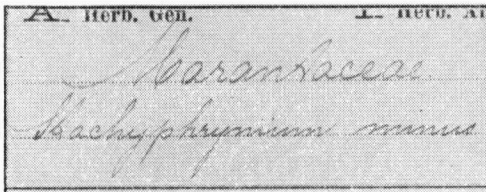

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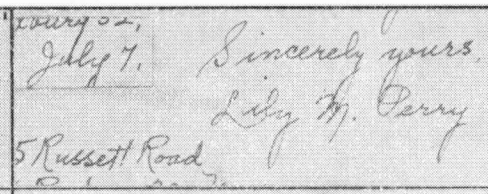

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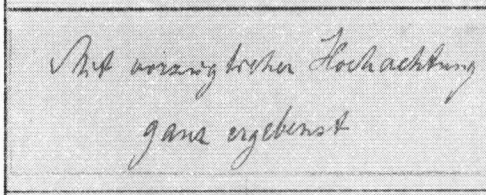

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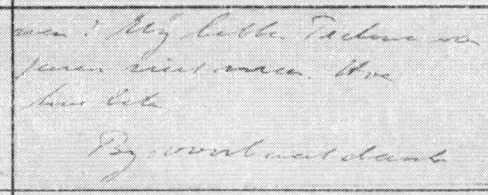

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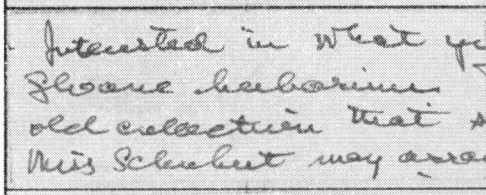

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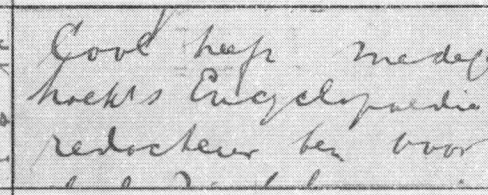

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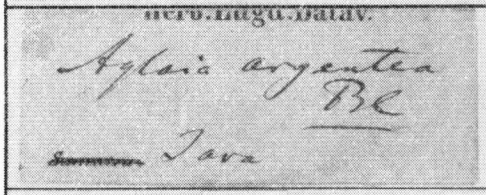

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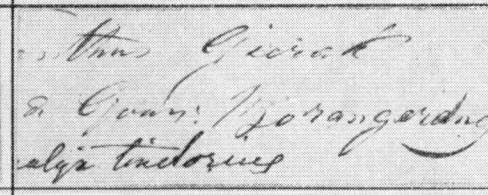
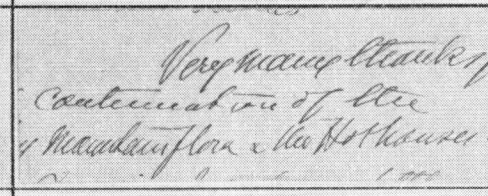


REINWARDT



DE MONCHY



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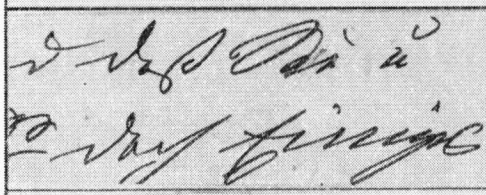

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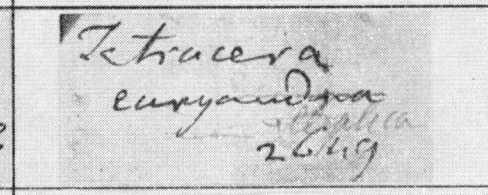

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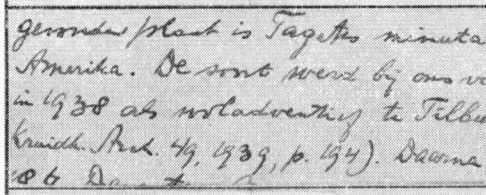

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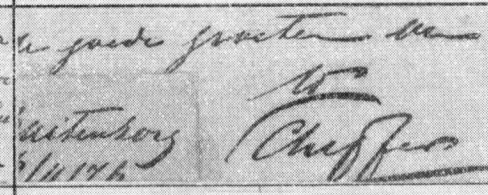

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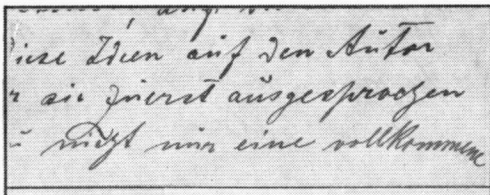

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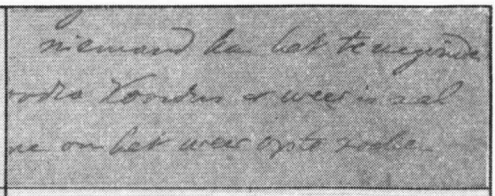

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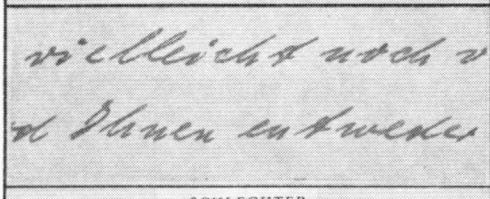

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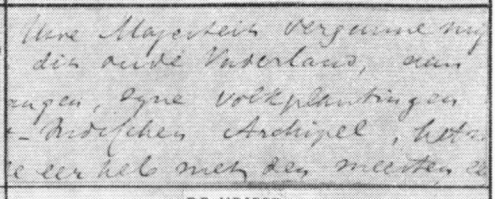

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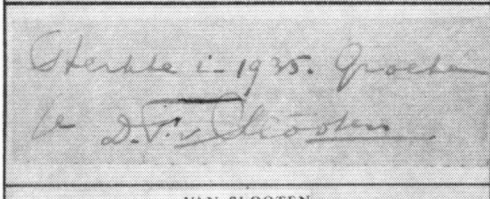

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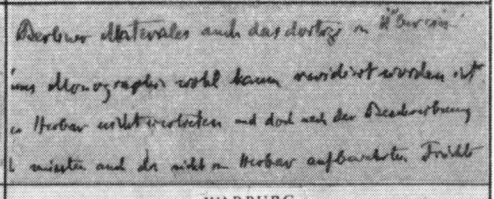

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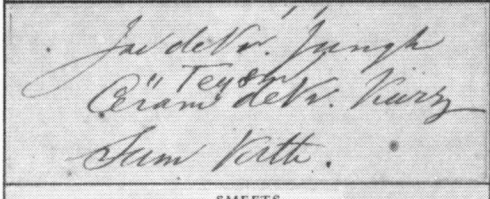

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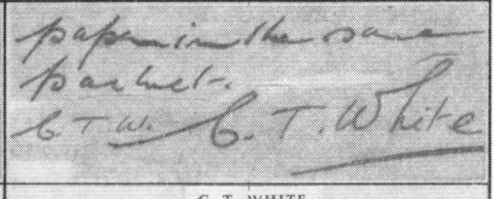

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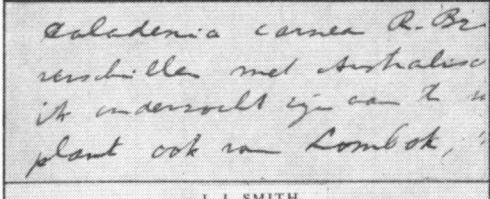

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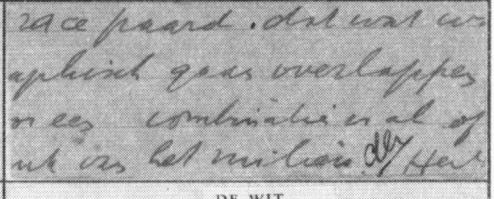

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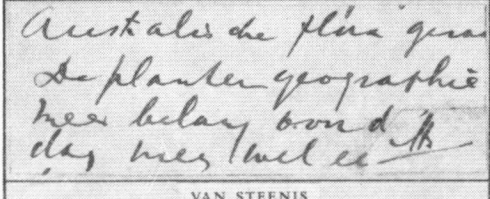
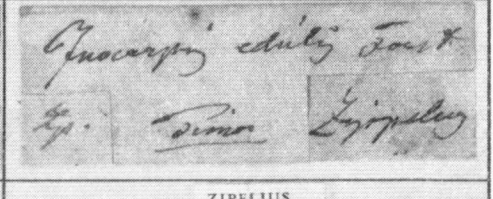


VAN STEENIS



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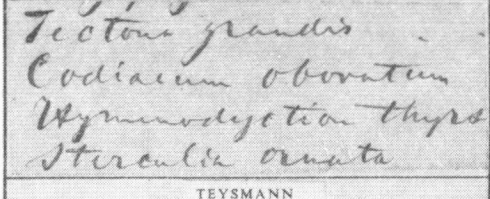
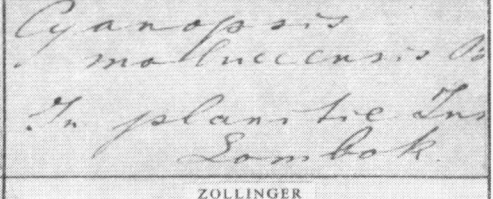


TEYSMANN



ZOLLINGER

CORRECTION

(FLORA MALESIANA VOLUME 1)

On page **cxii** some errors have crept in the figures of surface and density index.

Under **IX. NEW GUINEA** read:

1. Vogelkop[2] (= Dutch West New Guinea) . . .	± 93.200	12.550	13
2. Dutch North New Guinea	± 138.500	15.600	11
Total:	894.855	106.775	12

Under **RECAPITULATION** read:

9. New Guinea	894.855	106.775	12
Approximate grand total:	3.013.926	989.492	33

SPECIAL PART

LEGEND TO ABBREVIATIONS AND SYMBOLS

1. Abbreviations of Herbaria and collecting series

For the names of the Herbaria the reader is invited to consult the list given in the 'Sources' (Introduction chapt. VI).

An often recurring abbreviation is *Hort. Bog.* meaning 'Hortus Bogoriensis' = Botanic Gardens, Buitenzorg, after the Sundanese equivalent 'Bogor' for Buitenzorg.

The botanical and forestry centres in Malaysia often have consecutively numbered series to which many collectors have contributed.

The principal series of this kind are:

Manila:

B.S. (= Bureau of Science) series.
F.B. (= Forestry Bureau) series.
P.N.H. (= Philippine National Herbarium) series.

Singapore:

S.F. (= Singapore Field) series.

Kepong (Kuala Lumpur):

C.F. (= Conservator of Forests) series.

Buitenzorg:

H.B. (= Herbarium Buitenzorg) series.
bb. (= Bossen Buitengewesten = Forests in the Outer Provinces) series, mostly cited **F.R.I.bb.** (= Forest Research Institute bb.) series.
Ja. (= Java) series.
Cel. (= Celebes) series.

For some other small F.R.I.-series marked **Bil., E., Ri., Sum., T.,** compare the entry: Forest Research Institute, Buitenzorg.

2. Some titles of the Netherlands Indian Civil Service

To explain the abbreviations used for officers of the Civil Service till 1942, an outline is given of the hierarchy. A *Gov.*(ernor) administrated a *Govt* (Government, *e.g.* Govt Celebes & Dependencies). Each Government was subdivided in *Res.*(idencies) under the jurisdiction of a *Res.*(ident). Each Residency was subdivided in *Ass. Res.*(idencies), each under an *Ass. Res.*(ident) and an Indonesian *Regent*. The Ass. Residencies were, again, subdivided in districts for which a *Controleur* (District Officer) was responsible. In the Outer Provinces (that is: territory outside Java & Madoera Islands) districts or small islands were often administrated by a *Gezaghebber* (Civil Administrator) and smaller units by a *Posthouder* (Post-Holder).

In the time of the E.I.C. the titles *Koopman* (Merchant) and *Opperkoopman* (Chief Merchant) were used.

3. Common abbreviations and contractions

> = more than
a. = *anno*
acq. = acquired
agr(ic). = agricultural
c. = *circa*
cf. = compare
Dept = Department
Dr = Doctor
exc. = except
exch. = exchange
f. = son of
fl. = *floruit*, flourished
Govt = Government
Herb. = Herbarium
Isl(s) = Island(s)
Jr = Junior
km = kilometre
l.c. = see cited reference
MS(S) = Manuscript(s)
Mt(s) = Mountain(s)
No(s) = number(s)
pr. = near
princ. = principally
prob. = probably
pres. = presented
purch. = purchased
rec(d). = received
Sc(i). = Science
sp. = species
Sr = Senior
viz = namely
w. = with

4. Geographical names and abbreviations

The indication of mountains, rivers, capes, *etc.* in the numerous Indonesian languages and in Dutch is often difficult to understand and has been liable to change in the course of time. During the printing of this Cyclopaedia it has been prescribed by the Indonesian Government to replace in future the *oe* (pronounced as *oo* in hood) by *u*. This brings conformity in the writing of this vowel with the English and German languages. Many of the prefixes belong to the name; it is either G. Gedeh or Mt Gedeh, not Mt G. Gedeh, as G. stands for Gunung which means 'mountain'. For the geography of Indonesia the reader is referred to the 'Atlas van tropisch Nederland' (1938).

A. = *Air* = *A(j)ĕr* = stream (Malay)
**Aèk* = river (Batak)
agoeng = large
atas = above (di atas goenoeng = near or on mountain summit)
barat = west
baroe = new (Malay)
Batang = river (Malay)
**Bĕnéden* = Lower (Dutch)
bĕsar = large (Malay)
Bk. = Boekoe (buku) = mountain (N. Borneo)
Boer(ni) = mountain (Gajo)
Bovĕn = Upper (Dutch)
Bt = *Boekit* (bukit) = mountain
Danau = lake (Malay)
D.E.I. = Dutch East Indies (= N.I.)
dèsa = *dèssa* = native settlement
Dolok = mountain (Batak)
Ds. = *doesoen* = native settlement
eiland = island (Dutch)
G. = *Goenoeng* (*gunung*) = mountain
gĕbèrgte = mountain complex (Dutch)
gĕbied = country (Dutch)
gĕdéh = large (Sundanese)
Gĕgĕr = mountain ridge (Sundanese)
Glé = mountain (Atjeh)
Goea = *Goeha* = cave
H. = *Hoeta* = village in the Batak Lands, N. Sumatra
Ilir = *Hilir* = Lower
K. = *Kali* or *Koeala* (*kuala*) = river (Malay)
Ka = *Koeala* (*kuala*) = river-mouth
kalèr = north
kĕtjil = small (Malay)

(*) The accents denote the pronunciation of the 'e': è as e in get, ĕ as e in the, é as a in late.

kidoel = south
Koelon = west
Kot(t)a = settlement larger than kampong
kp. = *kampo(e)ng* = native settlement
Kr. = *Kroeëng* = river (Atjeh)
landĕn = lands (Karolanden) (Dutch)
laoet = north (Malay)
Laoet (*Laut*) = sea or large lake
Lĕbak = swamp (Sundanese)
leutĭk = small (Sundanese)
lor = north
Ma = *Moeara* = river-mouth
meer = lake (Dutch)
N.G. = New Guinea
N.I. = Netherlands Indies (= D.E.I.)
Noesa = island (Javanese)
Noord = north (Dutch)
Oedj. = *Oedjoeng* (*Udjung*) = cape
Oost = east (Dutch)
oud = old (Dutch)
P. = *Poelau* = *poele(e)* (*pulu*) = island
Padang = flat open country
Paja = swamp (Malay)
Pasir = hill (Sundanese), also ridge (pasir itself means sand in Malay)
Pĕmatang = ridge (often low) mostly sandy
P.I. = Philippine Islands
pondok = house (Pondok Gedeh landen)
Piek = peak, summit (Dutch)
rawa = swamp (Javanese)
S. = *Salo* = river
S(g). = *Soengai* = *Soengei* (*Sungai*) = river
s.f. = sugar factory (suikerfabriek, Dutch)
Sitoe = lake (Sundanese)
Soeban = hot spring
Soember = well (E. Java)
Tĕlaga = lake (Javanese)
Tĕlok = gulf (Malay)
Tg = *Tandjoeng* (*tandjung*) = cape
Timoer = east
Tji = river
top = summit (Dutch)
Wai or *Wae* = river
wĕtan = *east*
Zuid = south (Dutch)

5. Abbreviations of cited literature

The abbreviations used for cited literature are generally conform to those mostly accepted in botanical literature.

For the full title of important books which are very often cited, *e.g.* those of LASÈGUE, URBAN, KROK, DECANDOLLE, *etc.* the reader is referred to the chronologically arranged 'Sources' (Introduction, Chapter VI).

Some possibly obscure abbreviations are:

Ber. D.B.G. = Berichte d. Deutschen Botanischen Gesellschaft.
Bull. Mij Bev. Nat. Ond. Ned. Kol. = Bulletin der Maatschappij tot bevordering v/h Natuurkundig Onderzoek der Nederlandsche Koloniën.
Hand. N.I. Nat. Wet. Congr. = Handelingen v/h Nederlandsch-Indisch Natuurwetenschappelijk Congres.
Nat. Tijdschr. N.I. = Natuurkundig Tijdschrift v. Nederlandsch-Indië.
Nat. Ver. N.I. = Natuurkundige Vereeniging in Nederlandsch-Indië (Batavia).
Trop. Nat. = De Tropische Natuur (Batavia).
Tijdschr. K.N.A.G. = Tijdschrift v/h Koninklijk Nederlandsch Aardrijkskundig Genootschap.
Verh. Bat. Gen. K. & W. = Verhandelingen van het Bataviaasch Genootschap v. Kunsten en Wetenschappen (Batavia).

6. Spelling

As to the **arrangement of the collectors' names** the following details must be born in mind:

(1) The 'ä', 'ö', 'ø', 'ü', are placed resp. as 'ae', 'oe', 'oe', 'ue'.

(2) The Dutch 'ij' is placed as the 'y'.

(3) If *not* attached to the family name, the names preceded by 'van', 'van de', 'van den', 'der', 'du', 'd', 'de', 'de la', *etc.* are inserted under the name proper (*e.g.* VAN DEN BERG under BERG).

(4) Double names of Dutch collectors are entered under the first name; double names of English or American collectors are usually entered under the second name but, when hyphenated, under the first (*e.g.* BODEN KLOSS under KLOSS, but WYATT-SMITH under WYATT).

7. Notes on details of entries

Anonymous collectors are grouped in the entry ANONYMOUS in accordance with the geographic arrangement (see Chapt. IVa); collectors in the same island are arranged chronologically.

(1) BIOGRAPHIES. Day and month of death are given only when it may be of importance in connexion with dates of collecting in Malaysia. The present author generally has refrained from personal comment; Birthday honours and such-like are only exceptionally mentioned. If a collector is commemorated in plant names, no attempt is made to give a complete enumeration of those. Of several important collectors no photographs could be obtained.

(2) ITINERARIES. *Geographical names* are mostly literally copied from the collector (from MSS, papers, labels, *etc.*). If the now current name differs considerably, and is known to the present author, the equivalent is added between brackets. For some large parts of the archipelago the English name has been used throughout this book, *e.g.* Moluccas, New Guinea, *etc.* As to the *dates* mentioned between brackets, the first one is that of arrival, the second one the last day of the stay; *e.g.* May 1–5 means arrival on May 1, departure on May 6 or in the afternoon of May 5. Of places outside Malaysia no exact dates are mentioned.

(3) LITERATURE. Papers in which one or few plants of a collector are described are only exceptionally cited. Books are cited with place and year of publication, but mostly without pages, size, *etc.*

(4) BIOGRAPHICAL DATA. The present author did not aim at completeness, only the more important sources and biographies are cited.

ALPHABETICAL LIST OF COLLECTORS

Aars, Ch.
Post-Holder in *Roti* (Lesser Sunda Islands), sent some plants to *Hort. Bog.* in *1905* and *1917*.

Aart, Johannes Hendrikus van
a resident of *Ambon*, in *1885* sent a collection of dried *Sideroxylon* species to *Herb. Bog.* The species were thought identical with those described in the work of RUMPHIUS. Also many living orchids and myrmecophilous plants to *Hort. Bog.* (1885).

Aarts, F. W. J.
in *1915* collected at Bodjong Terong Estate, Sidodjaja, in Priangan Residency, *W. Java;* 117 *nos* in *Herb. Bog.*

Abaca, Y., *cf. sub* Forestry Bureau, Manila.

Abar bin Adan, *cf. sub* Forest Research Institute, Buitenzorg.

Abas Gelar St. Saidi, *cf. sub ditto.*

Abbott, Dr William Louis
(1860, Philadelphia, U.S.A.; 1936, Northeast, Md, U.S.A.), was educated at the University of Pennsylvania, taking his medical degree in 1884. He continued his medical studies in London. Being financially independent he decided to engage in scientific exploration and field work rather than devote his life to medical science. From 1880 onwards he made collections of birds in America, from 1887–90 zoological collections in East Africa, and subsequently visited the Seychelle Archipelago, Madagascar, and the Himalayas. In 1897 he explored Siam, and in the next 10 years visited Sumatra and Borneo, and cruised the coasts of Siam and the China Sea in his own vessel. He never published any of the results of his explorations.

ITINERARY. *1901. N. Sumatra:* Atjeh, at Loh Sidoh Bay, a few miles S of Acheen Head. From May 26–Aug. 7 *islands E of Singapore*, coast and rivers of *Johore*. From Aug.–Sept. *Centr. Sumatra:* Indragiri river; *Lingga* and *Singkep.—1902. Pag(a)i Islands* (part of the Mentawai Islands, W of Sumatra).—*1903* and *1905. Nias*, W of Sumatra.

COLLECTIONS. Some plants together with C. B. KLOSS (see there) in the *Pag(a)i Islands* in 1902.[1] Living plants from *Sumatra* in *Hort. Sing.* (pres. 1903). Zoological and ethnological collections in the U.S. Nat. Mus. Washington, but no Malaysian botanical collections.

LITERATURE. (1) *cf.* 'Spolia Mentawaiensia' in Kew Bull. 1926, p. 56.

BIOGRAPHICAL DATA. Auk 53, 1936, p. 369–370.

Abdoelhamid (= Abdulhamid), *cf. sub* Forest Research Institute, Buitenzorg.

Abdoellah (= Abdullah), *cf. sub ditto.*

Abdoelmalik (= Abdulmalik), *cf. sub ditto.*

Abdoelmoein, *cf. sub ditto.*

Abdoelwahab, *cf. sub ditto.*

Abellanos(a), *cf. sub* Forestry Bureau, Manila.

Abendanon, Eduard Cornelis
(1878, Pati, Java; x), mining engineer, educated at the Technical College at Delft (Holland) and for an interval of one year at Aix-la-Chapelle (Germany); study tours in Europe for the D.E. Indian Government, 1900–01; in the employ of the D.E.I. Mining Service, 1901–06, from 1903–05 at his own expense making an exploration tour in China and a voyage round the world; from 1907–18 preparation for, execution of, and working out of the results of the Celebes Expedition (see below) of the Royal Dutch Geographic Society;[1] exploration tour to Spitsbergen, 1920; Extraordinary Professor at the Municipal University of Amsterdam, 1921–25; from Nov. 1937–Nov. 1939 travelling in S. Africa, the Dutch East Indies, Australia, New Zealand and Tasmania, and the Dutch East Indies once more; from Febr. 1940–July 1946 staying at Monte Carlo; at present living at Voorburg near The Hague and planning to work out the material for a 3-volume work.

He composed a geological map of the Dutch East Indies and is the author of several geological papers.

Quercus abendanonii VAL. is named after him.

ITINERARY. *Celebes Expedition, 1909–10.*[1] *1909. S. Celebes:* arrival at Makassar (March 30); Makassar-Palo(p)po (Apr. 10–13); Palo(p)po (13–15); reconnaissance from the N and E of the Latimodjong Mts (15–26), *e.g.* exploring S. Latoepa, S. Limbong, S. Garoeang, Limpo Batoe, S. Merating; Palo(p)po (Apr. 26–May 7); Ponrang (8) and exploration of the *Latimodjong Mts* till June 12 (top bivouac on Boeloe Palakka, May 16–June 2); ascending the middle-course of the Sa(ä)dang to Rante Pao (June 14–22), also visiting Makale; Rante Pao (22–30); trip to Palo(p)po (July 1–12), *e.g.* visiting S. Loko; trip to the west, S. Masoepoe (8–25); along the S. Mamasa (July 26–Aug. 14), Letta Mts; descending the Lower Sa(ä)dang River (17–22), Enrekang; Makassar (23–24); trip to Malili (25–28); basin of the Malili River (Sept. 28–Nov. 10), visiting the lakes Matana (Oct. 3–11), Towoeti, Mahalona, Wawo toa and Masipi (Oct. 14–Nov. 3); Malili–Makassar (Nov. 10–14) and for some months back to Java.—*2nd Part of the Expedition. 1910. SW. Celebes:* Makassar-Palo(p)po (March 13–21); *Centr. Celebes: via* Lake Po(s)so to Kolone Dale (March 21–Apr. 10), visiting Masamba; stay at Kolone Dale (10–18); exploration of the connecting part with the E. peninsula of Centr. Celebes (19–23); Po(s)so (Apr. 24–May 6); the Po(s)so depression (May 7–25), visiting Tentena; Koro–Lariang trip (May 26–June 17), visiting Gintoe, Gimpoe, Bangkakoro, as far as Saloeponto; beach-bivouac at Saloeponto and by sea to Donggala (20-21); the depression, *fossa Sarasina*, of the SARASINS (July 1–10), Paloe, Koe-

lawi Plain; Donggala (11–18); by sea to Mamoedjoe, Madjene and Pare Pare (arriving 21st); stay at Pare Pare (21–24); ancient beds of the Lower Sa(ä)dang and the bay of Pare Pare (July 25–Aug. 1); back to Makassar and Aug. 7 sailing to Java.

COLLECTIONS. *Herb. Bog.*, valuable but very scanty material, few numbers, *e.g.* from Latimodjong Mts.[2] During the expedition zoological collections were made too. See also under R. M. AMAD and J. J. LEFÈVRE. Also living material for *Hort. Bog.*

LITERATURE. (1) E. C. ABENDANON: 'Onderzoek van Centraal Celebes' (Tijdschr. K.N.A.G. 26, 1909, p. 141–142, 464, 645–654, 800–821, 988–995; 27, 1910, p. 79–106, 506–529, 979–1001, 1219–1232); 'Celebes en Halmaheira' (*l.c.* 1910, p. 1149–1172 and 1303; both with ill., maps, *etc.*); 'Die Expedition der Kgl. Niederl. Geogr. Ges. nach Zentral Celebes 1909 und 1910' (PETERM. Geogr. Mitt. 57, 1911, p. 234–238); 'Midden-Celebes Expeditie. Geologische en geographische doorkruisingen van Midden-Celebes (1909-1910)' (Leiden 1915–18, 4 vols + atlas).

(2) On the flora of the Latimodjong Mts *cf.* 'Midden-Celebes Expeditie *etc.*' *l.c.* vol. 1, p. 102; description of a new species *cf.* Icon. Bogor. 4^1, 1910, p. 81–82; and *l.c.* 4^3, 1912, p. 179–180.

BIOGRAPHICAL DATA. Amsterdamsche Studenten-Almanak for 1926, p. 63–70 + portr.; BACKER, Verkl. Woordenb., 1936.

Abid, *cf. sub* Forest Research Institute, Buitenzorg.

Ablaza, M., *cf. sub* Forestry Bureau, Manila.

Aboe Baker, *cf. sub* Forest Research Institute, Buitenzorg.

Aboe Hasan, *cf. sub ditto.*

Aboe Oemar, *cf. sub ditto.*

Aboeseno, *cf. sub ditto.*

Abrahamson, E. E.
in the years 1884–85 sent several *North Borneo* plants to *Hort. Singapore.* Mr HOLTTUM does not think that any records or specimens remain.

Abram, *cf. sub* Forest Research Institute, Buitenzorg.

Abrams, J.
a sergeant of the Forest Guards, and later Forest Ranger in Penang, *1888–1910*, obtained specimens for CH. CURTIS (see there) in the *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

Abu bin Talib
joined the Forest Department in 1908; now retired.

He collected mainly in Selangor, contributing to the C. F. (see *sub* Conservator of Forests) series of the Forest Service of the *Malay Peninsula, e.g.* with ABDUL GHANI.

COLLECTIONS. *Herb. Kuala Lump., Sing.*, and *Kew.*

Abyero, D., *cf. sub* Forestry Bureau, Manila.

Achacoso, *cf. sub ditto.*

Achmad
Indonesian collector who collected specimens for K. HEYNE (see there) in *Simaloer* Island W of N. Sumatra, from September *1917*–April *1920.*

COLLECTIONS. *Herb. Bog.:* 1818 *nos; Herb. For. Res. Inst. Buitenzorg* (with original labels); dupl. in *Herb. Utrecht.*

Achmad, *cf. sub* Forest Research Institute, Buitenzorg.

Ackeringa, *cf.* AKKERINGA.

Ackert, C.
from Zürich, presented museum objects from *Sumatra* to *Bot. Mus. Univ. Zürich* in *1913.*

Acuña, *cf. sub* Forestry Bureau, Manila.

Adam, *cf. sub* Forest Research Institute, Buitenzorg.

Adams, Arthur
(1820, ? ; 1878, Honor Oak, Kent, England), Assistant Surgeon on H.M.S. 'Samarang' (itinerary *etc.* see *sub* Capt. E. BELCHER), author of some publications on this voyage,[1] and numerous zoological papers. Evidently some botanical collections were made during the voyage, but the chief object was decidedly zoological. Plants from a certain ADAMS are preserved in *Herb. Imp. Gard. St Petersb.* (= *Leningrad*), no collecting locality known to us;[2] probably not identical.

LITERATURE. (1) A. ADAMS: 'Notes on the Natural History of the islands' (in BELCHER, Narrative *etc.*, vol. 2).

Together with others he published the 'Zoology' of the Voyage (London 1850).

(2) *cf.* A. DECANDOLLE, Phytographie, 1880, p. 391.

Addison, George Henry
(1911, England; x), Assistant Curator in the Gardens Department Straits Settlements since 1938; after a short leave in India returned to Singapore in 1946; formerly Student Gardener at Kew.

He collected herbarium specimens and local plants for cultivation in forest in the neighbourhood of Gap, Selangor-Pahang boundary (Aug. *1939*) and at various times in and near *Singapore.*

COLLECTIONS. *Herb. Sing.*

Adduru, Marcelo
made his first collection when a student in the University of the Philippines in 1917; he was appointed Assistant of the Bureau of Science at Manila in 1918, being a graduate of the Forest School.

COLLECTING LOCALITIES. *Philippines. 1917. Luzon:* Cagayan Province (May–June).

COLLECTIONS. Collection 1917, 279 *nos*, in *Herb. Manila;* dupl. in *Herb. Arn. Arbor.;* later collections numbered in the F.B. series (*cf.* Forestry Bureau, Manila), in *Herb. Manila.*

In *Herb. Field Mus. Chicago:* 457 *Philippine* plants from a series specially collected for the Arnold Arboretum (pres. 1918) (apparently this is the ADDURU collection 1917); in *U.S. Nat. Herb. Wash.:* 127 *Philip.* plants.

Adèr, J.

a resident of Garoet, who collected in *1928–30* in *W. Java, e.g.* at Kratjak, Mangoenredja, on G. Papandajan, at Bandjar, Telaga Bodas and on G. Galoenggoen (May 1930).

COLLECTIONS. *Herb. Bog.: Orchidaceae, Balanophoraceae* and *Rafflesiaceae;* also plants in *Hort. Bog.*

Adèr, J. W. H.

a surveyor at Garoet, who sent orchids from *W. Java* (G. Tjikorai *etc.*) to *Hort. Bog.* (coll. *1891–97*).

Some specimens, material of which is probably preserved in *Herb. Bog.*, are mentioned in the papers of J. J. SMITH.

Adjiz, Abd., *cf. sub* Forest Research Institute, Buitenzorg.

Administrateur Lokkibedrijf, *cf. sub ditto.*

Aduviso, P., *cf. sub* Forestry Bureau, Manila.

Aerensbergen, A. I. van

(1874, Nijmegen, Gld, Holland; x), a priest, missionary in Flores (Lesser Sunda Isls), 1908–10; at the seminary at Woloan (N. Celebes), 1910–16; at Manado (N. Celebes), 1917–October 1920; at Batavia, 1920–21; at Bandoeng, 1921–25; at Buitenzorg, 1925–28; at Bandoeng, 1928–32; and at Batavia from 1932 till the war.

COLLECTING LOCALITIES. *1917. N. Celebes,* Minahassa: Woloan.

COLLECTIONS. *Herb. Bog.:* orchids from there.

Aët

(± 1901; x), an Indonesian, in 1919 already in the employ of the Herbarium at Buitenzorg, in later years appointed 'mantri'. He attended several expeditions; during some he independently made plant collections.

ITINERARY. *1937. NE. Borneo.* With Expedition Mrs M. E. WALSH (see there). Environs of Sangkoelirang (Apr. 14–June 28), collecting at the following localities: Kari Orang (= prob. Sg. Kaliorang) (Apr. 14–20); Maloewi, G. Dajak, pinggir laoet (sea coast) and G. Batoe Ampar (22–24) and Kari Orang again; Pelawan besar and ketjil, G. Toda, G. Tembakan, G. Ketapang (low hills only), Babi Djolong, Daga Oenan, Sampajau, Malawai and Mangapoe; in the environs of Samarinda: Tenggarong (July 2–5).—*1938.* Attending BUWALDA (see there) to *Aroe & Tanimber Islands.*—*1939.* With Expedition L. J. VAN DIJK (see there) to *P. Jap(p)en:* Saroerai near Seroei–G. Wawah–Mentemboe (July 22); Seroei (23), Kainoei (25), Sambĕri (26), Saroerai near Seroei (27), Antam near Seroei (29). kp. Baroe (30), Wamiami (Aug. 1), Semèmi (2), Randomi (3), Fèrèrifi (4), Mariaroti



AËT

(10), Wasabori (11–16), Sg. Soemboi near Seroei (17), Sg. Arompaul near Seroei (18), Kaunda (19), Wandèsi (21), Kamioraro (22–23), Sg. Papoma (24) Mariadai (26–29), G. Hirong (30), Mariadai (Sept. 1, 8), Seroei (9–11), Sg. Mĕmpĕrawaja (16–17), Soemberbaba (17); VAN DIJK and IDJAN (see there) to Biak, AËT staying behind on account of ill health; Seroei (Sept. 22–26).—*1941.* With E. LUNDQUIST (see there) to *W.* and *S. New Guinea. SW. New Guinea,* near Babo: Tisa (May 8), Moetoeri (11–12), Anakasi (14–16), Jakati (19), Rorièsi (22), P. Kraka (23); Kaimana (June 3–4); *Dutch S. New Guinea,* near Oeta: Sg. Oemar (12), Sg. Si-èra (Djiera) (16–19), Najaja (20–22), Aria (26–28), Aëndoea (July 1–14), Japakopa (17), Patawai (20–21), Boeroe (23), Tarèra (27–29); *SW. New Guinea:* Kaimana (Aug. 2); near Kaimana: Sg. Bianoga, kp. Aergoeni (9); S of Babo, Sjoga (10), Babo (13–23); near Babo: Agonda (25).

COLLECTIONS. *Herb. Bog.:* from Exp. WALSH *nos* 1–654; from Exp. VAN DIJK *nos* 1–845, 956–1000, for the greater part numbered too in the bb. series of the Forest Research Institute; from Exp. LUNDQUIST *nos* 1-731. Dupl. Exp. WALSH in *Herb. Brit. Mus.*

From *New Guinea* Exp. LUNDQUIST he brought home living seeds for *Hort. Bog.*

Agama, José
(1889, Manila, Luzon, P. I.; x), a Filipino, at first Ranger of the Bureau of Forestry at Manila, and later Headranger of the Forestry Service in Br. N. Borneo; in 1926 appointed Deputy Asst Conservator of Forests.



AHERN

Courtsey Underwood & Underwood Studies

Several plants are named after him, especially by MERRILL.

COLLECTIONS. *Herb. Manila: Philip.* plants numbered in the F.B. series (*cf. sub* Forestry Bureau, Manila), and *Br. N. Borneo* plants (coll. *1917–19*); the 2nd set of the *Bornean* plants in *Herb. Sandakan;* 23 dupl. *Philip.* in *U.S. Nat. Herb. Wash.*

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Agati, J.
collected *Helminthostachys zeylanica* in *Luzon*, P. I., *no* 7799; material in *Herb. Univ. Montreal.*

Agoo, *cf. sub* Bureau of Science, Manila.

Agudo, *cf. sub* Forestry Bureau, Manila.

Aguilar, S., *cf. sub ditto.*

Agullana
in 1926 appointed Junior Ranger in the For. Dept Br.N. Borneo, collected at Sandakan (*Br. N. Borneo*) for the Bur. Sci. at Manila.

COLLECTIONS. *Herb. Manila;* dupl. in *Herb. Bog.* (pres. 1929).

Ahern, George Patrick
(1859, New York City, U.S.A.; 1942, Washington, D.C., U.S.A.), Lieutenant-Colonel in the U.S. Army, organizer and Chief of the Philippine Bureau of Forestry, 1900–15.[1] Under his direction material of tree species was collected. In 1910 he founded the Forest School in the Philippines. After his return to the U.S.A. on duty at the Army War College, living in Washington.

Canarium ahernianum MERR. was named after him.

COLLECTIONS. > 850 *nos* collected under his direction (*not* by himself) in *Luzon, Mindanao, etc.* in *1901–02* in *Herb. Manila*;[2] dupl. in *Herb. Bog.* (600), *Herb. Leyden, U.S. Nat. Herb. Washington* (> 1800 specim.), in *Berl.* (210), *Herb. N.Y. Bot. Garden.* They were probably partly collected by QUADRAS (see there). AHERN's collector (= RAMOS, see there) numbered in the F.B. series (*cf. sub* Forestry Bureau, Manila); material in *Herb. Manila* too.

LITERATURE. (1) G. P. AHERN: 'Compilation of notes on the most important timber tree species of the Philippine Islands' (1901, p. 1–112, pl. 1–43).
(2) E. D. MERRILL: 'Plantae Abernianae' (Dept of the Interior, Forestry Bur. Bull. 1, 1903, p. 9–55).
J. PERKINS: 'Enumeration of some recently collected plants of AHERN, *etc.*' (Fragm. Fl. Philip. 1904, p. 4–66, 77–202).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; portr. in Philip. Journ. Forestry 2, 1939, pl. 1; Amer. Forests 48, 1942, p. 276 + portr.

Ahern's collector, *cf. sub* AHERN and Forestry Bureau, Manila.

Ahmad, *cf. sub* Forest Research Institute, Buitenzorg.

Ahmad bin A. Bakar
joined the Forest Department of the *Malay Peninsula* in 1910; now retired.

COLLECTIONS. He collected mainly in Pahang East, numbering in the C.F. (see *sub* Conservator of Forests) series; *Herb. Kuala Lump.*

Ahmad bin Hassan, *cf.* AHMED BIN HASSAN.

Ahmed bin Hadji Omar
plant collector of the Singapore Botanic Gardens, collected in *Singapore Island* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Sing.*

Ahmed bin Hassan
brother of SAPPAN BIN HASSAN and SAPPI BIN HASSAN; employed by the Botanic Gardens, Singapore, 1901 up to the present; 1901–12 plant col-

lector to Mr RIDLEY; then Record Keeper, Botanic Gardens.

COLLECTING LOCALITIES. *Malay Peninsula: e.g.* on Lenggong limestone cliffs;[1] in *Singapore Island* at various times.

COLLECTIONS. Earlier collections numbered along with RIDLEY's, and later in BURKILL's Field Number Series (S.F. *nos*) (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5); *Herb. Sing.*, also in Herb. of cultivated plants.

LITERATURE. (1) *cf.* Journ. Str. Br. Roy. As. Soc. *no* 57, p. 5.

Ajat, F., *cf. sub* Forest Research Institute, Buitenzorg.

Ajoeb

(*c.* 1877; x), an Indonesian, employed by the Botanic Gardens at Buitenzorg, finally as assistant 'mantri'. He was attached to several expeditions as a plant collector.

Dendrobium ajoebii J.J.S. was named after him.

ITINERARY. *1910-12. Dutch N. New Guinea.* With GJELLERUP (see there).—*1914–15. Dutch N. New Guinea.* With JANOWSKI (see there), and later with FEUILLETAU DE BRUYN (see there).—*1916. S. Sumatra*, Benkoelen. With JACOBSON (see there).—*1920. W. Java.* Garoet and environs, *e.g.* G. Mandalagiri and G. Djaja with LAM.—*1920–21. Dutch N. New Guinea.* With LAM (see there).

COLLECTIONS. *Herb. Bog., e.g.* 550 *nos* Benkoelen Exp.; and especially hundreds of living plants for *Hort. Bog.*[1]

LITERATURE. (1) *cf.* list Exp. GJELLERUP in Versl. Pl. Tuin Buitenzorg for 1912, p. 22.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Akker, van den

collected *Alternanthera sessilis* R.BR. at Kesisat, *Bali* (Lesser Sunda Islands) in *1914*; the specimen preserved in *Herb. Bog.*

Akkeringa, Johannes Evert

(1829, Delfshaven, Z.H., Holland; 1864, Banka, E of Sumatra), engineer employed in the tinmines in Banka from about 1855; inventor of the so-called Banka drill, and author of a report on the prospects of the Billiton exploration in general and of those of the tin loads in particular.[1]

From 1862–63 stationed in the Office at Buitenzorg; in 1863–64 making an investigation into the occurrence of tin ore in the Riouw-Lingga Archipelago, in charge of the D.E. Indian government. He is said to have died from typhoid fever caught during a Borneo trip.

He is commemorated in some plant names by TEYSMANN & BINNENDIJK.

COLLECTIONS. He sent plants from *Banka* to *Hort. Bog.*; some are described by TEYSMANN & BINNENDIJK in the 'Nat. Tijdschr. N.I.'[2]

LITERATURE. (1) *cf.* 'Billiton 1852–1927' ('s-Gravenhage, M. NIJHOFF) vol. 1, p. 126.

(2) *cf.* also SCHEFFER in 'Observationes phytographicae' (Nat. Tijdschr. N.I. 31, 1870, p. 361, 362).

BIOGRAPHICAL DATA. Nat. Tijdschr. N.I. 27, 1864, p. 31–32; portr. and some particulars in 'Billiton 1852–1927' *l.c.* p. 126–127; BACKER, Verkl. Woordenb., 1936.

Alambra, *cf. sub* Forestry Bureau, Manila.



AJOEB

Alamsjah, *cf. sub* Forest Research Institute, Buitenzorg.

Albers, E.

collected near Deli Langkat in the Butta Mts, *Sumatra East Coast* (*cf.* Pflanzenreich Heft 92, p. 19). Material in *Herb. Berl.*

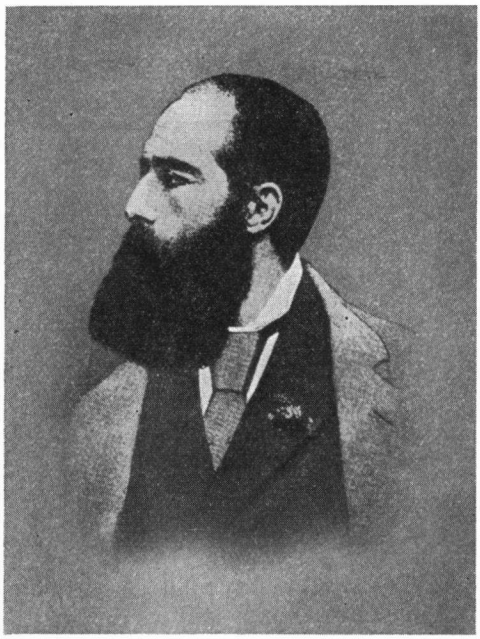
Albertis, Count Luigi Maria d'

(1841, Voltri, W of Genoa, Italy; 1901, Sassari, NW. Corsica), zoologist-ethnographer who accompanied BECCARI (see there) on his first New Guinea trip and who afterwards made further explorations, partly alone, partly with others. In 1875 he settled in Yule Island; he made veritable raids among the natives to enrich his collections. At his arrival in Thursday Island on Jan. 4th, 1878, he was indicted for murder on two Chinamen; after acquittal on May 4th he left Sydney, homeward bound.

The genus *Albertisia* BECC. was named after him and several other plant species by F. VON MUELLER and BECCARI.

ITINERARY.[1] *1st Voyage.* Sailing with BECCARI (see there) from Genoa Nov. *1871* and *via Java*

(Batavia, Buitenzorg, Mt Pangrango, Soerabaja), Makassar, *Timor* (Dilly and Koepang) and *Banda* to *Ambon*, where preparations were made for the New Guinea trip. During the stay in Ambon, a visit was paid to *Boeroe* Island and to Wahai in



D'ALBERTIS

Ceram. Sailing from Ambon (March 21, *1872*) *via* Gissar (= Geser), Ceram Laut, Goram (Apr. 1) to *Dutch New Guinea* (8): *P. Karas* (Faor), Kapour (15), *Sorong* (23), the 28th starting for *Salawati* (where fallen ill), Ramoi River (June 13), back to *Sorong* (July 2) and departure from there (15); coast Amberkaki (= Amberbaken) (23); *P. Mansiman* opposite of Doré (Aug. 3); Andai; trip in the Arfak Mts (Sept. 4–Oct. 1)[2] as far as Hatam; taken ill again at Andai (a month); to *P. Mansiman* (Nov. 2); departure to *Sorong* (7), arriving the 15th; *Ambon* (Dec. 7), sailing from there (12) in the 'Vittor Pisani' to Sydney, *via Klein Kai* (= *Noehoerowa*) (Doulan, Dec. 17–20), *Aroe Islands* (Dobo, 21st) and along the S. coast of New Guinea to Port Jackson. At the end of *1873* sailing from Australia *via* Fiji, Honolulu, America, to Europe, arriving in April *1874*.

2nd Voyage. Nov. 10, *1874* sailing from Naples *via* Singapore to Somerset in Australia (stay Dec. 27–March 4, *1875*); March 5 sailing for *Papua* (*SE. New Guinea*): Darnley Island (12); Yule Island (arriving the 14th or 16th), which was used as a starting point for several trips:[3] *e.g.* canoe trip to the Hilda and Ethel River, Nikura and Epa (mid-April); visiting Nikura for the 2nd time (May 17) and several other trips by boat to the New Guinea coast; to Naiabui (Aug. 14), exploring the Bioto River and then going back to Naiabui (Sept. 4); march in the mountains (13–17); back in Yule Island (Sept. 22), from where Nov. 7 to Somerset on account of illness (arrival on the 14th).—*1st Exploration of the Fly River*[4] with S. MACFARLANE (see there) and H. M. CHESTER: sailing from Somerset (Nov. 29, *1875*) in the 'Ellengowan'; Fly River (Dec. 6–21); back at Somerset (28).—*2nd Exploration of the Fly River*[5] with HARGRAVE and WILCOX: sailing from Somerset in the 'Neva'; Katow (May 21, *1876*), mouth of the Fly (22); ascending the river till June 25, travelling on foot upstream for another 5 miles and thereafter return trip during which ascending the Alice River (June 30–July 6); leaving the Fly River mouth on the 18th and *via P. Mibuou* (= *Bristow Island*) (July 18–Aug. 3), *Bampton Island*, Yarrou; Katow River (Aug. 7–Oct. 27, at Moatta = Mawata); *Tawan Island*; back to Somerset (arrival Nov. 21).—*3rd Exploration of the Fly River*:[6] in the 'Neva' sailing from Somerset (May 3, *1877*), reaching the mouth on May 21st. As a result of D'A.'s conduct during the trip they suffered from attacks by the natives; with the Chinese on board difficulties arose too; in consequence they were unable to extend the journey farther inland than in 1876, only the Strickland River was detected. The return voyage was made *via* Moatta (= Mawata near the Katow River; Nov. 23–Dec. 5) to *Thursday Island* (Jan. 4, *1878*).

COLLECTIONS. His ornithological collection in Mus. Civ. Stor. Nat. Genoa; anthropological coll. in Mus. Florence; botanical collection, at least partly, given to BECCARI (= *Florence*). The plants of the trips 1875 and 1876 for the greater part described by F. VON MUELLER,[7] and probably in *Herb. Melbourne;* those of the last trip by BECCARI.[8] According to the latter's account the collection of the last exploration consists of magnificent material thanks to preservation in spirits. The plants originating from the Fly River which are mentioned in D'A.'s book are numbered between 1 and 314.

LITERATURE. (1) L. M. D'ALBERTIS: 'Alla Nuova Guinea. Ciò che ho veduto e ciò che ho fatto' (Torino 1880, ill.); English transl. : 'New Guinea, what I did and what I saw' (London 1880, 2 vols); abridged French. transl. Some dates mentioned do not agree with those of BECCARI.

(2) *cf.* 'Una mesa fra i Papuani del Monte Arfak' (Boll. Soc. Geogr. Ital. 10, 1873, p. 67–71; 'Viaggio di de ALBERTIS nei monti Arfak e sue collezioni zoologiche' (Cosmos di Guido CORA 1, 1873, p. 218–220).

(3) *cf.* Letter from D'ALBERTIS giving some account of several excursions into Southern New Guinea' (Proc. Zool. Soc. Lond. 1875, p. 530–532).

(4) L. M. D'ALBERTIS: 'Remarks on the natives and products of the Fly River, New Guinea' (Proc. Roy. Geogr. Soc. Lond. 20, 1875–76, 1876, p. 343-353, discuss. p. 353–356; extracts from letters to Dr BENNETT of Sydney, publ. in Sydney Morning Herald March 1876).

(5) L. M. D'ALBERTIS: 'Journal of the expedition for the exploration of the Fly River in 1876' (Sydney 1877) w. App. by Baron F. VON MUELLER (*l.c.*

p. 14). *cf.* Map in PETERM. Mitt. 1878, Taf. 23; and F. ANTOINE in Oesterr. Bot. Zeitschr. 27, 1877, p. 206–208; Tour du Monde 43², 1882, p. 321–336, w. ill.

(6) *cf.* PETERM. Mitt. 1878, p. 198–199 and 423–426; and Boll. Soc. Geogr. Ital. 15, 1878, p. 105–108; Tour du Monde 43², 1882, p. 321–336, w. ill.

(7) in 'Descr. Not. Pap. Pl.' I, parts 3, 4, 5 and 6.

(8) O. BECCARI: 'Notizie sulle piante raccolte dal sign. L. M. D'ALBERTIS alla Nuova Guinea' (in D'ALBERTIS, Alla nuova Guinea, 1880, p. 571–579); 'Catalogo delle piante del fiume Fly, 1877' (in *l.c.* p. 575–577), also in the Engl. transl.; 'Sulle piante raccolte alla Nuova Guinea dal Sign. L. M. D'ALBERTIS durante l'anno 1877, con descrizione di tre nuove specie di Icacinaceae' (in Malesia vol. 1, fasc. 3, 1878, p. 255–257).

BIOGRAPHICAL DATA. Portr. in Tour du Monde 43², 1882, p. 325; Rivista Geogr. Ital. Roma 7, 1901, p. 628–632 + portr.; Boll. Soc. Geogr. Ital. 38, 1901, p. 849–855; Geogr. Journ. Lond. 18, 1901, p. 629; Deutsche Rundschau f. Geogr. u. Stat. Wien 25, 1902, p. 182–184; BACKER, Verkl. Woordenb., 1936.

Alberto

MERRILL cites a *no* 36 collected by ALBERTO, in his 'Enum. Philip. Fl. Pl.'; *no* A 328, *Dioscorea elmeri var. vera* PRAIN & BURK., was collected at Los Baños (*cf.* PRAIN & BURKILL, The genus Dioscorea, 1936, p. 181); and other plants from Los Baños, *Luzon, about 1905.*

FORTUNATE R. ALBERTO coll. for Bur. of Sci. Manila, acc. to BURKILL.

Alcala, *cf. sub* Bureau of Science, Manila.

Alderwerelt van Rosenburgh, C. R. W. K.

(1863, Kedong Kebo, Poerworedjo, Java; 1936, The Hague, Holland), officer in the D.E.I. Army, 1885–1904; retired on account of deafness; temporary Assistant of the Herbarium at Buitenzorg, 1905–08; Conservator and later Acting Assistant of the said institution, 1910–22.

Author of many systematic publications, principally on ferns.[1]

Dendrobium alderwereltianus J.J.S. was named after him.

COLLECTIONS. Principally ferns, also orchids *e.g.* from Soekaboemi (*W. Java*) in *Herb. Bog.;* in *Herb. Berl.:* 310 *nos Selaginella* (pres. 1912–13).

Hort. Bog.: ferns from Soekaboemi (pres. 1908).

LITERATURE. (1) *e.g.* 'Malayan Ferns' (1908), 'Malayan Fern Allies' (1915) and following supplements.

BIOGRAPHICAL DATA. Bull. Jard. Bot. Buit. sér. 3, vol. 14, 1936, p. 1–3, w. portr. & bibliogr.; BACKER, Verkl. Woordenb., 1936; Chron. Bot. 3, 1937, p. 203 + portr.

Alejandro, B., *cf. sub* Forestry Bureau, Manila.

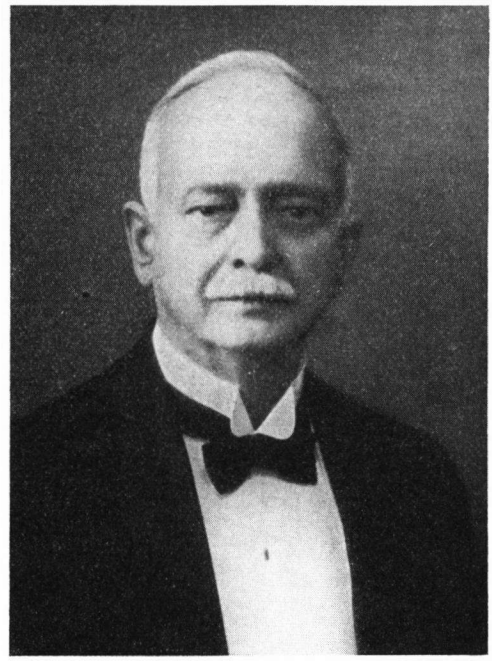
Alfalla, P., *cf. sub ditto.*

Alfaro Cardoso

Portuguese.

COLLECTIONS. *Herb. N.Y. Bot. Gard.:* 38 *nos* from *Timor*, coll. *1930.* Cf. also *sub Addenda.*

Alfiah, Moh., *cf. sub* Forest Research Institute, Buitenzorg.



V. ALDERWERELT V. ROSENBURGH

Alga, A.

collected *c.* 20 *nos* in *Mindanao;* 6 dupl. in *U.S. Nat. Herb. Wash.*

Ali, *cf. sub* Forest Research Institute, Buitenzorg.

Ali, Moh., *cf. sub ditto.*

Ali bin Hj. Salleh

joined the Forest Department in the *Malay Peninsula* in 1903; now retired.

COLLECTIONS. Mainly in Negri Sembilan, numbered in the C.F. (see *sub* Conservator of Forests) series; *Herb. Kuala Lump.*

Ali Djemar, *cf. sub* Forest Research Institute, Buitenzorg.

Ali Silang, T., *cf. sub ditto.*

Alimoesa, *cf. sub ditto.*

Alkemade, J. A. van Rijn van, *cf. sub* RIJN VAN ALKEMADE, J. A. VAN.

Alleizette, Charles d'

(1884, Paris, France; x), made botanical col-

lections in Madagascar (1904–06), and in Tonkin (Indo-China, 1908). In 1909 he was appointed Underlieutenant of Administration in Oran (Africa), where he was again from 1911–15 and 1917–22. He ended his military career as Chief of Administration at Versailles.

COLLECTIONS. *Herb. Paris*, from Madagascar, Tonkin, *etc.* He collected some ferns, cult. in *Hort. Sing.*, *viz nos* 516 T and 517 T in *1909* (*cf.* BONAPARTE, Notes Ptéridol. fasc. 7, 1918, p. 38–39). *Herb. Leyden* received a set of his collection in 1948.

BIOGRAPHICAL DATA. In 'Flore générale de l'Indo-Chine' prelim. vol. 1944, p. 33.

Allen

MERRILL cites the *nos* 168 and 171 in his 'Enum. Philip. Fl. Pl.', *e.g. Nepenthes truncata* from *Mindanao*.

Allen, Edgar F.

(born in England; x), Agricultural Officer of the Dept of Agriculture S.S. & F.M.S., stationed at Telok Anson, Perak.

COLLECTIONS. Especially plants of economic interest, *e.g.* keladis (*Araceae*) in *Lower Perak*.[1]

LITERATURE. (1) *cf.* Report Bot. Gard. Sing. for 1939, p. 2; and Gard. Bull. Str. Settlem. 11, 1941, p. 244.

Allen, Reverend G. Dexter

COLLECTIONS. *Herb. Sarawak:* a small fern from Lingga Mt., *Sarawak* (pres. 1906).

Almagro, *cf. sub* Forestry Bureau, Manila.

Almeida, d'

Some *Garcinia* leaves with 6 drawings (*Garcinia hanbury* HOOK. *f.*) in *Hanbury Herb.* (London).

Almeida, Pereira, J. d', *cf. sub* PEREIRA.

Almquist, Ernst Bernhard

(1852, Skogs-Tibble, Uppland, Sweden; 1946, Stockholm, Sweden), Medical Officer and lichenologist of the Swedish voyage of the 'Vega', 1878–79.[1] He took his M.D. at Uppsala in 1882, and was professor at Stockholm since 1891. The Superintendent of botanical work during the voyage was Dr KJELLMAN, Lecturer in Botany in the University of Uppsala.

ITINERARY. *Voyage in the 'Vega', 1878–79.*[1] Departure from Karlskrone (Sweden) (June 22, 1878), and Gothenburg (July 4); operating in arctic regions, but making the homeward voyage *via* Japan, Hongkong, Canton; *Labuan* (Nov. 17–20, *1879*), part of the expedition (no botanists) making an excursion to the opposite shore of *Borneo;* short stay at *Singapore* (Nov. 28–Dec. 4); Ceylon, and home to Stockholm.

COLLECTIONS. *Herb. Uppsala, Herb. Stockholm.* NYLANDER described 48 lichens from *Singapore*, and 77 from *Labuan*.[2]

In *Labuan* a collection of fossil plants was made by members of the expedition; *cf.* also *sub* TREACHER.

LITERATURE. (1) Baron N. A. E. NORDENSKIÖLD: 'The voyage of the "Vega" round Asia and Europe (1878–79)' (Engl. transl., London 1881).

The official record of the expedition was edited by NORDENSKIÖLD, and consists of 5 octavo volumes.

(2) W. NYLANDER: 'Sertum Lichenaeae tropicae e Labuan et Singapore' (Paris 1891).

BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 1903, p. 28; *l.c.* 2, 1905, p. 2, *t.* 110, p. 206; Svenska Linné-Sällsk. Årsskr. 29, 1946, p. 66–67, + portr.

Aloba, A., *cf. sub* Forestry Bureau, Manila.

Alsacid, Godefredo L.

made a study and collection of natural history specimens, *e.g.* of plants in *Palawan* (March 30–June 18, *1938*); in *1939* he made two joint botanico-zoological expeditions with CAPCO & EDAÑO to Baler and vicinity (March, May–June) in *NE. Luzon*.

COLLECTIONS. In *Herb. Manila*, at least partly with B.S. numbers (*cf. sub* Bureau of Science, Manila).

Altamirano, *cf. sub* Forestry Bureau, Manila.

Altheer, J. J.

(? ; died in 1863), appointed Pharmaceutical Chemist of the D.E.I. Army in 1852 and as such stationed in Banka in 1858; for some years after 1855, Lecturer in Physics and Chemistry at the Medical School, Batavia.

Author of many chemical papers in Nat. Tijdschr. N.I.

COLLECTIONS. *Herb. Bog.:* principally ferns;[1] also some *Amaryllidaceae* and an orchid from *Banka*, mentioned in TEYSMANN'S list of Banka plants;[2] the collection presented in 1860 to the Nat. Ver. N.I. at Batavia, was forwarded to Buitenzorg.[3] Numbering > 42; some plants numbered in the H.B. series of the Buitenzorg Herbarium.

LITERATURE. (1) *cf.* J. AMANN (= S. KURZ) in Nat. Tijdschr. N.I. 23, 1861, p. 399–412.

(2) *cf.* Nat. Tijdschr. N.I. 27, 1864, p. 157–258.

(3) *cf. l.c.* 21, 1860, p. 435.

BIOGRAPHICAL DATA. Tijdschr. v. N.I., N.S. 1, 1863, p. 244-245, w. bibliogr.

Altmann, Hendrik

(1896, Serang, Bantam, Java; Sept. 18, 1944, torpedoed in S.S. Junyo Maru when brought from Batavia to Benkoelen by the Japanese), studied tropical agriculture at Wageningen; after 6 years of practice in the Java sugar industry, appointed Group-Adviser of the Java Sugar Experiment Station at Pasoeroean; stationed successively at Koedoes (1925–31), Sidoardjo (1931–32), Pasoeroean (1932–36), Cheribon (1936–41); at the same time acting Director of the subdivision Cheribon in 1937, and Djokja (since Nov. 1941).

COLLECTING LOCALITIES. *1927. Centr. Java:* Koedoes.—*1930. E. Java:* Modjokerto (Patjet).—

1931. E. Java: Soerabaja.—*1932. E. Java:* Soerabaja, sf. Boedoeran, Modjokerto (Patjet, Brangkol), Binor, Sido(h)ardjo, G. Baoeng, Gempol, Pasoeroean, Probolinggo, G. Semongkrong, G. Abang, Kepoeh, Pasangrahan Soekolilo, sf. Tawangsari, Tjemorolawang, Ranoe Bedali, (H)Ijang Plateau (Taman (H)Idoep), S. slope G. Smeroe.—*1933. E. Java:* G. Lawoe (Sarangan and crater), S of Malang, sf. Kebonagoeng (Malang Distr.), sf. Alkmaar, Soerabaja, Modjokerto (Patjet, Bongsal), Sido(h)ardjo, Pasoeroean, Probolinggo, Oemboelan, G. Emprit, Tosari, sf. Goenoengsari, Ranoe Pani (G. Smeroe), Bremi, Taman (H)Idoep (Ijang plat.), Djember, Pradjekan, Besoeki, Binor, Sampean ravine, Idjen plateau.—*1934. E. Java:* Soerabaja, Porong, Trawas, sf. Krebet (Malang), Pasoeroean, Kepoeh, Ratji, G. Bentar, (H)Ijang Plateau (Taman (H)Idoep), sf. de Maas, Besoeki, Poeger; *Centr. Java:* Semarang; *W. Java:* Buitenzorg, Bandoeng.—*1935. E. Java:* G. Ardjoeno-Andjasmoro, Djoenggo, Malang Plain, Modjokerto (Patjet), Pasoeroean, G. Smeroe (Ranoe Daroengan), Tosari, sf. Pandji, sf. Pradjekan, Djember, Pasirian Poeger, Watoe-Oeloe, Besoeki, sf. Asembagoes.—*1936. E. Java:* Djoenggo, Soemberbrantas, G. Ardjoeno, Pasoeroean, Kraton, Modjokerto (Patjet), Poeger, Watangan, Besoeki, Garahan, Kendeng road, G. Loeroes, Djember.—*1937. W. Java:* Cheribon.—*1938–41. Centr. Java:* in Indramajoe, Tegal and the Kromong Mts.[1]

COLLECTIONS. *Private herb.* > 500 *nos;* many dupl. in *Herb. Bog.* and in *Herb. Pasoeroean* (453). The *nos* 13–58 not present in *Herb. Bog.*

His *private herbarium* was taken by the Japanese, and was possibly transferred with his office to the Klaten Estate Co. W. A. TERWOGT, at Djokja.

LITERATURE. (1) H. ALTMANN is the author of the botanical section in F. U. M. BUNING: 'Het Kromonggebergte' (Cheribon 1940).

Alvarez, Ramon J.

Forester of the Bur. of Forestry at Manila, since 1920 Asst Chief.

COLLECTIONS. *Herb. Manila,* numbered in the F.B. series (see *sub* Forestry Bureau, Manila), *etc.;* 66 dupl. in *U.S. Nat. Herb. Wash.;* also dupl. in *Edinburgh.*

Alviar, *cf. sub* Forestry Bureau, Manila.

Alvins, M. V.

collector employed in the Forest Dept of the Str. Settlem., from 1884–88 in Malacca.

COLLECTING LOCALITIES. *Malay Peninsula.*[1] *1884.* Reserves of Sg. Udang and Merlimau, around Selandar, Bt Danan, Naning and environs, G. Tampin, State of Sg. Ujong, E. Malacca, Ayer Kuning (from the Malacca side).—*1885.* Sent to Seremban (Negri Sembilan), passing through Rantau; Bt Lasing, Bt Sutu, Beranang, Pantai, G. Beremban; Cape Rachado (probably from Malacca by sea). Unnumbered plants (without date), bear names of Bukit Bruang, *Pulau Nangka, Pulau Dodol,* and other places near Malacca town, and Bt Panchor.

COLLECTIONS. His specimens (*c.* 1000 in 1884, 1840 in 1885 are in *Herb. Sing.* and have been quoted as 'CANTLEY's Collector' or briefly as 'CANTLEY' (see there). He numbered in the field.

LITERATURE. (1) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

Alwi, *cf. sub* Forest Research Institute, Buitenzorg.

Amad, Raden Mas

surgeon, in *1909* attached to ABENDANON's *Centr. Celebes* Expedition;[1] at the beginning engaged in collecting plants, assisted by sergeant J. J. LEFÈVRE; since May 20th till his departure he had to contend with illness.

ITINERARY. *cf. sub* ABENDANON (also for literature).

COLLECTIONS. *Herb. Bog.:* some waterplants from the lakes Matana and Towoeti about Oct. *1909.* He discovered the new endemic plant *Boottia mesenterium* HALL. *f.*[2]

LITERATURE. (1) *cf.* E. C. ABENDANON: 'Midden-Celebes Expeditie' vol. 1, 1915, p. 101.

(2) *cf.* Meded. 's Rijks Herb. Leiden *no* 26, 1915, p. 7.

Amand, J.

resident at Blitar (Kediri), *E. Java,* sent plants to *Hort. Bog.* in *1875.* In the lists of the material preserved in *Herb. Berl.* a collection of mosses from *Banka* is mentioned (presented by J. AMAND *a.* 1858), this is apparently based on a mistake and should be J. AMANN (= S. KURZ, see there); the same holds true for collections in *Herb. Leyden,* and *Utrecht.*

Amann, J., (*cf.* Nat. Tijdschr. N.I. 27, 1864, p. 15 *in notam,* p. 403) = S. KURZ (see there).

Amarillas, *cf. sub* Forestry Bureau, Manila.

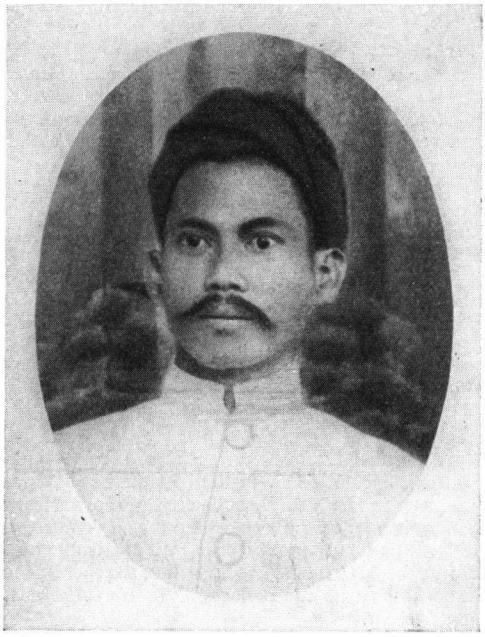
Amat, *cf. sub* Forest Research Institute, Buitenzorg.

Amdjah

(† 1916), an Indonesian employed by the Herbarium at Buitenzorg, finally as 'mantri'; he was attached to some Borneo Expeditions.

ITINERARY. *1898–99. Borneo* with A. W. NIEUWENHUIS (see there).—*1909. Isl. Noesa Kambangan* (S of Java) (June 9–20).—*1912. NE. Borneo* with Capt. P. VAN GENDEREN STORT (see there for detailed itinerary of the 1st part of the trip, and for literature): arrival at Bandjermasin (May 13), starting June 5th from Pladjoe to Moeara Tagel; after breaking bivouac there, during the return voyage to Labang (Ma Sedalir), the proa of the Indonesian collectors capsized and as result the collections and collecting necessaries were lost; in order to complete their outfit again, July 5th AMDJAH and some others went to Tg Seilor; after the evacuation of VAN GENDEREN STORT part of the expedition started for Agisan (*via* the Sěboekoe) by land, including AMDJAH who went as far as Djempanga and who was back at Tenampak on

Sept. 27th; by proa to Kw. Agisan (*via* Kapakoean) (Oct. 4-6). Some larger explorations were made, *e.g.* the Tawanan Expedition (Oct. 17–Nov. 3); to Upper-Seboeda (Nov. 13), Kw. Naoendoeng (17) and back at Tenampak (25); Dec. 7 start of the land expedition to the Simengaris; re-



AMDJAH

connaissance along the coast (27) and to Tawao. In the Report of the Expedition it is not recorded whether the Indonesian collectors participated in these trips. The following collecting localities are mentioned (in list herbarium): B. Oeloe Seboekoe, B.S. Tampilan, Tenampak, B.S. Toelit, G. Djempanga, Soedjau, Tikoeng, Pembliangan and Samenggaris. At the beginning of 1913 back to Tg Seilor and the greater part of the expedition leaving Bandjermasin on Jan. 10th.— *1913. Prinsen-eiland* (= *P. Panaïtan*) (W of Java) (Oct.) with J. C. KONINGSBERGER; also paying a visit to the lighthouse Oedjoeng Koelon (*W. Java*).

COLLECTIONS. *Herb. Bog.: Borneo* (1898–99) 502 *nos, Java, Noesa Kambangan* 242 *nos, Borneo* (1912) 1097 *nos; Herb. Leyden: Borneo* dupl. (1912). Living plants from *Borneo* in *Hort. Bog.* (coll. 1912).

Amerom, Willem Frederik Hendrik van

(1899, Soerabaja, Java; 1944, prisoner camp in Kiushu, Japan), Forest Officer, educated at Wageningen Agricultural College, went to Java in 1928. He was successively stationed at numerous places in that island; in 1934 at Garoet, and since 1935 at Madioen. Since 1940 he was attached to the Forest School at Madioen.

COLLECTING LOCALITIES. *W. Java:* Garoet (*1934*); *E. Java:* Magetan (*1935*), Ngawi (*1937*), G. Lawoe (*1940–41*).

COLLECTIONS. In *Hort.* and *Herb. Bog.:* a few numbers. In *Herb. For. Res. Inst. Buitenzorg* some Ja. *nos.*

Amin, *cf. sub* Forest Research Institute, Buitenzorg.

Amiroeddin, *cf. sub ditto.*

Amorie van der Hoeven, H. A. des

(1865, Macao, China; x), in 1888 Student Gardener in the Botanic Gardens at Buitenzorg, and in the same year changing his situation for one in the upland cultures. He was employed again by the Botanic Gardens from 1889–91, performing pioneer work in behalf of forest-tree investigation in West Java, first as assistant of KOORDERS (see there), afterwards working independently. Later he filled several high offices in agriculture. In 1946 he lived at Leyden, Holland.

Dipterocarpus vanderhoeveni K. & V. was named after him.

COLLECTING LOCALITIES. *W. Java:* principally at Tjibodas (*1890*), at the base of G. Halimoen near Soekaboemi (May 26, *1890*) and at Rongga Estate near Bandoeng.

COLLECTIONS. *Herb. Bog.*, especially ferns and material of forest trees.

BIOGRAPHICAL DATA. Tijdschr. Ned. Ind. 1897, p. 1003; BACKER, Verkl. Woordenb., 1936 (*cf. sub* hoevenianus).

Anang

Indonesian, for more than twenty years in the employ of the Botanic Gardens at Buitenzorg, at present 'mantri'. He attended some expeditions (see below).

COLLECTING LOCALITIES. *1938. Moluccan expedition* G. A. L. DE HAAN (see there). Collecting in *Ternate:* Kei Doekoe (Peak of Ternate) (Febr. 26–28); Loboso (March 5); Kabora (7); *Morotai:* Wajaboela (March 11–13); Goegoeti (15); G. Mokoe (16–18); G. Toetoehoe (March 23–Apr. 3); *Halmaheira:* Weda (Apr. 10–11); Tilope (13–17); Weda (May 17–24); Kobe (31).—*1939. Dutch New Guinea Company Expedition* (*cf. sub* A. SCHWARTZ). *Dutch N. New Guinea:* southern part of the subdivision Hollandia (Nimboran), basin of the Korimi River.

COLLECTIONS. *Herb. Bog.: Ternate nos* 1–147, *Morotai nos* 148–393 and *Halmaheira nos* 394–677 from Exp. DE HAAN, *New Guinea* duplicates (pres. by the F.R.I.). *Herb. For. Res. Inst. Buitenzorg:* 106 bb. *nos New Guinea.* Living plants in *Hort. Bog.*

Anang Atjil, *cf. sub* Forest Research Institute, Buitenzorg.

Anang Kaderi, *cf. sub ditto.*

Andel, W. J. D. van

(1867, Rotterdam, Z.H., Holland; x), came to the D.E.I. in 1891; since 1910 appointed Admini-

strator of the Civil Service, stationed successively in the Lampong Districts (S. Sumatra) 1910–13, in Manado Residency (N. Celebes) 1913–21, in Government Celebes and Dependencies 1922–28, and in Banka and Dependencies 1928–29. After expiry of his European leave, he retired.

COLLECTING LOCALITIES. *1898–1902.* W. *Java:* Soekaboemi and Djampang Tengah.—*1912. S. Sumatra,* Lampong Districts.[1]—*1916. N. Celebes:* Paleleh.

COLLECTIONS. For the greater part living plants in *Hort. Bog.;* also in *Herb. Bog., e.g. Burmannia lutescens* from the Lampong Distr.[2]

LITERATURE. (1) *cf.* Versl. Pl. Tuin Buitenzorg for 1912, p. 18.

(2) *cf.* JONKER, Monogr. Burmanniaceae, 1938, p. 150.

Anderson, Captain

visited *Ambon* before *1814* and from there brought seeds for ROXBURGH, *e.g.* of *Wendlandia paniculata.*[1] This might be the Capt. ANDERSON of the Hon. Comp.'s ship Admiral Hughes, which called at Penang in 1790.[2]

LITERATURE. (1) *cf.* COWAN in Bull. Jard. Bot. Buit. sér. 3, vol. 14, 1936, p. 33.

(2) *cf.* TH. FORREST: 'A voyage from Calcutta to the Mergui Archipelago *etc.*' (London 1792) p. 25.

Anderson, James Webster

an Assistant Curator in the Gardens Department Straits Settlements, 1910–17; he later became a planter. He is the author of 'Index of plants, Botanic Garden, Singapore' (1912). After return in Britain he became a private gardener.

COLLECTING LOCALITIES. *1910–17. Malay Peninsula:* Taiping Hills, Perak (1911) *etc.*—*1912. NW. Borneo,* Sarawak (at all events in Aug.): visiting Mt Poi and probably ascending Mt Pensaung.[1]

COLLECTIONS. Small collections. In *Herb. Kew:* plants from the *Malay Peninsula* (pres. 1912); *Herb. Sing.* He numbered in the field; the specimens have been named and the duplicates distributed in the last 12 years, but no list has been published (CORNER *in litt.*).

LITERATURE. (1) RIDLEY in Kew Bull. 1933, p. 490 describes *Microcos reticulata* from Mt Pensaung, collected by ANDERSON (without mentioning initials).

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlements 4, 1927, *nos* 4–5.

Anderson, Thomas

(1832, Edinburgh, Scotland; 1870, Edinburgh, Scotland), a surgeon under the Government of India and from 1860-68 Superintendent of the Royal Botanic Gardens, Calcutta.[1] He was also the first Conservator of Forests in Bengal. In 1861 he made a journey to Java in connection with *Cinchona* culture. In 1868 he returned to Scotland on account of illness and spent his time in working on *Acanthaceae.*

Eranthemum andersoni MASTERS was named after him.

COLLECTING LOCALITIES. *1861. W. Java,* Priangan Res.: G. Goentoer and G. Malabar (Oct. 19), *etc.*; Buitenzorg (Nov. 6); *Malay Peninsula:* Singapore.[2]

COLLECTIONS.[3] *Herb. Calcutta*; probably > 470 *nos* of above-mentioned trip; *Herb. Kew:* India, Suez (pres. 1861–70); *Herb. Brit. Mus.: Singapore* plants; also dupl. in *Herb. Berlin* and *Herb. Leyden.* See also *Addenda.*

LITERATURE. (1) Author of the 'Florula Adenensis' (Journ. Linn. Soc. Lond. Bot. 1860, suppl. 1, 47 pp.).

(2) T. ANDERSON: 'On a new genus of Moraceae from Sumatra and Singapore' (Journ. Linn. Soc. Bot. 8, 1865, p. 167–168).

(3) Plants mentioned by VALCKENIER SURINGAR in 'Het geslacht Cyperus' (Leeuwarden 1898) p. 110; in Pflanzenreich 46, p. 271; in Bull. Jard. Bot. Buit. sér. 2, vol. 9, 1913, p. 38; Ann. Conserv. Jard. Bot. Genève 21, 1920, p. 272.

BIOGRAPHICAL DATA. Journ. Bot. 1870, p. 368 w. bibliogr.; Gard. Chron. 1870, p. 1478; PRITZEL, Thes. Lit. Bot., 1872; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 26, 1888, p. 54 and in 2nd ed. by RENDLE, 1931; CURTIS' Bot. Mag. Dedic. 1827–1927, p. 151–152 + portr.; BACKER, Verkl. Woordenb., 1936.

Anderson, William

(died June 3, 1778, off Anderson's Island), Surgeon-Botanist of COOK's 2nd and 3rd voyage (resp. 1772–75 and 1776–80, *cf. sub* COOK). The 2nd voyage can be neglected, the territory treated here not being visited; on the 3rd voyage ANDERSON undertook the botany department together with NELSON (see there), but died in 1778 before arrival in the Malaysian region.

He is commemorated in the genus *Andersonia* R.BR.

COLLECTIONS. In *Herb.* BANKS = *Brit. Mus.,* also MSS; no plants from *Malaysia.*

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 36, 1898, p. 100, and in 2nd ed. by RENDLE, 1931; Journ. Roy. Soc. Tasmania 1909, p. 3; Journ. Bot. 54, 1916, p. 345, and *l.c.* 55, 1917, p. 54; Journ. & Proc. Roy. Soc. N.S.W. 55, 1921, p. 150.

Anderson, William

is mentioned by KRÄNZLIN[1] as collector of *New Guinea* plants in *1893*; data on collecting localities are omitted. F. M. BAILEY describes *Dendrobium andersoniana,* named after WILLIAM ANDERSON who collected the specimen in *British New Guinea.*[2]

A certain ANDERSON (initials not mentioned) was a settler and storekeeper at Dedele (Cloudy Bay) († 1899); he was a native of Norway, owned coconut plantations and began to exploit rubber, living 15 years in the colony.[3] He might be identical with the above-mentioned collector.

LITERATURE. (1) 'Orch. Papuan.' in Oesterr. bot. Zeitschr. 44, 1894, p. 161–162.

(2) *cf.* Queensl. Agr. Journ. 1901, p. 411–412.

(3) *cf.* Ann. Rep. Br. N.G. for 1898–99, Victoria 1900, p. 13.

Andersson, G. G.
evidently a plant collector of H. O. FORBES (see there).

Andersson, John
WICHMANN[1] mentions that a certain JOHN ANDERSSON has pointed to the occurrence of 'peat' in Sumatra already in the year 1794. It seems probable that A. had samples, and possibly also plants from Sumatra.

LITERATURE. (1) *cf.* Versl. gew. verg. Wis- & Natuurk. Afd. Kon. Akad. Wet. Amsterdam 29 Mei, 1909, vol. 18, 1909, p. (5)–(9).

Andersson, Nils Johan
(1821, Gärdserum, Småland, Sweden; 1880, Stockholm, Sweden), finished his studies at Uppsala, taking his Ph. Dr's degree in 1845; he was a member of a Swedish expedition round the world. In 1852 he was appointed Natural History Lecturer at Stockholm, in 1855 *ditto* at Lund; in 1856 Director of the Bot. Sect. of the Nat. Hist. Museum Stockholm, at the same time Professor.

Author of many systematic papers *e.g.* on *Gramineae* and *Salicaceae*.[1]

ITINERARY. *Voyage in the 'Eugenie', 1851–53.*[2] Departure from Karlskrona (Sept. 30, 1851) and *via* Madeira, Rio de Janeiro, Montevideo, Valparaiso, Callao, Panama, Galapagos Isls, Sandwich Isls, California, Sandwich Isls, Friendship Isls, New Holland (Sydney), Carolines, China; reaching the *Philippines, Luzon:* Manila (Jan. 4, *1853*), making trips to Pasig, Laguna, Santa Cruz, Pagsajan, Cavinti, Louisiana, Mahayhay, Lillo, G. Banajao (not reaching the summit), Bay, Los Baños, Lake Socal; Jan. 14th sailing for *Singapore* (arrival on the 25th, sailing on the 30th), where according to the account of the voyage (Dutch transl.) no collecting was done owing to illness; *W. Java:* Batavia (Febr. 4 arrival), where some little trips (Buitenzorg *etc.*) were made in the last few days; sailing for the Cocos Isls on the 13th and *via* Keeling and Cocos Islands and the Cape of Good Hope; back in Sweden in June 1853.

COLLECTIONS. *Herb. Mus. Stockholm;* dupl. in *Herb.* DECANDOLLE (*Geneva*) (500), *St Petersburg* (= *Leningrad*) (1478 *nos*), *Vienna, Liege, Brit. Mus.* (mosses acquired w. *Herb.* HAMPE), *Kew* (pres. 1856–74), *Berl.* (128 specimens of the Galapagos Isl. and 55 dupl. from Stockholm pres. 1935–36), Herb. LINDEMANN (? U.S.S.R.) (59), *N.Y. Bot. Gard.:* 18 *nos* of the *Philip. Isls.* Evidently the labels are not very trustworthy, especially with regard to collecting localities. KÜKENTHAL mentions *Cyperaceae* collected by A. in *Java* (Batavia), *Malacca, Singapore* and *Luzon*.[3] These data do not comply with the statement that in Singapore no collecting was done.

The botany of the voyage was partly published,[4] but no plants of the Malaysian region were dealt with.

LITERATURE. (1) The latter in DECANDOLLE, Prodromus 16[2], 1868, p. 190–331.

(2) C. SKOGMAN: 'Fregatten Eugenies Resa omkring Jorden åren 1851–53 under befäl af C. A. VIRGIN' (Stockholm 1857–61, 4 vols; 1st ed. 1854–55) (*non vidi*); Dutch transl. by J. J. A. GOEVERNEUR: 'Eene reis om de wereld met het Zweedsche oorlogsfregat Eugenie' (Groningen 1864); German transl. by A. VON ETZEL: 'Erdumseglung der Königl. Schwedischen Fregatte Eugenies in den Jahren 1851 bis 1853 *etc.*' (Berlin 1856, 2 vols).

cf. also some letters *etc.* from ANDERSSON in Svensk Vetensk. Akad. Öfvers. 10, 1853, p. 58–64, 75–76, 177–191 (in Swedish).

(3) In Pflanzenreich Heft 101, IV, 20, 1936, *cf.* p. 71, 86, 134, 424, 519 *etc.*

(4) Kongliga Svenska Fregatten Eugenies Resa *etc.* Botanik I–III, 1857–1910 by N. J. ANDERSSON and F. W. C. ARESCHOUG.

Mosses by J. ANGSTRÖM in Öfvers. Vet.-Akad. Förh. 29, 1872–73, p. 15–29, 118–139; *l.c.* 33, 1876, p. 50–55; Hedwigia 14, 1875, p. 85–93.

BIOGRAPHICAL DATA. MART. Flor. Bras. vol. 1, *pars* 1 in 'Vitae itiner. collect. *etc.*'; PRITZEL, Thes. Lit. Bot., 1872; WITTROCK, Icon. Bot. Berg., 1903, p. 29, *t.* 11 and in *l.c.* 2, 1905, p. 3.

Andoetoe, J. H., *cf. sub* Forest Research Institute, Buitenzorg.

Andrea, A. F.
captain in the mercantile marine, presented *Herb. Copenhagen* with a collection of plants from the *Philippines* in *1875*.

Andreas
of Menggala, *W. Borneo*, sent orchids to *Hort. Bog.* in *1896*.

Andreas, A. C.
District Officer of the Civil Service at Tegal (*Centr. Java*), sent plants to *Hort. Bog.* in *1878*.

Andreas, H., *cf. sub* Forest Research Institute, Buitenzorg.

Andreas, P. P.
Doctor of Law at Buitenzorg, *W. Java*, presented plants to *Hort. Bog.* in the years *1873–75*; when in *1883* at Bonthain (*SW. Celebes*), he forwarded plants (orchids *etc.*) to the said Gardens.

Andresen, A. J.
Lieutenant Colonel in the Western Division of *Borneo*, sent material of the gutta-percha tree to the 'Natuurkundige Vereeniging' at Batavia in *1852*.

Andrews, Charles William
(1866, Hampstead, England; 1924, ?), Assistant in the British Museum, Nat. Hist. Dept, who made an expedition to Christmas Island (Indian Ocean).

Some plants were named after him, *e.g. Panicum andrewsi* RENDLE.

ITINERARY. Left England beginning of May 1897, sailing July 23 from Batavia, and staying in *Christmas Island* July 29, *1897*–May *1898*, for 10 months.[1] He may have visited the island again in 1901 (see below).

COLLECTIONS. *Herb. Brit. Mus.:* 278 plants

collected in *Christmas Island*, pres. by Sir J. MURRAY, including types of the novelties described in the monograph of the island;[2] 110 spec. incl. 49 cryptogams from *Christmas Island* (pres. 1910) and crypt. from the same (pres. 1916). In *Herb. Bog.* a few duplicates, *e.g.* of *Strongylodon lucidus* SEEM., according to the label collected 12–10–*1901*.

LITERATURE. (1) C. W. ANDREWS: 'A description of Christmas Island (Indian Ocean)' (Geogr. Journ. 13, 1899, p. 17, w. map); 'A monograph of Christmas Island (Indian Ocean). Physical features and Geology. With descriptions of the Fauna and Flora by numerous contributors' (London 1900).

(2) *cf.* Chapter Botany in Monograph *l.c.* p. 171–200, pl. 17–18.

BIOGRAPHICAL DATA. Who's who 1913.

Angeles, *cf. sub* Forestry Bureau, Manila.

Angremond, Arend d'

(1883, Amsterdam, Holland; August 1945, Japanese prisonercamp Si Rengo-Rengo near Medan, Sumatra), was educated at the Agricultural School at Wageningen; went to Surinam as Estate Manager in 1905, taking much trouble for the promotion of the culture of bananas. In 1911 he went to Switzerland, where he studied for some years at Zürich under Prof. A. ERNST, taking his Ph. Dr's degree in 1914 on a flowerbiological thesis. Subsequently he departed for Java, where he was Director of the Tobacco Experiment Station at Klaten till 1928, and later of the A.V.R.O.S. Experiment Station at Medan (Sumatra).

COLLECTIONS. Probably a few plants only. In *Herb. Bog.*: *e.g.* material of *Curculigo orchioides* GAERTN. (pres. *1931*).

Angst, Ed.

architect, Zürich, presented 28 *nos* of cultivated plants from *Java* to *Herb. Univers. Zürich* in *1906*.

Anhali, *cf. sub* Forest Research Institute, Buitenzorg.

Aniff = HANIFF (see there).

Annandale, Thomas Nelson

(1876, Edinburgh, Scotland; 1924, Calcutta, Br. India), zoologist and anthropologist, Superintendent of the Indian Museum, Calcutta, and Director of the Zoological Survey of India. He came to India in 1904, and is the author of many zoological papers, D. Sc. at Edinburgh 1905. He was attached to the Skeat Expedition (see below) and revisited the Malay Peninsula on more than one occasion.

ITINERARY. *Malay Peninsula. 1899. Skeat Expedition,*[1] *cf. sub* YAPP. ANNANDALE left the expedition after the stay at Kuala Aring towards the end of September.—*1901–03*. On some occasions with H. C. ROBINSON (see there).—*1916*. Accompanied by a collector in the Siamese Malay States (Jan.–Febr.).[2]

COLLECTIONS. *Herb. Sing.*: collection *1916*, numbered in the field with S.F. *nos*.

We do not know whether any botanical collections were made by him during the former expeditions.

LITERATURE. (1) TH. N. ANNANDALE: 'The Siamese Malay States' (Scott. Geogr. Magaz. 16, 1900, p. 505–523).

(2) *cf.* Ann. Rep. Bot. Gard. Str. Settlem. for 1916, p. 4.

BIOGRAPHICAL DATA. Who's who 1913; Rec. Ind. Mus. Calc. 27, 1925, p. 1–28, incl. bibliogr.; Journ. Bomb. Nat. Hist. Soc. 30, 1925, p. 213–214; BURKILL in Gard. Bull. Str. Settlem. 4, 1929, *nos* 4–5.

Anonymous* **Indonesia**

The *Dutch East Indian* exhibits at the exhibition at Paris in 1867 and 1900 were presented resp. in 1869 and 1901 to the *Kolon. Mus.* (now *Ind. Inst. Amsterdam*). Those of the exhibition at Amsterdam in 1882–83 are at least partly in *Herb. Leyden.*

Anonymous **Sumatra**

12 *Filices* from Acheen (= Atjeh), *N. Sumatra*, with KAMEL's plants in *Herb.* PETIVER in *Brit. Mus.*; also 3 *Algae*. The material must have been collected *about 1700*.

A rather extensive collection from Padang and environs, *Sumatra West Coast*, collected in *1870*, in *Herb. Bog.* The labels are written in a non-German hand; some of the numbers exceed 300; *cf.* also *sub* JODNER.

The District Officer of the Lampong Districts (*S. Sumatra*) sent a lot of orchids to *Hort. Bog.* in *1895*.

The Resident of Pariaman, *Sumatra West Coast*, collected some plants (July 14, *1903*), *e.g. Knema mandaharan;* in *Herb. Bog.*

(*) Anonymous collectors are numerous in the Malaysian collections. Many of them were officials whose names can only be traced with difficulty or not at all, and who, in all probability, often did not collect in the field themselves.

Some large collections were made by native collectors whose names are not noted (*e.g.* from Borneo). Further there are quite a number of totally anonymous collections, of which we have not the faintest idea who made them. The anonymous collections cannot be neglected; some are very large *e.g.* the 'Native Collector(s)' employed by the Bureau of Science in Borneo. Some are very important, and contained a lot of novelties, *e.g.* the grasses collected by veterinary surgeons in Soemba Isl. (L.S.I.). Sometimes duplicates were distributed of well-known collections with totally inadequate labels, specially of the old collections; these duplicates are now often 'anonymous'. The anonymous collections have been annoying for the present compiler. They are here arranged geographically and chronologically.

G. MEYER-DARCIS, Wohlen (herbaria dealers), Switzerland, presented 408 *Sumatra* ferns to the *Herb. Univers. Zürich* in 1905. The actual collector(s) is (are) not mentioned. The collection must have been made *before 1905*. There is a possibility that the plants are duplicates of the Sumatra collection of G. SCHNEIDER (see there).

The Assistant Resident of Padang Pandjang, *Sumatra West Coast*, sent living orchids to *Hort. Bog.* in *1905*.

The Resident of the Lampong Districts, *S. Sumatra*, forwarded rattans *etc.* to *Hort. Bog.* in *1905*.

In *Herb. Bog.*: weed collection from Bah Biroeng Oeloe, Tea plantation SE of Pematang Siantar in *Sumatra East Coast* (coll. *1924*).

The Government Veterinary Surgeon of Sibolga (Res. Tapanoeli), *N. Sumatra*, sent more than 36 grasses from Padang Lawas to *Herb. Bog.* (pres. July *1926*).

In *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam:* a large amount of cultivated plants, presented in *1927* by the Deli Experiment Station, Medan, *Sumatra East Coast*.

In *Herb. Bog.*: 16 grasses from Tapanoeli, *N. Sumatra* (pres. in *1927* through the intermediary of the Dir. of the Veterinary Inst.).

In *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam:* 11 wood samples + herbarium from the forests of Singkel (= Singkil, S. Atjeh, *N. Sumatra*) (pres. by the N.V. Houthandel Singkel in *1928*).

The District Officer of Takengon in Atjeh, *N. Sumatra*, collected 4 living orchids on the Boerni Telong; in *Herb. Bog.* (*193* .).

The Forest Officer of Tapanoeli, *N. Sumatra*, collected 11 *nos* herbarium material of plants and shrubs on G. Semponan (Dairi Lands) (Nov. 27, *1929*), without labels; presented to *Herb. Bog.* by the Forest Research Institute (Buitenzorg) towards the end of 1930.

The Estate-Manager of Kotaboemi in the Lampong Districts, *S. Sumatra*, collected at least 9 *nos* of plants (March 22, *1934*); in *Herb. Bog.*

The Assistant Consulting Agriculturist at Wonosarie, Palembang Res., *S. Sumatra*, collected the weeds *nos* A–M; in *Herb. Bog.* (pres. *1940*).

Many times during several years plants were sent for identification to *Herb. Bog.* by:

1. **Deli Experiment Station**, Medan.
2. **General Experiment Station** of the A.V.R. O.S., Medan.
3. The agriculturists in the employ of the **Agricultural Syndicate**, stationed in Sumatra West Coast and S. Sumatra.

Anonymous **Islands near Sumatra**

The 'demang' (native government official of the Civil Service) of the *Batoe Islands*, W of Sumatra, sent 2 plants to *Herb. Bog.* in Dec. *1930*. The Civil Administrator of the said islands, *ditto* 1 plant to *Herb. Bog.*

In *1855* the Resident of *Banka* sent species of *Nepenthes* originating from there, to the 'Natuurkundige Vereeniging' at Batavia; the specimens were passed to TEYSMANN, *Herb. Bog.*, for identification.

The Consulting Agriculturist at Pangkalpinang, *Banka*, collected 4 plants (*1928*); in *Herb. Bog.*

Plants originating from *Billiton* and *P. Mendanau* in *Herb. Leyden*, presented by the Dept of the Colonies between the years *1871–98* (*cf.* GODDIJN in Meded. 's Rijks Herb. Leiden *no* 62b, p. 20; Mandanao = Mendanau).

Anonymous **Malay Peninsula**

12 *Filices* from *Malacca* with KAMEL's plants in *Herb.* PETIVER, *Brit. Mus.* The material must have been collected *about 1700*.

A collector employed by THOMAS EVANS (see there) collected in *P. Penang* in *1808*, *e.g. Begonia evansiana* ANDR. (*cf.* BACKER, Verkl. Woordenb., 1936).

A Chinese collector in the employ of the Fed. Malay States Museum, made a collection of plants near the summit of G. Benom, Pahang, in the *Malay Peninsula* (July–Aug. *1925*), at an alt. of 6000 feet and upwards. Material in *Herb. Fed. Mal. Stat. Mus.* = permanently on loan in *Herb. Sing.* (*cf.* M. R. HENDERSON: 'On a collection of plants from Gunong Benom, Pahang' in Journ. Fed. Mal. Stat. Mus. 13, 1926, p. 217–227).

Anonymous **Java**

Plants from a Javanese Garden in *Herb.* PLUKENET, *Herb.* SLOANE 89 in *Brit. Mus.* The material must date from *about 1700*.

Plants by a Dutch Gardener (from CLEYER's garden?) from Batavia in *Herb.* SLOANE 286–287, in *Brit. Mus.* The material must date from *about 1700*.

Java plants, collected *before 1842*, without the name of the collector (*ex Herb.* WEBB), were sold with the Herbarium of LAMBERT in 1842; they were bought by R. BROWN (= *Brit. Museum*).

A native collector of the Botanic Gardens Buitenzorg, discovered *Rafflesia rochussenii* on the Manellawangi (= Mandelawangi, spur of G. Gedeh) on July 29, *1850* (*cf.* TEYSMANN & BINNENDIJK in Nat. Tijdschr. N.I. 1, 1850, p. 425–430, 2 pl.; and in *l.c.* 2, 1851, p. 651–655; *cf.* also HOOK. Lond. Journ. Bot. & Kew Gard. Misc. 3, 1851, p. 217–220).

Java plants of an unknown collector in *Herb. Oxford* (*cf.* HOOK. Journ. Bot. & Kew Gard. Misc. 6, 1854, p. 281).

Herb. Amsterdam: Plantae Ind. Orient. Javanicae, beautiful collection of *Piperaceae etc.*, collected in the vicinity of Semarang, *Centr. Java*. Probably very old. At *Geneva* similar plants in *Herb.* BURMAN.

The Assistant Resident of Lebak, Bantam, *W. Java*, sent 6 plants of *Gonystylus miquelianus* to *Hort. Bog.* in *1866*.

The District Officer of Rangkas Bitoeng, Bantam, *W. Java*, sent some orchids to *Hort. Bog.* in *1886*.

From Aug. *1888*–March *1889* plants were collected on behalf of J. G. BOERLAGE (see there) in the environs of Buitenzorg (*cf.* Versl. Pl. Tuin Buitenzorg for 1888, p. 18); in *Herb. Leyden*.

Herb. Univers. Zürich: pharmaceutically important material in spirits from *Java* (purch. *1895*).

Herb. Univers. Zürich: 100 plants from *Java*, presented by SCHINZ in *1903*. Collector(s) unknown.

An Overseer of the Forest Service collected 13 *nos* of plants in the mangrove forest near the Kinderzee near Tjilatjap, *Centr. Java;* in *Herb. Bog.* (coll. *19* . .).

The Estate-Manager of Kiara Pajoeng, N of Tjiandjoer in *W. Java*, sent at least 8 *nos* of weeds to *Herb. Bog.* in July *1922*.

In *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam:* material of the cultivated species of coffee from Bangelen, presented by the Malang Experiment Station in *1926*.

In *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam:* samples of 'cubeben' + herbarium, presented by the Central Java Exp. Stat. at Salatiga in *1926* and *1931*.

The Consulting Horticulturist of *E. Java* collected in *1928*, 30 *nos Loranthaceae;* in *Herb. Bog.*

An Overseer of the Forest Service collected *Rubus calycinus* WALL. *var. suffruticosus* in *E. Java*, on the Jang Plateau near Taman Hidoep (Nov. *1929*); in *Herb. Bog.*

The Forest Officer of Djember, *E. Java*, sent 3 *nos* of *Aleurites montana* to *Herb. Bog.* (pres. July *1930*).

The Director of the Normal School at Ambarawa, *Centr. Java*, collected material of *Cuscuta* (Jan. *1930*); in *Herb. Bog.*

The Estate-Manager of Tjikopo, *W. Java*, collected *Dysoxylum macrocarpum* BL. (July *1933*); in *Herb. Bog.*

The Estate-Manager of Moedjoer, Pasoeroean, collected *Omphalopus fallax* (JACK) NAUD. at Moedjoer, *E. Java* (*cf.* BAKHUIZEN V. D. BRINK in Rec. Trav. Bot. néerl. 40, 1943, p. 119); specimen in *Herb. Bog.*

Many times during several years plants were sent for identification to *Herb. Bog.* by:

1. **General Experiment Station for Agriculture** (Algemeen Proefstation voor den Landbouw = A.P.L.) at Buitenzorg; partly collected by HACKENBERG, VAN HEETEREN and HUITEMA (see those) of the division **Agricultural Institute**, partly by others and presented through the intermediary of the said Institute; also by FRANSSEN, VAN DER GOOT and VAN DER VECHT (see those) of the division **Institute for Plant Diseases** (partly by others and presented by the said Institute).

2. The **Private Experiment Stations**, *viz* **W. Java** (a combination of the formerly separate stations for tea, rubber, *etc.*) at Buitenzorg, collected by the staff, principally by HEUBEL and PRILLWITZ (see those), and also a lot of material coming from various estates and presented through the intermediary of the Exp. Station; **Salatiga, Semarang, Klaten, Malang** and **Besoeki** (Djember) *ditto*, presented by the respective directors.

3. **Public Health Service,** Medical Laboratory at Batavia, *e.g.* from the Malaria Department, especially waterplants.

4. **The Opium Factory** at Batavia.

5. The **Commercial Museum** (Handelsmuseum) at Batavia (the former Museum and Inquiry Office for Economic Botany, Buitenzorg).

Anonymous **Islands near Java**

The Manager of the Government Caoutchouc Estate in *Noesa Kambangan* (S of Java) sent some plants to *Hort. Bog.* in *1922*.

The Consulting Horticulturist of *Madoera* sent 2 *nos* of plants to *Herb. Bog.* in Aug. *1932*.

The Assistant Consulting Agriculturist at Bangkalan (*Madoera*) sent some plants from experiment fields, *e.g. Tenagocharis latifolia* BUCH. to *Herb. Bog.* in *1933*.

The Agricultural Overseer at Toendjoeng (*Madoera*) collected ± 50 *nos* of weeds from experiment fields in *1934;* in *Herb. Bog.*

The Assistant Consulting Agriculturist at Pamekasan (*Madoera*), sent respectively 21 and 13 *nos* of plants from experiment fields to *Herb. Bog.* in *1934* and *1935*.

The Consulting Agriculturist of *Madoera* sent plants from experiment fields in the years *1934* and *1936;* a number of them preserved in *Herb. Bog.*

Anonymous **Lesser Sunda Islands**

The Resident of *Bali* and *Lombok* sent a lot of living orchids to *Hort. Bog.* in *1886* and *1908.*

The Estate-Manager of Poeloekan (*Bali*) collected *Salvia occidentalis* SCHWARZ; in *Herb. Bog.* (pres. Sept. *1933*).

The District Officer of *Lombok* sent a *Cypripedium sp.* to *Hort. Bog.* in *1906.*

The Overseer of the Forestry Service collected *Dysoxylum ramiflorum* MIQ. in *Lombok;* in *Herb. Bog.* (pres. *1933*).

The Veterinary Surgeon of Soembawa besar (*Soembawa*) sent 39 *nos* of grasses for identification to *Herb. Bog.* (*1930*).

The Govt Veterinary Surgeon at Waingapoe (*Soemba*), collected *Coleus scutellarioides* BTH. (April *1930*); in *Herb. Bog.*

In *Herb. Bog.*: 5 *nos* of grasses from *Soemba* (pres. through the Veterinary Institute Buitenzorg).

The Civil Administrator of *Flores* sent plants to *Herb. Bog.* in *1918.*

The Govt Veterinary Surgeon at Roeteng, *Flores* (= ? W. R. KNAAP, see there), sent 20 grasses to *Herb. Bog.* in *1926.*

A forester (in German: Förster) collected in 1932 in behalf of *Herb. Berl.* in *Flores. cf.* FÖRSTER, and Mrs I. RENSCH (coll. *1928*).

The Overseer of the Forestry Service collected prairie plants in *Flores* in Nov. *1934*; 7 *nos* in *Herb. Bog.* (pres. Febr. *1935*).

The Assistant Consulting Agriculturist at Larantoeka collected 3 *nos* from *E. Flores* in May *1935;* in *Herb. Bog.*

The Assistant Agriculturist collected 13 *nos* in *Flores* (Oct. 24, *1936*); in *Herb. Bog.*

The Consulting Agriculturist of Timor and adjacent islands, sent plants from Larantoeka, *E. Flores,* to *Hort. Bog.* in *1938.*

The Civil Administrator of *P. Lomblen* sent a *Myristica sp.* to *Hort. Bog.* in *1915.*

The Consulting Agriculturist of Timor and adjacent islands, sent plants from *P. Adonare* to *Hort. Bog.* in *1938.*

The Forest Architect (=? DE GRIJP, see there) at Koepang, *Timor,* collected plants, *viz* in *1934* a collection of 28 *nos* and in April *1935*: 18 *nos* from Fetin, Lelefoei, Nenas, Fatoe, Amnasi and Bidjeli; in *Herb. Bog.*

The *Herb. N.Y. Bot. Gard.* acquired a small collection from *Timor* in *1935* (*cf.* Bull. N.Y. Bot. Gard. 36, 1935, p. 21).

The Lieutenant of the Chinese in Ambon sent a lot of living orchids from the *Tanimber Islands* to *Hort. Bog.* in *1900.*

Anonymous **Borneo**

12 *Filices* from *Borneo* with KAMEL's plants in *Herb.* PETIVER in *Brit. Mus.* The material must date from *about 1700.*

The Resident of *SE. Borneo* sent material of some useful plants to the Nat. Ver. N.I. at Batavia in *1865;* they were forwarded to *Herb. Bog.* (*cf.* Nat. Tijdschr. N.I. 29, 1867, p. 428–429, 436).

The Civil Administrator of the Tidoeng lands, *NE. Borneo,* sent sterile specimens of *Dryobalanops lanceolata* BURCK to *Herb. Bog.* (year unknown).

The Sultan of Sambas, *W. Borneo,* sent some iron-wood (*Eusideroxylon*) plants to *Hort. Bog.* in *1869.*

The Resident of Pontianak, *W. Borneo,* sent living plants to *Hort. Bog.* in *1894* and *1896; cf. sub* S. W. TROMP.

The Sultan of Koetei, *E. Borneo,* forwarded several orchids to *Hort. Bog.* in *1895.*

The Resident of *SE. Borneo* presented fat-yielding plants to *Hort. Bog.* in *1897.*

Mrs A. BONORAND, Küsnacht, Switzerland, presented fruits *etc.* from *Borneo* to *Herb. Univers. Zürich* in *1902.* Probably not collected by herself.

In *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam: Palaquium sp. div.* of the Western Division of *Borneo* (pres. *1909*).

The Civil Administrator of Kotta Waringin, *SW. Borneo,* (= ? C. VAN NOUHUYS, see there), sent living orchids to *Hort. Bog.* in *1912*; *ditto* the Civil Adm. of Tanahgrogoh, *E. Borneo,* in *1912.*

A native collector has been employed by the Philippine Bureau of Science, through the agency of the Sarawak Museum during *1913–14.* The collections were made in Sarawak, *NW. Borneo, e.g.* on Mt Merinjak, Mt Santubong, at Kuching, and Retuh (*cf.* E. B. COPELAND: 'Notes on Bornean ferns' in Philip. Journ. Sci. C. Bot. 10, 1915, p. 145–149, pl. 1). In *Herb. Manila, nos* ranging between 1 and 2700. Duplicates *Herb. Arn. Arb., Herb. Bog., Herb. Kew,* and probably elsewhere.

The District Officer of W. Koetei (= ? W. C.

VAN GELDER, see there), Tenggarong, *E. Borneo*, sent some wild orchids to *Hort. Bog.* in *1919*.

A native collector of the Sarawak Museum collected at Kedurong, *Sarawak* in *1925*.

Native collectors under the supervision of the Sarawak Museum collected great numbers of plants at the instigation and with the assistance, both technical and financial, of E. D. MERRILL, then at Berkeley, California. In *1926–28* large collections were dispatched to the *U.S.A.* It seems probable that a duplicate set is in the *Sarawak Museum*.

The Agricultural Officer at Pontianak, *W. Borneo*, sent specimens of *Shorea* to *Herb. Bog.* in Oct. *1929*.

The Consulting Agriculturist at Pontianak, *W. Borneo*, collected *Crotalaria striata* at the end of *1935*; in *Herb. Bog.*

Anonymous **Philippines**

VIDAL in Rev. Pl. Vasc. Filip., 13, speaks of finding at the Museo del Jardin botanico, *Madrid*, 5 packets of *Philippine* plants collected in the years *1830* to *1835*. In 1884 these specimens were evidently still undisturbed in their original packages.

The collector is unknown, but was probably some army or naval officer. According to MERRILL (Bull. Philip. Bur. Agr. *no* 4, 1903 p. 33–34), COLMEIRO credited the collection (400 *nos*) erroneously to BLANCO & LLANOS.

Part of it is collected on Mount Arayat in the Province of Pampanga (*Luzon*), in *1829;* the first collection secured from one of the higher mountains!

Anonymous **Celebes**

The Assistant Resident of Pampanoea, *SW. Celebes*, sent material of orchids and *Loranthaceae* (dried and in spirits) to *Herb. Bog.*

The Civil Administrator of Melillik sent a collection of dried plants and material in spirits to *Herb. Bog.* in *1912*.

The Assistant Resident in Boni (= Bone, *SW. Celebes*), sent some orchids (dried and in spirits) to *Herb. Bog.* in *1912*.

The Resident of Boni, Pampanoe(w)a, *SW. Celebes*, sent some orchids to *Hort. Bog.* in *1913*.

The Veterinary Surgeon at Gorontalo, *N. Celebes*, sent plants to *Herb. Bog.* in *1928*.

The Assistant Veterinary Surgeon at Donggala, *Centr. W. Celebes*, collected several plants in the years *1928–29*; *nos* 1–71 originating from Lindoe, Sibalaja, Tobali, Biromaroe, *etc.* and *nos* 75–128 from Koelawi, Sidoa, Dolo and Lake Lindoe; in *Herb. Bog.*

The Assistant Veterinary Surgeon at Gorontalo, *N. Celebes*, collected 74 *nos* of plants in *1928–29;* in *Herb. Bog.*

Anonymous **Islands near Celebes**

The Resident of Manado sent material of *Gunnera macrophylla* from G. Awoe, *P. Sangihe* (coll. May *1941*) to *Herb. Bog.*

Anonymous **Moluccas**

The Estate-Manager of Tobelo, *Halmaheira*, sent some specimens of plants to *Herb. Bog.* in Nov. *1919*.

The Resident of *Ternate* sent some samples of *Sapotaceae* to *Herb. Bog.* in *1884*.

The Post-Holder at Kairatoe, *Ceram*, collected at Oldenburg, by the orders of the Resident of Ambon, specimens of *Ormocarpum cochinchinense* (LOUR.) MERR. (July 10, *1896*); in *Herb. Bog.* (*Herb. bot. var.* KOORDERS *no* 27).

A Civil Administrator of *Ceram* sent several specimens of sago-palms to *Herb. Bog.* in *1911–12*.

Some medicinal herbs originating from *Ceram* were presented by the Eykman Institute (Batavia) to *Herb. Bog.* in *Dec. 1939*.

Plants from *Ambon*, without mentioning the collector's name, were sold with the *Herb.* LAMBERT in *1842*; they were bought by RICH (*cf.* Advertisement in Athenaeum 1842, p. 44). Probably the plants were presented to LAMBERT by W. ROXBURGH (*cf.* LAMBERT, Descr. of the genus *Pinus*, 2, 1837, *appendix* p. 13–24), and collected by ROXBURGH *Jr* or CHRISTOPH. SMITH (see those) *early in the 19th century*.

The Lieutenant of the Chinese in *Ambon* sent a lot of living orchids from that island to *Hort. Bog.* in *1900*.

The Resident of *Ambon* sent plants to *Hort. Bog.* in *1901*.

In *Herb. Leyden:* 286 *Banda* plants, accompanied by a list of vernacular names. Neither collector, nor the year of collecting is mentioned, but probably dates from the first half of the 19th century.

The Roman-Catholic mission in the *Kai Islands* sent some fodder plants to *Herb. Bog.* in *1927*. *Ditto* 27 medicinal plant species to the Medical Laboratory (Batavia) in *1939*, which were forwarded to *Herb. Bog.* too.

Anonymous **New Guinea**

The German New Guinea Company sent living plants from *NE. New Guinea* to *Hort. Bog.* in *1894*.

The 'Landeshauptmann'(=?SCHMIELE) in former *German New Guinea* at Friedrich Wilhelmshafen

sent living plants to *Hort. Bog.* (*cf.* Versl. Pl. Tuin Buitenzorg for 1894, p. 138, 144) in *1894*.

Hort. Bog.: orchids from Doré, *NW. New Guinea* (pres. *1899*).

The Resident of Ternate presented *Piperaceae* originating from the N. coast of *New Guinea* to *Herb. Bog.* The same in *1900* a lot of orchids from *New Guinea* to *Herb. Bog.*

Herb. Univers. Zürich: 8 *New Guinea* plants presented in *1904* by H. BROCKMANN, student at Winterthur. Probably not collected by himself.

In *1905* the Assistent Resident of Merauke, *S. New Guinea*, sent orchids to *Hort. Bog.*

The Assistent Resident of Merauke (= prob. J. A. W. COENEN, see there), sent material preserved in formalin from *S. New Guinea* to *Herb. Bog.* in *1912*.

The Officer in Command of Ambon and Ternate sent some orchids from Upper Digoel, *Dutch S. New Guinea*, to *Hort. Bog.* in *1913*.

In Febr. *1938*, 2 specimens from *Dutch S. New Guinea* (Upper Digoel) were presented through the intermediary of the Army Surgeon E. M. ELSBACH at Soerabaja, to *Herb. Bog.*

Anonymous **Bismarck Archipelago**

The Department of Agriculture, Rabaul, *New Britain* (*Bismarck Archipelago*), sent orchids to *Hort. Bog.* in *1935*.

The New Guinea Department of Agriculture collected plants in *New Britain* (*cf.* Journ. Arn. Arbor. 22, 1941, p. 93).

Ansar, S. M., *cf. sub* Forest Research Institute, Buitenzorg.

Anta

an Indonesian employee of the Herbarium at Buitenzorg, accompanied BLOEMBERGEN (see there and *sub* ASDAT) on his trip to Celebes and the Soela Islands in 1939, and subsequently attended J. WENTHOLT (see there) on his 3rd New Guinea expedition in *1940–41* to *Dutch S. New Guinea*.

COLLECTIONS. *Herb. Bog.*: about 200 *nos* from Merauke River. Through the outbreak of the Pacific War part of the material was retained at Makassar, especially plants collected near the Digoel River. The latter material is probably all lost.

Antonio, D.

collected in the *Sulu Islands*, *cf. sub* Forestry Bureau, Manila.

Apalla, P., *cf. sub* Forestry Bureau, Manila.

Apostal, L.

Forest Ranger, *cf. sub* Forest Department, Br. N. Borneo.

Appelman, Frederik Johannes

(1894, The Hague, Holland; x), studied forestry at Wageningen; in 1920 appointed Forest Officer in D.E. Indian Govt service and as such stationed at Madioen 1920–28, in the forest district Cheribon-Tasikmalaja 1929, and since 1933 at the same time charged with the management of Garoet; at Bondowoso end of 1935–38[1], at Malang 1938–40; in 1940 stationed in the Head-Office Buitenzorg for affairs connected with nature and game protection; in 1941 appointed Inspector of the eastern part of the D.E.I., stationed at Makassar. After his internment by the Japanese returning thither about 1946; he retired in 1947. At present attached to the Zoological Garden at Rotterdam, Holland.

COLLECTIONS. Few, *Herb. Bog.*, *e.g.* from Garoet (*1933*), Madjalengka (*1934*), *Rafflesia patma* BL. collected in the Penandjoeng Peninsula[2] near Pangandaran on the S. coast of *Centr. Java* (March *1934*) and *Rafflesia zollingeriana* in S. Djember (*E. Java*, May 10, *1940*); some Ja. *nos* in *Herb. For. Res. Inst. Buitenzorg*.

LITERATURE. (1) F. J. APPELMAN: 'De Baloeran' (Natuur in Indië 1937, p. 49–56, w. ill.); and papers on nature protection *etc.*

(2) F. J. APPELMAN: 'Het schiereiland Penandjoeng' (Versl. N.I. Ver. t. Nat. Besch. for 1933–34, p. 55–59, fig. 3–5).

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 444.

Arden, Stanley

employed in the Agricultural Department of the *Malay Peninsula*, 1900–190 . .

COLLECTIONS. *Herb. Sing.* (pres. *1902*) (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

Arendsen Hein, Mrs

COLLECTIONS. *Herb. Bog.*: 27 *nos* from Brangkal, G. Ardjoeno (*E. Java*) in *1889*.

Arens, Pedro Martin José

(1884, Huancabamba, Peru; x), biologist who took his degree at Bonn (1907); employed by the Central Java Experiment Station at Salatiga 1908–11, by the Malang Experiment Station 1911–21; subsequently Director of the Research Department of the 'Rubber Cultuurmaatschappij Amsterdam' (Galang, Sumatra East Coast).

COLLECTING LOCALITIES. *Lesser Sunda Islands*, *Bali:* G. Agoeng (June 2, *1912*).—*E. Java:* G. Ardjoeno, Lalidjiwo (July 1, 1912, *etc.*); teak forest Singosari (Dec. 15, 1912); G. Kawi (Apr. 23 and Dec. 9 and 12, *1916*; Jan. 30, *1917*).—*Sumatra East Coast:* Sg. Poetih and Prapat, *etc.* (*1928–29*); *Sumatra West Coast:* Alahan Pandjang (May *1930*).

COLLECTIONS. Phanerogams in *Herb. Bog.* and *Herb. Leyden* (*Java* and *Bali*, 150 *nos*); *Java* collections many times made together with TH.

WURTH (see there). Mosses, especially from later years in *Sumatra*, in *private herbarium* and *Herb.* VERDOORN.

Arifin, *cf. sub* Forest Research Institute, Buitenzorg.

Aris, *cf. sub ditto.*

Armit, Miss
collected a living *Dendrobium*, described by BAILEY as *Dendrobium armitae nov. spec.* (*cf.* Queensl. Agric. Journ. 1899, p. 48), near Samarai in *SE. New Guinea.*

Armit, William Edington de Margrat
(1848, Liege, Belgium; 1901, New Guinea), Officer of the Queensland mounted Police at Georgetown, commanded the 'Argus Expedition' sent by the Argus and Australasian Melbourne Newspapers to Papua in 1883, to report on the resources and capabilities for settlement. The main object of the expedition was to cross the southeastern peninsula of New Guinea in ENE direction from Port Moresby to Dyke Acland Bay; on account of illness and loss of one of the members they did not succeed. When the expedition was over, he made several other New Guinea trips; acting Govt Agent for Rigo and Mekeo, from July 1894–Jan. 1895;[1] sub-collector of Customs, *etc.*, at Samarai, 1895–97; he retired towards the end of 1897; a trader of native rubber; reappointed to the public service in charge of the Northern Division during 1899. Falling ill in 1900, he returned to Australia in August, sailing for New Guinea again in November when not yet recovered; finally Resident Magistrate, Northern Division.

He is the author of a book and many ethnological papers on New Guinea.[2] The former, written over the pseudonym of J. A. LAWSON is, according to WICHMANN, wholly invented.

Ficus armiti KING and other plants were named after him.

ITINERARY. *Papua, SE. New Guinea. 1883. Argus Expedition*:[3] Port Moresby (July 10); setting out for Robaduma (14), ascending a spur of the Astrolabe Range; on the way to Laloki Valley (21), Sogeri region, Meroka region at the base of Mt Belford, Aroa River; back at Port Moresby (Sept. 3).—*1884. 2nd trip to E. New Guinea*,[4] visiting the Moresby and Basilisk islands and the Redlick group of the Louisiades, E of New Guinea, and on the mainland: Milne Bay and East Cape. In all staying away 7 months.—*1887.* He is cited to have collected in this year on Mt Astrolabe (*cf. sub* Lit. 7, BROTHERUS).—*1894.* Set ashore on the NE. coast together with R. E. GUISE by MACGREGOR near Fir-tree-Point (Febr. 26), Collingwood Bay for an attempted *ascent of Mt Victory*:[5] going up Dako River (until Febr. 28), continuing by land; reaching the junction of the Tanamgina and the Waia Waima (March 23, above 5200 ft); camping 10 days? near summit Mt Maneao (Mt Dayman); setting out for the return (Apr. 3), reaching the mouth of the Dako on the 12th; back on board of the 'Merrie England' (14) on the way to Port Moresby (arrival 21st). Shortly after, visit to the *Goodenough Islands* for exploration of the mountains.—*1900.* Leaving Tamata Station (Jan. 26) for *Yodda Valley*[6] for the purpose of discovering a practical road to the new Diggings: Ope River (Jan. 29); *via* Borua Tutu, Tumbare Susu and the watershed of the Ope and the Kumusi; Bogi Angerita (Febr. 4); Segarata (9); the confluence of the Kumusi in the Sena (11); ascending the Kumusi to Korobama, Pidsa, Papangi; Sisureta (22), Twidi (24); Kodo on the Yodda; back at Tamata Station (Apr. 1).

COLLECTIONS. *Herb. Melbourne;* specimens referred to by F. VON MUELLER, and others;[7] 5 dupl. *N. Guinea* grasses in *U.S. Nat. Herb. Wash.*

LITERATURE. (1) *cf.* Ann. Rep. Br. N.G. 1894/95, Brisb. 1896, p. xx.

(2) 'Wanderings in the Interior of New Guinea' (London 1875, over the pseudonym of J. A. LAWSON); 'Notes on the Philology of the Islands adjacent to the South-Eastern Extremity of New Guinea' (Proc. Roy. Soc. Queensl. 2, 1885, Brisb. 1886, p. 2–11; 'The Papuans: Comparative notes on various authors, with original observation' (in *l.c.* p. 78–116).

(3) *cf.* Globus 44, 1883, p. 287; Ausland 56, 1883, p. 717 and *l.c.* 57, 1884, p. 255–256; Proc. Roy. Geogr. Soc. Lond. 6, 1884, p. 37–38; Boll. Soc. Geogr. Ital. 21, 1884, p. 218–225; also in the 'Melbourne Argus' 1883.

(4) *cf.* Ausland 58, 1885, p. 480.

(5) *cf.* Ann. Rep. Br. N.G. for 1893/94, Brisb. 1895, p. 78–87, *App.* 10, AA and II.

(6) *cf. l. c.* 1899/1900, Brisb. 1901, p. 87–95, p. 96–98.

(7) F. VON MUELLER in the Vict. Naturalist 1, 1885, p. 168; 2, 1885, p. 18–20 and 3, 1886, p. 71–72; in 'Descr. Not. Pap. Pl.' pt 6.

A. COGNIAUX in Bull. Ac. Roy. Belg. sér. 5, vol. 14, Bruxelles 1887, p. 363.

F. M. BAILEY in Queensl. Agr. Journ. 7, 1900, p. 349.

BROTHERUS described his collection of mosses in Finska Vet. Soc. Förh. Helsingf. vols 37, 40 and 42, *e.g.* from Astrolabe Range *1887* (no trip known to us) and from Mt Dayman (9000 ft); *cf.* also GEHEEB in Bibl. Bot. Heft 13, 1889.

BIOGRAPHICAL DATA. Ann. Rep. Br. N.G. for 1900/01, Brisb. 1902, p. xlii; MAIDEN in Journ. Austr. Ass. Adv. Sci. Brisbane Meeting 1909, p. 374; BACKER, Verkl. Woordenb., 1936 (1886 or 1887 erroneously stated as year of death); Journ. & Proc. Roy. Soc. N. S. W. 55, 1921, p. 150–151.

Arnaud Gerkens, D. d'
COLLECTIONS. *Herb. Bog.: Burmannia lutescens* BECC., *no* D 27 from Sitoehiang, S of Leuwiliang in *W. Java*, collected in *1924* (*cf.* JONKER, Monograph Burmanniaceae, 1938, p. 151).

Arnold, Joseph
(1782, Beccles, SE of Norwich, England; July 1818, Padang, Sumatra), sometimes erroneously named ARNOTH or ARNOTT; Surgeon in the British Navy, 1808–16; in 1818 appointed Naturalist in the

service of RAFFLES who at that time was Lieutenant-Governor of Benkoelen (= Bencoolen). In his capacity of Naturalist he made several trips in *Sumatra*.

Rafflesia arnoldi R.BR. was named after him and RAFFLES.[1]

COLLECTIONS. He left behind collections of plants (acc. to BACKER, Verkl. Woordenb., shells and fossils too; the latter two were bequeathed to the Linnean Society). On his 2nd trip in *S. Sumatra*, he detected the mentioned *Rafflesia* near P. Lebar on the Manna River (2 days upstream) on May 20, *1818*. In *Herb. Bog.* 1 dupl., *viz* H.B. *no* 17315, originating from Siak (*Sumatra East Coast*).

LITERATURE. (1) *cf.* Transact. Linn. Soc. Lond. 13[1], 1822, p. 201–234, *t.* 15–22; Flora 4[2], 1821, p. 637–641.

BIOGRAPHICAL DATA. D. TURNER: 'Memoir' (Ipswich 1849); Biogr. Index BRITTEN & BOULGER in Journ. Bot. 26, 1888, p. 55, and in 2nd ed. by RENDLE, 1931; J. D. MILNER, Catalogue portraits in Kew, London 1906, p. 4; BACKER, Verkl. Woordenb., 1936.

Arnoldi, Wladimir Mitrofanowitsch

(1871, Koslow, Russia; 1924, Moscow, U.S.S.R.), botanist, educated at Moscow University, where he was Assistant for several years; from 1899–1900 he made a tour to the south of Italy, Munich and Copenhagen; in 1900 Lecturer at Moscow; in 1901 Professor at the Agricultural Institute at Nowo-Alexandria (Lublin), and in 1903–19 professor in Kharkov; subsequently working in the Kaukasus, and from 1921 at Moscow. At the outset he mainly did morphological work, but since 1909 he devoted most of his time to algological studies.

With his assistant S. L. STRELIN he made a voyage to the Dutch East Indies from Jan. 10–June 5, *1909*. They made a trip to the *Duizend Eilanden* (in the Bay of Batavia) and a voyage to the *Aroe Islands* to make studies on *Algae*.[1] They visited the *Mariri Archipelago*, E of Aroe, too.

COLLECTIONS. They brought together a rich collection of demonstration material on *Algae*. We do not know whether phanerogams were collected too; if so, *probably* preserved at *Kharkov*. In *Herb. Petrop. Mus.*: 7 *Algae* from *Aroe Islands* (pres. 1912); *Herb. Leyden: Algae* from the *Malay Archip.*

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 34.

W. ARNOLDI: 'Voyage to the Malay Islands' (Moskau 1911; in Russian) (*non vidi*); 'Zur Morphologie einiger Dasycladaceen' (Flora 104, 1912, p. 85–101, pl. V, 16 fig.); 'Materialien z. Morphologie des Meeressiphoneen II. Bau des Thallus von Dictyosphaeria' (*l.c.* 105, 1913, p. 144–161).

BIOGRAPHICAL DATA. Ber. D.B.G. 42, 1924, p. (98)–(103) incl. bibliogr.; Sci. Mag. Biol. (Ukraine) 1927, p. 1–6 + portr.

Arnot, D. B.

(killed in Java in Febr. 1942), joined the Forest Department Malay Peninsula in Sept. 1925; Instructor of the Forest School.

COLLECTING LOCALITIES. *Malay Peninsula:* Kanching Forest Reserve, Selangor (*1927*); Bubu Reserve in Perak (early part of *1933*) with the Forest Botanist (=? SYMINGTON); Bruas Reserve (March *1935*). He collected all over the Peninsula.

COLLECTIONS. *Herb. Kuala Lump.:* 60 *nos* from G. Bubu *etc.*, numbered in the C. F. (see *sub* Conservator of Forests) series.

Arnoth, D. Joseph = J. ARNOLD (see there).

Arnott, D. J. = J. ARNOLD (see there).

Arnush, R.

Andai, *NW. New Guinea*, sent orchids to *Hort. Bog.* in *1932*.

Arres & Ahn,

are cited by BITTER in his monograph on *Lycianthes* (Abh. Naturw. Ges. Bremen 24, 1919, p. 506), as collectors of *no* 3 = *Lycianthes parasitica ssp. epiphytica* (MERR.) BITT. from Moeara Teweh in *Borneo;* this specimen in *Herb. Bog. cf.* VAN ASSEN & AHN, the label being misread.

Arrhenius, Olof Wilhelm

(1895, Stockholm, Sweden; x), physiologist-ecologist who was educated and took his Ph. D. (1920) at Stockholm University. In Jan. 1921 he arrived at Buitenzorg in *W. Java*, where he worked for some time at the Foreigners' Laboratory.[1] From 1920–26 Assistant at the Central Agricultural Experiment Station at Stockholm; on the staff of the Java Sugar Experiment Station at Pasoeroean, 1926–28; after his return to Sweden he has made researches in agriculture and forestry on his estate Kagghamra near Stockholm.

COLLECTIONS. *Herb. State Mus. Nat. Hist. Stockholm:* material from Buitenzorg.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 44.

Arsad, Mohammed, *cf. sub* Forest Research Institute, Buitenzorg.

Arsát

retired native forest guard, *cf. sub* Forest Department, British North Borneo.

Arshad

an employee of the Forest Department *Malay Peninsula*.

COLLECTIONS. In *Herb. Kuala Lump.*, numbered in the C. F. (see *sub* Conservator of Forests) series; mainly collected in Perak.

Arsin

(† 1913), an Indonesian, since 1868 employed by the Botanic Gardens at Buitenzorg, finally in 1884 appointed 'mantri' at the Herbarium; he was an excellent connoisseur of plants, who *e.g.* classified the fossils of the ELBERT Expedition. In 1902 he was awarded the Silver Star for Loyalty and Merit. He arranged the Buitenzorg Herbarium in accordance with Index Kewensis.

COLLECTING LOCALITIES. *1879. W. Java:* G. Gedeh (Tjibodas, Tjibeureum, Geger Bintang) (end of Aug.—beginning of Sept.); G. Tjisalak near Pasir Tengah and kali Tjiapoes (beginning of Oct.); Pameungpeuk (Oct. 21).—*1883. Sumatra West Coast:* with Dr BURCK (itinerary *etc.* see there) to the Padang Highlands (Aug.–Nov.).—*1885–86. E. New Guinea:* with H. O. FORBES (itinerary *etc.* see there). —*1905. Krakatau* in Sunda Straits: with TH. VALETON (see there) on the 1st of March.

COLLECTIONS. *Herb. Bog.; Java* plants numbered in the H.B. series. The collections from *Sumatra, New Guinea* and *Krakatau* probably respectively under the names of BURCK, FORBES and VALETON.

Asda(t)

a Sundanese employed by the Herbarium at Buitenzorg, who attended BLOEMBERGEN (see there) on his trip to the *Soela Islands* in *1939*, and a soil-scientific expedition under the direction of VAN DER VOORT and TÄNZER (see those) of the Soil Science Institute (Buitenzorg), to the environs of Troemon in SW. Atjeh (*N. Sumatra*) (Aug. 17–Sept. 2, *1941*).

COLLECTIONS. *Herb. Bog.:* 207 *nos Sumatra* plants; *Herb. For. Res. Inst. Buitenzorg:* 69 *nos Soela Islands*, numbered in the bb. series, collected by ASDA & ANTA.

Asgar, *cf. sub* Forest Research Institute, Buitenzorg.

Askey, A. M.

Ranger in the Forest Department (1906–22), collected in the *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Kuala Lump.*, numbered in the C.F. (see *sub* Conservator of Forests) series.

Askey, J. E.

Ranger in the Forest Department (1905–10), collected in the *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Kuala Lump., e.g.* from Negri Sembilan, the Dindings, and mainly Perak and *Penang;* numbered in the C.F. (see *sub* Conservator of Forests) series.

Asloeri

an Indonesian, since 1910 employed by the Experiment Station for the Java Sugar Industry at Pasoeroean, in 1915 appointed 'mandoer' of the selection division and since 1937 Head-mandoer of the gardens. He has a notorious capacity for classifying still undescribed cane clones. He assisted many members of the staff of the said institution during trips in and outside Java, *e.g.* Prof. Dr J. JESWIET, Dr C. A. BACKER and Dr O. POSTHUMUS (see those).

COLLECTING LOCALITIES. *E. Java:* Pasoeroean and neighbourhood (*1931–33*); G. Kawi *1932*).

COLLECTIONS. *Herb. Pasoer.:* 47 *nos.*

Asnawigana, *cf. sub* Forest Research Institute, Buitenzorg.

Assen, van & Ahn

collected some plants near Moeara Teweh in *SE. Borneo* (June 24, *1894*); specimens in *Herb. Bog.*

Assu, Abd., *cf. sub* Conservator of Forests series, Kepong.



ARSIN

Atang, *cf. sub* Forest Research Institute, Buitenzorg.

Atasrip

(† 1921), an Indonesian, since 1888 employed by the Buitenzorg Herbarium, finally 'mantri'.[1] He assisted during some expeditions outside Java (see below).

Dryopteris atasripii ROSENST. was named after him.

ITINERARY. *1899. Moluccas*, with expedition HAM (see there). Collecting in *Banda* (Jan. 27), *Ternate* (Febr. 2); *P. Obi* (March 22–Aug. 12), and in this period visiting *P. Bisa, Obi–Latoe* (July), *P. Belang Belang* and *Woi Besar* (July); *Ternate* (Aug. 23).—*1903. Dutch North New Guinea.* With WICHMANN Expedition (see there, and *sub* DJIBJA), near Geelvink Bay, Cyclop Mts, Lake Sentani, Hollandia, *etc.* ATASRIP returned to Java before the fixed date, *viz* when the trip to Lake Sentani and the Cyclop Mts was over.[2]

COLLECTIONS. *Herb. Bog.:* 130 *nos* from the *Moluccas, Banda* 3, *Ternate* 43, *Obi Isls* 84; *c.* 250 *nos* from *New Guinea;* dupl. in *Herb. Leyden.* He brought home living plants from *New Guinea* too.[2]

The *New Guinea* plants were provisionally classified by ARSIN and later described by VALETON.[3]

LITERATURE. (1) In the papers published by WICHMANN and LORENTZ on this New Guinea expedition, he is erroneously mentioned as ATJIP or ADJIP. ATASRIP was accompanied by a 2nd assistant, *viz* DJIBJA (see there).



ATJE

(2) *cf.* Versl. Pl. Tuin Buitenzorg for 1903, p. 102–103; Bull. Mij Bev. Nat. Ond. Ned. Kol. *no* 45, p. 6.

(3) In 'Plantae papuanae' (Bull. Dép. Agr. Ind. néerl. 10, 1907, 72 pp.); *cf.* also in FEDDE Repert. 5, 1908, p. 377–397).

cf. also J. J. SMITH in Nova Guinea vol. 8.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Atin, *cf. sub* Forest Research Institute, Buitenzorg.

Atje(h)

Indonesian, in the employ of the Botanic Garden Buitenzorg.

ITINERARY. *1913–14.* With *Expedition* VAN HULSTIJN (see there) to the *Soela Islands.* According to Versl. Pl. Tuin Buitenzorg for 1913, his departure from Buitenzorg took place on July 18, 1912; this is, apparently, a printer's error and rightly should be *1913.* Collecting was done in the following islands: *Soela besi* (= *Sanana*), *Mangoli* (*e.g.* on G. Pakao), *Taliaboe, P. Masonie, P. Seho* and *P. Kano.* During the latter part of the expedition VAN HULSTIJN was assisted by SAÄNAM (see there).

COLLECTIONS. *Herb. Bog.:* 420 *nos Soela Islands* Exp. VAN HULSTIJN. Living plants in *Hort. Bog.*

Atmoesoewarno, *cf. sub* Forest Research Institute, Buitenzorg.

Atmotaroena, *cf. sub ditto.*

Augustin, D., *cf. sub* Forestry Bureau, Manila.

Augustinovicz, Thoma Matveyevich

a medical man and zealous botanical collector. From 1871–82 he explored E. Siberia. In *1879,* when on his home voyage in a Russian ship, he gathered some plants in *Singapore* (*cf.* E. BRETSCHNEIDER, History of European discoveries in China, London 1898, p. 1035 (the cited Christian name Foma is the pronunciation of Θοма).

COLLECTIONS. In *Herb. Bot. Gard. St Petersburg* (= *Leningrad*).

Awang Lela bin Mukin Adam

joined the Forest Department *Malay Peninsula* in 1926.

COLLECTIONS. *Herb. Kuala Lump.,* numbered in the C.F. (see *sub* Conservator of Forests) series; mainly collected in Pahang. Dupl. in *Herb. Sing.*

Azaola, Iñigo Gonzales y

a planter in Laguña Prov., Luzon, mentioned by MERRILL as cited in literature as a collector of *Philippine* plants (*cf.* Bull. *no* 4 Bur. of Agr. Manila, 1903, p. 30).

The genus *Azaola* BLANCO and several other plants were named after him.

He collected some *Rafflesia* specimens on Mt Majaijai (*cf.* HIERONYMUS, Ueber Rafflesia schadenbergiana GÖPP. *etc.*' (Breslau 1885, p. 8). He sent his plants to BLANCO, a friend of his, therefore they probably do not exist any more.

Aziz bin Ahmad

joined the Forest Department *Malay Peninsula* in 1914 as Forest Ranger; retired now.

COLLECTIONS. *Herb. Kuala Lump.,* numbered in the C. F. (see *sub* Conservator of Forests) series; mainly collected in Pahang West.

Azurin, *cf. sub* Forestry Bureau, Manila.

bb. *nos, cf. sub* Forestry Research Institute, Buitenzorg.

Blt. *nos, cf. sub ditto.*

B.S. *nos, cf. sub* Bureau of Science, Manila.

Baalen, J. van

collected some weeds from Tjikantjoeng Rubber Estate near Tasikmalaja (Priangan Res.), *W. Java,* at an altitude of ± 260 m (June 24, *1922*); plants in *Herb. Bog.*

Babak, *cf. sub* Forest Research Institute, Buitenzorg.

Bacani, E. S., *cf. sub* Forestry Bureau, Manila.

Bachmid, Mohammed, *cf. sub* Forest Research Institute, Buitenzorg.

Backer, Cornelis Andries

(1874, Oudenbosch, Holland; x), a schoolmaster who came to the D.E.I. in 1901 and when stationed at Weltevreden (Batavia) at once enthusiastically started collecting and studying Java plants. He came into touch with TREUB, at that time Director of the Botanic Gardens at Buitenzorg, through whose intermediary he was appointed at the Herbarium of the said institution in 1905, since 1914 Botanist for the Java flora. He spent many years in travelling in order to get the required materials for a flora of Java.[1]

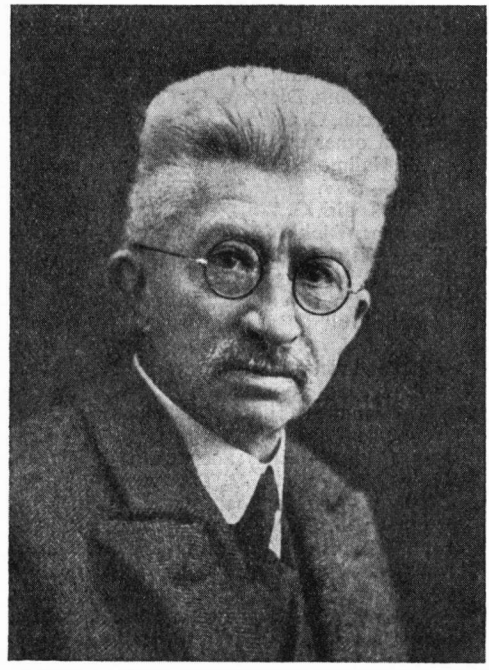
He was pensioned off at the end of 1924 and after that was temporarily employed by the Experiment Station for the Java Sugar Industry at Pasoeroean (1925–31) for composing a weed flora of the Java sugar-cane fields.[2] When the latter book was finished he left for Holland, settling at Heemstede (near Haarlem), where he up till now is engaged in continuing his work on the flora of Java which is near its completion.

In 1936 he was awarded a honorary Dr's degree at Utrecht University.

He is the author of a 'Verklarend Woordenboek', 1936, many times cited in this cyclopaedia.

Many plants were named after him including the genus *Backeria* BAKH. *f.* (*Melast.*).

COLLECTING LOCALITIES. *1903–05.* W. *Java:* environs of Batavia, *e.g.* at Pepango, Sentiong, Pesing, Doeri, Kemajoran, Bidara Tjina, Mr Cornelis, Tg Priok, Angké, Antjol, Tanggerang *etc.*; G. Tangkoeban Prahoe (Oct. 2, 1903).—*1905–24* collecting many times in the environs of Buitenzorg, *e.g.* on G. Salak (Tjiapoes, Waroeng Loa), at Dèpok, Sëmplak, Masing, Tjibinoeng, Tjilodong, Tjisëèng, Koeripan, G. Tjibodas, Tjampea, Leuwiliang, Bodjong Gedeh, Klappa Noenggal, Batoetoelis, Tjiogrèk, G. Gedeh (Tjibodas), Tjianten, Bolang, Djasinga.—*1906.* With ERNST & PULLE:[3] *P. Edam* (Bay of Batavia) (Apr. 24), Tg Rata (= Vlakke Hoek) (Lampong Distr., *S. Sumatra*) (25), Java's Eerste Punt (*W. Java*) (25), *Krakatau & Verlaten Eiland* (26).—*1908. Krakatau & Verlaten Eiland* (May 4–5), *Lang Eiland* (6).[4]—*1911–15*, travelling all over *Java.*—*1911. Centr. Java:* Poerwakarta, Maos (Apr. 11); Batoe Raden (12), G. Slamat (upwards of 1000 m) (13); Batoe Raden, S. slope of G. Slamat (16–22); *W. Java:* environs of Buitenzorg; in Bantam (June 9–July 1): Rangkas Bitoeng, Tjilèlès, G. Kentjana, G. Kendeng, Malingping, Panjawoengan, Bajah, G. Madoer, Langkop, Tjitorèk, Moentjang, Pasir Ajoenan and environs, Rangkas Bitoeng; Dec. 21–30 visiting the south coast: Tjibadak, Wijnkoopsbaai, Tjisolok, Tjilëtoeh, Zandbaai, Tjikëpoeh; Dec. 31–Jan 2, 1912: Pasawahan, Tjiëmas, Palaboehan Ratoe.—*1912. W. Java:* in Priangan Res. (March 1–5): environs of Bandoeng, Lembang, G. Tangkoeban Prahoe, Nagreh (= Nagreg); trip to Djokja (= Jogjakarta) and the south coast of *Centr. & E. Java* (Apr. 6–19): Djokja and environs, Wonosari, Kemadang, south coast, Djepitoe, Kalak, Patjitan, Toelahan, Tegalombo, Slahoeng; *E. Java* (May 27–June 19); Bangil, Malang District near Wonokerto, Soemberwalo, Gondang Legi, Ampel Ga-



BACKER

ding, Kali Glidik, Widodaren (near G. Smeroe), south coast, Soerabaja; *W. Java:* Leuwiliang & Bolang (July 16–19); trip to Bandjar in the SE. part of *W. Java* and *Noesa Kambangan* S of *Centr. Java* (Aug. 27–Sept. 11): Bandjar, Rawah Lakbok (27), G. Babakan, Tjikawoeng, Rawah Apoe, Tjikembo(e)lan, Tjilatjap, *Noesa Kambangan* (Sept. 7–8), Bandjar, Wanaredja (11); *W. Java:* Tjiandjoer and environs & G. Gedeh-Pangrango (Sept. 13–21); trip to environs of Cheribon (Oct. 17–31): Cheribon, Linggadjati, G. Tjeremai (up to 2210 m), Koeningan, G. Tjeremai (3075 m, crater); Priangan Res. (Nov. 12–Dec. 1): Bandoeng, Garoet-Tjipanas, G. Goentoer, Waspada, G. Tjikorai, Tjisoeroepan, G. Papandajan, Taloen, Tjinjiroean; in Krawang District (Dec. 19–Jan. 1, 1913): Tjileungsi, Klappa Noenggal, Si Boentoe, Goea Gadjah and surroundings, G. Handjawoeng, G. Boetik Boeligir, G. Karang Gantoengan, G. Soenarari. —*1913. Centr. & E. Java* (Jan. 21–Febr. 12): Solo, Karanganjer, Soemberlawang, Goendih, Koewoem Wirasari, Karangasem, Randoeblatoeng, Ngawi, G. Lawoe, Girimoeljo, Madioen and environs; *W. Java,* Bantam Res. (March 7–31): Mënës

and neighbourhood, G. Aseupan, Bandjarwangi, Pasaoeroean (beach), Pandeglang, G. Karang; *E. Java* (May 6–June 1): Bangil, Pasoeroean, G. Semongkrong, Djatiroto and environs, Besoeki (Asem Bagoes), Kepoeh, G. Abang; *W. Java*, Priangan Res. (Aug. 9–31): Padalarang, Tasikmalaja, Soekaradja, Singaparna, G. Galoeng(g)oeng, Taradjoe(r), Pasir Walang, Denoe and neighbourhood; Buitenzorg Res. (Sept. 11–30): Pasir Pogor, G. Salak; *E. Java* (Oct. 12–28) with JESWIET: G. Semongkrong, Bondowoso, Soemberwangi, Banderan, Jang Plateau; *W. Java* (Nov. 12–Jan. 1, 1914): Leuwiliang, Djasinga, G. Paniis, G. Kinarima, G. Maneuh, G. Gedeh, G. Angsana, G. Ratnararang and other mts, Nanggoeng, Nirmala, G. Botol, G. Halimoen (Bantam), G. Kendeng, Pasir Kempoeh.—*1914. E. & Centr. & W. Java* (Febr. 6–Apr. 2): Kediri, G. Wilis, Toeloengagoeng, Prigi and environs, Djokja (= Jogjakarta), Moentilan, Bandoeng District, Tji Sandawoet, G. Semboeng, G. Tampak Roejong, G. Masigit, G. Patoeha (March 23–Apr. 1) (*e.g.* Telaga Patengan, Rantja Bali, Rantja Walini, Rawah Oepas, G. Tikoekoer), Lembang; *E. Java* (Apr. 15–May 1): Pasoeroean, Kraksaän and vicinity, G. Argapoero, Padanlaras, Kroetjil, G. Jang, Bondowoso; *W. Java* (May 17–June 2): Tjiandjoer, Tjibeber and environs, Tjibodas, G. Gedeh-Pangrango, Geger Bintang; in Krawang *etc.* (June 15–July 1): Poerwakarta, Tjipinang, Tjikampek, G. Parang, G. Boerangrang, Wanajasa; (July 14–Aug. 3): Soekaboemi, Ngalindoeng, Selabintanah, G. Gedeh, E of G. Panindjoan, Lampegan, Tji Reunghas, Tji Paraj, G. Katé, Tjigoea Estate; *Centr. Java* (Aug. 31–Oct. 3): Tegal, Brebes, Pekalongan, Batang, Dara, Bandar, Pemalang, Petoeng Kriana, G. Ragadjembangan, Josoredjo, Kendal, Daroepana, Weliri and environs, Cheribon, Indramajoe, Haoer Geulis, Tjipoenegara; *W. Java* (Nov. 10–30): Tjibadak, Bodjong Lopang (Djampang Tengah), Lengkong, Tjitjoeroeg (Djampang Koelon), Tjiratjap, Oedjoeng Genteng and Tjiletoeh (south coast), Tjiloa (Priangan Res.); *E. Java* (Dec. 16–Jan. 3, 1915): Bangil, Pasoeroean, G. Semongkrong, Djember and environs, Poeger and G. Watangan (S. coast), G. Sadeng, G. Petoet, Kalisat, Kepoeh, Tarik.—*1915. W. Java* (Jan. 14–Febr. 1): Madjenang, Tji Salak, Wanaredja, G. Tjendana, Pasir Salam; *Madoera* (Febr. 21–March 29): Bangkalan, Kamal, Kwanjar, Arosbaja, peninsula SW of Bangkalan, Tanah Merah, Sapoeloe, Sampang, Rapa and environs, Ketapang, Karang Pinang, Pamekasan, Praägan, Pagantenan, environs of Tamberoe, Soemenep, also visiting *P. Poeteran* (March 27); *Centr. Java: Noesa Kambangan* (Isl. S of Centr. Java), Tjilatjap (Apr. 9).—*1916. P. Weh*, N of Sumatra: Sabang (Jan. 27–29); *Madoera* (June 30–July 6): Arosbaja, Bangkalan, Sapoeloe, Ketapang Daja, Telaga Biroe, Aperbong, Amboenten, Soemenep, *P. Poeteran.—1917. Centr. Java:* Diëng Plateau (Jan. 21–26), *e.g.* G. Prahoe; *W. Java* (June 4–17): Rarahan, Tjibodas, G. Gedeh-Pangrango, Tjiandjoer, Tjidadap, G. Bèsèr, Tjadasmalang, *etc.*, (Sept. 7–11): Tjidadap, Tjisokan and environs.—*1918. Centr. Java* (Jan. 13–14): Lebak Barang (S of Pekalongan) and Pemalang; *W. Java:* Tjilodong near Dèpok (Jan. 27); Kiara Pajoeng & G. Sanggaboewana (March 28–Apr. 1); *E. Java* (June 8–24): Pasoeroean, Kepoeh, G. Semongkrong, G. Weni, G. Bentar, Probolinggo, Sitoebondo, Besoeki, Pradjekan, Petjaron, G. Baloeran (17), G. Idjen (18), Idjen Plateau (19–24); *W. Java* (Aug. 2–3): Pasawahan, Tjiëmas and Zandbaai; in Priangan Res. (Oct. 13–16): Bandoeng, Rantja Gedeh, Taloen (Estate), Malabar Estate; Tjilodong near Dèpok (Oct. 27).—*1919. E. Java* and *Madoera* (March 6–11): G. Sahari, Soerabaja, Gedangan, *Madoera* (Bangkalan on the 8th), Soerabaja, *Madoera* (Soemenep, 11th); *Kangean Archipelago* (March 13–May 19): *e.g. P. Kangean, P. Mamboerit* (March 19), *P. Saoebi* (Apr. 11–13), *P. Sapapan* (14), *P. Sapeken, P. Saseël* (17–18), *P. Sepandjang* (19–26), *P. Saeboes* (27–28), *Bangko* (= *P. Bangkan?*) (29), *P. Sapeken* (Apr. 30 *etc.*), *P. Paliat* (May 1–8), *P. Saboenten* (= *Saboenting*) (8–11); *Madoera* (May 20–21): Kali Anget and Pamekasan.—*1920. Centr.* and *E. Java* (March 26–Apr. 19): Salatiga, Rawah Pening, G. Merbaboe, Ambarawa, Solo, Madioen, Pasoeroean, Bantoer, Srigontjo, Besoeki (*e.g.* G. Kemiri Sàngâ, G. Idjen (slope), G. Kendeng); *W. Java:* Lembang and G. Tangkoeban Prahoe (June 16); *islands in Bay of Batavia: P. Edam* (Nov. 10), *Klein Kombuis* (11).—*1921. W. Java:* Tjilodong near Dèpok (March 15); *S. Centr. Java* (May 9–11): Kinderzee, Tjilatjap, *Noesa Kambangan; islands in Bay of Batavia: Duizend Eilanden & P. Noordwachter* (Sept. 8) with VAN SLOOTEN.—*1922. W. Java:* Tjilodong near Dèpok (May 7).—*1924. Singapore* (Sept. 27).—*1925–31* collecting in several places, principally in E. Java, the more important ones mentioned below.—*1925. E. Java:* Pasoeroean, G. Semongkrong, G. Tengger (May), Bangil, Grissee, Soerabaja, Oemboelan, Malang; *Centr. Java:* G. Slamat (Sept.).—*1926. E. Java:* Pasoeroean, G. Tengger (*e.g.* Poespo), G. Semongkrong, Ngabob, Redjosa, Sitoebondo, Bangil, G. Ardjoeno, Poedjon, G. Dorowati.—*1927. E. Java:* Trètès, Lalidjiwo, G. Ardjoeno, G. Welirang, G. Dorowati, N. base of G. Andjasmoro (Modjosari), Zuidergebergte near Malang, Malang, Lawang, Bangil, Soerabaja, Modjokerto, Pasoeroean, Soekapoero, Gondanglegi, Redjosa, Oemboelan, Kepoeh, G. Semongkrong, G. Tengger (G. Bromo, Ngadisari, Tosari), Bantoer, Probolinggo, G. Bolang, G. Patjaran, Besoeki, Idjen Plateau (N. slope on June 10).—*1928. E. Java:* Trètès, Bangil, Pasoeroean, G. Tengger (Poespo, Nongkodjadjar), Redjosa, Kepoeh, G. Semongkrong, Lekok, G. Smeroe, Gerbo, G. Taroeb (Tiris); *Madoera:* Amboenten and Sapoeloe; *Singapore.—1929. Singapore; Centr. Java:* Semarang, Kendal, Kaliwoenga, Pekalongan, Pemalang, Tegal, Cheribon; *E. Java:* with SKOTTSBERG (see there) visiting G. Ardjoeno, G. Welirang and G. Kembar; Lalidjiwo, Djoenggo, G. Baoeng (near Lawang), Trètès, Malang, Bangil, Pasoeroean, G. Semongkrong (with SKOTTSBERG), G. Tengger, G. Smeroe (Ranoe Daroengan on the S. slope), Bantoer, G. Arak Arak, Bondowoso, Djember, Sitoebondo, Poeger, G. Watangan, Zuidergebergte near Djember (G. Boto), S. slope G. Raoeng.—*1930. E. Java:* Trètès, Lawang, G. Pe-

nandjaän, Bangil, Ngandjoek Madioen, Poedjon, Pasoeroean, G. Tengger (Poespo, Tosari, Nongkodjadjar) (Aug.), Redjosa, Kepoeh, G. Semongkrong, G. Smeroe (Ranoe Daroengan, and Ranoe Pani).—*1931. E. Java:* Trètès, Poedjon, Malang Plain, Pasoeroean, G. Tengger (Jan. and March), Gerbo, Poeger.

COLLECTIONS. > 36500 *nos* in *Herb. Bog.*;[5] many dupl. in *Herb. Leyden* and in *Herb. Utrecht.* His first collections, made before his being employed by the Herbarium, were without numbers; by now they have mostly been numbered in continuation. The collection *1925–31* (exceeding 3000 *nos*) in *Herb. Pasoer.*, partly collected with O. POSTHUMUS (1087 *nos*), a few with COERT, BOOBERG, VAN DILLEWIJN, DU RIETZ, RADERMACHER, SKOTTSBERG (68), VAN SLOOTEN, and VAN STEENIS (see there). Most of the plants collected during the Pasoeroean period were numbered starting at 40000; dupl. in *Herb. Bog., Leyden, Groningen, U.S. Nat. Herb. Wash.* (112). He brought many living plants for *Hort. Bog.*

LITERATURE. (1) C. A. BACKER: 'Flora van Batavia' (1907); 'Voorlooper eener schoolflora voor Java' (1908); 'Schoolflora voor Java' (1911); with Dr D. F. VAN SLOOTEN: 'Geïllustreerd handboek der Javaansche theeonkruiden *etc.*' (Batavia 1924); 'Handboek voor de flora van Java' (1924–28); with O. POSTHUMUS: 'Varenflora voor Java' (1939); 'Beknopte flora van Java' (mimeographed emergency edition, 7 parts, 1940–48); and several papers, partly in 'De Tropische Natuur'.

(2) 'Onkruidflora der Javasche Suikerrietgronden' (Soerabaja 1928–34 + atlas (still not completed)).

(3) *cf.* A. ERNST in 'Die neue Flora der Vulkaninsel Krakatau' (Zürich 1907) p. 9–39.

(4) C. A. BACKER: 'The problem of Krakatoa as seen by a botanist' (Weltevreden/The Hague, no date); *cf.* also Jaarversl. Topogr. Dienst 1908, p. 40.

(5) *cf.* 'On some results of the botanical investigation of Java (1911–13)' (Bull. Jard. Bot. Buit. sér. 2, *no* 12, 1913, 40 pp.).

BIOGRAPHICAL DATA. Arch. Suikerindustrie 39, 1931, p. 687–690; Trop. Nat. 25, 1936, p. 89–90, portr.; BACKER, Verkl. Woordenb., 1936; portr. in album *no* II of the 'Ned. Bot. Vereeniging'; Wie is dat? ed. 1–4.

Backhuys, Willem

(1904, Rotterdam, Holland; x), representative of the K.L.M. Airlines at Rotterdam.

COLLECTIONS. *Herb. Leyden: c.* 5 plants from Sabang, *P. Weh* (N of Sumatra), collected on Oct. 10, *1930.*

Badings, Capt. G. & **Broekhuis**

collected material of *Rafflesia* on the way from Rantau Pandjang to Plawi near km 41, Serbodjadi, Atjeh (*N. Sumatra*) (Oct. 24, *1918*; Jan. 18, *1919*; Febr. 2, *1919*).

Badoet, *cf. sub* Forest Research Institute, Buitenzorg.

Badroen, *cf. sub ditto.*

Bäuerlen, Wilhelm

(sometimes erroneously cited as BAUERLEN or BAEURLEN) (born *c.* 1845), was a member of the Bonito Expedition sent to New Guinea by the Australian Geographical Society in 1885, under the command of Capt. H. E. EVERILL. BÄUERLEN was the special Botanical Collector of the expedition, as such recommended by F. VON MUELLER, for whom he already collected previously; some other members were J. W. HAACKE as chief scientist (zoology and geology), and S. A. BERNAYS (see those) as surgeon and botanist. Taken into consideration the number of members, the results of this trip have been very poor.

BÄUERLEN has been commemorated in the plant species *Ficus baeuerleni* KING, *Aglaia baeuerleni* C. DC., *&c.*

ITINERARY. *'Bonito' Expedition, 1885.*[1] *S. New Guinea, Papua:* sailing from Sydney (June 10); *Thursday Island* (25), collecting there and in neighbouring islands; July 13 sailing for the Fly River, reaching the mouth on the 18th; ascending the river till the junction with the Bonito (= Strickland) River and exploring the latter; the ship ran aground on Aug. 27, remaining there till the voyage home on Oct. 25; in the meantime attempts were made to penetrate into the interior, however, without success; journey by boat to Cecilia River (Sept. 16–22), continuing till the 27th, when climbing a mountain of *c.* 750 m alt. and returning the next day; the mouth of the Fly was left on Nov. 18th; *Thursday Island* (20); back at Sydney (Dec. 3).

COLLECTIONS. *Herb. Melbourne;* dupl. in *Herb. Berl.* (*e.g.* 20 *nos* of mosses from the Fly River); some ferns in *Herb.* BONAPARTE (= *Paris*); 1 grass dupl. in *U.S. Nat. Herb. Wash.*

Specimens are referred to by several authors.[2]

LITERATURE. (1) On the preparations of the expedition *cf.* Transact. & Proc. Roy. Geogr. Soc. Australasia N.S.W. Br. III & IV, 1885/86, Sydney 1888, p. 105–164.

Capt. EVERILL's report in *l.c.* p. 170–187, w. map; *cf.* also Ausland 59, 1886, p. 592–593.

W. BAEUERLEN: 'The voyage of the Bonito' (Sydney 1886) (*non vidi*).

(2) F. VON MUELLER, Descr. Not. Pap. Pl., vol. 2, parts 7, 8 and 9, 1886–90, p. 25–70; *ditto* in Vict. Naturalist 2, 1886, p. 134–135; Austr. Journ. Pharm. Febr. & June 1886. See also *Addenda.*

A. COGNIAUX in Bull. Acad. Roy. Belg. sér. 5, vol. 14, 1887, p. 355.

Orchidaceae by KRÄNZLIN in Oesterr. Bot. Zeitschr. Wien 44, 1894, p. 164, p. 253, and in *l.c.* 45, 1895, p. 180.

Mosses by A. GEHEEB in Bibl. Bot. Heft 13, Cassel 1889, 13 pp., *t.* 1–8.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Baeurlen, W., *cf.* BÄUERLEN.

Baginda (or Bagindo), St., *cf. sub* Forest Research Institute, Buitenzorg.

Baharoedin, *cf. sub ditto.*

Bahen (Samosir), *cf. sub ditto.*

Bahoesin, *cf. sub ditto.*

Bailey, Frederick Manson

(1827, Hackney, Middlesex, England; 1915, Brisbane, Queensland), went with his family to Australia in 1838; he settled at Brisbane in 1861 and was appointed Colonial Botanist of Queensland in 1881. In 1898 he accompanied His Exc. Lord LAMINGTON and Sir HUGH M. NELSON on a tour of inspection of British New Guinea.

He is the author of many systematic publications on the flora of Queensland.[1]

He was commemorated in *Acacia baileyanus* F.v.M.

ITINERARY. *Tour with Lord Lamington,*[2] *1898. East New Guinea:* Port Moresby (Apr. 25), Tauko Isl.; Mt Werirata (26); Port Moresby (27); Tupuselei and Kapa-Kapa (28); Vatorata and Arema (29); Dedele (30); Dufaure Isl. (May 1); Samarai (3); Milne Bay (4); Mita and Awaima (5); Dogura (6), following the NE. coast to Phillips Harbour; Porlock Bay (7); mouth of the Mambare (8), going up the river till Tamata Station and past it; back at the mouth of the Mambare (11); mouth of the Gira, going upstream (14) till Tabara (16); mouths of the Ope and Kumusi rivers; Bafara (19); mouth of the Musa, going upstream; Port Hennessey (23); Jasa-Jasa (25); Dogura (26); Samarai.

In June *1897* he made a 3-week-trip by boat visiting the *Goode, Hammond,* and *Turtle Islands* and especially *Thursday Island.*[3]

COLLECTIONS. *Herb. Brisbane;* specimens of new species were sent to *Herb. Kew.*[4]

After his own statement the equipment for drying plants on board the 'Merrie England' was very poor; owing to that he brought only few duplicates, but made copious notes on the living plants.

LITERATURE. (1) 'Handbook on the Ferns of Queensland' (1874); 'The Queensland Flora' (1899–1905, 6 parts); several small papers in Queensl. Agric. Journ. 1898–1914 and in Proc. Roy. Soc. Queensl. 1899 and 1903.

(2) *cf.* Ann. Rep. Br. N.G. for 1897/98, Victoria 1899, p. 42–45 and 131–133; 'Visit to British New Guinea' (report by the right honourable Sir H. M. NELSON on his . . .) (Queensland, Brisbane 1898).

(3) F. M. BAILEY: 'Notes on the vegetation of New Guinea' (Proc. Roy. Soc. Queensl. 14, 1899, p. 14–20; extract in Gard. Chron. 1899[2], p. 218–219); 'A few words about the flora of the islands of Torres Straits and the Mainland about Somerset' (Rep. 7th Meeting Australas. Ass. Adv. of Sci. Sydney 1898, p. 423–447; incl. enumeration of Thursday Island plants).

(4) F. M. BAILEY: 'Names of easily recognised plants observed by Lord LAMINGTON's party during New Guinea trip' (in 'Report of visit to Br. N. G.' *l.c. sub* 2, Brisbane 1898, p. 31–32); 'Contributions to the flora of New Guinea' (Queensl. Agric. Journ. 3, 1898, p. 154–162, 201–203, 282–283; in Ann. Rep. Br. N. G. for 1897/98, 1899, p. 137–145). It is not clear whether the material described in Queensl. Agric. Journ. 1899, p. 41, belongs to his own collection.

BIOGRAPHICAL DATA. Kew Bull. 1915, p. 356–357; Gard. Chron. 1915[2], p. 136 + portr.; Journ. Bot. 1915, p. 275–276; Proc. Linn. Soc. Lond. 1915/16, p. 55–56; Vict. Naturalist 32, 1915, p. 52; in Proc. Roy. Soc. Queensl. 28, 1916, + bibliogr.; in Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Baim, T. C.

made plant collections on Samboga River, near Buna, *NE. New Guinea,* on Oct. 8, *1944,* during World War II; in *1945* he collected at Hollandia, *Dutch N. New Guinea.*

COLLECTIONS. Few specimens in *Herb. Arn. Arbor.*

Bain, V. L.

joined the Forest Department *Malay Peninsula* in Dec. 1919.

COLLECTIONS. *Herb. Kuala Lump.*, numbered in the C. F. (see *sub* Conservator of Forests) series; collected in Johore, Negri Sembilan, Pahang, and Selangor. Dupl. in *Herb. Edinburgh.*

Bakar

retired native Forest Guard, *cf. sub* Forest Department, British North Borneo.

Bakaroeddin, *cf. sub* Forest Research Institute, Buitenzorg.

Baker, Charles Fuller

(1872, Lansing, Michigan, U.S.A.; 1927, Manila, Luzon, P. I.), entomologist-mycologist, educated at Michigan Agricultural College; from 1912 in the Philippine Islands, Professor and Dean of the College of Agriculture, Los Baños, P.I. (since 1918); in 1917 on the staff of the Botanic Gardens, Singapore, during a period of leave acting as Assistant Director.

He is the author of many papers on lower *Fungi, e.g.* in ELMER, Leafl. Philip. Bot., for 1914.

COLLECTING LOCALITIES. In the *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5); ?in *Br. N. Borneo* (*cf.* MERRILL, Enum. Born. Pl., p. 45); and in the *Philippine Islands,* chiefly in Laguna Province, *Luzon.*

COLLECTIONS. *Herb. Dept Bot. Los Baños:* 5000 sheets *Malaysian* plants (pres. 1922); Phanerogams & *Fungi* of the *Malay Penins.* in *Herb. Sing.; Herb. Kuala Lump.:* from *Singapore* and *Penang* (pres. 1918); in the years 1912–15 *Herb. Manila* received many *Philippine* plants for identification and in 1915 *ditto* 22 *Malay* ferns, miscellaneous collections of *Philip.* and *Singapore* plants were presented in 1916–18; *Herb.* DELESS. (*Geneva*): 95 plants from the *Str. Settlem.* (pres. 1919–21), some from the *Philippines; Dept of Pathology Los Baños:* 15000 *Malayan Fungi* (pres. 1921); *Herb. Berkeley* (Cal.) and *N.Y. Bot. Gard.: Fungi.* He owned a

large *private collection*, mainly consisting of *Fungi*, which was willed to *Manila;* this is now lost.

BIOGRAPHICAL DATA. Bibliography in Lingn. Sci. Journ. 5, 1927, p. 271–280; Amer. Men of Sci. 1927; Philip. Agric. 16, 1927, p. 223–226 + portr. and 81 pp. + photographs appended to the volume; Philip. Journ. Sci. 35, 1928, p. 429–437; Gard. Bull. Str. Settl. 4, 1929, p. 427; in E. O. ESSIG, A history of entomology, New York 1931, p. 542–548, fig. 158 (= portr.); Philip. Agric. 24, 1935, p. 527; further references *cf.* in Amer. Midl. Naturalist 33, 1945, p. 5.

Baker, James A.

(1908, England; x), Agricultural Officer, Dept of Agriculture, S. S. & F. M. S., 1931–..; stationed in several parts of the *Malay Peninsula.*

COLLECTIONS. *Herb. Sing.: Macaranga spp.* from Johore (*1934*), grasses and *Cyperaceae* from Kedah (*1937–41*).

Bakhoven, A. C., *cf. sub* Forest Research Institute, Buitenzorg.

Bakhuizen van den Brink Sr, Reinier Cornelis

(1881, Pasoeroean, Java; 1945, Tjimahi, in a Japanese concentration camp in Java), after finishing his education in Holland, returned to Java; for several years a planter, finally on Tjidadap Estate, S of Tjiběběr in W. Java. In 1917 appointed Assistant, later Botanist in the Herbarium at Buitenzorg.[1] He retired when staying in Europe 1935–39, returned to Java, and died during the Japanese occupation.

Several plants were named after him, *e.g. Taeniophyllum bakhuizenii* J.J.S.

COLLECTING LOCALITIES. *W. Java. 1903.* Pasir Datar.—*1904.* Pasir Datar; G. Pangrango (Febr. 27), summit G. Gedeh (May 28), Batavia (Aug. and Oct.).—*1905.* Indragiri (in Semarang Res.?).—*1906–07.* Near Tjikadjang.—*1907–09.* Near Pangindangan, at Pameungpeuk *etc.*[2]—*1914. Centr. Java:* Kendal (Sept. 20); *W. Java:* mangrove forest Indramajoe (Sept. 29).—*1915.* Tjampea (and many times later on).—*1916.* G. Goentoer (Kawah Kamodjan *etc.*) (Jan. 18–22); *environs of Tjadasmalang* (*up to 1919*); Dèpok (and many times later on); Maroenda near Tg Priok (Oct.).—*1917.* Maroenda near Tg Priok (Nov. 11), Priok (Nov. 18); in the *environs of Buitenzorg, e.g.* Tjiboerial, G. Salak, Tjampea, G. Tjibodas *etc.* (*till 1941*).—*1918.* G. Kentjana (Febr. 3); Tjidadap–Tjisokan (July);[3] Koeripan near Tjisèèng (July 28); Zandbaai (S. coast) (Aug. 2–3); Djasinga (Sept. 16).—*1919.* Zandbaai (S. coast) (Febr. 5); Poentjak, Telaga Warna (Apr. 19); Batavia Noord (July 16); Maroenda near Tg Priok; S. slope G. Gedeh (Sept. 14).—*1920.* Near Tjibadak–Tjisalak (Jan. 6–9); G. Pantjar and vicinity (July 4 and Aug. 21); G. Boerangrang (Poerwakarta, Pameungpeuk, Wanajasa, G. Parang, Sitoe Lembang *etc.*) (July 22–28) with VAN SLOOTEN; Tjastana, Tjisalak (Dec.).—*1921.* G. Boender (Apr. 16); near Nangèla, Leuwiliang *etc.* (June).—*1922.* Priok (July 9): G. Perbakti (Sept. 3).—*1923.* Priok, Antjol (March 4); Tjadasmalang, Tjidadap *etc.* (June 18–23); G. Pantjar and vicinity with DOCTERS VAN LEEUWEN and DAKKUS (Dec. 8–13), visiting G. Paniisan (9) *etc.*—*1924.* Bolang (June 7–10) with DAKKUS; near Leuwiliang (June 15–30); G. Bongkok, Plèrèd (Oct. 20); Weltevreden (Oct. and Dec.).—*1925. P. Weh*



BAKHUIZEN VAN DEN BRINK SR

(Sabang, N of Sumatra) (Aug. 10).—*1926. P. Weh* (June 9).—*1927. P. Leiden* and *P. Purmerend* (Bay of Batavia) (Apr. 11).—*1928.* Pasir Ipis and G. Paroengpoeng (Jan. 1); G. Perbakti (Jan. 8).—*1929.* Poerasèda-Leuwiliang *etc.* with DOCTERS VAN LEEUWEN and VAN STEENIS (Febr. 2–5); near Nangèla (many times *up to 1931*).—*1930.* Pasir Ipis and G. Paroengpoeng (Dec. 22).—*1933.* Tjitjadas and G. Aseupan (July 2).—*Up to 1941* he occasionally collected.

COLLECTIONS. *Herb. Bog.:* > 8000 *nos* (pres. since 1916), especially among the Tjidadap collection much valuable material, the collection from Bolang (1924) amounts to 325 *nos;* he collected many times together with his son and namesake in the environs of Buitenzorg and on G. Salak. In *Herb. Pasoer.* (princ. pres. 1924–29): 110 *nos; Herb. Utrecht: Java* dupl. (1920–28); *Herb. Leyden: Java* dupl.; 6 dupl. in *U.S. Nat. Herb. Wash.* In *Hort. Bog.* many living plants.

LITERATURE. (1) As a well-known expert in native vegetables and fruits he collaborated with OCHSE in several books on this subject; he revised the *Ebenaceae* and other families in Bull. Jard. Bot. Buit.; several small papers in 'De Trop. Natuur'.

(2) ERYTRINA (pseudonym): 'Wandeltochten door de Preanger. Naar de watervallen van Tjidadap' (Kolon. Weekbl. 1916, *nos* 46–52; *l.c.* 1917, *no* 3).

(3) B. v. d. B.: 'Langs ongebaande wegen' (Trop. Nat. 10, 1921, p. 23–29, 44–48, 8 fig.).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; Bull. Jard. Bot. Buit. sér. 3, vol. 18, 1948, p. 1–4, incl. bibliogr. + portr.



BAKHUIZEN VAN DEN BRINK JR

Bakhuizen van den Brink Jr, Reinier Cornelis

(1911, Panjinangan, Java; x), son of the former, went to Holland after finishing the secondary school, and studied biology (botany) at Utrecht University. He took his Dr's degree in 1943 at Utrecht University on a thesis dealing with Malaysian *Melastomataceae*.[1] At present Assistant in the Rijksherbarium, Leyden, assisting BACKER in the completion of the Flora of Java.

COLLECTING LOCALITIES. *W. Java.* In the years *1920–25*, mostly with his father (see there) in the environs of Buitenzorg, *etc.;* in *1925* besides in Bantam Res. (June 13–15), *e.g.* on G. Karang (13) and on the way to Holland in *Sumatra East Coast:* Padang Boelan (Aug. 8–9) and at Sabang (*P. Weh*, N of Sumatra) (Aug. 10).

COLLECTIONS. In *Herb. Pasoer:* 136 *nos* (pres. 1923–29), all collected in the environs of Buitenzorg (G. Batoe, G. Salak *etc.*) in *W. Java.* His private collection amounting to 3820 *nos* from *W. Java* is present in *Herb. Bog.*, a duplicate set was presented to *Herb. Utrecht* (1936); dupl. in Leyden too.

LITERATURE. (1) Rec. Trav. Bot. néerl. 40, 1943, p. 1–391 (repr. 1946).

Bakker, Pr.

a resident of Malang; about 1917 Assistant at Soebanajam Estate, Benkoelen, S. Sumatra. He made a beautiful water-colour drawing of *Rafflesia arnoldi*, present in the Buitenzorg Herbarium.

COLLECTING LOCALITIES. *1918. S. Sumatra*, Benkoelen (Jan.).—*1931. E. Java:* near Soember Telogo, Dampit; slope of G. Kawi; Ranoe Daroengan (S. slope G. Smeroe); private garden at Malang.

COLLECTIONS. *Herb. Bog.:* 20 *nos* from *Java; Rafflesia* material from *Sumatra.*

Bakri, *cf. sub* Forest Research Institute, Buitenzorg.

Bakri bin Sjahden, *cf. sub ditto.*

Bal, A. J.

(1901, Zierikzee, Z., Holland; x), was educated at the Colonial Agricultural School at Deventer; since 1929 appointed Agricultural Officer in the D.E.I., successively stationed at Buitenzorg and Palembang (S. Sumatra); Pontianak (W. Borneo), end of 1929–31;[1] Djambi (Centr. Sumatra), Dec. 1931–32; Benkoelen (S. Sumatra), 1932–35; after European furlough, at Moektihardjo (Res. Japara-Rembang in Centr. Java), 1936–37; Tandjong Karang (S. Sumatra), 1937–40. He was dismissed on account of unfitness, receiving half-pay; in 1941 employed as Departmental Clerk at Buitenzorg and subsequently at Medan.

COLLECTING LOCALITIES. *S. Sumatra: pr.* Martapoera (Palembang) (Febr. *1930*); *W. Borneo*, in coconut plantations (Sept. *1931*).

COLLECTIONS. *Herb. Bog.:* 63 *nos* (1–64, *no* 32 absent) from *S. Sumatra*, and 26 *nos* (*nos* 121–150, with G. A. DE MOL, see there) from *Borneo.* Also material of 'tengkawang' trees, belonging to the genus *Shorea* (*cf. sub* Anonymous in 1929, probably identical).

LITERATURE. (1) Author of a mimeographed report on the 'Tengkawang' of West Borneo (in Dutch, 1932); 'De tengkawang in de Westerafdeeling van Borneo' (Landbouw 9, 1933/34, p. 211–278, 9 fig.; extract of the former, including English summary).

Balansa, Benjamin

(1825, Narbonne, France; 1892, Hanoi, Indo-China), a naturalist of Toulouse, who made extensive botanical explorations in N. Africa (1848, 1852, 1853), Asia Minor (1855–56), Morocco (1866–67), New Caledonia (1868–72), Paraguay (1877-85), and Tonkin (1885–1891).

COLLECTING LOCALITIES.[1] In Nov. *1886* he collected at least in *Singapore* (11); and in *W. Java*: at the base of G. Salak (16), at Bandoeng, and at Tjibodas on the slope of Mt Gedeh (25).

COLLECTIONS. Numbered collections of the East in *Herb.* COSSON and DE FRANQUEVILLE at *Paris*, DECAND. and BOISS. at *Geneva*, *Herb.* CESATI at *Naples*, *Mus. Nat. Hist. Nancy*, *Imp. Acad. St Petersburg* (778 *nos*), *Herb.* THURET with Mr BORNET, *Vienna*, *Univers. Heidelberg*;[2] some Malaysian dupl. in *Herb. Leyden*, and his herbarium left (purch.) of *Gramineae*, and plants from Tonkin and Paraguay.

LITERATURE. (1) *cf.* HENRARD in Meded. 's Rijksherbarium Leiden *no* 61, 1930, and KOORDERS, Exkursionsflora, 1, p. 148, and specimens in *Herb. Leyden.*

(2) *cf.* A. DECANDOLLE, Phytographie, 1880.

BIOGRAPHICAL DATA. Rev. de Bot. 10, 1892, p. 661–664; Rev. Mycol. 14, 1892, p. 88; 'Flore générale de l'Indo-Chine' tome prélim. 1944, p. 34; G. ASTRE, La vie de BENJAMIN BALANSA (Mus. Hist. Nat. Toulouse 1947).

Balbin, A., *cf. sub* Forestry Bureau, Manila.

Baldoein, *cf. sub* Forest Research Institute, Buitenzorg.

Balen, J. A. van

Dutch missionary, of the Utrecht Mission Society, who went to New Guinea in 1882; in 1889 he founded the station Windehsi.

COLLECTIONS. He is cited by MARTELLI as the collector (wrongly written 'von') of *Pandanus leiophyllus* MARTELLI *n. sp.* in a small island near the coast of Winde(h)si, Geelvink Bay, *Dutch NW. New Guinea* in July *1905* (*cf.* Webbia 4, 1913, p. 423). Material in *Herb.* MARTELLI (= *Florence*).

Balkstra, Miss L.

near Garoem (Kediri, *E. Java*), forwarded some orchids to *Hort. Bog.* in *1914*. Some from *New Guinea*, probably not collected herself, and some from G. Kawi in *E. Java.*

Ballot, J.

at the time Resident of *Sumatra East Coast*, stationed at Medan, sent dried material and seeds of *Palaquium pisang* to *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam* in *1909*.

Balluseck, Mrs van

at Tjiteureup, *W. Java*, sent plants to *Hort. Bog.* in the years *1877* and *1878*.

Bally, Walter

(born 1882), a botanist who took his degree at Zürich in 1907; 1908–19 at Bonn and Basel in various functions; in May 1919 appointed Botanical Assistant of the Central Java Experiment Station (Salatiga), 1920–21 Director of the said institution; Sept. 1921–Sept. 1931 Botanist of the Malang Experiment Station in E. Java and subsequently Head of the division Tropical and Subtropical cultures of the 'Institut international d'Agriculture' at Rome.

His most important paper is 'De ziekten van de koffie' (The diseases of coffee).

COLLECTING LOCALITIES. *Centr. Java*: G. Merbaboe (July 4, *1920*); *Java* (*1926*); *S. Sumatra*, Benkoelen: G. Dempo and G. Kaba (May *1928*).

COLLECTIONS. *Herb. Bog.*: 8 *nos* from *Sumatra* and also *Java* plants; *Herb. Bot. Gard. Berne: Coffea* seed (pres. 1924), material of *Pseudocolus gardneri* (pres. 1930).

BIOGRAPHICAL DATA. Bergcultures 5, 1931, p. 945.

Bamler, G.

a protestant missionary of the 'Neuendettelsauer Missionsgesellschaft' working in former German New Guinea, 1887–89; then transferred to the Tami Islands and in 1898 stationed again in former Kaiser-Wilhelmsland.[1]

He is the author of some ethnographical papers.[2]

Amyema bamleri DANS. and several other plants were named after him.

COLLECTING LOCALITIES. He visited the *Sias(s)i Islands* with G. SCHMIELE in *1892* lected).—*Tami Islands* (*1894*, also a statement of Aug. *1898*).—Former *German New Guinea, NE. New Guinea:* Sattelberg (Dec. *1898–99*); *1908–14* from Logaueng *etc.*, Wareo, Cromwell Mts, Sattelberg; autumn *1910* he climbed from Sialum *via* Mayawa summit to the source region of the Tewahe.

COLLECTIONS. *Herb. Berl.:* 121 *nos* from the *Tami Islands* (*Algae*, ferns and phanerogams) and 64 *nos* from the Sattelberg; 20 *nos* in the *Show Museum.* The plants from the Tami Islands were mainly collected during trips in 1894.[3] Ferns in *Herb.* BONAPARTE (= *Paris*) (coll. 1913–14).[4] *Herb. Leyden: Algae* from the *Tami Islands*, phanerogams Sattelberg (coll. 1898–99), and ferns (coll. 1909). The labels bear a number and a letter, the letter indicating the locality, *e.g.* S for Sattelberg, *etc.*

Some papers refer to his collections.[5]

LITERATURE. (1) by WICHMANN in Nova Guinea 2^2, p. 558 cited as AD. BAMLER, *l.c.* p. 597–8 as J. BAMLER, whereas evidently the same person is meant. The correct initial is G.

(2) 'Die Tami-Inseln' (PETERM. Mitt. 44, 1898, p. 105–106, Taf. 8); 'Der Balumglaube der Eingeborenen in Kaiser-Wilhelms-Land' (Mitt. Geogr. Ges. Jena 8, 1890, p. 56–57); 'Die Balumsfeier auf Tami' (Kirchl. Mitt. a.u.ü. Nord Amerika, Australien und Neu Guinea N. F. 28, Nördlingen 1896, p. 69–71); 'Tami' (in NEUHAUSS, Deutsch-Neu-Guinea, vol. 3, p. 489–566).

(3) *cf.* Allg. Missions-Zeitschr. Berlin 19, 1892, p. 40 and Kolon. Jahrb. Berlin 6, 1893 (1894), p. 106 (*non vidi*).

(4) *cf.* BONAPARTE, Notes Ptéridol., fasc. 13, 1921, p. 227–235.

(5) K. SCHUMANN: 'Plantae Bamlerianae' (Notizbl. Berl. Dahl. 1, 1895, p. 44–57; excl. dealing with coll. Tami Islands).

F. HEYDRICH: 'Neue Kalkalgen aus Deutsch Neu-Guinea (K.W.L.)' (Bibl. Bot. 7, Cassel 1897, Heft 41, 11 pp., 12 fig.).

E. ROSENSTOCK: 'Filices novo-guineenses Bamlerianae et Keysserianae' (FEDDE Rep. 10, 1912, p. 321–343).

cf. also *sub* 4.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Bamler, Mrs

wife of missionary G. BAMLER (see above). In *1911* she collected ferns on the Sattelberg in former *German New Guinea* (*Kaiser-Wilhelms-Land*) intended for Prof. F. FOERSTER (Bretten). They were

dealt with by ROSENSTOCK (*cf. sub* BAMLER, literature *sub* 5). *Herb.* ROSENSTOCK went to *Berlin.*

Bandaro Sati, *cf. sub* Forest Research Institute, Buitenzorg.

Bandat, Dr Horst Edler J. von

(1895, Budapest, Hungary; x), geologist in the employ of the B.P.M. (Batavian Oil Company) since 1929, in 1931/32 stationed at Serajoe on the Moesi River in Palembang, S. Sumatra. He intended to write a geographical paper in which he would like to include plantgeographical remarks. For this aim he collected plants which he sent for identification to Buitenzorg. At present he is employed in New Yersey.

COLLECTING LOCALITIES. *c. 1931–32. S. Sumatra,* Palembang: upper course of the Batangharilero, Sg. Merauti, dessa Poeroen, Moesi Lematang.

COLLECTIONS. He sent 280 wood samples, leaves and seeds for identification to *Herb. Bog.*

Banfield, Frederick Sydney

(born in England), Horticultural Assistant, Dept of Agriculture *S.S. & F.M.S., 1928–32;* formerly Student Gardener at Kew.[1] Stationed at Kuala Lumpur, Taiping Hills and Fraser's Hill; at all of these places he made small collections of plants, chiefly for cultivation. There may be a few dried specimens in *Herb. Sing.*

LITERATURE. (1) Author of 'Terrestrial orchids of the Malayan Peninsula' (Gard. Chron. ser. 3, 83, 1928, p. 416).

Bangham, Walter Nicholas & **Bangham-Masters,** Catherine

(1903, Wilmington, Ohio, U.S.A.; x) & (1903, Brookline, Mass., U.S.A.; x), cytologist, employed by the Firestone rubber plantations in Monrovia (W. Africa) 1926–28; in 1929 he travelled in Cuba, Honduras and Guatemala studying the flora; since 1930 he was employed by the Goodyear Rubber Plantations at Dolok Meranggir (Sumatra East Coast). His wife assisted him in plant collecting in Sumatra in behalf of the Arnold Arboretum, Jamaica Plain, Mass.

BANGHAM is the author of some cytological papers.

MERRILL named plants after both of them, *e.g. Ardisia banghamii, Endospermum banghamii* and *Adenia catherinae* MERR.

COLLECTING LOCALITIES.[1] Dec. *1931*–Febr. *1932. Sumatra East Coast:* on various estates, Simeloengoen, Dolok Meranggir, Sinaboeng and Sibajak volcanoes, Karoland, Brastagi, P(a)rapat (Toba Lake); *N. Sumatra,* Atjeh: along the coast N of the border of Deli, as far as Bireuen, Takengon, Lake Tawar, Balek, Redelong Volcano; *Tap(i)anoeli:* Deleng Piso-piso. Further in 1932 a number of plants from various localities and dates.

COLLECTIONS. From *Sumatra* in *Herb. Arn. Arbor.:* ± 600 *nos* betw. 600–1300; a nearly complete set (474 *nos*) in *Herb. N.Y. Bot. Gard.;* in GRAY *Herb.: c.* 70 *nos* herbaceous plants; in *Herb.* O. AMES: ± 70 *nos* of orchids; in *Herb. Kew: Sumatra* duplicates. The collection was identified by MERRILL in collaboration with others.[2]

LITERATURE. (1) H. H. BARTLETT gives a complete chronological record of the BANGHAM collection in: 'Batak Lands of N. Sumatra, from the standpoint of recent American botanical collections' (Nat. & App. Sci. Bull. *no* 4, 1935, p. 229–232).

(2) E. D. MERRILL: 'An enumeration of plants collected in Sumatra by W. N. and C. M. BANGHAM' (Contrib. Arn. Arbor. Harv. Univers. 8, 1934, p. 1–178, 14 pl.).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Banks, Charles S.

(1875, Washington, D.C., U.S.A.; x), since 1902 entomologist, Chief Division of Entomology, Bur. of Sci., Manila, P. I., collected in the B(ur). S(ci). series for *Herb. Manila.* In *1902* he was sent to *Negros* for 4 months.

BIOGRAPHICAL DATA. Who's who 1913.

Banks's collector, E.

native collector of E. BANKS, Curator of the Sarawak Museum, collected at Baram in Sarawak, *NW. Borneo,* in *1931.*

COLLECTIONS. *Herb. Kew* and *prob. in Sarawak.*

Banks, Sir Joseph

(1743, London, England; 1820, Spring Grove, Isleworth, Middlesex, England), possessor of a considerable fortune, benevolent promoter of science rather than an actual worker. From 1788–1820 President of the Linnean Society; founder of the Roy. Hortic. Society (1804); virtually Director of the Roy. Botanic Gardens at Kew for the greater part of his life. In 1766–67 he explored the coasts of Newfoundland and Labrador; and afterwards accompanied COOK's first voyage round the world, together with his librarian SOLANDER and the draughtsman S. PARKINSON (the name of the 2nd draughtsman is unknown to me). In the 2nd half of 1772 he and SOLANDER made a journey to Iceland.

He is commemorated in the genera *Banksea* KOEN. and *Banksia* L. *f.,* and in several plant species.

ITINERARY. COOK's *1st Voyage in the 'Endeavour', 1768–71.*[1] *cf.* Also *sub* COOK and SOLANDER. Sailing from Plymouth on Aug. 25, 1768; *via* Madeira, Rio de Janeiro, Terra del Fuego, Otaheite, Oheteroa, New Zealand, Australia (Endeavour River); through the Torres Straits, touching at the coast of *SW. New Guinea* (Sept. 3 or 4, *1770*); *Savu* (= *P. Sawoe,* one of the Lesser Sunda Islands) (Sept. 18–20);[2] *W. Java:* Anger Point (= Anjer) (Oct. 2), ashore on one of the *Mille Isles* (*P. Babi* in fact) (Oct. 8), Batavia (Oct. 9–Dec. 24); in the meantime the ship had to be docked; the members of the expedition and the crew suffered much from illness during the stay, Batavia at that time being a very unhealthy place; occasionally visiting the islets *Kuyper* and *Onrust;* Dec. 25, 26 or 27 under

sail, touching at *Prince's Island* (= *Prinsen-eiland*) (Jan. 4–13 or 5–14, *1771*), the 11th visiting the town of Samadang on the shore; returning *via* Cape of Good Hope and St Helena to England, landing at Deal (June 12).

COLLECTIONS. He bequeathed his rich collections and library to the *Brit. Mus.*[3] During COOK's expedition he mainly collected fishes, but plants too. Dupl. in *Herb. State Mus. Stockholm, Herb. Vienna*;[4] and in *Sydney c.* 600 specimens Australian plants collected by BANKS & SOLANDER (pres. by the Brit. Mus. in 1905).[5] Plants of BANKS & SOLANDER were at the disposal of J. GAERTNER, when he prepared his famous book.[6]

LITERATURE. (1) 'A Journal of a voyage round the World, in His Majesty's ship Endeavour, in the years 1768, 1769, 1770, and 1771; undertaken in pursuit of Natural knowledge, at the desire of the Royal Society; containing all the various occurrences of the voyage, with descriptions of several new discovered countries in the southern Hemisphere; and account of their soil and productions; *etc.*' (London 1771); 'Journal of the Right Hon. Sir JOSEPH BANKS' edited by Sir J. D. HOOKER (London 1896). For other publications *cf. sub* COOK and S. PARKINSON, literature.

(2) *cf.* BANKS, Journal (ed. by HOOKER), *l.c.* p. 331–361.

(3) 'Illustrations of the Botany of Capt. COOK's Voyage round the World in H.M.S. Endeavour in 1768–71 by Sir J. BANKS and D. SOLANDER' with determinations by JAMES BRITTEN (London, 3 vols).

J. H. MAIDEN: 'Observations on the Illustrations of the BANKS and SOLANDER plants' (Journ. & Proc. Roy. Soc. N.S.W. 1905. p. 34–39).

J. BRITTEN: 'The collections of BANKS and SOLANDER' (Journ. Bot. 43, 1905, p. 284–290; containing description of the various MSS connected with the voyage *etc.*)

(4) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 331.

(5) *cf.* Journ. Bot. 43, 1905, p. 279, and *l.c.* 44, 1906, p. 70–71.

(6) 'De Fructibus et Seminibus Plantarum' (Stuttgardiae et Lipsiae 1788–1807, 3 vols).

BIOGRAPHICAL DATA. A. CUVIER: 'Éloge historique' (Paris 1821); A. DUNCAN: 'A short account of the life of the right honourable Sir JOSEPH BANKS' (Edinburgh 1821); Biogr. Index BRITTEN & BOULGER in Journ. Bot. 26, 1888, p. 86, and in 2nd ed. by RENDLE, 1931; Kew Bull. 1891, p. 305–309; A biography in the 'Journal' cited above edited by HOOKER (*cf.* literature *sub* 1) p. xxiii–xxviii; BAILLON, Dict. de Botanique 1, 1876; WITTROCK, Icon. Bot. Berg., 1903, p. 89–90, and *l.c.* 2, 1905, p. 75; J. D. MILNER, Catalogue portraits in Kew, 1906, p. 5; MAIDEN: 'Sir JOSEPH BANKS the "Father of Australia"' (Sydney 1909); EDW. SMITH: 'Life of Sir JOSEPH BANKS' (1911); BACKER, Verkl. Woordenb., 1936; Chron. Bot. 9, 1945, p. 94–106.

Baptist, W. G. F. C.

(1878, Batavia, Java; Febr. 23, 1919, ?Borneo), came to the D.E.I. in 1897; at first a planter; since 1912 appointed Administrator of the Civil Service respectively stationed in Atjeh and Dependencies 1912–16, in Bali and Lombok Residency 1916–17, and since 1917 in Borneo's Western Division.

COLLECTIONS. Discoverer of *Rafflesia atjehensis*



BANKS

KOORD. near the Djerneh River in Atjeh (*1915–1916*) and of *Rafflesia sp.* in the subdivision Serbodjadi. Photograph only.[1]

LITERATURE. (1) *cf.* S. H. KOORDERS: 'Botanisch overzicht der Rafflesiaceae' (Meded. 4 N.I. Ver. t. Natuurbescherming 1918, p. 45 and p. 108–112, pl. 18).

Baranda, Isidro Sainz de

COLLECTIONS. *Herb. Forestry School Madrid*,[1] mostly from S. parts of *Luzon*, also from *Isl. Masbate, Isl. Batan* (E of Luzon), *about 1842.*

LITERATURE. (1) D. MÁXIMO LAGUNA Y VILLANUEVA: 'Cien helechos de Filipinas despuestos con arreglo á la última edición (1874) de la Sinopsis Filicum de HOOKER y BAKER' (Anal. Soc. Esp. Hist. Nat. 7, 1879, 19 pp.). He describes 102 species of ferns collected in the *Philippines* by SAINZ DE BARANDA.

Baranda, Dr José Sainz de

mentioned by MERRILL[1] as a collector of botanical material in the *Philippine Islands.* In the same paper,[2] MERRILL states that during VIDAL's absence in Europe in 1882–83, the position of Director of the Botanical Garden at Manila was filled temporarily by Don José BARANDA, an employee of the Forestry Bureau.

Vaccinium barandanum VIDAL was named after him.

COLLECTIONS. *Herb. de la escuela especial de montes, Escorial,* collection made in the *Philippines* by BARANDA, *previous to* 1874.[3] He collected for VIDAL.

LITERATURE. (1) *cf.* Bull. *no* 4 of Bur. of Agr. Manila 1903, p. 30.

(2) *cf. l.c.* p. 31.

(3) *cf. l.c.* p. 38.

Barber, *cf. sub* Forestry Bureau, Manila.

Barber, Mrs

is cited to have collected a *no* 98 K, *Ixora barberae* BREM. in *Labuan* (*cf.* BREMEKAMP in Bull. Jard. Bot. Buit. sér. 3, vol. 14, 1937, p. 243). The plant was named after her.

BREMEKAMP cites other *nos* too of a Mrs BARBER; this is no other than E. SCOTT BARBER (see there); according to H. K. AIRY-SHAW, HOOKER's handwriting of 'Mr BARBER' often looks very like 'Mrs BARBER'. Mrs BARBER was never in Labuan with her husband.

Barber, Edmund Scott

(not: E. BARBER SCOTT, as is evident from some original letters at Kew) about the middle of the 19th century Administrator of the island *Labuan* (NW. coast of Borneo), who according to BACKER made an extensive collection of plants in this island and in *N. Borneo.*

Dictyopteris barberi BEDD. and *Polypodium barberi* HOOK. were named after him.

COLLECTIONS. In *Herb. Kew* > 398 *nos.*

According to BACKER, BARBER purchased MOTLEY's herbarium after the latter was murdered and subsequently presented it to *Herb. Kew;* BURKILL told me that E. BARBOUR (spelt this way) bought it when M. left *Labuan.* In Herb. Kew often are 2 specimens of one and the same plant from Labuan, *e.g.* of *Kibara motleyi* PERK., both of them bearing *no* 119, one label however bearing the name of MOTLEY, the other of BARBER. The actual collector is MOTLEY, BARBER only purchased the collection.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Barbey, Auguste

(1872, ? , Switzerland; x), son of WILLIAM BARBEY,[1] who was educated at Munich and elsewhere in Natural Sciences (specially zoology and entomology) and subsequently in forestry; Dr Sci.; for years forester at Montcherand sur Orbe (Vaud, Switzerland); retired several years ago; since four years paralyzed after a stroke.

He made a voyage round the world, evidently visiting *Java* in March *1891.*

COLLECTIONS. *Java* plants, *e.g.* collected in the Botanic Gardens at Buitenzorg, in *Herb.* DELESS. (*Geneva*), and probably in *Herb.* BARBEY-BOISSIER too. See also *Addenda.*

LITERATURE. (1) *cf.* Biogr. notice in Bull. Soc. Bot. Genève 6, 1914, p. 220–240; BACKER, Verkl. Woordenb., 1936.

Barclay, George W. (?)

(?, Huntley, Aberdeenshire, Scotland; ?, Buenos Aires, Argentine), since 1833 Kew Gardener and collector; he accompanied the 'Sulphur' expedition of Capt. BELCHER. In later years he earned his living by collecting plants in S. America.

Piper barclayanum C.DC. and other plants were named after him.

ITINERARY. *Expedition in the 'Sulphur', 1835–42.*[1] *cf. sub* R. B. HINDS. As BARCLAY's autograph journal often mentions slightly different dates and localities from those given by BELCHER, an extract of BARCLAY's itinerary in Malaysia, exerpted from his journal, is given here: *New Ireland:* Carteret Harbour or Port Carteret (July 4–15, *1840*), making trips to *Leigh's Isl.* (6, 7, and 8), and several to *Green Isle* (all the time extremely bad weather and nearly impossible to get any plants dried, all covered with mildew *etc.*); anchoring off *New Guinea* (26), landing on the 27th; anchoring off the Isl. of *Aramoa* (Aug. 4), weighing again in the same evening; *Yobi* (= *Japen*) (9–17, occasionally landing, also on a small neighbouring islet); on a small island (18); *Pigeon Isl.* (26, collecting); *Boeroe:* Cajeli (30–Sept. 1); *Amboyna* (= *Ambon,* Sept. 4–12); *Boeroe* (16); *SW. Celebes:* Makassar (26–28); *c.* Oct. 1 sailing for *Singapore* (arriving 16). BARCLAY left the expedition on Oct. 21, 1840 at Singapore, conceiving himself out of sphere in the prospective war operations (*cf. sub* HINDS, Itinerary); he was back in London again on Febr. 14, 1841.[2]

COLLECTIONS. Collections made during the voyage of H.M.S. Sulphur, 1836–41[3] in *New Guinea,* Peru, Mexico, Brazil, *etc.* presented by W. T. AITON, 1839, and by the Lords of the Admiralty, 1896, in *Herb. Brit. Mus.* A vast collection of specimens now in the British Museum appear *not* to have been looked at in writing the botany of the Voyage, which was compiled from a private collection.[4] Some dupl. in *Herb. Utrecht.*

BARCLAY collected 24 plants in *Ambon;* the above-mentioned *Piper barclayanum* was collected, according to BACKER, in the island of *Tobi* N of Dutch New Guinea (probably a mistake for Jobi = *Japen*).

The American collections made later on are in *Herb. Kew.*

LITERATURE. (1) BARCLAY's autograph journal of the voyage is preserved in the Brit. Museum; a partial copy at Kew, *viz* from March 28, 1836–July 1, 1836.

Sir EDW. BELCHER: 'Narrative of a voyage round the world performed in H.M.S. Sulphur during the years 1836–1842' (London 1843, 2 vols).

cf. also *sub* HINDS.

(2) *cf.* Kew Bull. 1891, p. 321, and Gard. Chron. 1882[1], p. 305–306.

(3) G. BENTHAM: 'Enumeration of the plants collected by R. B. HINDS Esq. and by Mr. Barclay in the Feejee Islands, Tanna, New Ireland and New Guinea; to which are added a few species gathered in Amboyna by Mr. BARCLAY' (HOOK. Lond. Journ. Bot. 2, 1843, p. 211–240); 'Botany of the voyage of H.M.S. Sulphur under the command of EDW.

BELCHER during the years 1836–42' (London 1844–46, w. atlas of 60 pl.).

(4) *cf.* Gard. Chron. 1882[1], p. 305.

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 26, 1888, p. 86–87, and in 2nd ed. by RENDLE, 1931; Gard. Chron. 1882[1], p. 305–306; BACKER, Verkl. Woordenb., 1936.

Barends

made a collection of plants near Tjiamis in the eastern part of *W. Java;* the plants, including a *no* 25 = *Nepenthes mirabilis* DRUCE, were identified by BACKER in *1917* and are preserved in *Herb. Bog.*

Barends, H. B., *cf. sub* Forest Research Institute, Buitenzorg.

Barkmeyer - de Vries, A. M.

collected plants on the Rubber Estate Boemi-Ajoe near Wlingi in Kediri Res., *E. Java* (Aug. 22, *1926*), and at other dates *onwards of 1927.*

COLLECTIONS. *Herb. Pasoer:* 19 specimens.

Barnard, Basil H. F.

in the Forest Department, 1896–1929, chiefly in Perak, where he collected specimens of forest trees, *etc.* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

He is the author of a paper on forestry.[1]

Elaeocarpus barnardii BURK. was named after him.

COLLECTING LOCALITIES. *Malay Peninsula:* Perak, Pondok Tanjong Forest Reserve, Taiping; in May *1909* on G. Kerbau with M. HANIFF.[2]

COLLECTIONS. *Herb. Penang* = *Sing.* Also in *Kuala Lump.*

LITERATURE. (1) 'Forestry in the Malay Peninsula' (Ind. Forester 56, 1930, p. 191–196).

(2) H. N. RIDLEY: 'Plants from G. Kerbau, Perak' (Journ. Fed. Mal. Stat. Mus. 6, 1915, p. 43–62).

Barnard, R. C.

joined the Forest Department *Malay Peninsula* in August 1931. Nephew of the former.

COLLECTIONS. *Herb. Kuala Lump.*, numbered in the C.F. (see *sub* Conservator of Forests) series; mainly collected in S. Perak.

Barnes, Parker Thayer

(1874, Marshfield, Mass., U.S.A.; ?), was employed as Botanical Collector by the Forestry Bureau, Manila, *c.* 1903–04.

Author of 'House plants and how to grow them'.

Pavetta barnesii ELM. was named after him.

COLLECTING LOCALITIES. *c. 1903–04. Philippine Islands: Masbate; Luzon:* in Lamao Forest Reserve, Bataän Prov. (Oct. 1903–Apr. 1904);[1] also in Benguet (May–June 1904).

COLLECTIONS. He collected in behalf of the Bur. of Forestry, Manila, at least partly numbered in the F(or). B(ur). series; 313 *nos* from Lamao Forest Reserve; 306 from Bataän *etc.* in *Herb. Manila; c.* 300 dupl. in *U.S. Nat. Herb. Wash.;* also dupl. in *Herb. Leyden.*

LITERATURE. (1) *cf.* Philip. Journ. Sci. 1, 1906, Suppl. p. 3.

BIOGRAPHICAL DATA. Who's who in America vol. 12; BACKER, Verkl. Woordenb., 1936.

Barnes, Warren Delabere.

(1865, ? ; 1911, Hongkong), educated at Pembroke College, Cambridge; joined the Malayan Civil Service 1888–1910, and afterwards Colonial Secretary, Hongkong.

Elytranthe barnesii GAMBLE was named after him.

ITINERARY. *Malay Peninsula. 1900. Exp. towards the mountain of Benom in Pahang:*[1] leaving Raub (Aug. 31); reaching a subsidiary summit of G. Benom, which he supposed to be G. Kluang Terbang; back at Raub on Sept. 21.

COLLECTIONS. 122 species of trip G. Benom, listed by H. N. RIDLEY.[2] In *Herb.* ?.

LITERATURE. (1) W. D. BARNES: 'Notes on a trip to Gunong Benom in Pahang' (Journ. Str. Br. Roy. As. Soc. *no* 39, 1903, p. 1–10).

(2) In *l.c.* above, p. 10–18.

BIOGRAPHICAL DATA. In Journ. Str. Br. Roy. As. Soc. *no* 60, 1911; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; BACKER, Verkl. Woordenb., 1936.

Barrett, Otis Warren

(1872, North Clarendon, Vt., U.S.A.; x), an agriculturist who was Chief of the Division of Horticulture, Bur. of Agriculture, Manila, from 1910–14.

He is the author of 'Some new or little known Philippine economics' (Philip. Agr. Rev. 6, 1913, p. 493–503, pl. 2–12).

COLLECTIONS. He incidentally collected some plants for *Herb. Manila.*

BIOGRAPHICAL DATA. Amer. Men of Sci. 1938.

Barros, C., *cf. sub* Forestry Bureau, Manila.

Barrow, J. Vincent

schoolteacher.

COLLECTIONS. In *1903/04* a collection of 32 plants from *Cebu* was received at *Manila* for identification. Dupl. in *Herb. Leyden.*

Bartels Jr, Max

(1902, Soekaboemi, Java; Oct. 6, 1943, Tjung Kai, in Japanese camp, Siam), biologist, educated at the University of Berne, Switzerland, where he graduated *magna cum laude.* In 1932 he sailed to Java and settled at Tjiboeni Estate in the western part, making special zoological collections; in 1933 he settled at Sitoe Goenoeng, and in 1934 at Tjiparaj, both near Soekaboemi. In 1942 he was interned.

He made numerous zoological trips in Java, and to G. Tanggamoes in S. Sumatra.

COLLECTING LOCALITIES. Southern part of *W. Java:* south coast Priangan Res., E of Pangandaran, Dirk de Vries Bay (June *1933*); Wijnkoops Bay (Dec. 4, 1933); Tjiwideh (Tjidaoen) (*1937*); near Tjipoedeuj in S. Bantam (*1938*).

COLLECTIONS. *Herb. Bog., e.g.* material of *Rafflesia* (1933); collection 1938 in a bad state.

BIOGRAPHICAL DATA. Limosa 19, 1946, p. 144–146; Chron. Nat. 104, 1948, p. 1.

Barter

is cited by Miss J. KOSTER (in Blumea 1, 1935, p. 392) as a collector in *Borneo*, the material mentioned being in *Herb. Kew.* This is a slip for E. S. BARBER (see there).

Barthe

a surgeon on the French frigate 'Sybille'. Probably identical with J. BARTHE, a friend of Dr HANCE's of Hongkong (collecting with the latter in that island in 1855–56).[1] In 1855 the 'Sybille' (same voyage?) anchored near Ambon, but the crew was not allowed to go ashore, nor were the sick, as the representative of the Civil Service was afraid to violate neutrality on account of the Crimean war.[2] In 1855 and 1856 Japan was visited in the same ship.

COLLECTIONS. *Herb. Paris.* According to MERRILL,[3] B. secured his Philippine plants in the year *1857*, probably did no collecting himself, but secured them of some Spanish resident of Manila, as the manuscript notes at the museum accompanying the plants are written in Spanish, with the families and many of the genera indicated. A. GUILLAUMIN[4] supposes that BARTHE himself collected some plants in the Philippine Islands (without numbers!), and that the *numbered* plants belong to a collection of plants presented to him by a Spanish resident of the islands. The repeated occurrence of the name Nasé on the labels of the latter collection leads him to suppose that the plants have been collected at Nasé or Nazé in the island Oshima of the Riu Kiu Archipelago, though they are labelled 'Philippines'.

Elsewhere MERRILL states[5] that BARTHE made small botanical collections in the *Philippine Islands before 1870*, the concerning collections being preserved in the European herbaria.

After J. BARTHE several plants were named, *e.g. Barthea* BTH. & HOOK.

LITERATURE. (1) *cf.* BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 400.

(2) *cf.* Tijdschr. Ned. Ind. 17[1], 1855, p. 398.

(3) *cf.* Bull. *no* 4 of Bur. of Agric. Manila, 1903, p. 38.

(4) *cf.* LECOMTE, Not. Syst., 1, 1909, p. 327 footnote 1.

(5) *cf.* 'A discussion and bibliography of Philip. Flow. Plants' 1926, p. 50 (= An Enum. Philip. Fl. Pl. vol. 4, 1926, p. 50).

Bartlett, Edward

succeeded G. HAVILAND as Curator of the Sarawak Museum at Kuching; he laid the foundation of the Zoological Department.

Author of several small zoological papers.[1]

COLLECTIONS. *Herb. Brit. Mus.:* 338 *nos* from *Sarawak, NW. Borneo* (purch. 1899); dupl. in *Herb. Leyden; probably* duplicates in *Sarawak Herb.*

RIDLEY[2] refers to a specimen dated May 17, *1893.*

LITERATURE. (1) In Sarawak Gazette 1894–96. (2) In Kew Bull. 1938, p. 239.

Bartlett, Harley Harris

(1886, Anaconda, Montana, U.S.A.; x), Chemical Biologist of the Bureau of Plant Industry at Washington, 1909–15; since 1915 Professor of Botany at Michigan University and Director of the Botanic Garden there; in 1918 in the employ of the U.S. Rubber Co. at Kisaran, Asahan, Sumatra, as Botanist. In 1926–27 he made a collecting trip to Formosa and Sumatra under the joint auspices of the University of Michigan and the Smithsonian Institution; in later years he made several expeditions in America; in 1935 Exchange Professor of Botany, Univ. of the Philippines; in 1940 he left on a U.S.D.A. mission to the Indomalaya and the Philippine Islands.

The plant genus *Siraitia* was named after him (in Silo Maradja he was named Si Rait as an adopted tribal brother of the chieftain) and many plant species.

ITINERARY. *Sumatra East Coast. 1918.* Asahan and on the Karo Plateau.—*1926–27.*[1] Dec. 25, 1926 arriving in Asahan, field-work from Jan. to July 1927, operating from Silo Maradja: several weeks at Loendoet, south of Asahan River; hurriedly through the back of Asahan up over the mountains to Toba; ascent of Dolok Soeroengan; two trips to the Karo Plateau, B(e)rastagi, Si Naboen (= Sinaboeng) and Sibajak volcanoes, Deleng Piso-Piso and Deleng Baroes, Deleng Koetoe, Deleng Singkoet.—*1935. Philippines* (Oct. 31–Nov. 5): *Dalupiri Isl., Babuyan Isl.*, and probably other collecting trips to various parts of the islands in the same year.—*1940. Philippines.* Collecting at least at Del Monte, Bukidnon, *Mindanao* (Dec. 6).

COLLECTIONS. The *Sumatra* collection of *1918*,[2] ± 500 *nos*, was made by native collectors under the direction of C. D. LARUE and H. H. BARTLETT.

MERRILL distributed the sets: *Herb. Manila, Leyden, Kew, U.S. Nat. Herb. Wash.* (247), GRAY *Herb.* of Harv. Univers.; some in *Copenhagen.* As the collection was sent to Manila there were two series of numbers, those of GALOENGI (see there) who collected in Asahan (*nos* 1–70) and the Karolands (*nos* 71–338), and those of RAMAT alias BIDIN SIRAIT HOLBOENG, collected in Asahan (*nos* 1–165). These 2 series were thrown together at the Bur. of Science, where GALOENGI's collections were numbered 1 to 330, without maintaining correspondence between his original numbers and the new numbers. BIDIN's collection continued the numbering from 331 to 495. A few plants collected by BARTLETT near Balige, Toba, were included in the series as *nos* 496 to 502. Numerous mistakes were made in transferring the data, so botanists who intend to cite the specimens are urged to follow the data of the original hand-written labels. The set sent to the *Nat. Herb. Wash.* lacks the original labels and the Karoland plants are labelled incorrectly as from Asahan.

The *Sumatra* collection *1926–27*,[3] ± 2400 *nos* (numbered above 6000); best sets in *U.S. Nat.*

Herb. Wash., Univers. of Michigan, N.Y. Bot. Gard. and *Field Mus. Chicago* (522 dupl.).

In *1928* the native collector RAHMAT SI BOEEA (see there, and under HAMEL) made a *Sumatra* collection in the employ of BARTLETT.

Also dupl. in *Herb. Sing.* (pres. 1935); in GRAY *Herb.*: 20 *Philip. Isl.* plants, 96 *Sumatra* plants (pres. by Arn. Arbor. in 1938), 32 *Sumatra* grasses (dupl. of U.S. Nat. Herb.). *Philip.* plants in: *Herb. Univ. Michig., Arn. Arbor., Univ. of the Philip.*

LITERATURE. (1) H. H. BARTLETT: 'The fast-disappearing flora of Sumatra' (Smithsonian explorations 1927, p. 93–101, fig. 104–117).

(2) E. D. MERRILL: 'Notes on the flora of Sumatra' (Philip. Journ. Sci. 14, 1919, p. 239–250).

H. H. BARTLETT: 'Sumatran plants collected in Asahan and Karoland with notes on their vernacular names' (Pap. Michig. Acad. Sci. Arts & Lett. 6, 1926, p. 1–66).

(3) H. H. BARTLETT: 'The Batak Lands of North Sumatra, from the standpoint of recent American botanical collections' (Nat. & Appl. Sci. Bull. Univers. of the Philip. 4, 1935, p. 227–323, 2 maps).

E. D. MERRILL: 'New Sumatran plants' I–IV (Pap. Michig. Acad. Sci. Arts & Lett. 19, 1934, p. 149–203, pl. 16–35; *l.c.* 20, 1935, p. 95–112; *l.c.* 23, 1937, p. 177–202; *l.c.* 24, 1938, p. 63–92).

E. B. COPELAND: 'New pteridophytes of Sumatra' (Univ. Cal. Publ. Bot. 14, 1929, p. 371–378, pl. 55–61.

See also H. N. DIXON in Ann. Bryol. 5, 1932, p. 17–50, and A. W. EVANS in Pap. Michig. Acad. Sci. Arts & Lett. 17, 1933, p. 69–118, pl. 13–18.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; Americ. Men of Sci. ed. 3–5.

Barton, Francis Rickman

(born 1865; died after 1936), Captain of the British Army; from 1899 in Papua, Commandant of the Armed Native Constabulary, in 1902 Res. Magistrate Central Division, 1904–07 holding the post of Administrator; in April 1907 on leave of absence, resigning in April 1908, and subsequently in Zanzibar.

Platyclinis bartoni RIDL. and *Cassia bartonii* BAIL. were named after him.

ITINERARY. *SE. New Guinea, Papua. 1899.* Accompanying LE HUNTE (see there, on May 17th). In Nov. from *Daru Isl.* to *Paho Isl.* and Bugi, east of the mouth of the Wai Kusa.—*1900.*[2] Near the Morehead River (Febr.); Gulf of Wanari (July) (these trips[1] in the company of G.R. LE HUNTE (see there)). Punitive exp. with J. A. BLAYNEY and A. C. ENGLISH (see there) *etc.*[3] to the Doriwaida or Dorevaida tribe in Punea Buru (starting Sept. 2) crossing the Main Range into the territory of Okaude, examining Domara and Adau Rivers; *ditto* with ENGLISH to the Kemp-Welch District: departure from Port Moresby (Oct. 23), *via* Kapa-Kapa to Rigo Station (leaving on the 26th); back at Rigo (Nov. 22).—*1901.* With LE HUNTE:[4] from Port Moresby (Jan. 11) to Kabadi, Morabi, rowing up the Apisi, to Matapaila and Kopuana, Keweo and back to Matapaila; *via* Nanuabaka (14) to the coast, mouth of the Aroa; Delena; Ethel River (17), ascending the latter and the Bioto; on foot to Ina Wabui; St Joseph River (18) and Mekeo Station; back to Yule Island (20). Doriri punitive exp.[5] *via* the Wanigela (= Kemp-Welch River) in April.—*1902.*[6] From Port Moresby (July 13) *via* Sogeri to



H. H. BARTLETT

Seremina, west of the upper course of the Kemp-Welch River, and back to Port Moresby (25). By boat (Sept. 25) to Hall Sound, visiting Mekeo District (– Oct. 11), the 18th setting out for the Kumaweka tribe on the upper course of the Biaru, and back at Port Moresby (Nov. 3). Mekeo District (Nov. 15–25). Boat excursion (Dec. 2–7) to Kapa-Kapa, Kaile and Tupuselei.—*1903.*[7] Inspection of the *eastern portion of the central division:* from Port Moresby (July 21) *via* Kapa-Kapa to Rigo; inland patrol (29) to the upper waters of the Kemp-Welch River, Gauwada, Gubai-Goro (Pyramid Hill Range); Aug. 5 to Kuaipo near the head of Hood's Lagoon, Kerepunu; villages between Hula and Cheshunt Bay (Aug. 8–16); starting inland (18), Domui (20), Doriwaida; back at the coast (Sept. 4) and inspection there until the departure to Port Moresby (19). From that date several short tours of inspection up and down the coast to the beginning of Jan. 1904.—*1904.*[8] For January see *sub* 1903; in Febr. on leave on account of illness. In Aug. short inland journey from Port Moresby to the head waters of the Kemp-Welch River, also visiting Sogeri and Warirata. Early in Sept. to Kapa-Kapa, Rigo, Samarai, Kwato, Cape Nelson (Sept. 12); inspection through the *northern division*: Buna,

starting to Kokoda (15), Yodda field, Tamata by way of Papangi and Bogi, joining the 'Merrie England' again at the Mambare River mouth (Oct. 3); Oro Bay, short inland visit to the Baruga and Agaiambo tribes, Cape Nelson (Oct. 11), Mukawa, Cape Vogel, Wedau, Goodenough Bay, Samarai, *Woodlark Isl.*, Dobu; Port Moresby (Oct. 28). Inland expedition from Port Moresby (Dec. 10) to Kokoda *via* Sogeri, Uberi, Wamai, Manarem Kagi and Segerina and back at Port Moresby (Jan. 7, 1905).—*1905.*[8 9] Visit of inspection *to the west* (sailing Febr. 4): Daru, Orokolo, Bailala, Hall Sound, Port Moresby (March 9). Inspection in the district *east of Port Moresby* (May 2–July 16): Samarai, Cape Nelson, Kokoda, Tamata, Cape Nelson, Samarai, Dobu, *Trobriand Islands*, *Woodlark Island*, villages in the Milne Bay, Fyfe Bay, Milport Harbour, Port Moresby. From Port Moresby (Nov. 22), *via* Kapa-Kapa, Rigo, Samarai (24), Cape Nelson, Mambare River, Tamata Station, Ioma, Ope River (Dec. 4), climbing Duwera Hill; Cape Nelson (6), ascending the hills at the back of the Station (8); *Trobriand Islands*, *Woodlark Isl.*, Dobu, Cape Vogel, Cape Nelson (19) and some hills in the peninsula, Mambare River, Ioma; Jan. 2, 1906 *via* Samarai back to Port Moresby (9).—*1906.*[9–10] For the first part of Jan. see *sub* 1905. Inspection of the *western division* (Jan. 27–Febr. 22): *Yule Isl.*, Daru (Jan. 30–Febr. 6), Kaimare, Goaribari (10), Daru, Orokolo and walk along the coast as far as Kerema, by land to Silo (Febr. 20), by steamer to Hall Sound, and back to Port Moresby. *East of Port Moresby* (May 21–June 15): Kapa-Kapa, Aroma, Dedele, *Mailu Isl.*, Millport Harbour (May 27), Samarai, islands lying to the south-east, Samarai, Dedele, Kerepunu, walking to Hula *via* Kalo, back to Port Moresby. Leaving for *Yule Isl.* (Aug. 11), visiting the Mekeo villages as far as Rarai, on the 25th returning to Port Moresby. From Port Moresby (Sept. 11) to Samarai (13), *Woodlark Isl.*, *Trobriand Islands*, Buna Bay (18), Samarai (28), Cape Nelson, Buna (30), Samarai (Oct. 2), Port Moresby (6). Leaving Port Moresby (Dec. 22) by boat to Kerema (28–30 stay), *Yule Isl.*, back at Port Moresby (Jan. 12, *1907*).

COLLECTIONS: He forwarded several lots of plant specimens to F. M. BAILEY[11] for examination; in *Herb. Brisbane.* In *Herb. Brit. Mus.*: 22 *New Guinea* phanerogams (pres. 1907; the same number mentioned in Report for 1909, probably a mistake); *Herb. Sing.* (pres. 1903).

LITERATURE. (1) *cf.* Ann. Rep. Br. N. G. for 1899/1900, Brisb. 1901, p. 1–4, 21–33, 49–57.

(2) *cf. l.c.* 1900/01, Brisb. 1902, p. 42–46, 89–94 and Queensl. Geogr. Journ. N.S. 16, 1900/01 Brisb., p. 63–68.

(3) *cf.* Fr. P. WINTER: 'Notes on a government expedition under Dr J. A. BLAYNEY, capt. J. R. BARTON and Mr A. E. ENGLISH, to the Main Range, British New Guinea' (Queensl. Geogr. Journ. 16, 1900/01, p. 63–68, w. map).

(4) *cf.* Ann. Rep. Br. N. G. 1900/01, Brisb. 1902, p. 1–4.

(5) *cf. l.c.* p. 63–69, 94–100.

(6) *cf. l.c.* 1902/03, Brisb. 1904, p. 17–20.

(7) *cf. l.c.* 1903/04, Brisb. 1905, p. 21–23.

(8) *cf. l.c.* 1904/05, Brisb. 1905, p. 3–9.

(9) *cf. l.c.* 1905/06, Brisb. 1907, p. 4–8.

(10) *cf. l.c.* 1906/07, Brisb. 1907/08, p. 9–10.

(11) In Queensl. Agric. Journ. 9, 1901, p. 410–411; one collection in Proc. Roy. Soc. Queensl. vol. 18, 1903; in Ann. Rep. Br. N. G. for 1901/02, Brisb. 1902.

BIOGRAPHICAL DATA. Who's who (Engl.); BACKER, Verkl. Woordenb., 1936.

Bartsch, Paul

(1871, Tuntschendorf, Germany; x), conchologist, educated in the U.S.A., taking his Dr's degree in 1905; from 1896 onwards attached to the U.S. National Museum Washington; Professor of Zoology since 1899.

He made several expeditions, among which a Philippine one from *1907–09*, to accompany the Bureau of Fishery steamer 'Albatros' for the purpose of making zoological collections for the National Museum; he left Washington early in Oct. 1907.

In *1908* he collected in the W. part of *Basiao Isl.*, offshore from Catbalogan, *Samar*, and on *Twai Twai Isl.* (Febr.).

COLLECTIONS. *Herb. U.S. Nat. Herb. Wash.*: 565 *Philip.* plants (mostly ferns), 60 from *Borneo;* orchids in *Herb.* O. AMES; dupl. in GRAY *Herb.* and *Herb. N.Y. Bot. Gard.*

The *Borneo* plants are numbered in between the *Philippine* ones, so probably they have been collected during the same expedition.

BIOGRAPHICAL DATA. Amer. Men of Sci. ed. 2–4; Who's who in America vol. 9; Scient. Monthly 63, Nov. 1946, p. iv + portr.

Basjaroeddin, H., *cf. sub* Forest Research Institute, Buitenzorg.

Basoeng, *cf. sub ditto.*

Basri, Hasnil

since 1933 Municipal Veterinary Surgeon at Palembang, *S. Sumatra.*

COLLECTIONS. *Herb. Bog.*: 4 grasses from the environs of Palembang, pres. through the intermediary of the Veterinary School at Buitenzorg in *1934.*

Baster, Job

(1711, Zierikzee, Z., Holland; 1775, Leyden, Holland), medical doctor, algologist, friend of MILLER.

He is commemorated in the genus *Basteria* MILL.

COLLECTIONS. In *Herb.* LINNAEUS = *Linn. Soc. Lond.*: > 300 plants from *Java*, pres. by Dr BASTER from Zealand (Holland).[1] It is improbable that he himself was the collector.

LITERATURE. (1) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 357; and KREUTZER, Das Herbar, 1864, p. 168.

BIOGRAPHICAL DATA. PRITZEL, Thes. Lit. Bot., 1872; F. NAGTGLAS, Levensberichten v. Zeeuwen 1, 1890; Biogr. Index BRITTEN & BOULGER,

2nd ed. by RENDLE, 1931, p. 23; Ned. Kruidk. Arch. 50, 1940, p. 184; *l.c.* 51, 1941, p. 341–342.

Bastiaan, J., *cf. sub* Forest Research Institute, Buitenzorg.

Bateson, Mrs E.

wife of a Government Mycologist who retired about 1930; she collected plants for Dr E. D. MERRILL in *Br. N. Borneo, e.g.* a *no* 59 = *Homonoia riparia* LOUR. near Maruda Bay (June *1923*) (*cf.* MERRILL in Philip. Journ. Sci. 30, 1926, p. 81).

Bateson, G.

presented a collection of plants from *New Guinea* to *Herb. Kew* in *1931*. A *no* 128 was collected in *New Britain, Bismarck Archipelago,* between Baining Mts and Toma (*cf.* Journ. Arn. Arbor. 22, 1941, p. 88).

Bath, C. H.

is cited as the collector of *Sindora supa* MERR., *nos* 859 and 860 in *Luzon* (June *1904*) (*cf.* Philip. Journ. Sci. vol. 1, Suppl., 1906, p. 199).

In *1903/04* 3 *nos* of his from Tayabas, *Luzon* (F.B. series), were presented to *Herb. Manila.*

Batten Pooll, Arthur Hugh

(1891, Rutland Lodge, Knightsbridge, London, England; x), was educated at Eton and Balliol College, Oxford, where he studied agriculture after having been in active service during World War I and subsequently in 1919 against the Bolsheviks. After having obtained his Diploma in Rural Economics, he studied at the School of Botany.

Traveller[1] in Dalmatia (1932), the Pacific Islands (Tahiti, Marquesas *etc.*, 1934), New Zealand (1934/35), S. America (1935), Persia (1936), Morocco (1934, 1939), Bulgaria (1938), in the Malaysian region (1939/40, see below) and in Nigeria (1946/47).

He is commemorated in *Lucuma batten-poollii* BENOIST.

ITINERARY. *1939. N. Sumatra:* the plains, Brastagi Plateau, Telok Da (Sept. 30); islands W of Sumatra: *Nias, Moussala* (= *P. Moesala*) and the *Mentawei Islands.—Malay Peninsula* (Nov. *1939*–Jan. *1940*): Cameron Highlands around the Green Cow Tavern; *Langkawi Islands,* Pahang, Malacca.—*1940. SE. New Guinea*: around Port Moresby and on the mainland opposite Yule Island.

COLLECTIONS. *Herb. Sing.:* about 450 specimens from *Sumatra* and *Malaya;* dupl. at *Buitenzorg* (68), and *Kew. Herb. Sydney: New Guinea* plants. Other collections to Kew, Paris, *etc.*

The specimens are carefully labelled, but the material is scrappy.

His notes were bombed at Liverpool.

LITERATURE. (1) Author of 'Some globe trottings with a rod' (Spottiswoodes, Eton College, Windsor).

Baudin, Thomas Nicolas

(1754, Saint-Martin-de Rhé; Sept. 16, 1803, Isle de France), joined the French navy in 1774, Captain, leader of several French expeditions round the world.

He is commemorated in the genus *Baudinia* LESCH.

ITINERARY. *1793–95.* Visiting China, *Sunda Islands, etc.;* during the voyage home he was forced to touch at the island La Trinité.[1]—*1796–98.* Accompanied by LEDRU and RIEDLÉ (see there) to the Canary Islands, Teneriffe, La Trinité, Isl. St Thomas, Sainte-Croix and Porto-Rico.[1-2]—*1800–04. Voyage in 'Le Naturaliste' and 'Le Géographe'.*[3] *cf. sub* LESCHENAULT (other members: GUICHENOT, RIEDLÉ, SAUTIER, PÉRON).

COLLECTIONS. *Herb. Kew:* Australia 647 *nos* (acq. 1880); *Herb. Paris; Herb.* DECAND. (*Geneva*) ± 620 *nos*[4] (in the ms. Catalogue 820!, incl. 220 *Timor* plants); *Herb.* JUSSIEU (= *Paris*); *Brit. Mus.* (with *Herb.* BANKS): Australia specimens.

BAUDIN left his collection of *1793–95* in La Trinité, presented the same when home again, to the French Government, intending to fetch it on his next voyage; when coming again he was, however, denied the consent to bring it back to France.[1]

The expedition 1796–98 was outside the territory dealt with in this publication. The collection of BAUDIN's expedition *1800–04* included 4 cases of dried plants, 3 large casks of specimens of timber, 2 boxes of seeds, and 60 tubs of living plants.[5]

LITERATURE. (1) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 490–491.

(2) A. P. LEDRU: 'Voyage aux îles de Ténériffe, La Trinité, St. Thomas, Sainte-Croix et Porto-Ricco exécuté etc. depuis le 30 Sept. 1796 jusqu'au 7 juin 1798, sous la direction du capt. BAUDIN *etc.*' (Notes et add. par M. SONNINI; Paris 1810, 2 vols).

(3) Captain BAUDIN wrote several letters to DE JUSSIEU, which were published in the Ann. Mus. Hist. Nat. Paris. One from Timor was published in *l.c.* 3, 1804, p. 475–476.

F. PÉRON & L. FREYCINET: 'Voyage de découvertes aux terres Australes *etc.* sur les corvettes le "Géographe", le "Naturaliste", *etc.*' (Paris 1807–16, 2 vols + atlas).

(4) *cf.* A. DECANDOLLE, Phytographie, 1880, p. 394.

(5) *cf.* MAIDEN in Rep. Australas. Assoc. Advanc. Sci. 13, (1911) 1912, p. 225.

BIOGRAPHICAL DATA. PRITZEL, Thes. Lit. Bot., 1872; URBAN, Symb. Ant., 3, 1902–03, p. 20; J. DE COUSSANGES: 'THOMAS-NICOLAS BAUDIN, explorateur (1754–1803)' (in 'Les Contemporains', 16 pp. + portr., without date).

Bauer, Ferdinand Lucas

(1760, Feld(s)berg, Austria; 1826, Hietzing near Vienna, Austria). Dr SIBTHORP made his acquaintance in Austria and engaged him as natural history painter in 1784, and during the voyages with the latter (*e.g.* to Greece) BAUER devoted himself to the study of botany. In 1801 he was appointed Natural History Draughtsman to the expedition of FLINDERS to Australia. After the breakdown of the 'Investigator', he and Dr R. BROWN, the botanist of the expedition, stayed in Australia awaiting the return of FLINDERS. After his return in England

(Oct. 1805) he set to work out his sketches made during the voyage. In the beginning of 1813 he made a start with the 'Illustrationes Florae novae Hollandiae', which was a failure and after this desillusion he returned to Austria in 1814, taking his collections with him.

The genus *Bauera* BANKS was named after him.

ITINERARY. *Expedition to Terra Australis, 1801–05.*[1] Staying in *Timor* (*Lesser Sunda Islands*) Apr. 1–7 and Nov. 10–14, *1803*. For detailed data *cf. sub* R. BROWN.

COLLECTIONS. *Herb. Vienna* (by sale);[2] *Herb. Berl.:* 78 *nos* of *Timor* plants; *Herb. Hamburg:* BAUER (? identical) *East Indian* plants. Drawings of plants in Vienna; and in Library Brit. Museum.[3]

The plants collected during the stay of eight months in Norfolk Island were published by ENDLICHER in his 'Flora Norfolkiana'.

LITERATURE. (1) M. FLINDERS: 'A voyage to terra Australis' (London 1814, 2 vols w. app.); transl. into Dutch, without appendices.

(2) *cf.* Flora 10[1], 1827, p. 176; and *l.c.* 14[1], 1831, p. 398.

(3) J. BRITTEN: 'Ferdinand BAUER's drawings of Australian plants' (Journ. Bot. 47, 1909, p. 140–146); *cf.* also Bot. Centr. Bl. 33, 1888, p. 251.

BIOGRAPHICAL DATA. Proc. Linn. Soc. 1, 1839, p. 39–40; HOOK. Lond. Journ. Bot. 2, 1843, p. 106–113; PRITZEL, Thes. Lit. Bot., 1872; BAILLON, Dict. de Botanique 1, 1876; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 26, 1888, p. 87–88, and in 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Bauerlen, *cf.* BÄUERLEN.

Baume, Joseph

(1810, Toulon, France; ? , ?), Naval Surgeon during the voyage of 'La Favorite' (*cf.* also *sub* EYDOUX).

Melastoma baumeanum NAUD. was named after him.[1]

ITINERARY. *Voyage in 'La Favorite', 1830–32.*[2] Sailing from Toulon (Dec. 30, 1829), *via* Gorée, Bourbon, the Cape, Seychelles, Pondicherry, Madras; *Malacca* (Aug. 10 or 14, *1830*), *Prince of Wales Isl.* (= *P. Penang*), *Singapore* (17–25); Aug. 25 reaching the China Sea and *via* P. Condor to the *Philippine Islands: Luzon,* Manil(l)a (Sept. 4–Oct. 31 or Nov. 2); Macao, China, Macao, Cochin-China; *Anambas & Natoena Islands* (March-Apr. *1831, e.g.* visiting *P. Djemadja* and *P. Mobour* (= *Moeboer*); *E. Java:* Soerabaja (Apr. 14, 1831), under sail (May 10), touching at Soemenep (*Isl. Madoera*) (May 21), Panaroekan, Banjoewangi (May 27); making some trips in E. Java; June 1 sailing for New Holland, New Zealand, Chili, Brazil, France (Toulon, April 22, 1832).

COLLECTIONS. *Herb. Paris.*[3] See also *Addenda.*

DE WILDEMAN described *Algae* from Malacca Straits collected by BAUME, probably the same.

LITERATURE. (1) *cf.* Ann. Sci. Nat. sér. 3, vol. 13, 1849, p. 289.

(2) LA PLACE: 'Voyage autour du monde par les mers de l'Inde et de Chine exécuté sur la corvette de l'état la Favorite, pendant les Années 1830, 1831, et 1832 publié par ordre de M. le Vice Amiral Comte DE RIGNY ministre de la Marine et Colonies' (Paris 1833–35, 4 vols).

Also in Ann. Marit. et Colon. 1831 and 1832.

(3) It is quite possible that some of his plants (from *Anambas* and *Malacca*) originating from this expedition, were dealt with by J. DECAISNE in 'Voyage autour du monde sur la frégate la Vénus, Cdt. ABEL DU PETIT THOUARS, pendant les années 1836–39. Botanique.' (tome 5[2], 1864 (probably a printer's error for 1846) + atlas, 1846). The 'Vénus' itself never was in the mentioned localities.

RADLKOFER in his 'Sapindaceae Holl. Ind.' (Extr. Act. Congr. Internat. Bot. *etc.* Amsterdam 1877, 1878, p. 89) refers to *Guioa pleuropteris* collected by BAUME in *Anambas & Natoena Islands* in 1832; this rightly should be *1831.*

Baumhauer, C. M.

the then Acting Resident of Cheribon, collected *Rafflesia patma* in the island *Noesa Kambangan* (S of Centr. Java) in *1824*. The material, consisting of desiccated buds, was handed to BLUME, when the latter visited Cheribon in the same year.[1]

LITERATURE. (1) C. L. BLUME: 'Iets over de Patma van Noesa Kambangan' (Ind. Magaz. 2e twaalftal *nos* 3–4, 1845, p. 179–194).

cf. Trop. Nat. 10, 1921, p. 125.

Baumhauer, Jan Willem Samuel

Doctor of Law, Assistant Resident at Montrado, *W. Borneo,* sent living plants to *Hort. Bog.* in *1866* and to TEYSMANN (*Herb. Bog.*) in *1868* (*cf.* Nat. Tijdschr. N.I. 30, 1868, p. 462).

Baur, Emil

Zürich, presented museum objects from *Sumatra* to the *Bot. Mus. Univers. Zürich* in *1909.*

Bautista, H., *cf. sub* Forestry Bureau, Manila.

Bawa, I., *cf. sub* Forest Research Institute, Buitenzorg.

Bawan, F., *cf. sub* Forestry Bureau, Manila.

Bawoek, *cf. sub* For. Res. Inst., Buitenzorg.

Bayak

retired native Forest Guard, *cf. sub* Forest Department, British North Borneo.

Bayong bin Mat

joined the Forest Department *Malay Peninsula* in Dec. *1907*; now retired.

COLLECTIONS. *Herb. Kuala Lump.*, numbered in the C.F. (see *sub* Conservator of Forests) series; collected in South Perak.

Bazell, Clive

Educational Officer, stationed at Kuala Kangsar (Perak), collected plants from the summit of G. Bubu (Perak, *Malay Peninsula*) in *1923* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Sing.*, small collection.

b.b. *nos, cf. sub* Forest Research Institute, Buitenzorg.

Bea, *cf. sub* Forestry Bureau, Manila.

Beccari, Odoardo

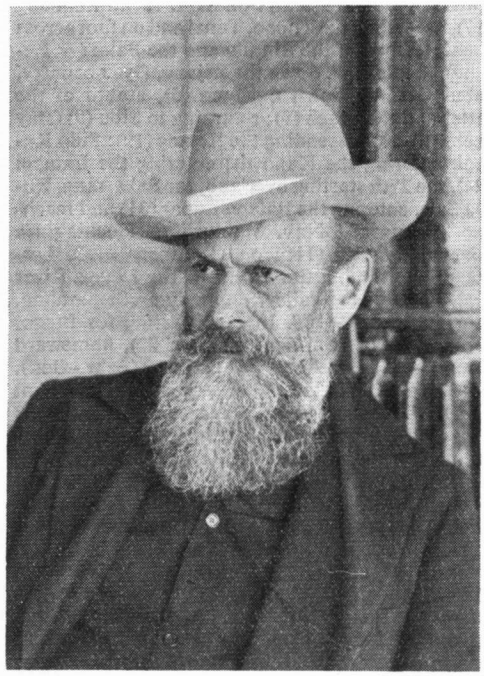
(1843, Florence, Italy; 1920, Florence, Italy), whose interest in nature was stimulated by IGNAZIO MEZZETTI, studied at the universities of Pisa and Bologna (Dr Sci. 1864) and spent some time in London (Kew). He travelled for many years, principally in the Dutch East Indies and adjacent territories. When back in Italy in 1876, he was appointed Director of the Botanic Garden and the Herbarium at Florence; in the 2 following years he made his final journey to the tropics and specially to Australia and New Zealand, afterwards devoting himself to the study of his collections, specially of palms, at Florence.

He was the founder of the 'Nuovo Giornale Botanico Italiano', and the author of numerous publications, including taxonomical papers.[11]

He is commemorated in many plant names. In the Botanic Gardens of Singapore a small avenue was made with palms described by BECCARI as a memorial to this great naturalist.

ITINERARY. *Borneo expeditions.*[1] *1865.* In April sailing with his friend the marquis G. DORIA *via* Ceylon, *P. Penang* and *Singapore* to *Borneo, Sarawak:* Kuching (June 19), exploring neighbourhood of, and towards Mat(t)ang; up the Batang-Lupar (Sept.), Simanggan, Undup, and back at Kuching (Sept. 13); Serambo Hill (Nov.), G. Skunyet; Mt Mat(t)ang (leaving Kuching Nov. 13th, *via* Siul, staying till the 19th); mission of Quop (Nov.).—*1866.* In Jan. *via* Salak, the trusan of Mat(t)ang, summit Mt Mat(t)ang (22); March accompanying DORIA to *Singapore*, remaining nearly to the end of the month (D. returning to Europe), passing a week at Woodlands on Johore Straits; *Sarawak:* Mat(t)ang; in June proceeding to Sibu; July leaving Mat(t)ang for exploring G. Santubong (20); *Isl. of Satang* (23); Mt Poe (= Poi) (Aug. 16 reaching the summit); *via* Sadomak returning to Kuching; Mat(t)ang (Sept. and part of Oct.); Buntal, Kuching; middle of Nov. starting to the upper waters of the Sarawak River, Tappo Kakas, G. Wa (Nov. 19), Pankalan Ampat, Senna (23), G. Braam, Koom (26), Kuching; Mat(t)ang (Dec.).—*1867.* Around Kuching (Jan.); arranging and packing collections (Febr.); in March visiting Lobang Angin, ascending Pininjau (6), Kuching; leaving by gunboat 'Heartsease' (March 17) *via* the Batang Lupar to Lingga, Marop and neighbourhood, *e.g.* G. Tiang Laju (Apr.); May 7th starting for the Kapuas Lakes in *Dutch West Borneo: via* Benda, Kantu (= Sg. Kantoe), Grogo, Segrat (May 14), Sg. Umpanang (= Empenang), Danau Lamadjan (= Seriang), Bt Lampei and back to *Sarawak:* Marop (arrival May 22); arranging collections at Kuching; leaving Kuching (June 13), bound for Tanjong Datu, *via* Santubong, Pulo Sampadien, Samatan; Samattang, ascending the Lundu River (22); Santubong, Kuching; Singhi Hill, July 9 returning to Kuching; Santubong (27–29); embarking (Aug. 4) for *Labuan* and *Brunei:* Labuan (8); Brunei (9–11); *Sarawak:* Bintulu (12) and trips in the neighbourhood, *e.g.* Tanjong Silei; Kayan country, Tubao; down the river Bintulu (29); Fort Bintulu (31); fruitless attempt to reach the Tinjar, only coming as far as Tubao; renewed attempt on Sept. 15 *via* Labbang (17), ascending the Tubao, Tunei and on foot across the watershed of the Bintulu and the Baloi (= Rejang), the Bellaga, down the Rejang, Dyak country, Sibu (Oct. 1); down the Igan (5), mouth of the latter and the beach (8); returning to Sibu (9) (stay there, 13–18); ascending the Rejang (19); Pulo Kaladi, entering the Kanowit; entering the Entabei (24), the 27th starting overland, the Sakarrang, Ruma Sale, entering the Batang Lupar (31) and reaching Simanggan; Nov. 8 return to Kuching *via* Lingga, Banting (11th on G. Lingga = G. Lessong), continuing the ascent of the Lingga River (15), Sumundjang Valley, Sumundjang, Samarahan, Kuching (20).—*1868.* In Jan. starting for Busso, Grogo, Paku; to *Singapore* (Jan. 20), homeward bound.—*1870.* In Abessynia (Eritrea) (Febr.–Oct.). —*1872.* Sailing in the end of Nov. 1871 with Count L. M. D'ALBERTIS (see there) *to New Guinea etc.*[2]: *Singapore* (Jan. 18 or 20, probably the latter), sailing from there on the 26th to *W. Java:* Batavia (28–29), Buitenzorg (Jan. 30–Febr. 2); trip *via* Megamendoeng, Poentjak, Telaga Warna to Sindanglaja (Febr. 3); G. Gedeh (Tjibodas, Tjibeureum), Warme bronnen (hot springs), Kandang Badak (4); back to Buitenzorg (5); Batavia (7–9); Soerabaja (14–20) and *via SW. Celebes:* Makassar (22–24), *Flores* and *Timor* (28–29, resp. Koepang and Dilly), to the *Moluccas: Banda* (March 3), *Ambon* (7), trip to *Ceram* (Wahai, 11–14) and back *via Boeroe* (Kajeli) and *Manipa* (15), *Ambon* (16–20), *Ges(s)er* (25), *Goram* (Apr. 2–3) and *Dutch West New Guinea:* Cape Bair (= Baik) and neighbourhood (8); *islands near the coast of W. New Guinea* (10–22): *P. Karas, P. Faor, P. Pandjang*, landing at Kapaor and Papua Onin; *Batanta* (26–28) and *Salawati:* Samaté (29); *P. Dōm, Sorong* (29) and the opposite mainland (Ramoi), sailing some times to and fro; sailing (July 15) for Doré; Dorei Hum (16), Bani (18), Amberbakin (23), *P. Mansinam* (Aug. 2–5); Andai (Aug. 6–Sept. 25); Putat (Sept. 28–Oct. 9); Andai; departure from *Mansinam* (Nov. 6); W of Amberkaki (9–11), *Sorong* (15–21) and Nov. 22 sailing for the *Moluccas: Ceram* (Wahai, 30); *P. Tugio* (= Toedjoeh) near Ceram (Dec.); *Ambon* (Dec. 6–Febr. 7, 1873), visiting *Saparoea* (± Dec. 14), ascending the Salhutu (Dec. 28) and visit to Batu Gadja (Jan. 11, 1873).—*1873.* For Jan./Febr. see before; sailing (Febr. 8) *via* Ges(s)er and Kilwarit (12–18) to the *Aru Islands:*[3] Dobo (22), Manumbai (25), Dobo (28); to Vokam (= *P. Wokam*) (29); Apr. 19 sailing for Dobo again; *P. Wamar;* to Giabu-lengan (E of Wokam) (21); to Wokam (May 25); Dobo (June 4), the following day sailing for *Trangan* and after a journey marked by vicissitudes ashore on *Maikoor* (11–13); Lutor (25; evidently situated in *W. Trangan, cf.* map BECCARI) and back to *Wokam via Maikoor* (26) and *P. Babi* (27);

sailing (July 6) for the *Kei* (= *Kai*) *Islands*: run aground in *Groot-Kei* (= *Noehoetjoet*) (8); *Keibandan* (11); *Tual* (Aug. 19–end of Sept.); Dulan (Oct. 1–3), sailing the 4th *via P. Manavolka* (= *Manawoka*, Gorong Group), Keffing (*E. Ceram*), Amahai (*S. Ceram*, 19), *Haroekoe*, to *Ambon* (staying



BECCARI

Oct. 23–Nov. 4); *Buru* (7), *Ternate* (8); *N. Celebes:* Kema (Nov. 10–11, small trips, coll. *Myrmecodia selebica* BECC.); Gorontalo (12–14, lake Limboto!); *SW. Celebes:* Makassar (Nov. 18–Febr. 6, 1874).—*1874.* For Jan.–Febr. see before; Febr. 6 sailing by bark *via P. Kobaina* (= *P. Kabaena*) (13) and *P. Moena* (14), through Boeton Strait, *P. Tciampada* (19–20) and ashore in *SE. Celebes:* Kendari (23),[4] exploring the environs, *e.g.* some times at Lepolepo, visiting *P. Wawo-sundi* (May 15–16), *P. Bokori* (17), near Sampara Bay, *etc.;* Aug. 12 sailing in the 'Sumatra' to *SW. Celebes:* Bonthain (13), Makassar (Aug. 14–31); *via Bali* (Boeleleng, Sept. 3) to *Java:* Soerabaja (4), Semarang, Solo, Djokja, making some trips in *W. Java:* Tjipanas, Tjibodas (G. Gedeh) (26), Tjibeureum (30), G. Gedeh-Pangrango (Oct. 5); Batavia (7–14); Soerabaja again (19–21); *via* Makassar (*SW. Celebes*), *Bima* (G. Tambora) and *Timor* (Koepang, ashore on the 31st) to the *Moluccas: Ternate* (arrival Nov. 11, the 24th on the Piek); *Ambon* (Dec. 7–Jan. 21, 1875).—*1875.*[2] For Jan. see before; on the 22nd sailing for *Dutch West New Guinea:* Samaté (*Salawati*) (Jan. 30 or 31), *Sorong* (Febr. 1), starting to Ramoi on the 3rd; *Sorong* (10–13); to Dore Hum Bay (14); trip to Mt Morait (17); Dore-Hum-Has (somewhat east of the first), staying in the neighbourhood until March 1, discovering river Wa(r) Samson and then back to *Sorong; Waigeo(e)* (Wakre, March 5–14); by proa to Doré on Geelvink Bay (16), Mo(e)mi (20), Warbusi (March 23–Apr. 1), arriving at Ansus on *Jobi* (= *Japen*) (4), *Mios Noem* (29); Korido in *Soepiori* (*Schouten Isls*) (May 6–24) (to Sowek = Sawek on May 18th), *P. Manim* (26–31); Doré (June 2); Andai (14), starting the 16th for an exploration of the Arfak Mts,[5] Hattam (June 20–July 12); Andai (13) and proceeding to *Mansinam* (–18), *Salawati* (21–22), *Batanta* (23 or 25–27), *P. Koffiao* (= *Kofiau*) (29); *Ternate* (Aug. 4, staying 3 months).—*3rd Voyage to Dutch New Guinea in the 'Soerabaja'.*[6] embarking at *Ternate* (Nov. 11, 1875); *P. Bam* (14); *Salawati*, Samaté (14–16); Bay of Doré (19–20), Bay of Ansus on *Japen* (22–23), Doré (25–29), Andai (30), Mom (Dec. 1), Warbusi Bay (2), *Mios Waar* (3–4), *P. Roon* (5–6), Wandamèn Bay (7–9), S. coast of *Japen* (11–13), *P. Kurudu* (14–15), Humboldt Bay (18–21; the 19th B. collected an *Acacia*, a *Proteacea*, *Casuarina*, and *Leptospermum*), Gulf of Tanah-Merah (22), N. coast *Japen* (24–26), Andai (27), Bay of Doré (Dec. 29–Jan. 7, 1876).—*1876.* For the first days of Jan. see before; *P. Saunèk Bondé*, S of Waigeo (Jan. 10–12); *Misool*, N. coast (14–15) and S. coast (16–17); *SW. New Guinea:* Gulf of MacCluer (19–23) and *via* Ges(s)er to *Ambon* (arrival 29). B. debarked in this island, went to *Ternate* and according to WICHMANN[7] sailed for Java on March 13, homeward bound; BECCARI himself mentions the 12th as the exact date; back at Florence (June 19). WARBURG in his *Myristicaceae* monograph refers to a plant collected in July 1876 in Ceram; this agrees with the statement of BURKILL,[8] that BECCARI went back to Italy not before July 1876, we doubt however the reliability of the latter references.—*1877.* Embarking at Genoa (Oct. 14) with Capt. Count ENRICO A. D'ALBERTIS (not L.M.!); Bombay, crossing the peninsula from Lahore to Calcutta; *Singapore; NW. Borneo*, Sarawak: Kuching (Dec. 31, staying some days).–*1878.* First days of the year see before; *Singapore* and after Apr. 16 proceeding to Australia (getting acquainted with F. VON MUELLER), Tasmania and New Zealand; in May ? in *Ambon* and *Ceram;* according to BURKILL,[8] BECCARI parted from E. A. D'ALBERTIS at Batavia (acc. to BECCARI Jr at Singapore!), stayed for 2 weeks at Buitenzorg (*W. Java*) and started alone for a final exploration in southern *Sumatra* (the latter statement is incorrect, BECCARI was mainly in *Sumatra West Coast*). Voyage to *Sumatra*:[9] sailing from Batavia (May 28); Bencoolen (S. Sumatra, 30); *W. Sumatra: P. Pisang*, Padang (31); visiting G. Monguiet (= probably monjet, Apenberg); from Padang (June 4) to Padang Pandjang (5); first trip to the Singgalang (8), where he had a hut built; making headquarters there (11); trip to the summit of G. Singgalang (17–19); stay at Ajer Mantjo(e)r (364 m alt.), collecting *Amorphophallus titanum* (Aug. 5) and *Rafflesia arnoldi;* Kaju Tanam (Sept. 5–20), Padang (Sept. 21–Oct. 4); from Pandialman (= Pariaman) to Sungei Balu, Fort de Kock (5), Kota Baru, Ma-

tua, Pajakumbo (7), Hubabang, Balu, Fort v. d. Capellen (10), Lake Singkarak (11), Solok (12), Ajer Bontuku, Padang (back Oct. 13; this trip was no collecting trip, but made with the intention to study the important cultures); embarking (Oct. 22); short time at Bencoolen (*S. Sumatra*); Bangkok (Nov. 10); back at Florence in Italy (Dec. 28). Though some plants of his are cited from Palembang,[10] there is no evidence of him ever having been there.

COLLECTIONS. *Herb. Florence;* duplicates elsewhere, *viz* in *Herb. Kew: Borneo, Sumatra, Ind. Archipelago,* Abessynia, 1872–88, 3428 *nos; Herb. Vienna: Borneo,* 505 *nos; Herb. Berl.:* mosses from *Borneo* (1865), *New Guinea* plants (princ. Arfak Mts 1872, 1875) 74 *nos, Java* (1872, 1875) 74 *nos, Aroe Islands* (1873), *Sumatra* (1878), *Borneo* (1865–68), extensive collection, *Singapore, etc.; Herb. Munich; Herb.* DECAND. (*Geneva*): *Borneo,* 1134 *nos; Herb.* Card. de HAYNALD (= *Budapest*) from *New Guinea; Herb.* LINDEMANN (U.S.S.R.) 11 *nos; Herb. Bog:* some H.B. *nos; Herb. Bot. Gard. Petersburg* (= *Leningrad*) (760); *Herb. Leyden* (several); in *Herb. Brit. Mus.:* 642 *nos* from Abessynia and *Malesia; Herb. Paris* (*Borneo* plants *e.g.* with *Herb.* PIERRE); *Herb.* v. HEURCK (=*Antwerp*): *Borneo* dupl.; *Herb. Monaco; Melbourne; Stockholm; Copenhagen: Borneo.*

The *Borneo* collection consists of 20.000 specimens representing 3300 phanerogams, 800 fruits in spirit and wood samples. BECCARI says in his 'Wanderings, *etc.*' (*cf. l.c.* p. 104, note 1): 'To every plant I collected in Borneo I attached a number corresponding to a catalogue, kept regularly, to which I added notes from time to time. These numbers are attached to all the samples of Bornean plants in my herbarium, or which have been distributed to the herbaria of Kew, Paris, St Petersburg, Vienna, and others. It is for this reason that here, in mentioning a plant, I also give its number the initials P.B. (Plantae Beccarianae)'. *Cf. Addenda.*

Besides his own publications,[11] a lot of articles dealing with his collections were written by various authors.[12]

In *Hort. Bog.:* some living plants from *New Guinea* (*e.g. Araucaria*) (pres. 1876) and several from *Sumatra* (1878).

Though his chief interest was plants, he brought back large collections of animals, human skulls, and ethnographical objects; the zoological collections are in the Museo Civico di Storia Naturale, Genoa, the anthropological and ethnological in the Univers. of Florence.

LITERATURE. (1) O. BECCARI: 'Nelle foreste di Borneo' (Firenze 1902, 2nd ed. 1921); transl. into English: 'Wanderings in the great forests of Borneo' (London 1904).

Map indicating his routes, also in Webbia 5, 1921.

(2) O. BECCARI: 'Nuova Guinea, Selebes e Molucche' (Firenze 1924); several letters in various periodicals, *e.g.* in Boll. Soc. Geogr. Ital. 1872–74; *cf.* also 'E viaggio del Dott. O. BECCARI' commentati da H. GIGLIOLO in Nuova Antologia 1872–76; Ausland 47, 1874, p. 214–215.

Some dates mentioned in his book do not correspond with those of L. M. D'ALBERTIS.

For map indicating his routes *cf.* Webbia 5, 1921.

(3) O. BECCARI: 'Sulle Fiora delle isole Aru' (Nuov. Giorn. Bot. Ital. 5, 1873, p. 330).

(4) *cf.* Cosmos 2, p. 92 seq. and Dutch transl. in Tijdschr. K.N.A.G. 1, 1876, p. 199–204; map indicating his route in Webbia 5, 1921.

(5) O. BECCARI: 'Esplorazione dei Monte Arfak' (Boll. Soc. Geogr. Ital. 13, 1876, p. 35–37).

(6) O. BECCARI: 'Viaggio a bordo del trasporto olandesa "Soerabaja"' (Cosmos (di Guido Cora) 3, Torino 1875–76, p. 220–221, 349–359, 364–379).

C. M. KAN: 'De reis der "Soerabaja" naar Nieuw Guinea, Nov. 1875–Maart 1876' (Tijdschr. K.N.A.G. 2, 1877, p. 175–189).

Rapport (= report) in Jaarb. Kon. Ned. Zeemacht 1875–76, 's-Gravenhage 1877, p. 333–355.

P. J. B. C. ROBIDÉ VAN DER AA: 'Reizen naar Ned. Nieuw-Guinea ... in de jaren 1871, 1872, 1875–76, *etc.*' ('s-Gravenhage 1879), *cf.* p. 211–342.

Map indicating his route in Webbia 5, 1921.

(7) *cf.* WICHMANN, Entd. Gesch. N. G., in Nova Guinea 2, p. 216.

(8) *cf.* Journ. Str. Br. Roy. As. Soc. *no* 83, 1921, p. 166.

(9) *cf.* Lettera del Prof. O. BECCARI a GIACOMO DORIA, Sumatra, Sept. 8, 1878, in Ann. Mus. Civ. St. Nat. Genova 13, 1878, p. 451–455; Webbia 5, 1921, p. 29–34.

N. BECCARI: 'O. BECCARI in Sumatra e la scoperta dell' Amorphophallus Titanum' (diary, publ. after his death by his son NELLO in Boll. R. Soc. Geogr. Ital. ser. 6, 7, p. 569).

(10) *cf.* ENGL. Bot. Jahrb. 44, 1910, Beibl. 101, p. 28.

(11) Author of 'Malesia' I–III (1877–90); many systematic papers, principally dealing with palms, ferns and *Lycopodiaceae* in Webbia, ENGL. Jahrb., Nuov. Giorn. Bot. Ital. and Malpighia; illustrations of new plant species from *Borneo* in Nuov. Giorn. Bot. Ital.; 'Beitr. z. Pflanzengeographie des malayischen Archipels' (ENGL. Bot. Jahrb. 1, 1881, p. 25–40); 'Plantes à Fourmis de l'Archipel Indo-Malais et de la Nouvelle Guinée' (Arch. Ital. Biol. 6, fasc. 3, 1885); *cf.* Bibliogr. in Webbia 5, pt 1a, 1921, p. 52–61.

(12) P. ASCHERSON: 'Plantae phanerogamae marinae, quas O. BECCARI in arch. indico annis 1866–67, et in mari Rubro annis 1870 collegit, enumeratae' (Firenze 1871).

E. HAMPE: 'Musci in insulis Ceylon et Borneo a BECCARI lecti' (Nuov. Giorn. Bot. Ital. 4, 1872, p. 273–278).

V. CESATI: 'Felci e specei nei gruppi affinis raccolte a Borneo dal Signor ODOARDO BECCARI' (Att. Accad. Sci. Fis. Math. Napoli 7, 1876, *no* 8); 'Prospette delle Felci raccolte dal Sign. O. BECCARI nella Polinesia, durante il suo secondo viaggio d'esplorazione in quei mari' (Rend. R. Accad. Sci. Fis. Math. Napoli, Febr. 1877, 9 pp.).

F. VON MUELLER in 'Descr. Nat. Pap. Pl.' pt 5.

V. CESATI: 'Mycetum in itinere Borneensi lec-

torum a cl. OD. BECCARI' (Atti Accad. Napoli 8 (1878), 1879, p. 1–28, *t.* 1–4).

A. VON KREMPELHUBER: 'Lichenes quos legit O. BECCARI in insulis Borneo et Singapore' (Nuov. Giorn. Ital. 7, 1875, p. 5–67, pl. 1–2).

C. DE NOTARIS: 'Epatiche di Borneo raccolte dal Dre O. BECCARI nel ragiato di Sarawak, durante gli anni 1865–66–67' (Mem. Acad. Sci. Torino 1876, p. 267–308, 35 pl.; Nuov. Giorn. Bot. Ital. 8, 1876, p. 217–251).

A. ENGLER: 'Araceae, specialmente Bornensi e Papuane raccolte da O. BECCARI' (Boll. Soc. Tosc. Ort. 1879, p. 265–271, 295–302).

H. BAILLON: 'Stirpes exoticae novae' in Adansonia vol. 11 (1873–76) and 12 (1876–79) (referring to several Borneo plants collected by BECCARI).

C. BAKER: 'On a collection of ferns made by Dr BECCARI in western Sumatra' (Journ. Bot. 1880, p. 209–217).

H. SOLMS-LAUBACH: 'Über die von BECCARI auf seiner Reise nach Celebes und Neu Guinea gesammelten Pandanaceae' (Ann. Jard. Bot. Buit. 3, 1883, p. 89–104, pl. 16).

U. MARTELLI: 'Compositae Beccarianae' (Nuov. Giorn. Bot. Ital. 15, 1883, p. 281–305).

R. H. C. C. SCHEFFER in Ann. Jard. Bot. Buit. 2, 1885, p. 1–31.

H. G. REICHENBACH: 'ODOARDO BECCARII novitae orchidaceae papuanae describuntur' (Bot. Centr. Bl. 28, 1886, p. 343–346).

K. SCHUMANN: 'Sterculiaceae Beccarianae' (ENGL. Bot. Jahrb. 24, 1897, Beibl. 58, p. 14–21).

Mosses by A. GEHEEB in Bibl. Bot. Heft 44, 1898.

G. BARGAGLI-PETRUCCI: 'Sulla struttura dei legnami raccolti in Borneo del dott. O. BECCARI' (Malpighia 17, 1903, p. 280–296, 24 pl. and *l.c.* p. 327–330, 361–363, 365).

M. DUBARD: 'Description de quelques types nouveaux ou peu connus de Sapotacées (Illipées) d'après les documents de L. PIERRE' (Bull. Mus. Hist. Nat. Paris 14, 1908, p. 405–409).

F. KRÄNZLIN on orchids collected by BECCARI in Pflanzenreich; corrections on it by R. SCHLECHTER in FEDDE Repert. 9, 1911, p. 286–287.

R. SCHLECHTER: 'Orchidaceae novae Beccarianae' (Notizbl. Berl. Dahl. 8, 1921, p. 14–20).

CH. CHRISTENSEN: 'Revision of the Bornean and New Guinean ferns collected by O. BECCARI and described by V. CESATI & J. G. BAKER' (Dansk Bot. Arkiv 9, 1937, p. 33–52).

Also in 'Beitr. z. Flora Papuasiens' (ENGL. Bot. Jahrb. 1912 →); WARBURG, Monsunia; and in Nova Guinea vol. 8, pt 3.

BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 1903, p. 160, *t.* 31; *l.c.* 2, 1905, p. 175; Kew Bull. 1920, p. 369–370; Nuov. Giorn. Bot. Ital. N.S. 28, 1921, p. 1–35, w. portr. + bibliogr.; Ann. Mus. Civ. Storia Nat. Genova ser. 3, vol. 9. 1921, p. 242–297; Webbia vol. 5, parte 1a, 1921, including maps indicating his routes, list of publications + portr.; L'Agricultura Coloniale 14, p. 449; Journ. Str. Br. Roy. As. Soc. *no* 83, 1921, p. 166–173; Ber. D.B.G. 39, 1921, Gen. Vers. Heft p. (56)–(87), w. portr.; Firenze (M. RICCI) 1921, 66 pp.; Bot. Jahresber. 1921, ref. 202; BACKER, Verkl. Woordenb., 1936.

Becher, Harry Macdonald

(born in India; Sept. 16, 1893, in a flood, when exploring towards G. Tahan, Malay Peninsula), got his education in London and at Heidelberg (Germany) as a mining engineer. From 1879–82 in Sarawak (NW. Borneo), Mining Engineer to Borneo Co. Ltd. About 1886 in charge of Pingtu Gold Mines in Shantung, China; subsequently Consulting Engineer to the Punjom Mining Co., coming on to Singapore, and soon starting the firm of BECHER, LOUIS & Co.

The genus *Becheria* RIDL. was named after him.[1]

COLLECTIONS. He collected a little about Kuala Tembeling, Pahang, *Malay Peninsula*, in *1893* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

LITERATURE. (1) *cf.* Journ. Str. Br. Roy. As. Soc. *no* 61, 1912, p. 20.

BIOGRAPHICAL DATA. Sarawak Gazette 23, 1893, p. 171 (copied from Straits Times and Free Press).

Beck, A., *cf. sub* Forest Research Institute, Buitenzorg.

Beck, H. J. L., *cf. sub ditto.*

Becker

plants of him, collected in the *D.E. Indies*, in *Herb. Breslau.* Nothing is known to me of a collector of that name. Possibly *ex Herb.* J. BECKER.

Becker-la Rivière, Mrs H.

previously Miss LA RIVIÈRE (see there, *sub* R).

COLLECTIONS. *Herb. Bog.:* 26 seaweeds from *Noesa Kambangan* (isl. S of Centr. Java) in *1928*, and a specimen of *Sterculia macrophylla* VENT. (pres. *1930*).

Becking, Johannus Hendrikus

(1890, Soerabaja, Java; x), studied forestry, and took his degree at Wageningen, Holland; in 1913 appointed Forest Officer in D.E.I. Govt Service, as such stationed principally in the teak districts of Java;[1] in 1930 appointed Head of the Division of Commerce of the 'Djatibedrijf' (= Teak Forest Administration), in 1933 Head of the Forests in Java and Madoera (excl. the teak forest administration), since 1936 Chief Inspector of the D.E.I. Forest Service; in 1946 appointed Professor at the Agricultural College at Wageningen.

He did much collecting in mangrove forests in which he was especially interested.[2]

He is commemorated in *Agathis beckingi* M.DR.

COLLECTING LOCALITIES. *1920. Bali* (*Lesser Sunda Islands*) (March–April), *e.g.* at Boeleleng, Prapatagoeng, Tjandikesoema and Djembrana; *W. Borneo:* Palo, Sambas (July); *E. Java:* Besoeki, Pangpang Bay *etc.* (Sept. 24–Oct. 23).—*1928. Centr. Java:* in teak forest near Blora.

COLLECTIONS. *Herb. Bog.:* 140 *Bali nos* (ranging between 1 and 175), 77 *Borneo nos* and coll.

from *E. Java* (probably each collection numbered anew, from Besoeki at least a *no* 8); ± 180 *nos* from teak forests; also in *Herb. For. Res. Inst. Buitenzorg*.

LITERATURE. (1) Author of 'De djaticultuur op Java. Verschillende verjongingsmethoden van den djati op Java' (Wageningen 1928, Meded. Proefstat. Boschwezen *no* 22).

(2) J. H. BECKING, L. G. DEN BERGER & H. W. MEINDERSMA: 'Vloed- of mangrove-bosschen in Ned. Indië' (Tectona 15, 1922, p. 561–611).

Beckl, Dr

COLLECTIONS. *Herb. Utrecht: Philippine plants.* As we did not meet with the same name anywhere else, it is supposed that the name was misread for BEHR (see there).

Beekman, *cf. sub* Forest Research Institute, Buitenzorg.

Beem, van, *cf. sub ditto.*

Been

A plant collected by him in *Halmaheira* (*Moluccas*) at Tabèlo, is numbered in the H.B. series, *Herb. Bog.* (coll. 19th century).

Begemann, Herman

(1893, Gantoeng, Billiton; 1942, Deventer, O., Holland), entomologist who took his degree in 1924 at Utrecht University; 1924–28 employed by the Malang Experiment Station; subsequently Adviser of the 'Internatio', stationed at Semarang. From 1938 till his death teacher at the Agricultural School at Deventer (Holland).

COLLECTING LOCALITIES. South of *E. Java: P. Sempoe* with F. W. WENT (see there) (Oct. 6, *1928*).

COLLECTIONS. *Herb. Bog.*

BIOGRAPHICAL DATA. Vakbl. Biologen 23, 1942, p. 49–50.

Begemans, K. A.

In the annual report of the garden at Buitenzorg for *1898* is mentioned a *Cirrhopetalum* from *Billiton*, sent by him. With a view to the birth-place of H. BEGEMANN (see above), it seems possible that the name rightly should be BEGEMANN, if so, the person involved may have been the father of the former.

Beguin, Victor M. A.

(1886, Amsterdam, Holland; July 20, 1943, Java, executed by the Japanese), planter in Java, 1904–19; collector employed by the Museum and Inquiry Office for Economic Botany (Buitenzorg) under K. HEYNE in 1919–23, and as such making extensive travels in the Dutch East Indies; since 1923 planter again, finally on Soeka Ati Estate near Bandoeng.

Many plants were named after him.

COLLECTING LOCALITIES. *1906. W. Java:* Buitenzorg Bot. Gardens (Jan. 22–23); *E. Java:* Djember.—*1919. Kangean Archipelago*, with C. A. BACKER (March 13–May 19) in order to learn the practice of plant collecting, BEGUIN probably staying for some time after that. *Sumatra East Coast:* Bengkalis and environs (end of Aug.–Nov.).—*1920. N. Celebes:* Manado Res. (Febr.–Apr.) and *Borneo:* Balikpapan (March–Apr.); *Moluccas* (since Oct.).—Oct. *1920–23. Moluccas: Ternate, Tidore,*



BEGUIN

Halmaheira (Galela and Weda) and surrounding islands.—*1924. W. Java:* Mandalagiri, G. Papandajan; *Centr. Java:* Soerakarta.—*1925. W. Java:* Garoet.—*1926. W. Java:* Priangan Res., Garoet; *Centr. Java:* Bojolali and Pekalongan.—*1927. W. Java:* Tjisoerian near Tjikadjang (May); Tjisoerian near Garoet (end of Aug.); Kawah Kamodjan, G. Papandajan, Priangan Res.; *Centr. Java:* Pekalongan, G. Merapi.—*1929. E. Java:* Idjen Plateau (March 2).—*1937. W. Java:* Priangan Residency.

COLLECTIONS. *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam:* 151 *nos* from the Buitenzorg Bot. Gard. and from Djember (*E. Java*), coll. 1906. Excellent collections in *Herb. Bog.: Kangean* 226 *nos, Sumatra nos* 227–593, *Celebes* 53 *nos, Borneo* 39 *nos;* taking it roughly the numbering of the *Moluccas* collection is: *Ternate nos* 594–1717, Galela (*N. Halmahera*) 1718–2319, Weda (*S. Halmahera*) 2320–2360; a few *Java* plants. In *Herb. For. Res. Inst. Buitenzorg* (with original labels). *Herb. Pasoer.: Java* plants coll. 1924–27 (for C. A. BACKER), *e.g.* from Tjisoerian *nos* 64–90 (dupl. in *Herb. Bog.*), 185 *nos* from Tjikadjang; in all 282 *nos* including some duplicates from former collections. *Herb.*

Utrecht: dupl. from *Sumatra* (1919); *Herb. Leyden:* dupl. *Moluccas* (coll. 1920–23). Living plants from *Ternate etc.* in *Hort. Bog.*

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Behaghel, G.

a resident of Palele(h) in *N. Celebes*, sent a collection of orchids to the Buitenzorg Botanic Gardens in *1901*.

COLLECTIONS. *Hort. Bog.;* a new species, described by J. J. SMITH,[1] preserved in *Herb. Bog.*

LITERATURE. (1) In Icon. Bogor. 2, 1903, p. 92–93.

Behr

is mentioned by MERRILL as cited in literature as a collector of plants in the *Philippines* (*cf.* Bull. Bur. of Agr. Manila *no* 4, 1903, p. 30).

Herb. Utrecht: plants of Dr BECKL from the *Philippine Islands*. As this name is unknown to us, it is supposed that the collector is BEHR, and *not* BECKL.

Beij . . ., *cf.* **Bey . . .**

Bélanger, Charles Paulus

(1805, Paris, France; 1881, St Pierre, Martinique), sailed for India charged by the French Colonial Department, to establish a Botanic Garden at Pondicherry.[1] After a long journey he reached his destination in 1826, from where making trips to Pegu and Java. At Buitenzorg he obtained permission to take with him all the plants he wanted from the Botanic Garden there. Sailing round Africa, he was back in France in 1829. In 1853 he was appointed Director of the Botanic Garden at Saint-Pierre, staying in Martinique till his death.

Several species of ferns and the genus *Belangera* CAMBESS. were named after him.

COLLECTING LOCALITIES. *1828. W. Java:* Bantam and Buitenzorg, *P. Merak*, and environs of Batavia.

COLLECTIONS.[2] In total 5400 species. In *Herb.* DELESS. (*Geneva*); *Herb. Paris; Herb. Berl.:* cryptogams from *East India, Java* and Bourbon, totally 149 *nos* (pres. 1890); *Herb. Florence: Java* and *Sunda Islands; Herb. Kew:* coll. of CH. J. (probably printer's error) BÉLANGER (pres. 1863); *Herb. Bot. Gard. St Petersb.* (= *Leningrad*): *Plantae ex India orientali; Herb. Leyden: Java* and *Sunda Islands* (1828).

The collections were partly dealt with by BÉLANGER himself and others.[1]

He made zoological collections too.

LITERATURE. (1) CH. P. BÉLANGER: 'Voyage aux Indes-orientales, par le nord de l'Europe, les provinces du Caucase, la Géorgie, l'Arménie et la Perse pendant les années 1825–29; publié sous les auspices des ministres de la marine et de l'intérieur' (Paris, 1831–54, 4 vols; vol. 1–2 Historique, vol. 3 Zoologie, vol. 4 Botanie + 3 atlases) (for exact dates see SHERBORN & WOODWARD in Ann. Mag. Nat. Hist. ser. 7, 7, 1901, p. 390 and *l.c.* 8, 1901, p. 494, and SHERBORN in Ind. Anim. 1, 1922, p. xxii. *cf.* Extract in HOOK. Comp. Bot. Mag. 1, 1835, p. 285–288.

(2) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 150–153.

BIOGRAPHICAL DATA. URBAN, Symb. Ant., 3, 1902–03, p. 20; BACKER, Verkl. Woordenb., 1936.

Belcher, Sir Edward

(1799, ? ; 1877, London, England), in the Naval Service as early as 1812; in later years in command of several expeditions, some of which operating in the territory dealt with in this publication. In 1852–54 he conducted an expedition in search of J. FRANKLIN. He was knighted in 1843, became K. C. B. in 1867, and Admiral in 1872.

ITINERARY. *Voyage in H.M.S. 'Sulphur', 1835–42.*[1] *cf. sub* HINDS.—*Voyage in H.M.S. 'Samarang', 1843–46.*[2] Sailing from Spithead (Jan. 26, *1843*), *via* the Cape of Good Hope, through Sunda Straits, touching *W. Java:* Anjer (June 11) and *Singapore* (19–25) and proceeding to *NW. Borneo:* Sarawak, Kuching and Brunei; Hongkong (Sept. 4); *Philippines: Luzon,* Manila (March 16–Apr. 1, *1844*), Samboanga (= Zamboanga, part of *Mindanao*) and *Sooloo* (= *Sulu*) *Islands; N. Celebes: Manado Tua Isl.* (May 18), Manado (19–25); May 26 sailing for *Ternate* (arrival June 1); *Singapore* (June 28–Aug. 4); *NW. Borneo:* Santubong, Sarawak, Ling(g)a River, Lundu River, *Labuan, Brunei; Philippines: Luzon,* Manila (Nov. 14); *E. coast* of *Borneo* (S. Kajan and Beraoe) (Dec. *1844*–Jan. *1845*); *Philippines: Sulu Islands, Luzon* (Manila); Japan and China; *Philippines* (between Nov. *1845*–March *1846* visiting *Batan, Luzon, Isl. Luban, Apo Isl.*, one of the *Calamianes, Mindoro, Ylin,* the *Cagayanes*, and Zamboanga in *Mindanao*); *N. Borneo: Balambangan, Labuan* and Sarawak; *Singapore; W. Java:* Anjer (July 8–16, 1846); Keeling Islands; *via* the Cape of Good Hope and St Helena, back to Spithead in 1846.

COLLECTIONS. *Herb. Kew:* from the Arctic regions (pres. 1847). It is not known to the present author from which expedition this collection originates, but it seems probable that the plants were collected during the voyage of the 'Samarang' as his Arctic expedition took place in 1852–54. A. ADAMS (see there) was Assistant Surgeon and Naturalist during the voyage of the 'Samarang'.

LITERATURE. (1) Capt. E. BELCHER: 'Narrative of a voyage round the world performed in H.M.S. Sulphur during the years 1836–42' (Londen 1843, 2 vols).

(2) Capt. E. BELCHER: 'Narrative of the voyage of H.M.S. Samarang, during 1843–46; employed surveying the islands of the Eastern Archipelago, *etc.*' (London 1848, 2 vols).

BIOGRAPHICAL DATA. Tijdschr. K.N.A.G. 2, 1877, p. 390; Encyclop. Brittann.

Belford, George

son of a high chief of Samoa and an Irish woman; at one time dweller on the Hunter River, then in Australian pilot service; he drifted to New Guinea, was a digger, a carrier of goods from Buna Bay to the Yodda, and one of Sir W. MACGREGOR's most

trusted men. He accompanied many New Guinea expeditions.

ITINERARY. *SE. New Guinea, Papua. 1883.* With the *'Argus' expedition* (*cf. sub* W. E. ARMITT).—*1884.* With the *Expedition of the 'Age'*,[1] Melbourne, leader G. E. MORRISON (naturalist C. STEWART): little way up the Goldie River, assaulted by the natives and return to Port Moresby.—*1887.* March from Sogeri to Eaha on the Brown River.[2] In October he accompanied H. O. FORBES (see there) on an expedition having for its object the sources of the Goldie River.—*1889.* Accompanying Sir W. MACGREGOR (see there) on the *expedition to Owen Stanley Range* (May–June) and *ditto* on a journey to the Fly River (Nov. 1889–Febr. *1890*).—*1890.* For the first months, see before. In Nov. with W. MACGREGOR to the Mekeo District (St Joseph River); BELFORD proceeded on this expedition[3] after the departure of MACGREGOR to Port Moresby: climbing the SW. slope of Mt Drew (Dec. 8) and the summit of Mt Yule (7500 ft, *via* the SE. slope); *via* Amo-Amo back to Mekeo Station (Jan. 3, *1891*); return journey to Port Moresby (7–10).—*1906.* With the *expedition of the Royal Commission etc.* (*cf. sub* Col. J. A. K. MACKAY).

COLLECTIONS. He collected on Astrolabe Range.[4] The plants from Mt Yule were described by F. VON MUELLER;[5] no collector is mentioned, but probably BELFORD directed the collecting assisted by other participants. On the latter mountain cryptogams were collected too.[6]

LITERATURE. (1) *cf.* Ann. Rep. Br. N.G. for 1897/98, Vict. 1899, p. 1 and 2.

(2) *cf.* W. MACGREGOR in *l.c.* 1897/98, Brisbane 1898, p. xii.

(3) For this expedition under the auspices of the Vict. Br. Roy. Geogr. Soc. Australia see Ann. Rep. Br. N.G. for 1890/91, Brisb. 1892, p. xiii, 19, 21–24, 34–42; Proc. Roy. Geogr. Soc. N.S. 13, 1891, p. 229, p. 430–431.

(4) *cf.* F. VON MUELLER, Descr. Not. Pap. Pl., pt 6.

(5) In Journ. Bot. 29, 1891, p. 176–178 and *l.c.* 30, 1892, p. 17–18; *cf.* also Gard. Chron. 9, 1891, p. 648.

(6) F. STEPHANI: 'Hepaticarum spec. nov.' (Hedwigia 33, 1894, p. 134–155).

V. F. BROTHERUS: 'Some new Australian Mosses described' (Öfv. Finska Vet. Soc. Förh. 37, 1894/95, p. 160).

BIOGRAPHICAL DATA. Portr. in Ann. Rep. Br. N. G. 1897/98, Vict. 1899, pl. 19.

Belgrave, T. B.

an Australian physician who was interested in the scientific exploration of *New Guinea*, in which island he collected *about 1887.*

Eupomatia belgraveana F.v.M. was named after him.

COLLECTIONS. *Herb. Kew* and *Melbourne.*

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Bell, E. D.

COLLECTIONS. *Herb. Kew: Malacca* plants (*1883*).

Bell, L. M.

Municipal Engineer, George Town, Penang (1904–20), and a member of the Committee for the management of the Waterfall Gardens, Penang; collected with HANIFF on Kedah Peak in March *1911*, climbing from Gurun upon the landward side (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. In *Herb. Sing.*

Bell, V. G.

Assistant Conservator of Forests, F.M.S. (1912 – . .), since 1921 Conservator of Forests, Kedah, collected plants from Kedah (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Sing.*

Bell, F. de, *cf. sub* Forest Research Institute, Buitenzorg.

Bemmel, J. H. van, *cf. sub* Forest Research Institute, Buitenzorg.

Benecke, Franz F.

(1857, Berlin, Germany; 1903, Berlin, Germany), studied botany in Germany; since 1889 employed by the Semarang Sugar Experiment Station, in 1890 appointed Director of the said institution. In 1893 the Experiment Station was transferred to Bojolali and discontinued in 1894; subsequently BENECKE got a situation in Brazil. In 1895 he returned to Berlin, mentally unfit for intellectual work.

Isachne beneckei HACK. was named after him.

COLLECTIONS. DE WILDEMAN mentions *Algae* from Semarang and Klaten, *Centr. Java*, collected by BENECKE. 2 *Java* grasses in *U.S. Nat. Herb. Wash.*

BIOGRAPHICAL DATA. Ber. D.B.G. 21, 1903, Gen. Vers. Heft p. (23)–(31), incl. bibliogr.; BACKER, Verkl. Woordenb., 1936.

Bennekom, W. A. O. van

collected *Selaginella opaca* WARB. on G. Pangrango (*cf.* ALSTON in Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1935, p. 438).

COLLECTIONS. The above-mentioned plant and phanerogams too, in *Herb. Leyden.*

Bennett, Frederick Debell

brother of GEORGE BENNETT (see below), accompanied the voyage round the world in the 'Tuscan', 1833–36,[1] under command of Capt. F. R. STAVERS. His special object was the study of the mode of life and the anatomy of whales.

ITINERARY. *Voyage in the 'Tuscan', 1833–36.*[1] Leaving England (Oct. 17, 1833); sailing *via* Madeira, round Cape Horn, Juan Fernandez, Pitcairn Isl., Society Islands (Tahiti, Raiatéa); making a cruise to the northward; Sandwich Islands, Duncan's Isl., Marquesas Islands, Society Islands, Carolines, Christmas Isl. (North Pacific Ocean); making a long cruise, and returning to the Sandwich Islands; Lobos Islands; Cape St Lucas (California); Marquesas Islands, Society Islands; on the

homeward voyage anchoring in the S(o)utran(h)a Bay (*Port. Timor*) (July 18–22, *1836*), and sailing *via* the Cape of Good Hope and St Helena; back at Gravesend (Nov. 27, 1836).

COLLECTIONS.[2] *Herb. Berl.:* siphonogams from *Timor* and Christmas Island (Pacific, 2° 0′ N, 157° 20′ W); in 1842 Berlin bought 2060 *nos* collected by F. D. BENNETT from the *Herb.* A. B. LAMBERT, London, partly originating from B.'s journey around the world.

In the cited list[2] 45 species from *Timor*, and many from elsewhere, are enumerated.

LITERATURE. (1) F. D. BENNETT: 'Narrative of a Whaling Voyage round the Globe, from the year 1833 to 1836. Comprising sketches of Polynesia, California, the Indian Archipelago, *etc.* with an account of the southern Whales, the Sperm Whale fishery and the Natural History of the climates visited' (London 1840, 2 vols).

(2) *cf.* Botany in the 'Narrative' *l.c.* vol. 2, p. 327–395: 'A descriptive catalogue of the plants collected during the Tuscan's voyage', in which several details are given on the use by the natives.

Bennett, George

(1804, Plymouth, England; 1893, Sydney, Australia), studied medicine, visited Ceylon in 1819, and was appointed Surgeon of a vessel sent out on an exploring expedition, during which Australia was visited; before the return voyage to England some parts of the Malaysian region and China were touched.[1] In 1836 he finally settled in New South Wales, being in practice at Sydney for many years. At intervals of disengagement from professional duties, he made botanical and zoological excursions in the interior of the Colony of N.S.W., *etc.*[2] He took his medical degree at Glasgow in 1859.

Flindersia bennettiana F.v.M., *Eupomatia bennettii*, and other plants were named after him.

ITINERARY. *Philippines: Luzon*, near Cavite (*1830*); various trips in Australia; sailing from Sydney (March 14, *1833*) to *W. Java:* Batavia (May 21–June 1); *NE. Sumatra:* Pedir Coast (July 1–mid-Aug.); *Singapore* (Aug. 19–21); China and Macao; *Singapore* (Nov. 26, arrival), making a trip inland to an estate, to *St John's Isl.* and *P. Panjang* (= *Long Isl.*); Dec. 15 leaving for England *via* the Cape.[1]

COLLECTIONS. Probably only a few plants from the *Malaysian region.* In *Herb. Kew:* from Australia (pres. 1853, *etc.*); *Herb. Brit. Mus.:* Australian plants; *in Herb. Linn. Soc. Lond.:* from N. Zealand, Tahiti *etc.*

LITERATURE. (1) G. BENNETT: 'Wanderings in New South Wales, Batavia, Pedir Coast, Singapore and China during the years 1832–34' (London 1834, 2 vols).

(2) G. BENNETT: 'Gatherings of a naturalist in Australasia; being observations principally on the animal and vegetable productions of New South Wales, New Zealand, and some of the austral islands' (London 1860).

BIOGRAPHICAL DATA. Proc. Linn. Soc. N.S.W. 18, 1893, p. 542–543; Proc. Linn. Soc. 1893/94, p. 27–28; Journ. Bot. 32, 1894, p. 191; Mrs BENNETT published a pamphlet for private circulation, including notes on his botanical labours; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 36, 1898, p. 102, and in 2nd ed. by RENDLE, 1931; MAIDEN in Journ. & Proc. Roy. Soc. N.S.W. 42, 1908, p. 84.

Bensbach, Jacob

Resident of Ternate, Moluccas, who made several tours of inspection in the eastern part of the Dutch East Indies; he made collections of living plants.

ITINERARY.[1] *Dutch New Guinea. 1889.* Put into Wandamèn Bay (end of July) in the 'Havik', to get satisfaction for the menacing attitude of the natives of the Geelvink Bay; before the arrival of the auxiliary troops (Dec. 8), he made a trip to Ansus (S. coast of *Japen*); Dec. 22 sailing along the W. coast of the Geelvink Bay and going ashore at Wèndesi, *P. Ro(ö)n*, Doré Bay (Jan. 5–11, 1890), leaving the 12th for *Ternate.—1890.* For Jan. see before. Embarking on the 'Raaf' (end of May);[2] Dobo (*P. Wamar, Aroe Isls*), sailing on June 9th; *P. Adi* (11), S. point of *Namatote*, Koningin Sophie Strait, discovery of Java Bay and Raaf Bay; Bitjura Bay, Kaimana Bay; *P. Adi* (30); *Ambon* (July 2). End of July for some days in Geelvink Bay in the 'Raaf' and in Oct. in the 'Havik' to Wandamèn District.—*1892.* In the 'Zeemeeuw' to the *W. and S. coast of New Guinea* (Apr.–May):[3] Gulf of MacCluer (Rumbati and Patipi), kp. Baru (Tagar Tuping) in Kapaúr District, *P. Karas.* Trip to the *Papua Islands* and the *N. coast of New Guinea* (Oct. 10–Nov. 18): *Waigeo(u), Waigama, Miso(ö)l, Salawati* and along the N. coast of New Guinea as far as Humboldt Bay; Ansus (S. coast of *Japen*); Doré. In Dec. in the 'Zeemeeuw' to Java Creek, Wenerika (*S. coast New Guinea*).—*1893. Ambon* (Febr. 12) and from there to *Thursday Island* for boundary negotiations with Sir W. MACGREGOR;[4] discovery of the Bensbach River; March 5 leaving on the return journey.

COLLECTIONS. *Hort. Bog.:* plants from *New Guinea* and *P. Tata* (*Obi Group*) (pres. 1889); probably various other consignments, coming from him, inserted under ANONYMOUS.

LITERATURE. (1) *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea, under the respective years.

(2) *cf.* Koloniaal Verslag for 1891, p. 21–23.

(3) *cf. l.c.* for 1893, p. 28.

(4) *cf.* Ann. Rep. Br. N.G. for 1892/93, Brisb. 1894, p. 20–21.

Bense, Hendrik Lodewijk

(1868, The Hague, Holland; 1945, The Hague, Holland), from 1888–91 officer in the D.E. Indian army, pensioned off with the rank of Colonel. He is the discoverer of *Vittaria bensei* v.A.v.R. in the Preanger Regencies (= Priangan Res.), *W. Java*, in *1906* (*cf.* BACKER, Verkl. Woordenb., 1936). The said specimen in *Herb. Bog.*

Benthem Jutting, Woutera Sophie Suzanna van

(1899, Batavia, Java; x), malaco-zoologist, a schoolteacher who studied natural history at Am-

sterdam from 1918–24; in 1920 appointed Assistant, later Curator of the Zoological Museum, Amsterdam; Febr. 1930–April 1932 temporarily stationed at the Buitenzorg Museum specially charged with the identifying of the malaco-zoological collection; after return in Europe in her old position again. In 1945 she married P. J. VAN DER VEEN, biologist, but is still on the staff of the Museum.

COLLECTIONS. *Herb. Bog.: Balanophora globosa* from G. Wajang, Priangan Res. in *W. Java* (Febr. 22, *1931*); occasionally *Fungi* for *Herb. Bog.*

Berck

is mentioned by Miss KOSTER (*cf.* Blumea 1, 1935, p. 472) as the collector of *Adenostemma lavenia, s.n.*, at Tjiloear near Buitenzorg. Probably misread for BURCK (see there).

Berg, Johannes van den

(1876, Vierlingsbeek, N.Br., Holland; 1940, Tilburg, N.Br., Holland), a missionary in the Kai Islands from Sept. 1907–June 1927. He was stationed in Klein Kai (= Noehoerowa), respectively at Langgoer, Namar and Ohoideertoetoe. Since 1921 he made tours to SW. New Guinea and the Tanimber Islands.

COLLECTIONS. *Herb. Bog.: 9 nos* of fodder grasses from the *Kai Islands.*

Berger, Louis Guillaume den

(1881, Batavia, Java; 1945, Nijmegen, Gld, Holland), chemical engineer, educated at the Technical College, Delft, Holland, where he took his degree in 1915; in 1905 appointed Assistant at the Experiment Station for Rice *etc.* at Buitenzorg; in 1917 placed at the disposal of the Director of the Forest Research Institute there, in 1918 wood-technologist, and in 1925 Chief of the division Technology of the same institution;[1] in 1928 appointed Director of the General Experiment Station for Agriculture (Buitenzorg), holding this post until his retirement in 1931.

Agrostophyllum denbergeri J.J.S. was named after him.

COLLECTING LOCALITIES. *1916. Centr. Java:* Selo (Oct. 30), G. Merapi.[2]—*1917. Centr. Java:* teak forest at Balapoelang (Tegal) and Padoeraksa (resp. Apr. 13 and 15); teak forest Krandang (Oct.); *W. Java:* Maroenda; Tandjong Priok (Nov. 12); G. Karang and Klappanoengal (Dec. 23).—*1918. Centr. Java: Noesa Kambangan* (Febr. 7–9); *W. Java:* G. Tjibodas, Tjampea (Aug. 3–4); *E. Java:* N. slope G. Wilis (Aug.); *W. Java:* Geger Bintang and Tjibeureum (Gedeh) (Sept.); *Centr. Java:* Soebah (Oct.); G. Slamat (Nov.); G. Linggapada (Margasari) (Nov. 2); Pekalongan; *E. Java:* Madioen and Kediri.—Besoeki (*19 . .*).—*1919. W. Java:* G. Malabar and Tjinjiroean (Aug. 27–Sept. 1).—*E. Java:* Kediri (*1920*); *W. Java: Meeuwen Isl.* (May 21, *1921*); *W. Borneo:* Sambas (*c. 1924*); *SE. Borneo* (*1925–26*).[3]

COLLECTIONS. *Herb. Bog.:* > 782 *nos* (*Java* + 4 *nos Noesa Kambangan*). He collected a hundred plants from the teak forests for BEUMÉE (see there), numbered in the latter's series (2921–2976) and besides bearing private numbers, *viz* 395–496. In *Herb. For. Res. Inst. Buitenzorg*: from *Java* (1917–18) and *Borneo* (1924–26).

LITERATURE. (1) He is the author of: 'Houtsoorten der cultuurgebieden van Java en Sumatra's Oostkust' (Meded. Proefstat. Boschw. *no* 13, 1926 + atlas).

(2) Dr L. G. DEN BERGER: 'Een uitstapje naar de Vorstenlandsche vulkanen' (Trop. Nat. 6, 1917, p. 100–105, 117–123, 129–134, 9 fig.).

(3) Typed report on a trip in SE. Borneo (Oct.–Nov. 1925) in For. Res. Inst. Buitenzorg.

BIOGRAPHICAL DATA. Tectona 24, 1931, p. 937–938; Landbouw 7, 1931/32, p. 157–159; BACKER, Verkl. Woordenb., 1936.

Berger, W. den

COLLECTIONS. *Herb. Bog.: Dendrobium pseudocalceolum* J.J.S. from the neighbourhood of the Geelvink Bay in *Dutch N. New Guinea* (*1905–06*).[1]

According to BURKILL,[2] in 1906 also collecting on the Arfak Mts. Living orchids to *Hort. Bog.*, collected between Geelvink Bay and Gulf of MacCluer and at Fak Fak in *1906.*

LITERATURE. (1) *cf.* J. J. SMITH in Bull. Dép. Agr. Ind. néerl. *no* 5, 1907, p. 35; Icon. Bogor. 3, 1909, p. 98; and in Nova Guinea vol. 8, p. 2 *etc.*

(2) *cf.* Ann. Roy. Bot. Gard. Calc. 14, 1939, p. 475.

Bergsma, Mrs

of Batavia, forwarded plants to *Hort. Bog.* in *1874.*

Berkhout, *cf. sub* Forest Research Institute, Buitenzorg.

Berkhout, Anton Hendrik

(1854, Zutfen, Gld, Holland; 1945, Bilthoven, U., Holland), Forest Officer who came to Java in 1878; he worked for some years in Semarang Forestry, at Getas and Kendal; in 1883 in charge of Preanger-Krawang, stationed at Bandoeng. In 1886 he made a tour of inspection to Banka,[1] the first planned forest reconnaissance in the Outlying Possessions; he evidently visited Banka more than once. In 1891 he returned to Europe on account of ill health, continued his studies in Germany, and in 1896 was appointed Teacher in Sylviculture (later Professor) at Wageningen College, Holland.

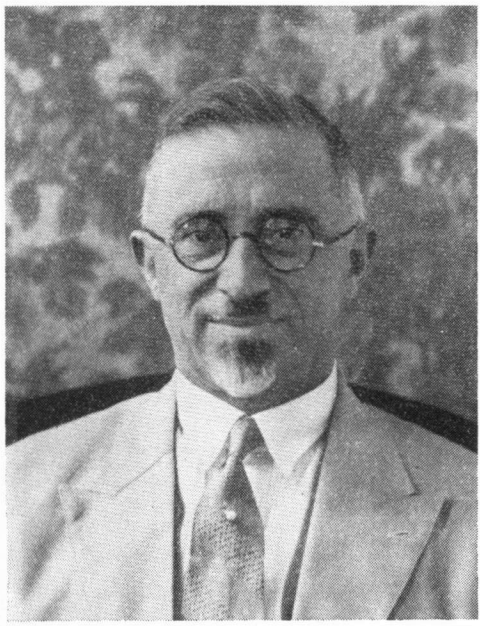
He visited Surinam twice, *viz* in 1903 and 1914; in 1909/10 he travelled in Java, Borneo, and the Malay Peninsula, and in 1920/21 through Java and across Sumatra. He took his Dr's degree *magna cum laude* at Tübingen[1] in Germany in 1909.

COLLECTING LOCALITIES. *1886. Banka* (Aug. 12–22).

In a list in the archives of the Leyden Herbarium the following localities are mentioned: G. Mangkol, Sg. Liat, G. Betong, G. Bras, Nangka, Batoeroesak, Bt besar, Kobok, Muntok, Gegas, Djeboes, Air Gegas, Blinjoe, Petar, Limbang, Permis, Pangkal Pinang, S(e)lan, Bt Patoekan, Bt Peting, Roekem, Bt Toboali, Dumes, Sg. Liat, foot G. Rangek, Sg. Pedoekan, and Merawang. Evidently he travelled all over the island.

COLLECTIONS. *Herb. Bog.:* from *Banka*[2] about 175 species, some of the numbers exceeding 1300. The list of the collection (see above) was probably brought to Leyden by HALLIER *f.*

LITERATURE. (1) Author of 'Boschbouwkundige beschrijving van het eiland Banka' (Tijdschr.



BERNARD

Nijverh. en Landb. 50, 1895, p. 1–57); 'Resultate und Zukunft der Indischen Forstwirtschaft' (Tübingen 1909).

(2) *cf.* Versl. Pl. Tuin Buitenzorg for 1887, p. 13.

BIOGRAPHICAL DATA. Stud. Alm. Wageningen 10, 1914, p. 52; Tectona 27, 1934, p. 703–720; Persoonlijkheden in Nederland, 1938, + portr.; Wie is dat? ed. 1–4; Nederl. Boschbouwk. Tijdschr. 17, 1945, p. 274–275.

Bermejos, J., *cf. sub* Bureau of Science, Manila.

Bernard, Charles Jean

(1876, Geneva, Switzerland, x), studied natural history at Geneva (Ph. Dr 1902); subsequently employed there, at Berlin and Leyden (Custodian of the Herbarium); in 1906 appointed Chief of the Botanical Laboratory (Treub Laboratory) at Buitenzorg (Java);[1] Director of the Tea Experiment Station (Buitenzorg), 1907–28; finally Director of the D.E.I. Department of Agriculture till June 1933; in the latter year returning to Europe.

COLLECTING LOCALITIES. *1906–c. 1928. W. Java;* he is the discoverer of the grass *Iseilema argutum* AND., new to Java, near Haoergeulis *pr.* Cheribon.[2] *Sumatra East Coast* (Apr.–May *1913*) (probably not collecting) and *Sumatra West Coast:* Padang Highlands, at Loeboek Sikaping (June) *etc.*;[3] collecting along the Alas road (Atjeh) and on the Karo Plain (*East Coast*) in *1918; S. Sumatra:* Lampong Districts (Oct. *1927*).

COLLECTIONS. *Herb. Bog.:* principally orchids and saprophytes from *Java*, some *Sumatra* plants; 33 glass containers with botanical material in spirit (pres. 1933 by the Tea Exp. Station). BERNARD also employed native collectors, specially for tiny saprophytes.

LITERATURE. (1) He is the author of many papers on *Phalloideae*, saprophytes, *etc.*, in Ann. Jard. Bot. Buit., and of: 'Protococcacées et Desmidiées d'eau douce recoltées à Java' (Batavia 1908).

(2) *cf.* VAN STEENIS in Ann. Jard. Bot. Buit. 45, 1935, p. 63.

(3) CH. BERNARD: 'Verslag van een reis naar Sumatra's Oostkust en de Padangsche Bovenlanden ter bestudeering van de theecultuur' (Meded. Proefstat. Thee 29, 1914, p. 1–95).

BIOGRAPHICAL DATA. Bergcultures for March 1928 + bibliography, and in *l.c.* 7, 1933, p. 661–674; portr. in Ann. Jard. Bot. Buit. 45, 1935, pl. 2.

Bernardo, A., *cf. sub* Forestry Bureau, Manila.

Bernays, Sidney A.

(*c.* 1853, ? ; ?), Surgeon and Botanist of the Bonito expedition to *SE. New Guinea* in *1885* under the command of Capt. H. C. EVERILL (*cf.* BÄUERLEN for itinerary, literature, *etc.*).

Uncaria bernaysii F.v.M., named after him, was collected by him and BÄUERLEN near the Strickland River. According to BACKER (Verkl. Woordenb., 1936) this and other plants were named after LEWIS ADOLPHUS BERNAYS (1831, London; 1908, Brisbane), surgeon at Brisbane, vice-president of the Society for acclimatization of plants in that place, grower of useful plants, with a great interest for the investigation of the flora of New Zealand and New Guinea. This cannot possibly be the same person, as the BERNAYS of the Bonito expedition was 32 years of age at the time of the expedition.

COLLECTIONS. Referred to by F. VON MUELLER,[1] *probably* preserved in *Herb. Melbourne.*

LITERATURE. (1) In Descr. Not. Pap. Pl. parts 7–9, 1886–90, p. 25–70; 'Notes on a new Papuan Uncaria' (in Australas. Journ. of Pharm., Febr. 1886).

Bernstein, Agathon Heinrich

(1828, Breslau, Germany; April 1865, Batanta, Papua Islands), came to Java in 1854; at first physician of the Health Establishment at Gadok near Buitenzorg. Since 1860 he was subsidized by the Dutch Government for making zoological collections on behalf of the Leyden Museum of Natural History.

ITINERARY.[1] *Moluccas. 1860. 1st Tour.* Arrival at *Ternate* (Dec.).—*1861. Batjan* (Jan.–March; visiting G. Sabellah = Sibela); *Ternate* (Apr.–May); northern part of *Halmaheira* (G. Api) and *Morotai* (July–Jan. 1862).—*1862.* For Jan. see before; back to *Ternate; S. Halmaheira* (June), *Obi*

Islands; Batjan, Kajoa; back at *Ternate* (end of Sept.).—*1863*. In Jan. visiting *P. Gebe(h)*, *Gag(ie)* and *Waigeo(e)* (*Papua Islands*), *P. Dam(m)er; Ternate* (July); Batavia.—*1864. 2nd Tour.* Sailing around Halmahera (July) and visiting some *Papua Islands: P. Gebe(h)*, *Batanta*, *Sal(a)wati*, *etc.;* in April *1865* dying in Batanta.

COLLECTIONS. In *Herb. Breslau.* Certainly mainly zoological. He is referred to as the discoverer of *Wolffia schleidenii* MIQ. near Soerabaja, *E. Java.*[2]

LITERATURE. (1) *cf.* Tijdschr. Ind. Taal-, Land- en Volkenk. 14, 1864, p. 399–495 and *l.c.* 17, 1869, p. 78–109; Zeitschr. f. allg. Erdkunde N.F. 19, 1865, p. 13–31.

'Dagboek van Dr H. A. BERNSTEIN's laatste reis van Ternate naar N. Guinea, Salawati en Batanta, 1864–65, bewerkt door S. C. J. W. v. MUSSCHENBROEK met aant. en bijl.' ('s-Gravenhage 1883, in Bijdr. Taal-, Land- en Volkenk. N.I. Reeks 4, vol. 7).

Prof. Dr E. C. MEINICKE: 'Dr BERNSTEIN's Reisen in den nördlichen Molukken' (PETERM. Mitt. 1873, p. 206–216).

H. J. VETH: 'Overzicht van hetgeen . . . gedaan is voor de kennis der fauna van Ned. Indië' (Thesis, Leiden 1879) p. 150–155.

(2) *cf.* Nat. Tijdschr. N.I. 10, 1856, p. 401; Ned. Kruidk. Arch. 3, 1855, p. 425–429.

BIOGRAPHICAL DATA. Bot. Zeitung 23, 1865, p. 326–327; CABAN's Journ. f. Ornithol. 1866, p. 130–143; Nat. Tijdschr. N.I. 29, 1867, p. 157; VETH, Overzicht van hetgeen . . . gedaan is voor de kennis der fauna van Ned. Indië, Leiden 1879, p. 150 seq.; Bibliogr. in Bijdr. Taal-, Land- en Volkenk. N.I. Reeks 4, vol. 7, 1883, p. 16–17; SIRKS, Ind. Nat. Onderzoek, 1915, p. 165.

Besser, V.

COLLECTIONS. *Herb. Kiel: Philippine* plants. Probably *ex Herb.* BESSER, and not collected himself.

Best, George Arnold

(? , ? ; 1937, in a road accident at Birmingham, England), Curator in the Gardens Department, Str. Settlements (1921– . .). He retired after the loss of an eye.

COLLECTING LOCALITIES. *Malay Peninsula.* Johore: G. Pulai (Apr. 24–26, and Dec. 28, *1922*); short tour in Selangor (*1923*); to Bentong in SW. Pahang (June 12–17, *1924*); *W. Java:* Tjibodas and G. Gedeh (*1928*, coll. ?); *Mal. Penins.:* a week's expedition from Penang to Baling in Kedah (Oct. *1929*).

COLLECTIONS. *Herb. Sing.*, numbered in Singapore Field (S.F.) Number series (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5); dupl. in *Herb. Bog.*

Betche, Ern(e)st

(sometimes BETCKE or BETKE) (1851, Potsdam near Berlin, Germany; 1913, Sydney, Australia), horticulturist with practice at Berlin and Ghent; in 1880 he made a trip to the Samoa Islands;[1] he went to Sydney in 1881, where he was employed as collector of the Nat. Museum till 1897, and afterwards as Botanical Assistant of the same institution. In spite of his weak health he was a zealous investigator of the Australian flora.

He is the author of a paper on the Marshall Islands,[2] and together with J. H. MAIDEN of publications on Australian plants.

The genus *Betchea* SCHLTR was named after him.

COLLECTING LOCALITIES. *1883. Bismarck Archipelago: Mioko, New Britain,* and *Duke of York Island.*

COLLECTIONS. His collection from the Samoa Islands from 1880 came into the hands of F. VON MUELLER, *Melbourne;* it was, however, only partially worked up by the latter;[3] the orchids of the *Bismarck Archipelago* were transmitted by F. v. MUELLER to F. KRÄNZLIN[4] and the *Acanthaceae* to G. LINDAU.[5] The collections since 1881 in *Herb. Sydney;* in *Herb. Berl.:* 195 *nos* from E. Australia (pres. by his wife in 1918/19).

LITERATURE. (1) E. BETCHE: 'Vegetations-Character der Samoa Inseln, nach eigenen Beobachtungen zusammengestellt' (Monatschr. Ver. Gartenb. Preuss. Staat. 24, 1881, p. 28–31, 74–77) (*non vidi*).

(2) 'Vegetationsskizze der Marshalls-Inseln' (WITTMACK's Gartenzeitung 3, 1884, p. 133–134).

(3) *e.g.* in WING's Southern Sci. Rec. 2, 1882, p. 95–97.

(4) *cf.* Oesterr. Bot. Zeitschr. Wien 44, 1894, p. 337.

(5) *cf.* ENGL. Bot. Jahrb. 19, 1894, Beibl. 48, p. 3–5.

BIOGRAPHICAL DATA. Legisl. Assembl. N.S.W. Rep. Bot. Gard. & Domains for 1913, p. 14–15; Journ. & Proc. Roy. Soc. N.S.W. 55, 1921, p. 153 + portr. (pl. 9); in Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931.

Betcke, *cf.* BETCHE.

Bethune, D.

Captain in the British Navy, who brought *Clerodendron bethuneanum* LOW (named after him) and several other fine plants from Borneo to England. The specimen was most probably collected by H. LOW.

Clerodendron squamatum VAHL *var. bethuniana* (LOW) BAKH. was named after him.

LITERATURE. (1) Capt. D. BETHUNE & Comm. L. C. HEATH: 'Views in the eastern Archipelago: Borneo, Sarawak, Labuan, *etc.*' Introd. by J. A. ST JOHN (London 1847).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Betke, *cf.* BETCHE.

Betrem, Johan George

(1899, The Hague, Holland; x), zoologist, educated at Leyden University (Ph. Dr 1928); Assistant in the Entomological Laboratory at Wageningen, 1926–28, and in 1929 Phytopathologist; Entomologist of the Malang Experiment Station in E. Java,

1930–38, subsequently Agriculturist-Entomologist, and finally Head of the Central Java division. After World War II he was evacuated to Holland; at present teacher at the Colonial Agricultural School at Deventer.



BEUMÉE

Author of several zoogeographical, entomological, phytopathological, and eco-climatological studies.

COLLECTING LOCALITIES. *E.g. Centr. Java:* G. Moeriah, Djolong Estate (June *1939*).

COLLECTIONS. *Herb. Leyden* and *Herb. Bog.*, few plants.

Beumée, Johan Gotlieb Benjamin

(1888, Veendam, Gr., Holland; x), Forest Officer, educated and taking his Dr's degree (1922) at Wageningen Agricultural College; in the D.E.I. from 1913–22 on the staff of the For. Research Institute (Buitenzorg), except in the years 1914–15 when he was stationed in the teak districts. In 1922 appointed Botanist at the Buitenzorg Herbarium, 1924–31 Chief of the same institution; in 1931 Director of the General Experiment Station for Agriculture (Buitenzorg) and since 1934, besides, Head of the Service of Agriculture and Fishery. He retired in 1938 and settled near Wageningen; in 1947 appointed Lecturer at the Agricultural College there.

Nervilia beuméei J.J.S. was named after him.

COLLECTING LOCALITIES.[1-2] *1914. Java,* mainly in teak forests: Banjoemas Distr. (Dec.).—*1915.* W. Cheribon, Soemedang and E. Tegal (Jan.); Margasari Forestry (March, June, Aug.–Nov.); Telawa Forestry (Dec.).—*1916.* N. Randoeblatoeng (Nov.).—*1917.* Todanan Distr. (Apr.–May); forestries of Koendoeran, Tjabak, Nanas and Pajaman (June); forestries Doplang, Banjoe Oerip, Banglean and Randoeblatoeng (Aug.); Kedawan Distr., Ngrogoenoeng Forestry and W. Toeban Distr. (Sept.); Ngarengan (Oct.); W. Toeban Distr., Manggar, Gedangan, Regaloh, Ngarengan, Banjoemas (Nov.); Ngawi, Banjoe Biroe, Ponorogo, *etc.* —*1918.* N. Kediri Distr. (Jan.); Krawang Distr. and W. Cheribon-Soemedang (March); W. Tegal, E. Tegal, Soebah, Bodja, Bandjaran, *etc., Centr. Java:* G. Merapi (Oct.); *W. Java:* G. Karang (prob. Dec.).—*1919. E. Java:* Pasoeroean, Besoeki and S. Pasoeroean (Nov.).—*1921. P. Weh,* N of Sumatra. —*1927. Sumatra East Coast:* Toba Lake *etc.* (Apr. –May); *W. Java: P. Edam* (in Bay of Batavia) (Sept. 11); Wijnkoopsbaai, Tjisolok (Dec.).—*1928. Java; Noesa Kambangan* (Aug. 10); *Sumatra East Coast* (Dec.): Deli, Sibolangit, Brastagi.—*1929. W. Java:* Priok.—*1931. Madoera* (Febr. 27); *Centr. Java:* Moektihardjo (May 27); *P. Purmerend* (Bay of Batavia) (May 31).—*1932. W. Java:* Oedjoeng Genteng (S. coast) (March).—*1933. P. Edam* (Bay of Batavia) (Sept.).—*1934. W. Java:* Patjet (Apr.); *E. Java:* Bangil (Nov.).–*1935. W. Java:* near Batavia.

During many years in the *environs of Buitenzorg, e.g.* at Depok and Koeripan;[3] for Depok he employed a special Indonesian collector.

COLLECTIONS. *Herb. Bog.:* from *1913–22* in a series numbering 1–3332, 3401–4649, 4701–5643 (till Nov. 1922), 5641–5674 (Nov. 1922, from Depok; evidently using the *nos* 5641–3 twice), 6603–6684 (Nov. 1914) *etc.;* dupl. in *Herb. Leyden* (coll. 1917–30). In Nov. 1917 the series numbered up to 1273, after that other foresters *etc.* numbered in the series too, *e.g.* TH. ALTONA, D. BURGER, Dr L. G. DEN BERGER, C. BOOT, O. H. GOBÉE, B. J. GRUTTERINK, W. A. P. DE BOER, A. THORENAAR, E. VAN DER LAAN, J. A. J. H. STOUTJESDIJK, P. TIMMER, F. KRAMER, R. WIND, L. P. WEEDA and H. E. WOLFF VON WÜLFING (see those) and many others. Evidently he started a new numbering at Buitenzorg; also *A-nos, e.g.* from Madoera, Bangil and the coast E of the old harbour-canal (? near Batavia, 1935); in 1928 he collected 150 *nos* from *Java* and 66 from *Sumatra;* in 1929, 10 *nos* from Priok, *W. Java.*

LITERATURE. (1) J. G. B. BEUMÉE: 'De korte flora der djatibosschen' (Tectona 12, 1919, p. 146–205); 'Floristisch-analytische onderzoekingen van de korte flora in kunstmatig aangelegde djatiplantsoenen op Java . . . *etc.* (Dr's Thesis, Wageningen 1922).

(2) J. G. B. BEUMÉE: 'Een tocht door het Karanggebergte' (Trop. Nat. 8, 1919, p. 25–30, 42–48, 60–63, 77–79, 96–98, 12 fig.); 'Een bezoek aan de modderbron Kesongo' (*l.c.* 9, 1920, p. 39–46, 49–55, 8 fig.); 'Een auto-botaniseertocht in Rembang' (*l.c.* 10, 1921, p. 81–91, 6 fig.).

(3) J. G. B. BEUMÉE: 'De kalkheuvels van Koeripan en hunne vegetatie" (Hand. 3e N.I. Nat. Wet. Congres 1925, p. 145–181, 10 fig.).

BIOGRAPHICAL DATA. BACKER, Verkl. Woor-

denb., 1936, *cf. addenda* too; Landbouw 14, 1938, p. 193–194; Wie is dat? ed. 1–4.

Bevan, Theodore F.

(1860, London, England; ? , ?), entered a merchant's office in the city of London, but when of age he sailed to New Zealand and after a stay of eighteen months, made a tour through the principal colonies of the Australasian group. In autumn 1884 he made up his mind to visit New Guinea and booked passage on a boat destined for the fishery of tripang; mid-1885 he bought the cutter 'Electra' and got Sir P. SCRATCHLEY's permission 'to explore and trade'. In 1887 he succeeded in getting the 'Victory' from a shipping company at Sydney, for the exploration of New Guinea. Of the latter exploration he imagined mountains of gold and it took him little trouble to obtain money from private persons, and government assistance in the form of a topographer and the use of the steam-launch 'Mabel', for a 2nd expedition to the recently discovered rivers. In 1888 he tried in vain to obtain 250.000 acres of land as a reward for his merit.

Mussaenda bevani F.v.M. was named after him.

ITINERARY. *SE. New Guinea.*[1] *1884.* Departing from Sydney; Port Moresby (Nov. 25), staying 5–6 weeks in this and other neighbouring coastal towns, *e.g.* at Kerepunu (Hood Bay); return to Sydney.—*1885.* 2nd Start for New Guinea: Port Moresby (March 7); the 11th sailing in eastern direction, visiting Kalo, Quibo, Kemp Welch River (ascending part of it), Hood Bay, Suau (Apr. 5), S. Cape and trips to Bertha Lagune, Baxter Harbour, *etc.;* Milne Bay, staying 3 weeks and making many excursions along the coast; *Port Moresby Isl.* (May 14); till May 30 making several trips aboard a cutter to various tripang (fishery) stations situated on the neighbouring islands; along the south coast as far as Orangerie Bay; back at Cooktown (June 19) and from there to Sydney. Port Moresby (Sept. 2), coastal trade to the Gulf of Papua (sailing the 23rd), *e.g.* staying 2 weeks at Toaripi; founding of several tripang (fishery) stations along the coast, *e.g.* on the Bay of Hula (Oct. 14); Aroma.—*1886.* Seized with gold-fever he set out for a trip to Astrolabe Range (April), returning, however, without result. Visiting the Bay of Hula (July). Some months later illness caused him to return to Sydney.—*1887. In the 'Victory',*[2] *Thursday Isl.* (Febr.-March 16), sailing the 17th for New Guinea, exploring the Aird or Douglas River (= Kikori R.), Newbery River, Philp River, returning on Apr. 2nd; Deception Bay (Apr. 9), Toaripi, Penrose River, Stanhope River, Jubilee (= Purari) River; Bald Head (28); *Thursday Isl.* (May 3).—*In the 'Mabel':*[3] bringing the launch from Thursday Isl. to Port Bevan (Nov. 1); Douglas River (8); back at Bald Head (23); ascending Jubilee River upwards of Mt Samuel and along the Aiwai River (= Purari of W. MACGREGOR) back to the south coast; Bald Head (Dec. 3); Centenary River, *via* the junction canal to the Douglas River, reaching open sea again on the 10th; Omati River (= Merewith River); *via* the mouth of the Fly, *Kiwai Isl.* (village Iasa, Dec. 18–19), *Daru Isl.* and Turi-Turi; *Thursday Isl.* (26) and back to Sydney.

COLLECTIONS. *Herb. Melbourne;* referred to by F. VON MUELLER.[4]

LITERATURE. (1) TH. F. BEVAN: 'Toil, travel and discovery in British New Guinea' (London 1890, w. maps).

(2) *cf.* 'New Guinea Expedition, the Douglas and Jubilee Rivers' (Sydney Morning Herald, 27th May 1887); 'Discovery of two new rivers in British New Guinea' (Proc. Roy. Geogr. Soc. Lond. N.S. 9, 1887, p. 595–608 and *erratum* in *l.c.* 11, 1889, p. 89–90); Tijdschr. K.N.A.G. 5, 1888, p. 89, 427.

(3) *cf.* 'Further exploration in the regions bordering upon the Papuan Gulf' (Proc. Roy. Geogr. Soc. Lond. N.S. 11, 1889, p. 82–89); 'The discovery of the Great "Purari" (Queen's Jubilee River), New Guinea' (Sydney 1896); 'The discovery of the Aird and Purari rivers (Gulf of Papua, Brit. New Guinea)' (Transact. Roy. Geogr. Soc. Australasia, Vict. Br. 15, Melbourne 1898, p. 12–15).

(4) In Proc. Linn. Soc. N.S.W., N.S. 2, 1887, p. 419–422, pl. 6–7 (small collection of plants from the Aird River), and in Descr. Not. Pap. Pl. pt 9.

Beversluis, Antoon Johannes

(1891, Utrecht, Holland; x), was educated at Wageningen Agricultural College; since 1914 employed by the Forestry Service in the D.E.I., at first stationed in Java, from the end of 1918 in Moena, May 1919 in Boeton,[1] Oct. 1920–end of 1925 at Fort de Kock (Sumatra West Coast), 1925–28 in Ambon,[2] 1928–30 in Palembang (S. Sumatra), 1930–35 at Medan (Sumatra East Coast); in 1936 he was appointed Inspector of Forests and since 1938 Head of the Service of the Forests of the Outlying Possessions; after World War II at Batavia, Department of Economic Affairs.

COLLECTIONS. *Herb. Bog.:* 3 *nos* from *N. Boeton,* collected at Kulipapo and Wila (*1920*); *Herb. For. Res. Inst. Buitenzorg:* some from *P. Boeton* and 1 from Hollandia, *Dutch N. New Guinea* (*1927*).

LITERATURE. (1) A. J. BEVERSLUIS: 'Iets over de samenstelling, verspreiding, gesteldheid en benuttiging der bosschen in het landschap Boeton *c.a.* (Tectona 12, 1912, p. 513–528, 1 map).

(2) A. J. BEVERSLUIS & Mr A. H. C. GIEBEN: 'Meded. afd. Bestuurszaken der Buitengewesten 1929. Het gouvernement der Molukken'.

Typed reports on the Moluccas (1926), W. Ceram (1926), and New Guinea (Tanah Merah) (1927) in For. Res. Inst. Buitenzorg.

BIOGRAPHICAL DATA. Tectona 37, 1947, p. 113–115.

Beyer, de

collected *Sanicula europaea* L. in *Java* (*cf.* BUWALDA in Blumea 2, 1936, p. 164). Probably misread for L. G. DEN BERGER.

Beyer, Henry Otley

(1883, Edgewood, Iowa, U.S.A.; x), Ethnologist in the Philippine Islands from 1905–14; Anthropologist in the University of Manila, Asst Prof. from 1914–23, from then onwards Professor.

COLLECTIONS. He occasionally collected plants

which were numbered in the Bur. of Science (B.S.) series (see there); in *Herb. Manila*, dupl. may be elsewhere.

BIOGRAPHICAL DATA. Amer. Men of Sci. 1938.

Bianchi, André Thomas Johan

(1893, Amsterdam, Holland; x), studied forestry at Wageningen, and was appointed Forest Officer in the D.E.I. Government Service in 1915; he was stationed some years in the teak districts of Java and was employed by the Forest Research Institute (Buitenzorg) since 1918; in 1928 Chief of the section of wood-technology and in 1940 charged with the direction of the Section for Botanical Exploration of Forests of the said institute. He retired in 1946, and now lives in Holland; he is attached to the Indian Institute, Amsterdam.

COLLECTIONS. *Herb. Bog.*: dupl. *nos* 1–6 and 33–55b from *W. Borneo*, Sambas, Paloh (coll. in the first half of Febr. *1927*); *no* 7 is a *fungus*. Fruits collected on the beach near Anjer, *W. Java* (Jan. 2, *1940*), in show coll. *Herb. Bog.* In *Herb. For. Res. Inst. Buitenzorg:* 38 bb. *nos* from *Borneo*.

Bickmore, Albert Smith

(1839, St George, Maine, U.S.A.; ?), zoologist who travelled in the Dutch East Indies[1] with the special object of collecting shells in the Moluccas, identical with those of Rumphius.[2] In 1870 he was appointed Professor of Natural History at Madison University, Hamilton (New York); from 1869–1914 he was attached to the Amer. Mus. Nat. Hist., New York.

ITINERARY. Departure from Batavia (June 7, *1865*) *via* Semarang, Soerabaja, Makassar (*SW. Celebes*) (18–19), *Timor* (23); to the *Moluccas: Ambon* (June 29–beginning of Aug.), *Nusa laut, Ceram, Banda* (Sept. 8), *Buru, Halmahe(i)ra* (= *Gilolo*), *Ternate, Tidore;* Minahassa (*N. Celebes*): Kema (Dec. 13–19); trip by boat to *P. Limbi* (= *Lembeh*), but on account of the heavy seas hardly being able to go ashore; Kema (24–25); on horseback to Manado (26); trip to the highlands (Dec. 28–Jan. 9, *1866*), *e.g.* visiting Linu Lake, Tompasso, Langowan, neighbouring mud-wells, Tondano Lake and Kakas, Rurukan; Kema (Jan. 9); Makassar (*SW. Celebes*) (Jan. 15); *Java:* Soerabaja, Semarang, Batavia (Febr.); to *Sumatra:* Padang (Febr. 21) and Tapanoeli (Manindjau Lake), Bataklands, Padang, Benkoelen (Apr. 18) and across *S. Sumatra* to Palembang (arrival May 9); *Banka* (May 13), *Riouw, Singapore*, Cochinchina and China.

COLLECTIONS. It is not known to me whether any botanical collections were made by him; WARBURG was not able to settle it either.

LITERATURE. (1) A. S. BICKMORE: 'Travels in the East Indian Archipelago' (London 1868, New York 1869, w. maps and 35 ill. *etc.*); transl. into Dutch: 'Reizen in de Oost-Indische Archipel' (transl. and annotations by D. J. J. HOLLANDER) (Schiedam 1872, 2 vols w. maps).

(2) For List of birds and shells collected by him, see the Mem. and Proc. Boston Soc. Nat. Hist. and Amer. Journ. of Sci. for 1868 and 1869.

BIOGRAPHICAL DATA. Amer. Mus. Journ. for 1914, p. 144 + portr. (p. 122); and 'Memories' in *l.c.* 15, 1915, p. 79–82.

Bidin bin Sukor

joined the Forest Department *Malay Peninsula* in 1913; now retired.

COLLECTIONS. *Herb. Kuala Lump.*, numbered in the C.F. (see *sub* Conservator of Forests) series; mainly collected in Selangor.

Bidin Sirait Holboeng

a native collector, employed by H. H. BARTLETT (collections, literature, *etc.* see there), who collected in Asahan, *Sumatra East Coast*, in *1918*.

Biggs

a Reverend who collected *Dendrochilum sarawakense* (RIDL.) J.J.S. in *NW. Borneo*, Sarawak (*cf.* MERRILL, Enum. Born. Pl., 1921, p. 148); the specimen was cultivated in *Hort. Penang*.

Bij . . ., *cf.* **By . . .**

Bik, Adrianus Johannes

(1790, Dunkirk, Belgium; 1872, Brussels, Belgium), was appointed draughtsman to REINWARDT, on his mission to the Dutch East Indies, at the end of 1815. He and his brother J. TH. BIK (appointed in 1816, *cf.* also *sub* J. C. v. HASSELT) accompanied REINWARDT on his voyages in Java, and to the eastern part of the Archipelago in the brig 'Experiment' in 1821/22. The skillful drawings made during the latter trip were brought to Holland by REINWARDT; many of the originals are still in the Leyden Herbarium. They partly served to illustrate REINWARDT's book (*cf. sub* REINWARDT, Lit. 7), but did not tell to full advantage due to the poor method of reproduction. In 1823 BIK was Auction-Master at Batavia; in 1824 he made a tour of commission to the southern Moluccas to restore the neglected relations with the Dutch East Indian Government;[1] in 1826 he was appointed Bailiff of Batavia and Assistant Resident of Batavia District; in 1832 a member of the Superior Court of Law. In 1847 he went home to Holland, settling at Amsterdam.

ITINERARY. *Voyage in the schooners 'Daphne' and 'Pollux', 1824.* Embarked o/b the 'Daphne' at *Ambon* (March 17); *Bandaneira* (21–24); *Kef(f)ing* (28–31), making a trip to *Ceram laut* (= *P. Geser*) (30); *Goram* (= *Gorong*) (Apr. 2–9); *Aroe Islands:* Dobo on *P. Wamar* (Apr. 13–May 5), on Apr. 16 collecting some seeds of trees and plants unknown to him, and from 21–30 making a trip into the S. Workai; after return in *Wamar*, collecting seeds once more (May 1); *P. Wokam* (May 1–2); leaving Dobo on the 5th; *Groot Key* (= *Noehoetjoet*) (May 6–11), anchoring near Doula, and making trips by proa to *Thoual* (= *Toeal*); back at *Bandaneira* (14), and *via Ambon* to *Ternate* (arriving May 27).

COLLECTIONS. In his diary[1] BIK occasionally mentions the collecting of seeds. Though no herbarium records are known, it is probable that the seeds were collected in behalf of *Hort. Bog.* As at

that time no yearly reports were published, it will be hardly possible to get certainty, however. He collected birds too.

LITERATURE. (1) A. J. BIK: 'Dagverhaal eener reis, gedaan in het jaar 1824 tot nadere verkenning der eilanden Keffing, Goram, Groot- en Klein Kei en de Aroe-eilanden' (Leiden 1828).

BIOGRAPHICAL DATA. Encycl. N.I. 1, 1917; BACKER, Verkl. Woordenb., 1936.

Bik, Miss L. P. L.

COLLECTIONS. *Herb. Bog.*: 5 *nos* of *W. Java* plants, from Tjitarik on the way to Wijnkoopsbaai (Aug. 4, *1922*) and from G. Gedeh (Sept. 2, 1922).

In *Hort. Bog.*: 1 plant from Kamodjan(g), G. Goentoer (pres. 1922).

Billardière, Jacques Julien Houton de la

(1755, Alençon, France; 1834, Paris, France), surgeon-botanist, graduated at Paris in 1780, who travelled in S. Europe and through the Libanon and Syria, and then accompanied the expedition conducted by A. R. J. BRUNY D'ENTRECASTEAUX in search of LA PÉROUSE.[1] Other partners in the expedition were L. A. DESCHAMPS, LAHAIE, RICHE and VENTENAT (see there). When staying at Soerabaja, D'AURIBEAU (the successor of the deceased commander) refused to proceed on the voyage in consequence of the situation in France, on March 1, 1794. The ships were transferred to the D.E.I. Government and the crew and 7 members of the expedition, among whom BILLARDIÈRE, RICHE and VENTENAT, were imprisoned, at first at Soerabaja and then at Semarang. After some time B. was interned in the fortress of Angké near Batavia and obtained permission to walk in the neighbourhood. In 1796 he was back in France and was appointed member of 'l'Institut de France' in 1800.

He was commemorated in several plants.

ITINERARY. *Voyage in 'La Recherche' and 'L'Espérance', 1791–94.*[1–2] Sailing from Brest (Sept. 28, 1791), *via* Teneriffe, Cape of Good Hope, St Paul, New Holland (Apr.–May *1792*), New Caledonia, W. coast of Bougainville Isl. and Bouka (July); *Bismarck Archipelago: New Ireland*, Carteret Harbour (July 18, trip inland on the 23rd); *Admiralty Islands, Hermites Islands* (Aug.); past the Schouten Islands, Batanta and Salawati (evidently not going ashore); in Sept. between Bonoa Isl. (= prob. P. Boano) and W. Ceram, P. Kelang, P. Manipa; on land in *Ambon* (Sept. 6–Oct. 13);[3] to New Holland again, sailing past several islands (Kisar, Timor, P. Sawoe), not going ashore, however; SW. coast of New Holland to Cape Van Diemen (Dec. 1792–March *1793*); Friendly Islands; New Caledonia (Apr.); in May *via* Île de St Croix and the Solomon Islands to the Louisiades; through Dampier Strait past New Britain (July), *Portland Islands, Admiralty Islands; Waigeo(u)* (Aug. 29–Sept. 11); *Boeroe*, Kajeli (Sept. 18–30); taking in water in *S. Boeto(e)n(g)* (Oct. 16); making trips in the island *Pangesani* (= *Moena*) (16) and *Boeton* (17); sailing through Saleier Strait (18); some times taking in water along the coast of *Madoera;* anchoring near Soerabaja (Oct. 28), making trips in *E. Java: e.g. via* Porong to the Prau Mts (Dec. 21) and the next days to Penanggoenan and environs. B. was imprisoned on March 1, *1794*, and transferred to Semarang on the 6th, where he was allowed to make small tours in the environs, if not coming near the coast; Sept. 14 by boat to Batavia (*W. Java*), staying from the 18th in the fortress of Angkée. He sailed for Île de France on April 9, *1795*, staying in the latter island from May 18; Nov. 30 he was homeward bound, arriving in France in March 1796. Photo *etc. cf. sub Addenda.*

COLLECTIONS.[4] Exceeding 4000 specimens of the years 1791–96.[5] In *Herb. Florence* (acq. with *Herb.* WEBB); in *Herb.* DELESS. (*Geneva*): Syria plants + dupl. of the Voyage; *Herb.* DECAND. (*Geneva*): ± 300 New Holland plants, 20 from the Orient; several specimens in *Herb. Paris; Herb. Kew* (1835, 300 specim.), *Vienna, Brit. Mus.* (from Australia; also mosses and hepatics), *Cambridge* (with *Herb.* LINDLEY), *Berl.* (N. Caledonia plants, a few in *Herb.* TURCZANINOW (= *Univ. Kharkov*) (referred to in T.'s 'Animadversiones *etc.*'); *Herb. Leyden: Ambon etc.* (coll. 1791–94); *Herb.* MARTIUS (= *Brussels*).

When at Soerabaja, D'AURIBEAU took possession of all collections which were subsequently sold as war prize to England. They were given back after some time through the intermediary of BANKS (a fact foreseen by DESCHAMPS in his diary!). During the stay at Semarang D'AURIBEAU tried to get possession of BILLARDIÈRE's notes too, but in vain.

BILLARDIÈRE himself studied part of the collection,[6] but no Malaysian plants. His MSS are in the library of the Nat. Hist. Mus. Paris;[7] unpublished drawings made during the expedition by PIRON are at Paris too.[8]

LITERATURE. (1) 'Voyage à la recherche de LA PÉROUSE publié par S. M. l'Empereur et Roi et redigé par M. DE ROSSEL, ancien capitaine de vaisseau' (Paris 1808, 2 vols + atlas; vol. 1, Itinerary and introduction; vol. 2, Astronomic observations).

(2) C^en^ LABILLARDIÈRE: 'Relation du voyage à la recherche de LA PÉROUSE, fait par ordre de l'assemblée constituante pendant les années 1791 et 1792 et pendant la première et la seconde année de la république française' (Paris 1799, 2 vols + atlas). Includes a description of *Ambon*, together with all kind of remarks on useful plants, *etc.;* only few lines are spent on the islands of *Waigeo* and *Boeroe.*

(3) WARBURG, in 'Rumphius Gedenkboek' p. 66, erroneously fixes the year as 1793.

(4) É. BONNET: 'Les collections de l'expédition envoyée à la recherche de LA PÉROUSE d'après des documents inédits' (Ass. franç. pour l'avancement d. sc. Compt. Rend. 20me sess. Congr. de Marseille 1891, II, Paris 1892, p. 488–492).

(5) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 78.

(6) J. J. DE LA BILLARDIÈRE: 'Specimen plantarum novae Hollandiae' (Paris 1804–06); 'Sertum austro-caledonicum' (Paris 1824–25, 80 pl.).

(7) *cf.* Bull. Mus. Hist. Nat. Paris 1, 1895, p. 27.

(8) *cf. l.c.* p. 195.

BIOGRAPHICAL DATA. Tijdschr. Nat. Gesch. & Phys. 1[2], 1834, p. 223–224; Ann. Mus. Hist. Nat. 16, 1837, p. xxi-xxxi; Alg. Konst- en Letterbode

1839[1], p. 148–152; PRITZEL, Thes. Lit. Bot., 1872; WITTROCK, Icon. Bot. Berg., 2, 1905, p. 105; J. D. MILNER, Catalogue portraits in Kew, 1906, p. 72; Journ. & Proc. Roy. Soc. N.S.W. 43, 1910, p. 128,



BINNENDIJK

with portr. pl. 3; in LACROIX, Notice historique sur les membres et correspondants de l'Acad. des Sci. *etc.*, Paris 1934, p. 94; BACKER, Verkl. Woordenb., 1936.

Binnendijk, Simon

(1821, Leyden, Holland; Oct. 28, 1883, Buitenzorg, Java), got a special training as Student Gardener in the Hort. Lugd. Batavum by Prof. DE VRIESE; Assistant Curator in the Botanic Garden at Buitenzorg, 1850–69, and subsequently Curator of the said Garden. By decree of May 10th, 1866, he was charged with a botanical exploration of New Guinea. When the steamship 'Prinses Amalia' did not proceed on the voyage, the original project was cancelled and BINNENDIJK seized the opportunity to collect in the Moluccas, and possibly on the way thither in Borneo and Bali.

He published some papers in collaboration with TEYSMANN.[1]

Garcinia binnendijkii PIERRE was named after him.

COLLECTING LOCALITIES. *W. Java*, on G. Tangkoeban Prahoe *etc.*; in *1850* to Tjipanas, Tjibeureum and crater G. Gedeh, and with TEYSMANN (see there) on the Mandalawangi, Tjawi; with TEYSMANN to the Vogelberg of Tj(i)ampea (= G. Tjibodas).—*1866. Borneo* (or misread for Boeroe?); *Moluccas:*[2] in *Ambon*, *Ceram* and principally in *Boeroe* (*e.g.* at Kajeli and Wakoholo Lake). He probably collected too, when touching at *Bali* (Lesser Sunda Islands).

COLLECTIONS. *Herb. Bog.:* numbered in the H.B. series (a *no* 2748 from *Bali*, Beliling (= Boeleleng); 42 *nos* (+ wood samples) from *Ambon* (received Oct. 6, 1866) and *nos* 43–144 from *Ambon* and *Ceram* (received Oct. 25, 1866). *Herb. Kew: Java, Indian Archipelago* 1859–66, 110 *nos.* Some pharmaceutical plants in *Herb.* HANBURY (London) (pres. 1865–69).

He mainly collected living plants for *Hort. Bog.*, a list of which is extant at Buitenzorg.

LITERATURE. (1) Many plants cultivated in the Buitenzorg Botanic Gardens described in Nat. Tijdschr. N.I. (*cf.* list in Versl. Pl. Tuin for 1883, Batavia 1885, p. 39–51) and in Ned. Kruidk. Archief; 'Nieuwe catalogus van 's Lands Plantentuin' (1855 *ed. ined.*, not valid, *cf.* Flora 1858, p. 255; and 1866, Batavia).

(2) *cf.* Versl. Pl. Tuin Buitenzorg for 1883, Batavia 1885, p. 5.

BIOGRAPHICAL DATA. Versl. Pl. Tuin for 1883, Batavia 1885, p. 3–5; Sempervirens 13, 1884, p. 3–5; C. DE VOS, Korte schets van de geschiedenis der plantkunde *etc.*, Bolsward 1888, p. 108–109; portr. in "s Lands Plantentuin te Buitenzorg, 1817–1892' (Batavia 1892), facing p. 26; Encyclop. N.I. 1, 1917; BACKER, Verkl. Woordenb., 1936.

Binoe, *cf. sub* Forest Research Institute, Buitenzorg.

Binstead, Charles Herbert

Reverend, British bryologist who paid a visit to *Penang* and *Singapore* in *1913* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5) and previously or subsequently visited *Brit. N. Borneo* (April–May),[1] especially the coastal region of the NE. proection of the island and part about Tenom.

COLLECTIONS. Mosses only? In *Herb. Kew.*

LITERATURE. (1) H. N. DIXON: 'On a collection of Bornean mosses made by the Rev. C. H. BINSTEAD' (Journ. Linn. Soc. Lond. 1916, 32 pp. 2 pl.).

Birkhoff

collected at Gombong, *Centr. Java: Peronema canescens* JACK (*cf.* LAM & BAKHUIZEN in Bull. Jard. Bot. Buit. sér. 3, 3, 1921, p. 97) and *no* 8, *Cinnamomum iners* REINW. (in *l.c.* 7, 1925, p. 473). He sent weeds to BACKER, *Herb. Bog.*

Biro, Lajos

(or Ludwig in German) (1856, ? ; 1931, ?), a Hungarian zoologist, teacher from Budapest, who was sent out to former German New Guinea in Nov. 1895 by the direction of the Hungarian National Museum. During his stay he collected a lot of valuable zoological, botanical, and ethnological objects.[1] In 1898 he paid a visit to Buitenzorg (W. Java), during which he took the opportunity to collect and study provisionally various interesting forms of animal life.[2]

He is the author of many, principally entomological, papers.[3]

He is commemorated in the plant species *Jadunia biroi* LIND.[4]

ITINERARY.[5] *NE. New Guinea*, former *Kaiser-Wilhemsland. 1896.* Friedrich Wilhelmshafen (beginning of Jan.); exploring in the environs of Astrolabe Bay (Jan. 6–end of June), from Friedrich Wilhelmshafen visiting the islands *Siar*, *Gragèt*, *Beliáu*, and *Bili-Bili*, further Jomba and the Hansemann Gebirge (Mts); beginning of July–2nd half of Oct. on the islands (*Tarawai*, *Seleo*, *Ali*, *Sans Souci*, *Dudemain*) in Berlin Hafen and on the opposite mainland, the Lamin (= Leming) Coast; Friedrich Wilhelmshafen (*1897*, 1st half of Jan.); Erima and environs (till Apr. 22), proceeding as far as Tjingadji in the headland and as Balai and Bawag in the Oertzen Mts; Stephansort (Apr. 23–Aug.), making trips to the slopes of the Konstantinberg (Uom and Wale), to Bongu, Jam-Jam and Wenki. Subsequently sailing for *Singapore* and staying in *Java* (Buitenzorg, see biography above), not before July *1898* appearing at Simbang on the Langemuk-Bucht (= Gulf) in *NE. New Guinea* again; till Dec. exploring the Sattelberg and various regions N of the Gulf of Huon. After a 2nd stay at *Singapore*, he returned in March *1899* in *New Guinea*, Simbang, and investigated anew the environs of Finschhafen and the Sattelberg (till Aug.); Stephansort (Dec.); in the first days of May *1900* with ROBERT KOCH to Herbertshöhe, participating in a voyage to various islands of the *Bismarck Archipelago* (May 13–28), visiting: SE. coast of *Neu Mekklenburg* (= *New Ireland*), S. side *Gardenijs Isl.* (*Lihir*), *San Joseph Isl.* (*Masahèt*), *San-Francisco Isl.* (*Mahur*), *Tabár Isl.* (*Gardner Isl.*), *Visscher Isl.* (*Simbéri*), *Neu Mecklenburg* (*New Ireland*) (May 23 at Lasu), *Nusa* (24), *Kabóteron Isl.*, S. coast *Neu Hannover* (= *New Hanover*) (25), Sandwich Islands (28), and back to Herbertshöhe (30). In Oct. he went to Sydney and stayed in New South Wales till the 2nd half of Dec.; in the beginning of Jan. *1901* sailing again for *NE. New Guinea:* Friedrich Wilhelmshafen; near Astrolabe Bay (May). After that, no data on him are known to me before the end of Jan. *1902* when he turned up in *Singapore* again, from where he went to Bombay (*via* Ceylon) for a longer stay.

COLLECTIONS.[6] *Herb. Budapest;* in *Herb. Berl.:* 30 *nos* from the Sattelberg and the Gulf of Huon.

LITERATURE. (1) A descriptive catalogue of his ethnographical collection in New Guinea was published in 'Ethnographische Sammlungen des Ung. Nat. Mus.' vol. 1 and 3, 1899.

(2) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 22.

(3) *e.g.* in Rovartini Lapok Budapest 4, 1897, in *l.c.* 6, 1899 and in *l.c.* 12, 1905.

(4) *cf.* ENGL. Bot. Jahrb. 50, 1913, p. 169.

(5) *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea 2^2, p. 641–643 (as no account of his journey is published, W. derived the data from papers dealing with BIRO's collections).

(6) SCHUMANN & LAUTERBACH in 'Nachtr. z. Fl. d. Deutsch. Schutzgeb. *etc.*' (Leipzig 1905).

For papers on the zoological collections *cf.* WICHMANN *l.c. sub* 5.

Bish, Freddy Charles Joagim

(1908, Weltevreden, Java; x), Overseer employed by the D.E. Indian Forest Service since the end of 1930; stationed in N. Celebes, respectively at Manado, Gorontalo, Donggala, and Manado; since 1935 in SW. Celebes at Rantapaoe and Watampone (1937); since June 1938 employed in Java.

COLLECTING LOCALITIES. *Centr. Celebes:* in the subdivisions Donggala (Manado Res.) and Paloe (Manado Res.) (*1932–34*); *SW. Celebes* (*1935–37*).

COLLECTIONS. *Herb. Bog.:* 3 *nos* of dupl. from Donggala (56, 58 and 60) and 10 *nos* from Paloe (*nos* betw. 61–74) (pres. through the intermediary of the Forest Research Inst.); *Herb. For. Res. Inst. Buitenzorg:* from *Centr. Celebes* (126 *nos*) and *SW. Celebes.*

Bish, G. R., *cf. sub* Forest Research Institute, Buitenzorg.

Bisschop

COLLECTIONS. In *Herb. Leyden: Ixora javanica* (Bl.) DC. *s.n.*, L.B. 908, 218 and 428 (*cf.* BREMEKAMP in Bull. Jard. Bot. Buit. sér. 3, vol. 14, 1937, p. 255) from *Java.* Probably *ex Herb.* G. BISSCHOP.

Bitonio, *cf. sub* Forestry Bureau, Manila.

Blaauw, Anton Hendrik

(1882, Elst, Gld, Holland; 1942, Oosterbeek, Gld, Holland), studied natural history at Utrecht University, where he took his Dr's degree in 1909. Having been granted the subvention of the Buitenzorg Fund, he stayed in Java from Nov. 1911 until March 1912;[1] in 1912 he was appointed Custodian of the Ned. Bot. Vereeniging at Haarlem; teacher at a secondary school at Haarlem, 1913–17; since 1918 Professor of Plant Physiology at the Agricultural College, Wageningen; on account of poor health he resigned in September 1942.

He is the author of some popular books on the Dutch East Indies[2] and of many physiological papers.

ITINERARY.[1] *W. Java:* Buitenzorg (Nov. *1911*); Tjibodas, Tjibeureum and G. Gedeh-Pangrango (Dec.); from Priok (Jan. 18, *1912*), *via* Cheribon and Semarang (*Centr. Java*, trip to Weleri) to Soerabaja by boat, making some trips in *E. Java:* Tosari, Tengger Mts (Bromo, G. Penandjaän) and *via* Nongkodjadjar to Malang; Pasoeroean and Soerabaja; *Centr. Java:* Soerakarta, Klaten, Djokja, Boroboedoer and to the island of *Noesa Kambangan* (S of Java) from Tjilatjap. In *Sumatra West Coast* (*1912*) he visited: Padang, Fort de Kock (first half of March), Pajacombo, Manindjau Lake, Karbouwengat, Danau Mts, Matoer, and G. Merapi.

COLLECTIONS. *Herb. Utrecht*, from G. Merapi (*Sumatra*), G. Tengger (*E. Java*), *etc.*; *Leyden.*

According to DAMMERMAN,[3] he collected embryological material of some *Proteaceae* and *Icacinaceae*, material on formalin and dried seeds, all on behalf of the *Bot. Lab. at Utrecht.*

LITERATURE. (1) *cf.* 'Verslag van de werkzaamheden van Dr A. H. BLAAUW, gedurende zijn bota-

nische reis naar Nederlandsch-Indië' (Bijvoegsel Ned. Staatscour. 11 Sept. 1912, *no* 212, *no* 35).

(2) 'De tropische natuur in schetsen en kleuren' (1917, 2nd ed., edit. by the 'Koloniaal Instituut'); 'In de sfeer der vulkanen' (Ned. Ind. Oud & Nieuw



BLANCO

1916, p. 357–364, 4 fig.); 'Tjibodas' (*l.c.* afl. 12, 1917, 9 pp., 11 fig.).

(3) In Ann. Jard. Bot. Buit. 45, 1935, p. 37.

BIOGRAPHICAL DATA. Wie is dat? ed. 1–4; Persoonlijkheden in Nederland, 1938; Vakbl. Biologen 23, 1942, p. 133; Weekbl. Tuinb. en Plantk. 16, 1942, p. 394; Jaarb. Ned. Akad. Wetensch. 1941–42, 22 pp. + portr.; Chron. Bot. 9, 1945, p. 211–212.

Black, Reverend R. F.

is cited as the collector of the *nos* 8, 10, 15, and 16 in *Mindanao* (*cf.* MERRILL, Enum. Philip. Fl. Pl.); O. AMES (Orchidaceae fasc. 2, 1908) cites the *nos* 20, 22, 25, 27, all collected in *1906* at Davao, *Mindanao*, and some *s.n.* collected in Oct. *1905*.

Blackwood, Beatrice

(1889, London, England; x), ethnographer-anthropologist, educated at Oxford (B.S. 1923); Research Assistant to Prof. A. THOMSON, 1918–21; Departmental Demonstrator, Dept of Human Anatomy, Univ. of Oxford, 1921–24; travel and research in U.S.A. and Canada with L. SPELMAN ROCKEFELLER Memorial Fellowship, 1924–27; since 1928 University Demonstrator in Ethnology at Oxford, and since 1936 Lecturer in the Dept of Ethnology (Pitt Rivers Museum) there.

In 1929–30 she visited the Solomon Islands;[1] in 1936–37 she stayed during nine months among the Kukukuku in SE. New Guinea for the purpose of studying the life of a modern Stone Age people.[2]

ITINERARY. *1936–38. NE. New Guinea:* valley of the Upper Watut River and the mountains on either side of it (between 3500–6000 ft) in Morobe Distr. (Aug. 1936–Apr. *1937*); *SW. New Britain*, among the Arawe people (*Bismarck Arch.*) (May–Aug. 1937), including a short stay on *Umboi Isl.*; *NE. New Guinea:* Madang Distr., among the Bosmun people of the Lower Ramu River (Oct. 1937–Jan. *1938*).

She paid a brief visit to *New Ireland* in *1929* (while waiting for transport), but did no botanical work there.

COLLECTIONS. *Herb. Kew: c.* 250 *spp.* from *New Guinea* mainland and 50 from *New Britain* (pres. 1937)[3], also a collection in 1931 (from the Solomon Islands).

LITERATURE. (1) B. BLACKWOOD: 'Both sides of Buka Passage' (Oxford 1935, List of identified plants on p. 592–594); 'Treatment of the sick in the Solomon Islands' (Folk-Lore 46, 1935, p. 148–161).

(2) B. BLACKWOOD: 'Use of plants among the Kukukuku of Southeast-central New Guinea' (Proc. 6th Pac. Sci. Congr. 1939, vol. 4, 1940, p. 111–126); 'Folk-stories of a Stone-Age People in New Guinea' (in Folk-Lore 50, 1939, p. 209–242).

(3) Some figs described by V. S. SUMMERHAYES in Journ. Arn. Arbor. 22, 1941, p. 81–109.

Blake, J.

COLLECTIONS. *Herb. Leyden: Ambon* plants (*1880*).

Blanco, Francisco Manuel (or Manoel)

(1778 or 1780, Navianos, Spain; 1845, Manila, Luzon, P.I.), an Augustinian friar whose first station (1805) was at Angat, in the Prov. of Bulacan; as Curate he at various times occupied positions at San José, Bauan and Batangas, in the Prov. of Batangas, and at Pasig and Paranaque in the Prov. of Manila (now Rizal). In his last position as provincial delegate of the Augustinian order, his duties necessitated much travel in the Philippine Archipelago, taking him through the Prov. of Manila, Bulacan, Batangas, Pampanga, Pangasinan and Ambos Camarines in Luzon, and those of Iloilo, Capiz, Antique, and Cebu in the Visayas. He is the author of a flora of the Philippines.[1]

The genus *Blancoa* Bl. and many plant species were named after him.

COLLECTIONS. *Herb. Madrid:* 400 *nos* supposed by COLMEIRO to have been collected by BLANCO & LLANOS,[2] but according to MERRILL today not even a tradition of a herbarium collected by them exists (Bull. Philip. Bur. Agr. *no* 4, 1903, p. 33–34). See also *Addenda*. The original collection in the monastery Notre Dame de Guadeloupe, Manila, was destroyed by fire.[3] The actual collector of the concerning collection is not known. MERRILL when identifying BLANCO's species had

species, recorded by BLANCO, collected anew. He distributed these 'representative specimens' as *exsiccata* among the principal world herbaria. These specimens belong to his book 'Species Blancoanae', of which the text on the concerning species is printed on the label. The plants were collected by employees of the Bureau of Science, mostly by MERRILL, FÉNIX, and a much larger number by RAMOS. The collection comprised 1060 *nos* in 16900 specimens, in *Herb. Manila.* In *Herb. Bog.:* dupl. Plantae Blancoanae (pres. 1918); *Field* (= *Nat. Hist.*) *Mus. Chicago:* cent. 1–10 Species Blancoanae (exch. Bur. of Sci. Manila); *Herb. Leyden;* 29 dupl. in *U.S. Nat. Herb. Wash.; etc.*

LITERATURE. (1) 'Flora de Filipinas según el sistema de Linneo' (Manila, 1837; ed. 2, 1845).

C. FERNANDEZ-VILLAR revised the 3rd ed. of this flora (*cf.* MERRILL in Philip. Journ. Sci. C. Bot. 12, 1917, p. 113–116): 1, 1877; 2, 1878–79; 3, 1879; 4^1, 1880; 4^2, 1880; 4^3, 1880–83; *t.* 1–473. The last part of this 3rd edition contains 'Novissima Appendix ad Floram Philippinarum R. P. FR. EMANUELIS BLANCO, seu enumeratio contracta plantarum philippinensium hucusque cognitarum. Cum synonymis P. P. BLANCO, LLANOS, MERCADO et aliorum auctorum' by the reviser of this edition in collaboration with A. NAVES (*cf. l.c.* p. 1–375).

J. K. HASSKARL: 'M. BLANCO, Flora der Philippinen übersetzt und kritisch beleuchtet' (Flora 47, 1864, p. 17–29, 49–59).

E. D. MERRILL: 'A review of the identifications of the species described in BLANCO's Flora de Filipinas' (Govt Lab. Publ. Philip. 27, 1905, p. 1–132).

E. D. MERRILL: 'Additional identifications of the species described in BLANCO's Flora de Filipinas' (Philip. Journ. of Sci. C. Bot. 2, 1907, p. 429–439).

E. D. MERRILL: 'On the identity of BLANCO's species of Bambusa' (Amer. Journ. Bot. 3, 1916, p. 58–64).

E. D. MERRILL: 'Species Blancoanae: A critical revision of the Philippine species of plants described by BLANCO and by LLANOS' (Bur. Sci. Publ. 12, 1918, p. 1–423, map).

(2) *cf.* COLMEIRO, Bosquejo Hist. Jard. Madrid, 1875, p. 88.

(3) U. MARTELLI: 'Lettera sopra l'Erbario Blanco' (Boll. Soc. Bot. Ital. 1902, p. 89).

BIOGRAPHICAL DATA. DUCHARTRE Revue Bot. 1846, p. 281–285; COLMEIRO, Bot. Hisp., 1858, p. 204; portr. in Flora Filipin. *ed.* August. vol. 1; Bull. Bur. Agr. Manila *no* 4, 1903, p. 11; Journ. N. Y. Bot. Gard. 7, 1906, p. 107; BACKER, Verkl. Woordenb., 1936.

Bland, Laura Shelford

wife of R. N. BLAND, Resident Councillor, Penang, collected on the Taiping Hills (Perak), *Malay Peninsula* in *1905*; collections in *Herb. Sing.* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

Bley, Franz J.

(1881, Selokaton Estate, Semarang Res., Java; ?), son of the following, studied botany in Holland and at Zürich (Switzerland), worked a long time, from Aug. 1915 until Febr. 1920, in the Treub Laboratory at Buitenzorg on the embryology of *Laurembergia*, a marsh-plant of the Diëng Plateau.[1] Then he was Estate Manager of a Cinchona plantation, and subsequently Botanist of the Besoeki Experiment Station (Djember) in E. Java. He returned to Europe on account of illness. Later in Java again?

Liparis bleyi J.J.S. was named after him.

COLLECTIONS. ?

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935. p. 41.

Bley, G. F. J.

(1855, Jever, Oldenburg, Germany; 1944, Buitenzorg, Java), attended the 'Technikum Mitweida' in Germany, came to Java in 1878 and was employee at Selokaton Estate, Centr. Java, since 1879; in 1882 appointed Estate-Manager of Soekamangli and in 1890 of Selokaton. He retired in 1916, settling at Buitenzorg where he devoted himself to photography and the study of fibre plants.

COLLECTIONS. *Herb. Bog.:* material of some *Bombax* species from Kendal (*Centr. Java*), dried and in spirit (through the intermediary of KOORDERS pres. in 1911); 6 *nos* from Gebangan (Aug. 23, *1915* coll.). In *Hort. Bog.:* orchids from Semarang, presented in *1894* and some from *Bali* in *1919* (collected himself?). In *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam: Crotalaria usaramoensis* BAK. *f.* (pres. 1919).

BIOGRAPHICAL DATA. De Thee 6, 1925, p. 98 + portr.; Bergcultures 9, 1935, p. 806–807 + portr.

Bligh, William

(1753 (sometimes erroneously 1754), St Tudy, Cornwall, England; 1817, London, England), Captain of the 'Bounty' during the voyage 1787–89, made to obtain breadfruits from Otaheite (for itinerary *cf. sub* D. NELSON) for the West Indies.[1] In 1791–93 he made a second, and this time successful, voyage in the 'Providence' (*cf. sub* CHRISTOPH. SMITH and J. WILES).[2] About 1806 he was appointed Governor of New South Wales in which capacity he was not a success; he soon ruffled the military officials, with the result that he was kept a prisoner within his own house for 12 months. He returned to England in 1809; and was appointed Admiral in 1811.

The genus *Blighia* KÖN. was named after him.

COLLECTIONS. A large collection of living plants made during the voyage of the 'Providence' by CHRISTOPH. SMITH and WILES, was recorded as introduced by Capt. BLIGH in AITON, Hortus Kewensis (2nd ed. 1813). Letters from him are included in the transcript of the Banksian Correspondence, Dept Bot. Brit. Mus.[3] He brought some useful plants from *Timor* to Jamaica.[4]

LITERATURE. (1) 'A voyage to the South Sea undertaken by command of his Majesty for the purpose of conveying the breadfruit tree to the West Indies, in his Majesty's ship the Bounty, commanded by Lt. W. BLIGH, including an account of the mutiny o/b the said ship, and the subsequent

voyage of part of the crew, in the Ship's Boat, from Tofoa, a Dutch settlement in the East Indies' (London 1792). Reissued: 'BLIGH and the Bounty. His narrative of the Voyage to Otaheite with an account of the mutiny and of his boat journey to Timor' (London 1936, with a preface by LAUR. IRVING).



BLOEMBERGEN

M. E.: 'One hundred and fiftieth anniversary of the "Bounty" expedition' (Gard. Chron. 3rd ser. 104, p. 305–306). See also *Addenda*.

(2) I. LEE: 'Captain BLIGH's second voyage to the South Sea' (based on B.'s logbooks in the Admiralty Libr.) (1920).

(3) *cf.* Journ. Bot. 60, 1922, p. 23.

(4) *cf.* KONIG & SIMS Ann. of Bot. 2, 1806, p. 570.

BIOGRAPHICAL DATA. Dict. Nat. Biogr.; in the preface of I. LEE, Capt. BLIGH's second voyage *etc.* (*cf. sub* 2); I. LEE in 'Early explorers in Australia' (London 1925) p. 94; in Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931.

Bloembergen, Siebe

(1905, Rottevalle, Fr., Holland; x), studied botany at Groningen University, where he took his Dr's degree in 1935. During many years he was Assistant at the said university; in May 1938 he went to the D.E.I. Some weeks after his arrival in Java he was appointed Assistant on Bodja Estate near Semarang; 1939–40 at the disposal of the director of the Forest Research Institute (Buitenzorg); since April 1940 Botanist at the Buitenzorg Herbarium. During the war he was finally interned in Siam, was evacuated to Holland in 1946, and returned to Java in Oct. 1947.

ITINERARY. *1939. W. Java:* Garoet, Tasikmalaja (Jan. 24–28) with F. H. HILDEBRAND.—*Lesser Sunda Islands.*[1] *Lombok:* western part near Poesoek Pass (Febr. 18); eastern part near Laboehanhadji, along the beach (19); *Soembawa:* near Soembawabesar (19); in teak forest near kp. Kapinta E of Bima and in the neighbourhood of Dessa (20); *Soemba:* Waimoengoera and on the way back to Waikelo (21); *Flores:* G. Kingo N of Endeh and along the beach (22); *Savoe:* along the beach near Seba (23); *Dutch Timor* (Febr. 27–March 21): Noil Mina (Febr. 27–March 1); near kp. Obé Naik (March 2); Bioba and environs (4–5); on the way from Bioba to Oi Poela (6); near Kipeana (9); near Hoeë–Kenoetoe (10); rain forest Fatoe Nasimètan S of Kapan and on the way thither (11–17; the 16th near Batoe Napi); Kapan–Noil Bisnain (18); *Pterocarpus* forest near Soeblèlè W of Soë (20); near Baoemata SW of Koepang (21); *Wetar* (March 31–Apr. 20): near the Meta Lerai N of Ilwaki in rain and *Eucalyptus* forest (March 31–Apr. 5); on the way from the Meta Lerai to Meta Lahèla (6); near the Meta Lahèla (7–8); the Meta Lahèla–Ilwaki (9); E of Ilwaki (11); near Massapoean on G. Lagantè and in a coastal grove (12–13); Moning and Oehak (14); Tarra and between Tarra and Naoemètan (15); Erai (16); Klisana (17–18); Ilwaki (20); *Kisar* (22); *Timor:* by car from Atapoepoe to Koepang (26–27).—*Central Celebes.*[2] Attended by the 'mantris' of the herbarium, ASDA and ANTA: Donggala (July 3); by car to Paloe and Sidaoento (4); Tomado (5); crossing Lindoe Lake to the marsh on the E. coast (6); in *Agathis* forest on Goenoeng Ngilalaki (7–8); summit G. Ngilalaki (9); on the way back collecting in the marsh bordering the lake (11); back to Sidaoento (12); collected near Sidaoento (13), by car to Paloe (14) and to Donggala (15), embarking the 16th on the way to the *Moluccas, Soela Islands:*[3] (collecting 1 *no* in *Boeroe*, near Namlea), *Sanana* (July 23–Aug. 23): by bicycle from Sanana to Oemo-oja and back (July 24); on foot to Molboefa and by bicycle along the coast round the north and back to Sanana (25); to Fat Iba and back (26); Sanana–Bega (27); Bega–Tandjong Baleha (28); Wai Baleha (29); T. Baleha–Fat Kaujon and back to Sanana (30); in SW. direction for exploration of the hills (31); hills NW of Tandjong Baleha (Aug. 1); T. Baleha–Wai Taboekoh (3); from Wai Taboekoh along the coast to the east (4–5); along the Wai Gaj (6); hill NE of Wai Taboekoh and along the Wai Taboekoh (7); Wai Taboekoh–Fowata (8); along the Wai Fowata (9); hills along the Wai Boessa SE of Fowata (10–11); hills along the Wai Temoea (12); Fowata–Kabauw (13); NE of Kabauw in the mountains (G. Gasoe) (14); NE of Kabauw (E of the creek) (15); by proa across the creek, along the Wai Booija and in mangrove forest (16); along the coast in southern direction (17); Kabauw–Molboefa (18); hills SE of Molboefa and sago swamp NE of Molboefa (19); E of Molboefa (20); across the mountains to Sanana (21); by motor-proa (24) to *Mangoli* (=

Mangole) (Aug. 24–Oct. 19): hills N of kp. Mangoli (25); staying in bivouac Mangoli on account of a tropical ulcer (Aug. 26–Sept. 2); for medical treatment to *Sanana* (Sept. 3–17) and back to *Mangoli:* NE of Mangoli (19); NW of Mangoli (20); neighbourhood of kali Wai Mana (21–24); N of Mangoli (26); across the island *via* kp. Tjapaloeloe to Lampaoe (27–28); Kimakol (Sept. 29–Oct. 1); coastal forest *etc.* (Oct. 2–3); crossing the island back to Mangoli (4–5); stay at Mangoli (6–9); by sailing-proa to *Sanana* (10), from where to Wai Ko (11) and kp. Wai Tamila (13), NE of Wai Tamila (14), NW of Wai Tamila (15); *P. Pas Pagama* (=*P. Lifamatola*); kp. Wai Oeffi (17); by proa *via* Lampaoe to Pas Mentjeri (18–19) and proceeding to *Taliaboe:* kp. Samoeja and environs (20–24); by proa through Tjapaboeloe Strait to *Pas Ipa* (25); *Mangoli*, collecting in northern direction (26); *Pas Ipa* (27); the next day sailing for Java.—*1941. W. Java:* G. Salak, G. Boender, Kawah Ratoe (Jan. 8); Tjibodas, G. Gedeh-Pangrango.

COLLECTIONS. *Herb. Bog.:* from the *Lesser Sunda Islands nos* 3000–3896 (bb. *nos* from *Timor* and *Wetar* only, 27065–27300 in *Herb. For. Res. Inst. Buitenzorg*, dupl. in *Herb. Bog.*); from *Centr. Celebes nos* 3896a–4263 (bb. *nos* 28240–28283 in *Herb. For. Res. Inst. Buit.*, dupl. in *Herb. Bog.*); from the *Soela Islands nos* 4265–4792 (and bb. *nos* 28755–28901, 29748–29974, dupl. in *Herb. Bog*). He gave 2 numbers (1 private, the other bb. *no*) to one and the same plant.

The plants from Garoet (1939) numbered in the Java (Ja.) series of the *For. Res. Inst. Buitenzorg; Java* plants 1941 in *Herb. Bog.*

In *Hort. Bog.:* living plants from *Timor* and *Soela Islands.*

LITERATURE. (1) S. BLOEMBERGEN: 'Verslag van een exploratietocht naar de eilanden Timor en Wetar' (Tectona 33, 1940, p. 101–196, with map, and in Korte Meded. Boschb. Proefstat. *no* 71, with Engl. summary). A brief report in Dutch on the proceedings in the islands Lombok, Soembawa, Soemba, Flores, Savoe, and Kisar, was mimeographed by the For. Res. Inst. Buitenzorg.

(2) S. BLOEMBERGEN: 'Verslag van een exploratie-tocht naar Midden-Celebes (Lindoemeer en Goenoeng Ngilalaki ten Zuiden van Paloe) in Juli 1939' (Tectona 33, 1940, p. 377–418, 2 fig. + map; incl. Engl. summary).

(3) S. BLOEMBERGEN: typed report on the Soela Islands 1939 in For. Res. Inst. Buitenzorg (mimeographed in 1943).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936, p. 646.

Bloemen Waanders, Pieter Lodewijk van

(1823, Antwerp, Belgium; Warnsveld near Zutfen, Gld, Holland), entered the D. E. Indian Civil Service in 1850. He was successively District Officer in W. Sumatra, Palembang (S. Sumatra) and Bali (Lesser Sunda Islands). In Bali he was promoted to Assistant Resident, and from 1862–67 Resident of Palembang. After his return from sick-leave to Europe, he was appointed in Kedoe Residency, Centr. Java; he retired in 1876.

He accompanied ZOLLINGER (itinerary *etc.* see there) on the latter's *Bali* trip in *1857.* When Z. was unable to continue the ascent of G. Abang (Sept. 10) on account of his health, VAN BLOEMEN WAANDERS proceeded alone and brought back a few plants, among which the new species *Agalmyla waandersiana*, referred to in ZOLLINGER's report of the trip.[1] The specific name is probably invalid, as to our knowledge no valid description was published.

COLLECTIONS. Beside the above-mentioned specimens which were certainly inserted in ZOLLINGER's collections (see there), he forwarded a case containing specimens of *Baeckea frutescens* from Palembang to *Hort. Bog.* in *1865.*

LITERATURE. (1) *cf.* Bijdr. Taal-, Land- en Volkenk. N.I. 13 (3rd ser. vol. 1), 1866, p. 528; and in the original paper published in PETERM. Mitt. 1864, p. 145 *seq.* ZOLLINGER mentions the initials F. L. VAN BLOEMEN WAANDERS; these certainly must be P. L.!

Bloemsma

of Singkawang, *W. Borneo*, sent an abnormal ananas to *Herb. Bog.* in *1933.*

Hort. Bog.: living orchids from *W. Borneo*, collected with COOMANS DE RUYTER (pres. 1932).

Blok, Ferdinand

(1884, Tjimalakka, W. Java; x); since 1909 Forest Officer in the D.E.I., stationed at Madioen, Besoeki, and in the teak districts of Java; in 1921 in the Head-office of the Forestry Service at Buitenzorg and afterwards in the employ of the Teak Forest Administration there; in 1929 appointed Inspector of the latter service; retired in 1932.

COLLECTIONS. *Herb. Bog.: Dendrobium hasseltii* from G. Moeriah (= Moerjo in *Centr. Java*) (pres. Sept. *1929* through the intermediary of the For. Res. Inst.).

Blok, J.

Resident of Benkoelen, *S. Sumatra*, sent living specimens of *Rafflesia arnoldi* to *Hort. Bog.* in *1854.* The curator J. E. TEYSMANN planted the ripe seeds by infecting the roots of the host plant, and succeeded in obtaining new plants which flowered after some years.

Blok, P., *cf. sub* Forest Research Institute, Buitenzorg.

Blokhuis, Gijsbert M.

(1889, Noordwijk Binnen, Z.H., Holland; x), since 1915 Forest Officer in D.E.I. Govt service in various stations, principally in Central Java, *e.g.* in Banjoemas. He was honourably dismissed on account of inaptitude in 1927.

He is the author of some papers.[1]

COLLECTING LOCALITIES. *Centr. Java:* teak forest Randoeblatoeng (Sept. *1917*); Bekoetoek Forestry (July *1918*); *E. Java:* G. Lawoe (Aug. 19, 1918); *Centr. Java:* G. Diëng (Oct. *1919*); *E. Java:* Lawang (Jan. *1920*); *Centr. Java:* G. Sindoro (Nov. 29, *1921*); Diëng Plateau (Dec. 7, 1921); *Centr. Java* (*1922*).

COLLECTIONS. *Herb. Bog., e. g. Peristylus latilobus* J.J.S. *n.sp.* from Lawang. In *Herb. For. Res. Inst. Buitenzorg:* plants from *Centr. Java* (1922).

LITERATURE. (1) 'Determinatie-tabel der boomsoorten welke in djatiwouden op Java voorkomen' (Tectona 12, 1919, p. 531–550); 'De brandhoutvoorziening in de afd. Wonosobo van de Res. Kedoe' (*l.c.* 16, 1923, p. 291–307).

Blokzeyl, Mrs
a resident of Bandoeng, collected plants on G. Papandajan, *W. Java* (May 12, *1929*); 10 *nos* in *Herb. Bog.*

Blommestein, L. van
of Bojolali, *Centr. Java*, sent living plants to *Hort. Bog.* in *1878.*

Blow, Thomas Bates
visited Singapore in *1904* and collected *Characeae* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Kew:* from the West Indies (*Nitella*) (pres. 1898); also later collections.

Blt. *nos, cf. sub* Forest Research Institute, Buitenzorg.

Blum, Gebhard
(1888, Lüchingen, St Gallen, Switzerland; x), since 1914 Assistant at the Freiburg Botanical Institute, Switzerland; University Lecturer, in later years appointed Professor there. He visited Java in 1930–31, stayed for some months at Buitenzorg, working as a guest in the Foreigners' Laboratory of the Botanic Gardens.[1]

COLLECTING LOCALITIES. Aug. *1930*–March *1931. W. Java:* Botanic Gardens and Economic Garden of the Gen. Agric. Exp. Stat. Buitenzorg; Mountain Garden Tjibodas (slope G. Gedeh, Aug. 29–Sept. 9, 1930); *E. Java:* Pasoeroean (Oct. 8–15), Pasir Poetih (18–21), Baloeran (Sitoebondo, 23), Poeger (Oct. 30–Nov. 1); *W. Java:* environs of Buitenzorg, *e.g.* Tjiboerial (Dec.); *P. Onrust*, Bay of Batavia (Dec.); mangrove Batavia; Mountain Garden Tjibodas and slope G. Gedeh (Dec. 30–Febr. 1, *1931*); *Centr. Java: Noesa Kambangan* (island S of Java, Febr.).

COLLECTIONS. *Herb. Bot. Inst. Freiburg: c.* 390 *nos.* The plants were partly identified at the Buitenzorg Herbarium, those from E. Java by C. A. BACKER (Pasoeroean).

LITERATURE. (1) G. BLUM: 'Osmotische Untersuchungen in Java' I–II (Ber. Schweiz. Bot. Ges. 42, 1933, p. 550–680; *l.c.* 47, 1937, p. 400–416); 'Über osmotische Untersuchungen in der Mangrove' (*l.c.* 51, 1941, p. 401–422).

cf. DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 50.

Blume, Carl Ludwig
(1796, Brunswick, Germany; 1862, Leyden, Holland), a medical doctor, went to Java in 1818, and was soon appointed Inspector of the Vaccine and at the same time Assistant Director of the Buitenzorg Botanic Garden; in 1822 Director of this institution until 1826, when the latter situation was discontinued on account of economy. He then went to Holland, where he was appointed Director of the State Herbarium at Leyden (Rijks Herbarium) in 1829 (the first year still at Brussels).[1] Together with PH. FR. VON SIEBOLD he made the project for the foundation of the 'Kon. Ned. Maatschappij tot aanmoediging van den tuinbouw' (Roy. Dutch Soc. for the Advancement of Horticulture), which took place in 1842.

He is the author of many important books on the flora of Java.[2]

He is commemorated in the genus *Blumea* A.P.DC.

COLLECTING LOCALITIES. *W. Java:* to Bantam, Tjiboam, Tji Oedjoeng, with SPANOGHE and KENT (Dec. 31, *1821*–Jan. 3, *1822*);[3] G. Salak (1822);[4] G. Gedeh-Pangrango (Apr. 14, *1823*).[5]—*1824. Tour of inspection in Java*,[6] accompanied by G. H. NAGEL, KENT, LATOUR, and *pr. p.* HOOPER, in *W. Java:* exploration of the Duizendgebergte (G. Seriboe)[7] (from Febr. 26, W of Buitenzorg; ascent on the 28th); departure from Pasir Djierak (March 3); to Romping (= Roempin) (here HOOPER joined the party) (March 14–Apr. 1); trip to Koeripan[7] and G. Dapoer; Romping (Apr. 14–18); Tangerang and environs of Batavia (till June 28); Krawang (according to BLUME June 22, this date does not agree with the account of NAGEL); Tjikao (July 5–13); G. Parang (14); back to Tjikao (Aug. 12); Wanyassa (13); G. Boerangrang (Aug. 17–Sept. 5); Tjiratjas; Wanyassa (= Wanajasa) (15); *via* Soebang to Indramajoe (18), Pamanoekan (21–22) and Kandang-Auer (= Kandanghaoer) (22); *via* Indramajoe to Cheribon and Tegal (no collecting was done here) and back; base of G. Tjeremai (Oct. 8)[8] and Ling(g)a (D)Jati (8–12); ascent of the Tjeremai *via* Tjigerobak (13), reaching the summit on the 18th, leaving the mountain Oct. 24 on account of a forest fire; on the way (Nov. 3) *via* Tjiamis to *Noesa Kambangan*[9] (stay till Dec. 1) (S of *Centr. Java*); back at Tjiamis (4), and *via* Bandoeng (29) and Tjiandjoer (30) returning to Buitenzorg. He is recorded to have ascended G. Tangkoeban Prahoe with ROORDA VAN EYSINGA in the same year.[10]—*1825.* With NAGEL to Rembang (*Centr. Java*): starting Jan. 13, *via* Tjiandjoer, Bandoeng, Cheribon, Tegal, Pekalongan and Semarang, reaching Rembang on the 19th. In the same year he climbed G. Parang (Krawang, *W. Java*) with NAGEL.[11]

Other localities in *W. Java:* Geger Bintang (spur of Mt Gedeh), G. Pantjar NE of Buitenzorg, Panaroekan (beach), G. Patoeha, Lembang, Megamendoeng, Telaga Warna, between Sadjira and Lebak.

COLLECTIONS. *Herb. Leyden* (also material in spirits)[12]; dupl. in *Herb. Berl.* (284 *nos* from 1823–26), *Herb. Bog.* (in H.B. series), *Brit. Mus.* (by exch. 355 *nos* of BLUME and others), *Herb. Oxford Univ.* (3000 specimens with *Herb.* FIELDING), *Utrecht, Florence* (recorded from Java and Celebes; this cannot be correct as BLUME *never* collected outside Java),[13] *Paris, Vienna* (also *Orch.* from Java

with *Herb.* REICHENBACH; the Sumatra orchids cannot possibly be from BLUME), *Herb.* DECAND. (*Geneva*), *Herb.* DELESS. (*Geneva*), *N.Y. Bot. Gard.* (acc. to MERRILL *in litt.*), *Herb. Bot. Gard St Petersb.* (=*Leningrad*) (106 from Java), *Herb. Sydney* (acq. in 1908), *Herb. Kiel* (Java); *Herb.* SENCKENB. (= *Univ.*) *Frankfurt* (cryptogams only); *Herb. Munich; Herb. Breslau, Cambridge* (with *Herb.* LINDLEY); *Nat. Hist. Mus. Oldenburg; Herb. Madrid* (400, certainly mixed with plants collected by others in Sumatra, Moluccas, *etc.*); *Herb. Copenhagen; Herb. State Mus. Stockholm.*

The records of duplicates in foreign herbaria are certainly in several cases untrustworthy, as BLUME sent duplicates from *various* collectors; these acquisitions were occasionally later labelled and listed under his name.

When he left Java, he took with him the greater part of the herbaria of REINWARDT, KUHL, and VAN HASSELT; BLUME issued a list concerning those herbaria.[14]

As to his own collections, it was always supposed that he took all of them to Europe. Only recently it was found that numerous duplicates had been left behind in the interest of the study of natural science in the Buitenzorg Botanic Gardens. These, and part of the collection which had mysteriously disappeared before his departure from Java, together with other plants, were offered for sale to the Dutch Government by G. J. A. KOLLMANN (see there) in 1836. The specimens which had been collected at Government expense (*viz* BLUME and ZIPPEL plants) were selected and kept at the Leyden Herbarium.[15]

It would be certainly worthwhile if a work as MERRILL, Species Blancoanae, could be accomplished for BLUME's type specimens, as these authorized specimens are very welcome to the critical phytographer.

LITERATURE. (1) *cf.* Alg. Konst- en Letterbode 1829[1], p. 227.

(2) *e.g.* 'Catalogus van . . . 's Lands Plantentuin' (1823); 'Tabellen en platen voor de Javaansche Orchideën' (1825) (*cf.* FEDDE Repert. 39, 1936, p. 318); 'Bijdragen tot de Flora van Ned. Indië' (Batavia 1825–27); 'Flora Javae' (1828) (for dates of publication *cf.* Blumea 3, 1939, p. 203–211); 'Rumphia' (1835–48); 'Museum botanicum Lugduno-Batavum' (1849–56); 'Mélanges botaniques' (1855).

(3) C. L. BLUME: 'Bijdrage tot de kennis van het landschap Bantam *etc.*' (Cybele *no* 6, 1827, p. 1–36); 'Gedachten op eene reis door het zuidoostelijk gedeelte der residentie Bantam' (Ind. Magaz. 2e twaalftal, *nos* 3–4, 1845, p. 1–36).

(4) C. L. BLUME: 'Beschrijving van eenige gewassen, waargenomen op eenen togt naar den Salakh in den jare 1822' (Verh. Bat. Gen. K. & W. 9, 1823, p. 129–202).

Review in Flora 8[1], 1825, p. 150–156.

(5) *cf.* Letter in Flora 7[1], 1824, p. 289–295.

C. L. BLUME: 'Over de gesteldheid van het gebergte Gedeh' (Verh. Bat. Gen. K. & W. 10, 1825, p. 55–104).

(6) *cf.* Letters in Flora 8[2], 1825, p. 577–585; *l.c.* p. 676–680; *l.c.* 9[2], 1826, p. 417–426 and 433–441.

G. H. NAGEL: 'Schetsen uit mijn Javaansche portefeuille' (Amsterdam 1828).

(7) For the vegetation of G. Seriboe and Koeripan *cf.* BLUME in NAGEL, Javaansche tafereelen, Amsterdam 1829, p. 69–75.

(8) C. L. BLUME: 'Bestijging van den berg Tjerimai, gewoonlijk genoemd Tjermé, in de residentie Cheribon' (Ind. Magaz. 2e twaalftal, *nos* 3–4, 1845, p. 102–116).



BLUME

(9) *cf.* Flora 8[2], 1825, p. 558.

C. L. BLUME: 'Etwas über die Rhizantheae, eine neue Pflanzenfamilie, und die Gattung Rafflesia insbesondere' (Flora 8[2], 1825, p. 609–624); in 'Flora Javae' *Rhizantheae*, 1828, p. 3–4; 'Iets over de Patma van Noesa Kambangan' (Ind. Magaz. 2e twaalftal *nos* 3–4, 1845, p. 179–194).

(10) *cf.* J. OLIVIER: 'Tafereelen en merkwaardigheden uit Oost-Indië' (1836), p. 297.

(11) *cf.* Nat. Tijdschr. N.I. 31, 1870, p. 198.

(12) *cf.* Flora 14[1], 1831, p. 27–28.

(13) *cf.* PH. PARLATORE: 'Les collections botaniques du Musée de Phys. et d'Hist. Nat. de Florence' (1874), p. 52.

(14) 'Enumeratio plantarum Javae et Insularum adjacentium ex herbariis Reinwardtii, Hasseltii, Kuhlii, Blumei, *etc.*' (Lugd. Bat. 1827–28, 2 vols).

C. G. NEES VON ESENBECK: 'Plantae javanicae ineditae' (Syll. Plant. Nov. Regensb. 1, 1824, p. 91–101) (describing plants collected by BLUME).

(15) *cf.* M. J. VAN STEENIS-KRUSEMAN: 'Kollmann's collection of Javan plants' (Bull. Bot. Gard. Buit. 3rd ser., vol. 18, *in the press*).

BIOGRAPHICAL DATA. Proc. Linn. Soc. Lond. 1862 (meeting May 24th), p. xcvi–xcviii; Bot.

Zeitung 20, 1862, p. 56; SEEMANN Journ. Bot. 1, 1863, p. 64; PRITZEL, Thes. Lit. Bot., 1872; BAILLON, Dict. de Botanique 1, 1876; C. DE VOS, Korte schets van de geschiedenis der plantkunde *etc.*, Bolsward 1888, p. 91–92; SIRKS, Ind. Nat. Onderzoek, Amsterdam 1915, p. 109–112 + portr.; Encyclop. N.I. 1917; portr. in Med.'s Rijksherb. 62a; *cf.* also *l.c.* 62b; BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 51, 1941, p. 343.

Bluntschli, H. C., *cf. sub* Forest Research Institute, Buitenzorg.

Boachie, Aquasie

(± 1827, Ashanti, Gold Coast, Africa; 1904, near Buitenzorg, Java), Prince of Ashanti who was transported to Holland with a cousin of his as hostages, when about 9 years old (his father being bound yearly to supply soldiers for the D.E.I.). As a pupil of the King of the Netherlands he got a European education, studying at Delft and Freiburg. In September 1850 he was appointed Mining Engineer in the D.E.I., stationed in Bantam; he resigned in 1857 as it became evident that he would have no access to the higher ranks. After a complaint to King Willem III, he obtained the right of long lease on land in Madioen (E. Java), together with a monthly gratification. In later years he was the tenant of the land Soekasari near Buitenzorg and subsequently a resident at Bantar Peteh near the same place.

We have little information concerning his tours; he accompanied C. DE GROOT (see there) on a trip to Bawean.

He is the author of several geological papers.[1]

COLLECTIONS. *Herb. Bog.*, dried specimens of *Jonesia monopetala* HASSK.,[2] *etc.* Also living plants to *Hort. Bog.* in *1868–69*.

For recent collections, *cf.* his son A. BOACHI, *sub* Forest Research Institute, Buitenzorg.

LITERATURE. (1) 'Onderzoek naar de kolen, gevonden langs het strand der Meeuwenbaai, res. Bantam' (Nat. Tijdschr. N.I. 9, 1855, p. 49–52) and other papers in the same periodical.

(2) *cf.* HASSKARL, Retzia, in Nat. Tijdschr. N.I. 10, 1856, p. 199.

BIOGRAPHICAL DATA. De Ingenieur 1900, p. 647 + portr. and p. 714; *l.c.* 1904, *no* 29; Ind. Gids 1904[2], p. 1362–1367; Encyclop. N.I. 5, 1927, p.131.

Boachi, A., *cf. sub* Forest Research Institute, Buitenzorg.

Bobok, St., *cf. sub* Forest Research Institute, Buitenzorg.

Bock, Carl

(1849, Copenhagen, Denmark; ? , ?), explorer and ethnographer who made a zoological collecting trip in Sumatra through the liberality of the late Marquis of Tweeddale,[1] and subsequently one to Borneo with support of the D.E. Indian Government.[1–2] In 1885 he collected reef-animals in the Java Sea and the Moluccan Sea on behalf of the Berlin Academy of Science. Later on he was appointed Consul-General respectively at Shanghai, Antwerp and Lisbon. In 1913 he was a resident of Brussels.

ITINERARY. *1878–79. Sumatra West Coast.* To Padang (Aug. 6, 1878); to Ajer Mantjoer (Aug. 14) and Batang Aneh (=?Aneikloof), at the latter place staying 3 days in company with BECCARI; to Padang Pandjang (18), Tanah Datar (Fort van der Capellen) and Boea; to Mt Sago (Landanglawas) (30), up to 5000 feet; on the way to Sidjoengjoeng (Sept. 9–11); to Kotta Baroe (Oct. 12), Soepajang *via* G. Silampoeng, Solok, Paio; Solok (Nov. 14), Moeara Laboe, Ajer Angat, Lolo; setting out for Solok (Jan. 18, 1879), Padang Pandjang, Ajer Mantjoer (staying till May 12).—*1879–80. NE. & SE. Borneo.* Sailing into the Mahakam (July 16, 1879); Tengaroeng (July 20–Aug. 10); by proa to Longwai, at first following the Mahakam, subsequently the Telèn (arrival 21); following the same route during the return voyage. Samarinda; Tengaroeng (Nov. 9–20); starting by proa (21) to Moeara Pahoe (stay Dec. 4–14); by proa (15) to Moeara Anan and proceeding by land to Tiko on kali Benangan, proceeding by proa to Teweh (staying 25–27); by proa (28) on the way to Bandjermasin (stay Dec. 31–Jan. 26, 1880); departure to Amoentai; to Barabei (29); to Mindai (Febr. 1); back *via* Birajan, Barabei (21–24), the 25th proceeding to Bandjermasin, and March 3 sailing from there to Soerabaja.

COLLECTIONS. *Herb. Kew, e.g. Coscinium fenestratum* SCHEFF. from *Borneo.*[3]

He specially collected birds, shells, and insects. It is just possible that he collected a few botanical specimens in *Sumatra* too; in the descriptions of his trips in the latter island, he relates of his trouble in dragging a large specimen of *Amorphophallus* with tuber to the cottage.

His collections (probably zoological) from Ajer Mantjoer, Lolo, and Ajer Angat were lost by shipwreck in the Red Sea; his living specimens were shipped later on and duly reached their destination. He made natural history collections in China, Siam and Laos too.

LITERATURE. (1) C. BOCK: 'The head-hunters of Borneo' (London 1881; including: 'Journeyings in Sumatra'); transl. into German: 'Unter den Kannibalen auf Borneo' (Jena 1882).

cf. also Nat. Tijdschr. N.I. 41, 1882, p. 118–129 (bird coll. from Sumatra).

(2) C. BOCK: 'Reis in Oost- en Zuid-Borneo van Koetei naar Banjermassin, ondernomen op last der Indische Regeering in 1879–1880' ('s-Gravenhage 1887, 1 vol. + atlas; publ. Kon. Inst. v. Taal-, Land- en Volkenk. N.I.). According to footnotes, the names of kampongs *etc.* mentioned by him, do not agree with the data of others, *e.g.* with those of SCHWANER.

(3) *cf.* Pflanzenreich 46, 1910, p. 114.

BIOGRAPHICAL DATA. Who's who 1913.

Bodegom, Arie Hendrik van

(1902, Middelharnis, Z.H., Holland; x), Forest Officer, educated at the Agricultural College, Wageningen; in the employ of the D.E. Indian Forest

Service, 1927–42. He made explorations in Djambi (Centr. Sumatra) (1929–31), and in Sumatra East Coast (1931–33, 1934–36).

Author of some important sylvicultural papers.[1]

COLLECTING LOCALITIES. *1931. Centr. Sumatra*, Djambi, collecting *Primula imperialis* on G. Masoerai (Oct.).[2]—*1935. Sumatra East Coast.*[3]

COLLECTIONS. He collected in the F.R.I. bb. series; collections in *Herb. For. Res. Inst. Buitenzorg* and *Herb. Bog.*

LITERATURE. (1) 'De vloedbosschen in Riouw en Onderhoorigheden' (Tectona 22, 1929, p. 1302–1332, 1 map); and a typewritten report on the forests of Djambi (1933).

(2) A. H. VAN BODEGOM: 'Primula imperialis op den G. Masoerai in Djambi' (Trop. Nat. 21, 1932, p. 43–46).

(3) A. H. VAN BODEGOM: 'De Asahan Watervallen' (Natuur in Indië, 1937, p. 23–26).

Boden Kloss, C., *cf.* KLOSS, C. B.

Boeal Pohan, *cf. sub* Forest Research Institute, Buitenzorg.

Boedin, *cf. sub ditto.*

Boedjang, G., *cf. sub ditto.*

Boedoet, *cf. sub ditto.*

Boedijn, Karel Bernhard

(1893, Amsterdam, Holland; x), botanist, educated at Amsterdam; Assistant in the University of Amsterdam, 1916–25, taking his Dr's degree in 1925; Botanist at the Experiment Station of the A.V.R.O.S., Medan, Deli (Sumatra East Coast), 1926–27; Mycologist at the Buitenzorg Herbarium, 1928–41; since 1933 at the same time Extraordinary Professor of Botany in the Faculty of Medicine at Batavia; in 1941 appointed Professor in the latter faculty and in the Faculty of Agriculture (Buitenzorg). After World War II he was evacuated to Holland, and returned to Java in July 1947.

He is the author of many cytological, and principally mycological papers.

Boedijniopeziza and other *Fungi* were named after him.

COLLECTING LOCALITIES. *1926–27. Sumatra East Coast:* between Brastagi and Medan, Laudeboekdeboek (June 20, *1926*), *etc.*—*W. Java:* Tjikampek (teak forest) (Aug. 2, *1929*); *Noesa Kambangan* (isl. S of Centr. Java) (Febr. *1931*); *W. Java:* G. Karang (Bantam) (May 26–27, 1931); *E. Java:* Pasoeroean (June 1931); *Krakatau group* (Nov. *1932* and Jan., Apr., Oct., and Dec. *1933*; Apr. *1934*): *Krakatau, Anak Krakatau, Verlaten Eiland;* in April 1934 besides visiting *P. Edam* and *Toppershoedje; E. Java:* G. Pandan (Kediri Res.) (Apr. *1935*); *W. Java:* G. Patoeha (July *1939*).

COLLECTIONS. *Herb. Bog.:* principally *Fungi;* from the above-mentioned localities phanerogams too, *e.g.* ± 50 *nos* from *Krakatau,*[1] 7 from *Noesa Kambangan,* 7 from G. Pandan (some remarkable ones), 12 *nos* from G. Patoeha. The plants from Tjikampek were numbered VAN STEENIS (*leg.* BOEDIJN) 3052–3065; the other phanerogams probably numbered in one series with his *Fungi.* His collections total about 3000 numbers.

LITERATURE. (1) K. B. BOEDIJN: 'The Mycetozoa, Fungi, and Lichenes of the Krakatau Group' (Bull. Jard. Bot. Buit. sér. 3, vol. 16, 1940, p. 358–429, 14 fig.).

BIOGRAPHICAL DATA. Wie is dat? ed. 3 and 4.

Boeea, *cf. sub* RAHMAT SI BOEEA.

Boekholz, J. van

Commissary of the Dutch Government, who in 1816 was instructed to take over Bandjermasin from the English (after the interval of British Rule). He is recorded to have collected objects of the three kingdoms of nature, at the request of REINWARDT.[1] With a view to the unhappy fate of most of the latter's shipments, it remains very doubtful whether BOEKHOLZ's specimens ever reached Holland.

In 1818 he was commissioned to Borneo's West Coast with the expedition under Major MUNTINGHE, to establish Dutch authority there.

LITERATURE. (1) *cf.* KORTHALS in Ned. Kruidk. Arch. 1, 1846, p. 22.

Boengsoe, D., *cf. sub* Forest Research Institute, Buitenzorg.

Boer, Willem Albert Pieter de

(1893, Malang, Java; Aug. 29, 1945, prisoner camp at Tjimahi, Java), studied forestry at Wageningen, Holland; since 1915 appointed Forest Officer in the D.E.I., at first stationed in the teak districts of Java, subsequently in Moena (S of Celebes), 1920–Febr. 1924; Sumatra West Coast (employed by the mining-company Aequator) at Mangani, March–Sept. 1924; in the teak districts in Java again; at Bandjermasin (SE. Borneo), 1934–37; since 1937 at Buitenzorg, where in 1939 appointed Inspector, Chief of the section of Forest Reconnaissance and Organisation of the Outlying Possessions.

COLLECTING LOCALITIES. *E. Java:* Pasoeroean Forest District (June *1918*); *W. Java:* Krawang, Indramajoe, Tjikampek and E. Tegal (*Centr. Java*) (Dec. *1918*); *Centr. Java:* Pekalongan-Kendal (Apr. *1919*); Kedoengdjati (Oct. 1919); *W. Java:* together with WOLFF VON WÜLFING near Tjikampek, Poerwakarta.—*P. Boeton,* S of Celebes (March *1921*); *P. Kabaëna* and Kendari (*SE. Celebes*) (*c. 1922*).—*Sumatra West Coast:* Mangani, Loeboek Sikaping, Soeliki (*1924*).—*Centr. Java:* Bodjonegoro (1924); Grobogan, Blora (May–June *1927*); *NE. & SE. Borneo* (*1935–36*);[1] *Kangean Archipelago* (*1938*).

COLLECTIONS. *Herb. Bog.:* in the years 1918–19 numbered in BEUMÉE's series (see there); from *Boeton nos* 1–28; the collection from Grobogan 1927, numbered 1–28. *Herb. For. Res. Inst. Buitenzorg:* from *SE. Celebes, P. Boeton* and *Kabaëna* 60 *nos,* from *SE. Borneo* 10 and from *Kangean* 11, *etc.*

LITERATURE. (1) Typed report on a tour to

Moeara Teweh and Poeroek Tjahoe (mid-March–mid-April 1936) in For. Res. Inst. Buitenzorg.

Boerhan(oeddin), *cf. sub* Forest Research Institute, Buitenzorg.



BOERLAGE

Boerlage, Jacob Gijsbert

(1849, Uithoorn N.H., Holland; Aug. 25, 1900, Ternate, Moluccas), teacher in Natural History from 1876–80, Custodian of the Leyden Herbarium (Rijksherbarium) 1881–96 (since 1894 Asst Director and University Lecturer); he was the first to be granted the Buitenzorg Fund, for which he travelled to Java in 1888. His special object was to compose a list of plants, on behalf of which he collected specially in the environs of Buitenzorg; following his departure, the collecting of plants was continued for another 8 months.[1] In 1896 he was appointed Asst Director of the Garden and Chief of the first division (Herbarium) of the Botanic Gardens, Buitenzorg. He died during a tour with J. J. SMITH to the Moluccas, made with the intention to identify RUMPHIUS's plants.

He is the author of several botanical papers.[2]

He is commemorated in the genus *Boerlagea* COGN. *etc.*

COLLECTING LOCALITIES. *1888. W. Java:* arrival at Buitenzorg (Apr. 14); environs of Buitenzorg, *e.g.* Tjiomas, Kota Batoe; a fortnight at Tjibodas, *e.g.* on Geger Bintang; Wijnkoopsbaai (Pelaboean Ratoe) (July 4); environs of Bandoeng (G. Tangkoeban Prahoe) and Garoet (Telaga-Bodas); G. Papandajan (± July 13); Aug. 4 sailing for Holland.—1896. *Krakatau, Lang Eiland*[3] and *P. Leiden* (Bay of Batavia) (Sept. 29).—*1897. W. Java:* Tjibodas; *Islands in Soenda Straits* with TREUB, PENZIG and others (March 16–18): *P. Babi, P. Merak, Krakatau, Lang Eiland, Verlaten Eiland.*—*1898–99. W. Java:* Tjibodas.—*1900. Tour to the Moluccas* with J. J. SMITH.[4] *Ambon* (arrival on July 3), making small trips in Leytimor; G. Sirimau and G. Horiel (July 6); G. Nona (7), Waai (10); ascent of the Hoetoe Mortetoe (10–11); to Hitoe and Hitoe Lama (16); G. Toena (17–18); Asiloeloe and Alang (20–21); ascent of the Latoea (23–25; the first ascent by a naturalist); Hina Niwel (26); back at Ambon (27), having to contend with illness; trip to Halong and Batoe Gantoeng; departing on Aug. 11; *Boeroe:* Kajeli (12); *Batjan* (13); *Ternate* (14). In the latter island BOERLAGE fell seriously ill and subsequently died; further data on the tour *cf. sub* J. J. SMITH.

COLLECTIONS. Collection *1888* in *Herb. Leyden:* 250 species from Buitenzorg, 170 Wijnkoopsbaai, 100 Tangkoeban Prahoe, 100 G. Papandajan, 100 Telaga Bodas (also material in spirit); later collections in *Herb. Bog.* and *Herb. Leyden.* The *Lang Eiland* collection (1896) consists of not yet a 100 species; the collection BOERLAGE & SMITH from the *Moluccas* amounts to 710 *nos. Herb. Kol.* (= *Ind.*) *Inst. Amsterdam:* 21 plants of the D.E.I. (pres. 1891/92).

LITERATURE. (1) *cf.* Ann. Jard. Bot. Buit. 45, 1935, p. 63–64; Versl. Pl. Tuin Buitenzorg for 1888, p. 18.

(2) 'Uitheemsche planten om Buitenzorg verwilderd' (Hand. 2e Nat. Geneesk. Congr. Leiden 1889, p. 146–150); 'Handleiding tot de kennis der flora van Nederlandsch Indië' (1890–1900, 3 vols); a catalogue of the Buitenzorg Botanic Garden (2 parts, 1899–1901); several small papers; the *Annonaceae* of the Botanic Garden in Icon. Bogor.; *cf.* also Ann. Jard. Bot. Buit. 45, 1935, p. 63, 72–73, 93, 103.

(3) *cf.* 'The trip of BOERLAGE to Lang Eiland in September 1896' (chapt. V in BACKER, The problem of Krakatoa as seen by a botanist, 1929, p. 84–87).

(4) *cf.* Reisverslag (travel account) in Versl. Pl. Tuin Buitenzorg for 1900, 1901, p. 101–107.

BIOGRAPHICAL DATA. Versl. Pl. Tuin Buitenzorg for 1900, 1901, p. 17–24; Ned. Kruidk. Arch. 3rd ser. vol. 2, 1901, p. 404–414; Nat. Tijdschr. N.I. 60, 1901, p. 396–412; Encyclop. N.I. 1, 1917; BACKER, Verkl. Woordenb., 1936; Portr. in album of the 'Ned. Bot. Vereeniging' (Leiden) *no* I.

Boerrigter, Johan Herman

(1876, 's Hertogenbosch, N.Br., Holland; x), was employed by the D.E.I. Forest Service since 1898; stationed many years in the teak districts of Java (in 1901 at Gombong), at the end of 1916 at Soekaboemi and in 1921 at Buitenzorg. He was appointed Inspector in 1922, and retired in 1925.

COLLECTING LOCALITIES. *1901. Java:* Palorono; Gondanglegi, S of Malang (*E. Java*).[1]

COLLECTIONS. *Herb. Bog.*, the *nos* 64 and 82 S (the latter from Palorono) *etc.*

LITERATURE. (1) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 7, 1925, p. 350 and *l.c.* 12, 1932, p. 233.

Boers, A. J.
of Ketitang, Soerakarta (*E. Java*), sent living plants (*e.g.* of *Strobilanthes*) to *Hort. Bog.* in *1905*.

Boesri, *cf. sub* Forest Research Institute, Buitenzorg.

Boestojah, *cf. sub ditto*.

Boesveld, Johan
(1878, Brummen, Gld, Holland; x), schoolteacher, from 1905–24 serving in the D.E.I., *e.g.* at high schools at Ambon, Tondano (N. Celebes), and finally at Buitenzorg (W. Java); pensioned off and returning to Holland in 1924.
COLLECTING LOCALITIES. *1921. Ambon:* G. Nona and Noesa Niwi (Sept.).—*1923. N. Celebes:* Tondano and on G. Klabat.
COLLECTIONS. *Herb. Bog.:* from *Ambon* 15 *nos*, from Tondano 10 specim. *s.n.* Living orchids from G. Masarang and G. Klabat (*N. Celebes*) to *Hort. Bog.* (pres. 1923–24).

Boettcher
is cited as a collector of plants in the *Philippines* in MERRILL, Enum. Philip. Fl.Pl., *s.n.*, from *Luzon*, on Mt Pasoan *etc.*
A certain GEORG BOETTCHER (Berlin 1890–1920), made entomological collections in the Philippines;[1] he may be identical with the above-mentioned.
LITERATURE. (1) *cf.* Entomol. Beih. Berl. Dahl. 1935, p. 23.

Bogen, Emil
Commander of the American Marines. He is reported to have worked on a full account of the Admiralty Islands, including its natural history.
COLLECTIONS. *U.S. Nat. Herb. Wash.:* 200 very fragmentary specimens from *Manus Island* in the *Admiralties*, collected during World War II *in the forties* of this century.

Boger, F.
collected 7 *nos* of plants at Galela in *Ceram* (*Moluccas*) towards the end of *1927*; they are preserved in *Herb. Bog.*

Bois, Cora du
(1903, New York, N.Y., U.S.A.; x), anthropologist, educated at Columbia, who took her Ph. Dr's degree in California in 1932, where she worked for several subsequent years; Professor in the Columbia University, N.Y. City; she took part in the Ethnological Mission of the said University, making explorations in the Isle of *Alor* (*Lesser Sunda Islands*), when stationed at Kalabahi from *1938*–Febr. *1939*.
COLLECTIONS. In Jan. *1939* she collected 99 *nos* of useful plants which were presented to *Herb. Bog.;* they were identified by Dr VAN STEENIS.[1]
LITERATURE. (1) C. G. G. J. VAN STEENIS: 'Report on some useful plants from the Island of Alor (Timor Archipelago, N.E.I.) collected by Miss CORA DU BOIS in 1939 (Blumea 6, 1948, p. 246–262).

BIOGRAPHICAL DATA. Amer. Men of Sci. 1938.

Bois, Désiré Georges Jean Marie
(1856, Granville, Manche, France; 1946, Saint Mandé, France), Professor of Agriculture in the



BOLDINGH

Mus. d'Hist. Nat. Paris, was delegated to a Congress in Indo-China and made use of this opportunity to make a trip in Java. At Buitenzorg he devoted himself mainly to taxonomic studies and the collecting of an extensive herbarium;[1] he was especially interested in useful plants.
He is commemorated in *Merremia boisiana* (GAGNEP.) VAN OOSTSTR.
ITINERARY.[2] *1903.* Principally *W. Java*, (Febr.–March, staying 6 weeks in all): Buitenzorg, Tjibodas (G. Gedeh), Tjipetir, Lembang; *Centr. Java:* Klaten.
COLLECTIONS. *Herb. Paris.* A lichen from *Java* was cited as collected in Jan. 1903.[3] The latter date does not agree with the itinerary; he may have arrived in Java at the end of Jan.
LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 28.
(2) D. BOIS: 'Voyage en Indo-Chine et à Java' (Bull. Mus. Hist. Nat. Paris 9, 1903, p. 251–255); 'L'Institut Botanico-Agricole de Buitenzorg (Java)' (Rev. Hortic. 82, 1910, p. 15–18, 2 fig.); 'Le Jardin Botanique de Buitenzorg (Java)' (*l.c.* p. 37–39, 63–66, 4 fig.).
(3) *cf.* HUÉ in Bull. Soc. Bot. France 54, 1907, p. 417.

BIOGRAPHICAL DATA. Qui êtes-vous? 1924; Dict. Nat. Contemp. (1936) + portr.; Bull. Soc. Bot. France 93, 1946, p. 115–118 + portr.; Rev. Argent. Agron. 14, 1947, p. 177; Rev. Hortic. n.s. 30, p. 236 + portr., p. 294.

Bokhorst, H. G., *cf. sub* Forest Research Institute, Buitenzorg.

Bolanon, *cf. sub* Forestry Bureau, Manila.

Boldingh, Isaac

(1879, Purmerend, N.H., Holland; 1938, Amersfoort, U., Holland), botanist, from 1908–14 Assistant and Custodian for Botany at Utrecht University; appointed Botanist at the Buitenzorg Herbarium in 1914, and in the same year Acting Chief of that institute; in Oct. 1917 transferred to the Agric. Inst., Subdivision for Annual Crops of the General Experiment Station for Agriculture (Buitenzorg), specially charged with the selection of maize. He retired in 1932, and subsequently sailed for Europe.

Author of a 'Zakflora voor de Landbouwstreken op Java' (1916). See also *Addenda*.

COLLECTIONS. *Herb. Bog.*, small collection, from G. Salak (*W. Java*) *etc.*

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936, p. 646; portr. in album *no* 2 of the 'Ned. Bot. Vereeniging' (Leyden).

Boleleh, *cf. sub* Forest Research Institute, Buitenzorg.

Bolhuis, Garbrand Gerhard

(1903, Veendam, Gr., Holland; x), agriculturist, educated at the Agricultural College, Wageningen; since 1930 attached to the Subdivision for Annual Crops of the Agricultural Institute (Buitenzorg), sent *Sesbania roxburghii* MERR. from *Borneo* for identification to *Herb. Bog.*; at intervals *Java* plants for identification to *Herb. Bog.*

Bolla, mistake for BOEEA, *cf. sub* RAHMAT SI BOEEA.

Bolle, Pierrette Cornelie

(1893, Rotterdam, Holland; 1945, in Japanese concentration camp at Semarang, Java), phytopathologist who studied and took her Ph. Dr's degree (1924) at Utrecht University; Assistant at the 'Centraalbureau voor Schimmelcultures', Baarn, Holland, 1924–25; employed at the Subdivision Cheribon of the Java Sugar Experiment Station, 1925–30; in the latter year transferred to the Agricultural Department of the said Station at Pasoeroean.

She is the author of many phytopathological publications.

COLLECTING LOCALITIES. *E. Java. 1927.* Nongkodjadjar (G. Ketjiri), G. Tengger (Tosari, Moengal Pass).—*1928.* Pasoeroean.—*1930.* Soembermantjing.—*1933.* G. Ardjoeno; G. Tengger (with POSTHUMUS).—*Centr. Java. 1934.* G. Merbaboe.

COLLECTIONS. *Herb. Pasoer.:* 36 *nos* + 1 *no* BOLLE & POSTHUMUS; *Herb. Bog.:* material of *Rhodoleia teysmannii* MIQ. from G. Merbaboe (1934).

Bolster, Frederik H.

(1876, Oppenheim, N.Y., U.S.A.; x), a teacher, employed at the Bureau of Education at Manila, who beside his teaching work found time to collect a lot of interesting plants in *Mindanao etc.* *Polypodium bolsteri* COPEL. and other plants were named after him.

COLLECTIONS. Some of the collecting numbers referred to in MERRILL, Enum. Philip. Fl.Pl., exceed 400; 12 dupl. in *U.S. Nat. Herb. Wash.*

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Bolter

is referred to by VAN SLOOTEN as a collector of a plant in *Ambon;* MERRILL also mentions a specimen collected by BOLTER (*cf.* Interpr. Rumph. Herb. Amboin., 1917, p. 168). ?Identical with BOTTER, see there.

Bolung, H., *cf. sub* Forest Research Institute, Buitenzorg.

Bomban, *cf. sub ditto.*

Bona, Frederico R.

COLLECTIONS. *Herb. Manila:* 99 *Philippine Islands* plants (*1911–12*) and 153 Lepanto (*Luzon*) plants for identification (*1912–13*); 33 dupl. in *U.S. Nat. Herb. Wash.*

Bonorand, Mrs A.

Küsnacht-Zch, Switzerland, presented seeds and fruits from the *Sumatra* jungle to *Mus. Univers. Zürich* in *1902.* Collected herself?

Bontius, Jacobus

(1592, Leyden, Holland; Nov. 30, 1631, Batavia, Java), physician, educated at Leyden University (M.D. in 1614); in 1626 appointed Doctor, Dispenser, and Inspector of Surgeons in the D.E.I., sailing thither with the Governor General J. P. COEN in 1627. Possibly he soon made an official tour to the Moluccas and Timor, but was stationed at Batavia, successively in several positions. In the 4 years he passed in the tropics he found the energy and time to make the first investigations of Java's nature in the environs of Batavia, making ample notes. In 1631 four books were ready for the press, but it took several years after his death before publication followed.[1]

He is commemorated in the genus *Bontia* L.

COLLECTIONS. It is assumed that dried collections were never made, or at least are not existing anymore.

LITERATURE. (1) J. BONTIUS: 'De medicina Indorum' (Lugd. Bat. 1642, 4 vols), the 1st and most important volume being: 'Notae in Garciam ab Orta'.

His scientific inheritance was also published in G. PISONIS, medici Amstelaedamensis, de Indiae utriusque re naturali et medica *etc.* (Amstelaedami 1658, 14 vols), of which 6 vols contain BONTIUS's work, 'Historiae naturalis et medicae Indiae orientalis'.

His works were translated into English too, *viz:* 'An account of the Diseases, Natural History and Medicines of the East Indies, translated from the Latin of JAMES BONTIUS, Physician to the Dutch settlement at Batavia' (London 1769).

BIOGRAPHICAL DATA. Nat. Tijdschr. N.I. 30, 1868, p. 285–342, 475–477; SIRKS, Ind. Nat. Onderzoek, 1915, p. 5–12; Encyclop. N.I. 1, 1917; L. S. A. M. VON RÖMER, Historische Schetsen, Batavia 1921, p. 25–43; BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 50, 1940, p. 186 and *l.c.* 51, 1941, p. 345.

Booberg, Karl Gunnar

(1892, Örebro, Sweden; Oct. 28, 1944, Tjimahi, Java), peat expert and plant geographer who took his degree at Uppsala in 1930; till 1924 he was employed in Sweden, at first as Assistant in the Geological Service at Stockholm, subsequently by the 'Svenska Mosskulturföreningen', Jönköping; since 1925 employed at the Java Sugar Experiment Station (Pasoeroean), respectively Group-Adviser at Modjokerto 1925–26, Inspector of the Field Service 1926–28, Asst Director of the Agricultural Department 1928–34 and Director of the same Department 1934–41. After his retirement he settled at Djoenggo, Poenten (E. Java).

He is the author of many papers, principally concerning cane-breeding, but of some plant-sociological publications on the Malaysian flora too.[1]

COLLECTING LOCALITIES. *1925. E. Java:* Poeger.—*1926.* Poeger.—*1927. Sumatra East Coast.*—*1928. E. Java:* Poeger (with BACKER).—*1929.* G. Watangan, Poeger.—*1930. Centr. Java:* Watoe Oeloe, Koedoes, Rembang.—*1931. W. Java:* Indramajoe, Cheribon.—*1934. Islands in the Bay of Bantam and Batavia.*—*1936. E. Java:* at Bondowoso with CLASON (see there) (Sept. 6).—*1940. Centr. Java:* Solo.

Collecting was done too in S. Priangan, *W. Java*, and at Gradjagan (*SE. Java*).

COLLECTIONS. *Herb. Uppsala:* 500 dune plants (pres. 1928); *Herb. Pasoer.:* 68 *nos*, and BOOBERG & BACKER 24 *nos; Herb. Bog.: e.g.* 19 specim. CLASON & BOOBERG, without numbers. The specimens preserved at Pasoeroean and Buitenzorg are for the greater part without dates. Also some sheets in *Herb. Nat. Hist. Mus. Stockholm.*

LITERATURE. (1) 'Een plantensociologisch onderzoek der duinen bij Poeger' (Hand. 5e N.I. Nat. Wet. Congr. Soerabaja 1928, p. 366–377, 11 fig., 1 map); 'De grondvormen, étages en phytocoenosen van Java's vegetatie' (*l.c.* 6e Congr. Bandoeng 1932, p. 328–352); 'Die malayische Strandflora. Eine Revision der SCHIMPERschen Artenliste' (ENGL. Bot. Jahrb. 66, 1933, p. 1–39); 'Ipomoea pes caprae ROTH in het binnenland van Java en Bali (Inland occurrence of Ipomoea pes caprae ROTH), with an English summary' (Hand. 7e N.I. Nat. Wet. Congr. Batavia 1936, p. 403–410); 'Verband tusschen klimatologische factoren en vegetatie' (*l.c.* 8e Congr. Soerabaja 1939, p. 351–357).

BIOGRAPHICAL DATA. Arch. Suikerindustrie in Ned. en N.I. 1941, p. 308–313.

Boogerd, Frans Johannes

(1893, Epe, Gld, Holland; 1939, Djokjakarta, Java), studied tropical agriculture at Wageningen; employed in the Department of Agriculture in the D.E.I., 1917–24; at the Java Sugar Experiment Station (Pasoeroean), respectively Group-Adviser at Tegal, 1924–27, and Solo, 1927–28; finally Agricultural Adviser of the Sugar Experiment Station of the United Klaten Plantation Company Ltd (Klaten), at Djokjakarta.

COLLECTIONS. *Herb. Pasoer.:* 9 *nos* from *Centr. Java*, Pekalongan and Tegal, collected in *1926.*

Boorsma, Simon Eliza

(1872, Katwijk a/Zee, Z.H., Holland; x), biologist, Ph. Dr at Utrecht in 1899; since 1913 teacher at the K.W. III school at Batavia; he evidently returned to Holland, was appointed teacher at the secondary school at Purmerend, and resigned in 1922 on account of bad health. At present living at Amsterdam.

COLLECTIONS. *Herb. Bog.:* plants from G. Merbaboe (*Centr. Java*) (*1916*) and a small collection from Krawang in *W. Java.*

Boorsma, Willem Gerbrand

(1867, Katwijk a/Zee, Z.H., Holland; 1937, Oegstgeest, Z.H., Holland), pharmacist, graduated (Ph. Dr) at Utrecht University in 1891; in the same year he went to the D.E.I., where he was appointed Military Dispenser; Chief of the Pharmacological Laboratory of the Buitenzorg Botanic Gardens, 1892–1917, and since 1904 besides teacher at the School of Agriculture at Buitenzorg; since 1914 until his retirement Director of the said school. He was the editor of the periodical Teysmannia from 1911–22.

His publications are all in the field of chemistry and pharmacology.

Piper boorsmae C.DC. was named after him.

COLLECTIONS. *Herb. Bog.:* haphazard specimens from excursions, *e.g.* from *P. Boeled*, Bay of Batavia (Apr. 30, *1911*). *New Guinea Pipers* were collected on his behalf; preserved in *Herb. ?* . In *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam:* some specimens of plants (1912 and previously); in *Show Mus. Berl.:* 59 nos pharmacol. coll. from *Java* (pres. 1907).

Hort. Bog.: in the course of years many living plants from several localities.

BIOGRAPHICAL DATA. Portr. in Ann. Jard. Bot. Buit. 45, 1935, pl. 8; BACKER, Verkl. Woordenb., 1936.

Boot, Cornelis

(1890, Kerkwerve, Z., Holland; x), since 1917 Forest Officer in D.E. Indian Govt service, principally stationed in the teak districts of Java; retired in 1947.

VAN SLOOTEN (in Bull. Jard. Bot. Buit. sér. 3, vol. 7, 1925, p. 370) refers to a *no* 3322 collected in teak forest in Pekalongan Residency, *Centr. Java* (July *1923*). This is a number of the BEUMÉE series (see there).

Booth, H. or J.
the collector of *Dendrobium boothii* T. &. B. on G. Salak, *W. Java*, in *1862*,[1] and of *Liparis boothii* REGEL in *1864*.[2]
In *Herb. Edinburgh:* material of *Primula imperialis* JUNGH. from Mt Pangrango, *W. Java, no* 102.
LITERATURE. (1) *cf.* TEYSMANN & BINNENDIJK in Nat. Tijdschr. N.I. 24, 1862, p. 318.
(2) *cf. sub* boothii in BACKER, Verkl. Woordenb., 1936.

Borden, Thomas E.
at first schoolteacher, later employed by the For. Bur. Manila as botanical collector.
Dryopteris bordenii CHRIST and *Cyclostemon bordenii* MERR. were named after him.
COLLECTIONS. In *1903/04* 219 *nos* from Bataan, *Luzon* (F.B. series, *cf. sub* Forestry Bureau) were presented to *Herb. Manila;* > 900 dupl. in *U.S. Nat. Herb. Wash.;* also dupl. in *Herb. Edinburgh.*

Boreel, Jhr Th. W.
forwarded *Rafflesia rochussenii* TEYSM. & BINNEND. *forma typica* KDS from the forest on G. Probakti (SW of G. Salak), *W. Java*, to KOORDERS. The specimen numbered and preserved in *Herb.* KOORDERS = *Herb. Bog.*[1]
LITERATURE. (1) *cf.* S. H. KOORDERS: 'Botanisch Overzicht der Rafflesiaceae van Ned.-Indië' (Meded. N.I. Ver. t. Natuurbesch. *no* 4, 1918, p. 85).

Borges, V. P.
Extra Assistant Conservator in the Forest Department Str. Settlements from 1903–24, stationed in Malacca until Oct. 1909, in Penang 1910–June 1913, and subsequently in Prov. Wellesley and the Dindings. He collected in the *Malay Peninsula*, in Perak *etc.* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).
COLLECTIONS. Probably preserved in *Herb. Sing.* or *Kuala Lumpur.*

Borgmann, H. L., *cf. sub* Forest Research Institute, Buitenzorg.

Borromeo, *cf. sub* Forestry Bureau, Manila.

Bosch, J. C. G. van den
Several plants collected by him are cited in literature, *e.g. Digitaria ciliaris* WILLD. from Weltevreden (*W. Java*),[1] *Panicum parvum* BÜSE from the same locality,[2] *Ischaemum muticum* L. from Tjilatjap (*Centr. Java*),[3] *Orthopogon compositus* R. BR. from the latter locality,[4] and other grasses; he also collected together with JUNGHUHN, and is mentioned in MIQUEL, Plantae Junghuhnianae.
COLLECTIONS. *Herb. Leyden;* also with *Herb.* DE VRIESE.
LITERATURE. (1) *cf.* MIQUEL, Flora Ned. Ind., 3, p. 437.
(2) *cf. l.c.* p. 448.
(3) *cf.* MIQUEL, Plant. Junghuhn., 1854, p. 358.
(4) *cf. l.c.* p. 370.

Bosch, Graaf Johannes Hendrik van den
(1807, Batavia, Java; 1854, Batavia, Java), was educated in Holland and returned to Java in 1829, where he was appointed officer in the Civil Service; first placed at the disposal of the Governor-General, since 1831 Assistant Resident of Buitenzorg. When his father left for Holland, he was charged with the supervision of Pondok Gedeh Estate near Buitenzorg. He quitted Government service in 1839 and then devoted himself entirely to the management of his estate.
Aeschynanthus boschianus DE VRIESE was named after him.
COLLECTIONS. He sent several plants from *Java* to *Hort. Amstelod., e.g.* the above-mentioned *Aeschynanthus* (evidently *leg.* GESKER, see there), and to *Hort. Lugd. Bat.*

Boschbouwproefstation Buitenzorg, *cf. sub* Forestry Research Institute, Buitenzorg.

Boschma, Hilbrand
(1893, Ysbrechtum, Fr., Holland; x), zoologist who studied and took his Ph. Dr's degree (1920) at Amsterdam University; he was granted the Buitenzorg Fund in 1920 and was in charge of the Treub Laboratory there, while Dr VON FABER was on leave, in the second half of 1921.[1] In the first half of 1922 he participated in the Danish expedition to the Kai Islands (see *sub* MORTENSEN and HJ. JENSEN).
In 1922 he was appointed Chief Assistant of Zoology at Leyden University, in 1928 Lecturer in Zoology and in 1931 Professor there; in 1934 besides, Director of the Natural History Museum. After the 4th Pac. Sci. Congr. in 1929, at Bandoeng, he again made some investigations on reef corals awaiting the departure of the SNELLIUS Expedition which he accompanied as biologist. In 1939 he was zoologist of the expedition of the 'Kon. Ned. Aardrijkskundig Genootschap' to the Wissel Lake region in Dutch New Guinea (for botanical collections *cf. sub* EYMA).
COLLECTING LOCALITIES. *1921. W. Java: P. Noordwachter* (Sept.) and *P. Edam* (Dec. 9–15) in the Bay of Batavia; he paid a visit to Tjibodas on G. Gedeh, but no botanical collecting was done there.
COLLECTIONS. *Herb. Bog.:* 44 *nos* from the islands in the Bay of Batavia; *Algae* from *Noordwachter* in *Herb. Leyden.* During the SNELLIUS Expedition he occasionally collected *Algae;* in *Herb. Leyden.*[2]
LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 45.
(2) *cf.* Alphabetical list of the visited localities in H. BOSCHMA: 'Biological data' (The Snellius-Expedition vol. 6, 1936, p. 25–27).
BIOGRAPHICAL DATA. Wie is dat? 1935, p. 46.

Bosscha, Johannes
(1857, Leyden, Holland; 1940, Merano, Italy), studied chemistry, geology, mineralogy and physics, and took his Ph. Dr's degree at Leyden University in 1879. As a mining expert he was employed

in Spain till 1882, and subsequently he was for some years a teacher at Breda (Holland); in 1888 he went to Borneo as a mining expert, founded an agricultural company in Sambas (W. Borneo) in 1893, which, however, soon proved a failure. After conducting mining explorations in the Padang Highlands (Sumatra West Coast), he was appointed acting Estate Manager of the tea and cinchona plantation Malabar (W. Java) in 1901; in 1902 Estate Manager and later Chief Estate Manager of Taloen Estate. He left for Europe in 1920 and settled at Clarens near Montreux.

Dictyopteris labrusca v.A.v.R. *var. bosschae* v.A.v.R. and some other plants were named after him.

COLLECTIONS. *Herb. Bog.:* orchids in spirit from *W. Java*, collected near the Tjilakki (pres. *1914*). In *Hort. Bog.:* living orchids from *Borneo* (pres. *1901*).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; Bergcultures 14, 1940, p. 362 + portr.

Bosscha, Karel Albert Rudolf

(1865, The Hague, Holland; 1928, Malabar, Priangan Res., Java), studied at Delft Technical College and went to the D.E.I. in Dec. 1887, where he was appointed employee at Sinagar Estate near Tjibadak (W. Java). After half a year he went to Sambas in W. Borneo, employed at the diggings until 1892; in the latter year he returned to Sinagar Estate; in Aug. 1896 he undertook the management of Malabar Estate.

He was a promoter of science and had a great part in the foundation of the Technical College at Bandoeng, the Observatory at Lembang, *etc.*

COLLECTING LOCALITIES. *W. Java.* In *1903* on Malabar Estate; also collecting near Taloen and Pengalengan.

COLLECTIONS. *Herb. Bog., e.g.* a species of bamboo, *Balanophora*, *Aristolochia*, and orchids (the latter for J. J. SMITH); *Herb. Leyden:* material of *Morus macroura* MIQ. Living plants to *Hort. Bog.* (pres. *1902*, *1906*, *1910*).

BIOGRAPHICAL DATA. Encylop. N.I. 6, 1930, p. 641; Bandoeng Vooruit, Dec. 1938.

Bossche, (? Jules Felicien Romain Stanislas) van den

Governor of *Sumatra West Coast*, sent plants and seeds from there to *Hort. Bog.* (pres. *1865–67*).

Bosscher, Casparus

(1820, Amsterdam, Holland; ? , ?), came to the D.E.I. in 1840; in 1847 he entered the Civil Service, was appointed Resident of Ternate in 1857, of Manado in 1859, of Banka in 1861, of Madoera in 1867, of Kediri in 1872. In 1874 Director of the Dept of Education and Public Worship, in 1875 *ditto* of the Civil Service; retired in 1876.

He is commemorated in the genus *Bosscheria* DE VR. *et* T.

When Resident of Banka, he gave plants to TEYSMANN (*cf.* Nat. Tijdschr. N.I. 32, 1873, p. 38), which will be in *Herb. Bog.*

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Boswell, A. B. S.

some duplicates of his of the *Malay Peninsula* are in *Herb. Edinburgh*, part of a collection received from the Malay Forest Department from the late Dr BERT DAVY of Oxford.

He may have been someone in the Forest Service, and his collecting was probably merely incidental.

Botma, Geertje

(1921, Boerakker, Fr., Holland; x), schoolteacher and nurse who after World War II went to Indonesia for the Red Cross; at present married to Dr V. DE BRUYN, official of the Civil Service in New Guinea.

COLLECTING LOCALITIES. *1947. Java; Lombok* (*Lesser Sunda Isls*); *Biak* (*Schouten Isls*).

COLLECTIONS. 50 Plants in *Herb.* D. T. E. VAN DER PLOEG (Bergum, Fr., Holland), including 2 from *Java* and 1 from *Lombok*.

Botter, H. E. (sometimes H. S. or H. G.)

a Resident of Ambon, possibly sometimes erroneously cited as BOLTER (see there).

COLLECTIONS. > 41 *nos* of living plants from *Ambon* in *Hort. Bog.* (pres. *1877–78*); 2 specimens of *Maniltoa* numbered in the H.B. series, *Herb. Bog.*

Bouman-Houtman, Albertine

(1893, Weltevreden, Java; 1933, Bandjermasin, Borneo), wife of an official of the D.E.I. Civil Service. She made botanical collections in the islands where her husband was stationed.

Dendrobium and *Vanda boumaniae* J.J.S. were named after her.

COLLECTING LOCALITIES. *1922–24. S. Sumatra:*[1] Kroë, Benkoelen.—*1925–26. SW. Celebes:*[2] Djeneponto; Bangkoa (Oct. 29, 1925); Tolo (May 1926); Malakadji (1926).—*1926–28. W. Timor:*[3] Koepang.—*1928–31. Alor:* Kalabahi.—*1931–33. SE. Borneo:* Kota Baroe (*P. Laoet*) (1931–32) and Bandjermasin (1932–33).

COLLECTIONS. *Herb. Bog.:* from *Celebes* > 100 *nos*, *viz* 1–97 and 178–181; from *Timor* and *Alor* 182 *nos* (the *nos* 98–177 in 1929 from W. Timor and Alor); *etc.* She collected *Lumnitzera lutea* (GAUD.) PRESL near Koepang, in the type locality of GAUDICHAUD.[4] Many living plants in *Hort. Bog.*

LITERATURE. (1) A. BOUMAN-HOUTMAN: 'Onze bloedvlek-Orchideeën' (Trop. Nat. 13, 1924, p. 40–43, 2 fig.).

cf. Also J. G. B. BEUMÉE in *l.c.* 14, 1925, p. 88–93.

(2) A. BOUMAN-HOUTMAN: 'Lente op den Lompobattang' (*l.c.* 15, 1926, p. 93–97, 5 fig.).

(3) A. BOUMAN-HOUTMAN: 'Boomenleven om Koepang' (*l.c.* 17, 1928, p. 43–47, 5 fig.).

(4) *cf.* VAN SLOOTEN, *l.c.* 17, 1928, p. 136.

BIOGRAPHICAL DATA. Trop. Nat. 23, 1934, p. 17; BACKER, Verkl. Woordenb., 1936.

Bovien, Prosper Louis

(1894, Copenhagen, Denmark; x), zoologist who took his Ph. Dr's degree at Copenhagen in 1937;

Group-Adviser of the Java Sugar Experiment Station (Pasoeroean) stationed at Djombang, 1920–24; he returned home and in 1928 was appointed Chief Zoologist, Phytopathological Institute of the State (Lijngby) and in 1936 in addition Lecturer in Zoology at the Copenhagen Roy. Agr. College.

COLLECTIONS. *Herb. Pasoer.:* > 107 *nos* collected near sugar factories in the environs of Djombang, *E. Java* (Sept.–Oct. *1923*); some dupl. in *Herb. Leyden*, and in *Herb. Univ. Amsterdam*. Some *nos* collected with KOOPER (see there).

Boxall, Richard

(*cf.* also WILLIAM BOXALL, ? identical), employed by the firm of HUGH LOW and Co., to collect plants of horticultural value.

COLLECTING LOCALITIES. *Malay Peninsula:*[1] Kedah Peak (with Sir HUGH LOW) and the Settlements, *about 1880.—Borneo.*[2]*—Philippines.*[3]

COLLECTIONS. *Herb. Kew:* from Burma and Shan States (pres. 1890–91). In *Herb. Vienna:* (? *Philippine*) orchids with *Herb.* REICHENBACH.

LITERATURE. (1) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(2) Cited by MERRILL, Enum. Born. Pl., 1921, p. 157, as the collector of *Dendrobium bostrychodes* RCHB. *f.*

(3) A certain BOXALL (without initials) is cited by MERRILL as a botanical collector in the Philippines in Bull. Bur. of Agr. Manila *no* 4, 1903, p. 30.

Boxall, William

(1844, ? ; 1910, Clapton, England), in the early sixties employed by the firm of VEITCH & Co., later in the Orchids Dept of Messrs HUGH LOW & Co.'s Nurseries. According to BACKER he travelled in Brazil and America too and was an undaunted and successful collector.

Vanda coerulescens GRIFF. *var. boxallii* RCHB. *f.* was named after him. We do not know his relation to RICHARD BOXALL (see there), he may even be identical with the latter.

COLLECTING LOCALITIES. According to BACKER in Burma, the *Malay Peninsula*, the *Philippines*, *Borneo* and *Java* (*cf.* also *sub* RICHARD BOXALL).

BIOGRAPHICAL DATA. Gard. Chron. 3rd ser. vol. 48[2], 1910, p. 192 + portr.; BACKER, Verkl. Woordenb., 1936.

Boyd, Major A. J.

in Aug. *1909*, collected a few plants on behalf of F. M. BAILEY in *Papua, SE. New Guinea* (*cf.* BAILEY in Queensl. Agr. Journ. 23, 1909, p. 221 and *l.c.* 24, 1910, p. 60); probably in *Herb. Brisbane*.

Braaksma, F. J. H., *cf. sub* Forest Research Institute, Buitenzorg.

Braam, Jouke Seerp van

(1872, Sneek, Fr., Holland; 1941, Rijswijk, Z.H., Holland), Forest Officer in the D.E. Indian Forest Service; stationed in Java, respectively in Semarang-Vorstenlanden 1896; Kedoe, Kedawan and Bodjonegoro, 1897–1900; from Oct. 1900–Dec. 1905 in W. Priangan-Bantam (at Soekaboemi); Cheribon-Tegal, 1906–11; in July 1912 appointed Inspector of the same service, stationed at Buitenzorg; in Sept. 1917 he retired.

Numerous typed reports of his are preserved in the For. Res. Inst. Buitenzorg.

COLLECTIONS. *Mus. Kol.* (= *Ind.*) *Inst. Amsterdam:* 4 large boards with herbarium (pres. *1905*). In *Herb. Bog.: Dacrydium elatum* from *Boengoeran* (*Groot Natoena*), collected in *1913* in low dry-land forest; material of *Dipterocarpus baudii* KORTH. from the Padang Highlands in *Sumatra West Coast* (July *1913*). In *Herb. For. Res. Inst. Buitenzorg:* some plants from *SE. Borneo* (*1917*) collected with LABOHM (see there).

Braat, Christoph George Sigismund

(1879, Haarlem, Holland; x), Forest Officer, employed by the D.E. Indian Forest Service since 1903; in the beginning stationed in E. and Centr. Java (*e.g.* in S. Soerabaja in 1915), since 1919 at Buitenzorg; in 1925 appointed Inspector, in 1926 Chief Inspector of the Forest Service. He retired in 1930.

COLLECTIONS. *Herb. Bog.: no* 2979 collected in the series BEUMÉE (see there), *Stereospermum suaveolens* DC. in Soerabaja Residency (Oct. *1918*). Evidently dupl. of the said number in *Kew* and *Leyden*.

BIOGRAPHICAL DATA. Tectona 23, 1930, p. 825, w. portr.

Braat-Harmsen, Mrs

of Soerabaja, *E. Java*, sent living orchids to *Hort. Bog.* in *1912*.

Brackenridge, William Dunlop

(1810, Ayr, Scotland; 1893, Baltimore, Maryland, U.S.A.), at first a gardener employed by PATRICK NEILL at Edinburgh; about 1837 he settled in America and shortly after accompanied the WILKES U.S. Exploring Expedition (see *sub* WILKES, PICKERING and RICH) as Horticulturist and Assistant Botanist. When the expedition was over, he was charged with the supervision of the living plants which were brought home by the expedition, in the years 1842–54. In 1855 he settled at Baltimore as a floriculturist and garden architect.

Assisted by A. GRAY he wrote the 16th volume of the Reports on the expedition.[1]

The genus *Brackenridgea* GRAY was named after him.

ITINERARY. WILKES *U.S. Exploring Expedition, 1838–42*. Visiting the *Philippines* (Jan. 13–Febr. 12, *1842*). Detailed itinerary, literature, *etc. cf. sub* WILKES.

COLLECTIONS. *U.S. Nat. Herb. Wash.* The present author does not know whether the labels bear the names of the actual collector or the name of the expedition only.

Several living plants were brought home from *Singapore Island*.

LITERATURE. (1) Botany of the U.S. Exploring Expedition under the command of WILKES vol. 16 'Cryptogamia, Filices including Lycopodiaceae and

Hydropterides' (1854, atlas 1855, pl. 1–46). In this exceedingly rare volume 77 *Philippine* species are referred to. Several other issues of this work exist (*cf. sub* WILKES Lit. 1); *cf.* also J. H. BARNHART: 'BRACKENRIDGE and his book on ferns' (Journ. N.Y. Bot. Gard. 20, 1919, p. 117–124).

BIOGRAPHICAL DATA. Portr. in MEEHAN'S Gard. Monthly, Dec. 1884; MAIDEN in Journ. & Proc. Linn. Soc. N.S.W. 42, 1908, p. 93; Journ. N.Y. Bot. Gard. 20, 1919, p. 117–124; in Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936; portr. in D. C. HASKELL, The U.S. Expl. Exped. *etc.*, New York 1942.

Bradtke, Wilhelm

(† May 10, 1919), collected extensively in the *Duke of York* and *Keravara Isls* (*Bism. Arch.*) during World War I;[1] and evidently some plants on the mainland of *New Guinea* too.[2]

He is commemorated in *Pseuderanthemum bradtkei* SP. LE M. MOORE.

COLLECTIONS. In *Herb. Brisbane; Herb. Sydney:* phanerogams and ferns from *New Guinea* and *New Ireland* (pres. *1917*). The numbering exceeds 349.

LITERATURE. (1) Some of the collected species referred to by S. LE M. MOORE in 'Acanthaceae Papuanae' (Journ. Bot. 58, 1920, p. 190–195).

(2) Author of 'The Flora of a small tropical island' (Queensl. Naturalist 11, *no* 6) (*non vidi*).

Branderhorst, Bastiaan

(1880, Meeuwen, N.Br., Holland; x), since 1906 Military Surgeon in the Dutch East Indian army. In July 1907 he joined an exploration detachment under Capt. A. J. GOOSZEN in Dutch S. New Guinea and stayed in the latter island for more than 3 years. During part of the time (1907–08) he was assisted in making botanical collections by PRINGGO ATMODJO (see there). In 1912–13 he was a member of the Anglo-Dutch Committee for Boundary Delimitation in Borneo. He retired in 1924, was for a short time thereafter employed by the D.E. Indian Service of Public Health, and was appointed physician of the Pengalengan Society for Nursing (W. Java) in 1925.

Several plants were named after him.

ITINERARY. *Dutch S. New Guinea. Merauke, Digoel and environs* (July *1907*–March *1908*),[1] collecting *e.g.* at Merauke (since July 23, 1907), O(e)-kaba and environs (end of Aug.–beginning of Oct.), Gelieb camp (end of Oct.–Nov.), Kabatiel camp (Dec.), Bian River, Merauke and environs (Febr.–March 1908).—*Exploration of the headwaters of the Noordrivier* (= *Oetoemboewe*) (March 28–May 15, *1908*):[2] March 28 setting out from Zwaluw bivouac to Alkmaar bivouac, *via* Oetoemboewe (= Lorentz) River, and Sabang camp (Apr. 1–3); march to the Resi Mts (Apr. 12–15); from Alkmaar bivouac (Apr. 21) to the mountains between Hellwig and Nevelgebergte, reaching the highest summit on the 28th; departure from Alkmaar bivouac (May 3) to Zwaluw bivouac, by land (with 2 mantris of the Buitenzorg Botanic Garden) along the left bank of the Oetoemboewe; mouth of the Schultz River (5); back at Zwaluw bivouac (11).—*Merauke and Digoel* (June 5, *1909*–end of March *1910*):[3] Digoel River (Aug.–Sept. 1909); Mappi River (Nov. 14–Dec. 16) with WEBER and VAN DER VEN; Eilanden River (Jan. 1910); A. and B. River (until the end of March).

He evidently paid a visit to *Frederik Hendrik Island* and the Otakwa River too.

COLLECTIONS. *Herb. Bog.*, *nos* 1–444 (mat. in spirit too) (*1907–08*); dupl. in *Leyden*, *Utrecht*, *Kew* and *Berl.*[4] In 1907–08 he was assisted by PRINGGO ATMODJO (see there). He sent many living plants to *Hort. Bog.* (1909–10), numbering about 300.[5]

LITERATURE. (1) *cf.* Tijdschr. K.N.A.G. 1908, p. 584–619.

(2) *cf.* Tijdschr. K.N.A.G. 1908, p. 1179, map 19, and 'Verslag Militaire Expl. Ned. Nieuw Guinea 1907–15' (Weltevreden 1920).

(3) *cf.* Tijdschr. K.N.A.G. 1910, p. 582 and 1011 *seq.*; Meded. Encyclop. Bur. *no* 11, 1916, p. 7.

(4) List of the collection preserved in the archives of Herb. Bog.

The botanical results of the expedition 1907–08 in Nova Guinea 8, 1909.

Meliaceae by H. HARMS in ENGL. Bot. Jahrb. 72, 1942, p. 158–205.

(5) *cf.* Versl. Pl. Tuin Buitenzorg for 1910, p. 21–22, and *l.c.* 1911, p. 20–21 (lists); and in Nova Guinea 8[2].

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Brandes, J.

COLLECTIONS. In *Show Mus. Berl. Dahl.:* Mulantah-Catechu from *Borneo* (pres. *1909*).

Brandts Buys, L. F. R. P. C. A., *cf. sub* Forest Research Institute, Buitenzorg.

Brant, A.

COLLECTIONS. *Herb. Pasoer.:* some *nos* collected with J. H. COERT (see there). = A. RANT? (see there).

Brascamp, Engelbert Hendrik Berend

(1876, Olst, O., Holland; 1945, ? The Hague, Holland), Estate Assistant (tobacco) in Deli (Sumatra East Coast), 1898–1901; in 1902 appointed Overseer and put at the disposal of the Inspector and Chief of the organization brigade of the D.E. Indian Forest Service. In later years he was appointed Forest Officer in the same service. Since 1906 stationed in the teak districts of Java, in 1919 in the head-office at Buitenzorg; since 1926 again employed in the teak districts, *e.g.* at Modjokerto, where he was charged besides with the management of Kangean-Madoera District. He retired early in 1932.

He is the author of some papers concerning forestry.[1]

COLLECTING LOCALITIES. *W. Java:* Kandang Badak (July 13, *1924*) and summit G. Pangrango (July 14).—*Centr. Java:* Djokja (July 8, *1927*), Pe-

malang (Sept. 12), Pekalongan desa Soeren (Nov. 12).—*E. Java:* teak forest (Dec. 23, *1927*).

COLLECTIONS. *Herb. Bog.*, only a few numbers.

LITERATURE. (1) *e.g.* 'Djati en geen Hindoes' (Tectona 14, 1921, p. 137–141).

Brass, Leonard John

(1900, Toowoomba, Queensland, Australia; x), Assistant in the Queensland Herbarium, 1918–19; for some years engaged in cattle ranching activities in N. Queensland and the Northern Territory of Australia. In 1925–26 he made an expedition to Papua for the Arnold Arboretum, and in 1932–33 he visited the British Solomon Islands for the same institution. Joining ARCHBOLD expeditions of the American Museum of Natural History in 1933, he was responsible for the plant collections made on the three large-scale and successful biological expeditions to New Guinea which were led and financed by RICHARD ARCHBOLD (see below). In 1946, on leave of absence from ARCHBOLD expeditions, he represented the New York Botanical Garden on the VERNAY expedition to Nyasaland.

His name has been given to about 90 species and the following genera of plants: *Brassiophoenix* BURRET, *Brassiodendron* C. K. ALLEN, and *Brassiantha* A. C. SMITH.

ITINERARY. *Arnold Arboretum expedition, 1925–26*, to *Papua, SE. New Guinea:*[1] Port Moresby (Oct. 15–19, 1925); by boat to Kapa Kapa and Kalo (20); Hula (20–21); *overland journey Port Moresby to Kapa Kapa:* Laloki River and Rona (30); Mt Warirata (31); Bisiatabu (Nov. 6–15); Sogeri (16–20); Iawarere (21–27); Iaritari (28–29); Borabere (30–Dec. 1); Uniori (2); Budatobara (2–5); Kapa Kapa (6–15); Port Moresby and vicinity (16–Febr. 1, *1926*); *visit to the Gulf Division:* based at Ihu, Vailala River (6–26), with excursions to Lepokera (16), Orokolo Bay (20), Maira (21), Hohoro (22), and Aroara (25); *visit to the Purari Delta, Delta Division*, on vessel 'Vaiviri': Wame River Sawmill (28–March 1); Kapaina River and Village (2); *2nd visit to the Gulf Division:* again based at Ihu (3–18), and from there a canoe trip (9–16) was made up the Vailala River as far as Hewa, 3 days travel from Ihu: Kira (9), Akauda (10), Hewa (11–14), returned down river to Lowa, Upoia and Akauda (15); Kira and Ihu (16); journey on foot along the beach from mouth of the Vailala River to Kerema; Vailala River Estuary (19–21); Maclatchie Point (20): Keuru (22); Kerema and vicinity (23–Apr. 2), with trips to The Cupola (24 and Apr. 1); Murua River, by canoe (March 26–29); and Siroura River, by canoe (30); Port Moresby (Apr. 3–27); *visit to the Eastern Division:* based at Domara (May 4–June 6); trip to the summit of the *Owen Stanley Range:* Mowabula, on Mori River (May 8–10); Kuraudi, on Aisa River (11–17); camp near head of U-uma River (18–20); summit of the range between Mt Clarence and Mt Brown (19); return journey to Kuraudi (21–22); Mowabula (23) and Domara (24); excursions from Domara to Bongwina River (27, June 1 and 2); Lower Mori River (28); Domara River (31, June 4); Sandbank Bay (June 3); *Port Moresby hinterland:* Laloki River (16–17); Hombron Bluff (17).—*ARCHBOLD expedition, 1933–34 in Papua, SE. New Guinea.*[2] Port Moresby (March 2–6, 1933); by motor lorry to Ro(u)na (7), collecting there until March 17; the next day return to Port Moresby; to Kairuku, *Yule Isl.* (30), crossing to Aropokina and making base camp at Baroka (Apr. 3); BRASS went on to Diene (or Dieni) (19–May 10, coll. from 450–700 m), the other members of the expedition setting out for Ononge (May 7) and making camp on the E. slope of Mt Tafa (Nemodi); BRASS arriving there on May 24; breaking camp (June 5); Ononge (6); Urunu (9); Ero Creek camp (10); Gerenda (camp site below Mt Albert Edward), staying there (16–July 12), visiting the *summit of Mt Edward (Wharton Range)* (June 21); Neon Basin, Wharton Range (July 13); return to Murray Pass (14), staying until Aug. 15; Urunu, Vanapa Valley (16–17); Ononge (17–18); camp on the W. slope of Mt Tafa at 2400 m (21–Sept. 24), making a trip to Mave (Sept. 6–8); back at Mondo (26), Bella Vista (27) and near Mafulu (28), where collected until Nov. 20, visiting the Auga River below camp and the top ridge above; Deva Deva (Nov. 21), Matsika (22); Kubuna on Kubuna River (coll. Nov. 24–Dec. 16); Baroka (17–18); *Yule Isl.* (19–26); Port Moresby (27). *Visit to the lowlands W of the Fly River:* leaving Port Moresby by coastal boat (Jan. 3, *1934*); various stops made, *e.g.* at Kikori on the Kikori River, Daru (Jan. 8); trip up the Benituri River and up the Oriomo River to Wuroi and Dogwa (= Dagwa) (12–15); first collecting camp at Wuroi (Jan. 17–Febr. 13); Dagwa, between Oriomo River and Head of the Binaturi River (Febr. 14–27); Wuroi (Febr. 28–March 2); *Daru Isl.* (5–8); visit to mainland opposite Daru (10); leaving for Port Moresby (15, arriving on the 20th), making stop at the delta Saw Mills up the river above Port Romilly (16).—*2nd ARCHBOLD expedition, 1936–37, in Papua, SE. New Guinea:*[3] Port Moresby (Febr. 6–13, 1936); Rona (14–15); Port Moresby (19); by vessel (20–24) to the Western Division, *Isl. Daru* (staying Febr. 24–March 30; part of the expedition arriving later), making occasional trips to the mainland (31) and out towards the reefs in Torres Straits; *Daru Isl.* (Apr. 1–9), mainland opposite (10); collecting at Mabad(a)uan, mouth of the Pahoturi River (13–23); leaving Daru (May 2) in the 'Maira' to the *Upper Fly;* 30 miles below Everill Junction (6); camp 5 miles below Palmer Junction (May 13–June 3); Black River camp, Upper Fly (June 4–Aug. 3); return to Middle Fly; Oroville camp (Aug. 8–12); Lake Daviumbu camp (Aug. 16–Sept. 30); Sturt Island camp (Oct. 3–Nov. 4); Madiri (5); E. bank of the estuary of the Fly (6–8); Gaima (8–22); *Daru Isl.* (28–30); *visit to area between Fly River and border of Dutch New Guinea: via* the Mai Kussa River (Dec. 1) on the Wassi Kussa River, Tarara (Dec. 3–12); trip NW to Tumbuke (13) and to Penzara between the Morehead and Wassi Kussa River (13–19); *via* Tumbuke (20–21) and Tarara (21–31); trip by row-boat up east branch of Wassi Kussa to *c.* 10 miles above Tarara (31–Jan. 5, *1937*), Tarara (6–18); trip down Wassi Kusa

by row-boat to *c.* 10 miles below Tarara (19–20); Tarara (21–31); *Daru Isl.* (Febr. 1–15); Port Moresby (23); leaving New Guinea in the first week of March. During the first part of the expedition a plane was used, which was wrecked, however, on July 9 on the road of Port Moresby.—*3rd* ARCHBOLD *expedition, 1938–39*, in *Dutch New Guinea*[4] (combined American-Dutch exp., *cf.* also *sub* MEIJER DREES and CH. VERSTEEGH). Coastal base at Hollandia (Apr. 23–June 1938), collecting at Tabati, the vicinity of Hollandia (June 13–16, 18–25, 27–29, July 1–12), Jautefa Bay (June 17), some plants near Lake Sentani (26), lower E. slopes of Cyclops Mts (30); Lake Habbema camp (July 22–Sept. 4), making trips to the N. and NE. slopes of Mt Wilhelmina (Aug. 15–17) *etc.*; camps on the northern slopes of Mt Wilhelmina at 3400 m (Sept. 5), 3560 m (6–16), 3800 m (17–28), collecting up to 4350 m; 3560 m camp (29); Wamena River (3200 m), N. slopes Mt Wilhelmina (30); Lake Habbema camp (30–Oct. 7); valley of the Balim River (Grand Valley), 2800 m camp (Oct. 8–24), patrol of the Bele and Etlanti Valley (25–29); 2800 m camp (30–Nov. 8); Nov. 9 moving to camp at 2200 m alt. on the right-hand bank of the Bele River, a tributary of the Balim (vacated on Dec. 5); journey through lower Bele Valley and the Balim Valley (5–7); Balim base camp (8–19), Hollandia (by air, 20); Bernhard camp on the Idenburgh River (Jan. 3, *1939*); camps at 1800 m (7–31), 2150 m (Febr. 1–9), 1600 m (11–12), 1200 m (Febr. 13–March 3), and 850 m (4–Apr. 5); Bernhard camp (Apr. 6–May 19); by air to Hollandia (10), leaving by boat (20).

COLLECTIONS. From the exp. *1925–26* in *Herb. Arn. Arbor.:* ± 1165 *nos* (501–1664); the plants were classified by C. T. WHITE; most of the papers on the botanical results were published in the Journ. of the Arnold Arboretum.[5]

From the exp. *1933–34* in *Herb. N.Y Bot. Gard.:* ± 2500 *nos* (ranging from 3551–6077, composing about 15.000 specimens); the plants were identified in the said institution and most of the results embodied in the periodical Brittonia;[6] 150 dupl. in *U.S. Nat. Herb. Wash.*

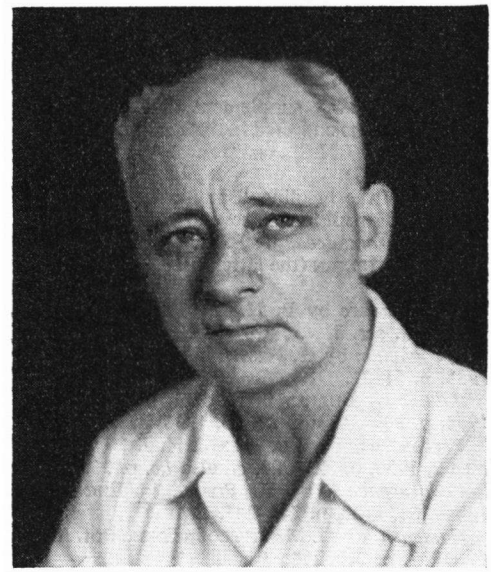
From the exp. *1936–37* in *Herb. Arn. Arbor:* 2500 *nos* (6201–8800) (Fly river), partly in GRAY *Herb.;* the results published principally in the Journal of the Arnold Arboretum.[7]

From the exp. *1938–39* in *Herb. Arn. Arbor.:* about 5500 *nos* (composing ± 15.000 specimens, *nos* 8801–14132),[8] partly in GRAY *Herb.;* BRASS collected an amount of numbers together with CH. VERSTEEGH (see there); before Oct. 1938 Dr MEIJER DREES (see there) assisted in general botanizing on Mt Wilhelmina; some plants were collected by Capt. TEERINK (see there).

Dupl. of the expeditions *e.g.* in *N.Y. Bot. Gard.; Berl.* (650 *nos* pres. 1929–31, 1934–35), *Paris, Brussels, Vienna, Stockholm, Uppsala, Utrecht* (140 *Cyper.* Fly River exp.), *Singapore, Brisbane, Buitenzorg* (± 1500 *nos*), *Kew, Leyden* (110 *nos* pres. by the Arn. Arbor. in 1938/39, 208 in 1939/40). Of the 1938–39 exp. sets will be presented to *Herb. Bog.* and *Leyden.*

LITERATURE. (1) *cf.* Journ. Arn. Arbor. 8, 1927, p. 202, and Ann. Rep. Papua for 1925/26, p. 60. Other data from L. J. BRASS personally.

(2) R. ARCHBOLD & A. L. RAND: 'Summary of the 1933–1934 Papuan Expedition' (Bull. Amer. Mus. Nat. Hist. 68, 1935, p. 527–579, pl. 28–46).



BRASS

(3) R. ARCHBOLD & A. L. RAND: 'With plane and radio in stone age New Guinea (Archbold 1936 expedition, Upper Fly River)' (Nat. Hist. Mag. Amer. Mus. Nat. Hist. 11, 1937, p. 567–576, many fig.).

L. J. BRASS: Botanical notes of the Archbold Expedition IX. 'Notes on the vegetation of the Fly and Wassi Kussa rivers, Brit. N.G.' (Journ. Arn. Arbor. 19, 1938, p. 175–190, pl. 221–223, w. map).

R. ARCHBOLD & A. L. RAND: 'New Guinea Expedition, Fly River Area, 1936–37' (New York 1940).

A. L. RAND & L. J. BRASS: Results of the Archbold expeditions *no* 29. 'Summary of the 1936–1937 New Guinea expedition' (Bull. Amer. Mus. Nat. Hist. 77, 1940, p. 341–380, pl. 21–42, 2 maps).

(4) L. J. BRASS: 'The 1938–39 expedition to the snow mountains, Netherlands New Guinea' (Journ. Arn. Arbor. 22, 1941, p. 271–295, 297–342, pl. 1–7); 'Stone age agriculture in New Guinea' (Geogr. Review 31, 1941, p. 555–569, map, 14 ill.).

R. ARCHBOLD: 'Unknown New Guinea' (Nation. Geogr. Mag. 79, 1941, p. 315–344, w. ill.).

cf. also Tijdschr. K.N.A.G. 1938, p. 505, 838, 957–959 + map; *l.c.* 1939, p. 321–342 + maps; 1940, p. 233–247.

R. ARCHBOLD, A. L. RAND & L. J. BRASS: Results of the Archbold Expeditions *no* 41. 'Summary of the 1938–1939 New Guinea expedition' (Bull.

Amer. Mus. Nat. Hist. 79, 1942, p. 197–288, pl. 1–35, 3 maps).

(5) Principally by C. T. WHITE (Pteridophytes by C. B. COPELAND) in Journ. Arn. Arbor. 10, 1929.

Some new species by S. MOORE in Journ. Bot. 65, 1927, p. 241–247, 265–272 and in *l.c.* 67, 1929, p. 49–51.

Grasses by A. S. HITCHCOCK in Proc. Linn. Soc. N.S.W. 54, 1929, p. 145–146.

Palms by BURRET in Journ. Arn. Arbor. 12, 1931, p. 264–269.

A. REHDER: 'A supplement to C. T. WHITE: Ligneous plants collected in the Territory of Papua in 1925–26 by L. J. BRASS' (Journ. Arn. Arbor. 14, 1933, p. 62–67).

(6) Over the heading 'Botanical results of the Archbold Expedition' in several vols of Brittonia; *e.g.* the *Loranthaceae* by B. H. DANSER, the ferns by C. CHRISTENSEN (the latter in *l.c.* 2, 1937, p. 265–317).

Polygonaceae by B. H. DANSER in Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1935, p. 429–431.

Lycopodium by H. NESSEL in FEDDE Repert. 39, 1935, p. 61–71.

Palmae by BURRET in Notizbl. Berl. Dahl. 12, 1935, p. 309–348 and *l.c.* 13, 1936, p. 65–101.

Verbenaceae by EVA BEER & H. J. LAM in Blumea 2, 1936, p. 221–228, *cf.* also *l.c.* p. 31.

Podocarpaceae by R. PILGER in ENGL. Bot. Jahrb. 68, 1937, p. 244–247.

Compositae by J. MATTFELD in ENGL. Bot. Jahrb. 68, 1937, p. 248–268.

Loranthaceae by B. H. DANSER in Blumea 3, 1938, p. 37–59.

cf. also *sub* 8.

(7) Many papers concerning the results of the exp. in Journ. Arn. Arbor. 20–24, 1939–43, by E. D. MERRILL, L. M. PERRY, *etc.*

Ferns by E. B. COPELAND in Philip. Journ. Sci. 73, 1940, p. 345–347, 457–469.

Ericaceae by H. SLEUMER in ENGL. Bot. Jahrb. 70, 1940, p. 95–124.

Proteaceae by H. SLEUMER in *l.c.* p. 125–148.

Cyperaceae by G. KÜKENTHAL in *l.c.* p. 463–468.

Mosses by E. B. BARTRAM in Farlowia 1, 1943, p. 41–47, 2 pl., 30 fig.

(8) *cf.* papers by E. D. MERRILL, L. M. PERRY, A. C. SMITH, and others in Journ. Arn. Arbor. 22–28, 1941–47 (and eventually in later volumes).

Ferns by E. B. COPELAND in Philip. Journ. Sci. 75, 1940, p. 347–361, and in *l.c.* 76, 1941, p. 23–25.

Ericaceae by H. SLEUMER in ENGL. Bot. Jahrb. 72, 1942, p. 207–269.

Braun, Arnold H.

COLLECTIONS. In *U.S. Nat. Herb. Wash.:* 3 *Philip.* plants without numbers.

Braun, Max

Veterinary Surgeon in the Bismarck Archipelago, leader of the Ramu-Gogol expedition in 1913 (*cf. sub* K. GEHRMANN).[1] At an earlier date he made several expeditions in E. Africa.

COLLECTIONS. *Herb. Berl.:* 41 plants from the *Bismarck Archipelago* (pres. *1914–15*).

Plants collected by him in *Neu Pommern* (= *New Britain*), Rabaul, and in *Neu Lauenburg* (= *Duke of York Isl.*) are referred to in the series 'Beitr. Fl. Papuas.', published in ENGL. Bot. Jahrb. from 1912 onwards.

LITERATURE. (1) M. BRAUN: 'Bericht über die Ergebnisse der Landerkundung zwischen Gogol- und Ramu Fluss in Deutsch-Neuguinea' (Mitt. Deutsch. Schutzgeb. 29, 1916, p. 51–81).

Brautigam, Dirk Ferdinand André

(1864, Buitenzorg, Java; 1923, Mr Cornelis, Java), joined the D.E. Indian Civil Service in 1891; in 1900 District Officer at Semangka, Lampong Districts, S. Sumatra; Secretary of the Civil Service in Djambi, Centr. Sumatra, 1907–08; in 1909 appointed Assistant Resident of Boni (Pampanoea), SW. Celebes; in 1913 Resident of Palembang, S. Sumatra; he retired in 1920.

COLLECTIONS. *Herb. Bog.:* orchids from the Lampong Districts (*S. Sumatra*), and from *SW. Celebes;* palms for K. HEYNE in *Billiton* (the latter were sent for identification to BECCARI in July 1914).

Breda de Haan, Jacob van, *cf.* HAAN, DE.

Breemen, Pieter Johan van

(1875, The Hague, Holland; x), a biologist, educated at Amsterdam University (Ph. Dr 1905); for 12 years employed in Curaçao at the Inspection of Fisheries as a planter, and at the Inspection of Agriculture (until 1920); Chief of the Field Experiment Service of the Experiment Station for Java Sugar Industry (Pasoeroean), 1921–27, at the same time Entomologist (till 1926). He subsequently retired and settled at The Hague.

COLLECTING LOCALITIES. *1925. E. Java:* G. Tengger (April, May), *e.g.* at Tosari, on G. Bromo, at Nongkodjadjar.—*1926.* G. Tengger, G. Bromo, Pasoeroean, Nongkodjadjar, Lawang, Poedjon, Malang Plain.—*1927. W. Java:* Priangan Residency.

COLLECTIONS. *Herb. Pasoer.:* 59 *nos;* dupl. in *Herb. Bog.*

Bremekamp, Cornelis Elisa Bertus

(1888, Dordrecht, Z.H., Holland; x), a physiologist who graduated (Ph. Dr) at Utrecht University in 1912; Chief Assistant of the Phytopathologist of the Java Sugar Experiment Station (Pasoeroean), 1912–14; teacher at the Medical College (N.I.A.S.) at Soerabaja, 1915–Jan. 1921; University Lecturer at Amsterdam, 1921–23; Professor of Botany at Transvaal University College, Pretoria (S. Africa), 1924–31. At present he lives at Zeist, Holland, where he devotes himself to the study of *Rubiaceae, Acanthaceae, etc.*

He is the author of several physiological, taxonomical, and morphological papers, and besides of some small sketches of the Javan landscape.[1]

COLLECTING LOCALITIES. *E. Java:* Lalidjiwo on the slope of G. Ardjoeno with VAN DER GOOT and JESWIET (March 23–25, *1913*); Jang Plateau (Oct. 19–20, 1913); *W. Java:* visit to Tjibodas (May

24–28, *1914*); *E. Java:* Soetji (Grissee) (*1916*); *Noesa Baroeng* (Isl. S of E. Java) (± 1916); G. Panderman; in *1917 e.g.* at Soerabaja, Pasoeroean and on G. Tengger, in *Madoera* (May 8–9), on G. Ardjoeno & G. Kembar (June 2); Trètès (Aug. 4); G. Penanggoenan (Juny *1919*); Gresik near Soerabaja (Febr. *1920*).

COLLECTIONS. *Herb. Bog.;* in *Herb. Pasoer.* 1 *no* from *Madoera.*

LITERATURE. (1) 'Ranoe Bedali' (Trop. Nat. 3, 1914, p. 155–158); 'Travertijnvorming op het Idjen-Hoogland' (Teysmannia 1914, p. 68–79); 'Ratoe Loro-Kidoel' (Trop. Nat. 5, 1916, p. 150–155).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936, p. 646; Portr. in A. WHITE & B. L. SLOANE, The Stapelieae (2nd ed. 1937), p. 131.

Brero, J. van

(1864, ? ; 1940, Bandoeng, Java), of the Nursery 'Tjibeganti' Bandoeng, W. Java, sent living orchids (*e.g. Calanthe turneri* RCHB. originating from Banjoemas, Bandjar Patoman) to *Hort. Bog.* in the years *1927–28.*

He was a post office official who was pensioned off in 1919.

BIOGRAPHICAL DATA. Orchidee 9, 1940, p. 41–42 w. portr.; and *l.c.* 10, 1941, p. 38.

Bridge, Cyprian A. G.

Captain of the British war-ship 'Espiègle', in which he made various journeys;[1] at the end of Dec. 1884 he embarked at Sydney on the 'Dart', to hoist the British flag on the east coast of New Guinea from East Cape to the Gulf of Huon, and in the d'Entrecasteaux Islands.

Bikkia bridgeana F.V.M. was named after him.

ITINERARY.[1] [2] *Bismarck Archipelago.* In the years *1882–83*, when sailing in the western part of the Pacific, he touched at *New Britain* and *Duke of York Island* (no dates mentioned). R. PARKINSON states[3] that the ship left Port Jackson on Oct. 25, 1882, paid a visit to the Solomon Islands and subsequently came to anchor at *Mioko* (Nov. 19). In the next year he visited several islands, among which *New Britain* and *Duke of York Island* again, and made a trip by land in the former island from Nodup to Blanche Bay; he departed from there on Sept. 4, *1883* and arrived at Sydney a month later. —*SE. New Guinea:* Port Moresby (Nov. *1884*); by boat visiting Kalo, Kamalu, Hula, Aroma, Kerepunu, and proceeding to *Toulon Isl.;* in the Gulf of Argyll he came across other ships, and a joined ascent of the Cloudy Mts (end of Nov.)[4] was made under the guidance of CHALMERS (see there); after a visit to the *Moresby Islands*, he returned to Port Moresby.—Sailing again from Sydney (Dec. 23, 1884) in the 'Dart': *via* Townsville (30), through China Strait to the Milne Bay (*SE. New Guinea*), coming to anchor near the most eastern of the Killerton Islands (Jan. 3, *1885*), near the Louisiades, *etc.*; Gulf of Ta Maté (16); Samarai (19) and return to Sydney.

COLLECTIONS. Partly together with CHALMERS (see there).[5] Probably preserved in *Herb. Melbourne*, specimens at least referred to by F. VON MUELLER.[6]

LITERATURE. (1) C. BRIDGE: 'Cruises in Melanesia, Micronesia, and Western Polynesia, in 1882, 1883, and 1884; and visits to New Guinea and the Louisiades in 1884 and 1885' (Proc. Roy. Geogr. Soc. N.S. 8, 1886, p. 545–565).



BREMEKAMP

cf. also Further Corresp. resp. N.G. Febr. 1885, p. 90 (*non vidi*).

(2) *cf.* Further Corresp. resp. N.G. 1885 (*non vidi*).

(3) In 'Im Bismarck Archipel' (Leipzig 1887) p. 1, 8, 14.

(4) *cf.* Ausland 60, 1887, p. 671–675 (after the journal of CHALMERS, 1886).

(5) *cf.* KRÄNZLIN in Oesterr. Bot. Zeitschr. 44, 1894, p. 255; GEHEEB in Bibl. Bot. Heft 13, 1889.

(6) In Descr. Not. Pap. Pl. pt 6 and 7, and in Vict. Naturalist 1, 1885, p. 168.

Bridges, J. H., *cf. sub* Forestry Bureau, Manila.

Brigham, Dr William Tufts

(1841, Boston, Mass., U.S.A.; 1926, Honolulu, Hawaii), Director of the Bernice P. Bishop Museum at Honolulu, made a journey around the world to study matters relating to museums,[1] during which the Malay Peninsula and Java were visited.

ITINERARY.[1] *1912.* During his voyage round the world (Apr. 10–Dec. 3) he visited the *Malay Peninsula: Penang, Singapore* (1 week) and *Java;* in *W. Java:* Tandjong Priok–Batavia–Buitenzorg (Sept. 14–16); Garoet (17–22), visiting Lake Bagindas

(= prob. Bagendit!) (18), G. Papandajan crater (ascending from Tjisoeroepan, 21); in *Centr. Java:* Djokja (23–25), visiting the Boroeboedoer and Tjandi Mendoet (24), and the Prambanan (25); in *E. Java:* Soerabaja (26–27), Pasoeroean–Poespo–Tosari (G. Tengger) (28), Zandzee–G. Bromo (Tengger) (30); Poespo–Soerabaja (Oct. 1); Oct. 4 leaving Java.

COLLECTIONS. *Herb. Bern. P. Bish. Mus.:* some ferns, *Nepenthes, etc.*, from G. Papandajan,[2] possibly from other localities too.

LITERATURE. (1) *cf.* Occ. Pap. Bern. P. Bish. Mus. Hawaii 5, 1913, p. 128–184 (relating to the Malay Peninsula and Java).

(2) *cf. l.c.* p. 157.

BIOGRAPHICAL DATA. Who's who in America ed. 3–4; Amer. Men of Sci. ed. 3.

Brink, G. van den

COLLECTIONS. *Herb. Leyden:* plants from the *Malaysian Archipelago* and China, *e.g.* from *Java.*

Brink, Rinse

(1902, Heer-Hugowaard, N.H., Holland; x), a zoologist who graduated (Ph. Dr) at Groningen University in 1925, and thereafter still was assistant at the Zoological Laboratory of the same university; teacher at the secondary school at Gorinchem, 1926–27; Group-Adviser employed at the Java Sugar Experiment Station (Pasoeroean), stationed at Solo, 1928–31; 2nd Inspector at the said Experiment station, at Pasoeroean, 1931–38; subsequently Representative of the combined Majang Estates and residing at Malang.

COLLECTIONS. *Herb. Pasoer.:* 2 *nos* of weeds from Solo (*Centr. Java*) (*1931*).

Brinkgreve, J. H.

(1905, Arnhem, Gld, Holland; x), studied agriculture at Wageningen, and went to the D.E.I. in 1930; after half a year in agriculture (sugar), he was appointed Consulting Agriculturist in Government service, respectively stationed at Medan (Sum. East Coast) 1930–31, Padang (Sum. West Coast) 1932–33, Tandjong Karang (S. Sumatra) 1933–37, and after expiry of his leave, at Palembang 1938–40. In May 1940 he was interned on account of his political conviction and subsequently dismissed.

COLLECTIONS. *Herb. Bog.: Amorphophallus decus-sylvae* BACKER from the Lampong Districts in *S. Sumatra* (Jan. *1936*).

Brinkman, J., *cf. sub* Forest Research Institute, Buitenzorg.

Brinkman, Rindert

(1899, Kollumerzwaag, Fr., Holland; x), schoolteacher, from 1927 in the D.E.I., in 1928 stationed at Keboemen, in 1933 at Gombong (Banjoemas), both in Centr. Java; he will shortly retire.

He has an interest in the Javan flora, and is the author of a popular booklet.[1]

COLLECTING LOCALITIES. *Centr. Java:* many times on the Diëng Plateau and near Wonosobo (betw. *1929–37*); Djokja, Kali Oerang (June 18, *1931*); Karangbolong (*1934*); in *1935* in Banjoemas, Kedoe, Sempor, Kedjadjar, Gombong; in *1936* at Sempor, Gombong and on G. Watoebaroet, Tawangmangoe and G. Lawoe (on the boundary betw. Centr. & *E. Java* (*e.g.* at Tjemara Sewoe in July); N. slope of G. Slamat (July *1937*) from Boemidjawa (Pekalongan Res.).

COLLECTIONS. *Herb. Bog.:* 857 *nos.*

LITERATURE. (1) 'Van Indische planten en bloemen' (Zaaierbibliotheek *no* 6, 1937, 63 pp.).

Brinkman-van Mullem, Mrs

sent *Hydnophytums* and *Myrmecodias* from *Ceram* to *Hort. Bog.* in *1929.*

Briones, S., *cf. sub* Forestry Bureau, Manila.

Britton, Max Edwin

(1912, Hymera, Indiana, U.S.A.; x), botanist, educated at Ohio State University (M.S. 1937), taking his Ph. Dr's degree at the Northwestern University, Evanston (Ill.) in 1941; Instructor of Botany, Northwestern University, 1938–42; Assistant Professor of Botany, Northwestern University, 1942 onwards; U.S. Army, Infantry, 1943; Medical Dept, 1944–46.

ITINERARY. *NE. New Guinea:* Milne Bay (March–Aug. *1944*), collecting *Algae* betw. June and Aug.).—*Schouten Islands: Biak* (Aug. 1944–June *1945*), collecting along the S. coast between Bosnek and Sorido from Sept. 1944–May 1945. —*Philippines. Leyte:* Palo (June–Dec. 1945), collecting *Algae* along the coastal areas in vicinity of Palo, Tacloban, Santa Fe, San Joaquin and Dulag between July to Dec.

COLLECTIONS. *Herb. Arn. Arbor.:* set of all vascular plants (92 *nos*); dupl. in *Herb. Chicago Nat. Hist. Mus.* (almost complete set); *Leyden.*

Algal collections in *Herb. Northwest. Univers. Evanston,* and the *Myxophyceae* in *Herb. Nat. Hist. Mus. Chicago.* Dupl. *Desmidiaceae* in *Herb. Ohio State Univers.;* dupl. *Bacillariophyceae* in *U.S. Nat. Herb. Wash.*

BIOGRAPHICAL DATA. Amer. Men of Sci.; Who's who in Amer. Educ.

Brockmann, H., *cf. sub* ANONYMOUS, *New Guinea.*

Brocx, Willem Christiaan Laurens

(1890, Pasoeroean, Java; x), since 1915 Forest Officer in D.E. Indian Government service, principally stationed in the teak districts of Java; when at Modjokerto, he was charged with the forest administration of Kangean and Madoera too. In 1948 Inspector of E. Java, stationed at Soerabaja.

COLLECTIONS. *Herb. Bog.:* some orchids from Modjokerto (*E. Java*) in *1935*; *Herb. For. Res. Inst. Buitenzorg:* 1 *no* Modjokerto (*1935*). *Hort. Bog.:* occasionally some living plants (*1927, 1928, etc.*).

Broekhuis, *cf. sub* BADINGS.

Brondgeest, George Alphonse Matthias

(1884, The Hague, Holland; x), Overseer in the

employ of the D.E. Indian Forest Service; in Nov. 1912 stationed at (D)Japara (Centr. Java), in 1915 at the Forest Research Institute (Buitenzorg), in 1918 at Palembang; he resigned in July 1919.

COLLECTIONS. *Herb. Bog.*: E. *nos* (*cf.* also *sub* ENDERT) of the Forest Research Institute, in Palembang, *S. Sumatra*, in the years *1918–19*; *Herb. For. Res. Inst. Buitenzorg: ditto.*

Brooke, Gilbert E.

was a member of a small exploring party to look into the flora and fauna, and to do some clearing of the bush with a view to occupation at a later time in *P. Jong*, near Singapore. Small zoological and botanical collections were made during the trip.[1] According to Mr HOLTTUM he is not worth mentioning, he only sent few unsuitable ornamentals to *Hort. Sing.* (in *1924* and *1928*).

LITERATURE. (1) *cf.* Sing. Naturalist *no* 5, 1925, p. 47–50.

Brooke, Sir James

(1803, Benares on the Ganges (after JACOB, Encyclop. N.I., and BACKER) or Coombe Grove near Bath (after LOW and BECCARI); 1868, Burator, Devonshire, England), was sent to England when 12 years old; he joined the Bengal army and made several voyages. In Nov. 1838 he sailed in the yacht 'Royalist' as owner and commander to Singapore and subsequently to Sarawak, for the establishment of a commercial enterprise and of English authority. He assisted in suppressing a revolt (1840) against the sultan of Brunei who declared him Rajah and Governor of Sarawak on Sept. 24, 1841, though at first the sultan seemed reluctant to keep his promise. In July 1847 he went on furlough to England and was appointed Governor of Labuan and Consul General of Borneo in the same year.

He founded an orderly and drastic government; in 1863 he returned to England for good.

Brookea BTH. and *Nepenthes rajah* HOOK. were named after him.

ITINERARY.[1] In Nov. *1838* in the 'Royalist' *via* Rio de Janeiro, the Cape of Good Hope and Anjer (*W. Java*), arriving at *Singapore* in the last week of May or on June 1 (the data don't agree), *1839*; July 27 sailing for the NW. coast of *Borneo*, which was reached on the 30th; *isl. Talang Talang* (Aug. 6); *Sarawak*, exploration of the rivers (Aug. 12–Sept. 8), *e.g.* between the River Lundu and Santubong (Aug. 15); Sadong River; return voyage to Singapore (Oct. 3).—Nov. 20 sailing in the 'Royalist' to *SW. Celebes:* Bantimurung Falls, environs of Bonthain, Senua, Lengang (Dec. 20) and Loka(r) (21), ascent of the Lompobatang (= G. Bonthain) (summit reached on the 22nd), Bonthain, Boela Komba (= Boeloekoemba) (26), Tandjong Berak (28) and along the coast of the Gulf of Boni (= Bone): *isl. Balunrueh* (= *Baloenroe*) (31), to So(e)ngi(e) (Jan. 1, *1840*), Meru, Tonjong Palettè, bay of Penekè (25), Chinrana (= Tjenrana) River, excursion in Wajo, Lake Tempé and Lake Taparkerajah, Boni (March 27), Latonro River, hill of Mampo (Apr. 3), Luwu (Palopo) (12–15), Minkoka country (*SE. Celebes*); May 4 off Salaya, Bonthain (May 5, road), *via* Semarang to *Singapore* (27).—In Aug. 1840 2nd visit to *Sarawak:* arriving on the 29th; visits to the interior, *e.g.* excursion up the Sadong River.—*1841.* In April to *Sarawak* again.—*1842. E.g.* Mt Toebang (cave) (Apr.); visit to *Borneo proper*, Brunei (July 14–Aug. 5); excursions up the river, Mt Sarambo.—*1843. Via* the *Anambas Islands* (Febr.) to *Singapore;* making the acquaintance of Capt. KEPPEL who offered to bring the 'Dido' to the coast of Borneo for the extirpation of piracy; in May back in *Sarawak* again; Mt Sarambo (May), Sereboes River.—*1844.* Early in Jan. leaving Sarawak on account of ill health; *Singapore*, where he volunteered accompanying an expedition to Acheen (= Atjeh), *N. Sumatra*, in the brig 'Wanderer'; in May back in *Sarawak* again.—*1845.* Sinjawang (Jan. 31), Toendoeng and Rahat (Febr. 1), Nawang Valley (2), Rahat (3), Sarawak (4); Febr. 21 setting out for *Brunei* (28); *Labuan* (March); *Singapore; Brunei* (May); Marudu Bay (Aug. 17–20); *Balambangan* (23–24) and *via Brunei*, back to *Sarawak* (beginning of Sept.); visiting various Dyak tribes and returning the 19th.—*1846.* In June leaving for *Brunei.*—*1848.* Embarking at Spithead (Jan. 24); *Singapore* (May 22); Aug. 29 *via Sarawak* (Kuching, Sept. 3–24), to *Labuan* (Sept. 29); visit to *Br. N. Borneo* (end of Nov.); at the end of Dec. sailing for the *Philippines*, the *So(e)lo(e) Islands, e.g.* visiting *Basilan* (Samboangan = *Mindanao*).—*1849.* Jan. 14 leaving the *So(e)lo(e) Islands*; back at *Labuan* (28); *Sarawak* (end of May), leaving (July 24) and arriving off Batang Lupar, *e.g.* ascent of the Serebas River and the Paku branch, up the Rejang *etc.;* quitting the Rejang River (Aug. 22) and back at Sarawak (24).—*1850. Singapore* (June 15); *Sarawak* (Oct. 28); Kuching (Nov. 6), Leda Tannah (9), Bow, Tudong, Leda Tannah; *Labuan* (Dec.).—*1851.* Departure from *Sarawak* (Jan. 18) to Europe *via Singapore* (Febr. 8) and *Penang* (9).—*1853.* Back to *Sarawak*, arriving at *Singapore* on May 14.

COLLECTIONS. *Herb. Kew:* from *Sarawak* (acq. 1853–55). It is not known whether he made botanical collections in Celebes.

LITERATURE. (1) H. KEPPEL: 'The expedition to Borneo of H.M.S. Dido for suppression of piracy. With extracts from the Journal of J. BROOKE of Sarawak' (London 1846, 2nd ed., 2 vols). Dutch transl., Amsterdam 1846.

R. MUNDY: 'Narrative of events in Borneo and Celebes, down to occupation of Labuan from the journals of JAMES BROOKE, with a narrative of the operations of H.M.S. Iris' (London 1848, 2nd ed., 2 vols, w. pl. & maps).

H. KEPPEL: 'A visit to the Indian Archipelago in H.M.S. Maeander, with portions of the private journal of Sir JAMES BROOKE, K.C.B.' (London 1853, 2 vols).

BIOGRAPHICAL DATA. In H. LOW: 'Sarawak *etc.*' (London 1848), Introduction; 'The private letters of Sir J. BROOKE' ed. by J. C. TEMPLER (London 1853); STEYN PARVÉ: 'De handelingen van Sir J. BROOKE op Borneo' (Haarlem 1859); G. L. JACOB: 'The Raja of Sarawak. Account of Sir J. BROOKE through letters and journals' (London 1876, 2 vols,

w. portr.); SP. ST JOHN: 'The life of Sir J. BROOKE' (Edinburgh and London 1879); BACKER, Verkl. Woordenb., 1936.

Brooks, Cecil Joslin

(1875, Cambridge, England; x), metallurgical chemist in the employ of the gold-exploitation of the Borneo Co. Ltd in Sarawak, 1900–10; he collected insects, animals, plants and especially ferns with the assistance of HEWITT (the latter since 1905 Curator of the Sarawak Museum). From 1912–23 he was employed at the goldmine Simau in Benkoelen (SW. Sumatra), travelled subsequently in the Dutch East Indies, and sailed *via* Australia and New Zealand to Europe in 1924.

He was assisted and inspired by his wife, ALIDA C. DE JONGH of Hilversum (Holland); after her *Macroglossum alidae* COPEL. was named.

Back in England, he devoted himself to the study of his collections and of the butterflies of the British Museum.

He is the author of some small papers.[1]

Several ferns, *e.g. Pteris brooksianus* v.A.v.R. and *Protolindsaya brooksii* COPEL. and the *Aracea :Amorphophallus brooksii* v.A.v.R. were named after him.

COLLECTING LOCALITIES. *NW. Borneo, Sarawak* (betw. *1907–10*): Mt Bongo (Febr. *1908*) with HEWITT; Bidi (Febr., Apr., Aug.); Sept. 21, 1908 starting from Bidi,[2] following the main stream of the so-called right hand of the Sarawak River to its source, crossing the watershed to the upper waters of the Sambas River, visiting Bengkarum Mts and returning to Sarawak by way of Siluas; Mt Penrissen (Apr. *1910*); also collecting on Mt Santubong, Mt Poë, Bungo Range, Bau, Singie, G. Kapor, Tringos.—*S. Sumatra*, Benkoelen (*1912–23*): Lebong Tandai (Febr. *1913*), Lebong Simpang (Ranau, Aug. *1917*); G. Lalangi (July *1923*), G. Dempo (Aug. 1923).—*W. Java:* Mt Tjikorai and Garoet Distr. (*1915*).—*SW. Celebes:* Maros and G. Bonthain.—*Ambon* (Moluccas) (Oct.–Nov. *1923* and in *? 1924*): G. Salahoetoe, Latehetoe, Mamela, Hila, G. Toena, Telaga Radja, *etc.*

COLLECTIONS. Mainly ferns. *Herb. Sing.: Borneo* plants (pres. 1908–09); *Herb. Berl.:* from *Sarawak* (pres. 1908–10); *Brit. Mus.: Java & Sumatra* ferns; *Herb. Kew:* from *Sumatra* (pres. 1924); *Herb.* BONAPARTE (= *Paris*): ferns from *Sumatra* (pres. 1913) and *Borneo* (coll. 1907–10); *Herb. Bog.; Herb. Leyden:* ferns from *Borneo*, phaner. from *Ambon* and *Sumatra.*

In the Buitenzorg Herbarium a list of his collections from Sumatra and Ambon is present, however, without mentioning exact dates; the Sumatra plants are partially numbered with S *nos*, but also with numbers exceeding 15000 (*e.g.* from G. Dempo); the Ambon collection, so far as present in the list, has a numbering from 17555–18142 (collected between Oct.–Nov. 1923).

Several papers deal with his botanical collections.[3]

In *Hort. Bog.: Sumatra* plants (pres. 1919).

LITERATURE. (1) 'Notes on the fertilisation of a few orchids in Sarawak' (Journ. Str. Br. Roy. As. Soc. *no* 54, 1910, p. 99–106; with J. HEWITT); 'English tombs and monuments in Bencoolen' (*l.c. no* 78, 1918, p. 51–58, pl. 4–6); *cf.* also *sub* 2 and 3.

(2) C. J. BROOKS: 'A trip to a source of the Sarawak River and Bengkarum Mountains' (in *l.c.* 60, 1911, p. 41–51; incl. list of ferns).

(3) Numerous described by VAN ALDERWERELT VAN ROSENBURG in his various books and papers on ferns and fern allies.

E. B. COPELAND: in Philip. Journ. Sci. C. Bot. 3, 1908, p. 343–349; *l.c.* 5, 1910, p. 283–285; *l.c.* 6, 1911, p. 133–141; *l.c.* 7, 1912, p. 59–65 (all references dealing with Sarawak collections); and in *l.c.* 9, 1914, p. 227–233 (Sumatra collection).

C. J. BROOKS: 'The ferns of Mt. Penrissen' (Sarawak Mus. Journ. *no* 2, 1912, p. 40–52; new forms described by COPELAND); *cf.* also Journ. Str. Br. Roy. As. Soc. *no* 60, 1911, p. 50–51 (list).

H. N. RIDLEY: 'Some Bornean Aroideae' (Journ. Bot. 51, 1913, p. 201–202, pl. 527).

Prince BONAPARTE, Notes ptéridologiques, fasc. 1, 1915, p. 213–214 (from Benkoelen); fasc. 10, 1920, p. 235–239 and 14, 1923, p. 447–475 (all from Sumatra).

H. N. RIDLEY: 'Plants from Bencoolen, Sumatra' (Kew Bull. 1925, p. 76–94).

H. N. DIXON: 'New and rare Bornean mosses' (Journ. Bot. 79, 1941, p. 57–62, 72–77).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Brooks, Frederick Tom

(1882, Wells, Somerset, England; x), plant pathologist (Ph. Dr Cambridge 1905); in 1914 temporarily in the Agricultural Department Str. Settlem.; in 1919 appointed Lecturer in Botany at Cambridge University, and Professor of Botany in 1936.

COLLECTING LOCALITIES. *Malay Peninsula. 1914.* Around Kuala Lumpur, in Prov. Wellesley and elsewhere in the Peninsula (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Kew:* coll. by C. T. BROOKS (pres. 1915); probably the same with wrong initials.

Brouwer, H. A.

Engineer of the Mining Department, collected some orchids in *Waigeo(e)* and *Salawati* (*Papoea Islands*), which he forwarded to *Hort. Bog.* in *1915.*

Brown, *cf. sub* Bureau of Science, Manila.

Brown, F. H.

commemorated in *Wendlandia paniculata var. brownii* VAL.

COLLECTIONS. *Herb. Berl.:* small collection from the Astrolabe Range (*1898*); *Nat. Herb. N. S.W.* (= *Sydney*): at least ferns from Astrolabe Range, *SE. New Guinea.* Referred to in LAUTERBACH, Beitr. Fl. Papuas., and in SCHUMANN & LAUTERBACH, Nachträge z. Fl. *etc.* (1905).

Brown, George

(1835, Barnard Castle, Durham, England; ? , ?), after some adventurous years of life in

his youth, joined the Australian Wesleyan Meth. Miss. Society in 1860, and served for 14 years at Samoa (Fiji). He sailed from Port Jackson at the end of April 1875 for the purpose of extending the mission in the Bismarck Archipelago; he studied the life-histories of the tribes met with.[1] In 1886 he was back in England and from 1887–1908 General Secretary of the Foreign Missionary Society at Sydney, N.S.W.

He made large zoological collections together with JAMES COCKERELL, further he collected stones and minerals, and probably but few plants.

ITINERARY. *Bismarck Archipelago. 1875–76. Duke of York Isl.*, Port Hunter (Aug. 15, 1875–Aug. 31, 1876) and from there making various trips,[2] *e.g.* to *New Britain, New Ireland,* the surrounding islands *Makadau, Ulu, Utuan, Mioko* and *Mualim*; coastal trips along the opposite part of *New Ireland,* and crossing the latter island (May 30, 1876); along the E. coast of *New Britain* from Orford-Nordspitze to Weberhafen on the N. coast; ascent of Ta Wur-Wur (Kaije) Volcano on the peninsula opposite of Duke of York Isl.—*1877. Duke of York Isl.:* Hunter-Hafen (= Port Hunter; end of the year).—*1878.* Jan. 1st sailing in company of WILFR. POWELL to the SE. coast of *New Britain.*[3]—*1880.* Tour to Kurumait on the W. coast of *New Ireland,* crossing the island for the 2nd time (June 23).[4] Some months later he accompanied the voyage of the 'Beagle' under THOMAS DE HOGHTON: leaving Makadau Harbour (Oct. 25); *Duke of Portland Isl.* (Nov. 1); *New Hanover* (2).[5]—*1890.* End of June with W. MACGREGOR (see there) to Kerepunu, the *d'Entrecasteaux Isls* and the *Louisiades.* End of July sailing with some others to Wari (Teste Isl.), *Moresby Isl., Slade Isl.* (Aug. 1), *Normanby Isl., Goulvain Isl.* (*Dobu*), *Fergusson Isl.* (5–6), *Isl. Kwaru Awa* (Wagipa), and back to Samarai (8).[6]—*1891. Goulvain Isl.* (*Dobu*) (June–July 12) and from there to Blanche Bay.[7]—*1897.* Voyage to several mission stations (May–Sept.): from Sydney *via* Port Moresby to Samarai; *Engineer group, Deboyne Isl., Dobu* (longer stay), *New Britain, New Ireland, Duke of York Isl.* and the isl. *Kiriwina.*[8]

COLLECTIONS. *? Herb. Melbourne.* Plants (princ. ferns) collected in the *Bismarck Archipelago* referred to by F. VON MUELLER.[9]

LITERATURE. (1) G. BROWN: 'Melanesians and Polynesians, their life-histories described and compared' (London 1910).

(2) G. BROWN: 'Notes on the Duke of York Group, New Britain and New Ireland' (Journ. Roy. Geogr. Soc. 47, 1877, p. 137–150).

H. GREFFRATH: 'Der Missionär G. BROWN auf Neu-Britannien und Neu-Irland' (Globus 31, 1877, p. 79–80; PETERM. Mitt. 23, 1877, p. 41–42).

(3) *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea vol. 2, p. 243.

(4) G. BROWN: 'A journey along the coasts of New Ireland and neighbouring islands' (Proc. Roy. Geogr. Soc. Lond. N.S. 3, 1881, p. 213–215).

(5) G. BROWN: 'Excursion to Sandwich Island, Portland Islands and New Hannover' (Proc. Roy. Geogr. Soc. Lond. N.S. 3, 1881, p. 216–220).

(6) *cf.* Further Corresp. resp. N.G. April 1891, p. 218–219.

(7) *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea vol. 2^2, p. 526 and 529.

(8) G. BROWN: 'Notes on a recent journey to New Guinea and New Britain' (Rep. 7th Meeting Australas. Assoc. Adv. Sci. Sydney 1898, p. 790–797).

(9) In Descr. Not. Pap. Pl. pt 4, 1876.

BIOGRAPHICAL DATA. G. BROWN: 'Pioneer Missionary and Explorer. An Autobiography' (London 1908, + portr.).

Brown, Robert

(1773, Montrose, Scotland; 1858, London, England), was destined for the medical profession. J. BANKS proposed for his acceptance the post of Naturalist in the expedition of Capt. FLINDERS in H.M.S. 'Investigator' (*cf.* also *sub* FERD. BAUER and PETER GOOD). Half-way the expedition the ship had to be written off as lost; after shipwreck in the 'Porpoise', they proceeded in the 'Cumberland'. After his return in England in Oct. 1805, he was appointed Librarian of the Linnean Society (resigned 1820); at the close of 1810 Librarian to J. BANKS who (in 1820) bequeathed to him his library and collections; in 1827 those were transferred to the British Museum and from this latter date BROWN filled the office of Keeper of the Botanical Collections in the National Establishment.

He was the discoverer of the Brownian movement (1827) and the nucleus in cells (1831), and is the author of many important papers.[1]

He is commemorated in *Eriocaulon brownianum* MART. and in the genera *Brownea* JACQ. and *Brunonia* SM.

ITINERARY. Capt. FLINDERS's *Voyage in the 'Investigator' etc., 1801–03.*[2] Summer 1801 embarking at Portsmouth; *via* Madeira, Trinidad and the Cape of Good Hope,[3] to Australia. *Timor* was visited twice, *viz* Apr. 1–7, *1803,* and Nov. 10–14 of the same year; the latter time, during the return voyage from Australia to Mauritius. FLINDERS was kept for years in Mauritius and BROWN too did not arrive at Liverpool before Oct. 1805.

COLLECTIONS. *Timor* (Koepang) plants in *Herb. Brit. Mus.;* dupl. in *Herb. Leyden, Edinb., Paris;* partly in *Herb. Vienna* pres. by F. BAUER. A MS. list of the plants, with Latin and vernacular names, collected in Timor is in the Brit. Museum.

BROWN bequeathed his private herbarium to J. J. BENNETT, after whose death in 1876, the 1st set went to the *Brit. Mus.* (3900 species in total), the 2nd to *Kew* and the 3rd to *Edinburgh.*[4] Other dupl. in *Herb.* DECAND. (*Geneva*) (200 identified *spp.*), and DELESS. (*Geneva*); *Paris; Herb. Munich* (with *Herb.* ZUCCARINI); *Herb.* TURCZANINOW (= *Kharkov*) (purch. 1861);[5] *Herb. Berl.* (from Australia); *Herb. Bot. Gard. Petersb.* (= *Leningrad*): 2055 *nos* from New Holland (pres. 1889); *Herb. Sydney:* 24 *spp.* of plants coll. 1802–05 (pres. 1899); *Herb. Melbourne; Herb. Chicago* (417 Austral. plants acq. 1903/04); *Herb. Stockholm* (from New Holland); *Herb.* MARTIUS (= *Brussels*): *Orch. et Gram. Austr.*

In coll. BROWN: 2 unpublished species of *Argo-*

stemma from *Penang* and one from *Timor*;[6] during FLINDERS's voyage Penang was *not* touched at, however.

2 Vols of MS. descriptions of plants in Libr. Bot. Dept Brit. Mus.

His diary in the same library has no scientific value.



R. BROWN

LITERATURE. (1) 'ROBERT BROWN's vermischte botanische Schriften' (Schmalkalden, Nürnberg, 1825–34, 5 vols); 'The miscellaneous botanical works of ROBERT BROWN' (London 1866–68, 2 vols + atlas, publ. for the RAY Soc.).

These works include 'Prodromus Florae Novae Hollandiae et insulae van Diemen' (also published London 1810), and 'General remarks geographical and systematical on the Botany of Terra Australis' (*ditto*, London 1814, as Appendix 3 of FLINDERS's Voyage *etc.* vol. 2, p. 533–613).

(2) M. FLINDERS: 'A voyage to Terra Australis' (London 1814, 2 vols w. app. + atlas, incl. 10 *tab. bot.*); transl. into Dutch, without appendices.

(3) *cf.* Journ. Linn. Soc. Bot. 45, 1920, p. 48–49.

(4) *cf.* Journ. Bot. 1876, p. 172 and *l.c.* 1877, p. 181.

(5) *cf.* Bot. Zeit. 19, 1861, p. 88.

(6) *cf.* BENNETT & BROWN, Plant. Jav. Rar., 1838, p. 94.

BIOGRAPHICAL DATA. Proc. Roy. Soc. 1858, p. 527; Flora N.R. 17, 1859, p. 10–15, 25–31; Proc. Linn. Soc. 1859, (meet. May 24th) p. xxv–xxx; tomb *cf.* Bot. Zeit. 20, 1862, p. 216; PRITZEL, Thes. Lit. Bot., 1872; BAILLON, Dict. de Botanique 1, 1876; Biogr. Ind. BRITTEN & BOULGER in Journ. Bot. 26, 1888, p. 149, and in 2nd ed. by RENDLE, 1931; WITTROCK, Icon. Bot. Berg., 1903, p. 90; *l.c.* 2, 1905, p. 209; J. D. MILNER, Catalogue portraits in Kew, 1906, p. 20; portr. in Journ. Bot. 44, 1906, *ad* p. 346; OLIVER, Makers of Brit. Botany, 1913, p. 108–125, w. portr.; J. REYNOLDS GREEN, A History of Botany *etc.*, 1914, p. 309–335.

Brown, William Henry

(1884, Richmond, Va., U.S.A.; 1939, Baltimore, U.S.A.), a plant physiologist who studied at Richmond College and at J. HOPKINS University and took his Ph. D. in 1910; since 1911 in the employ of the Bureau of Science, at Manila, P.I.; 1924–33 Director of that Institution; besides, since 1915 Professor of Botany at the University of the Philippines. After his retirement he stayed at Manila until 1937; in Febr. 1938 he took up residence at Baltimore, having charge of the Botanical Laboratory and the Botanic Garden at JOHNS HOPKINS University.

He made a trip to Java in 1917,[1] *e.g.* visiting Tjibodas (W. Java) from May 13–16; he made no collections in that island.

He is the author of a large number of publications, especially concerning useful plants.[2]

COLLECTIONS. *Herb. Manila*, in B(ur). S(ci). series, few *nos; e.g.* abundant material of *Cycas wadei* MERR. in *Culion* (posterior to April *1923*), and some plants from Mt Maquiling (*Luzon*).

MERRILL in his Enum. Philip. Fl.Pl. refers to many plants collected by BROWN; probably the same.

LITERATURE. (1) *cf.* Philip. Journ. Sci. C. Bot. 12, 1917, p. 305.

(2) *e.g.*: 'Philippine dipterocarp forests' (Philip. Journ. Sci. sect. A 9, 1914, *nos* 5–6); 'Vegetation of Philippine mountains' (Publ. 13 Dept Agr. & Nat. Res. Bur. Sci. Manila 1919); many papers in Philip. Journ. Sci. and Philip. For. Bull., partly together with A. F. FISCHER and E. D. MERRILL.

BIOGRAPHICAL DATA. Bibliogr. in MERRILL, Enum. Philip. Fl. Pl. 4, p. 168–169; Nat. Res. Counc. P.I. Bull. *no* 7, 1935, p. 629–632 incl. bibliogr.; Science 90, 1939, p. 531–532; Chron. Bot. 6, 1940, p. 20; Philip. Journ. Sci. 72, 1940, p. 241–247, w. portr., incl. bibliogr.

Brues, Beirne Barrett

(of Austin, Texas, U.S.A.), wife of C. T. BRUES, Professor of Economic Entomology, Harvard University, Massachusetts (U.S.A.). She accompanied her husband on a trip to the D.E.I.

ITINERARY. *1936 or 1937.*[1] In *Sumatra* visiting various regions in the north extending from Medan to Atjeh, to Pematang Siantar, to Fort de Kock and through the highlands to the W. coast and southward; Palembang and the highlands of southern Sumatra. *Java:* from Soerabaja to Batavia along the entire length of the island. *Celebes:* region about Makassar and the surrounding mountains;

northern part of the island about Manado, Lake Tondano and the mountains of that region, *e.g.* Mt Sopoetan (Aug. 8, *1937*).

COLLECTIONS. Seeds of a species of *Nepenthes*.[1] According to a letter from America (addressed to Dr J. VAN DER VECHT) Mrs BRUES made a collection of grasses which will eventually be deposited in the GRAY *Herb.* of Harvard University. They are as yet unidentified.

LITERATURE. (1) *cf.* Bot. Mus. Leafl. Harv. Univers. 8, 1940, p. 65. The year of collecting mentioned herein is 1937. This does not agree with the above-mentioned letter, in which is stated the year 1936.

Brug, W. van den

of Weltevreden, W. Java, collected a few plants in *Java* (Jan. *1915*).

Bruggeman, Marie Louis Abraham

(1894, Amsterdam, Holland; x), educated at the Horticultural School at Frederiksoord, was appointed Asst Curator, in charge of the Mountain Garden at Tjibodas (W. Java) in Dec. 1921; in Nov. 1927 he was transferred to the Buitenzorg Botanic Gardens.

He is the author of an illustrated guide of Tjibodas (1927), of a revised list of the numbered trees and shrubs in the mountain forest near Tjibodas, and of publications on ornamental plants.

He is commemorated in *Sindora bruggemanii* DE WIT.

COLLECTING LOCALITIES. *W. Java:* G. Gedeh, Tjibodas (*1924–27*); G. Bèsèr (Tjiandjoer) (*1929*); *Centr. Java:* Tjilatjap and *Noesa Kambangan* (Febr. 1929); *W. Java:* Tjibodas (Sept. *1931*); Wijnkoopsbaai (Nov. 1931).

COLLECTIONS. Large number of plants (834) in Mt Gedeh Nature Reserve, which formed the basis of the now destroyed local herbarium at *Tjibodas. Herb. Bog.:* 31 *nos* from Tjilatjap and *Noesa Kambangan;* coll. Wijnkoopsbaai together with HAGEN, *etc.; Java* dupl. in *Herb. Leyden.*

The numbers of his collections exceed 3744.

LITERATURE. (1) 'The numbered trees, shrubs and lianes in the forest of Mount Gedé near Tjibodas, West Java' (Bull. Jard. Bot. Buit. sér. 3, vol. 9, 1927, p. 196–217).

Bruigom

physician and Director of the hospital Kwala Simpang, *Sumatra*, collected material of the cultivated *Erythrina umbrosa* H.B.K. in Dec. *1934*; the material was forwarded to *Herb. Bog.*

Bruinier, Jan Berend Hendrik

(1884, Bandaneira, Moluccas; x), at first student overseer, later appointed Forest Officer in the D.E. Indian Forest Service; in 1906 stationed at Padangan and subsequently at various other stations in the teak districts of Java; since April 1911 in P. Boeton (S of Celebes); in Aug. 1917 at Medan (Sum. East Coast); in May 1918 at Tandjong Pinang (Bengkalis District); in 1919 he went on furlough; in 1922 at Manado (N. Celebes), in 1926 at Madioen (E. Java), since 1931 in the teak districts again. He was pensioned off in 1933.

His stay in Sumatra resulted in an unpublished report.[1]

COLLECTING LOCALITIES. *1916. SE. Celebes:* near Staring Bay *etc.—1918–19. Sumatra East Coast:* G. Sibajak;[2] islands before the coast, *viz P. Roepat* (Apr. 1–3), *P. Tebingtinggi, P. Bengkalis, P. Toepang, P. Merbau, Selat Pandjang, P. Rangsang* (at the end of July), *P. Serapoeng, P. Mendol, P. Medang* (Aug.–Oct., in this period he collected too at Doemai, Batang Ketjil, Soengei Misigit).

COLLECTIONS. *Herb. Bog.* and *Herb. For. Res. Inst. Buitenzorg:* 317 *nos* in F.R.I. bb. series from the islands before the E. coast of Sumatra, collected on behalf of K. HEYNE (see there) and the Forest Service; a collection of *SE. Celebes* plants (*e.g.* coll. near Staring Bay in 1916) pres. through the intermediary of the Forest Research Institute in 1920; several of the 64 *nos* were lacking (thrown away, being badly preserved), the remaining ones poor specimens. In Bengkalis *etc.* he was assisted by the native collectors: MARAH NAPI, SASTRO SOEWONDO, SOEPARMAN and SOERASMAN. He collected for LÖRZING (see there) too.

LITERATURE. (1) 'Aanteekeningen over houtsoorten van Bengkalis' (in Forest Research Institute, Buitenzorg).

(2) *cf.* Versl. Pl. Tuin Buitenzorg for 1918, p.231.

Bruinsma, Abraham Eduard Johannes

(1852, Leeuwarden, Fr., Holland; 1943, Ede, Gld, Holland), entered the D.E. Indian Forest Service in 1876; he was appointed Inspector of Forests in 1897 and Chief Inspector in 1900; retired in 1907. Thanks to him KOORDERS (see there) was given the opportunity for the floristical investigation of Java.

He is commemorated in the plant genus *Bruinsmia* BOERL. & KDS.

COLLECTIONS. *Herb. Bog.:* a few plants from Semarang, *Centr. Java* (Febr. 14, *1890*). *Hort. Bog.:* living plants from Tandjong Pinang, div. Mengala, Lampong Districts, *S. Sumatra* (pres. *1893*).

BIOGRAPHICAL DATA. Tectona 19, 1926, p. 656–708, w. portr. & 5 fig.; *l.c.* 25, 1932, p. 1281–1363 + portr., 1425–1515, w. fig.; BACKER, Verkl. Woordenb., 1936.

Brummeler, G. W. ten

Chief of the Postal Service at Batavia, Java, had a private collection from Pajoekombo (*Sumatra West Coast*), in which BURCK (see there) came across many gutta-percha samples of perfect quality. LAM (in Bull. Jard. Bot. Buit. sér. 3, vol. 7, 1925, p. 135) refers to *Payena dantung* H.J.L., *no* 43, collected by a TEN BRUMMELER at Ogan Hoeloe, *Sum. West Coast.*

COLLECTIONS. *Probably* in *Herb. Bog.*

Bruyn

collected material (dried and in spirit) of the rasak tree (*Dipterocarp.*) on *P. Simaloer*, near N. Sumatra in *1913*; in *Herb. Bog.*

Bruyn, F. de = FEUILLETAU DE BRUYN, W.K.H. (see there).

Bruyn Kops, de

He might be identical with G. F. DE BRUYN KOPS, lieutenant in the Navy, in 1855 Asst Harbourmaster at Batavia. The latter is the author of many papers which, however, do not relate to Borneo,[1] the island where the plant cited below was collected.

COLLECTIONS. *Herb. Bog.: Dipterocarpus rigidus* RIDL. from *Borneo, no* 12014 in the H.B. series.

LITERATURE. (1) 'Bijdrage tot de kennis der noord- en oostkusten van Nieuw Guinea' (Nat. Tijdschr. N.I. 1, 1850, p. 163–235); 'Schets van den Riouw-Lingga Archipel' (*l.c.* 4, 1853, p. 49–90, 303–392); 'Togt naar de Reteh-rivier ter onderzoeking van steenkolenlagen' (*l.c.* p. 611); 'Lijst van boomen en planten, gevonden wordende in de Residentie Riouw op de Oostkust van Sumatra en omliggende eilanden' (Tijdschr. Ind. Taal-, Land- en Volkenkunde 1, 1854, p. 271–317).

BIOGRAPHICAL DATA. G. F. DE BRUYN KOPS, in Encyclop. N.I. 1, 1917.

Bruyn Prince, Pieter Merkus Lambertus de

(1851, Soerabaja, Java; 1934, Voorburg, Z.H., Holland), since 1873 official in the D.E. Indian Civil Service; from 1896 Resident of Kedoe, Centr. Java; in 1901 elected a Member of Council, in 1904 Vice-president.

COLLECTIONS. At the request of *Herb. Bog.*, he sent dried material of *Alphonsea javanica* SCHEFF. from Kedoe in *Centr. Java* (*cf.* Icon. Bogor. 1, fasc. 2, 1899, p. 114).

Bryant, Alfred Thomas

of the Malayan Civil Service (1883–1918), collected some plants in the Dindings, *Malay Peninsula*, in *1890* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5); in *1916* he forwarded plants to *Hort. Sing.*

Bryant, Owen

of Cohasset (Mass., U.S.A.), leader of the OWEN BRYANT Expedition 1909–10, who, assisted by Mr W. PALMER (see there) of the staff of the U.S. Nat. Museum Washington, explored certain parts of Java, making valuable, principally zoological collections.

ITINERARY. *cf. sub* W. PALMER.

COLLECTIONS. In *U.S. Nat. Herb. Wash.*, collected together with W. PALMER (see there); dupl. in *Herb. Copenhagen*, and in *Herb. Leyden* (225 ferns).

B.S. *nos, cf. sub* Bureau of Science, Manila.

Bryce, George

(1885, Glasgow, Scotland; x), agriculturist, educated at Edinburgh University (D. Sc. 1922); Director of Agriculture, Rabaul, for New Guinea, 1923–26; in the Department of Agriculture, Malaya, 1926–29 and from 1946 onwards. He was employed in Nigeria too.

ITINERARY. *1924–25.* In *NE. New Guinea* he went to Lae and the headwaters of River Markham with River Ramu, returning to Lae.

COLLECTIONS. *Herb. Kew:* plants of the *Territory of New Guinea* (pres. by the Dept of Agr. Rabaul in 1925); 19 dupl. in *U.S. Nat. Herb. Wash.* According to his own information he collected seeds from *Mucuna bennettii* near Lae, at the mouth of the Markham Valley.

Buchanan, *cf.* HAMILTON, F. BUCHANAN.

Budding, L. F. Ch., *cf. sub* Forest Research Institute, Buitenzorg.

Buddingh, C.

a resident of Soekaboemi, *W. Java*, sent some plants to *Herb. Bog.* in *1917.*

Buddingh, J. A.

interpreter for the Chinese language, at first employed in China (Amoy), since Aug. 1864 in Banka, and since June 1869 at Padang (Sum. West Coast).

Salacia buddinghi SCHEFF. was named after him.

COLLECTIONS. He forwarded a large amount of plants from *Banka* to *Hort. Bog.* (pres. *1865–68*); probably part of the material was dried and preserved in *Herb. Bog.*

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; Dr A. GIJZEN, 's Rijks Mus. v. Nat. Hist. 1820–1915, Rotterdam 1938, p. 122 and 305.

Bültzings Löwe

of Soerabaja, sent *Cheilanthes farinosa* from G. Ardjoena (*E. Java*) to *Hort. Bog.* in *1873.* This was probably G. VON BÜLTZINGSLÖWEN, consular agent of the U.S.A., besides consul of the 'Nord-Deutsche Bund' (*cf.* portr. of G. VON BÜLTZINGSLÖWEN, and monument for . . . in L. S. A. M. VON RÖMER, Historische schetsen, Batavia 1921, pl. 216–217).

Buen, S., *cf. sub* Forestry Bureau, Manila.

Bünnemeijer, H. A. B.

(1890, Amsterdam, Holland; x), collector in the employ of the Buitenzorg Herbarium, Dec. 1916–1921, and subsequently until mid-1923 stationed at the Herbarium. In 1924 he was put on half-pay after expiry of his European leave and was dismissed at his own request in 1928. He attended college at Wageningen and subsequently became a teacher at horticultural schools at Boskoop and Lisse, settling at Oegstgeest.

Some plants were named after him.

ITINERARY. *1917. Centr. Java:* Diëng Plateau (Jan. 21–26)[1] with C. A. BACKER.—*Sumatra West Coast:*[2] Fort de Kock (Apr.); G. Taloe and environs (Apr. 7–13); Soekamananti (14); the 17th by way of Pinagar to the base of G. Talamau (= Ophir), making camp at 400 m alt. (21), at 1060 m on the NW. slope (May 6), at 1300 m (11), at 1900 m (21) and on the plateau (2780 m) (staying June 1–4; climbing the summit); Tanang Taloe (June 15–20); Loeboeksikaping (22); Baso, Beto,

Fort de Kock (25); G. Merapi (26; up to 1400 m); Fort de Kock, Karbouwengat, *etc.* (27–28).—*Banka:* Muntok (Oct. 10–19), *e.g.* visiting G. Menoembing and G. Neboeng; Bt Beban, Bakem (Oct. 23–24), Soengailiat and environs, *e.g.* G. Boei (27), G. Betong, Bt Lajang; Pangkal Pinang (Nov. 12); Soengai Selan (14); Permisan Mts (17–18); Soengai Selan (18–20; visiting *P. Nangka* on the 18th); back at Pangkal Pinang (22); Mangol Mts (28); Perlang, Bt Beboeloek, G. Pading (Dec. 1–2), Bontja (4–5), Toboali and neighbourhood (8–10); *P. Lepar* (11–13); SW. coast of Banka (collecting until the 17th).—*1918. Sumatra West Coast:* G. Singgalang (May 25–June 3); Bt Tinggi and Mangani (June 15); Brani (18–20), visiting Soengai Koeriman; Poear Datar, S.A. Ramboetan; G. Malintang (July 17–18); G. Sago (19); Bt Nan Tigo (20); G. Malintang (20–25); G. Sago (26–29); G. Malintang (July 29–Aug. 2); G. Sago (Aug. 3); G. Malintang (5–6); G. Sago (7–8); G. Malintang (10); G. Sago (11); G. Merapi (Sept. 12–Oct. 7); Pajakoembo; G. Talang (Oct. 24–Nov. 18), *e.g.* on Bt Gombak.—*1919. Anambas & Natoena Islands: P. Djemadja* (May 15–16); *P. Siantan* (16); *P. Toedjoej* (19–25), on G. Ranai (19 and 21) and at Tandjoeng Pasir (20). He also visited *Boengoeran* and *Sedano* (= *Sedanau*). *Riouw-Lingga Archipelago: P. Bintan* (June 12–July 4; visiting *P. Penjingat, P. Los* and *P. Oedjan*); *P. Selajar* (July 10–11); *P. Lingga* (12–30); *P. Singkep* (July 31–Aug. 8); *P. Selajar* (9–13); *P. Senajan* (15); *P. Sebangka* (16); S. Semarong (17–18); *P. Bakoeng* (19); *P. Temiang* (20); *P. Soegibawah* (Sept. 4); *P. Doerian* and *P. Boeroe* (5); *P. Papan* (6); *P. Karimon* (= prob. Groot Karimoen) (7).—*1920. Sumatra West Coast:*[3] G. Kerintji (Febr. 6–May 12); May 20 passing the Barisan Range, setting out from Kerintji Valley.—*1921. SW. Celebes:* Bonto Parang (March 22–29); Malino (March 30–Apr. 4); G. Galesong (5–7); Malino (8); G. Galesong (9); Lombasang (13–29); G. Bonthain (30); Lombasang (May 2–15); G. Bonthain (16–20); Lombasang (20–26); Tanette (27); G. Bonthain (28–29); Lombasang (29–31); G. Bonthain (June 5–17); Boeloe Balea (18); G. Bonthain (19–24); Tanette (25–27); Boeloe Parigi (27–28); Tanette (28–29); Raoelo (June 30); G. Bonthain (July 1).

COLLECTIONS. *Herb. Bog.:* 12658 *nos, viz* from *Sumatra 1917 nos* 1–1339, from *Banka etc. 1917 nos* 1340–2510, from *Sumatra 1918 nos* 2511–5765, from *Anambas & Natoena Isls nos* 5766–6100 and from *Riouw-Lingga Archip. nos* 6101–7891, from *Sumatra 1920 nos* 7920–10554, from *Celebes 1921 nos* 10555–12658.

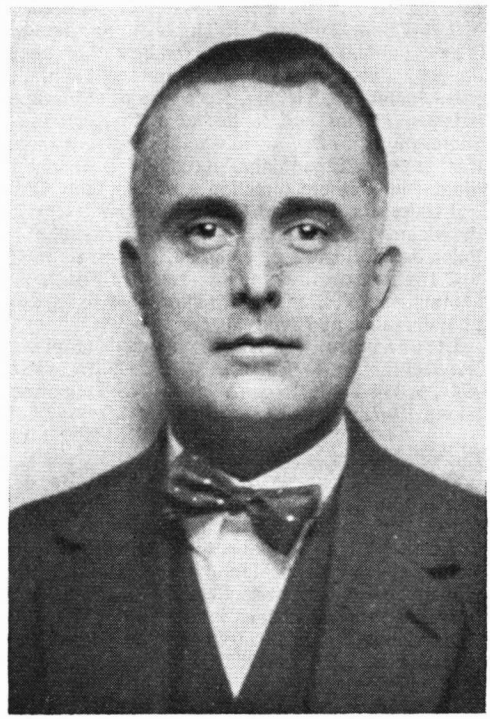
The collection from the Diëng Plateau (1917) was probably numbered apart, possibly together with C. A. BACKER.

Dupl. were distributed to various herbaria, *e.g.* to *Herb. Leyden;* material from G. Bonthain in *Herb. Berl.;* from *Sumatra* in *Herb. Utrecht;* some *Java nos* in *Herb.* DELESS. (*Geneva*); 11 dupl. in *U.S. Nat. Herb. Wash.;* in *Herb. Wageningen:* 71 dupl. of common and cultivated plants (pres. in 1926).

J. J. SMITH published several papers on the *Orchidaceae* and *Ericaceae* of his collections.[4] Occasionally other plants of his were described.[5]

In *Hort. Bog.:* many living plants from *Sumatra, Banka,* and *Riouw-Lingga.*

LITERATURE. (1) H. A. B. BÜNNEMEIJER: 'Een tocht naar het Diëngplateau' (Trop. Nat. 7, 1918, p. 43–48, 69–74, 101–104, 122–124, 135–138 + 15 fig.).



BÜNNEMEIJER

(2) E. JACOBSON: 'In het oerbos van den Ophir' (*l.c.* 8, 1919, p. 1–5, 17–21, 49–54, 65–72, 81–92, 113–121, 129–133, 145–150 + 17 fig.).

(3) H. A. B. BÜNNEMEIJER: 'Reizen in het bergland van Midden-Sumatra' (*l.c.* 10, 1921, p. 1–12, 33–37, 55–58, 74–78 + 12 fig.) (herein once stated erroneously 1919 as the year in which the trip took place).

(4) 'Additions to the orchid-flora of Celebes' (Bull. Jard. Bot. Buit. sér. 3, vol. 10, 1928, p. 1–24); 'Ericaceae from the East. Arch.' (*SW. Celebes* collection BÜNNEMEIJER) (FEDDE Repert. 30, 1932, p. 162–178); 'Die Orchideen der Anambas- und Natuna-Inseln' (*l.c.*, p. 327–336); for the *Sumatra* collection *cf.* FEDDE Repert. 32, 1933, p. 129–386.

(5) S. J. VAN OOSTSTROOM: 'A new species of Argyreia from Sumatra (Convolv.)' (Blumea 5, 1945, p. 686–688, 1 fig.).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Bünning, Dr Erwin

(1906, Hamburg, Germany; x), formerly of the

Bot. Institute at Jena and then Professor at Köln; since appointed Professor, Director of the Botanical Institute and Garden, Tübingen, Germany. In 1938–39 he travelled in the D.E.I. at the expense of the 'Reichsforschungsrat' (State Research Council).

ITINERARY.[1] July *1938*–July *1939*. In all parts of *Java*. In *N. Sumatra:* Medan–Tobasee (Lake Toba)–Tebing-Tinggi; Dk Tinggi-Radja; Balige; Sibolga; *Nias; Banjak Isls; Simalur;* Tapatuan, Singkil, Meulaboe, mountains between Tapatuan and Meulaboeh, Tjalang, Kota-Radja, mountains between Tjalang and Kota-Radja, Bireuen, Lho-Seumawe, Idi, Langsar, lowland and mangrove in this region, Kabandjahe, Kota-Tjane, Blangkedjeren; in southern direction near G. Löser, Central Gajo Mts, Tawarsee (Lake Tawar) and trips in the vicinity, Bireuen. *S. Sumatra:* Telok-Betong–Palembang, Benkulen, Ketaoen, Lebong-Tanda.

COLLECTIONS. Some hundreds of the more common species, for the greater part ferns and phanerogams, at *Tübingen*.

LITERATURE. (1) E. BÜNNING: 'Botanische Beobachtungen in Sumatra' (Ber. D.B.G. 137, 1944, p. 334–344); 'In den Wäldern Nordsumatras' (Bonn 1947, w. 64 pl.).

Büsgen, Moritz

(1858, Weilburg a.L., Germany; 1921, Hannöversch Münden, Germany), studied at Bonn and Berlin University; in 1883 graduated at Strassburg. In 1901 he was appointed Director of the Botanical Institute at Hannöversch Münden, previously he was University Lecturer and Extraordinary Professor at various institutions.

He visited the D.E.I. together with BUSSE (see there) in 1902–03; in 1908 he made a study tour to Cameroon and Togo.

He wrote some papers relating to the tropics.[1]

COLLECTING LOCALITIES. *Java* (Oct. *1902*–Febr. *1903*), at Buitenzorg and Tjibodas. During a visit to *Centr. Java* (Dec. 1902–Jan. 1903): G. Merbaboe (Dec. 6–7), Rembang, Semarang (teak forest).

COLLECTIONS. Some of his specimens in *Herb. Bog.*, the numbers evidently exceeding 205. *? Herb. Münden.*

His plants were identified by S. H. KOORDERS.[2]

LITERATURE. (1) *viz:* 'Wachstumbeobachtungen aus den Tropen' (Ber. D.B.G. 21, 1903, p. 435–440); 'Ödlandaufforstung in Niederl. Indien' (Tropenpflanzer 9, 1905, p. 83–86, 1 fig.); with HJ. JENSEN and W. BUSSE he edited 'Mittel- und Ost-Java' in KARSTEN, Vegetationsbilder, 3. Reihe, 1905.

(2) S. H. KOORDERS: 'Versuch einer Arten-Aufzählung der von Prof. Dr M. BÜSGEN in Java gesammelten Embryophyta Siphonogama' (Nat. Tijdschr. N.I. 63, 1904, p. 37–48).

BIOGRAPHICAL DATA. Who's who 1913; Ber. D.B.G. 39, 1921, Gen. Vers. Heft p. (87)–(96), w. bibliography.

Büttikofer, Johann

(1850, Ranflüh im Emmenthal, Switzerland; 1927, Berne, Switzerland), was originally intended to become a schoolteacher, followed his love for nature, and continued his study of biology at Berne. In 1879 he followed Prof. SCHLEGEL to Leyden, where he was Custodian of the Zoological Museum from 1884–97. He made some expeditions, *viz* to W. Africa in 1880–82, and 1886–87, and accompanied the NIEUWENHUIS expedition to Central Borneo in 1893–94. In 1895 he was awarded a honorary Ph. Dr's degree at Berne. From 1897–1924 he was Director of the Zoological Garden at Rotterdam. After his resignment he settled at Berne.

COLLECTIONS. *Herb. Bot. Gard. Berne:* plants of the *Dutch East Indies* (for Herbarium and carpological collection; pres. 1925), material of *Citrus aurantium var.* from *Java* (pres. 1926); plants from his inheritance, incl. mosses from Liang-Koeboeng (probably a hill visited during the above-mentioned NIEUWENHUIS *Borneo* expedition) (pres. 1928).

BIOGRAPHICAL DATA. ANONYMOUS: 'Zum Andenken an Dr JOHANN BÜTTIKOFER' (Bern 1927, + portr.); cuttings from several newspapers, in *Herb. Leyden;* Ned. Kruidk. Arch. 52, 1942, p. 380–381.

Buitendijk, P.

probably identical with the ship's doctor of that name, who in the years 1904–14 brought home large zoological collections from his travels to the D.E.I.[1]

COLLECTIONS. *Herb. Leyden:* plants from Sabang, *P. Weh* (N of Sumatra), collected in May *1914*; and some from *W. Java* (Tandjong Priok). His plants are referred to in papers by LAM and VAN OOSTSTROOM; evidently they were not numbered.

LITERATURE. (1) *cf.* A. GIJZEN, 's Rijks Mus. v. Nat. Hist. 1820–1915, Rotterdam 1938, p. 152, 233 and 305.

Burbidge, Frederick William

(1847, Wymeswold, Leicestershire, England; 1905, Dublin, Ireland), at first Gardener at Kew Gardens and from 1877–78 explorer for ornamental plants in the employ of Messrs VEITCH. From 1879 onwards he was Curator of the Botanic Gardens of Trinity College at Dublin; in 1894 he was appointed Keeper of the College Park. In 1889 he was awarded the honorary degree of M.A. of Dublin University and in 1897 granted the Victorian Medal of Honour by the Roy. Hort. Society. He was the introducer of *Nepenthes rajah.*

He is commemorated in the genus *Burbidgea* HOOK. *f.*, *Globba burbidgei* RIDL., *etc.*

ITINERARY.[1] *1877–78. Malay Peninsula: Singapore*, southern Johore (Aug. *1877*; *e.g.* G. Pulai with MURTON and at Kanka Ah Tang, from the Straits of Malacca to the China Sea); *Labuan; NW. Borneo:* to the Kadyan and Murut countries (Sept.), near the head of the Lawas and Meropok rivers; *Labuan* (Nov. 29), starting on a journey to *Br. N. Borneo:* Mt Kinabalu with Mr PETER VEITCH (see there), by way of the Tawaran River, Kalawat Peak, ascent up to 9000 feet; return to *Labuan; NW. Borneo*, Brunei; boat journey up the Limbang and Pandarowan rivers as far as Bukit Sagan; NW.

coast of Borneo in the interior of the Murut and Dusun countries; Apr. 5, *1878*, sailing for Sandakan and the *Sulu* Archipelago (Jolo), reaching Meimbong (10), from where making trips, *e.g.* on the Bu'at Timantangis, the highest mountain of the island, and Bu'at Dahau; *via* Sandakan returning to *Labuan; Br. N. Borneo:* July 31 starting *via* Lumbedan (Aug. 1), *Pulo Tiga*, Gaya Bay, Qualla Tampassuk, Kiau, to Mt Kinabalu (reaching 10700 feet), Aug. 18 descent; *Labuan* (Aug. 30). According to BURKILL[2] he visited *Singapore* once more in 1878.

COLLECTIONS. *Herb. Kew:* 963 *nos* from *Borneo, Sulu, etc.* (pres. 1878–97); *Herb. Brit. Mus.:* 230 *Br. N. Borneo* plants (pres. 1879 by Messrs VEITCH); *Herb. Oxford Univers.* (with *Herb.* FIELDING); *Herb. Bot. Gard. Petersburg* (= *Leningrad*): 130 *Borneo* plants; *Herb. Berl.:* cryptogams from *N. Borneo* and *Sulu Arch.; Herb. Vienna: Borneo* orchids (with *Herb.* REICHENBACH); some dupl. in *Herb. Bog.* In 1878 he sent *Borneo* plants to *Hort. Sing.*

40 Plates and 115 original sketches of Borneo in the Brit. Mus. (1886).[3] The labels of Borneo plants in many cases do not indicate the locality beyond the general printed heading 'North Borneo'. J. G. BAKER dealt with his fern collections,[4] STAPF with his Kinabalu plants.[5]

LITERATURE. (1) F. W. BURBIDGE: 'The Gardens of the Sun: or a naturalist's journal on the mountains and in the forests and swamps of Borneo and the Sulu Archipelago' (London 1880) (Itineraries of the Kinabalu trips also in Sarawak Mus. Journ. 2, 1915, p. 145–149); 'A trip to the Sooloo Archipelago' (1884) (*non vidi*).

(2) In Gard. Bull. Str. Settlem. 4, 1927, p. 118.

(3) *cf.* Journ. Bot. 25, 1887, p. 217.

(4) *cf.* Journ. Bot. 1879, p. 37–44; *cf.* also abridged account in BURBIDGE, The Gardens of the Sun, *l.c.* App. p. 345–350 (*Borneo* ferns) and p. 350–351 (ferns of the *Sulu Archip.*).

(5) *cf.* Transact. Linn. Soc. Bot. 2nd ser. vol. 4, 1894, p. 69–263, pl. 11–20.

cf. also Appendix to BURBIDGE, The Gardens of the Sun, p. 339–344.

BIOGRAPHICAL DATA. Gard. Chron, 38, 1905, p. 460 w. portr. and *l.c.* 39, 1906, p. 10; Hortus Veitchii 1906, p. 75–78; Journ. Kew Guild 1906, p. 326–327 + portr.; Journ. Bot. 44, 1906, p. 80 and Biogr. Index BRITTEN & BOULGER in *l.c.* 46, 1908, Supplem. p. 3, and in 2nd ed. by RENDLE, 1931; Kew Bull. 1906, p. 392–393; Orch. Review 14, 1906, p. 8; Dict. Nat. Biogr. 2nd Suppl. vol. 1, 1912; BACKER, Verkl. Woordenb., 1936.

Burcham, Levi Turner

(1912, Ronda (Wilkes County), N. Carolina, U.S.A.; x), was educated in agriculture at the University of California (B. S. 1941); Range Examiner, Range Development Service, U.S. Dept of Interior, 1941–42; on active duty, U.S. Marine Corps Reserve, 1942–46; Asst Forest Technician and later Forest Technician, California division of Forestry, 1947–to present. Between Nov. 1942 and July 1945 he collected in the South and Western Pacific while on duty with the U.S. Marine Corps. Outside of the Malaysian region as accepted in this Cyclopaedia, he visited and collected in the Solomon, Palau and Russell Islands, the Ryukyu Archipelago, and New Caledonia.

COLLECTING LOCALITIES. *1943–44. Goodenough Isl.* (*d'Entrecasteaux Isls*, Terr. of Papua)



BURBIDGE

(Oct. 21–Dec. 15, *1943*), exploring much of the NE. portion of the island on foot, collecting at: Haiwali village (Nov. 14, 22), Malauma Creek (27), Nubuali village (Dec. 5), and W of Haiwali (11); *Bism. Archipelago, New Britain* (Dec. 26, *1943*–May 4, *1944*), visiting the entire western end, and the N. coast as far eastward as Talasea, collecting at: Bitokara Mission, Talasea (Apr. 22, *1944*); Waru village, Talasea (23); Cape Gloucester (May 2).

COLLECTIONS. Grasses in *U.S.Nat.Herb.Wash.*, isotypes in *Herb. Berkeley*. The total collection includes 104 *nos* of grasses,[1] but evidently other plants too, as the highest number mentioned is 237. In *Goodenough Isl.* the *nos* 118–136 (grasses) were collected, and in *New Britain* the *nos* 137–142 (grasses).

LITERATURE. (1) L. T. BURCHAM: 'Observations on the grass flora of certain Pacific islands' (Contrib. U.S. Nat. Herb. 30, 1948, p. 405–447 + i–vii).

Burchard, W. F. G.

(† 1933, Aër Molek Estate in Indragiri, Sumatra), at first in the employ of a commercial firm in Deli (Sum. East Coast) and since 1900 in agriculture in Indragiri, Centr. Sumatra. He was one of the pioneers of rubber culture in Sumatra, but nevertheless he died in poverty.

Diplazium burchardi ROSENST. and *Sarcochilus burchardianus* SCHLTR were named after him.

COLLECTIONS. Ferns from *Centr. Sumatra*, Indragiri (coll. *1906–07*), *e.g.* near Sg. Lala, were forwarded to Dr E. ROSENSTOCK who described some new species[1] (*Herb.* ROSENSTOCK = *Berlin*). Some dupl. in *Herb. N.Y. Bot. Gard.*, in GRAY *Herb.*, and in *Herb. Leyden.*



BURCK

LITERATURE. (1) *cf.* in FEDDE Repert. 4, 1907 & 5, 1908; Meded.'s Rijks Herb. Leiden *no* 31, 1917.

Burck, William

(1848, Monnikendam, Holland; 1910, Leyden, Holland), botanist, educated at Leyden University (Ph. Dr 1874); teacher at a secondary school at Leyden, and subsequently at Apeldoorn in Holland, then at the School of Agriculture at Buitenzorg, Java. In 1881 he was appointed Asst Director (in charge of the Herbarium) of the Botanic Gardens, Buitenzorg; he made a trip to the Padang Highlands in connection with gutta-percha in 1883, attended by 'mantri' ARSIN (see there) of the Herbarium. After a European sick-leave of 2 years, he was appointed Scientific Adviser for the government coffee culture in 1893, and retired in 1902.

His publications are principally in the field of systematics (*Dipterocarpaceae, Sapotaceae, Filices*) and of flower biology.[1] The genus *Burckella* PIERRE was named after him.

ITINERARY & COLLECTING LOCALITIES. *1883. Sumatra West Coast:*[2] Padang (Aug. 15); Padang Pandjang (arriving the 18th), collecting *e.g.* on G. Sing(g)alang; Sept. 2 by way of Fort de Kock to Pajoekombo; excursions starting from the pasanggrahan (= guest-house) at Halaban (11–20); on the way to Soeliki (22) for explorations in the subdivisions Poear Datar, Pangkalan, Kota Baroe, XII Kotta's, Kampar, Gloegoer; back at Pajoekombo (15); the 16th *via* Fort de Kock, Padan gPandjang to Fort van der Capellen (22); explorations in the XII and IX Kotta's (Solok); Soepajang–Padang Pandjang (Nov. 2); Padang (6–9).—*1890. W. Java:* Depok, Tjipetir, Tjibodas and Buitenzorg.—*1891.* The first nine months with P. DE MONCHY (see there): in the environs of Buitenzorg, *e.g.* at Depok and Tjampea; Telaga Bodas (Apr. 4, June 21, July 3 and 7), G. Papandajan (June 23), Garoet (June 29, July 10), G. Tjikorai (June 29), environs of Garoet (June–July), G. Goentoer (July 1), Gegerbintang (spur of G. Gedeh) (July), Tjiloear and G. Gedeh (June–July).—*1896. Lang-eiland* in Sunda Strait (Sept.) with BOERLAGE.

COLLECTIONS. *Herb. Bog.:* some 400 ferns and some 100 other plants from the Padang Highlands; from the environs of Garoet (1891) 565 *nos, etc.* Dupl. in *Herb. Leyden* (Padang Highlands) and much material in spirit; *Herb. Kew:* 112 'types' from the Indian Archip. (pres. 1887–88); *Herb. Kol. Mus.* (= *Ind. Inst.*) *Amsterdam* (formerly *Haarlem*): 178 *nos* from *Java*, preserved in spirit (pres. 1904); *Herb.* DECAND. (*Geneva*) (*Dipterocarp.*); *Herb. Bot. Gard. Petersburg* (= *Leningrad*): 103 *Sapot. & Filices Mal. Arch.* (pres. 1886).

LITERATURE. (1) *cf.* Ann. Jard. Bot. Buit. 45, 1935, p. 64, 73, 79, 103.

(2) *cf.* Report in Versl. Pl. Tuin Buitenzorg for 1883, p. 6–9.

BIOGRAPHICAL DATA. Versl. Kon. Akad. Wet. A'dam Wis- en Nat. afd. 29, Oct. 1910, p. 481–483; Ind. Mercuur 1910, p. 837–838; Ned. Kruidk. Arch. 20, 1910, p. 20; Encyclop. N.I. 1, 1917; BACKER, Verkl. Woordenb., 1936.

Bureau of Forestry, Manila, *cf.* Forestry Bureau, Manila.

Bureau of Science, Manila, P.I.

On behalf of this bureau a large amount of plants was collected in the *B.S. series*, principally by officials and native collectors in the employ of that institute, partly by others, *e.g.* by AGOO, ALCALA, C. S. BANKS,* J. BERMEJOS (low *nos, e.g.* from *Palawan, 1905–06*), H. O. BEYER,* BROWN (also together with KIENHOLZ (= ? W. H. BROWN, see there), CASTILLO,* A. CELESTINO,* CONVOCAR, A. B. DUYAG,* G. EDAÑO* (also with MARTELINO and RAMOS), ESCRITOR,* EUGENIO, E. FENIX,* F. W. FOXWORTHY,* FRANCIA, GALANG, GALERA, GATES* & OTAÑES, P. W. GRAFF,* L. E. GRIFFIN,* GUERRERO* (also in the F.B. series), Mrs LYON, R. C. MACGREGOR,* L. MANGUBAT (*Balabac, Mindoro, 1906*), MARTELINO* (also with EDAÑO), E. A. MEARNS,* OCAMPO, OTAÑES,* PASCASIO* (with RAMOS), E. QUISUMBING,* RAMOS* (also with EDAÑO, PASCASIO and DEROY), J. REILLO* (low *nos e.g.* from *Mindanao* and *Basilan;* also *s.n.*), F. RIVERA, CH. B. ROBINSON,* SANDKUHL,* SANTOS,* W. SCHULTZE, SERVINAS, TOPPING* (private *nos* too), DE VEYRA (also *s.n.* from *Mindanao*), WESTER* (also private *nos*), WORCESTER,* H. S. YATES.*

(*) An asterisk refers to a separate entry.

Some time before the war the name of the Manila Herbarium was changed to Philippine National Herbarium (see there), and a new series was started with *P.N.H.* or *Phil. Nat. Herb. nos* (see there).

COLLECTIONS. *Herb. Manila* (destroyed now); duplicates distributed all over the world, *e.g.* in *Herb. Berkeley* (Cal.), *U.S. Nat. Herb. Wash., N.Y. Bot. Garden, Herb. Arn. Arbor., Herb. Leyden, Paris.*

Burer, J., *cf. sub* Forest Research Institute, Buitenzorg.

Burer, N., *cf. sub ditto.*

Burg, B. C. van den, *cf. sub ditto.*

Burgeff, Hans

(1883, Geisenheim (Rheingau), Germany; x), took his Ph. Dr's degree at Jena (1909); Professor of Botany and Pharmacognosy, Würzburg Botanical Institute, Germany.

In 1927–28 he made a voyage to Malaysia, working for some time in the Foreigners' Laboratory at Buitenzorg.[1]

His special interest is root *Fungi* of orchids.[2]

ITINERARY. *1927–28.*[2] Travelling from Würzburg *via* Genoa, and Colombo; *Singapore* (Oct. 5, *1927*); *W. Java:* Priok (9); Buitenzorg, making a trip to Tjiampea; *via* Tjiandjoer (28) to Tjibodas, and G. Gedeh-Pangrango; Buitenzorg (Nov. 13); Tjibodas (20), climbing G. Gedeh (Dec. 13–14); Buitenzorg (18), making some trips, *e.g.* to Depok (29), and G. Salak; to Priok (Jan. 3, *1928*), sailing for the *Philippines, Luzon:* Manila (arriving Jan. 15); Mt Maquiling (21–24); trip by car (Jan. 29–Febr. 4) from the dry W. coast from Paete *via* Pagsanjan to Lucban, Luzena and Antimonan Forest Parks to Antimonan (Pacific coast); from Manila (Febr. 9) to Tarlac and the Zambales Mts in W. Luzon, from St Miguel to the O'Donell River, not reaching the Pinatubo chain; back at Manila (18); by car (22) to Bontoc (N. Luzon) *via* Baguio; returning *via* Sabangan, Malayan, Beçan Pass, San Fernando to Manila; sailing (March 16) *via Singapore,* Belawan (making a short trip to Brastagi, *Sumatra East Coast*), back to Germany.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 48.

(2) H. BURGEFF: 'Saprophytismus und Symbiose Studien an tropischen Orchideen' (Jena Fischer 1932; itinerary in 'Nachschrift').

Burger, *cf. sub* Forest Research Institute, Buitenzorg.

Burger

is cited to have presented botanical material to BLUME (*cf.* JUNGHUHN, Java, 2nd Dutch ed. 1, 1853, p. 184).

Burger, Dionijs

(1893, Groningen, Holland; x), Forest Officer, educated at Wageningen Agricultural College, in D.E. Indian Government service since 1917; at first stationed in the teak districts of Java, in 1921 put at the disposal of the Director of the Forest Research Institute (Buitenzorg), in Dec. 1925 transferred to Banka, in 1927 to the teak districts in Java again and subsequently to Malang (1929), Buitenzorg (1935), Djombang (1936) and Malang (1937). In 1941 he was promoted to Inspector; retired in 1947.

His publications relate to forestry and ecology.[1]

COLLECTING LOCALITIES. *Centr. Java:* Getas (Febr. *1918*); Zuidergebergte near Djokja, and Duizendgebergte near Soerakarta (Aug. *1922*).—*E. Java:* Kediri (Sept. 1922).—*Centr. Java:* G. Sewoe (= G. Kidoel or Zuidergebergte) (*1924*).—*Billiton:* Manggar (on padangs) (May 26, *1926*); *Banka:* Blinjoe (on padangs) (May 30, 1926).—*E. Java:* G. Kembar (one of the lower summits of the Ardjoeno-Welirang complex) (*1929*).

COLLECTIONS. *Herb. Bog.:* collections 1918 and 1922 on behalf of BEUMÉE (see there) and numbered in the latter's series; coll. 1924 from G. Sewoe is composed of the *nos* 2054–2100, 2150–2200 and 5609–5640 (possibly Ja. *nos* of the F.R.I.?); from *Banka* 26 and from *Billiton* 16 *nos,* numbered in succession 1–42.

In *Herb. Pasoer.:* 2 *nos* from G. Kembar (1929).

LITERATURE. (1) *e.g.* 'Brand in gebergtebosch' (Tectona 23, 1930, p. 392–407).

Burgers

is cited by RIDLEY (in Flor. Mal. Penins. 1, 1922, p. 454) as collector in the *Malay Peninsula,* at Krian in Perak.

Burgess, R. G.

schoolteacher, collected at Manapla, *Negros, P. I.;* material in *Herb. Manila.*

Burghardt, Carel Paul

(1890, Makassar, Celebes; x), at first Head Overseer, in later years promoted to a higher rank in the D.E. Indian Forest Service; in Dec. 1911 stationed in P. Boeton (= Boetoeng), and in Febr. 1921 at Raha in P. Moena, both islands situated S of Celebes; in Febr. 1924 transferred to Bonthain (SW. Celebes), in June 1926 to S. Sumatra at Tandjong Karang, June 1932 to Makassar (SW. Celebes). He retired in 1936 and afterwards settled at Bandoeng.

COLLECTIONS. In *Herb. For. Res. Inst. Buitenzorg* from *P. Moena* (*1922–23*) and from *SW. Celebes* (*1925*), numbered in the F.R.I. bb. series; several dupl. in *Herb. Bog.* and *Leyden.*

Burke, David

(1854, Kent, England; Apr. 1, 1897, Ambon, Moluccas), plant collector in the employ of Messrs VEITCH & Sons.[1] Outside the Malaysian territory, he travelled in Guiana (1881), Burma (1891) and Columbia (1894–96).

Selaginella burkei HIER. was named after him.

ITINERARY. *1880. NW. Borneo.* With CH. CURTIS (see there) in Sarawak, on a trial trip.—*18...* He evidently made 2 voyages to the *Philippine Islands,* visiting *Mindanao etc.;* the concerning dates unknown.—*1888–91. SE. New Guinea, Papua.* With

J. B. CAMERON (see there) *via Yule Isl.* to St Joseph River (1888). Some trips with FR. HELLWIG (see there) in *German NE. New Guinea* (1888–89). *Dutch W. New Guinea:* ascent of the Arfak Mts (1891), starting from Andai, reaching the village of Hatam.[2]—*1896.* In this year he left England for



I. H. BURKILL

Celebes and the *Moluccas;* it is not known to the present author whether this destination was duly reached, he might have gone straight to New Guinea instead.—*1897. SE. New Guinea:* between the south coast and Owen Stanley Range.

COLLECTIONS. In *Herb.* H. J. VEITCH = *Herb. Kew.*

In the list of Kew collections (1901), FRANCIS and JOSEPH BURKE are mentioned, under VEITCH a BURKE without initials; whether one of them collected in the Malaysian territory cannot be derived from the available data.

In *Herb. Berl.:* 67 vasc. cryptogams from *Br. New Guinea* (1888–91). Here and there some of his plants are referred to in literature.[3]

LITERATURE. (1) WICHMANN, Entd. Gesch. N.G., in Nova Guinea, mentions a plant collector G. L. BURKE; this name was rectified in the same work into that of DAVID BURKE; WICHMANN made inquiries after B.'s travels with the firm of VEITCH, who also knew no further particulars.

(2) *cf.* PETERM. Mitt. 44, 1898, p. 233.

(3) In Kew Bull. 1895, p. 282; CURTIS' Bot. Mag. 56, 1900, *t.* 7764; LAUTERBACH Beitr. Fl. Papuas. 10 (= ENGL. Bot. Jahrb. 58, 1923), p. 263.

BIOGRAPHICAL DATA. Hortus Veitchii 1906, p. 87–88; BACKER, Verkl. Woordenb., 1936; Journ. Roy. Hort. Soc. 73, 1948, p. 289.

Burki, A., *cf. sub* Forest Research Institute, Buitenzorg.

Burkill, Ethel Maud Morrison

(1874, Wakefield, Yorkshire, England; x), wife of I. H. BURKILL (see there), from 1912–25 residing in Singapore, collected plants at Brastagi, *Sumatra East Coast* (Dec. 2–21, *1921*), with Miss A. M. BURKILL. Her chief interest is in *Fungi.*

COLLECTIONS. *Herb. Sing.: Sumatra* plants (132, *nos* 15401–15500, 16301–16332),[1] and *Fungi* from the *Malay Peninsula.* Dupl. of the *Sumatra* coll. in *Herb. Kew; Fungi* dupl. in *Herb. Kuala Lump.* (pres. 1918).

No phanerogams were collected in the Malay Peninsula.

Drawings of *Fungi* in the Bot. Gard. Sing.

LITERATURE. (1) *cf.* H. N. RIDLEY in 'A botanical excursion to Northern Sumatra' (Journ. Mal. Br. Roy. As. Soc. 1, 1923, p. 46–113).

I. H. BURKILL: 'A record of the occurrence of some ferns in Northern Sumatra, being additions to Mr. RIDLEY's list' (*l.c.* p. 114–116).

Burkill, Isaac Henry

(1870, near Leeds, Yorkshire, England; x), studied natural history at Cambridge; Assistant Curator at Cambridge from 1891–96; subsequently Technical Assistant at Kew; since 1901 collaborator of GEORGE WATT for the study of the economic products of India, in the employ of the Botanic Garden at Calcutta; Director of Gardens, Str. Settlements, 1912–25.

Author of many publications relating to the flora of the Malay Peninsula, of which several on useful plants.[1]

The genus *Burkillia* RIDL. was named after him.

COLLECTING LOCALITIES.[4] *1913. Malay Peninsula: Penang,* Malacca, Taiping Hills, Kuala Kangsar, Port Swettenham (June), Kuala Lumpur, Kubob Distr. (Aug.) in Johore, Lunas (Dec.).—*1914.* Kubob Distr. (Jan.), Batu Hampar (March 3), Lumut & Pangkalan Bahru (March).—*1915. P. Tioman* and *P. Tinggi* (June 21–24); slopes G. Tampin (Aug.).—*1916.* Slopes G. Tampin (July, Aug.), Ipoh (Aug.), Batu Caves (Nov.).—*1917.* Ipoh, slopes G. Tampin (July, Nov.).—*1918.* South bank of the Muda River (Jan.), G. Tampin (Jan., May, Oct.).—*1919.* Near Kuala Lumpur (Febr.).—*1920* (2nd half). *Penang,* Ipoh (Sept.), Kuala Lumpur, Sg. Siput (Sept.), Gemas.—*1921.* Near Padang Sarai (Sept.).—*1922.* Port Swettenham and *P. Penang* (March 11–20, June 17–26); Fraser Hill *etc.* (Sept. 15–Oct. 11),[2] Kuala Lumpur (Oct.), *Penang,* Prov. Wellesley and Port Swettenham; Kuala Lumpur and *Penang* (Dec. 5–13). *W. Java:* Tandjong Priok (May 14), Buitenzorg Botanic Gardens (15–16), Batavia (17, business), Buitenzorg (18); G. Gedeh, Tjibodas, Tjibeureum, *etc.* (19–25); Buitenzorg (25–27), Batavia and Tg Priok (28).—*1924. Malay Peninsula:* Taiping Hills;[3] Kedah, Prov.

Wellesley, Larut, in March; in April *ditto;* inland parts of Perak (May), Ipoh (June), Batu Gajah (June), at Grik and along the road to Kuala Kangsar (July); Pahang and Johore, *etc.* (Nov.–Dec.).

COLLECTIONS. *Herb. Sing.: e.g.* an important collection from Taiping Hills, 520 *nos.* He numbered in the field in the series labelled 'Singapore Field Number' (S.F. *nos*), to which the whole Department and others contributed (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5). In *Herb. Kew:* dupl. from various localities in the *Mal. Penins.* (pres. betw. 1915–22); some dupl. in *Herb. Bog.*, in *Herb. Manila, Herb. Cambridge* (1917), *U.S. Nat. Herb. Wash.* (66 from *Mal. Penins.* and *Sing.*).

LITERATURE. (1) *e.g.* 'Dictionary of the Economic products of the Malay Peninsula' (1935); many taxonomic publications on the genus *Dioscorea.*

(2) I. H. BURKILL & R. E. HOLTTUM: 'A botanical reconnaissance upon the main range of the Peninsula at Fraser Hill' (Gard. Bull. Str. Settlem. 3, 1923, p. 19–110 and *l.c.* 4, 1927, p. 92–105).

(3) I. H. BURKILL: 'The flowering plants of Taiping, in the Malay Peninsula' (*l.c.* 3, 1925, p. 303–458).

(4) Data extracted from the Ann. Reports of the Bot. Gard. Singapore, and from BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

BIOGRAPHICAL DATA. Who's who 1913, 1926; BACKER, Verkl. Woordenb., 1936; Flore gén. de l'Indo-Chine prelim. vol. 1944, p. 36 + portr. pl.X.

Burman(n)

is cited by ALSTON[1] as the collector of *Selaginella opaca* WARB. near Semarang, *Centr. Java.*

The collections of JOHANNES and NIC. LAURENS BURMAN are in *Herb.* DELESSERT, *Geneva;* in *Herb. Leyden:* plants of JOHANNES from Ceylon; in *Herb. Munich:* plants of NIC. LAURENS. By DECANDOLLE[2] no plants from the *D.E.I.* are mentioned. The herbarium BURMAN contains plants of KLEINHOFF, HOUTTUYN, PRYON, VAN ROYEN, *etc.*[3] We may safely assume that the above-mentioned plant was *not* collected by BURMAN himself, but was *ex Herb.* BURMAN.

LITERATURE. (1) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1935, p. 438.

(2) *cf.* A. DECANDOLLE, Phytographie, 1880.

(3) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 65–66.

Burn-Murdoch, Alfred M.

(1868, Scotland; March 6, 1914, Klang, Selangor, Malay Peninsula), was appointed in the Ind. For. Dept in 1891 and stationed in Burma; in 1901 to the Fed. Malay States on deputation; Chief Forest Officer, afterwards Conservator of Forests (1904) in the Fed. Mal. States and Str. Settlements, 1901–14. Author of 'Trees and timbers in the Malay Peninsula' (1911–12).

Alpinia murdochii was named after him.

COLLECTING LOCALITIES.[1] *1903. Malay Peninsula: Singapore* (Jan., Apr.); *Penang* and Prov. Wellesley (June); Dindings (Aug. 6–11); Malacca (Aug. 23–24); *Singapore* (Aug. 26), Bt Timah (Sept.); Malacca (Oct.); *Penang* (Nov.).—*1904.* Dindings (Jan., Febr. 1–2, March 16–18); Semangko Pass (Febr.); *Singapore* (Apr. 17–20 and in May); Malacca (June 4–5); *Penang* (June 16–17, July 14–19); Malacca (Aug. 6–8, Dec. 11–13); Rantau Panjang in Selangor (Aug.).—*1906. Singapore,* visiting all the more important forest reserves; Alor Gajah Distr. in Malacca; Bt Bruang Reserve; *Penang* (on 2 occasions).—*1908. Singapore* (Bt Timah, Sembawang, Kranji and Mandi Reserve); *Penang* and Prov. Wellesley (Tasek Glugor Reserve); Dindings (Lumut, Telok Muroh, *Pangkor,* Tanjong Burong Reserve); Malacca (Bt Bruang, Sg. Udang, Nyalas, Bt Pancher).—*1909. Singapore* (Bt Timah and Pandan reserves); *Penang* and Prov. Wellesley (Telok Bahang, Govt Hill and Penara Bt Reserve); Dindings (Lumut, Tanjong Burong, Telok Sera, Telok Muroh, Tanjong Hantu, Telok Semangin); Malacca (Ayer Kroh and Ayer Panas Reserve); Perak (mangrove islands and mainland mangrove reserves); Selangor (Rantau Panjang, Kuang, Kanching, Sg. Buloh, Sg. Lalang, Ulu Gombak, Bangi, Bt Tunggu, Ayer Itam); Negri Sembilan (Senaling, Senawang, G. Tampin, Serting, Triang); Pahang (Bilut, Rotan Tunggal, Mangsok, Baloh, Bt Goh). —*1910. Singapore* (Sembawang and Bt Timah reserves); *Penang* (Govt Hill and Telok Bahang reserves); Prov. Wellesley (Bt Gua Ipoh and Bt Langkap Reserve); Dindings (*Pangkor Isl.,* Tanjong Hantu and Lumut Reserve); Malacca (Bt Bruang and Bt Sebukor Reserve); G. Ulu Kali.—*1912. Singapore* (Mandi and Bt Timah); *Penang* (Govt Hill and Telok Bahang); Dindings (G. Melintang, Tanjong Hantu and *P. Pangkor);* Malacca (Bt Bruang and Bt Sebukor); Perak (Trollah, Pondok Tanjong, several mangrove reserves, Behrang, Larut Hills, Bikum, Plus and Chior Reserve); Selangor (around Kuala Lumpur, Sg. Buloh, Ulu Gombak, Bangi, Bt Tunggal, Kanching, Serendah, Bt Cheraka, Sg. Lalang); Negri Sembilan (Senawang, Pasir Panjang, Senaling Inas, Pasoh, Serting, Triang); Pahang (G. Lesong, Perak, Riyam, Rotan Tunggal, Bilut, Kuala Tembeling Plantation).—*1913.* Along the Pahang River[2] from Temerloh down the river to its mouth (June), and again northwards, it was carried up to the coast to Balok: *e.g.* G. Chini, Kuala Bera, Lubok Paku, Bintang, Bt Gapis, Bt Galing, Tanjong Api, Bt Ubi, Tanjong Tembeling.

COLLECTIONS. *Herb. Kuala Lump.:* forest trees.

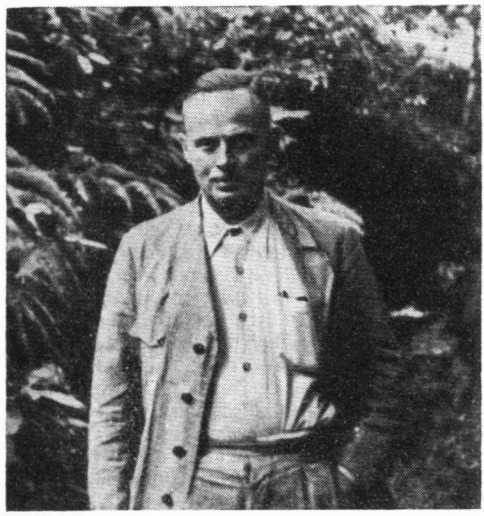
In 1913 he contributed to the Singapore Field Number series on his tour of inspection down the Pahang River (accompanied by a collector from the Botanic Gardens, Singapore).[2] This collection, in *Herb. Kuala Lump.* too, is numbered 151–350. In *Herb. Sing.:* other collections (pres. 1906). In *Herb. Kew:* plants from around Kuala Lumpur in 1912. The herbarium of the Plus & Chior Reserve is, according to BURKILL (in Gard. Bull. Str. Settlem. 4, 1927, p. 157), mislabelled Selangor.

LITERATURE. (1) He made many tours of inspection throughout the Peninsula, mentioned in the Reports of the For. Dept.

(2) I. H. BURKILL: 'Fragments of Malayan geographic botany *no* 1. Enumeration of Pahang plants

collected by the late A. M. BURN-MURDOCH' (Gard. Bull. Str. Settlem. 1, 1915, p. 310–318).

BIOGRAPHICAL DATA. Indian Forester 40, 1914, p. 155–156; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; in Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931.



BURRET

Burne

is cited as the collector of *Cyperus pennatus* LAMK in *Java* (*cf.* KÜKENTHAL in Pflanzenreich Heft 101 (IV. 20) 1936, p. 477). Misread?

Burnea, R., *cf. sub* Forestry Bureau, Manila.

Burnett, Gilbert

a Queensland District Forest Inspector who visited Papua in 1908 for the purpose of reporting on the timber resources of the Territory.[1]

ITINERARY.[2] *1908. SE. New Guinea, Papua:* trip up the Vailala; Kemp Welch District; visiting various places right along the coast from the Purari Delta in the Gulf of Papua, to Samarai, and in the vicinity of Buna Bay on the NE. coast.

COLLECTIONS. Of the numerous timbers listed in the cited report, with 2 or 3 exceptions, only native Papuan names are given. According to C. T. WHITE a fine opportunity was lost of doing good botanical work. Probably no collections made.

LITERATURE. (1) G. BURNETT: 'Timber trees of the Territory of Papua' (issued by Dept of Ext. Affairs, Melbourne 1908, 45 pp.).

(2) *cf.* Ann. Rep. Papua for 1907–08, 1908, p. 51, 58 en 121.

Burret, Carl Ewald Max

(1883, Saffig near Andernahr, Rhine Prov., Germany; x), originally studied law at Lausanne and Munich at the instigation of his father, but his interest in botany was roused and he went to Berlin to to take up that study (Ph. Dr 1909, on a taxonomic thesis); Assistant at the Berlin Bot. Museum and Garden, 1909–11; Botanical Assistant and Lecturer at the Bot. Institute of the Agricultural College, Berlin, 1911–21; in 1922 appointed Custodian of the Botanical Museum and Garden, Berlin, and later Professor at Berlin University.

He made numerous travels in Europe and Africa. He was invited by the Brazilian government to make a trip to that country, specially for the study of palms.[1] Shortly after his return to Germany he was enabled to make a voyage to the Old World tropics, visiting Ceylon, the Malay Peninsula, Java, and Sumatra in 1938–39.[2]

Author of numerous systematic papers on *Tiliaceae* and *Palmae*.

ITINERARY.[2] *1939. Malay Peninsula: Singapore* (Jan. 30 arrival), making trips to Sedili River (Johore), Bt Timah; Kuala Lumpur, making trips to Ulu Gomba (in the mountains), Telok Reserve, Sungei Lalang Reserve, and to Kanching, Kapur Forest, Bt Takun; Gap, Frasers Hill, Jerantut; back to *Singapore*, from where sailing on Febr. 16; *W. Java:* Tandjung Priok (Febr. 18); sojourn at Buitenzorg and from there making trips to Depok (March 4), Tjibodas and G. Gedeh-Pangrango (18–27), Wijnkoopsbaai (Apr. 2–3); Garut, making trips to G. Papandajan (18), Kawah Kamodjan (19), Kawah Manuk (20), Tjipanas and G. Guntur, lakes of Leles, Bagendit and Pandjalu; Batavia (Angké and Priok, 28); *E. Java:* Surabaya, making trips to Grisé (= Grissee), G. Ardjuno, and G. Tengger (May 1); May 7 leaving for *S. Sumatra:* Palembang, visiting Kertapati, Ogan River; to Benkulen, visiting Lahat, Pageralam, Tebingtinggi, Lubuklinggau, Tjurup, *Rafflesia* Reserve near Kepahiang, collecting above Kaba Wetan Estate; Dusun Besar, Lebong Tandai (May 16); *Sumatra West Coast:* Padang, visiting lakes of Sin(g)karak, and Manindjau, Subang Pass; Fort de Kock (May 25), *Rafflesia* Reserve Batang Palupuh, G. Singgalang (27), Panti Reserve (29), Padang Sidempuan; *Tapanoeli*: Sibolga, Tarutung, and *via* Siborongborong, Hutah Gindjang to Balige on Toba Lake, staying at Siuhan; *Sumatra East Coast:* Brastagi (June 5), Lao Debok (= Lau Deboek), Petani Fall (6), Sibolangit, Medan and vicinity, Belawan (sailing June 10).

COLLECTIONS. *Herb. Berl.:* 234 *nos* of palms, 400 other plants from *Hort. Bog.* and from the above-mentioned localities.[2]

Some *Sumatra* palms were collected with USCHDRAWEIT, and W. O. H. SCHULTZE (see those).

The material is lost now; no duplicates were distributed.

LITERATURE. (1) *cf.* Notizbl. Berl. Dahl. vol. 14, 1938, p. 206–207.

(2) M. BURRET: 'Indomalayische Palmen' (Notizbl. Berl. Dahl. 15, 1940, p. 164–210; itinerary *cf.* p. 164–189); 'Interessante Palmen aus dem botanischen Garten Buitenzorg' (in *l.c.* p. 210–213).

Bussche, C. van den, *cf. sub* Forest Research Institute, Buitenzorg.

Busse, Walter Carl Otto

(1865, Berlin, Germany; 1933, Rome, Italy), was educated at Freiburg, taking his Ph. Dr's degree in 1893; of the Agricultural College at Berlin. He made a trip to Java in 1902–03[1] and worked for some time in the Treub Laboratory of the Botanic Gardens at Buitenzorg. At the time of his death he was a permanent member of the Internat. Agric. Institute at Rome.

COLLECTING LOCALITIES. *Java* (Oct. *1902*–Febr. *1903*). *W. Java:* environs of Buitenzorg (Oct. 1902); Priangan Res., G. Tangkoeban Prahoe, Lembang, Pengalengang, G. Papandajan, Sitoe Bagendit, near Garoet, Tjikadjang (all localities in Nov.); *Centr. Java:* Solo (Jan. 1903); *E. Java:* base and slope of G. Smeroe (Jan.). He collected in *Singapore* in *1903*, probably on the way home.

COLLECTIONS.[2] *Herb. Berl.: nos* 1410–2048, composed of about 100 useful plants (*Java*) *etc.*, several hundreds of lichens (*Java* and *Singapore*).

250 Pathological objects were presented to the 'Biologische Reichsanstalt'.

LITERATURE. (1) W. BUSSE: 'Die Cinchona-Kultur auf Java mit besonderer Berücksichtigung von Kamerun und Deutsch-Ostafrika' (Tropenpflanzer 10, 1906, p. 15–32, 5 pl.); 'Über Aufgaben des Pflanzenschutzes in den Kolonien' (Verh. Deutsch. Kol. Kongr. 1905, Berlin 1906, p. 30–43).

(2) S. H. KOORDERS: 'Versuch einer Arten-Aufzählung der von Dr W. BUSSE in Java gesammelten Embryophyta Siphonogama' (Nat. Tijdschr. N.I. 63, 1904, p. 49–60).

BIOGRAPHICAL DATA. Hedwigia 74, 1934, p. (139); Ber. D.B.G. 51, 1933, p. (61)–(71) + portr.

Busseuil, François Louis

(1791, Nantes, France; June 14, 1835, Gorée, Senegambia), chief Surgeon-Zoologist o/b the 'Thétis', during a circumnavigation of the world from 1824–26, under command of Baron DE BOUGAINVILLE.[1] Later appointed by the French government in Senegambia, where he died before having published the natural history part of the voyage.

The genus *Busseuilli a* LESS. (=*Eriscaulon*) was named in his honour.

ITINERARY. *Voyage in 'La Thétis' and 'L'Espérance', 1824–26.*[1] Leaving Brest (March 2, 1824), sailing *via* Teneriffe, Cape of Good Hope, Île de Bourbon, coast of Coromandel, Pondicherry; the Nicobars; *Malacca* (Aug. 22–26, *1824*), *Singapore* (Sept. 1); *Philippines, Luzon:* Cavite (Sept. 18–Dec. 11, in this period the ship got badly damaged by a typhoon), making a trip to Manila (Sept. 20–21); Canton, Hainan, Cochin-China; *Anambas & Natoena Isls* (March 3–7, *1825*); *E. Java:* Soerabaja (20–Apr. 22), paying a visit to *Madura* (March 26) and making a trip to the Bromo (G. Tengger); Australia, New South Wales; S. America: coast of Chili, Valparaiso, Cape Horn, Brazil, Rio de Janeiro; Ascension, Azores; Brest (June 24, 1826).

COLLECTIONS. In the introduction of the cited journal BOUGAINVILLE expresses his opinion that it was a pity that no specialists for natural history were attached to the expedition. As far as was in their ability he himself and Dr BUSSEUIL made the zoological collections. Of botanical collections no mention is made, but in the Natural History part in the 2nd volume, 2 new plants, both *not* from the Malaysian region, are described by LESSON (*l.c.* p. 346–348). So we surmise the possibility that elsewhere plants have been collected too, though certainly on a small scale only. If so, they will be preserved in *Herb. Paris*, like the above-mentioned plants. See also *Addenda*.

LITERATURE. (1) Baron DE BOUGAINVILLE: 'Journal de la navigation autour du globe de la frégate La Thétis et de la corvette L'Espérance pendant les années 1824–26, publié par ordre du Roi' (Paris, 1837, 2 vols + atlas). 'Histoire naturelle' by R. P. LESSON in vol. 2, p. 297–351.

Butter, A. S. (or A. L.)

collected plants at Pekan, Pahang (*Malay Peninsula*), in *1899*.

Butterworth, Colonel

Indian Army officer, Governor of the Straits Settlements, *1843–1855*.

COLLECTIONS. *Herb. Kew:* from *Singapore* (pres. 1855).

Buurman van Vreeden, W.

(1841, Apeldoorn, Gld, Holland; 1906, The Hague, Holland), since 1864 in the employ of the D.E. Indian Forest Service, in 1887 promoted to Inspector, in 1897 Chief Inspector. He was the instigator of KOORDERS's investigations of the forests of Java. He retired in 1900.

Author of a paper on djati culture.[1]

Schoutenia buurmanni K. & V. was named after him.

COLLECTING LOCALITIES. *1892. S. Sumatra:* Palembang. He made a trip to *Sumatra West Coast* in *1894*[2] (possibly no collections made); the itinerary runs as follows: sailing from Batavia (Febr. 7); Emmahaven (10); *via* Padang Pandjang, Lake Singkarah and Solok, to the Ombilin coal-fields (Sawah Loentoh).

COLLECTIONS. *Herb. Bog.:* Palembang plants, referred to by VAN STEENIS and ALSTON.[3] The number cited by ALSTON is 120. *Hort. Bog.:* living ferns (pres. 1886).

LITERATURE. (1) *cf.* Tijdschr. Nijverh. & Landb. N.I. 27, 1883, p. 329 *seq.*

(2) W. BUURMAN VAN VREEDEN: 'Eene reis naar de Ombilien-kolenvelden' (Tijdschr. Nijverh. & Landb. N.I. 48, 1894, p. 133).

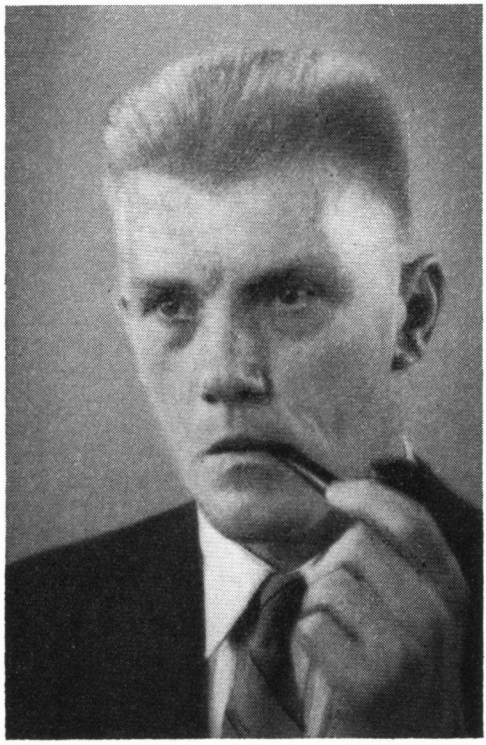
(3) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 12, 1932, p. 233 and *l.c.* 14, 1937, p. 179.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Buwalda, Pieter

(1909, Exmorra, Fr., Holland; 1947, Haren, Gr., Holland), botanist who studied and graduated (Ph. Dr 1936) at Groningen University; in 1937 assistant on the Rubber plantation Bantardjaja near Rangkasbitoeng in Bantam (W. Java); since the end of 1937 in the employ of the D.E. Indian Forest Service and put at the disposal of the Director

of the Forest Research Institute (Buitenzorg) for forest reconnaissance; in 1939 stationed for some time at Rengat, Indragiri (Centr. Sumatra); in 1941 temporarily put at the disposal of the commander in chief of the D.E. Indian army as a first lieutenant



BUWALDA

on account of approved personal capacities. In 1946 his transfer to the Buitenzorg Herbarium was planned.

COLLECTING LOCALITIES. *1937. W. Java:* Bantam (Apr. 20–).—*P. Bawean* with J. H. COERT (Nov. 20–Dec. 4).[1]—*W. Java:* Tjempaka (Djampangs) (end of Dec.).—*1938. SW. Celebes:* Bantimoeroeng and neighbourhood (Febr. 20); *Boeton* (= *P. Boetoeng*): Boea Boean (= ? Baoebaoe) (23); *Ambon:* G. Nonna (26), to Batoe Merah (27); *Tanimbar Islands,*[1] *P. Jamdena:* Saumlaki–Olili(t) (March 8), neighbourhood Saumlaki (9–10), Ilgnei (11), forest between Ilgnei and Otimmer (12–21), Otimmer (22–23), Ranobi (24), Otimmer (25–29), ENE of Otimmer (March 30–Apr. 3), Otimmer (4–5), Makatian (5–7), Weri Ranarmaje (7–14), kp. Loeroemboen (15), Waitoeroe (Arkilo) (16–18), by proa (19), to Loeroemboen (20–21), Saumlaki (24); *Aroe islands,*[1] *P. Wamar:* Dobo and environs (May 3–5); *P. Wokam:* Dosinamalaoe (= ? Dosi) (9–16); *P. Kobroör*, opposite Dosi (17–18); Dosi and *P. Watoebakar* and *P. Kobroör* (May 19–June 10); Selibatabata on *P. Wokam* and *P. Kobroör* (14–20); *P. Trangan:* near kp. Ngaibor (June 25–July 3), Popjètoe (5–6), Sia alang alang (7–8), Meroor (9), Selarin (10–12), Batoegojang (13), Tafirmaar (= Tafermaär) (13–14), Ngaibor (14–16), Taberfane (18); *P. Maniko(o)r:* Fatoedjoering (19); *P. Wamar*, Dobo (21); *P. Oedjir* (28–29); *E. Ceram:*[1] Kiandarat (Aug. 16–20), Artafela (21), Kiandarat (22–23); Angar (24), Selagor and G. Selagor (26), Kiandarat (27), Kikoerane (30), Kiandarat (31), Roemoga (Sept. 1–2), Kiandarat (6), Kwaos (8–9), Kian Laoet and Aroean (11); *Geser* (16–17); *Ambon:*[1] Waai (24–30), *e.g.* G. Koekoesan (30); G. Salahoetoe (Oct. 1).—*Riouw Archipelago*[1] (Dec.): *N. Batam*, Sambo, Tering Bay and *P. Kasap.*—*1939. Centr. Sumatra*, Indragiri: Pangian (Jan. 10–13); Pankalankasai (Apr. 3–4), Moeara Padjanki (5–11), Berapit (13–14), Soengei Bankar (16), Klessa (17–18), Pankalankasai (19), Danau Mangkoang (20–22), Sg. Berapit–Pakan Heran (23), S of Pakan Heran (24–25), Kuala Belilas (26–29); Sg. Raja (May 24), S of Pakan Heran (26–31); along the Sg. Gangsal (June 27), kp. Kemang–Djawi-djawi–Tjeranjan (28), Penjagoan and Koeala Lau (29), swamp Kuala Lau (30); kp. Teroesan on Sg. Akar (July 3), near kp. Lakat between Seberida and Sg. Akar (4), Kemoening Moeda (15) and from there to Sg. Akar *via* Kritang (16), Sg. Akar above kp. Sg. Akar (17), near Kritang (18), along Sg. Kritang (19–20), between Sg. Kritang and Sg. Reteh (21), Sg. Reteh (22–23), near Kota Baroe (23–24); Oeloe Gangsal (Oct. 12), Sg. Toealang (13), Sg. Temberan (14), to Sanglap (15), Sanglap (16), Bt Tjengkeemboen (17), Sanglap (18), Anak Talang (20), Aer Tjina and Pankalankasai (21); Lisoen Kwantan Mts, Loeboek Djambi and Oeloe Tesso (24).—*1940. E. Java*, Besoeki: Poeger (Febr. 27–29), Watoe Oeloe (March 1), G. Watangan (2); Idjen Plateau: Sempol (March 4), Kawa Idjen (5); Sitoebondo (6–7); G. Ringit (8).—*S. Sumatra,*[1] Palembang: Moeara Enim, Semangoes (Apr. 13–May 2).—*S. Borneo:*[1] Sampit (Aug. 21–Oct. 8).—*1941. W. Java:* Tjalobak, N. slope G. Salak (March 16); Poentjak (Apr. 27, May 25); G. Tjibodas, Tjampea (June 2); *E. Java:* Sarangan (June 14), G. Lawoe (17).

COLLECTIONS. *Herb. Bog.: Java*–Bantam *nos* 2684–2960 (in continuation of the European collections), *Bawean nos* 2961–3399,[2] *W. Java* (1937) *nos* 3400–3672, *SW. Celebes nos* 3673–3813, *Boeton* (= *Boetoeng*) *nos* 3814–3857, *Ambon nos* 3858–4013, *Tanimbar Isls nos* 4014–4815, *Aroe Islands nos* 4816–5438, *Ceram nos* 5588–6053, *P. Geser nos* 6054–6096, *Ambon nos* 6097–6219, *Riouw Arch. nos* 6220–6255, *Sumatra*–Indragiri *nos* 6256–7143, *E. Java* 1940 *nos* 7144–7572, *Sumatra*–Palembang *nos* 7573–7632, *S. Borneo nos* 7632a–7984, *Java* (1941) *nos* 7987–8150. Part of his collection was numbered in the series of the Forest Research Institute besides (see below).

In *Herb. For. Res. Inst. Buitenzorg: Bawean* 63 Ja. *nos,*[1] *Ambon* 55 bb. *nos, Tanimber Islands* 219 bb. *nos, Aroe Islands* 237 bb. *nos, Ceram* 161 bb. *nos, Ambon* 50 bb. *nos, Sumatra*–Indragiri 790 bb. *nos, Sumatra*–Palembang 90 bb. *nos, S. Borneo* 58 bb. *nos* (with NOERKAMAL).

In *Herb. Groningen:* dupl. *Java*-Bantam collection.

Hort. Bog.: living plants from *Tanimber* (1938).

His exploration of the Aroe Islands was specially aimed at obtaining samples and seed of species of *Eucalyptus*. Unfortunately the explorer was not granted sufficient time for bibliographic preparation. Therefore he omitted to go to the island Mariri (or Meriri) which Miss Dr I. SPERLING indicated in her compilation as the only locality of (gregarious occurrence of) *Eucalyptus* in Aroe (*cf.* Frankf. Geogr. Hefte 10, 1936, Heft 1, p. 131).

LITERATURE. (1) *cf.* Typed report in For. Res. Inst. Buitenzorg.

(2) *cf.* O. POSTHUMUS: 'Ferns of Bawean' (Proc. Roy. Acad. Sci. Amsterdam 32, 1929, 9 pp.).

BIOGRAPHICAL DATA. Bull. Bot. Gard. Buit. 3rd ser., vol. 17, 1948, p. 377–380 + portr.

Buysman, Maarten

(1856, Zaandam, N.H., Holland; June 1919, buried at Lawang, E. Java), office-clerk at Vlissingen and Koudekerke, and founder of a botanical garden at the former place, of which, however, nothing remains. In April 1907 he sailed for Java in pursuance of an advertisement of MOUSSET (see there) who looked for a partner in his nursery. M. was given to drinking and BUYSMAN was temporarily led away. Later the proprietor of the Hotel Nongkodjadjar (G. Tengger) took him into his employ from a feeling of pity; in hours of leisure BUYSMAN grew plants and even exchanged seeds abroad. In 1916 he still published a catalogue of plants for sale.

Author of some papers on G. Tengger.[1]

COLLECTIONS. *Herb. Utrecht;* less in *Herb. Bog.* The plants are from G. Tengger, *E. Java* (exceeding 260 *nos*); in *Herb. Utrecht* also material from Kidoel (= ? Zuidergebergte, *Centr. Java*) collected in Aug. *1907. Herb. Brit. Mus.:* 50 phaner. + 5 vasc. crypt. from Java (pres. 1907; the same amount mentioned for 1909, probably a mistake!); *U.S. Nat. Herb. Wash.:* 154 *Java* plants.

In ± 1887 somebody collected in the D.E.I. on behalf of BUYSMAN for a general *Herbarium analyticum*, the latter mainly composed of useful plants. In April 1887 BUYSMAN had the following subscribers: Prof. OUDEMANS (Amsterdam), the Botanical Mus. at Utrecht, the State Herbarium at Leyden, Prof. WILLKOMM at Prague and Prof. HENRIQUES at Coimbra (Portugal).[2] In *Herb. Groningen:* collections of the pre-Indian period; in *Herb. Hamburg* some *nos*, probably pertaining to the *Herb. analyticum.*

LITERATURE. (1) M. BUYSMAN: 'Botanischer Garten in Nongko Djadjar bei Lawang (Ost-Java)' (Flora 106, 1913, p. 90–128); 'Bijdrage tot de kennis van het klimaat van Java. De plantengroei en cultuur in 't Tenggergebergte' (Cultura 19, 1907, p. 592–593); 'De plantencollectie van Nongkodjadjar' (*l.c.* 28, 1916, p. 182–186).

(2) *cf.* Nat. Tijdschr. N.I. 47, 1887, p. 168–171; and *l.c.* 57, 1897, p. 104.

BIOGRAPHICAL DATA. Through the intermediary of C. A. BACKER, by A. J. A. MEERUM TERWOGT, in a letter dated Nov. 1936, and from other sources.

Bijhouwer, Ali Pieter Cornelis

(1902, Amsterdam, Holland; May 10, 1938, by car accident near Malang, Java), was educated at Wageningen Agricultural College, and was appointed Consulting Horticulturist in D.E.I. Government service in 1930; at first he was stationed at Buitenzorg, since March 1931 at Pasoeroean, and since the end of 1935 at Malang. When on European leave he took his Dr's degree at Wageningen,[1] and after his return to Java he was stationed at Batavia in 1937 and since 1938 at Soerabaja.

COLLECTING LOCALITIES. *1931–38. E. Java:* Kepoeh (teak forest S of Pasoeroean, and G. Abang), G. Bao(e)ng (near Lawang), Ratji (experiment field on the way Pasoeroean–Probolinggo), Randoegang (exper. field on the way to Kepoeh), G. Semongkrong, G. (N)Dorowati (near Poedjon), Sekar (exper. field near Poedjon), G. Lamongan, Rànoe Daroengan (S. slope G. Smeroe), Songgoriti (between Batoe and Poedjon), Gemoeloengtonggo (exper. field Cheribon, *Centr. Java*), Tosari (G. Tengger), Pasoeroean (town and along kali Redjoso and kali Tjaloeng), Moeneng; *W. Java:* Tjikopo, Pasir Leutik, G. Salak, G. Tjibodas, Tjampea, Buitenzorg kotta (= town).

COLLECTIONS. *Herb. Bog.:* a few plants collected with ALTMANN (pres. 1933), and 282 *nos* (pres. 1936); in *Herb. Pasoer.:* 6 *nos* (coll. 1931–33).

LITERATURE. (1) A. P. C. BIJHOUWER: 'Een bijdrage tot de kennis omtrent het bloeien en het vruchtdragende vermogen van den mangga (Mangifera indica L.)' (Dr's thesis, Wageningen 1937).

BIOGRAPHICAL DATA. Landbouw 14, 1938, p. 265 + portr.

C. . . . . (H. C.)

according to BURKILL (in Gard. Bull. Str. Settlem. 4, 1927, p. 119) a correspondent of the Botanic Gardens, Calcutta, who after having been in the *Moluccas*, sent plants from *Penang* to ROXBURGH in *1798*. According to Dr A. H. G. ALSTON (or. comm.) the initials simply stand for '*Hortus Calcuttensis*'.

Cel. *nos, cf. sub* Forest Research Institute, Buitenzorg.

C. F. *nos, cf. sub* Conservator of Forests series, Kepong.

Cabiling, Raphael B.

in 1925 appointed Junior Ranger in the employ of the Forest Dept of Br. N. Borneo. He collected in Sandakan, *Br. N. Borneo.* He died as a result of the treatment by the Japanese.

COLLECTIONS. The 1st set in *Herb. Berkeley* (Cal.); dupl. sets in *Manila, Herb. Sandakan* (*cf.* under For. Dept Br. N. Borneo), *Herb. Bog.* (pres. 1929) and probably in *Kew* and elsewhere.

Cachero, T., *cf. sub* Forestry Bureau, Manila.

Cailipan, *cf. sub ditto.*

Calacosa (Calicosa), *cf. sub ditto.*

Callery (or Calléry), Joseph Maxime Marie

(1810, Turin, Italy; 1862, St Martin Les Boulangis, Dépt Seine et Marne, France), Roman Catholic missionary who sailed for Korea in March 1835 and on his way thither called at Batavia and the Philippines. As he was denied admittance in Korea, he stayed at Macao (SE. coast of China), arriving in the latter place in 1836. In April 1842 he forsook his monastic order and returned to France; in 1843 he was appointed interpreter of the Chinese consulate at Macao, and was attached too to LAGRENÉ's Embassy (see *sub* YVAN). In 1846 he returned to Europe, was naturalized in France, and settled at Paris.

He is the author of a Sino-Latin dictionnary and was a good sinologist.

Several plants were named after him, *e.g. Eugenia calleryana* C. B. ROB.

COLLECTING LOCALITIES. *1835.* On the way to China he collected plants at Batavia (*W. Java*) and in the *Philippines* (*N. Luzon*). In Madura he collected *Salvadora madurensis* (= *Azima sarmentosum*);[1] probably this locality has no relation with the island Madoera near Java, but is situated in India.—*1840. Philippines, Luzon:* Manila (Calawan), collecting *Phlebocalymna calleryana;*[2] near Pangasinan; Mt Igorottes.—Between *1845–1850*, collecting in the *Philippines, Luzon*, again.

COLLECTIONS. Important botanical and zoological collections, principally from the east coast of China, Macao. His plants from Batavia (*Java*) and the *Philippines*, collected on the way to China, are preserved in *Herb.* DELESS. (*Geneva*) (birds in Turin); to *Paris* he presented > 800 *nos* of plants from *Luzon* (coll. 1845–1850). His China plants are in *Paris;*[3] dupl. in *Herb.* DELESS. (*Geneva*). In *Herb. Kew:* 237 *nos* from Macao, Cochin-China and *Malaya* (pres. 1886). Evidently many specimens wrongly labelled. A MS on 45 plant species from Manila, in Herb. (Phanér.) Paris.

LITERATURE. (1) *cf.* BAILLON in Adansonia 9, 1870, p. 284; this species was named in 1844 by DECAISNE, type specimen of CALLERY, in 'Voyage JACQUEMONT' p. 140, *alt.* 144, fig. 6–8.

(2) *cf.* BAILLON in Adansonia 9, 1868/70, p. 9.

(3) *cf.* A. DECANDOLLE, Phytographie, 1880; and BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 526.

BIOGRAPHICAL DATA. BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 525–527; FOURNIER, Voyages et découvertes scientifiques, 1932, p. 22–23; BACKER, Verkl. Woordenb., 1936.

Camel or Camellus, *cf.* KAMEL.

Cameron, J. B.

an Australian surveyor who made some travels to New Guinea, prospecting for gold, with ENGLISH and BURKE, however, returning without success. In Oct. 1888 he was appointed Justice of the Peace and Officer of Customs in Sud-Est Isl., in 1890 Resident Magistrate at Mabaduan.

Helicia cameronii F.v.M. was named after him.

ITINERARY. *SE. New Guinea. 1887. Yule Isl.* (Oct. 17); with A. C. ENGLISH (see there) *via* Pinupaka (19) to St Joseph River (20) and returning to Yule Isl. (31).—*1888.* Yule Isl. (Febr. 24); with plant collector D. BURKE (see there) by land to Taéna, St Joseph River, returning without success on account of the menacing attitude of the natives.—*1889.* Accompanying Sir W. MACGREGOR's (itiner. see there) *Owen Stanley Expedition;*[1] 1st of June CAMERON returned to the camp on Mt Musgrave, not feeling well enough to proceed on the journey towards the Main Range; he reached the summit of Mt Musgrave, 9150 feet high. Besides in this expedition, he partook in several other tours of MACGREGOR's, *e.g.* to the Fly River in *1889–90.* —*1892.* In this year he is still mentioned as a partner in several tours, but it is improbable that he made any collections on the latter.

COLLECTIONS. *? Herb. Melbourne.*

LITERATURE. (1) J. B. CAMERON: 'Dr Sir WILLIAM MACGREGOR's ascent of Mt. Owen Stanley' (Transact. & Proc. Roy. Geogr. Soc. Australasia Vict. Br. 8, Melbourne 1889, p. 58–66); further literature on the expedition *cf. sub* W. MACGREGOR.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Cammerloher, Hermann

(1885, Vienna, Austria; 1940, Vienna, Austria), botanist, educated at Vienna, where he took his Dr's degree in 1910; 1910–11 Botanical Assistant at Triest; 1911–13 Assistant at Czernowitz. He accompanied Dr O. PORSCH (see there) on the latter's journey to *Java* in *1914.*[1] In active service during the war 1914–18; 1919–21 Assistant to Prof. HEINRICHER at Innsbrück; 1921–24 attached to the Buitenzorg Botanic Garden; from 1924 onwards at Vienna as University Lecturer and Assistant at the Botanical Institute; since 1932 Extraordinary Professor.

Author of systematic papers on *Cinnamomum, Loganiaceae*, and of some others relating to his stay in the tropics.[1] His interest was mainly in flower biology.

COLLECTIONS. *Java* material for scientific researches in Europe collected from Febr. until May *1914.*[2] He might have collected in the years 1921–24 too.

LITERATURE. (1) *cf.* Ann. Jard. Bot. Buit. 45, 1935, p. 90, 92, 102. *E.g.:* 'Javanische Studien' (Oesterr. Bot. Zeitschr. 76, 1927, p. 57–65); on the images of plants on the Boroboedoer, *cf.* Natur 1923, p, 222–229 and Trop. Nat. 20, 1931, p. 141–152, 14 fig.

(2) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 40–41.

BIOGRAPHICAL DATA. Ber. D.B.G. 58, 1940, p. (18)–(26), incl. bibliogr. + portr.

Cammill

collected *Averrhoa bilimbi* L., *no* 118, in *Panay* (*P. I.*) in *1903* (*cf.* Pflanzenreich IV. 130, 1930, p. 419). The name may have been misread, and is probably GAMMILL (see there).

Campbell, Charles

(*c.* 1765, Glasgow, Scotland; 1808, Calcutta, India), was appointed to the Bengal Establishment as an Assistant Surgeon in Oct. 1791; in Jan. 1793 he was appointed to do duty at the Medical Establishment at Bencoolen, Fort Marlborough, as surgeon and botanist. Early in the year 1798 nutmegplants and cloves were received, which were put generally under his inspection. He made some trips into the interior. In 1807 he returned to Bengal on account of ill health.

ITINERARY.[1] *1800. Sumatra West Coast.* From Moco-Moco on the coast, to the northeast, Korinchi (= Kerintji) country, visiting 2 lakes (Danau Lake). In a private letter dated March 1802 he says: 'We crossed the hills nearly behind the Sugarloaf and entered the valley of the Musi' (Palembang).

COLLECTIONS. He evidently forwarded some plants to Dr ROXBURGH at Calcutta, for the latter's herbarium (*cf.* W. ROXBURGH Jr), *e.g. Urceola elastica* ROXB. and a Sumatran species of the genus *Phoberos* (= *Scolopia*);[2] in 1800 he also forwarded seeds, from which ROXBURGH raised plants in the Calcutta Bot. Gardens. Of these plants CAREY later sent seeds to England (*cf.* LODDIGES, Bot. Cabinet, 6, 1821, pl. 531, 587). To *Kew* he sent seeds of *Antiaris.*[3]

In the description of his tour of 1800 it is stated that he had only little time for botanizing, but brought some roots with him to Fort Marlborough.

LITERATURE. (1) 'Account of the inland country of Korinchi-Expedition to the Serampei and Sungei-tenang countries' extracted from his correspondence in MARSDEN, The history of Sumatra, 1811 (3rd ed.), p. 304–308. For other data mentioned above *cf. l.c.* p. 147–148 and p. 364.

(2) *cf.* ROXBURGH, Asiat. Research. vol. 5, p. 167 and BENNETT & BROWN, Plant. Javan. rarior., p. 188.

(3) *cf.* BENNETT & BROWN *l.c.* p. 58.

Campbell, Douglas Houghton

(1859, Detroit, Michigan, U.S.A.; x), botanist, educated at Michigan, taking his Dr's degree in 1886. From 1886–88 he studied in Germany; Professor of Botany at Indiana from 1888–91; subsequently at Stanford University (Cal.); now emeritus.

Author of many papers on ferns and liverworts, *etc.*[1]

ITINERARY. *1906. W. Java* (March–June).[2] He visited the Botanic Gardens at Buitenzorg; G. Salak (Tjiapus) and G. Gedeh-Pangrango (Tjibodas); Garut, slopes G. Guntur; with ERNST and BACKER to *Krakatau*[3] and *Verlaten Eiland* (Apr. 26) in Soenda Strait.—Dec. *1912*–Febr. *1913. NW. Borneo*, Sarawak,[4] *e.g.* Mt Matang and Bau, Mt Santubong, Mt Sarambo; on his return making a brief stop in *Java.—2nd visit to the East Indies, 1913–14.* Staying a month in the *Fed. Mal. States* with headquarters at Kuala Lumpur; a very short visit to *Sumatra* (East Coast) (Medan and Bandar Baroe); to *Borneo*, staying about a month at Kuching, *Sarawak*, making several brief excursions in the vicinity; *Java:* Buitenzorg Botanic Gardens (*1914*); on his way home stopping in the *Philippines*, doing some collecting.

From his systematic papers it becomes evident that he collected in Ceylon and *Singapore* too.

COLLECTIONS. *Herb. ? Stanford.* Ferns and liverworts only. From *Java* a great quantity of material of the *Ophioglossaceae;* at Tjibodas a rich collection of liverworts.[1]

LITERATURE. (1) *e.g.* 'Studies on some Javanese Anthoceraceae' I–II (in Ann. Bot. 21, 1907 and 22, 1908); 'Collecting liverworts in Java' (Torreya 8, 1908, p. 103–110); 'Notes on collecting ferns with particular reference to certain Bornean forms of considerable interest' (Sarawak Mus. Journ. 2, 1914, p. 73–78); and numerous others.

(2) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 30.

(3) D. H. CAMPBELL: 'The new flora of Krakatau' (Amer. Naturalist 43, 1909, p. 449–460).

(4) D. H. CAMPBELL: 'Botanizing excursions in Borneo' (Pop. Sci. Monthly 86, 1915, p. 193–203).

BIOGRAPHICAL DATA. Amer. Men of Sci. 1938.

Candi, Thomas

(also CANDISH or CAVENDISH) (about 1555, Gumston Hall in Trimley, Saint Martin Parish, Suffolk, England; 1592, on voyage homewards), had an early inclination to go to sea, and converted part of his lands into money and went out to see the world. His 1st voyage was made to Virginia in the 'Tiger'; in 1586–88 a voyage with his pilot CHRISTOPHER HARE, in the 'Desire', 'Content' and 'Hugh Gallant' (see below).

ITINERARY. *1586–88.*[1] July 21, 1586 leaving Plymouth; Brazil; *via* Straits of Magellan, Chili, Peru, New Spain, California; the Ladrones (= Marianas Isls); *Philippines:* at Cape del Espiritu Santo in *Tandayas* (= ? *Samar*) (Jan. 14, *1588*); Isl. *Capul* (15–23); passing the *Moluccas, e.g.* Batachina (= *Halmaheira*) on the way to Java; March 1 having passed between Java minor and major (= Bali Straits), casting anchor near Bolamboam (= Balambangan in *SE. Java*) (5–15); Cape of Good Hope, St Helena; back at Plymouth (Sept. 9).

COLLECTIONS. CLUSIUS figured and described *Anisum philippinarum insularum* from material secured at Manila(?) (*Luzon*) by THOMAS CANDI.[2]

LITERATURE. (1) 'Twee vermaarde scheepstogten, van THOMAS CANDISCH *etc.* gedaan in het jaar 1586 en vervolgens . . . geschreeven aan den Hr. TRISTAM GORGES' (Leyden 1706) (wrongly recording the ship to have been in Bantam Straits).

J. BURNEY, A chronological history of discovery in the South Sea or Pacific Ocean, 2, 1806, p. 64–94.

'CAVENDISH' Circumnavigation of the Globe' by FR. PRETTY in HAKLUYT series 11, 1904, p.290–347.

D. M. CAMPBELL, Java past and present, 1, 1915, p. 665–669 and *l.c.* 2, p. 165 *seq.* (the supposition that the ship was in Bantam Straits is an error).

R. HARE, Voyage of the Caroline *etc.*, London 1927, p. 246–248.

(2) CLUSIUS, Rariorum plantarum historiae, pt 6, p. ccij and cciij.

BIOGRAPHICAL DATA. HAKLUYT series 11, 1904, p. xi–xii & portr. frontispiece.

Candish, Th., *cf.* CANDI.

Canilao, A., *cf. sub* Forestry Bureau, Manila.

Canlas, *cf. sub ditto.*

Cantley, Nathaniel

(? , Thurso, N. coast of Scotland; 1888, on a voyage to New Zealand, Tasmania), a Kew Gardener since 1869; in 1873 appointed Asst Superintendent of the Botanic Garden in Mauritius; Superintendent of the Singapore Botanic Gardens, 1880–88, and of Forests, 1883–88. In December 1887 he went on sick-leave.

Several plants were named after him, also the genus *Cantleya*.

COLLECTING LOCALITIES. *1880–88. Malay Peninsula:* Johore (Febr. *1882*), Perak (*e.g.* on G. Bubu, Jan. *1885*, with Ch. CURTIS), For. Reserve of Tasek Gelugor (Prov. Wellesley) (Nov. 1885), *Singapore*, Selangor, and Malacca.

COLLECTIONS. *Herb. Kew:* Mauritius, *Malaya*, 1878–86, 305 *nos*. In 1881 he was on short leave of absence (6 months) to England taking ± 2000 bot. specimens with him for identification at Kew; 500 were destroyed at the Cape of Good Hope.

According to BURKILL (in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5) the collection till 1881 in *Kew*, the collection after 1881 in *Herb. Sing*.

He made and caused to be made (*cf.* CANTLEY's collector = M. V. ALVINS), very extensive collections; unfortunately they are inadequately labelled (often recording the State only), and even incorrectly in many instances.

BIOGRAPHICAL DATA. Journ. Kew Guild, May 1898, p. 37; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 36, 1898, p. 147 (death erroneously stated in 1887), and in 2nd ed. by RENDLE, 1931; Gard. Bull. Str. Settlem. 2, 1918, p. 101–103; BACKER, Verkl. Woordenb., 1936.

Cantor, Th. E., *cf. sub* WHITE.

Capco, *cf. sub* ALSACID, G. L.

Caragual, Gonzales de

Intendant of the Philippines in the times of LA PÉROUSE (1787) (*cf. sub* MARTINIÈRE), sent plant collections from Manila (*Luzon*) to his mother country,[1] probably *Spain*.

LITERATURE. (1) *cf.* KOTZEBUE in 'Entdekkungsreise *etc.* auf dem Schiffe Rurik, 1815–18' (Dutch transl., Amsterdam 1822) vol. 3, p. 148–149.

Cardona, *cf. sub* Forestry Bureau, Manila.

Cardoso, *cf.* ALFARO CARDOSO.

Carr, Cedric Er(r)oll

(1892, Napier, New Zealand; 1936, Port Moresby, New Guinea), went to England with his parents at the age of 7; he came to Malaya in Jan. 1913 as an Assistant on Kulong Rubber Estate, Malacca; in 1916 he returned to England for military service; in 1919 to Malaya again, as Manager of Lendu Estate, Malacca, and then of Tembeling Estate, Pahang, until 1931. In 1933 he went to England, working at the Kew Herbarium, leaving again at the end of 1934 for his Papuan expedition. On the road back he fell ill with blackwater fever. From his boyhood he was interested in orchids, on which subject he wrote several papers, principally based on his own collections.

Hydriastele carrii BURR. was named after him.

COLLECTING LOCALITIES. *19..–32. Malay Peninsula.* Tembeling (in Pahang) was the centre of his collecting; in *1928* he accompanied HOLTTUM (see there) on an expedition to G. Tahan (Aug. 19–Sept. 10).—*1931. Sumatra East Coast:*[1] Brastagi and environs, and the Kaban Djahe Plateau (between Sept. 5–16), and along the new road above Lake Toba (W and NW of the lake).–*1932. Malay Peninsula.* Trip in southern Johore with CORNER & HOLTTUM (see there).—*1933. Br. N. Borneo.* Several months on the slopes of Mt Kinabalu.—*1935–36. SE. New Guinea.* He visited various places, *e.g.* Kanosia (sea level, Febr.–March 1935), Veiya (sea level, March), Kanosia (Apr.); Koitaki and Rouna (Apr.–July); Boridi Forest (above 4000 ft, Sept.–Oct.); Aloda, Yodda, and Lala rivers (Dec.); Alola (Jan. *1936*), Main Range NW of Gap (Jan.), Isuarava (4500 ft, Febr.) and for 7 months on Mt Victoria, Owen Stanley Range.

COLLECTIONS. *Herb. Sing.:* coll. Kinabalu (1933) 2000 *nos* (incl. 700 orchids); 1300 *Papuan* plants (purch. 1935); in 1936, after his death, the Singapore Bot. Gardens were allowed the first offer of purchase of his collections; this resulted in the addition of all Mr CARR's *locally* collected orchid specimens (*c.* 4300, dried and in spirit) with his critical notes attached.[2] During his life assistance was given to him by the Herbarium, Singapore, by sorting and distributing his botanical collection made in New Guinea; this service was given as partial payment for a set, amounting to nearly 7000 *nos*.

Herb. Brit. Mus.: 1st set *New Guinea* coll.; *Herb. Leyden: New Guinea* coll., ± 2500 *nos; Herb. Berl.:* 5032 *nos N. G.* (purch. 1935–37), partly inadequate material; *Herb. Kew: Mal. Penins.* orchids, dried and in alcohol (pres. 1930), > 4800 *nos N.G.* plants (pres. 1935–36); *Herb. Manila: N.G.* dupl. (pres. 1935–36); *Herb. N.Y. Bot. Gard.:* 1135 *N.G.* plants (purch. 1935); *Herb. Canberra:*[3] *N.G.* plants.

His collections were partially worked up.[4]

In *Hort. Bog.: Malay Peninsula* orchids (pres. 1929).

LITERATURE. (1) C. E. Carr: 'Some Malayan Orchids' IV (Journ. Mal. Br. Roy. As. Soc. 11, 1933, p. 66–109, i–iv, pl. 1–13).

(2) *cf.* Ann. Rep. Bot. Gard. Singapore 1936, p. 6.

(3) *cf.* Journ. Arn. Arbor. 28, 1947, p. 99.

(4) C. E. CARR: 'Some Malayan Orchids' I–III (Gard. Bull. Str. Settlem. 5, 1929, p. 1–50; *l.c.* 1930, p. 124–160 (from G. Tahan); *l.c.*7, 1932, p.

1–60); based on own collections. *cf.* Also *sub* 1, on Sumatra.

C. E. CARR: 'Two collections of Orchids from British North Borneo' pt I (*l.c.* 8, 1935, p. 165–240), based on coll. CARR 1933 and CLEMENS 1931–33.

Palmae by BURRET in Notizbl. Berl. Dahl. 13, 1936, p. 317–332 (coll. CARR and CLEMENS from *N. G.*).

In Beitr. Flor. Papuas. (ENGL. Bot. Jahrb. 1938 →), *passim.*

Loranthaceae by B. H. DANSER in Blumea 3, 1938, p. 37–59.

Ferns from *New Guinea* by A. H. G. ALSTON in Journ. Bot. 78, 1940, p. 225–229.

Ericaceae from *New Guinea* by H. SLEUMER in ENGL. Bot. Jahrb. 70, 1940, p. 95–124.

Proteaceae from *New Guinea* by H. SLEUMER in ENGL. Bot. Jahrb. 70, 1940, p. 125–148.

Icacinaceae by H. SLEUMER in Notizbl. Berl. Dahl. 15, 1940, p. 228–257.

Figs from *New Guinea* by V. S. SUMMERHAYES in Journ. Arn. Arbor. 22, 1941, p. 81–109.

Mosses from *New Guinea* by H. N. DIXON in Farlowia 1, 1943, p. 25–40.

BIOGRAPHICAL DATA. Kew Bull. 1936, p. 531–532; Journ. Bot. 75, 1937, p. 143–144, incl. bibliogr.; Chron. Bot. 3, 1937, p. 235 + portr.

Carrier, C. L.

joined the Forest Department *Malay Peninsula* in Sept. 1930.

COLLECTIONS. *Herb. Kuala Lump.*, numbered in the C. F. (see *sub* Conservator of Forests) series; collected mainly on the E. coast of Pahang.

Carteret, Philip

(† 1796, Southampton, England), accompanied a South Pole Expedition under the guidance of SAMUEL WALLIS, as commander of the 'Swallow' (with the other corvettes 'Dolphin' and 'Prince Frederick'). His ship was outdistanced in the Straits of Magellan and he proceeded on his own, discovering several islands in the Pacific among which Pitcairn, besides, the canal of St George between New Britain and New Ireland. He hardly went ashore on account of the hostile attitude of the natives. He quitted the service as Rear-Admiral in 1794.

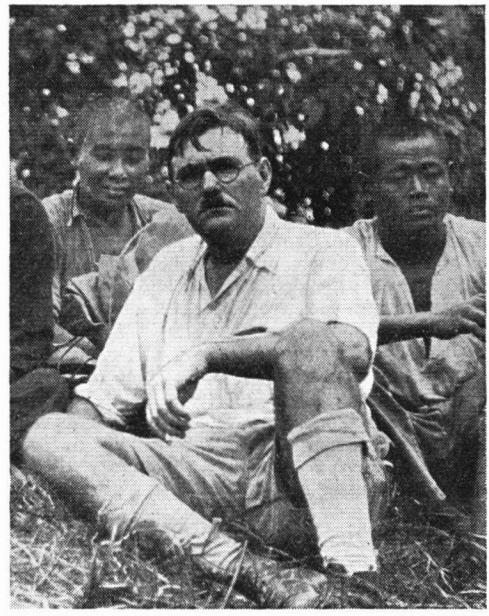
The genus *Carteretia* A. RICH. was named in his honour.

ITINERARY. *Voyage in the 'Swallow', 1766–69.*[1] Departing from Plymouth (Aug. 22, 1766); *via* Straits of Magella(e)n to the Pacific Ocean; *Bismarck Archipelago:* along *New Britain* and *Duke of York Island* (Sept. *1767*); *New Ireland:* Carteret Harbour (Sept. 7–8); *Mindanao* in the *Philippines* (Nov. 2–4); *SW. Celebes:* Makassar (Dec. 15–20), road of Bonthain (Dec. 21–May 21, *1768*); *Java:* Batavia (June 3–Sept. 14), to *P. Onrust* (in the Bay of Batavia) (15), *Prinseneiland* (20); *via* the Cape of Good Hope *etc.;* St Helena; back at Spithead (March 18, 1769).

COLLECTIONS. ?

LITERATURE. (1) His voyage is described by J. HAWKESWORTH in 'Account of the voyages for making discoveries in the Southern Hemisphere, *etc.* (1773). Compiler saw the French transl., Amsterdam and Rotterdam 1774.

J. A. VAN DER CHIJS: 'PHILIP CARTERET in Ned. Indië (1767–1768)' (Tijdschr. Ind. Taal-, Land- en Volkenk. 34, 1891, p. 1–61) (study on documents concerning his voyage).



CARR

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Castillo

Ranger, in 1918 in the service of the Br. N. Borneo Co.

He is commemorated in *Cyclostemon castilloi* MERR.

COLLECTING LOCALITIES. *1918. Br. N. Borneo.* At Sandakan (Jan., Febr.) and Suanlamba River (Aug.) *etc.—1920. S. Sumatra.* With VALDERRAMA in Palembang (March).—He is mentioned by MERRILL in his Enum. Philip. Fl.Pl. as a collector in the *Philippines.*

COLLECTIONS. *Sumatra* dupl. in *Herb. Bog., e.g. Eusideroxylon zwageri, no* 3; also in *Leyden,* and in *U.S. Nat. Herb. Wash.* (13 *nos*). In the *Philippines* he collected in the B.S. and F.B. series (*cf. sub* Bureau of Science, and Forestry Bureau, Manila).

Castlewood

is cited as the collector of a *Piperacea* at Cheng Kang, G. Pulai in Johore (*Mal. Penins.*) by C. DECANDOLLE (in Rec. Bot. Surv. Ind. 6, 1912, p. 18).

Castro, P.
collected together with F. MELEGRITO; both of them Filipino Rangers in the employ of the Br. N. Borneo Forest Department (see *sub* For. Dept *etc.*).
COLLECTING LOCALITIES. *1920. Br. N. Borneo.—Before 1926* in *Banguey* and *Balambangan Isl.*, both of which situated N of Borneo.
COLLECTIONS.[1] *Herb. Berkeley* (Cal.), original set; dupl. sets in *Herb. Sandakan, Manila, Kew* (pres. 1925), *Herb. Bog.* (pres. 1927), *U.S. Nat. Herb. Wash.* (115 *nos*), *Herb.* DELESS. (*Geneva*): 74 *nos Banguey Isl.* (prob. coll. CASTRO & MELEGRITO), and in other herbaria.
LITERATURE. (1) *cf.* E. D. MERRILL: 'The flora of Banguey Island' (Philip. Journ. Sci. 29, 1926, p. 341–427 + map).

Castro, Alberto Osorio de
about 1911 official of the Civil Service of Portuguese Timor; a judge, a poet, and a very good prose writer. He wrote a book describing his travels in Timor.
Aspidium decastroi v.A.v.R. was named after him.
COLLECTIONS. *Herb. Bog.*: some small collections, numbering > 136 (pres. *1911*), collected in *Portuguese Timor*. In *1909* and *1910* plants were sent for identification to *Buitenzorg*. Dupl. in *Herb. Leyden*. In *Herb. Univ. Lisbon*. (251 poor specim.). Identifications printed in Bol. Soc. Broter. Univ. Coimbra.
BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Catalan, *cf. sub* Forestry Bureau, Manila.

Cateban, *cf. sub ditto.*

Catip, *cf. sub ditto.*

Cattenburgh, van
Resident of *Banka*, gave plants to TEYSMANN (*cf.* Nat. Tijdschr. N.I. 32, 1873, p. 38). Probably in *Herb. Bog.*

Cavendish, Th., *cf.* CANDI.

Cayaux, A.
of Tjitjoeroeg, *W. Java*, sent a specimen of *Hoya diversifolia* BL. to Buitenzorg in Aug. *1936*; in *Herb. Bog.*, through the intermediary of Dr D. KOOLHAAS.

Ceballos, *cf. sub* Forestry Bureau, Manila.

Cel. *nos, cf. sub* Forest Research Institute, Buitenzorg.

Celestino, A.
Filipino, assistant to JOHN WHITEHEAD on a trip to *Mindanao* in *1895*. He was with W. when the latter died in Hainan in 1899. Later he made ornithological collections for R. C. MACGREGOR (see there), and only occasionally collected some plants.
COLLECTIONS. Few *Philip.* plants, numbered in the Bur. of Sci. series (see there); at *Manila.*

Cenabre, *cf. sub* Forestry Bureau, Manila.

Cephas, J. A.
sent a living orchid from Poerworedjo near Kempit (Banjoewangi, *E. Java*) to *Hort. Bog.* (*cf.* J. J. SMITH in Bull. Jard. Bot. Buit. sér. 3, vol. 3, 1921, p. 308); preserved in *Herb. Bog.*

C. F. *nos, cf. sub* Conservator of Forests series, Kepong.

Chaffanjon, Jean
(1854, Arnas, Rhône, France; 1913, P. Tjitlim betw. Malacca and Sumatra), Assistant Naturalist at the Lyons Museum; he made several travels in S. America between 1884–90; in 1894–96 an expedition in Centr. Asia, making mainly ethnographical, zoological and geological collections, but a small botanical one too. After the termination of the expedition, he founded a firm at Wladiwostok, which enterprise failed in consequence of the Sino-Japanese war. He subsequently went to Indo-China, where he settled as a planter; after a visit to the Malay region, especially with a view to inspecting new rubber estates, he settled in P. Boulang in Malacca Straits. See also *Addenda.*
He is commemorated in *Callicarpa chaffanjoni* LÉV.
COLLECTIONS. When at Singapore (*about 1904*), he forwarded 6 cases, containing living orchids, collected on a tour to *Borneo, Sumatra* and *Java*, to *Paris* (received in the beginning of 1905).[1]
LITERATURE. (1) *cf.* Bull. Mus. Hist. Nat. Paris 11, 1905, p. 130.
BIOGRAPHICAL DATA. Bull. Mus. Hist. Nat. Paris 19, 1913, p. 411–415.

Chairoeddin, *cf. sub* Forest Research Institute, Buitenzorg.

Chalmers, James B.
(1841, Ardrishaig, Scotland; April 8, 1901, Isl. Goaribari, S. coast New Guinea), since 1866 missionary of Raratonga; in 1877 he set out for New Guinea by way of New Zealand and Australia. He made numerous New Guinea travels, on the last of which he was murdered by cannibals.
Author of several books and smaller publications relating to his travels.[1]
Appendicula chalmersiana F.v.M., *Aglaia chalmersii* C.DC., *etc.* were named after him.
ITINERARY (not fully complete). *SE. New Guinea. 1877.* Departing from Sydney (Sept. 20); *Darnley Isl.* (Oct. 6–9); *Murray Isl.* (12–17); mainland of New Guinea, 5 miles from Bura (21); Port Moresby (22), trip inland (± 10 miles) with MACFARLANE and GOLDIE; by boat along the coast (sailing Oct. 31, making trips into the interior) with LAWES (see there), to Kerepunu (Nov. 6); to *Teste Isl.* (8); *Moresby Isl.* (22–23); further along the coast by way of South and East Cape (unttil Jan. 20 1878).—*1878.* For Jan. see before. In the spring departing from Sydney; sailing along the coast of New Guinea from east to west; exploration of the hinterland of Kerepunu and on foot along the

coast from Keppelpoint to Macfarlane Harbour. With H. M. CHESTER sailing in the 'Ellengowan' from *Thursday Isl.* (July 1); Somerset, *Murray Isl.*, Bura (July 14), Port Moresby (16), tour to gold-diggers bivouac on the Laloki River (18); departure Port Moresby (23), Hood Bay (24); trip from Hula to the Kemp Welch River (25); Kerepunu (26), Dundee River (27), Kerepunu (30); sailing in eastern direction (Aug. 1) and trip to Maopa; *Grange Isl.*, *Dufaure Isl.*, *Stacey Isl.* (= *Suau*, Aug. 10–12); to the mainland, *crossing the southeastern peninsula* from Warauru (= Varaura) on the Catamaran Bay (13) to Waga-Waga (= Vaga-Vaga) (18) on Milne Bay; to South Cape (22), China Strait, *Dinner Isl.*, *Stacey Isl.*; Sept. 14 in the 'Ellengowan' to Hula and Kerepunu and back (21). Several short tours by boat.—*1879.* From Port Moresby (July 15) visiting the interior in NE. direction, *e.g.* the mountainous country between Goldie and Laloki River; back at Port Moresby (Sept. 26). In the 'Ellengowan' from Bura (Nov. 22) to the Gulf of Papua, *via Yule Isl.*—*1880.* Intending a visit to Owen Stanley Range *via* Goldie River; setting out from Port Moresby (June 7) *via* Laloki to Goldie River; this proved impracticable and instead the *sources of the Kemp Welch River* were visited; finally the latter's mouth near Kalo was reached (July 10); back at Port Moresby (15)[2]. From Port Moresby (July 31) to Bura and Redscar Bay, Kabadi Distr. To Na(a)ra, district near Cape Suckling (Oct.).—*1881.* From Port Moresby (Oct. 24) to Elema by boat.—*1882.* From Port Moresby (Febr. 6) to Bura, Manu-Manu (8), Kabadi, Aroa River, and back *via* Bura. Aug. 7 to Manu-Manu, Daura (Doura) region, Redscar Point (12) and by way of Bura back to Port Moresby. At the end of the year with W. G. LAWES (see there) to Sogeri region, *via* Laloki River (Rauna Fall).—*1883.* Trip to distr. of Oiabu (Maiva) and Mekeo.Tour by boat along the Papua Gulf (setting out Oct. 5), Hall Sound (6), Iokea (8), to Delena; on foot to Orokolo (13), leaving by boat (27) to Iokea (29); return to Port Moresby (Nov. 1).—*1884.* By boat from Port Moresby to the NW. coast region; on account of ill health not past the debouchment of the Wai Lala (= Annie River). Some trips by boat (Febr.–March) with WYATT GILL, *e.g.* to Maiwa, Delena, *Yule Isl.*, Hula, Hood Bay, Kalo, Maopa, Kerepunu, Bura (LAWES too); from Port Moresby (March 12) to Laloki River; Fairfax Bay. Ascent of the *Cloudy Mts* (Nov. 28–29).[3] Trips on board H.M.S. 'Raven': from Port Moresby (Dec. 27) to South Cape, Killerton, East Cape, and see *sub* 1885.—*1885.* Porlock Bay (Jan. 1–2), Caution Point (3), Traitor's Bay (3), Deaf Adder Bay (4–5), Goodenough Bay (7), *d'Entrecasteaux Isls* (8), Bentley Bay, *Killerton Isls* (10), and trips o/b H.M.S. 'Dart' with Capt. BRIDGE: East Cape, anchoring near *Rook Isl.*, *Long Isl.* From Samarai (Apr. 29) to Aroma. By boat (July 25) to the stations situated E of Port Moresby, *e.g.* to Tupuselei, Kaile, Kapa-Kapa, Hula, Kalo, Aroma, mouth of Clara River, Belerupu (Macfarlane Harbour), Parimata, Kerepunu, Hula, Port Moresby. By boat to the subdistricts Daura and Kabadi, visiting all intermediate stations; Port Moresby (before Aug. 19). Trip inland with a party to the Varagadi villages. Dec. 12 setting out with H. O. FORBES (see there).—*1886. cf. sub* H. O. FORBES. On English furlough (Aug. 10, 1886–July 25, 1887).—*1887.* From Sydney (Sept. 13) to Port Moresby. At the end of the year in the 'Ellengowan' to Annie River (Wai Lala) and Wickham River.[4]—*1888.* Tour of inspection to the mission stations W of Port Moresby (March) and after return, to the eastward ones; back at Port Moresby (mid-May).—*1889.* Visit to the mission stations W of Hallsound.—*1890.* Some tours with W. MACGREGOR (Febr.; see there), when the latter's ascent of the Fly River was over and before the latter's return to Port Moresby. On foot from Toaripi to Oiapu. In July departing from Port Moresby to Queensland, shipwrecked; back at Port Moresby (Aug. 15), from where to Toaripi and by canoe to Mowi Awi.—*1892.* Along the coast of the Gulf of Papua (June); from Port Moresby to Toaripi, mouth of the Wai Lala (Annie River), Orokolo, and by land to the mouth of the Alélé (Aréré), the Urika, the Kaimari, back to Kariki and downstream to Port Bloomfield; the Ai Wai.[5]—*1893.* From Port Moresby (Jan. 5) to the *islands in Torres Strait;* mouth of the Fly, Orokolo (Febr. 1), ascending the Wai Lala part of the way (2), Kerema, Toaripi (4), Jokea (8), Delena at Hall Sound (9); by canoe to Cape Suckling and journey inland to Nala (Nara), staying until the 13th; by way of Delena back to Port Moresby (14).[6]—*Probably 1894.* Navigation on the Fly River (last trip described in 'Pioneer Life' *l.c.*).—On furlough to England (July 3, 1894–Nov. 13, *1895*).—*1901.* Embarking in *Daru Isl.* (Apr. 4), to the Aird River with O. F. TOMKINS.[7]

COLLECTIONS. *Herb. Melbourne,* ± 79 *nos;* dupl. in *Herb.* DECAND. (*Geneva*) and *Herb. Berl.;* some ferns in *Herb.* BONAPARTE (= *Paris*); *U.S. Nat. Herb. Wash.:* 15 dupl. *N.G.* grasses.

The bulk of his collections was worked up by F. VON MUELLER.[8]

LITERATURE. (1) CHALMERS & WYATT GILL: 'Work and adventure in New Guinea 1877–1885' (1885); transl. into German: 'Neuguinea. Reisen und Missionsthätigkeit, 1877–1885' (Leipzig 1886).

J. B. CHALMERS: 'Adventures in New Guinea' (Religious Tract Soc. 1886); 'Pioneering in New Guinea' (London 1887); 'Explorations in South-Eastern New Guinea' (Proc. Roy. Geogr. Soc. N.S. 9, 1887, p. 71–73); 'Pioneer Life and Work in New Guinea 1877–1894' (New York *etc.* 1895); many papers in Chron. Lond. Miss. Soc.

(2) *cf.* Ann. Rep. Br. N.G. for 1897/98, Victoria 1899, p. 7–9 (diary H. N. CHESTER).

(3) *cf.* Ausland 60, 1887, p. 671–675, and Further Corresp. resp. N.G. Febr. 1885, p. 90.

(4) J. M. HENNESY: 'Report of a trip to the western part of the south coast of British New Guinea' (in Proc. & Transact. Roy. Geogr. Soc. Australasia Queensl. Br. 3, 1887/88 (*non vidi*).

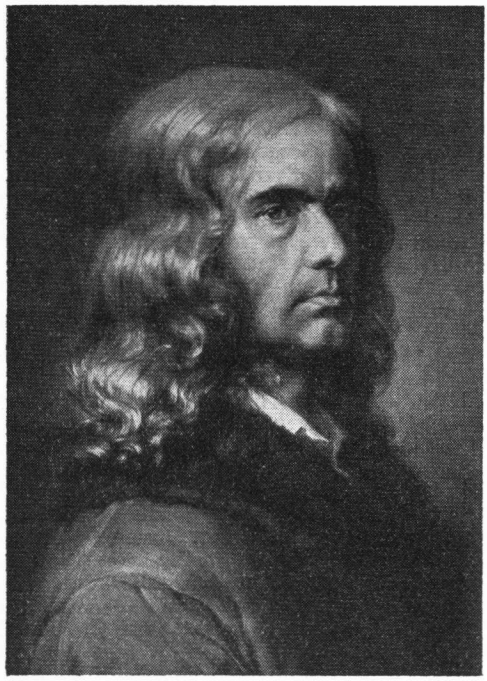
(5) *cf.* Chron. Lond. Miss. Soc. 1893, p. 52–57, 95–98; and Geogr. Journ. Lond. 2, 1893, p. 172–173.

(6) According to WICHMANN, Entd. Gesch. N.G.,

in Nova Guinea, this trip is erroneously placed in 1892 in 'Pioneer Life *etc.*'

(7) *cf.* Ann. Rep. Br. N.G. for 1900/01, p. 25–35; Chron. Lond. Miss. Soc. 1901, p. 188–189 and *l.c.* 73, 1908, p. 119.

(8) 'Descr. Not. Pap. Pl.' pts 6–8, 1885–86,; in



CHAMISSO

Vict. Naturalist 3, 1886, p. 45–52; WING's South. Sci. Rec. 2, 1882, p. 95–97, in *l.c.* n.s. 1, 1885, 2 pp.; and *l.c.* 2, Febr. 1886, 2 pp.; in Melbourne Chemist & Druggist, June 1884; and in Austr. Journ. Pharm. April 1886.

F. KRÄNZLIN mentions *Dendrobium sphenochilum* F.v.M., collected by CHALMERS and Capt. BRIDGE in the Cloudy Mts, in Oesterr. Bot. Zeitschr. 44, 1894, p. 255; *cf.* also *l.c.* p. 208–212.

Some ferns in BONAPARTE, Notes ptéridol., *e.g.* in fasc. 13, 1921, p. 227–235.

Some mosses by GEHEEB in Bibl. Bot. Heft 13, 1889.

BIOGRAPHICAL DATA. W. ROBSON: 'JAMES CHALMERS missionary and explorer of Raratonga and New Guinea' (London 1887, 2nd ed., w. portr.); Tijdschr. K.N.A.G. 1901, p. 726; CUTHBERT LENNOX: 'JAMES CHALMERS of New Guinea. Missionary, Pioneer, Martyr' (London 1902); Allg. Miss. Zeitschr. 29, 1902, p. 171–183, 236–250; C. A. W. MONCKTON, Some experiences of a New Guinea Resident Magistrate, vol. 2, Chapt. VI, p. 117 *seq.* (Penguin book); Autobiography and letters by LOVETT (1905, w. ill.); E. H. HAYES: 'Chalmers of Papua' (Relig. Educ. Press Ltd, Surrey, 1930 and later ed.); BACKER, Verkl. Woordenb., 1936.

Chamisso, Adalbert von

(rightly LOUIS CHARLES ADÉLAÏDE CHAMISSEAU DE BONCOURT) (1781, Boncourt, Champagne, France; 1838, Berlin, Germany), emigrated with his parents as refugees to Prussia in 1790; he entered the military service and started his study of natural history at Berlin in 1812. He was Botanist of the expedition of KOTZEBUE at the expense of Prince ROMANOFF, and was assisted by Dr ESCHSCHOLZ (see there and *sub* L. CHORIS). He ended his life as Custodian of the Herbarium at Berlin-Dahlem.

The genus *Chamissoa* H.B.K. was named in his honour.

ITINERARY. *Voyage in the 'Ruri(c)k', 1815–18.*[1] *cf.* also *sub* L. J. Y. CHORIS. Sailing from Kronstadt (July 30, 1815); *via* Copenhagen, Teneriffe, Brazil, Chili, the Oster (= Easter) and Romanzoff (= Toamotu) Islands, Kamschatka, California, Sandwich Isls, Radack (= Marshall Islands), St Laurens Isl., Sandwich Isls, Marianas (Gua(ha)m Isl.) (Nov. 24, 1817); *Philippines:*[2] *Luzon*, at Cavite (Dec. 17, *1817*–Jan. 28, *1818*), Tierra alta, trips in the vicinity of Cavite and Manila and to Taal Volcano (Jan. 12–19); back *via* St Helena *etc.*, to Petersburg (arriving Aug. 3).

COLLECTIONS. *Herb. Imp. Acad. St Petersb.* (= *Acad. Sci. Leningrad*): main set, comprising about 10 to 12000 *nos* of the whole voyage (purch. 1841), and grasses with TRINIUS's *Agrostotheca* (pres. 1841); dupl. in *Herb. Berl.:* ± 100 species from *Luzon; Herb. Kiel; Herb. Munich* (with *Herb.* ZUCCARINI); *Herb.* MARTIUS (= *Brussels*) (85);[3] *Herb.* LINDEMANN (U.S.S.R.): 319 *nos; Herb. Leyden; Herb. Vienna* (with *Herb.* REICHENBACH): orchids of the voyage; *Herb. Hamburg: Algae* of the voyage; *Herb.* DECAND. (*Geneva*). Only a few numbers in *Herb. Bot. Gard. St Petersb.* (= *Leningrad*).[4]

According to KREUTZER[5] plants of his also in *Herb.* HOOKER (= *Kew*) and JUSSIEU (= *Paris*).

He exchanged duplicates with ESCHSCHOLZ (see there) who benefitted by the transaction, as the latter collected but few plants.

The botanical results of the expedition were published.[6]

LITERATURE. (1) A. VON CHAMISSO: 'Reise um die Welt mit der Romanzoffischen Entdeckungsexpedition in den Jahren 1815–1818 auf der Brigg Rurik, Capitän OTTO VON KOTZEBUE (I, Tagebuch; II, Bemerkungen und Ansichten)' (Leipzig 1836, 2 vols); 'Notices respecting the botany of certain countries visited by the Russian Voyage of discovery under the command of Capt. KOTZEBUE' (transl. from the German ed. of the voyage in HOOK. Bot. Misc. 1, 1830, p. 305–323).

O. VON KOTZEBUE: 'Entdeckungsreise in die Südsee und nach der Berings-Strasse . . . unternommen in . . . 1815–1818 . . . auf dem Schiffe Rurick' (Weimar 1821, 3 vols; vol. 3 containing the natural history); transl. into Dutch (Amsterdam 1822, 3 vols).

L. CHORIS: 'Voyage pittoresque autour du monde, avec des portraits des sauvages d'Amérique, d'Asie, d'Afrique, et des îles du grand Océan; des paysages, des vues maritimes et plusieurs objets

d'histoire naturelle' (Paris 1822; the author accompanied the expedition as a painter; with descriptions of CHAMISSO).

(2) *cf.* Linnaea 1, 1826, p. 7 and MERRILL in Philip. Journ. Sci. C. Bot. 3, 1908, p. 88.

(3) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 337; and EICHLER, Das Herbarium MARTII, 1869, p. 11.

(4) *cf.* ENGL. Bot. Jahrb. 9, 1888, p. 434.

(5) K. J. KREUTZER, Das Herbar *etc.*, Wien 1864, p. 169.

(6) G. F. KAULFUSS: 'Enumeratio Filicum, quas in itinere circa terram legit cl. AD. DE CHAMISSO adjectis in omnia harum Plantarum genera permultasque species non satis cognitas vel novas animadversionibus' (Lipsiae 1824).

'De plantis expeditione speculatoria Romanzoffiana observatis rationem dicunt AD. DE CHAMISSO et D. DE SCHLECHTENDAL' (in Linnaea 1–10, 1826–36).

BIOGRAPHICAL DATA. Linnaea 1839, p. 93–112 (transl. in HOOK. Lond. Journ. Bot. 2, 1843, p. 481–491); PRITZEL, Thes. Lit. Bot., 1872; Verh. Bot. Ver. Brandenburg 1881, p. 1–4; WITTROCK, Icon. Bot. Berg., 1903, p. 122, and *l.c.* 2, 1905, p. 121; J. D. MILNER, Catalogue portraits in Kew, 1906, p. 27; Beih. Bot. Centr. Bl. 2. Abt. 36, 1918, p. 270–306; 2 portr. in J. H. VERDUYN DEN BOER, Botanists at the Cape I, 1929; portr. in E. O. ESSIG, A history of entomology, New York 1931, fig. 187; BACKER, Verkl. Woordenb., 1936.

Champion, Herbert William

(1880, Kaiapo, Canterbury, New Zealand; x), went to Sydney at the age of 16, and two years later, in 1898, to Papua; he joined the Public Service of Papua in March 1902; in 1916 Govt Secretary and Chief Executive Officer, later in addition Commissioner for Native Affairs, frequently acting as Lieutenant Governor; retired in 1944; now living in New South Wales, at Chatswood.

COLLECTIONS. He sent innumerable specimens of plants to Australia for analysis, plants which had been held to have medicinal properties. He collected *Ficus benjamina* L. from Suau Div., *Papua* (*cf.* ENGL. Bot. Jahrb. 67, 1935, p. 184).

BIOGRAPHICAL DATA. Pacif. Isl. Monthly 16, *no* 2, 1943, p. 40; and *l.c. no* 4, p. 10 (*non vidi*); Who's who in Australia 1947.

Chaper, Maurice

A civil mining engineer who made geological explorations in Panama Isthmus, Borneo, the Caucasus, Africa, Ivory Coast (1882), California, the Antilles, Venezuela and Ceylon.

Author of some papers relating to Borneo.[1]

Millettia chaperii GAGN. from Borneo (coll. Nov. 1890) was named after him.

ITINERARY.[1] *1890–91.* Leaving Paris (Aug. 23, 1890); *Singapore* (Sept. 17–Oct. 2); *W. Borneo:* Sambas (5); Bay of Padang-Tikar, sailing into the Koeboe branch of the Kapoeas, Kapoeas ketjil, Pontianak (6); by boat (16) ascending the Kapoeas River to Sanggau, Sekadau (18), Sepau, Belitang, and Sintang; proceeding the 23rd, reaching the confluence with the Sebroeang (27), and Semitau; exploration of the Sebroeang River, Sg. Knapei (Kenepai), Penindoe River, Sg. Mang, Sg. Ajoe, and visiting G. Rajoen and G. Oejan (6 weeks from the end of Oct. onwards); Semitau; leaving Semitau (Jan. 9, *1891*), Sintang (10), and back at Pontianak (21); *Singapore* (31).

COLLECTIONS. *Herb. Paris.* Extensive zoological collections at Paris too. Sometimes botanical specimens of his are referred to.[2]

LITERATURE. (1) 'Voyage à Bornéo' (Ann. d. Géogr. 3, 1894, p. 371–381); 'Huit cents kilomètres à l'intérieur de l'île de Bornéo' (Bull. Soc. Géogr. Comm. 16, 1894, p. 266–297).

(2) UITTIEN mentions a *Thoracostachyum sumatranum* from *W. Borneo* near Sg. Knapei (= Kenepai) (Oct. 1890); several plants in MERRILL, Enum. Born. Pl., 1921; RIDLEY mentions *Alpinia laxiflora* GAGN. from Borneo, without specific locality in Journ. Str. Br. Roy. As. Soc. *no* 46, 1906, p. 245.

BIOGRAPHICAL DATA. Bull. Mus. Hist. Nat. Paris 2, 1896, p. 305–307.

Charidjie Kasoema, G. M.

Assistant Advising Fishery Expert, made a collection of plants in the Lake District, subdivision Semitau in *W. Borneo* (Upper Kapoeas), in *1941.*

COLLECTIONS. *Herb. Bog.:* 27 *nos*, presented by intermediary of B. M. HOEKS (see there). The material mostly sterile.

Chastelein, Antonio

(† 1715), sent a specimen of *Caryophyllus* (= clove) to J. P. BREYN (*cf.* J. BREYNIUS, Prodromi fasciculi rariorum plantarum, 1739, p. 50). Specimens of BREYN'S Herbarium are preserved in the *Brit. Museum*, at *Oxford*, and with *Herb.* BURMAN at *Geneva* (DELESS.) and maybe at *Leyden.* These herbaria might contain other plants collected by CHASTELEIN.

His father, CORNELIS CHASTELEIN, had several drawings made for the 'Herbarium Amboinense' of RUMPHIUS.

Chatiboe, *cf. sub* Forest Research Institute, Buitenzorg.

Chaufepié, Dr

collected the orchid *Eulophia exaltata* RCHB. *f.* near Wadjo(e) (*SW. Celebes*) for J. J. SMITH, *before 1907;* the concerning specimen in *Herb. Bog.*

Cheesman, Lucy Evelyn

(1881, Westwell, Kent, England; x), entomologist who attended a two years' course at the Imp. College of Science, London. In 1924 she collected in Tahiti, in 1930/31 in the New Hebrides, and from 1933 onwards she made three New Guinea expeditions (see below) under the auspices of the British Museum.

The moss *Spiridens cheesmanniae* was named after her.

ITINERARY.[5] *SE. New Guinea, Papua, 1933–34.*[1] Port Moresby (Apr. 14, *1933*); making base camp at Kokoda (Apr. 21) in NE. Division, Owen Stanley Range, 1200 ft; making a trip to Buna, some

mountain trips (Ishurava, Orori) reaching 6000 ft alt.; leaving for Buna and sailing (Oct. 27) for Samarai, visiting some small islands (*e.g. Ebomi Isl.*, E. Division) in Nov.; returning to Port Moresby; *Yule Isl.* (30); from the coast to base camp at Range View in the Mafulu Distr., visiting Mt Tafa (*c.* 8000 ft) twice (in total 24 days), collecting at Mafulu, Mondo, near Ononge, *etc.;* back to Range View, Deva Deva, Kabuna, Boroka; *Yule Isl.;* Port Moresby (end of Apr. 1934).—*Dutch N. New Guinea, 1936.*[2] Arrival at Hollandia (Febr.); making trip inland to Njau through the swamp country behind Mt Bougainville as far as Mt Nomo, S of the Yjapo Mts on the boundary, with Mr STÜBER (see there) from Febr. 10–24; making camps on Cyclop(s) Mts, *e.g.* on Mt Lina (Apr.); camps at *c.* 2000 ft and at 2500–3000 ft, both in the vicinity of Sabron (remaining 3 months); Iffar, from where exploring the neighbourhood of Lake Sentani; about the middle of Sept. leaving Dutch territory by proa for a coastal voyage to Aitape in *Mand. Terr. of New Guinea;* Sydney (end of Nov.).—*Dutch New Guinea, 1938–39.*[3] *Waige(o)u:* Saonek (March 21, 1938); encamped on Mt Nok, collecting on the summit; Go, Lam-lam; *Japen:* Seroei (arriving Aug. 10); moving to camp on Mt Amomi (18) on 1000 ft on Aiam Range; to camp on Mt Eiori (Sept. 19); crossed to Mt Oude (2000 ft) (Nov. 8, camping until 11); return to camp Mt Eiori; by steamer (Dec. 1) to Hollandia; from Jan. 16–Febr. 15, *1939*, making a collection for the South Australian Museum, Adelaide, in the Torricelli Mts (*NE. New Guinea*, Mand. Terr.); returning to Aitape, and walking to Vanimo (arriving March 19), exploring the Bewani mountains on the *border between the Mandated Territory and Dutch N. New Guinea* about 12 miles inland until June 31; returning to England *via* Makassar, Sumatra and Ceylon.

COLLECTIONS.[4] *Herb. Brit. Mus.; Herb. Kew:* from Owen Stanley Range (coll. 1933–34), and coll. of grasses with notes on those suitable for stock; also dupl. in *Herb. Arn. Arbor.*

The botanical specimens, collection 1933/34, were attacked by rats. In *Dutch New Guinea* she specially collected cryptogams.

LITERATURE. (1) L. E. CHEESMAN: 'The two roads of Papua' (London, Jarrolds); 'An expedition to the mountains of Papua' (Nat. Hist. Mag. (Br. Mus.) 5 (*no* 33), 1935, p. 19–37).

(2) L. E. CHEESMAN: 'The Cyclops Mountains of Dutch New Guinea' (Geogr. Journ. Lond. 91, 1938, p. 21–30, w. map and ill.).

(3) L. E. CHEESMAN: 'Two unexplored islands of Dutch New Guinea: Waigeu and Japen' (Geogr. Journ. Lond. 95, 1940, p. 208–217, w. ill.).

(4) H. N. DIXON & W. R. SHERRIN: 'On a small collection of mosses from New Guinea, with a revision of the genus Spiridens' (Ann. Bryol. 10, 1937, p. 16–19).

Ferns by A. H. G. ALSTON in Journ. Bot. 78, 1940, p. 225–229.

Figs by V. S. SUMMERHAYES in Journ. Arn. Arbor. 22, 1941, p. 81–109.

(5) L. E. CHEESMAN: 'Camping adventures in New Guinea' (w. ill.) (*non vidi*).

BIOGRAPHICAL DATA. Who's who.

Chevalier, Auguste J. B.

(1873, Domfront, Orne, France; x), was educated at Caen from 1893–96, and took his Dr's degree in 1901. He was sent on several missions, mainly to Africa. In 1913–14 to Indo-China, paying a visit to *Java* in 1914, *e.g.* at Buitenzorg, and Tjibodas (May 2–4).

Author of many papers on useful plants, published in the Rev. Bot. Appl. Agric. Coloniale. From 1917–19 he was General Inspector of Agriculture and Forests in Indo-China. In 1929 Professor at Paris. He is Director of the Agricultural Colonial Laboratory at Paris.

He is commemorated in *Premna chevalieri* DOP.

COLLECTIONS. *Herb.* BONAPARTE (= *Paris*): some ferns collected *s.n.* near Tjibodas on the slope of G. Gedeh, *W. Java* (May *1914*).[1]

LITERATURE. (1) *cf.* BONAPARTE, Notes ptéridol., fasc. 13, 1921, p. 207 *seq.*

BIOGRAPHICAL DATA. In 'Flore génér. de l'Indo-Chine' tome prélim. 1944, p. 38, portr. pl. X; Bull. Acad. Géogr. Bot. 11, p. 159–160.

Chinnery, Ernest William Pearson

(1887, Waterloo, Vict., Australia; x), was educated in anthropology at Christ's College, Cambridge; Magistrate in Papua, 1909–21 (in 1917 Acting Resident Delta Division); anthropological study of native labour in Papua, 1921–24; Govt Anthropologist, Mandated Territory New Guinea, 1924–32 (in 1930 Rockefeller Fellowship Human Biology, U.S.A. and Europe); Director District Service and Native Affairs Mandated Territory and Member Executive and Legislative Councils, 1932–38; Director Native Affairs, Northern Territory, Australia, 1938–46; Official Adviser native matters Dept of the Interior, 1938–47; at present a member (representing Australia) of the Trusteeship Committee of U.N.O. He took a leading part in the exploration and discovery of New Guinea, and is the author of numerous anthropological and ethnographical papers.

COLLECTING LOCALITIES. *SE. New Guinea, Papua. 1917.* When exploring in the Central Division in the neighbourhood of Mts Yule, Chapman, Strong and St Mary (end of Febr.–May),[1] a collection was made on the look-out Pitzoka in the Avau-Muri Valley (March 3–7) and at the Poto Range (9) at an alt. of 7 to 8000 ft.

COLLECTIONS. A collection of ferns and lycopods was made for classification. *?Herb. Brisbane.* He made an entomological collection too.

LITERATURE. (1) *cf.* Ann. Rep. Papua for 1916/17, App. C, p. 50–59 (fauna and flora *cf. l.c.* p. 64).

BIOGRAPHICAL DATA. Pacif. Isl. Monthly 1, *no* 7, 1931, p. 7 (*non vidi*); Who's who in Australia 1947.

Chinte, Felix

collected herbarium material in the *Philippines* on behalf of the Forestry Bureau at Manila in *1937;* preserved in *Herb. Manila.*

Chipp, Thomas Ford

(1886, Gloucester, England; 1931, Kew, England), entered Kew as a Student Gardener; after a few months he was selected for one of the Temporary Technical Assistant posts in the Herbarium, which he occupied until 1908. In 1909 he passed the B. Sc. examination with Honours in Botany. In 1910 appointed as Assistant Conservator of Forests on the Gold Coast. Before proceeding to W. Africa he spent a year studying forestry in Germany and the Fed. Malay States; he joined his regiment in England in 1914–19. From 1914–21 Asst Director of Gardens, Singapore; he took possession of the post not before July 1919 on account of the war. He returned to the Gold Coast to be Deputy Conservator of Forests in that colony in 1921; Asst Director of Kew Gardens from 1922 till his death.

During his stay in the Malay Peninsula, he published about 30 short articles in the Gard. Bull. Str. Settlements 1920–21, several on *Fungi*.

COLLECTIONS. Collected in *Singapore* and elsewhere in the *Malay Peninsula*, chiefly cryptogams (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

In *Herb. Kew:* cryptogams *Mal. Penins.* (pres. 1920).

BIOGRAPHICAL DATA. Kew Bull. 1931, p. 397–398 and 433–440 (bibliogr.); Proc. Linn. Soc. Lond. 144, 1931/32, p. 169–174.

Choris, Louis Joseph Yorik

(1795, Jekaterinoslaw, Russia; 1828, on the way to Jalapa, Mexico, murdered), painter who accompanied the expedition in the 'Ruri(c)k' (1815–18) (*cf* itinerary, literature, *etc.* under CHAMISSO).[1] After his return he settled at Paris; since 1827 correspondent of the Museum, and setting out on a voyage to America.

COLLECTIONS. *Herb. Bot. Gard. St Petersb.* (= *Leningrad*),[2] with *Herb.* FISCHER, *etc.*[3]

LITERATURE. (1) L. CHORIS: 'Voyage pittoresque autour du monde, avec des portraits des sauvages d'Amérique, d'Asie, d'Afrique, et des îles du grand Océan; des paysages, des vues maritimes et plusieurs objets d'Histoire naturelle' (Paris 1822).

(2) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 338.

(3) *cf.* ENGL. Bot. Jahrb. 9, 1888, p. 434.

BIOGRAPHICAL DATA. Globe, 19 juill. 1828; Bull. Mus. Hist. Nat. Paris 12, 1906, p. 353–357.

Christiaan, *cf. sub* Forest Research Institute, Buitenzorg.

Christophersen, Erling

(1898, Oslo, Norway; x), botanist, educated at Yale University, where he took his Ph. Dr's degree in 1924. From 1924–25 Fellow Bishop Museum, Honolulu; at the University and on the staff of the Botanic Garden at Oslo, 1925–29; Botanist of the Bernice P. Bishop Museum and Professor of Botany at Honolulu, Hawaii, 1929–33; in 1929 attended the 4th Pac. Sci. Congress in Java. From 1933 onwards Curator of the Botanical Museum, Roy. Frederick University, Oslo. Leader of a scientific expedition to Tristan da Cunha in 1937/38. From 1947 Cultural Attaché to the Roy. Norwegian Embassy at Washington, D. C.

COLLECTING LOCALITIES. *1929.* During the Pan-Pacific Science Congress. At least on *Krakatau* (Soenda Straits);[1] *W. Java:* Buitenzorg, G. Gedeh-Pangrango[2] and Tjibodas, probably near Priok, *Islands in the bay of Batavia; Centr. Java:* Tjilatjap; *E. Java:* G. Tengger, and *Madoera Isl.*

COLLECTIONS. About 400 *nos* in *Herb. Oslo;* no duplicates distributed, though *possibly* some retained in *Herb. Bog.*, where the collection was identified.

LITERATURE. (1) E. CHRISTOPHERSEN: 'Krakataus nye vegetasjon' (Naturen *no* 11, 1934, p. 321–335, 6 fig.).

(2) E. CHRISTOPHERSEN in Naturen 1936, p. 289–295 (*non vidi*).

BIOGRAPHICAL DATA. Amer. Men of Sci. 1938.

Clancher, Le, *cf.* LECLANCHER.

Clark, J. B.

Reverend of the London Missionary Society, who collected on an expedition to Mt Durigolo, an outlier of the Owen Stanley Range, in the neighbourhood of Boku in Port Moresby District, *SE. New Guinea*, in *1916*.[1] In *1923* he collected once more in the same locality.[2]

COLLECTIONS. 50 *nos* of mosses.[1] Till now there is no evidence of any phanerogams having been collected.

LITERATURE. (1) *cf.* Journ. Linn. Soc. Bot. 45, 1922, p. 477 and *l.c.* p. 496–510.

(2) *cf.* Ann. Bryol. 10, 1937, p. 16.

Clark, W. W., *cf. sub* Forestry Bureau. Manila.

Clarke, A. A.

COLLECTIONS. *U.S. Nat. Herb. Wash.:* 141 *Philippine* plants, numbered between 983–2539. Neither he, nor his collection, is known to Dr E. D. MERRILL.

Clason, Else Willem

(1904, Oldenhove, Gr., Holland; x), passed for the natural history examination (K IV) at Groningen, and subsequently studied botany at Groningen University (till 1928); Group-Adviser in the employ of the Java Sugar Experiment Station (Pasoeroean), stationed at Sitoebondo 1929–33, Kediri 1933–35, Cheribon 1935–36, Pasoeroean 1936–37, Kediri 1937–39; since 1939 Inspector of the Field Service. After World War II he was evacuated to Holland, and returned to Java in Aug. 1947.

He partly collected together with his wife EPPIENA HENDERIKA HARMANNA CLASON-LAARMAN (1903, Winschoten, Gr., Holland; x) who studied biology at Groningen University too.

COLLECTING LOCALITIES. *E. Java. 1928.* G. Tengger, *e.g.* at Ngadisari.—*1929.* N. slope G. Ringgit, Tanggoel Koelon, S of Tanggoel, Grissee. —*1930.* Watoe Oeloe, G. Watangan (S. coast).—

1931. G. Ringgit,[1] G. Baloeran;[2] on March 31 with VAN SLOOTEN (see there) at the base of G. Baloeran, near Watoedodol (Bali Strait), G. Ringgit, G. Pakisan (slope G. Raoeng); G. Idjen (May 25); G. Jang (between 2300–2600 m alt.) (Nov.), *e.g.* on the way from Taman Kring to Aeng Poetih.—*1932.* G. Idjen (Febr.), G. Raoeng (May); Gradjagan.—*1934.* G. Dorowati (July 22).[3]—*1935.* G. Kloet (= Keloed) (May 30).[4]—*1936.* Bondowoso Res. (dunes) (Sept. 6) with BOOBERG.—*1937–39.* Kediri and Madioen.

COLLECTIONS. *Herb. Groningen: c.* 1000 *nos*; *Herb. Pasoer.:* 104 *nos* (princ. coll. 1928–30), and collection ricefield plants E. Java (1937–39); *Herb. Bog.:* ± 1000 *nos* of dupl. (coll. 1931—41); *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam*: material of wild and cultivated *Ocimum basilicum* specimens.[5] Many of his numbers are preceded by letters, *e.g.*: B, C, D, E, F, G, K, X; the collection of G. Kloet numbered K 1–K 209 (all material at *Buitenzorg*?) and some *s.n.*

Also numbers with Mrs CLASON-LAARMAN (1930—33, from Besoeki, E. Java), Dr D. F. VAN SLOOTEN and Dr G. BOOBERG. At the outbreak of war the lists of his collections were in the Java Sugar Exp. Station at Pasoeroean.

LITERATURE. (1) E. W. CLASON & E. H. H. CLASON-LAARMAN: 'De Goenoeng Ringgit in Oost-Java' (Trop. Nat. 21, 1932, p. 1–12, 9 fig.).

(2) E. W. CLASON: 'Het Noord-Westelijk Baloerangebied' (in *l.c.* 23, 1934, p. 121–129, 10 fig.).

(3) *cf.* Trop. Nat. 23, 1934, p. 195.

(4) E. W. CLASON: 'The vegetation of the Upper Badak region Mt. Kelut E. Java' (Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1935, p. 509–518).

(5) *cf.* Meded. Kolon. Inst. *no* 35 (afd. Handelsmus. *no* 14) for 1933, 1934, p. 20–22 (on the oil).

Cleerens, Jo(h)annes Baptista

(1785, Antwerp, Belgium; Apr. 18, 1850, Ambon, Moluccas), entered the military service in 1807 and went through some campaigns in Russia and Spain. He went to the D.E.I. as Asst Inspector of the Military Administration; in the course of time colonel; he returned to Europe and was given the honorary rank of Major-General in 1835. He subsequently returned to the D.E.I. in 1840, was appointed Resident of the Priangan Regencies, and in 1846 Governor of the Moluccas.

COLLECTIONS. He sent *Maba ebenus* SPRENG. and other plants from *Ambon* to *Hort. Bog.* in *1847.*[1] Other references[2] give the name W. CLEERENS, probably a mistake.

LITERATURE. (1) *cf.* HASSKARL, Retzia, in Nat. Tijdschr. N.I. 10, 1856, p. 107–108.

(2) *cf.* HASSKARL, Hort. Bog., 1, 1858, p. 69, and in Flora 40, 1857, p. 535.

BIOGRAPHICAL DATA. Encyclop. N.I. 1, 1917.

Clemens, Joseph & Mary (Knapp) Strong

(1862, St Just, Cornwall, England; 1936, Finschhafen, New Guinea) & (1873, Liberty, New York, U.S.A.; x), the former Chaplain of the American Army since 1902. He and chiefly his wife made large collections of plants in the Malayan region, and besides in China (1912–14), Indo-China (1928) and the U.S.A. In later years, when CLEMENS was in active service no more, he charged himself especially with the administration and arrangement of the collections. When in New Guinea he died of food poisoning; his wife dauntlessly proceeded on her field work. Late in Dec. 1941, or early in Jan. 1942, she was evacuated from Lae tot Port Darwin, North. Territory, Australia, and is now at Brisbane, Queensland, Australia.

Several plants were named after her and her husband.

COLLECTING LOCALITIES. *Philippines. 1905–29.* While the Chaplain was stationed at Camp Keithley, Lake Lanao, *Mindanao*, his wife collected from Dec. *1905*–Oct. *1907* in that region, *e.g.* on Mt Apo. *Luzon:* Benguet Prov., Bontoc Prov., Isabela Prov. (Mt Moises, San Mariano, *etc.*), N. Viscaya, Zambales Prov., Cagayan Prov., Pangasinan, Manila, Bulacan Prov. (Mt Pinatubo). —*Br. N. Borneo:* Mt Kinabalu (Oct.–Nov. *1915*), Mt Kalawat (Dec. 11, 1915), Mt Kinabalu (Nov. *1916*, Nov. *1917*).—*NW. Borneo,*[1] *Sarawak:* leaving Singapore (May 15, *1929*) for the Rejang River, Sibu (18), Kapit (24 arrival, staying about a month), Gat (Upper Rejang); down to Kapit (July 29); Kuching (Aug. 18); to Lundu (Sept. 4); exploring Mt Poi; Lundu (Oct. 7); Mt Gadin; Oct. 12 to Kuching by Govt launch; to Bidi Cave (17), staying 5 days; Mt Matang; Kuching.—*Br. N. Borneo:* Mt Kinabalu (*1931–33*), with a short interruption in 1932.—*W. Java. 1932.* Mainly at Buitenzorg for the arrangement of the collections; trip toTjibodas, G. Gedeh.—*NE. New Guinea. 1935.* Landing at Salamaua (Aug. 16); Finschhafen (31); collecting in Morobe District, and on the Sattelberg (Oct.–Dec.).—*1936.* At Wareo (Febr. 7), Yunzaing(4500 ft, Apr.–Sept.), about Ogeramnang (5000–5800 ft, Dec.).—*1937.* Ogeramnang, Bulung River vicinity, Sarawaket (Jan.–Febr.).—*1938 onwards.* Still collecting in NE. New Guinea.

COLLECTIONS. From *Mindanao,*[2] 1st set in *Herb. Manila:* 1200 *nos;* dupl. in *Herb. Field* (= *Nat. Hist.*) *Mus. Chicago:* 1150 (purch. 1909); *Berlin:* 780; *Herb. Bog.:* 371 (purch. 1909); *Herb.* DECAND. (*Geneva*): 605; *Herb.* DELESS. (*Geneva*): 270 (acq. 1911/12); *Herb. Berkeley* (Cal.): 199 from Mt Apo; GRAY *Herb.*

From *Luzon,* 1st set in *Herb. Manila:* 2805 *nos;* dupl. in *Herb. Berkeley* (Cal.).

In *U.S. Nat. Herb. Wash.:* 492 dupl. *Philippines;* also *Philippine* dupl. in *Herb. Univ. Michigan* (*Fungi*).

From *Br. N. Borneo 1915–17,*[3] 1st set in *Herb. Manila:* 1839 *nos;* dupl. in *Herb. Arn. Arbor.: nos* 9439–11277; *Kew* (acq. 1920/21).

From *Sarawak, NW. Borneo,*[4] 1st set in *Herb. N. Y. Bot. Gard.:* > 2500 *nos* (20001–22591); dupl. in *Herb. Manila:* 1016 specim.; *Herb. Sarawak; Herb. Kew* (purch. 1931); *Herb.* COPELAND: > 290 ferns; *Herb. Univ. Zürich:* 695 *nos* (pres. 1931).

From *Br. N. Borneo 1931–1933,*[5] study set in *Herb. Brit. Mus.;* dupl. in *Herb. Bog.: nos* 26000–31225; *Herb. Leyden:* 3128 *nos* (purch. 1933/35); *Herb. Berlin:* 5603 *nos* (purch. 1933–36); *Herb.*

Arn. Arbor.: 7196 *nos* (acq. 1932–35); *Herb. Berkeley* (Cal.): 4000 Angiosperms; GRAY *Herb.:* 544 *nos; Herb. Manila:* 427 orchids and 34 Pipers (purch. 1934); *U.S. Nat. Herb. Wash.:* 210 *nos; Herb. Univ. of Michigan; Herb. Sing.; Kew* (acq. 1933–35); *Herb.* DELESS. (*Geneva*): several thousands (acq. 1933–34, 1936–37); *Herb. N.Y. Bot. Gard.; Herb. Edinburgh:* 464 *nos* (mostly *Ericaceae*).

From *Java 1932*, in *Herb. Bog.;* dupl. in *Herb. Arn. Arbor.*; some at *Geneva.*

From *New Guinea*,[6] in *Herb. Berlin:* 6059 *nos* (purch. 1935–38); *Herb. Arn. Arbor.; Herb. Leyden:* 1000 *nos* (purch.); *Herb.* DELESS. (*Geneva*) (608); *Herb. Brit. Mus.; Herb. Brussels* (899), and certainly in many other herbaria. The *New Guinea* collection is numbered from 1 onwards and probably exceeds 10.000; much of the material is scrappy and in a bad state. Being evacuated by plane she was forced to leave behind all of her equipment and her assembled botanical collections; it is assumed that all this material has been lost or destroyed.

LITERATURE. (1) E. D. MERRILL: 'Botanical exploration of Borneo' (Journ. N.Y. Bot. Gard. 31, 1930, p. 185–191).

(2) E. D. MERRILL: 'New Philippine plants from collections of MARY STRONG CLEMENS' I (Philip. Journ. Sci. C. Bot. 3, 1908, p. 129–165).

J. C. ARTHUR & G. B. COMMINS: 'Philippine rusts' (Philip. Journ. Sci. 59, 1936, p. 437–449, 3 pl. and in *l.c.* 61, 1936, p. 463–488, 4 pl.).

(3) E. B. COPELAND: 'New species and a new genus of Borneo ferns chiefly from the Kinabalu collections of Mrs. CLEMENS and Mr. TOPPING' (Philip. Journ. Sci. C. Bot. 12, 1917, p. 45–65).

E. D. MERRILL: 'Contribution to our knowledge of the Flora of Borneo' (Journ. Str. Br. Roy. As. Soc. *no* 76, 1917, p. 75–117); in 'Alabastra Borneensia' (*l.c. no* 77, 1917, p. 189–247); in Amer. Journ. Bot. 5, 1918, p. 514–515.

O. AMES & CH. SCHWEINFURTH: 'The orchids of Mount Kinabalu, Br. N. Borneo' (Ill. and Stud. of the fam. of Orch. issued from the AMES Lab. North East Mass. Boston fasc. 6, 1920, xiv + 335 pp., pl. 80–101).

(4) Ferns by E. B. COPELAND in Brittonia 1, 1931, p. 71–78.

J. J. SMITH: 'Additions to our knowledge of the orchid flora of Borneo' (*l.c.* p. 105–111).

Boschia oblongifolia RIDL. *n. sp.* from Mt Bungal (in ?Sarawak) in Kew Bull. 1933, p. 488.

(5) C. CHRISTENSEN & R. E. HOLTTUM: 'The ferns of Mt Kinabalu' (Gard. Bull. Str. Settlem. 7, 1934, p. 191–324, pl. 51–62).

C. G. G. J. VAN STEENIS: 'Some remarks on the Kinabalu collection of Chaplain and Mrs. CLEMENS, 1931–32' (Journ. Bot. 1934, p. 1–12).

Loranthaceae by B. H. DANSER in Rec. Trav. Bot. néerl. 31, 1934, p. 229–235, 751–758.

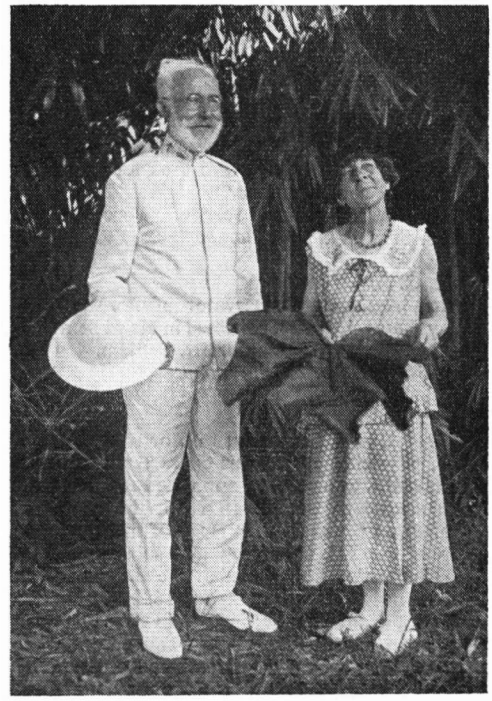
E. B. COPELAND: 'Additional ferns of Kinabalu' (Philip. Journ. Sci. 56, 1935, p. 471–481, pl. 1–10).

C. E. CARR: 'Two collections of Orchids from Br. N. Borneo' pt I (coll. CARR & CLEMENS) (Gard. Bull. Str. Settlem. 8, 1935, p. 165–240).

Mosses by E. B. BARTRAM in Philip. Journ. Sci. 61, 1936, p. 235–252.

B. H. DANSER: 'New CLEMENS-numbers from Mt. Kinabalu (Loranthaceae), Borneo' (Blumea 2, 1936, p. 39–42; *l.c.* 3, 1938, p. 36–37).

E. D. MERRILL: 'Two new opposite-leaved species of Ilex from Borneo' (Journ. Arn. Arbor. 20, 1939, p. 222–224).



J. & M. S. CLEMENS

W. R. PHILIPSON: 'New Bornean Myrsinaceae' (Journ. Bot. 77, 1939, p. 101–106); 'New Bornean Araliaceae' (*l.c.* 78, 1940, p. 116–119, 2 fig.).

Icacinaceae by H. SLEUMER in Notizbl. Berl. Dahl. 15, 1940, p. 228–257.

H. N. DIXON: 'New and rare Bornean mosses' (Journ. Bot. 79, 1941, p. 57–62, 72–77).

Ericaceae by H. SLEUMER in ENGL. Bot. Jahrb. 71, 1941, p. 138–168.

(6) *Palmae* by M. BURRET in Notizbl. Berl. Dahl. 13, 1936, p. 317–332 (coll. CARR & CLEMENS), and in *l.c.* 15, 1940, p. 7–12.

Several families by various authors in ENGL. Bot. Jahrb. from vol. 69, 1938, onwards.

Loranthaceae by B. H. DANSER in Blumea 3, 1938, p. 37–59.

Ferns by A. H. G. ALSTON in Journ. Bot. 78, 1940, p. 225–229.

Icacinaceae by H. SLEUMER in Notizbl. Berl. Dahl. 15, 1940, p. 228–257.

G. B. CUMMINS: 'Uredinales of New Guinea' II–

IV (Mycologia 33, 1941, p. 64–68, 5 fig.; *l.c.* p. 143–154, 7 fig.; *l.c.* p. 380–389, 14 fig.).

Many species dealt with in Journ. Arn. Arbor. from 22, 1941, onwards.

E. D. MERRILL & L. M. PERRY: 'Notes on some Papuan collections of MARY STRONG CLEMENS' (Journ. Arn. Arbor. 29, 1948, p. 152–168).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; Kew Bull. 1936, p. 287–288; Journ. N.Y. Bot. Gard. 37, 1936, p. 117–118; Chron. Bot. 2, 1936, p. 89–90 + portr., p. 264.

Clement, W. R. F.

Officer in the Sarawak Government service, stationed at Lawas in 1910, who took an interest in botany and natural history.

COLLECTIONS. *Herb. Sarawak:* 6 orchids from Lawas, Sarawak, *NW. Borneo* (pres. *1910*).

Clerk, C. A.

Extra Assistant Conservator of Forests, Fed. Malay States, 1910–20, collected in Negri Sembilan (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5). In *Herb. ?Kuala Lump.*

Cleyer, André

(? , Cassel, Germany; 1697 or 1698, Batavia, Java), physician of dubious character, who came to the D.E.I. as a soldier; appointed Rector of the Latin school at Batavia in 1666 (the next year Curator), in the same year Head of the Medicinal Shop of the E.I. Company and subsequently of the Chemist's Shop. Chief of the E.I. Comp. at Decima near Nagasaki (Japan) 1682–83, making much out of illicit trade; in 1685 in the same position again, organizing a lively smuggling; when detected by the Japanese government in 1686, his Japanese accomplices were decapitated and he himself was banished for lifetime. During several years he was a member of the Superior Court of Law at Batavia, in which place he layed out botanical gardens at Molenvliet and near Angké. At his own expense he employed a botanical collector at the Cape of Good Hope and had drawings of plants made (preserved at Cape Town). He was a correspondent of RUMPHIUS,[3] to whom he sent plants, and whom he supplied with drawings for the 'Herbarium Amboinense'. In Japan he bought a collection of 739 drawings of Japanese plants (later at Berlin *via* J. BREYN), to which VON SIEBOLD added the scientific names in 1856. The 'Specimen Medicinae Sinicae', edited by him in 1682, is written by MICHAËL BOYM S.J., a missionary in China. According to LASÈGUE[1] he has described 300 Javan plants; this may refer to a book published by his gardener (in his employ from 1678–87), GEORG MEISTER,[2] containing notes on *c.* 60 Javan plants, a list of seeds brought from Ceylon and Java to Holland, besides notes on Japanese plants.

COLLECTIONS. He sent plants, *e.g.* of clove and cinnamon from the *Moluccas* (probably from specimens cultivated in his garden) to J. BREYN *about 1688*. The latter forwarded them to PETIVER; now in *Herb. Brit. Mus.* with *Herb.* SLOANE '*Botanicum Hortense & medicinale indicum*'. The specimens are mostly referred to by RAY. Specimens of BREYN's Herbarium are preserved in the *Brit. Mus.*, at *Oxford*, and with *Herb.* BURMAN in *Herb.* DELESS. (*Geneva*) and maybe in *Leyden;* these herbaria may contain other CLEYER plants.

LITERATURE. (1) Mus. Bot. DELESS., 1845, p. 434.

(2) G. MEISTER: 'Der orientalisch-Indianische Kunst- und Lust-Gärtner, das ist: eine aufrichtige Beschreibung derer meisten Indianischen, als auf Java Major, Malacca und Jappon, wachsenden Gewürtz-, Frucht- und Blumen-Bäume *etc.*' (Dresden 1692).

(3) *cf.* letters in 'India Literata' p. 424–427, 429–431, and also p. 432–433 (Appendix to M. B. VALENTINI, Historia simplicium reformata, Francofurti a/M 1716).

BIOGRAPHICAL DATA. HALLER, Bibl. Bot., 1, 1772, p, 585–587; SPRENGEL, Hist. Rei Herbariae, 2, 1808, p. 81–82; PRITZEL, Thes. Lit. Bot., 1872; Tijdschr. Bat. Gen. K. & W. 46, 1903, p. 423–468; Ind. Gids 32^2, 1910, p. 1136–1148; Geneesk. Tijdschr. N.I. 51, 1911, p. 159–171, 215–227; BACKER, Verkl. Woordenb., 1936, *cf.* also *sub Addenda;* H. A. C. BOELMAN, Bijdrage t.d. Gesch. der geneeskruidcultuur in Ned. O.I., Leiden 1936, p. 34–41; Bijdr. Gesch. Geneesk. 21, 1941, p. 148.

Clotten, F. E.

sent dried material of coffee and capok from the *Bismarck Archipelago* to the *Herb. Senckenb. Ges.* (= *University*) *Frankfurt* (pres. *1905/06*).

Clumper, C.

of the Capok Estate Bandarredjo, Parakan (Kedoe Res., *Centr. Java*), sent a fruit of *Gossampinus valetonii* (HOCHR.) BAKH. to *Herb. Bog.* (Sept. *1931*).

Cocq d'Armandville, Jean Henri Idisbald le

(1873, Maastricht, L., Holland; x), in the service of the D.E. Indian Army, 1893–1926, pensioned off with the rank of Major-General. He accompanied some expeditions; at the end of May 1911 he was appointed Detachment Commander of the Dutch South New Guinea Exploration.

Some plants were named after him.

ITINERARY. *1908. Centr. Celebes:* Bada Mts, W of Lake Posso.—*1911–12. SW. New Guinea.*[1] A tour in the mountainous region, comprising the sources of various affluents of the Eilanden River, *e.g.* the A River (July–Aug. 1911);[2] reconnaissance of the Vriendschaps River (starting Nov. 6), one of the boats springing a leak; ascending the river for a second time (Nov. 23); trip inland to the Joh. Keyts Mts (Dec. 7–Jan. 5, *1912*),[3] reaching the highest summit on Dec. 16; in Jan. the detachment was transferred to the Noordwest River; exploration between Noordwest River and Bloemen River (= Oetakwa) (Febr. 23–Apr. 4).[4]

COLLECTIONS. *Herb. Bog.:* only a few *Celebes nos;* 251 *New Guinea* plants.

The botanical results of the New Guinea expedition were published in Nova Guinea vol. 12.

LITERATURE. (1) *cf.* Versl. Milit. Expl. Ned.

N.G. 1907–15 (Weltevreden 1920), p. 42–44 and 349; Meded. Encyclop. Bur. fasc. 11.
(2) *cf.* Tijdschr. K.N.A.G. 1912, p. 76–80.
(3) *cf. l.c.* p. 353 and 529–533.
(4) *cf. l.c.* p. 729.
BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936 (*sub* d'armandvillei); Persoonlijkheden in Nederland, 1938, + portr.

Coelingh, Wilhelmina Maria
(1903, Amsterdam, Holland; x), a plant physiologist who got her education and took her degree (1929) at Utrecht University; Assistant Physiologist at the Java Sugar Experiment Station, Pasoeroean, 1929–32; subsequently she married Dr M. HILLE RIS LAMBERS, Selectionist in the employ of the Malang Experiment Station (E. Java).
COLLECTIONS. *Herb. Pasoer.:* 26 *nos* from the N. slope of G. Kawi, *E. Java*, in *1932*.

Coenen, Jacob Antoon Willem
(1874, Nijmegen, Gld, Holland; 1919, Padang, Sumatra), came to the D.E.I. as a commercial employee in 1897; since 1907 in the employ of the Civil Service as Administrator, stationed in New Guinea, respectively at Merauke 1907–1909, Manokwari 1909–10, and in 1912 at Merauke again.[1]
Rhododendron coenenii J.J.S. was named after him.
COLLECTING LOCALITIES. *NW. New Guinea:* environs of Manokwari.—*SW. New Guinea:* Noordwest River (*1912*).
COLLECTIONS. *Herb. Bog.:* > 41 *nos* (*cf.* also *sub* ANONYMOUS).[2]
LITERATURE. (1) Author of a 'Rapport betreffende Britsch Nieuw-Guinea (Papua)' (Weltevreden 1918, Meded. Encyclop. Bur. fasc. 16, w. map and 29 pl.).
(2) Published in Nova Guinea vol. 12.
Ericaceae by H. SLEUMER in ENGL. Bot. Jahrb. 72, 1942, p. 207–269.
BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Coert, Johan Hendrik
(1887, Bloemendaal near Haarlem, Holland; Oct. 26, 1945, ex-prisoner camp at Bandoeng, Java), took his degree at Zürich University (Switzerland) on a thesis 'Beziehungen zwischen Lichtreaktion und Assimilation anorganischer Substanzen durch Pflanzen'. In Dutch military service (till 1916); Group-Adviser in the employ of the Java Sugar Experiment Station (Pasoeroean), stationed at Kediri 1917–23, Ngandjoek–Madioen (Kediri) 1923–29, Sidhoardjo 1929–30; Agricultural Adviser of the firm of Tiedeman & van Kerchem since 1930, residing at Soerabaja.
He was a very active vice-president of the D.E.I. Nat. History Society.
COLLECTING LOCALITIES. *E. Java. 1925.* S of Ngawi, s.f. Soedhono.—*1926.* Ngawi (Madioen), Kediri, Saradan–Ngandjoek.—*1927.* s.f. Poerwodadi (Madioen), Kediri (with SCHRÖTER), Rawah Bening (with SCHRÖTER), G. Keloed and Sarangan (with SCHRÖTER), G. Andjasmoro (Ngantang) (with SCHRÖTER); Modjokerto; *W. Java:* G. Papandajan, G. Patoeha, G. Tiloe, Bandoeng.—*1928. W. Java:* G. Tampomas.—*E. Java. 1929.* Kediri, Saradan; *Madoera* with RANT (Sept.).—*1930. E. Java:* Trawas (near Soerabaja).—*1931.* Kediri, Rawah Bening.[1]—G. Lawoe (Oct.–Nov. *1932*, Nov.



COERT

–Dec. *1934* and Apr. *1935*); s.f. Kenongo (May 1935).—*P. Bawean* (with BUWALDA, Nov. 20–30, *1937;* and July 25–28, *1938*).[2]—*E. Madoera:* dunes (Apr. 12 and May 9, *1941*). See also *Addenda*.
COLLECTIONS. Large *private Herbarium*, still intact. Some dupl. in *Herb. Pasoer.:* 176 *nos* + 39 together with Prof. Dr C. SCHRÖTER (see there) (coll. 1927); and in *Herb. Bog.* (*e.g.* 50 *nos* from G. Lawoe in 1936); some dupl. and his private herbarium (pres. 1949), in *Herb. Leyden*.
LITERATURE. (1) J. H. COERT: 'Excursies in Oost-Java' I–II (Trop. Nat. 22, 1933, p. 62–68, 8 fig., and *l.c.* 23, 1934, p. 6–14, 26–31, 17 fig.).
(2) J. H. COERT: 'Verslag van de excursie naar het eiland Bawean' (Hand. 8e N.I. Nat. Wet. Congr. 1939, p. 525–533, with App. on fossils by J. OOSTINGH, *l.c.* p. 534–535).

Colclough
collected fruits or seed of *Macrozanonia* in the *Aroe Islands;* at *Kew* (*cf.* HUTCHINSON in Ann. Bot. n.s. 6, 1942, p. 96).

Colfs, Petrus Fredericus Albertus

(1853, Antwerp, Belgium; 1882, Tebingtinggi, S. Sumatra), came to Batavia in 1874 as a soldier; in 1875 he quitted the service, and was appointed draughtsman in the employ of the Department of Harbour-works in 1878. In 1879 he met the explorer DE LA SAVINIERRE (see there) and subsequently decided to make a collecting trip (for forest products *etc.*) to Bantam, at his own risk; Prinseneiland was visited too; the trip was not a financial success. The collected insects were bought by Governor General VAN LANSBERGE, entomologist himself, who subsequently sent COLFS to Soembawa. The latter was the first European who penetrated into the interior of Flores; he drew a sketch map, which, however, is not very reliable. After the termination of his trips to the Lesser Sunda Islands, he went to S. Sumatra, though already ailing, and soon afterwards died.

A. G. VORDERMAN got possession of his left documents, from which he composed a journal.[1]

ITINERARY.[1] *Lesser Sunda Islands. Soembawa* (incl. Bima and Dompoe) (Oct. 5, *1879*–Febr. 5, *1880*): sailing from Makassar (*SW. Celebes*) (Sept. 27, 1879); Bima (Oct. 5–11); Laboehan (harbour of Soembawa) (14–15); Soembawa (16–20); *W. coast:* Ré (21–23); Oetang (24–26); Bouèr (27–29); Alas (Oct. 30–Nov. 4); back to Laboehan by proa (5); Soembawa (6–8); Pélat (9); Batoe-oelang (10–13); Soembawa (14–15). From Soembawa making an *extensive journey*, returning *via* Sanggar and Dompoe to Bima: setting out from Soembawa (Nov. 16); Lopok (16); Plampang (17–19); Ampang (20–21); Mata (22–25); Kowanko (26–27); Gempo (Nov. 28–Dec. 2); Bango (3–5); Kormet (in Sanggar, 6–8); Pioeng (9); Teloko (10); Dompoe (11–15); Ranggo (16–20) (*southwards*); Tjèmpi (21); Dompoe (22–23); Sila (24–25); Mangé (26–27); O'o (28–31); Bima (Jan. 1–5, *1880*); Bima–Soba–Said–G. Soromandi (6–9); back to Bima (11). *2nd trip to the south coast:* setting out from Bima to Bella (Jan. 12); Nata (13); Keboro (14–15); Sambori (16–18); Kemina (Kelobon) (19); Keroemboe (24); Prado (Jan. 28–Febr. 1); Tengah–Bima (2–3); Bima (4–5).—*Flores* (Febr. 7–May 12, 1880). *W. Flores:* Réo (Febr. 7–10); Rouï (11–13); Réo (14–17); Koï (18–19); Tjiba (20–22); Dégai (23–24); Routé (25–26); Raho (27–29); Lalak (March 1–4); Li (5–6); Todo (7–9); Nangaramo (10); Nanga-lélé (12); Badjo (12–14); Kampong (15–19); Boleh (20–24), Kantor (25); presumably fallen ill and from there transported to Réo; Apr. 11 from Réo to Pot(t)a (staying 11–15); by sea to *E. Flores:* Maoemere (eastwards to Geliting and westwards to Bèbèng, Apr. 19–29); Nitta (Apr. 30–May 1); Maoemere (2–4); by sea to Larantoeka (staying 8–12); by sea to *P. Klikoer* (= *P. Lomblen*) (May 15–17); *Flores:* Ota Waloe (27–29); Larantoeka (May 30–June 2); *Timor:* Koepang (June 4–13), trip to Amarasie, *etc.*; *Flores:* Larantoeka (June 18–beginning of July); *P. Adonare* (= *Adonara*) (end of June); *Timor:* Koepang (July 9–12); *Flores:* Larantoeka (13); *Alor* (July 15–Aug. 16), staying at Kokar part of the time (July 24–30); from Aug. 17–Sept. 8 the journal was not kept; Sept. 9 he was on *P. Pandai* (= *P. Pantar*), W of Alor; *P. Alor* (from Sept. 10), at Blagar (11–20) and Terong (21), *etc.*; *Flores:* Larantoeka (22–29); *Timor: via* Koepang to Anfouan (Sept. 30); Atapoepoe (Oct. 3–29); Koepang (Oct. 30–beginning of Nov.); Pariti (Nov.); Koepang (till about Dec. 2); *Soembawa* (he did *not* visit P. Rot(t)i): Waingapoe (Dec. 12–18); Monboro (Lauwéra and Ketervé, Dec. 18, 1880–Febr. 13, *1881*); Waingapoe (Febr. 13–17), departing the 18th; *S. Sumatra* (*1881–82*) (he collected birds near Lahat,[2] but probably no plants).

COLLECTIONS. His collections of the *Lesser Sunda Islands* were received at Buitenzorg in 1881 and were shipped off to Leyden, where they were to be identified by BOERLAGE.

Herb. *Leyden:* > 300 *nos*, including from *Soembawa* (Dompoe and Bima) 228, and material in alcohol; some dupl. in *Herb. Bog.* (numbered in the H.B. series) and in *Herb. Berl.*

VORDERMAN[1] gives a list of vernacular names (from Soembawa and Bima), which, without the material, is of no importance.

LITERATURE. (1) 'Het journaal van ALBERT COLFS' (Batavia 1888).

(2) *cf.* VORDERMAN in Nat. Tijdschr. N.I. 41, 1882, p. 125.

BIOGRAPHICAL DATA. A. G. VORDERMAN, Het journaal van ALBERT COLFS, Batavia 1888, p. 1–3.

Colijn, *cf.* COLYN.

Collard

Assistant Resident at Magetan (Madioen) in *East Java*, collected a flowering bamboo on behalf of the Buitenzorg Botanic Gardens in *1895*. Dried material in *Herb. Bog.*

Collett, Colonel Sir Henry

(1836–1902), entered the Bengal Army when he was nineteen, taking part in several campaigns, mostly in India; in 1867–68 he accompanied the Abyssinian expedition. His first interest in botany was in 1878 during the Kuram Valley expedition, but it was not before 1885 that his attention seriously turned to botanical work; he collected plants in Burma in 1887–88 when in command of a brigade there. He retired in 1893, the year of his visit to Java,[1] eventually settling in London.

About 1895 his plan for a 'Flora Simlensis' began to ripen, and resulted in his devoting his years of retirement to botanical studies.[2]

COLLECTING LOCALITIES.[1] *1893. W. Java:* G. Tangkoeban Prahoe,[3] and maybe in several other localities. Itinerary see *sub Addenda.*

COLLECTIONS. *Herb. Kew:* plants from various countries, Burma, *Java*, *etc.*, 746 *nos.*

LITERATURE. (1) Sir H. COLLETT: 'Six weeks in Java' (BLACKWOOD Magaz. Edinb. 1894[2], p. 78–97.

(2) Author of 'Flora Simlensis' (Calcutta & Simla 1902; 2nd ed. 1921).

(3) *cf.* KOORDERS, Exk. Flora, 3, 1912, p. 17.

BIOGRAPHICAL DATA. 'Flora Simlensis' *l.c.* p. xv–xxii; BUCKLAND, Dict. Ind. biogr., 1906.

Collignon, Jean Nicolas

(1762, Metz, France; 1788, Vanikoro, Santa Cruz Islands), gardener of the 'Jardin du Roi', accompanied the expedition of '*La Boussole*' and '*L'Astrolabe*' under command of J. F. DE G. LA PÉROUSE, *1785–88*. He sailed on the 'Boussole'.

ITINERARY *etc.* see *sub* MARTINIÈRE.

BIOGRAPHICAL DATA. A. GUILLAUMIN: 'COLLIGNON, jardinier du voyage de LA PÉROUSE' (Bull. Mus. Nation. Hist. Nat. 2e sér., vol. 20, 1948, p. 96–100; the dates mentioned for the stay in Luzon are wrong).

Collingwood, Cuthbert

(1826, Christchurch, Hampshire, England; 1908, Lewisham, England), studied medicine in England and on the Continent. In 1858 appointed Lecturer in Botany at the Roy. Infirmary School, Liverpool, subsequently physician in that city. In 1866–67 he made a voyage,[1] mainly in the China Sea, with the special object of the study of the sea and reef fauna. He made some journeys and accordingly gave short descriptions of the vegetation, mentioning plant names too, in his cited book. In 1901 he moved to Paris where he lived till late in 1907, when he returned to London.

ITINERARY. *Voyage in H.M. Vessels 'Rifleman' and 'Serpent', 1866–67.* In the Malaysian territory he visited: *Br. N. Borneo* and the islands *Labuan* (Aug. 10–Sept. 1866), *P. Papan*, and *P. Enoe; Sarawak* (from Sept. 21), *P. Marundum* (Oct. 7), Serambo; *Malay Peninsula:* Malacca, *Singapore*, trip to Tandjong Putri (S. Johore); *Philippines: Luzon*, Manila (end of Dec.).

COLLECTIONS. *Herb. Kew:* plants from Pratas Isl., SW of Formosa (acq. 1867). From his book it could not be derived whether botanical collections were made.

LITERATURE. (1) C. COLLINGWOOD: 'Rambles of a naturalist on the shores and waters of the China Sea; being observations in natural history, during a voyage to China, Formosa, Borneo, Singapore, *etc.* in 1866 and 1867' (London 1867).

BIOGRAPHICAL DATA. Who's who; Proc. Linn. Soc. 1908/09, p. 35; Transact. Liverpool Bot. Soc. 1, 1909, p. 65.

Colomb, R. E.

joined the Forest Department *Malay Peninsula* as a Forest Ranger in 1913; retired as an Extra Ass. Conservator of Forests in 1933.

COLLECTIONS. *Herb. Kuala Lump.*, numbered in the C. F. (see *sub* Conservator of Forests) series; collected all over the Peninsula.

Columna, V., *cf. sub* Forestry Bureau, Manila.

Colijn, Dr A. H.

(1894, Ambarawa, Java; 1945, Muntok, Banka), since 1921 in the employ of the B.P.M. (Batavian Oil Co.). Leader of an expedition to the Carstensz Mts in *Dutch New Guinea*, performed at the end of *1936* (further data *cf. sub* WISSEL).

He is commemorated in the moss *Ditrichum colijnii* DIXON.

Comision de la Flora Forestal Filipinas, *cf. sub* VIDAL.

Commerson, Philibert

(1727, Châtillon-les Dombes, Ain, France; 1773, Mauritius), studied medicine at Montpellier, where he took his Dr's degree, and for the subsequent 4 years devoted himself to the study of natural history and botany, and began to collect a herbarium. In 1756 he established a botanical garden at Châtillon. In 1764 he went to Paris and soon after was selected as Naturalist to accompany the expedition of BOUGAINVILLE (1766–69). He was assisted by one of the sailors who halfway the voyage was detected to be a woman, JEANNE BARRÉ (or BARET), his former housekeeper. On the voyage home he stayed behind in Mauritius, visited Madagascar in 1770, and Réunion (Bourbon) in 1771, returning in the latter year to Mauritius, where he stayed till his death. Photo *cf. sub. Addenda.*

The genus *Commersonia* FORST. and other plant species were named in his honour.

ITINERARY. *Voyage in 'La Boudeuse' and 'L'Etoile', 1766–69.*[1] Nov. 15, 1766, sailing from Nantes to La Plata, Montevideo, the Malouines, Rio de Janeiro (meeting l'Étoile), Straits of Magellan, Tahiti, the Navigators, New Hebrides, *etc.*, the Louisiades (E of New Guinea); *Bismarck Archipelago:* along the E. coast of *New Ireland*, touching at Port Praslin (July 7–23, *1768*); *Moluccas: Boeroe* (Kajeli, Sept. 2–6); *via* Boeton Strait (only just ashore on *Boeton* on Sept. 15) and Saleijer Strait to *Java:* Batavia (Sept. 28–Oct. 15); sailing back *via* Isle de France, where COMMERSON stayed behind, while the expedition was back in France on March 16, 1769.

COLLECTIONS. 30.000 specimens of plants which he destined for various institutions. After his death in *Herb. Paris*, but not numbered and arranged as he had intended. From there, unnumbered duplicates were distributed to various herbaria; ± 3000 *nos* in *Herb.* DELESS.; also in Herb. *Leyden,*[2] *Montpellier, Herb. Brit. Mus.* (acq. with *Herb.* BANKS, *Herb.* BROWN, and lichens with *Herb.* LIMMINGHE); in *Berl.* (also with *Herb.* KNUTH); in *Stockholm* with *Herb.* BERGIUS; *Herb. Linn. Soc. Lond.:* 1500 specimens.

A large number of his plants were described, all scattered in literature. Occasionally plants collected by SONNERAT in the Philippines were credited to COMMERSON who never visited the islands.[3] Java plants credited to SONNERAT, were probably collected by COMMERSON.

He sent living plants from Mauritius to the 'Jardin des Plantes', *Paris.*

LITERATURE. (1) MSS at Paris and Berlin.

Some unpublished letters were edited by O. TEISSIER in Bull. Soc. Sci. arts et belles-lettres Toulon, 1859, p. 265–275.

L. A. DE BOUGAINVILLE: 'Voyage autour du monde par la frégate du Roi La Boudeuse et la flûte l'Étoile en 1766, 1767, 1768 et 1769' (Paris 1771); several translations were issued, a Dutch (Dordrecht 1772), an English (London 1772) and a German one (Leipzig 1772).

The 'Supplement au voyage de BOUGAINVILLE' (Neuchâtel 1773) has no relation with the voyage dealt with above, nor the publication of D. DIDEROT with the same title (Paris 1935; based on a manuscript at Leningrad).

(2) *cf.* A. DECANDOLLE, Phytographie, 1880, p. 373 and 404.

(3) *cf.* C. B. ROBINSON in Philip. Journ. Sci. C. Bot. 4, 1909, p. 683.

BIOGRAPHICAL DATA. BAILLON, Dict. de Botanique 2, 1886; Gard. Chron. 3rd ser., 12, 1892, p. 89–90, 125–126, 207–208; URBAN, Symb. Antill., 3, 1902–03, p. 32–33; F. MOEWES: 'COMMERSON der Naturforscher der Expedition Bougainvilles' (Naturwiss. Wochenschr. 2, 1903, p. 340–342, 349–355, 389–392, 400–403); Ann. Soc. Bot. Lyon 31, 1906, p. 35–36; S. P. OLIVER: 'The life of PHILIBERT COMMERSON, D.M., naturaliste du roi: an old-world story of French travel and science in the days of Linnaeus' (ed. by G. F. SCOTT ELLIOT 1909, w. ill. & portr.); BACKER, Verkl. Woordenb., 1936.

Connell, E.

orchid grower[1] at Alas Besoeki Estate, Loemadjang, collected many orchids in *E. Java*, principally at Loemadjang, Kraksaän and Prigi, *about 1905–07.*

COLLECTIONS. *Herb.* and *Hort. Bog.;* many orchids described by J. J. SMITH. He forwarded material to England too (*cf.* Bot. Mag. *t.* 8229).

LITERATURE. (1) Author of: 'Orchid growing and collecting in Java' (Orch. Review 14, 1906, p. 257–261, 294–296).

Conover, J. T.

did several days collecting in the *Philippine Islands* during World War II. Further data not known to the present author.

Conrad, *cf. sub* Forest Research Institute, Buitenzorg.

Conservator of Forests (C.F.) series

Numerous employees of the Forest Department of the *Malay Peninsula* have collected in this series, on behalf of the Forest Institute at Kepong (Selangor). The more important collectors are: ABU*, AHMAD,* ALI,* D. B. ARNOT,* ARSHAD,* J. E. ASKEY,* A. ASSU, AWANG LELA,* A. AZIZ,* V. L. BAIN,* B. H. F. BARNARD,* BAYONG,* BIDIN,* C. L. CARRIER,* R. E. COLOMB,* G. E. S. CUBITT,* VAN DELDEN,* H. C. DOLMAN,* C. L. DURANT,* A. F. DUSEH,* C. O. FLEMMICH,* E. C. FOENANDER,* C. FOSTON,* ABD. GHANI,* ABD. HADI,* HARUN,* HASHIM,* D. H. HODGSON,* HUKUM,* HUSS(A)IN,* IDRIS,* JA'AMAT,* JACOB,* ABD. KADIR,* KANDAH,* KASSIM BIN AWANG, W. E. KINSEY,* LAMBAK,* LUDIN,* MAHMOOD or MAHMUD*, MAJID,* MAT SANI,* J. P. MEAD*, MEH,* A. S. MITCHELL*, NGADIMAN*, NONG,* NOORDIN, G. M. O'HARA,* V. O'HARA,* OMAR,* OTHMAN,* PA WANCHE, PUJEE, ABD. RAHMAN,* ABD. RANI,* SAHAT,* SALLEH,* A. E. SANGER DAVIES,* SOW,* C. A. SPELDEWINDE,* T. A. STRONG,* E. A. STROUTS,* E. J. STRUGNELL,* SUMAN, J. M. SWEKLIE, C. F. SYMINGTON,* TACHUN,* TAHA BIN BADOR,* M. TAHIR, ABD. TALIB,* USOP or USOPE, A. E. WELLS,* R. H. WHITTY,* H. W. WOOLLEY,* J. WYATT-SMITH,* YAKIN,* YUNUS,* YUSOF*, YUSOP, ZAINAL*, ZIN.*

COLLECTIONS. In Herb. Forest Research Institute Kepong, usually referred to as *Herb. Kuala Lumpur.*

The first number of the series was collected on Sept. 5, *1908*, and the series started in earnest early in *1918* at which time the Conservator's number had reached 1250. Prior to that there had been numerous small collections of which the Conservator's was one. It was then decided to simplify the use of numbers, and make the collector's number and the Conservator's number the same. All numbers that were received by the Conservator thereafter and which had a collector's field number below 1251 were changed to the Conservator's number by prefixing 0; thus field *no* 102 became C.F. 0102. The C.F. series has now (in 1947) reached the number 65.000, but there is a very large gap from 50.000 to 64.000, owing to books, which had been issued to District Forest Offices, becoming lost as a result of the Japanese occupation.

Borneo collections made by forest officers in Sarawak and Brunei, and even dupl. received from Br. N. Borneo, are numbered in the series too.

Several dupl. in *Herb. Sing., Edinburgh,* and certainly elsewhere.

Contreras, *cf. sub* Forestry Bureau, Manila.

Convocar, Pascual, *cf. sub* Bureau of Science and Philippine National Herbarium, Manila.

Cook, James

(1728, Marton, Yorkshire, England; Febr. 14, 1779, murdered at Hawaii), volunteered for the Navy in 1755 and was afterwards appointed Marine Surveyor to the coast of Newfoundland Labrador. In 1768 placed in command of the 'Endeavour' and successively making 3 famous voyages round the world (see below).

The genus *Cookia* SONN. was named in his honour.

ITINERARY.[1] *In the 'Endeavour', 1768–71.*[2] *cf.* BANKS (detailed itiner. *etc.*), SOLANDER, and S. PARKINSON.—*In the 'Resolution' and 'Adventure', 1772–75.*[3] Accompanied by J. R. and J. G. A. FORSTER, and A. SPARRMAN; not operating in the Malaysian territory.—*In the 'Resolution' and 'Discovery', 1776–80.*[4] *cf. sub* D. NELSON (itiner. *etc.*) and W. ANDERSON. Only *after* COOK's death, under the command of J. KING in *Malaysian* territory.

COLLECTIONS. *Herb. Brit. Mus.: e.g. Vernonia cinerea* (L.) LESS. *var. parviflora* (BL.) DC. *s.n.* from *Java.*[5] This plant must have been collected towards the end of *1770.*

Many MSS and drawings relating to his voyages in Libr. Brit. Mus. and in Roy. Soc. London.[6]

(*) Of the personal names provided with an asterisk, more details may be looked up *in situ* in this cyclopaedia.

LITERATURE. (1) 'The three famous voyages of Capt. JAMES COOK round the world. Narrating his discoveries *etc.* with the account of his murder at Hawaii, and the subsequent voyage of Capt. KING *etc.*' (London, no date, 1 vol., with numerous ill., portr., and biogr.).

cf. also I. LEE: 'Early explorers in Australia' (London 1925).

(2) *cf.* J. HAWKESWORTH: 'Account of the voyages for making discoveries in the Southern Hemisphere, *etc.*' (1773). *cf.* also literature *sub* BANKS.

W. J. L. WHARTON: 'Capt. COOK's Journal during his first voyage round the world made in H.M. Bark Endeavour 1768–1771' (London 1893).

(3) J. COOK: 'A voyage towards the South Pole and round the world. Performed in His Majesty's ships the Resolution and Adventure in the years 1772–1775, *etc.*' (London 1777, 2 vols).

'Reizen rondom de waereld' (Transl. into Dutch by J. D. PASTEUR, 1795–1800, 6 vols; voyage 1772–75).

(4) J. COOK: 'A voyage to the Pacific Ocean. Undertaken by the command of His Majesty, for making discoveries in the Northern Hemisphere *etc.* in his Majesty's ships the Resolution and Discovery in the years 1776–1780' (London 1784, 3 vols + atlas; 3rd vol. by Capt. JAMES KING). Only the French transl. was available in Java.

(5) *cf.* KOSTER in Blumea 1, 1935, p. 413.

(6) *cf.* 'The history of the collections of the Brit. Mus.' 1, 1904, p. 33; and Journ. Bot. 61, 1923, p. 260–261.

BIOGRAPHICAL DATA. *cf. sub* Liter. 1, COOK's Voyages, p. xii–xx; A. KIPPIS: 'The life of Captain JAMES COOK' (1788) (*non vidi*); Biogr. Index BRITTEN & BOULGER in Journ. Bot. 26, 1888, p. 218 and in 2nd ed. by Rendle, 1931; *cf. sub* Liter. 2, WHARTON, COOK's Journal, 1893, p. xvii–li + portr.; WITTROCK, Icon. Bot. Berg., 1903, p. 90; J. D. MILNER, Catalogue portraits at Kew, 1906, p. 29; portr. in I. LEE, Early explorers in Australia, 1925, opposite p. 26.

Cool, Hugo

(† before 1915), Mining Engineer in Government employ. In 1909 exploring in SW. Celebes.

COLLECTIONS. Abundant material of a white *Rhododendron aff. schadenbergii* WARB., collected on the E. side of the Latimodjong Mts (*SW. Celebes*), just below the watershed between the summits Potok Sia and Boentoe Sikollong and on the road from Boni (Doeri) to Bolla, at 2200 m alt.; in *Herb. Bog.* (see letter dated June 19, 1909, Ag. 13481).

Coolidge, Harold Jefferson

(1904, Boston, Mass., U.S.A.; x), zoologist, educated at Arizona, and Harvard (Cambridge), was attached to several expeditions, *viz* to Africa (1926–27), Indo-China (1928–29), and as Leader to the Asiatic Primate Expedition (1937). During the latter expedition plants were collected by J. A. GRISWOLD (see there); COOLIDGE did *not* climb Mt Kinabalu.

COLLECTIONS. *Herb. Arn. Arbor.: Borneo* and Siam plants collected by COOLIDGE & GRISWOLD (pres. 1937–38) (*cf.* Journ. Arn. Arbor. 19, 1938, p. 452). The *Borneo* plants were collected by GRISWOLD only.

BIOGRAPHICAL DATA. Amer. Men of Sci. 1938.

Coomans de Ruiter, Louis

(1898, Makassar, Celebes; x), was educated in Holland and came back to the D.E.I. towards the end of 1921, in the employ of the Civil Service; before the war Assistant Resident. He was stationed in Palembang (S. Sumatra) 1926–28, in the Western Division of Borneo 1928–34; after expiry of his study leave in Europe, in Palembang again, Dec. 1936–1938; at Manado (N. Celebes) 1938–41, and since Febr. 1941–1942 at Makassar (SW. Celebes). During his European leave he passed the examination for Indian economy. In 1949 working at the Nat. Hist. Mus., Leyden.

Author of several papers relating to his stay in Borneo.[1]

COLLECTING LOCALITIES. *W. Borneo:* at Mandor (*1931*); G. Raja region (Jan. *1933*); G. Poteng and G. Beor (Nov. 1933); G. Pasi (Dec. 10, 1933); *etc.*

COLLECTIONS. *Herb. Bog.:* mainly *Rafflesiaceae, Orchidaceae* and *Nepenthaceae.*

Living orchids to *Hort. Bog. Cf.* also *sub* K. KUBOTA.

LITERATURE. (1) 'Uit Borneo's Wonderwereld. Schetsen over dieren en planten' (Batavia 1932); 'Porphyroglottis Maxwelliae RIDL. en eenige andere Orchideeën gevonden op de zandstrook "Pasir Pandjang"' (Trop. Nat. 21, 1932, p. 131–138, 7 fig.); 'Nieuwe vindplaatsen van Rafflesia Tuan-Mudae BECC.' (*l.c.* 22, 1933, p. 165–174 and p. 188–196, 21 fig.); 'Op zoek naar de bekerplant met de Maria-Stuart kraag (Nepenthes Veitchii HOOK. *f.*)' (*l.c.* 24, 1935, p. 195–201, 11 fig.); 'Borneo Orchideeën' (Haarlem 1936).

Cop

A collection of *East Indian* fruits in liquor was presented by COP to the *Herb. Nederl. Overz. Bezitt. Ned. Kruidk. Ver.* in *1854* (= *Herb. Kon. Ned. Bot. Ver.*, at *Leyden*).

It is doubtful whether the material is still at Leyden.

COP might be Dr M. J. COP, professor at Deventer, Holland, in which case he certainly did not collect the material himself.

Copeland, Edwin Bingham

(1873, Monroe, Wisc., U.S.A.; x), a well-known pteridologist who got his education at Stanford University and in Germany, taking his Ph. Dr's degree at Halle in 1896; appointed in the Philippines late 1903; Professor and Dean, Los Baños, P. I., 1909–17; Professor University of California, 1928–32; Technical Adviser, Dept of Agriculture and Nat. Resources, Manila, and Director of the Nation. Economic Garden, Los Baños, 1932–35.

Author of many papers on pteridophytes and

useful plants, mainly in Philip. Journ. Sci. Bot. since 1907, besides in ELMER, Leafl. Philip. Botany; *etc.*

He is commemorated in *Capparis copelandii* ELM., *Cyrtandra copelandii* MERR., and in several other plant species.



E. B. COPELAND

COLLECTING LOCALITIES. *Philippines. c. 1903–04.* Islands of *Calignan, Bayas, Panay,* and *Negros; Luzon:* Bataan.—*1904. Negros* and *Panay* (Jan.); *Mindanao:* Davao (March), Cotabato and Zamboanga, Mt Apo at Todaya (Apr. and Oct.). —*19 . . . Luzon:* Lamao Forest Reserve; Mt Maquiling.—*1909. Luzon:* Mt Pulog (May 11–13).[1]— Probably in many other localities.—*W. Java* (May *1915*):[2] G. Gedeh-Pangrango *etc.*

COLLECTIONS. *Herb. Manila;* mostly ferns and *Fungi, e.g.* 1360 *nos* (coll. 1903–04); from Lamao For. Reserve 200 *nos.*[3] Dupl. in *Herb. Berl.:* 589 *Pterid. Philip.* (acq. 1906–09); *Herb. Sing.:* 100 *Philip.* plants (acq. 1907); *Herb. Bog.:* 98 *nos* from *P.I.* (princ. *Luzon*) and some from *Java* (acq. 1930);[2] *Herb. Leyden: P.I.* plants; *Herb. Brit. Mus.:* 150 *Philip.* ferns (by exch. in 1906); *Herb. Kew:* from *Mindanao* (pres. 1905); *Herb. Sydney* (exch. in 1908); GRAY *Herb.:* 90 *Philip.* ferns; *N.Y. Bot. Gard.:* 162 *Philip.* ferns; *U.S. Nat. Herb. Wash.:* 500 dupl. *P.I.; Herb.* O. AMES: *Philip.* orchids. A *private* fern herbarium too, including more than 500 holotypes. In *Herb. Berkeley* (Cal.): *New Guinea* ferns; probably collected by somebody else and inserted in *Herb.* COPELAND.

LITERATURE. (1) *cf.* E. D. MERRILL: 'The flora of Mt. Pulog' (Philip. Journ. Sci. C. Bot. 5, 1910, p. 287–401).

(2) *cf.* E. B. COPELAND in Philip. Journ. Sci. 46, 1931, p. 219–220.

(3) *cf.* Philip. Journ. Sci. C. Bot. 1, 1906, Suppl. p. 3.

BIOGRAPHICAL DATA. Amer. Men of Sci. ed. 2, 3, and 4; Philip. Agr. & Forester 6, 1917, p. 1–5 + portr.; Nat. Res. Counc. P.I. Bull. *no* 7, 1935, p. 642–646 incl. bibliogr.; in COPELAND, Genera Filicum, 1947 (Ann. Crypt. et Phytopath. vol. 5).

Copeland, R. A.

during World War II lieutenant in the American Navy.

COLLECTIONS. *U.S. Nat. Herb. Wash.:* about 55 specim. of mosses from various places at which his L.S.T. touched in the *Philippines,* or which he visited.

Copland King, *cf.* KING, COPLAND.

Coppinger, Richard William

(1847, Dublin, Ireland; 1910, Fareham, England), got his medical education at Dublin, graduating M.D. in 1870; entered the Medical Department of the Navy, appointed surgeon to the 'Alert' in 1875; promoted staff-surgeon and from 1878–82 serving once more on the 'Alert' (see below); in 1889 Instructor in Hygiene at the Haslar Naval Hospital at Gosport; in 1901 Inspector-General of hospitals and fleets; in 1904 on half-pay, retiring in 1906.

ITINERARY. *Voyage in the 'Alert', 1878–82.*[1] Under command of Capt. Sir G. NARES (*cf. sub* MACLEAR). Sailing from Plymouth (Sept. 25, 1878), and proceeding to the Pacific Ocean by way of Straits of Magellan; for a longer time in the waters of the Tahiti and Fiji Islands; Sydney (Jan. 23–Apr. 16, *1881*); E. coast of Australia; *Thursday Isl.* (4 months' stay), surveying Prince of Wales Canal, visiting many *islands S of New Guinea, e.g.: Horn, Prince of Wales, Hammond, Fitzroy, Goode, Possession, West* and *Booby Isl.;* leaving Torres Strait (Oct. 1), and *via* Port Darwin and *Singapore* (Nov. 18–Febr. 5, *1882*), homeward bound; Plymouth (Sept. 3, 1882).

COLLECTIONS. *Herb. Kew;* including 90 *nos* from Australia, among which possibly plants from the islands S of New Guinea.

Zoological collections in Brit. Museum.

LITERATURE. (1) R. W. COPPINGER: 'Cruise of the Alert. Four years in Patagonian, Polynesian and Mascarene Waters (1878–82)' (London 1885, 4th ed.).

Only the zoological results were published: 'Report on the zoological collections made in the Indo-Pacific Ocean during the voyage of H.M.S. Alert, 1881–82' (London 1884). *Cf.* also Proc. Zool. Soc. 1881.

BIOGRAPHICAL DATA. Dict. Nat. Biogr. 2nd Suppl., vol 1, 1912.

Cops

Extraordinary Member of Council, in *1681* Pre-

sident of Makassar (*SW. Celebes*), sent material of the '*Arbor toxicaria*' (*Antiaris toxicaria* LESCH.) from there to RUMPHIUS. The latter gave a description in his 'Herbarium Amboinense', unfortunately mixed with untrustworthy data supplied by natives, and soldiers of the Company.

Cordero, *cf. sub* Forestry Bureau, Manila.

Cordes, Jan Willem Hugo

(1836, Amsterdam, Holland; 1906, Apeldoorn, Gld, Holland), since 1857 in the employ of the D.E. Indian Forest Service, commissioned to Sumatra West Coast (1865) *etc.;* appointed Inspector of the above-mentioned Service in 1877, and afterwards Chief Inspector. In 1887 he returned to Europe; retired in 1890.

Author of some papers relating to forestry, among which is a standard work on teak.[1]

COLLECTING LOCALITIES. *Centr. Java:* Kendal, in teak forest between Bodja and Kaliwoengoe. —*Sumatra West Coast.*[2] In this residency he made explorations in Priaman Distr., the southern division of Padang, the XIII and IX Kotta's, part of Tanah-Datar Distr. and Agam. In the below-mentioned references, no dates or chronological itineraries are given.

COLLECTIONS. *Herb. Bog.;* from the 63 *nos* he originally collected in the teak forests of Kendal, 28 are still preserved in *Herb. Bog.*[3]

He collected in *Sumatra* too; living plants from *Sumatra West Coast* in *Hort. Bog.* (pres. early in *1866*).

LITERATURE. (1) 'De djatibosschen op Java' (Batavia 1881); some papers in Ind. Gids, vol. 11 and 12, on the mountains of Pasoeroean and on Priangan Residency.

(2) J. W. H. CORDES: 'Verslag over een bewerkstelligd onderzoek naar den toestand en de ligging der bosschen en het daarin voorkomen van bruikbare timmerhoutsoorten over een gedeelte van Sumatra's Westkust' (Tijdschr. Nijverh. & Landb. N.S. vol. 9, 1869, p. 101–200); 'Herinneringen aan Sumatra's Westkust' I–II (*l.c.* 15, 1874, p. 289–369 and 16, 1875, p. 1–84).

(3) *cf.* BEUMÉE in Tectona 12, 1919, p. 157–165, and list on p. 204–205.

BIOGRAPHICAL DATA. Ind. Gids 1906[2], p. 1094–1095; Encyclop. N.I. 1, 1917.

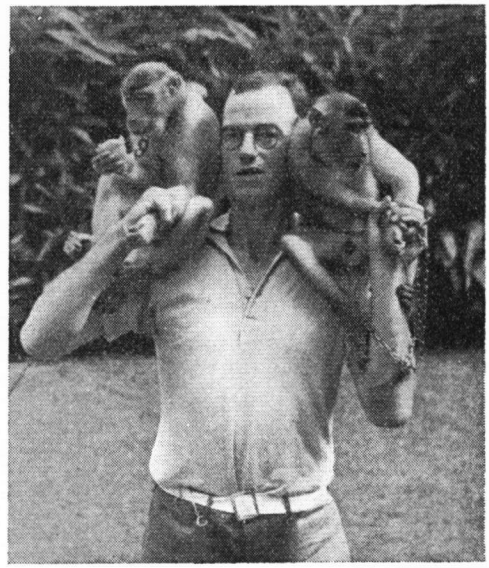
Corner, Edred John Henry

(1906, England; x), botanist, educated at Cambridge (M.A.); Assistant Director, Botanic Gardens, Singapore, 1929–41. During war years the Japanese enabled him to continue his work; in 1947 he was appointed Principal Field Officer for S. America of Unesco, and Director of the Hylean Amazon project; in 1949 Lecturer in taxonomy, Cambridge.

At Singapore he trained monkeys to collect fertile material from trees.[3] Author of systematic papers on *Fungi*, the genus *Ficus, etc.*, principally published in Gard. Bull. Str. Settlements.[1]

Thrixspermum corneri HOLTTUM and other plants were named after him.

COLLECTING LOCALITIES.[2] *Malay Peninsula. 1929.* Perlis (Nov.), vicinity of Kangar, neighbourhood of *Singapore*, G. Panti in Johore.—*1930.* Negri Sembilan (June 23–July 8), *e.g.* at Kuala Pilah, Jelebu and G. Angsi; Tembeling (Nov. 2–Dec. 7), *Singapore*, G. Panti in Johore.—*1931.*



CORNER

Short exp. to the Sedili River, Johore (Febr.); Pahang (May–June).—*1932.* Visit to the East Coast, *P. Tioman* and other outlying islands; stopping at several villages on the Pahang coast, Kemaman and Nipa rivers, Bukit Kajang; a number of short excursions to southern Johore, especially to the Sedili River and surrounding forest; swamp forest in *Singapore.*—*1933.* Swamp forest *Singapore;* few excursions to the Sungei Tiram, Johore.—*1934.* Swampy forest of Johore; exp. to the East Coast (June 9–24), Jason Bay and swampy forest on the Sedili Kechil River; short trips to the vicinity of Mawai, Johore.—*1935.* Swampy forest E. Johore; short excursions along the new Jemaluang Road (Febr. 1–10, May 10–15); Mawai Distr. (Johore); E. coast of Pahang (Aug.), *P. Tioman* and other islands; Bukit Kajang and Kemaman (Oct. 29–Dec. 1).—*1936.* At the end of Febr. a fortnight travelling through Malacca, Negri Sembilan, Pahang and Selangor; in July a month in Kedah, Perlis, *Penang* and Upper Perak; in April the neighbourhood of Mawai and numerous one-day excursions to this district.—*1937.* Apr. 18 for 3 weeks to Kelantan and Trengganu; Fraser's Hill (Aug.); *exp. to the summit of G. Tahan:* leaving Kuala Tembeling (Sept. 6) and returning on the 18th; several one-day excursions to the Sedili River in *E. Johore.* —*1938.* In the first half of the year a number of visits to neighbouring parts of Johore and regularly in the Bt Timah Reserve (*Singapore*); since

July 16 on furlough.—*1939*. Since May visits to southern Johore; near the Sedili River (July, 1 week collecting).

COLLECTIONS. *Herb. Sing.:* many *Fungi*, but phanerogams too; *Herb. Leyden: Fungi* dupl.

LITERATURE. (1) Also of 'Wayside trees of Malaya' (Singapore 1940, 2 vols).

(2) Data extracted from the Annual Reports of the Singapore Gardens.

(3) *cf.* M.A.H.A.Magaz. 10, 1940, p. 147–149.

BIOGRAPHICAL DATA. Chron. Bot. 4, 1938, p. 259 + photogr.

Cortenbach, W. J. K., *cf. sub* Forest Research Institute, Buitenzorg.

Cortes

Plants collected by CORTES, CORTES & KNAPP and CORTES & RENDAL are mentioned in MERRILL, Enum. Philip. Fl.Pl.

Cortez, P., *cf. sub* Forestry Bureau, Manila.

Costales, G., *cf. sub ditto*.

Coster, Charles

(1895, Batavia, Java; betw. 1943–45, executed by the Japanese), attended College at Wageningen, Holland; since 1918 in the employ of the D.E. Indian Forest Service, stationed principally in the teak districts of Java; in 1923 on the staff of the Forest Research Institute (Buitenzorg); Acting Chief of the Treub Laboratory (Bot. Gard. Buitenzorg), 1925–27. In 1927 he graduated in agriculture and subsequently studied natural history at Amsterdam University, where he took his Ph. Dr's degree in 1928. Stationed in the teak districts of Java again, 1928–29; put at the disposal of the Director of the F.R.I. once more, besides charged with the administration of the Indramajoe Forest District in 1930; Chief of the Section of Forest Hydrology since 1932; in 1940 for a short time Director of the Forest School at Madioen (E. Java) and in the same year appointed Director of the W. Java Experiment Station (Buitenzorg).

Author of many papers relating to physiology and ecology.[1]

COLLECTING LOCALITIES. *W. Java:* Tjibodas (*1924*); Poerwakarta (*1929*); Mr Cornelis (*1930*); G. Patoeha, Tjiwedeh (March *1932* and Oct. *1936*). —*E. Java:* Tjobanrondo (Malang) (coll. by COSTER without initials).

COLLECTIONS. *Herb. Bog.:* 2 *nos* from Poerwakarta, 95 *nos* G. Patoeha (coll. 1932) and in 1936 the *nos* 358–371 from the same locality, from Tjobanrondo 3 *nos* of grasses. In *Herb. For. Res. Inst. Buitenzorg:* a few Ja. *nos*.

LITERATURE. (1) *cf.* Ann. Jard. Bot. Buit. 45, 1935, p. 86, 90.

BIOGRAPHICAL DATA. Wie is dat? ed. 3–4.

Couperus, H. W. L.

Temporary Curator of the Botanic Garden at Tjibodas (W. Java), Aug. 15, *1893*–end of Nov. *1897*; he was to carry out experiments on the breeding of some subtropical Japanese plants.

COLLECTIONS. *Herb. Bog.:* from Tjibodas, G. Gedeh, *W. Java;* in later years orchids from Fort de Kock, *Sumatra West Coast*. He forwarded 41 specimens of living orchids from the latter place to *Hort. Bog.* in *1910*.

In *Herb. Christiania* (= *Oslo*): *Veronica javanica* BL., *no* 48 (coll. March *1897*).[1]

LITERATURE. (1) *cf.* LEHMANN in Ann. Jard. Bot. Buit. 25, 1912, p. 195.

Couvreur, F. J.

from Pradjekan (Java), collected a few plants on G. Idjen, *E. Java* (*1916*), which are preserved in *Herb. Bog.*

Couwenberg, J. T., *cf. sub* Forest Research Institute, Buitenzorg.

Cowley, E.

Overseer, Kamerunga State Nursery, North Queensland; an assiduous collector of Australian plants. In May *1893* he went to *New Guinea* at the request of the Queensland Government to collect samples of sugar-canes for trial in Australia.[1]

COLLECTIONS. During his *New Guinea* trip he made general, not extensive, botanical collections; they are incorporated in *Herb. Brisbane*. He collected at least in *Kwato Isl.* (Samarai Distr.) and at Port Moresby (*Papua*).[2] See also *Addenda*.

LITERATURE. (1) *cf.* List in Ann. Rep. Dept Agric. Brisbane 1893/94, p. 43.

(2) *cf.* Journ. Bot. 58, 1920, p. 193; and Proc. Roy. Soc. Queensl. 34, 1922, p. 49–51.

Crab, P. van der

was for the greater part of his official career in the Moluccas; since 1857 Assistant Resident of the Civil Service, at the disposal of the Governor of the Moluccas; in 1863 promoted to Resident of Ternate; the first Resident of Ambon, 1866–68; after expiry of European furlough he was to make an exploration tour to the W. and N. coasts of Dutch New Guinea; when the voyage was over, he was appointed Resident of Manado (N. Celebes); in 1874 he retired and returned to Holland.

ITINERARY. *Aroe Islands* (*1859* and *1860*).— Tour through the *Moluccas* (Dec. *1860*–Jan. *1861*),[1] visiting successively: *Banda, Ambon, S. Ceram, Batjan, Ternate* and the Minahassa (*N. Celebes*).— Tour to the *SW. coast of Dutch New Guinea, etc.*:[2] *E. Ceram, Goram* and *Ceram Laut Isls.*— *Dutch N. New Guinea:* Dorei (Oct. *1863*, July *1864*, Oct. *1866*).—*Voyage in the 'Dassoon', 1871*.[3] To *Dutch West and North New Guinea; cf. sub* TEYSMANN (detailed itiner., liter., *etc.*).

COLLECTIONS. *Herb. Bog.* In the course of time (*1865–69*) he forwarded some *Moluccan* plants to Buitenzorg, from *Batjan etc.*

LITERATURE. (1) P. VAN DER CRAB: 'De Moluksche eilanden. Reis van de G. G. CH. F. PAHUD door den Molukschen Archipel' (Batavia 1862).

(2) P. VAN DER CRAB: 'Reis naar de Zuidwestkust van Nieuw Guinea, de Goram- en Ceram Laut eilanden en oostelijk Ceram' (Batavia 1864).

(3) *cf.* P. J. B. C. ROBIDÉ VAN DER AA: 'Reizen naar Nederlandsch Nieuw-Guinea . . . . in de jaren 1871, 1872, 1875–76 . . .' ('s-Gravenhage, 1879), p. 3–134.

BIOGRAPHICAL DATA. *cf.* ROBIDÉ VAN DER AA *l.c. sub* 3, p. xi–xvi.

Craddock, W. H.

of the Burma Forest Service; worked on deputation in the *Malay Peninsula, 1902–03,* and sent Pahang plants to *Herb. Sing.* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5). Also in *Herb. Calcutta.*

Cramer, Alle Meendert

(1877, Banda, Moluccas; *c.* 1943, in a Japanese camp in Java), established the firm of CRAMER & Son, seed traders at Kedjadjar, Wonosobo, Centr. Java.

COLLECTING LOCALITIES. He sent from time to time plants to Buitenzorg, *e.g.* from dessa Semboengan (July *1921*), from Pasoeroean (*E. Java,* Jan. *1924*) and from Banjoemas (*Centr. Java, 1924*); ornamentals too.

COLLECTIONS. *Herb.* and *Hort. Bog.* In *Herb. Pasoer.*: 1 *no* from Banjoemas.

Cramer, Pieter Johannes Samuel

(1879, Lonneker, O., Holland; x), a botanist who was educated and took his degree (1905) at Amsterdam University; since July 1905 in the employ of the Department of Agriculture at Buitenzorg, occupying various posts; at the end of 1909 for 3 years on deputation in Surinam; after return at Buitenzorg filling various places in the said Department again, finally Director of the General Experiment Station for Agriculture, 1921–27. He retired in 1928; subsequently Adviser for the firm of Dunlop and others in Malaya, *etc.* He was appointed University Lecturer in the Economy of Tropical Agriculture at Leyden University in 1936, and at Wageningen on rubber in 1937. When stranded in England, after the German invasion of Holland, he returned to the D.E.I. in mid-1940; two years later he was appointed at the above-mentioned Experiment Station by the Japanese Government and was charged to prepare, with F. H. ENDERT, a new edition of HEYNE's 'Nuttige planten' (useful plants). After the war he was evacuated to Holland, and in 1947 he was appointed Honorary Professor of Tropical Cultures at Utrecht University.

He is the author of many papers on economic plants.

COLLECTING LOCALITIES. *E. Java:* G. Kawi (Oct. 10, *1905*); *S. Sumatra* (Aug.–Sept. *1915*): Benkoelen (Kroei, Kenali) and in Lampong Districts (Kota Agoeng, Wai Beloe).—*Lesser Sunda Islands: Bali* (*1918*).

COLLECTIONS. *Herb. Bog.*: 182 *nos* of *Sumatra* plants, 1 *no* from *Bali, etc.*

BIOGRAPHICAL DATA. Portr. in Ann. Jard. Bot. Buit. 45, 1935, pl. 3.

Creagh, Charles Vandeleur

Governor of British North Borneo, 1888–95. *Bauhinia creaghi* BAKER was named after him.

COLLECTING LOCALITIES. *1888–95. Br. N. Borneo:* along the whole coast from Cowie Harbour to Gaya and Kimanis, *e.g.* at Sandakan, Port Myburgh, *Labuan,* Tawan (E. coast), Kinabatangan.

COLLECTIONS. *Herb. Kew:* 1114 *nos* from *Br. N. Borneo* (acq. 1895–96) and a 2nd collection. In *Herb. Brit. Mus.*: 462 *nos* (acq. 1896–97). Some plants described by HEMSLEY, and RIDLEY.[1]

LITERATURE. (1) *cf.* Kew Bull. 1896, p. 21 and 167; and Saraw. Mus. Journ. 1, 1913, p. 67–98.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Crocket, Frederick E. & Mrs Charis Denison

of the DENISON-CROCKET South Pacific Expedition for the Academy of Nat. Sciences of Philadelphia.[1] S. D. RIPLEY (see there), ornithologist, accompanied the expedition. It was the intention to make botanical explorations too.

ITINERARY. DENISON-CROCKET *South Pacific Expedition, 1937–38.*[1] Departing from Philadelphia in Nov. 1936, sailing from Gloucester, Mass., in the schooner 'Chiva'; arriving *via* Rabaul in *Dutch NW. New Guinea:* Manokwari (beginning of Oct. *1937*), staying 1 day and proceeding to *Sorong,* remaining for a short time and then continuing to *Lophon Island* of the *Schildpad group* (*Papua Islands*) where their base camp was established; N. coast of *Misoöl* (Oct. 29), inland to the village of Tipon, Kassim River (staying 1 week); *Lophon* (short stay); *Sorong;* Manokwari (Nov. 15), the ornithologist making trips to *Mansiman Isl.*, Andai, *Biak* (*Korrido*), and *Sorong;* Dec. 27 setting sail again for *Lophon; Sorong* (end of Jan. *1938*); the CROCKETS in permanent camp at Saindekock (= Sainkedock)[2], S of Mega River (N. coast of W. New Guinea).

COLLECTIONS. Botanical specimens mouldered away before they could ever get them out of New Guinea; they were sent to *Philadelphia.* According to the Curator of Plants there, *no* plants are preserved in *Philadelphia Herb.*

LITERATURE. (1) Zoological results + short itinerary (p. 97–100) published in Proc. Acad. Nat. Sci. Philad. 91, 1939.

(2) CHARIS CROCKET: 'The House in the rainforest' (Boston 1942).

Croockewit, Dr Johan Hendrik

(1823, Amsterdam, Holland; 1888, Nijmegen, Gld, Holland), went to the D.E.I. in 1849, where he was appointed Officer charged with Natural Science Investigations. In Oct. 1850 he began with the geological exploration of Billiton; subsequently he was charged with an investigation of coal-beds in Borneo and later with scientific observations in the Moluccas and New Guinea. In 1852 he worked for some years in the Chemical Laboratory at Buitenzorg; in 1859 he went on furlough, after the expiry of which he was appointed Assistant Resident of the Civil Service, successively stationed at Solok, Priaman and Padang, all in Sumatra West Coast Residency. At the end of his career he was

Resident of Banka; he quitted the Government service in 1871.

Coelogyne croockewitii T. & B. was named after him.

ITINERARY. *1850–51. Billiton.*[1] Making 3 extensive tours: from Tandjong-Pandan to Blantoe; *via* Boeding (in the north) to the Boeroeng-Mandi and Soengai Padang and Penjabin; from Tandjong-Pandan by way of G. Tadjem to Lenggang (SE. part of the island).—*1851. SE. Borneo:* at Pagattan and Kusan, together with H. VON DEWALL.—*1854–56. W. Borneo,*[2] *e.g.:* G. Klam, E of Sintang (beginning of July *1855*), Pen(e)ing Mts (Bt Penai, SW of Silat) (July 12), saline spring near the Spauk (= Sĕpaoek) River (left tributary of the Kapoeas) and Palo Distr.; prospecting for coal near the Kapoeas and Melawi (1855–*56*).—*1858. Voyage in the 'Etna'* to the *Moluccas* and *New Guinea.*[3] *cf.* VON ROSENBERG (detailed itiner., liter., *etc.*).

COLLECTIONS. He sent 120 *nos* of *Banka* plants to *Herb.* and *Hort. Bog.* (1870). TEYSMANN & BINNENDIJK described some of his *Borneo* plants. He was the first to state the occurrence of the guttapercha tree in Borneo.[4]

LITERATURE. (1) J. H. CROOCKEWIT: 'Uittreksel van het rapport eener reis over het eiland Billiton' (Nat. Tijdschr. N.I. 3, 1852, p. 355–406). *cf.* also 'Banka, Malakka en Billiton' ('s-Gravenhage 1852) and in Gedenkboek 'Billiton 1852–1927' ('s-Gravenhage, Nijhoff).

(2) J. H. CROOCKEWIT: 'Verslag van een reisje naar het landschap Palo en naar Tandjong Datoe' (Tijdschr. Taal-, Land- en Volkenk. 3, 1855, p. 387–396); 'Verslag van een tocht naar den Goenoeng Klam en naar het Peneinggebergte' (Nat. Tijdschr. N.I. 11, 1856, p. 279-294); 'De zoutbron aan de Spaukrivier, *etc.*' (*l.c.* 12, 1856/57, p. 86-89).

(3) H. D. A. VAN DER GOES: 'Nieuw Guinea, ethnographisch en natuurkundig onderzocht in 1858' (Bijdr. Taal-, Land- en Volkenk. 5[2], 1862, p. 1–106). The dates here and there do not agree with those mentioned by ROSENBERG (see there).

(4) *cf.* Nat. Tijdschr. N.I. 21, 1860, p. 303.

BIOGRAPHICAL DATA. Encyclop. N.I. 1, 1917; BACKER, Verkl. Woordenb., 1936.

Crutwell, Norman Edward Garry

(1916, Minehead, England; x), Reverend, educated at Oxford University (M.A., with First Class Honours in Botany); from 1940–45 a curate at Basingstoke, England; came out to Papua in 1946, stationed at Dogura for 6 months; since 1947 transferred to Menapi, NE. Division.

COLLECTING LOCALITIES. *Papua,* NE. division: in Menapi Distr. and on Mt Simpson (in and about Oct. *1947*).

COLLECTIONS. *Herb. Kew;* a few small vouchers in private herbarium. In total about 100 *nos,* some from the coast, but mostly from Mt Simpson (Owen Stanley Range, 10.000 ft). The collector is compiling a set of drawings of Papuan plants, some of which are also at Kew.

Cruz, de la, *cf. sub* Forestry Bureau, Manila.

Cubitt, George Eaton Stannard

Conservator of Forests in the Malay Peninsula from 1914. He made many tours of inspection, and retired at the end of 1929. The Department was greatly expanded during his regime.

COLLECTING LOCALITIES. *Malay Peninsula, e.g.:* Semangko Pass (*1921*), Fraser Hill, in NE. Selangor.

COLLECTIONS. Specimens of forest trees collected in various places, in his departmental Herbarium, *Kuala Lump.* and in *Herb. Sing.* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5). Also collections made by CUBITT's collector. He numbered in the C.F. (see *sub* Conservator of Forests) series.

Cubitt's collector, *cf. sub* G. E. S. CUBITT.

Cuellar, Juan de

from Spain, was sent out to the Philippines for economic purposes; he layed out a botanical garden at Cavite in Luzon, of which, however, nothing remained in 1817.[1]

CAVANILLES seems to mention, that he spent 5 years prior to 1791, collecting, describing and drawing Philippine plants.[2]

COLLECTIONS. Besides by CAVANILLES, he is referred to by MERRILL, as a collector of botanical material in the *Philippines.*[3]

KOTZEBUE[1] states, that he sent natural history objects to *Madrid* and forwarded seeds for the botanical garden there. His first shipment of living plants and seeds, destined for the Garden at *Aranjuez,* arrived at Cadiz in September 1787; in February 1788 it was followed by a second shipment on behalf of the Nat. Hist. Museum and Garden at *Madrid,* and subsequently by others. The collections were accompanied by descriptions; the plants were collected in several *Philippine Islands.*[4]

LITERATURE. (1) *cf.* KOTZEBUE: 'Entdeckungsreise auf dem Schiffe Rurik 1815–18' (Dutch transl. Amsterdam vol. 3, 1822, p. 149).

(2) *cf.* ROBINSON in Journ. N.Y. Bot. Gard. 7, 1906, p. 106.

A. CUELLAR: 'Descripcion del arbol que produce la Canela de Manila' (Madrid 1793).

(3) In Bull. Bur. of Agric. Manila *no* 4, 1903, p. 30.

(4) F. DE LAS BARRAS DE ARAGON: 'Documentos de D. CASIMIRO GOMEZ DE ORTEGA, referentes a un envio de plantas vivas y otros objetos de Filipinas, hecho por D. JUAN DE CUELLAR en 1787' (Bol. r. Soc. esp. Hist. Nat. 16, 1916, p. 386–394).

Cuming, Hugh

(1791, West Alvington, Devon, England; 1865, London, England), traveller and naturalist, started collecting (since 1819) in S. America and the Pacific Islands.[1] In the course of time he brought together extensive botanical, zoological and conchological collections (the latter, one of the largest of the world), principally in the Philippines.

Many plants were named after him.

ITINERARY.[2] Leaving England (Febr. 26, *1836*).

expecting to sail for Batavia (*Java*), *Singapore* and Manila (*Luzon, P.I.*); *Philippines:* arrival at Manila, *Luzon* (July 24, 1836); the rainy season had set in and therefore he could not make any excursions in the country until the end of Sept.; then he left Manila for the Hacienda of Calaguan (Calauan) in the centre of Luzon, remaining until Dec. 15;[3] borders of the great lake (Laguna); in *1837* visiting *the islands in the south* (this trip occupying 10 months): *Panay, Guimaras, Negros, Siquijor, Zebu* (= *Cebu*), *Bohol, Camiguing* (*Camiguin de Misamis*) and *Mindanao; Southern Islands, viz Samar, Leyte, Masbate, Ticao, Burias, Mindoro* and the SE. provinces of *Luzon*: Albay, Camarines, Tayabas and Batangas; in Nov. *1838* at Manila, preparing for a trip to the northern part of *Luzon;* Nov. *1839* leaving Manila, proceeding to *Singapore, Malay Peninsula* (Malacca, visiting Mt Ophir in Johore in *1840*) and *Sumatra; via* St Helena; back in London (June 5, 1840).

COLLECTIONS. He collected 130.000 herb. specimens, and sent living orchids both to the *Calcutta Gardens* and to the firm of LODDIGES (see there).

In *Herb. Kew* (*ex Herb.* BENTHAM and HOOKER) *nos* 401–2464, 2 practically complete sets; *Herb. Brit. Mus.:* 2433 *nos* (purch. 1841) and 113 orchids in alcohol (purch. 1843) and acq. with *Herb.* SHUTTLEWORTH in 1877; *Herb. Oxford: c.* 2500 species (*ex Herb.* FIELDING); *Herb. Cambridge; Herb. Berl.:* extensive coll.; GRAY *Herb.* (Cambr., Mass.); *Herb. Paris:* 1870 specim., and ferns with *Herb.* BONAPARTE; *Herb. Caen; Herb. Bot. Garden St Petersb.* (= *Leningrad*) (2000); *Herb. Imp. Acad. St Petersb.* (= *Leningrad*) (1962); *Herb. Moscow* (many types of TURCZANINOW); *Herb.* DELESS., BOISS. and DECAND. (1150 spec.), at *Geneva; Herb. Göttingen* (1200); *Herb.* Card. DE HAYNALD (= *Budapest*); *Herb. Univ. Kiel; Herb. Senckenb. Ges.* (= *Univ.*) *Frankfurt:* 600 specim. from the *P.I.; Herb. Munich* (with *Herb.* ZUCCARINI); *Nat. Hist. Mus. Vienna:* 2073 *Philip.* plants, also with *Herb.* REICHENBACH: *Orch. Philip.* and from *Singapore; Univers. Leipsic; Herb.* CESATI (= *Rome*); *Herb. Florence; Manila:*[4] 880 dupl. *Philip.* pl. by exchange with Brit. Mus. (the former material of CUMING was destroyed by fire in Sept. 1897), 104 dupl. *P.I.* (pres. Kew 1907/08), 156 *Philip.* ferns (dupl. Brit. Mus., pres. 1908/09); *Herb.* v. HEURCK(= *Antwerp*): 800 *Philip.* plants; *Herb. Leyden; Herb. Sing.* (dupl. pres. by Brit. Mus.); *Herb. Calcutta; Herb. Manchester; Columbia Univers. Herb.* (on deposit at the *Herb. N.Y. Bot. Gard.*);[5] *N.Y. Bot. Gard.* (200 + coll. Columbia Univers. Herb.); *Herb. Miss. Bot. Gard. St Louis* (splendid series); *Herb.* TURCZANINOW (= *Kharkov*); *Herb.* LINDEMANN (U.S.S.R.) (105 *nos*); *Herb. Linn. Soc. Lond.:* from the *Philippines, Malacca, etc.; Herb. Utrecht.*

Ferns of his were sold at the sale of the herbarium of WM GOURLIE of Glasgow, in 1858.

Most of the specimens from 1–2153 were collected in the *Philippines*, and all of the numbers between 2154 and 2464 were collected outside of the Philippines, in *Malacca, Singapore, Sumatra* and St Helena (2428–2443 from Sumatra);[6] the numbers 1–434 are vascular cryptogams of both the Philippines and other localities. They should not be confounded with his previous collections from America and the Pacific Islands, as these also run from 1 to 1499![7] Probably CUMING did not collect botanical material on all the Philippine islands visited.



CUMING

He used a printed label '*Ins. Philippinae 1841*' for the entire collection; the localities were not written on all the labels as the sets of duplicates were prepared, but the new locality was added on the label of the first number from that locality. As many subscribers omitted to complete the labels, many of CUMING's extra-Philippine plants occur in various herbaria under Philippine labels.[8]

Many papers are based on his collections.[9]

His letters[2] are preserved at Kew.

LITERATURE. (1) H. ST JOHN: 'Itinerary of HUGH CUMING in Polynesia' (Occ. Pap. Bern. P. Bish. Mus. 16, 1940, p. 81–90, w. portr.).

(2) R. A. ROLFE: 'The localities of CUMING's Philippine plants' (Kew Bull. 1908, p. 116–119).

E. D. MERRILL: 'HUGH CUMING's letters to Sir WILLIAM HOOKER' (Philip. Journ. Sci. 30, 1926, p. 153–184, w. portr.).

(3) *cf.* Ann. Nat. Hist. 1, 1838, p. 56–57.

(4) E. D. MERRILL: 'Notes on CUMING's Philippine plants in the herbarium of the Bureau of Government Laboratories' (Govt Lab. Publ. Philip. 35, 1905, p. 69–77).

(5) *cf.* Journ. N.Y. Bot. Gard. 5, 1904, p. 40.

(6) A list of numbers and localities prepared by

CUMING for Sir W. HOOKER and preserved at Kew, is reproduced by E. D. MERRILL in Philip. Journ. Sci. C. Bot. 10, 1915, p. 183 and in *l.c.* 30, 1926, p. 175.

(7) *cf.* ROLFE in Journ. Linn. Soc. Bot. 21, 1886, p. 287.

(8) E. D. MERRILL: 'Genera and species erroneously credited to the Philippine flora' (Philip. Journ. Sci. C. Bot. 10, 1915, p. 171–194); *cf.* also *l.c.* 30, 1926, p. 174–175.

(9) J. LINDLEY described orchids in Bot. Register 26, 1840, Misc. p. 74.

J. SMITH: 'Enumeratio Filicum Philippinarum; or a systematic arrangement of the ferns collected by H. CUMING, Esq. F.L.S., in the Philippine Islands and the Peninsula of Malacca, between the years 1836 and 1840' (HOOK. Journ. Bot. 3, 1841, p. 392–422).

C. MONTAGNE: 'Plantas cellulares quas in insulis Philippinensibus a cl. CUMING collectas recensuit observationibus non nullis descriptionibusque illustravit' (HOOK. Lond. Journ. Bot. 3, 1844, p. 658–662 and in *l.c.* 4, 1845, p. 3–11).

TURCZANINOW based an extensive series of special papers on CUMING's collections in Bull. Soc. Nat. Moscow 19^2, 1846, p. 489–496, 497–510; 20^2, 1847, p. 148–174; 21^1, 1848, p. 250–262, 570–591; 24^1, 1851, p. 166–214; 25^1, 1852, p. 310–325; 27^2, 1854, p. 271–372; 31^1, 1858, p. 185–250, 379–476; 36^2, 1863, p. 193–227, 228–235, 545–615.

PRESL in 'Epimeliae Botanicae' (1849), described a number of CUMING's Philippine plants.

C. G. NEES AB ESENBECK: 'Gramineae Cumingianae' (HOOK. Journ. Bot. & Kew Gard. Misc. 2, 1850, p. 97–105) and 'Cyperaceae Cumingianae' (*l.c.* 6, 1854, p. 27–30).

J. PALACKY: 'Uebersicht der von MIQUEL in der Flora Indiae batavae bestimmte CUMING'schen Philippinen-Pflanzen' (Flora 43, 1860, p. 446–448).

J. HASSKARL: 'Ueber einige neue Pflanzen der Philippinen aus der CUMING'schen Sammlung' (Flora 48, 1865, p. 401–403).

J. MÜLLER: 'Nouvelle espèce de Loranthus (L. mirabilis VAN HEURCK et MUELL. ARG.) provenant des îles Philippines' (Verh. Schweiz. Naturf. Ges. 55, 1872, p. 47–48).

C. MÜLLER: 'Novitates Bryothecae Müllerianae' (Linnaea 38, 1874, p. 545–572).

S. VIDAL Y SOLER: 'Phanerogamae Cumingianae Philippinarum, ó Indice numérico y catálogo sistematico de las plantas fanerogamas coleccionado en Filipinas por HUGH CUMING, con caracteristicas de algunas especies no descritas y del genero Cumingia (Malvacéas)' (1885).

BONAPARTE, Notes Ptéridol., fasc. 1, 1915, p. 205–207.

E. D. MERRILL gives a partial bibliography of papers based wholly or to a large extent on Philippine botanical and zoological material collected by CUMING, in Philip. Journ. Sci. 30, 1926, p. 176–184.

BIOGRAPHICAL DATA. Journ. Linn. Soc. 9, 1868, p. lvii–lix; Bot. Zeitung 24, 1866, p. 31–32; SEEMANN Journ. Bot. 3, 1865, p. 325–326; URBAN, Symb. Antill., 3, 1902–03, p. 34–35; other references *cf.* MERRILL in Philip. Journ. Sci. 30, 1926, p. 159–160, w. portr.; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936; portr. *cf. sub* Lit. 1.

Cuninghame, James, *cf.* CUNNINGHAM, JAMES.

Cunningham, Allan

(1791, Wimbledon, Surrey, England; 1839, Sydney, Australia), clerk of Mr W. T. AITON; recommended by Sir JOSEPH BANKS, he was appointed Botanical Collector of Kew Gardens in 1814 and in October of that year he sailed for Brazil in company with JAMES BOWIE in H.M.S. 'Duncan'; in 1816 he received orders to proceed to New South Wales and early in 1817 he joined OXLEY's Australian expedition for exploring the Lachlan and Macquarie rivers;[1] subsequently he was attached to Capt. KING's expedition for surveying the coast of Australia and visited various parts of the east and west coast and Tasmania, and paid some visits to Timor. About 1822 he set up for himself (New Zealand in 1826), and returned to England in 1831, but left again in 1836 to fill the post of Colonial Botanist and Superintendent of the Sydney Bot. Garden, vacant through the death of his brother RICHARD; he soon resigned.[2] In 1838 he travelled over New Zealand once more, returning with a broken health.

The genera *Cunninghamia* R.BR. and *Alania* ENDL. were named in his honour, and so were many plant species.

ITINERARY. During KING's *West Coast voyages in the 'Mermaid'*[2] some visits were paid to the *Lesser Sunda Islands, viz* to *Timor* (Coepang and environs; June 4–13, *1818*), and in the next year landing in *Savu* (= *Sawoe Island*) (Oct. 24, *1819*) and in *Timor* (Nov. 1–9, 1819).

COLLECTIONS. His private Herbarium (incl. material of above-mentioned expedition) at *Kew.*[3] *Herb. Brit. Mus.:* coll. Brazil (with *Herb.* BANKS), Austr. pl. (incl. *Timor*) from 1818–26 (pres. by W. T. AITON, Kew); *Herb. Linn. Soc. Lond.; Herb.* DECAND. (691) and DELESS. (*Geneva); Herb. Munich; Herb.* MARTIUS (*Brussels*) (215); *Herb. Vienna:* 526 Austr. pl.; *Herb. Sing.; Herb. Cambridge* (with *Herb.* LEMANN); *Herb. Leyden* (*Timor*). The collection from *Timor* consists of few numbers, from Nov. 1–9, 1819, the numbers 513–531 were collected.

Besides MSS at Kew,[3] MSS and Journal in the Library of the Brit. Mus.; Journal and Field books preserved at Sydney.

LITERATURE. (1) J. OXLEY: 'Journal of two expeditions into the Interior of New South Wales in 1817–18' (London 1820).

(2) P. P. KING: 'Narrative of a survey of the intertropical and western coasts of Australia. Performed between the years 1818 and 1822' (London 1827, 2 vols incl. Appendix on Nat. Hist. *etc., no* botany). In this book a chapter is written by A. CUNNINGHAM: 'A few general remarks on the vegetation of certain coasts of Terra australis and more especially of its north-western shores' (*l.c.* vol. 2, p. 497–533).

J. H. MAIDEN & R. H. CAMBAG: 'Botanical, topo-

graphical and geological notes on some routes of ALLAN CUNNINGHAM' (Journ. & Proc. Roy. Soc. N.S.W. 43, 1909, p. 123–139, pl. 5–7; *not* dealing with *Timor*).

I. LEE: 'Early explorers in Australia' (London 1925); herein the full extracts of C.'s Journal.

(3) *cf.* Kew Bull. 1891, p. 309–310.

BIOGRAPHICAL DATA. HOOK. Journ. Bot. 4, 1842, p. 231–320 + portr.; HOOK. Lond. Journ. Bot. 1, 1842, p. 107–128, 263–292 and *l.c.* 5, 1846, p. 661–662 + pl.; PRITZEL, Thes. Lit. Bot., 1872; Gard. Chron. 1881[2], p. 440; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 26, 1888, p. 247, and 2nd ed. by RENDLE, 1931; J. D. MILNER, Catalogue portraits at Kew, 1906, p. 31; Journ. & Proc. Linn. Soc. N.S.W. 42, 1908, p. 99; portr. in I. LEE, Early explorers *etc.*, *l.c.* above *sub* 2, opposite p. 167; BACKER, Verkl. Woordenb., 1936.

Cunningham (or **Cuninghame**), James

(born in Scotland; in 1708 or 1709 embarked for England, but apparently died on the home voyage, as he disappears completely from record), surgeon, entered the service of the English E.I. Comp. in 1698, and was sent at once to Amoy, returning home in the next year. In *1701* he again set sail for China, during which voyage he evidently touched at and collected in the Straits of *Malacca*, *Java*,[1] and *Borneo* (July 17–19),[2] and reached Chusan in October. In 1703 he was sent to Pulo Condor(e), one of the Company's factories, for the purpose of trying to open up trade with Cochin-China. According to COX (*cf. sub* Biogr. data below) he is next heard of in Makassar (SW. Celebes) in 1705, when the station was attacked and the English killed almost to a man. CUNNINGHAM was spared and was taken to Cochin-China where he was a captive for 2 years. Finally in 1707 he was sent to Batavia to try and start trade, this time with Java. He was expelled at the instigation of the Chinese in 1708 or 1709.

The genus *Cunninghamia* SCHREB. was named after him.

COLLECTIONS. *Herb. Brit. Mus.:* > 600 species, acq. with *Herb.* SLOANE. He originally sent plants from China, *Java* (and *P. Kombuys* in the Bay of Batavia), *Malacca*, the Cape, and Ascension to RAY, PETIVER, and PLUKENET (see *Herb.* SLOANE 94 vol. 2; from Batavia and *Java* in H.S. 289). In Java a Dutch gardener presented him with plants too.

Plants of his were described by PLUKENET in 'Amaltheum' and 'Phytographia', and by PETIVER in 'Museum'.

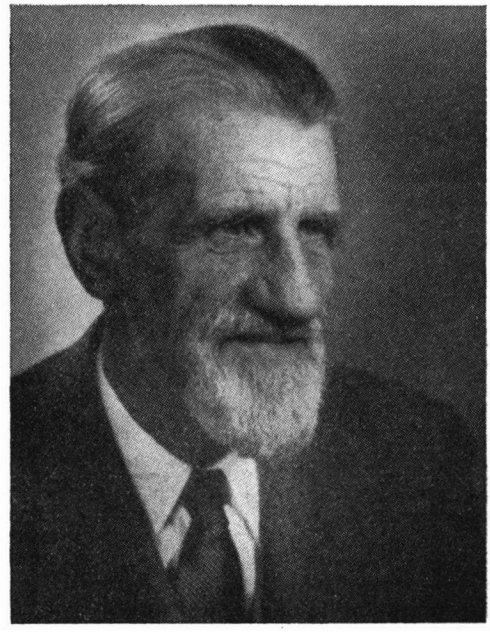
LITERATURE. (1) *cf.* Mus. Petiv. 1695–1703, p. 44, 94.

(2) *cf.* Philos. Transact. Lond. 23, 1702, *no* 280, p. (1201).

BIOGRAPHICAL DATA. PULTENEY, Sketches, 2, 1790, p. 59–62, and Esquisses Hist., 2, 1809, p. 58–60; PRITZEL, Thes. Lit. Bot., 1872; Biogr. Ind. BRITTEN & BOUGLER in Journ. Bot. 26, 1888, p. 247, and in 2nd ed. by RENDLE, 1931; BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 31, 33; in E. H. M. Cox, Plant-hunting in China, 1945, p. 40–42.

Curnow, Richard

orchid collector in the employ of the firm of HUGH Low & Co., London. In *1888* he stayed in *W. Java* with the special object of collecting 10.000 living specimens of *Phalaenopsis grandiflora* in the southern part of Priangan Residency. The journey to



H. M. CURRAN

Java was preceded by one to the *Philippines*, where he collected at Manila (*Luzon*); in the meantime he was in London.

He may have collected well-known species only.

Curran, Hugh McCullom

(1875, New York City, U.S.A.; x), Forest Officer from Yale University, in the employ of the Bureau of Forestry, Manila (Luzon, P.I.), 1906–13; subsequently employed in S. America; 1921–29 Forester, State Dept Agriculture, N.C.; since 1929 Professor of Tropical Forestry, Agric. College, Laguna, Luzon. During the war he was interned by the Japanese at Los Baños; at present a forestry consultant for the Venezuelan government, living at Caracas.

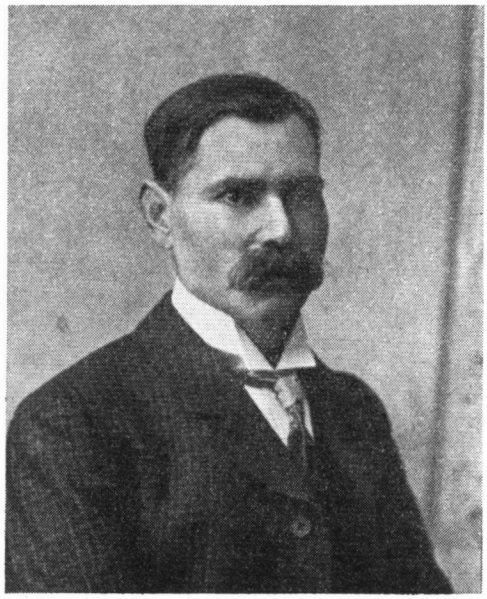
Author of some papers on Philippine woods.[1]

The genus *Currania* COPEL. and many species were named after him.

COLLECTING LOCALITIES. *Philippines: Palawan* (May *1906*); *Luzon*, on Mt Pulog (Jan. 2–8, *1909*); *Singapore* (Aug. *1910*); *Philippines: e.g.* Mt Canlaon in *Negros* and Bukidnon in *Mindanao* (*1933*); in *Luzon:* Mt Banahao (Apr.–May *1935*), Paete, Laguna (many sterile) (*1936*); Pañgel, Laguna (*1937*).

COLLECTIONS. Many plants in *Herb. Manila*,

at least partly numbered in the F.B. series; besides from the *Philippines*, a collection from *Singapore*, Honkong, Colombo and Port Said amounting to 122 specimens (pres. 1910–11). Dupl. in *Herb. Berl.; Leyden; U.S. Nat. Herb. Wash.:* > 1000 *Philip.* plants, and 146 *nos* collected with MERRITT *etc.;* few in *Herb.* DECAND. (*Geneva*); *Herb. Edinburgh.*



CURTIS

The collection of Mt Pulog was described by E. D. MERRILL.[2]

Before his stay in the Philippines, he collected in S. America.

LITERATURE. (1) In Philip. Journ. Sci. 1932–34.

(2) 'The flora of Mount Pulog' (with M. L. MERRITT) (Philip. Journ. Sci. C. Bot. 5, 1910, p. 287–404, pl. 1–4 + map).

BIOGRAPHICAL DATA. Nat. Res. Counc. P.I. Bull. *no* 7, 1935, p. 646–647, incl. bibliogr.; BACKER, Verkl. Woordenb., 1936.

Curran, Hugo

son of HUGH M. CURRAN (see there), took part in the cruise of the 'Chêng Ho' through the Moluccas in *1940* (*cf. sub* D. G. FAIRCHILD), collecting a few plants, but especially seeds in *Celebes* and the *Moluccas* (*e.g. Halmaheira*), *etc.* (itiner. and liter. see *sub* FAIRCHILD). In April 1940, when the junk went to Soerabaja for repair, CURRAN visited the interior of N. Celebes, but evidently visited other parts of the island too (*e.g.* collecting seeds at Masamba and Paloe), joining the expedition once more at Makassar.

When the expedition came to a close in June, he took a position with the Philippine Packing Corporation in Mindanao, P.I.

COLLECTIONS. *Herb. Arn. Arbor.* (Cambr., Mass.): few specimens. Mostly living seeds of palms *etc.* for the FAIRCHILD *Tropical Garden*, Florida.

BIOGRAPHICAL DATA. Portr. in D. G. FAIRCHILD, Garden Islands of the Great East, New York 1945, p. 48a, 112c, *etc.*

Curtis, Charles

(1852, Barnstaple, Devonshire, England; 1928, Barnstaple, England), plant collector in the employ of the firm of JAMES VEITCH & Sons, 1878–84 (previously for 4 years in the New Plant Dept at Chelsea); he travelled in Madagascar and the Malay Archipelago. He occupied the post of Superintendent of Gardens and Forests, Penang, 1884–1903; retired n March 1903 owing to ill health.[1] He built up a herbarium in Penang, which in 1910 was incorporated into that of the Botanic Gardens, Singapore.

Several plants were named after him.

COLLECTING LOCALITIES. *1880–82.* Travelling in the *Malay Archipelago: Sumatra* (*e.g.* Padang Highlands and Indragiri), *Java* (*e.g.* Mt Salak, environs Buitenzorg), *Borneo* (accompanied by D. BURKE, see there, in Sarawak; after seeing BURKE + collection shipped at Singapore, he proceeded to Pontianak. Owing to a mishap with the boat, a month's collections were lost), *Celebes* (Minahassa, *N. Celebes*, being a guest of Mr VEEN of the Coffee Estate Kelolonde, collecting on G. Kelolonde; also *pr.* Maros in *SW. Celebes*); *Moluccas.—1882–83.* 2nd Mission to *Malaya* (*cf.* Hortus Veitchii).—*1884. Timor* (*Amaranth.* at Kew, coll. July). *Malay Peninsula:* since July stationed in *Penang.—1885. Penang;* Perak (in Jan. with CANTLEY), *e.g.* G. Bubu and G. Pondok near Kuala Kangsa, and Maxwell's Hill near Taiping; in Nov. to Telŭk Ansun (= Telok Anson) and up the Sungkei River; For. Reserve Tasek Gelugor.—*1887.* Perak:[2] Hermitage Hill, Waterloo Estate, Kuala Kangsar, top of Taiping Hills.—*1888.* Visiting *Pangkor Isl.*, about Lumut, Rajah Itam, *etc.* in the Dindings (Jan.);[3] Dindings (July 7–14); Kuala Malaka and Telaya Tujoh (= *Langkawi Isl.*) (Aug.).[4]—*1889.* Dindings (Jan.);[5] Hill ranges in Perak (Sept.); *Langkawi Islands.—1890.* Selangor (Apr.–May), Perak (May); *Langkawi Isls* (Febr., Sept.; *e.g.* G. Raya and G. Chindrang).—*1892.* Dindings (Febr.); *Sembilan Isls;* Kedah and Perak (Oct.); short visits to Malacca and *Langkawi Isls* (Apr., *P. Nior Stali etc.*).—*1893. Penang;* Siamese west coast (Febr.); accompanying H. N. RIDLEY (June 4) to *P. Song-Song* and *Yan.—1894.* Taiping (July); from Telok Anson (Aug. 16) to Tapah, Kalinda, Kuala Depang, G. Bujong Malaka, Sg. Siput, G. Mesah, Kampar, Tapah, Telok Anson; Perak (Oct.);[6] Dindings.—*1895.* Kinta Distr., Perak (Dec.).[7]—*1896. Langkawi Isls* (Apr.), Siamese Malay State of Kasum (Nov.).[8]—*1897. Langkawi Isls* with RIDLEY (Febr.).—*1898.* Ipoh (July); Perak, G. Bujong Malaka (Aug.).[9]—*1899. Langkawi Isls* (Febr.).—*1900.* No special excursion, but several plants collected, *e.g.* in Malacca (May) and in Perak (Oct.).[10]—*1901. Penang;* Malacca, Muar River (Kedah) (Apr.); Johore; trip to Indra-

giri in *Sumatra* during the early part of the year;[11] *Langkawi Isls* (Nov., *P. Nior Stali etc.*); Perak (Dec.).—*1902.* Pahang track.

COLLECTIONS. His main herbarium from the *Malay Peninsula* was transferred to *Singapore* in 1903; also sets in *Herb. Kuala Lump.* and *Penang* (= *Sing.* now) (study set). Dupl. in *Herb. Kew:* from *Timor, Java, Sumatra, Borneo, Penang, Perak* (acq. 1881–99), 2535 *nos* (see also H. J. VEITCH, 1898); *Herb. Brit. Mus.:* 27 *nos* of *Dipterocarp.* (pres. 1888), 243 *Penang* plants (purch. 1890), 333 *Malayan* plants (pres. 1891–94); *Herb. Calcutta:*> 1239 specim. (pres. 1888–1901); *Herb. Vienna:* 205 *nos* of *Penang* plants (purch. 1891) + *Borneo* orchids with *Herb.* REICHENBACH; *Herb. Berl.* (dupl. from Herb. Sing.); *U.S. Nat. Herb. Wash.:* 297 plants *Mal. Pen.* (purch. 1892); *Herb. Leyden* (*Penang*).

The numbers were put on the specimens only after study. J. G. BAKER classified part of his fern collections.[12]

LITERATURE. (1) Author of 'Catalogue of the flowering plants and ferns found growing wild in the island of Penang' (Journ. Str. Br. Roy. As. Soc. *no* 25, 1894, p. 67–163; with Appendix by H. N. RIDLEY, 'The botanists of Penang', *l.c.* p. 163–169).

(2) *cf.* App. to Forest Rep. Str. Settlem. for 1887, p. 9.

(3) *cf.* Str. Settlem. Govt Gazette, March 1888.

(4) *cf.* Ann. Rep. For. Dept Str. Settlem. 1888, App. F, p. 16 and App. C, p. 12.

(5) *cf. l.c.* App. D, p. 13–14.

(6) *cf.* Ann. Rep. Bot. Gard. Str. Settlem. for 1894, App. C.

(7) *cf. l.c.* for 1895, App. B.

(8) *cf. l.c.* for 1896, App. B; partly copied in Gard. Chron. 3rd ser. 21, 1897, p. 333–334.

(9) *cf. l.c.* for 1898, App. B.

(10) *cf. l.c.* for 1900, App. B–C.

(11) *cf. l.c.* for 1901, App. B.

(12) 'On a collection of ferns made by Mr. CURTIS in the Malay Islands and Madagascar' (Journ. Bot. 19, 1881, p. 366–368).

cf. also HOOK. Icon. 37, 1886/87, *t.* 1607.

BIOGRAPHICAL DATA. Hortus Veitchii 1906, p. 85–86; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; Journ. Bot. 66, 1928, p. 332–333; Kew Bull. 1928, p. 383; Gard. Bull. Str. Settlem. 4, 1929, p. 427; BACKER, Verkl. Woordenb., 1936; Journ. Roy. Hort. Soc. 73, 1948, p. 288–289.

Cuthbertson, Walter R.

a surveyor in Queensland, who in 1886 was instructed to survey Port Moresby and environs, SE. New Guinea. In 1887 leader of an Australian expedition to British New Guinea,[1] equipped by the Vict. Branch of the Roy. Geogr. Soc. of Australasia; W. A. SAYER accompanied the expedition as a naturalist.

Dendrobium cuthbertsonii was named after him.

ITINERARY. *1887. SE. New Guinea, Papua. cf. sub* W. A. SAYER.

COLLECTIONS. The above-mentioned plant was collected by him on Mt Obree; other plants too, partly with SAYER (see there).[2] In *? Herb. Melbourne.*

LITERATURE. (1) W. R. CUTHBERTSON: 'Explorations of the Highlands of South-Eastern British New Guinea (July to October 1887)' (Transact. & Proc. Roy. Geogr. Soc. Australasia Vict. Br. 5, 1888, p. 2, 7–12); 'Journal of the Royal Geographic Society's exploration to the highlands of British New Guinea' (*l.c.* p. 13–43).

(2) *cf.* F. VON MUELLER, in Transact. and Proc. Roy. Soc. Victoria 24, 1887, p. 174–175; in Vict. Naturalist 4, 1887, p. 110–112, 121; in Descr. Not. Pap. Pl., pt 9, 1890.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Cuzner, Harold

(1880, Beckington, Somerset, England; x), B.S.F. in the University of Minnesota, U.S.A.; Forester in charge of the School of Forestry, and Professor of Silviculture and Physiography in the University of the Philippines.

Author of several papers on useful plants.[1]

COLLECTIONS. Scattered in literature we met with the numbers 21 and 29, both from *Luzon.* He only made a minor collection; in *Herb. Manila.*

LITERATURE. (1) *E.g.* in the Philip. Agric. 1908–10, 1921, and in Makiling Echo 1922–23.

BIOGRAPHICAL DATA. Philip. Agric. 18, 1929, p. 301, 309 + portr.; Nat. Res. Counc. P.I. Bull. *no* 7, 1935, p. 647, incl. bibliogr.

Daalen, Gottfried Coenraad Ernst van

(1863, Makassar, Celebes; 1930, The Hague, Holland), got his military education in Holland and returned to the D.E.I. towards the end of 1884; from 1891–94 he attended staff college in Holland and subsequently went back to the Indies again. In *1904* he made a punitive expedition through the Gajo and Alas Lands,[1] N. Sumatra, accompanied by the native collector PRINGGO ATMODJO (itiner., coll., *etc.* see there). In 1909 he was appointed Lieutenant-General; in 1914 he retired and returned to Holland.

Sonerila daalenii BAKH. *f.* was named after him.

COLLECTIONS. *Hort. Bog.: Sumatra* orchids (pres. *1906*). *Cf.* also *sub* PRINGGO ATMODJO.

LITERATURE. (1) J. C. J. KEMPEES: 'De tocht van Overste van Daalen door de Gajo-, Alas- en Bataklanden' (Amsterdam, no date).

BIOGRAPHICAL DATA. Encyclop. N.I. 6, 1932, p. 824–825.

Dachlan (Bin Anoem), Mohamad

at first 'Mantri' of the Police and since 1917 of the D.E.I. Forest Service in SE. Borneo, at the following stations: Karang Intau, Bandjermasin, Pleihari, Kandangan, Kota Baroe, Martapoera, Koeala Kapoeas, and Batoe Litjin. In 1937 appointed Chief Mantri.

COLLECTIONS. In *Herb. Bog.*, from Bandjermasin, *P. Laoet, etc.;* from subdivision Rantau (Aug. *1922*) 27 *nos* (1–27) + dupl. F.R.I. In *Herb. For. Res. Inst. Buitenzorg:* several hundreds of numbers from *SE. Borneo* and *P. Laoet* (coll. *1918–39*).

Däniker, Albert Ulrich

(1894, Steinmaur, Switzerland; x), botanist-ecologist, educated at Zürich (Ph. Dr 1928); travelled and studied in Europe (1921–24), and made an expedition to New Caledonia and the Loyalty Islands in 1924–26, paying a visit to Australia in that period; since 1929 acting leader of the Botanic Garden and Museum, Zürich; in 1933 appointed Extraordinary Professor, and in 1939 Ordinary Professor and Director of the Botanic Garden and Museum.

Author of several ecological papers, not concerning the Malaysian region.

COLLECTING LOCALITIES. *1926.* When homeward bound from the expedition to New Caledonia and the Loyalty Islands, he visited the *Malaysian region, viz: E. Timor:* Dilly; *E. Java:* Soerabaja; *W. Java:* Bandoeng (Apr.), G. Tangkoeban Prahoe, Lembang, Buitenzorg, Priok; *Malay Peninsula: Penang,* Kuala Lumpur.

COLLECTIONS. About 20 plants from the Malaysian region in *Herb. Univers. Zürich.*

BIOGRAPHICAL DATA. Neujahrsbl. Naturf. Ges. Zürich for 1947, 149, 1946, p. 105 + portr.

Dahl, Friedrich Otto

(1856, Holstein, Germany; 1929, Berlin, Germany), zoologist who took his Ph. Dr's degree at Kiel in 1884; in 1894 Professor, before then University Lecturer, at Kiel; finally Curator of the Zoological Museum, Berlin. In 1889 he accompanied a plankton expedition in the Atlantic Ocean; in May 1896, when on a scientific tour to the Bismarck Archipelago, he settled at Ralum Estate, Blanche Bay, New Britain, to found a zoological station with the help of R. PARKINSON (see there).[1]

Some plants were named after him.

ITINERARY. *Bismarck Archipelago.*[2] Departing from Genoa (March 12, 1896) to the *Bismarck Archipelago,* N of E. New Guinea. From his collections we derive the following dates: *Credner Isl.* (= *Balakuwor*) (Aug. *1896*); in Oct. by boat to the N. coast of Gazelle Peninsula, *New Britain,* to Wuna Márita, ascent of volcano island *Watom* (= *Wuatom*) and volcano Nord-Tochter (Towanumbatir); *Neu-Lauenburg* Group (= *Duke of York Isl. etc.*) (Nov. 10–19): *Mioko, Duke of York Isl., Kerawara* and *Mualim;* volcano island *Raluan* (Nov. and Dec.); Wuna Kokor (Varzinberg) (Febr. *1897*), reaching the summit; in March 1897 visiting the volcano island *Raluan* again, along the N. coast of Gazelle Peninsula, *New Britain,* and from Wuna Márita making a tour in the Baining Mts. He returned to Kiel by way of former *Kaiser-Wilhelmsland* (= *NE. New Guinea*).

COLLECTIONS. *Herb. Berl.:* 329 *nos* of siphonogams from the *Bismarck Archipelago.*[3]

LITERATURE. (1) *cf.* Nachr. Kais. Wilh. Land 12, 1896, p. 50–51.

(2) FR. O. DAHL: 'Eine Reise nach der Südsee' (Deutsch. Kolon. Zeit. Berl. N.F. 11, 1898, p. 98–99); 'Das Leben der Vögel auf den Bismarck-Inseln nach eigenen Beobachtungen vergleichend dargestellt' (Mitt. Zool. Mus. Berl. 1, 1899, p. 107–122); 'Blumenbesuchende Vögel des Bismarck-Archipels' (Sitz. Ber. Ges. Naturf. Freunde Berl. 1900, p. 106) (*non vidi*); for the many zoological papers, *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea 2^2, p. 648, footnote 5.

(3) K. SCHUMANN: 'Plantae Dahlianae' (Notizbl. Berl. Dahl. 1, 1897, p. 206–209); 'Flora von Neu Pommern' (*l.c.* 2, 1898, p. 59–158).

Araceae and *Fungi,* respectively by A. ENGLER and P. HENNINGS in ENGL. Bot. Jahrb. 25, 1898.

SCHUMANN & LAUTERBACH in 'Flora d. Deutsch. Schutzgeb. *etc.*' (Leipzig 1901) and in 'Nachträge' (1905).

References dealing with the zoological results, *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea 2^2, p. 648–649, footnote 7.

BIOGRAPHICAL DATA. Who's who 1913; Mitt. Zool. Mus. Berl. 15, 1930, p. 625–632; BACKER, Verkl. Woordenb., 1936.

Dakkus, Pieter Martinus Wilhelmus

(1892, Utrecht, Holland; x), since Nov. 1920 till World War II, Curator of the Botanic Gardens at Buitenzorg. At the end of 1920 he accompanied DOCTERS VAN LEEUWEN to Fort de Kock, Sumatra West Coast,[1] in 1924/25 the expedition of HANS WINKLER to Central Borneo, attended by the native plant collector RACHMAT (see there).

Author of a book on orchids.

COLLECTING LOCALITIES. *Sumatra West Coast:* Padang (*1920*).—*W. Java:* Kandangbadak on G. Gedeh (March *1921*); Depok (1921); G. Pantjar and Paniisan with R. C. BAKHUIZEN VAN DEN BRINK and W. M. DOCTERS VAN LEEUWEN (Dec. 8–10, *1923*); Radjamandala and Sangian Tikoro (Jan. 20–21, *1924*); Bolang Estate, Pasir Tjerèwèd (June 7–10, 1924); *P. Kerkhof,* Bay of Batavia (1924).—WINKLER *Borneo Expedition,* Oct. *1924* –March *1925*,[2] *cf.* Itiner. *etc. sub* HANS WINKLER.

COLLECTIONS. 350 *nos* of living material from *Borneo* for *Hort. Bog.*;[3] possibly some specimens of dried material in *Herb. Bog.* Living plants from the other localities in *Hort. Bog.* too. Some *Java* dupl. (1923) in *Leyden.*

LITERATURE. (1) *cf.* Versl. Pl. Tuin Buitenzorg for 1920, p. 2.

(2) P. DAKKUS: 'Verslag van een reis naar Centraal-Borneo. Oct. 1924–Maart 1925' (Ind. Comité Wet. Onderz. 1925, 16 pp., w. map); 'Naar den Boekit Raja in Centraal-Borneo' (Trop. Nat. 14, 1925, p. 129–139, 7 fig.); 'In het bovenstroomgebied van de Kapoeas' (*l.c.* 16, 1927, p. 168–172, 3 fig.).

(3) *cf.* Versl. Pl. Tuin Buitenzorg for 1925, p. 13–15.

Dalenberg

is cited as the collector of *Schleichera trijuga* WILLD. *no* 325, in the mountain region of *Ambon* (June *1857*); the cited specimen in *Herb. Vienna* (*cf.* Pflanzenreich Heft 98b (IV. 165), 1932, p. 879).

Dalhousie, Christina Countess of (born BROWN)

(1786, Coalstoun, Scotland; 1839, Edinburgh, Scotland), wife of G. RAMSAY, the 9th Earl of DALHOUSIE and Commander in Chief in India, 1829–32. She collected in *Penang* for Sir W. HOOKER

(*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

Some plants were named after her.

COLLECTIONS. *Herb. Kew:* from Madeira, Rio, Cape, Morocco, *Penang*, India, 600 and 400 dupl.; many ferns. Her private herbarium consisting of 1200 specim. was presented to the *Bot. Soc. Edinburgh*, after return in Europe. Plants collected by her in *Penang* were sold with the Herbarium of ROBERT GRAHAM in 1846, and were acquired by RICH.

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 36, 1898, p. 446; CURTIS' Bot. Mag. Dedic. 1827–1927, p. 27–28 + portr.; BACKER, Verkl. Woordenb., 1936.

Dalzell

COLLECTIONS. In *Herb. Vienna* (acq. with *Herb.* REICHENBACH): orchids from *Java*. No collector in Java of that name is known to us; it may be NICOL ALEXANDER DALZELL (1817, Edinburgh, Scotland; 1878, Edinburgh) who was in the employ of the Forest Service in the Prov. of Bombay, 1841–70; we do not know, whether the latter paid a visit to Java. His collection is at *Kew*.

BIOGRAPHICAL DATA (of N. A. DALZELL). PRITZEL, Thes. Lit. Bot., 1872; Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; Journ. Bomb. Nat. Hist. Soc. 41, 1939, p. 145.

Damanoe, F., *cf. sub* Forest Research Institute, Buitenzorg.

Dames, Teo Willem Gerrit

(1908, Paramaribo, Surinam; x), was educated at the Agricultural College, Wageningen; since 1937 Pedologist in the Soil Science Institute at Buitenzorg, W. Java, finally leader of the Java Soil-Mapping Division. In his function he made tours all over Java; in 1939 he visited the Dairi Lands in N. Sumatra to examine their suitability for colonization of Dutch farmers. On the latter trip a non-published report was written.

COLLECTING LOCALITIES. *1939. N. Sumatra*, Tapanoeli: Dairi Lands (May 6–July 6), situated on the NW. side of Lake Toba from Tele (on Lake Toba) as far as Limadoema in the NW.

COLLECTIONS. *Herb. Bog.:* 94 *nos* (including 7 'a' *nos*).

Damit, A.

collected on behalf of E. D. MERRILL (see there).

COLLECTIONS. *Herb. Manila:* from Sandakan, *Br. N. Borneo*; dupl. in *Herb. Bog.* (acq. *1929*).

Dammerboer, J. G.

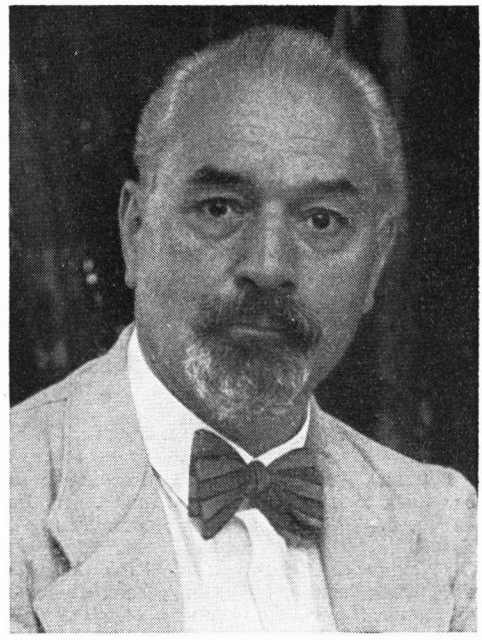
(1867, Oeta Rimbaroe, Sumatra; x), education expert, collected some orchids in *Java* (*1918*), which he forwarded to J. J. SMITH.

Dendrobium dammerboerii J.J.S. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. *Herb. Bog.:* some orchids.

Dammerman, Karel Willem

(1885, Arnhem, Gld, Holland; x), zoologist who got his education at Utrecht University, was for 2 years Assistant in the Nat. Hist. Museum at Leyden, and took his Ph. D. at Utrecht in 1910. In the same year he was appointed Entomologist of the Botanical Laboratories of the Botanic Gardens, Buitenzorg (in 1912 division of Plant Diseases); in 1919 Chief of the Zoological Museum and Laboratory, since 1932 also Director of the Botanic Gardens. He was pensioned off at the beginning of 1939, and returned to Holland in October of that year. He settled at Leyden.



DAMMERMAN

His publications are principally in the field of agricultural and systematic zoology; an extensive book on the fauna of Krakatau was published in 1948.

COLLECTING LOCALITIES. *Riouw Archipelago: P. Doerian* (first visit in June *1923*, Nov. 1923); *E. Java:* G. Idjen, Ongop-Ongop (May *1924*); G. Idjen (June 1924).—*Soemba* (*Lesser Sunda Isls*) (March 14–May 26, *1925*)[1] with native collector IBOET (itiner. *etc.* see there).—*Karimoen Djawa Isls* (fortnight in May *1926*).—*P. Bawean* (May 4–13, *1928*) with native collector KARTA (see there).—*W. Java:* Ardjoeno Estate on G. Papandajan (Sept. *1933*); Tjikepoeh in S. Priangan (Apr. *1934*).

COLLECTIONS. *Herb. Bog.*, only few numbers, *e.g. P. Doerian nos* 9–11, from G. Idjen and Tjikepoeh both about 16, some from *Soemba;* in *Bawean* possibly collected by KARTA only.

LITERATURE. (1) K. W. DAMMERMAN: 'Een tocht naar Soemba' (Nat. Tijdschr. N.I. 86, 1926, p. 27–122, 14 fig., 15 pl.; repr. Ind. Comité Wet.

Onderz. Batavia 1926); 'Flora en Fauna van Soemba' (Trop. Nat. 15, 1926, p. 72–82); 'Soembaneesche Dieren- en Plantennamen' (Tijdschr. Ind. Taal-, Land- en Volkenk. 66, 1926, p. 205–239); 'On the mammals of Sumba' (Treubia 10, 1928, p. 299–315).

BIOGRAPHICAL DATA. Wie is dat? ed. 2–3.

Dampier, William

(1652, East Coker in Somerset, England; 1715, London, England), went to sea when 16 years old; made several voyages as Captain in the Navy and Hydrographer, especially to the South Seas. There is a gap in our knowledge respecting the years 1691–97. He is the discoverer of Miangas (*c.* 1687) and of the Bismarck Archipelago (1700).

This so-called buccaneer who was notorious with the D.E.I. Company who suspected him of having the intention to claim New Guinea for the English, had an open eye for nature, and at that early date not only brought home a dried collection of plants, but also illuminated an account of his travels with drawings of plants and animals (a draughtsman accompanied the voyage of the 'Roebuck'), and mentioned many data on useful plants, birds and fishes.[1]

The genus *Dampiera* R.Br. was named in his honour.

ITINERARY.[2] He left England, sailing in the beginning of 1679,[3] to the West Indies, America, Africa, S. America and then proceeding to the East Indies by way of Guam (May 21, *1686*); June 2 leaving for the *Philippines: Isl. St John* (21), *Mindanao* (22); Jan. 14, *1687* sailing from Mindanao to Manila (*Luzon*) *via* Zamboanga; *island W of Cebu* (Febr. 3–9); *Mindoro* (Febr. 18–20); *Luzon* (Manila, 23–25); P. Condor (March 16–Apr. 15), Siam, P. Condor again and sailing from there with destination Manila, but turning up in China through unfavourable wind; Formosa; visiting 2 *islets near SE. Mindanao* (Oct. 16–Nov. 1) (*Miangas* ?); E. coast of *Celebes* (Nov.); *P. Boeton* (Dec. 6–11) at Calla–Susung (E. coast = Dwaal Bay); sailing for New Holland; Cocos Isls; *Christmas Isl.* (March 28, *1688*); along the W. coast of Sumatra (Apr.) visiting some of the *Nassau* (= *Pagai*) *Islands* (betw. Apr. 12–20), proceeding to the Nicobars, where D. quitted the vessel on account of a quarrel with the captain; May 15 he sailed to Atchin (= Atjeh, *N. Sumatra*), staying near the mouth of the Passange Jonca (May 20–beginning of June); trips to Tonkin, *Malacca* (Oct.–Nov., Christmas *1689*), *P. Dinding* (Nov. 1689), Fort St George (5 months in *1690*) and Bencoolen (*S. Sumatra*), where he was appointed gunner of the fort. In Jan. *1691* he secretly embarked to England, arriving on Sept. 16th of the same year, *via* the Cape and St Helena. —*Voyage in the 'Roebuck', 1699–1701.*[4] 14 (26) Jan. 1698 (9) sailing from England in command of the 'Roebuck', *via* Brazil to New Holland; in Sept. navigating in the direction of *Timor:* near Fort la Concorde in S. Timor (Sept. 23–25, *1699*), Bay of Coepang (Babao) (27–28); *Port. Timor:* Bay of Laphao (Oct. 12–21); *Dutch Timor:* Bay of Coepang (27), Babao (Oct. 28–Dec. 11); the next day sailing to *New Guinea* which came in sight on Jan. 1, *1700*, and where he visited: Mackerels Bay, Freshwaterbay, Gulf of Maccluer and the near *P. Sabudi* (= *Saboeda*) (Jan. 16–20); rounding Cape Mabo (W. point of *Batante*) (Febr. 4); passing through the later Dampier Strait where he visited *several small islands* (5–8); passing Schouten Island; sighting a large amount of floating botanical material (trunks *etc.*, probably from the Mamberamo!); passing Mathis Islands (25); once more sighting floating material, and then circumnavigating (Febr. 28–Apr. 1) what D. at the outset supposed to be the mainland of New Guinea, but what proved to be a large island, to which he gave the name of 'Nova Brittania' (= *New Britain*), sailing along its north, east and south coast, and then proceeding (Apr. 2) in western direction; passing Schouten Island once more (14); sighting a smoking high mountain on the mainland (17, ? Arfak or ? G. Kwoka); rounding Cape Mabo (18); *Ceram* (Apr. 26–May 2); *Timor:* Babao (May 18–22); *Java:* Batavia (July 4–Oct. 16). On the return voyage the boat sprang a leak, but the crew was rescued; *via* the Cape and St Helena back to England in 1701.—*Voyage in the 'St George' and the 'Fame', 1703–1707.*[5] Along the American Pacific coast; in 1704 the expedition separated; the party under FUNNEL visited Ambon, Batavia, Bantam, Prinsen-eiland (*cf.* 2nd half of his account[5]), DAMPIER himself in the 'St George' was forced to leave that ship, on account of her poor state, near the coast of Peru and proceeded on his voyage in a prize ship; he went ashore in *New Guinea* and *Mindanao* (*P.I.*), sailed along the Talaut Isls, and *Batjan* (Moluccas), where he and his crew were taken prisoners and transported to *Ternate;* released in the latter island, they sailed to Batavia (arriving July 26, *1706*); back in England at the end of 1707.[6]—*Voyage under* ROGERS *in the 'Duke' and 'Dutchess'*, DAMPIER serving as pilot, *1708–11.*[7] Sailing from Kingroad (Aug. 1, 1708), *via* Teneriffe, the Canaries, S. America, Falkland Isls, Cape Horn, Juan Fernandez, Peru, Galapagos Isls, Mexico, California and Guam; passing New Guinea and the Moluccas on the way to *P. Boeton* (staying ashore May 29–June 7, *1710*), sailing between SW. Celebes and Salajar to *Java:* Batavia (June 20–July 22), *P. Hoorn* in the Bay of Batavia (July 23–Sept. 13), back to Batavia again and weighing anchor for the return voyage on Oct. 24; sailing *via* the Cape, St Helena, Ascension, to England (arriving Oct. 1, 1711).

COLLECTIONS. Some in *Herb. Brit. Mus.*, acquired with *Herb.* SLOANE (book 94 vol. II). In *Sherardian Herb. Oxford:* 40 *nos*, mostly scraps, 18 of which figured in DAMPIER, A new Voyage *etc.* (*l.c. sub* 4), and also reproduced by I. LEE (*l.c. sub* 2); of 6 specimens it cannot be proved that they originate with DAMPIER;[8] besides from Australia, too from Brazil, *Timor*, near *New Guinea* (floating *Algae*). DAMPIER handed the plants to WOODWARD who forwarded them to RAY and PLUKENET for examination;[9] some plants described by RAY[10] and PLUKENET (by the latter in Amaltheum Botanicum) are missing in the Oxford Herbarium.

LITERATURE. (1) *cf.* 'Captain W. DAMPIER as a botanist' (Gard. Chron. 3rd ser. 15, 1894[1], p. 429–430, 464).

(2) 'A collection of voyages' made by KNAPTON (London 1729, 4 vols).

E. J. MASEFIELD: 'DAMPIER's voyages' (London 1906, 2 vols + portr.).

cf. also in J. BURNEY, A chronological history of discoveries in the South Sea, 4, 1816; I. LEE, Early explorers in Australia, London 1925.

(3) W. DAMPIER: 'A new voyage round the world' (London 1697); transl. into French: 'Nouveau voyage autour du monde' (Amsterdam 1701 and 1711, 3 vols).

New edition with introduction by Sir ALBERT GRAY (London 1927).

(4) W. DAMPIER: 'A voyage to New Holland, *etc.* in the year 1699' (London 1703–09); transl. into French: 'Voyage de GUILLAUME DAMPIER aux terres Australes, à la Nouvelle Hollande, *etc.* fait en 1699' (Amsterdam 1705 and 1712, 2 vols).

New edition with Introduction, Notes and Illustrative Documents by J. A. WILLIAMSON (1939).

cf. also PETERM. Mitt. 60[2], 1914, p. 223–225, 4 fig.

(5) W. FUNNEL: 'A voyage round the world. Containing an account of Capt. W. DAMPIER's Expedition into the South-Seas in the ship St. George, in the years 1703 and 1704' (London 1707).

DAMPIER himself wrote a protest against some statements of FUNNEL: 'Captain DAMPIER's vindication for the present of Mr. FUNNEL's chimerical relation' (London 1707); reprinted in MASEFIELD, DAMPIER's voyages (London 1906), *cf.* vol. 2, p. 575–593.

(6) *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea vol. 1, 1909, p. 161–162.

(7) WOODES ROGERS: 'A cruising voyage round the world' (London 1712); transl. into Dutch: 'Nieuwe reize naa de Zuidzee van daar naa Oost-Indien, en verder rondom de Waereld 1708–1711 gedaan onder het bestier van W. DAMPIER' (Amsterdam 1715).

E. COOKE: 'A voyage to the South Sea and round the world' (London 1712).

(8) Prof. T. G. B. OSBORN & Mr C. A. GARDNER: 'DAMPIER's Australian plants' (Proc. Linn. Soc. Lond. 151, 1939, p. 44–50); *cf.* also Journ. Bot. 11, 1873, p. 348: Prof. LAWSON, Remarks on plants collected by the voyager DAMPIER.

(9) *cf.* Journ. Bot. 77, 1939, p. 95.

(10) 'A new voyage round the world (1697). Plantae a D. GUILIELMO DAMPIER in Brasilia, Nova Hollandia, Timor et Nova Guinea, observatae et collectae' (RAY, Hist. Plant., 3, 1704, App. p. 225–226).

'List of plants collected on the West Coast of Australia, in 1699, by WILLIAM DAMPIER' (KONIG and SIMS Ann. Bot. 2, 1806, p. 531–532).

BIOGRAPHICAL DATA. HALLER, Bibl. Bot., 2, 1772, p. 35–37; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 26, 1888, p. 278, and in 2nd ed. by RENDLE, 1931; Gard. Chron. 3rd ser. 15, 1894[1], p. 429–430 and 464; MASEFIELD, Dampier's voyages, 1906, p. 1–13 and portr.; MAIDEN in Journ. West Austr. Nat. Hist. Soc. 1909, p. 13–14; WILKINSON: 'William Dampier' (Bedley Head ed. 1929) (*non vidi*); W. H. BONNER: 'Capt. William Dampier buccaneer-author' (Stanford Univ. *etc.* 1934); portr. and biogr. in the new edit. of 'A voyage to New Holland' (1939) by J. A. WILLIAMSON.

Dana, James Dwight

(1813, Utica, N.Y., U.S.A.; 1895, New Haven, Conn., U.S.A.), was educated at Yale College; in 1833 he entered on a voyage of 15 months as instructor in mathematics of the U.S. Navy; on returning, Assistant in chemistry at Yale College; in 1838–42 Naturalist of the WILKES U.S. Exploring Expedition (detailed data, liter., *etc. cf. sub* WILKES); from 1842–44 at Washington, preparing his reports; subsequently Professor at New Haven, engaged in teaching and in original work. With forthcoming age his interests yielded more and more to geology, though he was an authority in mineralogy and several departments of zoology too.

Author of numerous scientific papers.

COLLECTIONS. He may have made botanical collections during the WILKES Expedition (see above) which visited the *Philippines* from Jan. 13–Febr. 12, *1842*.

BIOGRAPHICAL DATA. Bull. Geol. Soc. Amer. 7, 1896, p. 461–479, incl. bibliogr. + portr.

Danao, F., *cf. sub* Forestry Bureau, Manila.

Danhof, G. N., *cf. sub* Forest Research Institute, Buitenzorg.

Daniels, Hendrik Willem

(1899, Rotterdam, Holland; x), got his education at the Agricultural College at Wageningen; he went to the D.E.I. in 1926 and was appointed Chemical Engineer in the s.f. Redjosari; Group-Adviser of the Experiment Station for the Java Sugar Industry (Pasoeroean), stationed at Probolinggo, 1929–32; subsequently in the employ of the dairy industry at Rotterdam and later Agricultural Adviser of the firm of WATTIE & Co., stationed at Malang (E. Java).

COLLECTIONS. *Herb. Pasoer.*: 4 *nos* of weeds from Probolinggo (*E. Java*) (pres. *1931*).

Danne

collected an orchid on G. Tjikorai, *W. Java*, which he forwarded to J. J. SMITH, *Herb. Bog.*

Danoesoegondo, *cf. sub* Forest Research Institute, Buitenzorg.

Danser, Benedictus Hubertus

(1891, Schiedam, Z.H., Holland; 1943, Groningen, Holland), a botanist, formerly school-teacher, who got his education at Amsterdam University, where he took his Ph. Dr's degree in 1921; natural history teacher at Haarlem, 1920–25; in 1925 he was granted the Buitenzorg Fund, went to the D.E.I. and remained for some years temporarily on the staff of the Buitenzorg Herbarium. At the end of 1929

he returned to Holland, was at first appointed Assistant and in 1931 Extraordinary (since 1934 Ordinary) Professor in the University of Groningen.

He is the author of many systematic and genetic papers; in the Buitenzorg period he wrote revisions of the *Polygonaceae*, *Nepenthaceae* and



DANSER

Loranthaceae, published in the Bull. Jard. Bot. Buitenzorg.

He is commemorated in the genus *Dansera*.

COLLECTING LOCALITIES. In the years *1925–29* especially in *W. Java*, *viz* near the coast, Oude Haven (Old Harbour) of Batavia (*1925*), Tjibodas on G. Gedeh (Dec. 1925, *1926*), Bekassi (1926), Priok (Apr. 4, 1926); several times in Priangan Residency, G. Gedeh, G. Salak, environs of Buitenzorg and Batavia; Kamodjan near Garoet (May 23–June 2, *1928*).—In *E. Java* he collected at: Tosari (G. Tengger) (end of Dec. *1927*–beginning of *1928*) and in the environs of Poenten (end of *1928*–beginning of *1929*): Poenten, Tjobanrondo, G. Ardjoeno.

COLLECTIONS. *Herb. Groningen*, partly in *Herb. Bog.*; 101 dupl. (and European collections before 1925) in *Herb. Leyden*. The collection from Kamodjan consists of 112 *nos*, numbering above 6700. He numbered his Javan collection from *no* 6000 onwards.

BIOGRAPHICAL DATA. Wie is dat? ed. 2–4; Vakbl. Biologen 24, 1943, p. 119–120; Ned. Kruidk. Arch. 53, 1943, p. 129–136, w. portr. & bibliogr.; in Jaarb. Rijksunivers. Groningen 1945.

Daoed, *cf. sub* Forest Research Institute, Buitenzorg.

Dare

According to RIDLEY (*cf.* Sarawak Mus. Journ. 1, 1912, p. 38) he brought home a specimen of *Saccolabium odoratissimum n.sp.* from *Borneo*, which he planted in his own garden. No information is given on the situation of the latter. Collector of *Bulbophyllum macranthum* LINDL. from Landak, *Borneo* (*cf.* RIDLEY in Journ. Linn. Soc. Bot. 31, 1895/97, p. 272).

Darling, F. W.

forest officer who did but little collecting; *cf. sub* Forestry Bureau, Manila.

He is commemorated in *Terminalia darlingii* MERR.

Daroesman, *cf. sub* Forest Research Institute, Buitenzorg.

Datoeq Hanapi, *cf. sub ditto*.

Daubanton, C.

got his horticultural practice in the Botanic Gardens at Utrecht and Kew; he went to the D.E.I. where he was appointed temporary teacher at the School of Agriculture at Buitenzorg and subsequently in 1912 Curator of the Botanic Gardens. At the end of 1918 he went on furlough and after that year he was mentioned no more in the reports of that institution.

COLLECTIONS. *Herb. Bog.*: few plants, some of them collected near Tjisaroea (Pasir Pandjang) on the W. slope of G. Gedeh, *W. Java*, in *1916*.

Daud

COLLECTIONS. In *Herb.* WIGHT (see there) are plants labelled 'Singapore, Dawood'. It is assumed that they came from a Malay collector named DAUD, perhaps through ROBERT WIGHT's seafaring brother (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5). *Herb.* WIGHT = *Herb. Kew*.

Evidently DAUD is a rather common name with Malays, in 1905 a certain DAUD was Deputy Ranger in Perak; *cf.* also TASSIM DAUD.

Another DAUD, a Malay coolie from the Singapore Botanic Gardens, collected in Sarawak (*NW. Borneo*) together with TACHUN (= TACHUN BIN BABA, see there). They worked under the direction of the For. Dept Sarawak *about 1938*.

Daum, G. C.

an Army Paymaster who sent material of the gutta-percha tree to the 'Natuurkundige Vereeniging N.I.' (Batavia) in *1852*.

Davis, B. F.

COLLECTIONS. *Herb. Sarawak:* flower of *Amorphophallus*, collected above Krokong Village near Bidi, *Sarawak*, *NW. Borneo* (pres. *1906*).

Dawood, *cf.* DAUD.

Day, Alice W.

wife of K. B. DAY, rubber planter.

COLLECTING LOCALITIES. *Luzon:* Baguio;

Mindanao, Zamboanga: Mt Silingan (Nov. *1934*).

COLLECTIONS. *C.* 50 *nos*, labelled 'Phil. Nat. Herb. 3000' (see Philip. National Herb.); orchids in O. AMES *Herb.*

Day, John

(1824, London, England; 1888, Tottenham, London, England), owner of a nursery of ferns and orchids at Tottenham, who travelled in Br. India, Ceylon, Jamaica and the Malay Peninsula. He imported many exotic orchids in England, was a co-operator of VEITCH's 'Manual of Orchidaceous Plants' and owned a collection of 3000 coloured drawings of orchids, at present preserved at Kew.[1]

Some orchids and *Gymnogramme dayi* BEDD. were named after him.

COLLECTING LOCALITIES. *188.. Malay Peninsula:* Perak, *e.g.* on Mt Idjo, Maxwell's and Birch's Hill, Perak River; *Penang*.

COLLECTIONS. From time to time he presented living plants to *Hort. Kew*. He collected dried ferns,[2] a collection of which was presented to *Herb. Kew* in 1907.

LITERATURE. (1) *cf.* Kew Bull. 1906, p. 177–179.

(2) Col. R. H. BEDDOME: 'Ferns collected in Perak and Penang by Mr. J. DAY' (Journ. Bot. 26, 1888, p. 1–6).

BIOGRAPHICAL DATA. Kew Bull. 1906, p. 177–179; 3rd Suppl. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 46, 1908, p. 4, and in 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Dayao, *cf. sub* Forestry Bureau, Manila.

Deare, Colonel

REICHENBACH *f.* named some orchids after Colonel DEARE (*cf.* BACKER, Verkl. Woordenb., 1936) of Englefield Green (near Egham, W of London), the owner of a beautiful collection of exotic orchids. According to RICKETS (*cf.* Orch. Review 1936, p. 78), Colonel DEARE himself collected orchids in *Borneo* (Sarawak), a short time *before 1885*.

Defensor, *cf. sub* Forestry Bureau, Manila.

Deissner, H.

collected *Elaeocarpus angustifolia* BL. in the forests near Batoe Roesak in *Banka* (*cf.* TEYSMANN in Nat. Tijdschr. N.I. 27, 1864, p. 180).

Deistel, Hans

German Government Gardener in Cameroon (collecting there from 1898–*c.* 1907), who made a study tour to Java *etc.* in 1906–07.[1] At Singapore and Buitenzorg he was introduced by SCHLECHTER.

Habenaria deistelii SCHLTR was named after him.[2]

ITINERARY. Sailing from Genoa (Oct. *1906*); *Singapore* and Botanic Gardens; *W. Java:* Buitenzorg and Botanic Gardens; Tjipetir; Tjinjiroean; Tjibodas; setting out (Jan. 8, *1907*) to *E. Java:* Pantjoer Estate on the slopes of the Idjen Plateau; Petoeng Estate near Djember; Soerabaja; *Centr. Java:* Djokja (visiting the temple ruins); *W. Java:* Buitenzorg; *Singapore*, *P. Penang;* Ceylon.

COLLECTIONS. He presented his collections to SCHLECHTER;[3] with *Herb.* SCHLECHTER in *Berl.:* some *Orchidaceae* and *Burmanniaceae* collected on G. Pangrango (probably collected during his stay at Tjibodas) and G. Wilis (in the cited report no mention is made of this mountain, nor of a stay in the neighbourhood), *etc.*

LITERATURE. (1) H. DEISTEL: 'Bericht über eine Reise nach Britisch- und Niederländisch-Indien' (Tropenpflanzer 9, 1908, Beiheft *no* 4, p. 63–131).

(2) *cf.* FEDDE Repert. 16, 1919/20, p. 353–354.

(3) *cf.* R. SCHLECHTER in Notizbl. Berl. Dahl. 8, 1921, p. 31.

Dekalb Russell Jr., *cf. sub* RUSSELL JR, DE KALB.

Dekker, Dr Johannes

(1879, Alkmaar, N.H., Holland; x), pharmacist, educated at Utrecht University, taking his Dr's degree at Berne with Prof. TSCHIRCH in 1902; Military Dispenser in the D.E.I., 1902–10; Director of the division Commercial Museum of the Colonial Museum at Haarlem, Holland, 1910–16; Scientific Adviser of the firm of JURGENS, 1916–22; Municipal Chemist at Rotterdam, 1922–25; since 1929 pharmaceutical chemist at Middelburg.

Author of 'De looistoffen' (tannins).[1]

COLLECTIONS. When stationed at Kotaradja in *N. Sumatra*, he sent a herbarium of the Gajo and Alas Lands to the *Herb. Kol. Mus. Haarlem* (the later *Ind. Inst. Amsterdam*), in 1905, which was later transferred to *Herb. Leyden*. Actually the plants were collected by R. M. PRINGGO ATMODJO (see there) in *1904*.

LITERATURE. (1) In Bull. Kol. Mus. *no* 35, 1906, and *no* 39, 1908.

BIOGRAPHICAL DATA. Portr. in Bull. Kol. Mus. *no* 52, 1913.

Delahaye, *cf.* LAHAIE.

Delden, van

Manager of Selbourne Estate, Pahang, *Malay Peninsula*.

COLLECTIONS. In *Herb. Kuala Lump.*, numbered in the C.F. (see *sub* Conservator of Forests) series. He collected *Palaquiums* at Kuala Lipis *etc.*

Delessert, Adolphe

nephew of BENJAMIN DELESSERT, the founder of the Botanical Museum DELESSERT; he travelled in the years 1834–39 (see below), and in 1843 he went to British India again. He made principally zoological collections and was accompanied by some hunters.

ITINERARY.[1] On March 28, *1834* departing to Pondicherry (with PERROTTET), staying until Nov. 8, then embarking to *P. Penang* (making some trips in the island and on the opposite coast of the *Malay Peninsula*, and to *Bouton Cawanes Isl.*) (Dec. 6–), *Malacca* (25–30), *Singapore* (Jan. 2–21, *1835*),

Java (Batavia) (27–Febr. 19);[2] back to Pondicherry again and making trips to Madras, Île de Bourbon (1836), Bengal, Br. India; 1839 returning to France.

COLLECTIONS. *Herb.* DELESS. (*Geneva*): small collection of plants from *P. Penang*, *Malacca* and *Batavia*;[3] *Herb. Paris* (through the intermediary of PERROTTET).[4] Dupl. in *Herb.* DECAND. (*Geneva*) (168). Some letters in Archives Nationales, Paris.

LITERATURE. (1) A. DELESSERT: 'Souvenirs d'un voyage dans l'Inde exécuté de 1834 à 1839' (Paris 1843, 2 vols in 1, vol. 2 containing the zoological results).

(2) According to HOOK. Comp. Bot. Mag. 1, 1835, p. 306, in *Borneo* too, but that island is *not* mentioned in the narrative of the voyage.

(3) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 156–158.

(4) *cf.* Flora 19[1], 1836, p. 47.

Delessert, Eugène

travelled to Brazil and the U.S.A. in 1839–41; back in France in July 1841. Some years later he made a second voyage, during which he visited the Malaysian region.

ITINERARY. *1844–47.* Sailing from France in Aug. 1844, visiting the following regions: New Holland, Oceania, Society Isls, *Java; Philippines* (from Hongkong): *Luzon*, at Manila, Laguna, Yala-Yala, Pasig, Taal Volcano, Los Baños, Cavite, *etc.;* China, East Indies and Egypt.

COLLECTIONS. According to his book he made natural history collections; possibly including a botanical one.

LITERATURE. (1) E. DELESSERT: 'Voyage dans les deux océans, Atlantique et Pacifique, 1844 à 1847, Brésil, États-Unis, Cap de Bonne-Espérance, Nouvelle Hollande, Nouvelle Zélande, Taiti, Philippines, Chine, Java, Indes Orientales, Égypte' (Paris 1848). No details on his sojourn in Java are given.

Deli Experiment Station

laboratory for the study of Deli tobacco, established at Medan, *Sumatra East Coast*, in 1906.

COLLECTIONS. *Herb. Deli Exp. Stat.*, especially containing the elements of the flora of fallow tobacco fields, collected by the Indonesians DJADOEK and ROESIL, and by the staff officers JOCHEMS, VAN DER MEER MOHR, PALM, VAN DER WEY, *etc.* (see there); numbered in a series. *Herb. Bog.:* some collections of dried plants, presented in 1928 and in March 1929; the latter collected in the mangrove forests near Belawan, at Perbaoengan, Sibajak, Brastagi, Lau Deboek Deboek, *etc.* and numbered 5000–5092. In *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam:* large collection of cultivated plants (pres. 1927).

Delmaar, Carel Nicolaas Johan

(1885, Bandaneira, Moluccas; x), Head Overseer in the employ of the D.E. Indian Forest Service; since Aug. 1917 stationed at Bandjermasin in SE. Borneo,[1] in Nov. 1925 transferred to Fort de Kock in Sumatra West Coast, Oct. 1927 to Balige in Tapanoeli (W. Sumatra) and in March 1932 to Padangsidimpoean in the same residency. He retired in 1933.

COLLECTING LOCALITIES. *SE. Borneo. Since 1917* in the environs of Bandjermasin, *e.g.* at Loepak, Koeala Kapoeas, Tanah Boemboe, *etc.*— *W. Sumatra:* Tapanoeli, Dairi Lands (*1930*).

COLLECTIONS. *Herb. Bog.:* dupl. of the F.R.I.; *Herb. For. Res. Inst. Buitenzorg:* many numbers from *SE. Borneo* (coll. 1917–25), from Tapanoeli (1930) 3 *nos.*

In *Hort. Bog.: Borneo* orchids (pres. 1921).

LITERATURE. (1) Author of 'Lijst van de ultimo 1924 in de dienstkring Zuider- en Oosterafd. van Borneo aangetroffen boomsoorten' (with L. VAN MEURS, *cf.* abstract in Tectona 18, 1925, p. 890, 898, 899); and 'Eenige mededeelingen omtrent de in de Res. Zuider- en Oosterafd. van Borneo voorkomende katiausoorten' (Tectona 19, 1926, p. 142–150).

Typed reports on a trip to subdiv. Pleihari (Nov. 16–Dec. 15, 1924) and to Sg. Hiang (tributary of the Kapoeas) in 1925, in For. Res. Inst. Buitenzorg.

Delsman, Hendricus Christoffel

(1886, Amsterdam, Holland; x), zoologist, educated at Amsterdam University; on the staff of the Marine Biological Laboratory at Den Helder, 1908–14; Zoological Assistant at Leyden University, 1915–19; at the Marine Biological Laboratory at Batavia, 1919–33 (since 1923 Head); from 1927–33 besides Extraordinary Professor at the Medical College, Batavia. He retired in 1935, living at Hilversum (Holland) since 1933.

COLLECTIONS. *cf. sub* J. D. F. HARDENBERG.

BIOGRAPHICAL DATA. Wie is dat? ed. 2–3.

Demandt, Ernst

(1883, Holzwickede, Westfalen, Germany; x), was educated at the Technical College at Darmstadt; for 13 years employed in Samoa, *viz* Manager of a cocoa plantation 1907–10, Assistant at the Phytopathological Institution, 1910–15, and connected with the Magn. Meteor. Samoa Observatory, 1915–20; subsequently Group-Adviser of the Experiment Station for the Java Sugar Industry (Pasoeroean), stationed at Sitoebondo 1921–27, and Chief of the Field Experiment Service, besides Inspector of the Field Service 1927–35. When pensioned off, he returned to Germany and settled at Lindheim, Ober-Hessen.

COLLECTIONS. *Herb. Pasoer.:* 17 *nos* from *Bali* (*Lesser Sunda Isls*), NW. coast (*1929*) with VAN DILLEWIJN (see there); dupl. in *Herb. Leyden.*

Demetrio, C. H.

COLLECTIONS. *Herb. Sydney:* a few of his *Java* specimens of ferns. They are evidently *ex Herb.* DEMETRIO, and collected by MOUSSET (see there) on Mt Tengger in *1906.*

Demmeni, Jean

(1866, Padangpandjang, Sumatra; 1939, Buitenzorg, Java), non-commissioned officer who entered the D.E. Indian Army in 1888; later he was

transferred to the Topographical Service. In 1896–97, and 1898–1900 he accompanied the expeditions of NIEUWENHUIS (see there) to Borneo, in 1908 he took part in a topographical survey of Krakatau Island, and was the first to reach the summit; in 1909–11 he was a member of the Exploration in Dutch N. New Guinea, mainly as photographer and mentor of the Dyak coolies. Employed by the Topographical Service at Batavia, 1911–20; when pensioned off in the latter year, he continued work in the Central Office of Dactyloscopy.

Dendrobium demmenii J.J.S. was named after him.

ITINERARY. *1909–11. Dutch N. New Guinea.* Accompanying the *Mamberamo Expedition*, Nov. *1909*–Apr. *1910:*[1] Manokwari (Nov. 20, 1909); setting out (Jan. 3, 1910) to the Mamberamo, making Koetei bivouac near the mouth of Van Gelder River; Pionier bivouac (Jan. 20); Febr. 11 starting in southern direction; Lake District (March 27); at 850 m alt. (Apr. 2); return to Manokwari (Apr. 23); and several tours.

COLLECTIONS. *Herb. Bog.:* some *New Guinea* orchids for J. J. SMITH. *Dendrobium demmenii* was grown by him at Batavia.

Hort. Bog.: orchids from *P. Djamna, P. Roon,* Kaiserin Augusta River (= Sepik) (*N. New Guinea*), Selakei, *Boeroe,* Fak Fak (*SW. New Guinea*), *Halmaheira,* Amberbaken and Manokwari (*NW. New Guinea*) and *Ambon* (pres. 1919).

LITERATURE. (1) *cf.* 'Verslag van de militaire exploratie van Ned. Nieuw Guinea, 1907–15' (Weltevreden 1920) p. 63–64.

J. DEMMENI: 'Uit lang vervlogen tijden. Mamberamotocht 1910' (De Orchidee 6, 1937, p. 172–178).

BIOGRAPHICAL DATA. De Orchidee 3, 1934, p. 329; BACKER, Verkl. Woordenb., 1936.

Demmers

forwarded living orchids from Atjeh, *N. Sumatra,* to Dr J. J. SMITH; cultivated in *Hort. Bog.;* no dates of collecting known to me.

Denison, N.

since 1869 in various government functions in Sarawak (*NW. Borneo*);[1] in 1876 appointed Secretary of the Resident Magistrate in Perak, *Malay Peninsula,* and in 1881 Superintendent of Lower Perak.

Artocarpus denisoniana KING was named after him.

COLLECTIONS. He presented 650 plants to *Hort. Sing.* in *1883.* The above-mentioned plant was not collected by himself.

LITERATURE. (1) Author of 'Journal of a trip from Sarawak to Meri' (Journ. Str. Br. Roy. As. Soc. *no* 10, 1883, p. 173–188; trip from April 29–May 25, 1872).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Denker, Carl Johann Friedrich

(1885, Amsterdam, Holland; x), schoolteacher, from 1910–end 1931 serving in the D.E.I.; in 1910 stationed at Probolinggo, in 1913 transferred to Bandoeng; later at Buitenzorg, and since 1925 temporary teacher at secondary schools at Batavia *etc.*

COLLECTING LOCALITIES. *Centr. Java:* Poerbolinggo (= Probolinggo) and other places in Banjoemas Residency (May–June *1911*).—*W. Java:* G. Malabar and Pengalengan (July–Aug. *1916*).

COLLECTIONS. *Herb. Bog.;* some dupl. in *Herb. Utrecht.*

Dennison

at Koeripan in *W. Java,* forwarded plants to *Hort. Bog.* in the years *1873* and *1878.*

Denny, A.

planter at Sungei Pelek, Sepang, Selangor (*Malay Peninsula*), near which place he collected specimens of a number of trees, *1940–41.* Specimens in *Herb. Sing.*

Dennys, Dr Nicholas Belfield

(† 1900, Hongkong), entered the civil department of the Navy in 1855; appointed Student Interpreter at Peking in 1863; 1866–76 editor of the China Mail of Hongkong and Curator of the Museum there; in 1877 appointed Assistant Protector of the Chinese at Singapore and Librarian and Curator of the Museum; 1879–88 employed in Magistrate's work at Singapore, and then at Gopeng. Invalided home in 1889; he resigned in 1890; in 1894 appointed Protector of the Chinese and Magistrate in Br. N. Borneo, where he became Editor of the Br. N. Borneo Herald; in 1899 Acting Judge and Member of Council.

COLLECTIONS. Plants and seeds from the *Mal. Penins.* to *Hort. Sing.* (pres. *1881–82*); he sent a number of specimens from *Borneo* to *Singapore* in *1897.*

BIOGRAPHICAL DATA. Journ. Str. Br. Roy. As. Soc. *no* 35, 1901, p. 106–107 (extr. from Br. N. Borneo Herald).

Denoga, A. N., *cf. sub* Forestry Bureau, Manila.

Denslow, H. M.

? collected *Aeginetia indica* in the *Philippines;* material in GRAY *Herb.* (Cambr., Mass.); possibly *ex Herb.* DENSLOW (Hobart College, Geneva, N.Y.).

Dent, H. C.

plants of his from *Thursday Isl.* in *Herb. Univ. Manchester* (*cf.* 'A brief account of the Gen. Herb. formed by J. C. Melvill' 1904, p. 14).

Derry, Robert

at first in the employ of the Botanic Garden at Berbice (Br. Guiana); Assistant Superintendent of Forests, Malacca (1886–88); partly in Malacca (1889–93), partly in Perak (till 1903); Assistant Superintendent, Botanic Gardens, Singapore (1904–08); Superintendent of Gardens and Forests, Penang (1908); Curator, Botanic Gardens, Singapore (1909–13).

Dendrobium derryi RIDL. was named after him.

COLLECTING LOCALITIES. *Malay Peninsula.* Malacca (*1885 or 1886–93*): headquarters at Ayer Kroh (except in 1891); Mt Ophir (May *1890*);[1] neighbourhood Kuala Kangsar, Perak (*1899–02*).

COLLECTIONS. *Herb. Kew:* 101 *nos* from *Malacca* (acq. 1889); *Herb. Sing.:* plants collected at various times.

LITERATURE. (1) *cf.* Rep. Bot. Gard. & For. Dept Str. Settlem. for 1890, p. 22.

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; BACKER, Verkl. Woordenb., 1936.

Desch, H. E.

COLLECTIONS. *Herb. N.Y. Bot. Gard.:* 20 *nos* of *Avicennia* from Kepong, Selangor, *Malay Peninsula* (must be dupl. from *Herb. Kuala Lumpur* at Kepong, certainly not collected at Kepong).

Deschamps, Emile

French traveller who in 1898 planned to make for sale botanical collections in Travancore, Cochin-China, Ceylon, Java, Sumatra, the Pacific Islands, Japan, Australia and the coast of China. Before Sept. 1900 plants were collected at Colombo, Pondicherry, Madras and Mahé de Malabar.[1] Subsequently he went to Singapore.

In May 1901 he was at Shanghai.

COLLECTING LOCALITIES. In easily accessible places as far as Batu Gajah (Perak State) in the *Malay Peninsula* and in *Penang* (Sept. *1900*–March *1901*).[2]

COLLECTIONS. *Herb. Calcutta:* 662 *nos* (pres. 1901); *Herb. Leyden:* set from India. From the correspondence[1] it is evident that the collection consisted of common plants, and that the material was badly prepared and scrappy. As no data are known of later collections, it may be assumed that his collecting business was not much of a success.

LITERATURE. (1) *cf.* Letters in the archives of the Leyden Herbarium.

(2) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5. According to BURKILL collecting started in Dec. 1900, but from above-mentioned letters it is evident that DESCHAMPS was in Singapore at least as early as Sept. 25 of that year.

Deschamps, Louis Auguste

(1765, Saint-Omer, Dépt Pas de Calais, France; 1842, Saint-Omer), Surgeon-Naturalist of the expedition of the 'Recherche' in search of LA PÉROUSE, 1791–1793 (*cf. sub* BILLARDIÈRE, detailed itiner. *etc.*). When the expedition stranded in Java he was interned for a short interval, but Governor VAN OVERSTRATEN offered him to stay in Java to make natural history investigations for which he would get facilities to extend his research into the interior of the island. DESCHAMPS accepted, as he says, in the interest of science, and took leave of his travel companions. In the subsequent years this Frenchman made numerous trips, and he certainly has been the first to make botanical collections on several of the mountains and in many remote localities of Java. It is a pity that evidently none of his botanical specimens are preserved, as his diary, drawings and MS. papers are such, that we might have expected extremely valuable material. During his travels he was partly accompanied by some young assistants who were to help him with the description and drawing of plants and animals (he collected fishes too!). Afterwards he settled at Batavia as a physician until 1802, in which year he sailed for Mauritius. Later he settled at St Omer in France.

Some small papers of his were published.[4]

The genus *Deschampsia* P.B. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

ITINERARY. For the *voyage in 'La Recherche' and 'L'Espérance' cf. sub* BILLARDIÈRE. The expedition anchored near Soerabaja (*E. Java*) on Oct. 28, *1793*, where the members were not exactly interned, but not allowed to go far inland. D. used his time in studying the native language and the flora. With the other members he was transferred to Semarang (*Centr. Java*) in March *1794*, where Governor VAN OVERSTRATEN made him the abovementioned proposal. He started collecting in the environs of Oen(g)aran(g), in the meanwhile preparing for an extensive excursion into the interior. Leaving Semarang (May 8, *1795*) for Salatiga, from there climbing G. Merbaboe (Marababou in his diary) *via* Kopeng (15), and returning to Salatiga; setting out (29) to Bojolali; Djokjakarta; trip to the south coast (hot spring and caves); stay at Djokjakarta; setting out with Mr IJSSELDIJK on a tour (Aug. 2), *via* Bantol, Brosot, Selangon, Rawa, Padat, to Caranbolon (= Karangbolong on the south coast), collecting several new plants on hills in the environs; from Patanaga to Rawa (large lake with pelicans *etc.*), Louvano (pepper plantations), Soerakarta (24); Sept. 2 *via* Bojolali climbing the Merapi and back; Sept. 8 to G. Lawoe, *via* Gondo (9), he himself being too tired to reach the summit, but sending his collectors thither (11); back at Solo (= Soerakarta) (12); return to Djokjakarta (18); to Djivo (28), Maniaran (29), Bankat (30), through teak forest (31), Zuidergebergte, from Mounon (Oct. 1) to Patiitan (= Patjitan), back to Maniaran, Djivo (6), Baudion (or Bodion) (7), *via* Magelang and Setron returning to Semarang; in the vicinity of G. Soembing and Sindoro (20), at Wonogiri (21), Soulocaten (= Selokaton) (22); teak forest with many monkeys, Batan(g) (23); Pekalongan (24); *via* Pemalang to Tegal (26), giving up the idea of climbing G. Slamat, and returning to Pekalongan (staying 3 weeks), from where (Nov. 22) *via* Batam (= ? Batang) along the coast to Plaboeran, Panarouban, Bleri (= Weleri) (leaving on the 23rd), Kendal (24), and Semarang. The rainy monsoon was availed of, to arrange and identify the collections. April *1796* setting out for a 6-month trip, accompanied by 2 draughtsmen, slaves, *etc.*; from Semarang to Masaròn; Siraguèn (May 3), Djogorogo (4), and the 5th proceeding by proa to *E. Java:* Ngawi at the junction of Solo and Madioen River; descending the river to Panolang (6), Searang (8), Camolan (9), Doucon (= Doekoeng) (10), and Grissée (11), visiting the environs of the latter place; by boat to Soerabaja (23), from there (26) to Bangil, making a mountain trip (30)

to Pandangan and Ledoe (June 2); to Bagel (= Bangil) (3), Pasoeroean (5), and the 11th setting out to Tinguer (= G. Tengger), visiting the Bromo *via* Poespo, the 'mer de cendre' (= Zandzee), Bato(er), till the 14th, and then proceeding to Malan(g) *via* Bangor (14), Poron(g) (15), Malang (15); Poron(g) (16) to Pasoeroean (16), Soerabaja (20), embarking (25) for *Madura*, visiting: Ban(g)kalan(g), making a trip to the N. coast (26), and to Pamekas(s)an (30); from Bankalan (July 5) to Sumenap (= Soemenep) (6), staying till July 14; leaving the island by boat (15) and forced to land near Besoeki at Panarucan (= Panaroekan) in *E. Java;* proceeding by land to Cape Sundana (= ? Sedano) near Sombrouarou (= Soemberwaroe), and to Banjoewangi *via* Batoedodol (20); collecting in the environs of Banjoewangi (zoologically too); on his way (Aug. 8) to the Ydjieng (= G. Idjen) *via* Bandjar, visiting the crater; back to Banjoewangi (11) with an extensive collection of plants *etc.;* trip to the S. coast, collecting a new *Passiflora*, a *Limonia*, *etc.*, and returning *via* Kradjagan (= Gradjagan) (18), Pan(g)pan(g) (19), making several small trips, and staying for 6 weeks at B(e)lambangan; by sea (Sept. 6) to Besuki; proceeding to Probolinggo (9), and Pasoeroean; Soerabaja, Grisse(e); crossing to *Madura* (fort Sambilungan = Sembilangan) (20), and back to *E. Java:* Sydayo (= Sidajoe) (21); to Crandji (22), Touban (23), Niangolon (24); *Centr. Java:* Las(s)em, Rembang (26), Joinna (= Joanna), from where (Oct. 2) to (D)Japara, climbing G. Murai (= Moerjo) (4), and returning to Japara (6); back at Semarang (7). During the wet monsoon staying at Semarang. May 1, *1797* 'en route' once more, this time to the west: leaving Semarang (May 1), *via* Kaliwongan (= Kaliwoengoe), Kendal, Vleri (= Weleri), Batan(g) (2); Pekalongan (3); Tegal (June 5–13); setting out to G. Tagal or G. Sraia (= Slamat ?), *via* Bandiaran (14), Ramboul (15), Tchibedel, not reaching the summit, but descending on the 16th; *via* Labaxio (= Lebak Sioe) (16) returning to Tegal (17); the 19th proceeding *via* Berbes (= Brebes) to *W. Java*, Cheribon; visiting some hot springs in the environs of Cheribon (July 7 and 8), making a trip to the district W of G. Tjermé (= Tjeremai or Tjareme); to Ling(g)adjati (10), visiting slope of G. Tjeremai; the 13th trying to climb G. Tjermé, but being himself too tired, he sent his collectors to the summit; Cheribon (15–23); proceeding *via* Ragasvatjana (24), Quali (= Kawali) (26), Tj(i)amis (27), Konasin (30), Tjeboulon (31); by proa downstream the river Tjeboulon (Aug. 1) and Tchelando, and crossing to the island of *Noesa Kambangan*, visiting Manoudjai, N. central coast of the island, some caves (2), Pamotan (3), and walking along the S. coast of *W. Java* to the west (5) to point Penandjon (= Penandjoeng or Panindjoan Peninsula); Tchecomboulon (= Tjikemboelan), leaving the 6th for Soukapoura (staying 9–12); to Pamoijanan (13), Panembon (14), trip to G. Papandajan (15), and from Panembon along the foot of G. Goentoer to Djatilaxano, and Prakamoutjon (W of Soemedang); visiting hot spring (18); Bando(e)ng (19); mountains N of Bandoeng (21); to Tjeraton (23), collecting in the environs (23–24); Bandoeng (25–26); to Batoelaian (27), collecting in the environs (29); Radjamandala (30); Tchekalon (= Tjikalong) (31); Tj(i)andjo(e)r (Sept. 1–5); G. Gede (not the summit), Tjipanas and environs (6–11); back at Tjiandjoer (12); from Bandoeng (17) to Tche-Combar (= Tjikembar) (–20), Tcheringin (= Tjaringin) (21), and Wijnkoopsbaai or Pelaboean Ratoe (22); Pandjindang (23); Tchethourou (= Tjitjoeroeg) (24), Pondok Gede (25–30), Tjisero(e)a and Megamendoeng (Oct. 1–8), Pondok Gede (9), Buitenzorg (10), Batoetoelis; towards the end of October proceeding to Batavia.—*1798*.[3] Buitenzorg (April); Soemedang, P. Moentjang, G. Goentoer, G. Tangkoeban Prahoe.

COLLECTIONS. According to BACKER (MS.) DESCHAMPS was imprisoned by the English when on his home voyage to France, and robbed of his collections.[5] JOHN REEVES bought his MSS with a quantity of dried plants from *Java* at a sale at the India House and later (1861) presented them to the *British Museum;* the specimens of plants are apparently lost, there is no evidence that they were ever received at the National Herbarium.[1] The MSS consist of his unpublished autograph journals kept during the voyage and on his subsequent travels in Java, with materials for a Flora Javanica,[2] water-colour sketches of Javan scenery, plants (including those of NOROÑA, which were sent to him by Governor VAN OVERSTRATEN) and animals, as well as other notes and memoranda, all preserved in the Library of the Brit. Museum (Bot. Dept).

LITERATURE. (1) *cf.* Journ. Bot. 41, 1903, p. 282–283.

(2) 'Plantes trouvées dans mon voyage de cette année 1798 à Tjiseroa' (with drawings in pencil); 'Genera et species nova recondita in meo itinere e Cheribon usque Batavia' (with drawings too); 'Flora javanica seu Descriptio plantarum quae reperiuntur in insula Java'; 'La flore javane ou Description des plantes qu'on trouve dans l'isle de Java'; 'Apperçu de l'isle de Java et de ses productions' (several lists of plants).

(3) *cf.* DE HAAN, Priangan, 4, 1912, p. 561.

(4) 'Notice sur le Pohon Upas ou Arbre à poison. Extrait d'un voyage inédit dans l'intérieur de l'Isle de Java, par L. A. DESCHAMPS, D.M.P., l'un des Compagnons du Voyage du général d'Entrecasteaux' (in M. MALTE-BRUN, Annales des voyages *etc.*, 2nd ed., 1, 1809, p. 69–74); 'Mœurs, amusements et spectacles des Javanais. Extrait d'un voyage inédit dans l'intérieur de l'Isle de Java, fait par M. L. A. DESCHAMPS (in *l.c.* 1, 1809, p. 145–168).

(5) *cf.* also M. MALTE-BRUN, Annales des voyages *etc.*, 2nd ed., 4, 1809, p. 279.

Deshmukh, Gopal Bhikajee

Field Assistant in the Botanic Gardens, Singapore (*1918–21*), collected in and near *Singapore* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Sing.*

Detmer, Wilhelm

(1850, Hamburg, Germany; 1930, Hamburg,

Germany), educated at Leipsic, where he took his Ph. Dr's degree in 1871; since 1875 Professor of Plant Physiology and Soil Science at Jena. He made a study tour to *Java*, leaving Europe in the autumn of *1904* and returning in April *1905*.[1] He visited G. Salak, G. Papandajan, Tjibodas, Depok, all in *W. Java*, and in Jan. 1905 the island of *Noesa Kambangan* (S of Centr. Java).

COLLECTIONS. Possibly some collections were made.

LITERATURE. (1) Author of 'Botanische und landwirtschaftliche Studien auf Java' (Jena 1907).

cf. DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 29.

BIOGRAPHICAL DATA. Ber. D.B.G. 49, 1931, p. (126)–(138), incl. bibliogr. + portr.

Devore, *cf.* VORE, DE.

Diakonoff, Alexey

(1907, St Petersburg, Russia; x), entomologist, educated at Amsterdam University; on the staff of the Experiment Station for the Java Sugar Industry at Pasoeroean; since end 1941 Entomologist of the Zoological Museum at Buitenzorg.

COLLECTING LOCALITIES. *E. Java:* Trètès on the N. slope of G. Ardjoeno (March 4, *1940*); on the S. slope of G. Smeroe.

COLLECTIONS. *Herb. Bog.:* some foster-plants of insects.

Diard, Pierre

(1795, Château la Brosse, France; Febr. 16, 1863, Batavia, Java), zoologist, pupil of CUVIER, who accompanied RAFFLES to Sumatra in 1818, together with JACK, another Frenchman, and a missionary clergyman. JACK (see there) let on about these French gentlemen anything but favourable in his letters to WALLICH; it was settled that their collections and notes were to be the property of the British E.I.C.; they tried, however, to cut their stick, which plan miscarried. DIARD evidently had the intention (in March 1820) to sail to Calcutta by way of Batavia. For some time he was employed as a collector of the Natural History Museum at Paris; in 1825 he was appointed Inspector of Agriculture by the D.E.I. Government, in which function he made tours to Banka (1825),[1] Borneo (1826), Bawean (1841), and in 1858 to Mauritius, Bourbon and Ceylon. After the death of BOIE in 1827, he was appointed member of the 'Natuurkundige Commissie' (Commission for the Natural Sciences) and as such resided at Buitenzorg; in the Government Almanac of the year 1835, he is mentioned as Director of the Botanic Gardens; in reality he was in charge till 1841 as directing member of the said 'Commissie'. He propagated the systematic arrangement of plants in this garden, which was executed later by HASSKARL. He has been curator of the Natural History Museum of the 'Bataviaasch Genootschap van Kunsten en Wetenschappen', which was discontinued in 1844. In Sept. 1841 he went to Europe; in 1842 appointed Honorary Inspector of Agriculture; from 1846–47 on European leave once more, and subsequently returned, but at least partly on half-pay. In about 1853 he made a great fuss about an invention for the manufacture of tiles. In 1862 he was charged with natural history investigations and the making of collections on behalf of the State Museum at Leyden, and died shortly afterwards.

COLLECTIONS. Besides for the British E.I.C., he collected on behalf of Paris and Leyden, especially birds and other animals.[2] According to LASÈGUE[3] he made extensive *botanical* and zoological collections; of the former I could not get any further data and doubt the reliability of L.'s statement.

LITERATURE. (1) *cf.* Tijdschr. Neêrl. Ind. 8[4], 1846, p. 125.

(2) *cf.* extensive data in H. J. VETH: 'Overzicht van hetgeen in het bijzonder door Nederland, gedaan is voor de kennis der fauna van Ned. Indië' (Thesis, Leiden 1879) and in A. GIJZEN: "s Rijks Museum v. Nat. Hist. 1820-1915' (Thesis, Rotterdam 1938) p. 123.

(3) in Mus. Bot. DELESS. 1845, p. 433.

BIOGRAPHICAL DATA. Alg. Konst- en Letterbode 1839[1], p. 148; Tijdschr. Ned. Ind. 1863[1], p. 389; SIRKS, Ind. Nat. Onderzoek, 1915, p. 115–117, 119, 125–130, 196; Encyclop. N.I. 1, 1917.

Dias, F., *cf. sub* Forestry Bureau, Manila.

Diaz, *cf. sub ditto.*

Didrichsen, Didrick Ferdinand

(1814, Copenhagen, Denmark; 1887, Copenhagen, Denmark), physician who accompanied a Danish expedition under Capt. ST. BILLE as Surgeon-Botanist. The special aim of the expedition was the investigation of the Nicobars, to decide whether it was worthwhile to maintain the Danish claim on these islands. Surgeon in the army, 1849–54; Assistant at the Copenhagen Botanic Garden, 1856–75; Lecturer in Botany at the University from 1873, Professor from 1875; besides Director of the Botanic Garden from 1876–85.

ITINERARY. *Voyage in the 'Galathea', 1845–47.*[1] *Cf.* also *sub* KAMPHØVENER and RINK. Sailing from Copenhagen (June 24, 1845); Madeira; Coast of Coromandel (Tranquebar, Pondicherry and Madras), Calcutta; the Andamans; the Nicobars (extensive exploration); *P. Penang* (March 7–21, *1846*); *Singapore* (March 29–Apr. 8); *Java:* Batavia (Apr. 22–May 11), part of the members (*not* DIDRICHSEN) made a trip to Buitenzorg, Tjipanas, G. Gedé-Pangrango (with TEYSMANN), and to Champia (= Tjampea), bird-caves; sailing along the Natoena Islands to *Luconia* (= *Luzon*); Manila (June 3–9); Macao, Honkong, Canton; Amoy *etc.* on the coast of N. China; Japan; Sandwich Islands, Oahu; Society Islands, Tahiti, *etc.;* W. Coast of S. America: Valparaiso, Cobija, Callao, Lima; round Cape Horn; Plata River, Montevideo and Buenos Ayres; coast of Brazil, Rio de Janeiro and Bahia; home voyage *via* the Scilly Islands, and through the Canal; back at Copenhagen (Aug. 31, 1847).

COLLECTIONS. *Herb. Copenh., Kiel* and *Berl.;*

U.S. Nat. Herb. Wash.: 87 dupl. 'Galathea' Expedition; some in *Leyden.*

According to the journal of the expedition: the *nos* 3418–3659, 3742–3744 from *P. Penang; nos* 4400–4438 from *Singapore; nos* 3001–3134 in *W. Java* (Buitenzorg); *nos* 3318–3417, 3907–3946 from neighbourhood of Batavia (*W. Java*); and *nos* 3155–3199 from the Pasig River in *Luzon.*

LITERATURE. (1) ST. A. BILLE: 'Beretning om Corvetten Galathea's Reise omkring Jorden, 1845–47' (Kjøbenhavn, 1849–51, 3 vols) (transl. into German: Kopenhagen, Leipzig, 1852, 2 vols).

BIOGRAPHICAL DATA. Ann. Bot. 1, 1887/88, p. 399, w. bibliogr.; Bot. Notiser 23, 1887, p. 110; Bot. Tidsskr. 12, 1887, p. 190–191, w. bibliogr.; *l.c.* 17, 1890, p. 103 (bibliogr.); MARTIUS, Flora Bras., vol. 1 pars 1 in 'Vitae itiner. collect. *etc*'. p. 15–16; CHRISTENSEN, Den Danske botanisks historie, 1, 1924–26, p. 293–295, 561–565; portr. in CHRISTENSEN, Den Danske botaniske literatur 1880–1911, 1913, p. 8.

Diepenhorst, H.

(1811, Giesen-Nieuwkerk, Z.H., Holland; 1860, ?), from 1834–39 schoolmaster in the D.E.I., in 1839 entering the Civil Service. In 1843 appointed District Officer in Natal (W. Sumatra), in 1852 Assistant Resident of Agam and in 1853 of Priaman, the latter places situated in Sumatra West Coast.

Several plants were named after him.

COLLECTIONS. Partly in *Herb. Bog.*, also at *Utrecht* and *Leyden*, principally from Priaman, *Sumatra West Coast* (*1855–60*). Several of the specimens in *Herb. Bog.* are numbered in the H.B. series. He made a large collection at the instigation of TEYSMANN whom he met in Sumatra in 1857.

He forwarded many living plants to *Hort. Bog.*

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Diest, Pieter Hendrik van

(1835, Edam, N.H., Holland; ?), mining engineer, educated at the Technical College, Delft; joined the D.E. Indian Government service in 1857; in 1870 on sick-leave to Holland, and retired in 1873.

He is cited by MIQUEL (in Ann. Mus. Bot. Lugd. Bat. 1, 1863–64) as the collector of *Hepaticae* on G. Maras in *Banka;* material in *Herb. Leyden.* He travelled across the island for seven years (*1858–65*).[1]

LITERATURE. (1) Author of 'Bangka beschreven in reistogten' (Amsterdam 1865 + 2 maps), and of some other papers.

Dihm, Dr H.

evidently a German, judging from his handwriting.

COLLECTIONS. Some *Melastomataceae* in *Herb. Munich* and *Leyden* (*cf.* BAKH. V. D. BRINK *f.* in Rec. Trav. Bot. néerl. 40, 1943, p. 55 and 115), collected in the Buitenzorg Botanic Gardens, *Java* (Oct. 6, and Nov. 18, *1899*).

Dij . . ., *cf.* **Dy . . .**

Dillewijn, Cornelius van

(1899, Modderfontein, S. Africa; x), physiologist who got his education at Wageningen Agricultural College and at Utrecht University, and took his Ph. Dr in 1927 at Utrecht; Group-Adviser of the Experiment Station for the Java Sugar Industry (Pasoeroean), stationed at Probolinggo 1928–29; Chief of the sub-division Cheribon, 1929–38; in the latter year return to Holland, and in 1939 appointed Agricultural Adviser Soc. An. Italo-Olandese di Piantagioni in Africa Or. Ital., Ethiopia. This was evidently of short duration, as he was invited in the same year by the Turkish government to make a study tour to southern Anatolia to investigate the possibilities of a sugar-cane culture. From 1940–43 on the staff of the Central Institute for Agricultural Research at Wageningen (Holland), and from 1943–46 Director of the Foreign Agricultural Advising Service of the Department of Agriculture *etc.* In 1946 study tour through the Near East; in charge of the Turkish government making study tours with a view to plans for the future development of subtropical cultures in Turkey; in 1947 appointed Adviser of the Turkish Sugar Syndicate, making a tour to Egypt.

COLLECTING LOCALITIES. *E. Java. 1927.* G. Tengger, Tosari, Soerabaja, Grissee (with BACKER), Grati, Redjosa, Lawang.—*1928.* G. Tengger (Tosari, Soekopoero), G. Taroeb-Lamongan (Oct. 21), G. Tjandi, G. (H)Jang, Grissee, Tjaloeng, Pasoeroean.—*1929.* G. Jang, G. Lamongan, G. Tengger, Tosari, Lawang, Pasoeroean, Soerabaja and in Oct. visit to *Bali* (*Lesser Sunda Isls*) with DEMANDT (see there).

COLLECTIONS. *Herb. Pasoer.:* 282 *nos* from *Java* and 17 *nos* with DEMANDT from *Bali;* dupl. in *Herb. Bog.*, and *Herb. Leyden*, and a few in *Herb. Univ. Amsterdam.*

Dillon Ripley, S., *cf.* **RIPLEY, S. D.**

Dingeman, J. F.

Manager of Pearl-fishery at Laboean Bodjo in W. Flores, sent *Dendrobium urvillei* FINET from *P. Komodo*, to *Hort. Bog.* in *1907.*

Diram, Mohd., *cf. sub* **Forest Research Institute, Buitenzorg.**

Dirige, M.

collected some plants in *Luzon;* numbered in the B.S. (= Bur. of Sci.) series (see there), *Herb. Manila.*

Dirks, Andries

(1897, Leyden, Holland; x), since 1918 in the D.E.I. Civil Service in various ranks, finally Assistant Resident; stationed respectively in the Lampong Districts (S. Sumatra) 1922–23, Kediri Res. (E. Java) 1923–25, SE. Borneo 1928–32, Palembang Res. (S. Sumatra) 1932–34, Assistant Resident of Langkat (Sumatra East Coast) at Bindjei 1935–36, of Loewoe (Celebes and Dependencies) at Palopo 1936–38, of Simeloengoen and the Karo Lands at Pematang Siantar (Sumatra East Coast)

1938–41, at Manado (N. Celebes) in 1941. In 1947 on leave in Holland.

COLLECTIONS. *Herb. Bog.: Rafflesia* from Telok Betong, Lampongs (*S. Sumatra*) (coll. Nov. *1922*); plants collected along the way of Badjo to Ranteballa (= Rantebello), E. slope Rante Mario in *SW. Celebes* (pres. Aug. *1937*).

Dirksen, M. J., *cf. sub* Forest Research Institute, Buitenzorg.

Disdon
is cited in MERRILL, Enum. Philip. Fl.Pl., as a collector of plants in the *Philippines, s.n.*

Djabar, *cf. sub* Foiest Research Institute, Buitenzorg.

Djadoek
native collector from Buitenzorg, who was in the employ of the Deli Experiment Station, Medan (Sumatra), in 1915. With ROESIL (see there) he was to make a collection of the vegetation on fallow tobacco lands.

COLLECTING LOCALITIES. *Sumatra East Coast. 1915.* G. Singgalang (Dec. 4), G. Pinto (Dec. 12).

COLLECTIONS. *Herb. Deli Exp. Stat.*, Medan, identified at Buitenzorg. From G. Pinto *e.g. no* 983; numbered in a series.

Djaja Atmadja
(born 1895), Assistant Teacher of Agriculture since 1919; stationed successively on the Govt Gutta-percha Estate Tjipetir (near Tjibadak in W. Java), in E. Priangan (1920), and at Tjipanas (1924); Assistant Consulting Agriculturist since 1925, stationed at Tjipanas (till 1931); 1931–32 employed at the Normal School at Poerwakarta; in the year 1932 for some months stationed at Tabanan, Lombok (Lesser Sunda Isls). He was dismissed at his own request; before the war leader of a course on retail trade for the Dept of Education and Public Worship.

COLLECTIONS. *Herb. Bog.:* 5 *nos* collected near Tjioedjoeng, Bantam Res., *W. Java.*

Djajaniti, *cf. sub* Forest Research Institute, Buitenzorg.

Djajasasmita, *cf. sub ditto.*

Djalin, *cf. sub ditto.*

Djalit, *cf. sub ditto.*

Djam & Marah-Djoekon, *cf. sub ditto.*

Djam bin Djelip, *cf. sub ditto.*

Djamari(e)f, St., *cf. sub ditto.*

Djamhari
and MAIN, mantris of the Buitenzorg Herbarium, partly accompanied the Swedish expedition of Dr S. BERGMAN to the *Papua Islands*, W of New Guinea, in *1948* (itiner. see *sub* D. R. PLEYTE).

COLLECTIONS. *Herb. Bog.:* 600 *nos.*

Djamit, *cf. sub* Forest Research Institute, Buitenzorg.

Djamita Pasariboe, *cf. sub ditto.*

Djamsarie, *cf. sub ditto.*

Djapar, *cf. sub ditto.*

Djaroki, *cf. sub ditto.*

Djawa, *cf. sub ditto.*

Djawa, R., *cf. sub ditto.*

Djazoeli, *cf. sub ditto.*

Djibja
(sometimes spelled DJIBDJA or DJIPJA), Student Mantri of the Botanic Garden at Tjibodas on Mt Gedeh (W. Java), who was discharged at his own request in 1906, after 18 years of service. He attended some New Guinea expeditions.

ITINERARY. *1903. Dutch North New Guinea.* With WICHMANN *expedition* (see there); he returned to Java, before the fixed date, with the other native collector, ATASRIP (see there).[1]—*1907. 1st* LORENTZ *expedition* to *Dutch South New Guinea*, with G. M. VERSTEEG (see there). DJIBJA did not like to go into the mountains and simulated illness. Besides from the localities mentioned (*cf.* VERSTEEG), he brought home some plants from the Varen River and from *Thursday Isl.;* the *Timor* plants, from Koepang, were collected on the home voyage.—*1909. Sumatra East Coast:* Deli, Medan.

COLLECTIONS.[2] *Herb. Bog.;* dupl. in *Herb. Leyden.*

He was especially charged with the collecting of living plants on behalf of *Hort. Bog.*[3] A *Sarcanthus* from Medan, Deli, *Sumatra East Coast* (July 27, *1909*) in *Hort. Bog.*

In *1911* and *1917* a M. DJIBDJA, mantri of the Municipal Works at Batavia, forwarded living plants to *Hort. Bog.;* ? identical.

LITERATURE. (1) Botanical report in Bull. Mij Bev. Nat. Onderz. Ned. Kol. *no* 44, 1903, p. 21–22; *cf.* also Versl. Pl. Tuin Buitenzorg for 1903, p. 102–103, and Bull. Mij Bev. Ond. Ned. Kol. *no* 45, p. 6.

(2) Described by Th. VALETON in Bull. Dép. Agr. Ind. néerl. *no* 10, 1907, 72 pp., and in FEDDE Repert. 5, 1908, p. 377–397; *cf.* also Nova Guinea vol. 8.

(3) *cf.* Versl. Pl. Tuin Buitenzorg for 1908, p. 15, and *l.c.* for 1909, p. 36–39, 40.

Djojopranoto
herb dealer at Boemiajoe, Java, collected *Cibotium baranetz* J.SM. on G. Slamat, *Centr. Java;* preserved in *Herb. Bog.*

Docters van Leeuwen, Willem Marius

(1880, Batavia, Java; x), biologist who was educated at Amsterdam University, where he took his Ph. Dr's degree in 1907; entomologist in the employ of the General Experiment Station at Salatiga (Centr. Java), 1908–09; teacher of natural history at secondary schools at Semarang (1909–15) and Bandoeng (1915–18; besides Director); Director of the Botanic Gardens at Buitenzorg (1918–32) and besides (1926–32) Extraordinary Professor at the Medical College, Batavia. When pensioned off in 1932, he returned to Holland, and settled at Leersum. After some years he was appointed University Lecturer at Amsterdam and in 1942 Professor.

During his term of office in Java, his studies especially covered the field of general biology, *viz Zoocecidia*, symbiosis of ants and plants, flower biology, seed dispersal, investigations on the mountain flora and the succession in the new vegetation of the isle of Krakatau.[1]

He was an excellent photographer; his negatives are deposited at the Buitenzorg Botanic Gardens.

Several plants were named after him.

COLLECTING LOCALITIES (certainly incomplete). *1910. Centr. Java:* teak forest near Semarang (May); G. Oengaran (May 7–8, Oct.); *W. Java:* Tjinjiroean (G. Malabar, May 22–. .); Rioeng Goenoeng (June 9), Telaga Bodas (June 12); *Centr. Java:* G. Oengaran (Oct.).–*1911. E. Java:* Trètès (June 6); *Centr. Java:* Pager Goenoeng (Sept. 30), G. Andong (W of G. Merbaboe) (Oct.), G. Telemojo (Oct. 2), G. Merbaboe (Oct. 10).—*1912. Centr. Java:* Semarang; G. Moeriah (= Moerjo) (Sept.–Oct.), G. Merbaboe (Dec., also repeatedly in former years).[2]—*1913. SW. Celebes and neighbouring islands:*[3] Makassar (Apr.), *P. Kajoeadi* (May 3–4), *P. Bonerate* (4), *P. Kalaotoa* (5–6), *P. Bonerate* (7–8), *Pasitaloe Isls* (8–9), *P. Kalao* (9–11), *P. Tanah Djampea* (12–16), *P. Salajar* (May 17–June 4), Makassar.—*1914. Centr. Java:* G. Oengaran (June); G. Diëng (Dec.).—*1915. W. Java:* G. Papandajan (Sept. 28); Taloen (Oct. 2).—*1916. W. Java:* G. Tangkoeban Prahoe (Dec.).—*? 191 .. Sumatra* (herbarium list *nos* 2394–2489).—*1918. W. Java:* G. Galoenggan (= Galoenggoen) and Radjamandala (Nov.); *Bali (Lesser Sunda Isls):* between Gitgit and Batoeriti (Nov.).[4]—*1919. Sumatra East Coast:* Medan and Sibolangit (Febr. 14–end of Febr.); *Malay Peninsula:* Bot. Gard. Singapore; *W. Java:* Buitenzorg, Tjibodas, Tjampea, Depok; *Krakatau* and *Verlaten Eiland* (Apr. 24–28);[5] *W. Java:* Batavia; Tjibodas and G. Pangrango (Dec.).—*1920. Sumatra West Coast:* environs of Fort de Kock (with JACOBSON and DAKKUS) and G. Sing(g)alang (with DAKKUS & LUYTJES) (Jan.);[6] *W. Java:* G. Salak (March); *Verlaten Eiland* (Sunda Strait) (Apr.); G. Pangrango; *Sumatra East Coast:* Sibolangit (Sept.) and subsequently to the *Malay Peninsula:*[7] *Singapore,* Kuala Lumpur, *Penang* and proceeding to Bangkok, Saigon, Hongkong, Japan and the Sandwich Isls.—*1921. P. Sebesi* (Sunda Strait) (Apr.);[8] *P. Berhala* (E of Sumatra East Coast Res.) (July).—*1923. W. Java:* G. Pantjar and environs (with BAKHUIZEN VAN DEN BRINK Sr & DAKKUS) (Dec.).—*1924. P. Leiden* (Bay of Batavia) (April 21);[9] *Krakatau* (July); *E. Java:* G. Lawoe (2nd half of Nov.).[10] —*1925. W. Java:* G. Tjikorai (May); *E. Java:* G. Tengger and G. Smeroe (Nov.); *W. Java:* G. Pantjar (Dec.).—*1926. W. Java:* Bekas(s)i (Febr. 16). *Dutch-American Expedition to New Guinea,* 1926



DOCTERS VAN LEEUWEN

(so-called STIRLING *Expedition*):[11] sailing from Priok (Apr. 7); *Ambon* (collecting was done from 15–19; departure from there on the 24th); *Dutch North New Guinea:* Manokwari (28); mouth of the Mamberamo (29); Albatros camp (May 1–13), making collecting trips in the neighbourhood, *viz* on the VAN REES Mts *etc.;* setting out from Pionier bivouac (May 14), further inland; 7 days' trip along the Van Gelderen River (end of May); 7 days' trip along the Thomsen River; back to Albatros bivouac (end of June); in July collecting was done at Albatros bivouac, Mamberamo, Havik Isl., Van der Willigen River; in Aug. and Sept. along the Rouffaer River; in Oct. Exploration bivouac, Nassau Mts (up to 2600 m) and along the Rouffaer River; in Nov. Rouffaer River, Motor bivouac, Exploration bivouac, Batavia bivouac, Albatros bivouac, Otken River.—*1927. Centr. Java:* G. Sindoro-Soembing (May);[12] *E. Java:* Pasoeroean (June 2); *W. Java:* G. Gedeh-Pangrango; Lembang and G. Tangkoeban Prahoe (Nov.); Wijnkoops Bay (Dec.).—*1928. Toppershoedje* (Febr. 17)[13] & *P. Babi* (in Sunda Strait); *W. Java:* Java's Eerste Punt (Febr.); G. Tangkoeban Prahoe (Apr.); G. Gedeh-Pangrango; *Krakatau; E. Java:* G. Idjen (Oct.); *W. Java:* G. Pantjar (with VAN STEENIS) (Oct. 27–31).—*1929. W. Java:* G. Gedeh-Pangrango; SW of Leuwiliang (with BAKHUIZEN VAN DEN BRINK Sr & VAN STEENIS) (Febr. 2–5); *E. Java:* G. Kawi-Boetak and Oro-Oro (Apr. 14–21);[14] *Kra-*

katau (July); *W. Java:* Zandbaai, S. coast (July); *Sumatra East Coast* (Sept.): G. Sibajak, Brastagi and Sibolangit.—*1930. W. Java:* G. Papandajan (with VAN STEENIS) (Jan. 19–23, May 2–5);[15] Kamodjan, Danoe Tjiharoes, *etc.*(May).—*1931. Centr. Java:* G. Moeriah (= Moerjo) (March); *W. Java:* Wijnkoops Bay.—*1932. W. Java:* Wijnkoops Bay and Tjisolok (May 2); *Anak Krakatau* and *Toppershoedje* (May 29) in Sunda Strait; *Centr. Java: Noesa Kambangan* and Kedoe; *S. Sumatra,* Palembang: aerodrome (Aug. 13).

During the Buitenzorg period, *1918–32,* he many times visited G. Gedeh-Pangrango[16] and *Krakatau,* making special studies there (see *sub* literature).

COLLECTIONS. Principally in *Herb. Bog.,* where many lists of the collections are preserved, *e.g.* from the 1st *Sumatra* coll. numbered 2394–2489, from *Krakatau* (1919) numbered 3513–3778, from *Ambon* (1926) *nos* 8652–8680 and from *New Guinea* (1926) *nos* 8681–11403.[17] Many dupl. in *Herb. Leyden,* some in *Herb. Univ. Amsterdam.* In *Herb. Utrecht:* 561 plants from *SW. Celebes, Saleijer* (= *Salajar*) and *neighbouring islands* with Mrs DOCTERS VAN LEEUWEN-REYNVAAN (see there), *nos* 1300–1951; partially at *Leyden;*[18] some dupl. in *Herb. Bog.* Many living plants in *Hort. Bog.*

A number of plants was collected together with his sister-in-law C. REYNVAAN (see there).

Original notes on *New Guinea* were destroyed o/b the 'Dempo' in 1932; his number lists got partially lost during the German occupation.

His large collection of zoocecidia[1] is preserved at *Herb. Leyden.*

LITERATURE. (1) Author of 'The Zoocecidia of the Netherlands East Indies' (with Mrs J. DOCTERS VAN LEEUWEN-REYNVAAN; Batavia 1926); 'Biology of plants and animals occurring in the higher parts of Mount Pangrango-Gedeh in West-Java' (Verh. Kon. Akad. Wet. (2nd sect.) 31, 1933, p. 1–278, 66 fig., 30 pl.); 'Krakatau, 1883 to 1933. A. Botany' (Ann. Jard. Bot. Buit. vol. 46–47, 1936, xii + 506 pp., 36 pl. + map).

(2) W. M. DOCTERS VAN LEEUWEN: 'Über die Erneuerung der verbrannten alpinen Flora des Merbaboe-Gebirges in Zentral-Java' (Ber. D.B.G. 31, 1913, p. 151–157, 3 fig.).

(3) W. M. DOCTERS VAN LEEUWEN: 'Botanical results of a trip to the Salajar Islands' (Blumea 2, 1937, p. 239–277), with Appendix (*l.c.* 3, 1939, p. 236–237).

(4) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 8, 1926, p. 155.

(5) W. M. DOCTERS VAN LEEUWEN: 'De flora en de fauna van de eilanden der Krakatau-groep in 1919' (Hand. 1ste N.I. Nat. Wet. Congr. 1919, p. 36–79, incl. 5 App.); 'The flora and fauna of the islands of the Krakatau-groep in 1919' (Ann. Jard. Bot. Buit. 31, 1921, p. 103–140, pl. 19–24); *cf.* also *sub* 1.

(6) W. M. DOCTERS VAN LEEUWEN: 'Naar de top van de Singalang bij Fort de Kock' (Trop. Nat. 9, 1920, p. 97–104, 7 fig.).

(7) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(8) W. M. DOCTERS VAN LEEUWEN: 'The vegetation of the Island of Sebesy, situated in the Sunda-Strait, near the Islands of the Krakatau-group; in the year 1921' (Ann. Jard. Bot. Buit. 32, 1923, p. 135–192).

(9) W. M. DOCTERS VAN LEEUWEN: 'Blumen und Insekten auf einer kleinen Korallen-Insel' (Ann. Jard. Bot. Buit. 37, 1927, p. 1–31, pl. 1–4).

(10) W. M. DOCTERS VAN LEEUWEN: 'De alpiene vegetatie van de Lawoe-vulkaan in Midden-Java' (Nat. Tijdschr. N.I. 85, 1925, p. 23–48, pl. 1–4).

(11) W. M. DOCTERS VAN LEEUWEN: 'Schets van de flora en fauna van het van Rees-gebergte rondom Albatros-bivak Nieuw-Guinee' (Trop. Nat. 15, 1926, p. 177–186, 10 fig.); *cf.* also Ind. Gids 48, 1926, p. 745–768, 955–960, 1038–1056, and Tijdschr. K.N.A.G. 43, 1926, p. 271–272, 747–750.

This expedition under the auspices of the Smithsonian Institution at Washington, D.C., made use of a plane, brought by the American members, which became unfit for use, however, in July; the Dutch members were DOCTERS VAN LEEUWEN and LE ROUX, the former was appointed leader during the latter part of the expedition.

cf. also CH. C. F. M. LE ROUX: 'Expeditie naar het Nassau-gebergte in Centraal Noord Nieuw Guinee' (Tijdschr. Ind. Taal-, Land-, en Volkenk. 66, 1926, p. 447–513, with maps and plts).

(12) HANS DOCTERS VAN LEEUWEN: 'Beitrag zur Kenntnis der Avifauna der Mitteljavanischen Vulkane Soembing und Sindoro' (Treubia 10, 1928, p. 439–446, pl. 14).

W. M. DOCTERS VAN LEEUWEN: 'Beitrag zur Kenntnis der Gipfelvegetation der in Mittel-Java gelegene Vulkane Soembing und Sindoro' (Bull. Jard. Bot. Buit. sér. 3, vol. 11, 1930, p. 28–56, 2 fig., pl. 4–13).

(13) W. M. DOCTERS VAN LEEUWEN: 'Die Vegetation der Insel Toppers Hoedje in der Soenda-Strasse' (Nat. Tijdschr. N.I. 94, 1934, p. 149–169).

(14) W. M. DOCTERS VAN LEEUWEN: 'Op de toppen van den Goenoeng Kawi in Oost-Java' (Levende Natuur, Gedenkboek J. P. THIJSSE 1935, p. 57–62, 4 fig.).

(15) W. M. DOCTERS VAN LEEUWEN: 'De krater Tegal Primula van de Goenoeng Ipis (bij de Papandajan)' (Trop. Nat. 19, 1930, p. 121–123).

cf. also *sub* VAN STEENIS.

(16) W. M. DOCTERS VAN LEEUWEN: 'Uit het leven van planten en dieren op de top van de Pangerango' I–IV (Trop. Nat. 13, 1924, p. 97–103, 152–159; *l.c.* 15, 1926, p. 57–65, 141–146; and *l.c.* 16, 1927, p. 111–119, 185–194; in total 36 fig.); *cf.* also *sub* 1.

(17) Part of the New Guinea results published in Nova Guinea 18, 1934; and in LAUTERBACH, Beitr. Flor. Papuas. (in ENGL. Bot. Jahrb.).

Meliaceae by HARMS in ENGL. Bot. Jahrb. 72, 1942, p. 158–205.

(18) *cf.* Blumea 3, 1939, p. 236.

BIOGRAPHICAL DATA. Trop. Nat. 21, 1932, p. 121–122, w. portr.; BACKER, Verkl. Woordenb., 1936; Wie is dat? ed. 1–4.

Docters van Leeuwen-Reynvaan, Jenny (1880, Amsterdam, Holland; x), biologist, edu-

cated at Amsterdam University; teacher at a secondary school at Gouda, 1906–07; in 1907 she married W. M. DOCTERS VAN LEEUWEN (see there) whom she followed to Java.

With her husband she published several papers on galls.

COLLECTING LOCALITIES. *E. Java:* environs of Nongkodjadjar (Kletak) (Oct. *1920*–Febr. *1921*).

COLLECTIONS. *Herb. Bog.:* Nongkodjadjar plants. Galls in *private Herb.* DOCTERS VAN LEEUWEN, not numbered.

Doelitzsch, R. F., *cf. sub* Forest Research Institute, Buitenzorg.

Dohong, T. H., *cf. sub ditto.*

Doleschall, Carl Ludwig

(1827, Vag-Ujhely, Hungary; 1859, Ambon, Moluccas), a physician who was educated at Vienna University; in 1853 appointed surgeon in the D.E.I. Army and stationed successively at Weltevreden, Ambarawa (fort Willem I, Centr. Java), Djokja (Centr. Java) and in *Ambon* (*since 1856*). His special interest was the study of invertebrates; in Ambon he was placed under Dr O. MOHNICKE (see there), who himself had a wide interest in natural history.

He made many tours in the island, also to the part called Leitimor.[1]

COLLECTIONS. *Herb. Berl.; Herb. Vienna: Ambon* plants, incl. lichens;[2] > 390 *nos.* Some dupl. in *Herb. Utrecht.*

He evidently collected in *Java* too, MIQUEL cited a number 101 from there.[3] He arrived at Batavia on Sept. 14, *1853.*

LITERATURE. (1) Author of: 'Korte karakterschets der flora van Amboina' (Nat. Tijdschr. N.I. 14, 1857, p. 139–144; herein several particulars on Leitimor); *cf.* also 'Auszüge aus Briefen' (Verh. k.k. Zool. Bot. Ges. Wien 4, 1854, p. 51–58; *l.c.* 5, 1855, p. 111–116; 12, 1862, p. 801–808); extract of these letters transl. into Dutch in De Gids 29, 1865, p. 134–158.

(2) *cf.* A. V. Krempelhuber: 'Flechten aus Amboina' (Verh. k.k. Zool. Bot. Ges. Wien 1871, 12 pp., pl. 6–8).

cf. also MIQUEL in Ann. Mus. Bot. Lugd. Bat.

(3) In Ann. Mus. Bot. Lugd. Bat. 4, 1868/69, p. 290.

BIOGRAPHICAL DATA. De Gids 29, 1865, p. 133–158; in MOHNICKE, Blicke auf das Pflanzen- und Thierleben in den Niederländischen Malaienländern, 1883, p. 560, footnote 1.

Dolman, H. C.

in 1922 appointed Asst Conservator of Forests in the Malay Peninsula.

COLLECTING LOCALITIES. *Malay Peninsula: e.g.* at Kuala Kangsar, Perak (Oct. *1926*); in Kedah, *P. Langkawi* (K. Ayer Angat) (Dec. 2, *1929*); NW. and N. Lipis Distr. in Pahang West (Aug., Sept., Oct. *1931*); Pahang East Coast.

COLLECTIONS. In *Herb. Kuala Lump.*, numbered in the C.F. (see *sub* Conservator of Forests) series.

Dom, *cf. sub* Forest Research Institute, Buitenzorg.

Dom, J. M., *cf. sub ditto.*

Domingo

Philippine Ranger (cf. *sub* Forestry Bureau, Manila); also employed by the Forest Dept *Br. N. Borneo* (see there); now retired.

Dommers, Johannes Leonardus

(1870, Padang, Sumatra; Jan. 13, 1923, Soerabaja, Java), Head Overseer in the employ of the D.E.I. Forest Service; in 1900 temporarily put at the disposal of the Botanic Gardens (Buitenzorg) and stationed at the Govt Gutta-Percha Estate Tjipetir (near Tjibadak, W. Java); at the end of 1901 back with his corps again. Ten of his thirty years of service were passed in *P. Kangean* (NE of Java), in which island he collected plants in the years *1913* and *1919–22.*

COLLECTIONS. *Herb. Bog.:* 208 *nos*, and material in alcohol (pres. 1913).

BIOGRAPHICAL DATA. Tectona 16, 1923, p. 291–292 + portr.

Dommes, A.

of Pengaliau Estate, Indragiri (*Centr. Sumatra*).

COLLECTIONS. *Herb. Bog.: Euphorbia piluli-fera* L., 1 *no* collected in *1918.*

Donati, Vitaliano

(1717, Padua, Italy; Febr. 26, 1762, on the coast of Malabar, Indian Ocean), professor and Director Bot. Garden at Turin, 1749–62. He was instructed by KAREL EMANUEL III of Sardinia to make a voyage to the Orient, to collect material for a planned Natural History Museum. In Alexandria he fell in love with a girl who urged him to take her brother as a travel companion. Evidently the latter was no good and stole his money and at least part of his collections. After a shipwreck DONATI fell ill and subsequently died.

He is the author of 'Della storia naturale marina dell' adriatico' (Venezia 1750).

The genera *Donatia* FORST. and *Vitaliana* SESLER were named in his honour.

ITINERARY. In 1859 he successively visited Egypt, Sinai, Palestine, Arabia, and embarked at Maskat for India. In *c. 1760* he stayed at Batavia, *Java.*[1] He evidently visited G. Parang in Krawang (*W. Java*); a permit to travel through the territory of the E.I. Company is dated Oct. 16, *1759.*[2]

COLLECTIONS. Mainly collected in Egypt and the Near East; for the greater part pulverized, a small part still recognizable, but without labels and precise indication; with *Herb.* BALBIS in *Herb. Turin.*[3] Part of his stolen collections fell into the hands of LINNAEUS, maybe only from the first part of the voyage.[4] LASÈGUE[5] mentions, that LINNAEUS received Arabian plants from BASSI and DONATI, 'qui lui furent remises après la mort de FORSKAL'.

LITERATURE. (1) *cf.* HAGEMAN in Nat. Tijdschr. N.I. 31, 1870, p. 192.

(2) *cf. l.c.* p. 198; and J. A. v. D. CHIJS, Ned. Ind. Plakkaatboek 7, 1890, p. 348–349.

(3) *cf.* List by BONINO in 'Bibliografia medica piemontese' 2, p. 171 (*non vidi*).

(4) *cf.* further particulars in BACKER, Verkl. Woordenb., 1936, copied from 'Bref och skrifvelser af och till CARL VON LINNE' (ed. by Upsala Univers., Första afd.) vol. 2, p. 264, ann. 3.

(5) in Mus. Bot. DELESS., 1845, p. 358–359.

BIOGRAPHICAL DATA. By G. GENNARI (Padova 1839) (*non vidi*); PRITZEL, Thes. Lit. Bot., 1872; MATTIROLO, Cron. Orto Bot. Torino 1929, p. xxxvii–xxxix + portr.; BACKER, Verkl. Woordenb., 1936.

Donk, Marinus Anton

(1908, Sitoebondo, Java; x), mycologist, educated at Utrecht University, who took his Dr's degree in 1933. From 1934–39 teacher at secondary schools at Soerabaja, from 1939–40 at the Medical school (N.I.A.S.) in the same place, since 1941 Mycologist on the staff of the Herbarium, Botanic Gardens, Buitenzorg. During World War II he was finally interned at Singapore, from where he was evacuated to Holland in March 1946 (previously working for some months in the Singapore Herbarium); he returned to Java in Sept. 1947.

He made large mycological collections, but in later years collected ferns too.

COLLECTING LOCALITIES (of ferns). *1939–41. E. Java:* G. Tengger; *Centr. Java:* environs of Kalioerang (Djokja Sultanate); *W. Java:* G. Gedeh-Pangrango, and G. Patoeha.—*1945–46. Singapore Island:* Singapore and Bt Timah.

COLLECTIONS. His fern collection amounts to *c.* 600 *nos*, and will be deposited in *Herb. Bog.*

Doop, *cf. sub* ENDERT.

Doop, Johannes Elizius Alphonsus den

(1889, 's Hertogenbosch, N.Br., Holland; ?), for some years educated in biology at Amsterdam; he did not finish his study. In 1916 appointed Entomologist of the Deli Experiment Station, Medan (Sumatra). Later temporary Zoologist at the Institute for Plant Diseases, Buitenzorg, 1921–23, 1924–25; subsequently Adviser of the Anglo-Dutch Plantation of Java Ltd, at Tjikamoening Estate.

He collected some plants in *W. Java. e.g.* at Kadipaten in *1928*.

Author of some papers, which have no relation to the flora.[1]

COLLECTIONS. *Herb. Bog.:* few numbers, principally *Leguminosae* (pres. *1928* and *1937*).

LITERATURE. (1) 'Over de geomorphologie van den Kloet' (Nat. Tijdschr. N.I. 79, 1919, p. 172–179); 'Deli en Karovlakte als Lahar produkt' (*l.c.* 82, 1922, p. 208–214).

BIOGRAPHICAL DATA. Bijdr. Dierk. 27, 1939, p. 188.

Doorman, A. I.

of Garoet, *W. Java*, sent living ferns to *Hort. Bog.* in *1895*.

Doorman, Ludovicus Antonius Carel Marie

(1891, Gouderak, Z.H., Holland; x), lieutenant who entered the Roy. Dutch Navy in 1910. He took part in the Military Exploration Detachment in New Guinea for more than 2 years, and was the first European to climb the so-called Doormantop;[1] the Doorman River was named after him too. At present vice-admiral in the Dutch Navy.

ITINERARY.[2] *Dutch North New Guinea* (Oct. *1912*–Jan. *1915*). From Dec. 2–14, *1912*, the SE. part of the Geelvink Bay, the coast region between Wanggar and Siriwo, and the situation of the islands N of Hamoekoe and the Haarlem Isls, were mapped out (with Lt STROEVE). He took part in the *3rd Mamberamo expedition*[3] under Capt. OPPERMAN: Pionier bivouac (Dec. *1913*); setting out from there (June 3, *1914*) with column SCHULTZ, ascending the Mamberamo for reconnaissance of the Rouffaer River (June 17); reaching a summit of 2650 m alt. (Aug. 26); reconnaissance of various tributary rivers in the neighbourhood (till Oct. 18); the expedition setting out on the way back, while DOORMAN ascended Idenburg River and made a tour by land in southern direction, reaching a summit of about 3550 m alt. (Nov. 21; descent on the 23rd).

COLLECTIONS. *Herb. Bog.:* about 40 *nos* preserved in alcohol, without indication of locality. It is certain, that he collected orchids during the *3rd Mamberamo expedition*,[4] whether before that time too, we do not know.

LITERATURE. (1) *cf.* De Aarde en haar Volken 1918, p. 179–180.

(2) *cf.* 'De uitkomsten der verrichtingen van de militaire exploratie in Ned. N. Guinea' (voorl. uitg.) (Meded. Encyclop. Bur. *no* 11, 1916, 35 pp., 1 map); 'Verslag van de militaire exploratie van Ned. Nieuw Guinea, 1907–15' (Weltevreden 1920; with botanical and zoological notes); Meded. Encyclop. Bur. *no* 11, p. 18–19.

(3) *cf.* Tijdschr. K.N.A.G. 1914, p. 237–238; and *l.c.* 1915, p. 542–543, 857–860 + map.

(4) described by J. J. SMITH in Nova Guinea vol. 14.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Doorn, Zeger van

(1891, Zegveld, U., Holland; x), Forest Officer, educated at the Agricultural College at Wageningen, who went to the D.E.I. in 1915; finally Chief of Forest Management. He retired in 1946, and returned to Holland.

Author of some sylvicultural papers.

COLLECTIONS. *Herb. Bog.: Arthrocnemum indicum* MOQ. from the S. coast of *P. Kangean*, NE of Java (coll. March *1940*).

BIOGRAPHICAL DATA. Tectona 38, 1948, p. 1–2.

Doposcheg-Uhlár, Dr Joseph

about 1913 Assistant at the Botanical Laboratory of Munich University. He stayed at Buitenzorg (*Java*) from Apr.–July *1913*, making studies on cleistogamy, anisophylly, *etc.* In 1931 Major, living at Partenkirchen, Bavaria.

COLLECTIONS. Plants and materials were col-

lected for the Bot. Garden and the Lab. for Plant Physiology of the Univ. of *Munich.*[1]

LITERATURE. *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 39.

Dorgelo, J. D.

(1891, Kotten, near Winterswijk, Gld, Holland; May 4, 1925, Soerabaja, Java), was a teacher in Holland for some years; in 1922 he sailed for Java, where he was appointed at a secondary school at Soerabaja. In the few remaining years of his life he made a large collection of plants.[1]

Ixora dorgelonis BREM. was discovered by him in Bawean.

COLLECTING LOCALITIES. *E. Java. 1922.* Soerabaja, Gris(s)ee, Pasoeroean, G. Tengger (Kletak and Nongkodjadjar), and in *Madoera* (Kamal). —*1923.* Madioen, G. Lawoe (Sarangan, Tjemarasewoe, Oct.), G. Wilis, Kediri (Popoh), Soerabaja, limestone hills near Sidajoe, Sidohardjo, Gris(s)ee, Modjokerto, G. Tengger (Simo, Nongkodjadjar), Banjoewangi.—*1924.* Banjoemas (in *Centr. Java*), G. Lawoe, G. Keloed, Madioen, Soerabaja, Trawas, Gris(s)ee, Toeban, Modjokerto (Patjet); *P. Bawean* (June): Tg Lajar and Sangkapoera; *Madoera* (Boernih); G. Wilis (Ngebel) (Oct.–Nov.).—*1925.* Soerabaja, Gris(s)ee, Toeban.

COLLECTIONS. *Herb. Pasoer.:* ± 3000 *nos* (bought after his death, with his notes); dupl. in *Herb. Bog.* (identified by BACKER), and *Leyden.* The *Bawean* collection contains some ferns.[2]

He presented living plants from the environs of Soerabaja to *Hort. Bog.* in *1925.*

LITERATURE. (1) Author (posthumous) of 'Epiphyten' (Trop. Nat. 15, 1926, p. 2–6, 6 fig.).

(2) *cf.* O. POSTHUMUS in Proc. 4th Pac. Sci. Congr. Java 1929, vol. 3, p. 140 and in 'Ferns of Bawean' (Proc. Roy. Acad. Sci. Amsterdam 32, 1929, 9 pp.).

BIOGRAPHICAL DATA. Trop. Nat. 14, 1925, p. 95.

Dorsett, Palemon Howard

(1862, Carlinville, Ill., U.S.A.; 1943, Washington, D.C., U.S.A.), agricultural explorer, for 41 years Horticulturist with the U.S. Dept Agric. Washington; recipient of the Meyer Medal for distinguished service.

For his voyage to the *Dutch East Indies* and the collections made there, see *sub* D. G. FAIRCHILD.

BIOGRAPHICAL DATA. Amer. Men of Sci. ed. 3–6; Science N.S. 97, 1943, p. 322.

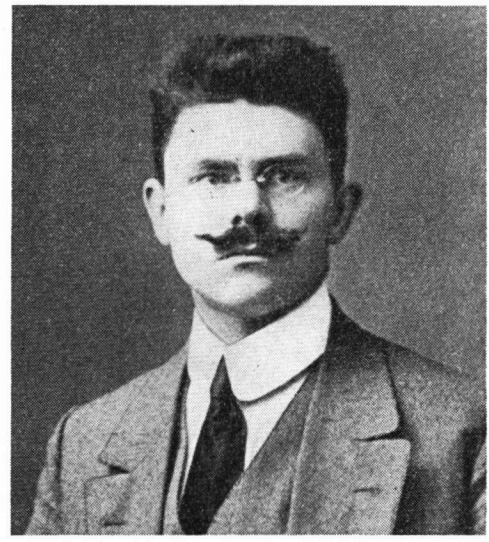
Dorst, Leenderd Jan Willem

(1901, Tjimahi, Java; ?), Overseer in the D.E.I. Forest Service, who was at the disposal of THORENAAR (see there) in Palembang (S. Sumatra), 1920–Oct. 1924; in 1925 stationed in Java, May 1930 transferred to Lingga (Riouw), May 1935 to Tembilahan in Indragiri (Centr. Sumatra) and since Sept. 1937 in Java again.

COLLECTIONS. For the *Forest Research Institute* (F.R.I.) *Buitenzorg; Herb. Bog.:* dupl. from Benkoelen and Palembang in *S. Sumatra;* from Palembang E. & T. *nos* (*cf.* ENDERT & THORENAAR); from *Lingga* 1 *no;* some dupl. in *Herb. Utrecht.*

Doubrowine, Dr N.

from Moscow, stayed during two months, between May and Sept. *1885,* at the Foreigner's Lab-



DORGELO

oratory at Buitenzorg, *Java.* In the first place he wished to make a general survey of the Netherlands Indian flora by means of the Buitenzorg Garden before making an expedition through the *Archipelago.* In the second place he intended to bring together collections for the Botanical Museum *Moscow.* (*cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 11–12).

He visited at least *Billiton* (*cf.* Versl. Pl. Tuin for 1885, p. 12).

Douglas, R. S.

Resident of the Baram District of Sarawak in *1910,* collected specimens of *Matonia sarmentosa* for Prof. DIELS (*Berlin*), at Niah, Sarawak (*NW. Borneo*), at the request of the Sarawak Museum (*cf.* Rep. Sarawak Mus. for 1910).

Doux, J. A. le, *cf.* LEDOUX, J. A.

Down, St Vincent B.

merchant of Singapore and afterwards of Sarawak; for many years on the Gardens Committee (–1919), Singapore (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTING LOCALITIES. *Malay Peninsula.* In *1900* a few plants at the mouth of the Telubin River, Patani, Siam.—In *1911* on the Bekok and Sedili rivers in Johore.

COLLECTIONS. *Herb.* and *Hort. Sing.* (pres. in *1916, 1919, etc*).

Draaisma, *cf. sub* Forest Research Institute, Buitenzorg.

Drake, Sir Francis

(*c.* 1541 or '45, near Tavistock, Devonshire, England; 1596, o/b his ship near the town of Nombre de Dios, West Indies), in his youth apprenticed on a vessel, finally admiral. In 1577 he started for a voyage into the South Seas through the Straits of Magellan at the expense of Queen Elizabeth (see below). In 1581 appointed Mayor of Plymouth; in 1585 again to sea, when the hostilities with Spain had commenced; in 1588 vice-admiral.

ITINERARY. *Voyage in the 'Pelican' etc., 1577–80.*[1] Sailing from Plymouth (Dec. 13, 1577); Isl. Mogadore (coast of Barbary), Cape Blanco, Isl. Maya, Isl. Brava, River de la Plata, Bay of Seals (Seal Bay), Port San Julian, Terra del Fuego (discovery), Isl. Mocha, Valparaiso, Coquimbo, Tarapaca, Arica, Callao, Isl. Canno, Guatulco, W. coast of N. America, Isls of St James, Isls of Thieves; *Philippines, Mindanao* (Oct. 21, *1579*), sailing again on the 22nd; *Moluccas, Ternate* (Nov. 3–8); anchoring at small island near E. Celebes (*Crab Isl.* of the English) (Nov. 14–Dec. 11); port on S. side of *Java* (March 12–25, *1580*); Cape of Good Hope; Sierra Leone; Plymouth (Sept. 26).

COLLECTIONS. RUMPHIUS in his 'Herbarium Amboinense' (I, p. 183) mentions the fact (cited from CAROL. CLUSIUS lib. 2 Exot. Cap. 27) that '*Fructus Beretinus*' (= *Gnetum gnemon* L.) was brought to Europe in 1580 with the celebrated voyage round the world of FR. DRAKE. The specimen was collected in *Beretina Island* in the *Philippines*, probably in *1579*. DRAKE presented sundry natural history objects to CLUSIUS.[2]

LITERATURE. (1) *cf.* 'Voyage of Francis DRAKE' in J. BURNEY, A chronological history of discovery in the South Sea or Pacific Ocean, 1, 1803, p. 304–369.

(2) *cf.* MEYEN, Geschichte der Botanik, 4, 1857, p. 352.

BIOGRAPHICAL DATA. Encyclop. Britan.; in 'Les explorateurs célèbres' (Genève/Paris 1947) p. 64–66 + portr.

Dranen, van

when employed at the People's Loan-bank at Fort de Kock (Sumatra West Coast), collected a living orchid which was cultivated in *Hort.* JACOBSON (see there) at Fort de Kock. The plant came from Agam in the same residency. Material was sent to *Buitenzorg.*

Drescher, Friedrich Carl

(1875, Amsterdam, Holland; x), finished his secondary education at Amsterdam in 1891, and some time later went to the D.E.I., where he was for 16 years in the employ of the H.V.A. (Handels Vereeniging Amsterdam). Since 1909 a partner of the firm of ROUWENHORST MULDER & Co. which was liquidated in 1934. From his youth he was an ardent amateur entomologist who made extensive private collections, more especially of beetles. In 1943 he was appointed Custodian of the Buitenzorg Zoological Museum by the Japanese government, a function he still fulfilled after the Japanese capitulation.

COLLECTIONS. *Herb. Bog.*: 16 *nos* of foodplants collected at Batoeraden on the S. slope of G. Slamat, *Centr. Java* (Apr. 10, *1930*).

Droop, Th., *cf. sub* Forest Research Institute, Buitenzorg.

Druce, George Claridge

(1850, Potterspury, Northamptonshire, England; 1932, Oxford, England), at the age of 15 apprenticed to a pharmacist; later he purchased a business of his own at Oxford. He had a great interest in the local flora and was the writer of various county floras; in 1899 he was awarded the honorary degree of M.A. by the University of Oxford. In 1895 appointed Curator of the Fielding Herbarium, Bot. Gard., Oxford; from 1903 till his death Secretary of the Bot. Soc. and Exchange Club of the British Isles.

He visited the *Malay Peninsula* and *Singapore* in *1908* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Oxford;* ? incl. the *Malay Peninsula* collection.

BIOGRAPHICAL DATA. Proc. Linn. Soc. Lond. 144, 1931/32, p. 174–176; Journ. Bot. 70, 1932, p. 141–144; Kew Bull. 1932, p. 157–158; Nature 129, 1932, p. 426–427.

Druif, Dr Jan Henrie

(1893, Rotterdam, Holland; x) geologist, educated at the Wageningen Agricultural College, the Technical College at Delft, at Utrecht University, and at the Hanover Technical College (Germany). On the staff of the Deli Experiment Station (Sumatra); in 1939 appointed Pedologist at the Soil Science Institute at Buitenzorg; in 1946 transferred to the Makassar (SW. Celebes) branch of the General Experiment Station.

COLLECTING LOCALITIES. *1939. S. Sumatra* (betw. Apr. 8–May 11): Tebingtinggi (Palembang), Lahat, Pagaralam and G. Dempo; during an exploration trip by car along the main roads of Palembang Residency.

COLLECTIONS. *Hort. Bog.*: living orchids.

Duff, John

till 1884 official of the Botanic Garden at Sydney, who collected *Nephrolepis duffii* TH. MOORE (*cf.* BACKER, Verkl. Woordenb., 1936) in *Duke of York Island* (*Bismarck Archipelago*).[1] As the plant was described in 1878, the collecting must have taken place previously.

COLLECTIONS. Plants and seeds on behalf of the *Bot. Gard. Sydney.*

LITERATURE. (1) *cf.* also Hortus Veitchii 1906, p. 325.

Duldulao, *cf. sub* Forestry Bureau, Manila.

Dumas, J. M.

a Eurasian who went to school at Batavia till

the age of 16. He made extensive travels, especially with the object of collecting birds and insects, sometimes in the employ of others, likewise at his own expense. It appears that he owned land in British North Borneo, of which the tenants did not need to pay any rent, but in return yearly a dozen of them had to attend him on his tours.[1]

He is the author of a vocabulary collected on the Mimika and Atoeka rivers (SW. New Guinea).[2]

ITINERARY. *Dutch North New Guinea. 1899.* As early as January in the environs of Humboldt Bay;[3] in the same year visiting the Cyclop Mts.—*1900.* DUMAS orally communicated to WICHMANN (see there) about his *voyage in the 'Camphuys'* under Capt. D. DE GROOTH:[4] mouth of the Mamberomno (= Mamberamo) (Jan. 10); the river was ascended to W of the northern point of Havik Isl., when the 'Camphuys' returned; DUMAS was put ashore on the left bank and made bivouac near the mouth of a tributary, on the last winding of the river before Havik Isl.; there was a outbreak of beri-beri among the Dyaks and about 50 days later all embarked on the 'Camphuys' again and returned to Humboldt Bay.—*1901.* In July L. A. VAN OOSTERZEE met with him in the island of *Metu Débi* in Jotëfa Bay (Humboldt Bay), and together they made several excursions in Aug.–Sept. (*cf. sub* VAN OOSTERZEE, Itiner. *etc.*).—*1902.* After having returned from Humboldt Bay to *Ternate*, he was instructed by the New Guinea Trading Company to make a tour to the coast of *SW. New Guinea* (March–May); he principally stayed between Cape Buru and the mouth of the Newérip, *alias* Pisang Bay.[5]—*1903. With* WICHMANN *expedition* (see there) *to Dutch North New Guinea.*[6] He went from Manokwari to Humboldt Bay to make arrangements for their settlement in Metu Débi; WICHMANN arrived on March 13th; besides the excursions together with WICHMANN, DUMAS made a vanguard (May 26) to the Jafuri region in order to trace a path to some unknown lakes; the same trip together with others (June 4–7); setting out from Humboldt Bay (June 11) to Walckenaer Bay, ascending the Tawarin and downstream the Erisangra; on the way back to Humboldt Bay, visiting Moegé Distr., S of Tanah Merah; D. took part in the trip to Jamoer Lake too; when the expedition was over, he went to Batavia.—*1907. With 1st* LORENTZ *expedition to Dutch South New Guinea* (*cf.* Itiner. *etc.* under VERSTEEG). DUMAS made many vanguards.—May *1908*–Sept. *1912,* naturalist attached to the *Exploration Detachment* in *S. New Guinea.* In May *1908* to the Bloemen River (between Hellwig and Kasteel River), ascending the river (May 30), and back to Merauke (June 15); to the mouth of the NW. Oetoemboewe River (June 29), upstream (till July 7), and back at Merauke (12); a 12-day reconnaissance of the region between Byan and Merauke River, *e.g.* of the basin of the Koembe.[7] In Sept. further exploration of the same region.[8] Exploration continued (till Dec. 29) and back by land to Merauke.[9] Mouth of the Digoel River (Febr. 18, *1909*), upstream and exploration of the basin;[10] reconnaissance of the lower basin (since March 27).[11] Tracing a path from Central bivouac to the Fly River with brigade NIJWEIDE;[12] exploration downstream Digoel River (Apr. 29–May 5), some small tributaries downstream (May 27) and the Ederah (May 29–June 5), the Oewimmerah (erroneously named Idala) (June 17), ascending the latter until July 1.[13] Subsequently (since Nov. 15) exploring the region near and above the Koembe River; part of the expedition, including D., visited *Frederik Hendrik Isl.* (Jan. 19, *1910*), which proved rather impassable; setting out to the Otakwa (Apr. 9); venturing on the way to Carstensz Mts, following the left tributary of the Setekwa; Nov. 5 the march was discontinued and the whole detachment was transferred to the Eilanden River (arriving Dec. 2).[14] Reconnaissance of the Eilanden River and A and B River; back to Merauke (end of March *1911*); exploration of A River and W of it (Aug.).—*1917. S. Sumatra* (± Apr.–June): Palembang, Rawas.

COLLECTIONS. *Herb. Bog.:* probably only few *New Guinea nos;* from *Sumatra, nos* 1501–1668 as collector for K. HEYNE (see there). He evidently collected in *Br. N. Borneo* too;[15] as to that island we do not know any dates. The collection on behalf of HEYNE also in *Herb. For. Res. Inst. Buitenzorg* (with original labels); dupl. in *Herb. Utrecht.*

He tried, when ATASRIP and DJIBJA of the WICHMANN expedition had gone homeward, to complete the botanical collection as much as possible.

LITERATURE. (1) *cf.* Bull. Mij Bev. Nat. Ond. Ned. Kol. *no* 41.

(2) *cf.* Bijdr. Taal-, Land- en Volkenk. 65, 1911, p. 116–127.

(3) *cf.* Ornith. Monatsber. Berl. 8, 1899, p. 137.

(4) *cf.* ROUFFAER in Tijdschr. K.N.A.G. 1909, p. 119–124.

(5) *cf.* J. W. VAN HILLE in *l.c.* 1905, p. 318–321.

(6) *cf.* Bull. Mij Bev. Nat. Ond. Ned. Kol. *nos* 44–47.

(7) *cf.* Tijdschr. K.N.A.G. 1909, p. 142–154.

(8) *cf. l.c.* p. 272–273.

(9) *cf. l.c.* p. 452–455.

(10) *cf. l.c.* p. 659–660.

(11) *cf. l.c.* p. 822–824, 827.

(12) *cf. l.c.* p. 839–840; for exploration Digoel region by others *cf. l.c.* p. 822–841.

(13) *cf. l.c.* p. 996, 1000, 1001, 1003–1012.

(14) *cf.* Meded. Encyclop. Bur. *no* 11, 1916, p. 7–8; and scattered news on the exploration of SW. New Guinea in Tijdschr. K.N.A.G. 1910.

(15) A living specimen of *Dendrobium reticulatum* J.J.S., collected at the base of Mt Kinabalu (*cf.* Bull. Jard. Bot. Buit. sér. 2, *no* 13, 1914, p. 18–20).

Dumont, J. A. F.

a resident of *Borneo,* forwarded some plants, amongst which *Mastixia sp.* to *Herb. Bog.* in *1912* (*cf.* Versl. Pl. Tuin Buitenzorg for 1912, p. 7).

Dumont d'Urville, Jules Sébastien César

(1790, Condé sur Noireau, Calvados, France; 1842, Versailles, France), officer in the French Navy, excellent hydrographer; accompanied the expedition of the 'Chevrette' to the Levant in

1819; Lieutenant and Commander of several French expeditions round the world, on the first of which he was especially in charge of the botany department. He is the discoverer of the Astrolabe Bay, named after the vessel of the expedition.

Many plants were named in his honour.



DUMONT D'URVILLE

ITINERARY. *Voyage in 'La Coquille', 1822–25.*[1] *cf.* also *sub* R. P. LESSON. Sailing from Toulon (Aug. 11, 1822) *via* Brazil, Cape Horn, Chile, Peru, Tahiti, Society Isls; *New Ireland (Bismarck Archipelago)*: Port Praslin (Aug. 12–20, *1823*), from where visiting the *Isl. Lambonne* (= *Île aux Marteaux*) (Aug. 15); along the coast of New Britain and N. New Guinea to *Waigeo(e)*: Bay of Offack (Sept. 6–15); *Moluccas: Boeroe* (Sept. 23–Oct. 1, at Cajeli *etc.*), *Ambon* (Oct. 4–27); sailing to Port Jackson, New Zealand, *via* Sydney; Carolines, Isl. Ualan; *NW. New Guinea:* Doré (July 26–Aug. 9, *1824*); *E. Java:* Soerabaja (Aug. 28–Sept. 10); returning to France by way of Mauritius and St Helena, arriving March 24, 1825.—*Voyage in 'L'Astrolabe', 1826–29.*[2] *cf. sub* P. A. Lesson.—*Voyage in 'L'Astrolabe et La Zélée', 1837–40.*[3] *cf. sub* J. B. HOMBRON, H. JACQUINOT, and E. J. F. LE GUILLOU; collected together in *Timor, etc.*

COLLECTIONS.[4] *Herb. Paris:* 3000 *nos* from the 'Coquille'; *Herb.* DECAND. (*Geneva*): 188 *nos* from the 'Astrolabe'; *Herb.* DELESS. (*Geneva*): from *Singapore, Sumatra, Borneo, etc.; Herb. Caen; Herb. Berl.* (with *Herb.* KNUTH); *Herb. Vienna: Plant. Amer. Australis et Novae Zelandiae.*

The collections of the 2nd and 3rd voyage were mainly made respectively by P. A. LESSON and J. B. HOMBRON (liter. on the collections see there).

MSS in the Library of the Nat. Hist. Mus. Paris.

LITERATURE. (1) D. F. J. ARAGO: 'Rapport sur le voyage de M. DUPERREY' (Paris 1825).

L. I. DUPERREY: 'Voyage autour du monde, exécuté . . . en la corvette de S.M. la Coquille, pendant les années 1822, 1823, 1824 et 1825' (Paris 1826–34).

R. P. LESSON: 'Voyage autour du monde sur la corvette la Coquille' (Paris 1838–39, 2 vols; in vol. 2 a description of the vegetation of Waigeo on p. 114, and of Boeroe, recording useful plants too, on p. 165–170). *Cf.* also Le Moniteur 1848/49, p. 17, 149, 217 and Literature *sub* R. P. LESSON.

(2) J. S. C. DUMONT D'URVILLE: 'Voyage de la corvette l'Astrolabe, exécuté par ordre du Roi pendant les années 1826, 1827, 1828, 1829, *etc.*' Histoire du voyage (Paris 1830–33).

(3) J. S. C. DUMONT D'URVILLE: 'Voyage au Pôle Sud et dans l'Océanie sur les corvettes l'Astrolabe et la Zélée'. Histoire du voyage (Paris 1841–46, 10 vols + 2 vols Atlas). And *cf. sub* GUILLOU.

He is the author too of: 'Voyage pittoresque autour du monde' (Paris 1839, 2 vols; general résumé of voyages of discovery).

D'URVILLE gave a lecture at Batavia, *cf.* Tijdschr. Neêrl. Ind. 3[1], 1840, p. 1–24.

(4) The botanical results of the 'Coquille' were published by DUMONT D'URVILLE (Botanique, 1828), J. B. M. BORY DE SAINT VINCENT (Cryptogames, 1827–29), A. BRONGNIART (Phanérogames, 1829–34) (*cf.* Journ. Bot. 39, 1901, p. 206; Ann. Mag. Nat. Hist. ser. 7, vol. 7, 1901, p. 391 and MAIDEN in Journ. & Proc. Roy. Soc. N.S.W. 44, 1910, p. 140–142).

For literature on the collections of the 'Astrolabe' and the 'Astrolabe et la Zélée', *cf.* respectively *sub* P. A. LESSON and J. B. HOMBRON.

BIOGRAPHICAL DATA. In 'Voyage au Pôle Sud *etc.*' vol. 10 of the 'Histoire du voyage', p. 55–148; Ann. Marit. et Colon. 27[1], partie non officielle, 1842, p. 881–895; Alg. Konst- en Letterbode 1842[1], p. 385–386; PRITZEL, Thes. Lit. Bot., 1872; Journ. & Proc. Roy. Soc. N.S.W. 44, 1910, p. 123–129, w. portr. pl. 9; BACKER, Verkl. Woordenb., 1936; in 'Les explorateurs célèbres' (Genève/Paris 1947) p. 266 *seq.* + portr.

Dunselman, J.

(1901, Medemblik, N.H., Holland; x), a Roman Catholic missionary, stationed in Borneo since 1933, respectively at Benoea Martinoes (till June 1935), and Pontianak. In July 1942 he was interned by the Japanese in Kuching camp (Sarawak); from Oct.–Dec. 1945 in a restoration camp in Labuan; subsequently till March 1947 back at Pontianak. In 1948 in a convent at Eindhoven, Holland.

COLLECTING LOCALITIES. *W. Borneo. 1935.* Principally in the environs of Pontianak.—*1936.* Karangan, Tioeng Tandjoeng, G. Serantak, Benkajang, Pontianak.—*1937.* Visiting Nature Reserve Lo Pat Foen Pi, a lake near Montrado (Febr.).[1]—*1938. E.g.* at Pangkalan, environs of Pontianak, Mandor; mainly along the beach and on padangs.[2]

COLLECTIONS. *Herb. Bog.:* > 172 *nos*, amongst which *Salvinia cucullata.*[3]

Some living plants in *Hort. Bog.*

LITERATURE. (1) J. DUNSELMAN: 'Aanteekeningen betreffende het Natuurmonument Lo-Pat-Foen-Pi bij Montrado (West-Borneo)' (Natuur in Indië 1937, p. 83–85, w. ill.).

(2) J. DUNSELMAN: 'Vegetatieschets van de goudterreinen in de Westerafd.' (Trop. Nat. 27, 1938, p. 97–104, 12 fig.).

(3) *cf.* Trop. Nat. 25, 1936, p. 85.

Duperrey, Louis Isidore

(1786, Paris, France; 1865, Paris, France), accompanied the voyage of 'L'Uranie et La Physicienne' (*1817–20*) under command of FREYCINET (*cf. sub* GAUDICHAUD and QUOI); commander of 'La Coquille' (*1822–25*) (*cf. sub* DUMONT D'URVILLE).

His entomological collection is preserved in *Mus. Hist. Nat. Paris;* probably no botanical collections were made by him.

Duperreya GAUD. was named after him.

BIOGRAPHICAL DATA. Nouv. Biogr. Génér. 15, 1868.

Dupont, Frits

(1909, Schiedam, Z.H., Holland; probably killed Febr. 1942 during military action in Celebes), was appointed Agriculturist in the employ of the General Experiment Station for Agriculture (Buitenzorg, Java) in 1930; later stationed at Manado, Celebes, at the Coconut Experiment Station.

Author, together with G. J. SCHEEPMAKER (see there), of a book on the life-history of Javan butterflies.

COLLECTIONS. *Herb. Bog.:* 9 *nos* for identification (*1935*), some from the Wijnkoopsbaai in *W. Java* (Dec.).

Durant, C. L.

(† 1945, Siam), joined the Forest Department, Malay Peninsula, as Assistant Conservator of Forests in 1925; seconded in Brunei (NW. Borneo)[1] in August 1932; Silviculturist, 1939–41.

COLLECTING LOCALITIES. *1925–41.* Throughout the *Malay Peninsula*, but mainly in Kelantan, Perak, and Negri Sembilan.—*1932. NW. Borneo:* forests of Brunei.[1]

COLLECTIONS. In *Herb. Kuala Lump.*, numbered in the C.F. (see *sub* Conservator of Forests) series, from *Borneo* 82 *nos* (many sterile); dupl. in *Herb. Edinburgh.*

LITERATURE. (1) C. L. DURANT: 'Report on the forests of Brunei' (Singapore 1933, p. 1–69, w. map).

Durnford, J.

a miner of Kuantan, who collected orchids which he contributed to *Singapore* in *1889* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

Cited many times in MERRILL, Enum. Born. Pl., 1921, as the collector of orchids from *Borneo*. He evidently sent living orchids from Borneo to *Hort. Sing.* (*cf.* RIDLEY in Journ. Linn. Soc. Bot. 31, 1896, p. 261–306) *before 1894.*

Duseh, A. F.

Employee of the Forest Service, *Malay Peninsula*, collected mainly in Negri Sembilan; *cf. sub* Conservator of Forests series.

Dussumier

merchant of Bordeaux, France, made several voyages to the Orient between 1818 and 1837. He made zoological collections in *Malacca, Sumatra, Java, Borneo, Luzon* (Manila), and outside the Malaysian region, enriching the Parisian collection with valuable natural history objects. In about 1836 he planned one of his voyages to India, and accordingly had a boat built, which was to be named 'George Cuvier'. The said boat was to be provided with hothouses (*cf.* Flora 19^2, 1836, p. 606–607).

As A. DECANDOLLE in his 'Phytographie' (1880) does not mention DUSSUMIER, it is hardly probable that his botanical collections amounted to much.

Dutrieux, F. B.

is mentioned by H. J. LAM (in Blumea 5, 1945, p. 638) as a collector of plants at Makassar, *SW. Celebes*, in *1937.*

Duyag, A. B., *cf. sub* Bureau of Science, Manila.

Duyfjes, Jacobus Johan

(1876, Haarlem, Holland; 1938, The Hague, Holland), Forest Officer, since 1897 in the employ of the D.E. Indian Forest Service; in the beginning stationed in various regions of Central Java, in 1910 in charge of the Forest Administration of E. Priangan; in 1914 in the Head Office (Buitenzorg), in 1917 transferred to Bandoeng; in 1920 appointed Inspector and in 1925 Head Inspector; retired in 1926.

COLLECTING LOCALITIES. *W. Java*, Priangan Res.: Limbangan Distr. near Pangentjongan; G. Patoeha (July *1910*, March *1914*).

COLLECTIONS. *Herb. Bog.:* orchids for J. J. SMITH.

Dwyer, R. E. P.

Economic Botanist, Botanic Gardens, Rabaul (New Britain), in the Bismarck Archipelago, made a study tour through the D.E.I. in July and Nov./Dec. 1934 to acquaint himself with the biological and agricultural work performed there.

COLLECTIONS. He sent fruits of *Parinarium laurinum*, and fibres from *New Guinea* to the *Kew Museum* in *1936.*

Dijen, A. M., *cf. sub* Forest Research Institute, Buitenzorg.

Dijk, Lucas Jan van

(1910, Kampen, O., Holland; x), Forest Officer, since 1934 in the employ of the D.E. Indian Forest Service; at first stationed for a short time at Salatiga (Centr. Java), then at Samarinda (E. Borneo) 1934–37, in Java again 1937–39, and at Manokwari (W. New Guinea) from May–Oct. 1939;[1] in the beginning of 1940 he went on European furlough, in 1948 still in Holland.

COLLECTIONS. During his stay in New Guinea (May–Oct. *1939*), collections were made in *Japen* and *Biak* with the assistance of AËT and IDJAN (see there), both of the Buitenzorg Herbarium. *Herb. Bog.* and *For. Res. Inst. Buitenzorg:* 840 bb. *nos* from *P. Japen*, Hollandia (Genjam, *Dutch N. New Guinea*), *P. Biak* and *Meos Noem* (the latter island in October).



EDAÑO

LITERATURE. (1) L. J. VAN DIJK: 'Boschbedrijf en boschbeheer in de Residentie Molukken in het bijzonder in Noord-Nieuw-Guinea (Eilanden der Geelvinkbaai)' (mimeographed report Dienst d. Bosschen i.d. Buitengewesten, 1940).

Dijkman Marinus Johannes

(1907, Djombang, Java; x), physiologist, educated at Utrecht University (Ph. Dr in 1934); he went to Java where he was employed by the pharmaceutical firm of BROCADES & STHEEMAN; in 1935 appointed Secretary of the West Java Experiment Station at Buitenzorg; in 1940 he was stationed at Tandjoengkarang in S. Sumatra as Agriculturist; in 1947 appointed Asst Professor at the University of Miami (U.S.A.).

COLLECTIONS. *Herb. Bog.:* some plants from the Lampong Districts, *S. Sumatra* (*1940–41* collected).

E. *nos*, *cf. sub* ENDERT.

Ebalo, Liborio Ela

collected plants in *Mindoro* (Wawan & Dimaraga Mts, Mansalay, Oct. 26–30, *1939*), in *Palawan* (Febr. *1940*), and in *Basilan Island, P.I.*, on behalf of the University of Michigan, in about Jan. *1941*.

COLLECTIONS. *Herb. Univ. Philip.*, and *Univ. Michigan;* dupl. in *Arn. Arbor.;* numbered till 1018.

Eck, Baron P. C. van

Acting Civil Administrator at Soekadana, *W. Borneo*, sent material of the gutta-percha tree to the Natuurk. Ver. N.I. (= Natural Science Society) at Batavia, *about 1852*.

Ecoma Verstege, Ch. M. G. Arinus Marinus

(1827, Sunda Strait, o/b the Arinus Marinus; 1892, ? Arnhem, Gld, Holland), came to the D.E.I. in 1844, and entered the Civil Service in 1845; Assistant Resident of Billiton, 1868–75;[1] Resident of Timor, 1875–78; *ditto* of Banka, 1878–84.

Palaquium verstegei BURCK was named after him.

COLLECTIONS. *Herb. Bog.;* in the years *1872*, *1873* and *1874*, he forwarded gutta-percha-yielding plants from *Billiton*, amongst which the abovementioned species.

Many plants to *Hort. Bog.* from *Banka* and *Billiton*.

LITERATURE. (1) Author of 'Opmerkingen omtrent sommige voortbrengselen van Billiton en onderhoorige eilanden' (Tijdschr. Nijverh. & Landb. N.I. 19, 1874, p. 96–126).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Ecoma-Verstege, François

(1879, Muntok, Banka, E of Sumatra; x), at first in the D.E. Indian army, subsequently in the employ of the D.E.I. Mining Department; finally Head Overseer; retired in 1933. He still lives in Indonesia.

COLLECTING LOCALITIES. *W. Java:* G. Papandajan (*1930*).

COLLECTIONS. *Herb. Bog.:* 13 plants, including *Pimpinella pruatjan* MOLKENB. collected S of G. Djaja, Papandajan. On June 4, 1930, a plant from Tegal Pandjang (Papandajan), numbered by VAN STEENIS (*no* 4438, *leg.* ECOMA VERSTEGE).

Edaño, Gregorio E.

Philippine collector in the employ of the Bureau of Science, Manila, at least from 1916 onwards, mostly working with others, *i.e.* RAMOS *etc.* Still living at this moment.

Cyathea edañoi COPEL., *Cryptocarya edañoii* MERR., *etc.* were named after him.

COLLECTING LOCALITIES. *Philippines. cf. sub* RAMOS. He made some trips on his own, visiting in *1927: Balabac, Palawan* (Nov., with RAMOS); in *1928: Luzon*, Camarines Sur, *Catanduanes* (with RAMOS); in *1929*: *Palawan*, W of Sir J. Brooke Point and in *N. Luzon:* Mt Cagua and Mt Balatongan; in *1930*: *Camiguin* and *Babuyan Isls*, and the northern part of Cagayan Prov. in *Luzon*.—In *1947* taking up collecting once more, *e.g.* in *Mindanao* and *Palawan*.

COLLECTIONS. *Herb. Manila*, at least partly numbered in the B.S. (*cf.* Bureau of Science), and P.N.H. (*cf.* Philip. Nation. Herb.) series. Also dupl. in *Herb. Geneva* (coll. with RAMOS).

Eddingfield

geologist, about 1918–20 on the staff of the Bureau of Science, Manila, P.I. He collected *Nepenthes truncata* in *Mindanao, P.I.* (cited in MERRILL, Enum. Philip. Fl.Pl.), probably the only specimen ever collected; *Herb. Manila.*

Edelfelt, E. G.

about 1880 forestaller of products and Agent of the English Government at Toaripi (= Motumotu) in SE. New Guinea; in 1885 he was mentioned by F. VON MUELLER as an emissary of THOMAS GULLIVER of Townsville who made large monetary sacrifices, to obtain some new scientific material from New Guinea; part of 1886 and the whole of 1887 he resided at Motumotu on the entrance of Williams River in the Papua Gulf; about 1888 Government-Agent at Samarai.

Several plants were named after him.

ITINERARY. *SE. New Guinea.*[1] *1884.* Embarking at Townsville (May 25); *Thursday Isl.* (29); Port Moresby, setting out (June 27) on an expedition to the Astrolabe Range, visiting Gemenoma Valley; Narianumu, NW. spur, Tabori Distr.; collecting *Quercus gulliveri* and *Grevillia edelfeltii;* Rona Falls in the Laloki River; back at Port Moresby (Sept. 18); Narianumu (27). In Nov. setting out on a 2nd expedition, aiming the ascent of Mt Yule (Kowio); sailing from Port Moresby (Oct. 17) to Maiva, Hula (Hood Point), Keppel Point (Aroma), Davitt River, Beleropu, Aroma (25), Kerepuna (29–Nov. 2), Kalo (Kemp Welch), Hula (28); subsequently returning (Dec. 8) without having accomplished the original object.—*1887.* With some French friars of the mission Sacré-Cœur, in August exploring the neighbourhood of Mt Yule: Inawabui Village, Eboa, Bebeo, Rarai (15–17), St Joseph River; the plan to ascent Mt Yule fell through again.

COLLECTIONS. *Herb. Melbourne:* > 33 *nos;* in *Herb.* DECAND. (*Geneva*): *e.g. Aglaia edelfeldti* C.DC. from Port Moresby. He collected ferns too,[2] some preserved in *Herb.* BONAPARTE (= *Paris*). Plants of his were described by F. VON MUELLER;[3] some orchids by KRÄNZLIN.[4]

LITERATURE. (1) E. G. EDELFELT: 'Anteckningar från en resa till Nya Guinea' (Ymer. 7, Stockholm 1886, p. 148–159); 'Resor i Britiska Nya Guinea' (*l.c.* 9, 1889, p. 147–167); 'Notes on New Guinea' (Proc. & Transact. Queensl. Br. Roy. Geogr. Soc. Australasia 3^2, 1887/88, p. 92–102).

(2) *cf.* Ann. Rep. Brit. N.G. for 1893/94, Brisbane 1894, p. 126.

(3) in Descr. Not. Pap. Pl., pts 6–8; in Vict. Naturalist 1, 1885, p. 167–168, and in *l.c.* 3, 1886, p. 45–52; in Austr. Journ. Pharm. Apr. 1886.

(4) in Oesterr. Bot. Zeitschr. 44, 1894, p. 421, 460, 461.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Edeling, A. C. J.

(? , ? ; 1895, Bandoeng, Java), Lieutenant in the Dutch Navy; in 1857 appointed Administrator of the Depot of hydrographic maps, books, *etc.* at Batavia; Head of the Hydrographic Department of the Navy Office at Batavia, 1860–70 and from 1876 onwards; from 1870–72 on European leave and subsequently to the Minahassa (N. Celebes) for an investigation into the culture of coffee there. Pensioned off in 1894.

COLLECTING LOCALITIES. *W. Java,* probably *about 1860–70:* Mr Cornelis, Pondok Tjempaka, Bidara Tjina.[1]

COLLECTIONS. *Herb. Bog.*, presented in *1870,* numbered in the H.B. series; dupl. in *Herb. Leyden.*

LITERATURE. (1) A. C. J. EDELING: 'Botanische wandeling in den omtrek van Bidaratjina' (Nat. Tijdschr. N.I. 31, 1870, p. 287–331).

BIOGRAPHICAL DATA. Nat. Tijdschr. N.I. 66, 1896, p. 25.

Eden

cited in MERRILL, Enum. Philip. Fl.Pl., as a collector of *Philippine* plants.

Edwards, J. P.

Assistant Conservator of Forests in the Malay Peninsula; Febr.–Nov. *1934* in charge of the For. Dept *Br. N. Borneo* (see there).

He paid a visit to Trengganu (*Mal. Penins.*) in *1935.*

COLLECTIONS. *Borneo* collections *cf. sub* For. Dept Br. N. Borneo.

Edwards van Muyen, R.

Chief Controller in Government service, Makassar (SW. Celebes), presented orchids from *Ambon* and *? Batjan* to *Hort. Bog.* in *1935.*

Eechoud, Jan Piet Karel van

(1907, Horst, L., Holland; x), Superintendent of Police, at present Resident of New Guinea, stationed at Hollandia.

Leader of several expeditions in *Dutch New Guinea.* At the instigation of the Forest Officer L. J. VAN DIJK (see there), he collected material of forest trees in 1939/40 during an expedition to Swart Valley.

COLLECTING LOCALITIES. *Dutch North New Guinea.*[1] Between Oct. 14, *1939* and Jan. 10, *1940* near the Mamberamo River.

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg:* 146 bb. *nos*; dupl. in *Herb. Bog.*

LITERATURE. (1) J. P. K. VAN EECHOUD: 'Verslag van de exploratie naar Centraal Nieuw Guinea begonnen op 3 Mei 1939, afgebroken wegens het uitbreken van den oorlog op 10 Mei 1940' (3 vols, mimeographed).

Effendi(e), Ibr., *cf. sub* Forest Research Institute, Buitenzorg.

Effendi, Ish., *cf. sub ditto.*

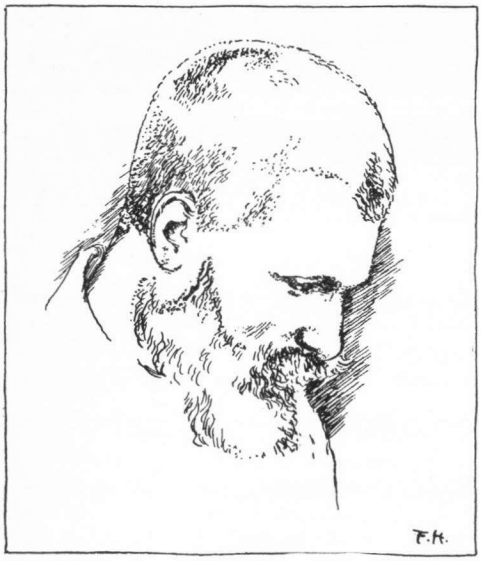
Egeria, Officers of H.M.S.

evidently collected plants in *Christmas Isl.* (*1887*), during the voyage of Capt. ALDRICH (*cf. sub* LISTER, Itiner., Liter., *etc.*).

Eggink, J. G. H., *cf. sub* Forest Research Institute, Buitenzorg.

Egon

collected in Sarawak, *NW.Borneo*, in *about 1924–25*, *e.g.* the *nos* 202 and 306.



ELBERT

Eibergen

SCHEFFER described a new species, *Tabernaemontana pentasticta*, *'in insulis Aroë* EIBERGEN *lecta, nobiscum a* VAN DER GOES, *nunc in horto floret'* (*cf.* Nat. Tijdschr. N.I. 31, 1870, p. 22–23); *Hort. Bog.*

A certain H. C. VAN EIJBERGEN was for several years an official in Ambon (in 1852 Captain in the army, in 1861 District Officer); in Jan. 1868 he was appointed Assistant Resident at Boeleleng, Bali. He may be identical with the collector.

Eisses, J. C. D.

of Liberta-Perdagangan, collected living orchids on behalf of *Hort. Bog.* (pres. *1913*), in *Sumatra East Coast*, Deli, at Laboehan Roekoe (*cf.* J. J. SMITH in odd publications).

Ekeberg

among the plants collected by HORNSTEDT (*Herb. Acad. Sci. Stockholm*), studied by Dr VAN STEENIS in March 1949, were some sheets on which was written by BERGIUS: 'EKEBERG *e Java*'; also some from Cochin-China and Canton.

The plants must have been collected during the voyage of Capt. C. G. EKEBERG to China, in *1765–67* (for Itiner., Liter., etc., *cf. sub* A. SPARRMAN). See also *Addenda*.

Elbert, Dr Johannes

(1878, Koppenbrügge near Hameln, Germany; 1915, Granada, Spain), geologist-geographer who travelled twice in the Malay Archipelago, the first time as a member of the SELENKA Expedition, the second time as Leader of an expedition to the Lesser Sunda Islands equipped by the 'Frankfurter Verein f. Geogr. u. Statistik'. In 1914 he conducted a geological expedition in the Cameroons; at the outbreak of war he fled to Spain, where he died of heart failure after having suffered much from sleeping sickness.[1]

Clerodendron elberti HALL. *f.* was named after him.

ITINERARY. *1907. E. Java*, as a member of the SELENKA *expedition:* G. Pandan near Madioen, G. Kendeng, G. Lawoe.—*1908. E. Java:* G. Lawoe;[2] *S. Sumatra:* Lampong Districts (Jan.–March), at Telok Betong, G. Sugi, Tandjong Karang, Bt Ranggal.—*Sunda expedition, 1909–10.*[3] *N. Lombok:* arrival at Labuan-Tjarik (Apr. 21, *1909*); to the base of G. Rindjani and ascent of the latter; Segara Anak (May), Baru Volcano (May 9), summit of the Rindjani; Sembalun Highland; 2nd ascent Rindjani; *E. Lombok:* to Pussuk (June 2), on pass height of the southern part of the Sembalun Mts; excursions in the SE. coast region to Selong; from the south to the crater of the Rindjani; *Centr. & W. Lombok:* to Praja (June 28), from there crossing the island to the SW. part; *Tukang-besi Isls* (since July 22), on Wandji (= Wangiwangi) and Benongko (= Binongko); *Muna* (July 26–Aug. 7), Buton Strait (Aug. 8); *Buton* (= *Boetoeng*) (mid-Aug.), making trips around and crossing the island; *SE. Celebes:* Dualo (Sept. 10); from S to N through Rumbia; through Mengkoka; Kolaka; sailing to *P. Kabaëna* (Oct. 6), making a trip from the N. coast inland (GRÜNDLER, see there, ascending the Batun Sangia) and one from the E. coast (G. on the Sangia Wita up to 900 m); in November *Sumbawa:* Bima; departing to the Donggo Mts (Nov. 24); N. Bima; setting out to Dompu (Dec. 18); sultanate Sumbawa, crossing the island in the narrow part; western part of the island; sailing (Jan. 23, *1910*) to *Centr. Flores:* from Endeh going through Rea and Ndona districts; sailing from Flores (Febr. 10) to *Wetar:* S. coast, the interior, Tihu Lake; setting out on the return voyage (March 18) *via* Kupang (*Timor*) to Soerabaja.

COLLECTIONS. Herb. *Senckenb. Mus.* (now in *University*) *Frankfurt:* 4284 *nos* 'Sunda Expedition'[7] (± 16300 specimens), on loan in *Leyden Herbarium. Herb. Leyden:* from *Sumatra* (26) and *Java* together 564 *nos* (purch. 1908/09), *Lesser Sunda Isls and Celebes* ± 2750 specim.; *Herb. Kew, etc.*

During the 2nd expedition he was assisted by his wife HETTA ELBERT[4] and by C. GRÜNDLER (see there). The collection of this so-called *Sunda expedition* is numbered 530–4704,[7] *viz* from *Lombok* the *nos* 530–2509, *Tukang-besi Isls* 2510–2591, *Buton* 2592–2848, *Muna* 2849–2962, *SE. Celebes* 2963–3236, *Kabaëna* 3237–3498, *Sumbawa* 3499–4206, *Flores* 4207–4347, *Wetar* 4348–4704; the preceding numbers pertaining to the collection *1907–08*.

The collection from G. Lawoe was described by H. HALLIER;[5] that of the *Sunda expedition* by the

latter and various other monographers.[6] HALLIER's papers include an enumeration of the Sunda expedition numbers with pertaining localities.[7]

Living plants from *Lombok, Celebes* and *Wetar* to *Hort. Bog.*

LITERATURE. (1) *cf.* Meded. 's Rijks Herb. Leiden *no* 37, 1918, p. 1–2.

(2) J. ELBERT: 'Ueber die zonare Verbreitung der Vegetation auf dem Lawu-Vulkan Mittel-Javas' (Meded. 's Rijks Herb. Leiden *no* 12, 1912, p. 1–7).

(3) J. ELBERT: 'Die Sunda-Expedition des Vereins f. Geogr. und Statistik zu Frankfurt a.M.' (in Festschr. z. Feier d. 75-jährigen Bestehens d. Ver., 1911/12, 2 vols, w. maps with marked routes).

J. ELBERT: 'Austrasien und die ehemalige Landverbindung zwischen Asien und Australien' (Verh. Ges. d. Naturfr. u. Ärzte 84, 1913, p. 211–217, w. map).

(4) Authoress of a paper in Die Umschau 20, 1916, p. 281–285.

(5) 'Verzeichnis der von ELBERT bei und auf dem Lawoe gesammelten Pflanzen' (Meded. 's Rijks Herb. Leiden *no* 12, 1912, p. 7–31).

(6) H. HALLIER: 'Botanische Ergebnisse' (in ELBERT, Die Sunda-Expedition *etc., l.c.* vol. 1 and in Meded. 's Rijks Herb. Leiden *no* 14, 1912, p. 1–42).

Scattered in Meded. 's Rijks Herb. Leiden, *i.e.: Meliaceae* by C. DECANDOLLE in *l.c. no* 22, 1914, p. 7–10; *Orchidaceae* by J. J. SMITH in *l.c. no* 53, 1925, p. 1–17; pteridophytes by O. POSTHUMUS in *l.c. no* 70, 1933, p. 3–27; Compositae by J. TH. KOSTER in FEDDE Repert. 34, 1933, 29 pp.

(7) *cf.* Meded. 's Rijks Herb. Leiden *no* 14, 1921, p. 7–15.

BIOGRAPHICAL DATA. Frankf. Wochenschrift 'Die Umschau' 20,1916, p.281–285; BACKER, Verkl. Woordenb., 1936, also *sub Addenda.*

Eld

member of the WILKES U.S. Exploring Expedition, 1838–42; this expedition visited the *Philippines* (Jan. 13–Febr. 12, *1842;* detailed data, liter., *etc., cf. sub* WILKES).

He may have made botanical collections.

Elgincolin, *cf. sub* Forestry Bureau, Manila.

Elias, *cf. sub* Forest Research Institute, Buitenzorg.

Ellagar, *cf. sub* Forestry Bureau, Manila.

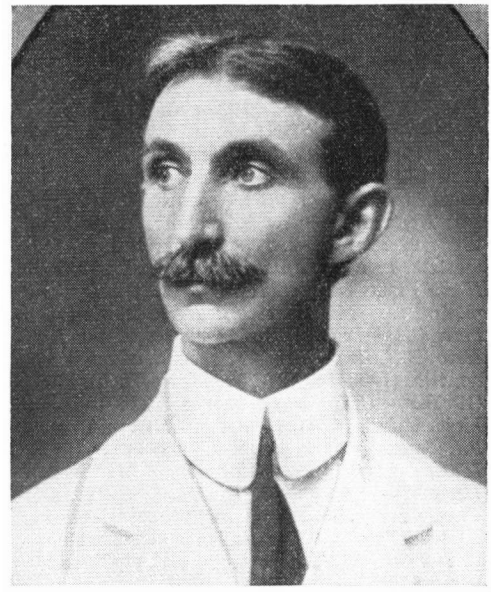
Ellis, William Gilmour

Principal Colonial Medical Officer, *Singapore;* on the Gardens Committee in 1903; collected plants in a few places (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5). In *Herb. ? Sing.*

Elmer, Adolph Daniel Edward

(1870, Vandyne, Wisconsin, U.S.A.; Apr. 17, 1942, Manila, Luzon, P.I.), educated at Washington Agric. College, M. A. Leland Stanford Jr University (1903). Since 1904 he settled as a plant collector in the Philippines, originally in the employ of the Bureau of Science (until 1905); he made extensive travels there and in Borneo too. He made a botanical exploration of the Pacific Coast States, probably before his coming to the Philippine Islands.

Editor of the 'Leaflets of Philippine Botany', in which more than 1500 new species were described,



ELMER

and besides a few new genera and varieties, mostly by ELMER himself.

Several plants were named after him, including some genera of *Fungi* and *Musci.*

COLLECTING LOCALITIES. *Philippines. c. 1903–04. Luzon:* Prov. of Union and Benguet.—*1904. Luzon:* Mt Santo Tomas and Baguio (May); Lamao Forest Reserve, Mt Mariveles (Nov.).—*1905. Luzon:* Sorsogon (Nov.).—*1906. Leyte* (Jan.); *Luzon:* Los Baños (Apr.); Mt Banahao (= Banajao) (May); Lucban in Tayabas Prov. (May).—*1907. Luzon:* Baguio (March); Lucban (May).—*1908. Negros:* Cuernos Mts, Dumaguete (March–June), near the Bonyao River.—*1909. Mindanao:* Todaya (Mt Apo) (Apr.–Oct.), summit of Mt Calelan *etc.; Cebu* (Oct.).—*1910.* Isl. of *Romblon* (March); Isl. of *Sibuyan:* Magellanes (Mt Gitinggiting) (March–May); Isl. of *Samar:* Basay (June).—*1911. Palawan:* Puerto Princesa (Mt Pulgar and Brooks Point) (Febr.–May).—*1912. Mindanao:*[1] landed at Surigao (early part of July); Tubay; Cabadbaran, Mt Urdaneta in Prov. of Agusan (July–Oct.); Butuan; Isl. of *Camiguin* (*Babuyan Isls*)*:* Mambajao (Nov.); *Cebu* (5 days, on the way back to Manila).—*1915. Luzon:* Irosin (Mt Bulusan), Sorsogon Prov. (Oct.–Dec.)[2] and the same locality from Apr.–Sept. *1916.*—*1917.* Mt Maquiling

(June–July).—*Br. N. Borneo. 1921.* In the vicinity of Batu Lima near Sandakan (Oct.–Dec.).—*1922.* Since Oct. headquarters at Tawao.—*1923.* At Tawao till March; return for a short period to Manila, then staying at Tawao until Oct.—*Philippines. 1927. Luzon:* Mt Pinatubo in Zambales Mts (May).[3]

COLLECTIONS. Coll. *Philippines*[4] in *Herb. Manila:* 1120 specim. (1903–04), 3744 specim. (1907–14); *Herb. Vienna:* ± 3800 phanerog. (purch. 1909–15), also ferns, mosses and hepatics; *Herb. Bog.; Herb. Leyden:* 8612 specim. (purch. 1907/33); *Herb. Utrecht; Herb. Berl.:* 2500 *nos* (purch. 1924/25) + 98 *nos* (pres. 1908–13); *Herb.* DELESS. (*Geneva):* 5550 *nos* (acq. 1908–33), 17 bryophytes (1916–18); *Herb.* DECAND. (*Geneva*): 5173 *nos* (acq. 1906–18); *Herb. Kew: Philip.* pl. (purch. 1906–14, 1920, 1933–34); *Herb. Brit. Mus.:* 1857 phanerog. + 738 cryptog. (by exch. & purch. 1910–14); *Herb. Stockholm; Herb. Sing.* (dupl. Manila 1908); *Herb. Sydney:* 3134 pl. (purch. 1908–14) + material in exchange, > 1600 (purch. 1922–23); *Herb.* FIELD (= *Nat. Hist.*) *Mus. Chicago:* 8484 pl. (purch. 1910–15, 1924); *Herb. Bot. Gard. St Petersb.* (= *Leningrad*): 547 species; GRAY *Herb.; Herb. N.Y. Bot. Gard.:* 125 specim. of mosses and hepatics (1908–14), 213 *Fungi* (pres. 1907), 1398 pl. (1907–34); *U.S. Nat. Herb. Wash.:* 2300 dupl. *P.I.; Herb. Univ. Zürich* (8000 *nos* princ. from America!; *P.I.* plants too); in *Herb.* CHRISTENSEN (= *Brit. Mus.*): complete set of ferns from Mt Pinatubo; *Herb. Hamb.:* 1802 *nos* (purch. 1912–13); *Herb. Copenhagen; Herb. Paris;* and probably elsewhere.

The collection of Lamao Forest Reserve amounts to 302 *nos.*[5] The Mt Pinatubo coll. (1927) is numbered 219 . .–above 22000.

Coll. *Borneo*[6] in *Herb. Manila:* 1st and 2nd set including the actual types; *Herb. Berkeley* (Cal.): set of dupl. with isotypes; *Herb. Kew* (purch. 1927); *Herb. Berl.:* 1800 *nos; Herb. Brit. Mus.; Leyden:* 1823 *nos; Utrecht; Herb. Bog.; Herb. Univ. Zürich:* complete set;[7] *Herb. N.Y. Bot. Gard.:* 1209 specim. (1931); *Herb. Arn. Arbor.:* 1085 pl. (1926/27); *Herb.* FIELD (= *Nat. Hist.*) *Mus. Chicago:* 1460 pl. (*purch.* 1926); GRAY *Herb.; Herb. Stanf. Univers.* (Cal.); *Carnegie Mus. Pittsburgh; Miss. Bot. Gard. St Louis; Bern. P. Bish. Mus. Honolulu; Herb. Sydney; Herb. Edinb., Munich, Hamburg, Copenhagen* (1750), *Stockholm, Calcutta, Sing., Herb.* DELESS. (*Geneva*): 269 *Borneo* pl. (purch. 1922/23) + 1535 (purch. 1926/28); in *Herb.* MARTELLI (= *Florence*): type specim. *Pandanaceae; Herb. Paris.*

The original field labels are attached to the Manila set, copies to the Univers. Calif. (Berkeley) set. The numbers run as follows: *nos* 20001–20395 from the vicinity of Batu Lima, near Sandakan; *nos* 20396–21919 near Tawao.

In 1924 TH. OSW. WEIGEL offered for sale a collection of 2000 plants from the *Philippines* and *Borneo;* probably collection ELMER.

LITERATURE. (1) *cf.* ELMER Leafl. Philip. Bot. 7, 1914, p. 2359–2384.

(2) *cf. l.c.* 9, 1937, p. 3397–3413.

(3) *cf. l.c.* 9, 1933, p. 3140–3148.

(4) Many plants described in ELMER, Leaflets Philippine Botany, 1906–37.

(5) *cf.* MERRILL in Philip. Journ. Sci. 1, 1906, Suppl. p. 3.

(6) E. D. MERRILL: 'Plantae Elmerianae Borneenses' (Univers. Calif. Publ. Bot. 15, 1929, p. 1–316).

(7) *cf.* Mitt. Bot. Mus. Zürich 1924/25, p. 21, note. Herein stated: 'A complete series of Sumatra and Borneo'; as ELMER never collected in the former island, we may assume that this is based on an error.

BIOGRAPHICAL DATA. Nat. Research Counc. P.I. Bull. *no* 7, 1935, p. 805–808, incl. bibliogr.; BACKER, Verkl. Woordenb., 1936; an obituary will be published in the near future in Philip. Journ. Sci.

Elphinstone, Sir Graeme Hepburn Dalrymple Horn

(1841-1900), in former days coffee-grower in Ceylon; one of the earlier of European planters in Perak, *Malay Peninsula;* collected a little on the Taiping Hill and in *1884 or following years* near the Gapis Pass.

COLLECTIONS. *Herb. Sing.*

BIOGRAPHICAL DATA. Who was who 1897–1916; BURKILL in Gard. Bull. Str. Settl. 4, 1927, *nos* 4–5 (*cf.* p. 154 *etc.*).

Elumir, G., *cf. sub* Forestry Bureau, Manila.

Emmel, J. F., *cf. sub* Forest Research Institute, Buitenzorg.

Emondt, Johannes Wilhelmus Constantinus

(1875, Batavia, Java; 1921, Lawang, Java), since 1900 in the employ of the Opium Police; in 1912 appointed Head Overseer in the D.E.I. Forest Service, for many years stationed in Atjeh (N. Sumatra). He resigned in Oct. 1919 on account of illness.

COLLECTIONS. *Herb. Bog.:* especially *Dipterocarpaceae,* from Peureula Distr. in Atjeh, *N. Sumatra* (early part of *1914*), *etc.,* bearing low numbers. *Herb. For. Res. Inst. Buitenzorg:* plants from Singkel and Langsa, Atjeh, *N. Sumatra* (coll. *1914–15*).[1]

LITERATURE. (1) *cf.* Typed report on the Peureula exploration 1915 in For. Res. Inst. Buitenzorg.

Ende, W.

collected *Kyllingia monocephala* ROTTB. in *Neu Hannover* (= *New Hanover*) (*cf.* ENGL. Bot. Jahrb. 59, 1924, p. 42 and *sub Cyperus kyllingia* ENDL. in Pflanzenreich Heft 101 (IV. 20) 1936, p. 607). The specimen was *probably* in *Herb. Berl.*

Endert, Frederik Hendrik

(1891, Semarang, Java; x), since 1915 Forest Officer in the D.E.I. Forest Service, in July 1917 charged with the forest reconnaissance of Palembang; since 1918 connected with the Forest Research Institute (F.R.I.), Buitenzorg; in 1937 appointed Inspector, in 1938 stationed at Makassar (SW. Celebes) for the supervision of the forests of the eastern part of the Malay Archipelago; since 1941 Secretary of the Committee for Economic

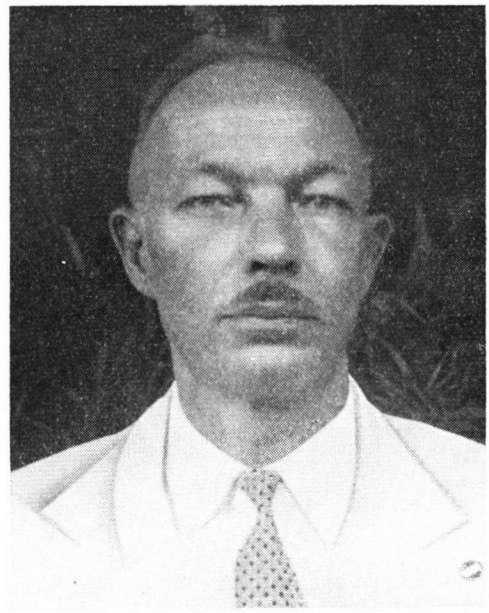
Plants. He accompanied a Central Borneo expedition.

Besides of the publications cited below, he is the author of many papers relating to forestry and of a key for the identification of Malaysian arboreous genera by means of vegetative characters.[1]

Several plants from the Malayan region, including the tree genus *Endertia* STEEN. & DE WIT (*Leg.*), were named after him.

COLLECTING LOCALITIES. *1917–21. S. Sumatra:* Palembang (Aug. 1917–June 1921);[2] Benkoelen and Djambi (*Centr. Sumatra*) (by ENDERT or ? DOOP) (1920); Lampong Districts (Sept. 1920); Benkoelen (June 1921).—*1922. N. & Centr. Sumatra:*[8] Atjeh (Jan.); Sumatra East Coast (Jan.); Tapanoeli (Febr.); *P. Morsala* (Febr. 7); Sumatra West Coast (Febr.).—*Central East Borneo expedition, 1925.*[3] *NE. Borneo:* Beraoe region, W. Koetei. Arriving at Samarinda (June 13); small trips along the Djembajan River and the Mahakam; by boat (June 17) to the Lake District, on the way collecting on the banks of the Mahakam and along the Kedang Rantau and vicinity (Sabentoeloeng and Benoewatoewa), by boat from Ma Moentai (28) *via* Kenohan, kp. Djantoer and kp. Semajang to Ma Ohong; bird's nest caves near Lahoeng (= Lakoem) (29); Tg Isoei (July 3–5) and hence to Ma Alo for investigation of the lakes: Kenohan Batoe Boemboe and Kenohan Melenteng; Ma Moentai; setting out (July 12) to Ma Kaman, D. Siran, Ma Antjaloeng (15–22) (trips to Kenohan Sahoei and K. Geloembang and the Teroesan Pesanget); ascending the Telen River, Kiham Batoe Beng (or Bong) (July 25–Aug. 1); Ma Marah; Ma Wahau (Aug. 3–7); bivouac at Long Poehoes, Villa Rust Roest (Aug. 8–13); at Long Hoet, Villa Nooit Gedacht (14–23); Long Temelen (24–28); Long Liah Leng, Long Soeh; Long Petak, Prauwen bivouac (Sept. 8); vicinity of Long Petak (9–22); hilly country around G. Kemoel, climbing the summit (1850 m) some times, and in the valleys of the Long Mehiang, Long Kiau and Long Petak (Sept. 25–28); returning (Nov. 2) from Long Petak *via* Long Soek, Liah Leng, Long Hoet, Long Poehoes, Long Djenau, Ma Wahau, *e.g.* collecting on G. Kombeng (Nov. 22–30); Tenggarong (Dec. 7); Samarinda (till Dec. 11).—*1928. SE. Borneo* (with D. F. v. SLOOTEN, see there) (Nov. 1–16)[5], visiting Tanah Boemboe and *P. Laoet.*—*1930. W. Java:* Bantam (May 12–17),[5] visiting Doengoes Iwoel, G. Kentjana, Malimping, *etc.*; Moeara Angké near Batavia (July 25);[5] Danau Swamp (Sept. 11–13);[4–5] *S. Sumatra:* Palembang (Oct.).—*1931. Centr. Java* (March 20–24);[5] Klino (G. Pandan), Ngorogoenoeng and Goendik; *W. Java:* SW. Bantam (July 24–Aug. 4),[5] collecting in Oedjoeng Koelon Peninsula on G. Hondje, also visiting *Lang Isl., Prinsen Isl.* and *Meeuwen Isl.; Centr. Java:* Poerwodadi (Aug. 1).—*1932. Centr. Java:* Soebah (Nov. 4).[6]—*1935.* In Dec. *SW. Celebes, SE. Celebes* (Kendari) and *P. Boeton* (= *Boetoeng*).[5]—*1938. W. Borneo* (May 6–21):[5] Sanggau, Sambas, Paloh, *etc.*

COLLECTIONS. In *Herb. For. Res. Inst. Buitenzorg.* From *Sumatra:* Atjeh, Tapanoeli, Sum. East & West Coast, E. *nos* 1328-1364; Djambi E. *nos* 873–880; Benkoelen E. *nos* 869–872 and 1040–1103; Palembang E. *nos* 1–868, 881–1039, 1104–1131, 1148–1163, 1366–1370; Lampong Distr. 1301–1327; *Java:* E. *nos* 1132–1147, 1164–1201, 1224–1226, 1366–1370; *Celebes:* E. *nos* 1227–1237; *Borneo:* bb. *nos* + dupl. of woody plants from the Borneo exp. 1925.



ENDERT

Herb. Bog.: > 1300 E. *nos* dupl. of the For. Res. Inst. Buitenzorg from *S. Sumatra* (princ. Palembang); > 4000 *nos* from *Borneo* 1925 (E. *nos* 1400–5417); 38 *nos* from Danau Swamp (Bantam, *W. Java*), *etc.*; dupl. in *Herb. Leyden.*

Some other collectors of the F.R.I. collected in the E. series too, *viz* P. BLOK (? 1917) and VAN DER ZWAAN (1920–21) (see those).

J. J. SMITH published a paper on the *Borneo* orchids.[7]

Living orchids from Palembang (*S. Sumatra*) in *Hort. Bog.* (pres. 1919–20).

LITERATURE. (1) 'Geslachtstabellen voor Ned. Indische boomsoorten naar vegetatieve kenmerken' (Meded. Proefstat. Boschwezen Buitenzorg *no* 20, 1928; thesis, Wageningen).

(2) FR. H. ENDERT: 'Woudboomflora van Palembang' (Tectona 13, 1920, p. 113–159); *cf.* also typed Reports in For. Res. Inst. Buitenzorg.

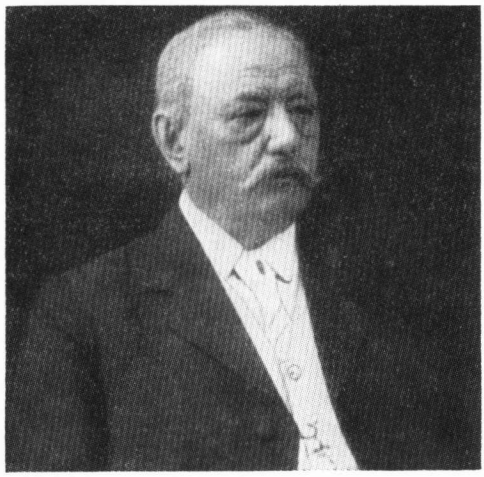
(3) FR. H. ENDERT: 'Plan voor een expeditie ten behoeve van de topographische en natuurwetenschappelijke exploratie van een gebied in Midden Oost Borneo nader aan te duiden met den naam Beraoe' (Weltevreden 1925); 'Aneta Communiqué over de Midden Oost Borneo Expeditie' I–III (Batavia 1925); 'Botanisch en floristisch verslag, Mid-

den-Oost-Borneo-Expeditie 1925'(Ind. Comité Wet. Onderz. 1925).

(4) FR. H. ENDERT: 'Het natuurmonument Danau in Bantam' (Tectona 25, 1932, p. 963–987, 8 fig., 1 map).

(5) *cf.* typed Reports in For. Res. Inst. Buitenzorg.

(6) FR. H. ENDERT:' Het natuurmonument Soe-



ENGLER

bah' (Versl. N.I. Ver. t. Nat. Besch. for 1935, p. 117–124, fig. 6–9).

(7) 'On a collection of Orchidaceae from Central Borneo' (Bull. Jard. Bot. Buit. sér. 3, vol. 11, 1931, p. 83–160).

(8) FR. H. ENDERT: 'Boschbouwkundige aanteekeningen, *etc.*' (Tectona 18, 1925, p. 1–160, 1 map).

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 451; BACKER, Verkl. Woordenb., 1936.

Engler, Heinrich Gustav Adolf

(1844, Sagan, Lower Silesia, Germany; 1930, Berlin, Germany), botanist, educated at Breslau University; Professor of Botany, respectively at Kiel, Breslau, and Berlin (1889–1921); in the latter place besides Director of the Botanic Garden and the Museum.

In the years 1905–06 he travelled in Africa, India, Ceylon, the Malay Peninsula and Java.[1]

Editor of 'Pflanzenreich', 'Pflanzenfamilien', 'Botanische Jahrbücher', 'Syllabus', *etc.*

Several plants were named after him.

ITINERARY. *Malay Peninsula. 1905. Singapore* and Kuala Lumpur (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).—*Java* (Dec. *1905*–Febr. *1906*). Staying at Buitenzorg and making some trips in *W. Java* to G. Gedeh (Jan. 20, 1906), G. Papandajan and Kawah Manoek, and in *E. Java* above Tosari, G. Tengger (Febr. 1906).[2]

COLLECTIONS. *Herb. Berl.:* 1074 *nos* from *Java*, 164 from *Singapore*, 64 from the *Malay Peninsula.*

He collected *Fungi* in Hort. Bog.[3]

LITERATURE. (1) A. ENGLER: 'Die Vegetationsformen tropischer und subtropischer Länder' (ENGL. Bot. Jahrb. 41, 1908, p. 367–372).

(2) *cf.* KOORDERS, Exkursionsflora, 1, p. VI.

(3) P. HENNINGS: 'Fungi javanici novi a cl. Dr A. ENGLER collecti' (Ann. Jard. Bot. Buit. 23, 1910, p. 62–65).

BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 1903, p. 124, *t.* 25; Ber. D.B.G. 48, 1930, Gen. Vers. Heft p. (146)–(163), incl. bibliogr. + portr.; Verh. Bot. Ver. Brandenb. 73, 1931, p. 100; Journ. Bot. 68, 1930, p. 375–377; Proc. Linn. Soc. Lond. 143, 1930/31. p. 171–176; Kew Bull. 1930, p. 495–498; ENGL. Bot. Jahrb. 64, 1931, p. i–lvi + portr. and bibliogr.; BACKER, Verkl. Woordenb., 1936; PETERM. Mitt. 1944, p. 86–87; Forsch. u. Fortschr. 20, 1944, p. 71.

Engles-Julius, C. M.

authoress of 'In tuinen en langs wegen in de Indische laagvlakte' (Batavia 1932, Bibl. N.I. Nat. Hist. Ver.).

COLLECTING LOCALITIES. *W. Java:* Bantam (Eastern *1919*).[1]—*S. Sumatra:* Lampong Districts (Toeloeng Boejoet) (Dec. *1929*).—*E. Java:* Jang Plateau (Apr. *1934*).

COLLECTIONS. *Herb. Bog.:* Lampong Distr. 23 *nos* and from Jang Plateau 5 *nos; Herb. Pasoer.:* 2 *nos* from Bantam.

LITERATURE. (1) C. M. ENGLES-JULIUS: 'Een fietstocht in het Bantamsche' (Trop. Nat. 9, 1920, p. 69–75, p. 92–95, 5 fig.).

English, Albert Charles

(1861 or 1863, England; 1945, Sydney, N.S.W., Australia), arrived in Australia in 1881 as a collector for British scientific institutions. In 1883 he went to British New Guinea to collect zoological, botanical and ethnological materials. Upon the murder of GEORGE HUNTER by the natives in 1889, he was appointed Government Agent, in the latter's place, at Rigo; remained in government service until 1907, then started planting[1] and trading at Rigo. He made several expeditions into the interior (see below), discovered *Ficus rigo* F. M. BAIL. and experimented with it as a commercial rubber tree.

He is commemorated in *Symplocos englishii* HEMSL., collected by himself.

ITINERARY. *SE. New Guinea* (*Papua*). *1887.* With J. B. CAMERON (see there) to the St Joseph River (Oct.).—*1889.* From E. side Ansell Peninsula (Jan. 14) walking across to Chads Bay with W. MACGREGOR. With MACGREGOR (see there for itinerary *etc.*) on the first ascent of Mt Victoria (June 11–12).—*1895.* Tour of inspection from Rigo on foot to the upper course of the Kemp Welch River (= Vanigela), returning down the river on rafts (23); back at Rigo (26).[2]—*1896.* To Kerepuna, making trips in the interior (May). With Sir W. MACGREGOR (itiner. *etc.* see there) on *Mt Scratchley, etc.—1897.* To the *Vanapa Valley* and the *Wharton Range* (bivouac GIULIANETTI) (Sept.–Oct.) with W. MACGREGOR (itiner. *etc.* see there).—*1898.*

Expedition to the *eastern slopes of Mt Potter.*[3] From Rigo (Apr. 6) to Devemava; crossing 2 spurs of Mt Bride and descending to the Musgrave River (9); ascending the other side to Ihovi, Demori, Babuori; crossing a spur of Mt Deakin (14); crossing Iaba Creek and the Mera; ascending spur of Mt Potter and reaching Badoa; Apr. 19 returning to Demori; *via* Mt Pasco to Vegofi (20); confluence of the Meneme Creek in the Kemp Welch River (22), Kalikodobu; Rigo (24). Visit with W. MACGREGOR (see there) to the lower portion of the Brown (Naoro) River (Aug.).—*1899.* By boat (July 10) to Bumbaka and Bumugina; Barua (13); Robinson River (16); Dedele; to Domari (18), Kabadi and rowing upstream to Domu Distr. ; along the coast (21); Kabauda and inland to Gemaboro (25).[4] From Dedele (Nov. 14) *via* Baile and Baitu Boga to Keveri Valley; passing the watershed between the Wawela and Gradukwin (Dec. 14); back *via* Huwaia, passing the coastal mountains to the villages of Bumbago Distr.; by boat to Dedele (arriving the 30th).[5]—*1900.* With BLAYNEY and F. R. BARTON (see there) to the Doriwaidi tribes in Punea Buru (Sept.). Punitive expedition with F. R. BARTON (see there) from Rigo (Oct. 26) to Kemp Welch Distr.[6]—*1902.* Boat-excursion to Bugi, as well as to the coastal towns west of Daru (Sept. 26–Oct. 1). Visit to *Kiwai Isl.* in the mouth of the Fly and the villages on the right bank of the lower course (Oct. 13–21).—*1904.* Returning to the Possession (Febr. 6), after an absence of 9 months; leaving Port Moresby (14) for Hall Sound to proceed to the Gulf Distr., W. Centr. Division; as far west as Maipua in the Purari Delta, remaining in the Division till March 23; resuming his duties in the Rigo Distr. on Apr. 1. Visit to Hood Peninsula (May 23). *Inspection of the interior* (June 8–20):[7] Baifana, Seramina and Demori districts, slopes of Mt Deakin and Mt Potter. Trip to the end of the division, leaving Rigo (July 20) and calling at all the villages along the coast, Bulaa, Keapara, Bilirupu, Lalaura, Dedele (28); Cloudy Bay Distr. (July 28–Sept. 3), *e.g.* Keveri Valley and Domara Gold-fields; return to Rigo (Sept. 6), calling at the villages along the coast. Sailing in the 'Merrie England' from Rigo (Oct. 13) to Cloudy Bay, Dedele (15), staying in the district until Dec. 2; Rigo (Dec. 3).—*1905.* From Rigo (Jan. 23) to the headwaters of the Kemp Welch River (trip taking 12 days). Setting out (May 8) on a trip to the Upugau Valley, Kamiti (15).[8] Trip to the Taboru (Aug. 4); returning to the coast by canoe down the Kemp Welch River to Kalo (7 days' trip). From Dedele (Oct. 6) to the Keveri Valley and back (acc. to statement 29 days' trip; probably wrong). Trip of inspection to the *Upper and Lower Upugau River:* starting from Rigo (Oct. 28), reaching the extreme end of the Henty Range; Wika, Ikea, Pyramid Hill; return to Rigo (Dec. 16).—*1906.* Landed (May 25) with the object of patrolling the Cloudy Bay and Keveri Valley districts; Upper Adau or Upper Musa rivers; June 9 returning to the coast. Several other minor trips of inspection.[9]

COLLECTIONS. *Herb. Kew;* forwarded by Sir W. MACGREGOR after F. VON MUELLER's death, in 1898.[10] He may have made other collections besides the one with GIULIANETTI (see there) in 1897.

LITERATURE. (1) *cf.* Ann. Rep. Papua for 1907/08, 1908, p. 10.

(2) *cf.* Ann Rep. Br. N.G. for 1895/96, Brisb. 1897, p. 35–38.

(3) *cf. l.c.* for 1897/98, Vict. 1899, p. 115–117.

(4) *cf. l.c.* for 1899/1900, Brisb. 1901, p. 69–70.

(5) *cf. l.c.* p. 57 (by BLAYNEY).

(6) *cf. l.c.* for 1900/01, p. 42–46; Queensl. Geogr. Journ. N.S. 16, 1900/01, p. 63–68.

(7) *cf.* Ann. Rep. Br. N.G. for 1903/04, 1905, p. 23–24.

(8) *cf. l.c.* for 1904/05, 1905, p. 23–24.

(9) *cf. l.c.* for 1905/06, 1907, p. 25.

(10) *cf.* 'Report by Mr W. B. HEMSLEY of the Royal Gardens, Kew, on botanical collections' (Ann. Rep. Br. N.G. 1897/98, Vict. 1899, p. 147–150; probably coll. ENGLISH & GIULIANETTI).

Described by HEMSLEY and others in 'Flora of British New Guinea' (Kew Bull. 1899, p. 95–126).

BIOGRAPHICAL DATA. Pacific Isl. Monthly 4 (1), 1933, p. 22; and *l.c.* 15 (10), 1945, p. 12 (*non vidi*).

Enriquez, C. M.

officer (Major) of the Burma Rifles, stationed at Taiping, Perak (Malay Peninsula), for a few years round 1925.[1] Interested in insects, especially butterflies.

He visited Mt Kinabalu in *Br. N. Borneo* in *1925.*[2]

COLLECTIONS. *Herb. Sing.:* some ferns[3] and a small coll. of mosses from the Kinabalu. Probably no plants from the Malay Peninsula.

LITERATURE. (1) Author of 'Malaya, its people, flora and fauna' (London 1928).

(2) C. M. ENRIQUEZ: 'Kinabalu, the haunted Mountain of Borneo. An account of its ascent, people, flora and fauna' (London 1927; abstract in Journ. Bot. 65, 1927, p. 235).

(3) *cf.* Gard. Bull. Str. Settlem. 7, 1934, p. 192.

Ermeling, General J. Ph.

representative of the Billiton Company in the D.E.I.

COLLECTIONS. Material of *Eusideroxylon zwageri* T. & B. from the W. slope of G. Langsat in *Billiton, nos* 2 and 3, in *Herb. Bog.* (pres. in *1899* through the intermediary of KOORDERS).

Ernst, *cf. sub* Forest Research Institute, Buitenzorg.

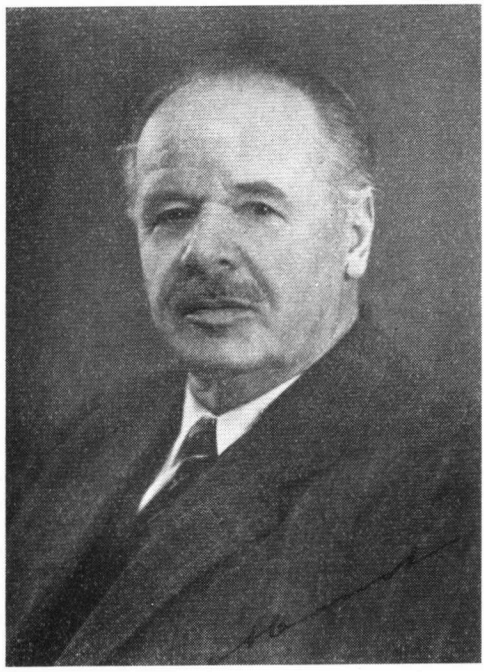
Ernst, Alfred

(1875, Winterthur, Switzerland; x), Ph. Dr, Professor of Botany in the University of Zürich and Director of the 'Institut für Allgemeine Botanik' there, 1905–45.

He travelled twice in the Malay Archipelago; in 1905 he was awarded the first Swiss grant for a stay at Buitenzorg, Java; the 2nd time he was accompanied by his second wife Dr MARTHE ERNST-SCHWARZENBACH, and had financial aid of the 'Stiftung f. wissenschaftl. Forschung' and of the 'J. Klaus Stiftung Univ. Zürich'.

Author of many papers, especially on floral development, genetics, reproduction, *etc.*[1]

ITINERARY. *1st Voyage*, Aug. *1905*–June *1906*.[2] *W. Java:* Buitenzorg (Aug. 27–Oct. 31, *1905*), making trips to Depok, G. Salak, Megamendong, Tjipetir, *etc.;* excursions in the coastal region of Batavia and Tandjong Priok in company with C. A. BACKER (Sept. 15–17, Oct. 13–15); stay at Ga-



ERNST

roet (Nov. 1–9) making trips to G. Goentoer, G. Papandajan, lakes of Lèlès and Bagendit; Tjibodas and Kandang Badak, trips on G. Gedeh-Pangrango (Nov. 15–30, Dec. 15–Jan. 12, *1906*); Buitenzorg (Jan. 13–Febr. 20); Febr. 21 setting out on a voyage to Centr. and E. Java and the Outer Possessions: *E. Java:* Tosari, G. Batok, Bromo and Zandzee (G. Tengger) (Febr. 26–March 1); Bodjonegoro, teak forests (March 2–4); *SW. Celebes:* Makassar (5–11); *Lesser Sunda Islands: Soembawa* (13–14), *Lombok* (16–30, visiting Mataram, Narmada, Lingsar, Solnadi, slopes G. Rindjani), *E. & Centr. Java:* Soerabaja and Djokjakarta (Apr. 1–5); *Centr. Java:* Diëng Plateau (6–10); Salatiga (11–13); Tjilatjap and *Noesa Kambangan* and Kinderzee (14–18); *W. Java:* Buitenzorg (19–23); excursion to *islands in the Bay of Batavia* and *Sunda Straits* (24–27), *viz P. Edam, P. Pajong, P. Babi*, touching at Java's 1ste Punt (W. coast Java) (25) and Vlakke Hoek (S. coast *Sumatra*) (25), and *Krakatau Islands* (26, in company with CAMPBELL, PULLE, and BACKER); *Sumatra West Coast:* excursions from Padang and in the Padang Highlands (May 1–30), visiting: Padang Pandjang, Fort de Kock, Pajakombo, Matoer, Poentjak boekit, Singkara(k) Lake, Manindjau Lake, Sawahloento, Boekit tinggi, G. Merapi, G. Singgalang, Boekit telaga koembang; *W. Java:* Buitenzorg and Batavia (June 1–16); *Malay Peninsula:* excursions (June 20–30) in *Singapore*, to Johore, Malacca, Rembang (?), G. Angsi; from July 1–18 visiting Kuala Lumpur, Batoe Caves, Taiping, Maxwell Hills, G. Hijau, and *P. Penang;* before returning to Europe, staying for a week in Ceylon.—*2nd Voyage*, July 28, *1930*–Apr. 16, *1931*.[3] Ceylon and Br. India (Aug. 15–Sept. 13); between Sept. 14–19 touching at Sabang (*P. Weh*), Belawan (*Sum. E. Coast*), and *Singapore; W. Java:* Batavia and Buitenzorg (Sept. 20–24); Hongkong, Indo-China, Yunnan-Fu; Macao; between Oct. 30–Nov. 8, visiting Manila (*Luzon*), Makassar (*SW. Celebes*), Soerabaja and Grissee (*E. Java*); *W. Java:* Buitenzorg (Nov. 9–19); Batavia and coral islands *P. Hoorn* and *P. Edam* (20–29); Buitenzorg (Nov. 30–Dec. 9); Tjibodas, Kandang Badak, G. Gedeh-Pangrango (10–19); Buitenzorg and Batavia (20–23); *via* Soerabaja (*E. Java*) to *Bali* (Dec. 24–31), visiting Boeleleng, Den Pasar, Danau Bratan, Karangasem, Kintamani, G. Batoer; *E. Java:* Soerabaja (Jan. 1, *1931*); Pasoeroean and Tengger Mts (1–5), visiting Tosari, Zandzee, Bromo, Penandjaän; Jan. 6–9 visiting Probolinggo, Pasirpoeti, Sitoebondo; Djember, G. Boto, and Poeger (S. coast); *Centr. Java:* Djokjakarta (10–13); *W. Java:* Jan. 14–31 at Buitenzorg, Batavia and coral island *Onrust* (21–26); Tjibodas (Febr. 2–6); *Centr. Java:* Febr. 9–15, visiting Wonosobo, Diëng Plateau, and Garoet (Tjipanas, Lèlès, Bagendit) in *W. Java;* from Febr. 16–26, at Buitenzorg, Batavia, coral islands *P. Edam* and *P. Onrust;* between Febr. 27–March 3 at Batavia, *Verlaten Eiland, Krakatau,*[4] and *Lang Eiland;* Tjinjiroean and G. Malabar (March 5–7); Buitenzorg and Batavia (8–18); *via Singapore* (20), Belawan–Medan (*Sum. E. Coast*), Sabang (*P. Weh*), to Colombo *etc.*

COLLECTIONS. *Herb. Univers. Zürich* and in *private Herbarium: c.* 3000 herbarium *nos* voyage *1905/06*,[5] and besides about 2000 *nos* (938 phaner., 160 pteridoph. and numerous other cryptogams) of study and demonstration material; collection *1930/31* consists mainly of *Algae, Characeae, Hepaticae* and *Musci*, but includes besides: 21 *nos* of *Hydrocharitaceae*, 45 *nos* of *Loranthaceae*, 175 *nos* of *Palmae*, 45 *nos* of *Balanophoraceae*, 60 *nos* of *Burmanniaceae* and other saprophytic phanerogams, 63 *nos* of *Rubiaceae*.

LITERATURE. (1) For those relating to the D.E.I. *cf.* Ann. Jard. Bot. Buit. vol. 45, Literature lists.

(2) A. ERNST: 'Die neue Flora der Vulkaninsel Krakatau' (Zürich 1907); 'Die Besiedlung vulkanischen Bodens auf Java und Sumatra' (in KARSTEN, Vegetationsbilder, 7. Reihe, 1909); 'Beiträge zur Kenntnis der Saprophyten Javas' (with CH. BERNARD in Ann. Jard. Bot. Buit. 1911–14).

Data on the itinerary were communicated by Prof. ERNST himself.

(3) A. ERNST: 'Ergebnisse der Indo-Malayischen Forschungsreise' I (Arch. Jul. Klaus Stift. 7, 1932, p. 203–240; *cf.* also *nos* 2–21 published from 1933–47).

(4) A. ERNST: 'Das biologische Krakatauproblem' (Zürich 1934).

(5) *Lichens* by ZAHLBRUCKNER in Ann. Crypt. exot. 1, 1928, p. 109–212.

BIOGRAPHICAL DATA. Festschr. Eröffn. Neues Inst. f. Allgem. Bot. Univ. Zürich, Jena Fischer 1914, p. 28–35, incl. bibliogr.; Bibliogr. of A. ERNST and list of theses prepared under his supervision in Jubil. vol. Arch. J. Klaus Stift., Zürich, Erg. Band (suppl. vol.) 20, 1945, p. 9–16; Vierteljahrschrift Naturf. Ges. Zürich 90, 1945, p. 64.

Ertzinger, J. F., *cf. sub* Forest Research Institute, Buitenzorg.

Eschscholz, Johann Friedrich

(1793, Dorpat, Latvia, Baltic States; 1831, Dorpat, Latvia), surgeon who accompanied the two Russian expeditions under command of KOTZEBUE, the last one as naturalist. Later appointed Professor of Zoology at Dorpat.

The genus *Eschscholzia* CHAM. was named in his honour.

ITINERARY. *Voyage in the 'Ruri(c)k', 1815–18.* Itiner., liter., *etc. cf. sub* CHAMISSO.—*Voyage in the 'Predpriiatii'* (or Predpriyatie), *1823–26.*[1] Sailing from Kronstadt (July 28, 1823), *via* Brazil, Rio de Janeiro, Cape Horn, Chile, Taïti, Samoa Islands, Radack Archipelago (= Marshall Islands), Kamschatka, N. Archangel, California, Sandwich Isls and many others; Mariannes; *Philippines, Luzon:* Manila (Nov. 8, *1825*–Jan 10, *1826*); home voyage *via* the Cape of Good Hope; back at Kronstadt (July 10, 1826).

COLLECTIONS. *Herb. Bot. Gard. St Petersb.* (= *Leningrad*): 1300 *nos* (purch. 1825), and with *Herb.* LEDEBOUR and FISCHER;[2] *Herb. Acad. Sci. St Petersb.:* grasses (with TRINIUS *Agrostotheca*), and with *Herb.* CHAMISSO; *Herb.* LINDEMANN (U.S. S.R.): 526 *nos;* some from California in *Herb.* DELESS. (*Geneva*).[3]

His plants in *Herb.* FISCHER are provided with the pseudonym '*Melioxylon*'.[2]

LITERATURE. (1) O. VON KOTZEBUE: 'Neue Reise um die Welt in den Jahren 1823–26' (transl. from the Russian edition, Weimar 1830, 2 vols in one); also transl. into Dutch: 'Nieuwe ontdekkingsreise rondom de wereld *etc.*' (Haarlem 1830, 2 vols).

ESCHSCHOLZ took care of the accessory zoological atlas (1829–33).

(2) *cf.* ENGL. Bot. Jahrb. 9, 1888, p. 435.

(3) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 212–213.

'Descriptiones plantarum Novae Californiae adjectis florum exoticorum analysibus' (Mém. Acad. Imp. Sci. St Petersb. 10, 1826).

Also plants of his described by C. A. MEYER in 'Cyperaceae novae descriptionibus et iconibus illustratae' (vol. 1).

BIOGRAPHICAL DATA. E. O. ESSIG, A history of entomology, New York 1931, p. 617–622, fig. 186 (portr.); BACKER, Verkl. Woordenb., 1936; references in Amer. Midl. Naturalist 33, 1945, p.29.

Escritor, L.

collected at Butuan, in *Mindanao*, and in *Mindoro, P.I.;* probably the collector in the B.S. series (*cf. sub* Bureau of Science, Manila) of the same name; dupl. in *Herb. Leyden.*

He is commemorated in *Dendrobium escritorii* AMES.

Esguerra, P., *cf. sub* Forestry Bureau, Manila.

Eskridge, J. P.

school-teacher in the Philippine Islands.

COLLECTIONS. *Herb. Manila:* > 75 specim. of *Philippine* plants, from *Negros etc.* (pres. *1911–15*).

Espinoza, B., *cf. sub* Forestry Bureau, Manila.

Espinoza, D. M., *cf. sub ditto.*

Espiritu, A., *cf. sub ditto.*

Estabillo, *cf. sub ditto.*

Etty, Thomas

(1884, Arnhem, Gld, Holland; 1932, Amsterdam, Holland), was educated at the Agricultural College, Wageningen, and subsequently (1904) went to Java, being employed in sugar factories. In 1911 he settled at Bondowoso, E. Java, being director of several estates.

COLLECTING LOCALITIES. *E. Java:* near the Arak-Arak (June *1923*; June 13, *1930*); G. Raoeng (Nov. 7, *1930*); also collected in *1931.*

COLLECTIONS. *Herb. Bog.:* some grasses, curiosities, *etc.*

Eugenio, *cf. sub* Bureau of Science, Manila.

Evangelista, B.

Philippine Ranger, in the employ of the Forest Dept *Br. N. Borneo* (see there), Sandakan.

COLLECTIONS. *Herb. Manila;* dupl. in *Herb. Bog.* (pres. 1929); also dupl. in *Herb. Arn. Arbor.*

Evans, Ivor H. N.

in the Museum Department, Fed. Malay States, 1912–32; previously government officer in Br. N. Borneo.

Author of many ethnological publications.[1]

RIDLEY named some plants after him, *e.g. Crudia* and *Eugenia evansii.*

COLLECTING LOCALITIES.[2] *Malay Peninsula. 1917.* Pahang: limestone rocks at Kota Tongkat (June), Kuala Tekam, and G. Sennyum (= Sinyum) (June, July); mouth of the Pahang River (July), Pekan, Lower Rompin River and at Leban Chondong (July), Endau River (Aug.).—According to Mr HOLTTUM he collected on Kedah Peak too; date unknown to me.—*1923.* Ascent of G. Benom, Pahang, from the west (March–Apr.).[3]

COLLECTIONS. *Herb. Kew:* from the *Malay Peninsula* (pres. 1919). Some plants were collected in *Borneo.* A few plants from G. Benom in *Herb. Sing.* (on loan from the F.M.S. Museum, Kuala Lump.).

LITERATURE. (1) Principally in the Journ. Fed. Mal. Stat. Mus. and of two books: 'Among primi-

tive peoples in Borneo' (London 1922); 'Religion, folklore and custom in N. Borneo and the Malay Peninsula' (Cambr. Univ. Press 1923).

(2) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(3) I. H. N. EVANS: 'An expedition to Gunong Benom' (Journ. Fed. Mal. Stat. Mus. 12, 1924, p. 1–7).

Evans, Thomas

(*fl.* 1792–1810) of Stepney, connected with the India House, owner of a garden. He sent a collector to *P. Penang* (*Mal. Penins.*) (*1808*, *cf. sub* ANONYMOUS), who discovered the beautiful *Begonia evansiana;* he spent almost his whole income on the acquirement of new and rare plants from China, *etc.*, which he generously distributed among other collectors (*cf.* Journ. Bot. 41, 1903, p. 372–373).

Evansia SALISB. was named after him too.

BIOGRAPHICAL DATA. BRETSCHNEIDER, Hist. Bot. Disc. China, 1898, p. 215–216.

Everett, Alfred Hart

(1848–1898), an English collector who mainly made zoological collections.[1] In 1869 he went to Sarawak for the purpose of making natural history collections, but after 2 years entered the service of the Sarawak Government to get a more settled kind of employment; since February 1872 Asst Resident of Rejang, later transferred to Bintulu as Resident of that district. In 1875 or 1876 he resumed exploration, quitting government service, but his health failed and at least till 1877 he made no explorations in Borneo. Subsequently he joined the service of the Br. N. Borneo Co., and was appointed Resident of the West Coast, resigning in 1883; in 1885 Consul for Sarawak at the Court of the Sultan of Brunei; in the same year appointed Resident of Trusan, and finally Hon'ble of the 4th Division; he retired from government service in March 1890.

Before 1872 he made ornithological collections in the Philippines; before 1894 he made entomological collections for Rajah BROOKE of Sarawak, and since 1894 on behalf of L. W. Baron ROTHSCHILD, owner of the Tring Museum.[2] About 1888 he evidently resumed outdoor work.

He collected plants too, at the instigation of RIDLEY.

Several plants were named after him.

COLLECTING LOCALITIES (partly zoological only). Only few data are known; in the years *1888–±94* collecting especially in *NW. Borneo, Sarawak*; on an excursion with CH. HOSE (itiner., liter., *etc.* see there) to Mt Dulit (Sept.–Oct. *1891*), also on Mt Matang; Mt Penrissen (July *1892*). In this period he collected (botanically) in the *Philippines* too, *viz* in *Palawan* and *Balabac;* also in the *Natuna Isls* (*1893*): *Sirhassen Island* (= *P. Serasan*) (Sept.), and *Bunguran* (Sept. 29–Oct.), camping at the foot of Mt Ranai.—*1894*. Visiting the *Philippines, viz N. Mindoro* (Nov.–Dec.).—*1895*. *Luzon:* Laguna de Bay (Jan.). Leaving Labuan for a trip to *SW. Celebes:* Makassar (Sept. 16); ascent of G. Bonthain, going by way of Bulekomba, Balang Nipa, Bikeroe, Indrulamau and Tasoso, making headquarters in the latter locality; *Saleijer* (Nov.).—*1896*. *Lesser Sunda Islands, viz* on *Djampea* (probably P. Tanahdjampea, S of SW. Celebes), *Lombok* (May–July), *Savu* (= *Sawoe*) (Aug. 7–Sept. 10), *S. Flores* (Oct., headquarters at Nanga Ramau = Roma), *Sawoe*, and *Timor*.

COLLECTIONS. *Herb. Brit. Mus.:* 933 *nos* from *Borneo* (pres. 1893–95), 108 *nos Borneo* coll. EVERETT & CH. HOSE (acq. 1896), 100 *nos* from *Lombok* (acq. 1896); *Herb. Kew:* 92 *nos* from *Celebes* (acq. 1895);[3] *Herb. Sing.:* 83 specim. of mosses from *Borneo* and *Natoena* (pres. 1893), 243 *nos* Bonthain (*Celebes*, pres. 1895) and mosses from the latter locality (pres. 1896); *Herb. Berl.:* mosses from *Borneo* (1892); *Herb. N.Y. Bot. Gard.:* mosses with *Herb.* MITTEN.[4]

In *Natoena* he collected ferns too.[5]

LITERATURE. (1) Author of 'Cave exploration in Borneo' (Athenaeum July 1877, p. 53–54); 'Remarks on the Zoo-geographical relationship of the Island of Palawan and some adjacent Islands' (Proc. Zool. Soc. 1889, p. 220–228).

(2) *cf.* Entomol. Beih. Berl. Dahl. 1935, p. 70. Many dates on his voyages derived from vols of Novitates Zoologicae.

(3) Described by HEMSLEY in Kew Bull. 1896, p. 36–42; *cf.* also HOOK. Icon. Plant. *t.* 2437: *Trachymene celebica* HEMSL.

(4) R. SHELFORD: 'Mosses and Hepatics collected by A. H. EVERETT and named by V. F. BROTHERUS' (Journ. Str. Br. Roy. As. Soc. *no* 33, 1900, p. 26 *seq.*

H. N. DIXON: 'A contribution to the moss flora of Borneo' (Journ. Linn. Soc. Bot. 50, 1935, p. 57–140, pl. 1–4); 'New and rare Bornean mosses' (Journ. Bot. 79, 1941, p. 57–62, 72–77).

(5) *cf.* Kew Bull. 1896, p. 41.

BIOGRAPHICAL DATA. Sarawak Gazette 28, 1898, p. 136–137; BACKER, Verkl. Woordenb., 1936.

Everett, Harry Day

(1880, Malone, New York, U.S.A.; about May 11, 1908, Negros, P.I.), Forest Officer, since 1905 in the employ of the Bureau of Forestry, Manila.

He made extensive collections in *Negros*, in which island he was murdered by the natives.

Ficus everettii ELM., *Lasianthus everettii* MERR., *etc.*, were named after him.

COLLECTIONS. *Herb. Manila: nos* 12309–12336 in the For. Bur. (F.B.) series from *Negros*, collected in April *1908; U.S. Nat. Herb. Wash.:* 43 dupl. *P.I.; Herb.* O. AMES (Cambr., Mass.): orchids; *Herb. Edinburgh.*

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Everett, H. H.

COLLECTIONS. *Herb. Sarawak:* 4 species of *Sapotaceae* from *NW. Borneo*, Sarawak (pres. *1912*).

Exploitatie Mij W. Borneo, *cf. sub* Forest Research Institute, Buitenzorg.

Eydman

of Kraksaän, *E. Java*, sent plants to *Hort. Bog.* in *1877*. He may be identical with F. H. EYDMAN of Malang, who sent plants to *Hort. Bog.* in *1878*.

Eydoux, Joseph Fortuné Théodore

(1802, Toulon, France; 1841, St Pierre, Martinique), since 1821 surgeon in the French Navy. He accompanied the expeditions of 'La Favorite' (*cf. sub* BAUME), and 'La Bonite' (*cf. sub* GAUDICHAUD). Later at the naval hospital at St Pierre, Martinique.

According to LASÈGUE (*cf.* Mus. Bot. DELESS., 1845, p. 383) he was appointed on account of his knowledge of natural history. No botanical collections of his are known to the present author.

BIOGRAPHICAL DATA. Ann. Marit. et Colon. 26[2], partie non officielle, 1841, p. 783.

Eyken

collected at Bandoeng (*cf.* KOSTER in Blumea 1, 1935, p. 432 and LAM & BAKHUIZEN in Bull. Jard. Bot. Buit. sér. 3, vol. 3, 1921, p. 96); specimens *s.n.* in *Herb. Bog.* Identical with the next mentioned?

Eyken, Dr P. A. A. F.

of Utrecht, in *1913* presented a herbarium of 63 cultivated plants from *Java* to the *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam.*

In 1917 he was charged by the D.E.I. Service of Public Health with the investigation of the biological purification in the pond of the Botanic Garden, Buitenzorg.

Eykman, Jan Frederik

(1851, Nijkerk, Gld, Holland; 1915, Groningen, Holland), Professor of Chemistry and Pharmacology at Tokyo, who, on the home voyage to Holland, stayed 4 months at Buitenzorg, *Java* (Oct. *1885*–Febr. *1886*)[1], and made a collection of dried plants in the Botanic Garden. In 1897 appointed Professor of Organic Chemistry at Groningen University, Holland.

COLLECTIONS. *Herb. Groningen* (pres. 1898): 139 *nos*, mostly cult. Hort. Bog.; also plants from America and Japan.

LITERATURE. (1) *cf.* Dammerman in Ann. Jard. Bot. Buit. 45, 1935, p. 12; and *l.c.* p. 106, 108.

BIOGRAPHICAL DATA. Who's who 1913; Jaarb. Rijksunivers. Groningen 1914/15, p. 40–43, incl. bibliogr.; Nature 95, 1915, p. 543.

Eyma, Pierre Joseph

(1903, Maarssen, U., Holland; July 25, 1945, in Japanese P.O.W.camp near Palembang, Sumatra), botanist, educated at Utrecht University; Assistant at the Utrecht Herbarium, 1929–37, taking his Dr's degree in 1932 on a taxonomic thesis on Surinam plants. In 1937 he set out to Java, from where he undertook several expeditions (see below) with financial aid of various funds. In 1940 he was appointed Assistant at the Buitenzorg Herbarium.

He is commemorated in the plant species *Eurya eymae* DE WIT and *Randia eymai* STEEN.

COLLECTING LOCALITIES. *1937. W. Java:* Tjibodas, G. Gedeh-Pangrango.—*SW. Celebes:*[4] Pangkadjene (June 12); S of Rapang (13); Pasoei–Rante Lemo (14); Rante Lemo–Angin Angin–Pintealon (spur of the Pokapindjang, up to 2600 m) (15); Pintealon–Pokapindjang–Tinabang (ridge, 2600–3000 m) (16); Tinabang–summit Rante Ma-



EYMA

rio (3440 m) (17); Tinabang, W. side summit (2950 m) (18–19); summit Rante Mario (20); E. slope Rante Mario and ridge to Rante Kombola (3200 m) (21); plateau SE of the summit (22); Rante Mario–Batoebollong (2300 m) (22–23); Batoebollong–Mamadja–Masimbollong (24); N. and S. slopes Masimbollong (25); SSW. spur Masimbollong (26); valley W of Latimodjong (27); Latimodjong summit (3300 m) (28); SSW. side of the Batoemetan (2800–2900 m) (29); W. side of the Poeangari–Sawito (30); Sawito and vicinity (July 2–4); Oeroe–Dantemaloea (900 m) (4); stay at Kalosi (5–10); Lemo near Rante Paoe; *Central Celebes:* stay at Rantepao (10–12); stay at Palopo (13–17), making a trip to Rantepao and Todjamboe (16); Tandoeng–Boeka–Kanandède (18); Kanandède–Komba (19); Limboeng–Maboesa (1800 m) (20); Maboesa–Saë (1000 m) (21); Saë–Wono (22); Wono (23); Wono–Lodang (24); Lodang (25); Lodang, spurs and summit of Kamboeno (2860 m) (26–27);[4] Kamboeno–Tomadoe (2550 m) (29); Tomadoe–Singkalong (1000 m) (30); Singkalong–Loré bivouac (1200 m)–Takala (2400 m) (Aug. 1); E. side Takala–Teboro (2); Teleboi–Pangko–Dodolo (3); Dodolo–Tetahi–Toeke-aho Pass–Maraowa (4); Maraowa summit–Kaboesangan (1400

m) (5); Badangkaja–Gintoe (5); Bomba (660 m) (8); Boro–Poena (1700–1800 m) (10); Poena–Boro–S. Maleï (11); above S. Maleï (–1600 m) (12); Bomba (13); Bomba–Bewa (14); Gintoe–Lengkèkas–Kageróa (14); Toeare–Moa (15); Moa–Mangkoedjawa (16); Mangkoedjawa–Koelawi (17); Lemo–Koelawi–Momi (600 m) (18); Paloe (5 m) and S of it (20); Tandjoeng Karang, N of Donggala (22).—*Ceram expedition, 1937–38.* From Buitenzorg (Oct. 5, *1937*), *via* Boeleleng, Makassar and Ambon (15) to *Ceram,* touching at: Piroe (17), Kairatoe (17), Amahei (18–19); Noeitetoe and Tehoroe (20); *S. Centr. Ceram:*[5] Mahariki Estate and environs (21–26); from Oesinaman to Japoetih and Pileana (*c.* 340 m) (27); to Wae Pileana bivouac (680 m) (28); to the SW. foot of G. Airoem and the summit of the Pipileina (2400 m) (29); descent to Manoesela (30); stay at Manoesela (Oct. 31–Nov. 1); Maraïna to Moerkele ketjil bivouac I (1600 m) (2); on the way collecting *Treubia!;* to bivouac II (*c.* 1850 m) (3); to Moerkele besar (reaching 2800 m, *c.* 50 m below the summit) and back to bivouac II (4); descending to bivouac I by way of the summit of the Moerkele ketjil (2200 m) (5); to Maraïna (6); Manoesela (7–9); Maraïna to Kobipoto bivouac I (10); summit of the Seahari (1200 m) and the Kobipoto (1330 m) and back to bivouac I (11); descending to Manoesela, collecting especially on the Wae Isal (12); stay at Manoesela (12–14); *via* Selumena to Kanike (15); stay at Kanike (15–21); to Moenoea bivouac I (22); Moenoea I to the slope of the Oeeimpoekoe (23); *Oeeimpoekoe summits* (3000 m) (24–25); *G. Binai(j)a* (3055 m) (26); Oeeimpoekoe to Kanike (27); back to Manoesela (29); to Manoesela lama and Hoale Pass (Dec. 1); Hatoemeten (40 m) (2); by proa to Oesinaman (3); collecting medicinal plants at Oesinaman and proceeding to Japoetih (4); to the mouth of the Wae Kawa and Tehoroe (5) on the Bay of Taloeti (= Teloeti); Tehoroe (6–7); making a trip to Laimoe (7); Amahei (8–10); by boat to Piroe (11); *W. Ceram:* Piroe (12–18); to Moerikau (19); *via* Kawa to summit G. Baloe (Oelawaloe on the map, 830 m); to Niniari (500 m) (20); to Riring (21); stay at Riring (22–26); Batoe Keye bivouac (27); Lhinia bivouac (28); Batoe Keye, B. Poetih, *etc.* (29); to Riring and stay there (Dec. 30–Jan. 4, *1938*); to Boeria (5); to Wae Bekai bivouac (6); to Seakasale (7); to Walokone (8); summit Sosokoetai (1130 m) and back to Walokone (9); to Seakasale and bivouac on the E. slope Cecilia Mts (10); pass between Meïta and Sanaï and summit Batoe Meïta, making bivouac on the Wae Mejna (11); summit Batoe Sanaï (1070 m) (12); from Wae Mejna bivouac to Wae Bekai bivouac (13); to Boeria (14); Riring (15–23), making trips to Batoe Soré and Sapalewa Cave (18), and to kp. Baroe (20); from Riring to Manoesa (24); to R(o)embatoe (25); to Honitetoe (26), staying in the latter locality (27–28); setting out to Meoete bivouac (so-called Koekoesan; 29–30); summit Salahoea (1160 m), N. and S. summit Toplana (resp. 1180 and 1190 m alt.), and back to Meoeti bivouac (31); to Imahatai (Febr. 1), and Honitetoe (2); to Wae Toeba (4) and back; Honitetoe (5–8); Kairatoe (9–10), making a trip to Wae Selau (10); to Hatoesoea (11); Wae Samoe (12–15), making a trip to Telaga Sawan (13); to Kamal and by boat to Kaibobo (16); trip to the summit of the Oernitoe (17); by boat to Piroe (18), staying till Febr. 20; by boat to Loki and by cycle to Tanah gojang (21); to Wae Sahoeiai and Kajoe Ani bivouac (22); to Waelisa bivouac (23); Wae Tapinaloe (24); to Erang and along the coast to Sëri Kambelo (25); by proa to Loehoe and Loki (26); to *Ambon* (27); stay at Ambon (Febr. 27–March 5); by car to Waai (6), trip to the *Salahoetoe* (7–11);[6] back at Ambon (12–13); *Saparoea* (14–16); *Ambon:* Liang (17–19), and back to *S. Ceram:* Amahei (19–28), making trips to Tandjong Koeako (21), Hoeroeroe (22), Tiboe Ala (23); to Wae Roeatan (29), Wae Toni; Horale (March 31–Apr. 2); to Seleman and Sawai and back (3); Horale, collecting SW of it in swampy forest (4); to *G. Loemoet* (5), Loaloa bivouac (6) and back to Amahei (8); Amahei and environs (9– ? 19); environs of Wae Mala (20–25), collecting on Elpapoetih Estate; embarking (26) and *via* Piroe and Saparoea to *Ambon:* Ambon town (Apr. 28–May 9), making a trip to Soja, Serimau and Ajer besar (7); embarking (8), bound for Makassar.—*2nd Celebes Expedition, 1938. SW. Celebes:* Makassar (May 13–14); Malino (May 20–June 8), making trips to a neighbouring fall (28), to Galang Rapat (June 4), to the old Tombolo Road and back *via* Lombasang (6); back at Makassar (June 9–July 8), for the greater part staying at the hospital, towards the end of the stay making a trip to Bantimoeroeng (July 7); Malino (9–30), making trips in the environs, *viz* to Tombolo Road, Benteng tinggi, Lombasang, Dj. Moentoeloeroeng Fall (29); Makassar (31–Aug. 3); by car to Enrekang (4), Palopo (5); *Centr. Celebes:* Malili (6), Paë Paë (8, the last part of the way on horseback); to Soroako on the border of Matano (= Matana) Lake (9), crossing the lake to Noeha on the N. side (10); afoot to Oeloeanso (11), Bettelèmme (12); Kolone Dale (13–18); crossing the bay to Tambajoli and afoot to Wioe (19); to Katikaja (20), making bivouac; Poso (22–26); by boat to the *E. Peninsula:* Ampana (on the N. coast) (27) and Borone (staying 28–31); trip to *G. Loemoet* (Sept. 1–8),[4] climbing some summits (4–5); Borone (8–13); sailing eastwards along the coast to Tobelombang (staying 13–15), Nohon, and Boenta (staying 16–17), making a trip to Gonohop, Koninis and Rawa Tampalang (17); by boat to Loboe and by car to Pakoa (18); afoot to Pinapoeang (19), Lingketeng (20), Tamboenan (21); climbing G. Lokai (1260 m) (22–23); Tamboenan (23–24); Pinapoeang (25–26); G. Loloa and G. Beabis (27); limestone plateau (28); to Bojange (29), Nambo (S. coast Peninsula) (30) and Batoei (Oct. 1); after a short interval at Kolone Dale (2–3), back to the E. Peninsula: Upper Tokala and Lemo (5), Tompantette (6), mountains of the Tomongkobaë group (7–10), Tompantette (10–11), Lemo (12–16); *Centr. Celebes:* Kolone Dale (17–20), to Tomata (21), Kamba (22); Taripa (23–24, *e.g.* rawah source S. La(a), Pape (25), Pendolo (S. side Poso Lake, 26–27), Majoa (28), *via* the pass (Tokalakadjo Mt.) (29) to Tawib (30) and Tomoni

(31); to *SW. Celebes:* Palopo (Nov. 2), Enrekang (3), and Makassar (staying 4–7), embarking for *Ambon* (8, arriving on the 11th).—*New Guinea Expedition, 1939.* From Makassar (*SW. Celebes*) (Nov. 8, *1938*) sailing *via Boeroe* (Waemoelan and Leksoela) to *Ambon* (staying Nov. 11–Dec. 19); sailing (20) for *SW. New Guinea: via* Fakfak (22) to Oeta (24–25); ascending the Oeta in the 'Albatros' (26 onwards), camping at Magda bivouac (26–27), Orawja bivouac (28–Jan. 1, *1939*); afoot to the Wissel Lakes (Jan. 2–13) following the valleys of the Jawei and Oeroemoeka rivers, camping at bivouac IV (500 m), bivouac VII (760 m), bivouac X (1010 m), bivouac XVI (1380 m), bivouac XVIII (1600 m), bivouac XX (Rotan bivak) (1634 m), proa bivouac (Prauw bivak) (1740 m); Paniai, Enarotali Station (1750 m) (13–26), collecting in the neighbourhood, *viz* in a *Pandanus* swamp (at the foot of the Boebeiro) (22), on the slope of the Odéro (24), crossing a swamp to the summit of the Boebeiro (1810 m) (25); along the S. border of Paniai Lake to Koteboe (27), Tage River and Lake (28), island Maiarie (29–30) and back to Enarotali Station (30); Enarotali Station (30–Febr. 19), collecting near the S. border of the lake at the foot of the Poti (Febr. 12); *Kemandora* trip:[1] to Koegapa (20), bivouac on the ridge (2400 m) after having climbed the summit (2460 m) (21), to Ekkadide (= Eagidide) (22), Koemopa in Arandora (23); climbing the ridge N of Arandora, reaching the summit (1840 m) and the mountain kp. Waparaba, and *via* the Oegotopa (1900 m) to bivouac on the Maiboe River (24); summit Maitapa (2045 m), descending to Moroboe River, making bivouac at Ginambarai on the brink of Kemandora Valley (25); to Djembodini (or Djembodimi) (26), to Kerimamba and Tongkaja (27), *via* the Kemaboe River to Wandai (28); stay at Wandai (March 1–5); to Isandora bivouac near the Isaboe River (6), to the Upper Ara (= Araboe) River (7), Toimoeti in Arandora (8), and back at Enarotali Station (9); from that station making many trips: to Proa bivouac and back (17), G. Odéro (20), swamps E and NE of Boebeiro (24), to Koegapa and Egogitoagapa, heath vegetation on sandy soil (padang) (29–Apr. 1), Ennaro Valley (5), Upper Ennaro Valley and Poeraida Ridge (11), summit Boebeiro (13), to Proa bivouac and Tigi Lake (19–22, the last 2 days padang vegetation on white sand, at Oerida, *etc.*); back at Enarotali Station, making trips to: Boebeiro (May 8), Weaboe Delta (9–10), Boebeiro (11–12), Wotai and E. end Tage Lake (13), and collecting in the neighbourhood of the Station (May–June).—As a member of the *Expedition of the 'Kon. Ned. Aardrijkskundig Genootschap' (Dutch Geographic Society), 1939:*[2] headquarters at Enarotali Station; from there making several trips, to island Maiarie, Tage River, *etc.* (July 18–21); *to G. Dejai* (July 28–Aug. 2), SW. corner of Paniai Lake, reaching one of the lower summits (2900 to 2950 m, Aug. 1), on the way camping at Moeiè(boe) bivouac; Weremoeka Cape (Aug. 4); Wisoriwodide near Koteboe (14); in the same month collecting at Boebeiro, Enarotali, and at the foot of the Boebeiro; leaving for a trip to the *NW. corner of Paniai Lake* (Sept. 3, for nearly a fortnight): Dejatej (or Dejateda), summit of Barara (Sept. 6–7), slope and summit of the Moetaro (9); S of Tage Lake (padang ?) at Tarapadimi (Sept.); *trip to the north:*[3] by motorboat to Araboe bivouac (Oct. 3), afoot to Toeka and Wodapoerauto (8), Oewodèredidè and Bogidide Plain (Bogisega) (9), Egoemè Valley and crossing the Egoemè (10), descending the river and climbing the Moeneiepa (11); bivouac on formerly cultivated land (11–17, kebon bivouac), climbing the look-out Perai (*c.* 2400 m) (13, 15); back to Egoemè and proceeding to Ariepa and the Piabeutara (18); Oewagimama (19–21); *via* G. Tarahoegiwi to Bogesiga (22), and back to Araboe bivouac (23); to Bogesiga again (25); Kemandora and G. Digitara, making bivouac on the pass (Oct. 26–Nov. 1, climbing the summit on Oct. 30); returning *via* Koparotali bivouac (Nov. 2) and Araboe bivouac (3) to Enarotali (4); staying at Enarotali Station (till Nov. 22); by land back to Oeta (23–29), following the same route as in January; sailing (Nov. 30) for *Ambon* (arriving Dec. 3), *via* Fakfak.

COLLECTIONS. *Herb. Bog.: nos* 1–300 from G. Gedeh-Pangrango and Tjibodas (*W. Java*), *nos* 301–1781 from 1st *Celebes* trip (1937), *nos* 1790–3291 from *Ceram* and *Ambon, nos* 3292–4212 from 2nd *Celebes* trip (1938), *nos* 4213–5467 (some *leg.* LOUPATTIJ, see there) from *New Guinea.*

Living plants from *Celebes* and *New Guinea* to *Hort. Bog.*

During the unsettled state of affairs at Buitenzorg, after the capitulation, *Celebes* material got lost (it was not yet mounted and Indonesians took it away because of the wrappers); at present it is not yet known whether *all* the material has disappeared, nor whether the other collections are all intact.

LITERATURE. (1) *cf.* Tijdschr. K.N.A.G. 1939, p. 743–764, map after p. 920.

(2) C. C. F. M. LE ROUX: 'De expeditie van het K.N.A.G. naar het Wisselmerengebied en het Nassau-gebergte op Nederlandsch Nieuw Guinea in 1939' (Tijdschr. K.N.A.G. 1939, p. 305–320, 661–679, 765–792, map after p. 740; and in *l.c.* 1940, p. 37–55, 173–232).

(3) P. J. EYMA: 'Een tocht ten Noorden van het Paniaimeer (Nieuw Guinea)' (Ned. Ind. Geogr. Meded. 1, 1941, p. 4–14, pl. 1–4, map, w. Engl. summary).

(4) P. J. EYMA: 'Bergtochten in Zuid- en Centraal Celebes' (Meded. Ned. Ind. Ver. Bergsport *no* 17, July 1940, p. 14–19, w. ill.).

(5) P. J. EYMA: 'Ceram. Centraal Hooggebergte' (*l.c.* p. 21–22).

(6) P. J. EYMA: 'Ambon. Salahóetoe-groep' (*l.c.* p. 23).

F.B. *nos, cf. sub* Forestry Bureau, Manila.

F.R.I. *nos, cf. sub* Forest Research Institute, Buitenzorg.

Faber, Dr Friedrich Carl von

(1880, Amsterdam, Holland; x), German plant physiologist, in *c.* 1909 appointed Botanist at the

Laboratory for Coffee Culture at Buitenzorg, W. Java; in Nov. 1910 Head of the Foreigners' Laboratory and the Laboratory at Tjibodas; since 1930 Professor in the University of Munich, and Director of the 'Botanische Staatsanstalten' there; at present suspended.



D. G. FAIRCHILD

His special interest was physiology and ecology, especially of mangrove and crater plants; author of important papers.[1]

COLLECTIONS. Probably only few plants, at least so in *Herb. Bog.*; at *Leyden* a dupl. of a plant collected near the Boroboedoer in *Centr. Java* in May *1912*. He might have sent collections to Germany.

LITERATURE. (1) *e.g.*: 'Zur Physiologie der Mangrove' (Ber. D.B.G. 41, 1923, p. 227–234); 'Untersuchungen über die Physiologie der javanischen Solfatarenpflanzen' (Flora 118/119, 1925, p. 89–110); 'Die Kraterpflanzen Javas in physiologisch-ökologischer Beziehung' (Arbeiten aus dem Treub Labor. 1, 1927, 119 pp., 18 pl.); he wrote the 2nd ed. of A. F. W. SCHIMPER: 'Pflanzengeographie auf physiologischer Grundlage' (1934–35).

BIOGRAPHICAL DATA. Portr. in Ann. Jard. Bot. Buit. 45, 1935, pl III; some of his papers are listed in *l.c.* p. 86.

Fairchild, Mrs

collected an orchid at Baguio, *Luzon, P.I.* (Aug. 26, *1930*), *no* 6118 = B.S. *no* 80806. In O. AMES *Herb.* (Cambr., Mass.).

This will be Mrs GEORGE FAIRCHILD of whom D. G. FAIRCHILD relates in his 'Garden Islands of the Great East' (New York 1945). She was born in Hawaii, and was an excellent gardener. In 1940 she lived at Pasay, Luzon, but the family had a villa in the mountains at Baguio too.

Fairchild, David Grandison

(1869, Michigan, U.S.A.; x), attended some agricultural colleges, taking his Dr's degree in 1916 at Oberlin College; from 1889 in the employ of the Bureau of Plant Industry, Washington; from 1903–28 Senior Agricultural Explorer in charge; since 1933 Collaborator division Foreign Plant Introduction.

From 1898–1903 assistant to BARBOUR LATHROP, on expeditions in search of valuable plants *etc.*; in 1926 Leader of the ALLISON V. ARMOUR Expedition.

Author of several popular books.[1]

The Fairchild Tropical Garden at Coconut Grove, Florida, is named after him; he is commemorated in *Ficus fairchildii* BACKER.

ITINERARY.[1] *1896–97*. Sailing from Europe in April 1896; *Singapore; W. Java:* Buitenzorg, Tjibodas, Tjinjiroean; *Sumatra West Coast*[2] with Mr LATHROP: Padang, Padang Pandjang, Fort de Kock, Haraukloof, Pajakombo, Karbouwengat; by boat *via* Kotaradja (Atjeh), Dec. 25 to the *Malay Peninsula: P. Penang* (Dec. 31), *Singapore (1897);* Bangkok; *Singapore;* Ceylon, Australia, *etc.—1900*. With Mr LATHROP rushing through *Java:* Batavia (Jan. 1), Buitenzorg, Soerabaja; stops at *Bali, Lombok*, Makassar (*SW.Celebes*), *Ambon, Banda, Ceram*,[3] *Kai Islands, Letti*, Dobo (*Aru Isls*); *W. New Guinea:* Fakfak and Sekar; *Timor; Java* (visiting Borobudur); Febr. 24 sailing to *Singapore; Philippines;* March 16 sailing for Hongkong, Siam; *Singapore* (1 week stay); Colombo; Europe.—*1926*.[4] *N. Sumatra* (Febr. 13–March 30): Sabang (*P. Weh*), Medan, Aroe Bay, Takengon, Laut (= Lake) Tawar, Blang Kedjeren, Kota Tjane, Kabandjahe, Toba Lake, Sibolangit;[5] *Java* (Apr.–June): Batavia, Buitenzorg, Bandoeng, Tegal, Tjilatjap & *Noesa Kambangan* (S of Centr. Java) (mid-Apr.; P. H. DORSETT and son afterwards departing to Hongkong), Wonosobo, Diëng Plateau, Djokjakarta, Solo, Karangpandan (on G. Lawoe), Soerabaja, Pasoeroean, Batavia; *Singapore.—1940. Cruise of the 'Chêng Ho'*, sponsored by Mrs ANNE ARCHBOLD for FAIRCHILD Tropical Garden.[6] Leaving California (Sept. *1939*) bound for Japan, China and the *Philippines, Luzon:* Manila; stay in Makiling Reserve; in Nov. setting out to Legaspi in S. Luzon by train; Bulusan Lake National Park; in Dec. to Baguio (villa of the FAIRCHILDS, see *sub* Mrs FAIRCHILD); proceeding to Bontoc (Igorot country); Paoay in Ilocos Norte; return to Manila, keeping to the coast, visiting Lamao Station; Jan. *1940* in the 'Chêng Ho' (recently arrived at Manila) with HUGO CURRAN (see there) as plant collector to Mindanao, stopping near the tiny island of *El Templo* taking a look around (coll. *Diospyros* seeds), and making stops on 5 other islands, *e.g. Biliran, Burias, Cebu*, and *Negros* (Dumaguete); *Mindanao:* Zamboanga, bay of Parang, N of Cotabato, and by car (Jan. 24) to

Davao; visiting Milbuk; the 26th sailing from Milbuk, leaving the Philippine Islands; *Sangihe Islands: Sangihe* (Tahoena), and *Siaoe; N. Celebes*, Minahassa (arriving Febr. 5); CURRAN collecting on the slopes of G. Sopoetan; collecting trip to *P. Lembeh;* CURRAN on slopes Mt Klabat; Febr. 20 sailing along the E. coast of Celebes to Gorontalo, visiting Bone River; sailing to Marisa, CURRAN exploring the forest inland (Febr. 24); fire on board the 'Chêng Ho', back to Gorontalo, the ship to Soerabaja (March) and CURRAN staying in Celebes; *Bali*, anchoring in the bay of St Nicholas (coll. palm seeds); *E. Java:* Soerabaja, paying visits to *Madoera* (Bangkalan), and *Bali* (crossing Bali Strait and by car to Den Pasar); by plane from Soerabaja to Bandoeng, by car to Buitenzorg (*W. Java*), and by train to Batavia; sailing (Apr. 16) in the 'Chêng Ho', bound for the Moluccas, making a stop at Makassar (*SW. Celebes*), where they were joined by CURRAN (the latter in the meantime having collected seeds at Masamba, Paloe, *etc.);* touching at Nanka on *P. Wowoni* (E of SE. corner of Celebes); sighting *Boeroe* (Apr. 30), ashore on *P. Tengah* (W of Boeroe); CURRAN collecting on Mt Tomahoe in Boeroe; sailing through the Straits of Manipa; *Amboina* (= *Ambon*) (May 7); sailing (17) for the Philippines, making stops at Isl. of *Mandiolo, Kasaroeta* (= *Kasiroeta*) and other islets of the Batjan group; to *W. Halmahera*, Pajahe Bay, Bai River; *P. Makian* (Ternate group); anchoring in South Loloda Bay, *S. Loloda Islands; N. Loloda Islands* (Doi, Dagasoeli, Toekara) (June); *Morotai* (Toetoehoe); *Talaud Islands: Karakelong; Mindanao:* Zamboanga (June 16), from where returning to the U.S.A.

COLLECTIONS. In 1926 with P. H. DORSETT, for the greater part living plants and seeds; there are also a few herbarium specimens, of which the complete set is at the *U.S. Nat. Herb. Washingt.*, some bearing accession numbers 1426495–1426536; scattered duplicates elsewhere. Data about the collections made before 1926 are lacking; in 1926 some herbarium specimens from Bireuen (Atjeh, *N. Sumatra*);[7] in 1940 well-nigh seeds only (> 500 species), destined for gardens, parks and orchards.

LITERATURE. (1) D. G. FAIRCHILD: 'Exploring for plants' (New York 1930); 'The World was my garden. Travels of a plant Explorer' (New York and London 1938); 'Garden Islands of the Great East' (New York 1943); 'The World grows round my door' (New York 1947).

(2) D. G. FAIRCHILD: 'Sumatra's West Coast' (Nat. Geogr. Magaz. 9, 1898, p. 449–464, w. ill.).

(3) D. G. FAIRCHILD: 'A tropical forest in Ceram' (Bot. Gaz. 32, 1901, p. 218–221).

(4) D. G. FAIRCHILD: 'Two expeditions after living plants' (Scient. Monthly 26, 1928, p. 97–127).

(5) D. G. FAIRCHILD: 'A jungle botanic Garden, the Sibolangit Garden in the Highlands of Sumatra' (Journ. Heredity 19, 1928, p. 145–159, 8 fig.).

(6) *cf.* Chron. Bot. 6, 1941, p. 210–212.

(7) *cf.* BARTLETT in Nat. & Appl. Sci. Bull. Univers. Philip. 4, 1935, p. 232–233.

BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 1903, p. 178; *l.c.* 2, 1905, p. 195, *t.* 147; Who's who 1913; Amer. men of Sci. 1938; Chron. Bot. 4, 1938, p. 445; Blumea 6, 1948, p. 307, note 3.

Fajatin, *cf. sub* Forestry Bureau, Manila.

Fangidae, D., *cf. sub* Forest Research Institute, Buitenzorg.

Farquhar, William

(1770, ? ; 1839, Perth, Scotland), Major in the British Army, Resident of Malacca (1803–18), later the first Resident of Singapore (1819).

He employed a native or Chinese artist[1] to delineate the plants of the Peninsula, and submitted the drawings to JACK and WALLICH (see those).

Myristaca farquhariana and other species were named after him by WALLICH.

COLLECTING LOCALITIES. He climbed Mt Ophir in Johore, *Malay Peninsula, about 1818*, and collected a little on it (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. His plants were described by WALLICH; probably sent to him together with the drawings of plants. Plates in Libr. Roy. As. Soc.

LITERATURE. (1) BURKILL's statements, respectively in Journ. Str. Br. Roy. As. Soc. *no* 73, 1916, p. 153, and in Gard. Bull. 4, 1927, p. 121, do not agree!

BIOGRAPHICAL DATA. 3rd Suppl. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 46, 1908, p. 5; BACKER, Verkl. Woordenb., 1936.

Fatumasse

collected plants in *Timor* (*Lesser Sunda Isls*).

F.B. *nos, cf. sub* Forestry Bureau, Manila.

Feddersen, Poul

(1888, Copenhagen, Denmark; x), civil engineer, planter and surveyor in the *Malay Peninsula*, in the employ of the Danish East Asia Company.

COLLECTIONS. He sent specimens of orchids[1] and other plants to the *Bot. Gard. Singapore* (*1916– . .*) (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

LITERATURE. (1) P. FEDDERSEN: 'Notes on the Orchids of Johore' (Sing. Naturalist 1^2, 1923, p. 80–85).

Feilding, J. B.

in 1892 in the service of the Sultan of Johore.

Ischaemum feildingianum A. B. RENDLE was named after him.

ITINERARY. *Malay Peninsula.* In *1892*, at the instance of the Government of Johore, he visited the foot of Mt Ophir, and several places upon the coasts of the State, *e.g.* Parit Jawa and Bt Muar, from the Kesang River (on the border of Malacca) round to the Endau (or Indau) on the border of Pahang (Oct.) and to the islands off the latter coast (Oct.), successively: *P. Aor, P. Dayong, P. Tinggi.* Part of his journey was in the company of LAKE and KELSALL (see there, also *sub* Liter.) (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Sing.:* small collection;

Herb. Brit. Mus.: Malayan grasses (pres. 1893).[1]

LITERATURE. (1) A. B. RENDLE: 'Grasses from Johore' (Journ. Bot. 32, 1894, p. 100–104).

Felix, M., *cf. sub* Forestry Bureau, Manila.

Fenix, Eugenio

(1883, La Union, P.I.; died about 1939), Overseer of Forests, later Clerk in the Bureau of Science, Manila, P.I., mainly doing inside work; he retired at the end of 1917; subsequently he had a private business in Lingajan Gulf, trading salt. In October 1938 he offered his services as private collector; the Arnold Arboretum gave him a grant for work in the Philippines.

Radermachera fenicis MERR. (*cf.* BACKER, Verkl. Woordenb., 1936), and some other Philippine plants were named after him.

COLLECTING LOCALITIES. *Philippines.* In company with R. C. MACGREGOR he spent the greater part of June and July *1907* on the islands N of Luzon: *Batan, Sabtan, Babuyan, Camiguin* and *Y'Ami (Batanes Isls).*[1]—In *1916* with RAMOS & EDAÑO: *N. Samar*, Bukidnan; *Mindanao* and *Luzon.—1938. Luzon:* Bulacan Prov., Meycanayan.

COLLECTIONS. *Herb. Manila*, numbered in the B.S. series (*cf.* Bur. of Science); *U.S. Nat. Herb. Wash.: c.* 300 dupl. *P.I.; Herb. Edinburgh.* Collections made *since 1938* at least in *Herb. Arn. Arbor.*, > 280 *nos* (mostly medicinal).

He collected several plants for the 'Species Blancoanae' (*cf. sub* BLANCO).

LITERATURE. (1) *cf.* MERRILL in Philip. Journ. Sci. C. Bot. 3, 1908, p. 388.

Ferguson, J. H. A., *cf. sub* Forest Research Institute, Buitenzorg.

Ferguson-Davie, Charlotte Elizabeth Hull

Doctor of Medicine, wife of the Bishop of Singapore.

COLLECTIONS. *Herb. Sing.:* plants collected about Fraser Hill on the main Range (Oct. *1921*) of the *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

Ferman, Jan Hendrik Gerard

(1911, Zeist, U., Holland; about Sept. 1944, drowned during a Japanese transport of P.O.W.'s, W of Padang, Sumatra), botanist, educated at Utrecht University (Ph. Dr 1938). Since 1938 Group-Adviser of the Experiment Station for the Java Sugar Industry (Pasoeroean), stationed at Pasoeroean, and from 1939–42 at Cheribon.

COLLECTING LOCALITIES. *W. Java:* W. slope of G. Tjeremai, 600 m alt. (Apr. 7, *1939*); Telaga Patengan (June *1940*); E. slope G. Rompang, Kromong Mts (Apr. 20, *1941*); E. slope G. Tjeremai (May 1941), Telaga Patengan (June 1941).

COLLECTIONS. *Herb. Bog.:* some tens of plants.

Fernandes, D., *cf. sub* Forest Research Institute, Buitenzorg.

Fernandez, *cf. sub* Forestry Bureau, Manila.

Fernandez, Emanuel

a collector employed by W. GRIFFITH (see there) in *Malacca* while he was at Calcutta and presumably during his first residence in Malacca (1841–42) (*cf.* BURKILL in Gard. Bull. Str. Settlem 4, 1927, *nos* 4–5).

COLLECTIONS. In *Herb.* GRIFFITH (see there; in *Calcutta, Kew, etc.*).

Fernandez, I., *cf. sub* Forest Research Institute, Buitenzorg.

Fernandez-Villar, Celestino

(1838, Argueria (after MERRILL) or Tudela, Oviedo (after BACKER), Spain; 1907, Manila, Luzon, P.I.), an Augustinian who came to the Philippines in 1859, from 1859–61 completing his studies for the priesthood at Manila; from 1862-65 Curate of the town of Barotac Nuevo in Panay, returning to Manila for 2 years to complete his studies, then being sent to the town of Jari in Leyte, where he remained until 1877. He made investigations of a religious nature in N. Luzon (1879), Spain and Rome (1885), China (1887), Australia (1889). In 1889 elected Prior of the convent of Guadelupe; *c.* 1895 he was afflicted with blindness.

Together with his colleague ANDRES NAVES he took care of the 3rd edition of BLANCO's 'Flora de Filippinas' and added an enumeration (1880–83) of all Philippine plants known at that time.[1]

Vaccinium villarii VIDAL was named after him.

COLLECTIONS. Together with A. NAVES he brought together a collection of plants from the *Philippines*, which was preserved in the convent of Guadelupe near Manila, which was burnt out in 1899. No type specimens are preserved, duplicates were possibly distributed.

LITERATURE. (1) Author of 'Cataloga de muchas de las plantas que habitan en le pequeña Isla del volcan de Taal, sita en el centro de la Laguna de Bombón, Isla de Luzón, recogidas en los años 1877 a 1879, y estudiadas después por el Padre Fr. CELESTINO FERNANDEZ-VILLAR, Augustino' (in CENTENO, J. Estudio geologica del Volcán de Taal 1885, p. 41–50).

BIOGRAPHICAL DATA. E. D. MERRILL in Bull. Bur. Agr. Manila *no* 4, 1903, p. 13–14; *cf. l.c.* p. 14–17; BACKER, Verkl. Woordenb., 1936 (*sub* villarii).

Ferns, G. W., *cf. sub* Forest Research Institute, Buitenzorg.

Ferraris, C., *cf. sub* Forestry Bureau, Manila.

Ferwerda, Willem Johannes Jan

(1886, Heeg, Fr., Holland; x), since 1908 planter in the D.E.I.; in 1918 appointed Assistant Estate-Manager of the 'Pondok Gedeh Landen', since 1926 Head Estate-Manager; retired in 1940.

COLLECTIONS. *Herb. Bog.:* material of *Rafflesia rochussenii* T. & B. with the host-plant *Tetrastigma lanceolarium* BL. (pres. *1929*); and *Rafflesia* material collected in Febr. *1928*.

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 452.

Feuilletau de Bruyn, Willem Karel Hendrik

(1886, Palembang, Sumatra; x), entered the D.E.I. Army in 1907 and was pensioned off in 1925 as a colonel; in 1931 member of the National Council; afterwards back to Holland. Between the years 1910–15 he was a member of Exploration and Excursion Detachments in Dutch N. and S. New Guinea and the Schouten Islands.

Author of many geological and ethnological papers.[1]

Several species of plants were named *bruynii* after him.

ITINERARY. *1912. Dutch SW. New Guinea:* exploring the sources of the Noordwest River, at first making use of a proa and since June 23 going by land, reaching an altitude of 2720 m;[2] making a tour (Sept. 10–26) from the Bloemen River (starting from a point where it becomes unnavigable), by land to Tjemara River; following the left bank of Tjemara River upstream; exploration of the Great Moeras River and Tjemara River (Oct. 5–24); the upper course of the Pater le Cocq d'Armandville River (Nov. 14–25).[3]—*1914. Dutch N. New Guinea,* Mamberamo region: setting out from Pionier bivouac (Jan. 1) for reconnaissance of the region between the Apauwar and the Mamberamo; ascending the Mamberamo (Jan. 30);[4] upper course of the Idenburg River (May 14–Oct. 7),[5] in this period visiting the sources of the Sermowai and on the way back reconnaissance of the Poeveh (Aug. 29) and the Pauwasi River (Sept.); further exploration of the Mamberamo (Oct.), proceeding as far as Kalong Isl.; in Nov.–Dec. exploring the Mamberamo, Meervlakte and the Van Rees Mts.—*1915. Schouten Islands* (N of New Guinea): *Soepiori* (July 22–25) and *Biak* (Aug. 1–Oct. 13).

COLLECTIONS. *Herb. Bog.: nos* 1–248 from the Mamberamo region (*New Guinea*) (dated May 23–Dec. 10, *1914*); *nos* 249–468 from the *Schouten Islands;* also material in alcohol and 115 living plants.[6] During the Mamberamo expedition he was assisted by mantri AJOEB (see there) of the Buitenzorg Herbarium. Some of his consignments evidently were mixed up with those of A. CH. T. THOMSEN (see there). Dupl. in *Herb. Utrecht.*

The botanical results were published in Nova Guinea vol. 14.[7]

LITERATURE. (1) *E.g.* in 'Meded. Nieuw Guinee Comité' and in 'Nieuw Guinee Studiekring Molukken Inst.'; 'Schouten en Padaido-eilanden' (Meded. Encyclop. Bur. *no* 21, 1920, 193 pp., with A. MEYROOS); 'Contribution à la géologie de la Nouvelle Guinée' (Bull. Lab. Géol., Géogr., *etc.* Lausanne 1921); 'Komen er in het Arfak gebergte vulkanen voor?' (Tijdschr. K.N.A.G. 1937, p. 268–269).

(2) *cf.* Meded. Encyclop. Bur. *no* 11, p. 9 and Tijdschr. K.N.A.G. 1913, p. 75–76.

(3) *cf.* Tijdschr. K.N.A.G. 1913, p. 534–535 and Versl. Milit. Expl. Ned. N.G. 1907–15 (Weltevreden 1920) p. 44–45.

(4) *cf.* Meded. Encyclop. Bur. *no.* 11, p. 16 and Tijdschr. K.N.A.G. 1914, p. 542–543.

(5) *cf.* Meded. Encyclop. Bur. *no* 11, p. 17; Versl. Milit. Expl. *l.c.* p. 66–69; and Tijdschr. K.N.A.G., 1915, p. 372–376 + map).

(6) *cf.* Versl. Milit. Expl. *l.c.* p. 350.

(7) *cf.* also in 'Beitr. z. Flora Papuas.' (ENGL. Bot. Jahrb. 1912 →).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936 (*sub* bruynii); Persoonlijkheden in Nederland, 1938, + portr.

Fevrell, *cf. sub* HEIDE, F. F. R.

Finet, Achille Eugène

(1863, Argenteuil, France; 1913, Paris, France), laboratory assistant, later collaborator of Prof. Dr H. LECOMTE; from the outset onwards editor of the 'Notulae systematicae'. He travelled in Iceland (1889), and SE. Europe (1899), and accompanied Prof. Dr H. LECOMTE (see there, also *sub* Liter.), on his journey to the tropics, *via* Japan and China. After the visit to Java, they travelled to Indo-China.

He is commemorated in *Clerodendron finetii* DOP.

ITINERARY. *1911. W. Java:* staying 5 weeks at Buitenzorg (Aug.–Sept.), visiting Tjibodas on the slope of G. Gedeh, and G. Salak.

COLLECTIONS. *Herb. Paris:* 500 *nos* from *Java* LECOMTE & FINET.

BIOGRAPHICAL DATA. Bull. Soc. Bot. Fr. 40, 1913, p. 205–216, incl. bibliogr.; Nouv. Arch. Mus. 5, 1913, p. i–xii + portr.; BACKER, Verkl. Woordenb., 1936, p. 650; in 'Flore génér. de l'Indo-Chine' tome prélim. 1944, p. 41 + portr. pl. XI.

Finlayson, George

(1790, Thurso, Scotland; 1823, at sea between Calcutta and England), Surgeon in the service of the East India Company; Naturalist of the Mission to Siam and Cochinchina, 1821–22.[1] When returning to Singapore in 1822 he was seriously ill with consumption.

The genus *Finlaysonia* WALL. was named in his honour.

ITINERARY.[1] *Malay Peninsula.* Sailing from Calcutta (Nov. 21, 1821); upon its way to the Further East, the mission reached *Penang* (staying Dec. 11, *1821*–Jan. 4, *1822*), made some trips in the island, and visited Qualla (= Kuala) Muda on the opposite shore of Queda (= Kedah) (Dec. 25) and Mt Palmer in the southern part (Jan. 1, *1822*); touched at the Dindings, *Pangkor Isl.* (9); Malacca (14); landed on the island of *Little Carimon; Singapore* (Jan. 20–Febr. 23); landed in a bay within a few miles of the extreme point of the Peninsula (26).

COLLECTIONS. *Herb. E.I.C.,* distributed by WALLICH (see there) in 1827–32; 1st set at present at *Kew.* Specimens badly localized, sometimes not at all.[2] Only few duplicates, *e.g.* in *Herb.* DELESS. (*Geneva*).

LITERATURE. (1) Diary of G. FINLAYSON edited by RAFFLES: 'The mission to Siam and Hué in the years 1821–22' (London 1826).

(2) *cf.* CH. CURTIS in 'Catalogue *etc.* of Penang' (1892) p. 99; RIDLEY in Journ. Str. Br. Roy. As.

Soc. *no* 25, 1894, p. 164–165; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 147; KERR on the Siam collections in 'Early botanists in Thailand' (Thail. Res. Soc. Nat. Hist. Suppl. 12, 1939, p. 8–9).

BIOGRAPHICAL DATA. In 'The mission to Siam *etc.*' *l.c.* p. ix–xxvi; in Biogr. Index BRITTEN & BOULGER, 2nd. ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Finsch, Friedrich Hermann Otto

(1839, Warmbrunn, Germany; 1917, Brunswick, Germany), zoologist-ethnographer, in 1862 appointed Assistant of the Museum of Natural History at Leyden; from 1864–78 Director of the Nat. Hist.-Ethnol. Museum at Bremen. He made extensive travels, especially making zoological and ethnological collections, *viz* in Europe, the U.S.A. (1872), W. Siberia (1876); in 1879 under the auspices of the 'Humboldt Stiftung'[1] round the world to Polynesia, visiting New Guinea too. His 2nd journey to New Guinea was made in commission of the German 'Neu Guinea Kompagnie', aiming at the foundation of German colonies in the visited regions. In 1897 he was appointed Custodian of the Ornithological Department of the Natural History Museum at Leyden; since 1904 Director of the Ethnological Department of the Municipal Museum at Brunswick.

Besides of the papers referred to below, he is the author of numerous others.[2]

The genus *Finschia* WARB. was named after him.

ITINERARY.[2] *Voyage round the world* (Apr. 21, *1879*–Nov. 18, *1882*):[3] New York, San Francisco, Honolulu, Sandwich Isls, Marshall & Gilbert Isls, Carolines, Ontong Java, in *1880* arriving in the *Bismarck Archipelago: Neu Mecklenburg* (= *New Ireland*), Liki-Liki; *Neu Pommern* (= *New Britain*), Blanche Bay, staying till March 29, *1881*, making trips in the NE. part of Gazelle Peninsula and to *Neu Lauenburg* (= *Duke of York Isl.*); Sydney, Tasmania, New Zealand; *islands in the Torres Strait, Thursday Isl. etc.* (Oct. 12, 1881–Jan. 14, *1882*); Cape York, N. coast of Australia; *SE. New Guinea* (half a year in 1882), from the Gulf of Papua to Keppel Bay, Port Moresby, Hood Bay, Aroma Distr., Laloki River, Goldie River in the direction of Owen Stanley Range; returning to Europe by way of *Java* and Ceylon.—*In the 'Samoa', 1884–85.*[4] *Bismarck Archipelago: Neu Lauenburg* (= *Duke of York Isl.*), *Mioko* (Sept. 26–Oct. 6, 1884); *NE. New Guinea:* Konstantinhafen on the Astrolabe Bay (Oct. 11–18); along the north coast in eastern direction to Festungskap; *Mioko* (*Bism. Arch.*) (Oct. 29–Nov. 12); Huon Gulf (16), Finschhafen (23), Weberhafen; N. coast of *Neu Pommern* (= *New Britain*), Gazelle Peninsula; *Neu Mecklenburg* (= *New Ireland*), *Nusa*; back at *Mioko* (Dec. 9). On the way to Australia touching at Port Breton (*New Ireland*) (Dec. 20) Bentley and Goodenough Bay (27) in *SE. New Guinea.* Operating in the *Bismarck Archipelago* again: *Mioko* (Febr. 1–March 22, *1885*); to the Bentley Bay (*SE. New Guinea*), Milne Bay, *Killerton Isls*, Samarai and Teste Island; *Mioko* (Apr. 18–May 4); *Vulkan Isl.;* to the mainland of *N. New Guinea:* discovering the Kaiserin Augusta River (= Sepik) (9), Cape della Torre, Dallmann Hafen (11), as far as Angriffshafen (May 15) and Humboldt Bay (17) and back along the north coast *via* Hatzfeldhafen (22), Astrolabe Bay, Friedrich Wilhelmshafen (= Madang) (23), Konstantinhafen; back at *Mioko* (*Bism. Arch.*) (28). By way of Australia returning to Germany, Berlin (arriving Sept. 2).

COLLECTIONS. *Herb. Berl.:* only few plants from *New Guinea* (prob. coll. 1880–82), more from the Pacific Islands.

Between 1879–82 he collected almost the whole flora of the Marshall Isls (1000 plants) and part of that (200 plants) of the Gilbert Isls; these collections were given, according to his wishes, for identification to Dr KURTZ of Berlin, who shortly after departed for Cordoba (La Plata), so that FINSCH did not get any information about them.[5] They are still in *Herb. Cordoba.*[6]

FINSCH mentions[2] the purchase of a collection of birds from HUNSTEIN (see there), during his 2nd voyage (1884–85), as he himself had no spare time to make natural history collections; in consequence of this statement, we may assume that he made *no botanical* collections in those years either.

Some plants were published by K. SCHUMANN.[7]

LITERATURE. (1) *cf.* Tijdschr. K.N.A.G. 1917, p. 299.

(2) O. FINSCH: 'Systematische Uebersicht der Ergebnisse seiner Reisen und Schriftstellerischen Thätigkeit (1859–99)' (Berlin 1899).

(3) O. FINSCH: 'Anthropologische Ergebnisse einer Reise in der Südsee und in der malayischen Archipel 1879–82' (Berlin 1884); 'Hausbau, Häuser und Siedelungen an der Südostküste von Neu-Guinea' (Mitt. Anthrop. Ges. Wien 17, 1887, p. 1–15).

(4) O. FINSCH: 'Entdeckungsfahrten des deutschen Dampfers "Samoa"' (Gartenlaube 1886, p. 83–86, 111–112, 192–195, 367–370; and *l.c.* 1887, p. 295–296, 460–462, 541–543); 'Dr FINSCH's fünfte Fahrt im Dienste der Neuguinea-Kompanie' (Deutsche Kolon. Zeit. 3, 1886, p. 11–18); 'Ueber Naturprodukte in der westlichen Südsee besonders der deutschen Schutzgebiete' (*l.c.* 4, 1887, p. 519–530, 543–551, 593–596); 'Samoafahrten. Reisen in Kaiser Wilhelmsland und Englisch Neu-Guinea, 1884–85' (Leipzig 1888).

cf. also Nachr. Kais. Wilh. Land 1885/86, Heft 2, p. 8–13; *l.c.* Heft 3, p. 9–24; *l.c.* Heft 4, p. 3–4.

(5) *cf.* 'Syst. Uebersicht' (*l.c. sub* 2) p. 15 and footnote 2.

(6) *cf.* Chron. Bot. 4, 1938, p. 565.

(7) in 'Die Flora der deutschen ostasiatischen Schutzgebiete' (ENGL. Bot. Jahrb. 9, 1888, p. 189–223).

BIOGRAPHICAL DATA. Portr. in FINSCH, Samoafahrten, 1888; in FINSCH, Syst. Uebersicht der Ergebnisse, 1899, bibliogr. p. 35–93, *cf.* also p. 147–153; BACKER, Verkl. Woordenb., 1936; in A. GIJZEN, 's Rijks Museum v. Nat. Hist. 1820–1915, Rotterdam 1938, p. 272; Ned. Kruidk. Arch. 52, 1942, p. 385.

Fischer, Arthur Frederick

(1888, Chicago, Ill, U.S.A.; x), visited the Yale

University Forest School; in 1912 appointed Assistant Professor at Los Baños, Luzon; in 1917 Professor of Tropical Forestry and Dean of the Forest School in the University of the Philippines; later Chief Director Investigation Bureau of Forestry, Manila.

He made a trip to Java and N. Sumatra as delegate tot the 4th Pac. Sci. Congr. in 1929.[1]

Author of many papers.[2]

Hoya fischeriana WARB. was *not* named after him; he is commemorated in *Eugenia fischeri* MERR.

COLLECTIONS. *Herb. Manila.* Besides private numbers, also some in the F.B. series (see For. Bur. Manila), but he did only little collecting. No plants from Java and Sumatra.

LITERATURE. (1) *cf.* Makiling Echo, 9, 1930, p. 6–16 (report).

(2) *e.g.* W. H. BROWN & A. F. FISCHER: 'Philippine mangrove swamps' (Philip. Bur. For. Bull. 17, 1918, p. 1–112, pl. 1–44; reprinted in *l.c.* 22, 1920, p. 13–125, pl. 1–44); 'Philippine bamboos' (*l.c.* 15, 1918, p. 1–32, pl. 1–33; reprinted in *l.c.* 22, 1920, p. 248–278, pl. 1–33).

BIOGRAPHICAL DATA. Nat. Research Counc. P.I. Bull. *no* 7, 1935, p. 660–661, incl. bibliogr.; portr. in Philip. Journ. Forestry 2, 1939, pl. 1.

Fitzgerald, W. V.

(? died at Sydney, N.S.W., Australia, in the nineteen-twenties), was an official collector of botanical specimens for the West Australian Government, and acted as Government Botanist. He was an assiduous collector of West Australian plants and in addition published some important papers. He visited New Guinea on a mining proposition.

COLLECTIONS. He collected in *SE. New Guinea, e.g.* at Dogura and Yampota (*1895*),[1] and near the Kumusi River (*1896*). His collection is > 118 *nos.* Mr C. T. WHITE supposes the plants to be in *Herb. Sydney;* also at *Melbourne.*

LITERATURE. (1) *cf.* ENGL. Bot. Jahrb. 56, 1920/21, p. 276.

Fitz Verploeg, A.

Resident of Bagelen, *Centr. Java,* who started his career as a clerk to the Director of Agriculture and then entered the Civil Service (*e.g.* Asst Resident of Palembang). In later years Director of the Civil Service and finally Resident of Pasoeroean in E. Java.

COLLECTIONS. He forwarded *Java* plants to *Hort. Bog.* in *1869;* possibly no dried material preserved.

BIOGRAPHICAL DATA. Ind. Gids 10[1], 1888, p. 266.

Fleischer, Max

(1861, Lipine, Upper Silesia, Germany; 1930, Mentone, France), painter and bryologist who studied geology for some time at Zürich University in 1892. He resided in Java for several years, invited by TREUB (see there) who thought him the right man to make pictures destined for the exposition at Paris, the more so as he was able to collaborate on the just started 'Flore de Buitenzorg'.[1] In the years 1908–13 he travelled for the second time in the Malayan region; in 1914 temporarily connected with the Botanical Museum at Berlin and in 1917 appointed professor. He travelled in Europe too and visited the Canaries. In the beginning of 1926 he settled at The Hague, Holland.

Dendrobium fleischeri J. J. S. was named after him.

ITINERARY. *1898. Malay Peninsula:*[2] *Singapore,* Kuala Lumpur, *P. Penang; W. Java:* Tjibodas on the slope of G. Gedeh.—*1899. Java; S. Sumatra* with Prof. K. GIESENHAGEN (see there detailed itiner. *etc.*); starting on Nov. 5, FLEISCHER returned to Java on account of illness from Kalangan Djarei (Nov. 21) *via* Benkoelen.—End of *1899–1902.* Staying in *Java,* returning to Germany in *1903* after making a world tour, during which he visited the *Bismarck Archipelago, Mioko,* and Finschhafen in former *Kaiser Wilhelmsland* (*NE. New Guinea*) in March.—*2nd Voyage, 1908–13.* In 1908 he made preparations for a second voyage to the Malay region, from which he returned in 1913. He collected at least in the following localities in the year *1909*: *Malay Peninsula,* near Taiping (Apr. 12); *W. Java:* G. Salak (Aug. 15); Mr Cornelis (Sept. 12–13); Weltevreden, Batavia (Dec. 5); Tjipanas, Sindanglaja (Dec. 18–20); Tjibodas and Tjibeureum on the slope of G. Gedeh (22–28). In the following years in *W. Java:* near Tjibeureum (Dec. *1910*), at Soekaboemi (*1911*), on the Gegerbintang (June 22, 1911), *etc.*

COLLECTIONS. Principally *Musci,* but *Fungi, Pteridophyta* and *Orchidaceae* too. *Herb. Berl.:* many mosses, 411 *nos* of *Fungi* (1898–99), 26 *nos* of siphonogams from Tjibodas (1898), 54 orchids from *Java* (1910–14) and orchids with *Herb.* SCHLECHTER, 86 *nos* in the *Show Mus.; Herb. Bog.:* many *Musci* and several orchids from *Java* (pres. 1911); *Herb. Brit. Mus.:* '*Musci Archipelagi Indici*' 250 species in 5 fasc. (1898), 100 *ditto* (purch. 1906–08); *Herb. N.Y. Bot. Gard.:* '*Musci Arch. Ind.*' 500 species (acq. 1905–08); *Herb.* DELESS. (*Geneva*): '*Musci Arch. Ind.*' 173 species (1916–18); *ditto* ser. 12(50)(acq. 1933); *Herb. Leyden:* '*Musci Arch.Ind.*' (purch.), *Fungi,* ferns and phanerogams *Java; Herb. Vienna:* '*Musci frond. Arch. Ind.*' ser. 7 (50) (purch. 1905); *Herb.* BONAPARTE (= *Paris*): his collection of ferns, principally from *W. Java.*[3] His mosses probably sold to many other herbaria too.

After his death his private collections and library were bought by an antiquarian at Leipsic. At present in FARLOW *Herb.* (Cambr., Mass.).

LITERATURE. (1) M. FLEISCHER: 'Die Musci der Flora von Buitenzorg' (Leiden, 1900–22, 4 vols).

(2) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(3) *cf.* BONAPARTE, Notes Ptéridol., fasc. 1, 1915, p. 215–222 and *l.c.* fasc. 3, 1916, p. 5–27.

BIOGRAPHICAL DATA. Ann. Cryptog. Exot. 3, 1930, p. 161–167 + portr. and bibliogr.; Ann. Bryol. 4, 1931, p. 113–122; BACKER, Verkl. Woordenb., 1936.

Fleischman

New Guinea, sent living orchids to *Hort. Bog.* in *1932.*

Flemmich, C. O.
joined the Forest Department Malay Peninsula in 1931; since 1936 State Forest Officer in Brunei (NW. Borneo); seconded Fiji in 1941.
Shorea flemmichii SYMINGTON was named after him.
COLLECTIONS. In *Herb. Kuala Lump.:* large amount of excellent herbarium material from trees in Brunei (*NW. Borneo*); also material from the *Malay Peninsula.* He numbered in the C.F. (see *sub* Conservator of Forests) series.

Flippance, Frederick
an Assistant Curator in the Gardens Department, Str. Settlem., 1919–38; then transferred to Hongkong as Superintendent of the Government Botany and Forest Department.
COLLECTING LOCALITIES. *Malay Peninsula: P. Penang* (Balik Pulau); Kedah: Klian Intan (Jan. *1922*), Kedah Peak (July 9–18, *1925*).
COLLECTIONS. Contributed to the Sing. Field number (S.F. *no*) series in *Herb. Sing.* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5). In *Herb. Kew: Singapore* palms (pres. 1920).
BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; Chron. Bot. 7, 1942, p. 232 (by mistake recording his death).

Flood
an American collector of natural history objects, who collected some plants in *Timor* (*Lesser Sunda Isls*), and evidently in N. Australia.
A. E. PRATT[1] mentions FLOOD's arrival at Port Moresby in mid-1901, from where he proceeded without company to Wanapa, for the collecting of land molluscs; later on nothing but his bivouac was found.
COLLECTIONS. DANSER in his monograph on *Loranthaceae* cited some specimens collected by him in *Timor;* preserved in *Herb. Kew.*
LITERATURE. (1) in 'Two years among the New Guinea Cannibals' (London 1906) p. 181.

Florentinus, Ch., *cf. sub* Forest Research Institute, Buitenzorg.

Flores, J., *cf. sub* Forestry Bureau, Manila.

Flores, M.
collected > 17 numbers in *Samar, P.I.*, in *1916*; some orchid specimens in *Herb.* O. AMES (Cambr., Mass.).

Foenander, E. C.
joined the Forest Department *Malay Peninsula* in 1920 as Forest Ranger; since 1946 Assistant Conservator of Forests.
COLLECTIONS. *Herb. Kuala Lump.:* mainly from Pahang, a few *nos* of plants during a journey to Tasek Bera (Temerloh), in *1931;* numbered in the C.F. (see *sub* Conservator of Forests) series.

Förster
no family name, but the German translation of forester; probably an official of the D.E. Indian Forest Service stationed in *Flores* (*Lesser Sunda Isls*), who collected in June *1928* in the mountainous region N of Endeh, at the instigation and on behalf of Mrs I. RENSCH (see there).
COLLECTIONS. *Herb. Berl.:* > 277 *nos* in a very poor state, only 50 of them fit for identification. Evidently the collection was numbered separately (*No* 1–*seq.*) from that of Mrs RENSCH, but is cited by Mrs RENSCH as RENSCH *no* . . . and by VON MALM (for both references *cf.* liter. *sub* Mrs RENSCH) as *no* . . . *comm.* RENSCH; *e.g.* RENSCH 277 is a *Desmodium* (collected by Mrs RENSCH herself in *Lombok*) and another RENSCH 277 is *Archidendron harmsii* (collected by 'Förster' in *Flores*) (*cf.* Notizbl. Berl. Dahl. 11, 1932, p. 629).

Förstermann, Ignatz F.
(1854, Coblenz, Germany; 1895, Newton. N.Y., U.S.A.), about 1880–86 plant collector in the employ of the firm of SANDER & Sons at St Albans near London; afterwards manager of its branch at Summit, New Jersey, U.S.A. He started for India in 1881, and visited Burma, the *Malay Archipelago*, and the *Philippines.*
Coelogyne foerstermanni RCHB. *f.* was named after him.
COLLECTIONS. Evidently from Assam, and *NW. Borneo* (spring *1886*) (Sarawak, ferns and orchids).[1] In *Herb. Vienna* (with *Herb.* REICHENBACH): orchids from *S. Celebes* (*Malacca*); of course this statement is false, there are three possibilities, *viz* he collected in Malacca, and S. Celebes was misread for a locality there, or the reverse (Malacca may be rightly Makassar!), and the 3rd that he collected in Celebes *and* Malacca; this question cannot be settled here, as further data are still lacking. In Gartenflora 44, 1895, p. 463 he is said to have collected in *Sumatra.*
LITERATURE. (1) *cf.* J. G. BAKER in Journ. Linn. Soc. 24, 1888, p. 256–261; and J. J. SMITH in Bull. Jard. Bot. Buit. sér. 3, vol. 9, 1928, p. 490 (*sub Vanda hastifera* RCHB. *f.*).
BIOGRAPHICAL DATA. Orch. Review 3, 1895, p. 134; Gartenflora 44, 1895, p. 463; BACKER, Verkl. Woordenb., 1936.

Fogh, F. C.
a Danish planter, first at Mt Austin Estate, Johore (from *c.* 1912), later at Teluk Merbau Estate, Sepang, Selangor. He is interested in orchids, *Nepenthes* and other plants.
COLLECTIONS. *Herb. Sing.:* orchids (pres. 1939). According to Mr HOLTTUM he collected in several parts of *Malaya*, and forwarded some specimens to the herbarium, from *1939 onwards.*

Fokkinga, Johannes
(1895, Augustinusga, Fr., Holland; x), Forest Officer, since 1921 in the employ of the D.E. Indian Forest Service; stationed in Java, in teak districts, and elsewhere. In 1947 he was appointed Chief Inspector of the Forest Service.
COLLECTING LOCALITIES. *Centr. Java:* Pekalongan Res. (June and Oct. *1923*).

COLLECTIONS. *Herb. Bog.:* plants collected in teak forests on behalf of BEUMÉE (see there).

Fontanella, E., *cf. sub* Foresty Bureau, Manila.

Fontanoza, J.
collected in *Leyte, P.I., cf. sub* Forestry Bureau, Manila.

Forbes, Henry Ogg
(1851, Drumblade, Aberdeenshire, Scotland; 1932, Selsey, E of Portsmouth, England), had to discontinue his study in medicine on account of the loss of one of his eyes; from then he applied himself to botany and ethnology. He made extensive travels in the Malay region from 1878 onwards, from April 1882–83 in company of his wife ANNABELLA KEITH FORBES (? , Rubislaw, Aberdeenshire, Scotland; 1922, ?).[1] Mid-1886 he was appointed Deputy Commissioner in Brit. New Guinea, stationed at Samarai; he resigned in March 1887, hoping to secure funds for new exploration tours. When his efforts were in vain, he was offered a job as Meteorologist at Port Moresby by the Special Commissioner JOHN DOUGLAS; at the end of September he was instructed to explore the Goldie River. At the end of February 1888 he returned to England; Director of the Canterbury Museum in New-Zealand, 1890–93; Director of the Liverpool Musea, 1894–1911, and since 1905 University Lecturer in Ethnology at Edinburgh, Scotland.

Several plants were named after him and his wife.

ITINERARY.[2] *W. Java:* arrival at Batavia (Nov. 17, *1878*), Buitenzorg; Cocos and Keeling Isls (Indian Ocean) (Jan.–Febr. 9, *1879*); *W. Java:*[3] at Batavia (Febr. 16); Bantam Res. (at Genteng, Tjipanas, Kosala Estate); *via* Buitenzorg, Megamendung Pass (= Poentjak) to Priangan Res.: Bando(e)ng, Pengalengan, vicinity of G. Malabar and G. Wajang; in the first half of May returning to Buitenzorg and Batavia.—Probably May 18, *1880* (in the cited book erroneously Nov.!) to *S. Sumatra*, Lampong Districts: Gedong Tetahan, Kotta Djawa, Gunung Trang; mid-Aug. to Penanggungan near G. Tanggamus, Terratas, ascent of G. Tanggamus, Penanggungan, Telok Betong; back to Batavia, shipping off his collections mid-Dec. At the end of Dec. 1880 crossing Sunda Strait from Anjer to *S. Sumatra* (Lampongs and Palembang) again: Telok Betong, Beneawang, along the W. Semangka, Kenali, Hudjung (till end of Jan. *1881*), Sukau, Ranau Lake (Banding Agong); Muara Dua, Gunungmegang, Darmo, Muara Enim, Lahat, Passumah Plateau, Pau on the slope of G. Dempo, ascent of G. Dempo; from Pau (at the end of May) to Pageralam, Gunungmeraksa, Lampar, Batu Pandjeh, Tebingtinggi, Tandjong Ring on the Saling, Kepala Tjaruk (= ? Kapalatjoeroep) and ascent of G. Kaba; along S. Klingi in northern direction, S. Rupit, Muararupit (end Oct.), Surulangun, S. Rawas, Pulaukida, Muara Mengkulem, Napallitjin, limestone hill Karang Nata, back at Muara Mengkulem (Nov. 27), Binginteluk on the Rawas, Pau (= Paoeh), downstream the Musi to Palembang (Dec. 20); sailing for Batavia (25) *via* Muntok (*Banka*).—*W. Java:* Buitenzorg (Dec. 27, 1881–Apr. 14, *1882*).—To the *Moluccas etc., 1882–83*, with aid of the D.E.I. Govt: sailing from Batavia (Apr. 15, 1882), *via* Makassar (*SW. Celebes*), *Sumbawa* (Bima), *Flores* (Larantuka), *Timor* (Kupang and Dilly), *Bandaneira*, to *Ambon* (staying May 12–July 4, visiting Paso, Leitimor, Tengah-Tengah, Wai); *via Saparua, Bandaneira*, Ges(s)ir (on *Ceramlaoet*), *New Guinea, Kai* and *Aru Isls* to *Timor-laut* (= *Tanimbar Isls*) (staying July 13–Sept. 28):[4] *P. Larat* and *Jamdena; Ambon* (Oct. 7–Nov. 7); *Buru* (Nov. 8–Dec. 11): Kajeli, Lake Wakolo; *Ambon* (Dec.12–14); *via Bandaneira; Port. Timor* (Dec. 19, 1882–May 31, *1883*): staying above Dilly, Fatunaba; breaking up (March 30) for a trip to the interior, Erlura, Komai River, Fatete (31), Ligidoik (Apr. 1), Sauo (2), Turskain (3–6), Bibiçuçu (6–22), G. Tahaolat, S of the Kaimauk River, Serarata Valley, Saluki (22–26), Fatuboi, Samoro (Apr. 28–May 3), G. Sobale (not reaching the summit), Buarahu River, Manuleo, Sumasse River, Laclo (May 5), Metinaru, Dilly; back to Fatunaba; sailing from Timor (June 1), *via Banda, Ambon*, Manado (*N. Celebes*, June 10), Macassar (*SW. Celebes*), Ampenan (*Lombok*), Boeleleng (*Bali*) to *Java:* S(o)urabaya (June 23), Batavia (28); July 9 homeward bound.—*SE. New Guinea. 1885–86.* From several societies, *e.g.* the Roy. Soc. of Queensland, he got financial aid for an intended exploration of Owen Stanley Range.[5] Arrival at Batavia (May 8, *1885*); to Ambon for the required hunters; Batavia (June 29–July 12); Queensland; *Papua:* Port Moresby (Aug. 29–Sept. 24); from Port Moresby (Sept. 25) setting out to Sogeri Distr.; bivouac at Saminumu, as he supposed the rainy season to set in; Nov. 7 he was visited by the Special Commissioner, abandoned everything and accompanied the latter to Port Moresby and subsequently to the NE. coast of New Guinea;[6] back at Port Moresby (Dec. 8); back to Sogeri, awaiting the dry season for the intended ascent of Owen Stanley Range; by the endless dragging on, he ran out of money and when the Special Commissioner declared the ascent to be impossible at that time, FORBES decided to make a trip in northern direction: setting out (Dec. 12) in company with CHALMERS (see there), *via* Richardson Ridge to the Baccari River and climbing Justice Fry Ridge in northern direction to the village Kaukari; on account of the disappearance of the guides, forced to return to Sogeri; some excursions in eastern and southern direction; Port Moresby, and sailing (May 3, *1886*) to Cooktown.—*1887. Exploration of the Goldie River:*[7] setting out from Port Moresby (Oct. 1), Goldie River, Mt Wallaby, Annabel Range, Mt Bowdler Sharpe; Savage Club Range, Mt Archer, Mt Ginianumu; the coolies refused to proceed further and F. was forced to return (Oct. 30); back at Port Moresby (Nov. 5).

COLLECTIONS. *Herb. Brit. Mus.:* 1st set, 4654 *nos* (pres. 1879–88); *Herb. Berl.:* 2200 *nos* (coll. 1880–83) + *Brit. N.G.* coll.; *Herb. Edinburgh: Su-*

matra plants; *Herb. Calcutta* (pres. 1879–87); *Herb. Kew:* 489 *nos* (pres. 1881–87); *Herb. Bog.:* from *Java, Sumatra,* (pres. 1881), *Tanimbar Isls* (320 *nos*)[8] and some *New Guinea* dupl.; *Herb. Bot. Inst. Fac. Sci. Lisbon; Herb. Melbourne, Herb. Leyden* (5th set, 1350 specim. purch. 1884), *Singapore,* DE CAND. (*Geneva*), *Florence, N.Y. Bot. Gard., Paris* (*N.G.* dupl.); *Herb. Bot. Gard. St Petersb.* (= *Leningrad*): 2 *Java* + 2 *Sumatra* plants; GRAY *Herb.* (Cambr., Mass.).

26 Original drawings of Sumatran and Javan plants in the Library Bot. Dept Brit. Museum.

Evidently by some mistake many of his *Java* plants were labelled '*South East Java*', whereas he only visited the *western* part.

During the New Guinea expedition 1885–86, he was assisted by mantri ARSIN (see there) of the Buitenzorg Herbarium and apparently by the plant collector G. G. ANDERSSON too.

The *Timor-laut* (= *Tanimbar*) collections were partly destroyed by fire in the drying-room *in situ;* F. was forced to leave behind part of the *Boeroe* collections owing to the machinations of Mr RIEDEL (see there).

Several papers were based on his collections.[9]

In *Hort. Bog.: Amorphophallus* from Palembang, *S. Sumatra* (pres. *1881*).

LITERATURE. (1) A. FORBES: 'Experiences of a naturalist's wife in the Eastern Archipelago' (London 1887); 'Reizen in den Indischen Archipel' (Tijdschr. Ned. Ind. 17[1], 1888, p. 161–197, 241–282, 365–388).

(2) H. O. FORBES: 'A naturalist's wanderings in the Eastern Archipelago. A narrative of travel and exploration from 1878–1883' (London 1885); transl. into German: 'Wanderungen eines Naturforschers im Malayischen Archipel von 1878 bis 1883' (Jena 1886).

(3) H. O. FORBES: 'Notes from Java' (extr. from a letter in Nature 22, 1880, p. 148).

(4) H. O. FORBES: 'Three months exploration in the Tenimber Islands, or Timor Laut' (Proc. Roy. Geogr. Soc. Lond. N.S. 6, 1884, p. 113–129).

RIEDEL points to several mistakes made by FORBES in the description of Timor-laut in Tijdschr. K.N.A.G. 1884, p. 721–725.

(5) *cf.* 'On attempts to reach the Owen Stanley Peak' (Scott. Geogr. Magaz. Edinb. 1, 1885, p. 401–415); *cf.* also *l.c.* p. 138–144.

(6) *cf.* 'Mittheilungen über die Nordostküste von Neu Guinea' (Nachr. Kais. Wilh. Land 2, 1886, p. 98 *seq.*).

(7) *cf.* Ausland 59, 1886, p. 139, 569–572, 879; 'Attempted ascent of Mt Owen Stanley' (Scott. Geogr. Magaz. Edinb. 4, 1888, p. 138–144).

(8) *cf.* Versl. Pl. Tuin Buitenzorg for 1883, p. 13.

(9) 'List of plants from Timor-laut' (in 'A naturalist's Wanderings *etc.*' *l.c.* p. 354–355); 'Prodromus florae timorensis' (in *l.c.* Appendix, p. 497–523). Both compiled in the Brit. Mus.

TH. DYER: 'Report on the botany of Mr. FORBES' expedition to Timor-Laut' (Journ. Linn. Soc. Bot. 21, 1885, p. 370–374).

cf. also in W. B. HEMSLEY, Report of the Challenger *etc.*, vol. 1, pt 3, p. 101–226.

F. VON MUELLER: *Vacciniaceae* in Journ. Bot. 24, 1886, p. 321 (*New Guinea*); *cf.* also Vict. Naturalist 3, 1886, p. 45–52, 63–64, 71–72.

H. N. RIDLEY: 'On the monocotyledonous plants of New Guinea collected by Dr. H. O. FORBES' (Journ. Bot. 24, 1886, p. 321–327, 353–360).

G. KING: 'On some new species of Ficus from New Guinea' (Journ. As. Soc. Bengal 55, 1887, p. 394–412).

H. O. FORBES: 'On a new species of Boea from New Guinea' (Journ. Bot. 25, 1887, p. 347–348).

H. O. FORBES: 'A new fern from New Guinea' (Journ. Bot. 26, 1888, p. 33, pl. 280).

G. KING: 'Some new species of Ficus from New Guinea' (Ann. Roy. Bot. Gard. Calc. 1, App. 1, 1888, p. 1–9, pl. 226–232).

F. VON MUELLER in Descr. Not. Pap. Pl. 9, 1890 (from Sogeri, Owen Stanley Range, *E. New Guinea*).

R. A. ROLFE: 'A morphological and systematic review of the Apostasieae' (Journ. Linn. Soc. Bot. Lond. 29, 1890, p. 5–6).

F. KRÄNZLIN: 'Orchidaceae Papuanae' (Oesterr. Bot. Zeitschr. 44, 1894, p. 163).

O. WARBURG: some *Sumatra* plants in 'Monsunia' (1900).

SP. LE M. MOORE: new species in Journ. Bot. 52, 1914, p. 289–296.

H. F. WERNHAM: *Rubiaceae* of *New Guinea* in Journ. Bot. 56, 1918, p. 68–77, 129–135.

SP. LE M. MOORE: 'Acanthaceae Papuanae' (Journ. Bot. 58, 1920, p. 79–80).

By the staff of the Brit. Mus.: 'Dr. H. O. FORBES' New Guinea plants' (Journ. Bot. 61, 1923, p. 53–55 and Suppl. p. 1–64); 'Dr. H. O. FORBES' Malayan plants' (*l.c.* 62, 1924, Suppl. p. 1–48; *l.c.* 63, 1925, Suppl. p. 49–136; *l.c.* 64, 1926, Suppl. p. 137–149).

BIOGRAPHICAL DATA. Journ. Bot. 71, 1933, p. 74 (herein the 2nd attempt to reach Owen Stanley Range erroneously mentioned for 1889!); BACKER, Verkl. Woordenb., 1936 (for Mrs FORBES see *sub* annabellae).

Forest Department British North Borneo

Several forest officers and native (Philippine) rangers collected on behalf of this department, *e.g.* L. APOSTAL, ARSAT, BAKER, BAYAK, R. B. CABILING,* CASTRO,* DOMINGO,* J. P. EDWARDS,* B. EVANGELISTA,* T. GOKLIN, H. G. KEITH,* MAIL, MELEGRITO,* MONARKA,* OROLFO,* G. PASCUAL, PUASA,* SULEIMAN, MOH. TAHIR, H. TANDOM, ? ZEANO. Further data about the collectors whose names are provided with an asterisk can be looked up *in situ.*

COLLECTIONS. D. M. MATTHEWS, Conservator of Forests, Govt Br. N. Borneo, sent the 1st set of the collections made by his rangers (1918 →) to *Herb. Manila* which also distributed the duplicates; 2nd set in *Herb. Sandakan;* others in *Herb. Leyden; Herb. Kew*[1] (which sent dupl. to *Herb. Bog.*); *Herb. Berkeley* (Cal.); *U.S. Nat. Herb. Wash.*

LITERATURE. (1) C. E. C. FISCHER and H. N. RIDLEY in 'Contributions to a flora of British

(*) An asterisk refers to a separate entry.

North Borneo' (Kew Bull. 1932 →); H. K. AIRY SHAW in *l.c.*

Forest Department Fed. Malay States, Kepong, Kuala Lumpur. *cf. sub* Conservator of Forests series.

Forest Research Institute, Buitenzorg, Java.

The 'Boschbouwproefstation' was founded in the year 1913. Numerous forest officers, overseers, rangers, *etc.*, in the employ of the D.E. Indian Forest Service, and some others who were not, have made extensive collections (numbering, amount, *etc.* see below) on behalf of this Institute.[1] The more important collectors are: ABAR BIN ADAN (*SE. Borneo 1919–30*); ABAS GELAR ST. SAIDI (*Sumatra West Coast 1933*); ABDOELHAMID (= ABDULHAMID) (*NE. Borneo 1928–31, 1937*); ABDOELLAH (= ABDULLAH) (*N. Sumatra:* Atjeh, Singkel ± *1921*, and Bengkalis *1926*); ABDOELMALIK (= ABDULMALIK) (*Sumatra East Coast 1923; Lingga Archipelago 1933, 1937–38, P. Singkep etc.*); ABDOELMOEIN (*S. Sumatra:* Lampong Distr. *1924–25, 1939*); ABDOELWAHAB (*cf.* also WAHAB) (*S. Sumatra:* Palembang *1936*); ABID (*Sumatra West Coast 1934*); ABOE BAKAR (*Sumatra East Coast 1939–40*); ABOE HASAN (*S. Sumatra:* Lampong Distr. *1924–26, 1941;* Palembang *1925*); ABOE OEMAR (*Java:* Blora *1928; SE. Borneo 1934*); ABOESENO (*Java:* Rembang *1927*); ABRAM (*W. Borneo 1933*); ACHMAD (*W. Borneo 1924–26, 1939–40*); A(C)HMAD (*Soembawa 1926–27*); ADAM (*Sumatra East Coast 1925*); ABD. ADJIZ (*Java:* Soekaboemi *1937*); ADMINISTRATEUR LOKKIBEDRIJF (*W. Ceram 1938–39*); AHMAD (*cf.* ACHMAD); F. AJAT (*NE. Borneo 1937–38*); ALAMSJAH (*Sumatra West Coast 1925; Riouw Arch. 1933; N. Sumatra:* Atjeh *1940*); MOH. ALFIAH (*Sumatra:* Palembang *1921–22*, Djambi *1927–30*); ALI (*Sumatra East Coast 1926);* MOH. ALI (*S. Sumatra:* Palembang *1930; P. Saleijer 1937; Centr. Celebes:* Poso *1940*); ALI DJEMAR (*S. Sumatra:* Palembang *1925*); T. ALI SILANG (*N. Sumatra:* Atjeh *1926*); ALIMOESA (*S. Sumatra:* Lampong Distr. *1925*); ALWI (*S. Sumatra:* Palembang *1925*); AMAT (*Riouw-Lingga Arch., e.g. P. Singkep 1921–24; Bengkalis,* E of Sumatra *1928, 1937–38*); W. F. H. VAN AMEROM* (*Java 1934–37*); AMIN (*W. Borneo 1938–40*); AMIROEDDIN (*N. Sumatra:* Atjeh *1937*); ANANG* (Hollandia, *N. New Guinea 1939*); ANANG ATJIL (*SE. & NE. Borneo 1919–21, 1926–35*); ANANG KADERI (*SE. Borneo 1934–36, 1940; P. Laoet 1940*); J. H. ANDOETOE (*N. Sumatra:* Atjeh, *1927–30*); H. ANDREAS (*SE. & NE. Borneo 1932–34*) [1b]; ANHALI (*W. Java:* Djampang Koelon *c. 1922*); S. M. ANSAR (*S. Sumatra:* Palembang *1937–38*); ANTA (*cf. sub* ASDA(T)); F. J. APPELMAN* (*W. Java 1933–34*); ARIFIN (*Sumatra West Coast:* Agam *1922; SE. Borneo 1927; W. Borneo 1933, 1940*); ARIS (*E. Java:* Djember *1935*); MOHD. ARSAD (*S. Sumatra:* Palembang *1925*); ASDA(T)* & ANTA (*Soela Islands 1939*); ASGAR (*W. Java:* Buitenzorg *1937; W. Sumatra:* Tapanoeli *1938*); ASNAWIGANA (*W. Java:* Buitenzorg *1939*); ATANG (*Soembawa 1929–30*); ATIN (*Sumatra West Coast:* Painan *1922*); ATMOESOEWARNO (*SE. Borneo 1926*); ATMOTAROENO (*Centr. Java:* Bandjarnegara *1933*); BABAK (*Sumatra West Coast 1921–23*); MOHD. BACHMID (*N. Celebes 1938*); BADOET (*W. Java:* environs Soekaboemi *1923*); BADROEN (*SE. Borneo 1921–22*); BADROEN (with WAROUW in *N. Sumatra:* Langsa, Atjeh *1921–22*; *Sumatra East Coast 1925–27*); ST. BAGINDA (or BAGINDO) (*Sumatra:* Tapanoeli and West Coast *1924*); BAHAROEDIN (*N. Sumatra:* Atjeh *1928*); BAHEN (SAMOSIR) (*Sumatra East Coast 1939–41*); BAHOESIN (*Sumatra:* Djambi *1928–30*); BAKAROEDDIN (*Sumatra West Coast 1925, 1933–36*); A. C. BAKHOVEN (*W. Sumatra:* Tapanoeli *1936*); BAKRI (*Billiton 1928*); BAKRI BIN SJAHDEN (*SE. Borneo 1921–22*); BALDOEIN (*Bengkalis,* E of Sumatra *1926*); BANDARO SATI (*Sumatra West Coast 1922–23*); H. B. BARENDS (*Sumatra East Coast:* Langkat *1923–25*); H. BASJAROEDDIN (*Sumatra:* Djambi *1941*); BASOENG (*Sumatra West Coast 1922*); J. BASTIAAN (*Sumatra:* West Coast *1922–24*, and Tapanoeli *1939*); I. BAWA (*Bali 1929*); BAWOEK (*Centr. Java:* Tjilatjap *1938*); A. BECK (*W. Borneo 1931–36*); H. J. L. BECK (*S. Sumatra:* Palembang *1913–15*); J. H. BECKING* (*Bali 1920; W. Borneo 1920; Java 1920, 1928*); BEEKMAN (*W. Java:* Buitenzorg); VAN BEEM (*Sumatra East Coast 1932*); F. DE BELL (*Ambon 1926; W. Ceram 1928–29;* Upper Digoel, *Dutch S. New Guinea 1930*); J. H. VAN BEMMEL (*Timor 1923–24*); L. G. DEN BERGER* (*Java 1917–18*; Sambas, *W. Borneo c. 1924; SE. Borneo 1925–26*); BERKHOUT (*E. Java:* Kediri *1918*); J. G. B. BEUMÉE* (*Java 1917–18, e.g.* G. Merapi *1918*); A. J. BEVERSLUIS* (*P. Boeton 1920;* Hollandia, *Dutch N. New Guinea 1927*); A. T. J. BIANCHI* (*W. Borneo:* Sambas *1927*); BINOE (*N. Sumatra:* Atjeh, Singkel *1923*); F. CH. J. BISH* (*Centr. Celebes:* Donggala and Paloe *1932–34; SW. Celebes 1935–37*); G. R. BISH (*N. Celebes:* Minahassa *1923*); S. BLOEMBERGEN* (*W. Java 1939; Timor, Wetar, Centr. Celebes* (Paloe) and *Soela Islands* in *1939);* P. BLOK (*S. Sumatra:* Palembang *? 1917*); G. M. BLOKHUIS* (*Centr. Java 1922*); H. C. BLUNTSCHLI (*E. Sumatra:* Siak *1922*); A. BOACHI (*S. Sumatra:* Benkoelen *1925, 1929;* Palembang *1930*); ST. BOBOK (*Sumatra:* Tapanoeli *1924,* West Coast *1933–34*); A. H. VAN BODEGOM* (*Sumatra:* Djambi *1931* [1b]), East Coast *1935*); BOEAL POHAN (*NE. Borneo 1928–31* [1b]); *Sumatra West Coast 1933–36; Bengkalis,* E of Sumatra *1937–38*); BOEDIN (*Lingga Arch. 1939–40*); G. BOEDJANG (*W. Borneo 1939–40*); BOEDOET (*Sumatra West Coast 1922–24*); D. BOENGSOE (*Sumatra West Coast 1923–24*); W. A. P. DE BOER* (*P. Boeton 1921; P. Kabaëna* and *SE. Celebes,* Kendari *c. 1922; Sumatra West Coast 1924; Java 1924; SE.* and *NE. Borneo 1935–36; Kangean Arch. 1938*); BOERHAN(OEDDIN) (*SE. Borneo 1926; Riouw Arch. 1926–27; E. Sumatra:* Siak *1927; Sumatra West Coast 1933; SE. Borneo 1938*); BOESRI (*SE. Borneo 1921–23*); BOESTOJAH (*S. Sumatra:* Palembang *1930–40*); H. G. BOKHORST (*S. Sumatra:* Lampong Distr. *1923–25;* Palembang *1930*); BOLELEH (*Sumatra East Coast 1925*); H. BOLUNG (*Centr. Celebes:* Paloe *1939*); BOMBAN (*Sumatra East Coast*

(*) An asterisk refers to a separate entry.

1925–26); H. L. BORGMANN (*E. Sumatra:* Bengkalis *1923*, Siak *1924*); F. J. H. BRAAKSMA (*N. Sumatra:* Atjeh *1924*); J. S. VAN BRAAM* (*SE. Borneo* with LABOHM *1917*); L. F. R. P. C. A. BRANDTS BUYS (*Sumatra East Coast:* Karo Lands *1924*); J. BRINKMAN (*Sumatra East Coast 1925*); W. BROCX* (*E. Java:* Modjokerto *1935*); G. A. M. BRONDGEEST* (*S. Sumatra:* Palembang *1918–19*); J. B. H. BRUINIER* (*Bengkalis etc.*, E of Sumatra *1918–19*); L. F. CH. BUDDING (*W. Java:* Pandeglang *1937; W. Borneo 1937–41*); J. BURER (*W. Java:* Bandoeng *1937; W. Sumatra:* Tapanoeli, *e.g. P. Morsala* and Toba Plateau *1937–38*); N. BURER (*W. Java:* Pandeglang *1937; S. Sumatra:* Benkoelen *1937*); B. C. VAN DEN BURG (*W. Java:* Pandeglang *1937; Ceram 1937*); BURGER (*W. Java:* N. Djampangs *1920*); C. P. BURGHARDT* (*P. Moena 1922–23; SW. Celebes 1925*); A. BURKI (*W. Java:* Bandoeng *1937; SW. Celebes 1937–39*); C. VAN DEN BUSSCHE (*W. Java:* N. Djampangs *1918*); P. BUWALDA* (*P. Bawean 1937; Tanimber & Aroe Islands 1938; Sumatra:* Indragiri *1939*, Palembang *1940; S. Borneo* with NOERKAMAL: Sampit *1940*); CHAIROEDDIN (*Sumatra West Coast:* Pajakoemboh *1922; P. Nias 1923*); CHATIBOE (*SE. Borneo* and *P. Laoet 1938–39*); CHRISTIAAN (*W. Sumatra:* Tapanoeli *1922–24*); CONRAD (*W. Sumatra:* Tapanoeli *1922–24*); W. J. K. CORTENBACH (*Sumatra East Coast 1937–38*); CH. COSTER* (*W. Java:* Tjibodas *1924*, Mr Cornelis *1930*); J. T. COUWENBERG (*Sumatra East Coast:* Asahan *1926*); MOHD. DACHLAN* (*SE. & NE. Borneo* and *P. Laoet 1918–39*); F. DAMANOE (*Timor 1924–27, 1932–33, c. 1938*); G. N. DANHOF (*S. Sumatra:* Lampong Distr. *c. 1937*); DANOESOEGONDO (*Centr. Java:* Wonosobo *1933*); DAOED (*W. Sumatra:* Tapanoeli *1923–24; Soembawa 1926–27; S. Sumatra:* Palembang *1930; Soembawa:* Bima *1934; S. Sumatra:* Benkoelen *1935*); DAROESMAN (*Soembawa 1926–27*); DATOEQ HANAPI (*Sumatra East Coast 1939*); C. N. J. DELMAAR* (*SE. Borneo 1917–21, 1924–25; W. Sumatra:* Tapanoeli, Dairi Lands *1930*); MOHD. DIRAM (*Sumatra East Coast 1925–26*); M. J. DIRKSEN (*S. Sumatra:* Lampong Distr. *c. 1920–21*); DJABAR (*Sumatra West Coast 1934–35*); DJAJANITI (*W. Java:* Priangan Res. *1926*); DJAJASASMITA (*W. Java:* Soekaboemi *1937*); DJALIN (*Sumatra West Coast 1934–37*); DJALIT (*Sumatra East Coast 1925*); DJAM & MARAH-DJOEKON (*Banka 1936*); DJAM BIN DJELIP (*Banka 1938–41*); ST. DJAMARI(E)F (*W. Sumatra:* Tapanoeli *1923–24*, West Coast *1934*); DJAMIT (*SE. Borneo 1927*); DJAMITA PASARIBOE (*Sumatra East Coast:* Karo Lands *1940*); DJAMSARIE (*SE. Borneo 1938*); DJAPAR (*Sumatra East Coast 1939–41*); DJAROKI (*Riouw Arch.:* Karimoen *1936*); DJAWA (*Sumatra West Coast 1930*); R. DJAWA (*Flores 1925–28, 1930–31*); DJAZOELI (*Sumatra West Coast 1922*); R. F. DOELITZSCH (*E. Java:* Kediri *1934*, G. Wilis *1935*); T. H. DOHONG (*SE. Borneo 1940*); DOM (*Sumatra East Coast 1921*); J. M. DOM (*W. Java:* Pandeglang *1937*); DOOP (*cf.* ENDERT); L. J. W. DORST* (*S. Sumatra:* Palembang *1920–24; Lingga Arch. 1932*); DRAAISMA (*SE. & NE. Borneo 1924–25*);[1b] TH. DROOP (*W. Borneo 1939*); A. M. DIJEN (*NE. Borneo 1937–38*); L. J. VAN DIJK* (*Dutch N. New Guinea: P. Japen*, Hollandia, *P. Biak, P. Mios Noem 1939*); J. P. K. VAN EECHOUD* (*Dutch N. New Guinea:* Mamberamo *1939–40*); IBR. EFFENDI(E) (*NE. Borneo 1938–41*); ISH. EFFENDI (*S. Sumatra:* Palembang *1938*); J. G. H. EGGINK (*SW. Celebes 1939*); ELIAS (*Sumatra East Coast 1921*); J. F. EMMEL (*Centr. Java:* Karanganjar *1932*); J. W. C. EMONDT* (*N. Sumatra:* Singkel and Langsa, Atjeh *1914–15*); F. H. ENDERT* (*S. Sumatra:* Palembang, Benkoelen and Lampong Distr. *1917–21; N. Sumatra:* Atjeh, East Coast, Tapanoeli, *P. Morsala* and West Coast *1922; SE. Borneo* and *P. Laoet 1928; W. Java 1930; S. Sumatra:* Palembang *1930; W. & Centr. Java 1931–32; SW. & SE. Celebes* and *P. Boeton 1935; W. Borneo c. 1938*); ERNST (*Sumatra East Coast 1921*); J. F. ERTZINGER (*N. Sumatra:* Singkel, Atjeh *1923*); EXPLOITATIE MIJ W. BORNEO (*W. Borneo 1922, 1927*); D. FANGIDAE (*Timor 1924*); J. H. A. FERGUSON (*W. Sumatra:* Tapanoeli *1931; W. Java:* Soekaboemi *1935; Centr. Java:* Pemalang *1936*); D. FERNANDES (*Centr. Java:* Tjilatjap *1933*); I. FERNANDEZ (*E. Flores & ? Solor Isl. 1931*); G. W. FERNS (*SE. Borneo* and *P. Laoet 1938–39*); CH. FLORENTINUS (*Sumatra East Coast 1925* and *? 1926*); FREDRIKSZ (*N. Sumatra: P. Simaloer 1922*, Singkel in Atjeh *1922*); A. A. FRIJD* (*W. Borneo 1929–31*); ABD. GAFAR (*S. Sumatra:* Palembang *1930*); GAJA (*Sumatra East Coast 1922*); ALB. HOETA GALOENG (*W. Sumatra;* Tapanoeli *1933–35*); GALOENGI* (*Sumatra East Coast:* Karo Lands *1920, 1928, 1938–39*); GAMALIEL (*W. Sumatra:* Tapanoeli *c. 1921*); GANIH (*S. Sumatra:* Lampong Distr. *1935–36*); GARICH (*S. Sumatra:* Lampong Distr. *1939*); GAROGA PASARIBOE (*N. Sumatra:* Atjeh *1924, 1926*); W. GASPERSZ (*Centr. Java:* Blora *1940*); J. GEELS (*SW. Celebes 1929*); F. G. GEERLINGS (*NE. Borneo 1938, 1941*); J. P. L. GELPKE (*Centr. Java:* Wonosobo *1937*); R. GELSING (*SW. Celebes 1929*); GERDENG (*W. Sumatra:* Tapanoeli *1922*); H. H. GEUL (*Centr. Java 1934*); GIMIN (*Bali 1936*); M. VAN GOBEL (*N. Celebes 1934–40*); W. GÖLLER (*E. Soemba 1931*); O. D. GOMA (*Centr. Celebes:* Poso *1939–40*); GONDJO (*N. Sumatra:* Atjeh *1930*); L. GONGGRIJP* (*Centr. Celebes:* Malili *1930; SW. Celebes 1934; E. Java:* Magetan *1940*); A. GOVERS (*Sumatra West Coast 1940*); E. GRESSER (*W. Sumatra: P. Morsala c. 1918*);[1b] H. F. DE GROOT (*S. Sumatra:* Benkoelen *1938–39*); B. J. GRUTTERINK* (*E. Java:* Kediri *1918–26; W. Java:* Soekaboemi *1928; Centr. Java:* Poerworedjo *1929; W. Java 1932*); A. DE GRIJP* (*Timor 1924, 1935–37*); G. A. L. DE HAAN* (*Moluccas: Batjan, Halmaheira, Obi, P. Bisa, Ternate* and *Morotai 1937–38; W. Sumatra:* Tapanoeli *1938–40*); J. H. DE HAAN* (*Centr. Java:* Tjilatjap *1928; E. Java 1935*); ABD. HABAN (*SE. Borneo:* Sampit *1918*); HALIDJENG (*Centr. Celebes:* Malili *1921; SW. Celebes 1936–39*); J. HALLATU (*P. Waigeo(e) 1934; W. Ceram 1935*); ABD. HAMID (*Billiton 1931, 1935*); HAMZAH (*Billiton 1924–27; Sumatra East Coast ? 1925–26*); HAN HIAN GWAN (*E. Java 1934–35*); A. HANJA (*NE. Borneo 1939*); F. H. HANSEN (*Centr. Java:* Tjilatjap *etc. 1931–32*); HARDJAWINATA (*W. Java:* Garoet *1940*); HARD-

JOWIJONO (*Karimondjawa Isls 1928*); C. HARING (*SE. & NE. Borneo 1926–28, 1930*); [1b] HARNADI NATAKOESOEMAH (*W. Java:* Soekaboemi *1937*); HAROEN (or HAROEM) (*Lingga Arch. 1923–24*); A. E. O. VON HARRAS (*Riouw Arch.:* Karimoen *1923*); MOHD. HARRIS (*W. Java:* Pandeglang *1936*, Lebak *1937*, Pandeglang and *Trouwers Isl. 1939*); H. N. J. HART* *Centr. & E. Java:* Blora and Madioen *1928*); MOHD. HASAN (*Billiton 1935*); K. HASIBOEAN (*Riouw Arch.:* Karimoen *1933, 1936*); HASSANOEDIN (*Sumatra East Coast:* Asahan *1924–27*); B. H. TE HASSELOO (*Sumatra East Coast:* Simeloengoen *1936*); HATARA (*S. Sumatra:* Palembang *1940*); E. J. HEIDEMA (*Bengkalis,* E of Sumatra *1938*); G. H. HENAR* (*SE. & NE. Borneo* with *P. Tarakan, P. Mandoel* and *P. Noenoekan 1931–39, 1941*); P. K. HERINGA (*N. & Centr. Celebes: e.g.* Minahassa and Paloe *1921*); [1b] HERMANUS (*Sumatra East Coast 1924*); HERRAN KANDANG (*SE. Borneo 1921–22*); H. L. HEYL (*Dutch N. New Guinea:* Hollandia *1939*); D. HIDIK (*SE. Borneo 1921–23*); HIE A ATJIL (*SE. Borneo 1926–28, 1931*); J. L. HIEMSTRA* (*Sumatra East Coast:* Langkat *1922*); F. H. HILDEBRAND* (*SE. Borneo:* Pleihari about *ult. 1925; Java 1927–41; SE. Borneo* and *P. Laoet 1928*); HOENDOEL (*Sumatra East Coast 1930*); A. H. HOFMAN (*S. Sumatra:* Lampong Distr. *1938*); M. HOLLE (*P. Japen 1935*); HANS HOLUB (*W. Borneo 1925–26*); A. HOORNSTRA* (*Centr. Celebes:* Malili *1925–29, 1933–35*); HOUTHANDEL V. A. COOLS (*NE. Borneo 1932, 1937–39*); H. HUKA (*Ambon 1930, 1933; W. Ceram 1935*); IBRAHIM (*Centr. Sumatra:* Djambi *1925*); IDA BAGOES TOJO (or IDE BAGOES TOJA) (*Bali 1927; W. Lombok 1939–40*); IDRIS (*W. Java:* Buitenzorg *1937; E. Java:* Blitar *1938–40*); MOHD. IDRIS (*S. Sumatra:* Benkoelen *1921–22, 1925; SE. Borneo 1926; Riouw Arch.:* Karimoen *1926*); D. H. IMMINK* (*Java 1918–19*); INDIR ALAM (*Soembawa 1929–30*); INDISCHE HOUT MIJ 'KIARA ROA' (*W. Java c. 1926*); F. IROT (*cf.* PANDE IROOT, ? identical) (*SW. Celebes 1938–41*); M. IRSAD (*E. Java:* Loemadjang *1934–35*); ISKANDAR (*E. Java:* Panaroekan *1935–38*); ISMAIL (*Sumatra East Coast:* Laboean Batoe *1924*; *S. Sumatra:* Palembang *1929; W. Borneo 1934–36*); JACOEB (*S. Sumatra:* Palembang *1919*); G. JÄGER (*S. Sumatra:* Palembang *1937–38*); A. JAHJA (*N. Celebes 1938*); Z. JAHJA (*Riouw Arch. 1932–33, 1936, 1938–39*); W. C. K. JANSEN (*E. Java:* Magetan *1939*); CH. H. JAPING* (*N. Sumatra,* Atjeh: Langsa and Lho Seumaweh *1923,* Takengon *1927*); H. W. JAPING (*E. Java:* Malang *c. 1929,* Kediri *1930*); JASIR (*E. Java:* Malang *1935*); W. E. JASPERS (*Sumatra East Coast:* Karo Lands *1923–25*); MOHD. JATIM (*Sumatra East Coast 1940*); W. C. JESSE (*W. Java:* Djasinga *1927*); JOENG (DJAN) (*Banka 1936–39*); JOENGOES MOKODOMPIT (*N. & Centr. Celebes, e.g.* Toli Toli *1940*); JOESOEF (*S. Sumatra:* Lampong Distr. *1939*); B. DE JONG (*W. Borneo 1924–26;* [1b] *Centr. Java:* Temanggoeng and Wonosobo *1932; E. Java:* Loemadjang *1933*); A. KAHAR (*SE. Borneo 1919–22*); KALIK (*SE. & NE. Borneo, e.g. Tarakan, P. Mandoel 1933–34*); L. G. E. KALSHOVEN* (*Java 1917–19*); KAMAROEDDIN (*N. Sumatra:* Langsa, Atjeh *1940*); P. KAMOELIAAN (*P. Moena 1940–41*); KAMPMAN (*Bali* and *E. Lombok 1927*); KARIM (*Banka 1927*); KARMA (*W. Java:* Priangan Res. *1930*); R. M. KARNO (*SW. Celebes 1936–37*); KARSOEM (*W. Borneo 1933–34, 1938–41*); W. J. J. KARSTEL (*Billiton 1936*); R. KARTADIKOESOEMAH (*W. Java:* environs Soekaboemi *1936–37*); KARTAHAMIHARDJA (*Centr. Java 1932*); KARTAPRADJA (*W. Java:* Doengoes Iwoel *1930*); KARTODIHARDJO (*Centr. Java:* Bodjonegoro *1930–31*); KARTOMIDJOJO (*Centr. Java:* (D)Japara *1929*); MOHD. KASSIM (*Lingga Arch., e.g. P. Singkep 1920–25*); KATARNIDA (*Sumatra West Coast 1922–24* and in *1933–35, e.g.* in *P. Siberoet* (*1933*), *Mentawei*); KAWOENGANTEN (*Centr. Java:* Tjilatjap *c. 1920*); E. B. KIEL (*Sumatra East Coast 1924–25; E. Java:* Ngawi *1929*); F. W. DE KLERK (*W. Java:* environs Garoet *1927*); W. M. KLEYN (*SE. Celebes:* Kendari *etc. 1928*); [1b] R. B. A. VAN DER KLIP (*N. Sumatra:* Atjeh *1935–36*); KOESNOE (*E. Java:* Djember *1941*); M. KOESNOE (*W. Lombok 1936, 1939–40*); [1b] E. KOESNOEN (*W. Java:* Tjinjiroean ± *1933*); KOESOEMOBROTO (*E. Java:* Besoeki *1924*); KOHAR (*S. Sumatra:* Palembang *1925, 1928, 1935–36, 1940*); J. F. KOOLS (*E. Java:* Banjoewangi *1937*); M. J. F. KOOPMAN* (*W. Java:* Pandeglang *1937*); C. VAN DE KOPPEL* (*Centr. Celebes:* subdiv. Sindjai *1922; P. Djampea 1922; SE. Celebes 1922; P. Boeton 1922; E. Celebes:* Banggai *1923*); KOREP (*W. Java:* Pandeglang *1936*); KOSIM (*S. Sumatra:* Palembang *1925*); P. KOSTER (*Sumatra West Coast 1939*); F. KRAMER* (*W. Java:* Priangan Res., *e.g.* Tjiwideh *1919,* G. Gedeh *1922–23*); B. KRUYNE (*E. Java:* Banjoewangi *1932*); E. VAN DER LAAN* (*Centr. Java:* Pati, G. Temoeloes *1928*); J. F. LABOHM* (*SE. Borneo:* Sampit *1916, P. Laoet etc. 1917–19; W. Java:* Garoet *1931*); P. LADAGE (*W. Java:* W. Priangan *1918–32*); LAHARI (*W. Java:* environs Soekaboemi *1923*); N. LALENO (*N. Celebes 1929–30, 1934–38*); L. R. LAMMERS (*Riouw Arch.:* Karimoen *1937; SE. Borneo & P. Laoet 1938*); M. LAMPE (*Lingga Arch. 1927*); G. C. O. LANGSA (*N. Sumatra:* Atjeh *1924*); LT LATUPERISA (*W. Borneo 1930*); C. N. VAN LAWICK (*W. Borneo 1938–39*); LAY ONG SIONG (*Timor 1927*); H. F. LEDEBOER (*Bengkalis,* E of Sumatra *1938*); H. A. L. DE LEEUW* (*W. Java:* environs Soekaboemi *1936–38*); P. H. W. DE LEEUW* (*W. Borneo 1928*); LEMAN (*W. Borneo 1926*); J. A. LIT (*SE. Borneo 1926–27*); LOS (*W. Java:* Plaboean *1921*); LOT OBI (*SE. Borneo 1918–21, 1925–27*); I. LOUISA (*SW. Celebes 1929*); C. W. O. LUCAS (*W. Borneo 1938–39*); W. J. LÜTJEHARMS* (*P. Enggano,* W. of Sumatra *1936*); E. LUNDQUIST* (*NE. Borneo 1933; Dutch New Guinea:* Vogelkop and *S. New Guinea 1941*); A. LUYTJES* (*Sumatra West Coast:* Agam *1921; Sumatra East Coast:* Laboehan Batoe, Asahan and Langkat *1923*); A. B. MACHMOED (*SE. Borneo 1928*); I. MADE DJINGGA (*Bali 1936*); J. MAËNGKOM (*N. Celebes:* Minahassa *1923–24*); ST. MAHARADJA (*W. Sumatra:* Tapanoeli *1924,* West Coast *1924*); A. B. MAHIDIN (*NE. Borneo 1939*); MAHMOED (*Sumatra East Coast 1925*); F. J. D. MAIRUKU (*Centr. Sumatra:* Djambi *1938*); MAKBOEL (*NE. Borneo 1921–22; 1933–35, e.g.* on *Tarakan, P. Mandoel*); D. MALESSIJ (*Ambon & Saparoea, P. Japen, P.*

Misoöl, and Hollandia in *Dutch N. New Guinea 1930; Ambon 1931*); G. M. MALINKA (*W. Java:* Bandoeng *1937; SE. Borneo 1937–40*); F. J. MAMAHIT* (*SW. Celebes 1938–40*); J. MANALOE (*N. Sumatra:* Atjeh *1928, 1936, 1939–40*); ABD. MANAN (*Sumatra East Coast 1925, 1936, 1939*); MANGARADJA GINAGAN (*W. Sumatra:* Tapanoeli *1922–24, 1933*); S. MANGOPANG (*SW. Celebes 1939–41*); W. MANOERANG (*Sumatra East Coast 1939*); MARAH NAPI (*Bengkalis*, E of Sumatra *1919*); MARAHASAN (*S. Sumatra:* Benkoelen *1930–31*); MARASAN (or ?MARATAN) (*W. Sumatra:* Tapanoeli *1933–34*); MARDJOE (*E. Java:* environs of Malang *1933*); ? MAREMAN (*W. Sumatra:* Tapanoeli *1922–24*); MAS MARIKO (*W. Borneo 1933–34, 1939–40*); R. MAROETOE (*E. Java:* Probolinggo *1936*); MARTAÄDMADJA (*W. Java:* Soekaboemi *1935*); MARTIN (*N. Sumatra:* Atjeh *1924–26*); MARTINOES (*Sumatra East Coast 1921*); MARTODIHARDJO (*Centr. Java:* Semarang *1937–38*); MARTOHARDJO (*Centr. Java:* Wonosobo *1933*); R. MARTONO (*E. Java:* Idjen Plateau *1930*, G. Baloeran *1931*, Bondowoso *1934*, Panaroekan *1937–39*, Malang *1941*); MARZOEKI (*SE. Borneo 1926*); F. A. MASOKO (*E. Java:* environs of Djember *1933–35*, G. Raoeng *1934*); J. B. MASSIE (*Centr. Celebes:* Donggala *1931*; *N. Celebes:* Minahassa *1936–39*); A. MATATULA (*P. Boeton 1925; Ambon, P. Rao* and *Morotai 1930; W. New Guinea*, Vogelkop: Fak Fak *1936*); N. MAWEIKERE (*NE. Borneo 1939–40*); MÉHPÉH (*Sumatra East Coast 1921–22*); H. W. MEINDERSMA* (*Centr. Java:* Tjilatjap, *Noesa Kambangan 1920; W. Java:* Bantam *19 . .*; *Centr. Java 1932*); F. L. MENTE* (*E. Java:* environs of Djember *1924*); C. D. MENTEL (*Lingga Arch. 1929; W. Java:* Bandoeng *c. 1931; E. Java:* Djember *1933*); M. MERTOWARDOJO (*S. Sumatra:* Palembang *1924*); MESOERIP (*S. Sumatra:* Benkoelen *1921–22, 1925, 1931, 1937, 1939–40*); L. VAN MEURS (*SE. Borneo 1924–25; Ambon* and *Boeroe 1931*); P. MEYBOOM (*W. Java:* Tjibodas *1920*); E. MEIJER DREES* (*W. Java 1936–37; Dutch N. New Guinea:* Hollandia, Bernhard Bivouac, Roode rivier, *etc. 1938; SW. Celebes 1939; SE. Borneo 1941*); H. G. W. MEYS (*? E. Java:* Bondowoso *1926; S. Sumatra:* Palembang *1931*); P. C. J. MEYS (*E. Java:* ? Bondowoso *1926;* ± *1935*); M. MIFTAH (*W. Java:* Soekaboemi *1934–35*); MINDAM (*Sumatra East Coast 1921*); MOCHTAR (*Centr. Sumatra:* Djambi *1931*); MOECHTAROEDDIN (*SE. Borneo 1926*); PA MOENAH (*E. Java:* Pasoeroean *1934*); R. MOERAH (*Centr. Java:* Tegal *1934*); MOESA (*Centr. Sumatra:* Djambi *1929*); S. MOHA (*N. Celebes 1929; Centr. Celebes:* Donggala *1938*); MOHAMAD (*Sumatra East Coast 1925*); D. MOL (*Centr. Sumatra:* Indragiri *1937–38*); G. A. MOL* (*W. Borneo 1932*); A. MONGULA (*N. Celebes:* Minahassa *1932–34*; *S. Sumatra:* Benkoelen *1936–37, 1940*); P. MONINGKA (*Centr. Celebes 1940*); MONOARFA (*N. Celebes 1929–30*); MONTEIRO (*E. Java:* Malang *1937*); MIJNBOUW MIJ BILLITON (*Billiton 1935*); NAIMOEN (*S. Sumatra:* Palembang *1922, 1925*); M. NAJOAN (*P. Moena*, S of Celebes *1938*); NALANG (*Sumatra East Coast 1925–27*); M. NASIRAN (*W. Java:* Priangan Res. and environs Soekaboemi *1934; Timor 1938*); NATADIREDJA (*W. Java:* Priangan Res. *1926*); NATADIWANGSA (*W. Java:* Garoet *1938*); NATAMIHARDJA (*W. Java:* Tjiandjoer *1937*); NATAPOERA (*W. Java:* Soekaboemi *1937*); NATWIRI(J)A (*W. Java:* Tjiandjoer *1937–38*); R. NETOHARDJO (*Ambon 1934*); NIEUWENBOER (*Sumatra East Coast:* Simeloengoen *1936*); NJA'TJECH (*N. Sumatra:* Koetaradja *c. 1922*); MOHD. NOEH (*Sumatra East Coast 1925–26*); MOHD. NOER (*Centr. Sumatra:* Djambi *1931; Centr. Java:* Banjoemas *1932*); O. NOERHADI (*W. Java:* Soekaboemi *1935*, Garoet *1940*); NOERKAMAL (*cf.* BUWALDA and VERSTEEGH); A. C. NOLTÉE* (*Java 1918*); B. NONI (or NONY) (*Flores 1930–32*); NORMAN (*W. Borneo 1933–35*); M. ODING (*W. Java:* Tjiandjoer *1936–37*); OEDIN (*cf.* ABD. SALIM); OEKOEP (*SE. Borneo 1926–28*); OELO(E)NG (*Sumatra East Coast 1925–26*); OEMAR (*Sumatra West Coast 1922–24, 1933–37*); OEMAR BASAH (*W. Java:* environs Buitenzorg *1931*, Pandeglang and *Trouwers Isl. 1932*); OEMAR HASAN (*S. Sumatra:* Palembang *1935–38*); OENOES (*Riouw Arch.:* Karimoen *1923–24*); P. S. P. OERSIPUNY* (*Boeroe 1936–40*); OESMAN (*Centr. Sumatra:* Siak *1925*, Indragiri *1926; Riouw Arch.:* Karimoen *1927; S. Sumatra:* Palembang and Lampong Distr. *1933; W. Sumatra:* West Coast and Tapanoeli *1934; N. Sumatra:* Atjeh *1934–35; Sumatra West Coast 1935; Lingga Arch.: P. Singkep 1939–40 etc.*); OESMAN NANDIKA (*NE. Borneo 1935–41*); MOHD. OETOEI (*Banka 1924–28; Billiton 1935–38; Banka 1939–41*); OEY DJOEN SENG (*Java:* Mr Cornelis *1930, Centr. Java 1931*, Malang *1931*, Garoet *1932*, Kediri *1932*, Malang *1933*, Soekaboemi and Tjiandjoer *1934–35; Boeroe 1936*); [1b] OEY LIANG HOK (*W. Borneo 1939*); J. F. OLIVIER (*E. Java:* Kraksaän *1921; S. Sumatra:* Benkoelen *1920–22*); F. G. OSTWALD (*N. Sumatra:* Atjeh *1923–25; Sumatra East Coast 1936–37*); P. J. H. OTTEN (*W. Java:* Priangan Res. *1935–37*, Buitenzorg *1939*); PACHMIT (*Banka 1929–31, 1936–39; Billiton 1939–41*); PAKO (*S. Sumatra:* Palembang *1934–36*); A. PALANGKEY (*NE. Borneo 1938*); D. PALIT (*Centr. Celebes:* Poso *1939*); ST. PAMOENTJAK (*Sumatra West Coast 1922–24*); H. F. PANDE IROOT (*cf.* also IROT, ? identical) (*E. Celebes:* Banggai *1939; Centr. Celebes:* Kolonedale *1939*); PANDENGARAN (or PANANGARAN) (*Lingga Arch.: P. Singkep 1932–33; Riouw Arch.:* Karimoen *1941*); M. PANDI (*Centr. Java:* Tjilatjap *1938*); PANDITO(E)KARI (*W. Sumatra:* Tapanoeli *1923–24*); J. PANGGABEAN (*Soembawa 1927, 1929–30, 1934; Flores 1936*); R. M. PANGGABEAN (*Sumatra East Coast 1925, 1927–29, 1939–41*); S. PANGKEY (*NE. Borneo 1938–39*); PARTASASMITA (*W. Java:* Garoet *1940*); PARTODIMEDJO (*Centr. Java:* Rembang *1927*); PARTOWIPARO (*Centr. Java:* Bandjarnegara *1933*); M. PAYER (*Ambon 1941*); PEDERSEN (*W. Java:* Tjiwideh and G. Papandajan *1918*); D. S. PELLO (*SW. Celebes:* Palopo *1940–41*); PERAN (*SE. Borneo 1939*); J. PESIK* (*Centr. Celebes:* Paloe and Donggala *1930–31*, Kolonedale *1933*); PHILIPS (*Sumatra East Coast 1926*); M. S. PIETERS* (*S. Sumatra:* Lampong Distr. *1921–22*); E. K. PLASSCHAERT* (*E. Sumatra:* Kampar Distr. *1914; N. & W. Sumatra:* Atjeh and Padang Highlands *1914*, Tapanoeli and *? P. Morsala 1915*); D. H. POELMAN (*Banka 1924*);

POELOENG SOEGONDO (*NE. Borneo 1939*); ABD. POETIH (*Sumatra East Coast 1939*); ADR. POHAN (*Sumatra East Coast 1940*); B. POHAN (*cf.* BOEAL POHAN); POLIN PASARIBOE (*W. Sumatra:* West Coast *1923–25*, Tapanoeli *1924*); W. POLITON (*Centr., E. & N. Celebes 1940–41*); PRAWIRODIHARDJO (*Centr. Java:* Rembang *1927*); A. DE RAAD (*E. Java 1934–35*); P. RABOE (*SE. Borneo 1921–22*); A. RACHMAN (*cf.* RAHMAN); AMIR RADJAB (*Sumatra East Coast:* Langkat *1923*); RADJAMIN (*Bengkalis,* E of Sumatra *1937*); RADJO AMAT VAN HENTRI (*Centr. Sumatra:* Djambi *1939–40*); H. RADJO MELANO (*Lingga Arch. 1923*); B. RAË (*Flores 1930–31*); TH. RAHM (*W. Soemba* and *P. Roti 1923; Timor 1924*);[1b] A. RAHMAN (*S. Sumatra:* Djambi *1920*, Palembang *1921*, Benkoelen *1921; Lingga Arch.: P. Singkep 1922; Sumatra West Coast 1934, 1938*); RAM(A)LI(E) (*SE. Borneo 1918–20, 1926–27, 1929–31; W. Sumatra:* Tapanoeli *1933*); W. RANTEGAOE (*SW. Celebes 1938; SE. Celebes 1940–41*); ABD. RAOEF (*S. Sumatra:* Benkoelen *1931*); RAPII (*Centr. Sumatra:* Djambi *1939–40*); F. W. RAPPARD* (*S. Sumatra:* Benkoelen *1935–36*); RASAD (*W. Sumatra:* West Coast *1922–23*, Tapanoeli *1924*); M. RASDI (*Centr. Java:* Pekalongan *1937*); ABD. RAS(J)ID (or RASHID) (*SE. Borneo 1918–21*); MOHD. RASJID (*Sumatra East Coast 1925*); L. RENWARIN (*S. Sumatra:* Palembang *c. 1915*, Benkoelen *1921–23* and *1925*); H. N. REPPIE (*Centr. Celebes:* Malili *1931–35; SW. Celebes 1933–38; SE. Celebes 1938–40; SW. Celebes 1940–41*); L. H. RIKKEN (*SE. Borneo 1938–39*);[1b] RIPIN (*W. Sumatra:* Tapanoeli *1924*); J. M. RIUPASSA (*SW. Celebes 1938–39*); E. C. RODERKERK* (*S. Sumatra:* Benkoelen *1940; Sumatra East Coast 1941*); J. W. ROELOFFS (*N. Sumatra:* Takengon, Atjeh *1927–28; E. Java:* Kediri *1933*, Blitar *1935*); ROESLAN (*SE. Borneo 1934*); J. ROLDANUS (*Centr. Java:* Poerwokerto *1936*, Banjoemas *1937*); J. VAN ROOSENDAAL (*Centr. Java:* Blora *1928*); ROPI (*S. Sumatra:* Palembang *1925, 1935–36*); F. RORINGPANDEY (*N. Celebes:* Gorontalo *1924*, Minahassa *1932–37* and *1940–41*); SAÄMAN (*Billiton 1939*); F. J. P. SACHSE* (*W. Ceram c. 1919*); SAHAROEDIN (*SE. Borneo 1927*); SAHIBOE (*W. Sumatra:* Tapanoeli and West Coast *1923–24*); A. S. SAID (*Flores 1926*); SAIDI NAÄMIN (*Sumatra West Coast 1922–23*);[3] M. SALEH (*S. Sumatra:* Lampong Distr. *1925–26; Soembawa 1926–27; Flores 1930–32*); SALIH (*Sumatra West Coast 1923*); ABD. SALIM & OEDIN (*W. Java:* Priangan Res. *1929*); MOHD. SALIM (*N. Sumatra:* Singkel, Atjeh *1923*); Z. SALVERDA* (*W. Ceram 1935; W.* (Vogelkop) *& Dutch S. New Guinea 1936–37; Ambon, W. Ceram* and *SW. Celebes 1940*); SAMBA (*W. Java:* Soekaboemi and environs *1935–36*); E. SAMEL (*E. Celebes:* Banggai *1939–40*); SAMETHINI (*Bengkalis,* E of Sumatra *1926;*[1b] *Riouw Arch. 1927*); SAMIAN (*Lingga Arch. 1925*); A. B. SAMIOEDIN (*NE. Borneo 1938*); SAMUELS (*S. Sumatra:* Palembang *1924*); SARDJO MARTOSOEDIRO (*Centr. Java:* Brebes *1936–37*); SARI (*Bengkalis, P. Roepat, etc.*, E of Sumatra *1938–39*); SARIP (*Billiton 1922*); SASTRAÄTMADJA (*W. Java:* Tjiamis *1934*); SASTRO SOEWONDO (*Bengkalis etc.*, E of Sumatra *1919*); SASTROATMODJO (*Bali 1927, 1929*); SASTRODIHARDJO (*Lesser Sunda Isls 1923–25: E. Soemba, Timor, Flores, Solor, Soembawa, Alor, Wetar, Roma, Bali; Bali 1927*); ST. SATI (*W. Sumatra:* Tapanoeli *1924*); SCHILLING (*cf.* EXPL. MIJ W. Borneo); W. C. R. SCHNEPPER* (*S. Sumatra:* Benkoelen *1925* or *'26; W. Java 1931* and *1935*); F. K. SCHOLTEN (*E. Java:* Kediri *1933–34*); F. A. SCHRADER (*Banka 1920–21; S. Sumatra:* Palembang *1921* and *1924*, Benkoelen *1931*); E. J. SCHREUDER (*Bengkalis,* E of Sumatra *1938; Sumatra East Coast:* Toba *1941*); J. P. SCHUITEMAKER* (*W. Borneo 1929–32; W. Java:* Buitenzorg *1937*); SCHUMM (*cf.* EXPL. MIJ W. Borneo); SEM (*Sumatra East Coast:* Karo Lands *1922–24*); SEMEROE (*SE. Borneo 1921*); J. CH. B. SENFF (*Bali 1932–33*); SENGOET (*Sumatra East Coast 1925*); MOHD. SENIN (*S. Sumatra:* Palembang *1930*); M. SEWANDONO (*E. Java:* Madioen Res. *1934–35; Bengkalis,* E of Sumatra, and the opposite mainland *1936–37*); J. SIAHAAN (*W. Sumatra:* Tapanoeli, Dairi Lands *1931*); W. SIEGERS (*W. Ceram 1930*); A. SILO (*SW. Celebes 1939–41*); SIMANDJOENTAK (*Lingga Arch.: P. Singkep 1941; Sumatra East Coast 1941*); K. SIMATOEPANG (*Bengkalis,* E of Sumatra *1938*); P. SINAIJ (*SE. Borneo 1938*); A. H. SIREGAR (*Sumatra West Coast 1930; Mentawei Isl. 193 .*); ANDR. SIREGAR (*Sumatra East Coast 1940*); N. SIREGAR (*Sumatra East Coast 1938–40*); P. F. SIREGAR (*Sumatra East Coast 1941*); E. SITORANG (*Sumatra East Coast 1921*); SJAFEI (*S. Sumatra:* Benkoelen *1930*); SJAHBOEDIN (*Sumatra East Coast 1940*); SJAMSOEDDIN (*Sumatra West Coast 1922–24*);[3] A. SJARADJOE(D)DIN (*SE. Borneo 1939–40*); SJARIF (*Billiton 1922–23, 1928–30*); SOEDARMO (*E. Java:* Malang *1935–38; W. Java:* Buitenzorg *1939*); M. SOEDARSONO (*W. Borneo 1940*); R. SOEDJONO (*Riouw Arch. 1938*); M. SOEKANDAR (*E. Java:* Malang and environs *1933–37*, Ngawi *1939*); M. SOEKARMAN (*Bali 1927; N. Celebes 1931–32; E. Java:* environs Djember *1933–35*); SOEKAWIONO (*W. Java:* Pandeglang *1937*); SOEKOEN (*N. Sumatra:* Atjeh *1926*); SOEKOWIONO (*Bengkalis,* E of Sumatra *1929–30, 1933*); SOELA (*Flores 1926*); G. SOELAIMAN (*W. Borneo 1930, 1932–33, 1937, 1939–40*); SOEMADI (*Centr. Java:* Pati *1928*); SOEMADJI (*Riouw Arch.:* Karimoen *1924*); SOEMARDI (*SE. Borneo 1938*); SOEMARDJO (*Centr. Java:* Temanggoeng *1932*); SOEMARMO (*E. Java:* Bondowoso *1941*); SOEMAWIRIA (*W. Java:* Lebak *1936*); SOEMINTADIREDJA (*W. Java 1936–37*); SOEMODIMOTO (*E. Java:* environs Malang *1937*); M. SOEMOMIHARDJO (*Centr. Java:* D(J)apara *1929*); SOEPARMAN (*Bengkalis,* E of Sumatra *1919*); SOEPOMO (*NE. Borneo 1937–39*); R. M. SOERACHMAT (*E. Java:* Djember *1933–35*); SOERADINATA (*W. Java:* Buitenzorg *1936*); A. SOERADIREDJA (*W. Java:* Tjiandjoer *1937*); SOERATMAN (*Bengkalis,* E of Sumatra *1919; SE. Borneo 1938*); SOERIA (*W. Java:* Segaranten and Djampang Tengah *c. 1922*, other localities *1931*); R. SOERIAKOESOEMA (*W. Java:* Lebak *1937*); SOERIAWISASTRA (*W. Java:* Priangan Res. *1926*); SOERI(O)DIKARTO (*SE. Borneo* and *P. Laoet 1920–21, 1927, 1930; P. Noenoekan* near NE. Borneo *1937*); SOETAN BESAR (*Sumatra West Coast 1923–24*); SOETAN PALEMBANG (*Sumatra West Coast 1922–23*); SOETARDJO (*Riouw-Lingga Arch. 1939–40: P. Singkep, Kari-*

moen, etc.); SOETARMO (*W. Java:* Buitenzorg *1936; N. Sumatra:* Atjeh *c. 1937; E. Java:* Kediri *1938; Centr. Java:* Bodjonegoro *1940*); E. SOETISNAWINATA (*SW. Celebes 1939*); M. SOETOMO (*W. Java:* Tjiandjoer and Soekaboemi *1935*); SOEWONDO (*Soembawa 1929–30*); G. H. VAN DER STAR (*P. Saleijer 1937, P. Djampea 1938, SW. Celebes 1939*); H. STEENBERGEN (*Centr. Java:* Grobogan *1938*); H. VAN DER (or DEN) STEENHOVEN (*Sumatra East Coast 1925*); F. K. M. STEUP* (*Centr. Sumatra:* Djambi *1927; N. & Centr. Celebes 1930–34: P. Lembeh,* Poso, *etc.; SW.* and *Centr. Celebes 1936–37*); J. A. STOUTJESDIJK* (*Sumatra West Coast 1931*); W. STÜBER* (*Dutch N. New Guinea:* Hollandia *1927*); M. SUAWAH (*Centr. Celebes 1940*); SUMEIS(E)Y (*SE. Borneo 1935, 1939*); CHR. SUMENDAP (*Centr. Celebes:* Poso *1939–40*); F. SWART* (*N. Sumatra:* Atjeh *1927; E. Java:* Kediri *1938*); A. B. TADJOEDIN (*NE. Borneo 1931*); B. TAHAR (*Sumatra West Coast 1933–35*); MOHD. TAIB (*Sumatra East Coast 1925–26*); P. R. TALAKUA* (*Timor 1925–29*); M. TAMA (*Sumatra West Coast 1933–35*); D. B. F. TAMBOENAN (*W. Sumatra:* Tapanoeli *1922–23*); TAN KENG WIE (*E. Java 1935–36*); P. TANASALÈ (*SE. Celebes:* Kendari *1923, 1925*); W. TANGKILISAN (*Centr. Celebes:* Poso *1939; N. Celebes:* Minahassa *1941*); H. TANJE (*SW. Celebes 1929*); DJA. BT. TARIS (*W. Sumatra:* Tapanoeli *1924*); J. TETELEPTA (or TETALEPTA) (*P. Boeton 1929; Dutch S. New Guinea:* Upper Digoel *1930; Aroe Islands 1931;*[2] *Dutch N. New Guinea:* Manokwari[2] and *P. Japen 1931*; *P. Kasiroeta* near Batjan *1932; P. Batjan 1932–33; SW. Celebes 1941*); MOHD. THABRANIE (*N. Sumatra:* Atjeh *1922–29*); J. K. (or J. T.) THENU (*SW. Celebes:* Makale and Rantepao *1927*; *Centr. Celebes:* Upper Binoeang *1929*); H. THERIK (*Timor 1923–26*); A. V. THEUNISSEN* (*N. Sumatra:* Atjeh, Singkel *1915;* ? *P. Simaloer, W. Sumatra: P. Morsala 1916,* Tapanoeli *1916–17; Sumatra West Coast:* Fort v. d. Capellen *1923*); A. THORENAAR* (*Java c. 1918; S. Sumatra:* Palembang & Djambi *1920–24*); THUNG PAN SOEY (*SW. Celebes 1937–38*); L. P. THIJSSEN (*Sumatra East Coast:* Karo Lands *1925–26*); H. TICOALU (or TICOALA) (*N. Celebes 1924, 1934*); TIHAL (*Sumatra East Coast 1925–26*); P. TIMMER (*Centr. Java:* Gombong *1922; cf.* also *sub* BEUMÉE); TIRTODIKROMO (*Centr. Java:* Koedoes *1928–29*); TIRTODIMEDJO (*E. Java:* Malang *1935*); K. TIWEL (*SE. Borneo 1921–22*); TJAMPA (*SE. Borneo 1918*); TJIOE KIN TJING (*S. Sumatra:* Palembang *1925*); R. TJIPTOSOESILO (*E. Lombok 1937*); TJOKROSANDJOJO (*Centr. Java:* Rembang *1927*); TJOKROTENOJO (*Centr. Java:* Wonosobo *1939–40*); G. L. TOBING (*W. Sumatra:* Tapanoeli *1922*); O. M. L. TOBING (*SW. Celebes 1938*); T. L. TOBING (*Sumatra East Coast 1941*); TOELAN (*Sumatra East Coast 1925*); A. TOENGGA (*Timor 1927*); H. TOEPAN (*Sumatra East Coast 1921*); TOESIN (*S. Sumatra:* Palembang *1925*); E. P. TOGAS (*SW. Celebes 1937–39*); TRIDOLIN (*Sumatra East Coast 1921*); VAN TUIL (*SE. Borneo 1927*); W. A. M. TUMBEL (*N. Celebes 1933–35, 1940*); JOH. A. ULJEÉ (*W. Borneo:* Sambas *1929–30*); A. UNO* (*N.* and *Centr. Celebes:* Poso *etc. 1930–38*); P. VAN DER VEEN (*Banka 1935*); H. DE VEER (*Sumatra East Coast:* Karo Lands *c. 1923–25; W. Java:* Soekaboemi, G. Gedeh, *1920–21; E. Java 1934–35, e.g.* at Bondowoso); F. A. VERDUYN LUNEL (*S. Sumatra:* Palembang *1923–24*, Benkoelen *1924*, Lampong Distr. and Benkoelen *1926; Centr. Java:* Tjilatjap *1931, 1934–35, 1937*); L. VERHOEF* (*E. Java:* E. Brantas *c. 1928; SE. Borneo* and *P. Laoet 1928–29; W. Java:* Mt Cornelis *1934; N. Celebes 1935*); T. A. VERSLUYS (*Sumatra West Coast:* G. Merapi *1915; W. Sumatra:* Tapanoeli,[1b] *e.g.* Toba and Habinsaran *1916; Sumatra West Coast:* Agam and G. Merapi *1917; P. Siberoet* and *N. Pagai*[1b] *1917*); CH. VERSTEEG (*P. Boeton 1922–23*); CH. VERSTEEGH* (*W. Java:* Bandoeng *1937; Sumatra West Coast 1937–38; Mentawei Islands 1937; Dutch N. New Guinea 1938–39; W. Java 1939–40; E. Java:* G. Idjen, G. Baloeran and Djember *1940;* with NOERKAMAL in *S. Sumatra:* Palembang *1940* and in *SE. Borneo 1941*); H. M. VERWEY (*SW. Celebes:* Pare-Pare *1929*); A. P. VAN DER VLIES* (*SE. Celebes 1938; N. Celebes:* Minahassa *1941*); J. VÖLKE (*Sumatra East Coast 1929, 1937–39*); O. G. VÖLKE (*Sumatra West Coast:* subdiv. Balai salasa *? 1914*); C. N. A. DE VOOGD* (*S. Sumatra:* Lampong Distr. and Palembang *1928–29*, Benkoelen *1931–33; Lesser Sunda Islands 1933–36: Bali, Lombok, Soembawa, Flores, Timor, Soemba*); B. B. VOS (*Flores 1925*); DE VRIES (*N. Sumatra:* Atjeh *1926–27*); WAGIMAN (*Centr. Java:* (D)Japara *1928–29, 1936–38, e.g.* G. Moeria in *1936,* Koedoes *1938*); WAHAB (= ? ABDOELWAHAB) (*S. Sumatra:* Palembang *1925*); I. WAJAN PASEK (*Bali 1935; E. Lombok 1941*); L. TH. WALANGITANG* (*Saleijer group 1922; SW. Celebes 1922–23; P. Boeton 1924; SE. Celebes:* Kendari *1925; P. Moena 1925; N. Celebes:* Minahassa *1928–30; W.* and *Centr. Lombok 1931*); K. WALOEWANDJA (*Soemba 1925*); D. F. WALUJAN (*W. Borneo 1933–39*); G. F. WAROUW (*N. Sumatra,* Atjeh: Takengon *1921,* Langsa *1921–22,* Lho Soekoen *etc. 1925–26; N. Celebes 1927*); WARTA (*W. Java:* environs Soekaboemi *1935*); WATTIMENA (*W. Borneo 1932*); A. G. WATURANDANG (*Centr. Celebes:* Malili *1930–36; SW. Celebes 1933–36; SE. Celebes* and *P. Moena 1936–38; SW. Celebes:* Maros *1938*); O. WEISMANN* (*P. Moena 1936; SE. Celebes 1938, 1941*); P. VON WERNER (*Centr. Celebes:* Mamasa *1935–36*); E. WIDJANA (*W. Java:* Lebak *1941*); P. L. WILTEN (*Centr. Java:* Balapoelang *1924*); WINANTADIPOERA (*W. Java:* Priangan Res. *1926*); W. F. WINCKEL* (*W. Java:* Tjadasmalang, Tjibeber *1918*); E. J. WIND* (*W. Java 1918;* Centr. Java ± *1918*); R. WIND* (*Centr.* and *E. Java 1917–19; N. Sumatra:* Atjeh, Takengon *1926*); W. K. J. DE WIT* (*S. Sumatra:* Lampong Distr. *1921*); V. DE WOLFF (*Sumatra East Coast 1923–27*); C. B. WOLLAND* (*SE. Borneo* ± *1922*); L. VAN WOUDENBERG (*Sumatra East Coast 1923–25*); H. WULLUR (*N. Celebes:* Minahassa *1929–30*); ZAINOEDDIN (*E. Sumatra: Bengkalis 1932–33,* Siak *1933–34; S. Sumatra:* Palembang *1940*); ZAINOELLAH (*S. Sumatra:* Palembang *1925–26*); ZAKARIA (*Centr. Sumatra:* Djambi *1939–40*); P. VAN ZON* (*Sumatra East Coast:* Siak and *Bengkalis 1914–15*); A. ZUIDEMA (*Centr. Java 1933*); C. J. VAN DER ZWAAN* (*S. Su-*

matra: Palembang *1920–25; SE. Borneo 1927–28; Centr. Sumatra:* Indragiri *1929–30; SE. & NE. Borneo 1934–37, e.g.* on *P. Noenoekan 1935*); ZWART (*Centr. Java:* Bagelen *1924*); J. L. ZWART (*Riouw Arch.:* Karimoen *1932–33, 1936*); W. ZWIER (*Sumatra West Coast 1923*);[3] J. VAN ZIJLL DE JONG* (*SW. Celebes 1932–36; Centr. Celebes:* Malili *1933–34; W. Borneo 1937–40*); W. A. ZIJP (*Sumatra East Coast 1916*).

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg;* duplicates in *Herb. Bog.;* partly in *Herb. Leyden* and *Utrecht* too.

The oldest collections originally had private numbers only; as far as possible the specimens were provided with F.R.I. numbers later. Subsequent collections were numbered consecutively, those from *Java and neighbouring islands* with Ja. (= Java) *nos*, those from *other islands* of the D.E.I. with bb. (= bossen buitengewesten) *nos*. In some regions especially complete collections were made, *viz* in *S. Sumatra* with E. and T. *nos* (*cf.* resp. ENDERT and THORENAAR); and from numbered trees in *Sumatra West Coast* with S.W.K. I–III *nos*, from *P. Singkep* (Lingga Arch.) with Ri. I *nos*, from *Billiton* (Distr. Tandjong Pandan) with Blt. I *nos*, from *SW. Celebes* with Cel. I *nos*, from *Centr. Celebes* (Malili) with Cel. II–V *nos*.

The total collections (in Oct. 1942) amounted to: 33128 bb. *nos* (including 1263 ACHMAD, 69 BEGUIN, 662 BRASS & MEYER DREES & VERSTEEGH *nos* which were *not* collected on behalf of the F.R.I.), 5035 Ja. *nos* (incl. 64 BACKER *nos not* collected on behalf of the F.R.I.), 1306 E. *nos* (incl. 110 *nos not* collected in S. Sumatra), 1317 T. *nos*, 51 S.W.K. I *nos*, 30 S.W.K. II *nos*, 35 S.W.K. III *nos*, 194 Ri. I *nos*, 140 Blt. I *nos*, 96 Cel. I *nos*, 56 (99–154) Cel. II *nos*, 301 (200–500) Cel. II *nos*, 180 Cel. III *nos*, 115 (80–194) Cel. IV *nos*, 285 (119–403) Cel. V *nos;* together upwards of 37000 *nos* (including upwards of 2000 *nos not* collected on behalf of the F.R.I.).

These collections, specified as to the various regions of Indonesia, are: *Sumatra:* Atjeh 724 *nos*, Tapanoeli 1071 *nos*, Sumatra West Coast 1671 *nos*, Sumatra East Coast (incl. Siak and Bengkalis) 2155 *nos*, Indragiri 1191 *nos* (incl. 790 BUWALDA *nos*), Djambi 304 *nos*, Benkoelen 982 *nos*, Palembang 3359 *nos* (incl. 90 BUWALDA *nos*), Lampong Districts 420 *nos; P. Simaloer* 16 *nos* (excl. ACHMAD *nos*); *P. Nias* 56 *nos; P. Morsala* 191 *nos; Mentawei Islands* (P. Siberoet) 78 *nos* and (N. Pagai) 5 *nos; P. Enggano* 170 *nos* (incl. 159 LÜTJEHARMS *nos*); *Banka* 472 *nos; Billiton* 442 *nos; Riouw-Lingga Archipelago* 931 *nos* (many on P. Singkep); *Java* 4900 *nos* (incl. some from *Noesa Kambangan*); *Trouwers Isl.* 24 *nos; Noesa Kambangan* (*cf. sub* Java); *Kangean Arch.* 12 *nos; P. Bawean* 63 *nos* (BUWALDA); *Bali* 327 *nos; Lombok* 64 *nos; Soembawa* 224 *nos; Soemba* 83 *nos; Flores* 422 *nos; P. Roti* 2 *nos; Alor* 11 *nos; Dutch Timor* 354 *nos* (incl. 75 BLOEMBERGEN *nos*); *P. Wetar* 123 *nos* (incl. 110 BLOEMBERGEN *nos*); *P. Roma* 6 *nos; Tanimbar Islands* 219 *nos* (BUWALDA); Dutch *W. Borneo* 2191 *nos; S. & SE. Borneo* (exc. P. Laoet) 3419 *nos* (incl. 58 BUWALDA *nos*); Dutch *NE. Borneo* (incl. Koetai distr. and Upper Mahakam) 4277 *nos; P. Laoet* 249 *nos; P. Noenoekan, Tarakan, Mandoel, etc.* 526 *nos; N. Celebes,* Manado Peninsula 780 *nos; Centr. Celebes* 2095 *nos* (incl. 44 BLOEMBERGEN *nos*); *SW. Celebes* 762 *nos; SE. Celebes* 153 *nos; E. Celebes,* Banggai Peninsula 68 *nos; Saleijer group* (incl. *P. Djampea*) 48 *nos; P. Moena* 312 *nos; P. Boeton* (= *Boetoeng*) 191 *nos; P. Lembeh* 13 *nos; P. Morotai* and *P. Rao* (in the latter, 5) 98 *nos; Halmaheira* 170 *nos; P. Ternate* 16 *nos; P. Batjan* 154 *nos; P. Kasiroeta* 9 *nos; Obi Islands* 64 *nos; Soela Islands* 377 *nos* (incl. 308 BLOEMBERGEN *nos*); *Boeroe* 230 *nos; Ceram* 233 *nos* (incl. 161 BUWALDA *nos*); *Ambon* 136 *nos* (incl. 50 BUWALDA *nos*); *P. Saparoea* 6 *nos; Banda* 27 *nos; W. New Guinea,* Vogelkop 657 *nos; Dutch N. New Guinea* (exc. BRASS & MEYER DREES and BRASS & VERSTEEGH, in total 662 *nos* with BRASS) 485 *nos; Dutch S. New Guinea* 195 *nos; Schouten Islands, P. Biak* 254 *nos; P. Japen* 473 *nos; P. Meos* (= *Mios*) *Noem* 55 *nos; P. Misoöl* 16 *nos; Aroe Islands* 261 *nos* (incl. 237 BUWALDA *nos*).

LITERATURE. (1a) For papers published by forest officers *etc., cf.* the journals, 'Tectona', 'Meded. Proefstat. Boschwezen' and 'Het Bosch'.

A very useful book was written by Dr F. H. ENDERT (see there) with keys for the identification of Malaysian trees by means of vegetative characters.

(1b) Numerous typed reports, written in Dutch, are compiled upon the various larger explorations.

(2) *cf.* Typed reports TH. KERN 1913 in For. Res. Inst.

(3) *cf.* Typed report by SCHNEPPER on subdiv. Korintji 1924.

Forestry Bureau, Manila, P.I.

was organized under the American Administration in May 1900.[1] Various employees of this Bureau, and others, have together made extensive botanical collections in the F.B. series, *e.g.* Y. ABACA, ABELLANOS(A), M. ABLAZA, D. ABYERO, ACHACOSO, ACUÑA,* M. ADDURU,* P. ADUVISO, J. AGAMA,* AGUDO, S. AGUILAR (*Mindanao, Luzon*), AHERN's collector (= RAMOS,* *cf.* also QUADRAS), ALAMBRA, B. ALEJANDRO, P. ALFALLA, ALMAGRO (*Basilan*), A. ALOBA, ALTAMIRANO, R. J. ALVAREZ,* ALVIAR, AMARILLAS, ANGELES, D. ANTONIO, P. APALLA, ASPILLERA, D. AUGUSTIN, M. AZURIN, E. S. BACANI, A. BALBIN, BARBER, P. T. BARNES,* C. BARROS, H. BAUTISTA, F. BAWAN, BEA, A. BERNARDO,* BITONIO, BOLANON, THOMAS E. BORDEN,* BORROMEO, J. H. BRIDGES, S. BRIONES, S. BUEN, R. BURNEA, T. CACHERO, CAILIPAN, CALICOSA, CANLAS, CARDONA, C. CASTILLO, CATALAN, CATEBAN, CATIP, CEBALLOS, A. CENABRE, WILLIAM W. CLARK (*Ticao, Masbate, 1904*), V. COLUMNA, CONTRERAS, CORDERO, P. CORTEZ, G. COSTALES, DE LA CRUZ, H. M. CURRAN,* F. DANAO (*Palawan 1914*). F. W. DARLING,* DAYAO, DEFENSOR, N. DENOGA, F. DIAS, DIAZ, DOMINGO,* DULDULAO, ELGINCOLIN, N. G. ELLAGAR, G. ELUMIR (*Mindanao 1921*), P. ESGUERRA, B. and D. M. ESPINOZA, A. ESPIRITU,

(*) An asterisk refers to a separate entry.

ESTABILLO, H. D. EVERETT,* T. FAJATIN, M. FELIX, FERNANDEZ, C. FERRARIS (*Mindanao 1914*), A. F. FISCHER,* J. FLORES, E. FONTANELLA, J. FONTANOZA,* F. W. FOXWORTHY* (princ. B.S. *nos, cf. sub* Bureau of Science), FRANCO,* P. GACAD, G. GAMALINDA, J. A. GAMMILL,* R. and S. GARCIA,* M. GENOVE, GOJAR, C. GOMES, F. GUERRERO* (also B.S. *nos*), GUIEB, G. GUILLEN, A. GUILLERMO, E. HAGGER,* HIERO, P. HINOLAN, HIRRO, HSIA, W. I. HUTCHINSON,* P. IGLEA, JIMENEZ, C. JUNDAK, F. KAPUNO, W. KLEMME,* W. H. KOBBE,* G. J. LABITAG (*Luzon*), O. A. LADIA, T. LAGESCA, LAGUNA, P. LASQUETY, LEAÑO, DE LEON, LEUTERIO, L. LIZARDO, J. LOPEZ, C. MABESA,* E. MADRID, MAGINGI, MAGISTRADO, I. MAGLUYAN, J. MAKIL, MALLONGA, A. MANALO* (*Palawan*), C. MANEJA, MANUEL, MARIANO, MARQUEZ, MASIAS, R. MATAYA, W. M. MAULE,* E. A. MEARNS,* MEDINA, MELLA, MENDOZA, M. L. MERRITT,* A. DE MESA, R. MEYER,* G. MIGUEL, D. P. MIRANDA (*Mindanao*, May–June *1912*), MIRAS, MOLINA, S. MONTERO, J. F. NANO, NATIVIDAD, G. NAVARRO, NERA, NIEBERT, OLIVEROS, M. ORO, OTAÑES* (also B.S. *nos*), OTEYZA, J. G. PACIS, PADUADA, PALMA, E. PARAISO, PARRAS, J. PASCASIO,* PASCUA, I. PASCUAL, M. PATO, N. PEÑAS (*Calayan Isl.*), PHASIS, G. POBLACION, S. S. PONCE,* F. L. PRAY* (*Basilan, Luzon*), D. PRIMO, G. C. QUEZON, T. QUIMPO, C. RABAYA, RACELIS,* RAFAEL, I. RAMIREZ, M. RAMOS,* RAZON, J. REILLO* (princ. B.S. *nos*), C. REYES* (*Luzon 1907*), RIO, J. W. RITCHIE* (low F.B. *nos*), J. ROJAS, C. & F. L. ROLA, T. N. ROQUE, ROSARIO, R. ROSENBLUTH (*Mindoro*, May *1908*), Q. RUIZ, S. SABADO, V. SAJOR,* A. SALAZAR, F. M. SALVOZA,* SANDIQUE, H. SANDKUHL* (*Luzon*, also private and B.S. *nos*), P. SANTOS, SARAYA, SARENO, SELORIO, SEREVO, W. F. SHERFESEE,* R. SIMAJON, F. SIRIBAN, SOMONTE, M. SORIANO, STADTMILLER,* V. SUAREZ, C. SULIT,* M. D. SULIT,* TAAY, TABAT (*Luzon*), M. A. TAMAYO, TAMESIS,* TARROSA (or TARROSO), T. TECSON,* TOMELDAN, TOPACIO, TORRIBLE, P. TUNGOL, TUPAS, UDASCO, M. UNGO, VALDERRAMA, N. VALENCIA, P. VALENTIN, VALERA, VELASCO, P. VERGARA (*Panay, before 1915*), B. VIDAO, VILLAMIL,* E. VILLANUEVA, W. H. WARE* (low F.B. *nos*), R. F. WENDOVER (*Sulu Islands*), H. N. WHITFORD,* G. S. VAN WICKLE,* D. D. WOOD,* H. S. YATES,* J. ZALDUA, Z. ZAMBRANO, G. ZAMUCO, T. C. ZSCHOKKE.* Further data about the collectors whose names are provided with an asterisk can be looked up *in situ*.

COLLECTIONS. *Herb. Manila*, in 1926 already 29.000 numbered specimens in the F.B. series; all a total loss, as the Japanese set the buildings on fire in 1945. Dupl. in *Herb. Berkeley* (Cal.), *N.Y. Bot. Gard.*, *U.S. Nat. Herb. Wash.*, in GRAY *Herb.*, *Herb. Arn. Arbor.*, *Edinburgh*, *Buitenzorg*, *Kew*, *Leyden*, *etc.*

LITERATURE. (1) *cf.* MERRILL in 'A discussion and Bibliography of Philip. Flow. Plants' (= Enum. Philip. Fl. Pl. vol. 4) 1926, p. 54; and Philip. Journ. Forestry 2, 1939, p. 1–7, pl. 1.

Forrest, Thomas

(1729–1802), an English sea-farer who was instructed by the English E.I.C. to make a voyage to the Malay Archipelago, in order to bring nutmegs and young nutmeg trees to Balambangan (N of Borneo); at his arrival the latter settlement had been deserted, however.

He is commemorated in the genus *Forrestia* A. RICH.

ITINERARY. *Voyage in the 'Tartar-galley', 1774–76.*[1] Sailing from *Balambangan* (N of Borneo) (Nov. 9, *1774*); *Cagayan Sooloo* (= *Cagayan Sulu*) (11–12); *Sooloo* (= *Sulu*) (17–18); *P. Tonkil* (20–21); *Moluccas:* Malaleo (on *P. Tappa*, Latalata Str., Nov. 30), *P. Mandioli* (Bissory, Nov. 30–Dec. 2), *P. Bally* (Dec. 4), *P. Selang* (S of Batjan) (6–7); *Papua Islands: P. Gag* (12), Manafouin (= ? Minjaifoen), *P. Tomoguy*, Batang Pally (= prob. *P. Batangpele*), Manafouin (sailing from there Jan. 7, *1775*), *Waigeo(u)* (Offak, 10–11), *Ajoe Isls* (15–21, visiting *Aïou Baba* and *P. Abdon*); *NW. New Guinea:* Bay of Doré (Jan. 27–Febr. 18); *Papua Islands: Waigeo(u)* (Rawak, Febr. 23–24), *P. Manouaran* (= *Manoeran*), *Waigeo(u)* (Piapis, Febr. 26–March 2), *P. Een* (3), *P. Kanari* (13), *P. Ef-Be* (= *Jef Bie*) (14–30), in the latter period touching at *P. Misoöl* (*e.g.* at Linty = Lelintah) too, *Kanari Isls* (Apr. 2–8); *Moluccas: P. Eye* (= *Ai*) (12), *P. Syang* (= *Sajang*) (13–14), *P. Eye* (= *Ai*); *Talaud Islands:* Leron on *P. Salibabo* (= Liroeng on *P. Salebaboe*) (22–24); *Serengani* (= *Sarangani*) *Islands* (29–30); along the S. coast of *Mindanao* (*Philippines*), staying in the island: river of Mindanao (or R. Pelangy, May 7–Jan. 7, *1776*) and visiting some islands in Illana Bay: *P. Ebus* and *P. Bunwoot;* Kamaladan (Jan. 12); Bankoogan (17); *via Sooloo;* along the northeast, anchoring between Banguey and Balambangan Island (27), finding the latter island deserted by the English; along the north and west coast of *Borneo* (Brunei): mouth of the Borneo River (Febr. 9–26); along the Anambas Isls (March 6) to the *Malay Peninsula:* Malacca (March 13–14); Queda (29–30); *Sumatra:* road of Atcheen (April 13–16), Siddo (19–. .), Bencoolen (Fort Marlborough) (end of June); and back to England.

COLLECTIONS. ?

LITERATURE. (1) TH. FORREST: 'A voyage to New Guinea and the Moluccas, from Balambangan. To which is added a Vocabulary of the Magindano Tongue' (London 1779, w. portr.); transl. into French: 'Voyage aux Moluques et à la Nouvelle Guinée, fait sur la galère la Tartare en 1774–76, par ordre de la Compagnie Angloise' (Paris 1780).

FORREST gives an account of Sumatra and Celebes in his book: 'A voyage from Calcutta to the Mergui Archipelago, *etc.*' (London 1792).

BIOGRAPHICAL DATA. BUCKLAND, Dict. of Ind. Biogr., 1906; BACKER, Verkl. Woordenb., 1936.

Forsten, Eltio Alegondas

(1811, Middelburg, Z., Holland; Jan. (or ? June) 3, 1843, Ambon, Moluccas), zoologist who took his medical degree in 1836;[1] in 1838 elected member of the 'Natuurkundige Commissie' (Commission for Natural Sciences) for the D.E.I., in which

region he made especially ornithological collections. In Sept. 1839 he temporarily filled the post of Director of the Natural History Museum at Batavia; in the beginning of 1840 he set out to Celebes in company with H. VON GAFFRON.

Several plants were named after him.

ITINERARY.[2] *W. Java:* arrival at Batavia (Dec. 14, *1838*); settling at Buitenzorg, making excursions in the neighbourhood, climbing G. Pangrango with JUNGHUHN (Apr. 1, *1839*). He is cited in literature as the collector of a plant on *P. Dwars in den Weg* (Sunda Strait) (April *18* . .).[3]—*NE. Celebes:* arrival at Menado (March 22, *1840*); Tondano (Apr. 15), making headquarters there; for a year exploring the whole of the Minahassa, visiting: G. Klabat, crater of the Batoe Angoes, Li(e)koepang (Sept. 8–9), *pr.* Belang (Oct.), Amoerang (Dec.), G. Sopoetan (Dec.), Tomahon (Febr. *1841*); during an intended trip to Gorontalo, he was forced by unfavourable wind to land in the vicinity of *Ternate* (June 19), in which island he was ill for some months, in the meantime sending his hunters some times to *Halmahera;* ascent of the Peak of Ternate; sailing from Ternate (mid-Sept.) to *NE. Celebes* again, making headquarters at Gorontalo; Gulf of Tomini; Apr. 14, *1842* sailing to *Ambon* (collecting at Laha *etc.*) from where in Aug. on a tour of inspection with the Governor of the Moluccas to the *Banda Islands;* to *Ceram* (end of the year, *e.g.* at Piroe), from where transported to *Ambon* on account of illness. It appears that he visited the *Lesser Sunda Islands* too, *viz Sumbawa* (Bima) in *1842*.[4]

COLLECTIONS. Several hundreds of plants in *Herb. Leyden* (incl. some material in alcohol); dupl. *e.g.* in *Kew* and *Herb. Bog.*

Plants described in the works of BLUME and MIQUEL.

A MS. narrative of his travels was found among the personal estate of SCHWANER (see there); present location unknown.

LITERATURE. (1) E. A. FORSTEN: 'De Cedrela febrifuga' (Diss. bot. pharm. medica, Lugd. Bat. 1836).

(2) 'Berigten betreffende de natuurkundige reis door de Res. Menado, Amboina en Makassar' (De Kopiist 1, 1842, p. 681 and 2nd ed. p. 102).

cf. H. J. VETH: 'Overzicht van hetgeen . . . gedaan is voor de kennis der fauna van Ned. Indië' (Leiden 1879) p. 94–99 and 107.

(3) *Viz Tetraplasandra paucidens* MIQ. (*cf.* Ann. Mus. Bot. Lugd. Bat. 1, 1863, p. 4).

(4) *cf.* RENSCH in Mitt. Zool. Mus. Berl. 17, 1931, p. 454.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 52, 1942, p. 385.

Fortune, Robert

(1812 (*not* 1813), Kelloe, Edron, Berwick, Scotland; 1880, Brompton, Scotland), horticulturist, at first in the employ of the Botanic Garden at Edinburgh, in 1842 transferred to the garden of the Roy. Horticultural Society at Chiswick; for the latter Society travelling to China (1843–46) to collect plants.[1] In 1846–48 Curator of the Botanic Garden at Chelsea; from 1848–51 he was sent to China for the 2nd time, now by the E.I.C., with the special object of collecting seeds and plants of tea.[2] In later years he once more visited China (1853–56)[3] and Japan (1858 or 1860–62).[4]

Excellent plant introducer. Author of many



FORSTEN

papers.[5] At his death his entire collection of notes and diaries was destroyed by his family.

Rosa fortuneana LINDL. was named after him.

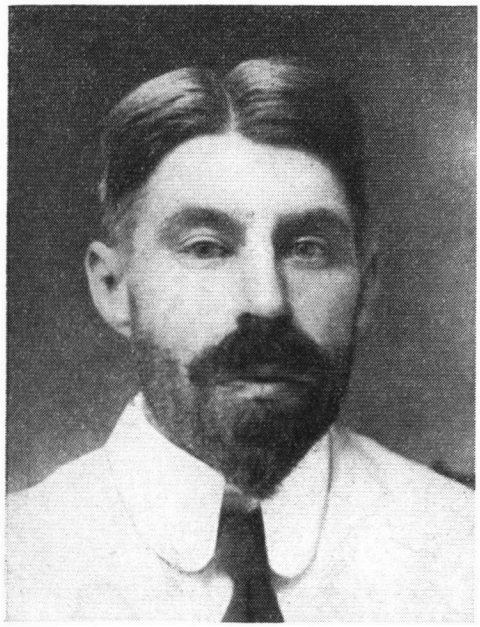
ITINERARY. *1843–46.* On the outward voyage to China, touching at *W. Java:* Anjer (June 15–16, *1843*);[6] from China sailing (beginning of Jan. *1845*) for the *Philippines*,[7] staying a short time at Manila (*Luzon*); visiting Laguna, St. Pablo, Dolores, St. Pablo again, in total spending 3 weeks in the interior, collecting *Phalaenopsis etc.;* leaving again on March 14, returning to China once more; back in London on May 5, 1846.

COLLECTIONS. Living and dried material distributed by the Roy. Hort. Soc.; *Herb. Kew* (pres. 1843–50; and in 1872 with *Herb.* BENTHAM the *nos* 1–182 and A 1–A 327 (1846)); *Herb. Brit. Mus.:* 549 *nos* from China; *Herb. Cambridge; Herb.* DECAND. (*Geneva*): 300 *nos; Herb.* DELESS. (*Geneva*): 53 *nos* (pres. 1846); *Herb. Berl.:* from China and Japan, partly numbered;[8] *Herb.* v. HEURCK (= *Antwerp*): Japanese plants; *Herb. Bot. Gard. St Petersb.* (= *Leningrad*): '*Plantae chinensis*' (200); in *Herb. Vienna* and *Herb. St Louis Miss. Bot. Gard.* FORTUNE's collection of the Roy. Hort. Soc. (coll. 1845, 181 *nos*, mainly from China) was bought by PLANCHON in 1856;[9] now in *Herb. Paris.* Sets of his China plants were offered for sale. The plants cited by MERRILL in Enum. Philip. Fl.Pl.

are without number. In *Java* he is cited to have collected a fine variety of *Dendrobium secundum.*[10]

His letters are at the Roy. Hort. Society.

LITERATURE. (1) R. FORTUNE: 'Three years' wanderings in the northern provinces of China, including a visit to the Tea, Silk and Cotton Countries. With an account of the agriculture and horticulture of the Chinese, new plants, *etc.*' (London 1847); transl. into German: 'Wanderungen in China in den Jahren 1843 bis 1845' (Leipzig 1854).



FOXWORTHY

(2) R. FORTUNE: 'A journey to the Tea Countries of China; including Sung-Le and the Bohea Hills' (London 1852).

cf. also in Athenaeum April 1854.

(3) R. FORTUNE: 'A residence among the Chinese' (London 1857).

(4) R. FORTUNE: 'A narrative of a journey to the capitals of Japan and China' (London 1863).

(5) *cf.* in MERRILL & WALKER, Bibliogr. of East. Asiat. Bot., 1938.

(6) *cf.* Letters in Revue Britannique Nov. 1843, p. 218–222.

(7) *cf.* 'Three years' wanderings' *l.c. sub* 1, Chapt. XVIII, p. 332–345.

(8) *cf.* E. BRETSCHNEIDER: 'On some old collections of Chinese plants' (Journ. Bot. 32, 1894, p. 295–296).

(9) *cf.* Journ. Bot. 32, 1894, p. 298–299.

(10) *cf.* Gard. Chron. 1880[1], p. 488; and Rev. Hort. Belge 6, 1880, p. 272 (footnote).

BIOGRAPHICAL DATA. Journ. Bot. 18, 1880, p. 160; Gard. Chron. 1880[1], p. 487–489; Rev. Hort. Belge 6, 1880, p. 272–274; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 26, 1888, p. 374 and in 2nd ed. by RENDLE, 1931; Rev. Hort. Belge 19, 1893, p. 198–199; BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 403–518; New Fl. & Silva 8, 1936, p. 172–179 (including data on his expeditions and a list of 48 plants introduced by him); BACKER, Verkl. Woordenb., 1936; in E. H. M. COX, Plant-hunting in China, 1945, p. 76–92, portr. pl. 5.

Foston, C.

joined the Forest Department *Malay Peninsula* in 1915 and is still in service; collected in the Federated Malay States only; *cf. sub* Conservator of Forests series, Kepong.

Fox, Walter

(1858, near Liverpool, England; 1934, Shoreham-by-Sea, Sussex, England), trained at Kew, in the service of the Gardens Department Str. Settlements from 1878 or 1879 to 1910, first in Singapore[1] and since March 1903 Superintendent of Gardens and Forests, Penang. He retired in 1910 from ill health; afterwards he undertook journeys to S. America and elsewhere for the purpose of reporting on rubber.

COLLECTING LOCALITIES. *Malay Peninsula. 1893.* Pahang: Pahang River, G. Chini.—*1899. Penang* and Taiping Hills, Perak (Oct.).—*1904.* Kedah, limestone hill G. Geriang (June); *Langkawi Isls* (Dec.).—*1905. Langkawi Isls* (Oct.).

COLLECTIONS. *Herb. Sing.: e.g.* from Pahang (1893) 259 *nos!*

LITERATURE. (1) W. FOX: 'Guide to the Botanic Gardens, Singapore' (1889).

BIOGRAPHICAL DATA. Journ. Kew Guild 2, 1905, p. 227 + portr.; *l.c.* 1935, p. 462–466 + portr.; Gard. Bull. Str. Settlem. 8, 1935, p. 164.

Foxworthy, Frederick William

(1877, Goodland, S of Chicago, U.S.A.; x), botanist, graduated (Dr's degree) at Cornell University in 1904; from 1906–11 Botanist of the Bureau of Science, Manila. He began his study of Philippine timbers in 1906; in 1907–08 he was deputed to Singapore and Borneo; 1908–09 collecting in Borneo; in 1911 transferred to Bureau of Forestry, besides Assistant of the Professor of Dendrology at Manila; in 1918 he joined the Forest Department of the Malay Peninsula (F.M.S.) as Research Officer; in 1932 he retired.

Author of many papers relating to forestry and wood-anatomy.[1]

Several Malaysian plants were named after him.

COLLECTING LOCALITIES. *NW. Borneo*, Sarawak (*1908*): at Lundu (May 10), Niah, Mt Poe (= Poi) (June), Mt Santubong (June), Siol, Kuching, *etc.—Br. N. Borneo:* Mt Kinabalu (March *1910*, summit on the 19th).[2]—*Philippines. Between 1906–17, e.g.* in *Palawan* (May *1906*). He paid a short visit to *Java*, Botanic Garden at Buitenzorg (*1915*).—*Br. N. Borneo* (*1915 or 1916*, with VILLAMIL).—*Malay Peninsula, 1918–32.*[3] *1918.* Negri Sembilan: G. Tampin (May 1, summit, with BURKILL); NW. Johore: Penyabong (May).—*1922.* Pahang: Bentong (Dec. 6); Ginting Sempah (Dec.).

—*1923.* Temerloh Distr. (March); Fraser Hill (Aug. 25–Sept. 18), Klang Gates and the Sungei Buloh Forest (Dec.).—*1924.* Kelantan (Jan. 29–Apr. 7; *cf.* also *sub* MOH. NUR).—*1931. P. Penang* with SYMINGTON (Sept.). Many times around Kuala Lumpur and in Perak.

COLLECTIONS. *Herb. Manila:* 590 *Borneo* plants (1908/09),[4] 286 *ditto* collected with VILLAMIL (see there) (pres. 1916); collections of *Philippine* plants numbered in the B.S. (*cf.* Bureau of Science) and in the F.B. (*cf.* Forestry Bureau) series; large collection of the *Malay Peninsula* (pres. 1920); *U.S. Nat. Herb. Wash.:* 640 dupl. *P.I.;* 92 dupl. *Borneo;* O. AMES *Herb.* (from *Sarawak*); *Herb. Sing.: Borneo* plants (pres. 1908 and 1924); *Herb. Kuala Lump.:* from the *Malay Peninsula,* numbered in the C.F. series; *Herb. Kew: Mal. Penins.* (pres. 1920), *Sarawak* (pres. 1924); also dupl. in *Herb. Berl., Bog., Leyden* (*P.I.*), and *Edinburgh.*

LITERATURE. (1) *e.g.* 'Philippine woods' (Philip. Journ. Sci. C. Bot. 2, 1907, p. 351–404, fig. 1–55); 'Timbers of British North Borneo and minor forest products and jungle produce' (Govt Br. N. Borneo Dept of Forestry Bull. *no* 1, 1916, p. 1–61); 'Mangrove and Nipah-swamps of British North Borneo' (with D. M. MATTHEWS in *l.c.* Bull. *no* 3, 1917, 22 pp.); 'Commercial woods and minor forest products' (in Mal. For. Rec. 1, 2, and 3).

(2) F. W. FOXWORTHY: 'A vacation trip to Kinabalu in Br. N. Borneo' (Sierra Club Bull. 1911, p. 18–34) (*non vidi*). Extract in Sarawak Mus. Journ. 2, 1915, p. 164–165.

(3) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(4) New fern species from *Borneo, cf.* Philip. Journ. Sci. C. Bot. 3, 1908, p. 343–349.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; Amer. Men of Sci. 1938.

Francia, *cf. sub* Bureau of Science, Manila.

Francis, A. B. C.

Resident of the Interior at Tenom, *Br. N. Borneo,* sent a specimen of *Gelsemium sumatranum* GIBBS to Miss L. S. GIBBS (*cf.* Journ. Linn. Soc. Bot. 42, 1914, p. 111).

Francisco, D.

COLLECTIONS. *U.S. Nat. Herb. Wash.:* herbarium of the Insular Bureau of Agriculture, Albay, *Luzon,* collected by him in *1901.*

Franck, C. W.

(1871, Copenhagen, Denmark; x), teacher in natural history at Frederiksberg College, 1900–36; Mag. Scient. in 1920, Senior Master in 1932.

He made three voyages to the East (see below), including Siam (1929, 1937), and the China coast (1937, 1938), from which he brought home collections of plants.

COLLECTING LOCALITIES. *Ist Voyage, 1923–24. Malay Peninsula:* South Johore (Nov. 9–21, 1923); *E. Java:* Djember (Nov. 27, 1923–March 26, 1924), making excursions in the whole of Besoeki; *Malay Peninsula:* South Johore (Apr. 15–May 15, 1924).—*2nd Voyage, 1929–30. Malay Peninsula:* Selangor, Teluk Merbau Estate (Dec. 7–26, 1929); *E. Java:* Djember (Jan. 3–Apr. 7, 1930); *SE. Borneo:* Bandjermasin (Febr. 17–25, 1930).—*3rd Voyage, 1937–38. Malay Peninsula:* Selangor, Teluk Merbau Estate (June 17–Oct. 24, 1937), making excursions to large parts of Negri Sembilan, and southern Selangor, and two small trips to Bt Fraser in Pahang (June 26–28, Aug. 7–9); *Sumatra East Coast:* Prapat (Febr. 9–12, 1938), Brastagi (Febr. 16–23).

COLLECTIONS. *Herb. Copenhagen: c.* 1500 specim.; some dupl. in *Herb. Sing.; U.S. Nat. Herb. Wash.:* 750 from *E. Java* (numbered betw. 3–280) and New Caledonia (must be wrong).

CHRISTENSEN described a new fern, collected in *E. Java.*[1]

LITERATURE. (1) in Dansk. Bot. Ark. 9, 1937, p. 65, *Dryopteris peltochlamys* C.CHR.

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5 (evidently partly wrong).

Franck, P. F.

(† 194 . in prisonercamp in Br. India), was appointed taxidermist of the Zoological Museum at Buitenzorg, W. Java, in Nov. 1922. He accompanied DAMMERMAN (see there) on his Soemba Expedition and during a fortnight's stay in Karimondjawa Islands (N of Java); on his hunting-tours he now and then collected plants, especially for the investigation of the food of *bantengs.*[1] In 1940 he was interned on account of his German nationality and later shipped to Br. India.

COLLECTING LOCALITIES. *Soemba,* with DAMMERMAN (*1925*).—On the border between *W.* and *Centr. Java:* Rawah Lakbok (June *1933*); *E. Java:* Jang Plateau (July 13–21, *1935*);[2] *W. Java:* Tjikepoeh, jachtterrein (preserve) of the hunting-society Venatoria (mid-Aug. 1935 and Apr. 14–18, June *1938*).

COLLECTIONS. *Herb. Bog.:* 180 Java *nos* (pres. till 1938), principally from Tjikepoeh.

Hort. Bog.: a *Spathoglottis* from *Soemba.*

LITERATURE. (1) P. F. FRANCK: 'Waarnemingen over neushoorns en bantengs in het natuurmonument Oedjon Koelon' (Versl. N.I. Ver. Nat. Besch. 1933/34, p. 40–54).

(2) P. F. FRANCK: 'Het Hiang-Plateau als natuurreservaat' (Natuur in Indië 1937, p. 33–41, w. ill.).

Franco, Felix

(1892, Mexico, Pampanga; x), forester, educated at Montana State University (B.S.F.) and at Cornell University (M.F.); District Forester at Baguio, Manila and Naga, Luzon, 1922–27; Chief Division of Forest Management, Bur. of Forestry, Manila, 1928-30; Chief Division of Forest Fauna and Grazing, 1931–32; since 1933 Chief Fish and Game Administration.[1]

COLLECTIONS. ? Identical with the collector in the F.B. (*cf.* Forestry Bureau) series.

LITERATURE. (1) Author of 'Lumbering in

Bataan' (Philip. Agric. and Forester 1, 1911, p. 132–136).

BIOGRAPHICAL DATA. Nat. Research Counc. P.I. Bull. *no* 7, 1935, p. 819, incl. bibliogr.

Fraser, Mrs.

of Buitenzorg, presented plants to *Hort. Bog.* in *1874.*

Fraser, M.

(† 1884 or 1885),[1] murdered by Muruts at Kawang, Br. N. Borneo), Medical Officer of the Br. N. Borneo Co., appointed at Kudat in 1883.

COLLECTING LOCALITIES. *1883–85. Br. N. Borneo:* Kudat, Marudu Bay, *Balambangan Isl.* (N of Borneo), Gaya, Papar, Banggi (= *Banguey* or Panggi) (March 1885).

COLLECTIONS. *Herb. Kew:* 293 *nos* (pres. 1885).

LITERATURE. (1) According to GIBBS in Journ. Linn. Soc. Bot. 42, 1914, p. 2, he was murdered in 1884; this does not correspond with the plant collections, evidently made till March 1885.

Fredriksz, *cf. sub* Forest Research Institute, Buitenzorg.

Fretes, de

a resident of Ambon (Moluccas), descendant of Don RAFAËL DE FRETES and the former Radjahs of Ema.[1]

A certain R. A. DE FRETES, Overseer, and besides President of the District Joint Court at Boero (= ? Boeroe), compiled a list of timbers of Boeroe (with PIKAOLIS, in 1847), mentioning vernacular names only.[2] He may be identical with the collector.

Antiaris fretessii T. &. B. was named after him (Cat. Hort. Bog. 1866, p. 84).

COLLECTIONS. Partly in *Herb. Utrecht,* partly in *Leyden* and *Herb. Bog.;* in the latter herbarium some plants numbered in the H.B. series. He forwarded plants to *Hort. Bog.* from *1865–68,* mainly from *Banda, Batjan, Boeroe, etc.* Several of his plants are described in MIQUEL, Ann. Mus. Lugd. Bat.

LITERATURE. (1) *cf.* Nat. Tijdschr. N.I. 37, 1877, p. 78.

(2) In WILLER: 'Het eiland Boeroe' (Amsterdam 1858).

Frey-Wyssling, Albert Friedrich

(1900, Küssnacht near Zürich, Switzerland; x), plant physiologist, educated at the Technical College, Zürich, and at the universities of Geneva, Jena and Paris (Ph. Dr Zürich 1924); from 1928–32 Botanical Assistant at the General Experiment Station of the A.V.R.O.S. at Medan (Sumatra East Coast); later replaced as University Lecturer and Assistant of the Botanical Institute of the Polytechnical College at Zürich; since 1938 appointed Professor.

Rhododendron frey-wysslingii J.J.S. was named after him; he was the discoverer of some new orchids which were described by J. J. SMITH too.

COLLECTING LOCALITIES. *1929. Sumatra East Coast:* Harangaol on Toba Lake (Dec. 29), 900 m alt.—*1930.* Dolok Pintau near Brastagi (Febr. 26); kp. Baroe near Medan; Dolok Baros; *N. Sumatra,* Gajo Lands: Takengeun (= Takengon or Takingeun) and neighbourhood (June 12–24), collecting in the rice fields, bloekar, and at Paja hilang near kp. Beubasan, on Boer ni Telong (2600 m) (June 16), and Boer ni Popandji (1895 m) (22);[1] *W. Sumatra,* Tapanoeli: Habinsaran (*c.* 1000 m) (Dec. 28).[2]—*1931. Sumatra East Coast:* vicinity of Prapat[3] and Toba Lake (Apr. 1–6); *Sumatra West Coast etc.:* Taroetoeng (in Tapanoeli Res., July 26); Peak of Kerintji (Juli 30–Aug. 4);[4] *Sumatra East Coast:* G. Sibajak, G. Piso-Piso, G. Sinaboeng, Padang Lawas (Dec. 22).[5] In this year he paid a visit to *Java,* but no collecting was done.—*1932.* Returning to Zürich by way of the *Philippines,* Japan and the U.S.A.

COLLECTIONS. *Herb. Bog.:* nearly 300 plants from *Sumatra;* the numbering starting several times with 1, so identical *nos* from different places; the highest number given is 196.

LITERATURE. (1) A. F. FREY-WYSSLING: 'Over de vegetatie van den Boer ni Telong en omstreken in de Gajolanden (Noord Sumatra)' (Trop. Nat. 20, 1931, p. 37–49, 16 fig.).

(2) A. F. FREY-WYSSLING: 'Over de struikwildernis van Habinsaran' (*l.c.* p. 194–198, 4 fig.).

(3) A. F. FREY-WYSSLING: 'Over de oeverflora van Prapat in het Tobameer' (*l.c.* 21, 1932, p. 73–78, 6 fig.).

(4) A. F. FREY-WYSSLING: 'Over de flora van den Piek van Kerintji (3800 m)' (*l.c.* 22, 1933, p. 1–10, 13 fig.).

(5) A. F. FREY-WYSSLING: 'Over de zandsteppen van Kota Pinang ter Oostkust van Sumatra' (*l.c.* p. 69–72, 3 fig.).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936, *cf.* also *sub Addenda;* Neujahrsbl. Naturf. Ges. Zürich for 1947, 149, 1946, p. 108–109 + portr.

Freytag Jr, J. H. W.

since 1882 Acting Surveyor at Ternate, *Moluccas,* sent some natural history objects to the International Exposition at Amsterdam in *1883, viz:* leaves of 'woka' from *Halmahera,* and 4 collections of sea-plants fished up in Kaloemata Strait between Ternate and P. Maitara (*cf.* Catalogue of the exposition p. 125–126).

F.R.I. *nos, cf. sub* Forest Research Institute, Buitenzorg.

Friedmann

COLLECTIONS. *Elaeocarpus sp.* from *Java* (FRIEDMANN *legit 1846*), *ex. Herb.* MARTIUS, in *Herb. Brussels.*

Frij . . ., *cf.* FRY . . .

Froggatt, John L.

of the Department of Agriculture, Queensland, visited the Botanic Garden at Buitenzorg in 1928.

Later Government Entomologist at Rabaul (*New Britain, Bism. Arch.*), and subsequently Director of Agriculture.

COLLECTIONS. *Herb. Kew: New Guinea* plants (pres. 1932 by the Dept of Agr.) and in *Kew Mus.: New Guinea* timbers (pres. 1936); some in *Herb. Brisbane.* He probably only collected plants of direct interest to him.

Froidemont, J. H. de

COLLECTIONS. *Hort. Bog.* (*pr.p.* preserved in *Herb. Bog.*): 10 orchids, collected in *N. Sumatra*, Atjeh, at Langsa, in *1918.*

Frowein, Hans

COLLECTIONS. *Herb. Bog.: Brainea insignis* HOOK. (*Polypodiac.*) collected near Prapat, Toba Lake, *Sumatra East Coast* (Jan. *1934*).

Fruhstorfer, Hans

(1866–1922), from 1888–1905 insect dealer at Berlin, later settled as private collector at Geneva and Munich. He travelled in Ceylon and *Penang* (*1889*), *Java* (*1891/94*), *Celebes*, *Bali & Lombok* (*1895/96*), and besides in N. America, Japan, and in several parts of Asia.

Macromitrium fruhstorferi CARD. is named after him.

COLLECTIONS. He is cited as the collector of 62 *nos* of mosses on the Buakraeng (= Wawakraeng, one of the summits of G. Bonthain) in *SW. Celebes.*[1] This collection includes 12 new species and one new genus. He may have collected in other islands too; up till now no collection of phanerogams is known to us.

LITERATURE. (1) J. CARDOT: 'Note sur deux collections de Mousses de l'Archipel Indien' (Rev. Bryol. 1901, p. 112–117).

BIOGRAPHICAL DATA. W. HORN & I. KAHLE, Über entomologische Sammlungen *etc.* (Entomol. Beihefte II–IV, 1935/37), p. 83.

Frijd, Aage August

(1898, Kalundborg, Denmark; x), 'Boscharchitect' in the employ of the D.E. Indian Forest Service; since 1921 stationed in the teak districts of Java; in Dec. 1928 transferred to W. Borneo, Pontianak; in June 1931 to Sumatra West Coast, Fort de Kock; since 1935 in the teak districts in Java again.

COLLECTIONS. *Herb. Bog.* and *Herb. For. Res. Inst. Buitenzorg:* from *W. Borneo* (*1929–31*), numbered in the F.R.I. series (see *sub* Forest Research Institute).

Frijlinck, F. J.

of Klappanoenggal (near Bekas(s)i), W. Java.

COLLECTIONS. *Herb. Bog.*: > 15 *nos* of plants collected at Tjileungsi and Klappanoengal near Buitenzorg, *W. Java* (*1915*).

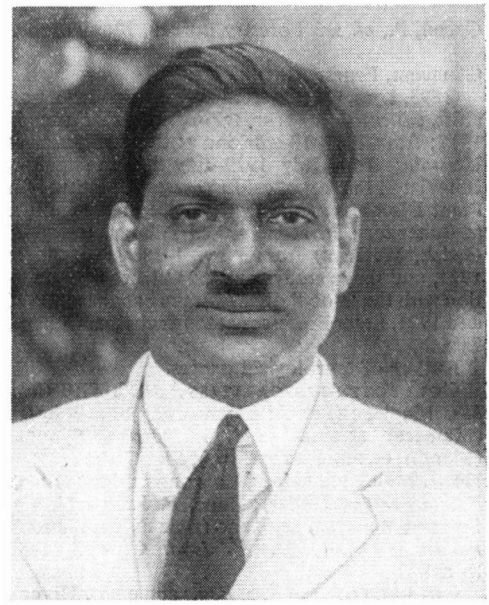
Funke, H. C.

COLLECTIONS. Grasses from Tapanoeli, *W. Sumatra*, coll. *1915*, in *Herb.* Dr P. JANSEN & Dr W. H. WACHTER, which in due time will be incorporated in *Herb. Leyden.*

Furtado, Caetano Xavier Dos Remedios

(1897, Merces, Goa, India; x), since 1919 Assistant Curator in the Gardens Department, Str. Settlements. In the beginning of 1940 he took his Dr Sc. degree at Bombay University.

Author of many papers, especially on nomen-



FURTADO

clature and the systematics of *Palmae* and *Araceae*, for the greater part published in the Gard. Bull. Str. Settlements.

COLLECTING LOCALITIES. *Malay Peninsula. 1919–hodie, e.g.* W. side of Malaya (May 20–June 19, *1937*) and Pontian Distr. of SW. Johore (towards the end of *1939*).—*Br. N. Borneo:* Mt Kinabalu with CLEMENS (see there) (6 weeks, March–Apr. *1932*).

COLLECTIONS. *Herb. Sing., e.g.* from W. side of *Malaya* about 136 *nos;* some dupl. in *Herb. Bog.* He contributed to the Singapore Field (S.F.) Number series.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936, p. 650.

G.W.

These initials stand for the collecting locality G. Windoe, situated in Priangan Res., *W. Java*, and pertain to the collection of SOEGANDIREDJO (see there) whose name several times is not mentioned on the labels.

Gaag, Henk van der

(1926, Schiedam, Z.H., Holland; x), was educated at the Horticultural School at Boskoop; sent out to Indonesia with a regiment of grenadiers in November 1947; stationed successively at Bima

(Soembawa), Makassar and Watampone (Celebes).

COLLECTING LOCALITIES. *1948. Lesser Sunda Islands: Sumbawa*, at Bima (Jan.–May); *SW. Celebes:* Watampone (July–Aug.).

COLLECTIONS. In *private herbarium:* > 56 *nos*, identified at Leyden. The plants are accompanied by nice water-colour drawings.

Gacad, P., *cf. sub* Forestry Bureau, Manila.

Gäumann, Ernest Albert

(1893, Lyss, Canton Berne, Switzerland; x), botanist, educated at Berne, taking his Dr's degree in 1917; from 1917–18 working at the University of Uppsala; from July 1919–July 1922 temporary Botanist in the Botanical Laboratory (Institute for Plant Diseases) of the Department of Agriculture at Buitenzorg, Java. He visited Tjibodas (slope G. Gedeh, W. Java) from Nov. 4–18, 1919 and in 1921, and made study tours to Celebes in connection with the 'blood' disease of the bananas in 1920 and 1921. Later Professor at the Technical College, Zürich.

Author of mycological papers.

COLLECTING LOCALITIES.[1] *1920. SW. Celebes:* Madjene (Febr.); Somararong and Polewali (Mamasa) (Nov.).—*1921. W. Java:* Tjibodas (March); G. Pangrango (May); *SW. Celebes* (May–Dec.): Malakadji (May), Lonrong in Bone (June), *P. Saleijer* (= *Salajar*); Bone, *P. Palette* (Aug.); Makala, Watampone, Rano (near Palopo), and *P. Palette* (Oct.).—*1922. W. Java:* G. Pangrango (May).

COLLECTIONS. *Herb. Bog.:* some *nos*. His collection of cryptogams was presented to *Herb. Berne* in 1918 (so *before* his stay in Java!); in 1923 material in alcohol of *Gnetum*, and *Fungi* of the *D.E.I.*, in 1937 *Fungi* from *Celebes* and *W. Java.*[1]

LITERATURE. (1) J. FISCHER: 'Ueber einige von E. GÄUMANN in Java und Celebes gesammelten Ustilagineen und Uredineen' (Ber. Schweiz. Bot. Ges. 47, 1937, p. 419 *seq.*).

Gafar, Abd., *cf. sub* Forest Research Institute, Buitenzorg.

Gaimard, Joseph Paul

(1793, Saint Zacharie, Dept du Var, France; 1858, Paris, France), surgeon-zoologist of two French expeditions round the world, and on a voyage to Iceland and Greenland.[1]

Humata gaimardianus J.SM. was named after him.

ITINERARY. *Voyage in the 'Uranie', 1817–20. cf. sub* GAUDICHAUD (also for Liter.).—*Voyage in the 'Astrolabe', 1826–29. cf. sub* P. A. LESSON (also for Liter.). In 1828 he was left behind in the hospital at Bourbon, on account of illness.

COLLECTIONS. *Herb. Paris, e.g.* plants collected with QUOI (see there) from the Bay of Doré (*NW. New Guinea*) (1827) and in the Minahassa (*N. Celebes*) (1828).[2]

The zoological results of the 'Uranie' and the 'Astrolabe' were published by him and QUOI. Zoological MSS in Libr. Nat. Hist. Mus. Paris.

LITERATURE. (1) J. P. GAIMARD: 'Voyage en Islande et au Groënland, exécuté pendant les années 1835–36 sur la corvette 'La Recherche'' (Paris 1838–51).

(2) The botanical results of the 'Astrolabe' were published by A. RICHARD in 'Sertum Astrolabianum' (Paris 1834).

BIOGRAPHICAL DATA. In 'Portraits et Histoire des Hommes Utiles' (publ. par la Soc. Montyon et Franklin, Paris 1837) p. 193–196 + portr.; PRITZEL, Thes. Lit. Bot., 1872; A. MUSGRAVE in Bibl. Austr. Ent. 1932, p. 117 (*non vidi*); BACKER, Verkl. Woordenb., 1936.

Gaja, *cf. sub* Forest Research Institute, Buitenzorg.

Galang, *cf. sub* Forestry Bureau, Manila.

Galera

Philippine collector of the Bur. of Science at Manila (see there), collected at Dupax, *Luzon*, in *1911/12.*

Gall, L. A.

in 1937 warrant-officer of the Topographical Service of the D.E.I.

COLLECTIONS. A small collection of mountain plants from the summit zone of the extinct volcano Peëut Sago (Atjeh, *N. Sumatra*) in *Herb. Bog.* (coll. *c. 1937*).

Galoeng, Alb. Hoeta, *cf. sub* Forest Research Institute, Buitenzorg.

Galoengi, Karo-Karo Sinoelingga

a native collector employed by H. H. BARTLETT (see there), who collected in Asahan and Karo Land, *Sumatra East Coast* in *1918;* in Karo Land for LÖRZING (see there) in *1919;* for the Forest Research Institute, Buitenzorg *1920, 1928* and *1938–39.*

COLLECTIONS and LITERATURE. *cf. sub* H. H. BARTLETT. The collection is chiefly interesting from an ethnobotanical standpoint, as GALOENGI recorded vernacular names in his own language; most of the species common lowland types. For LÖRZING numbered > 554. *Herb. For. Res. Inst. Buitenzorg:* from Karo Lands; dupl. in *Herb. Bog.* A dupl. set of coll. 1919, made on behalf of LÖRZING, was presented by the District Officer MIDDENDORP, to *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam* (1920); it amounted to 554 *nos.*

Gamaliel, *cf. sub* Forest Research Institute, Buitenzorg.

Gamalinda, G., *cf. sub* Forestry Bureau, Manila.

Gammill, J. A.

(1868, Panora, Iowa, U.S.A.; x), a schoolmaster who discovered *Pisonia gammillii* MERR. in the island *Guimaras, Philippines*, in *1904* (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. *Herb. Manila:* private and F.B. *nos* (*cf. sub* Forestry Bureau), in *1903/04* 140 *nos*

in *Guimaras Isl.; U.S. Nat. Herb. Wash.:* 132 *P.I.* dupl.; also dupl. in *Herb. N.Y. Bot. Garden.*

Gandrup, Jens Johannes Sörensen

(1882, Aggersborg Rimme, Denmark; Oct. 14, 1943, Malang, Java), botanist, Mag. Scient. (1919); from 1903–20 teacher in natural history; in 1920 appointed on the staff of the Besoeki Experiment Station, and from 1925–30 Director of the same Station (Djember, E. Java); *ditto* of the Rubber Experiment Station (Buitenzorg, W. Java), 1930–32; and of the Malang Experiment Station (E. Java), 1932–38.

COLLECTING LOCALITIES. *1920–25. E. Java:* Sempol, Malang; Jang Plateau (June *1928*), *etc.*— *SE. Borneo* (*1930*).

COLLECTIONS. *Herb. Copenhagen:* 650 specimens (ferns and phaner.) *E. Java.* Partly in *Herb. Bog., e.g.* material of *Cladopus nymani*[1] and *nos* from *Borneo*, amongst which weeds collected on rubber estates. He collected liverworts too.

LITERATURE. (1) J. GANDRUP: 'Een nieuwe interessante vindplaats van Cladopus nymani H. MÖLL.' (Handel. 5e N.I. Natuurwet. Congr. 1928, p. 393–398).

BIOGRAPHICAL DATA. In CHRISTENSEN, Den Danske botaniske litteratur 1912–1939, 1940, p. 212–213, incl. bibliogr. + portr.; Bot. Tidsskr. 46, 1944, p. 290–293 + portr.

Ganih, *cf. sub* Forest Research Institute, Buitenzorg.

Ganz, Dr Ernst

Palembang, *S. Sumatra*, presented 89 *nos* of plants from? *Java*, and *Sumatra*, to *Herb. Univers. Zürich* in *1910*, and museum objects to the *Bot. Mus. Univ. Zürich* in *1910–11.*

Garai

collector employed by G. D. HAVILAND (see there). Cited by BLOEMBERGEN (*cf.* Blumea 1, 1935, p. 265) as the collector of a *no* 2018 on Mt Buan, Sarawak (*NW. Borneo*), material of which preserved in *Kew* and *Sarawak; cf.* also *sub* GARAMAN.

Garaman

Sometimes plants are cited as collected by HAVILAND (see there) & GARAMAN, *cf.* also GARAI; both collectors in HAVILAND's employ, or possibly one of the names misread.

Garcia, Regino

(1840, Manila, Luzon, P.I.; ?), Filipino who has been associated with the Botanical Garden at Manila, in one or another capacity, since the inception of that institution in 1858, and with the Spanish Forestry Bureau from 1877–98. In May 1900, he entered the American Civil Service as Botanist in the Forestry Bureau,[1] and till August 1902, he had charge of all work of botanical nature in that office.[2]

He is commemorated in *Eugenia garciae* MERR.

COLLECTING LOCALITIES. *Philippines: Luzon; Mindoro*, Palo (May *1903*).

COLLECTIONS. His early collections went out under VIDAL (see there) labels. In *Areneo Municipal Manila: c.* 1000 specim.; since 1900 numbered in the F.B. (*cf.* Forestry Bureau) series, preserved in *Herb. Manila.* In *Herb. Vienna:* 55 *nos* (pres. 1891).

LITERATURE. (1) Author of 'List of the Tree Species of the Philippine Islands' (Publ. For. Bur. 1901); 'Los Árboles de la goma, resinas y frutos oleosos de Filipinas' (1902). He was of material assistance to Capt. AHERN in the preparation of 'Important Philippine woods'.

(2) *cf.* MERRILL in Bull. Bur. Agr. Manila *no* 4, 1903, p. 22.

Garcia, Simeon

son of the former, employed for a limited time by the Bur. of Forestry (see there), Manila, P.I.

Garcin, Laurent

(1683, Grenoble, France; 1752, Neuchâtel, Switzerland), whose parents emigrated to Switzerland after the anulment of the Edict of Nantes (1685). After his coming of age he was educated in Holland and was for 16 years surgeon in Dutch employ, travelling in Europe; in the years 1720–29 he accompanied 3 voyages to the East Indies in the service of the Dutch E.I.C. At the instigation of BOERHAAVE, at the time professor at Leyden, he collected dried plants and seeds during his eastern voyages, which were respectively sent to herbaria and botanical gardens. After his return to Holland (1730), he stayed for another year at Leyden, to accomplish his medical studies, subsequently taking his Dr's degree at Reims. In 1732 he settled at Neuchâtel, but occasionally visited France and Holland (settling for 2 years at Hulst), returning in 1739.

He was the author of some botanical papers.[1]

The genus *Garcinia* L. was named in his honour.

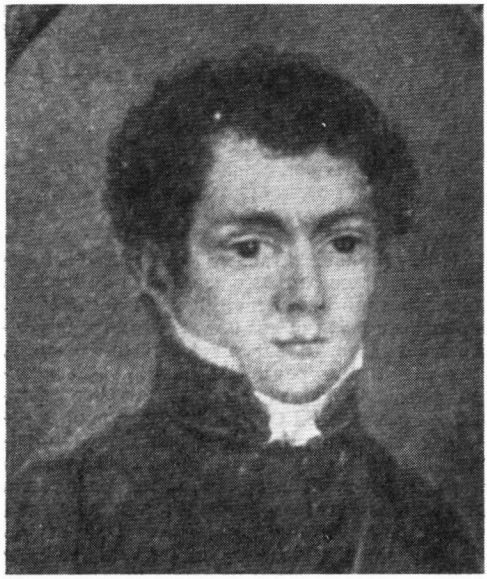
COLLECTING LOCALITIES. Between *1720–29* he visited Bengal, the coast of Coromandel, Ceylon, Surate, *Malacca, Java, Sumatra*, Arabia and Persia. Plants from *Madoera* are known too.

COLLECTIONS. His herbarium was destroyed, but duplicates are preserved in some European herbaria. The most remarkable set was in *Herb.* N. L. BURMAN (now at *Geneva, Leyden, etc.*) The latter made use of it for the composition of his 'Flora Indica'. Unfortunately the specimens are mixed up with those of other collectors, *e.g.* of HOUTTUYN and HERMANN, so that it is mostly impossible to denote G.'s specimens with certainty.[2] MIQUEL cited *Senecio multifidus* WILLD. from *Java*, evidently extant in *Herb.* GARCIN.[3] He brought seeds of *Chrozophora rottleri* from Surat to Batavia.[4] Africa plants with *Herb.* GESSNER in *Herb. Techn. Coll. Zürich.*

LITERATURE. (1) *e.g.* 'Memoirs containing a description of a new family of plants called Oxyoides; some remarks on the family of plants called Musa, and a description of Hirundinella marina, or a sea leach' (Philos. Transact. *no* 415, Sept.–Oct. 1730, Memoir II, vol. 36, 1731, p. 377–394); 'The settling of a new genus of plants, called after the Malayans, Mangostans' (*l.c. no* 431, Jan.–March

1734, vol. 37, p. 232–242, 1 pl.). Both transl. from the French; *cf.* also letter to Sir H. SLOANE in *l.c.* *no* 489, vol. 45, 1748, p. 564.

(2) *cf.* SPRENGEL, Hist. Rei Herbariae 2, 1808, p. 274–275; LASÈGUE, Mus. Bot. DELESS., 1845, p. 66; BRIQUET in Ber. Schweiz. Bot. Ges. 50a, 1940, p. 233–235.



GAUDICHAUD-BEAUPRÉ

(3) *cf.* Flora Ned. Ind. 2, p. 104.

(4) *cf.* PRAIN in Kew Bull. 1918, p. 97.

BIOGRAPHICAL DATA. Conservateur Suisse 13, 1831, p. 98–108 (2nd ed.: 13, 1857, p. 69–76); HALLER, Bibl. Bot. 2, 1772, p. 223; BACKER, Verkl. Woordenb., 1936; BRIQUET, Biographies des Botanistes à Genève (Ber. Schweiz. Bot. Ges. 50a, 1940) p. 233–235, incl. bibliogr.

Garich, *cf. sub* Forest Research Institute, Buitenzorg.

Garoga Pasariboe, *cf. sub ditto.*

Garretsen

COLLECTIONS. *Herb. Bog.: Polygonum nepalense* MEISN. on Tjinjiroean Estate, slope G. Malabar, *W. Java,* in March *1920* (*cf.* DANSER in Bull. Jard. Bot. Buit. sér. 3, vol. 8, 1926/27, p. 202).

Gaspersz, W., *cf. sub* Forest Research Institute, Buitenzorg.

Gates, Frank Caleb

(1887, Chicago, Ill., U.S.A.; x), botanist-ecologist who took his Dr's degree at Michigan University in 1912. From 1912–15 employed in the Philippines,[1] as Instructor of Botany. From 1916–19 Professor of Biology at Carthage College; in 1919 Asst Professor, in 1922 Associate Professor, and since 1928 Professor of Botany, Kansas State Agric. College Manhattan, Kans. (U.S.A.).

COLLECTIONS. Many numbers of GATES cited by MERRILL in his Enum. Philip. Fl.Pl.; also numbered in the B.S. (*cf.* Bureau of Science, Manila) series with OTAÑES. In the years 1912–15 he sent more than 1000 specimens of *Philippine* plants to the *Herb. Manila* for identification. *Herb. Field* (= *Nat. Hist.*) *Mus. Chicago:* 397 *Philip.* plants (purch. 1915).

LITERATURE. (1) Author of 'The pioneer vegetation of Taal Volcano' (Philip. Journ. Sci. C. Bot. 9, 1914, p. 391–434, pl. 3–9); 'Swamp vegetation in hot springs areas at Los Baños, Laguna, P.I.' (Philip. Journ. Sci. *l.c.* p. 495–516, pl. 11–15); 'A Sphagnum bog in the tropics' (Journ. Ecology 3, 1915, p. 24–30, pl. 1); 'Notes from the tropical strand; Ipomoea pescaprae and Canavalia lineata' (Torreya 15, 1915, p. 27–28); 'Notes on Philippine vegetation: The Casuarina association' (*l.c.* 16, 1916, p. 91–94, fig. 1–4).

BIOGRAPHICAL DATA. Amer. Men of Sci. 1938.

Gaudichaud-Beaupré, Charles

(1789, Angoulème, France; 1854, Paris, France), since 1810 Dispenser in the Military Marine; undertook the botany department on several French expeditions. Later Professor of Pharmacy.

Connarus gaudichaudi PLANCH. was named after him.

ITINERARY. *Voyage in 'L'Uranie' and 'La Physicienne', 1817–20.*[1] *cf.* also *sub* GUICHENOT, QUOI, GAIMARD and DUPERREY. Sailing from Toulon (Sept. 17, 1817); *via* Teneriffe, Rio de Janeiro, the Cape, Île de France, Bourbon; *W. Timor* (*Lesser Sunda Isls*) (Oct. 9–22, *1818*): the vicinity of Koepang, Namessey (= Namsaen) (15), Koepang River (18) and a hill near the Bay of Babao (20) *etc.* (*cf.* also *sub* QUOI); setting sail (Oct. 23), *via P. Ombai* (= *Alor*) (Nov. 2), to *Port. Timor:* Delhi (= Dilly) (17–22); *P. Pisang* (Dec. 8); *Papua Islands: P. Rawak* (= *Lawak*) (Dec. 16, 1818–Jan. 5, *1819*), from there visiting *P. Boni* (Dec. 26–27), *Waigeo(u)* and *P. Manoe(a)ran;* Marianas, Carolines, Sandwich Isls, Australia, Malouines (here the 'Uranie' ran ashore; proceeded in the 'Physicienne') to S. America; back at Hâvre (Nov. 13, 1820).—*Voyage in 'L'Herminie', 1831–33.*[2] To S. America; not in the Malaysian region.—*Voyage in 'La Bonite', 1836–37.*[3] Leaving Toulon (Febr. 6, 1836) and stopping at Cadiz, Rio de Janeiro, Montevideo, Cape Horn, Valparaiso, Cobija, Callao, Lima, Payta, Guayaquil; Sandwich Isls; Hawaii, Honolulu; *Philippines: Luzon,* Bay of Mariveles (Dec. 5), Manila (Dec. 7–20), GAUDICHAUD and EYDOUX making a trip to Laguna; Macao; Canton, Macao; Cochinchina; *Singapore* (Febr. 17–21, *1837*), *Malacca* (Febr. 23–25), and *P. Pinang* (= *Penang*) (March 3–7); Calcutta, Pondicherry, Bourbon, Réunion; Cape of Good Hope, St Helena; returning to Brest (Nov. 6, 1837).

COLLECTIONS. *Herb. Paris.* A large part of the collections of the Moluccas, Timor and the Marianne was lost, due to the stranding of the 'Uranie' (see above); notwithstanding, more than 4000 *nos* were brought home.[4] From the voyage in the 'Bonite' *c.* 3500 *nos* and numerous living plants.[5] Dupl. in *Herb.* DECAND. (*Geneva*) (2343, incl. 33 from *Malacca*, 48 *P. Penang*, 38 Manila (*Luzon*), and 37 *Singapore* plants), *Herb.* DELESS. (*Geneva*), *Herb.* de FRANQUEVILLE (= *Paris*), *Herb. Montpellier; Herb. Vienna; Herb. Leyden; Herb. Kew:* 237 *nos* from Macao, Cochinchina, *Malaya* (pres. 1886); *Herb. Berl.* (with *Herb.* KUNTH) from the *Philippines* and the *Moluccas; Herb. Florence: Philippine* plants; *Herb. Brussels:* with *Herb.* MARTIUS; *U.S. Nat. Herb. Wash.:* 3 *nos.*

His *Timor* plants included *Lumnitzera lutea* (GAUD.) PRESL, collected in the Bay of Babao; the species was found back some 15 years ago by Mrs BOUMAN-HOUTMAN (see there).

LITERATURE. (1) 'Voyage autour du monde entrepris par ordre du Roi, exécuté sur les corvettes de S.M. L'Uranie et La Physicienne pendant les années 1817, 1818, 1819 et 1820' (Paris 1824–44). 'Partie Historique et Nautique' by FREYCINET (1825–37, 2 vols + atlas). For Alor and Timor *cf.* Part. Hist. *l.c.* 1^2, p. 488–721 and for the Papua Islands *cf. l.c.* 2^1, p. 20–64.

J. ARAGO: 'Promenade autour du monde, pendant les années 1817–1820, sur les corvettes du Roi L'Uranie et La Physicienne, commandées par M. FREYCINET (Paris 1822, 2 vols). The author was the draughtsman of the expedition.

See also *sub Addenda.*

(2) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 81 and 'Vitae itineraque *etc.*' in MARTIUS, Flor. Brasil. 1, pars 1.

(3) 'Instructions relatives au voyage circumnavigation de La Bonite' (Compt. Rend. Acad. Sci. 23 Nov. 1835).

cf. Flora 19^1, 1836, p. 62–64.

'Voyage autour du monde exécuté pendant les années 1836 et 1837 sur la corvette La Bonite, commandée par M. VAILLANT, publié par ordre du Roi' (Paris 1840–66, 15 vols + 4 atlases). 'Relation du voyage' par A. DE LA SALLE (1845–52, 3 vols).

(4) *cf.* LASÈGUE, Mus. Bot. DELESS., p. 79–80.

C. GAUDICHAUD: 'Description de quelques nouveaux genres de plantes receuillies dans le voyage autour du monde, sous les ordres du Capitaine FREYCINET' (Ann. Sci. Nat. 3, 1824, p. 507–510).

C. GAUDICHAUD: 'Botanique du voyage *etc.* de L'Uranie et La Physicienne' (Paris 1826–30, 1 vol. + atlas). Herein several descriptions of the vegetation, *cf.* Chapt. 8 and 9. See also *Addenda.*

cf. also DECAISNE: 'Herbarii Timor. descriptio' (1835).

(5) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 83.

C. GAUDICHAUD: 'Botanique du voyage *etc.* de La Bonite' (Paris 1844–66, 4 vols + atlas (1841–52)). This work consists of: 1 vol. vascular and cellular cryptogams (by MONTAGNE, LÉVEILLÉ, SPRING) (not issued till 1846), 2 vols Introduction (1851) and 1 vol. Explication et description d. pl. d'Atlas (1866).

M. DE MIRBEL: 'Rapport sur la partie botanique' (in LA SALLE: 'Relation du voyage de La Bonite' 1, 1845, p. 452–459).

I. M. JOHNSTON: 'Publication-dates of GAUDICHAUD's botany of the voyage of the Bonite' (Journ. Arn. Arbor. 25, 1944, p. 481–487). Other papers on this subject in Journ. Bot. 39, 1901, p. 206, and in Ann. Mag. Nat Hist. ser. 7, *no* 7, 1901, p. 391.

BIOGRAPHICAL DATA. 'Liste des travaux' (Arch. d. Botanique, nov. 1833, 4 pp.); E. PASCALLET: 'Notice biographique' (Rev. gén. biogr., polit. et litt. d'avril 1844, 31 pp., incl. bibliogr.); Proc. Linn. Soc. 2, 1854, p. 320–321; Arch. Médic. Naval. 13, 1870, p. 31–54; PRITZEL, Thes. Lit. Bot., 1872 (year of death erroneously 1864); Nouv. Biogr. Génér. 19,1877; BRETSCHNEIDER, Hist. Bot. Disc. China, 1898, p. 307; MAIDEN in Journ. & Proc. Roy. Soc. N.S.W. 43, 1910, p. 139; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5 (year of death erroneously 1844); BACKER, Verkl. Woordenb., 1936.

Gee, G. S.

Agricultural Officer of the Mandate of New Guinea, collected *Clymenia polyandra* (TANAKA) SWINGLE at Buratamtabai, Namatanai, in *New Ireland* (*Bism. Arch.*) on June 6, *1937* (*cf.* Journ. Arn. Arbor. 20, 1939, p. 254). Material in *Herb. Nat. Arboretum, Washington,* collected on behalf and at the request of W. T. SWINGLE, of the Bureau of Plant Industry, Washington.

Geels, J., *cf. sub* Forest Research Institute, Buitenzorg.

Geerlings, F. G., *cf. sub ditto.*

Geerts, Johannes Matinus

(1881, Leeuwarden, Fr., Holland; x), plant physiologist, educated at Amsterdam University, who took his Dr's degree at Utrecht; for some years a teacher at a secondary school at Utrecht; Sub-Director of the Agricultural Department of the Experiment Station for the Java Sugar Industry (Pasoeroean, E. Java), 1913–18; Agricultural Adviser of the Ned. Ind. Landbouw Mij at Soerabaja, 1918–28; subsequently appointed Extraordinary Professor at the Agricultural College at Wageningen. After World War II he was interned on account of political activity before and during the German occupation of Holland.

COLLECTIONS. *Herb. Pasoer.:* 1 *no* from Probolinggo, *E. Java* (*1928*).

BIOGRAPHICAL DATA. Wie is dat? ed. 2–4.

Geerts-Ronner, Sjoerdtje Johanna

(1882, Dokkum, Fr., Holland; x), pupil of Prof. HUGO DE VRIES, who passed the natural history examination (K IV) at Amsterdam; in 1915 Assistant at the Agricultural Department of the Experiment Station for the Java Sugar Industry; subsequently she married Dr J. H. GEERTS (see there).[1]

COLLECTING LOCALITIES. *1927. E. Java.—1928. W. Java:* Sindanglaja, Tjibodas-G. Gede(h), G. Papandajan; *E. Java:* Madioen, Sarangan; Ngoro (Djombang); the neighbourhood of Soerabaja;[2] Wonokitri, Grissee, Sidhoardjo; Soembermiri, Bondowoso, Idjen Plateau; *Madoera.—1929. E. Java:* Idjen Plateau; *Madoera.*

COLLECTIONS. *Herb. Pasoer.:* 92 *nos* (acq. 1928–29); also plants in *Herb. Bog.*

LITERATURE. (1) Authoress of 'Vacantie in de bergen. Schetsen van landschap en flora' (Batavia 1927, Bibl. N.I. Nat. Hist. Ver. *no* 2); 'Een tocht door Rembang en Noord-Sumatra' (De Ind. Post Oct. 10, 1925, p. 10; *l.c.* Nov. 7, p. 12; Nov. 14, p. 12; Nov. 28, p. 7).

(2) S. J. GEERTS-RONNER: 'Uit Soerabaja's omstreken' (Trop. Nat. 13, 1924, p. 161–173, 17 fig. and *l.c.* 29, 1940, p. 101–106).

Gehrman, Karl

leader of the Botanical Garden at Rabaul, New Britain (Bismarck Archipelago), travelled in the D.E.I. in 1912, and evidently once more in 1915 when he visited Tjibodas (slope G. Gedeh, W. Java) from Jan. 4–10. In 1913 botanist of the Gogol-Ramu expedition in Kaiser-Wilhelms Land (later Mandated Terr. of New Guinea).[1]

ITINERARY. *Gogol-Ramu expedition,* Sept.–Oct. *1913,* to *Kaiser-Wilhelms Land* (= *NE. New Guinea,* Mandated Territory). Leader: veterinary surgeon M. BRAUN (see there). Setting out (Sept. 6) from Friedrich Wilhelms Hafen to Furan, Panim; Mirkuk region, Ou (7); Efu, Furumu, Gumana (or Kumane) (8); Gomalu, Gogol River (9); trip in the vicinity (10); Sedu (11); tributary of the Gogol, the Tun, Peisari (or Peisalik) (12); to tributary Munem (13); Gumentebi (or Gumentejä), rivulet Naun (14); Mänik (15); Bamutu, Kweawak River (16); exploring the vicinity (17); march in river basin, Malem (Ungase), Aweabo River, Kana (18); view on the Ramu River (19); reaching the Ramu (21); small trips in the vicinity, numerous *Citrus* trees!; abortive attempt (28) to go downstream with rafts, which resulted in the loss of collections, outfit, *etc.;* on foot (29) following the river (*Mucuna kraetkei!*) downstream to Apas, Samagol, Atembe, Jambi (Oct. 14); Irijambi (15); part of the expedition (*not* BRAUN and GEHRMANN) proceeding downstream by canoe (15), the latter two later by canoe too (18), reaching the mouth of the Ramu on the 26th (the river having been explored up to 400 km from the mouth).

COLLECTIONS. *Herb. Berl.:* 11 *nos* of siphonogams from *Java* (*1911–12* coll.). In *Hort. Rabaul:* living plants from Kaiser-Wilhelms Land, collected near the Sepik, and Jomba River. Possibly all collections of the Gogol-Ramu expedition have been destroyed.

LITERATURE. (1) 'Die Gogol-Ramu Expedition in Kaiser-Wilhelms Land Sept. und Okt. 1913' (Mitt. Deutsch. Schutzgeb. 29, 1916, p. 1).

K. GEHRMANN: 'Tagebuch über die Gogol-Ramu Expedition' (*l.c.* p. 2–30).

Geill, Mrs

forwarded a lot of living orchids, originating from *Ambon* and *Tanimbar Islands* to *Hort. Bog.* in *1900.*

Gelder

is cited by BLUME[1] as the collector of *Gnetum leptostachyum* BL. in *Borneo,* the type specimen of which is preserved in *Herb. Leyden.*

This may be D. H. R. VAN GELDER (1809, Leyden, Holland; ? , ?), preparer, put at the disposal of P. W. KORTHALS (see there) in 1830, in company with whom he visited the north coast of Java and the Padang Highlands.[2]

According to SIRKS[3] he left the committee before Febr. 1836; according to BACKER,[2] however, he resigned in 1838, and was later employed at the, in 1844 discontinued, Natural History Museum at Weltevreden. In the register of the Dutch Government it is recorded that he was granted permanent leave on April 4, 1838, in order to settle as a manager on the Tariek and Gabang Lands; he finally left Java in 1857. As it is evident that he was still in the employ of the committee when KORTHALS visited Borneo in 1836, he may have accompanied the latter.

Ficus gelderi MIQ. was named after him.

LITERATURE. (1) Rumphia 4, 1848, p. 5.

(2) *cf.* BACKER, Verkl. Woordenb., 1936 *sub gelderi.*

(3) *cf.* SIRKS, Indisch Natuuronderzoek, Amsterdam 1915, p. 119.

Gelder, Dr J. K. van

acting Chief of the Salt-monopoly control at Bandoeng, Java, sent a collection of orchids to *Hort. Bog.* in *1927;* they originated from *Borneo,* Benkoelen (*S. Sumatra*) and Merauke (*S. New Guinea*). Probably collected by others.

Gelder, Willem Cornelis van

(born 1878), entered the D.E.I. Government service in 1901 and joined the Civil Service in 1903; since 1913 District Officer, later Assistant Resident in SE. Borneo; in 1924 dismissed on account of physical disability.

COLLECTING LOCALITIES. *1918–19. SE. Borneo:* at Tenggarong and Koetei.

COLLECTIONS. *Herb. Bog.:* orchids (pres. 1919).

Gelpke, J. P. L., *cf. sub* Forest Research Institute, Buitenzorg.

Gelsing, R., *cf. sub ditto.*

Genderen Stort, Pieter van

(1873, Moeara Doea, S. Sumatra; x), entered the D.E. Indian army in 1893 and was pensioned off with the rank of major-general in 1926. In 1912 he was appointed leader of the Dutch members of the Anglo-Dutch boundary delimitation committee for North Borneo; during the expedition he was attended by the Indonesian collector AMDJAH (see there).

Several plants were named after him.

ITINERARY. *Anglo-Dutch NE. Borneo expedition, 1912.*[1] Sailing from Batavia (Apr. 31) to Soerabaja and from there (May 4) to *SE. Borneo:* Bandjermasin (staying May 6–14); by boat to *NE. Borneo:* Tg Seilor (arriving the 21st); transfer of the expedition to Pladjoe; VAN GENDEREN STORT setting out (June 7) to take up the English by boat from Tarakan; back at Pladjoe (Lower Sembakoeng River) (12); Manoek (14), S. Bakoeng (15), Kalampising (16), Bk. Toekoelan (17), Saladingan (20), Semaloemoeng (21), Bk. Labang (27); VAN GENDEREN STORT marching ahead to Gm. Loejoe (27) and Moeara Tagel (29; the last part of the exp. arriving July 2); breaking camp (July 4) and back to Labang (Ma Sedalir); VAN G. S. with the Indonesian collectors setting out (22) to Loembis, he himself returning to Labang on the 27th; departing (Aug. 16) *via* Sg. Bakoeng (18) and Sarapoen (= Serapon) (19) to Pladjoe (20); in Sept. by boat to Tg Seilor for discussion; Pembeliangen bivouac (on the Seboekoe River); the whole of the expedition united at Bk. Tenampak (Sept. 19); VAN GENDEREN STORT was invalided home (23), and was not replaced as leader. For the 2nd part of the expedition *cf. sub* AMDJAH.

COLLECTIONS. *cf. sub* AMDJAH.

LITERATURE. (1) 'Verslag der Commissie tot uiteenzetting op het terrein van de tusschen het Nederlandsch gebied en Britsch Noord-Borneo vastgestelde grens' (Batavia 1913).

BIOGRAPHICAL DATA. Weekbl. v. Indië 3, p. 467 + portr.; BACKER, Verkl. Woordenb., 1936.

Genove, M., *cf. sub* Forestry Bureau, Manila.

Gent, van

Post-Holder in Ceram, Moluccas.

COLLECTIONS. *Herb. Bog.: Ormocarpum sennoides* DC., collected at Oldenburg, *Ceram* (July 10, *1896*). He forwarded a living *Musa* to *Hort. Bog.* in *1893.*

Gent, H. N. W. van

at Telok Betong, *S. Sumatra,* sent living plants to *Hort. Bog.* in *1917.*

Gerdeng, *cf. sub* Forest Research Institute, Buitenzorg.

Gersen, G. J.

(1826, Alkmaar, N.H., Holland; April 1, 1877, ?), came to the D.E.I. in 1852 and was appointed Officer of the Civil Service in 1855. He was stationed in Sumatra (1855–63)[1], Celebes (1863–74; since 1865 Assistant Resident)[2] and SE. Borneo (Resident at Bandjermasin from 1874); dismissed in 1877 on account of ill health.

Several plants were named after him.

COLLECTING LOCALITIES. *c. 1860. S. Sumatra,* Palembang: Moeara Enim.[3]—*1868–69. SW. Celebes:* Maros, Makassar, *etc.*

COLLECTIONS. *Herb. Bog.;* a *Hopea* from Maros (*Celebes*) was numbered in the H.B. series.

LITERATURE. (1) GERSENS (probably identical, but misspelled): 'Iets over de katoencultuur in de divisie Lematang Ilier, Res. Palembang' (Nat. Tijdschr. N.I. 22, 1860, p. 435–442); 'Korte beschrijving van eene aardharslaag, voorkomende in de divisie Lematang-Oeloe, Res. Palembang' (*l.c.* 24, 1862, p. 517–519).

(2) G. J. GERSEN: 'Topographische schets van de bergregentschappen der Noorder-districten van Celebes' (Tijdschr. Ind. Taal-, Land- en Volkenk. 16, 1867, p. 352–376). The title is misleading, but this paper bears upon SW. Celebes.

(3) *cf.* Nat. Tijdschr. N.I. 24, 1862, p. 320.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Gesker, Herman van

(† 1858), horticulturist, Student-Gardener in the University Botanic Garden at Amsterdam; probably about 1840 already a resident in W. Java (? Assistant on Pondok Gedeh Estate); in 1847 appointed Assistant Curator in the Botanic Garden at Buitenzorg, at least in 1848 stationed at Tjipanas; he was dismissed in 1849, as he was imprisoned on account of shooting an Indonesian.[1] After his release in July 1854 he was assisted by TEYSMANN in starting a floricultural garden at Batavia.

COLLECTING LOCALITIES. *About 1840–49. W. Java:* G. Salak, G. Gedeh-Pangrango, Pondok Gedeh, Megamendoeng, Tjibogo; *Centr. Java:* Tjilatjap, *Noesa Kambangan* (S of Java); *E. Java:* Soerabaja.

COLLECTIONS. *Herb. Leyden;* principally ferns, lycopods and lichens, but other plants too. Partly described by various authors.[2]

Living plants of his in *Hort. Amsterdam.*[3]

LITERATURE. (1) *cf.* "'s Lands Plantentuin te Buitenzorg 18 Mei 1817–18 Mei 1892' (Batavia 1892) p. 23–24.

(2) in MIQUEL: 'Flora Ned. Indië' and 'Plantae Junghuhnianae'; VAN DEN BOSCH: 'Hymenophyllaceae' 1861; J. VALCKENIER SURINGAR: 'Het geslacht Cyperus' 1898.

Selaginella by ALSTON in Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1935, p. 436 and 440.

(3) W. H. DE VRIESE: 'Plantarum javanicarum minus cognitarum vel novarum, nuper in hortum botanicum amstelodamensem introductarum' (Tijdschr. Nat. Gesch. & Physiol. 11, 1844, p. 336–347).

Geul, H. H., *cf. sub* Forest Research Institute, Buitenzorg.

Geul, Johannes Jacobus

(1892, Blitar, Java; x), attended the Agricultural School at Wageningen and the Sugar School at Amsterdam; in 1914 he went to Java, where he was employed on sugar factories, and was appointed Manager of s.f. Pagongan, Tegal, in 1928; in 1932 *ditto* at Goedo near Djombang, and since 1934 at Mentjan, Kediri. In 1943 he was interned by the Japanese, and was evacuated to Holland in 1946.

COLLECTING LOCALITIES. *Centr. Java:* G. Merbaboe (Oct. *1932*); *E. Java:* Kediri Res. (Jan. *1935*).

COLLECTIONS. *Herb. Bog.:* some orchids.

Gex, Father

Roman Catholic missionary, interested in garden plants, and introducing many into *Singapore*, *c. 1900–12*, including the first modern Cannas. Frequent visitor to the Singapore Gardens.



MISS GIBBS

Ghani bin Lebai Bakar, Abdul

joined the Forest Department *Malay Peninsula* in 1913; now retired.

COLLECTIONS. In *Herb. Kuala Lump.*, mainly from Pahang; numbered in the C.F. (see *sub* Conservator of Forests) series.

Gibbs, Lilian Suzette

(1870, London, England; Jan. 30, 1925, Santa Cruz, Teneriffe), botanist who besides in the Malaysian region (1910 and 1913), made extensive travels to S. Africa (1905), the Fiji Islands (1907), Australia (1914–15) and Hawaii, for the comparison of the alpine floras.

She wrote many important papers on the results of her investigations.

Some plants, including the genus *Gibbsia* RENDLE, were named after her.

ITINERARY. *Br. N. Borneo.*[1] Landed at Jesselton (end of Dec. *1909*); Tenom (Jan. *1910*), Kiau, Gurulau Spur, Maraiparai Spur, ascent of Mt Kinabalu (reaching the summit Febr. 23), return to Kiau (27), Koung, Usakan, Kotabelud, Tenghilan, Tuaran.—Visited *Java* (Buitenzorg Botanic Garden) in *1913* on the way to *Dutch NW. New Guinea*:[2] Manokwari (Nov.), Warèn and Wariap; Arfak Mts, Angi Lakes (Dec.); Mt Koebré, Wariap; vicinity of Manokwari, Dorei Bay, Isl. of *Roon*, Humboldt Bay, *P. Wakdé* (N of Tor River), Isl. of *Wiak* (= *Biak*, Schouten Isls; Bosnik) (Jan.–Febr. *1914*); Manokwari.

COLLECTIONS. *Herb. Brit. Mus.:* 1st set, *c.* 1000 *nos* from *Br. N. Borneo*, 330 *nos* Arfak Mts, 150 *nos* Manokwari, Humboldt Bay, *etc.*; she also bequeathed her private collection of plants to this institution. Duplicates in *Herb. Kew:* from *Br. N. Borneo* (pres. 1912/13) and *New Guinea* (pres. 1918); *Herb. Bog.; Herb. Leyden; Herb.* BONAPARTE (= *Paris*): some *New Guinea* ferns.[3]

LITERATURE. (1) L. S. GIBBS: 'A contribution to the flora and plant formation of Mt. Kinabalu and the highlands of Brit. N. Borneo' (Journ. Linn. Soc. Bot. 42, 1914, p. 1–240, pl. 1–8); extract Kinabalu trip in Saraw. Mus. Journ. 2, 1915, p. 162–164.

(2) L. S. GIBBS: 'Dutch North West New Guinea: A contribution to the Phytography and Flora of the Arfak Mountains, *etc.*' (London 1917); 'Some peculiar Papuan customs' (Journ. Str. Br. Roy. As. Soc. *no* 79, 1918, p. 15–16).

(3) *cf.* BONAPARTE, Notes Ptéridol. fasc. 13, 1921, p. 227–235.

BIOGRAPHICAL DATA. Journ. Bot. 63, 1925, p. 85, 116–117, incl. bibliogr.; Kew Bull. 1925, p. 189; Bolet. Soc. Broter. (Coimbra) ser. 2, vol. 3, 1925, p. 239–241 + portr.; in Biogr. Index BRITTEN & BOULGER, 2nd ed. by Rendle, 1931; BACKER, Verkl. Woordenb., 1936.

Gibson

is cited by MERRILL in Enum. Born. Pl. 1921, as the collector of some orchids, *viz* of *Aerides odoratum* LOUR. in Sarawak, *NW. Borneo.*

COLLECTIONS. Probably especially orchids.

In *Herb. Kew:* 18 *nos* from India, 1882, from a GIBSON (*per* VEITCH); and plants from India, 1841–60, collected by ALEXANDER GIBSON (1800, Lawrencekirk, Kincardineshire; 1867, Bombay, Br. India). In *Herb. Brit. Mus.:* 153 plants from Buenos Ayres (pres. 1901), collected by ERNEST GIBSON.

We do not know whether one of these collectors is identical with the above-mentioned. In the biography of ALEXANDER (see below) no mention is made of any voyage to the Malaysian region.

BIOGRAPHICAL DATA (of A. GIBSON). PRITZEL, Thes. Lit. Bot., 1872; BUCKLAND, Dict. Ind. Biogr., 1906, p. 164–165.

Giesenhagen, Karl

(1860, Teterow in Mecklenburg, Germany; 1928, Munich, Germany), botanist, educated at Rostock and Berlin, who took his Dr's degree in 1889 at Marburg; in 1891 he followed GOEBEL (see there) to Munich and was appointed Custodian of the Herbarium of cryptogams. In 1899 he was awarded the Buitenzorg stipendium and made a voyage to the D.E.I. for the study of economic plants, and besides of epiphytic ferns and the moss flora.[1] In 1907 appointed Professor of Botany in the University of Munich.

Author of many papers on ferns.[2]

ITINERARY.[3] Leaving Genoa (July 25, *1899*); arrival at *Singapore* (Aug. 16), making trips to Bt Tima and to Johore (*Mal. Penins.*); *W. Java:* Buitenzorg (arriving Aug. 24); Tjibodas, on the slope of G. Gedeh (Oct. 11–end of the month), climbing the summit of G. Gedeh (21); back at Buitenzorg;

departing (Nov. 5) with FLEISCHER (see there) and PEYNART to *S. Sumatra:* Palembang, by boat to Muara Enim (arriving Nov. 11); Merapi, Lahat, Bandar, Lebuan; Kalangan Djarei, Bt Besar (18); Padang Burnei; Talang Padang (24–25); Tandjong Agung, Kebon Agung; Kepahiang, from where setting out (29) *via* Taba penandjung and Talampat to Benkulen (30); by boat to *Sumatra West Coast:* Padang (Dec. 2); Padang Highlands: Padang Pandjang, Aneikloof, Sawahlunto, back to Padang Pandjang and from there (Dec. 7) to Fort de Kock, Karbouwengat, Pajakombo (9), Harau kloof; Padang (11); by boat to *N. Sumatra:* Atjeh, Kota Radjah (15–16); Selimun; by boat *via P. Penang* (20–21), to *Sumatra East Coast:* Deli, Medan (arriving 22); to Bindjei (Jan. 4, *1900);* to Tandjong Morawa (6); Gunung Rinte; Sungei Bahasa Estate; Medan, from where sailing (10) to *Java;* trip to *Centr. Java* and the 'Vorstenlanden': Djokjakarta, the Borobudur, Prambanan, Tjandi Sewu; back to *W. Java,* Buitenzorg; Febr. 24 sailing from Tandjong Priok to Europe, interrupted by a stay of some weeks in Ceylon.

COLLECTIONS. *Herb. Munich,* principally ferns and mosses. Living plants and seeds on behalf of the 'Botanische Centralstelle' for the German colonies.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 24.

K. GIESENHAGEN: 'Der Tabaksbau in Sumatra' (in BAYER Industr. & Gew. Blatt 1902); 'Über die Nutzpflanzen tropischer Kolonien' (in Natur u. Kultur 1906); 'Die Moostypen der Regenwälder' (Ann. Jard. Bot. Buit. suppl. 3, 1910, p. 711–790).

(2) *cf.* references in Ann. Jard. Bot. Buit. 45, 1935, p. 79, 86, 101.

(3) K. GIESENHAGEN: 'Auf Java und Sumatra. Streifzüge und Forschungsreisen im Lande der Malaien' (Leipzig 1902).

BIOGRAPHICAL DATA. Who's who 1913; Ber. D.B.G. 46, 1928, p. (157)–(169), w. bibliogr.

Gij . . ., *cf.* **Gy . . .**

Gilbert, G., see *sub Addenda.*

Gill, William Wyatt

(1828–1896), a Reverend, stationed in the Pacific Islands, who made some tours to New Guinea.[1]

ITINERARY.[2] *SE. New Guinea. 1872.* Sailing from Somerset (Oct. 17); *Islands in the Torres Strait;* Katau (29), Mauat; Tauan (Oct. 31–Nov. 6); Mauat, Katau River, Torotoran; at anchor in Redscar Bay (Nov. 22); exploration of Manu-manu River, leaving Nov. 27.—*1884.* In Febr.–March some tours by boat with CHALMERS (see Itiner. there).

COLLECTIONS. *Herb. Kew:* Pacific Islands 1872–82, 48 *nos.* This collection includes some *New Guinea* plants.[3]

LITERATURE. (1) W. W. GILL: 'Life in the southern isles, or scenes and incidents in the South Pacific and New Guinea' (London 1876). Chapt. VII of this book deals with Natural History, zoology; scattered drawings and notes on plants; for New Guinea *cf. l.c.* p. 197–272.

J. CHALMERS & W. WYATT GILL: 'Work and adventure in New Guinea 1877–1885' (1885); transl. into German (Leipzig 1886); 'Botanische Miscellen aus der Südsee' (Mitt. Geogr. Ges. Jena 1889, p. 85–105; on Oceania).

(2) W. W. GILL: 'Three visits to New Guinea' (Journ. Roy. Geogr. Soc. 44, 1874, p. 15–30).

(3) F. v. MUELLER: 'Description of a new Papuan Bassia, yielding an edible fruit' (Vict. Chemist and Druggist, April 1885).

Gils, van

a resident of Padang, *Sumatra West Coast,* sent plants to *Buitenzorg* in *1873.*

He may be identical with A. VAN GILS, a member of the 'Kon. Natuurkundige Vereeniging' (Batavia), president of the Chamber of Commerce and Industry at Padang, since 1866 Consular Agent of France.

Giltay, Eduard

(1858, Rotterdam, Holland; 1935, Apeldoorn, Gld, Holland), professor at the Agricultural College, Wageningen; he was granted the Dutch Buitenzorg Fund, for which he stayed in Java from Sept. *1895* until Jan. *1896.*[1]

COLLECTIONS. *Herb. Wageningen:* material collected at Buitenzorg and Tjibodas in *W. Java,* provided with notes on the occurrence of stomata.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 20.

E. GILTAY: 'Ueber die vegetabilische Stoffbildung in den Tropen und in Mitteleuropa' (Ann. Jard. Bot. Buit. 15, 1898, p. 43–72, pl. 11–12).

BIOGRAPHICAL DATA. Stud. Alman. Wageningen 1912, p. 49–50 + portr.; Landbouw 10, 1935, p. 413–414 + portr.; Landb. Tijdschr. 48, 1936, p. 417–420 + portr.; Chron. Bot. 2, 1936, p. 237 (portr.)–238; Wie is dat? ed. 1–3.

Gimin, *cf. sub* Forest Research Institute, Buitenzorg.

Gimlette, John Desmond

(1867, Southsea; 1934, Cheam, Surrey, England), appointed Surgeon Magistrate, Selinsing, Pahang (Malay States) in 1886; he resigned government service to join the Duff Company in 1903. From that year he worked in Kelantan for the remainder of his stay in the East; from 1908 in government service again (Apr. 1915–Aug. 1918 he served in the war); retired in 1921.[1]

He is commemorated in *Cyrtandra gimlettei* RIDL.

COLLECTING LOCALITIES. *Malay Peninsula.* Kelantan: Kuala Lebir (*1903–09*), Kota Bahru (from *1909 onwards*).

COLLECTIONS. *Herb. Sing.:* plants with economic interest (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

LITERATURE. (1) Author of many papers and some books on native medicine, *viz* 'Malay Poisons and Charm Cures' (London 1915, and later editions); 'A dictionary of Malayan Medicine' (with H. W. THOMSON, 1939); *etc.*

BIOGRAPHICAL DATA. Journ. Mal. Br. Roy. As. Soc. 12^2, 1934, p. 184; Journ. Bot. 72, 1934, p. 176; Nature 133, 1934, p. 900–901.

Gisius

owner of the 'Smeroehoeve', a primitive hotel formerly situated near Ranoe Pani on the saddle of G. Tengger and Smeroe.

He brought together large collections of natural history objects.

COLLECTING LOCALITIES. *E. Java*, principally from G. Smeroe–Tengger.

COLLECTIONS. *Private herbarium.* In *Herb. Pasoer.:* 48 dupl. (*1921–30*); *Herb. Bog.:* 25 *nos* G. Smeroe (*1941*); dupl. in *Herb. Leyden* too. It seems doubtful whether his private herbarium is still intact.

Giulianetti, Amadeo

(† Nov. 4, 1901, shot at Mekeo, SE. New Guinea), came to SE. New Guinea as assistant of L. LORIA (see there). When once more in that island in 1896, he made a tour with Sir W. MACGREGOR and was subsequently appointed Travelling Government Agent for the collecting of natural history objects; in Febr. 1897 appointed Government Agent for the Interior and in Sept. 1898 *ditto* of Mekeo District.

The genus *Giulianettia* ROLFE and several plant species were named in his honour.

ITINERARY. *SE. New Guinea, 1889–c. 1897.* Arriving at Port Moresby (June 10, 1889) in company with L. LORIA (itiner., liter., *etc.* see there). —*1892.* With C. KOWALD (Govt Agent) from Mekeo (Oct. 13) to the villages on the Upper Angabunga River, returning Dec. 10.[1] —*1896.* After a stay in Europe, returning to New Guinea; Port Moresby (end of Apr.);[2] with Sir W. MACGREGOR (itiner. and liter. see there) to Daru and the Wasu Kusa (Apr. 29–end of May). In his function of Travelling Govt Agent setting out from Port Moresby (July 2); Magula on Orangerie Bay (4); march to the Suabina Mts, staying a fortnight in the vicinity of the village Boirawe; bivouac between Koiari and Milne Bay (some days at the end of July); to Samarai; in the beginning of Aug. with W. MACGREGOR (see there) to the Mambare River *etc.* (till Aug. 25), then proceeding on his own; he arrived in Lookout bivouac in advance of MACGREGOR, and ascended *Mt Scratchley* (Oct. 9–15); descending to Neneba on the Adjibara, where collecting was done (also at Maiama) until Nov. 9; reaching the coast (29) and back to Port Moresby.[3]—*1897.* Instructed to clear a path from the Vanapa to the *Owen Stanley Range:* upstream the Vanapa River (March 3–5) to Daura (= Doura) and Kone (Koni) (6); bivouac on the Toiwa (= Evelyn River) (14); Exton River (17); Kebokanamo Creek (19); the Atoa (Bebi) (20); Suku (21–23); Amaseba (24); Sikube (29–31); back at Port Moresby (Apr. 14). Setting out for the 2nd time to the Vanapa (June 8); Morabi (–June 15); Kone; Suku (19); Amaseba; Ilabana (25); trail to the *Wharton Range*, reaching a spur (30) and collecting at 11000 ft alt.; breaking camp (Aug. 10) and *via* Neneba in the Adjibara Valley to Maclaughlan River (18); Mt Scratchley (20); Wharton Range Station (Aug. 24–Sept. 17); fruitless attempt to climb Mt Albert Edward (Sept. 18–29); Wharton Range Station (Sept. 29–Oct. 17); to the Mambare River; Tamata Station (Nov. 20), and downstream to the mouth.[4]—*1898.* Leaving Port Moresby (Sept. 13), to take over the administration of Mekeo District: Mekeo (16), from where making several minor tours.[5]—*1899.* With J. A. BLAYNEY (Res. Magistr.) on an expedition from Delena (July 21); from Paukawa along the Ethel River and the Upupu to Epa; Inaumolopa (24); crossing the Manena in eastern direction to Wanua (26); descent, crossing the Akuluma; *via* Ika ascending to Aliama (28); Mt Kebea (30), Pia; descending to the Ulala, a tributary of St Joseph River; ascending to Eola (31); Igilaha (Aug. 2); Kea; Kaidiaba (Mafula) (3); Tjiwua; Pia (14), from where in northern direction; watershed (17); the Papala (18); Paula; Paura (21); the Auiu and the Awera (24); Awo Rani (25); along the Aabawe and the tributary of the Aroa, the Iaroga, to Aworani and Hiba; the Afe (28); Sekuba (30); Iritumuni; Mt Fabana (Sept. 3); back to the Afe and Hiba; descending to the Iaroga (6); Mt Koewan; descending to the Ilabana; junction with the Iaroga, following its course to Arowa; Kereo (9); Delena (12).[6]—*1899–1900.* Some minor tours.—*1901.* With LE HUNTE and F. R. BARTON (see there) from Port Moresby, visiting the Apisi, Ethel River, the Bioto and St Joseph River, Mekeo Station, *etc.*

COLLECTIONS. *Herb. Melbourne; Herb. Kew:* 2 *New Guinea* collections (pres. 1897–98) (with A. C. ENGLISH from Vanapa Valley and Wharton Range, pres. *per* W. MACGREGOR), about 120 specim. of flow. plants, 9 ferns, mosses, lichens and liverworts.[7] In *Herb. Berl.:* 14 *nos* of orchids coll. with LORIA (pres. 1896); LORIA forwarded part of his collections to SCHLECHTER, whose herbarium was bequeathed to *Berlin* in 1913 (for dupl. *cf. sub* SCHLECHTER).

He made zoological collections too.

LITERATURE. (1) *cf.* Ann. Rep. Br. N.G. for 1892/93, Brisb. 1894, p. 107–113.

(2) *cf.* Boll. Soc. Geogr. Ital. 34, 1897, p.161–166.

(3) *cf.* Ann. Rep. Br. N.G. for 1896/97, Brisb. 1898, p. 68–69.

(4 *cf.* Ann. Rep. Br. N.G. *l.c.* p. 68–69 and *l.c.* for 1897/98, Vict. 1899, p. 31–34 and 37–38; Boll. Soc. Geogr. Ital. 35, 1898, p. 385–399; Geogr. Journ. Lond. 12, 1898, p. 318.

(5) *cf.* Ann. Rep. Br. N.G. for 1898/99, Vict. 1900, p. 76–77.

(6) *cf. l.c.* for 1899/1900, Brisb. 1901, p. 57–78.

(7) Mosses by V. F. BROTHERUS in Öfv. Finska Vet. Soc. Handl. 40, 1897/98, p. 59–193 and in *l.c.* 42, 1899/1900, p. 91–128.

By various authors in 'Flora of British New Guinea' (Kew Bull. 1899, p. 95–126) (plants from Mt Scratchley).

F. M. BAILEY in Ann. Rep. Br. N.G. . . . . App. II, p. 133–134 (*non vidi*) and in Queensl. Agr. Journ. 7, 1900, p. 348–350, pl. 45.

Probably also pertaining to the collection

GIULIANETTI and ENGLISH is the paper of W. B. HEMSLEY: 'Report by Mr W. B. HEMSLEY, of the Roy. Gardens, Kew, on botanical collections' (Ann. Rep. Br. N.G. 1897/98, Vict. 1899, p. 147–150).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Gjellerup, Knud

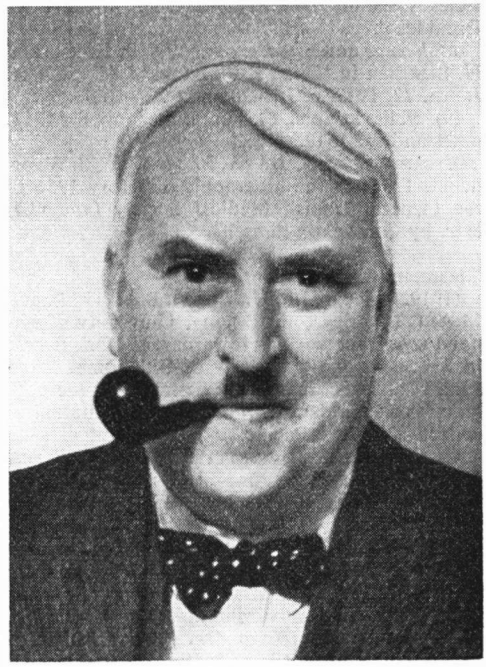
(1876, Sorö, Seeland, Denmark; x), studied medicine in Denmark, and followed a course in botany by Prof. E. WARMING; since 1904 Medical Officer in the D.E. Indian army, stationed respectively in West and North Sumatra, Java and Celebes; from 1909–12 member of an exploration detachment in Dutch North New Guinea.[1] Retired in 1921, and subsequently set up as an ear, nose and throat-specialist at Semarang (Centr. Java). He finally returned to Denmark in 1932, settled at Copenhagen and since 1936 on Bornholm. He travelled in Eastern Asia, America and Europe.

He is commemorated in the genus *Gjellerupia* LAUT. and in several plant species.

ITINERARY. *Dutch North New Guinea. Humboldt Bay expedition:*[2] probably as early as Dec. *1909* near Humboldt Bay, Hollandia; in March *1910* exploring near the Tami River, P. Kayoe, Hollandia and Eti River; in April, the Upper Tami, Hollandia bivouac and Humboldt Bay; in May–June, Hollandia bivouac and Bougainville Mts (June).—*Dutch-German boundary delimitation expedition, 1910* (*cf.* also *sub* SCHULTZE JENA):[3] setting out from Hollandia (June 11, 1910); ascending the Mosso River; to the Béwani and proceeding to the salt-spring on the Begoure (= Begowi River) (20), GJELLERUP staying behind; in July in Hollandia bivouac, and exploring Béwani River, Upper Tami River and the mouth of the Tami; bivouac Hollandia (Aug.); by boat (Sept. 8) to the mouth of the Kaiserin Augusta (= Sepik) River (10); headquarters facing October River (Oct. 3); ascending the river E and W of the Neumond Mountain (Oct. 14–Nov. 8); back at headquarters (Nov. 11); march to Hollandia (18–28); Hollandia Bivouac and Humboldt Bay (Dec.); Jotefa Bay (Jan. *1911*); for some months staying in the vicinity of Hollandia and Humboldt Bay, *reconnaissance of the Sermowai* (March 19–May 19);[4] setting out (June 12) on a march to *Lake Sentani and the Cyclop Mts*;[5] in August, the hinterland of Hollandia, Sawia and Arso; in September, Mt Misate, Tami River, hinterland of Hollandia and Jotefa Bay (16); coastal region between Biri River and the mouth of the Mamberamo, with the main object of the *reconnaissance of the Mafin* (= *Tor*) *River:*[6] in October, Tor River, Berkombor and Tenem River; spurs of the Gautier Mts (Nov.); leaving the Tor region (Nov. 15), reconnoitring the north coast to W of the Berdowi; *P. Wandoewa, P. Sarmi* and hinterland of Hollandia; in Jan.–Febr. *1912* exploring the hinterland of Hollandia, Humboldt Bay and Kajo Bay; transfer of the detachment from Hollandia to Manokwari in *NW. New Guinea*, Vogelkop: march from Siari (= Sjeri) on the W. coast of Geelvink Bay to Angi and Warmasin Lakes in the Arfak Mts.[7]

COLLECTIONS. *Herb. Bog.:* 1243 *New Guinea nos* (dried and in alcohol) incl. 231 *nos* from the NW. part; dupl. in *Herb. Leyden, Utrecht, Kew, Berl., etc.*[8]

Important collections were lost, when a vessel capsized during the Dutch-German expedition. At



GJELLERUP

first he was assisted by the Indonesian SADELI, later by mantri AJOEB (see there) of the Botanic Gardens at Buitenzorg. From a list of numbers of his collection, present at the Buitenzorg Herbarium, it is evident that he started collecting in March 1910.

Together with AJOEB he collected many living plants for *Hort. Bog.*;[9] in the cited list is an orchid from *Boeroe*, which may have been collected on the home voyage.

LITERATURE. (1) Author of: 'De Saweh-stam der Papoea's in Noord Nieuw Guinea' (Tijdschr. K.N.A.G. 1912, p. 171–182).

(2) *cf.* Versl. Milit. Expl. Ned. N.G. 1907–15 (Weltevreden 1920), p. 55.

(3) 'Verslag der Commissie ter voorbereiding van de aanwijzing eener natuurlijke grens tusschen het Nederlandsche en het Duitsche gebied op Nieuw Guinea' (Batavia 1911); 'Uittreksel uit het Verslag der Commisie *etc.*' ('s Hage, no date, w. 50 fig., 4 maps); extract in Tijdschr. K.N.A.G. 1911, p. 708–712.

(4) *cf.* Tijdschr. K.N.A.G. 1912, p. 73–74.

(5) *cf.* Versl. Milit. Expl. *l.c.* p. 57, and Tijdschr. K.N.A.G. 1911, p. 1035.

(6) *cf.* Meded. Encyclop. Bur. *no* 11, p. 13;

Tijdschr. K.N.A.G. 1912, p. 834–836 + map; Versl. Milit. Expl. *l.c.* p. 58.

(7) *cf.* Tijdschr. K.N.A.G. 1913, p. 77–78; Versl. Milit. Expl. *l.c.* p. 54.

(8) Results published in Nova Guinea vol. 8 and 12.

J. J. Smith described many new orchids in the series 'Vorläufige Beschreibung neuer Papuanischer Orchideen'.

Meliaceae and *Ericaceae* resp. by H. HARMS and H. SLEUMER in 'Beitr. z. Fl. Papuas.' (ENGL. Bot. Jahrb. 72, 1942, p. 158–205 and 207–269).

(9) *cf.* list in Versl. Pl. Tuin Buitenzorg for 1911, p. 21 and for 1912, p. 22.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; in the biographic directory 1936 of the General Danish Medical Society (*non vidi;* extr. by GJELLERUP himself).

Glassman, Sidney Frederick

(1919, Chicago, Ill., U.S.A.; x), B.A. (1942), and M.A. (1947) degree in Botany, University of Illinois; at present working towards a Ph. Dr's degree in Botany at the University of Oklahoma. From June 1943 to February 1946 he served in the U.S. Navy as a Pharmacist's Mate, and made botanical collections in the Pacific.

COLLECTING LOCALITIES. *1945. Philippine Islands. Leyte* (betw. June–Sept.): Tacloban and vicinity, Baybay, Cacao and vicinity, Palo and vicinity, Dagami, Guingawan and vicinity, Tanauan, White Beach area, Burauen, Bayran, San Miguel, Dapdap, Alangalang, Lukay, Abuyog, Lake Bito and vicinity, Diit, Jaro; in the same period collecting in addition at Besey in *Samar.*

COLLECTIONS. *Herb. Arn. Arbor.:* 1st set (a lot of common weeds were thrown out by Dr MERRILL); dupl. set in *Herb. Univ. Illinois:* about 800 *nos*, 300 from Guam (coll. 1945/46),[1] the others from the *Philippines.*

LITERATURE. (1) E. D. MERRILL & L. M. PERRY: 'Some additions to the Guam flora' (Journ. Arn. Arbor. 27, 1946, p. 323–326).

S. F. GLASSMAN: 'A survey of the plants of Guam' (Journ. Arn. Arbor. 29, 1948, p. 169–185, pl. 1–2).

Gleason, Henry Allan

(1882, Dalton City, Ill., U.S.A.; x), botanist, from 1900–1910 in Illinois; Assistant and later Associate Professor of Botany in the University of Michigan (1910–19), who took his degree in 1906 at Columbia University. He visited Buitenzorg and Tjibodas in W. Java (Dec. 1913–Febr. 1914). He spent his time mainly in surveying tropical plant-life and the culture and use of food crops. He brought together much photographic and other material for educational purposes.[1] He visited the Philippines too,[2] and besides, Japan and Ceylon. Since 1919 on the staff of the New York Botanic Garden, since 1935 Deputy Director of that institution.

He is commemorated in *Aegiphila gleasonii* MOLD. and other plants.

ITINERARY.[2] *Philippines, Luzon* (Oct. 6–Nov. 16): arrival at Manila (Oct. 6, *1913*), Los Baños (17–23), Mt Maquiling, trip on Laguna de Bay as far as Paete and thence by canoe to Pagsajan, the gorge, *etc.;* by rail to Tanauan, and Bombon Lake (Banadero) (24); by native boat to Taal Volcano (on small island in the lake); *Mindanao:* near Zamboanga (Nov. 20–Dec. 5); *W. Java* (Dec. 19, 1913–Febr. 19, *1914*): Tandjong Priok, Batavia, Buitenzorg (Bot. Gardens, Economic Garden), Mountain Garden at Tjibodas; leaving for Ceylon.

COLLECTIONS. *No* herbarium material; ecological and botanical museum material.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 40.

(2) H. A. GLEASON: 'Botanical sketches from the Asiatic Tropics II. The Philippines' (Torreya 15, 1915, p. 117–133, 139–153, fig. 1–11); '*ditto* III. Java' (*l.c.* 15, 1915, p. 161–175, 187–202, 233–244, fig. 12–27).

Goadby, R.A.E., *cf.* GOODBY.

Gobée, Oscar Hugo

(1879, o/b s.s. Overijssel, in the Channel; x), Forest Officer, since 1903 in D.E. Indian Government service; retired in 1928.

COLLECTIONS. He collected a plant on G. Midangan, Banjoemas, *Centr. Java* (Oct. 27, *1925*), *no* 6686 of series BEUMÉE (see there); in *Herb. Bog.*

Gobel, M. van, *cf. sub* Forest Research Institute, Buitenzorg.

Goebel, Karl Immanuel Eberhard Ritter von

(1855, Billingheim, Baden, Germany; 1932, ? , Germany), a botanist (originally destined for the study of theology) who took his degree at Strassburg in 1877; in 1881 appointed Botanical Assistant at Leipsic University and subsequently Associate Professor at Strassburg and later (1882) at Rostock; in 1887 Professor at Marburg; since 1891 Professor and Director of the Botanical Institute and Garden at Munich; in 1909 D.Sc. degree at Geneva; he retired in 1930.

From 1885–86 he travelled in India, Ceylon and Java;[1] later to S. America, and in 1898–99 to Australia and New Zealand.

Author of many papers,[2] principally relating to ferns.

Urostachys goebelii NESSEL was named after him.[3]

ITINERARY. *W. Java:* Buitenzorg (Nov. *1885*–March *1886*),[4] making excursions in the neighbourhood, *e.g.* to G. Salak, Megamendoeng and Tjibodas (Febr. 1886).—*W. Java* (Sept. *1924*–Jan. *1925*)[5] and subsequently visiting *Sumatra West Coast, e.g.* Haraukloof (Jan. 1925) and *Sumatra East Coast, e.g.* Petani Fall near Brastagi.

COLLECTIONS. *Herb. Rostock: Java* collection 1885–86; *Herb. Berl.:* ferns, mosses and hepatics[6] (coll. 1885–86); in the *Mus. Berl.:* 55 *nos* of fruits in alcohol; *Herb. Munich:* coll. 1924–25.

LITERATURE. (1) K. VON GOEBEL: 'Pflanzenbiologische Schilderungen I–II' (Marburg 1889–91); 'Morphologische und biologische Studien' (in

Ann. Jard. Bot. Buit. vol. 7, 9, 35, 36 and 39).
(2) *cf.* references in Ann. Jard. Bot. Buit. 45. 1935, p. 79, 86, 92.
(3) Collected in Haraukloof, *cf.* FEDDE Repert. 36, 1934, p. 187–189, pl. CLXXV.
(4) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 12.
(5) *cf. l.c.* p. 46.
(6) *Hepaticeae* by V. F. SCHIFFNER in Nova Acta Leop. 60, *no* 2, 1893; by TH. HERZOG in Svensk. Bot. Tidskr. 42, 1948, p. 230–241.
Lichens by ZAHLBRUCKNER in Ann. Crypt. Exot. 1, 1928, p. 109–212.
BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 1903, p. 127, *t.* 27; and *l.c.* 2, 1905, p. 125, *t.* 100; Ber. D.B.G. 50, 1932, Gen. Vers. Heft p. (131)–(162), incl. bibliogr. and portr.; Journ. Bot. 71, 1933, p. 1–3; Plant Physiology 10, 1935, p. 203–208, 2 portr.; Flora 131, 1936, p. v–xi.

Goedhart, J. G. A.
of Deli, *Sumatra East Coast*, sent living plants to *Hort. Bog.* in *1897–98*.

Göller, W., *cf. sub* Forest Research Institute, Buitenzorg.

Goenawan
(1906, Bandoeng, Java; x), attended a school of agriculture; since 1928 in D.E. Indian Government service, for some months Assistant Consulting Agriculturist at Buitenzorg, subsequently Assistant Advising Fishery Expert at Soerabaja (1928–29), Weltevreden (1929), Moeara Aman in Benkoelen (S. Sumatra) (end of 1929–32) and in W. Java again, *viz* at Serang (1933–34), Tjiomas (1935) and Serang (since 1936).
COLLECTIONS. *Herb. Bog.:* 12 *nos* of aquatic plants (pres. Sept. *1932*) from the experiment ponds of the Freshwater Fishery Department, at Moeara Aman, Benkoelen Res., *S. Sumatra*.

Goering (or Göring), Philip Friedrich Wilhelm
(1809, Oldendorf, Westfalen, Germany; 1879, Dresden, Germany), German-born, later naturalized; between 1844 and 1856 pharmaceutical chemist at Batavia. In 1856 he left Java for some time; in 1870 his license to practise as a doctor at Batavia was discontinued.
Some Malaysian plants were named after him, *e.g. Cyperus goeringii* STEUD.
COLLECTIONS. In August 1845 GOERING's brother, the veterinary surgeon H. GOERING at Oldendorf in Germany, offered for sale a collection of some 600 plant species sent from Java by the pharmacist F. GOERING.[1] This offer went under the heading *Japanese* plants, but when the text is read only plants collected in *Java* are mentioned. Further it is said that the plants are numbered, but partly unidentified; in the next winter H. GOERING is looking forward to a collection of *Sumatra* plants. No data as to this ever having arrived are available.
ZOLLINGER in his 'Verzeichnis'[2] includes several Japanese plants, which he reported (*l.c.* p. viii–ix) to have found in a shed in the Buitenzorg Botanic Garden where they were exposed to decay. He arranged the collection in change for part of the duplicates, and mentions that it contained GOERING plants. GOERING collected at Decima and Nagasaki (Japan). The Japanese plants cultivated in Java ZOLLINGER listed under Java.
Several of his plants were described by TURCZANINOW;[3] the cited numbers range between 1 to upwards of 500 with the addition: coll. II; as locality often '*Java or Sumatra*' is mentioned. Apparently a set is present in *Herb.* TURCZANINOW (= *Univ. Kharkov*). *Herb. Paris:* some Java ferns, *etc.*[4]
Some plants of his are cited by MIQUEL;[5] Japanese plants by STEUDEL and ZUCCARINI.
LITERATURE. (1) *cf.* Flora 28, 1845, p. 527,766.
(2) ZOLLINGER, Syst. Verz. 1, 1854, p. viii–ix.
(3) In 'Animadversiones ad primam et secundam partem herbarii Turczaninowianii, nunc universitatis caesareae charkowiensis' (Bull. Soc. Nat. Moscou 1854–63).
(4) *cf.* Bull. Mus. Hist. Nat. Paris 22, 1916, p. 410–416.
(5) In Flora Ned. Ind. vol. 3 and in Ann. Mus. Bot. Lugd. Bat.; also ferns.
BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Gojar, *cf. sub* Forestry Bureau, Manila.

Goklin, T.
retired Forest Guard; *cf. sub* Forest Department, British North Borneo.

Goldham, C.
educational officer stationed at Ipoh and Kuala Kangsar in Perak, *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).
COLLECTIONS. He sent living orchids to *Singapore;* examined by RIDLEY.

Goldie, Andrew
an emissary of the great horticulturist S. B. WILLIAMS of London; he is said to have been in the employ of SANDER & SONS at St Albans too. In 1882 he settled at Port Moresby, SE. New Guinea, as a store-keeper; he speculated in land and claimed to have bought 17.000 acres at about one penny per acre! Many of his travelling tours were made in company with Rev. MACFARLANE (see there) and with HUNSTEIN (see there).
Combretum goldieanum F.v.M. was named after him.
ITINERARY. *SE. New Guinea, Papua. 1876.* Early in the year in the 'Ellengowan' from Somerset, visiting some islands in Torres Strait: *Darnley* and *Murray Isl.* In March from Somerset to Port Moresby, exploring the neighbourhood in a circle of 10 miles. For the 3rd time from Somerset to Port Moresby, undertaking a voyage (June 12–22) with W. G. LAWES (see there) and W. Y. TURNER to Hula and Kerepuna; subsequently for some time in the vicinity of Port Moresby.[1]—*1877.* Joining some others for an expedition to New Guinea,[2] sailing in the cutter 'Explorer' from Som-

erset (July 4); *Darnley Isl.* (6), *Murray Isl.* (9–14); Port Moresby (17–27), proceeding by boat in eastern direction, going ashore at Bootless Inlet; during a fortnight's stay, Mt Astrolabe was climbed by JAMES H. SHAW; sailing back (Aug. 10) to Port Moresby and proceeding in western direction; by boat from Bura to Laloki River; to the bivouac of MORTON and BLUNDEN (who set out to Laloki as early as July 27); back to Port Moresby; for the 2nd time (Nov. 10) to the said bivouac, from where making a joined tour in western direction, discovering the Goldie River; Nov. 20 on the way back to Port Moresby. In Dec. sailing in the 'Explorer' to Kapa-Kapa, Hood Bay, Kerepunu (from where sailing the 25th); *Isl. Suáu* (South Cape) (29); Port Moresby.—*1878.* In the 'Explorer'[3] in southeastern direction: Cloudy Bay; ascending Robinson River and discovery of the Blunden River; the Louisiades and Teste Isls; Port Moresby (the voyage taking 7–8 weeks).—*1879.*[4] Starting from Port Moresby to the Laloki River (June 28), crossing the latter (29) and making camp, after a good march, in a level open country; after a fortnight's stay transporting the collections to Port Moresby and subsequently returning to Laloki River; Goldie River, making bivouac at several stations (*e.g.* Momari camp); in Sept. returning to Port Moresby *via* Laloki River and Rona Falls. From *Yule Isl.* by boat along the coast to Freshwater Bay, going ashore at Maiva only.[5]—*1880.* On the Upper waters of the Goldie River.[6]—*1882.* By boat visiting the west coasts of the *D'Entrecasteaux Isls: Fergusson* and *Normanby.*

COLLECTIONS. *Herb. Melbourne*, forwarded to F. VON MUELLER (approx. in 1876–78).[7] In the following years he certainly collected too.[6] When returning to Sydney at the end of 1876, he sent 15 cases containing living plants to London; dried specimens were dispatched to VON MUELLER.[8]

He made zoological collections too.

LITERATURE. (1) *cf.* PETERM. Mitt. 23, 1877, p. 192; Ausland 51, 1878, p. 178–179.

(2) A. GOLDIE: 'A journey into the interior of New Guinea from Port Moresby' (Proc. Roy. Geogr. Soc. Lond. 22, 1877/78, p. 219–223).

A. MORTON: 'Notes on a trip to the islands of Torres Straits and the Southeast coast of New Guinea' (Proc. Geogr. Soc. Australasia 1,1885, p. 65–84).

(3) 'Mr GOLDIE's Reisen in Neu Guinea' (Ausland 51, 1878, p. 178–180).

cf. Nature 19, 1878/79, p. 43.

'Mr GOLDIE's travels in New Guinea' (Gard. Chron. 1879, p. 597–598).

cf. Proc. Linn. Soc. N.S.W. 4, 1879, p. 85–102 (on a zoological collection).

(4) A. GOLDIE: 'Mon dernier séjour de quatre mois dans l'intérieur de la Nouvelle-Guinée' (transl. by J. MEULEMANS in Bull. Soc. Géogr. d'Anvers 5, 1880, p. 193–198).

(5) *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea 2, p. 262.

(6) *cf.* Ann. Rep. Br. N.G. for 1897/98, Vict. 1899, p. 1.

(7) Described by him in Descr. Not. Pap. Pl. 1, pts 3, 4 and 5.

(8) *cf.* Ausland 51, 1878, p. 178–179.

Golenkin, Michail Iljitsch

(1864, Petersburg, Russia; ?), professor at the University and Director of the Botanical Garden at Moscow, stayed for some months at Buitenzorg, W. Java, making provisional studies about the development of some plants belonging partly to the mosses and ferns, partly to the phanerogams.[1]

ITINERARY. *W. Java* (Dec. *1904*–May *1905*): Buitenzorg, making trips in the environs, to G. Salak *etc.*; *Krakatau* (in Sunda Str.) with TH. VALETON (see there) (March 1, 1905); *E. Java:* G. Ardjoeno (Lalidjiwo), *etc.*

COLLECTIONS. On G. Salak he discovered *Treubia insignis* and *Ephemeropsis tjibodensis*, on the west and the north side, till then found on G. Gedeh only. It seems probable that he collected, at least cryptogams. In *Herb. Moscow?*

According to DAMMERMAN[1] he made a collection of demonstration material for his lectures.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 29–30.

Author of 'Rapport sur un voyage à l'île de Java' (Bull. Acad. Sci. St Petersb. 24, 1906, p. 185–197; in Russian).

Goma, O. D., *cf. sub* Forest Research Institute, Buitenzorg.

Gomes da Silva, José, *cf. sub* SILVA, Dr J. GOMES DA

Gomez, C., *cf. sub* Forestry Bureau, Manila.

Gondjo, *cf. sub* Forest Research Institute, Buitenzorg.

Gonggrijp, Justus Willem

(1885, Plantage Clevia, Surinam; x), was educated at Wageningen Agricultural College, Holland; Forest Officer in Surinam, 1908–23; subsequently in the D.E.I., at first stationed at Buitenzorg, at the end of 1926 transferred to Sumatra East Coast; in Aug. 1928 appointed Acting Inspector at the disposal of the Adviser for the Forests Outside Java & Madoera, at Buitenzorg, and in May 1933 Adviser of the said department; retired in 1935; now Lecturer at Delft.

He made a local investigation of the pine forests round Takengon (Atjeh). He published a report on the proposed industry of resin and turpentine.[1]

COLLECTING LOCALITIES. *1924. N. Sumatra:* from Bireuën (March 9) to Takengon; Boer ni Panté (13–15); Takengon (16), and subsequently to Medan, paying a visit to the Karo Lands.

COLLECTIONS. *Herb. Bog.*, probably under the names of his assistants and numbered in the F.R.I. series (see *sub* Forest Research Institute).

LITERATURE. (1) J. W. GONGGRIJP: 'Over de winning van hars en terpentijn uit pijnboomen. Resultaten van een plaatselijk onderzoek in de Pinus Merkusii bosschen der Gajoe-landen' (Meded.

Proefstat. Boschw. *no* 10, 1924, 87 pp., 14 photogr.).

BIOGRAPHICAL DATA. Tectona 28, 1935, p. 727–732 + portr.; Wie is dat? ed. 3–4.

Gonggrijp, Louis

(1893, The Hague, Holland; x), was educated at Wageningen Agricultural College; Forest Officer in Surinam, 1920–26; in 1926 transferred to the D.E. Indian Forest Service and stationed in Java; for several years (1929–36) in Celebes (Makassar), subsequently at Buitenzorg and since 1941 at Malang, E. Java. He resigned in 1947.

Author of a typescript on the Moluccas (in For. Res. Inst. Buitenzorg).

COLLECTIONS. *Herb. Bog.:* 2 species of *Aleurites* (cultivated) from *Celebes* in Oct. *1930* + dupl. F.R.I.. *Herb. For. Res. Inst. Buitenzorg:* Malili (*Centr. Celebes*) 24 *nos* in July *1930*; *SW. Celebes 1934*, 1 *no;* Magetan in *E. Java 1940*, 10 *nos.*

Good, Peter

(† June 11, 1803, Sydney, N.S.W., Australia), a Scotch Kew Gardener who was selected in 1796 to proceed to Calcutta, to bring home a collection of plants made by CHRISTOPHER SMITH (see there). On his return he remained at Kew as Foreman till 1801, when he was appointed Assistant to ROB. BROWN on FLINDERS's voyage.

He was commemorated in the genus *Goodia* SALISB. and in some other plant species.

ITINERARY. Capt. FLINDERS's *Voyage in the 'Investigator', 1801–03, cf. sub* R. BROWN (also for liter.); *Timor* was visited (Apr. 1–7, *1803*); GOOD died before the 2nd visit to the island.

COLLECTIONS. He made a fine collection of Australian *Proteaceae* for Kew Gardens and forwarded seeds of Australian plants too.[1]

He may have made collections in Timor.

LITERATURE. (1) *cf.* 2nd edit. AITON, Hortus Kewensis, 1813.

BIOGRAPHICAL DATA. Gard. Chron. 1881[2], p. 568; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 27, 1889, p. 19–20; Kew Bull. 1891, p. 301–302; Journ. Kew Guild 1897, p. 28; MAIDEN in Journ. & Proc. Roy. Soc. N.S.W. 42, 1908, p. 105–106.

Goodby, G. T.

(died recently), Lieutenant-Colonel of the Royal Australian Engineers (R.A.E.), was a lieutenant in New Guinea during World War I. He was a keen collector of Australian plants.

COLLECTIONS. *State Herb. Perth* (W. Australia): his principal collections; *Herb. Sydney:* plants from *New Britain* (coll. *c. 1915*), *Bismarck Archipelago.*

Goodenough, James Samuel

Eurasian who entered the Forest Service of the Straits Settlements in 1888 and served in Malacca, Singapore (1895–96), and as Forest Inspector in Selangor to 1901.

COLLECTING LOCALITIES. *1888–1901. Malay Peninsula:* Malacca; Negri Sembilan: G. Tampin (*1893–94*); Selangor: near Kerling (*1899*), Batu Caves, Rawang, Kuang and Kanching. Apparently in *NW. Borneo*, Sarawak, too.[1]

COLLECTIONS. *Herb. Sing.:* from Malacca (pres. 1893), from Selangor small collection (pres. 1896) and 240 *nos* from Selangor (pres.1899). Dupl. in *Herb. Berl.:* Malacca plants; *Herb. Kew, Leyden.* He collected material of forest trees for RIDLEY.

LITERATURE.(1) cited by MERRILL in Enum. Born. Pl. 1921, p. 170–171 as the collector of *Eria hispidissima* RIDL.

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

Goos, G. H.

COLLECTIONS. In *Mus. Hamburg:* several fruits in alcohol, originating from the Straits Settlements, *Malay Peninsula.*

Goot, Piet van der

(1887, Amsterdam, Holland; Apr. 10, 1944, in a Japanese prisoner camp, Tjimahi, Java), was educated at Wageningen Agricultural College (Dr's degree in 1925); in 1912 appointed Zoologist at the Experiment Station for the Java Sugar Industry at Pasoeroean (E. Java); Entomologist of the Central Java Experiment Station (Salatiga), 1914–17; after expiry of his leave, on the staff of the Institute for Plant Diseases of the General Experiment Station for Agriculture (Buitenzorg), and since 1934 Chief of the said institute.

On account of special merit he was awarded the BOSSCHA medal.[1]

COLLECTING LOCALITIES.[2] *E. Java* (Oct. *1912*–July *1914*): on weekends and holidays, on G. Tengger (Ngadiwono, Lebasari, Poespo, Tosari, Nongkodjadjar), G. Ardjoeno (Prigen), Djember, G. Kawi (Songgoriti), Lawang, G. Wilis (Modjopanggoeng), *etc.—Centr. Java* (July *1914*–Apr. *1917*): G. Diëng, G. Merbaboe (July *1915*), G. Telemojo, Salatiga.—*W. Java:* Indramajoe (*1923*). —*Centr. Celebes*, S. Toradja Lands: Taba (June *1926*).[3]—*Madoera* (Jan. *1931*).

COLLECTIONS. Especially host-plants of lice. His *East Java* plants were handed to JESWIET (see there), they were partly forwarded to *Herb. Bog.; Centr. Java* plants too partly in *Herb. Bog.*, from *Madoera* 1 *no* only. In *Herb. Pasoer.:* 1 *no* from Indramajoe (*W. Java*).

LITERATURE. (1) *cf.* Landbouw 12, 1936, p. 106–109.

(2) For localities and plants *cf.* P. VAN DER GOOT: 'Zur Kenntnis der Blattläuse Java's' (Contrib. Faune Ind. néerl. 1, fasc. 3, 1917, p. 1–301).

(3) *cf.* Landbouw 20, 1948, p. 107–116.

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 454; Landbouw 19, 1946, p. 50–53 + portr.

Göring, *cf.* GOERING.

Gorkom, Karel Wessel van

(1835, Zutphen, Gld, Holland; 1910, Baarn, U., Holland), was appointed Military Pharmacist at Batavia (W. Java) in 1855; he resigned in 1857 and was since in several functions at Buitenzorg; in 1864 Leader of the Cinchona Culture and in 1875

Chief Inspector of the Rice and Sugar Culture *etc.*[1] In 1878 he went on European leave and was subsequently pensioned off.

He was a zealous promoter of the interests of Indonesian agriculture; he took his honorary degree in pharmacy at Utrecht in 1886.

COLLECTING LOCALITIES. *W. Java (about 1869–71)*; Malabar, Tjinjiroean, Kendang.

COLLECTIONS. *Herb. Bog.:* some plants (incl. species of *Ficus* through the intermediary of the Kon. Natuurkundige Vereeniging at Batavia) (pres. 1870–71), a few numbered in the H.B. series. *Herb. Leyden* and *Berl.: Cinchona* material (pres. 1869); *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam:* material of cultivated species of *Cinchona* from *Java* (pres. 1873–74).

LITERATURE. (1) Author of 'Die Chinacultur auf Java' (Leipzig 1869, transl. from Dutch); 'De Oost-Indische Cultures in betrekking tot handel en Nijverheid' (1st ed. 1881, 2nd ed. 1884, suppl. in 1891).

BIOGRAPHICAL DATA. Ind. Mercuur 1910, p. 187, 535–540; Encyclop. N.I., 1917.

Gors, Walter

of Port Moresby, SE. New Guinea, agent of the firm of BURNS, PHILP & Co. He accompanied G. R. LE HUNTE (see there) on his tour to Mt Werirata and the Rauna (= Rona) Falls in June 1899. *Cf.* also *sub* W. H. Goss (? identical).

COLLECTIONS. *Herb. Sydney* (pres. through BURNS, PHILP & Co. in 1902).

Goss, W. H.

? Identical with WALTER GORS.

COLLECTIONS. In *Herb. Sydney* a *no* 162, *Boea lawesii* FORB. collected in *SE. New Guinea* in *1900*.[1]

LITERATURE. (1) *cf.* ENGL. Bot. Jahrb. 58, 1923, p. 262.

Govers, A., *cf. sub* Forest Research Institute, Buitenzorg.

Graaf, D. A. J. B. de

Harbour-master at Makassar (SW. Celebes), sent material of the gutta-percha tree from *E. Borneo*, Koetei River, to the Natuurkundige Vereeniging at Batavia in *1852*. He was transferred to Soerabaja in 1858.

Grabowsky, Friederich

(1857, Marggrabowa = Treuhand, E. Prussia, Germany; 1929, Breslau, Germany), zoologist who made extensive travels; later Director of the zoological Garden at Breslau and finally Inspector of the Zoological Institute at Brunswick.

Some plants were named after him.

ITINERARY. *1881–84. SE. Borneo.*[1] Arrival at Bandjermasin (Jan. 29, 1881); since June *1881* in the basin of the Kapuas River (4½ months) and in Dusson Timor Distr. (4 months); from Bandjermasin (March 10, *1882*) to Martapura, making excursions in the vicinity (till March 17); by boat to kp. Sungei Raja (18); Pengaron and environs (March 19–Apr. 3); from Pengaron to Mengkauk and G. Batu Hapu (cave); proceeding to Mengkauk River, crossing the Bobaris Mts near G. Pakan, to Tambarangan and Benoa Padang; caves of G. Lampinit (8); G. Talikor, situated E of G. Lampinit, and back to Rantau; making base bivouac at Kendangan (Apr. 21 or 30); by boat to cave in G. Batu Laki on the Amandit River (30); departing (May 17) *via* Danau Bangkau to Barabei (18); June 13 to Lok, Rangas, kp. Labuan, *etc.*, at the westfoot of the Meratoes Mts; after a long stay in these regions, visiting many caves, *e.g.* in G. Mandella (Oct. 7, *1883*), leaving the island (July 4, *1884*).—*NE. New Guinea* (former *Kaiser-Wilhelmsland*).[2] As a member of the 1st expedition after the foundation of the German New Guinea Comp., under command of R. MENTZEL (see there) in *1885*; after the establishment of Finschhafen (Nov.1885), he proceeded to look for other suitable localities which resulted in the establishment of Samoa Hafen, soon renamed Hatzfeldhafen. His first march into the interior was to the mountain village Tambèro (setting out Febr. 20, *1886*). In the 2nd half of 1886 he went to Soerabaja for recruiting coolies; visiting caves near Grissee. In *1887* he quitted the service of the New Guinea Comp.

COLLECTIONS. *Herb. Berl.:* 140 species (241 specim.) of siphonogams from *Borneo* (pres. 1883); in *Herb. Brit. Mus.:* 407 or 421 (the statements don't agree) *Borneo* plants (purch. 1884). The collection preserved in the British Museum is stated to originate from HENRI EMANUEL GRABOWSKI; as the latter died at Breslau in 1842 (*cf.* PRITZEL, Thes. Lit. Bot., 1872) and to our knowledge never visited Borneo, we may assume that the statement is based on a confusion of name. Part of his botanical collections was lost by shipwreck.

I do not know whether he also collected *New Guinea* plants, he sent at least a *Musa* species to *Hort. Bog.* (pres. 1886).

LITERATURE. (1) F. GRABOWSKY: 'Der Distrikt Dusson Timor in SO. Borneo' (Ausland 1884, p. 444–449, 469–475); 'Ueber seine Reisen in Süd–ost Borneo' (Verh. Ges. Erdk. Berl. 1884, p. 419–422); 'Kalksteinhöhlen in Südost-Borneo' (Globus 54, 1888, p. 326–329); 'Ueber Aeusserungen geistigen Lebens bei den Osengadju in Südost Borneo' (1889); 'Streifzüge durch die malayischen Distrikte SO. Borneo's' (Globus 1890, p. 11–13, 219–221); 'Der Reisbau bei den Dajaken Südost-Borneo's' (Globus 1908, p. 101–105); and many other papers, mainly published in 'Ausland'.

cf. also POSEWITZ, Borneo, 1889, p. 380–381 (note).

(2) *cf.* Nachr. Kais. Wilh. Land 1885, p. 6; *l.c.* 1886, p. 62, 77, 82 and 113; *l.c.* 1887, p. 163.

F. GRABOWSKY: 'Erinnerungen an Neu-Guinea' (Ausland 62, 1889, p. 121–123); 'Der Bezirk Hatzfeldhafen und seine Bewohner' (PETERM. Mitt. 41, 1896, p. 186–189, pl. 13).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Gracht, van der

of Soerabaja, sent orchids from *Madoera*, the

Boroboedoer (*Centr. Java*), *etc.*, to *Hort. Bog.* in *1906*.

Graeffe, Dr Eduard

(1833, Zürich, Switzerland; 1916, Laibach, Germany), Swiss collector of GODEFFROY at Hamburg, Germany, who stayed for 11 years in the Samoa Islands. He accompanied the voyage of the 'Planet' (*cf.* itiner. *etc. sub* A. KRAEMER), 1906–07. Some time Inspector of a zoological station at Trieste.

The liverwort *Anastrophyllum graeffei* JACK & STEPH. was named after him.

COLLECTIONS. *Herb. Berl.:* marine *Algae* collected near *New Guinea* and in the Pacific.[1] *Herb. Hamb.* (acq. with *Herb. Mus.* GODEFFROY in 1886): collection from the Pacific (Samoa, Tonga, Fiji, *etc.*, made in 1862).[2]

He may have collected N.G. phanerogams too.

LITERATURE. (1) *cf.* O. C. SCHMIDT in Hedwigia 68, 1928, p. 19–86.

(2) B. SEEMANN: 'New South Sea island plants' (SEEMANN Journ. Bot. 2, 1864, p. 70–77).

BIOGRAPHICAL DATA. Deutsche Entom. Zeitschr. (Berl.) 1916, p. 605; Vierteljahrschr. Naturf. Ges. Zürich 61, 1916, p. 1–39 + portr.

Graevenitz, Miss A. L. von

and Miss E. STEIN (see there) stayed in *Java* in *1907* to study for a few months the tropical flora and to collect material.[1]

In 1921 a certain Dr LUISE VON GRAEVENITZ, Assistant at the Institute for Genetical Research of het Agricultural College, Berlin, died (*cf.* Ber. D. B.G. 39, 1921, p. 63); she may be identical with the collector.

COLLECTIONS. In *Herb. Bog.: Rhododendron zollingeri* J.J.S. from Mt Diëng, *Centr. Java*.[2] We do not have data on the location of contingent collections.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 32.

(2) *cf.* Icon. Bogor. 4, 1910, p. 74.

Graff, Paul Weidemeyer

(1880, Indianapolis, U.S.A.; x), mycologist who took his Dr's degree in 1932; from 1911–14 on the staff of the Bureau of Science at Manila, Luzon, P.I.; later at Montana, Columbia, *etc.;* since 1931 Consulting Mycologist.

COLLECTIONS. Mostly *Fungi*, numbered in the Bur. Sci. series (see there), *Herb. Manila.*

BIOGRAPHICAL DATA. Amer. Men of Sci. 1938.

Gramberg, J. S. G.

officer of the D.E. Indian Civil Service; since April 1870 Secretary, besides notary in Timor. Evidently previously working in Sumatra.[1]

ITINERARY.[2] *1870.* Sept. 3 he was sent as peacemaker in the name of the Government on a tour to *SW. Timor*, Babauw (Sonnebait and Amfoeang), returning at Koepang on Oct. 2nd.

COLLECTIONS. *Herb. Bog.: Timor* plants (pres. 1871).

LITERATURE. (1) J. S. G. GRAMBERG: 'Reis naar Siak' (Tijdschr. Ind. Taal-, Land- en Volkenk. 13, 1864, p. 497–527); 'Schets der Kesam, Semendo, Makakauw en Blabauw' (*l.c.* 15, 1866, p. 446–474; dealing with the Palembang Highlands).

(2) J. S. G. GRAMBERG: 'Een maand in de binnenlanden van Timor' (Verh. Bat. Gen. 36, 1872, p. 161–217; no data on collections).

Grashoff, Carl Wilhelm Ferdinand

(1879, Seesen, W of Goslar, Harz, Germany; June 17, 1916, Palembang, Sumatra), entomological and botanical collector who travelled for several years in the Malay Archipelago; successively in the employ of the entomologist H. FRUHSTORFER (see there) 1902–05, of Professor NEISSER (Breslau) 1905–07, and collected on behalf of ELBERT, MOSZKOWSKI and MORIN (= ? H. MORIN, see there), ROSENSTOCK and FÖRSTER, and from 1915 until his death for the Museum and Inquiry Office for Economic Botany at Buitenzorg (*cf. sub* K. HEYNE). In the meantime (Dec. 1913–Dec. 1914) draughtsman with the tin-mining and (from September) working on behalf of the Museum at Blinjoe, Banka.

ROSENSTOCK named some ferns after him.

COLLECTING LOCALITIES. *1902–05.* Visiting *Sumatra* and islands W of it: *Enggano, Mentawei,* and *Batoe Isls; Bawean, Kangean* (NE of Java); *Bali* (*Lesser Sunda Isls*).—*1905–07. Sumatra* and *Java.—1913. Sumatra West Coast:* Padangpandjang.—*1914. Banka,* at Belinjoe *etc.* (Sept.–Dec.). —*1914–16. S. Sumatra,* Palembang. *Since May 1915* visiting Lematang Oeloe, Lematang Ilir, Moelak Oeloe Division, Moeara Doea, Komering Oeloe, Banjoeasin, the Koeboe region, Rawas, *etc.*

COLLECTIONS. Probably no botanical collections were made prior to 1905; we do not have data about the collections made on behalf of ELBERT, MOSZKOWSKI and MORIN; the collections for Prof. ROSENSTOCK (Gotha) (*Herb. Berlin* now) (60 ferns in 1913)[1] and for FÖRSTER were made near Padangpandjang in *Sumatra West Coast* Res.

In *Herb. Bog.:* collections 1914–16, *viz nos* 1–123 (Banka), *nos* 124–1152 (Palembang); *Herb. For. Res. Inst.* (with original labels); dupl. in *Herb. Leyden.*

Some living plants from Palembang to *Hort. Bog.* (pres. 1915).

LITERATURE. (1) E. ROSENSTOCK: 'Filices sumatranae novae' (FEDDE Repert. 13, 1914, p. 212–221).

BIOGRAPHICAL DATA. Jaarb. Dept Landb. Nijverh. & Handel (Buitenzorg) 1916, p. 122; BACKER, Verkl. Woordenb., 1936.

Gravenhorst, C. A.

(1884, Randers, Jutland, Denmark; x), chief of the laboratory of an oil-factory near Aarhuus, since 1930 Sub-Director of the same. He made a study tour to the Dutch East Indies, Malaya and China, to make investigations on the properties of oleiferous seeds and on the copra problem. He was for some time a guest of the Herbarium and the Foreigners' Laboratory at Buitenzorg.[1]

Bulbophyllum gravenhorstii J.J.S. was named after him.

COLLECTING LOCALITIES. *W. Borneo:* Upper Kapoeas (*1916*), Landak (*1917*).

COLLECTIONS. He sent some living orchids from the above-mentioned localities to J. J. SMITH, *Hort. Bog.*, some material of which *probably* preserved in *Herb. Bog.*



GRETHER

LITERATURE. (1) *cf.* Versl. Pl. Tuin Buitenzorg for 1916, p. 7 (here the initials mentioned are C.O.!).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Greene, Dr D. L.

COLLECTIONS. *Herb. Sarawak:* leaves and fruit of '*puru*' (*? Artocarpus sp.*) from Kuching (*1912*).

Gregory, V. B.

COLLECTIONS. In literature we met with the *nos* 80 (*Costus speciosus* SM.) from *Luzon*, Prov. of Tayabas,[1] and 117 cited by MERRILL in Enum. Philip. Fl. Pl., *etc.*

LITERATURE. (1) *cf.* RIDLEY in Philip. J. Sci. C. Bot. 4, 1909, p. 192.

Greiner, Dr, see *sub Addenda.*

Greshoff, Maurits

(1862, The Hague, Holland; 1909, Haarlem, Holland), military dispenser; Phytochemist of the Botanic Gardens at Buitenzorg, 1888–92 (1891–92 chief of the Pharmacological Laboratory); father of systematic scientific investigations on the chemical properties of Indonesian plants. In 1895 he was appointed Assistant at the Colonial Museum at Haarlem, of which institution he was director from 1901.

Author of many papers on the use and history of economic plants, fish-poisons, *etc.*[1]

Canarium greshoffi KDS was named after him.

COLLECTING LOCALITIES. *1889. P. Seriboe* (= Duizendeilanden) in the Bay of Batavia.—*1891. W. Java:* G. Tangkoeban Prahoe and G. Papandajan.

COLLECTIONS. *Herb. Bog.:* a few specimens; *Herb. Leyden:* 55 *Fungi.*

He made a collection of native medicines and medicinal plants and an additional herbarium of medicinal and poisonous plants.

He is cited by UITTIEN[2] as the collector of *Thoracostachyum heyneanum* (BACK.) UITT. in Palembang Res., S. Sumatra; the name was misread and rightly should be GRASHOFF (see there).

LITERATURE. (1) *e.g.* 'Schetsen van nuttige Indische planten' (Amsterdam 1894, 60 pl.); 'Vischvergiften' I–III (Meded. 's Lands Pl. Tuin Buitenzorg *no* 10, 1893, and 29, 1900; Meded. Dept v. Landb. *no* 17, 1913); 'Indische vergifrapporten' ('s-Gravenhage, 1914, 3rd ed.).

(2) *cf.* Rec. Trav. Bot. néerl. 33, 1936, p. 139.

BIOGRAPHICAL DATA. Ind. Mercuur 1909, p. 959–960; Kew Bull. 1909, p. 424–425; Chem. Weekbl. 7, 1910, p. 231–249; Bull. Kol. Mus. *no* 45, 1910, p. 13–42 (incl. bibliogr.), and portr. in *l.c. no* 52, 1913; Encyclop. N.I. 1, 1917; 'Gedenkschrift 100-jarig Bestaan 's Lands Plantentuin Buitenzorg op 18 Mei 1917' p. 11–12; portr. in Ann. Jard. Bot. Buit. 45, 1935, pl. 8; BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 49, 1939, p. 443; *l.c.* 50, 1940, p. 191; *l.c.* 51, 1941, p. 352.

Gresser, E., *cf. sub* Forest Research Institute, Buitenzorg.

Grether, David Frank

(1920, Neillsville, Wisconsin, U.S.A.; x) studied pre-medicine at Mission House College, Plymouth, Wisconsin, and served as a laboratory assistant in biology as a junior, 1938–41; entered the University of Wisconsin Medical School, 1941, and terminated studies in that school to join the U.S. Navy in August, 1942, and became a flying officer, having duty in the Atlantic Fleet and in the Pacific Fleet, 1943–1946; became an Education Officer travelling to all Pacific outposts in an effort to interest men with abilities and training to become collectors for scientific advancement, 1946. In September 1946 re-entered the University of Wisconsin in the School of Zoology to complete requirements for a Bachelor of Philosophy degree in May, 1947; accepted as a Teaching Assistant in the Department of Botany, University of Wisconsin, Madison, Wisconsin, 1947.

COLLECTING LOCALITIES. Botanical collections were made in the *Philippines, Bismarck Archipelago*, Solomons, *New Guinea*, Marianas, Ryukyus, Marshall and Hawaiian Islands, during *1944–46*, jointly with W. H. WAGNER Jr (see there), while flying in the Pacific area. In the Malaysian

area: *Admiralty Islands: Los Negros* (Nov. 16–19, *1944*); *Philippines: Samar*, Guiuan (March 16–18, *1945*); *Admiralties: Los Negros*, and *eastern Manus Isl.* (March 20 and May 11); *Expedition to the Admiralty Islands* (Nov. 6–29, 1945): *Los Negros* (Nov. 6–29); *Manus;* Lorengau (Nov. 8, 9, 11, 12, 18, 20), Drangot River (Nov. 14), Patusi (Nov. 24), Watani River (Nov. 25); *Lou Island* (Nov. 13, 16); and *Tawi Island* (Nov. 24); Mount Tjajiak (Mt Dremsel Area, *Manus*, Nov. 25); *Schouten Isls: Biak* (Dec. 2, 3); *Philippines: Samar*, Calicoan and Guiuan (Dec. 5). In July *1946* he made a 1-week trip to the *Island of Manus, Admiralties*, where he took a native safari into the interior in company with a native police boy, ROHAS: Tingau River (July 10); Sabon, Bulihat, Warrabi, Lundret and Bowat (July 10); Drano, Tingau I, Tingau II, Kwaliap, Buyang II, Buyang I, and Pundrau (July 11); Waimdra, Badlock, Mundrau, Sau and Inrim (July 12); *Los Negros* (July 13).

COLLECTIONS. Number series, 3200–4639, including collections of W. H. WAGNER Jr (see there). First series deposited at *Herb. Berkeley* (Cal.). Main collections are pteridophytes,[1] often in multiplicate, distributed as follows: *U.S. Nat. Herb. Wash.; Natural History Museum*, Department of Agriculture and Commerce, *Manila*, P.I.; *Herb.* E.B. COPELAND; *Bern. P. Bish. Mus., Honolulu; Herb. Sydney; Paris; State Mus. Stockholm; Univ. of Pennsylvania Herb.; Univ. of Wisconsin Herb.; Herb. Kew.*

LITERATURE. (1) W. H. WAGNER Jr and D. F. GRETHER: 'Pteridophytes of the Admiralty Islands' (in the press, University of California Publications in Botany).

W. H. WAGNER Jr and D. F. GRETHER: 'Pteridophytes from Guam' (Bernice P. Bishop Mus. Occas. Pap. 19, 1948, *no* 2, p. 25–99). *cf.* also *sub* W. H. WAGNER Jr.

Grevenstuk, Antonie

(1892, Baambrugge, N.H., Holland; x) studied medicine, but later specialized in pharmacology. In 1929 he took his Dr's degree, and in the same year he was appointed Professor of Pharmacy at the Medical College, Batavia. After having been interned by the Japanese (1942–1946), he was reappointed in the University of Batavia.

Most of his papers deal with pharmacology and native medicine. From his youth he was interested in botany, especially in plant-breeding.

COLLECTING LOCALITIES & COLLECTIONS. *Herb. Bog.*: 250 *nos* from *E. Soemba* (*Lesser Sunda Isls*), collected July *1938*.[1]

LITERATURE. (1) A. GREVENSTUK: 'Vacantie op Soemba' (Trop. Nat. 28, 1939, p. 57–67, 11 fig.).

Griendt, de

collected some plants in the neighbourhood of Toeloengagoeng, Kediri Res. (*E. Java*) in Jan. *1909*.

COLLECTIONS. On behalf of C. A. BACKER (see there); *Herb. Bog.*

Grieve, H. G.

(born in Scotland), planter at Tebrau Estate, near Johore Bahru; collected orchids in *Malaya* from about *1935 onwards*, especially at Cameron Highlands.

COLLECTIONS. In *Herb. Sing.*

Griffin, Laurence Edmonds

(1874, Dalton, N.Y., U.S.A.; x), zoologist who took his Dr's degree in 1900 at Hopkins University. From 1908–10 Asst Professor at the Medical College of the Philippines, from 1910–13 Assoc. Professor (1911–13 Dean). Since 1914 Professor of Zoology at Pittsburgh, since 1920 at Reed College, Portland, Oregon.

COLLECTIONS. He collected a few plants in the *Philippines*, numbered in the Bur. of Sci. series (see there); in *Herb. Manila.*

BIOGRAPHICAL DATA. Amer. Men of Science 1938.

Griffith, William

(1810, Ham Common, Surrey, England; Febr. 9, 1845, Malacca), educated at London University, surgeon in the service of the East India Company (since 1832); appointed civil surgeon of Malacca in mid-1841; recalled to take charge of the Botanic Gardens, Calcutta in 1842, and Professor of Botany there; return in Malacca early in 1845.

His 'Posthumous Papers', bequeathed to the E.I.C., were arranged by JOHN MACCLELLAND.[1] His special interest was morphology. RIDLEY[2] refers to a GEORGE GRIFFITH, probably a mistake.

The genus *Griffithia* W. & A. and many other plants were named in his honour.

COLLECTING LOCALITIES. Mostly in British India.—*Malay Peninsula.* Malacca: first stay (*1841–mid-1842*), making journeys to Naning, Mt Ophir and Mt Mering (Febr. 1842); second stay (arriving Jan. 9, *1845*), visiting *P. Penang* on the way to Malacca.

COLLECTIONS. *Herb. Kew;*[3] dupl. in *Calcutta.*[4] Other duplicates in *Herb. Brit. Mus.:* 431 *Malacca* plants (purch. 1869) with *Herb.* WARD; *Herb.* BOISS. (*Geneva*); *Herb.* DECAND. (*Geneva*) (546); *Univ. Dublin; Herb.* VAN HEURCK (= *Antwerp*) (2370); *Herb. Oxford* (with *Herb.* FIELDING); *Munich; Imp. Gard. St Petersb.* (= *Leningrad*) and *Acad. Sci. ditto; Leyden; Vienna: e.g. Malacca* orchids with *Herb.* REICHENBACH; *Bot. Gard. Zürich; Sing.; Florence; Madrid; Berl.: Malacca* plants; *Paris;* some pharmaceutical plants in the *Hanbury Herb.* (Lond.); in *Herb.* MARTIUS (= *Brussels*).

He employed the native collector E. FERNANDEZ (see there), and in 1845 VERAPHA and NINGHUL (see there).

Among his miscellaneous collections was one of: *Malacca*, Tenasserim, and Afghanistan plants, distributed and numbered by himself. The best sets of these went to the late Dr LEMANN, and the majority form part of the *Cambridge Univers. Herb.;* the second sets were communicated by GRIFFITH to Sir W. HOOKER's *Herb.;* others were sent to Dr GARDNER of Ceylon and Dr WIGHT of Madras. Of these GARDNER's was sold at his death, when Sir W. HOOKER purchased the *Malacca* specimens. His private collection was bequeathed to the E.I.C., and distributed by Kew.[3]

Several plants of the *Malay Peninsula* were described.[5]

LITERATURE. (1) 'Journals of travels in Assam, Burma, Bootan, Affghanistan and the neighbouring countries' (Calcutta 1847; with notice of... and a few extracts from his private correspondence); 'Itinerary notes on plants collected in the Khasyah and Bootan mountains, 1837–38, in Affghanistan and neighbouring countries, 1839 to 1841' (Calcutta 1848; incl. 'Notes on the vegetation about Malacca' on p. 368–374; 'Letters to Dr R. Wight', *etc.*); and many systematic papers, *cf.* HOOK. Lond. Journ. Bot. 7, 1848, p. 446–449, and Journ. Bot. & Kew Gard. Misc. 2, 1850, p. 352.

(2) *cf.* Journ. Str. Br. Roy. As. Soc. *no* 25, 1894, p. 166.

(3) J. D. HOOKER: 'Catalogue of the plants distributed at the Roy. Gard. Kew... from the herbaria of GRIFFITH, FALCONER and HELFER' (London 1865, iv + 58 pp., printed for private distribution) (plants of different collectors *not* separately mentioned!). GRIFFITH's herbarium was originally presented to the Herb. Linn. Soc. (*cf.* Bot. Zeitung 8, 1850, p. 632).

(4) *cf.* Journ. As. Soc. Bengal 25, 1856, p. 410–411; HOOK. Journ. Bot. & Kew Gard. Misc. 9, 1857, p. 34.

(5) W. GRIFFITH in 'Notulae ad plantas Asiaticas' (Calcutta 1847–54, in Posth. Papers arranged by J. M'CLELLAND).

By HOOKER *f.* in Transact. Linn. Soc. Lond. 23[1], 1860, p. 155–172, pl. 20–28.

BIOGRAPHICAL DATA. Proc. Linn. Soc. 1, 1845, p. 239–244 (copied in 'Journals of travels' *l.c.* LITER. *sub* 1); Madras Journ. Lit. & Sci. 14, p. 187; Journ. Nat. Hist. 6, p. 294; Journ. Agr. Hort. Soc. Calc. 4, 1845; HOOK. Lond. Journ. Bot. 4, 1845, p. 371–375; PRITZEL, Thes. Lit. Bot., 1872; Gard. Chron. 1899[2], p. 252; J. D. MILNER, Catalogue portraits at Kew, 1906, p. 55; BUCKLAND, Dict. Ind. Biogr., 1906; OLIVER, Makers of British Botany, 1913, p. 178–191, w. portr.; Dict. Nat. Biogr. 23, p. 240; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936; portr. see *Addenda*.

Grij..., *cf.* Gry...

Grimm, Hermanus Nicolaas

(1641, Wisby, Gothland, Sweden; 1711, Stockholm, Sweden), surgeon who in 1663 accompanied a voyage to Nova Zembla, and in 1666 and 1671 visited Batavia and the D.E.I.; in the employ of the Dutch E.I.C. from 1678–81. He was in practice in Colombo and Coromandel too. Later court-physician at Stockholm.

In 1680 he accompanied W. TEN RHYNE (see there) on a tour to Sumatra West Coast.

Author of some botanical papers, *e.g.* on the benzoin tree of Sumatra.[1]

He occasionally sent descriptions and drawings of plants to the Stockholm Academy of Science, and possibly sent dried material to Sweden too.

LITERATURE. (1) H. N. GRIMMIUS: 'De arbore Benzoini Observatio' and several other papers in Misc. Acad. Nat. Cur. dec. 2 (*non vidi*).

BIOGRAPHICAL DATA. SPRENGEL, Hist. rei Herb. 2, 1808, p. 82–83; Bot. Tidskr. 17, 1890, p. 321, bibliogr.; Geneesk. Tijdschr. N.I. 1911, p. 176–177; L. S. A. M. VON RÖMER, Historische schetsen, Batavia 1921, p. 65–66; CHRISTENSEN, Den Danske Bot. Hist. 2, 1924–26, p. 27–28.

Griswold, John Augustus

(1912, Hewlett, Long Island, N.Y., U.S.A.; x), educated at Brooks School, Mass., joined the Museum of Comparative Zoology, Harvard, Cambridge, in 1932; subsequently ornithological collector attached to the Asiatic Primate Expedition (Harvard) to Siam and Borneo under H. J. COOLIDGE (see there) in 1937. Besides he joined expeditions to Panama (1936), Peru (1939), and Yucatan (1940), and then entered the Army on account of World War II.

COLLECTING LOCALITIES. *1937. Br. N. Borneo*, Mt Kinabalu:[1] Jesselton–Tagop (May 31), Tagop–Bongol (June 1), to Singaron (2), to Kiau–Tenompoh–Bundu Tuan (3), Bundu Tuan (4–7), to Lumu Lumu (8), to Kamburanga and Paka Cave (Aug. 4), to summit Lowe's Peak and back to Paka (5), collecting at Paka (10 days), to Kiau (16), to the coast (28).

COLLECTIONS. *Herb. Arn. Arbor.:* 125 *nos* from Mt Kinabalu. The plants are sometimes cited as collected by COOLIDGE & GRISWOLD, but COOLIDGE never ascended Kinabalu.

LITERATURE. (1) J. A. GRISWOLD: 'Up Mount Kinabalu I' (Scient. Monthly 48, 1939, p. 401–414, 504–518, w. ill.).

Groeneveldt, Willem

(1881, Batavia, Java; x), was educated in Europe and returned to the D.E.I. in 1907 as employee of the 'Nederlandsche Handel Mij'; in 1909 he entered the Civil Service; for several years stationed in Sumatra, filling various offices; in 1922 appointed Assistant Resident of Asahan (Sumatra East Coast), in 1923 in Timor, in 1924 in Soembawa and in 1927 of Agam (Sumatra West Coast, stationed at Fort de Kock); in 1932 Resident of Benkoelen. He retired in 1935, settling at The Hague. He moved to Buitenzorg (Java) early in 1940, and returned to Holland in 1946.

He is interested in nature protection and is the author of some papers dealing with that subject.[1]

J. J. SMITH named some orchids after him.

COLLECTING LOCALITIES. *1917–23. Sumatra*, especially *Sumatra West Coast, e.g.* on G. Merapi with JACOBSON (May 12, *1919*).—*1924. Timor.*—*1924–26.* According to his own statements in *Soembawa* and *Flores.*—*1927–32. Sumatra West Coast:* Batang Paloepoeh, Loeboek Sikaping, Loeboek Soelasih, Agam, Bt Batoe Balah, Taloe–Ophir Distr., Bt Batoe Banting, G. Singgalang, Palembajan, Pariaman.—*1932–33.* Benkoelen Residency, *e.g.* on *P. Enggano* (1932).

COLLECTIONS. Especially orchids for J. J. SMITH in *Hort.* and *Herb. Bog.*, but also other

plants; in 1924 a beautiful collection from *Timor* to *Hort. Bog.*

LITERATURE. (1) 'Het natuurmonument Doesoen besar in Benkoelen' (Versl. N.I. Ver. t. Nat. Besch. for 1935, 1936, p. 153–156, fig. 22–23); 'Bescherming van den wild- en vischstand in de Res. Benkoelen' (Versl. *l.c.* p. 130–136); *etc.*

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Groenhart, Pieter

(1894, Ilpendam, N.H, Holland; x), schoolteacher, from 1916–26 attached to several schools in Holland; in August 1926 to Java, at first stationed at Batavia, and subsequently teacher of the School of Agriculture at Malang (E. Java) till 1940, interrupted by a 4-year's leave from Nov. 1932–May 1936, during which he studied biology at Utrecht. Subsequently transferred to the High School at Buitenzorg (W. Java). For a long time president of the Natural History Society, Malang branch. He specialized in lichens, and when at Buitenzorg, he obtained permission to work one day weekly in the Herbarium. Since March 1946 as a stipendiate working in the Leyden Herbarium. In Aug. 1947 he returned to Buitenzorg.

Author of some small papers on lichens.

COLLECTING LOCALITIES. *E. Java: 1930–40.* Garden of the School of Agriculture at Malang.—*1936.* G. Dorowati (Aug. 23), Nongkodjadjar (Sept. 27).—*1937.* G. Kloet (= Kelud) (Oct. 15), Poesoengsadjimah on G. Smeroe (Nov. 7).—*1938.* Tretes (Oct. 18).—*1939.* Soemberbrantas (March 5, Oct. 15), Tempoe Sèwoe Estate, kali Glidik, S. Smeroe road (Sept. 17), Ngabab (Lebaksari, G. Panderman, 1500–1800 m) (Dec. 26).

COLLECTIONS. Especially lichens, *c.* 5–6000 specim. in *private herbarium;* some dupl. in *Leyden.*

In *Herb. School of Agric. Malang: Plantae ex horto scholae agriculturae malangensis;* a number of duplicates is present in *Herb. Bog.* His private collection of phanerogams (mainly collected *before 1932*) was partly destroyed by insects, the remaining part was presented to *Herb. Bog.* in Sept. 1940; plants partly numbered, partly not, if numbered then every specimen, so duplicates too. *Herb. Utrecht: c.* 100 *Java* plants (pres. 1932).

Groneman, Isaac

(1832, Zutfen, Gld, Holland; 1912, Djokjakarta, Java), surgeon, went to Java in 1858 and settled at Bandoeng (1859–69), Djokja (1869–89, soon as court-physician of the Sultan) and Indramajoe (1890–96); subsequently he laid down practice and took up his residence at Djokja again.[1]

He was a great lover of nature, friend of JUNGHUHN, in whose company he made several excursions in Priangan Residency. As amateur archeologist-ethnologist he instigated the excavation of the decayed Hindu building Prambanan.

ITINERARY. In *W. Java*[2] he visited: Buitenzorg, Tjiandjoer, Bandoeng; Tji-Kapoendoeng; Taroegoeng and Garoet; G. Papandajan; Limbangan; G. Telaga Bodas; G. Goentoer; Lembang, G. Tangkoeban Prahoe; mountains S of Bandoeng; G. Patoeha, G. Kendeng, Pengalengan, G. Wajang, G. Malabar; Gandasoli Valley (in Krawang).

COLLECTIONS. *Private herbarium;*[3] unknown whether still extant.

At Bandoeng he had a beautiful collection of epiphytic orchids which he had to leave behind during the journey to Djokja. *Hort. Bog.: Vanda limbata* BL. (pres. 1901).

LITERATURE. (1) Author of 'Bladen uit het dagboek van een Indisch geneesheer' (Groningen 1874); 'De hoogvlakten van 't Jang-gebergte' (Tijdschr. Gesch. Taal-, Land- en Volkenk. 1899, 19 pp.); 'Op het Jang Gebergte' (Zutfen 1902); and other papers dealing with the Jang Plateau.

(2) *cf.* 'Bladen uit het dagboek *etc.*' *l.c.*

(3) *cf. ditto l.c.* p. 50.

BIOGRAPHICAL DATA. Weekbl. v. Indië 1, 1904, *no* 5, p. 7–11, w. portr.; Encyclop. N.I. 1, 1917.

Groos

collector of *Phalaenopsis fuscata* RCHB. *f.* (*cf.* Gard. Chron. 1874[2], p. 6) from *Malaya.*

Groot (van Embden), Cornelis de

(1817, Delft, Z.H., Holland; 1896, The Hague, Holland), was educated at the Technical College, Delft, and was sent to England (1847–49) for the training of student mining engineers; in 1850 he was appointed Chief of the Mining Department of the D.E.I. at Batavia, and as such he travelled in many parts of the Malay Archipelago. He was pensioned off at the beginning of 1866 and was subsequently in the employ of the Billiton Company till 1871.

ITINERARY.[1] *1851. Madoera* (Febr.);[2] *Bawean* (back at Soerabaja on Apr. 15); *Banka* (Muntok, June 14); *Billiton* (= Blitoeng): arriving June 28 with the assistant engineer HUGUENIN (see there) anchoring in front of the Tjiroetjoep (= Tjeroetjoek), headquarters at fort Tandjong Goenoeng; at the end of his stay he made 2 one-month trips, *viz* the 1st to kp. Sidjoek and Soengei Lolo, and the 2nd by proa along the coast, visiting the western, southern and eastern coast regions and returning round the north.—*1852. SE. Borneo:* arrival at Bandjermasin (March); Tandjoeng Batoe (Apr. 2–10); *P. Soe(w)angi, P. Laoet,* Pagatan; *Madoera* (May).[2]—*1853. Borneo.*—*1855. SE.* and *E. Borneo:* on the way to the east coast, visiting P. Datoe and Bt Timah (Sept. 21); near the Mahakam (24–27), Samarinda.—*1858. Sumatra West Coast:* Padang Highlands.—*1863. Billiton.*

COLLECTIONS. Principally living plants to *Hort. Bog.;* some from *Borneo* were described by TEYSMANN & BINNENDIJK in Nat. Tijdschr. N.I., and by HASSKARL in his catalogue of the Buitenzorg Botanic Garden; specimens preserved in *Herb. Bog.* Apparently he collected in *Banka* too;[3] living plants from *Billiton* in *Hort. Bog.* (pres. 1866). No data about collections of plants from other islands are known to us.

In 1869 C. DE GROOT of Batavia sent living plants to *Hort. Bog.*; ? identical.

LITERATURE. (1) C. DE GROOT: 'Bijdragen tot

de mineralogische en geologische kennis van Ned. Indië' (Nat. Tijdschr. N.I. 3, 1852, p. 133 *seq.* on Billiton; *l.c.* 1857, p. 1–86 on SE. Borneo); 'Herinneringen aan Blitoeng' ('s-Gravenhage 1887).

(2) *cf.* Nat. Tijdschr. N.I. 4, 1853, p. 445–450.

(3) *cf.* TEYSMANN in Nat. Tijdschr. N.I. 27, 1864, p. 157–258.

BIOGRAPHICAL DATA. Tijdschr. Ned. Ind. 1896[2], p. 66–68; Jaarboek Mijnwezen N.I. 27, 1898, 122 pp.; Encyclop. N.I. 1, 1917.

Groot, Gerard Johannes de

(1912, Den Helder, N.H., Holland; Sept. 1944 drowned as a P.O.W., near Padang, Sumatra), botanist, educated at Utrecht University (Ph. Dr 1938). In the latter year he went to Java as selectionist in the employ of the Experiment Station for the Java Sugar Industry, Pasoeroean.

COLLECTING LOCALITIES. *E. Java.* Aug. *1942*–Febr. *1943.* With C. WEHLBURG (see there) on the S. slope of G. Smeroe, in the vicinity of Ranoe (= Lake) Daroengan. He collected grasses in the vicinity of Pasoeroean too, possibly before 1942. According to his wife he collected in the Japanese internment camp 'Kampong Makassar' near Batavia, but that material will have got lost.

COLLECTIONS. *Herb. Pasoer.:* especially grasses, partly coll. with C. WEHLBURG.

Groot, H. F. de, *cf. sub* Forest Research Institute, Buitenzorg.

Groothoff, A.

acting Director of thé Government Cinchona Plantation at Tjinjiroean (*W. Java*), collected plants on the Pengalengan Plateau, which were presented to *Hort. Bog.* in *1910*, through the intermediary of KOORDERS.

Grootings, L.

mining engineer, in 1902 stationed at Moeara Tewe on the Upper Barito in SE. Borneo.

Dendrobium grootingsii J.J.S. was named after him.

COLLECTING LOCALITIES. *SE. Borneo* (*1902*); *Centr. Sumatra:* Djambi, near Moeara Tebo (*1910*).

COLLECTIONS. Living orchids in *Hort. Bog.;* some described by J. J. SMITH and preserved in *Herb. Bog.*

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Gründler, C.

assistant of J. ELBERT (see there) on the so-called Sunda Expedition, 1909–10.

Peperomia gruendleri C.DC. was named after him.

ITINERARY & COLLECTIONS. *cf. sub* ELBERT (also for liter., *etc.*). Probably the itinerary is not completely identical, so GRÜNDLER alone collected on G. Tambora (*Sumbawa*) between 1000 and 1300 m alt.[1]

LITERATURE. (1) *cf.* ELBERT: 'Die Sunda-Expedition' 2, 1912, p. 101.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Grutterink, Barend Johannes

(1886, Wageningen, Gld, Holland; x), Forest Officer, since 1913 in the employ of the D.E. Indian Forest Service; at first stationed at Buitenzorg, since 1914 in the teak districts of Java; in 1925 transferred to Soekaboemi, in 1929 for some months at Buitenzorg, and subsequently to Magelang (Centr. Java), in Aug. 1930 to Malang, in 1931 to Bandoeng; in 1932 he was appointed Inspector of Forests; in 1934 he retired and returned to Holland.

COLLECTING LOCALITIES. *1918–26. E. Java:* Kediri.—*1928. W. Java:* Soekaboemi.—*1929. Centr. Java:* Poerworedjo.—*1930. Centr. Java:* G. Andong (July).—*1932. W. Java.*

COLLECTIONS. *Herb. Bog.;* collection from Kediri (1918) numbered in the series BEUMÉE (see there). *Herb. Pasoer.:* 1 *no* from Kediri; *Herb. For. Res. Inst. Buitenzorg:* several Ja. *nos.*

Grijp, A. de

(1898, Papendrecht, Z.H., Holland; x), since 1921 'Boscharchitect'; in the D.E. Indian Forest Service; stationed successively in the teak districts of Java, in Timor (Koepang) (Dec. 1923–1930), for a short time in Bali (Singaradja), and in Nov. 1930 transferred to Atjeh (Langsa) in N. Sumatra, in July 1931 once more to Timor (Koepang), from Sept. 1938–39 in Celebes (Makassar and Poso), and in 1940 in Lombok (Mataram).

COLLECTIONS. *Herb. Bog.: nos* 1–6 (= F.R.I. bb. *nos* 21416–21421) from *Timor* (pres. Oct. *1936* through the intermediary of the Forest Research Institute at Buitenzorg) and other dupl. F.R.I. In *Herb. For. Res. Inst. Buitenzorg:* from *Timor* (*1924, 1935–37* coll.).

Guerrero, Leon Ma.

(1853, Manila, Luzon, P.I.; 1935, ? , P.I.), was educated at S^to^ Tomas University, Manila; pharmacist at Zamboanga (1881), Cavite (1882) and Botica de Minonda (1883–96); Professor of Plant Histology at S^to^ Tomas University, 1887–1935; 1916–33 Botanist (1926–33 Chief) of the Bureau of Science, Manila, appointed for the purpose of undertaking a survey of medicinal plants of the Philippine Archipelago.[1]

Ilex guerreroii MERR. was named after him.

COLLECTIONS. Dr LEON GUERRERO was the owner of a herbarium, for the greater part collected by himself, which in 1903 was preserved in the *College of San Jose* at Manila, and was inaccessible. He collected a little in the B.S. (*cf.* Bureau of Science, Manila) and in the F.B. (*cf.* Forestry Bureau, Manila) series, *Herb. Manila;* in 1903/04 42 *nos* from Rizal Prov., *Luzon*, were presented to *Manila. U.S. Nat. Herb. Wash.:* 9 dupl. *P.I.*

LITERATURE. (1) Author of 'Medicinal plants' (in Census Philip. Isl. 3, 1921, p. 747–787); 'Medicinal uses of Philippine plants' (Philip. For. Bull. 22, 1921, p. 149–246); and others.

BIOGRAPHICAL DATA. Nat. Res. Counc. P.I. Bull. *no* 7, 1935, p. 672–673, incl. bibliogr.; Chron. Bot. 2, 1936, p. 253 + portr.

Guggitz, M.

COLLECTIONS. *Herb. Vienna:* 62 *Borneo* plants (pres. *1914*).

Guichenot, Antoine

(born at Paris, France), gardener who accompanied two French expeditions round the world (see below).

Several plants were named after him.

ITINERARY. *Voyage in 'Le Naturaliste' and 'Le Géographe', 1800–04; cf. sub* LESCHENAULT (Itiner., Liter., *etc.*), RIEDLÉ and SAUTIER. *Timor* (*Lesser Sunda Isls*) was visited twice (Aug. 21–Nov. 12, *1801*, and May 6–June 2, *1803*).—*Voyage in 'L'Uranie' and 'La Physicienne', 1817–20; cf. sub* GAUDICHAUD (Itiner., Liter., *etc.*). In *1818–19 Timor, Alor, P. Pisang*, and the *Papua Islands* were visited.

COLLECTIONS. *Herb. Paris;* dupl. in *Herb.* DELESS. (*Geneva*), and according to FORBES[1] in *Brit. Mus.* and *Kew.*

For the botanical results *cf.* respectively *sub* LESCHENAULT and GAUDICHAUD.

LITERATURE. (1) In 'A naturalist's wanderings in the Eastern Archipelago *etc.*' (London 1885), Appendix p. 497.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Guieb, *cf. sub* Forestry Bureau, Manila.

Guillen, G., *cf. sub ditto.*

Guillermo, A., *cf. sub ditto.*

Guillou, Elie Jean François le

(1806, Quinperlé, Dépt Finisterre, France; ?), surgeon in the French navy, who accompanied an expedition round the world (see below).

Bikkia guillovianus BRONGN. was named after him.

ITINERARY. *Voyage in 'L'Astrolabe' and 'La Zélée', 1837–40;*[1] *cf. sub* HOMBRON (detailed itiner., liter., *etc.*), DUMONT D'URVILLE and JACQUINOT.

COLLECTIONS. Neither A. DECANDOLLE, nor LASÈGUE give any information as to the location of his collections. They are with those of HOMBRON in *Herb. Paris.* In *Herb. Sydney* a few specimens.

For the botanical results *cf. sub* HOMBRON.

LITERATURE. (1) Besides of some small papers (Rev. Zool. Paris 1842, p. 138, 141, 314; L'Inst. Journ. d. Sci. et Trav. Scient. 1e sect. 9, Paris 1841, p. 279–280), GUILLOU is the author of 'Voyage autour du monde, pendant les années 1837, 1838, 1839 et 1840' (Paris 1842).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Guise, Reginald E.

an officer of the Government service of British New Guinea. In 1891 he accompanied M. H. MORETON (Leader)[1] and A. GIBB MAITLAND (geologist)[2] on an expedition to Mt Suckling, as collector of plants and birds. Leader of an expedition to Mt Dayman in 1894 (*cf. sub* ARMIT).

ITINERARY. *1891. SE. New Guinea, Papua. Expedition to Mt Suckling:* landed at Phillips Harbour, Collingwood Bay (July 16); reached an elevation of 7733 ft at 'Disappointment Rock', beyond which further progress was found impracticable; returned to starting place (Aug. 5). It seems certain that this expedition was not on Mt



GUERRERO

Suckling at all, but on a spur of the Goropu Mts, N to NE of Mt Suckling.

COLLECTIONS. The report states: 'The plants met with were, until we reached an altitude of 6,500 feet, uninteresting. A few have been brought down'.[1]

LITERATURE. (1) M. H. MORETON, in Ann. Rep. Brit. N.G. for 1891/92, App. C.

(2) A. GIBB MAITLAND: 'Geological observations in British New Guinea in 1891' (Ann. Rep. Brit. N.G. for 1891/92, App. M.).

Guppy, Henry Brougham

(1854 or 1855, Falmouth, England; 1926, Martinique), surgeon in the English navy (1876–85), commissioned for survey work and studying ethnology, geology and natural history, on the islands near Korea, the Solomon Islands, *etc.;* later he made extensive voyages in the Pacific Ocean, especially studying the problems of plant-dispersal.[1]

Several plants were named after him.

COLLECTING LOCALITIES.[2] *1888–89. W. Java:* Buitenzorg, S. Bantam and S. Priangan. He travelled from Garoet through Soekeradja to Tjipatuja, along the beach to Ranzaherrang (westward), Tjimari, further west and then inland for Boengboelan, Tjikadjang; from Tjibeber to Sindang-

barang; from Soekaboemi to Tjikaso, reaching Palabuan by crossing the Genting Promontory, following the Bantam coast *via* Tjisolok, Sirwana, Baia, Malingping, crossing the island to Djasinga and Batavia; from Soekaboemi to the S. coast by Sagaranten and Rambai; also in Krawang.

In a letter to TREUB (dated Java, Jan. 4, 1889) he says to have walked from Krawang to Tjiandjoer, then from Lembang to Poerwokerto (= prob. Poerwakarta), back again to the railway at Jagolapoe (?) all on foot; in a letter (dated Febr. 20, 1889) he intends to leave next mail and says to have spent 3 weeks on the south coast (Genteng, Promontory and Bantam), crossed Bantam to Batavia on foot from Malingping, collected littoral plants W of Palabuan (Wijnkoopsbaai) and also in the vicinity of Tjiara.

COLLECTIONS. *Herb. Kew:* 400 *nos* from Solomon Islands, Keeling Islands, *Java* (1885–89); *Herb. Bog.:* fruits from *SW. Java.*

LITERATURE. (1) Author of many important papers and books on the latter subject, *e.g.:* 'Observations of a naturalist in the Pacific between 1896 and 1899' (London 1906; Plant-Dispersal vol. 2); 'Plants, seeds and currents in the West Indies and the Azores. The results of investigations carried out in those regions between 1906 and 1914' (London 1917).

(2) GUPPY gives a list of plants observed on the south coast of Java in 'The dispersal of plants as illustrated by the flora of the Keeling and Cocos islands' (Transact. Vict. Inst. 1890) p. 293–299. *cf.* also Proc. Roy. Geogr. Soc. Lond. 1889, p. 696 (abstract).

H. B. GUPPY: 'The south coast of Java' (Scott. Geogr. Mag. 5, p. 625–637).

BIOGRAPHICAL DATA. Journ. Bot. 64, 1926, p. 161–162; BACKER, Verkl. Woordenb., 1936.

Gusdorf, H. A.

(1868, Soerakarta, Java; 1933, Tjimahi, Java), entered the D.E. Indian army in 1885, and was pensioned off with the rank of captain in 1910. In the years 1913–14 collector in the employ of the Museum and Inquiry Office for Economic Botany at Buitenzorg (*cf. sub* K. HEYNE). In 1919 he was a resident of Tjitjalengka (W. Java).

Bulbophyllum gusdorfii J.J.S. was named after him.

COLLECTING LOCALITIES. *1913. W. Java:* Priangan Residency, *e.g.* on G. Bèsèr near Tjiandjoer, Geger Bintang and G. Gedeh-Pangrango.—Oct. *1913–1914. S. Sumatra,* Lampong Districts: Telok Betong, Menggala, G. Soegih, Spoetik–Toelang Kawang, Kotaboemi, Soekadana, Kota Agoeng.

COLLECTIONS. In *Herb. Bog.* and *Herb. For. Res. Inst. Buitenzorg* (with original labels): 322 *nos,* including the *nos* 1–5 from *Java;* dupl. in *Herb. Leyden* (*Sumatra*).

In *Hort. Bog.:* living plants (pres. *1913–14, 1919*).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Gutierrez, Eulalio

botanical collector for the Bureau of Science, Manila, for the Encyclopaedia of Philippine useful plants, the Flora of Manila, *etc.* The collecting was done starting *1934,* at Manila and in the neighbourhood (*Luzon*).

COLLECTIONS. In *Herb. Manila.*

Gutteling, W. M.

temporary official for the cotton culture in Palembang, *S. Sumatra,* since 1906; he sent a lot of orchids to *Hort. Bog.* in *1908.*

Guttenberg, Hermann von

(1881, Trieste, Austria; x), was appointed Extraordinary Professor (subsequently Professor) of Botany in the University of Berlin in 1919; since 1923 Director of the Botanical Institute and of the Botanic Garden of the University at Rostock. In 1928–29 he made a study tour to Ceylon and the Dutch East Indies.[1]

Author of many plant anatomical and physiological papers.[2]

Dendrobium guttenbergii J.J.S. was named after him.

ITINERARY. In the *Dutch East Indies* (Nov. *1928*–April *1929*) he visited: *Java, Noesa Kambangan, Bali* (*Lesser Sunda Isls*) and *Sumatra* (Fort de Kock and Brastagi, resp. in *West Coast* and *East Coast*) (Apr. *1929*).

COLLECTIONS. *Herb. Rostock.* He collected some plants in *Sumatra.*

In *Hort. Rostock: Sumatra* orchids.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 49.

(2) *e.g.* 'Studien an Pflanzen der Sunda-Inseln' (Ann. Jard. Bot. Buit. 44, 1934, p. 1–62, pl. 1–12).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Guzman

probably DEOGNACIAS GUZMAN, Forest Ranger at Aparri Station, Cagayan, *N. Luzon.*

MERRILL in Enum. Philip. Fl.Pl. cites a *no* 27066, probably collected in the F.B. (*cf. sub* Forestry Bureau, Manila) series, *Herb. Manila.*

BACKER (*cf.* Verkl. Woordenb., 1936) mentions *Guzmania* RUIZ & PAV., named after A. GUZMAN, in the beginning of the 19th century pharmacist in Spain. With a view to the high number cited by MERRILL, it is evident that the latter cannot be the collector.

G. W., *cf. sub* SOEGANDIREDJO.

Gwynne-Vaughan, David Thomas

(1871, Llandovery, England; 1915, Reading, England), assistant in the Botany Department of Glasgow University, 1896–1907; in 1907 appointed Head of the Botany Dept at Birkbeck College, London; in 1909 Professor in Queen's University Belfast (Ireland), and in 1914 transferred to the chair of Botany in University College Reading.

In 1897 he was attached to a rubberprospecting

expedition up the Amazon and Purus rivers; in 1899 to the Skeat Expedition (see below).

Rhynia gwynne-vaughani KIDSTON was named after him.

ITINERARY. SKEAT *Expedition, 1899.*[1] From the southern Siamese Malay States travelling towards Kelantan in the *Malay Peninsula* (detailed itiner., liter., *etc. cf. sub* YAPP; *cf.* also *sub* ANNANDALE). He left the expedition either just before,[1] or soon after it crossed the border into the Malay States,[2] starting for Bangkok from Belimbing.

COLLECTIONS. In *Herb. Kew* (pres. 1909) and *Cambridge.*

Most of the plants collected in Siam;[2] he numbered in the field (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

LITERATURE. (1) *cf.* ANNANDALE in Scott. Geogr. Magaz. 16, 1900, p. 505–523.

(2) *cf.* KERR in Journ. Thail. Res. Soc. Nat. Hist. Suppl. 12, 1939, p. 24–25.

BIOGRAPHICAL DATA. Proc. Linn. Soc. Lond. 1915/16, p. 61–65; Journ. Bot. 53, 1915, p. 342; Nature 96, 1915, p. 61–62; Ann. Bot. 30, 1916, p. 33, w. portr.; in Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931.

Gijsberts, Andreas Herman

(1844, Rotterdam, Holland; ? , ?), entered the D.E.I. Government service in 1863; from 1874–78 and 1879–85 Assistant Resident of Sintang (W. Borneo); since 1885 Resident of Borneo's Western Division; pensioned off in 1891. He was a promoter of the interests of agriculture and industry.

Shorea gysbertiana BURCK was named after him.

COLLECTIONS. *Herb. Bog.:* material of *Shorea gysbertiana*[1] *(1886)* and of a gutta-producing tree *(1887).* Living plants to *Hort. Bog. (1881, 1885).*

LITERATURE. (1) *cf.* Ann. Jard. Bot. Buit. 6, 1887, p. 211, pl. 23.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

H. B. *nos, cf. sub Herbarium Bogoriense.*

H. C.

is supposed by BURKILL to be a correspondent of the Botanic Gardens, Calcutta (see *sub* C... (H. C.)).[1] According to A. H. G. ALSTON the initials in all probability stand for *Hort. Calcutta,* where the specimens were cultivated.

LITERATURE. (1) In Gard. Bull. Str. Settlem. 4, 1927, p. 119.

H., v.

collected some ornamental plants at Padang, *Sumatra West Coast,* in November *1883;* material in *Herb. Leyden.*

Haacke, J. Wilhelm

(1855, Klenze, Hanover, Germany; ? , ?), at first Assistant of the Zoological Institute at Jena and Kiel; 1882–84 Director of the Museum at Adelaide, Australia; 1888–93 Director of the Zoological Garden at Frankfurt a.M. and besides University Lecturer at Darmstadt. He travelled in Australia and New Guinea; to the latter island as Chief Scientist (zoology and geology) of an expedition under the command of H. C. EVERILL (see below).

Trigonotis haackei F.v.M. was named after him.

ITINERARY. *'Bonito' Expedition, 1885.*[1] *SE. New Guinea, Papua; cf. sub* BÄUERLEN (detailed itiner., liter., *etc.*) and BERNAYS.

COLLECTIONS. It is possible that he made no botanical collections.

LITERATURE. (1) *cf.* Transact. and Proc. Roy. Geogr. Soc. Australas. N.S.W. Br. 3 and 4, 1885/86, Sydney 1888, p. 105–187.

W. HAACKE: 'Forschungs-Expedition der Royal Geogr. Soc. of Australasia nach Neu-Guinea' (Export. 8, Berlin 1886, p. 404, 405, 437–438, 444, 451–453) *(non vidi);* 'Neu-Guinea. Ein Tropenbild aus meiner Erinnerung' (Jahresber. d. Frankf. Ver. f. Geogr. u. Statist. 53 and 54, 1888–1890, Frankf.a.M. 1890, p. 100–117; with remarks on the vegetation).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Haagen, Cornelis Johannes

(1881, Stompwijk, Z.H., Holland; 1946, Breda, N.Br., Holland), schoolteacher, serving from 1912–32 in the D.E.I.; in 1918 appointed temporary teacher at the secondary school (H.B.S.) at Soerabaja.

COLLECTIONS. In *Herb. Bog., e.g.* a *no* 319 from Malang, *E. Java* (coll. Aug. 12, *1920).*

Haak, Jurriaan

(† about 1920, Amsterdam, Holland), pharmaceutical chemist, the first director of the opium factory at Batavia; author of the first instruction-book for botany in the Dutch East Indies,[1] and of some papers on *Rafflesia.*[2] Between 1883–87 he paid several visits to the island Noesa Kambangan, situated S of Central Java; at the time he was probably a resident of Semarang. When back in Holland he settled at Amsterdam.

COLLECTIONS. A flower of *Rafflesia* in alcohol, collected by him in *Noesa Kambangan,* was sent to the World Exposition at Paris in *1889.* A *no* 568, *Millingtonia hortensis* L.*f.* was collected by him in Semarang Res., *Centr. Java* in *1903;* material in *Herb. Leyden* (also *Rafflesias* in alcohol) and *Herb. Bog.*[3] From the high number we may derive that he made a rather extensive collection. We have no data as to its location.

LITERATURE. (1) 'Leerboek voor plantkunde van Ned. Indië' (1891, + atlas).

(2) 'Iets over het eiland Noesa Kambangan en de Rafflesia Patma BL.' (Weekbl. Pharmacie 3, 1885, p. 1–19, 9 fig.); 'Observations sur les Rafflésias. Rafflesia Patma Bl.' (Semarang & Amsterdam 1889).

(3) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 10, 1928/30, p. 188.

Haan, de

of Buitenzorg (Tjikopomajak), sent plants to *Hort. Bog.* in the years *1877* and *1878.*

Haan, de

collected *Pseuderanthemum metallicum* HALL.*f.* in Deli, *Sumatra East Coast;*[1] in *Hort. Bog.*, with some *Begonias* from there.

Probably identical with JACOB VAN BREDA DE HAAN (1866, Haarlem, N.H., Holland; 1917, Soerabaja, Java), botanist who took his Ph. Dr's degree in 1891 at Leyden; Chief of the Laboratory for Deli tobacco of the Botanic Gardens at Buitenzorg, 1894–1900; in 1900, besides, Chief of the division Botanical Laboratories; in 1905 appointed Inspector of Native Agriculture. Until 1905 he was stationed for some longer periods in Deli, Sumatra East Coast.



G. A. L. DE HAAN

LITERATURE. (1) *cf.* Ann. Jard. Bot. Buit. 15, 1898, p. 27.

BIOGRAPHICAL DATA. Portr. of J. VAN BREDA DE HAAN in Ann. Jard. Bot. Buit. 45, 1935, pl. 2.

Haan, Gunter Adelbert Leonard de

(1911, Probolinggo, Java; x), went to the D.E.I. before terminating his study at the Agricultural College, Wageningen, Holland; enlisted in the D.E.I. army in 1933; bought off in Dec. 1933, and joined the Teak Forest Administration till end 1935; to 'Landschap' (province) Moena (S of SE. Celebes); since May 1936 in the employ of the D.E. Indian Forest Service, till 1940 stationed at the Forest Research Institute. In 1937–38 he was sent on an exploration tour to the Moluccas; in July 1938 stationed in Tapanoeli (N. Sumatra) and in April 1940 at Rengat (Centr. Sumatra). At the outbreak of war he was suspended and subsequently dismissed on account of his political opinions. After World War II he was evacuated to Holland; in 1948 he left for Kobe in Halmaheira (Moluccas) as manager of a private plantation and timber-concession. He planned to use his spare time for making botanical collections for sale, in this interesting little known island.

ITINERARY. *Moluccas. 1937. Batjan* (Aug. 7–29); *P. Kasiroeta* (Aug. 30–Sept. 5); *Batjan* (Sept. 6–20; G. Sibela 10–15); *via Ternate* to *Halmaheira:* Djailolo (Sept. 28), Soesoefoe (Sahoe) (Sept. 29–Oct. 3), crossing the island to Kau (Oct. 4–5); *Obi Islands* (Oct. 29–Dec. 7), visiting *P. Bisa* (Nov. 26–27), and the *Salamoli Islands* (28); *P. Batjan* (Dec. 9–11).[1]—*1938. Ternate* (Febr. 19–March 8); *Morotai* (March 10–Apr. 7): Tilai (March 17), Lokoelamoamokoe near kp. Pilowo (1000 m) (27–28), kp. Wajaboela (Apr. 4–5); *S. Halmaheira* (Apr. 9–June 4): G. Jefi near kp. Foja Tobaroe (Apr. 18), near Tg Fida (24), Ake Nganto (26), Tilope (May 8–9, 19), Pajahi Road near Weda (24–25), Welwaleloh near Kobe (28), Loekoelamo near Kobe (30).[2]—*1938–40. W. Sumatra*, Tapanoeli: Angkola, Sipirok, Tapanoeli, Panobasan, *etc.*

COLLECTIONS. During the first part of his stay in the Moluccas, he was assisted by mantri NEDI (see there) of the Buitenzorg Herbarium; during the second part by mantri ANANG (or ANONG) (see there) of the Botanic Gardens.

Herb. Bog.: dupl. F.R.I. from the *Moluccas* (1937–38); also *Sumatra* plants, partly without numbers, partly numbered in the F.R.I. (*cf. sub* Forest Research Institute) bb. series. In *Herb. For. Res. Inst. Buitenzorg.*

From DE HAAN & ANANG living plants in *Hort. Bog.*

LITERATURE. (1) Typed report on Batjan and Halmaheira, 1937, in For. Res. Inst. Buitenzorg.

(2) Author of a 'Verslag van een tournée naar de eilanden Ternate, Morotai en Halmaheira in het jaar 1938' (mimeogr., 20 copies).

Haan, Jacobus Hendrikus de

(1900, Wageningen, Gld, Holland; x), was educated at Wageningen Agricultural College; since 1926 Forest Officer in D.E. Indian Government service, at first stationed in the teak districts in Java, in 1928 at Tjilatjap (Centr. Java); in 1929 transferred to Buitenzorg, where since 1931 in charge of forest-hydrological research, starting experiments on G. Patoeha; from 1936–42 in charge of the forest-administration of the Lesser Sunda Islands, stationed at Singaradja (Bali); at present at Buitenzorg, Head of the Bureau of Land Utilization.

Author of some papers, mainly relating to forest-hydrology, and of some typed reports on the Lesser Sunda Islands 1937–38.

COLLECTING LOCALITIES. *1928. Centr. Java:* Tjilatjap (S. coast).[1]—*1935. Sumatra East Coast:* Bengkalis and adjacent islands (Jan.–Febr.), Siak; *W. Java:* G. Patoeha, Rantja Tjibodas (July 17);[2] *E. Java.*

COLLECTIONS. *Herb. Bog.:* mangrove plants from Tjilatjap (*Centr. S. Java*), *nos* 1–111a from *Sumatra* and *nos* 1–31 from G. Patoeha. Some Ja.

nos in *Herb. For. Res. Inst. Buitenzorg*, from Tjilatjap and *E. Java*.

LITERATURE. (1) J. H. DE HAAN: 'Een en ander over de Tjilatjapsche vloedbosschen' (Tectona 24, 1931, p. 39–75).

(2) J. H. DE HAAN: 'Boschhydrologische problemen en onderzoekingen op Java' (Tectona 26, 1933, p. 1–56, 6 fig.).

Haas, Dirk de

(? , Amsterdam, Holland; ? 1702, ?), was reared in the Amsterdam orphanage and probably went to the East as a sailor. When in Tonkin he acquired a large fortune; in 1677 and 1679 Chief of the Dutch East India Company in Japan; in 1687 Governor of Ambon, in 1689 extraordinary member of the Council of India (since 1691 member).

The genus *Dehaasia* BL. was named in his honour.

COLLECTIONS. In *1691* he forwarded material and a drawing of *Antiaris toxicaria* LESCH. to RUMPHIUS.[1]

LITERATURE. (1) *cf.* BLUME, Rumphia 1, p. 57.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Haban, Abd., *cf. sub* Forest Research Institute, Buitenzorg.

Habbema, D.

(1880, Fort de Kock, Sumatra; x), in 1902 appointed 2nd lieutenant in the D.E. Indian army, in 1929 pensioned off with the rank of colonel. He was elected commander of the military covering detachment of the Dutch South New Guinea expedition, the so-called 2nd LORENTZ Expedition (see below), on account of his knowledge of the Dyaks, the usual carriers on New Guinea expeditions.

Phreatia habbemae J.J.S. *etc.* were named after him.

ITINERARY. 2nd LORENTZ *Expedition, 1909–10*, to *Dutch S. New Guinea; cf. sub* L. S. A. M. VON RÖMER (itiner., liter., *etc.*). HABBEMA collected in the Wichmann Mts (end of Oct.–Nov. 2, *1909*) and in the Hubrecht Valley (Nov. 3).

COLLECTIONS. AS VON RÖMER himself did not accompany the ascent of the summit of Mt Wilhelmina, HABBEMA together with H. A. LORENTZ (see there) collected a few plants in the top region; in *Herb. Bog.*; dupl. in *Herb. Leyden, Utrecht, Kew* and *Berl.*

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Hackenberg, Karl Günther

(1898, Barmen, Germany; x), officer in the German army; in the years 1921–23 assistant on an estate at Sampit, SE. Borneo.

DIELS named several plants after him.

COLLECTING LOCALITIES. *1923. S. Borneo:* environs of Sampit (May–Oct.).

Evidently he collected at Sabang (*P. Weh*, N of Sumatra) too, probably on his return to Germany.

COLLECTIONS. *Herb. Berl.: c.* 150 *nos* from *Borneo;*[1] also from Sabang (*P. Weh*), *e.g. Selaginella mayeri.*

LITERATURE. (1) L. DIELS & K. G. HACKENBERG: 'Beiträge zur Vegetationskunde und Floristik von Süd-Borneo' (ENGL. Bot. Jahrb. 60, 1926, p. 291–316).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Hackenberg, Petrus Nicolaas

(1905, Middelburg, Z., Holland; June 24, 1944, drowned on a Japanese transport of P.O.W.'s o/b s.s. van Haerwijk), was educated at the Agricultural College, Wageningen, terminating his studies in 1930. Subsequently he went to Java, where he was appointed on the staff of the General Agricultural Experiment Station at Buitenzorg. Since 1939 Chief of the Agricultural Subdivision of the Agricultural Institute of that Station.

COLLECTING LOCALITIES. *W. Java:* dessa Ragoenan, Mr Cornelis Distr. (Sept. *1934*); experiment garden at Moeara near Buitenzorg (Apr. *1935*); experiment field in Bantam (Apr. *1936*); experiment fields, *e.g.* at Ragoenan (March *1937*); *Centr. Java:* experiment field dessa Modjopoera, Woerjantora Distr., Wonogiri Regency (Dec. *1938*).

COLLECTIONS. *Herb. Bog.: c.* 45 *nos* of weeds from experiment fields.

Hadi bin Abdul Rahman, Abdul

joined the Forest Department *Malay Peninsula* in 1911; now retired.

COLLECTIONS. In *Herb. Kuala Lump.:* from Malacca; numbered in the C.F. (see *sub* Conservator of Forests) series.

Haenke, Thadd(a)eus

(1761, Kreibnitz, N. Bohemia, Czechoslovakia; 1817, Cochabamba Prov. in Centr. Bolivia), botanist who entered the Spanish Government service in 1789, to accompany the Spanish expedition under command of MALASPINA (see below). He made many travels in S. America and in 1796 settled at Cochabamba, practising as a doctor and making several trips in the interior.

Several plants were named after him.

ITINERARY. MALASPINA *Expedition in 'La Descubierta' and 'La Atrevida', 1789–94;*[1] *cf.* also *sub* NÉE and PINEDA. HAENKE missed the ship at Cadiz and subsequently embarked (Aug. 19, 1789) for Montevideo; when he did not meet with the expedition there, nor at Rio de Janeiro, he made some travels on his own in S. America and finally joined the expedition in Chile (April 1790); at the end of 1791 the expedition left America, sailing *via* the Marianas to the *Philippines* (staying March–Dec. *1792*): *Luzon*, anchoring near Manila (March 27) and making several trips by land, *e.g.* to: Bulacan, Illocos, Panquasing, Pampanga, W. Luzon, Sorzogon and Cavite, returning at Manila in the beginning of July; sailing (Nov. 16) to *Mindanao;* returning to S. America *via* the Society Isls. The expedition was back in Spain in Sept. 1794, but HAENKE stayed behind in S. America.

COLLECTIONS. *Herb. Prague;*[2] *c.* 9000 *nos* MALASPINA Expedition, in part in the *Herb. Královstvi Ceského*, in part in the *German Univers.*

Herb. Duplicates in *Herb. Vienna, Munich* (700), *Berlin, Miss. Bot. Gard. St Louis* (U.S.A.); *Herb.* MARTIUS (= *Brussels*): 380 nos '*Reliq. Haenk.*'; *Herb. Brit. Mus.:* small set of '*Reliquiae Haenkeanae*' acq. with *Herb.* SHUTTLEWORTH; *Herb. Kew;* scattered specimens in *Herb.* DECAND. and



HAENKE

DELESS. (*Geneva*), GRAY *Herb.* (removed from Ann Arbor. in 1938–39); *N.Y. Bot. Gard.; Herb. Bot. Gard. St Petersb.* (= *Leningrad*): 100 species '*Reliq. Haenk.*'; *Leyden* and *Manila.* The duplicates were sold by Prague.[3] Part of his plants were sold with LAMBERT's Herbarium in 1842 (acq. by RILEY).

A number of plants were erroneously labelled.[4]

According to LASÈGUE only a small part of HAENKE's collections is preserved in Europe, the bulk having been sent to Lima by the Spanish Government in 1818.[1] In the same book (p. 347) he, however, mentions that H.'s collections from S. America are in *Herb. Madrid!* According to PRESL in his Introduction to the 'Reliquiae Haenkeanae', no plants were received after the return of the expedition in Sept. 1794; a number of cases were sent off from America, but never reached Europe. A Dutch unsigned paper on the expedition[5] mentions the arrival of part of his collections (*viz* of the first half of the voyage, which was left behind at Manila) at Cadiz, Spain; but evidently they lay neglected. Later they were acquired by Prague.[2]

Some living plants were cultivated in *Hort. Madrid.*

LITERATURE. (1) *cf.* C. STERNBERG in PRESL, Reliq. Haenk., 1, 1825, p. vi–xv (on dates of publication *etc.*); LASÈGUE, Mus. Bot. DELESS., 1845, p. 451.

A. MALASPINA: 'Viaje politico-cientifico alrededor del mundo por las corbatas Descubierta y Atrevida al mando de los capitanes de navió D. ALEJANDRO MALASPINA y Don JOSÉ DE BUSTAMANTE Y GUERRA desde 1789 à 1794' (1885; introd. by P. de NOVO Y COLSON) (*non vidi*).

V. MAIWALD in Ges. Bot. Böhmen 1904, p. 103–106; W. E. SAFFORD in Contr. U.S. Nat. Herb. 9, 1905, p. 25–27; A. H. G. ALSTON in Journ. Bot. 72, 1934, p. 223–225.

(2) *cf.* Flora 4^2, 1821, p. 423–427.

C. B. PRESL: 'Reliquiae Haenkeanae, seu descriptiones et icones plantarum, quas in America meridionali et boreali, in insulis Philippinis et Marianes collegit TH. HAENKE' (vol. 1, p. iii–xv + 1–84 (1825) pl. 1–12; p. 85–148 (1827) pl. 13–25; p. 149–206 (1828) pl. 26–36; p. 207–355 (1830) pl. 37–48; vol. 2, p. 1–56 (1831) pl. 49–60; p. 57–152 (1835) pl. 61–72; vol. 1, pl. 1–48 and vol. 2, pl. 49–72).

F. LAMSON SCRIBNER: 'Notes on the Grasses in the Bernhardi Herbarium, collected by THADDEUS HAENKE, and described by J. S. PRESL' (Rep. Miss. Bot. Gard. 10, 1899, p. 35–59, pl. 54).

The remaining part published in WARBURG, Monsunia, 1900.

cf. also E. D. MERRILL in Philip. Journ. Sci. C. Bot. 7, 1912, p. 364.

A. H. G. ALSTON: 'The Selaginellae collected by TH. HAENKE and described by K. B. PRESL' (Journ. Bot. 72, 1934, p. 223–230).

W.T. STEARN: 'PRESL's "Reliquiae Haenkeanae"' (Journ. Soc. Bibl. Nat. Hist. Lond. 1, 1938, p. 153–154).

T. NAKAI: 'Reliquiae Haenkeanae' (Bot. Magaz. Tokyo 56, 1942, p. 97; in Japanese).

(3) *cf.* Flora 12^1, 1829, Beil. p. 1; *l.c.* 13^1, 1830, Beil. p. 41; *l.c.* 17^1, 1834, Int. Bl. p. 33–34.

(4) E. D. MERRILL: 'Genera and species erroneously credited to the Philippine Flora' (Philip. Journ. Sci. C. Bot. 10, 1915, p. 171–194).

cf. also *sub* ALSTON (*l.c. sub* 2).

(5) *cf.* Nieuwe Vaderl. Bibl. 3^2, 1799, p. 132.

BIOGRAPHICAL DATA. Nieuwe Vaderl. Bibl. 3^2, 1799, p. 123–132; PRESL, Reliquiae Haenkeanae, 1, 1825, p. vi–xv; WITTROCK, Icon. Bot. Berg., 1903, p. 154; and *l.c.* 2, 1905, p. 166; BACKER, Verkl. Woordenb., 1936; Beih. Bot. Centr. Bl. 60^A, 1940, p. 157–222, 5 pl., 1 fig.

Hagedoorn, Henriëtte Jeanne

(1879, Amsterdam, Holland; 1915, Amsterdam), biologist, first wife of J. JESWIET (see there), followed her husband to Java. In December 1914 she returned to Holland to undergo an operation, and shortly after died.

COLLECTING LOCALITIES. *Centr. Java:* G. Slamat with JESWIET (Nov. 28, *1912*); *E. Java:* G. Welirang–Ardjoeno with JESWIET (March 21, *1913*); Nongkodjadjar (Oct. 8–10, *1914*).

COLLECTIONS. *Herb. Bog.:* collection labelled JESWIET-HAGEDOORN or HAGEDOORN-JESWIET (pres. 1913). In *Herb. Univers. Amsterdam:* dupl. JESWIET-HAGEDOORN, *e.g.* of *Rumex brownii* CAMPD.[1]

When she stopped collecting, her husband still used the old labels for some time.

LITERATURE. (1) *cf.* DANSER in Bull. Jard. Bot. Buit. sér. 3, vol. 8, 1926, p. 131.

Hagen, B.

(1853, Germersheim a.R., Germany; 1919, Frankfurt a.M., Germany), studied medicine at Munich University; from 1879–91 physician in the employ of a planting company (Senembah) in Deli, Sumatra East Coast, stationed at Tandjong Morawa.[1] During that period he made several exploration tours on which mainly zoological collections were made.[2] Towards the end of 1893 he was appointed in the employ of the Astrolabe Company, at first stationed at Erima and subsequently at Stephansort in former Kaiser-Wilhelmsland (NE. New Guinea).[3] In 1895, when on the return voyage to Germany, he paid a visit to Sumatra, revisiting the island some ten years later in company with his wife. From 1897–1904 Division Chief of the Senckenberg Museum at Frankfurt a.M., where he founded a municipal museum for ethnology in 1904.

Besides of the below-cited papers, he is the author of many others relating to zoology, ethnography and geography.

Asplenium hagenii v.A.v.R. was named after him.

ITINERARY. *Sumatra East Coast. 1881.* From Tandjong Morawa, Serdang (Aug. 3), *via* Patumbukan to the Batak Lands, Salamagura, Nama Djambu, kp. Durian, valley of the Sungei Boaia (= Boeaja) to its sources, kp. Gunong Sinombah, Toba Plateau, Sibaribuan, base of G. Singgalang and Tongging situated on Toba Lake, staying 11 days, making trips to Pageh, Sipablangit Peninsula, *etc.;* returning *via* Sipablangit and Pageh, Bangusaribu, Sibaribuan and following the same route back to Tandjong Morawa (Aug. 25).[4]—*1883.* The same route as above (Dec. 3–26).[5]—*Java.* Sept. *1887* paying a visit to the Botanic Gardens at Buitenzorg.—*NE. New Guinea* (= former Kaiser-Wilhelmsland). Nov. *1893*–Febr. *1895.* Apparently no extensive trips; he collected butterflies in *Neu Pommern* (= *New Britain, Bismarck Archipelago*).—*S. Sumatra:* climbing G. Kaba, when crossing from Palembang to Benkoelen (March–Apr. *1895*).[6]—*1905–06. S. Sumatra.* Palembang Res. and *Banka.*[7]

COLLECTIONS. *Herb. Bog.:* plants from the environs of Toba Lake (pres. 1884, through the Director of the Dept of Education and Public Worship). *Herb. Vienna*: small collection of *Sumatra* plants (pres. 1888–89); dupl. in Herb. *Munich.*[8]

In New Guinea he made zoological,[2] anthropological, and ethnological collections.

LITERATURE. (1) B. HAGEN: 'Die Pflanzen und Thierwelt von Deli auf der Ostküste Sumatra's' (Tijdschr. K.N.A.G. 1890, p. 1–240, 578); 'Die Gajoländer auf Sumatra' (Jahresber. Frankf. Ver. f. Geogr. u. Stat. 1901–03, 1903, p. 29–85); 'Sumatra und die nördlichen Batakländer' (*l.c.* p. 176–180); 'Die Orang Kubu auf Sumatra' (Frankfurt a.M. 1908).

(2) For the zoological collections in Mus. Leyden *cf.* F. A. JENTINK in Tijdschr. K.N.A.G. 1883, p. 77–79 and A. GIJZEN, 's Rijks Museum v. Nat. Hist. 1820–1915, Rotterdam 1938, p. 126, 153.

(3) B. HAGEN: 'Unter den Papuas. Beobachtungen und Studien über Land und Leute, Thier- und Pflanzenwelt in Kaiser Wilhelms-Land' (Wiesbaden 1899); 'Land und Leute in Deutsch Neu-Guinea' (Umschau 3, 1899, p. 499–502).

cf. Nachr. Kais. Wilh. Land 9, 1893, p. 134; *l.c.* 10, 1894, p. 11, 26–29; *l.c.* 11, 1895, p. 14.

Other references *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea 2^2, p. 581.

(4) *cf.* Ausland 54, 1881, p. 779, 840; PETERM. Mitt. 29, 1883, p. 41, 102, 142, 167 + map.

Dr B. HAGEN: 'Een reis naar het Toba-meer op Midden Sumatra' (Ind. Mercuur 6, 1883, *nos* 16–18, 23, and 26; with English transl.).

(5) B. HAGEN: 'Rapport über eine in Dezember 1883 unternommene wissenschaftliche Reise an den Toba-See' (Tijdschr. Ind. Taal-, Land- en Volkenk. 31, 1886, p. 328–386, 3 pl., 2 maps).

(6) B. HAGEN: 'Eine Besteigung des Vulkans Kaba auf Sumatra' (Globus 79, 1901, p. 245–250, 267–273, 278–281, w. map & ill.).

(7) *cf.* Jahresber. Frankf. Ver. f. Geogr. u. Stat. 1905/06, 1907, p. 89.

(8) *cf.* MEZ in Pflanzenreich 9, 1902, p. 42; and SYDOW, Deutscher Botaniker-Kalender für 1899.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Hagen, B. A.

for some years Assistant Curator of the Botanic Gardens, Buitenzorg.

COLLECTING LOCALITIES: *W. Borneo:* Pontianak, *e.g.* from Mandor (*1930*).—*W. Java:* Wijnkoopsbaai (Nov. *1931*) with BRUGGEMAN (see there).

COLLECTIONS. *Herb. Bog.*, and mostly in *Hort. Bog.*

Hagenaar, R.

of Batavia, sent orchids from G. Tengger, *E. Java*, to *Hort. Bog.* in *1884.*

Hagenaar Jr, R.

of Djokjakarta, *Centr. Java*, forwarded living plants to *Hort. Bog.* in the years *1900–01.*

Hagerup, Olaf

(1889, Balling ved Skive, Jutland, Denmark; x), botanist (Mag. Sci. 1911) who took his Dr's degree in 1930; of the botanical division of the Pharmacological Institute at Copenhagen, 1929–35; from 1935 onwards Keeper of the Botanical Museum. Besides to Sumatra (see below), he travelled to the Far Oer (1922–23), Greenland (1924–25) and Africa (1927–28).

Author of several publications on plant morphology, polyploidy, *etc.*

Liparis hagerupii J.J.S. and *Polypodium hagerupii* C. CHR. were named after him.

ITINERARY. *1916–17.* Travelling in *Sumatra East* and *West Coast*, visiting Toba Lake (Sept. 1916, also in 1917), Lake of Manindjau (Febr. 1917) *etc.; Mentawei Islands; Nias; Pagai; Sumatra West Coast:* Padang Highlands.

COLLECTIONS. In *Herb. Copenhagen:* 525 *nos* + 200 preparations in alcohol, from *Sumatra* and *neighbouring islands.* J. J. SMITH refers to some numbers of his.[1]

LITERATURE. (1) *cf.* FEDDE Repert. 32, 1933, p. 129–386; *Liparis hagerupii* J.J.S. in Blumea 5, 1945, p. 696, fig. 4.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; CHRISTENSEN, Den Danske botaniske litteratur, 1912–1939, 1940, p. 180–181, incl. bibliogr. + portr.

Hagger, E.

educated at Zürich (Switzerland), Forest Officer of the Forestry Bureau, Manila (see there), collected a few species in the island of *Polillo* in *1904.*

He is commemorated in *Ficus haggeri* MERR.

COLLECTIONS. *Herb. Manila,* including the type of *Trigonachras cuspidata* RADLK. from *Polillo,*[1] and 10 plants from Tayabas Prov., *Luzon* (acq. *1903/04*); *U.S. Nat. Herb. Wash.:* 7 dupl. from *Luzon.* Numbered in the F.B. (see Forestry Bureau, Manila) series.

LITERATURE. (1) *cf.* ROBINSON in Philip. Journ. Sci. C. Bot. 6, 1911, p. 186.

Hahn

of Neira, *Banda, Moluccas,* sent plants to *Hort. Bog.* in *1875.*

Haight

an American ex-soldier who contracted tuberculosis in the Philippines, and then settled in the mountains of Luzon, at Pauai (N. part of Benguet Prov.), growing vegetables. He collected orchids and a few other plants in *Luzon;* MERRILL, Enum. Philip. Fl.Pl., mentioned the *nos* 10, 14 and 127.

COLLECTIONS. Orchids in O. AMES *Herb.,* Cambridge (Mass.), and probably originally in *Herb. Manila* (now destroyed).

Halidjeng, *cf. sub* Forest Research Institute, Buitenzorg.

Halkema

COLLECTIONS. In *Herb. Bog.: Nepenthes mirabilis* from Rawah Lakbok in the SE. part of *W. Java* (Dec. *1910*).

Hall, C. L.

COLLECTIONS. He collected *Loranthus haenkeanus* PRESL in Tarlac Prov., *Luzon, s.n.* (*cf.* DANSER in Philip. Journ. Sci. 58, 1935, p. 66).

Hall, Hermann Christian van

(1801–1874), Professor of Botany at Groningen University.

Java plants *ex Herb.* VAN HALL in *Herb. Leyden.* He himself never visited the island.

Hallatu, J., *cf. sub* Forest Research Institute, Buitenzorg.

Hallier, Johann Gottfried

(calling himself Hans) (1868, Jena, Germany; 1932, Oegstgeest, Z.H., Holland), botanist, educated at Jena and Munich universities, taking his Ph. D. in 1892 at Jena; from 1892–93 Assistant at the University of Göttingen; 1893–96 temporary Assistant at the Buitenzorg Herbarium, Java; Assistant Head of the Botanical Laboratory of the University of Munich, 1897–98; Assistant of the Director of the Museum and Laboratory for Commercial Botany at Hamburg, 1898–1908; from 1908–22 Assistant at the State Herbarium, Leyden.

At the instance of the Indian Committee he was attached to the first scientific Borneo expedition (see below). In the years 1903–04 he travelled in the Philippines *etc.,* for the purpose of collecting material for the Botanical Museum at Hamburg; during his stay in the P.I. he was appointed collector of the Exposition Board for the World Exposition at St Louis, U.S.A. In 1908/10 he paid a visit to the U.S.A. and Canada.

Author of many plant systematic and other papers; one of the promoters of the German race superiority theory.

Several Malaysian plants were named in his honour.

ITINERARY. *1893. Sumatra West Coast:* Emmahaven near Padang (Febr. 21); *W. Java:* environs of Buitenzorg; *Banka* (July 29).—*Expedition to W. and Centr. Borneo, 1893–94;*[1] *cf.* also *sub* NIEUWENHUIS, and MOLENGRAAFF. Pontianak (Sept. 24, *1893*); Soeka Lanting, Kapoeas delta (24–27); Singkawang and P. L(o)emoekoetan (Oct. 3–7); Sambas, trip to G. Damoes (22–24) and G. Semedoem in the source region; kp. Dawar–Sanggau (27); Sanggau (Oct. 27–Nov. 2); Sg. Sambas and Sg. Tanggi (3–5); Pontianak (6–22); Poetoes Sibau on the Sibau River (30); making headquarters of the expedition at Smitau on the Upper Kapoeas (Dec. 3); exploration (3–18) of the Sg. Sibau, S. Smitau, S. Rikai, S. Keniboeng, S. Kenara, *etc.;* Oeloe Kenepai (19); G. Kenepai (20–29, near the base; Dec. 30–Jan. 4, *1894,* ascent); Sg. Kenepai (7–8); Smitau; Sg. Kenepai (14–23); Sintang (26), from where to G. K(e)lam (Jan. 30–Febr. 13, ascending the summit 5 times); Smitau (17–26, for the greater part ill); Sg. Mandai (Febr. 28–March 3); Nanga Raoen on the upper course of the Mandai (4–6); Mt Liang Gagang (March 7–Apr. 6); Nanga Raoen (7–14); Mt Amai Ambit (Apr. 15–May 4); Nanga Raoen (5–6); returning to Java on account of ill health; back at Buitenzorg (June 6).—*1894–96. W. Java:* environs of Buitenzorg, Bot. Gardens Buitenzorg, Depok, G. Salak (Tjiapoes), Tandjong Priok, Batavia, Kalibata, Poentjak, Telaga Warna, G. Tjibodas (Tjampea), G. Gedeh (Tjipanas, Tjibodas, Lebaksaät, Jan.–Febr. *1895*), Garoet, Tjipakoe (Aug. 14, *1896*), G. Wangoen (Aug. 1896); *Malay Peninsula: Singapore* (Oct. 14–15, 1896), visiting Bt Timah (15); *Penang.—1903–04. Southsea Voyage:* sailing from Genoa (Apr. 7, *1903*); stay in Ceylon; Bot. Garden *Penang* (May 12); *Singapore* (14); Hongkong; *Philippine Islands, Luzon:* arriving at Manila (May 24); vicinity of Manila and Prov. of Camarines: Kakalangen, N of Manila, and Pasig (May 26–31); *S. Luzon,* Camarines Norte (June 8–12), between the harbours

Barra de Mercedes and Daët, *etc.;* Camarines Sur, Nueva Caceres (June 18), ascent of Mt Iriga (20–22), and back at Nueva Caceras (24–26); Manila, July 13 sailing for Hongkong; Carolines; Hongkong; back in the *Philippines, Luzon:* Manila (arrival Nov. 17), San Miguel (21); Santa Mesa, E of Manila (22); environs of Manila; Ermita, Manila (29); from Caloocan to Malintah, N of Manila, visiting BLANCO's house (Dec. 6); *Malamawi Isl.* (6); Los Baños (Laguna) (15–21); San Lazaro near Manila (25, 27); Olongapoh N of Manila (29); trip to Subig, spending New Year's Eve and Day at Cabatogan, Subig Peninsula (Zambales Prov.) remaining till Jan. 7, *1904;* from Manila *via Mindoro, Romblon, Masbate, Cebu* and *Mindanao* to *Basilan:* (San) Isabela (Jan. 14–Febr. 6); *Mindanao:* Zamboanga (Febr. 6–17); San Ramon (17–27); *via Cebu, Masbate, Romblon* and *Mindoro* back to *Luzon:* Manila (March 4–25), going again to Kakalangen where he collected in LOHER's garden (N of Manila) and at Calla Novaliches (20); sailing for Hongkong; *via* Shanghai to Japan; Hongkong; on the homeward passage visiting: *Singapore* (May 30–June 13); *P. Penang* (June 15); Ceylon; back at Genoa (July 22).

COLLECTIONS. *Herb. Bog.:* > 3450 *nos Borneo* Expedition,[2] *W. Java* collection (made on behalf of the 'Flore de Buitenzorg'), *etc.; Herb. Hamburg:* original set of the *Philippines etc., c.* 2250 *nos* and dupl. of other collections; also in *Mus. Hamburg.* Duplicates in *Herb. Manila:* 773 *nos Philip. Isls* and dupl. from Hamburg (*Philip.*, Mariannes, *Singapore, etc.*); *Herb. Leyden; Herb.* BOISS. and DELESS. (*Geneva*): *c.* 250 *nos 'plant. ind. et malay.'* (purch. 1898, 1901); *Herb. Berl.:* 70 *Borneo* plants and 20 from the *Indian Archipelago; Herb. Sydney: Davallia* dupl. from *Java* (pres. by Kew); *Herb. Monaco; Herb. Utrecht* (*Borneo* and *Java*).

From lists in the archives in Leyden Herbarium it is evident that he collected 842 *nos* in the *Philippines, viz:* 384 in *Luzon*, 21 in *Romblon*, 3 in *Masbate*, 20 in *Cebu*, 166 in *Basilan*, and 248 in *Mindanao.*

The collections from *Sumatra* and *Banka* (1893) are numbered with C *nos.*

Living plants from *Borneo* in *Hort. Bog.*[3]

LITERATURE. (1) H. HALLIER: 'Verslag Borneo Expeditie' (Bull. Mij Bevord. Nat. Onderz. Ned. Kolon. *no* 14, 1894); 'Verslag dienstreis naar Midden-Borneo' (Versl. Pl. Tuin Buitenzorg for 1894, 1895, p. 15–19); 'Die botanische Erforschung Mittelborneo's' (Naturwiss. Wochenschr. 11, 1896, p. 2–7, 75–79, 85–89, 97–101, 109–114); 'Rapport over de botanische tochten in Borneo's Westerafdeeling gedurende de Borneo-Expeditie 1893–94' (Nat. Tijdschr. N.I. 54, 1895, p. 406–449, w. map).

cf. also Tijdschr. K.N.A.G. 1894, p. 965–972, and Globus 66, 1894, p. 336–338.

(2) *cf.* Versl. Pl. Tuin Buitenzorg for 1894, 1895, p. 15–19 for the numbers, collecting localities, important plants, *etc.*

H. HALLIER: 'Ein neues Cypripedium aus Borneo' (Nat. Tijdschr. N.I. 54, 1895, p. 450–452); 'Neue und bemerkenswerte Pflanzen aus dem Malaiisch-Papuanischen Inselmeer' I–III (Ann. Jard. Bot. Buit. 13, 1896, p. 276–327, pl. 21–30; Bull. Herb. BOISS. 6, 1898, p. 212–220, 284–288, 348–360, 604–622, and *l.c.* sér. 2, vol. 1, 1901, p. 667–676, pl. 9–12) (the last 2 references dealing with his W. Java plants too); 'Paphiopedilum amabile und die Hochgebirgsflora des Berges Klamm in West Bor-



HALLIER

neo, nebst einer Übersicht über die Gattung Paphiopedilum' (Ann. Jard. Bot. Buit. 14, 1897, p. 18–52); 'Beiträge zur Flora von Borneo' (Beih. Bot. Centr. Bl. 2e Abt. 34, 1916, p. 19–53).

Borneo ferns by H. CHRIST in Ann. Jard. Bot. Buit. 20, 1906, p. 92–140.

(3) *cf.* Versl. Pl. Tuin Buitenzorg for 1894, 1895, p. 56–58.

BIOGRAPHICAL DATA. Short sketch of the life and scientific education of HANS HALLIER Ph. D. (MS. made by HALLIER himself in 1910, in Leyden Herbarium files); BACKER, Verkl. Woordenb., 1936.

Ham, Sigismund Pieter

(1863, Berkenwoude, Z.H., Holland; 1936, Wageningen, Gld, Holland), since 1885 Forest Officer in the D.E.I., in 1912 pensioned off with the rank of Chief Inspector of the Forest Service; 1918–33 Professor at the Agricultural College, Wageningen.

Author of dendrological papers.[1]

Coptosapelta hammii VALET. and *Agathis hami* M.DR. were named after him.

COLLECTING LOCALITIES. *1899. Moluccas; cf. sub* ATASRIP, mainly on the *Obi Islands.—1907. Banka; Billiton,* Manggar (March 17).—*Before 1910. W. Java:* near Pangentjongan, Limbangan Distr. in Priangan Res.[2]—*1910. Sumatra West Coast:* Sawahloento (Dec. 22).—*c. 1912. P. Moena,* S of Celebes.

COLLECTIONS. *Herb. Bog.:* plants *Obi* Expe-

dition *etc.* (*cf.* collector ATASRIP), of which dupl in *Herb. Leyden;* the collection from *P. Moena* was presented to *Herb. Bog.* in *1912.*

LITERATURE. (1) *e.g.* 'Boschbouwkundige beschrijving der Residentie Kediri' (Tijdschr. Nijverh. en Landb. 47, 1893, p. 129–176); 'Over de damarwinning op Obi' (Tectona 4, 1911, p. 205–238, 301–339); 'Nota nopens de boschreserveering in de Res. Lampongsche Districten' (Tectona 6, 1913, p. 1–44).

(2) *cf.* Icon. Bogor. 4, 1910, p. 105.

BIOGRAPHICAL DATA. Wie is dat? 1935; Tectona 29, 1936, p. 71–78; Landbouw 11, 1936, p. 266 w. portr.; BACKER, Verkl. Woordenb., 1936, *cf.* also *sub Addenda;* Chron. Bot. 3, 1937, p. 206.

Hamel, Car(e)l

Missionary of the American Methodist Mission, who undertook the supervision of the Indonesian collector RAHMAT SI BOEEA, employed by H. H. BARTLETT. At the time of FAIRCHILD's cruise in the 'Chêng Ho', in 1940, head of the Protestant Mission in Ambon. During World War II he was interned with Dutch P.O.W.'s respectively in Java, Changi (Singapore), Thailand and Japan. He evoked the admiration of all those who were so lucky to share his camp life, for his wonderful unselfish behaviour. After the Japanese capitulation he left for America for the recovery of himself and his family. In 1946 he was decorated by the Dutch Government.

Rinorea hamelii MERR. was named after him.

COLLECTIONS. Some *Sumatra* plants *1928*, collected partly alone, and partly with RAHMAT, on behalf of H. H. BARTLETT (see there, also *sub* Liter.); in *Herb. Univers. Michigan, U.S. Nat. Herb. Wash., N.Y. Bot. Gard.* (84 *nos*).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Hamid, Abd., *cf. sub* Forest Research Institute, Buitenzorg.

Hamid bin Mohamed Sah.

Forest Ranger in the Forest Department Straits Settlements from 1907 (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. From many parts of the *Malay Peninsula*, numbered in the C.F. (see *sub* Conservator of Forests) series; *Herb. Kuala Lump.*

Hamilton, A. W. H.

of the Malayan Police Service, *c.* 1908–34; interested in Malay names of plants.[1]

COLLECTING LOCALITIES & COLLECTIONS. *Herb. Sing.:* few plants from *Singapore Island.*[2]

LITERATURE. (1) Author with R. E. HOLTTUM of 'A Malay Garden' (Journ. Mal. Br. Roy. As. Soc. 11, 1933, p. 139–143).

(2) 'Malayan Plants. A collection made by A. W. HAMILTON of some of the commoner plants and littoral trees found on Singapore Island. Identifications and descriptions by R.E.H.' (Journ. Mal. Br. Roy. As. Soc. 8, 1930, p. 318–330).

Hamilton, Francis Buchanan

(1762, the Branziet, county of Stirling, Scotland; 1829, Leny, near Callander), studied medicine at Edinburgh, where he developed a keen interest in botany. Early in 1785 he embarked on the first of his eastern voyages. In 1794 he accepted a commission from the Hon. East India Company as Assistant Surgeon; 1806–14 Surveyor; 1814–15 Superintendent of the Botanic Garden at Calcutta. In February 1815 he left India.

Clerodendron buchanani WALP. was named after him.

ITINERARY. He made two (possibly three) eastern voyages; during the second voyage, on the 8th of January *1789*, his vessel was in the sea of Celebes about midway between the Philippines and the Moluccas, on the 12th of April of the same year somewhere in the southern Atlantic.

COLLECTIONS. PRAIN says in his biography (see below) that there are no indications as to collecting during the East Indian voyages. When staying in India he made extensive collections, *e.g.* in Nepal, which are preserved in *Herb.* WALLICH (= *Kew* now), *Herb. Brit. Mus., Kew, Edinburgh,* and *Herb.* DELESS. (*Geneva*). It is recorded that he forwarded 4 species of Dipterocarps from *Sumatra* to Sir JOSEPH BANKS in *1798*. We do not know whether he collected them himself.

A MS. catalogue of dried plants, collected and presented to the Museum of the E.I. Comp. in Library Calcutta Bot. Gardens.

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 27, 1889, p. 49; PRAIN in Ann. Roy. Bot. Gard. Calc. 10^2, 1905, p. i–lxxv; BACKER, Verkl. Woordenb., 1936.

Hamzah, *cf. sub* Forest Research Institute, Buitenzorg.

Han Hian Gwan, *cf. sub ditto.*

Hanada, Nobuhira

COLLECTING LOCALITIES. *1938. NW. Borneo,* Sarawak: Kuching, mostly from G. Sengah.

COLLECTIONS. *Herb. Bog.:* 29 *nos* of climbers, principally *Menispermaceae.*

Hance, Henry Fletcher

(1827, Old Brompton, London, England; 1886, Amoy, China), was educated partly in London, partly in Belgium. He entered the Civil Service in Hongkong in 1844, was transferred to Canton in 1854; in 1861 appointed Vice-Consul at Whampoa near Canton and in 1886 Consul at Amoy. He devoted his spare time to botany, and was an expert linguist, though he flatly refused to learn Chinese! He was buried in Hongkong.

Author of many botanical papers.

The genus *Hancea* SEEM., *Ilex hanceana* MAX. and other plants are named after him.

COLLECTIONS. *Herb. Brit. Mus.:* > 22000 *nos* from China; *Herb. Kew:* 614 *nos* from China. In *Herb. Bot. Gard. St Petersb.* (= *Leningrad*): China and *Java* plants, the latter possibly not collected by himself. In *Herb. Brussels* (with *Herb.* MARTIUS):

plants from *Penang*, Ceylon, China, and Hongkong. As he paid a visit to the *Philippines* in *1871*,[1] he may have collected plants in that archipelago too; till now there are no indications pointing in that direction.

LITERATURE. (1) *cf.* Journ. Bot. 12, 1874, p. 241.

BIOGRAPHICAL DATA. PRITZEL, Thes. Lit. Bot., 1872; BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 365, 532, 632–652; WITTROCK, Icon. Bot. Berg., 2, 1905, p. 85, *t.* 85; BACKER, Verkl. Woordenb., 1936; E. H. M. Cox, Plant-hunting in China, 1945, p. 42.

Hancock, William

(1847, Lurgan, Ulster, Ireland; 1914, Bristol, England), since 1874 custom-house officer in China (stationed at Peking, Ning-Poi, Hainan and Formosa). He displayed a keen interest in the flora of China. He travelled in Java, Sumatra, *etc.* in periods of leave.

Polypodium hancockii BAKER was named after him.

COLLECTING LOCALITIES. *1862. Sumatra*, visiting G. Kerintji (*Sumatra West Coast*), *etc.*[1] He may have visited *Java* in the same year.

COLLECTIONS. *Herb. Kew:*[2] plants from China, Formosa, Japan, Jamaica, Guatemala, Mexico, *Sumatra* (90) and *Java* (91). GRAY *Herb.:* Malaysian duplicates; *U.S. Nat. Herb. Wash.:* 57 dupl. *Sumatra* and *Java;* in *Herb.* HANCE (= *Brit. Mus.*); *Herb. Univ. Oxford* (with *Herb.* DU BOIS); *Herb. Paris:* ferns from *Sumatra* (19) *etc.* It was stipulated that those specimens which were not required by Kew, should go to *Bristol.*

LITERATURE. (1) *cf.* COPELAND in Philip. Journ. Sci. 37, 1928, p. 340.

(2) On the presentation of his herbarium to Kew *cf.* Kew Bull. 1922, p. 204.

BIOGRAPHICAL DATA. BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 747–748; Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Handover, William P.

planter, collected a few specimens near Port Dickson on the coast of Negri Sembilan, *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5); preserved in *Herb. Sing.*

Haniff, Mohamed

(† 1930), entered the Gardens Department Straits Settlements in 1890, stationed in the Waterfall Gardens, Penang; 1911–21 in charge of those Gardens. In 1917 he was promoted to the rank of Field Assistant; he retired in 1926, but continued to collect plants from time to time.[1]

Dendrobium haniffii RIDL., *Eugenia haniffii* HENDERSON, and other plants, were named after him.

COLLECTING LOCALITIES. (often accompanied by NUR, see there).[2] *Malay Peninsula: P. Penang* (*1890–1928*); *Langkawi Islands* (Sept. *1900*, Aug. *1906*); Perak, G. Kerbau with BARNARD (May *1909*);[3] Kedah, G. Bongsu (*1910*); Kedah Peak with L. M. BELL (March *1911*); *P. Langkawi* and G. Kerbau (1911); Taiping Hills (Febr. *1913*); *P. Langkawi* & *P. Lidi* (Sept. *1914*); Kedah Peak (Nov. *1915*); Taiping Hills (Febr. *1917*); Taiping and Ayer Kuning (May 1917); Kulim (June 1917); Kedah Peak (Aug. *1919*, Febr. *1920*); Salak & Sg. Siput (Dec. 1920); Sg. Siput, Perak (*1921*); *Langkawi Islands* with NUR (Nov. 14–27,



HANIFF

1921); G. Tahan (May 20–June 18, *1922*); up the Lebir River in Kelantan to the roots of G. Tahan (Jan.–Febr. *1923*); Taiping Hills (Oct. 1923); in *1924* visiting Kedah, Prov. Wellesley, and Larut with BURKILL; Perak (May), Tapah (June), Batu Gajah, Telok Anson (Sept.), Pahang, Kuala Kangsar (Sept.); Kuala Kangsar and neighbourhood (Jan. 14–19, *1925*); Kedah Peak with HOLTTUM (Apr. 1925); Johore, G. Panti (Dec. 27, 1925); foot of G. Bintang on Kedah-Perak boundary (Apr. *1928*).

His locality Mt Erskine in Penang is *not* the Mt Erskine of the maps, but Mt Olivia where ERSKINE once lived.[4]

COLLECTIONS. *Herb. Sing.;* some dupl. at *Kuala Lump.*, in *Herb. Bog.* and *Kew.* His later collections are in the 'Singapore Field Number' series. For descriptions of plants *cf.* Liter. *sub* 1 and 3.

LITERATURE. (1) Author of 'Record of a few orchids and other interesting plants (Monocotyledons) found in Penang, Setol, Kedah Peak and Bukit Wang in the north of Kedah' (Gard. Bull. Str. Settlem. 1, 1916, p. 353–355).

(2) He assisted on numerous expeditions in many parts of the Malay Peninsula; the mentioned data

were derived from the Annual Reports of the Botanic Gardens, Singapore, they are probably incomplete; *cf.* also BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(3) *cf.* H. N. RIDLEY: 'Plants from G. Kerbau, Perak' (Journ. Fed. Mal. Stat. Mus. 6, 1915, p. 43–62).

(4) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 149.

BIOGRAPHICAL DATA. Gard. Bull. Str. Settlem. 5, 1932, p. 161 w. portr.

Hanja, A., *cf. sub* Forest Research Institute, Buitenzorg.

Hansemann, A. (von)

(1826, Aix-la-Chapelle, Germany; 1903, Berlin, Germany), founder (1885) and Director of the German New Guinea Company and of the German-Asiatic Bank. He was a promoter of the botanical exploration of former Kaiser-Wilhelmsland.

He was commemorated in the genus *Hansemannia* K. SCHUM., in some plant species, and in the Hansemann Gebirge (= Mts).

COLLECTIONS. According to SCHLECHTER he collected plants, *e.g. Rhododendrons* in *NE. New Guinea*. Probably occasionally only.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Hansen, F. H., *cf. sub* Forest Research Institute, Buitenzorg.

Hansen, J. F. K.

(1876, Soerabaja, Java; 1935, The Hague, Holland), from 1899–1924 in the D.E. Indian army, pensioned off with the rank of major. From Aug. 1911–Apr. 1912 he was stationed in the Pageh (= Pagai) Islands, once visiting the Mentawai Islands Siberoet and Sipora.[1]

Robiquetia hansenii J.J.S. was named after him.

COLLECTIONS. Living orchids in *Hort. Bog.*, material from some preserved in *Herb. Bog.*; some dupl. (*Java*) at *Utrecht*. 11 Orchids from the *Mentawai Islands* and 2 from *W. Java* were presented to *Hort. Bog.* in *1918*.

LITERATURE. (1) Author of 'De groep Noorden Zuid-Pageh van de Mentawei-eilanden' (Bijdr. Taal-, Land- en Volkenk. N.I. 70, 1914, p. 113–220, 1 map + ill.; on the flora *cf.* p. 126–128).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936, *cf.* also *sub Addenda*.

Hara, K., *cf. sub* INOKUMA.

Hardenberg, Coenraad Cornelis

(1822, Gouda, Z.H., Holland; 1864, Makassar, Celebes), joined the D. E. Indian Civil Service in 1843; at first stationed in Java, in 1851 transferred to W. Borneo, since 1855 as Assistant Resident at Sambas; from 1859 till his death Assistant Resident at Makassar, SW. Celebes.

COLLECTIONS. From *W. Borneo* he forwarded some dried plants to the 'Natuurkundige Vereeniging' at Batavia (*1858*), from where they were sent to TEYSMANN, *Herb. Bog.*, for identification.[1]

LITERATURE. (1) C. C. HARDENBERG & P. F. H. FROMBERG: 'Over eenige planten van Westelijk Borneo met betrekking tot de papierbereiding' (Nat. Tijdschr. N.I. 11, 1856, p. 295–302).

Hardenberg, Johann Dietrich Frans

(1902, Willem I, Ambarawa, Java; x), zoologist, educated at Utrecht University, where he took his Ph. Dr's degree in 1927; in 1927 appointed at the Marine Biological Laboratory at Batavia, since 1933 Chief of that institution.

Author of many, especially ichthyological, papers.

COLLECTING LOCALITIES. *Groot Massalemba* (= *Groot Salemboe*) in the Java Sea (May *1930*); *Aroe Islands: P. Wamar*, Dobo (*1938*).

COLLECTIONS. A few *nos* in *Herb. Bog.*, including *Euphorbia heterophylla* from *Groot Salemboe*, collected together with H. C. DELSMAN (see there).

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 455–456.

Hardenberg, van (or von),

collected *c.* 23 *nos* of plants near Gombong, *Centr. Java, before 1910*.

Harders, H. J. A.

of Dinewatie Estate near Soekaboemi, *W. Java*.

COLLECTIONS. *Herb. Bog.*: overblown inflorescence of *Amorphophallus decus-sylvae* (pres. Febr. *1938*).

Hardjawinata, *cf. sub* Forest Research Institute, Buitenzorg.

Hardjowijono, *cf. sub ditto*.

Hardon, Hendrik J.

(1903, Zwolle, O., Holland; x), chemist, educated at Utrecht University, where he took his degree in 1928; chemist-oceanographer attached to the SNELLIUS Expedition, 1929–30; chemist of the Soil Science Institute, Buitenzorg, 1931–39; since 1939 Chief of the Laboratory for Chemical Analysis, Buitenzorg. In 1946, after the war, he was stationed in the Head office of the Division of Industry of the Dept of Economic Affairs.

Author of chemical and soil-chemical papers.

COLLECTING LOCALITIES. *Banka* (March *1935*); *W. Java:* G. Patoeha (July *1935*).

COLLECTIONS. *Herb. Bog.*: 6 *nos* from Banka, 11 from *Java*.

BIOGRAPHICAL DATA. Chron. Nat. 105, 5, May 1949, Suppl. O.N.O. Meded. (O.N.O. News) p. 1–2, incl. bibliogr.

Haring, C., *cf. sub* Forest Research Institute, Buitenzorg.

Harison

a Kling, collecting for KUNSTLER and WRAY (see those).

Harmsen, C. P.
a resident of P. Simaloer (W of Sumatra), collected wild cotton in *P. Las(s)ia*, and forwarded the material to *Hort. Bog.* in *1919*.

Harmsen, Gerrit Johan
(1890, Zutfen, Gld, Holland; 1940, Eefde, Gld, Holland), Horticultural Assistant, since 1916 in D.E. Indian Government service, stationed successively at Makassar (SW. Celebes) 1916–21, Buitenzorg (W. Java) 1921–23, Ragoenan (W. Java) 1924, and at Poenten (near Malang, E. Java), Nov. 1924–1931. In 1931 he retired and went to Holland.
COLLECTING LOCALITIES & COLLECTIONS. *Herb. Bog.*: 3 *Loranthaceae* collected in subdistrict of Sisir, *E. Java* (*1928*).

Harmsen, J. R.
COLLECTING LOCALITIES. *W. Java:* Govt Rubber Estate Tjikoempai, E of Poerwakarta (Aug. and Dec. *1921*).
COLLECTIONS. *Herb. Bog.*: > 128 *nos.*

Harnadi Natakoesoemah, *cf. sub* Forest Research Institute, Buitenzorg.

Haroen (or Haroem), *cf. sub ditto.*

Harpst
is cited by MERRILL in Enum. Philip. Fl.Pl. as the collector of a plant in *Mindanao, P.I.*

Harras, A. E. O. von, *cf. sub* Forest Research Institute, Buitenzorg.

Harreveld, Jan van
(1890, Groningen, Holland; *c.* Dec. 1945, murdered by extremists, Batavia, Java), Doctor of Law, educated at Amsterdam University; Secretary of the Agricultural Department of the Experiment Station for the Java Sugar Industry (Pasoeroean), 1913–20; *ditto* of the Java Sugar Employers' Union, 1920–22, and of the Agricultural Department again, 1922–24; *ditto* of the said Experiment Station, 1925–27. Lastly a member of the sollicitor's office Messrs MACLAINE PONT, VAN HARREVELD and KRAAIJENBRINK at Batavia.
COLLECTING LOCALITIES. *E. Java:* Dessa Ngepoeh, G. Tengger (Apr. *1915*) and probably at other times on the Tengger complex.
COLLECTIONS. *Herb. Bog.*: > 52 *nos; Herb. Pasoer.*: 1 *no*, from G. Tengger too (pres. or coll. 1926).

Harreveld, Philippus van
(1879, Groningen, Holland; x), plant physiologist who was educated and took his Dr's degree in the University of Groningen; for some years a teacher at secondary schools at Groningen and The Hague; Director of the Agricultural Department of the Experiment Station for the Java Sugar Industry (Pasoeroean), 1912–22; General Director of the said Experiment Station, 1922–26. When pensioned off he settled at The Hague, Holland, and since 1940 at Pengalengan near Bandoeng in W. Java. In Febr. 1943 he was interned by the Japanese, and was evacuated to Holland in May 1946, settling once more at The Hague. In 1907 he worked for some months in the Foreigners' Laboratory at Buitenzorg.[1]
COLLECTING LOCALITIES. *1907. W. Java* (May–Sept.): Batavia, Tandjong Priok, Antjol (June 11), Buitenzorg, Tjampea, Tjiapoes, Poentjak, Tjibodas (Aug.); G. Gedeh-Pangrango (Aug. 20), Lembang, G. Papandajan (29), Telaga Bodas (Garoet).—*1914. E. Java:* Trètès (Nov.).—*1915. Centr. Java:* Koedoes; *E. Java:* Djombang, Modjokerto.—*1917. Sumatra East Coast:* Brastagi, Kabandja(h)e, Toba Plateau.—*1919. E. Java:* G. Tengger.—*1920. Lesser Sunda Islands, Soembawa* (Oct.): G. Tambora, Tg Pasoemba (13), *P. Satonda*, NW of Sanggar.—*1921. E. Java:* Kediri (Blitar and Lahar Temas, W. slope G. Kloet); *N. Celebes:* Gorontalo (Oct.).—*1923. W. Java:* Cheribon.
COLLECTIONS. *Herb. Groningen:* collection *W. Java* (1907) '*Herbarium javanicum*', 860 *nos; Herb. Amsterdam:* dupl. '*Herb. Javan.*' (1907); *Herb. Pasoer.*: 990 *nos*, mainly dupl. coll. 1907 (936); *Herb. Bog.*: later collections, including those from *Soembawa*. Some of his plants bear high numbers, exceeding 6000.
LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 32.
BIOGRAPHICAL DATA. Wie is dat? ed. 3–4.

Harreveld-Lako, Cornelia Hermina van
(1883, Wageningen, Gld, Holland; *c.* Dec. 1945, murdered by extremists, Batavia, Java) studied pharmacy at Utrecht University, and was for the following 6 years employed in various positions in Holland; Chemical Assistant at the Experiment Station for the Java Sugar Industry (Pasoeroean), 1913–15; Agrogeologist, besides Meteorologist at the same institution, 1915–27. When back in Holland she took her Dr's degree at Amsterdam University in 1933; since 1934 settled at Batavia with her husband J. VAN HARREVELD (see there).
COLLECTING LOCALITIES. *E. Java:* G. Tengger, probably several times, at least in *1913*, in Apr. *1915* (dessa Ngepoeh, Bendo), and in *1926* (Nongkodjadjar, Balepandjang, Poespo).
COLLECTIONS. *Herb. Bog.*: > 98 *nos; Herb. Pasoer.*: 4 *nos* (coll. 1926).

Harris, Mohd., *cf. sub* Forest Research Institute, Buitenzorg.

Hart
collected *Canarium hirsutum* WILLD., *no* 7, at Sambong, *Centr. Java* (*cf.* LAM in Bull. Jard. Bot. Buit. sér. 3, vol. 12, 1931/32, p. 469). ? Identical with H. N. J. HART (*cf. sub* Forest Research Institute, Buitenzorg).

Hartman, P.
COLLECTIONS. *Herb. Bog.: Clematis leschenaultiana, no* 14, collected at Kiedjadjawai (prob. in Priangan Res., *W. Java*), *before 1896*, and *no* 23, *Polygala pulchra* HASSK. from Malabar, Priangan. The latter plant with note on the medicinal use.

Hartman, R.
? physician, collected 10 *nos* of anti-scabies plants for TEYSMANN, *Herb. Bog.*

Hartmann
collector of *Piper nigrescens* BL. on G. Tilu, Priangan Res., *W. Java* (*cf.* KOORDERS, Die Piperaceae von Java, in Verh. Kon. Akad. Wet. A'dam 14, 1909, *no* 4, p. 36).

Hartmann, Carl H.
a well-known Queensland plant enthousiast who visited New Guinea twice.
Aglaia hartmanni C.DC. was named after him.
ITINERARY. *Papua. 1885.* Meeting the Bonito Expedition in the mouth of the Fly River (July); leaving the Fly with MACFARLANE (July 23); *Saibai Isl.* (S of Mabaduan) and *islands in the Papuan Gulf.—1887.* With G. HUNTER departing from Port Moresby (end of June); ascending the eastern bank of the Kemp Welch River and pushing forward with the intention to go to the top range between Mt Brown and Mt Obree; it is certain that not even the base of Owen Stanley Range was reached, evidently they were near Mt Gillies;[1] the highest point was reached on July 6; return journey to the S. coast (? Rigo) rafted down the Musgrave River to near its junction with the Kemp Welch; back at Port Moresby (July 16).—Evidently *Thursday Isl.* was visited too, as he is recorded to have collected lichens there.[2]
COLLECTIONS. He is reputed to have collected a large series of specimens;[2] possibly the bulk is still lying undetermined in *Herb. Melbourne.* Dupl. in *Herb. Kew:* Queensland and *New Guinea* (pres. 1881–88), 83 *nos; Herb. Berl.;* partly in *Herb.* DECAND. (*Geneva*); some ferns in *Herb.* BONAPARTE (= *Paris*); *U.S. Nat. Herb. Wash.:* 1 *N.G.* grass.
LITERATURE. (1) *cf.* Proc. Roy. Geogr. Soc. Lond. N.S. 9, 1887, p. 621; Scott. Geogr. Magaz. Edinb. 3, 1887, p. 542; PETERM. Mitt. 33, 1887, p. 383; and W. R. CUTHBERTSON in Proc. Roy. Geogr. Soc. Australasia Vict. Br. Melbourne 1888, p. 13–15, 32.
C. H. HARTMANN, letter to the President, (Royal) Geographic(al) Society, Sydney, written at the Government Bungalow, Port Moresby, July 17, 1887 (publ. in Pacif. Isl. Monthly 2 (12), 1932, p. 14), with facsimile reproductions of last page of the letter, and of a pencil note to the President, Roy. Geogr. Soc., Sydney, written by HARTMANN on (the supposed) top of the Owen Stanley Range, July 6, 1887).
(2) *cf.* F. VON MUELLER, Descr. Not. Pap. Pl., pts 7, 8 and 9; and in Ann. Rep. Br. N.G. for 1893/94, Brisb. 1894, App. II; F. M. BAILEY in Queensl. Agric. Journ. 24, 1910, p. 23; FR. KRÄNZLIN in Oesterr. Bot. Zeitschr. 44, 1894, p. 337.
Ferns, *cf.* Ann. Rep. Br. N.G. for 1893/94, Brisb. 1894, p. 126, identified by J. G. BAKER.
Lichens by F. M. BAILEY in Bot. Bull. *no* XIII Queensl. Dept Agr. 1896, p. 22 *seq.*

Harun bin Haji Tahib
joined the Forest Department *Malay Peninsula* as sub-Assistant Conservator of Forests in 1929; *cf. sub* Conservator of Forests series, Kepong.

Harvey, Lieut. R. E.
COLLECTING LOCALITIES. *Java,* G. Brama (= probably Bromo, G. Tengger in *E. Java*) (May *1897*).[1]
COLLECTIONS. He sent specimens of dried plants from *Java* to *Herb. Sing.* in 1897.
LITERATURE. (1) *cf.* DANSER in Bull. Jard. Bot. Buit. sér. 3, vol. 8, 1927, p. 155.

Hasan, Mohd., *cf. sub* Forest Research Institute. Buitenzorg.

Hashim bin Mohamed
first in the Gardens Department, Straits Settlements, joined the Penang Botanical Gardens in 1900, and since 1908 Forest Ranger in the Forest Department.
COLLECTING LOCALITIES. *Malay Peninsula: P. Penang;* around Kuala Lumpur (*1912*) under the direction of BURN-MURDOCH (see there).
COLLECTIONS. Collection 1912 sent to *Kew* (pres. 1913) (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5). He contributed to the C.F. (see *sub* Conservator of Forests) series, *Kuala Lumpur.*

Hasiboean, K., *cf. sub* Forest Research Institute, Buitenzorg.

Haslam, George A. G.
after whom was named *Dendrochilum haslamii* AMES.
COLLECTING LOCALITIES. *Br. N. Borneo:* G. Kinabalu (Aug. *1916*).
COLLECTIONS. In *Herb. Sing.,* including some ferns.[1] *Herb. Manila:* 101 Kinabalu plants (pres. 1916). According to Mr HOLTTUM his fern collections were seen by CHRISTENSEN.
LITERATURE. (1) *cf.* Gard. Bull. Str. Settlem. 7, 1934, p. 192.

Hassanoedin, *cf. sub* Forest Research Institute, Buitenzorg.

Hasseloo, B. H. te, *cf. sub ditto.*

Hasselt, Arend Ludolf van
(1848, Groningen, Holland; 1909, Oosterbeek, Gld, Holland) came to the East Indies in 1868 as a non-commissioned officer, the next year joining the Civil Service. After passing an examination in Europe (1872), he returned to the Indies again and was successively stationed in Java and Sumatra. In 1877 he was appointed leader of the non-nautical part of the expedition to Central Sumatra under the auspices of the 'Kon. Ned. Aardrijkskundig Genootschap'; due to several circumstances no botanist accompanied this expedition. In 1879 on European leave, in June 1882 back in Java, in 1888 appointed Resident in Tapanoeli

(Sumatra), in 1893 of the Riouw Archipelago; in 1896 he retired on account of ill health. From 1898–1900 Professor of Ethnography at the former Indian Institution at Delft, Holland.

Globba hasseltii BOERL. and *Rafflesia hasseltii* SUR. were named in his honour.

ITINERARY. *Central Sumatra Expedition, 1877–78.*[1] Arrival at Padang (*Sumatra West Coast*) of the other members of the expedition (Febr. 23, *1877*); Soepajang (March 8); Solok (16); *via* Singkarah to Padang Pandjang (17); Fort de Kock (18), from where making the following trips: Manindjau (the recorded date is the 26th, evidently a printer's error and rightly the 20th!), Biarau cave (23), Taloe (25), Ladang Lawas, Koebang Poetih and back to Fort de Kock; Paja Koemboeh (26), Haraukloof (27), Boea (28), Boea Cave (29), Fort van der Capellen (30), Pendjalangan (31), Singkarah (Apr. 1), Solok (2), Siloengkang (9), Solok (10) and some minor trips in the vicinity of Fort de Kock; Soepajang (15), making excursions in the neighbourhood (to Siroekam on the 22nd); setting out (May 8) across the mountains *via* Ajer Boesoek, Rengkiang, Loeloes (climbing Poentjak Penjaringan on May 12), Moeara, Grabak, Datar, Loeboe Karah, to Silago (staying May 22–June 6); to Sg. Simauoeng (7–17) and to Moeara Mamoen; Silago (July 1–12); region between the Mamoen and the Koeantan; along the eastern boundaries of the at that time Dutch territory, to the Pangéan and ascent of Bt Boela (24); Loeboe Tarab (Aug. 1); Soepajang (4); Solok (6); Alahan Pandjang (8) and environs (G. Talang on Aug. 23); setting out (Sept. 30) to Moeara Laboe, staying there; Oct. 18 to Loeboe gedang in the XII Kota; Kerintji Peak (reaching the summit on Dec. 11); returning to Loeboe gedang (29); journey to Padang (discovering *Rafflesia hasseltii* SUR. between Liki and Moeara Laboeh); back at Padang (Jan. 22, *1878*); *S. Sumatra:* Palembang (March 22); by paddle-boat (30) and proa to Soeroelangoen (staying till Apr. 28, making trips in the environs); *via* the Oeloe Rawas (Napal Litjin, Moeara Menkoelem); May 18 to Lebong, Bt Loemoet and G. Amboengan bras; on the way (June 7) to Redjang and Sindang, and back to Soeroelangoen from Teloek Doerian; Soeroelangoen (17); to Limoen, partly by proa (28), from where sudden return on account of hostilities of the natives; Soeroelangoen (July 9); tours through Palembang and Lower Djambi, partly by land (since July 22); embarking (Sept. 26), Batavia bound and after a sojourn till Oct. 11, sailing for Padang, from where to Paja Koemboeh for the study of some Malayan manuscripts. —*1894–96.* In this period visiting the *Anambas & Natoena Islands.*[2]

COLLECTIONS. *Herb. Leyden:* from *Sumatra*[3] and the *Anambas & Natoena Islands.*[4] The *Sumatra* collection is small and incomplete, but valuable owing to the material collected on G. Kerintji with D. D. VETH (see there).

378 Wood samples from the *Sumatra* Expedition in *Kol.* (= *Ind.*) *Inst. Amsterdam* (pres. 1880).

LITERATURE. (1) J. SCHOUW SANTVOORT: 'Plan van een onderzoekingstocht in Midden-Sumatra' (Tijdschr. K.N.A.G. Bijbl. 1, 1879, 1st part).

'Berichten ontleend aan de Rapporten en Correspondentiën ingekomen van de leden der Sumatra-expeditie' (*l.c.*, 2nd part, p. 1–235, 15 maps).

P. J. VETH edited: 'Midden-Sumatra. Reizen en onderzoekingen der Sumatra-expeditie, uitgerust door het Aardrijkskundig Genootschap 1877–1879' (Leiden 1881–92, 4 vols in 8 + atlas); VAN HASSELT author of vols 1, 3, *etc.*

JOH. F. SNELLEMAN: 'De Sumatra-Expeditie van 1877. Herinneringen van ...' (Ind. Gids 1927, p. 980–1006).

cf. also *sub* D. D. VETH.

Short notices in Nature 13, 1876, p. 209–210; Bull. Soc. Géogr. Paris, Dec. 1878, p. 481–512, 1 map; Proc. Roy. Geogr. Soc. 1, 1879, p. 759–776; PETERM. Mitt. 1880, p. 1–14 + map; Tour du Monde 40, p. 145 *seq.*, w. ill.; Deutsche Geogr. Blätt. 6, 1883, p. 130–146; *etc.*

(2) A. L. VAN HASSELT & H. J. E. F. SCHWARTZ: 'De Poelau toedjoeh in het zuidelijk gedeelte der Chineesche Zee' (Tijdschr. K.N.A.G. 1898, p. 21–45, 154–199, 444–476, 657–689, w. ill. & maps).

(3) 'Bijdragen tot de kennis der Flora van Midden-Sumatra' (vol. 4, pt 2, 1884 of 'Midden-Sumatra' *l.c. sub* 1). Herein J. G. BOERLAGE: 'Systematische lijst van de verzamelde planten' and A. L. VAN HASSELT: 'Lijst van de hout-, bamboe- en rotansoorten van Midden-Sumatra'.

(4) Identified by L. VUYCK, *cf.* Tijdschr. K.N.A.G. 1898, p. 691–692 (list of 14 phanerogams).

BIOGRAPHICAL DATA. Tijdschr. K.N.A.G. 1909, p. 893–895 and *l.c.* 1910, p. 389; Encyclop. N.I. 2, 1918; portr. in Ind. Gids 1927, facing p. 990; BACKER, Verkl. Woordenb., 1936.

Hasselt, Frans Johannes Frederik van

(1870, Ternate, Moluccas; 1939, Haarlem, Holland), schoolmaster-missionary, from 1894–1931 working (for the Utrecht Mission Society) in Dutch New Guinea, stationed at Mansiman, Manoekwari, and Kwawi.[1] He rendered service to Miss GIBBS (see there) when she was exploring that region in 1913. During his term of office he went twice on European leave, *viz* in 1914–16 and 1924–26.

Pellionia vanhasseltii GIBBS was named after him.

COLLECTING LOCALITIES. *Dutch NW. New Guinea:* Doré (*1919*), Manoekwari (*1928, 1929*).

COLLECTIONS. *Herb. Bog.:* few numbers.

VAN HASSELT (without initials, but probably identical) presented some *New Guinea* grasses to *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam* in *1905.*

LITERATURE. (1) Author of 'In het land der Papoea's' (1926); "n Bezoek aan de Humboldtsbaai' (Ber. Utr. Zend. Ver. 1909, p. 73 and 88); and of several small papers in Trop. Nat., Tijdschr. Bat. Gen. K. & W., *etc.*

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 146–147; BACKER, Verkl. Woordenb., 1936.

Hasselt, Johan Coenraad van

(1797, Doesburg, Gld, Holland; Sept. 1823, Buitenzorg, Java), surgeon-zoologist, educated at Groningen University (1816–20), appointed member

of the 'Natuurkundige Commissie' (Commission for Natural Sciences) for the D.E.I. in 1820, together with his friend KUHL (see there). In the same year they sailed for Java, exploring the western part of that island; after return from Bantam he died of dysentery and was buried in the cemetery of the Botanic Garden, Buitenzorg.



J. C. VAN HASSELT

He is commemorated in the genera *Hasseltia* BL. and *Kuhlhasseltia* J.J.S. and in several species of plants.

ITINERARY. *1820–23.* Together with KUHL sailing *via* the Cocos Islands to Java; exploring *W. Java:*[1] Bantam Res., G. Karang and G. Poelasari (Dec. *1820*); environs of Buitenzorg, G. Salak, Bantam, presumably Koeripan (lime-depositing saline springs between kp. Rompin and Waroe), G. Pangrango-Gedeh (July–early Aug. *1921*); since *1822* in Bantam with G. VAN RAALTEN, *e.g.* at Serang (Febr. *1823*) and on G. Karang (March); in the latter month VAN RAALTEN was forced to discontinue exploration and was substituted by BIK (the 3rd participant was MAUREVERT):[2] Anjer (March 23); Dano Lake (= Rawa Danau); *P. Sangiang* (= *Dwars in den weg* or *Geesteneiland*); Pasang Tenang; Tjaringin (May 14); to Menes (June 1), from where to Pabonkar, G. Poelasari (trip to the solfatara); *via* Panaud and Pandeglang to Serang (10); Tjaringin (28), and *via* Laboean and Tjimajang to Perdana (collecting 2 new palms, the *Sahadan* and the *Tjilankap*); *via* the Tjilatak, Tjimanahon and the Tjiboenar to Tjisekat (July 12); *via* Tjikatombier, Patoedja, Pasir Nangka and Toegoe to Tjiboerial (20); setting out from Patoedja (24) to Oedjoeng Koelon; beach to Terèleng (25) and proceeding in eastern direction to the base of G. Pajong; ascent G. Pajong (26); Patoedja (30) base of G. Pajong; ascent G. Pajong (26); Patoedja (30) and proceeding to Tjihoeang; Soedimanik (Aug. 4); kp. Binoeangen (13); kp. Tjilangkahan (14), VAN HASSELT falling ill; Tjitando; Madoer (25), falling seriously ill again; Sawarna (30); G. Tangkil (Sept. 1); along the beach to Tjimadja (by way of Tjibangbang and Tjisolok); crossing the Sakawaiana and the Tjidanah, kp. Tjigangsa and Tondjong (3); Leuwilieuw (4), Soekaboemi (5), Buitenzorg (6).

COLLECTIONS. *Herb. Leyden,*[3] thanks to the care of VAN RAALTEN; some dupl. in *Herb. Utrecht.*

LITERATURE. (1) *cf.* Extracts from the letters of KUHL and VAN HASSELT to C. J. TEMMINCK, TH. VAN SWINDEREN, and W. DE HAAN in Alg. Konsten Letterbode 1822[1], p. 99–104, 149–153 and from VAN HASSELT alone in *l.c.* 1823[2], p. 130, 230, 242, 264 and 341; and in Isis 10, 1822[1], p. 108–113, 472–476; *l.c.* 11, 1822[2], p. 893–904, on zoological discoveries.

cf. also HASSKARL in Verh. Bat. Gen. K. & W. 17, 1839, p. 5 and in Flora 30, 1847, p. 526.

(2) J. TH. BIK: 'Aanteekeningen op eene reis door het Westelijk gedeelte van de Residentie Bantam met de Heeren VAN HASSELT en MEAUREVERT in het jaar 1823' (Tijdschr. Ind. Taal-, Land- en Volkenk. 16, 1867, p. 260–276).

J. VAN HASSELT: 'Verslag eener reize naar den westhoek van Java' (Ind. Magaz. 2e twaalftal, *nos* 3–4, 1845, p. 85–91).

(3) VAN HASSELT & KUHL, Manuscript descriptions of several Javanese plants accompanied by drawings of VAN RAALTEN, BIK and KEULTJES (formerly in the Libr. Bot. Gard. Buitenzorg, not yet found back after the Japanese occupation).

C. L. BLUME: 'Enumeratio plantarum Javae et Insularum adjacentium ex herbariis Reinwardtii, Hasseltii, Kuhlii, Blumei, *etc.*' (Lugd. Bat. 1827–28, 2 vols). BLUME failed to underline the merits of VAN HASSELT.

cf. also BLUME: 'Bijdragen tot de flora van Ned. Indië' (1825–26) and 'Rumphia' (1835–48).

J. G. S. VAN BREDA: 'Genera et species Orchidearum et Asclepiadearum quas in itinere per insularem Java collegerunt Dr H. KUHL et Dr J. C. VAN HASSELT' (Gandavi 1827–29, 1 vol. *folio*, 15 *tab. col.*; not finished).

BIOGRAPHICAL DATA. TH. VAN SWINDEREN: 'Bijdrage tot eene schets van het leven, het karakter en de verdiensten van wijlen Dr J. C. VAN HASSELT' (Almanak der Akademie, Groningen 1824 + bibliogr.); Alg. Konst- en Letterbode 1825[1], p. 198–202, 212–218, 230–233; and *l.c.* 1829[1], p. 369–370; Ind. Magaz. 2e twaalftal, *nos* 5–6, 1845, p. 28–43; Album der Natuur 1903, fasc. 1, p. 1–22 and fasc. 2, p. 60–88; SIRKS, Ind. Nat. Onderzoek, Amsterdam 1915, p. 99–106 + portr.; Encyclop. N.I. 2,

1918; BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 49, 1939, p. 443; *l.c.* 50, 1940, p. 191; *l.c.* 51, 1941, p. 353.

Hassin bin Mohamed Rani
in 1938 appointed collector in the Gardens Department, Singapore.

Hasskarl, Justus Karl
(1811, Cassel, Germany; 1894, Cleves, Germany), came out to Java in 1837 and was appointed Assistant Curator of the Botanic Gardens at Buitenzorg; in the years 1841–43 he travelled over Java and was subsequently absent on sick-leave to Europe, returning to Java in 1845; in the same year he resigned, dissatisfied with his rank, and sailed for Europe again. In 1852 he was commissioned by the Dutch Government to travel to Peru for the study of the ecology of *Cinchona*, and if possible, for bringing living plants of the same to Java. He succeeded in 1854 and finally returned to Europe in 1856. In the 'Leopold. Carol. Akademie' he was known under the surname of RETZIUS.[1]

Author of numerous botanical publications;[2] commemorated in the genus *Hasskarlia* BAILL.

COLLECTING LOCALITIES. *1841. W. Java*, S. Bantam *etc.* (Sept.–Oct.):[3] at Tjampea (G. Tjibodas), Jassinga (= Djasinga), G. Angsana, Soedamani(e)k, Lebak, Pas(s)i(e)r Angi(e)n, Tjilangkahan, beach of S. Bantam, Bodjongmani(e)k, Goenoengkentjana, G. Dedap, Tjitjari(e)ngi(e)n, Kali Tjili(e)man, Lebaïboe, beach on the S. coast near kali Tji(h)ara and Baija (= Bajah), Sawarna, Tjisolok, Plamboean Ratoe (= Palaboehanratoe), G. Halimoen, kali Tjibarenoh, Tjisoengsang, *etc.*—*1842. W. Java:* Kawah Manoek (Sept. 24);[4] *Centr. Java:* Semarang (Oct.), Demak, Poerwadadi, Koewoe (mudwells, Oct. 13),[5] Demak, Djapara, Déweh, G. Moeria (= Moerjo).—*1843. W. Java:* Priangan and Cheribon Residencies.—*1855. W. Java:* Telagabodas, Depok; slope G. Malabar (July); Tjisandehr and Pasir Lodok (Aug.); G. Papandajan (Aug.).

Of the following localities we do not know the date: G. Tangkoeban Prahoe (*W. Java*) and Tjilatjap (S. coast of *Centr. Java*).

COLLECTIONS. *Herb. Leyden: c.* 20.000 species of the whole world (pres.); dupl. in *Herb. Bog.*, partly numbered in the H.B. series; *Herb. Berl.:* 650 *nos* from *Java*, partly from Hort. Bog.; *Herb. Kew;* dupl. with *Herb.* MEISNER in *Herb. N.Y. Bot. Gard.*

The herbarium of HASSKARL comprises 3605 genera with 17738 species and 3897 varieties, provided with an index. The collection consists mainly of European plants; beside his own *Java* plants, it contained a collection from *Hort. Bog.*, presented by TEYSMANN in 1867.

LITERATURE. (1) *cf.* Bot. Zeitung 17, 1859, p. 167.

(2) 'Catalogus plantarum in horto botanico Bogoriensi cultarum' (Batavia 1844); 'Retzia, sive Observationes botanicae' (1855–56); 'Hortus bogoriensis descriptus, sive Retzia editio nova valde aucta et emendata.' Pars Prima (Amstelodami/Bonnae 1858); 'Horti malabarici clavis nova' (Regensburg 1862); 'Neuer Schlüssel zu RUMPH's Herbarium amboinense' (Halle 1866); *etc.*

(3) J. K. HASSKARL: 'Sumadang in de residentie Bantam' (Tijdschr. Neerl. Ind. 4^2, 1842, p. 126–131); 'Bijdrage tot de kennis van Zuid Bantam' (*l.c.* p. 221–256).



HASSKARL

(4) *cf.* JUNGHUHN, Java, 2, 1854, p. 126–128.

(5) J. K. HASSKARL: 'Reise nach dem Berge Japara und den Schlamm-Quellen von Kuwu' (Flora N.R. 5, 1847, p. 639–653).

BIOGRAPHICAL DATA. Flora 28, 1845, p. 431; *l.c.* 40, 1857, p. 194–202; PRITZEL, Thes. Lit. Bot., 1872; Ind. Gids 16^1, 1894, p. 290–299, w. portr.; Teysmannia 5, 1894, p. 129–148, w. bibliogr.; Ned. Kruidk. Arch. ser. 2, vol. 6, 1894, p. 384–385; Ind. Mercuur 17, 1894, p. 13–14, w. portr.; ENGL. Bot. Jahrb. 18, 1894, Beibl. *no* 44, p. 41; Album der Natuur 1894, p. 101; WITTROCK, Icon. Bot. Berg., 2, 1905, p. 173, *t.* 132; Encyclop. N.I. 2, 1918; BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 49, 1939, p. 443; *l.c.* 50, 1940, p. 191–192; *l.c.* 51, 1941, p. 353; *l.c.* 52, 1942, p. 388.

Hatara, *cf. sub* Forest Research Institute, Buitenzorg.

Hatusima, Sumihiko
(1906, Nagasaki-Ken, Japan; x), botanist, educated at Kyushu Imperial University; Lecturer in Dendrology; Ph. Dr in 1942. He accompanied Prof. KANEHIRA (see there) on the *New Guinea* expedition *1940;* he came to Java towards the end

of 1942, as Head of the Buitenzorg Herbarium (Febr. 1943–1945); at present Professor at Kayushima College, Faculty of Agriculture, Kyushu.

Haviland, George Darby

(1857, Warbleton, Sussex, England; 1901, Natal, S. Africa), surgeon and naturalist, Director of the



HATUSIMA

Raffles Museum, Singapore; 1891–93 Medical Officer of the Sarawak Government, and 1893–95 Curator (possibly acting already in 1892) of the Govt Museum at Kuching, Sarawak. In 1895 he returned to England, worked for some time at Kew Herbarium, went to S. Africa and in 1901 was missing after a bicycle trip in Natal.

Several plants were named after him.

COLLECTING LOCALITIES. *1889. Borneo* (Jan.).—*1890. Malay Peninsula:* Pahang, at Pekan, mouth of the Pahang River, *etc.*—*1891–95. NW. Borneo*, Sarawak: Kuching, Mt Braang, ? Mt Penrissen, Limbang, Ulu Tawaran, Rejang (Sibu), Mt Lambia with CH. HOSE (May 21, 1895) and *Br. N. Borneo:* Mt Kinabalu with his brother H. A. HAVILAND (March–Apr. 1892).[1]

COLLECTIONS. *Herb. Sing.: Malay Penins.* coll.[2] and *c.* 1500 *Borneo* plants; *Herb. Kew:* 3600 *nos* from *Borneo* (*nos* 1055–1505 from Mt Kinabalu) and additional coll. (pres. 1908); *Herb. Brit. Mus.:* 1031 *Borneo nos* (partly with CH. HOSE); *Herb. Berl.:* 52 *Sarawak nos* and 266 *nos* HAVILAND & HOSE; also dupl. in *Herb. Sarawak, Paris* and *Cambridge; Vienna:* 227 *nos* (pres. by Kew in 1897); *Herb. Leyden* (*Sarawak* plants); some in *Herb. Bog.*, GRAY *Herb.* (dupl. HAVILAND & HOSE *ex* Kew). According to Mr HOLTTUM the ferns are in *Herb. Brit. Mus.* and partly in *Kew.*[3]

From time to time he employed native collectors, so we occasionally met plants collected by 'HAVILAND's collector', HAVILAND & GARAIMAN, & GARAI, & ULAK; also by SITAM. He collected together with CH. HOSE (see there) too.

Part of the collections was identified,[4] but there remain several important *indeterminatae*. The biography in Kew Bulletin *l.c.* below gives details on the cumbrous system of cyphers used for the earlier collections!

LITERATURE. (1) *cf.* Detailed itinerary in O. STAPF: 'Contribution to the flora of Kinabalu' (Transact. Linn. Soc. Lond. ser. 2, Bot. 4, 1894, p. 71–76); *cf.* also MOULTON in Sarawak Mus. Journ. 2, 1915, p. 158.

(2) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(3) *cf.* Gard. Bull. Str. Settlem. 7, 1934, p. 192.

(4) for plants from Mt Kinabalu *cf.* STAPF in *l.c. sub* 1, p. 127–263, pl. 11–20.

H. N. RIDLEY: 'An enumeration of all Orchidaceae hitherto recorded from Borneo' (Journ. Linn. Soc. Bot. 31, 1896, p. 261–306, pl. 13–15).

E. D. MERRILL: 'The Bornean species of Eugenia, Schefflera, and Saurauia, represented in the Singapore Herbarium' (Journ. Str. Br. Roy. As. Soc. *no* 79, 1918, p. 19–35).

H. N. DIXON: 'New and rare Bornean mosses' (Journ. Bot. 79, 1941, p. 57–62, 72–77).

BIOGRAPHICAL DATA. Kew Bull. 1907, p. 197–198; Biogr. Index BRITTEN & BOULGER 3rd Suppl. in Journ. Bot. 46, 1908, p. 7 and in 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Hawen, or Hawes

cf. sub Lt R. E. HARVEY; evidently sometimes misread.

Haxton, John

(*fl.* 1792–1808), gardener, attached to MACARTNEY's Embassy to China (itiner., liter., *etc. cf. sub* STAUNTON).[1]

The genus *Haxtonia* CALEY (= *Olearia*) was named after him.

COLLECTIONS. In *Herb.* BANKS = *Brit. Mus.*, including *Munronia javanica* R.BR., collected by HAXTON on P. Condor.[2] He may have collected a few plants in Java and Sumatra.

LITERATURE. (1) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 159.

(2) *cf.* BENNETT & BROWN, Plant. Jav. Rarior., p. 177.

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 27, 1889, p. 81, and in 2nd ed. by RENDLE, 1931.

Hay, M. C.

in the Malayan Civil Service; stationed at Batu Pahat (Johore) in *1924*, when he collected economic specimens for the *Singapore Gardens* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

Hazelhoff, Engel Hendrik

(1900, Blijham, Gr., Holland; 1945, Groningen, Holland), zoologist who was educated and took

his Dr's degree (1926) at Utrecht University; teacher at secondary schools, 1923–26, successively at Woerden and Rotterdam; Entomologist of the Experiment Station for the Java Sugar Industry at Pasoeroean (E. Java), 1926–31; subsequently appointed Professor of Zoology in the University of Groningen, Holland.

COLLECTIONS. *Herb. Pasoer.:* 1 *no* from sf. Kedawoeng, Pasoeroean, *E. Java* (*1928*).

BIOGRAPHICAL DATA. Vakbl. Biologen 25, 1945, p. 97–98.

Heering

collected *Ageratum conyzoides* L. at Tjimahi, *W. Java*, preserved in *Herb. Bog.*

No further data are known to us; he may be identical with P. HEERING, a clergyman, author of 'Indische schetsen' (Leiden 1886, 2nd ed. 1897). The latter ascended G. Tjeremai (2nd half of Sept. *1871*), G. Tengger (from the Pasoeroean side), G. Ardjoeno-Welirang *via* Lalidjiwo, G. Smeroe (Ranoe Koembolo and Ranoe Panie) and back to Watès, and visited Lawang. On *l.c.* p. 27 he mentions the collecting of some plant souvenirs; he sometimes refers to JUNGHUHN.

Hees

presented a lot of living orchids from *N. Celebes* (*e.g.* Gorontalo) to J. J. SMITH during the latter's official tour to the Moluccas in *1900. Hort. Bog.*, some of them preserved in *Herb. Bog.*

Heeteren, Hendrik Victor Alexander van

(1891, Keboemen, Java; Oct. 5, 1945, Buitenzorg, Java), entered the D.E.I. Government service in 1910, at first as a Student Surveyor of the Forest Service. In 1919 he was appointed Asst Curator of the Economic Garden of the Agricultural Institute at Buitenzorg, of which he was finally Curator.

COLLECTIONS. From time to time he sent some plants for identification to *Herb. Bog.*, *e.g.* from Tjibinoeng (*W. Java*) and from the kapok plantation at Moektihardjo near Pati (*Centr. Java*).

Hegge Zijnen, van der

of Pasir Koppo Estate, Rangkasbetoeng, Bantam Res., *W. Java*, sent a grass to *Herb. Bog.* in *1927.*

Hegge Zijnen, L. B. van der

COLLECTING LOCALITIES & COLLECTIONS. *Herb. Bog.:* 44 *nos* of *Orchidaceae*, collected in *W. Java* (*1918–19*) in the environs of Garoet, on G. Papandajan, *etc.*

Heide, Frits Ferdinand Rudolf

(1883, Roskilde, Seeland, Denmark; x), studied natural history for some years; flower biologist, collected a plant in *Hort. Bog.* with ? FEVRELL (July *1922*) of which material in *Herb. State Mus. Stockholm;* a *Chara* in Toba Lake, *N. Sumatra* (Jan. 9, *1923*), and *Cinnamomum burmanni* in the Padang Highlands, *W. Sumatra* (*cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 7, 1925, p. 452). He visited Tjibodas (*W. Java*) from May 2–4, *1923.* Material of the above-mentioned *Chara* in *Bot. Inst. Stockholm.* As far as known there are no collections of him in the Museum at Copenhagen.

LITERATURE. (1) Author of 'Observations on the pollination of some flowers in the Dutch East Indies' (Dansk Bot. Arkiv 5, 1927, p. 1–42), and several other papers (*cf.* CHRISTENSEN *l.c.* below).

BIOGRAPHICAL DATA. CHRISTENSEN, Den Danske botaniske litteratur 1880–1911, 1913, p. 251; *ditto* 1912–1939, 1940, p. 140–143.

Heidema, E. J., *cf. sub* Forest Research Institute, Buitenzorg.

Heideman, Charles

(1872, Rotterdam, Holland; x), a non-commissioned officer who was through the Atjeh campaign from 1892–94; in 1894 appointed Assistant at Soengei Boeloe Estate (Deli, Sumatra East Coast), from 1899–1902 Manager of the same; for the following 3 years Manager of the Tobacco Estate Hessa (Deli), from 1906–08 of the Tobacco Estate Sentang (Deli) and from 1908–13 of Bandar Baroe; 1913–29 Director of an emigrant asylum at Medan (Deli). He returned to Europe in 1930.

Trichoglottis heidemanianus SCHLTR was named after him.

COLLECTING LOCALITIES. *About 1910–11. Sumatra East Coast:* Deli, Bandar Baroe Estate, at 1200–1300 m alt., when clearing the forest.

COLLECTIONS. Orchids on behalf of SCHLECHTER (see there), who stayed in Deli in 1910–11 (partly as a guest of HEIDEMAN); *Herb. Berl.*

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936, *cf.* also *sub Addenda.*

Heij . . ., *cf.* HEY . . .

Heim, Dr Arnold

Palembang, *S. Sumatra*, presented museum objects to the *Bot. Mus. Univers. Zürich* in *1911.*

Heinke, misread for H. HEMKEN (see there).

Heinrich, Gerd

(1896, Berlin, Germany; x), zoologist who travelled in Europe (1925) and N. Persia (1927), and went on a zoological expedition to the D.E.I. (see below); in 1935 he made a journey to the Balkan.

Areca henrici FURTADO, *Vaccinium henrici* SLEUMER, *etc.*, were named after him.

ITINERARY. *1930–32.*[1] *SW. Celebes:* arriving at Makassar with his wife and sister-in-law (May 16, *1930*); Latimodjong Mts, ascending from Kalossi (June 4, July 1–10 on the summit; Aug. 9–Sept. 2 at Oeroe); back to Makassar, and setting out (Sept. 24) to *N. Celebes:* from Paleleh and Bodi to Matinan Mts; Menado (Dec. 23), Rurukan, G. Masarang, G. Mahawu and G. Lokon; back to Rurukan (Febr. 13, *1931*); Kumersot (Febr. 21–); sailing from Menado (March 27) to the *Moluccas: Ternate*, exploration of *Halmahera* (climbing G. Gamkonora and visiting Oba Distr.) and *Batjan;* back to *SW. Celebes:* starting from Makassar (Aug. 23) to the Peak of Bonthain,

Wawakaraeng, and the limestone hills of Maros (Nov. 1), staying at Talassa, visiting Bantimoeroeng too; from Makassar (Nov. 29) to *SE. Celebes:* from Kolaka to the Mengkoka Mts, the Tanke Salokko (1500 m?) (Dec. 1931–Jan. *1932*); till Febr. 23 staying in SE. Celebes.

COLLECTIONS. *Herb. Berl.:* > 438 *nos.*[2] The New York Museum of Natural History paid the expenses of the expedition and in return got half of the zoological collection, the other half going to Berlin.

LITERATURE. (1) G. HEINRICH: 'Der Vogel Schnarch' (Berlin 1932).

(2) *Ericaceae* by H. SLEUMER in ENGL. Bot. Jahrb. 71, 1941, p. 138–168.

BIOGRAPHICAL DATA. *cf.* BACKER, Verkl. Woordenb. 1936, *sub* henrici, *cf.* also *sub Addenda.*

Heinricher, Emil Johann Lambert

(1856, Cilli, Austria; 1934, Innsbrück, Austria), botanist, educated at Graz University (Ph. Dr 1879); in 1889 appointed Extraordinary Professor and in 1891 Professor in the University of Innsbrück. He paid a visit to Java from Nov. 10, *1903*–Jan. 21, *1904* for the study of parasitic phanerogams.[1]

Author of several plant morphological papers.

COLLECTIONS. Principally *Balanophoraceae* and *Rafflesiaceae;* preserved in the *? Bot. Inst. Innsbrück.* Also *Fungi.*[3]

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 28–29; BOEDIJN in *l.c.* p. 106, 111.

(2) *e.g.* 'Zur Biologie von Nepenthes, speciell der javanischen N. melamphora REINW. (Ann. Jard. Bot. Buit. 20, 1906, p. 277–296, 3 fig., pl. 24–26); 'Beiträge zur Kenntnis der Gattung Balanophora' (Sitz. Ber. Kön. Akad. Wiss. Wien Math. Naturw. Kl. 116, 1907, Abt. 1, p. 439–465).

(3) *cf.* Ann. Mycol. 5, 1907, p. 237–242; *l.c.* 10, 1912, p. 492–508; *l.c.* 18, 1920, p. 29, 30, 32, 49, 51.

BIOGRAPHICAL DATA. Ber. D.B.G. 52, 1934, 2. Gen. Vers. Heft 1935, p. (188)–(205), incl. bibliogr.; Chron. Bot. 1, 1935, p. 85 + portr.

Heldt, B. (or ? Held, F.)

collected living orchids in Deli, *Sumatra East Coast* (*1897*) and in *N. Sumatra* too, which he sent to *Hort. Bog.;* some preserved in *Herb. Bog.*[1]

LITERATURE. (1) *cf.* J. J. SMITH in Icon. Bogor. *t.* 119 B, 122 A.

Hell, Willem Frederik van

(1906, Medan, Sumatra; x), botanist, educated at Leyden University, taking his Ph. Dr's degree in 1931 at Utrecht; from 1931–34 teacher of natural history at Wageningen and Utrecht (1933–34); from 1934 onwards on the staff of the General Experiment Station A.V.R.O.S. at Medan, Sumatra. After World War II he was evacuated to Holland, returning to Sumatra in Aug. 1947.

COLLECTIONS. *Herb. Bog.: e.g.* some ferns and *Balanophora* (pres. through the A.V.R.O.S., *1935–38*).

Hellendoorn-van Schouwenburg, Etina Regnera

(1901, Bandoeng, Java; x), botanist, educated at Utrecht University; teacher at Bandoeng from 1926–29; in the latter year marrying Mr HELLENDOORN, planter, Manager of the tea estate Pasir Nangka, Soekanegara (Djampangs), W. Java.

COLLECTIONS. *Herb. Bog.:* some plants from the environs of Soekanegara (Djampangs), *W. Java* (coll. *1939*).

Hellwig, Franz Carl

(1861, Danzig, Germany; June 24, 1889, Finschhafen, former Kaiser-Wilhelmsland, NE. New Guinea), Assistant in the Botanic Garden of Breslau 1883–84, who took his degree in 1886 and was appointed Botanist of the German New Guinea Comp. and Head of Kelana Station in 1888.

The genus *Hellwigia* WARB. and several other plants were named after him.

ITINERARY. *NE. New Guinea,* former *Kaiser-Wilhelmsland. 1888.* Arrival at Finschhafen (May 7); Kelana Station (July 15–Aug. 11).—*Expedition to Finisterre Mts* with HUGO ZÖLLER (correspondent of the 'Kölnische Zeitung'):[1] from Finschhafen (Oct. 3) to Konstantinhafen, Oct. 7 starting the march to Finisterre Mts, returning Oct. 21.—With the plant collector BURKE (see there) by steam launch (Dec. 17) from Finschhafen to Tigedu, situated on the east entrance of Hänischhafen; visit of Bukau Asip village and returning on foot to Finschhafen.[2]—*1889.* With BURKE from Finschhafen (Jan. 12) to Busum, from where first ascent of the Sattelberg *via* Pasai (reaching one of summits on the 14th); vicinity of Pasai and *via* Bu Laki to Buarba (15); basin of Ubaja River, *via* Basakai in SE. direction back to Finschhafen.[3]—Boat tour (March 9–16) to kp. Kemboa, situated at Festungskap; exploring Póum (= Poom) District.[4]—With O. WARBURG (see there) to the Sattelberg (Apr. 6–12) from Busum *via* Pasia; descent to Siliio; back at Busum (11) and Finschhafen (12).[5]

COLLECTIONS. After his death taken care of by KÄRNBACH (see there), who provisionally arranged them and forwarded them to Berlin;[6] *Herb. Berl.:* 678 *nos;* 139 dupl. in *Herb. Bog.;* also dupl. in *Herb. Leyden.*

The numbering runs as follows: *nos* 1–184 from Kelana, 186–246 vicinity of Finschhafen, 247–280 from Sattelberg, 281–297 vicinity Finschhafen, 298–366 Finisterre Mts, 367–678 vicinity Finschhafen (405–438 of the tour along the coast in western direction, 493–672 from the Sattelberg).

LITERATURE. (1) H. ZÖLLER: 'Deutsch-Neuguinea und meine Ersteigung des Finisterre Gebirges' (Stuttgart 1891); *cf.* also PETERM. Mitt. 36, 1890, and Jahresber. Geogr. Ges. München 1888–89. ZÖLLER mentions altitudes of 2550 and 2660 m, HELLWIG of 2300 and 2330; probably the latter are more trustworthy.

WINTER & HELLWIG in Nachr. Kais. Wilh. Land 5, 1889, p. 3–15.

(2) *cf.* Nachr. Kais. Wilh. Land 5, 1889, p. 36–49; map in PETERM. Mitt. 44, 1895, p. 170.

(3) *cf.* Nachr. Kais. Wilh. Land 5, 1889, p. 40–44.

(4) *cf. l.c.* 6, 1890, p. 19–20.
(5) *cf. l.c.* 6, 1890, p. 20–21.
(6) *cf. l.c.* 6, 1890, p. 94.

O. WARBURG: 'Bergpflanzen aus Kaiser Wilhelmsland gesammelt auf der Zöllerischen Expedition im Finisterregebirge von F. HELLWIG' (ENGL. Bot. Jahrb. 16, 1892, p. 1–32, 1 pl.); 'Plantae Hellwigianae. Beitrag zur Flora von Kaiser Wilhelmsland' (*l.c.* 18, 1894, p. 184–212).

BIOGRAPHICAL DATA. Verh. Bot. Ver. Brandenb. 31, 1889, p. lviii–lix; Ber. D.B.G. 8, 1890, p. (12)–(17); SCHUMANN & LAUTERBACH, Nachtr. z. Flora d. Deutsch. Schutzgeb. i.d. Südsee, 1905, p. 21–23; BACKER, Verkl. Woordenb., 1936.

Hemert, Paul Joseph Leonard van

(1892, Semarang, Java; x), mining engineer, educated at the Technical College, Delft; from 1920–46 geologist in the employ of the B.P.M. (Batavian Oil Co).

COLLECTING LOCALITIES. *1930. S. Sumatra:* Palembang Residency, in the vicinity of Moeara Enim and Lahat; *Centr. Sumatra:* Djambi; *Banka:* near Muntok.

COLLECTIONS. He sent various orchids to *Hort. Bog.;* material partly preserved in *Herb. Bog.* He discovered the orchid species *Dendrobium longicolle* LINDL. in Sumatra.

Hemken, Hendrik

(1883, Lonneker, O., Holland; x), schoolteacher, from 1911–33 in the D.E.I.; at the time of collecting, in 1918, at a High School (M.U.L.O.) at Soerakarta.

COLLECTING LOCALITIES. *1918. Centr. Java:* Polokarto (E of Solo); Soerakarta, G. Merapi.

COLLECTIONS. *Herb. Bog.:* > 22 *nos,* at least partly without number.

Hemsley

is mentioned by MERRILL in Bibl. Enum. Born. Pl. 1921 (p. 73) as the collector of *Freycinetia rigidifolia* HEMSL., *no* 436, in Sarawak, *NW. Borneo.* As far as we know W. B. HEMSLEY never visited Malaysia; the statement is probably based on an error.

Henar, G. H.

since April 1930 in temporary employ of the D.E. Indian Forest Service; first stationed at Samarinda (E. Borneo) and since May 1937 at Kota Baroe (SE. Borneo), working in P. Laoet, Tanah-Boemboe, *etc.* In April 1938 he quitted Government service and entered provincial service, he was appointed Overseer of Forests in Boeloengan, stationed at Noenoekan, NE. Borneo.

COLLECTIONS. *Herb. Bog.: nos* 52, 55–64 and 67–71 from *P. Makijan* (*SE. Borneo*) (Febr. *1936*), presented through the Forest Research Institute (F.R.I.) at Buitenzorg + other dupl. F.R.I. In *Herb. For. Res. Inst. Buitenzorg:* from *E. Borneo, P. Laoet, P. Tarakan, P. Mandoel, P. Noenoekan,* and *NE. Borneo,* several hundreds of bb. numbers.

Henderson, Murray Ross

(1899, Banchory, Scotland; x), systematic botanist in the Museums Department, Fed. Mal. States, 1921–24; Curator of the Herbarium, Botanic Gardens, Singapore, 1924 onwards; Febr. 1937–July 1938 taking charge of the Department in Penang, subsequently return to normal duties in Singapore. He left Singapore before the invasion of the Japanese, and returned in 1946.

Author of botanical papers.[1]

COLLECTING LOCALITIES.[2] *Malay Peninsula. 1921.* Perak: Taiping (since Dec.).—*1922.* Taiping.—*1923.* Taiping (till March), Temerloh Distr. with FOXWORTHY (March), Cameron Highlands (June), Fraser Hill (Aug. 25–Sept. 17).—*1924.* Cameron Highlands (Jan.),[3] Taiping.—*1925.* Perak (April): near Batu Gajah, Gopeng; Cameron Highlands (Nov. 11–Dec. 7).[4]—*1927.* On the islands of *Aor, Dayang* and *Tioman* (Apr. 24–May 29); G. Lanoh near Batu Gajah, Perak (July); Pahang–Kelantan boundary, near Chigar Perak, Pahang, Goa Ninik, Kelantan (Oct. 10–Nov. 5).—*1928. Anamba(s) Islands* (Apr.):[5] *Siantan, (D)Jema(d)ja, P. Tandjungsuka.—Malay Peninsula. 1929. P. Tioman* (1 week in Apr.),[6] chiefly on G. Kajang; various parts of Pahang and Kelantan (July–Aug.), Tembeling, Kuantan, *etc.;* Perlis, vicinity of Kangar (Nov.).—*1930.* Cameron Highlands, nearly a month at Tanah Rata (Apr.); limestone hills[1] of Perak (May–June); G. Pondok *etc.;* Tasek Bera, Pahang (Oct.).—*1931.* Pahang (May–June); limestone hills[1] in Pahang (Oct.).—*1934.* In Nov. visiting the islands *P. Langkawi, P. Tioman, P. Dayang Bunting,*[7] and Kisap near Kuah.—*1935.* On his leave to *Java* (Apr.) no collections were made. In July: Kelantan, Sungei Lebir, Bt Batu Papan, Kuala Betis on the Nenggiri River and proceeding to Gua Masang and Gua Lambok.—*1938.* In May: limestone hills[1] at Baling and Alor Star in Kedah and to the Sungei Krian at Selama on the Kedah-Perak boundary.—*1939.* Neighbourhood of Pontain in SW. Johore (twice), to *P. Kemudi* (= P. Pisang group, off the W. coast) and to peat forest of Pontian.

COLLECTIONS. *Herb. Sing.; U.S. Nat. Herb. Wash.:* 150 dupl. *Mal. Pen.;* dupl. *Anambas Isls* in *Herb. Bog.*

He numbered in the field.[2]

LITERATURE. (1) *e.g.* 'On a collection of plants from Gunong Benom, Pahang' (Journ. Fed. Mal. Stat. Mus. 13, 1927, p. 217–227); 'The flowering plants of Kuala Lumpur' (Gard. Bull. Str. Settlem. 4, 1928, p. 211–373); 'The flora of the limestone hills of the Malay Peninsula' (Journ. Mal. Br. Roy. As. Soc. 17, 1939, p. 13–87, pl. 3–12).

(2) Data extracted from the Ann. Reports of the Bot. Gard. Singapore, and from BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

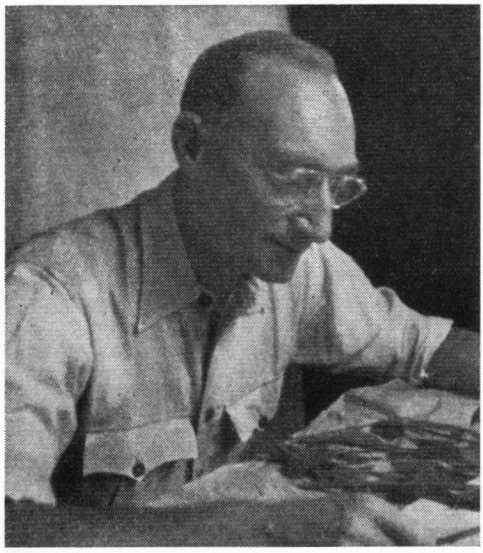
(3) M. R. HENDERSON: 'A note on the Flora of Cameron's Highlands' (Singap. Naturalist 1, 1925, p. 91–92).

(4) M. R. HENDERSON: 'A list of plants from Cameron's Highlands, Pahang' (Journ. Mal. Br. Roy. As. Soc. 5, 1927, p. 237–277).

(5) M. R. HENDERSON: 'The 'padang' flora of Jemaja in the Anamba Islands, N.E.I.' (Gard. Bull. Str. Settlem. 5, 1931, p. 234–240).

(6) M. R. HENDERSON: 'Notes on the flora of Pulau Tioman and neighbouring islands' (Gard. Bull. Str. Settlem. 5, 1930, p. 80–92).

(7) M. BURRET: 'Eine neue Palmengattung von der Malayischen Halbinsel' (Notizbl. Berl. Dahl. 15, 1941, p. 316–318).



HENDERSON

Hendrey, G. J.

Deputy Conservator of Forests, Fed. Mal. States, 1905– . . (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos.* 4–5).

COLLECTIONS. *Herb. Kuala Lump.*, numbered in the C.F. (see *sub* Conservator of Forests) series.

Henepai, G.

collected *Coelogyne sanderiana* RCHB. *f.* in *Br. N. Borneo* (*cf.* MERRILL, Enum. Born. Pl., 1921, p. 145). Possibly the collecting locality G. Kenepai in *Dutch W. Borneo!*

Henrici, A. H.

(† 1836, Europe), major in the D.E. Indian Army; in charge of the topographical survey of the Chinese districts of W. Borneo, 1830–32; in the latter year returning to Java, and in 1833 appointed Military Commander, lieutenant colonel, of S. Borneo. He died soon after return in Europe.[1] His notes were published by S. MÜLLER.[2]

ITINERARY. *1830–32. W. Borneo:* sailing from Batavia (Aug. 25, 1830); Pontianak (Sept. 5); ascending the Landak River to Koewala Terap near the mouth of the river of Mandor; visiting the gold-diggings; to Sg. Peniti and back to Pontianak *via* Ajer-mati and down the Mampawa (Oct. 5); stay at Pontianak; sailing (Oct. 21) by sea to the Mampawa, returning along the beach to Sg. Pinjoe, ascending the latter; G. Panoraman, Sg. Poeron besar, Sg. Poeron ketjil, Sg. Peniti besar and back to Pontianak; by proa (Nov. 12) to Mandor *via* Koewala Terap and Kopian. Returning to Java in 1832.[3]—*1833–34. SE. Borneo:* in 1833 upstream the Barito and proceeding on foot to Lawang; ascending the Teweh River (to a point farther than S. MÜLLER and KORTHALS afterwards); the Negara and the Kapoeas, not to be confused with the river of that name in W. Borneo; in 1834 probably the Kahajan River.

COLLECTIONS. *Herb. Leyden.* When returning to Java in 1832, he was shipwrecked and his notes and collections were lost; his topographical map was saved.

Some plants of his are referred to in publications of BLUME and MIQUEL, *e.g.* the new species *Paratropia gracilis* MIQ. (Ann. Mus. Bot. Lugd. Bat. 1, p. 22). Previously, evidently *before 1833*, he made a small zoological collection at Padang, *Sumatra West Coast.*[4]

LITERATURE. (1) *cf.* POSEWITZ, Borneo, Berlin 1889, p. 17.

(2) in 'Reizen en Onderzoekingen *etc.*' (Amsterdam 1857), in which several times referred to HENRICI; and in TEMMINCK, Verhandelingen *etc.*, 1839–44, vol. Land- en Volkenk. p. 321–446.

(3) P. J. VETH: 'Fragmenten van eene reis op de Westkust van Borneo in 1830' (Tijdschr. Ned. Ind. 1867^2, p. 474–502).

(4) *cf.* VETH, Overzicht van hetgeen . . . . . , gedaan is voor de kennis der Fauna van Ned. Indië, Leiden 1879, Thesis.

Henshall, John

a gardener who forwarded large lots of orchids from *Java* to Europe, probably to HENDERSON's.[1] He is the author of some papers relating to the flora of that island.[2]

He may be identical with JOHN HENSHALL, a gardener of J. H. SCHRÖDER, Tooting, author of a book on the culture of orchids.[3]

Dendrobium henshalli RCHB. *f.* and *Bulbophyllum henshalli* RCHB. *f.* may have been named after him.

COLLECTIONS. *Herb. Kew:* from *Java* (pres. 1850–56).

LITERATURE. (1) *cf.* letter from MOTLEY in HOOK. Lond. Journ. Bot. & Kew Gard. Misc. 7, 1855, p. 289–296.

(2) J. HENSHALL: 'Memoranda from Java' (Gard. Chron. 1852, p. 533–534, 581; extr. in Allg. Gartenzeit. 20, 1852, p. 379–381); 'Notizen über einige Waldbäume auf Java' (Hamb. Gart. u. Blumenzeit. 8, 1852, p. 484–487).

(3) *cf.* Biogr. Index BRITTEN & BOULGER in Journ. Bot. 27, 1889, p. 82.

J. HENSHALL: 'A practical treatise on the cultivation of orchidaceous plants, with remarks on their geographical distribution and a select catalogue of the best kinds in cultivation' (London 1845); transl. into German, Hannover 1846.

Herbarium Bogoriense = Herbarium of the Botanic Gardens, Buitenzorg.

About 1870, under Dr R. H. C. C. SCHEFFER's direction, cataloguing of the herbarium collections at Buitenzorg was started by giving to each sheet

a number preceded by 'H.B.', the common abbreviation for Herbarium Bogoriense. Not only collections made by staff members and Indonesian employees of the Herbarium and Botanic Gardens were inserted, but plants collected by outsiders too, *e.g.* those of BECCARI (only few) and DIEPENHORST. Later the series was discontinued.

Heringa

of Padang, *Sumatra West Coast*, sent living plants to *Hort. Bog.* in *1870;* some plants numbered in the H.B. series and preserved in *Herb. Bog.*

Heringa, P. K., *cf. sub* Forest Research Institute, Buitenzorg.

Hermanus, *cf. sub ditto.*

Herran Kandang, *cf. sub ditto.*

Herre, Albert William (Christian Theodore)

(1868, Toledo, Ohio, U.S.A.; x), zoologist, educated at Stanford University, taking his Dr's degree in 1909. For 30 years in different positions in the U.S.A.; Chief of the Division of fishes of the Bureau of Science, Manila, P.I., 1920–28; Acting Director Bureau of Science, Manila, July–Oct. 1923; since 1928 Curator Museum Zoology, Stanford. Member of the CRANE Expedition, 1928–29, sponsored by the Field Museum Nat. Hist. Chicago (see below), of a Philippine expedition (1931), and some other expeditions which explored in the Malaysian region too (1933–34, 1936–37).

As far as botany goes, his special interest is lichens; flowering plants were collected incidentally.

ITINERARY & COLLECTING LOCALITIES. CRANE *Expedition, 1929.* New Hebrides (March–Apr. 5); Solomon Islands (Apr. 10–23); *Bismarck Archipelago: New Britain* (April 28–29); *NE. New Guinea:* Huon Gulf (May 4); Sepik River (May 10–28); *W. New Guinea*, Vogelkop: Manokwari (31); *Waigeo(u)* (June 7); *NE. Celebes:* Lembeh Strait (20).—*Philippines: Culion* (Apr. 25–27, *1931*) (material of *Cycas*) and *Busuanga.*

COLLECTIONS. *Herb. Field* (= *Nat. Hist.*) *Mus. Chicago:* 402 *nos* 'CRANE Exp.'; *Stanford Univers.; N.Y. Bot. Gard.:* 400 dupl. (pres. 1931)[1] + 200 specim. *Philip.* plants (*nos* 1000–1200) (exch. 1932–33); *Celebes* dupl. in *Herb. Leyden.*

The numbering of the 'CRANE Exp.' collection runs as follows: *nos* 1–105 New Hebrides, 106–176 Solomon Isls, 177–208 *New Britain*, 209–376 *mainland of New Guinea*, 377–383 *Waigeo(u)*, 384–402 *Celebes. Cycas wadei* MERR. collected by him in *Culion* in 1931, is *no* 1061.

LITERATURE. (1) *cf.* Journ. N.Y. Bot. Gard. 31, 1930, p. 130.

BIOGRAPHICAL DATA. Amer. Men of Sci. 1938.

Hertling, Miss M. von

collected orchids near Malang in *E. Java.*[1]

COLLECTIONS. *Probably* some preserved in *Herb. Bog.*

LITERATURE. (1) *cf.* J. J. SMITH in Bull. Jard. Bot. Buit. sér. 3, vol. 3, 1921, p. 308.

Hervey, Dudley Francis Amelius

(1849, Great Chesterford, Essex, England; 1911, ?), educated at Marlborough College; in the Malayan Civil Service, Chief Clerk and Interpreter of the Lt Govn. of Penang 1870–82, Resident Councillor of Malacca 1882–93; retired in 1893. He accompanied the Governor on many political expeditions to the Native States and to the coast of Atjeh (N. Sumatra) in H.M.S. 'Algerine'.

ITINERARY.[1] *Malay Peninsula. 1876.* Johore: G. Pulai.—*1877.* Johore: G. Panti and G. Mĕntahak.—1879. *Trip to G.B.(e)lumut,*[2] Johore: sailing from Singapore (Jan. 21) in a steam launch *via P. Tekong* to Panchur up the Johor(e) River; Sg. Bukit Bĕrangan, Kota Tinggi (22–24); K. Panti; Seluang; Lenggiu River (27); Tĕbá River; proceeding by land (30); Ayer Putih, Bulu Lenggiu (source of the river); source of the Kahang; G. Blumut (Febr. 2); Batu Setinggon (3); Pengkalan tĕba (4–5).—Journey up the *Indau* (= *Endau*)*-Sembrong River* (Aug.–Sept.),[3] Johore.—*In* or *before 1889.* Collecting in the neighbourhood of Taiping, Perak.—*1892.* With H. N. RIDLEY from Lubok Kedongdong to G. Mering (lower peak of the range of Mt Ophir, Johore).[4]

COLLECTIONS. *Herb. Kew: Malacca* (= *Mal. Peninsula*), Aden, 911 *nos, etc.* (pres. 1886–93); *Herb. Sing.:* > 100 specim. from Perak, Taiping, *etc.* (pres. 1888–90). He sent plants to *Calcutta* too. His specimens are not precisely localized.

LITERATURE. (1) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(2) D. F. A. HERVEY: 'Trip to Gunong Blumut with vocabulary of Camphor language' (Journ. Str. Br. Roy. As. Soc. *no* 3, 1879, p. 85–115).

(3) D. F. A. HERVEY: 'Itinerary from Singapore to source of the Sembrong and up the Madek' (*l.c.* 8, 1881, p. 125–132); 'Additional notes' (*l.c.* 9, 1882, p. 167–168).

(4) *cf.* RIDLEY in 'The flora of Mt Ophir' (*l.c.* 35, 1901, p. 1 *seq.*).

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; Journ. Mal. Br. Roy. As. Soc. 5, 1927, p. 316; Who was who?

Herwaarden, J. van

COLLECTIONS. *Herb. Bog.:* collection of plants made in the northern part of *P. Simaloer* (= *Simeuloeë*), situated W of N. Sumatra, in Oct. *1913.* The collection was made on behalf of the D.E.I. 'Houtaankoopmaatschappij' (lumbering company); the numbering was continued by PFEIFFER (see there).

Herzog, Th.

of the 'Rheinische Mission', collected mosses in the Finisterre Mts (*cf.* Ann. Bryol. 10, 1937, p. 16), *NE. New Guinea, e.g. no* 41; *New Guinea* phanerogams in *Herb. Leyden.*

Hetharia, J. Ch.

COLLECTIONS. *Herb. Bog.:* 4 *nos* from Soengeiliat, *Banka* (pres. Oct. *1939*).

Heubel, Gustav Adolf

(1904, Amsterdam, Holland; 1946, Holland, after his health was ruined by the Kempetai and in a P.O.W.camp in Java), was educated at Wageningen Agricultural College; from March 1934–Dec. 1940 in the employ of various experiment stations in the D.E.I., stationed successively at Buitenzorg (W. Java), Tandjong Karang (S. Sumatra) and Malang (E. Java); subsequently Agricultural Adviser of the 'Internatio', stationed at Semarang (Centr. Java).

COLLECTING LOCALITIES. *E. Java:* Soerabaja (Nov. *1931*); *W. Java:* Tjiandjoer (Oct. *1934*); Tangerang (Oct. *1935*); *S. Sumatra,* Lampong Districts (*1938*).

COLLECTIONS. *Herb. Bog.:* a few *nos.*

Heurck, Dr Henri van

is cited as the collector of some plants in the Lampong Districts, *S. Sumatra, e.g.* of *Argyreia capitata* (VAHL) CHOISY *no* 8 in Febr. *1934* (*cf.* v. OOSTSTROOM in Blumea 5, 1943, p. 369). Material in *Herb. Bog.*

The collector is certainly not the well-known HENRI VAN HEURCK from Antwerp, who died in 1909.

Heurn, Jhr Frans Cornelis van

(1888, The Hague, Holland; x), chemical engineer, educated at the Technical College, Delft, from 1907–13 (Dr in 1922); for some years he was employed at Delft; in Dec. 1916 he went to the D.E.I., working for several years at the A.V.R.O.S. Experiment Station, Medan (Sumatra); after a stay in Holland in 1922, he returned to the Indies in 1923 as Adviser of the 'Mij t. Expl. d. Ondernemingen nagelaten door Mr Baron BAUD', stationed at Bandoeng (W. Java), in this period founding the first palm oil factory at Bolang in Bantam; in 1929 he joined the B.P.M. (Batavian Oil Company) as Head of the division Documentation of the Laboratory at Amsterdam.

COLLECTIONS. *Herb.* Leyden: few *Java* orchids (partly from Bolang, *W. Java*)[1] (pres. *1926*), a *Balanophora* in alcohol from G. Manglajang (*W. Java*), and some *Fungi; Herb. Bog.: Fungi* (morels from *Java*),[2] and possibly some *Sumatra* plants (with *Herb. Sibolangit*);[3] *Herb. Lab. Techn. Bot. Delft:* possibly some *Java* orchids, material of *Java* trees (common species),[1] and some *Sumatra* plants (*e.g.* from Laut Tawar in Atjeh),[3] also fossil woods and material in formalin; *Mining Inst. Delft:* fossil leaf impressions.

He sent living plants to *Hort. Delft.*

Owner of a collection of water-colours of Javanese orchids.

LITERATURE. (1) F. C. VAN HEURN: 'Het land Bolang en zijn natuurlijke rijkdommen' (Ind. Gids 49, 1927, p. 577–592, 697–721); *cf.* also Hand. 21ste Ned. Nat. en Geneesk. Congr. 1927, Amsterdam.

(2) *cf.* C. VAN OVEREEM in Trop. Nat. 14, 1925, p. 155.

(3) for his Atjeh trips *cf.* Jaarber. Club Ned. Vogelk. 11, 1921, p. 4–19, and *l.c.* 12, 1922, p.66–68; 'De gronden van het cultuurgebied van Sumatra's-Oostkust en hunne vruchtbaarheid voor cultuurgewassen' (Dr's thesis, Amsterdam 1922); 'De Pinus Merkusii der dennewouden van N. Sumatra en zijn economische beteekenis' (Tijdschr. Econ. Geogr. *no* 7, 1923, p. 1–6, 1 fig.); 'Studiën betreffende den bodem van Sumatra's Oostkust, zijn uiterlijk en zijn ontstaan' (Amsterdam 1923, w. map & bibliogr.).

(4) F. C. VAN HEURN & J. PH. PFEIFFER: 'Eenige tot dusver niet beschreven fossiele houtsoorten van Java' (Versl. gew. verg. Afd. Natuurk. Kon. Akad. Wet. A'dam 37, *no* 5; transl. into English in the Proceedings 31, 1928, p. 1005–1011, 3 fig.).

BIOGRAPHICAL DATA. Persoonlijkheden in Nederland, 1938, + portr.; bibliogr. in 'Gedocumenteerde afstammingsstaat van het geslacht VAN HEURN'.

Heurn, Jhr Willem Cornelis van

(1887, The Hague, Holland; x), zoologist who studied at Leyden and took his Ph. Dr's degree in 1924; in 1913 for 7 months on P. Simaloer (W of N. Sumatra) with E. R. JACOBSON (see there), and subsequently for 3 months in Sumatra West Coast to make zoological collections; Zoologist of the Institute for Plant Diseases at Buitenzorg, 1919–32 (in 1927 temporary Assistant at the Marine Biological Laboratory at Batavia); teacher at the K.W. III school at Batavia, 1932–33; *ditto* at the N.I.A.S. (Medical School), Soerabaja, 1933–39. When on leave in Holland, he was forced to stay on account of the war, and retired in 1940. Zoologist of a Dutch North New Guinea expedition in 1920–21 (*cf. sub* LAM).

COLLECTING LOCALITIES. *P. Simaloer* (*1913*); *W. Java:* G. Manglajang (*c. 1916–20*); *Lesser Sunda Islands: Flores* (May *1930*);[1] *W. Java:* G. Poetri (near G. Galoenggoeng) and G. Salak (Febr. *1931* pres. to *Herb. Bog.*); Tjiliwoeng and Telaga Warna (*1932*); *E. Java:* above Poedjon (*1937*); in *1938:* G. Dorowati (July), G. Kawi (July), Lebaksarie and Poedjon (July), G. Tengger and Tosari (Aug.), G. Panderman, G. Ardjoeno, Sarangan (on the slope of G. Lawoe), G. Kloet (= Keloed).

COLLECTIONS. *Herb. N.I.A.S.* (*Medical School*) *Soerabaja;* some dupl. in *Herb. Bog.*. *Herb. Leyden: Fungi* from *Simaloer.*

LITERATURE. (1) W. C. VAN HEURN: 'Reisindrukken van een bioloog op Timor en Flores' (Tijdschr. K.N.A.G. 1931, p. 924–930).

BIOGRAPHICAL DATA. Bijdr. Dierk. 27, 1939, p. 187; Bibliogr. in 'Gedocumenteerde afstammingsstaat van het geslacht VAN HEURN'.

Heusden, Willem Constans van

(1898, Delft, Z.H., Holland; x), was educated at the Agricultural College, Wageningen; Agriculturist for S. Sumatra (stationed at Tandjong Karang) in the employ of the General Agricultural Syndicate, 1933–37; subsequenty stationed in the Head Office at Batavia, as Adviser for the Rubber restriction; from 1942–45 P.O.W.; in 1947 returning to the E. Indies as Agricultural Adviser.

COLLECTING LOCALITIES. Nov. *1933–1935.*

S. Sumatra: in the Lampong Districts and near Sg. Laroe (Palembang).

COLLECTIONS. *Herb. Bog.:* some *Selaginellas*[1] and other plants.

LITERATURE. (1) *cf.* ALSTON in Bull. Jard. Bot. Buit. sér. 3, vol. 14, 1937, p. 180–181.

Heusser, Dr Carl

(1888, Glattfelden, N of Zürich, Switzerland; x), biologist in the employ of the General Experiment Station of the A.V.R.O.S., Medan (Deli, Sumatra East Coast), 1918–32; since 1932 volontaire at the Plant Physiological Institute of the 'Eidgenöss. Technische Hochschule' at Zürich.[1] He visited Java, *e.g.* Tjibodas (slope G. Gedeh, W. Java) in May 1920.

Rhododendron heusseri J.J.S. was named after him.[2]

COLLECTING LOCALITIES. *In* or *before 1932. Sumatra East Coast & Tapanoeli:* G. Sibajak, Prapat, Samosir Peninsula (Toba Lake).

COLLECTIONS. *Herb. Bog.:* 9 *nos* of *Rhododendron* (pres. *1932*) and possibly few other plants. As early as *1920* he sent mosses to HERZOG.

LITERATURE. (1) Author with Dr E. MJÖBERG of 'De schelpenheuvel van Boeloe Tjina' (Teysmannia 31, 1920, p. 443–446, 3 fig.).

(2) Description by HEUSSER in a paper of J. J. SMITH in Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1935, p. 448.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936, *sub Addenda.*

Heutz Jr, Johan Bastiaan

(1882, The Hague, Holland; recorded missing after 1941), physician, educated at Utrecht University (M.D. 1912); in 1912 to Borneo as jointmanager of a planned Forest products Co., and stationed at Bandjermasin (SE. part) till 1914; reservist Medical Officer in Holland, 1914–18; from 1918–20 in special service of the Dutch Government; in the Civil Health Department in the D.E.I., 1921–24; Medical Director of the Hospital of the Hospital Society at Lima Poeloe (Sumatra East Coast); settled as a private practitioner at The Hague, 1932–41.

COLLECTIONS. *Herb. Utrecht*, numbers above 800, rather poor specimens, collected in *Borneo* in *1915* (this does not agree with the biography!) or *? 1914.*

Hewitt, John

(1880, Dronfield near Sheffield, England; x), zoologist, educated at Cambridge, from 1905–Nov. 1908 Curator of the Sarawak Museum (NW. Borneo); in 1910 appointed Assistant of the Transvaal Museum at Pretoria, S. Africa; since 1911 Director of the Albany Museum at Grahamstown (S. Africa).

Author of mainly anthropological and zoological papers.[1]

Some plants were named after him.

COLLECTING LOCALITIES. *NW. Borneo*, Sarawak: neighbourhood of Kuching; Limbang (July *1905*), Baram (Sept. *1907*), Mt Bongo (Febr. *1908*) with C. J. BROOKS (see there), G. Matang (Apr. and July 1908), Saribas (Aug. 1908), Mt Poi (= Poë).

COLLECTIONS. *Probably* in *Herb. Sarawak.* In *Herb. Kew* (pres. 1908); *Herb. Sing.;* apparently duplicates, but also some originals, in *Herb. Bog.* He forwarded 2 consignments of ferns to Prince BONAPARTE = *Herb. Paris* (pres. 1908–09);[2] ferns of his were described by E. B. COPELAND too.[3]

LITERATURE. (1) *e.g.* H. H. EVERETT & J. HEWITT: 'A history of Santubong, an island off the coast of Sarawak' (Journ. Str. Br. Roy. As. Soc. *no* 52, 1909, p. 1–30).

(2) *cf.* Lists of identifications in BONAPARTE, Notes ptéridol., fasc. 1, 1915, p. 209–210. In these lists ferns are cited from Mt Matang and Mt Santubong, collected in 1893, so evidently other collections are mixed up with those of HEWITT.

(3) In Philip. Journ. Sci. C. Bot. 3, 1908, p. 343–349 and *l.c.* 7, 1912, p. 57–65.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936, *cf.* also *sub Addenda;* P. BONNET, Bibliogr. araneorum (Toulouse 1945) vol. 1.

Heyl, H. L.

was put at the disposal of WENTHOLT Exp. at Hollandia, *Dutch N. New Guinea*, in *1939*; *cf. sub* Forest Research Institute, Buitenzorg.

Heijliger, Mr

of Batavia, sent living plants to *Hort. Bog.* in the years *1872* and *1874.*

He may be identical with R. V. HEIJLIGER, resident of Batavia, since 1866 Consul of Belgium, member of the 'Natuurkundige Vereeniging'.

Heyligers, Arthur Henricus Maria Josephus

(1870, Antwerp, Belgium; 1936, The Hague, Holland), came to the D.E.I. in 1882; he joined the Civil Service in 1911 and was successively Administrator in: Timor and Dependencies (Lesser Sunda Islands), Palembang Res. (S. Sumatra) (1921–26), the Moluccas (1926–28), Manado Res. (N. Celebes) (1928–30), Billiton (1930–32). He was pensioned off early in 1932.

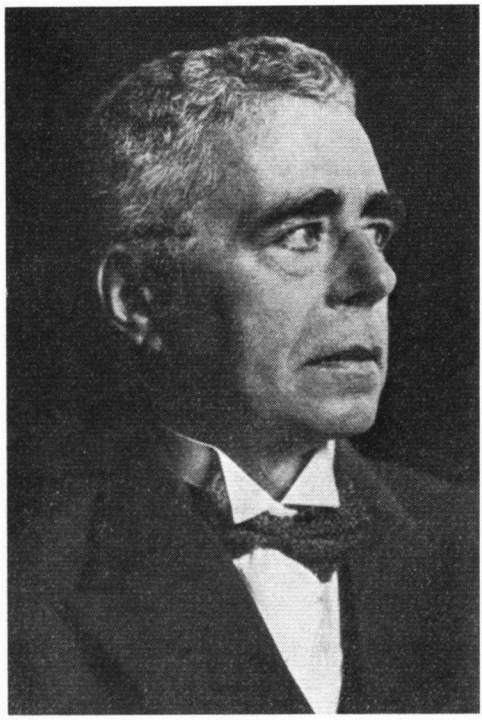
COLLECTIONS. Living plants from *Savoe* (= *Sawoe, Lesser Sunda Isls*) to *Hort. Bog.* in *1917–19.*

Heyn, Antonius Nicolaas Johannes

(1906, Delft, Z.H., Holland; x), botanist, educated at Utrecht University, taking his Ph. Dr's degree in 1931; in 1931–32 completing his studies in France and England for the Rockefeller Foundation. In 1936 he came to Buitenzorg, granted part of the Buitenzorg Fund, staying there from May–August. In August he travelled over Java, visiting experimental stations *etc.*[1] In the same year appointed Industrial Adviser of the D.E.I. Government, in charge of fibre and textile research, stationed at Djokjakarta (1937–40), and subsequently at Batavia. In 1947 on a study tour in the U.S.A.

COLLECTING LOCALITIES. *1936. W. Java* (before July): G. Salak, Tjibodas, Goeha Gadja, *etc.*— *1937–40. Centr. Java:* in Djokjakarta Principality, specially round Kalioerang, between 1000 and 1400 m alt., G. Merapi; G. Kloet (= Keloed).

COLLECTIONS. *Private Herbarium* of *c.* 3000 numbers; about one third was saved after Japanese occupation. For his private use he made lists of 510 species collected all over Djokjakarta, and of 326 species collected round Kalioerang. Plants partly identified at Buitenzorg.



K. HEYNE

LITERATURE. (1) *cf.* Versl. Gew. Verg. Wis- en Nat. Afd. Kon. Akad. Wet. Amsterdam 1937, p. 80–81.

Heyne, Benjamin

(? , ? , Germany; 1819, Vepery near Madras, India), surgeon of the Moravian Mission near Tranquebar, sailed for Madras in 1777; besides, acting botanist in the service of the English E.I.C.; in 1793 in charge of the pepper and cinnamon plantations. He was a member of the United Brotherhood (*cf. sub* KOENIG). In 1812 he went on leave to Europe *via* Sumatra.[1]

The genus *Heynea* ROXB. was named in his honour.

ITINERARY. When sailing for Europe in *1812*, he left Sangur o/b the 'Harleston' (Jan. 5); *S. Sumatra:* Bencoolen, near Marlborough; *Rat Island* (= *P. Tikoes*, W of Sumatra) (5 weeks' stay); March 8 embarking again.

COLLECTIONS. He made extensive collections in Madras, preserved in *Herb. E.I.C.* (*cf. sub* WALLICH; = at present *Kew*); dupl. identified by Dr A. W. ROTH;[2] duplicates distributed from there, *e.g.* in *Herb.* DELESS. (*Geneva*), *Herb. Cambridge*, and in *Herb.* FISCHER (then Dir. of Imp. Bot. Gard. St Petersb.). Type specimens in *Herb.* ROTH (= *Berlin*).

HEYNE compiled a 'Catalogue of the flora of Rat Island' of about 70 species, which was lost.[3]

LITERATURE. (1) Author of 'Tracts, historical and statistical, on India, with journal and several tours through various parts of the Peninsula; also an account of Sumatra in a series of letters' (London 1814).

(2) *cf.* Alg. Konst- en Letterbode 1814[2], p. 33–34.

A. W. ROTH: 'Novae plantarum species praesertim Indiae Orientalis ex collectione Doct. Benj. Heynii cum descriptionibus et observationibus' (Halberstadii 1821; includes some from Sumatra!); *cf.* also Flora 17[2], 1834, p. 760.

3) *cf.* HEYNE, Tracts, historical and statistical *etc., l.c.* p. 421.

BIOGRAPHICAL DATA. Catal. Scient. Pap. 3, p. 345; Cyclop. of India 2, 1885 (part. bibliogr.); BACKER, Verkl. Woordenb., 1936.

Heyne, Karel

(1877, Amsterdam, Holland; 1947, Bennekom, Gld, Holland), at first commercial employee at Batavia, Java; Chief of the Museum and Inquiry Office for Economic Botany at Buitenzorg (W. Java), 1906–27.

Author of 'De nuttige planten van Ned. Indië' (Buitenzorg, 2nd ed. 1927).

Some plants were named after him.

COLLECTING LOCALITIES. *Centr. Sumatra:* Djambi; *W. Java:* Buitenzorg, Nirmala Estate.

COLLECTIONS. *Herb. Bog.:* a large amount of plants from the *Mal. Arch.* (pres. 1913); his collection is the documentary evidence of his book on economic plants; material was sent to him from all parts of the Archipelago. In *Herb. For. Res. Inst. Buitenzorg:* set with the original labels of the collectors ACHMAD *etc.*

He employed collectors, *i.e.* ACHMAD, BEGUIN, DUMAS, GRASHOFF, GUSDORF, LAMBACH (see those); *cf.* also *sub* BRUINIER and A. OTTENS.

BIOGRAPHICAL DATA. Soerab. Handelsblad April 6, 1927, p. 3; BACKER, Verkl. Woordenb., 1936.

Heyning, Nicolaas

(1907, Buitenzorg, Java; x), schoolmaster in the D.E.I., who studied geography in Holland and was subsequently appointed teacher at secondary schools.

COLLECTING LOCALITIES. *E. Java:* G. Keneh (SW of Klakah) (March *1932*); G. Lamongan (G. Anjar) (Apr. *1933*).

COLLECTIONS. *Herb. Bog.:* 18 *nos.*

Heyting, L. C.

(1890, Padangsidimpoean, Tapanoeli, Sumatra; x), entered the D.E. Indian Civil Service in 1917; District Officer in SE. Borneo (1925), Sumatra East Coast (1925–28); District Officer and later Assistant Resident in Bali & Lombok Res. (1928–

32, stationed in Soemba *etc.*); Assistant Resident at Sintang, W. Borneo (1933–34); retired in 1935.

COLLECTING LOCALITIES. *Bali:* G. Tabanan (*1925*); *W. Borneo:* G. K(e)lam (Oct. *1933*, Apr. *1934*).

COLLECTIONS. *Herb. Bog.:* a few *nos*, including *Rafflesia* from *Borneo*.

Hickman

is cited by MERRILL in Enum. Philip. Fl.Pl. as the collector of a *no* 6, *Hebonga obliqua* RADLK., from *Mindoro, P.I.*

Hickson, Sydney John

(1859, Highgate, England; 1940, Cambridge, England), zoologist, educated at Cambridge University; D. Sc. London in 1883; Professor of Zoology in the University of Manchester, 1894–1926; subsequently returning to Cambridge. Especially interested in the problems of marine zoology, for the investigation of which he made some voyages.

ITINERARY. *Voyage to N. Celebes, 1885–86.*[1] Arriving at Makassar, *SW. Celebes* (July 24, *1885*), from where to *N. Celebes:* Manado (July 29); for a month sailing about (joining H.M.S. 'Flying Fish', Capt. MACLEAR) in Banka Strait; going ashore on several islands and on the coast of N. Celebes, *i.e.* near Likupang (Aug. 9), Bohoi Bay, *P. Limbé* (= *Lembeh*), Batu Kapal, *P. Tagulandang* (= Tahoelandang), *P. Ruang* (ascending the volcano, 21), Talisse (28); taking leave of the 'Flying Fish', going ashore on *Talis(s)e Isl.* (Sept.); staying for some months; o/b the Dutch steamship 'Ternate' (Nov. 14) to the *Nanusa* (= *Nenoesa*) *Archipelago* (arriving Nov. 29), touching at the *Talaud* (Lirung on *Salibabu*) and *Saha Islands; Isl. Kabrukan* (= *Kaboeroeang*, Talaud Isls), kp. Man(g)arang; and *Great Sangir* (= *P. Sangihe*, visiting Taruna and Manganitu); *P. Siauw* (= *Siaoe*), *P. Tagulandang* (= *Tahoelandang*), *P. Talis(s)e; N. Celebes:* Manado (since early in Jan. *1886* suffering from ill health); setting out (Apr. 3) to Tondana, Tondano Lake, Kakas, Lango(w)an, Kelelonde (a guest on a coffee estate for a fortnight); on account of illness back to Manado; *P. Talis(s)e* (June); sailing for Europe on July 10, 1886.

COLLECTIONS. *Herb. Kew: Ind. Archip.*, Mexico, Arizona, 45 *nos* (pres. 1887–90).

LITERATURE. (1) S. J. HICKSON: 'A naturalist in North Celebes: a narrative of travels in Minahassa, the Sangir and Talaud Islands, *etc.*' (London 1889).

cf. also Tijdschr. K.N.A.G. 1887, p. 131–161.

BIOGRAPHICAL DATA. Who's who 1913; Obituary Notices Fellows Roy. Soc. 3, 1941, p. 383–394 + portr.

Hidik, D., *cf. sub* Forest Research Institute, Buitenzorg.

Hie a Atjil, *cf. sub ditto.*

Hiemstra (van Gelderen), J. L.

author of some typed reports (1927) on the mangrove forests in Langkat, Administrator of the Forest Service at Langkat, *Sumatra East Coast*, presented dried material of a number of mangrove species to the *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam*, in *1927*. In *Herb. For. Res. Inst. Buitenzorg:* from *Sumatra East Coast*, collected in *1922*.

Hiero, *cf. sub* Forestry Bureau, Manila.

Hildebrand, Frederik Hendrik

(1900, Ternate, Moluccas; x), 'boscharchitect' who entered the D.E. Indian Forest Service in 1917; at first stationed in Centr. and W. Java (Krawang–Indramajoe); since March 1922 attached to the Forest Research Institute at Buitenzorg.

COLLECTING LOCALITIES. *1925. SE. Borneo:* Pleihari subdiv. (about end of the year).—*1927. Centr. Java:* Rembang.—*1928. SE. Borneo:* Tanah Boemboe and *P. Laoet.*—*1930. P. Ajer* and *P. Purmerend* in the Bay of Batavia (July 6); *Centr. Java:* Rembang Res., at Ngawen, Bandjarwaroe, Kalinanas.[1]—*1932. W. Java:* G. Patoeha, near Tjipadaroeöem (Jan.); Depok Nature Reserve (Oct. 23).—*1935. W. Java:* G. Patoeha near Tjipadaroeöem (Jan.); environs of Soekaboemi; Janglappa (also visited in 1930, 1932 and 1934);[1] *Centr. Java:* Tjilatjap and Poerwokerto.—*1936. W. Java:* G. Tjibodas near Tjampea (Jan.); Sitoe Goenoeng; G. Hambalang; Batavia.—*1937. W. Java:* G. Pantjar (G. Paniisan), Depok, G. (Tji)Bodas; *E. Java* (Dec.): G. Raoeng, G. Idjen, and G. Baloeran.—*1938. E. Java:* Panaroekan and G. Baloeran; *W. Java:* Angké-Kapoek, Batavia, G. (Tji)Bodas, Ngasoeh and Djasinga,[1] G. Gedeh, Doengoes Iwoel,[1] Depok, Poentjak.—*1939. W. Java:* environs of Garoet (Jan. 23–29),[1] G. (Tji)Bodas, Depok; *Centr. Java:* environs of Tjiandjoer.

In various years some *nos* from Buitenzorg, *W. Java.*

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg;* partly dupl. in *Herb. Bog.*

In general, small collections; the Patoeha collection consists of the *nos* 1–90, 151–347, the labels bearing letters (H, O, E, F, or G) corresponding with the altitude at which was collected, *viz* respectively 1600, 1600–2200, 1760, 1970 and 2200 m; from Soekaboemi (1935) 103 *nos;* from *Centr. Java* (1935) 90 *nos;* from *E. Java* (1937) *nos* 1–189.

LITERATURE. (1) *cf.* typed reports in For. Res. Inst. Buitenzorg.

Hill

is recorded to have ascended G. B(e)lumut, Johore, *Malay Peninsula*, in Jan. *1879*, preceding HERVEY (see there); he visited Bt Telenteng and Pupur too, in search of plants.[1]

COLLECTIONS. During the trip plants were collected, but HILL had been obliged to throw the bulk away.

LITERATURE. (1) *cf.* Journ. Str. Br. Roy. As. Soc. *no* 3, 1879, p. 87, 89–90, 101.

Hill, Henry Charles

(1852–1903), in the Indian Forest Service, 1872–1903; Inspector General of Forests, India, 1900–03; in 1900 deputed to report on the forests of the Malay Peninsula.

ITINERARY.[1] *1900. Malay Peninsula:* travelling rapidly through the three Settlements in turn; then from the Dindings through Perak and Selangor, into Pahang *via* the Semangkok Pass to Kuala Lipis and down the Pahang River, thence to the Kuantan and Rompin Rivers.



HILLEBRAND

Courtesy Honolulu Star-Bulletin Photo

COLLECTIONS. Specimens gathered for identification in 1900 were sent by him to *Herb. Sing.*

LITERATURE. (1) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5. The year erroneously mentioned as 1899; RIDLEY states in Ann. Rep. Sing. Gard. for 1900 to have accompanied Mr HILL early in that year.

Hillebrand, Wilhelm

(1821, Niehem, Westphalia, Germany; 1886, Heidelberg, Germany), physician, educated at Göttingen, Heidelberg, and Berlin. An affection of the lungs forced him to leave his country. He set sail for Australia, from there passed to Manila (Luzon, P.I.), and on account of his health embarked on a brig bound for San Francisco. By advice he subsequently settled in the Sandwich or Hawaiian Islands, where he resided from 1851–71.[1] In 1865 and 1866 he was on a voyage as Commissioner of Immigration for the Hawaiian Government to China and the East Indies. After his return in Europe (1871) he was in Germany and Switzerland, and stayed for some years in Madeira and Teneriffe.

Embelia hillebrandii MEZ and other species were named after him.

ITINERARY. *1865–66.* He visited *Java*, the Buitenzorg Botanic Gardens, *etc.; Sumatra;* the *Malay Peninsula* and *Singapore;* Hongkong and China.

COLLECTIONS. *Herb. Berl.:* '*Reliquiae Hillebrandianae*', *Java* 889 *nos* + 397 *nos* Buitenzorg Bot. Gard., *Sumatra* 52 *nos*, and phanerogams too from Hongkong and China; *Algae* from *Java;* collection from the Sandwich Islands. *Herb. Kew:* Honolulu *etc.* (pres. 1862–80); *Brit. Mus.:* Sandwich Isls 452 *nos* (exch. 1890); *Herb.* DELESS. (*Geneva*): China 537 *nos* (pres. 1890); *Herb.* BOISS. (Geneva): from China. From his Asia voyage he brought back numerous living plants to Hawaii.

He collected without dates and exact localities; certainly some plants are erroneously localized, *e.g. Philydrum lanuginosum* recorded from Java.[2]

LITERATURE. (1) Author of 'Flora of the Hawaiian Islands' (1888); *cf.* Chron. Bot. 7, 1942, p. 69–70.

(2) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1933, p. 112.

BIOGRAPHICAL DATA. Bot. Zeitung 44, 1886, p. 542–543; W. HILLEBRAND, Flora *etc., l.c.* 1888, preface, p. vii–xii; Hawaiian Forester 1919, p. 49–50; Chron. Bot. 7, 1942, p. 69–70.

Hillman, Eric Stanley

(1894, Colombo, Ceylon; 1940, U.S.A.), since 1919 in the employ of the B.P.M. (Batavian Oil Co.).

When stationed at Balikpapan, *E. Borneo*, he sent living orchids to *Hort. Bog.* in *1927.*

Hinds, Richard Brinsley

(1812, ? ; 1847, Perth, W. Australia), surgeon-botanist attached to the expedition of the 'Sulphur' under command of Capt. Sir EDW. BELCHER.

Author of some papers pertaining to the voyage.[1]

He was commemorated in the genus *Hindsia* BENN. and in several other plant species.

ITINERARY. *Voyage in the 'Sulphur', 1835–42;*[2] *cf.* also *sub* BARCLAY (the latter's dates are often different from those of BELCHER and SINCLAIR). Leaving Plymouth (Dec. 22, 1835); touching at Madeira, Teneriffe, Rio de Janeiro, Cape Horn, Valparaiso and many other places in S. and Centr. America; Sandwich Isls; NW. coast of America; S. America; Sandwich Isls; America; Marquesas Isls; Tahiti; Fiji Isls; New Hebrides; *Bismarck Archipelago: New Ireland* (July 5–16, *1840*), Carteret Harbour; *Britannia* or *d'Urville Isl.* (= *Kairu* or *Kairiru*, July 26–27); *Japen* (Aug. 7–15); *Isle of Amsterdam* (23) and *Middelburg* (25); *Pigeon Isl.* (one of the Wai Isls, Aug. 27); *Moluccas: Buru* (Cajeli Bay, 31–Sept. 1); *Ambon* (Sept. 3–13); *Buru* (Cajeli Bay); sailing (Sept. 16) *via* Macassar (*SW. Celebes*) (24–30) to *Singapore* (Oct. 16–22), ordered to proceed to China to take part in the war operation; *Philippines: Luzon*, Manila (Dec. 1, 48 hours ashore); China; *Singapore* (Dec. 5–17, *1841*), Malacca (*Mal. Penins.*) (20), *Penang* (27–Jan. 3, *1842*); *P. Bouro* (or *Malora*) (10, 12–13), visit to Acheen (= Atjeh, *N. Sumatra*) (Jan. 11); *via* Ceylon and the Cape, to England; Spithead (July 19, 1842).

COLLECTIONS. *Herb. Kew:* 'Sulphur' collection

(ferns with *Herb.* HOOKER), near 2000 species;[3] *Herb. Cambridge; Imp. Bot. Gard. St Petersb.* (= *Leningrad*): 107 from 'Sulphur' Exp.; *Herb.* LINDLEY (= *Cambridge, Orch.* in *Kew*); *Herb. Vienna*, with *Herb.* REICHENBACH: orchids 'Sulphur' Exp.

He made zoological collections too.[4]

LITERATURE. (1) R. B. HINDS: 'On the permanent regions of alpine vegetation' (HOOK. Lond. Journ. Bot. 1, 1842, p. 128–133); 'Remarks on the vegetation of the Feejee Islands, Tanna, New Ireland and New Guinea' (*l.c.* p. 669–676); 'The regions of vegetation; being an analysis of the distribution of vegetable forms over the surface of the globe in connexion with climate and physical agents' (in BELCHER, Narrative, *l.c.* below vol. 2, p. 325–460; for the New Guinea region *cf.* p. 384–386).

(2) Sir EDW. BELCHER: 'Narrative of a voyage round the world performed in H.M.S. Sulphur during the years 1836–42' (London 1843, 2 vols).

(3) G. BENTHAM: 'Enumeration of the plants collected by R. B. HINDS Esq. and Mr. BARCLAY in the Feejee Islands, Tanna, New Ireland and New Guinea; to which are added a few species gathered in Amboyna by Mr. BARCLAY' (HOOK. Lond. Journ. Bot. 2, 1843, p. 211–240); 'Botany of the voyage of H.M.S. Sulphur under the command of EDW. BELCHER during the years 1836–42' (London 1844–46, *nos* I–VI, 60 pl.).

(4) HINDS edited 'The zoology of H.M.S. Sulphur' (London 1844); he himself was author of the 2nd vol., molluscs.

BIOGRAPHICAL DATA. Catal. Scient. Pap. 3, p. 358–359; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 27, 1889, p. 114, and in 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Hinolan, P., *cf. sub* Forestry Bureau, Manila.

Hirro, *cf. sub ditto.*

Hirschmann, Frederik Charles Hendrik

(1894, Malang, Java; March 19, 1944, Manado, Celebes), joined the D.E. Indian Civil Service in 1917; at the time of collecting Assistant Resident at Donggala, *Centr. Celebes;* since 1941 Resident of Manado, N. Celebes.

COLLECTIONS. He sent living orchids from Lake Lindoe, *etc.*, *Centr. Celebes*, to *Hort. Bog.* in *1932–33;* partly preserved in *Herb. Bog.* (*cf.* FEDDE Repert. 36, 1934, p. 119).

Hitchcock, Albert Spear

(1865, Owassa in Michigan, U.S.A.; Dec. 16, 1935, o/b City of Norfolk, returning from Europe), since 1901 agrostologist, Senior Botanist and Custodian of the section of grasses of the U.S. Department of Agriculture, Washington; he took his D. Sc. degree at Iowa State College in 1920. He made extensive travels in the Orient, Africa, and America, for the study of grasses.

Author of many agrostological papers.

He is commemorated in several plant names.

ITINERARY.[1] *1920. Philippines.* Leaving Washington (the last of Apr.); arriving in *Luzon*, Manila (June 9); spending 19 days in the islands, mostly Luzon, visiting Los Baños, ascending Mt Makiling and St. Tomas (near Baguio); subsequently visiting Japan, China, and Indo-China, returning in the second half of December.

COLLECTIONS. *U.S. Nat. Herb. Wash.:* large and valuable collection of grasses; 141 *P.I.* plants (numbered 18025–18169).

LITERATURE. (1) *cf.* Rep. Smithson. Inst. for 1920/21, p. 10–11.

A. S. HITCHCOCK: 'A botanical reconnaissance in southeastern Asia' (Rep. Smithson. Inst. for 1921, 1923, p. 373–380, pl. 1–11).

BIOGRAPHICAL DATA. Portr. in Bull. Acad. Intern. Géogr. Bot. 1899, facing p. 56; URBAN, Symb. Antill., 3, 1902–03, p. 61; WITTROCK, Icon. Bot. Berg., 2, 1905, p. 197; Journ. N.Y. Bot. Gard. 37, 1936, p. 26; Kew Bull. 1936, p. 107–109; Journ. Bot. 74, 1936, p. 54; Lingn. Sci. Journ. 15, 1936, p. 305–306; Chron. Bot. 2, 1936, p. 308 + portr. (p. 309); and *l.c.* 3, 1937, p. 335–336.

Hobson, Lt Colonel Julian Campbell

COLLECTIONS. *Herb. Kew:* India and Archipelago (pres. 1874–75). It is not clear whether the *Malay Archipelago* is meant.

Hobson, S.

in the Posts & Telegraphs G. Department, Str. Settlements, collected plants near Taiping (Perak), *Malay Peninsula*, in *1909* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Sing.*

Hochreutiner, Bénédict Pierre Georges

(1873, Geneva, Switzerland; x), theologist-botanist, in 1896 Assistant at the Botanical Institute (Conservatoire et Jardin Botaniques) at Geneva, besides in 1898 University Lecturer there; from June 1903–Jan. 1905 temporarily attached to the Botanic Gardens (Herbarium) at Buitenzorg; in 1906 appointed Custodian of the above-mentioned Botanical Institute at Geneva, in 1918 besides Professor of Botany, and in 1931 Director of that Institute; he retired in 1943.

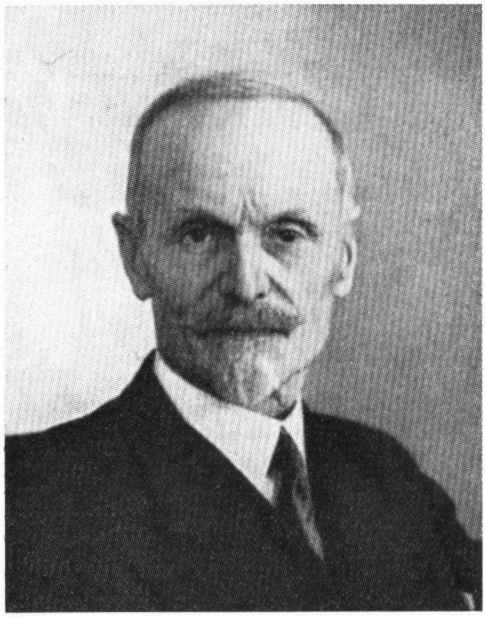
In 1901 he made a voyage to Algeria; when returning from Java to Europe in 1905, he went by way of Australia, New Zealand, Samoa, Hawaii and America.

Author of many plant taxonomic papers and of a new catalogue of part of the Botanic Garden at Buitenzorg.[1]

Several plants were named after him.

ITINERARY.[2] *1903.* Sailing from Genoa (May 1903), *via* Colombo, *P. Penang; Singapore* (June 9–12); *W. Java:* Tandjong Priok (15); arrival at Buitenzorg (16); Tjibodas and Tjibeureum on the slope of Mt Gedeh (Aug. 21–24); SE. slope of Mt Salak (30).—*1904.* From Jan. till the beginning of Apr. making several one-day tours to Mt Salak; Mt Pangrango-Gedeh (Apr. 18–24): Tjibodas, Kandangbadak and the summit; Kotta Batoe near Buitenzorg (May 7); mangrove near Tandjong Priok (12); Mt Geger Bintang (May 23, 2 days); Mt Salak (June 19, July 3); July 16–29 visiting:

Pengalengan Plateau, Tjileuntja Lake, Mt Malabar and Mt Wajang; Bandoeng (July 30); the Tjitaroem, waterfalls (July 31–Aug. 1); from Aug. till the beginning of Oct. many trips to Mt Salak and in the environs of Buitenzorg (G. Pantjar, Sept. 17); ascent of Mt Salak *via* Tegalankap (Oct. 9–10);



HOCHREUTINER

mangrove, Tandjong Priok (16); Oct. 23–27: Buitenzorg–Garoet, Mt Papandajan and Telaga Bodas; *Centr. Java* (Oct. 27–30): Garoet–Tjilatjap, and Isl. *Noesa Kambangan;*[3] Oct. 30–Nov. 8: Tjilatjap–Djokjakarta–Diëng Plateau, ascent of Mt Prahoe, Telaga Warno, Kawa Kidang; Nov. 8–11: Diëng–Bawang–Pekalongan–Cheribon–Kadipaten –Soemedang–Bandoeng and back to Buitenzorg in *W. Java;* end of Nov. and Dec. making 3 one-day trips in the environs of Buitenzorg (Depok *etc.*).—*1905. E. Java:* by train (Jan. 7 leaving Buitenzorg) *via* Djokjakarta, Solo, Soerabaja, to Lawang; Jan. 14–24 visiting: G. Tengger, Nongkodjadjar, Moengal Pass, G. Bromo, Zandzee (mer de sable), Roedjak, Ranoe Pani, Ranoe Koembolo, ascending Mt Smeroe, returning by the same route to Moengal Pass, Tosari and descending to Poespo and Pasoeroean; environs of Pasoeroean, Banjoebiroe and mangrove (24–26); Soerabaja (27–30); *P. Madoera* (31); sailing to Australia *etc.*

COLLECTIONS. *Herb.* DELESS. (*Geneva*): 3344 *nos* from his voyage round the world (pres. 1908).[4] He distributed *exsiccatae* of plants cultivated in Hort. Bog.:[5] few in *Herb.* DECAND. (*Geneva*); in *Herb. Berl.:* 162 *nos; Herb. Sydney* (pres. 1905); *Herb. Univ. Zürich;* and probably elsewhere.

LITERATURE. (1) B. P. G. HOCHREUTINER: 'Catalogus bogoriensis novus plantarum phanerogarum quae in Horto Botanico Bogoriensi coluntur herbaceis exceptis' (Bull. Inst. Bot. Buit. *nos* XIX and XXII, 1904–05); *cf.* also references in Ann. Jard. Bot. Buit. 45, 1935, p. 74.

(2) *cf.* Ann. Cons. & Jard. Bot. Genève 15/16, 1912, p. 148–150.

(3) B. P. G. HOCHREUTINER: 'A la recherche du Rafflesia Patma, la fleur géante de Java' (Globe 57, Genève 1918, p. 28–36, 4 pl.).

(4) B. P. G. HOCHREUTINER: 'Plantae Hochreutineranae' (Ann. Cons. & Jard. Bot. Genève 15/16, 1912, p. 145–247; Candollea 2, 1925, p. 317–513; *l.c.* 5, 1934, p. 175–341; *l.c.* 6, 1934/36, p. 399–488).

(5) B. P. G. HOCHREUTINER: 'Plantae bogorienses exsiccatae novae vel minus cognitae' (Buitenzorg 1904, p. 1–75); 'Descriptiones plantarum bogoriensium exsiccatarum novarum' (Ann. Jard. Bot. Buit. Suppl. 3, 1910, p. 815–870); 'Rectification touchant les Plantae Bogorienses exsiccatae' (Ann. Cons. & Jard. Bot. Genève 10, 1906/07, p. 118).

BIOGRAPHICAL DATA. B. P. G. HOCHREUTINER, Curriculum vitae, Genève 1931, w. bibliogr.; BACKER, Verkl. Woordenb., 1936.

Hochstetter, Ferdinand von

(1829, Esslingen, Austria; 1884, Oberdöbling near Vienna, Austria), studied theology and natural sciences; in 1856 appointed University Lecturer in the University of Vienna. He undertook the geology department of the 'Novara' expedition (see below). From 1860–81 Professor of Mineralogy and Geology at the Polytechnical Institute, Vienna.

ITINERARY. *Voyage in the 'Novara', 1857–59;*[1] *cf. sub* JELINEK (detailed itiner. *etc.*). HOCHSTETTER and VON SCHERZER made some trips in Priangan Res., *W. Java*, visiting: G. Tangkoeban Prahoe (May 18, *1858*, from Lembang) and exploring the vicinity of the Tjitaroem. From *Luzon* (*P.I.*) he mentions to have visited Jalajala and Binangonan, returning June 22, 1858, at Manila. In Dec. 1858 HOCHSTETTER stayed behind in New Zealand,[2] returning at the end of next year to Austria (Jan. 9, 1860 at Trieste).

COLLECTIONS. Principally ferns; the fern collection from New Zealand in *Herb. Vienna*, probably the material from elsewhere too.

LITERATURE. (1) 'Reise der Oesterreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858 und 1859 unter den Befehlen des Commodore B. VON WÜLLERSTORF-URBAIR' (Wien 1861–75). The geological part (1865–66) by HOCHSTETTER and others.

F. VON HOCHSTETTER: 'Geologische Ausflüge auf Java' (*l.c.* Geol. Theil, vol. 2, p. 113–152); 'Gesammelte Reiseberichte von der Erdumsegelung der Fregatte Novara 1857–59' (Wien 1885, w. portr. and introd.).

(2) F. v. HOCHSTETTER: 'Neuseeland' (Stuttgart 1863).

BIOGRAPHICAL DATA. Portr. in HOCHSTETTER, Gesammelte Reiseberichte *l.c. sub* Liter. 1.; Encyclop. N.I. 2, 1918.

Hodgson, D. H.

Sylvicultural Assistant (1921), later Assistant Conservator of Forests in the Fed. Malay States.

COLLECTIONS. *Herb. Kuala Lump.:* from *Singapore* and Larut (Perak), *etc., Malay Peninsula.* Mostly collected in the Fed. Malay States; all numbered in the C.F. (see *sub* Conservator of Forests) series.

Hoed, Gerrit den

(1907, Rotterdam, Holland; x), high school (M.U.L.O.) teacher, since 1930 in D.E. Indian Government service; first stationed in E. Java and since 1937 at Batavia (W. Java); after evacuation (from P.O.W. camp Siam) to Holland, he was reappointed teacher of natural history at secondary schools at Batavia in 1947. He is especially interested in plant sociology.

COLLECTING LOCALITIES. *1930–37. E. Java. —Since 1937. W. Java:* environs of Batavia,[1] on the beach Moeara Heemraad (between Antjol and Priok), in Rawah Tembaga near Bekassi, *etc.*

COLLECTIONS. *Nos* 1–21 in *private Herb.* (lost now); *nos* 22–47 (together with P. VAN DER MEER, see there) in *Herb. Bog.;* 22 *Compositae* dupl. in *Herb. Leyden.*

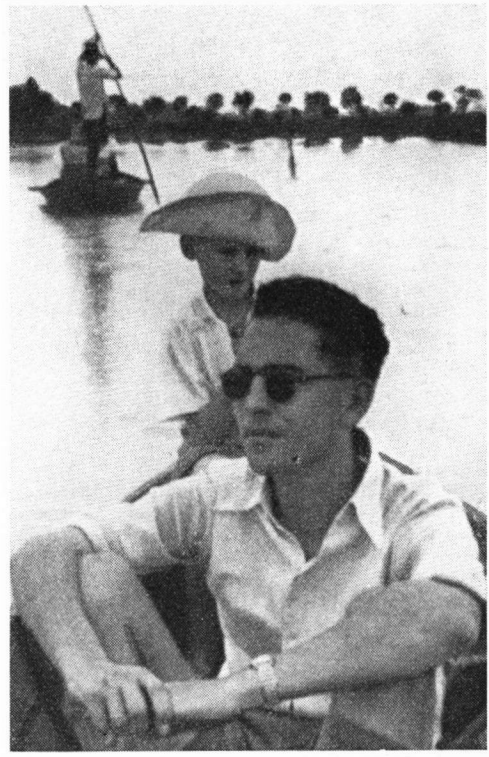
LITERATURE. (1) G. DEN HOED & P. VAN DER MEER: 'Ruderaalplanten bij Batavia' (Trop. Nat. 30, 1941, p. 78–79); 'Over plassen en moerassen' (I) (*l.c.* p. 181–184, 3 fig.).

Hoedt, Dirk Samuel (not D. J.!)

(1815, Ambon; Jan. 1, 1893, Ambon), in Government employ, since 1853 as Secretary of the Moluccas; in 1867 placed on half-pay on account of illness; subsequently retired.[1] In 1862 he was promised a monthly allowance for making zoological collections on behalf of the Natural History Museum at Leyden; in Oct. 27, 1866 he was appointed successor to BERNSTEIN (see there); he resigned on account of personal differences with the Resident and accordingly the planned New Guinea voyage fell through. At the end of 1872, when BECCARI visited Ambon, HOEDT was the owner of a coconut plantation and evidently grew vanilla too.[2]

ITINERARY. Sept. *1863–66. Moluccas: Ambon* and neighbouring islands: *Kelang, Boano, Manipa, Boeroe,* SW. coast of *Ceram, P. Haroeko(e), Amblauw; Soela Islands; Zuidwester & Zuidooster Islands* (include: Wetar, Roma, Kisar, Leti Isls, Damar Isls, Babar Isls); *Kai Islands; Sangir* (= *Sangihe*) *Isls* (N of Celebes); Doreh (*NW. New Guinea*). *—1867. Java.* Sailing from *Ambon* (Apr. 14); *Ceram:* Wahai (23–28); *Misoöl* (May 1–Aug. 17), visiting: Ado(e)a on the S. coast, Wa(a)igama (since May 14), Kas(s)im (since May 20), Goe (since June 11), Kas(s)im (June 20–22), Waigama (since June 23); *Ceram:* Sawa(a)i Bay near S(e)leman (Aug. 20–21); back at *Ambon* (30).[3]—In following years collecting (zoologically) in *Ambon* and *Ceram* again.—He collected some plants in *Salawati,* and *Misoöl* in *c. 1868.*[4]*—1870.*[5] Trip to the *Aroe Islands,* staying some months (March–June), *Ambon* (Apr.), *Boeroe* (July).—After his resignation he is said to have made zoological collections in *Timor* (*Lesser Sunda Isls*).

COLLECTIONS. He sent some plants to the 'Natuurkundige Vereeniging' at Batavia (pres. 1861–67)[6] and to *Herb. Bog.* (pres. 1868–69). Some plants from *Salawati* (1868) were numbered in the H.B. (see there) series. In the *Aroe Islands* he made botanical collections too.



DEN HOED

By original agreement his botanical collections were to go to *Herb. Leyden;* the reports of that herbarium for the concerning years give no data on collections of his, so we may assume that if they exist, they must be of little importance. The Herbarium has a few *Java* specimens collected in *1867.*

LITERATURE. (1) Author of 'Mededeeling over het voorkomen van wilde vanilje in het gebergte van Leytimor (Amboina)' (Nat. Tijdschr. N.I. 23, 1861, p. 134).

(2) *cf.* BECCARI, Nuova Guinea, Selebes e Molucche, 1924, p. 187–190.

(3) P. J. B. C. ROBIDÉ VAN DER AA states that HOEDT visited the W. coast of New Guinea (in 'Reizen naar Ned. Nieuw-Guinea', 's-Gravenhage 1879, p. 386), but set right the error himself (*l.c.* p. 466).

'Een tochtje naar het eiland Misool' (Tijdschr. K.N.A.G. 5, 1881, p. 82–89, with introd. by P. J. VETH).

(4) *cf.* Koloniaal Verslag for 1868, p. 82 and *l.c.* for 1870, p. 71.

(5) *cf.* Verh. k.k. Zool. Bot. Ges. Wien 22, 1872, p. 425–430.

(6) *cf.* Nat. Tijdschr. N.I. 23, 1861, p. 135, 158–159; *l.c.* 24, 1862, p. 100 and *l.c.* 29, 1867, p. 248.

BIOGRAPHICAL DATA. H. J. VETH, Overzicht .... voor de kennis der fauna van Ned. Indië, Leiden 1879, p. 149, 157–158.

Hoedt, Theophile George Emile

(1896, Magelang, Java; x), was educated at Wageningen Agricultural College, Holland, where he took his Dr's degree in 1930; Agriculturist at several experiment stations, from end 1926–33 stationed at Tandjong Karang, S. Sumatra; Director of the West Java Experiment Station (Buitenzorg), 1933–40; in April of the latter year appointed Head Manager of Pondok-Gedeh Estate near Buitenzorg.

COLLECTING LOCALITIES. *S. Sumatra:* Lampong Distr. (Nov. *1927*, *1931*, May *1932*); *Centr. Sumatra:* Djambi, Moeara Boengo (*c.* June *1929*). —*E. Java:* G. Andjasmoro, Pengandjaran Estate (*193* .).

COLLECTIONS. *Herb. Bog.:* few numbers.

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 457.

Höhnel, Franz von

(1852, Zombor, Hungary; 1920, Vienna, Austria), was educated at Vienna University; in 1884 appointed Extraordinary Professor of Technical Microscopy at Vienna Technical College; in 1894 Professor of Plant Anatomy and Physiology in the Soil Science College and later of Systematic Mycology in that place. He made several voyages, one of which to Ceylon and Java (see below) aided by the Vienna Academy of Science.

COLLECTING LOCALITIES. *Java* (Nov. *1907*–March 26, *1908*): particularly at Tjibodas on the slope of G. Gedeh in *W. Java.*[1]

COLLECTIONS. He brought together an extensive collection of *Fungi*,[2] *probably* preserved in *Herb. Vienna;* dupl. in *Herb. Leyden.* We do not know whether he collected phanerogams too.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 33; and BOEDIJN in *l.c.* p. 106, 108–109.

(2) FR. VON HÖHNEL: 'Atichia Treubii v. HÖHN.' (in Bull. Jard. Bot. Buit. suppl. 3, 1910); 'Beitrag zur Mikromyzetenflora von Java' (*l.c.* sér. 3, vol. 6, 1924, p. 1–8); and *cf.* Ann. Jard. Bot. Buit. 45, 1935, p. 108–109.

BIOGRAPHICAL DATA. Ber. D.B.G. 38, 1920, Gen. Vers. Heft p. (103)–(126).

Hoeks, Bastiaan Martinus

(1903, Dordrecht, Z.H., Holland; x), zoologist, educated at Leyden University; in 1928 teacher at a secondary school at Tiel, Holland; in 1929 appointed Advising Fishery Expert for Freshwater Fishery in West Java (Buitenzorg), since 1940 Leader of the Freshwater Fishery subdivision of the Department of Agriculture; in 1948 appointed on the staff of the State Institute for purification of sewage, The Hague.

COLLECTING LOCALITIES. *W. Java:* Bantam (Sept. *1932*); Lake Leles (Oct. 1932); Tjiandjoer (Nov. and Dec. *1934*).—*E. Borneo* (Oct. *1938*): W. Koetai (= Mahakam), Lake Djempang, Lake Batoeboemboen and between kp. Moearamoentai and kp. Djantoer.

COLLECTIONS. *Herb. Bog.:* a 30 *nos* of ricefield and aquatic plants.

Hoekstra, Pieter

(1911, Tietjerksteradeel, Fr., Holland; x), since 1936 veterinary surgeon in D.E. Indian Government service; for some months stationed at Bandoeng (W. Java), from the end of 1936–April 1938 at Taroetoeng (Tapanoeli, Sumatra) and since April 1938 at Waingapoe (Soemba, Lesser Sunda Isls).

COLLECTIONS. *Herb. Bog:* some 20 grasses and fodder plants from *Soemba*, including *Microchloa tenella* DOMIN, new for the D.E.I. (already known from Australia), received in Febr. *1940.*

Hoendoel, *cf. sub* Forest Research Institute, Buitenzorg.

Hoffmannsegg

COLLECTIONS. *Herb. Berl.:* 90 *nos* of *Java* plants;[1] *Herb.* DECAND. (*Geneva*): 157 *Java* plants; some dupl. in *Herb. Leyden.* His herbarium of mosses came into the possession of M. le past. DUBY at *Geneva*,[2] and later with the latter's in *Herb.* BOISSIER. The *Java* plants date from about *1837–38.*

The plants are from the herbarium of JOHANN CENTURIUS Graf VON HOFFMANNSEGG (1766, Dresden, Germany; 1849, Dresden, Germany), owner of a botanical garden, who made some travels to Portugal in the years 1795 and 1798–1801.[3] In *Java* he had a friend who made natural history collections on his behalf, as is evident from letters written by HOFFMANNSEGG to A. P. DECANDOLLE, dated July 18, 1837, and Sept. 13, 1838 (in the Archives of the Conserv. Bot. at Geneva). He employed a certain SIEBER to make entomological collections in Brazil; the latter occasionally collected plants too.[4]

The genus *Hoffmannseggia* CAV. was named after him.

LITERATURE. (1) *cf.* Pflanzenreich Heft 91, p. 77.

(2) *cf.* A. DECANDOLLE, Phytographie, 1880, p. 420.

(3) Author of 'Flore portugaise, *etc.*' (Berlin 1809–40).

(4) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 475.

Hofman, A. H., *cf. sub* Forest Research Institute, Buitenzorg.

Hofmann, Julius Ernst Michael

(1880, Munich, Germany; x), since 1921 Forest Officer in D.E. Indian Government service, stationed in Java successively in N. Soerabaja, Pekalongan–Kendal, Bondowoso (since Nov. 1928), Probolinggo (since Apr. 1929) and Bandoeng (since May 1931); he retired in 1933.

COLLECTIONS. *Herb. Bog.:* high numbers from Soebah and Pekalongan (Kalisat) in *Centr. Java, 1923*, probably numbered in BEUMÉE's series (see there).

Hofstee, Jan

(1895, Opènde near Grootegast, Gr., Holland; x), since 1929 Officer for Freshwater Fishery in the D.E.I., stationed successively at Buitenzorg (W. Java), Malang (E. Java) 1929–36, Pamekasan (Isl. Madoera near E. Java) 1937–40, and since 1940 at Magelang in Central Java; after the war, in 1947, reappointed in active service.

COLLECTING LOCALITIES. *E. Java (1930–33)*: environs of Malang, at Poenten *etc.—Madoera:* Pamekasan (*1937*); on the beach (*1939*).—*Centr. Java (1940–41)*: near Magelang, and Rawah Lakbok (on the boundary of *West* and *Centr. Java*).

COLLECTIONS. *Herb. Bog.:* > 100 *nos*, from *Madoera nos* 77–98.

Hollack, Captain

probably one of the members (military detachment?) of the Sepik Expedition, 1912–13 (*cf. sub* LEDERMANN for detailed itiner., liter., *etc.*).

COLLECTIONS. He collected *Lycopodium cernuum* in Malu bivouac, former *Kaiser-Wilhelmsland* (= *NE. New Guinea*) (Apr. *1912*).[1]

LITERATURE. (1) *cf.* ENGL. Bot. Jahrb. 54, 1917, p. 235.

Holle

A certain HOLLE, without initials, is cited several times as the collector of liverworts and mosses.[2] We do not know whether he is identical with K. F. HOLLE. In the list of contributors to Leyden Herbarium a HOLLE with the initials D.G. is mentioned as a collector of cryptogams; the latter collected phanerogams too.

Holle, Johan Abraham Cornelis

(1909, Ambarawa, Java; x), since 1937 Consulting Agriculturist in D.E. Indian Government service. When stationed at Palembang, *S. Sumatra*, he sent a plant to *Herb. Bog.* in Dec. *1940*.

Holle, Karel Frederik

(1829, Amsterdam, Holland; 1896, Buitenzorg, Java), came to the D.E.I. in 1844, and two years later entered Government service; till 1856 he filled various administrative offices; in the latter year appointed Manager of the tea estate Tjikadjang and in 1862 founder of tea estate Waspada on the W. slope of G. Tjikorai, both situated in W. Java. He was a convinced promoter of the interests of the Indonesians, especially fighting for improvement of education and agricultural methods, and at the end of 1871 he was nominated Honorary Adviser for Native Affairs. In 1889 he settled at Buitenzorg.

Author of many papers on native agriculture, cattle-breeding, *etc.*[1]

COLLECTIONS. *Herb. Bog.:* some plants from *Java* (pres. *1870–71*).

LITERATURE. (1) *e.g.:* 'Opgave van eenige geschikte houtsoorten, welke in de bosschen nabij Tjikadjang worden gevonden op een hoogte van 4000 à 7000 voet boven zee' (Tijdschr. Nijverh. N.I. 7, 1861, p. 324–329); 'Eenige gegevens omtrent den inlandschen landbouw op tegalans en het nut van terrassen' (Tijdschr. Nijverh. & Landb. N.I. 48, 1894, p. 1–35).

(2) *cf.* MIQUEL, Plantae Junghuhnianae, and VERDOORN in Ann. Bryol. Suppl. vol. 4, 1934 (= Studien über Asiatische Jubuleae, Thesis, Utrecht 1934).

BIOGRAPHICAL DATA. Tijdschr. Binnenl. Bestuur 13, 1896, p. 159–169, w. portr.; Ind. Gids 1896, p. 1003; Ind. Mercuur, 9 Mei, 1896; Encyclop. N.I. 2, 1918.

Holle, M., *cf. sub* Forest Research Institute, Buitenzorg.

Hollrung, Udo Max

(1858, Hosterwitz on the Elbe, near Dresden, Germany; 1937, Halle a/Saale, Germany), was educated at Leipsic (Ph. Dr); in 1882 appointed Assistant at the Agricultural Institute, Halle a/Saale; in 1889 Director of the Institute for Plant Protection there, with the honorary title of professor; from 1905–24 Lecturer in Plant Diseases at Halle University, in 1924 appointed Professor.

He undertook the botany department of an expedition under the auspices of the German New Guinea Company under command of Dr SCHRADER (see there).

He is commemorated in the genus *Hollrungia* K. SCHUM. and in several plant species.

ITINERARY. *1886–87.*[1] Former *Kaiser-Wilhelmsland* (= *NE. New Guinea*): Finschhafen (Apr. 19, *1886*); exploration of the hinterland; excursion to the Gulf of Langemak (May 10); Bubui Valley (beginning of June); Gulf of Selang (July 10), Waulu Mt. (11), Bo-Spitze (= Point), coast; Bogidu, Sattelberg, Kaluèng River; sailing from Finschhafen (24) *via* Konstantinhafen and Hatzfeldhafen to the mouth of the Augusta (= Sepik) River (29), ascending the latter till Aug. 6; back at Finschhafen (13).[2] At the end of Sept. arriving for a longer sojourn at Hatzfeldhafen; setting out (beginning of Nov.) for an exploration of the region E of that place to Cape Gourdon; trip to the Regenberg (= Ulum Bèbi, S of Hatzfeldhafen); coast region W of Hatzfeldhafen; in the beginning of *1887* to Finschhafen again; to Konstantinhafen (Jan. 31), till March 31 exploring the region near Astrolabe Bay between Cape Maragun and Friedrich Wilhelmshafen.[3] Bivouac NE of the village Bagili (approx. opposite Juno Isl.) (Apr. 1–15); marching along the coast to Cape Croisilles; region between Alexis-Hafen and the Gabaron (22–28); neighbouring mountain ridge (May 1–9); to Finschhafen (13), and to Butauèng (Langemak Bucht) (May 19–June 1), visiting Mésuing.[4] Sailing in the 'Samoa' (June 24) for the exploration of the basin of the Augusta River: Konstantinhafen (26), Hatzfeldhafen (27), mouth of the Augusta River (28); ascending the river till July 6; bivouac at kp. Tsenap (= Zenap) (8); the 'Samoa' returned to

Finschhafen (Aug. 20) and the members of the expedition were put ashore at Malu, part of the way downstream, making camp; Nov. 7 the expedition was taken aboard the 'Ottilie'; *Purdy Islands* (Nov. 12–15); *via Bismarck Archip.: Nusa Isl., Mioko,* Matupi and Ralum back to Finschhafen



HOLLRUNG

(arrival on the 25th).[5]—Before returning to Europe he visited Melbourne, Sydney, Buitenzorg (*W. Java*), *Singapore* and Hongkong.

COLLECTIONS. *Herb. Berl.:* 927 phanerogams from *New Guinea*[6] and some *Fungi;* various fruits and wood samples for the *Show Mus. Berl.* Duplicates in *Herb. Kew:* 364 *nos; Herb. Hamburg:* 100 *nos;* some in *Herb. Bog.; Herb. Bot. Gard. St Petersb.* (= *Leningrad*): 203 from *N.G.; U.S. Nat. Herb. Wash.:* 9 *N.G. nos; Herb. Melbourne.*

LITERATURE. (1) Report of the expedition in Nachr. Kais. Wilh. Land. 4, 1888, p. 183–237.

U. M. HOLLRUNG: 'Vegetationsverhältnisse von Hatzfeldhafen' (*l.c.* 3, 1887, p. 67–69); 'Das deutsche Schutzgebiet in der Südsee' (Globus 54, 1888, p. 305–311, 321–325, 337–341); 'Kaiser Wilhelmsland und seine Bewohner' (Verh. Ges. Erdk. Berl. 15, 1888, p. 298–314); several 'Botanische Berichte' scattered in Nachr. Kais. Wilh. Land, the most important one in *l.c.* 4, 1888, p. 197–223.

(2) *cf.* Nachr. Kais. Wilh. Land 2, 1886, p. 5, 84, 87, 89–90, 121–126, 128.

(3) *cf. l.c.* 3, 1887, p. 130, 135–143, 149, 178 and *l.c.* 4, 1888, p. 184.

(4) *cf. l.c.* 3, 1887, p. 149, 178–189.

(5) *cf. l.c.* 3, 1887, p. 189–192; *l.c.* 4, 1888, p. 23–32. On the Purdy Islands *cf.* HOLLRUNG in *l.c.* 4, 1888, *p.* 32–34.

(6) On the expedition, collections and results *cf.* K. SCHUMANN, Nachr. Kais. Wilh. Land, 1889, p. iii–v.

K. SCHUMANN: 'Die Flora von Kaiser Wilhelmsland' (Beih. z.d. Nachr. Kais. Wilh. Land 1889, p. 1–137); *cf.* also ENGL. Bot. Jahrb. 9, 1888, p. 189–223.

BIOGRAPHICAL DATA. SCHUM., Nachtr.z.Fl.d. Deutsch. Schutzgeb. i.d. Südsee 1905, p. 26; Arb. phys. angew. Ent. Berlin-Dahlem 4, 1927, p. 246; BACKER, Verkl. Woordenb., 1936; Chron. Bot. 4, 1938, p. 71; KÜHN-Archiv 44, 1938, 2 pp. + portr.

Holman, Richard Morris

(1886, Pittsburgh, Penn., U.S.A.; 1935, Berkeley, Cal., U.S.A.), plant physiologist, educated at Stanford, and Leipsic (1912–14); Dr's degree in California in 1915. One of the original members of the College of Agriculture in the Philippines,[1] staying there from *1909–12.* After his return to the U.S.A., at Michigan, Wabash College, and since 1920 at Berkeley in California, finally as Associate Professor.

He is commemorated in *Melastoma holmani* ELMER.

COLLECTIONS. *Herb. Manila:* 192 *Philip.* plants (pres. *1911/12*), from Mt Maquiling (coll. Apr. *1911*) and other localities in *Luzon.* According to MERRILL he sold the duplicates.

LITERATURE. (1) *cf.* ELMER Leafl. Philip. Bot. 8, 1919, p. 3089–3090.

BIOGRAPHICAL DATA. Amer. Men of Sci. ed. 3–5; Madroño 3, 1935, p. 144–145.

Holmberg, P. J.

in the Land Office, Malacca; in 1891 in charge of the Malacca forests, when he collected trees for RIDLEY (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Probably* in *Herb. Sing.*

Holstvoogd, Coenraad

(1897, Zaandam, N.H., Holland; x) schoolteacher at Zaandam, 1915–23; subsequently studying biology at Amsterdam University, passing for K IV in 1928 (Ph. Dr in 1936); teacher in natural history and chemistry in the D.E.I. from 1928 onwards, interrupted by internment during the war; in 1947 appointed Director of a secondary school at Batavia.

COLLECTING LOCALITIES. *W. Java. 1930–42.* In the vicinity of Bandoeng, Dago Fall, G. Tangkoeban Prahoe, Kawah Kamodjan, G. Patoeha, Kawah Manoek, G. Papandajan, Tjibodas and G. Gedeh.—*1936–38.* In mangrove forest W of Batavia.

COLLECTIONS. 700 to 1000 plants (about 2000 specimens) in *private herbarium.*

Holten, Petrus Antonius Hubertus

(1861, Maasbree, L., Holland; 1918, Bandoeng, Java), entered the D.E. Indian Army in 1887 as a 2nd lieutenant of the Infantry; retired with the rank of captain in 1907. From 1907–early in 1909 Acting Curator of the Mountain Garden at Tjibodas (W. Java).

COLLECTING LOCALITIES. *1906. N. Sumatra:* Atjeh, with VAN DAALEN expedition (see there).—

? .... *Centr. Sumatra:* Moeara Tembesi in Djambi; *SW. Sumatra:* plateau of Wai Tenong, E of Kroei (Benkoelen).—*1908–1909. W. Java:* Tjibeureum on the slope of G. Gedeh, and maybe from other localities near Tjibodas.—*1917. W. Java.*

COLLECTIONS. *Herb. Bog.:* some plants from Tjibeureum, *W. Java* (coll. betw. 1907–09).

Living orchids *etc.* from *Sumatra* and *Java* in *Hort. Bog.*

Holtermann, Carl

(1866, Solvorn, Norway; 1923, Berlin, Germany), botanist who took his Ph. Dr's degree in 1893 at Bonn; he made a voyage to the tropics in 1895/96, visiting Ceylon, *Borneo*, *Singapore*, and *Java*. He stayed in *Java* from July *1895*–May *1896*, working for some time in the Foreigners' Laboratory at Buitenzorg on the study and culture of different *Fungi*.[1] Later he was for a longer sojourn in Ceylon, making comparative studies with Java.[2] Professor of Botany at Berlin University.

He is the author of some books,[3] and of papers on *Fungi*.

COLLECTIONS. *Herb. Berl.: Fungi* in spirit. Possibly phanerogams were collected too.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 20; and BOEDIJN in *l.c.* p. 106, 109.

(2) *cf.* Sitz. Ber. Kgl. Preuss. Akad. Wiss. 1902.

(3) *e.g.:* 'Mykologische Untersuchungen aus den Tropen' (Berlin 1898); 'Der Einfluss des Klimas auf den Bau der Pflanzengewebe. Anatom.-physiol. Untersuchungen in den Tropen' (Leipzig 1907); 'In den Tropenwelt' (Leipzig 1912).

BIOGRAPHICAL DATA. Ber. D.B.G. 41, 1923, p. 235 (1).

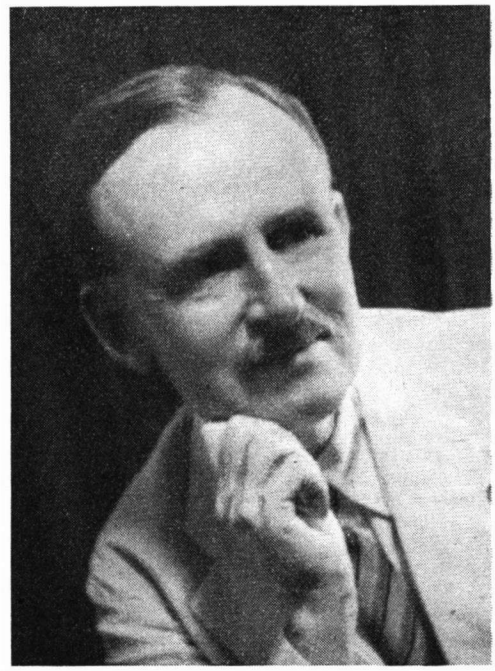
Holttum, Richard Eric

(1895, Linton, Cambridgeshire, England; x), studied botany at Cambridge; in 1921 a member of the West Greenland expedition with Prof. SEWARD; Assistant Director of Gardens, Straits Settlements, 1922–25, afterwards Director.

He is specially interested in pteridophytes; author of many papers dealing with ferns, orchids, flower biology, *etc.*

Sterculia holttumii RIDL. was named after him.

COLLECTING LOCALITIES.[1] *1922. Malay Peninsula.* With I. H. BURKILL (Sept. 15–Oct. 11) visiting Fraser Hill, Kuala Lumpur, *P. Penang*, Prov. Wellesly, Port Swettenham; excursion (Nov. 15–Dec. 5) to Centr. Johore, G. Lambak; Negri Sembilan, G. Tampin and G. Angsi.—*1923.* G. B(e)lumut in Johore (May 23–31);[2] Fraser Hill (Aug. 25–Sept. 17).—*1924. Sumatra East Coast:* Brastagi (Sept.); *Malay Peninsula:* G. Pulai in Johore (Nov.).—*1925.* Kedah Peak (March 31–Apr. 2); G. Panti (Apr. 11–13); Kuala Trengganu and neighbourhood (May 6–20), at *Pulau Kapas etc.; Langkawi Isls* (Aug. 17–31): *P. Langkawi* and *P. Dayang Bunting.*—*1926.* G. Panti in Johore (Febr.); *Penang* Hills at various times; *W. Java* (Aug.): Buitenzorg and Tjibodas.—*1928. Malay Peninsula:* short expedition to G. Muntahak and the upper tributaries of the Pelepah River in SE. Johore (March); G. Tahan (Aug. 19–Sept. 10: collected near the Tahan and Teku rivers, *etc.*).—*1929.* Fraser Hill (10 days' stay in March).—*1930.* Cameron Highlands (Apr., fortnight's stay at Tanah Rata); Mt Ophir (at Easter) with F. VERDOORN.—*1931.* Pahang, at various localities between Men-



HOLTTUM

tabak and Tembeling (Apr.); swampy forest bordering the Sg. Endau in Johore (July); Cameron Highlands (Sept.); *Brit. N. Borneo:* joining the CLEMENS Expedition (see there) on the slopes of Mt Kinabalu (Nov.–Dec.).—*1932. Malay Peninsula:* trip to S. Johore with CORNER.—*1933. W. Sumatra* (Benkoelen Res. and Sumatra West Coast in Febr.): Mt Dempo, Korinchi Peak (= G. Kerintji; Febr. 13), Mt Merapi (19), Kamang Mts (21), Mt Singgalang (23); *Malay Peninsula:* short visit from *Penang* to the vicinity of kp. Naka, Kedah (Sept.).—*1936.* Cameron Highlands (May).—1937. Sedili River in Johore (June).—*1939.* Sepang, Selangor (June) in the coastal country; Fraser Hill (Dec.).—*1946.* A fortnight in the Cameron Highlands (Aug.); by car to the north of the Malay Peninsula (*c.* Oct.).

COLLECTIONS. *Herb. Sing.*, in the Singapore Field (S.F.) Number series.[1] The collection of Mt Kinabalu (*Br. N. Borneo*) amounts to 300 ferns,[3] mosses[4] and other plants. Dupl. in *Herb. Kuala Lump.; Herb. Bog.:* from *Borneo* and *Sumatra*, also other ones; *Kew* (pres. 1923); *Manila:* 95 *nos* (pres. 1935); *U.S. Nat. Herb. Wash.:* 114 dupl. *Borneo* and *Mal. Pen.*, and some ferns.

LITERATURE. (1) Data extracted from the Annual Reports of the Botanic Gardens, Singapore, and from BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5, *etc.*

(2) R. E. HOLTTUM: 'The vegetation of Gunong Belumut in Johore' (Gard. Bull. Str. Settlem. 1924, p. 245–257, 3 pl.).

(3) *cf.* HOLTTUM & CHRISTENSEN: 'The ferns of Mt Kinabalu' (Gard. Bull. Str. Settlem. 7, 1934, p. 191–324).

(4) *cf.* H. N. DIXON in Journ. Linn. Soc. Bot. Lond. 50, 1935, p. 57–140, pl. 1–4.

BIOGRAPHICAL DATA. Gard. Chron. 103, 1938, p. 192, w. portr.

Holub, Hans, *cf. sub* Forest Research Institute, Buitenzorg.

Hombron, Jacques Bernard

(1798* or 1800**, Paris, France; 1852, between Senegal and Europe o/b a tradingship), surgeon-botanist with a French expedition (see below) under command of DUMONT D'URVILLE (see there). In 1851 he was stationed at Senegal, from where invalided home, passing away during the voyage.

Some plants were named after him.

ITINERARY. *Voyage in 'L'Astrolabe et La Zélée', 1837–40.*[1] Sailing from Toulon (Sept. 7, 1837); Teneriffe, S. America, South Sea Islands; *Philippines: S. Mindanao* (Jan. 21, *1839*); past the Sangihe Isls to the *Moluccas: Ternate* (Jan. 29–31, climbing the Peak), *Ambon* (Febr. 5–18; visit to the mountains in the NE. part),[2] *Banda group* (21–24, *e.g. P. Pisang* and G. Api); sailing for Australia, Port Essington; *Aroe Islands:* anchoring near Dobo (*P. Wamar*, Apr. 17), making trips to Wakan (= *? Wokam*), *Trangan, etc.;* sailing (21) for *SW. New Guinea* (Vogelkop): Triton Bay and Fort du Bus (Apr. 23–29); *E. Ceram:* Waroe (May 7–8); *SW. Celebes:* Makassar (May 22–27); *S. Borneo:* near Bandjermasin (June 2); *W. Java:* Batavia (9–18, of which 15–17 at Buitenzorg); *Singapore* (June 27–July 1); *W. Borneo:* Sambas (July 8); *Philippines: Solo* (= prob. *Sulu*) *Isls*, Bewan (21–24); *Mindanao*, Samboangan (= Zamboanga) (July 28–Aug. 5); sailing along the coast of *E. Borneo* (some times going ashore, on Sept. 1 *etc.*); *P. Laoet* (SE of Borneo) (Sept. 14); *Java:* Semarang (24–29), Batavia (Oct. 4–5); *S. Sumatra:* Lampong Distr., on the road of Radja Bassa (8–9); Tasmania, Southsea, Auckland Islands, *etc.;* Loyalty Isls; the Louisiades; *S. New Guinea:* Torres Strait (May 29–June 11, *1840*), visiting *Warrior Isl. etc.*; *Timor:* Koepang (June 21–25); *via* Bourbon and St Helena returning to Toulon (Nov. 6, 1840).

COLLECTIONS. *Herb. Paris;*[3] dupl. in *Herb.* DELESS. (*Geneva*). During the expedition some plants were collected by DUMONT D'URVILLE, GUILLOU, and JACQUINOT (see those). See also *Addenda.*

(*) According to BACKER, Verklarend Woordenb., 1936.

(**) According to Hist. du Voyage Astrolabe & Zélée 1, 1841.

HOMBRON published part of the zoological results of the expedition too.

LITERATURE. (1) J. S. C. DUMONT D'URVILLE: 'Voyage au Pôle Sud et dans l'Océanie sur les Corvettes L'Astrolabe et La Zélée, 1837–1840'. Histoire du voyag (Paris 1841–46, 10 vols; 2 vols atlas by J. DUMONTIER, 1844).

cf. also liter. *sub* GUILLOU.

(2) *cf.* extract from his journal 'Course dans les montages d'Amboine *etc.*' (Ann. Marit. et Colon. 28[3], partie non officielle, 1843, p. 391–419).

(3) J. B. HOMBRON & H. JACQUINOT: 'Botanique du voyage *etc.*' (Paris 1845–53 + atlas). J. F. C. MONTAGNE: 'Plantes cellulaires' (vol. 1 l.c., 1845); J. DECAISNE: 'Plantes vasculaires' (vol. 2 *l.c.*, 1853).

cf. Notices on the plates of the botanical part in HOOK. Lond. Journ. Bot. 3, 1844, p. 127–130, and *l.c.* 4, 1845, p. 28–30.

B. D. JACKSON: 'Note on the botanical plates of the Expedition of the "Astrolabe and the Zélée"' (Journ. Bot. 26, 1888, p. 269–272).

A. FINET: 'Orchidée nouvelle d'Amboine' (Not. Syst. 2, 1913, p. 253–255).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Home, Capt. Sir James Everard

(1798, ? ; 1853 or 1854, Sydney, N.S.W., Australia), entered the Navy in 1810; in 1841 he was appointed to the 'North Star' and employed on the East Indian Station, engaged in the Chinese war; later in New Zealand.

He corresponded with Sir W. HOOKER and ROBERT BROWN and collected plants which he brought home whenever his duties allowed.

Santalum homei SEEM. was named in his honour.

COLLECTIONS. *Herb. Brit. Mus.:* 141 plants from the E. coast of China (pres. 1843–44) and 1286 plants from Australia and the Pacific (pres. 1846–53); *Herb. Kew:* from Australia and New Zealand.

According to FORBES[1] he collected some plants in *Timor* (*Lesser Sunda Isls*) in *1843*, during the voyage home from China.

LITERATURE. (1) *cf.* 'Wanderings *etc.*', Prodromus florae timorensis, p. 498.

BIOGRAPHICAL DATA. CURTIS' Bot. Magaz. Dedic. 1827–1927, p. 79–80, w. portr.; in Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931.

Hommes, F.

(drowned during World War II on a transport of P.O.W.'s), manager of the s.f. Gondangwinangoen, subsequently taking over the management of a lime-kiln at Kates, Blitar (E. Java); on European furlough and after his return in 1939 manager of the s.f. Kremboong. In May 1940 interned on account of his political opinions.

COLLECTIONS. *Herb. Pasoer.: 6 nos* from Djokja and Soerakarta in *Centr. Java* (coll. *1926*).

Hondius

of Tjikadjang, S of Garoet, *W. Java*, sent some plants to *Hort. Bog.* in *1874.*

Hoogerwerf, Andries

(1907, Vlaardingen, Z.H., Holland; x), came to Java in 1931 as a taxidermist of the Zoological Museum at Buitenzorg. Since 1937 he is Officer for Hunting and Nature Preservation Affairs at the Bot. Gard. Buitenzorg.

Author of mostly ornithological papers.

COLLECTING LOCALITIES (botanical). *W. Java:* G. Tjeremai (Nov. 26, *1932*); G. Salak and G. Soemboel (*1934*).—*1935. E. Java:* Sidoardjo (March); *W. Java: P. Amsterdam* (Oentoeng Djawa, Bay of Batavia) (July 28).—*1936. P. Middelburg* (Bay of Batavia, Aug. 2); *P. Doea* (Bay of Bantam, May).—*1937.* Oedjoengkoelon (Nov.);[1] Danau Tjiharoes (Dec. 5–6).—*1938.* Oedjoengkoelon (May 1–9);[1] *Moluccas: G. Api* (Banda group) (Aug. 2–18).[2]—*1939. W. Java:* Tjabang Boengin, Tjitaroem Delta in Krawang; Oedjoengkoelon (May 7–9); *Prinsen Isl.* (May 10); *E. Java: Noesa Baroeng* (S of Besoeki Res.) (July 4) and the S. coast in the neighbourhood of Kandangan Bay.—*1941. Centr. Java:* mountain plateau near Igor Klantjing on the slope of G. Slamat (July); *E. Java:* G. Baloeran,[3] *e.g.* Tegal Kramat (Nov. 10), Bay of Masigit (11), Tegal bekol (12), Kelor and G. Montor (12), Glinserum (14).

COLLECTIONS. *Herb. Bog.:* about 360 *nos;* not numbered in succession.

LITERATURE. (1) A. HOOGERWERF: 'Bij de badaks en bantengs in het wildreservaat Oedjoeng Koelon' (Natuur in Indië 1937, p. 75–82, w. ill.); 'Honderd uren de "ongeziene" gast der bantengs in Oedjoeng-Koelon' (Trop. Nat. 27, 1938, p. 25–35, 7 fig.; *l.c.* p. 39–47, 7 fig.; *l.c.* p. 64–72, 6 fig.; *l.c.* p. 77–86, 6 fig.); 'Uit het leven van den gevreesden "gestreepte"' (Trop. Nat. 28, 1939, p. 4–13, 6 fig.); 'Wildreservaat Oedjoeng-Koelon. De wildstand in Java's schoonste natuurpark' (11e Versl. N.I. Ver. t. Nat. Besch. 1936–38, 1939, p. 172–213, fig. 34–52).

(2) A. HOOGERWERF: 'Naar den Vuurberg. Een bezoek aan het natuurmonument Goenoeng Api in de Banda Zee' (11e Versl. N.I. Ver. t. Nat. Besch. 1936–38, 1939, p. 316–333, fig. 119–135); 'Waar stoere vliegers samenkomen. Goenoeng Api, vogelparadijs in den waren zin des woords' (Trop. Nat. 28, 1939, p. 27–34, 6 fig.; *l.c.* p. 41–48, 7 fig.; *l.c.* p. 82–87, 6 fig.; *l.c.* p. 107–113, 7 fig.; *l.c.* p. 127–137, 13 fig.; *l.c.* p. 150–158, 10 fig.).

(3) A. HOOGERWERF: 'Het wildreservaat Baloeran' (Tectona 38, 1948, p. 33–49).

Hoogkamer, Capt.

veterinary surgeon; he collected fodder grasses at Batavia, *W. Java,* in *1900.*

COLLECTIONS. *Herb. Bog.:* 38 *nos* of grasses.

Hoola van Nooten, Mrs

a resident of Batavia, who sent cultivated plants to *Hort. Bog.* in the years *1872–73.*

She is probably identical with Mrs BERTHA HOOLA VAN NOOTEN-VAN DOLDER, authoress and paintress of 'Fleurs, fruits et feuillages choisis de la flore et de la pomone de l'île de Java, peints d'après nature' (Bruxelles 1863, 36 *tab. col.*).

Hooper, James

(? , ? ; 1830 or 1831, at sea between Batavia and Holland), for 6 years Chief Gardener in Kew Gardens; he accompanied the embassy of Lord AMHERST to the imperial court of Peking in 1816, at the recommendation of BANKS. On the return voyage in 1817 the frigate 'Alceste' was wrecked near Poeloe Liat between Banka and Billiton. They proceeded on another ship to Batavia, where HOOPER was appointed Curator of the Buitenzorg Botanic Gardens in 1817 on the suggestion of REINWARDT. In the beginning of Dec. 1830 he went on sick-leave to Europe.

Acacia hooperiana ZIPP. and *Rhaphistemma hooperiana* DECNE were named after him.

COLLECTING LOCALITIES. *W. Java:* Koeripan, in *1824* during the tour of inspection of BLUME (see there). HOOPER joined the party in March at Romping (staying till Apr. 1) and subsequently made a trip to Koeripan.

MERRILL cites in his Enum. Born. Pl. 1921 a *Calamus blumei* BECC. collected in *Dutch Borneo* by a HOOPER. This may refer to JAMES HOOPER, if so he must have collected the same when returning from China in *1817.*

COLLECTIONS. *Herb.? Leyden;* if so, probably but a few plants. No plants ever arrived at Kew.

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 36, 1898, p. 268; BACKER, Verkl. Woordenb., 1936.

Hoornstra, Alexander

(1894, Magelang, Java; x), since 1912 'Boscharchitect' in the D.E. Indian Forest Service; for many years stationed in the teak districts of Java, in Oct. 1924 transferred to Central Celebes (Malili), in June 1935 to Soembawa (Bima), and since 1940 stationed in Java again. In 1946, after the Japanese occupation, he was reappointed in Timor; he retired at the end of the year.

COLLECTING LOCALITIES. *Centr. Celebes:* Malili subdiv. (*1925–29, 1933–35*).

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg:* extensive collections; *Herb. Bog.:* dupl. and some herbaceous plants.

Hoover, *cf. sub* VORE, DE

Dennstaedtia hooverii CHRIST was named after him.

Hooykaas, J. C. F.

(1874, Rotterdam, Holland; x), officer who joined the Dutch Navy in 1898, finally vice-admiral; in 1935 Head of the department of Hydrography; retired in 1930.

COLLECTIONS. He collected living orchids in *Sumatra West Coast* (Agam) and in the *Mentawei* (*P. Siberoet*), and *Pagai Islands.* Cult. in *Hort.* JACOBSON (Fort de Kock), from where material to J. J. SMITH, *Herb. Bog.*[1]

LITERATURE. (1) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 12, 1932, p. 134.

Hope

is cited by MERRILL in Enum. Born. Pl. 1921 as

the collector of *Arachnis lowei* (LINDL.) RCHB. *f. var. rohaniana* (RCHB. *f.*) J.J.SM. in *Borneo*.

We know nothing about his identity; it seems improbable that he should be identical with CHARLES WILL. WEBLEY HOPE, of whom 29 ferns from North India are preserved in Herb. Kew (pres. 1889); *cf.* also *sub* HUPE, as the name may have been misread.

Horner, Ludwig

(1811, Zürich, Switzerland; Dec. 7, 1838, Padang, Sumatra), surgeon-geologist who was educated at Heidelberg, Germany; in 1835 appointed Medical Officer in the D.E. Indian Army and member of the 'Natuurkundige Commissie' (Commission for Natural Sciences). In the latter function he made geological investigations in several islands of the Malay Archipelago.[1]

Several plants were named in his honour.

ITINERARY. *1835. W. Sumatra.*[2] Starting in the environs of Padang, visiting the Apenberg (Bt Padang), trips to the W. side of the Padang coastal hills, Ajer-manis, Oedjoeng Batoe-poetih, *P. Pisang ketjil*, *P. Pisang-gedang*, *P. Bindalang*, excursions to the main range G. Melintang and northward to the banks of the Oedjong Karang River, Bt Nengalo; by sea to Indrapoera, Brandewijn Bay, Boengoes Bay (staying 2 months), some smaller bays and Setan or Hout Bay and various islets (*e.g. P. Marak*), bays of Salidah and Tjin(g)ko, *P. Tjin(g)ko ketjil* and *besar*; sailing up the Indrapoera (*cf.* also *sub* KORTHALS); back to Padang by sea (end of July); journey from Tapanoeli northward along the coast to Sokam (= prob. Pasarsorkam), visiting the *Marsalah group* (= *P. Morsala*, Moesala or Mansalar).—*1836. W. Java:* G. Gedeh (May); Bantam (*cf. sub* KORTHALS and S. MÜLLER). *SE. Borneo* (Aug.–Dec.; *cf. sub* KORTHALS and S. MÜLLER).[3]—*1837. N. Celebes* (according to BACKER, Verkl. Woordenb., 1936). *Batoe Islands*, W of Sumatra (Sept. 13–Oct. 2).[4]—*1838. W. Sumatra.*[2] From Kajoe Tanam (Febr. 1) to Plateau of Agam (Ambatjan Pass); G. Merapi (Febr. 8–14, not on the summit); Fort v. d. Capellen (20); Lima Kaum (21–24, G. Besi on the 22th); to Telaweh (25) in the Ombilin Valley; Tandjong Ampalo (26); Fort Boeah Pandjang (27–28); *via* Marapalam Pass to Fort v. d. Capellen; to Tandjong Alam (March 3).[5] Summit G. Ophir (May 14 of this year?).[6] From Padang (July)[2] by sea to Tapanoeli; Ajerbangi (= Aierbangis), making excursions in the environs, *P. Pangalarang*, *P. Pandjang*, *P. Pangka;* Natar (= Natal; beginning of Aug.) and vicinity; *P. Ilir;* Bay of Tapanoeli and *islets* in it; the interior of Tapanoeli: Loemoet, Batang Angkolah and proceeding (Aug. 27) to Pitjar-kolling, Goenoengtoea, Pertibi (= Portibi), Padanglawas Distr., back to Pitjarkolling (Sept. 3) and following the valley of the Lower Angkolah (7) and Mandaheling, *via* Fort Elout, Kota Nopan (= ? Hoetanopan), Botoeng, to Rau (= Raoe; Sept. 17); setting out (23) to Pakantan; some villages in the SW. part of Mandaheling: Kota Poenkoet, Kota Paloepoe, Kota Nopan, Simpang Tolang (30), Menambing (Oct. 3), Botoeng (4), Simpang-datar, especially for a visit to the gold-diggings; Oct. 7 back to Kota Nopan; *via* Ajer Nanali (12) to Moearasoma (14), Tapoes (17), to Natar (= Natal; 18) from where by sea to Padang, HORNER being ill already at his arrival.

COLLECTIONS. *Sumatra* plants after his death in *Herb.* JUNGHUHN = *Leyden;* some dupl. in *Herb. Bog.* To our knowledge he made botanical collections only in *Sumatra*.

Several MSS, notes, and diaries, in the municipal library of Zürich, Switzerland.

LITERATURE. (1) Author of mainly geological and mineralogical papers, published in Verh. Bat. Gen. K. & W. 1839 (on Borneo, Bantam and G. Gedeh), in Tijdschr. Nat. Gesch. & Physiol. 4, 1938, p. 359 (on Borneo), *etc.*

(2) S. MÜLLER & L. HORNER: 'Fragmenten uit de reizen en onderzoekingen in Sumatra' (Bijdr. Taal-, Land- en Volkenk. N.I. 2, 1854, p. 212–271; *l.c.* 3, 1855, p. 65–72, 193–249, 313–388). Herein the 2nd journey to Sumatra is dated in 1835, overlapping the 1st in the month of July *etc.;* in the same publication is mentioned a 'redoute' at Pitjarkolling which was not built before Dec. 1837 and was in use by the army when the party was there in Aug.–Sept.; so we may assume that the 2nd journey took place in 1838, and was *not* accompanied by S. MÜLLER who had returned to Europe in 1837.

(3) L. HORNER: 'Verslag van een geologisch onderzoek van het Zuid-Oostelijk gedeelte van Borneo' (Verh. Bat. Gen. K. &. W. 17, 1839, p. 89–119).

(4) L. HORNER: 'De Batoe-eilanden ten Westen van Sumatra' (Tijdschr. Neêrl. Ind. 3^1, 1840, p. 313–371).

(5) L. HORNER: 'Reizen over Sumatra' (Tijdschr. Ind. Taal-, Land- en Volkenk. 10, 1851, p. 322–374).

(6) L. HORNER: 'Beklimming van den berg Ophir' (Tijdschr. Neêrl. Ind. 2^2, 1839, p. 605–622).

BIOGRAPHICAL DATA. 17te Neujahrsblatt z.B. des Zürcher Waisenhauses 1854; Encylop. N.I. 2, 1918; in the Zürcher Taschenbuch 1919 and 1926, p. 173 *seq.*; Mitt. d. Gruppe Nied. Ind. d. Neuen Helvet. Ges. 5, 1927, p. 10–13, w. portr.; BACKER, Verkl. Woordenb., 1936.

Hornstedt, Claës Fredric

(1758, Linköping, Sweden; May 1809, Helsingfors or Sveaborg, Finland), surgeon-naturalist, educated at Uppsala, pupil of THUNBERG. He travelled in N. Europe, and in 1783–84, at the instigation of THUNBERG, *via* the Cape to Java with financial support of the Academy at Uppsala.[1] During his sojourn in Java he was offered a monthly allowance by the Batavian Society of Arts and Sciences on account of his knowledge of natural history. He returned to Europe in 1785 with rich collections in the fields of natural history and ethnology. He stayed for some time in Holland, France, and Denmark, and took his medical degree at Greifswald in Germany in 1786.[2] Subsequently he returned to Sweden, where he was appointed Curator of the Museum and Lecturer in Natural History at Linköping in 1787. In 1796 he entered the service

of the Swedish Navy, and in 1908 was made a prisoner by the Russians during the Swedish-Russian war. Subsequently appointed Chief Physician of a Russian hospital at fort Sveaborg.

He is commemorated in the genus *Hornstedtia* RETZ.

ITINERARY.[1] Sailing from Göteborg (Febr. 20, *1783*) in the Indiaman 'Sofia Magdalena', *via* the Cape of Good Hope, to *Java:* Anjer on the W. coast of Bantam (July 24), Bantam (25), Batavia (since July 30); setting out on an inland trip (Sept. 4), accompanied by a Frenchman; in Oct. or Nov. by boat to some islands near Java, visiting *P. Onrust, P. Kuyper, P. Dammer, P. Baru, P. Menjangan, P. Dammer Kitjil, P. Putri, P. Ubo Kitjil, P. Ontong Djawa, P. Rambu, P. Atrada;* on March 1, *1784* he writes a letter, stating having been ill; on Apr. 24 he writes that he visited parts of Mt Salak and Gedeh (Megmedon = Megamendoeng); sailing (July 22) on the Swedish ship 'Concordia', to Europe (on account of poor health, the departure of RADERMACHER for Holland, *etc.*); near P. Onrust (23), Angri (= ? Anjer, Aug. 12), and *via* the Cape of Good Hope and the Azores, to Amsterdam (arriving May 14, 1785).

COLLECTIONS. During his stay in *Java* he sent a *Herb. Javanense* to BERGIUS, which is now with *Herb. Bot. Bergiani* in *Herb. Roy. Acad. Sci. Stockholm* (70 species).

He made zoological and mineralogical collections too.

LITERATURE. (1) CL. F. HORNSTEDT: 'Anteckningar under en resa till Ostindien åren 1782–1786' (Skrifter utg. Svenska Litteratursällsk. i. Finland 10, 1888, p. 75–176).

(2) CL. F. HORNSTEDT: 'Fructus Javae esculenti eorumque usus cum diaeteticus tum Medicus' (Thesis, Gryphiae 1786).

BIOGRAPHICAL DATA. In Skrifter utg. Svenska Litteratursällsk. i. Finland 10, 1888, p. 77–80; KROK, Bibl. Bot. Suec., 1925, p. 307–308, incl. bibliogr. (he mentions Sveaborg as the place where H. died); BACKER, Verkl. Woordenb., 1936.

Horsburgh, Rev. H.

Java plants of his were presented to *Herb. Kew* in *1856.*

G. L. JACOB in his biography of Sir J. BROOKE (see there) mentions a Reverend A. HORSBURGH, for some years a missionary in Sarawak (before 1844) and in 1853 chaplain of the Bengal Establishment at Delhi; he may be identical with the abovementioned.

Horsfield, Thomas

(1773, Bethlehem, Penn., U.S.A.; 1859, London, England), took his degree of M.D. in the University of Pennsylvania in 1798; he was a pupil of Prof. B. S. BARTON. He visited Java in 1800 as a ship's doctor and decided to return there. From 1802–10 he made extensive travels in the employ of the Dutch, and since 1811 in that of the English Government, in part of the Malay Archipelago, to make botanical, zoological and geological investigations, principally on *Materia Medica* and botany.[1] Since 1804 he was aided by the Batavian Society of Arts & Sciences, who put at his disposal a draughtsman of the Naval School at Semarang.[2] In 1819 he sailed for England and from 1820 till his death he was Keeper of the E.I. Comp. Museum in London.

Several plants of the Malay Archipelago were named in his honour.

ITINERARY.[3] *1802–03. W. Java:* neighbourhood of Batavia and the Priangan Regencies as far as the boundary of Cheribon, and the southern coast of the island, visiting Mt Guntur, Mt Tangkuban Prahu, *etc.*[4]*–1804. Centr. Java:* in the early part of the year along the N. coast from Cheribon to Tegal, Pekalongan, Semarang, visiting Mt Ungarang, Merbabu and Merapi (many plants collected at Sello); Djocja, S. coast; Solo, excursions in the neighbourhood (Mt Lawu and mud-wells of Kuwu); *W. Java:* G. Tangkoeban Prahoe (July); G. Guntur.—*1805.* From Surakarta (= Solo) (Nov. 9) to *E. Java:*[5] investigation of the Solo River; Grissee (18); Surabaya (till Dec. 12); Pasuruan; Mt Tengger; Pasuruan (till Jan. 20); Surabaya. —*1806.* In the middle of April to Banger (Bangil), Lumadjang (May); Mt Smeru and Lamongan (May); Puger and environs (beginning of June); the southern beach near Batu Ulu; Djember; G. Jang; Bondowoso; spurs of Mt Ringgit; Panarukan; excursions in the vicinity of Banjuwangi (July–Aug.): Blambangan (Sumberwaru, Badjulmati), Mt Idjen (Merapi), Ulu Pampang and to Mt Sumbulungan and Mt Ikan and 1 day in *Bali.* In the month of September lying ill at Banjuwangi; in the beginning of Oct. along the N. coast to Pasuruan (till mid-Nov.); Mt Tengger (Dec.).—*1807.* Malang Regency and neighbouring districts (Jan.); Surabaya (Febr. 3).—Short visit to *Madura;* along the N. coast to *Centr. Java:* Semarang (end of the year).—*1808.* For several months in the neigbourhood of Semarang; residing at Solo (= Surakarta) from *1808–12,* exploring the coastal mountains S of it, *etc.*—From Nov. *1812*–Aug. *1813* to *Banka* and *S. Sumatra* (Palembang).[6]—In Sept. 1813 back in *Centr. Java:* Solo.—*1814.*[7] From Surakarta (Aug. 2) to Jokjakarta (= Djokja); to the south *via* Bantul, Brossot and Kadilangu; in NW. direction (5) towards the interior *via* Bubutan, Jonno, Weddi (6); *via* Ngambal to Bedati (7); Patanaän, Kaleng, Wetton to Karang-bol(l)ong (8); visit to bird's nests caves and exploration of the neighbourhood; the 14th setting out in northern direction, halting at Rangka; Jati-Nogoro (15) and a western course to Selondokko; Banyumas (= Banjoemas) (16); visit to SW. districts of Banjoemas, *e.g.* at Maos (20) and Penggalan (21); in southern direction to Bunton (22) near the sea and Talachap (= Tjilatjap); to Sukorodsho (= Soekaradja) and Purwokerto; in W. direction (Sept. 8) to Adshibarang (= Adjibarang); return (11) to Purwokerto; Probolingo (= Poerbolinggo) (12); *via* Sukorodsho and Purwokerto to Kumutuk for an exploration of the slopes of G. Gedè (= ? Slamat; large additions to his herbarium); Segalo, Kutto-waringin, Bandshar (= Bandjar) (Oct. 18); northward to Karang-Kobar Distr. (19), Pagger-pella; Karang

Kobar (20), Kali-lunyar (= Kaliloendjar) (21), Nusupan (22), Batur (23); eastward (27) *via* Konang near G. Di(y)eng and Prau, descent of G. Pra(h)u (collecting plants); Kayu-rangkang, Kalibebber; to Kerteg (31); to Jittis and Pakkiswing (Nov. 2), Kamantran and Koppeng; in E. direction to Kali-Gandu; return to Souracarta (4).—*1815.* In the middle of the year to *E. Java:* Kediri, Mt Kloet and back to Solo (Nov. 2).—*1816. Centr. Java:* visiting Mt Prahoe (Diëng) (Oct.), the south coast and Mt Merapi.—*1817.* Back at Solo and exploration of the neighbourhood.—*1818.* Semarang and Buitenzorg (*W. Java*).—In the middle of the year to *Sumatra:* early in July leaving Bencoolen for Padang (West Coast) with RAFFLES (see there); Isl. *Bitang(g)or* (or on the voyage home ?); Sept. 16th starting the march into the interior, Minangkabau.—At the end of the year back in *W. Java:* Batavia; Bantam (Mt Karang); Tjiandjoer, G. Gedeh; *Centr. Java:* Semarang, embarking in Jan. *1819,* arriving in London in July.

COLLECTIONS. *Herb. Mus. E.I.C. Lond.* = *Herb. Linn. Soc. Lond.: Java* (identified by MIQUEL!) and *Sumatra,* 2196 *nos* (pres. 1858/59) partly labelled by MIQUEL[8] (now in *Kew,* see below); *Herb. Brit. Mus.:* with *Herb.* BANKS (349 plants, pres. 1814–15), and 964 *nos* (list in Bot. Dept Br. Mus.) presented by the Dir. of the E.I.C. in 1858, including types *Plantae javanicae* BENNETT & BROWN;[9] *Herb. Kew:* HORSFIELD's own set from *Java,* bought at a sale, wanting the Monocotyledons and Cryptogams, and Herb. *Java* and *? Sumatra* (pres. by Linn. Soc. in 1913).[10] Some duplicates in *Herb. Bog., Utrecht, Cambridge (Java), Sing., Herb.* TURCZANINOW (*Kharkov*), *Herb. Bot. Gard. St Petersb.* (= *Leningrad*): 604 *Java* plants (pres. 1884); *Herb. Copenhagen;* and GRAY *Herb.*

A manuscript list of Javanese Plants with letters and 33 original pen and ink sketches in Libr. Brit. Mus.; original drawings of BENNETT & BROWN, Plant. Jav. rar., in Bot. Dept Brit. Museum too.

LITERATURE. (1) TH. HORSFIELD: 'The natural history of Java: including besides the flora Javana, a detailed account of the zoology and mineralogy of that interesting island' (London 1817);' Zoological researches in Java and the neighbouring islands' (London 1824); 'On the mineralogy of Java, Essay I' (Transact. Bat. Soc. Arts & Sci. or Verh. Bat. Gen. K. & W. 8, 1826, p. 139–173, 2nd ed.; 1st ed. in 1816); 'Essay on the Geography, Mineralogy and Botany of the Western portion of the Territory of the Native Princes of Java' (*l.c.* 8, 1826, p. 175–312); and papers on medicinal plants.

(2) *cf.* Verh. Bat. Gen K. & W. 7, 1814, p. iv.

(3) For Java *cf.* postscript and map in 'Plantae javanicae rariores' *l.c. sub* 7.

(4) *cf.* Transact. Bat. Soc. Arts & Sci. or Verh. Bat. Gen. K. & W. 8, 1826, p. 143 *seq.*

(5) TH. HORSFIELD: 'Over de rivier Solo en een reis naar de Oosterstreken van Java' (Verh. Bat. Gen. K. & W. 7, 1814, pt IV, p. 1–16); 'Reis naar de Oosterstreken van Java' (*l.c.* p. 17–31).

(6) TH. HORSFIELD: 'An account of the Island Banca in the East-Indies, containing the Natural History of that Island, the particulars of its tin mines, *etc.*' (London 1817); 'Verslag aangaande het eiland Bangka' (transl. by P. J. VETH from the Journ. Ind. Arch. and East. Asia 1848 and published in Tijdschr. Ned. Ind. 12, 1850, p. 192–226, 358–382; *l.c.* 13, 1851, p. 388–405 and 14, 1852, p. 321–345).

(7) *cf.* Transact. Bat. Soc. Arts & Sci. or Verh. Bat. Gen. K. & W. 8, 1826, p. 175–312; catalogue of the plants observed on *l.c.* p. 297–312.

(8) *cf.* Journ. Proc. Linn. Soc. Bot. Lond. 4, 1860, p. 197–198.

(9) J. J. BENNETT & R. BROWN: 'Plantae javanicae rariores descriptae iconibus illustratae, quas in insula Java, annis 1802–18 legit et investigavit THOMAS HORSFIELD. *Etc.*'(1838–52).With postscript and map (1855).

Some of his plants were described by MIQUEL in his 'Flora Indiae Batavae' and by TURCZANINOW in his 'Animadversiones *etc.*'.

Acanthaceae of Java by S. MOORE in Journ. Bot. 63, 1925, p. 166–170.

(10) *cf.* Kew Bull. 1913, p. 262.

BIOGRAPHICAL DATA. Verh. Bat. Gen. K. & W. 7, 1814, preface iii; Proc. Roy. Soc. Lond. 10, 1860, p. xix–xxi; Proc. Linn. Soc. Lond. 1860 (Meeting May 24th), p. xxv–xxvi; PRITZEL, Thes. Lit. Bot., 1872; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 27, 1889, p. 149, and 2nd ed. by RENDLE, 1931; Nat. Tijdschr. N.I. 21, 1890, p. 368; GRESHOFF, Nuttige Ind. planten, 1894, p. 95–96; Encyclop. N.I. 2, 1918; BACKER, Verkl. Woordenb., 1936; BOELMAN, Bijdrage t.d. gesch. v. d. geneeskruidcultuur in Ned. O.-Indië, Utrecht 1936, p. 57–65; Torreya 42, 1942, p. 1–9, incl. bibliogr.

Horst, A., *cf.* HORST, W. A.

Horst, Dirk Willem

(1846, Wehl, Gld, Holland; 1904, Amsterdam, Holland), since 1870 officer in the D.E. Indian Civil Service, from 1895–1903 Resident of Ternate. He was an orchid amateur and rendered good service to BOERLAGE and J. J. SMITH during their expedition to the Moluccas in 1900.

Dendrobium horstii J.J.S. was named after him.

ITINERARY. *1886.* In the warship 'Tromp'[1] sailing (Aug. 8) to: S. coast of *Waigeo(u), Klein Saunek* (= *? Saonek*); *NW. New Guinea,* Vogelkop: Bay of Doré (15–18); *Schouten Islands:* S. coast of *Soepiori, Wiak* (= *Biak*) (12); *P. Japen:* Bay of Ansoes (27), Bay of Seroei (Sept. 1); *P. Koeroedoe;* sailing along the N. coast; *P. Anoes* (6); *N. New Guinea:* Humboldt Bay (10), Tobadi, *Kajo Isl.;* Sept. 13 starting the voyage home, touching at *P. Roön* in Geelvink Bay, Bay of Doré (22–24); *Salawati:* Samaté (26); back in Ternate (30).—*1895.* In the 'Pelikaan'[2] to the N. coast of *New Guinea* as far as Astrolabe Bay (Sept.); in Oct. visiting Doré Bay, the W. coast of Geelvink Bay to Wendèsi (= Windehsi), Kabo, Dusnèr, and back to *Ternate.—1896.*[3] *Via P. Gebe, Waigeo(u),* Samaté and Sailolof on *Salawati, Miso(ö)l,* to *SW. New Guinea,* Vogelkop: Sekar Bay (June 16); mouth of the Insé (= Jakati, with HORST), ascending the river part of the way; back in Ternate

(30).—To *NW. New Guinea*, Vogelkop:[4] Bay of Doré (Oct.); *P. Manaswari; Mapia Islands;* Geelvink Bay; *P. Nufor* (= *Noemfoor*); *Schouten Islands: Soepiori*, S. coast of *Wiak* (= *Biak*); *P. Aberé* (= *Koeroedoe*); Tanah Merah Bay; *P. Japen* (Ansoes); *P. Ro(ö)n* (Oct. 30); Wendèsi, Wasuir on Wandamèn Peninsula; Andai and Doré; Gisser (= *? P. Geser*); *P. Aidoema* and *P. Lakahia* (near the SW. coast of New Guinea); *Ternate* (Nov. 21).—*1897.* In the 'Zeemeeuw' to *SW. New Guinea:*[5] *P. Lakahia;* eastern entrance of Kajoemerah Bay (19); *P. Lakahai* (22); Etna Bay; *P. Lakahia* (29); *Ternate.* In the 'Zeemeeuw' to *Dutch N. New Guinea:*[6] Bay of Doré, embarking on the cruiser 'Borneo' (sailing from there on Aug. 11); anchoring S of the Arimoa Islands; *P. Liki; P. (D)Jamna;* Tanah Merah Bay (14); Humboldt Bay, Tobadi; Jotëfa Bay (15), kp. Nafri (Waba) and *Isl. Metu Gâr;* mouth of the Tami River (16); Humboldt Bay; Tanah Merah Bay (3 days); *Isl.* of *Boèk* and *Madiun* and the opposite mainland; rowing up part of the way of the Witriwâi (20); *Podena Isl.;* Bay of Ansoes (S. coast of *P. Japen;* 22); Bay of Doré (till Aug. 26); *Ternate* (28). In the 'Zeemeeuw' to the N. coast of *Salawati* (Sept. 11), moving again to the 'Borneo'; Bay of Doré (12); Wendèsi; *P. Ro(ö)n; P. Japen:* Ansoes (16) and Wo(ö)i Bay (18); Bay of Doré (19); *Ternate* (21).—*1898.* In the 'Zeemeeuw" to *NW. New Guinea*, Vogelkop:[7] Bay of Doré; Andai; W. coast Geelvink Bay; Warbusi Bay; Werôr and opposite coast of Wandamèn Peninsula; delta of the Wosmimi; *P. Ro(ö)n;* Oct. 30 to Umar Bay and the mouths of the Bawé and the Jaratuar River; Doré Bay (Nov. 6); Manokwari (8).—*1899.*[8] *Banggai Islands*, E of Celebes (Nov. 23); *Soela Islands.*—*1900.* In the 'Zeemeeuw' (Apr. 8) from *Ternate* to *Salawati* (Samaté); *NW. New Guinea*, Vogelkop: *Sorong;* sailing along the N. coast; Batoe Lobang (Kalédoko, Apr. 12); *P. Hum* (13); Doré-Hum Bay (14); *Mios Soe* (*Amsterdam* and *Middelburg*) (15); Kleine (small) Geelvink Bay; Doré Bay (20); Wendèsi (22); *P. Soepiori* (Korido, 23); *Biak* (24); *Mapia Isls* (26); *Sorong* (29); SW. coast of *Salawati; Ternate.*[9]

COLLECTIONS. *Hort. Bog.:* collection of living orchids from *New Guinea* (possibly some from the *Moluccas*) (pres. 1900 to J. J. SMITH when he travelled in the Moluccas);[10] material of some of them preserved in *Herb. Bog.; cf.* also *sub* ANONYMOUS, *New Guinea.*

LITERATURE. (1) D. W. HORST: 'Rapport van eene reis naar de Noordkust van Nieuw-Guinea aan boord van Z. M. Stoomschip "Tromp"' (Tijdschr. Ind. Taal-, Land-, en Volkenk. 32, 1889, p. 217–260).

(2) *cf.* Koloniaal Versl. 1896, p. 33; Ber. Utr. Zend. Ver. N.S. 9, 1896, p. 76.

(3) *cf.* Koloniaal Versl. 1897, p. 30–31.

D. W. HORST: 'Nieuws van de Jakati-rivier' (Tijdschr. K.N.A.G. 1897, p. 124–130).

(4) *cf.* Koloniaal Versl. 1897, p. 31–32.

(5) *cf. l.c.* 1898, p. 24.

(6) *cf. l.c.* 1898, p. 24.

(7) *cf. l.c.* 1899, p. 41–42.

(8) D. W. HORST: 'Reis naar de Banggai- en Soela-eilanden. Rapport' (Tijdschr. K.N.A.G. 1897, p. 124–130).

(9) Other data extracted from WICHMANN, Entd. Gesch. N.G., in Nova Guinea.

(10) Some described by J. J. SMITH in Nova Guinea vol. 8; and Icon. Bogor. 3, *t.* 210.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Horst, (Willem) Adolf

(1881, Benkoelen, Sumatra; x), son of the former, educated at Wageningen Agricultural College (final examination in 1903); in Dec. 1915 appointed teacher at the School of Agriculture at Buitenzorg, Java; in June 1920 temporary official for the culture of fibre plants; since 1921 Consulting Agriculturist, first in Java and towards the end of 1927 transferred to Banka; he retired in 1932.

COLLECTING LOCALITIES. *1918. Sumatra West Coast:* Harau Kloof near Pajakombo. *E. Java:* G. Ardjoeno (July).—*1919. W. Java:* G. Tangkoeban Prahoe.—*1920. W. Java:* G. Tangkoeban Prahoe (Jan. 2); Indramajoe (Apr. 7).—*1921. Lesser Sunda Islands, Flores* (Sept.–Dec.): Gelimoetoe (Sept. 28), Maoemere, Reo, Badjawa (Nov. 9), Roeteng (Nov. 29), *etc.*—*1927–29. Banka:* Pangkalpinang.

COLLECTIONS. *Herb. Bog.: c.* 100 *nos.*

Material from Sumatra was presented through the intermediary of JACOBSON to *Hort. Bog.;* the Indramajoe plants were collected on behalf of C. A. BACKER.

Horst, van der

Assistant Resident of Sambas, W. Borneo.

COLLECTIONS. *Herb. Bog.:* some plants from Sambas, *W. Borneo*, numbered in the H.B. series; also in *Hort. Bog.* (pres. *1865–66*).

Hose, Charles

(1863, Witham, Hertfordshire, England; 1929, ?), went to Cambridge University, but left in the second year without a degree to accept a Cadetship in Sarawak, under Rajah Sir BROOKE (through the intermediary of his uncle Rev. G. FR. HOSE). He was stationed in the Baram District, after some time (1888) officer in charge of the same district; he served 20 years at Baram and 3 at Sibu (on the Rejang River), retiring in 1907. In 1900 he was awarded the Honorary Degree of D. Sc.

He made zoological investigations, publishing some papers on the same; author of some books on Borneo.[1]

Some plants were named after him.

ITINERARY. Febr. 4, *1884* sailing for *NW. Borneo*, Sarawak: arriving at Kuching (Apr. 15) and proceeding to Baram District.—*1891.* Setting out with A. H. EVERETT (see there) (Sept. 14) *via* the Baram River and the Tinjar to Long Sukong (17); climbing Mt Dulit (starting the 21st, Oct. 13 reaching the summit, on the 26th descending again).[2]—*1893.* Visiting Mt Dulit again.—*1894.* Mt Dulit with Rev. G. F. Hose; Mt Mulu(d); Long Lama (Oct.).—*1895.* Mt Dulit with Rev. G. F. HOSE; Mt Lambia with HAVILAND (May 21). Sept. 16

via Labuan (trip to *P. Papan* near the harbour) and Sandakan (26) to *N. Celebes:* Manado (Oct. 3); Tondano (visiting the lake), Mt Masarang (several days), Rurukan (few days), Tomohon; *Sangihe* and *Talaud Islands:* resp. at Terona (= Tahoena) and Lero(e)ng; back to *N. Celebes:* Manado, revisiting



CH. HOSE

Rurukan,[3] leaving for Borneo on Nov. 10.—*1898. NW. Borneo,* Sarawak: near the Madang Country (Nov.), between the headwaters of the Batang Kayang, Rejang and Baram rivers; Silat River; Lata River; Long Purau; visiting limestone caves on the Niah River many times.[4]—*1900.* Return from European leave to Sarawak.—After his retirement, revisiting Sarawak in *1920.*

COLLECTIONS. *Herb. Brit. Mus.:* 26 cryptogams from *Sarawak* (pres. 1894), 1631 *nos* from *Borneo* and *N. Celebes* (purch. 1900, 1902).[5] Dupl. from the Brit. Mus. in *Herb. Manila.* In *Herb. Berl.:* 675 *nos* from *Sarawak,* 43 *nos* from *N. Celebes* (pres. 1894–95); *Herb. Leyden:* dupl. *Sarawak, etc.* He also collected with HAVILAND and G. F. HOSE (see those). In *Herb. Sarawak:* coll. HAVILAND & HOSE (pres. 1901).

LITERATURE. (1) CH. HOSE: 'Fifty years of romance and research or a Jungle-wallah at large' (London; incl. appendices on collections, publications, *etc.*); 'Natural Man. A record from Borneo' (London 1926; with preface by Prof. ELLIOT and portr.); 'The Field Book of a Jungle Wallah, being a description of shore, river and forest life in Sarawak' (London 1929); 'Pagan tribes of Borneo' (with MACDOUGALL, 1912, 2 vols).

(2) CH. HOSE: 'A journey up the Baram River and the highlands of Borneo' (Geogr. Journ. Lond. 1, 1893, p. 193–208).

(3) CH. HOSE: 'A visit to Celebes' (Sarawak Gazette 26, 1896, p. 75–77, 99 *seq.*).

(4) CH. HOSE: 'In the heart of Borneo' (Geogr. Journ. Lond. 16, 1900, p. 39–59).

(5) *cf.* Monocotyledons by RENDLE in Journ. Bot. 39, 1901, p. 173–179.

Ferns by J. G. BAKER in 'On a further collection of ferns from W. Borneo, made by the bishop of Singapore and Sarawak' (Journ. Linn. Soc. Bot. Lond. 24, 1887, p. 256–261).

Mosses by H. N. DIXON in Journ. Bot. 79, 1941, p. 57–62, 72–77.

BIOGRAPHICAL DATA. In CH. HOSE, Fifty years *etc.*; portr. in CH. HOSE, Natural Man, 1926; Journ. Bot. 67, 1929, p. 344; BACKER, Verkl. Woordenb., 1936.

Hose, Ernest S.

(born 1872), son of the Right Rev. G. FR. HOSE (see there); in the Malayan Civil Service and from 1924–25, Colonial Secretary, Straits Settlements.[1] For many years he controlled the Borneo Co.'s rubber plantations in Sarawak; he took the place of CHARLES HOSE in a zoological expedition to the Natoena Islands, organized by Lord ROTHSCHILD.

Dolichos hosei CRAIB was named after him.

COLLECTING LOCALITIES. *1894. Natuna Islands* (July–Oct.): *Bunguran, P. Laut,* and some small islands.—*1917. Malay Peninsula:* Perak, G. Hijau and Telok Anson, when stationed there; *Sembilan Islands* (*1918*).

COLLECTIONS. *Herb. Kew:*[2] from *Natuna; Herb. Sing.*

LITERATURE. (1) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(2) *cf.* Kew Bull. 1896, p. 40–41.

Hose, Reverend George Frederick

(1838, Cambridge, England; 1922, Guildford, SW of London, England), chaplain in Malacca, 1868–73; in Singapore, 1874–81; Bishop of Singapore, Labuan, and Sarawak, 1881–1908. He retired from the East early in 1908.

One of the founders and first President of the Straits Branch of the Roy. Asiatic Society in 1877; author of many papers on ferns.[1]

The genus *Hosea* RIDL. and many plant species were named in his honour.

COLLECTING LOCALITIES. In various parts of the *Malay Peninsula,*[2] *e.g.* Prov. Wellesley (*1894*), Port Swettenham (Febr. *1904*), about Taiping (March 1904).—In *NW. Borneo,* Sarawak: on Mt Matang (*before 1886*), on Mt Dulit with CH. HOSE (*1894–95*),[3] and in other places in Sarawak District.

COLLECTIONS. Specially ferns, grasses and sedges.[4] The collector's own set was destroyed by white ants during his absence on leave, but a complete set is in *Herb. Sing.* He distributed duplicates to various herbaria, *e.g. Kew:* from Borneo and *Malaya,* 1886–95, 279 *nos; Herb. Calcutta:* specimens of *Malay* ferns (pres. 1879–80); *Herb. Sarawak:* 72 ferns *etc.* (pres. 1901 and earlier), 29 + 19 *Cyperaceae* (coll. with Miss G. HOSE, pres. 1903/04) and 29 + 19 *Graminae* (*ditto*).

LITERATURE. (1) G. FR. HOSE: 'A nominal list of the Flora of Mount Kinabalu' (Journ. As. Soc.

Br. N. Borneo 2, Suppl. 1896); 'Catalogue of the ferns of Borneo and some adjacent islands which have been recorded up to the present time' (Journ. Str. Br. Roy. As. Soc. *no* 32, 1899, p. 31–84); 'List of the ferns of Penrissen' (*l.c. no* 33, 1900, p. 25).

(2) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(3) *cf.* Kew Bull. 1896, p. 40.

(4) J. G. BAKER: 'On a collection of ferns made in North Borneo by the Bishop of Singapore and Sarawak' (Journ. Linn. Soc. Bot. 22, 1886, p. 222–231); 'On a further collection of ferns from W. Borneo, made by the bishop of Singapore and Sarawak' (*l.c.* 24, 1887, p. 256–261); 'On a third collection of ferns, *etc.*' (Journ. Bot. 26, 1888, p. 323–326; *cf.* also Journ. Bot. 29, 1891, p. 107–108).

H. N. RIDLEY: 'Grasses and sedges of Borneo' (Journ. Str. Br. Roy. As. Soc. *no* 46, 1906, p. 215–228; incl. coll. Miss G. HOSE).

BIOGRAPHICAL DATA. Journ. Str. Br. Roy. As. Soc. *no* 57, 1911, p. 1–5, w. portr.; *l.c. no* 86, 1922, p. 395; Journ. Bot. 60, 1922, p. 272–273; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; in Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Hose, Gertrude

daughter of Rev. G. FR. HOSE (see there).

COLLECTING LOCALITIES. In various parts of the *Malay Peninsula*,[1] *e.g.* about Taiping town with Bishop HOSE in March *1904.—NW. Borneo*, Sarawak (*about 1903*).

COLLECTIONS. *Herb. Sing.: Bornean* grasses (pres. 1903)[2] and probably others with those of G. FR. HOSE; *Herb. Sarawak:* grasses and sedges coll. with G. F. HOSE (see there).

LITERATURE. (1) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(2) Described by RIDLEY together with those of Bishop HOSE in Journ. Str. Br. Roy As. Soc. *no* 46, 1906, p. 215–228.

Hosokawa, T.

formerly Assistant in the University of Formosa, collected plants in Micronesia and the *Philippines* (Mt Apo, *Mindanao*), giving a description of the vegetation of Mt Apo, and of some new species and new combinations.[1]

Author of a book in Japanese on palaeobotany.

LITERATURE. (1) In Trans. Nat. Hist. Soc. Formosa 1942 (*non vidi*).

Hossel, v. (van or von)

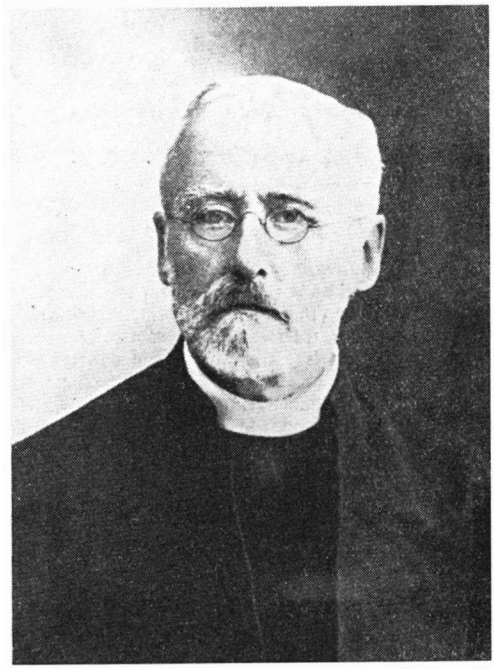
is cited as collector *pr.* Tanara (N. Bantam) in *W. Java* (*cf.* Pflanzenreich 46, p. 234). Probably misread and rightly J. C. VAN HASSELT (see there).

Hosseus, Carl Curt

(1878, Stromberg im Thale, Rhineland, Germany; x), botanist who took his Ph. Dr's degree in 1903, travelled in Thailand (Siam) in 1904–05,[1] making preliminary researches in Ceylon and the Malay Peninsula. He made botanical and ethnological collections. Later appointed Professor of Botany at Cordoba in Argentine, still filling the latter office in 1938.

Author of many botanical papers. *Viola hossei* BECKER was named after him.

ITINERARY.[2] Leaving Genoa (June 22, *1904*); staying for some time in Ceylon, *Singapore*, and



G. F. HOSE

the *Malay Peninsula*, *e.g.* visiting Semangko Pass with RIDLEY in Aug.;[3] Siam, Bangkok (Aug. 30); exploration of Siam; leaving (Aug. 5, *1905*) on a short visit to *Singapore* and the *Malay Peninsula*, specially visiting estates, *e.g.* on G. Angsi and in Negri Sembilan; back to Bangkok (Sept. 8); in Jan. *1906* returning by way of *Singapore* to Europe.

COLLECTIONS. *Herb. Berl.*[4] Material from *Singapore* in *Show Mus. Hamburg* (pres. 1904) Partly dupl. in *Herb. Leyden; Herb. Edinburgh; Herb.* DECAND. (*Geneva*).

LITERATURE. (1) C. C. HOSSEUS: 'Durch König Tschulalongkorns Reich' (Stuttgart 1912).

(2) *cf.* 'Kurzer Bericht von Dr K. HOSSEUS über den Verlauf zweier in das Innere von Siam ausgeführten Studienreisen' (Zeitschr. Ges. Erdk. Berlin 1906, p. 190–196).

(3) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(4) C. C. HOSSEUS: 'Die botanische Ergebnisse meiner Expedition nach Siam' (Beih. Bot. Centr. Bl. 2, Abt. 28, 1911, p. 357–457).

Houten, Hendrik Cornelis van

since 1872 Assistant Resident in the D.E. Indian

Civil Service, stationed in Borneo's Western Division.

COLLECTIONS. In the years *1872–74* he forwarded plants to *Hort. Bog.* from Sambas, *W. Borneo*. He evidently had them collected.[1]

LITERATURE. (1) *cf.* Nat. Tijdschr. N.I. 35, 1875, p. 377.

Houter

collected near Koeningan, on G. Tjeremai, *W. Java*, in March *1873*.

COLLECTIONS. *Herb. Bog.:* > 178 *nos.*

Houthandel V. A. Cools, *cf. sub* Forest Research Institute, Buitenzorg.

Houtsoorten Gedeh

A collection of 660 *nos* of forest trees, collected on G. Gedeh, *W. Java*, is labelled 'Houtsoorten Gedeh'.

For a long time it was a problem to the present author, who was the collector of this series. In the opinion of Dr VAN STEENIS it is practically certain that JUNGHUHN (see there) was the collector or possibly had the material collected. The collection was partly identified by HALLIER *f.*

The label induced the botanist L. PIERRE to name a new species *Ternstroemia houtsoortianus*, as he supposed 'Houtsoorten' to be the collector (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. *Herb. Leyden;* dupl. in *Kol.* (= *Ind.*) *Inst. Amsterdam*, and *Utrecht.*

Houttuyn, Martinus

(1720, Hoorn, N.H., Holland; 1798, Amsterdam, Holland), physician who took his Dr's degree at Leyden, and settled at Amsterdam. He was largely interested in botany and devoted his entire energies to natural history.

Author of some botanical works.[1] He is commemorated in the genus *Houttuynia* THUNB.

COLLECTIONS. Sometimes he is cited as the collector of plants from *Java*, which are preserved in *Herb. Leyden*. According to LASÈGUE (Mus. Bot. DELESS., 1845) plants of his in *Herb.* BURMAN = *Herb.* DELESS. (*Geneva*). HOUTTUYN himself never visited Java and it is known that THUNBERG (see there)[2] and others (OSBECK *etc.*) forwarded *Java* plants to him; we may assume that those plants were inserted in *Herb.* HOUTTUYN and rightly should be cited *ex Herb.* HOUTTUYN.

LITERATURE. (1) *cf.* E. D. MERRILL: 'A critical consideration of HOUTTUYN's new genera and new species of plants, 1773–1783' (Journ. Arn. Arbor. 19, 1938, p. 291–375).

(2) *cf.* 'Catalogus van eene uitmuntende verzameling van plantgewassen . . . in meer dan dertig jaren vergaderd en in order geschikt door den Heer MARTINUS HOUTTUYN . . . welk alles in veiling zal worden gebragt, op Maandag en Dinsdag den 30 en 31 Maart 1789 ten zijnen Huize op de Roozegragt te Amsterdam', p. 12.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936 (wrong!); Journ. Arn. Arb. 19, 1918, p. 297–300, incl. bibliogr.; Bijdr. t. d. Dierk. 27, 1939, p. 283; Ned. Kruidk. Arch. 51, 1941, p. 355.

Houwing, Herman

(1888, Heerenveen, Fr., Holland; x), educated at Wageningen Agricultural College, worked for some years in sugar factories in Holland and Java (Djokja); since 1914 in the employ of the Experiment Station for the Java Sugar Industry (Pasoeroean), respectively stationed at Djokja (1914–17), Koedoes (1917–25), and at Djokja again (1925–34). Subsequently he studied dental surgery at Utrecht; at present practising at The Hague.

COLLECTING LOCALITIES. *1923–27. Centr. Java:* mainly at Koedoes and near some sugar factories.

COLLECTIONS. *Herb. Pasoer.:* 880 *nos;* some dupl. in *Herb. Leyden.*

Houwink, Adriën Loo

(1905, Utrecht, Holland; x), botanist, educated at Utrecht University, where he took his Dr's degree in 1935. He went to Java in May of the same year for the Linnaeus Fund, working some time in the Foreigners' Laboratory at Buitenzorg; subsequently teacher of natural history at secondary schools at Soerabaja (1936–37), and Semarang. In 1946, after evacuation to Holland, he was appointed at a secondary school at Eindhoven.

COLLECTING LOCALITIES. *W. Java*, islands in the Bay of Batavia: *Middelburg* and *Amsterdam* (Sept. 28, *1935*).

COLLECTIONS. *Herb. Bog.: nos* 1–5 from *Middelburg, nos* 6–33 from *Amsterdam.*

Hsia, *cf. sub* Forestry Bureau, Manila.

Hügel, Anatole Freiherr von

son of C. A. A. VON HÜGEL (see below), visited several islands in the Pacific in *1875*. According to BURKILL[1] he brought back collections of plants from Ovalau (Fiji), Upolo (Samoa), *Duke of York's Islands* (= *Neu Lauenburg*) and from *New Britain* (= *Neu Pommern*). He himself only came as far as the Viti (= Fiji) Archipelago and from there sent his collector C. WALTER (see there) with the boat of the Wesleyan Mission to *Duke of York Island.* The latter collected in that island, and on the opposite coast of the Blanche Bay (*New Britain*).

COLLECTIONS. BURKILL states[1] that a large part was lost by a number of accidents; the remaining collections (± 60 *nos* from *New Britain*, incl. 9 ferns) were presented to the *University Herbarium Cambridge*. It is this collection from the *Bismarck Archipelago*, which was mentioned by SCHUMANN & LAUTERBACH in their 'Flora der Deutschen Schutzgebiete in der Südsee' (*cf. sub* C. VON HÜGEL).

LITERATURE. (1) I. H. BURKILL: 'On a collection of plants from New Britain (Neu Pommern)' (Proc. Cambr. Philos. Soc. 9, 1896, pt 2, p. 90–97).

Hügel, Carl Alexander Anselm Freiherr von

(1795, Regensburg, Germany; 1870, Brussels, Belgium, on his way to Vienna), lived with his family at Vienna from 1805 onwards. He started his career

as an officer in the Austrian army, but later (from 1826 onwards) devoted himself to horticulture. He was the founder and first president of the 'K.K. Gartenbau-Gesellschaft' in 1837, and introduced numerous New Holland and other plants into Europe. He travelled for many years in Europe, Asia, Malaysia, *etc.*, making living and dried botanical collections. From 1850–67 ambassador of Austria at Florence, and subsequently (from 1860 onwards) at Brussels. Settling in England (1867–70), and finally at Vienna again.

Author of an enumeration of New Holland plants.

Some plants were named after him.

ITINERARY.[1] *1831–36.* Sailing from Toulon (May 1831), visiting Greece, Cyprus, Syria, Palestine, Egypt, Nubia, Arabia; Brit. India (Bombay, 1832), W. coast *etc.;* Ceylon; India (Coromandel coast); *Malacca; Sumatra; Java;* some small islets when passing Sunda Strait to Australia (end of *1833*); New Zealand; Southsea Islands, Carolines, Marianas; sailing from Sydney (Oct. 6, *1834*) to the *Philippines: Luzon,* at Manila (arrival Dec. 2); he was not allowed to visit the interior, except Laguna Prov.; the following localities were visited: Pasig, Laguna de Bahia, Jal(l)a Jal(l)a (–11); to Los Baños (12), and proceeding to Socol Lake (= Dagatan); return at Manila (13); trip to Cueba di St. Matteo (cave) (16–17); St. Juan del Monte (20); sailing (23, Spanish calendar, = 24); to Canton and Macao; embarking for Madras, on the way paying short visists to *Singapore, Malacca* and *Penang;* Brit. India, Himalaya District *etc.;* voyage home from Bombay (June 8, 1836) *via* the Cape and St Helena; London (Oct. 18).

COLLECTIONS. *Herb. Vienna:* about 3000 *nos* from Asia and Australia; *Herb. Munich:* Indian plants; dupl. in *Herb. Brussels* (w. *Herb.* MARTIUS, ± 150 *nos*) and *Kew; Herb. Hamburg:* ferns from Asia; *Herb. Acad. Sci. Leningrad:* grasses (with TRINIUS *Agrostotheca*); *Herb. Cambridge:* Australian plants.

SCHUMANN & LAUTERBACH mention a collection of his from *Neu Pommern* (= *New Britain*);[2] this statement is based on an error, the cited collection is made by ANATOLE Freiherr VON HÜGEL's collector (see there).

LITERATURE. (1) KARL Frhr VON HÜGEL: 'Der stille Ocean und die Spanischen Besitzungen im ostindischen Archipel' (Wien 1860; deals with the Philippines; for plants and fruits of Luzon *cf.* p. 392–401).

Brief notice on his travels in HOOK. Comp. Bot. Magaz. 2, 1837, p. 190.

cf. LASÈGUE, Mus. Bot. DELESS., 1845, p. 384–385.

(2) in 'Flora d. Deutsch. Schutzgeb. i.d. Südsee' 1901, p. ix.

BIOGRAPHICAL DATA. Flora 20[1], 1837, p. 96; MORREN Belgiq. Hortic. 20, 1870, p. 202–207; Gartenflora 19, 1870, p. 254; PRITZEL, Thes. Lit. Bot., 1872; 'Charles von Hügel, April 25, 1795–June 2, 1870' (Cambridge 1903, w. several portr.); MAIDEN in Journ. W. Austr. Nat. Hist. Soc. 1909, p. 18–19; Gartenzeit. d. Österr. Gartenbau Ges. 1927, p. 54–55, w. portr.; BACKER, Verkl. Woordenb., 1936.

Hürlimann-Hirzel, Mrs B.

from Zürich, presented museum objects from *Java* to the *Bot. Mus. Univers. Zürich* in *1912.* No mention is made as to whether she collected them herself.

Huguenin, Otto Fredrik Ulrich Jacobus

(1827, Voorburg, Z.H., Holland; Aug. 6, 1871, Sumatra West Coast), mining engineer, educated at Delft; joined the D.E.I. Government service in 1850, and was subsequently placed at the disposal of C. DE GROOT (see there); in 1859 Head of the Mining Service of the D.E.I.; he resigned in 1860, and got a license to exercise the profession of surveyor in 1863; in 1867 he joined the Mining Service again and was stationed in Sumatra West Coast.

COLLECTIONS. *Herb. Bog.:* some ferns from *Banka* and *Billiton,* numbered in the H.B. series.[1]

LITERATURE. (1) *cf.* J. AMANN (= S. KURZ): 'Opsomming der vaatkryptogamen van het eiland Banka' (Nat. Tijdschr. N.I. 23, 1861, p. 399–412).

Huidekoper, Anne Willem

(1899, Delft, Z.H., Holland; x), was educated at Wageningen Agricultural College; in 1923 appointed Consulting Agriculturist in the D.E.I., stationed in Java, respectively at Djokjakarta (1923), Malang (1924–25), Buitenzorg (1925–28; partly at the disposal of the Veterinary Survey), at Pamekasan (Madoera, 1930–33), at Singaradja (Bali, 1934–38), and subsequently transferred to Medan in Sumatra; retired in 1947.

COLLECTIONS. *Herb. Bog.:* 2 *Madoera* plants, Pamekasan (March *1931* coll.).

Huitema, Waling Karst

(1899, Vreeswijk, U., Holland; Sept. 18, 1944, drowned o/b s.s. Zuynio Maru during a Japanese transport of P.O.W.'s, W of Padang), was educated at Wageningen Agricultural College; he came out to Java in 1925, and was appointed in temporary employ of the Government Guttapercha Estate at Tjipetir (W. Java); since 1927 on the staff of the General Agricultural Experiment Station at Buitenzorg. In 1935, during a European furlough, he took his Dr's degree at Wageningen.

COLLECTING LOCALITIES. *S. Sumatra:* Palembang (Dec. *1929*); *N. Sumatra:* Toba Lake (Sept. *1931*); *Banka* (mid *1932*).

COLLECTIONS. *Herb. Bog.:* 127 *nos* Palembang, 133 *nos* Toba Lake, 50 *nos Banka; Herb. Leyden:* dupl. *Sumatra* (coll. 1931). On each trip numbering was started anew.

Huka, H., *cf. sub* Forest Research Institute, Buitenzorg.

Hukum bin Inoh

joined the Forest Department *Malay Peninsula* in 1912; killed Oct. 1945. Collected mainly in Selangor; *cf. sub* Conservator of Forests series, Kepong.

Hullett, R. (Richmond or Richard) William
(1843, ? ; 1914, England), a schoolmaster at Singapore; a member of the Gardens Committee, and once in temporary control.

Begonia hullettii RIDL. and other plants were named after him.

COLLECTING LOCALITIES.[1] *Malay Peninsula*, Johore: on a trip to G. Blumut with D. F. A. HERVEY (see there detailed itiner. *etc.*) (Jan.–Febr. *1879*); before that time he had already visited G. Pulei, G. Pantei and G. Mĕntahak; Jaffaria in S. Johore with Sir G. KING (1879); Mt Ophir & Malacca (Dec. *1883*, Apr. *1888*); *Singapore; P. Penang.—NW. Borneo*, Sarawak, evidently as early as *1885 or previously and about 1890* again.—Orchids for RIDLEY on G. Dai, *Lingga* (*e.g.* July 17, *1893*).[2]—*W. Java:* Tjibeureum near Sindanglaja on the slope of G. Gedeh (July *1894*).

COLLECTIONS. *Herb. Sing.:* coll. Mt Ophir, *Singapore* and *Borneo* (pres. 1889); 201 *Borneo nos* (pres. 1890–91); 88 *Java nos* (pres. 1894); *Herb. Kew: Singapore* and *Borneo*, 280 *nos* (pres. 1885, erroneously mentioned as HALLETT) and dupl. from Sing. Herb.; *Herb. Calcutta:* plants (pres. 1883–90, partly dupl. from Sing. Herb.).[3]

LITERATURE. (1) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(2) *cf.* RIDLEY in Journ. Linn. Soc. Bot. 32, 1896, p. 312, 405, 413.

(3) *cf.* RIDLEY in Journ. Str. Br. Roy. As. Soc. *no* 33, 1900, p. 36.

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Hulshoff Pol
a resident of Buitenzorg, presented living orchids from *Sumatra* and *Borneo*, *viz* from Koetei (*E. Borneo*), from Oeloe Limau Manis (*Sumatra West Coast*) and from Moeara Tembesi (*Djambi*) to *Hort. Bog.* Some are described by J. J. SMITH and preserved in *Herb. Bog.*

Hulshof Pol, J.
collected an orchid near Garoet in *W. Java*, which he forwarded to *Buitenzorg*.

Hulstijn, Pieter van
(1881, Breda, N. Br., Holland; x), since 1902 in the D.E.I. army; retired in 1928 with the rank of lieutenant-colonel; subsequently in the military high court of justice and promoted to the rank of major-general. He took his degree in literature and philosophy. He conducted an expedition (see below) to the Moluccas.[1] In 1948 still living in Java.

Several plants were named after him.

ITINERARY. *Soela Islands* (May *1913*–May *1914*), *cf.* collecting localities *sub* ATJE(H).—*Obi Islands* (till Aug. *1914*), *cf. ditto sub* SAÄNAM.

COLLECTIONS. *Herb. Bog.:* plants VAN HULSTIJN Exp. collected by ATJE and SAÄNAM (see those); dupl. in *Herb. Leyden.*

LITERATURE. (1) P. VAN HULSTIJN: 'Memorie over de Soela Eilanden' (Meded. Encyclop. Bur. *no* 15, Weltevreden 1918, 155 pp., 23 pl., 1 map; for the vegetation *cf.* p. 24–25).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936, *cf.* also *sub Addenda.*

Hume, H. L.
planter, attached to the Federated Malay States Museums during 1921.[1]

COLLECTING LOCALITIES.[2] *1921. Malay Peninsula.* Towards the end of the year collecting in the neighbourhood of Kuala Lumpur, Klang Gates, in the Batang Berjuntai and Rantau Panjang Forest Reserve, in the Ulu Gombak, Selangor.

COLLECTIONS. In *F.M.S. Mus.*, on loan indefinitely to the *Herb. Sing.*[2]

LITERATURE. (1) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(2) *cf.* HENDERSON in Gard. Bull. Str. Settlem. 4, 1928, p. 212.

Hunger, Friedrich Wilhelm Tobias
(1874, Amsterdam, Holland; x), studied botany at Leyden, Jena and Brussels, taking his degree in 1898 at Jena; in 1899 for some months Acting Chief of the division Botanical Laboratories of the Botanic Garden at Buitenzorg, and since August of the same year attached to the Laboratory for Deli tobacco; in June 1904 leaving the East; University Lecturer in Tropical Botany at Utrecht, 1905–06; Director of the General Experiment Station for Agriculture (Buitenzorg, Java), 1906–10; University Lecturer in the History of Botany at Leyden, 1917–24; in 1936 appointed Director of the Institute for the History of Medical, Natural and Mathematical Science.

In 1920–21 he made a study tour to Borneo, New Guinea and Sumatra, in the interest of the culture of *Cocos* and *Elaeis.*

Author of papers on the history of botany and an extensive treatise on the coco-nut tree.[1]

COLLECTING LOCALITIES. *Malay Peninsula:* Penang Hill (*190 .*); he visited *Penang* in *1900* (staying a month on sick-leave), in the 2nd half of June *1902*, and possibly on the way back to Europe in *1904*.

COLLECTIONS. *Herb. Bog.:* 25 ferns from Penang Hill (pres. 1904, sent from Utrecht).

LITERATURE. (1) 'Cocos nucifera. Handboek voor de kennis van de cocospalm in Ned. Indië, zijn geschiedenis, beschrijving, cultuur en producten' (Amsterdam 1916, 2nd ed. 1920).

BIOGRAPHICAL DATA. Wie is dat? ed 2–4.

Hunstein, Carl
(± 1843, Homburg, Hesse-Kassel, Germany; March 13, 1888, NW. coast of New Britain, Bismarck Archipelago), beginning as a housepainter; emigrated to America, subsequently proceeded *via* San Francisco to New Zealand, in order to join the Thames Goldfield diggings; passed to Queensland on a similar occupation and joined the second or third lot of diggers which started from Cookstown to Port Moresby. The gold-digging proved a failure and he took to collecting specimens of natural history, occasionally in com-

pany with others. Since 1885 in the employ of the German New Guinea Company.

The Hunstein Mts and several plants were named in his honour.

ITINERARY. *SE. New Guinea, Papua. ? 1878.* In company with some other diggers penetrating into the Horse-shoe Mts.[1]—From *1879–83* several tours with A. GOLDIE (see there) and Capt. REDLICH.—*1882.* With FINSCH (see there) on a trip up the Laloki River.—*1884.* From Port Moresby over Astrolabe Range, *via* Taburi and Sogeri to Meroka, from where exploring the environs, *e.g.* climbing the Horse-shoe Mts (discovering a new *Rhododendron*).[5]—*NE. New Guinea,* former *Kaiser-Wilhelmsland. 1885.* Left behind by FINSCH in Bentley Bay for the management of Blumenthal Station; on June 25 FINSCH learned that in the meanwhile the station had changed into British hands again and in consequence HUNSTEIN was sent to the *Killerton Islands,* where he was called for in Nov. by the expedition under command of R. MENTZEL.—*1886.* Towards the end of Jan. stationed at Hatzfeldhafen. Visiting the mouth of Kaiserin Augusta (= Sepik) River (Apr. 4, with MENTZEL); Gulf of Langemak with HOLLRUNG (May 10); Bogidu with HOLLRUNG; in June in the 'Ottilie' under VON SCHLEINITZ (in company with HOLLRUNG and SCHRADER) to the Kaiserin Augusta River (ascending it part of the way; *cf.* itiner. *sub* HOLLRUNG).[2]—Towards the end of the year exploration of the interior part of the Gulf of Huon: Samoa-Hafen (Nov. 29), Markham River, and back at Finschhafen (Dec. 13).—*1887.* In bivouac NE of Bagili (Apr. 1) (*cf. sub* HOLLRUNG), staying in the region between Alexis-Hafen and the Gabaron (Apr. 22–28) too.—*1888.* In company with ST. VON KOTZE making 2 larger tours from Butauèng (S of Finschhafen): by sea to Kualsan (S of Schneiderhafen) (Jan. 20), from where climbing the Lugauèng Mts *via* Mt Ulama and the basin of the Bu Kau Imbang; on the voyage back on foot from Schneiderhafen along the coast to Butauèng; the 24th setting out to the watershed of the Bu Bui and the river debouching N of Finschhafen (reaching the same in 2 days).[3] In the 'Samoa' (Febr. 16) to the region W of Kelana. Sailing from Finschhafen again (March 4) to inspect the mountains situated on the W. coast of *New Britain* (= *Neu Pommern*), *Bismarck Archipelago,* to consider the possibility of making coffee plantations; on the 13th he and many others lost their lives by a tidal wave.[4]

COLLECTIONS. Mainly birds, but plants too. The older plant collections (1878–84) *probably* in *Herb. Melbourne;*[5] the ones made during his term of office with the German New Guinea Comp., *probably* with the latter's herbarium in *Herb. Berl.*[6]

LITERATURE. (1) *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea; refers to O. FINSCH & A. B. MEYER, Vögel von Neu Guinea (Zeitschr. ges. Ornithol. Budapest 2, 1885, p. 369).

2) *cf.* Nachr. Kais. Wilh. Land 2, 1886, p. 6, 62, 67–69, 87, 89, 91, 122, 123.

(3) *cf. l.c.* 4, 1888, p. 59.

(4) *cf. l.c.* 4, 1888, p. 71, 76–79, 147–149.

(5) F. VON MUELLER: 'Record of a new Papuan Rhododendron' (Vict. Naturalist 1, 1884, p. 101–102); *cf.* also in Gartenflora 34, 1885, p. 54–55.

(6) *cf.* SCHUMANN, Die Flora von Kaiser Wilhelms Land, Berlin 1889.

BIOGRAPHICAL DATA. Zeitschr. ges. Ornith. Budapest 2, 1885, p. 369–372; Ibis ser. 6, vol. 2, London 1890, p. 267–268; BACKER, Verkl. Woordenb., 1936.

Hunt, J.

is cited as the collector of *Sindora supa* MERR. in *Luzon* (May *1903*) (*cf.* Philip. Journ. Sci. vol. 1 Suppl., 1906, p. 199).

Hunte, Sir George Ruthven le

successor of Sir W. MACGREGOR as Lieutenant-Governor of the Territory of British New Guinea; he took up his office on March 22, 1899, at Port Moresby. At the end of March 1902 he sailed for Australia, from where on furlough to Europe. After expiry of his leave he still served a month in New Guinea; he left the island in June 1903, to be appointed Governor of S. Australia.

Ficus benjamina LINN. *var. lehuntei* BAIL. and *Eugenia lehuntei* BAIL. were named after him.

ITINERARY. *SE. New Guinea, Papua. 1899.* Tour to the *Western Districts:* in the 'Merrie England' (March 28) to Hall Sound, Kerema, mouth of the Wai Lala, Orokolo; Samari (31); Daru (Apr. 1), *Thursday Isl.;* back at Daru (6); Hall Sound, *Yule Isl.* (9), Chiria, Delena, Pokama, Kido (Redscar Bay); Port Moresby (10).[1]—*Eastern part of the division: Daugo Isl.* (= *Tauko*) (Apr. 14), Kapa-Kapa (14); visiting several localities, including Rigo Station; Keakaro Bay (16); Dedele (17–19); *Toulon Isl.,* Port Glasgow; Samarai (29), *Kwato Isl.;* further to the NE. coast; Taupota, Togo Wedau (Bartle Bay); Porlock Bay (25); mouth of the Mambare (26), Tamata Station; mouth of the Gira (May 1); mouth of the Musa (4), ascending the river part of the way; mouth of the Ope (6), ascending it part of the way; Port Hennessy (8); Collingwood Bay (9, at Wanigela *etc.*); Phillips Harbour; Mission Station Mukau at Cape Vogel (10); Wedau (11); Milne Bay; Samarai (May 13); Waga-Waga (17); mouth of the Gibara, Sekagura, by way of the watershed *via* Tobu to Goanipi, Kamudi; back (19) *via* Fooa, Degudagugu and Duria; passing the watershed, reaching the Gibara again, from where to Boni-Boni, embarking to Waga-Waga; proceeding the tour to the *Islands in the eastern portion of the Possession, viz* the *Louisiades, Trobriand Isls, Fergusson Isl., etc.;* Samarai (June 8); *Kwato Isl.* (9); Samarai–Fyfe Bay (10); Hood Bay (11); *via* Hula to Kalo; Kapa-Kapa and Port Moresby (13).[2] Tour *via* Bomana to Mt Werirata and proceeding to the Rauna Falls in the Laloki (June 22–24). Departure (June 6) for Brisbane, *via* Mission Station Vatorata, Dedele, *Toulon* and *Dufaure Isl.* and Samarai (9–11), Cooktown. From Port Moresby (Nov. 19) to *Daru Isl.; Paho Isl.;* mouth of the Mai Kusa; mouth of the Bina Turi; *via* Daru (27), back to Port Moresby (28).[3] Dec. 2 to Samarai *via* Dedele: sailing (7) to *Conflict*

group, Laughlan Isl., and other islands in the eastern portion; mouth of the Mambare (23); Tamata Station (24–27); mouth of the Mambare (30); mouth of the Ope (30); to Wanigela (Jan. 1, *1900*), visiting several small bays in the vicinity; Cape Vogel (3); Goodenough Bay; Wedau (Bartle Bay); Taupota (5); Samarai (6); Port Moresby (9).[4] Tour to the *Western portion of the Possession:* from Port Moresby (Febr. 10) *via* Djokea to *Daru Isl.;* the Oriomo; Dauan (15); Bugi; to the Wassi Kusa (17), Bé Kusa, Mai Kusa; Morehead River (ascending it 24–28); Bugi; *Thursday Isl.* (5 days' stay); Daru; *Kiwai Isl.* in the delta of the Fly, making several minor boat-excursions; Daru (18–19); Parama (*Bampton Isl.*) and Mawata (20); Hall Sound (21); Port Moresby (23).[5] Sailing from Port Moresby (March 30) to the *Eastern portion:* Samarai (Apr. 1), *via* Bartle Bay to Cape Nelson; Kumusi River, Mambare Bay and back to Cape Nelson; Samarai (8–10); Port Moresby (12).[6] In April a 5-day tour to the Laloki and the Naoro (= Brown) River. On May 22 to Kapa-Kapa; Hula (25); Kerepunu (26); MacFarlane Harbour (29), Bilirupu, *etc.;* Cheshunt Bay (June 1); Cloudy and Baxter Bay (2); *Amazon Isl.; Toulon Isl.* (4); Millport Bay, Port Glasgow, *Dufaure Isl.;* Samarai (8); Kwato (10); *Bentley Isl. etc.;* Samarai (19); Port Moresby (20).[7] On July 4 *via* Kapa-Kapa to Samarai; Wedau (5); Cape Nelson (9); Wanari Bay; mouth of the Mambare; Tamata Station (11); back *via* Holnicote Bay, Cape Vogel, and Dobu; Samarai (21–27, visiting Kwato, Hayter Isl., *etc.*); Port Moresby (28).[8]—*1901.* With F. R. BARTON and A. GIULIANETTI (see those) from Port Moresby (Jan. 11) to *Kabadi District:* rowing up part of the way of the Apisi, marching to Matapaila and Kopuana after passing the Aroa; returning (13) by way of the river, marching to Keweo and *via* Aukankana back to Matapaila; *via* Nanuabaka (14) to the coast, following the same to the mouth of the Aroa; when sailing to Cape Suckling, landing near Hisiu (Redscar Bay); Delena; *Yule Isl.;* Ethel River (= Kiwa, 17), ascending Ethel and Bioto River and proceeding to Ina Wabui on foot; *via* Ina Wa (18), Eboa, and Jesu Baibua (Jéku) on St Joseph River, and *via* Ina Wai and Ina Wi to Mekeo Station; *via* Mohu (20) and Pinupaka back to *Yule Isl.;* Port Moresby (21).[9] From Port Moresby (Febr. 19); Samarai (23); Cape Nelson; mouth of the Kumusi (24); mouth of the Mambare (25); Tamata Station (till March 2); Kumusi mouth (3), ascending the river to Bogi Station; Porlock Bay (11); Samarai (till March 22); Goodenough Bay; Rawdon Bay (23); Yasaiasa (= Jasa-Jasa) Road (25); W of Cape Sebiri-Biri; Phillips Harbour (26); Wiaku, Maisini and Wanigela; *Conflict Group* (29); *Louisiades, etc.;* Port Moresby (Apr. 24).[10] From Port Moresby (Nov. 26) to the *Eastern portion:* Rigo Station; Mission Station at Millport Bay; Samarai; short cut to the Milne Bay, from where to *Goodenough Isl.;* Government Station at Cape Nelson: mouth of the Mambare (Dec. 20), 5-day visit to Tamata Station; Kumusi Mouth; Bogi Station; Samarai; *Dobu Isl.*, from where excursions to *Normanby Isl., Fergusson Isl., etc.; via* Cape Nelson and Samarai, returning at Port Moresby (beginning of 1902).[11]—*1902.* To the *Western Districts:* from Port Moresby (Febr. 18) *via* Daru to *Thursday Isl.* and back; Cape Blackwood; 1-week stay on *Goari Bari Isl.;* Daru; back to Port Moresby *via* Orokolo, Wailala, Toaripi and mission stations on *Yule Isl.* and at Hall Sound.[12] Sailing for Australia (end of March).—*1903.* Final stay at Port Moresby (May 11–June 10).

COLLECTIONS. He forwarded a number of specimens to F. M. BAILEY; *probably* preserved in *Herb. Brisbane.*[13] In *Herb. Kew:* 43 *nos* of plants from the Pacific Islands (1884).

LITERATURE. (1) *cf.* Ann. Rep. Br. N.G. for 1898–99, Vict. 1900, p. 5–11.
(2) *cf. l.c.* p. 11–33, 35–37.
(3) *cf. l.c* for 1899–1900, p. 1–4.
(4) *cf. l.c.* p. 4–17.
(5) *cf. l.c.* p. 21–30, 2 maps, and p. 30–33.
(6) *cf. l.c.* p. 17–20.
(7) *cf. l.c.* p. 33–42.
(8) *cf. l.c.* p. 49–57.
(9) *cf. l.c.* for 1900–1901, p. 1–4.
(10) *cf. l.c.* p. 12.
(11) *cf. l.c.* for 1901–02, Vict. 1903, p. 12.
(12) *cf. l.c. ditto.*
(13) Described by F. M. BAILEY in Queensl. Agric. Journ. 7, 1900, p. 348–350, pl. 45 (the same in Ann. Rep. Br. N.G. . . ., App. II, p. 133–134) (*non vidi*) and in *l.c.* 9, 1901, p. 410–411, pl. 16; in Ann. Rep. Br. N.G. for 1901–02, Brisbane 1902, 3 pp., 3 pl.

Hunter, Dr H.

is said[1] to be the collector of *Ficus hunteri* MIQ.[2] in *P. Penang.* It seems highly probable that the initial is wrong, and the collector identical with W. HUNTER (see there).

LITERATURE. (1) *cf.* BACKER, Verkl. Woordenb., 1936.
(2) in HOOK. Lond. Journ. Bot. 7, 1848, p. 225.

Hunter, (*not* Sir) William

(1755, Montrose, Scotland; Dec. 1812, Batavia, Java), a ship's surgeon in the East, 1781; in the employ of the East India Company, 1783–1812; in 1811, after the conquest of Java by the English, appointed chief of the Medical Service in the same island.[1]

He is commemorated in the genus *Hunteria* ROXB. (*cf.* also *sub* H. HUNTER).

COLLECTING LOCALITIES. *1802. Malay Peninsula: P. Penang.*[1] His often mentioned 'Soongey Clooan' is the Sungei Keluang at Rihlau or St James.[2]

COLLECTIONS. *Herb. Glasgow*, and *Herb. Brit. Mus.;* he sent plants to ROXBURGH (see there) too.

LITERATURE. (1) An autograph of his 'Outline of a Flora of Prince of Wales' Island' (Penang) in Libr. Bot. Dept Brit. Mus. (originally with drawings to the number of 22, to which references were made in the margin of the copy); printed under the title 'Plants of Prince of Wales Island' (Journ. Str. Br. Roy. As. Soc. *no* 53, 1909, p. 49–127).

Other publications on Gambir (in Transact.

Linn. Soc. 1807) and 'Remarks on the species of Pepper and on its cultivation at Prince of Wales Island' (Asiat. Research. vol. 9, p. 383).

On his MSS *cf.* J. BRITTEN in Journ. Bot. 54, 1916, p. 143–144.

(2) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 146.

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 27, 1889, p. 151 and 2nd ed. by RENDLE, 1931; BUCKLAND, Dict. Ind. Biogr., 1906; Journ. Str. Br. Roy, As. Soc. *no* 53, 1909, p. 49; Dict. Nat. Biogr. 28, p. 305; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; BACKER, Verkl. Woordenb., 1936.

Hunziker, Gertrud

from Herbertshöhe, Neu Pommern, Bismarck Archipelago, collected *Phyllanthus lauterbachianus* PAX *n.sp.*, *no* 23, from Hubertshöhe (rightly Herbertshöhe) in *Neu Pommern* (= *New Britain*) (*cf.* FEDDE Repert. 8, 1910, p. 325).

COLLECTIONS. *Herb. Univ. Zürich:* 32 *nos* from *German New Guinea* and marine *Algae* from Herbertshöhe (pres. *1907*).

Hupe

is cited as the collector of *Oleandra tricholepis* KZE.[1] *Lycopodium hupeanum* MULL. was named after him.[2]

A certain C. HUPE is the author of a paper on the religion, customs, *etc.* of the Dyaks.[3] The latter was a German missionary, as was the collector; *cf.* also *sub* HOPE.

LITERATURE. (1) *cf.* Bot. Zeitung 9, 1851, p. 349.

(2) *cf. l.c.* 19, 1861, p. 165.

(3) *cf.* Tijdschr. Neêrl. Ind. 8[3], 1846, p. 127–172, 245–280.

Hurdt, Antonie

(? , Middelburg, Z., Holland; ?), in 1661 Merchant and Second in Ambon, in 1667 Chief Merchant, Second, and Civil Administrator there; from 1678–89 in several high positions in Java.

COLLECTIONS. A certain ANTONIUS HURT, probably identical with the above-mentioned official, sent botanical material from *Ambon* to RUMPHIUS in *1680*.

BIOGRAPHICAL DATA. Encyclop. N.I. 2, 1918.

Hurt, Antonius, *cf.* HURDT, ANTONIE.

Huss(a)in bin Mohd. Akip

joined the Forest Department *Malay Peninsula* in 1908; now retired. He mainly collected in S. Perak; *cf. sub* Conservator of Forests series, Kepong.

Hutchinson, Wallace Irving

(1881, Wolfville, Nova Scotia; x), Forest Officer from Yale University, New Haven (U.S.A.); in the first decennary of the 20th century in the employ of the Bureau of Forestry, Manila; at present in the Forest Service of the U.S.A.

Hydnocarpus hutchinsonii MERR. and other Philippine plants were named after him.

COLLECTING LOCALITIES. *Philippines, viz* in *Mindanao:* Mt Malindang (May *1906*, with MEARNS); *Mindoro:* Mt Halcon (Nov. 1906, with MEARNS and E. D. MERRILL) (see those); *Mindanao:* Agusan Valley, E. side between Tagabaca and Gibong rivers (May *1907*).

COLLECTIONS. *Herb. Manila*, numbered in the For. Bur. (F.B.) series (see there). *Herb. Sing.:* 840 dupl. of the *Philippines;* also dupl. in *Herb. Berl.; U.S. Nat. Herb. Wash.:* 100 *P.I.* pl. + 200 coll. with MEARNS and WHITFORD; *Herb. Leyden; Herb. Edinburgh.*

Hutsz

is cited as the collector of *Premna oblongifolia* MERR., *no* 841, in *Dutch Borneo* (*cf.* Govt Lab. Publ. Philip. 19, 1905, p. 118). Probably the label was misread and the collector is J. B. VAN HEUTZ Jr (see there).

Hutton, Henry

(† 1868, Java), son of a former head-gardener of Lord Houghton, was sent on a collecting mission to the Far East in the employ of the horticultural firm of VEITCH & Sons.

Celosia huttoni MAST. and other plants were named after him.

ITINERARY. *1866–68. Java* (1866), *Moluccas*[1] and *Timor* (1868).

COLLECTIONS. *Probably* in *Herb. Kew* with *General Herb.* H. J. VEITCH. He collected a few orchids.

In the list of acquisitions of *Kew Herb.* is a collection from the Cape and South Africa collected by HENRY HUTTON; collectors may be identical.

LITERATURE. (1) *cf.* 'Hortus Veitchii' 1906, p. 130.

BIOGRAPHICAL DATA. 'Hortus Veitchii' 1906, p. 54; BACKER, Verkl. Woordenb., 1936; Journ. Roy. Hort. Soc. 73, 1948, p. 286.

I., G. *cf. sub* T., G.

Iboet

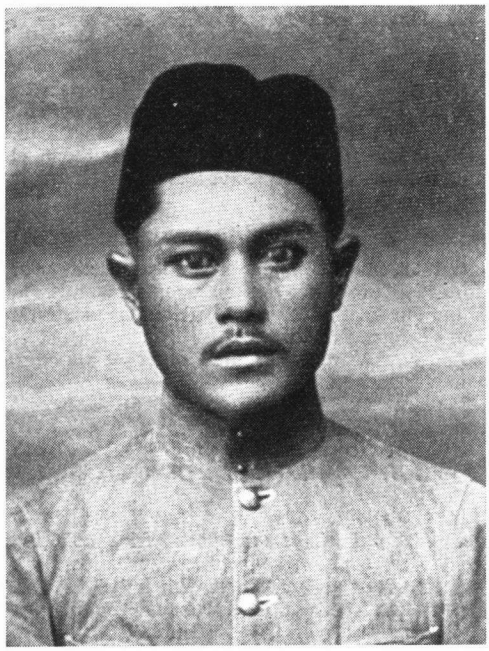
(† 1927, Buitenzorg, Java), an Indonesian, for many years 'mantri' of the Herbarium at Buitenzorg; he attended numerous expeditions.

Gymnacranthera ibutii HOLTH. (ms.) and *Microtatorchis iboetii* J.J.S. were named after him.

COLLECTING LOCALITIES. *1921. S. Sumatra*, Lampong Districts: G. Raté Telanggaran (Nov. 12–18), G. Raté Berenong (18–29), Wai Lima Estate (Dec. 1–15).—*1922.* Attending the Danish expedition to the *Kai Islands*, visiting the *Aroe Islands* (Dobo) and *Ambon* too (*cf. sub* HJ. JENSEN and MORTENSEN).—*1924.* With C. B. KLOSS (see there) and H. H. KARNY to the *Mentawei* (= *Mentawai*) *Islands*, W of Sumatra: *P. Siberoet* (Sept. 8–Oct. 31).—*1925.* With K. W. DAMMERMAN (see there) to *Soemba* (*Lesser Sunda Isls*) (March 14–May 26): Waingapoe and environs; excursions along the Kambera; Waikelo (Apr. 5); staying at Karoni, trips to Totoka, Palla, Waikaboebak, Waikelo; Waingapoe, *via* Melolo, Mao Marroe (May 3–13), Kananggar and vicinity, Lai Rondja, lake on the southern slope of Waidjelo Valley; setting out

from Kananggar (25) *via* Penang to Waingapoe.—*1926*. He accompanied H. J. LAM (see there) to *Celebes*, the *Moluccas*, *etc.*

COLLECTIONS. *Herb. Bog.:* 504 *nos S. Sumatra*, 562 *nos* (1–562) *P. Siberoet*,[1] ± 570 *nos Soemba;*[2] *Herb. Utrecht:* dupl. *Mentawai Isls* (1924). For the collection of the *Kai Islands etc.*, *cf. sub* HJ. JENSEN.



IBOET

LITERATURE. (1) R. E. HOLTTUM: 'Spolia Mentawaiensia Pteridophyta' (Journ. Mal. Br. Roy. As. Soc. 6, 1928, p. 14–23).

(2) O. POSTHUMUS: 'On the ferns of Sumba' (Proc. Kon. Akad. Wet. Amsterdam 33, 1930, p. 871–875).

BIOGRAPHICAL DATA. Blumea 5, 1942, p.145.

Ibrahim, *cf. sub* Forest Research Institute, Buitenzorg.

Ichebesta, *cf.* SCHEBESTA.

Ida Bagoes Tojo (or Ide Bagoes Toja), *cf. sub* Forest Research Institute, Buitenzorg.

Idenburg, Abraham Gerrit Adrianus

(1904, Utrecht, Holland; †), pedologist, educated at Wageningen Agricultural College; in 1930 appointed at the Soil Science Institute, Buitenzorg; Dr's degree at Wageningen in 1937;[1] from 1939 onwards in Holland, first on sick-leave and subsequently on half-pay.

COLLECTING LOCALITIES. *1931. S. Sumatra*, Lampong Distr.: Menggala (May), from Pelaboean Soengai Badak to Oemboelan Garoenggoeng, Sg. Gebang bivouac.

COLLECTIONS. *Herb. Bog.:* 61 *nos.*

LITERATURE. (1) Author of 'Systematische grondkarteering van Zuid-Sumatra' (Thesis, Wageningen 1937).

Idjan

Indonesian, in 1942 for about 7 years in the employ of the Herbarium at Buitenzorg; assistant of AËT (see there) on the VAN DIJK Expedition (see there) to P. Japen and Biak, N of New Guinea.

COLLECTING LOCALITIES. *1939. P. Biak* (Sept. 20–30); AËT, at that time being ill, stayed behind in P. Japen.

COLLECTIONS. *Herb. Bog.: nos* 846–955 (numbered in AËT's series), VAN DIJK Exp..

Idris, *cf. sub* Forest Research Institute, Buitenzorg.

Idris, Mohd., *cf. sub ditto.*

Idris, Mohd.

? identical with the former; he forwarded 21 *nos* of grasses from *Timor* to Buitenzorg in *1940*; the material was sent back after identification.

Idris bin Bilal Yusof

joined the Forest Department *Malay Peninsula* in 1914; now retired. He mainly collected in W. Pahang; *cf. sub* Conservator of Forest series, Kepong.

Iglea, P., *cf. sub* Forestry Bureau, Manila.

Illing, Mrs

of Tegal, *Centr. Java*, sent cultivated and wild orchids (the latter from G. Slamat in *Centr.*, G. Salak in *W. Java, etc.*) to *Hort. Bog.* between *1894* and *1905*.

Imhof, M. E.

Head-Manager of the Tobacco Company 'Tjinta Rassa', Medan (*Sumatra East Coast*), sent a collection of plants to *Hort. Bog.* in *1912*.

Immink, Derk Hendrik

(1895, Mr Cornelis, Java; x), Forest Officer, since 1918 placed at the disposal of the Director of the Forest Research Institute at Buitenzorg; dismissed in 1925 on account of physical inability.

COLLECTING LOCALITIES. *W. Java:* Tg Priok (Aug. *1918*), W. Priangan, Buitenzorg; *E. Java:* Ngawi; Soerabaja and environs (*1919*); G. Tengger, Bromo forest (March 14, *1921*).

COLLECTIONS. *Herb. Bog.* and *Herb. For. Res. Inst. Buitenzorg* (originally I. *nos*).

Indir Alam, *cf. sub* Forest Research Institute, Buitenzorg.

Indische Hout Mij 'Kiara Roa', *cf. sub ditto.*

Inokuma, Taizo

(born at Ehimeken, Japan; x), graduate of Tokyo Imp. University (faculty of Forestry); Assistant Professor of Botany at Tokyo Imp. University, who visited Java in Febr. 1939, on the way to New Guinea for the investigation of forest trees. At present Professor.

COLLECTING LOCALITIES. *1939.* Between March 25–May 10 in *Dutch West New Guinea*, Vogelkop: at Mo(e)mi; in *Dutch N. New Guinea*, on the Geelvink Bay: at Nabire, Sennen, Chaban, Papaja, Patema, Dallmann, Bumi (= Boeme) River.

COLLECTIONS. *Herb. Forestry Inst. Tokyo Imp. Univ.:* > 755 *nos*, collected with K. HARA.[1] Duplicates were promised to *Herb. Bog.*

LITERATURE. (1) R. KANEHIRA: 'A summary of our knowledge of Papuan Pandanus' (Bot. Magaz. Tokyo 54, 1940, p. 249–260, 9 fig.).

S. KUBATA: 'A new species of Vavaea in Netherland North New Guinea' (Bull. Tokyo Univ. Forests *no* 35, 1947, p. 198–199, 1 pl.); 'An enumeration of Verbenaceae collected by Prof. T. INOKUMA and K. HARA in Netherland North New Guinea' (*l.c.* p. 202–206, pl. 2). See also *Addenda.*

Ireland

school-teacher, cited by MERRILL in Enum. Philip. Fl.Pl. as the collector of *Mentha javanica* in *Samar, Philippines;* material in *Herb. Manila.*

Irot, F., *cf. sub* Forest Research Institute, Buitenzorg.

Irsad, M., *cf. sub ditto.*

Irsan

an Indonesian, 'mantri' of the Botanic Gardens at Buitenzorg.

COLLECTING LOCALITIES. *W. Java:* Buitenzorg (*1917, 1920*).—*E. Java:* G. Lamongan (Febr. *1921*) and Srigontjo.[1]—*W. Java:* Tandjong Priok and Tjiseëng (*1927*); Batavia and environs (*1931, 1933*).

COLLECTIONS. *Herb. Bog.:* > 49 *nos* from the Lamongan. Living plants in *Hort. Bog.* Type specimens of *Pandanus multifurcatus* F. FAGERLIND in *Mus. Bot. Inst. Univ. Stockholm.*

LITERATURE. (1) *cf.* F. FAGERLIND: 'Vier neue im botanischen Garten von Buitenzorg kultivierte Pandanus-Arten' (Svensk Bot. Tidskr. 34, 1940, p. 101–116) p. 107–113.

Isaac, Japhet S.

a clerk in the Botanic Gardens, Singapore (–1918), who collected a little there under RIDLEY (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Sing.*

Iskandar, *cf. sub* Forest Research Institute, Buitenzorg.

Ismail, *cf. sub ditto.*

Ismail

COLLECTIONS. *Herb. Bog.:* > 31 *nos* from Kepandjen, S of Malang, *E. Java* (coll. *1915*).

Iterson

Estate-Manager at Magetan near Madioen, *E. Java*, collected 2 *Orobanchaceae* (Dec. 2, *1924*); in *Herb. Bog.*, numbered A and B.



IRSAN

Iterson, Gerrit van

(1878, Roermond, L., Holland; x), was educated at the Technical College at Delft; Chief Assistant of Microbiology, 1901–07; in 1907 appointed Professor of Technical Botany. In *1911* he came to *Java* as a delegate of the Dutch Government to the Fibre Congress, but spent some time at Buitenzorg for research work of a purely botanical nature in August.[1]

COLLECTIONS. A collection of economic plants and their products (coll. 1911) in *Techn. Univ. Coll. Delft.*

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 36.

BIOGRAPHICAL DATA. Wie is dat? ed. 1–4; Persoonlijkheden in Nederland, 1938, + portr.; Ned. Kruidk. Arch. 49, 1939, p. 444; *l.c.* 50, 1940, p. 193; *l.c.* 51, 1941, p. 355.

Iwan

'Attaché à l'Ambassade du Roi en Chine', col-

lected in *Malacca* in *1846*; specimens of plants in *Herb.* DELESS. (*Geneva*) (*cf.* Pflanzenreich IV,165, 1932, p. 697). Rightly YVAN (see there).

Ja. *nos, cf. sub* Forest Research Institute, Buitenzorg.



JAAG

Jaag, Otto

(1900, Beringen, Kant.Schaffhausen, Switzerland; x), schoolteacher at Beringen, 1921–24; botanist, educated at Geneva University, in 1929 taking his Ph. Dr on a study on lichens; Assistant at the Plant Physiological Institute of the Technical College, Zürich, 1929–32; from 1932 onwards at the Institute for Special Botany of the same College; in 1941 with the honorary title of Professor, and in 1945 Extraordinary Professor of Special Botany (cryptogams and hydrobiology).

In Oct. 1937 he went on a study tour to the Dutch East Indies, working for several months in the Foreigners' Laboratory at Buitenzorg and Tjibodas for the study of epiphyllous lichens in the tropics.[1] He made a 3-month collecting journey in the Lesser Sunda Islands, accompanied by the Assistant Curator of the Buitenzorg Botanic Garden, C. L. L. H. VAN WOERDEN (see there). In December 1938 he was back in Europe.

Author of numerous papers on cryptogams, hydrobiology, plant pathology, ecology, *etc.*

ITINERARY. *1938. E. Soembawa:* kp. Lampe (Apr. 24); *Soemba:* Waingapoe (25); *Timor:* Forest Reserve near Koepang (27); hilly country above Timor-Dilly (*Port. Timor*) (28); *Alor:* Kabola Peninsula (May 1–5); Koei Distr., Moroe–Gendok (7); visiting the north coast, Kalabahi, Likoeatang, Taramana and Pisigomo (May 9–11); Pisigomo–Lantoka, Lake Apengmana (12–13); Lantoka–Naumang, G. Kojakoja, Merjak, Lantoka, Pido, Woisika(all on the central plateau, 14–20); Woisika–Saumassi, Atimelang and Kalabahi (21–23); *Flores:* Keli Moetoe (June 5); Boa–Wae–Mborong (9); Roeteng and G. Kasteno (10); Rana mesé near Roeteng (11); *SW. Celebes:* Makassar–Bantimoeroeng (16); *Bali:* Bedoegoel (20), Lake Bratan (20); kp. Tioemarga (21); Den Passar (24).

COLLECTIONS. *Herb. Bog.* and *Techn. Coll. Zürich:* 1956 *nos* (several of which lost), including rather many *Fungi, Algae, Musci* and other cryptogams. The numbering is not strictly chronological, it runs as follows: *Soembawa nos* 2–18, *Soemba nos* 19–47, *Timor nos* 49–130, *Alor nos* 132–1496, *Celebes nos* 1652–1688, *Bali nos* 1689–1709 and 1763–1797, *Flores* the intermediate *nos* and the greater part of those following 1797 (also including plants from other localities, forgotten material, *etc.*).

LITERATURE. (1) O. JAAG: 'Reisebriefe aus Java' (Mitt. Naturf. Ges. Schaffhausen 14, 1938, p. 173–183); 'Ergebnisse einer botanischen Studienreise nach Niederländisch-Indien 1937/38, I. Untersuchungen über den Rhytmus der Laubererneuerung, die Lebensdauer der Blätter und den Epiphytenbefall bei einigen Farnen in den Tropen' (*l.c.* 18, 1942/43, p. 205–257, 4 tabl., 3 pl.).

Ja'amat bin Keling

joined the Forest Department *Malay Peninsula* in 1925 and was mainly stationed at Kepong, working under the Forest Botanist. He died during the Japanese occupation. *Cf. sub* Conservator of Forests series, Kepong.

Jack, William

(1795, Aberdeen, Scotland; 1822, at sea near Bencoolen, S. Sumatra), surgeon in the employ of the East India Company in British India, 1813–18, and on the staff of RAFFLES (see there), accompanying the latter to Sumatra. Through family circumstances the wife of RAFFLES was for some months left behind in P. Penang under the care of JACK. This time he was left with light duties and the interesting flora of Prince of Wales' Island to investigate. In Bencoolen he was allowed to spend most of his time with the study of the botany of Sumatra. After his visit to Calcutta in 1819, his time was demanded more than before by other occupations. After an attack of lung trouble, he made a voyage to Java in the hope of recovery, but returned worse; according to RAFFLES he was carried off by acute malaria, the day after his embarking for the Cape.

He was commemorated in the genera *Jackia* BL. and *Jackia* WALL. and in several plant species.

ITINERARY.[1] *Malay Peninsula:* landing at *Penang* (Dec. 31, *1818*), staying in the island till May 22, *1819;* possibly landed on the Kedah shore; *Singapore* (May 31–June 27); *via Rhio* (= *Riouw*)

to *S. Sumatra*, Bencoolen; Sept. 2 for a week to *Rat Island* (= *P. Tikoes*, opposite Bencoolen).—After a visit to Calcutta in 1819, he returned at Bencoolen (March 3, *1820*), after 2 days of collecting in *W. Sumatra:* Tapanoeli and *Mansilar Isl.* (= *P. Moesala*) (according to JACK on Febr. 23–25, according to RAFFLES previous to Febr. 12!). —In the same year a trip *via* Natal (Oct. 15), *P. Kumbang*, *P. Bi(n)tangor*, *P. Pegang* and *P. Shytan* to *Nias* (Nov. 14–early in Jan. *1821*);[2] return voyage *via* Natal (Jan. 5). In June 1821 journey to the Sugar Loaf Mountain (G. Ben(g)ko(h)), starting from Bencoolen (June 10).[3]—*1822.* To Moco-Moco by sea (Apr. 1), returning (15) by land *via* Ipu.

COLLECTIONS. An important part of his botanical notes and collections was lost by the fire of the ship 'Fame' on which RAFFLES embarked for Europe in 1824. JACK had sent duplicates of his collections to WALLICH at Calcutta, which were distributed with the East India Comp. Herbarium,[4] *probably* in: *Herb. Linn. Soc. Lond.* (later pres. to Kew), *Brit. Mus.*, *Kew*, *Herb.* DELESS. (*Geneva*) (from *Sumatra*) and other herbaria. Some dupl. in *Herb. Leyden; Herb.* WEBB (= *Florence*).[5] Lady HASTINGS asked for a *Hortus Siccus* on behalf of the *Mus. Edinburgh;* he intended to send a second-rate collection, but evidently nothing of the kind at present is preserved in that Museum.[6] At the sale of LAMBERT's Herbarium in 1842 a batch of *Sumatra* plants was sold, of which it was supposed that JACK was the collector; it was bought by PAMPLIN, a London dealer.[7]

JACK described part of his collections in his 'Malayan Miscellanies', afterwards reproduced in other serials;[8] also other systematic papers in various periodicals.[9]

A few plants from *Penang* have escaped recent collectors, according to RIDLEY it is possible that some of those which were distributed by WALLICH as from Penang were really collected in *Sumatra.*[10] *Hypericum alternifolium* VAHL, *no* 4806, was collected in *Riouw*, erroneously labelled *Penang!*

LITERATURE. (1) *cf.* W. JACK: 'Malayan Miscellanies' (Bencoolen 1820–22, 2 vols); 'Brief Memoir and extracts from his correspondence' (HOOK. Comp. Bot. Mag. 1, 1835, p. 121–147); 'William JACK's letters to WALLICH, 1819–1821' (Journ. Str. Br. Roy. As. Soc. *no* 73, 1916, p. 147–241).

(2) Description of *Nias* in JACK, Malayan Miscellanies 2, 1822, *no* 8 (reprinted in HOOK. Comp. Bot. Magaz. 1, 1835, p. 137–140).

(3) *cf.* Malayan Misc. 2, 1822, *no* 1, p. 1–22 (republ. in HOOK. Comp. Bot. Magaz. 1, 1835, p. 141–144).

(4) WALLICH's 'Catalogue of the plants in the Hon. E.I.C.'s Herbarium', lithographed from 1828–32, and Sir J. HOOKER's 'Flora of British India', contain the elaboration of JACK's herbarium.

A list of JACK's herbarium as far as recorded in various places is given in Journ. Str. Br. Roy. As. Soc. *no* 73, 1916, p. 241–268.

(5) *cf.* Pflanzenreich IV, 165, p. 697.

(6) *cf.* Journ. Str. Br. Roy. As. Soc. *no* 73, 1916, p. 212 and 215 (also footnote).

(7) *cf.* advertisement in Athenaeum 1842, p. 44.

(8) 'Descriptions of Malayan Plants' (Malayan Misc. 1, 1820, *no* 1, p. 1–26; *l.c. no* 5, p. 1–48; *l.c.* 2, 1822, *no* 7, p. 1–96). Republished in HOOK. Bot. Misc. 1, 1830, p. 273–290; *l.c.* 2, 1831, p. 60–89; HOOK. Journ. Bot. 1, 1834, p. 358–380; HOOK. Comp. Bot. Magaz. 1, 1835/36, p. 147–157, 219–224, 253–272; Calc. Journ. Nat. Hist. 4, 1843.

(9) *e.g.* in Transact. Linn. Soc. 14, 1823, p. 1–22, 23–45, 114–130 (abstr. in Flora 6, 1823, Beil. 93).

(10) *cf.* Journ. Str. Br. Roy. As. Soc. *no* 25, 1894, p. 164.

BIOGRAPHICAL DATA. HOOK. Comp. Bot. Magaz. 1, 1835, p. 121 *seq.;* LASÈGUE, Mus. Bot. DELESS., 1845, p. 145–147; GRESHOFF, Nutt. Ind. Pl., 1895, p. 90–91; Gard. Chron. 1899[2], p. 252–253; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936; *cf.* also above *sub* Liter. 1.

Jacob bin Haji Omar

joined the Forest Department *Malay Peninsula* in 1916; now retired. He collected mainly in N. Perak, but also in Kedah; *cf. sub* Conservator of Forests series, Kepong.

Jacob, Jan Carel s'

(1900, Amsterdam, Holland; x), phytopathologist, educated at Utrecht University, taking his Ph. Dr's degree in 1927; subsequently appointed Botanist at the Besuki Experiment Station (Djember) in E. Java, filling the latter office till the end of 1939; since September 1940 teacher at the Colonial Agricultural School, Deventer (Holland); since 1941 leader of the scientific department of the 'C.V. Landbouwbureau M. Wiersum' at Groningen.

COLLECTING LOCALITIES. *1938. E. Java:* G. Lamongan and G. Merapi-Idjen.

COLLECTIONS. *Herb. Bog.:* > 9 *nos.* He had a small *private collection*, but as it remained at Djember in E. Java, it is probably lost now.

BIOGRAPHICAL DATA. Bergcultures 13, 1939, p. 400.

Jacob van Wijckersloot, E.

sent material of *Santalum album* from *Timor* to RUMPHIUS in the 17th century.

Jacobson, Edward

father of E. R. JACOBSON (see there), managing partner of the commercial firm of JACOBSON-VAN DEN BERG & Co., besides consul of Italy, Würtemberg and Hessen, at Semarang (Centr. Java), sent material of 'Widjoja Kesoema' (*Pisonia sylvestris*) in vinegar to *Herb. Leyden*, in *1867.* The material probably came from *Noesa Kambangan*, as the species is not found on the mainland of Java. He sent zoological material in liquid to Europe too.

Jacobson, Edward Richard

(1870, Frankfurt a/M, Germany, from Dutch parents; 1944, Semarang, Java), came to Java in 1892, being in business (firm of JACOBSON-VAN DEN BERG) till 1910. His entomological and zoological

collections date from the year 1904; after 1910 he wholly devoted himself to the study of nature. In 1917 he settled at Fort de Kock, Sumatra West Coast; in 1932 he was awarded the honorary degree of Dr of Sci. by the University of Amsterdam; in 1933 he moved to Bandoeng, W. Java.

Several plants were named after him.

ITINERARY. *Centr. Java:* G. Sindoro (May 23, *1902*); G. Merapi (May 22, *1904*); *W. Java:* G. Tangkoeban Prahoe (June 15, *1908*).[1] *Krakatau* (1908; probably making zoological collections only).—*1913.* Islands off the coast of W. Sumatra: *Simaloer* and surrounding islets, *e.g.* on *P. Babi* with W. C. VAN HEURN (Febr.–Apr.).[2]—*1913–14. Sumatra West Coast:* Padang Highlands and Lowlands.—*1915.* Kerintji Distr. (July–Sept.), summit G. Kerintji (= Peak of Indrapoera) (Aug. 26).—*1916. S. Sumatra, Benkoelen Expedition,*[3] with mantri AJOEB (see there): Benkoelen; Rimbo Pengadang (June 7–29); Soeban Ajam Estate at the foot of G. Kaba (July 1); bivouac in the forest (1200 m); back to Soeban Ajam (17); by car (early in Aug.) to Pasoemah Estate at the foot of G. Dempo; bivouac near Air Njoeroek; ascent to 2000 m (10); to 3100 m (23); descending (26) to Pasoemah Estate. *E. Java:* G. Lawoe (Dec.).[4]—*1917. Sumatra West Coast:* G. Ophir (= G. Tala(k)mau) (Apr.–June) with BÜNNEMEYER (itiner. *etc.* see there); JACOBSON came behind B., reaching the summit on June 6th.[5] *E. Java:* G. Lawoe.—*1917–32.* Mainly *Sumatra West Coast:* many excursions from Fort de Kock, *e.g.* to G. Singgalang and G. Merapi, Batang Paloepoeh (Nov.–Dec. *1925*), Aneikloof (Apr. *1926*); in *Sumatra East Coast* (*1929*); peat near Alahan Pandjang (*1931*), Padang (*1932*); also on G. Talang.—*1932–42.* Principally in *W. Java:* Priangan Res.; in *E. Java:* G. Idjen (*1936*) *etc.*

COLLECTIONS. *Herb. Bog.:* large collections of orchids, partly with GROENEVELDT and THEUNISSEN (see those),[6] but also many other plants and *Fungi* (some of the latter collected by his daughter ELEONORA JACOBSON); 550 *nos* (1–550) + material in spirit from the *Benkoelen Exp.* with mantri AJOEB. The numbering is rather confused, *e.g.* the *nos* 2311–2809 were collected in 1915, the *nos* between 2200–2265 were collected in ± 1925–27; in later years he used low numbers again. In *Herb. Leyden: Fungi* (coll. with VAN HEURN) and *Sumatra* phanerogams. In 1925 he sent material of *Rafflesia arnoldi* and *Brugmansia* (= *Rhizanthes*) *lowii* to the *Herb. Linn. Soc. Lond.*[7]

In *Hort. Bog.:* many living orchids, presented in the course of years; in 1921 the whole of his collection, comprising 347 specimens.

LITERATURE.(1) E. R. JACOBSON: 'Beklimming van drie van Java's vulkanen' (Tijdschr. K.N.A.G. 1909, p. 447–451, pl. 2–5).

(2) E. R. JACOBSON: 'Simaloer van thans' (*l.c.* 1913, p. 356–357); 'Het eiland Simaloer' (*l.c.* 1917, p. 265–277).

(3) E. R. JACOBSON: 'Rimboeleven in Sumatra' (Trop. Nat. 6, 1917, p. 1–7, 19–22, 33–37, 69–72, 93–95, 125–127, 136–139, 171–173; *l.c.* 7, 1918, p. 17–20, 41–43, 49–52; totally 12 fig.).

(4) *cf.* CAMMERLOHER in Bull. Jard. Bot. Buit. sér. 3, vol. 5, 1923, p. 335.

(5) E. R. JACOBSON: 'In het oerbos van den Ophir' (Trop. Nat. 8, 1919, p. 1–5, 17–21, 49–54, 65–72, 81–92, 113–121, 129–133, 145–150; totally 17 fig.).

(6) Described by J. J. SMITH in FEDDE Repert. 32, 1933, p. 129–386, and in other papers.

(7) *cf.* Journ. Bot. 63, 1925, p. 31.

BIOGRAPHICAL DATA. Trop. Nat. 21, 1932, p. 97, w. portr.; BACKER, Verkl. Woordenb., 1936, *cf.* also *sub Addenda;* Bijdr. t.d. Dierk. 27, 1939, p. 191–192; Natuurwet. Tijdschr. N.I. 102, 1946, p. 125–127; Entomol. Berichten 12, 1946, *no* 267/268, p. 2–3 + portr.

Jacoeb, *cf. sub* Forest Research Institute, Buitenzorg.

Jacquinot, Honoré

(1814, Moulins en Gilbert, Nièvre, France; ? , ?), medical officer of the voyage to the Antarctic regions in the 'Astrolabe' and 'Zélée' (1837–40) (itiner., liter.. *etc.*, *cf. sub* HOMBRON). Together with the latter he published the zoological and botanical results of the expedition.

COLLECTIONS. *Herb. Paris:* specimens from *Timor*, *Ceram* (Waroe), *W. New Guinea, etc.*

MS. drawings of the voyage (not mentioning the draughtsman) in Libr. Nat. Hist. Mus. Paris.

Jäger, G., *cf. sub* Forest Research Institute, Buitenzorg.

Ja(e)ger, Herbert de

(1636 or 1637, Zwammerdam, Z.H., Holland; Jan. 6, 1694, Batavia, Java), son of a farmer, educated at Leyden University from 1656 or 1657–62; from 1663–65 clerk and secretary at Batavia; from 1666–70 in Persia, and subsequently till 1680 on the Coromandel coast, from where to Batavia again. From 1683–86 in Persia once more, and then returning to Batavia. He was the closest friend of CLEYER (see there), a correspondent of RUMPHIUS,[1] and also acquainted with KAEMPFER, and N. WITSEN. He finally became mentally deranged. He had a wide knowledge of oriental languages.

He is the author of some botanical papers.[2]

COLLECTIONS. Like several others he evidently occasionally sent plants to J. BREYN, published by the latter.[3] His correspondence with RUMPHIUS was published by VALENTIJN who certainly used many posthumous papers of DE JAGER for his book, without mentioning it;[4] several letters of DE JAGER in SLOANE MSS, Brit. Museum.

LITERATURE. (1) Several times mentioned by RUMPHIUS in his 'Herbarium Amboinense' as a botanist.

(2) H. DE JAEGER: 'Observatio de herbae Indigo dictae salione, culta, *etc.* extractione coloris Indigo dicti circa Tsinsiam in regionibus Orientalibus' (in Misc. Acad. Nat. Cur. Dec. II).

(3) in 'Prodromi fasciculi rariorum plantarum' 1739, *cf.* p. 7 *etc.*

(4) in 'India Literata' p. 381–420 (Appendix to

M. B. VALENTINI, Historia simplicium reformata, Francofurti a/M. 1716), letters to and from RUMPHIUS. This Appendix includes some extracts from MSS of DE JAGER too.

BIOGRAPHICAL DATA. Bijdr. Kon. Inst. Taal-, Land- en Volkenk. reeks 2, vol. 4, 1862, p. 17–122; and *l.c.* reeks 3, vol. 4, 1869, p. 67–97; DE HAAN, Priangan, 1, 1910, personalia p. 220–224; Encyclop. N.I. 2, 1918; Ned. Kruidk. Arch. 52, 1942, p. 391; Oost en West 42, *no* 2, 1949, p. 10.

Jagoe, Robert B.

(1902, Ireland: x), Botanist in the Dept of Agriculture in the Malay Peninsula, *since 1926*.

COLLECTIONS. *Herb. Sing.*: plants of economic importance, especially grasses, collected in various parts of the *Malay Peninsula*.

Jagor, Fedor

(1816, Berlin, Germany; 1900, Berlin, Germany), traveller-ethnologist, son of a cook who came to Berlin from Russia in 1800 and finally became the owner of 'Hotel Russie' in that place.

Some plants were named after him.

ITINERARY.[1] *1857–58*. Departing from Hamburg (June *1857*), sailing *via* Sunda Strait to *Singapore* (voyage of 105 days), from where making excursions to *P. Brani* (*S* of *Singapore Island*) and Bt Tima; by boat (mid-Apr. *1858*) to *Malacca:* Rumbia, and trips to Al(l)or Ga(d)ja(h) and Linggi River; from *Singapore* (beginning of July) to *W. Java:* Batavia, Buitenzorg, Gadok, Megamendung, Telaga Warna, Tjipanas, Tjiandjur, Bandung (July 16), Lembang (17), Bandung, Trogon(g), G. Guntur (19), Kawah Manuk (20), Tjisurupan, Tjikadjang, G. Papandajan (crater), Garut, Wanaradja (22), Sumedang, G. Malabar; G. Gedeh, Tjibodas, G. Mandalawangi, G. Pangrango, G. Tangkuban Prahu, G. Tampomas, Lake of Pandjalu, G. Galungung (Aug.), Bandjar; *Centr. Java:* Tjilatjap, bird's nest caves at Karangbolang, Tjilatjap, Banjoemas, G. Slamat, Banjumas, Bandjarnegara, Diëng Plateau, Wonosobo, G. Sindoro, Magelang, the Borobudur, Karang-tritis (= ? Parang-tritis), Djokja, Surakarta, G. Lawu, Surakarta, Ambarawa, Semarang; *E. Java:* Surabaya, Malang, G. Ardjuno, G. Smeru (not reaching the summit), G. Tengger, G. Lamongan (from Klakah), Probolinggo, Plantungan; *W. Java:* back at Batavia (Dec.).—*1859–60. Via Labuan* (late in Dec. *1858*) to the *Philippines. Luzon:* from Manila to Bulacan; Laguna Prov., Pasig, Laguna de Bay, Jala-Jala, Calauan, Sta Cruz, Butucan; by sea (end of Aug.) to Albay (on the way staying for some time at Mariveles); Sorsogon, house at Daraga (= Cagsaua) at the foot of G. Mayon; march to G. Bulusan (the ascent of which failed); S. Camarines: Batu Lake, Buhi Lake, G. Iriga, solf. Igabo, Tibi, Naga, G. Yamtik (Amtik, Hantu); N. Camarines: Paracale *etc.*, along the coast *via* Quitang and Pasacao; from Naga to G. Isarog (May *1860*), G. Iriga and G. Mazaraga (June); *Samar:* Lauang (July 5), visiting the N., S. and E. coast and the interior; *Leyte:* G. Kasiboi and Bito Lake.—According to BACKER, Verkl. Woordenb., 1936, he visited the *Malaysian region* again in the years *1873–76* and *1890–93*.

COLLECTIONS. *Herb. Berl.: Singapore* and *Malacca* 294 *nos*, *Labuan* 20 *nos*, *Java* 522 *nos*, *Philippines* 345 *nos;* besides *Fungi*, lichens and mosses and an important collection in the *Show Museum;*[2] some dupl. in *Herb. Leyden* (*ex Herb.* HASSKARL). No collections are mentioned of his travels after 1860.

LITERATURE. (1) F. JAGOR: 'Singapore, Malacca, Java, Reiseskizzen' (Berlin 1866); 'Reisen in den Philippinen' (Berlin 1873, with Appendix on geology and skulls). In geographic names the German 'u' is used instead of the Dutch 'oe'.

(2) Plants of his described in WARBURG, Monsunia, 1900.

J. PERKINS and others gave an enumeration of some recently collected plants of JAGOR, *etc.* in Fragm. Fl. Philip. 1904, p. 4–66, 77–202.

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; BACKER, Verkl. Woordenb., 1936.

Jaheri

(1857, ? ; 1926, Buitenzorg, Java), Indonesian, since 1869 in the employ of the Herbarium at Buitenzorg, finally 'mantri'; plant collector who attended several expeditions in the Malay Archipelago. In 1922 he was awarded the Golden Star for loyalty and merit; he retired in 1925, after 56 years of service.

Several plants were named after him.

ITINERARY. *1888. Moluccas.* With WERTHEIM *Expedition* (see there) to the *Kai Islands:*[1] sailing from Priok (March 10) *via Bali* (Boeleleng), *SW. Celebes* (Makassar); *Ambon* (24–25), visiting Papenberg; *P. Wetar* (Ilwaki), *P. Kisar, P. Leti, P. Damar, P. Babar* (Tepa); *Tanimbar Islands* (March 30 on *P. Sera;* some hours on *P. Larat*); *Aroe Islands* (*P. Wamar*, Dobo); *Kei* (= *Kai*) *Islands:* Toe(w)al (Apr. 3), Noehoero(w)a; excursions to Ewoe, Langgoer, Sathean, Doellan, Ibra, Daboed, Faan, Totoad, *P. Dranan, P. Soea, P. Roemadan;* WERTHEIM sailed from Toeal (July 6), leaving JAHERI behind; when W. returned (Oct. 6), JAHERI recently had come back from a journey to *Hoog-Kei* (= *? Noehoetjoet*) and subsequently embarked for Batavia.—*1893. Moluccas* (incl. *Kai* and *Aroe Islands, Zuidooster* and *Zuidwester Islands*) & *New Guinea.* With M. TREUB (itiner. *etc.* see there).—*1895. Sumatra East Coast* (July–Aug.), from Permandian in Deli.[2]—*1896–97.* With NIEUWENHUIS *Expedition* (itiner. *etc.* see there) to *Borneo*, assisted by LAHIDIN of the Buitenzorg Botanic Gardens. JAHERI collected at least in the following localities: Tenggang, Nanga Bahangan, Peningin, Sg. Bloe-oe, Sg. Sibouw (= ? Sibau), Sg. Pary, Sg. Magne, Sg. Broen(e)i, Sg. Dengey (= Dingei), Leleboelan Tepoetsey, Bt Maong, Bt Liang Karing, Sg. Doho (= Dëhô), Tepoh and Sg. Sak.—*1901. Dutch S. New Guinea* in the 'Java': Merauke (Apr.), Fak-Fak and Skroë (Vogelkop); *Thursday Isl.* (May); *Tanimbar* (June 6); *Ambon.*—*1910. W. Java:* Tjibodas.

COLLECTIONS. *Herb. Bog.*: 478 *nos* from the

Kai Islands (+ 70 fruits for the carpological collection) and living plants and seeds for *Hort. Bog.*;[3] living plants collected with TREUB (see there); collection *Sumatra East Coast*;[4] 1764 *Borneo nos* (1896–97) + living plants; ± 250 *New Guinea nos etc.* (1901),[5] and 181 *nos* of seeds and plants for *Hort. Bog.*



JAHERI

The collection of the *Kai Islands* was sent for elaboration to the Herb. Leyden in 1906.

LITERATURE. (1) *cf.* 'Verslagen van de wetenschappelijke opnemingen en onderzoekingen op de Key eilanden' (Leiden 1893), including C. J. M. WERTHEIM: 'Verslag van mijne reis naar de Kei-eilanden' (*l.c.* p. 39–155; reprinted in Tijdschr. K.N.A.G. 1892[2], p. 757 *seq.* and 921 *seq.*).

(2) *cf.* Versl. Pl. Tuin Buitenzorg for 1895, p. 50–52.

(3) *cf. l.c.* for 1888, p. 77–78.

C. DECANDOLLE: 'Piperaceae a JAHERI in insulis Key collectae' (Meded. 's Rijks Herb. Leyden *no* 32, 1918, 2 pp.).

(4) *cf.* List of living plants in Versl. Pl. Tuin Buitenzorg for 1895, p. 51–54; *cf.* also HALLIER in Bull. Herb. Boiss. 6, 1898, p. 212–220, 284–288, 348–360, 604–622; and *l.c.* sér. 2, vol. 1, 1901, p. 667–676, pl. 9–12.

(5) Some of his plants described in Nova Guinea vol. 8.

BIOGRAPHICAL DATA. Bull. Jard. Bot. Buit. sér. 3, vol. 8, 1927, p. 494; BACKER, Verkl. Woordenb., 1936.

Jahja, A., *cf. sub* Forest Research Institute, Buitenzorg.

Jahja, Z., *cf. sub ditto.*

Jahn

at that time Manager of the Mining Company Simau at Lebong Tandai, Benkoelen (*S. Sumatra*), sent dried material of a *Sindora* to *Herb. Bog.* (June *1919*).

James

Medical Officer at Padangsidimpoean, Tapanoeli (*W. Sumatra*), collected material of the camphor-tree at Batang Taro, on behalf of Prof. W. H. DE VRIESE, in *1854* and *1855* (*cf.* DE VRIESE, Tuinbouwflora, 3, 1856, p. 87–88).

Jamie, R.

stayed for 30 years in the *Malay Peninsula;* retired in Nov. 1883.

COLLECTIONS. *Hort. Sing.:* plants and seeds (*1879, 1882*) and a large collection of orchids (purch. *1883*).[1]

LITERATURE. (1) *cf.* Str. Settlem. Govt Gazette, June 27, 1884.

Janowski (or Janowsky), R. Fr.

(1880, Mieschitz, Austria; x), temporary Military Surgeon in the D.E.I. Army (1911–14), was attached to the Exploration Detachment in New Guinea,[1] from May 1912–Febr. 1914. From the 2nd half of 1913–1914 he was assisted by the Indonesian collector KORNASSI (see there).

Several plants were named after him.

ITINERARY. *Dutch N. New Guinea. 1912.* In June exploring: E. coast Geelvink Bay, Moesairo, *P. Mambor*, Manokwari, Legarè (or Legarei) River; in July: Siriwo River, Giriwo River; Manokwari (Aug.).[2] Sept. 28–Nov.: S. coast Geelvink Bay, basin of the Wanggar River, penetrating into the Weijland Mts to 2190 m alt.; march to Hamoekoe, W of the Wanggar mouth and following the Baboeroema River and the middle course of the Wamma River to kp. Kapoerara.[3]—*1913.* Apr.–June: basin of the Wanggar River, kp. Oewapa at 2100 m alt. (June 10), proceeding to the highest summit of the Jabi (= Weijland) Mts (3720 m); for want of guides the party went astray on the road back, and all goods which could be dispensed with, were left behind; beach Geelvink Bay (June 26).[4] Manokwari (several times in Aug.–Nov.); Mamberamo River (Sept.–Oct.); *P. Koeroedoe* (Oct.); Toronta (Dec.).—*1914.* In Jan. E of the Mamberamo: Koeria and Bonggo, Tarvia and Armopa.[2]

COLLECTIONS. *Herb. Bog.: New Guinea nos* 1–637 (coll. 1912–14, incl. 20 from *Koeroedoe*) (*nos* 219–300 are wanting in the list preserved at Buitenzorg) + material in alcohol; dupl. in *Herb. Leyden* and *Utrecht.*

Hort. Bog.: 200 living *New Guinea* plants, attended to by KORNAS(S)I (see there).[5]

LITERATURE. (1) *cf.* 'De uitkomsten der verrichtingen van de militaire exploratie in Ned. Nieuw Guinea (Voorl. uitg.)' (Results obtained by military exploration work in Dutch New Guinea, Prelim. Stat.) (in Meded. Encyclop. Bur. *no* 11, 1916, 35 pp. w. map); 'Verslag van de militaire

exploratie van Ned. Nieuw Guinea, 1907–15' (Weltevreden 1920; incl. botany!).

(2) Data extracted from the list of the collection, which is preserved in the Buitenzorg Herbarium.

(3) *cf.* Tijdschr. K.N.A.G. 1913, p. 532–533 and Versl. Milit. Expl. *l.c.* p. 59–60.

(4) *cf.* Tijdschr. K.N.A.G. 1913, p. 795–796 and Versl. Milit. Expl. *l.c.* p. 61–62.

(5) *cf.* Versl. Milit. Expl. *l.c.* p. 350.

Many orchids described by J. J. SMITH in the series 'Vorläufige Beschreibung Papuanischer Orchideen'; other plants in Nova Guinea vol. 12, and in the 'Beitr. Flora Papuasiens' (ENGL. Bot. Jahrb. 1912 →).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Janse, Jacobus Marinus

(1860, Middelburg, Z., Holland; 1938, Zeist, U., Holland), plant physiologist who studied botany at Amsterdam, where he took his Ph. Dr's degree in 1885. He was for some years Assistant of Prof. SURINGAR, and in 1889 he was appointed in the Buitenzorg Botanic Gardens; in 1899 he succeeded SURINGAR at Leyden, retiring in 1930.

Author of several papers in the periodicals 'Teysmannia' and 'Ann. Jard. Bot. de Buitenzorg'.

COLLECTIONS. *Herb. Groningen:* demonstration material from the Botanic Gardens, Buitenzorg, *W. Java*, coll. in *1899* (pres. 1905). Probably the same at *Leyden* (also material in spirit).

BIOGRAPHICAL DATA. Wie is dat? ed. 1–4; H. VEENDORP & L. G. M. BAAS BECKING, Hortus academicus Lugduno Batavus 1587–1937, Harlemi 1938, p. 177; Ann. Jard. Bot. Buit. 49, 1940, p. 49–54, incl. bibliogr. + portr.

Jansen, Albert Jacques Frédéric

a resident of Manado (*N. Celebes*), sent plants to the 'Natuurkundige Vereeniging' at Batavia, intended for *Hort. Bog.*,[1] in the years *1854–57*. He sent dried material too, which was forwarded for identification to TEYSMANN, so it might have been preserved in *Herb. Bog.*

LITERATURE. (1) Data extracted from various volumes of the Nat. Tijdschr. N.I., *e.g.* from *l.c.* 11, 1856, p. 222.

Jansen, Arnold Hendrik

(1886, Rotterdam, Z.H., Holland; 1931, Bussum, N.H., Holland), brother of the well-known Dutch agrostologist Dr P. JANSEN; from 1911–14 stationed in *Boeroe* as a missionary. He returned to Holland on account of illness, and was subsequently in the employ of the 'Handelmaatschappij', at Amsterdam.

COLLECTIONS. *C.* 20 grasses from *Boeroe* in *Herb.* JANSEN, which in due time will be incorporated in *Herb. Leyden.* At present some dupl. in *Herb. Leyden.*

Jansen, Edouard Constant Louis

(1902, Ngawi, Java; June 24, 1924, Langsa, Atjeh, Sumatra), overseer, since 1921 in the employ of the D.E. Indian Forest Service; at first stationed in the teak districts, in 1922 transferred to N. Sumatra, stationed respectively at Langsa, Idi, and Langsa.

COLLECTING LOCALITIES. *1922. Centr. Java* (Sept.): Kedoengdjati, Semarang, Telawa, in teak forest.

COLLECTIONS. *Herb. Bog.*, numbered in the series of BEUMÉE (see there).

Jansen, W. C. K., *cf. sub* Forest Research Institute, Buitenzorg.

Jansz, P. A.

son of a missionary at Magelang, Java; in 1927 employed at a Sugar Factory of the 'Internatio' near Pasoeroean; about 1930 dismissed on account of the slump; subsequently manager of a furniture-store at Semarang.

COLLECTIONS. In *Herb. Pasoer.:* 19 *nos*, collected near Sarangan on the slope of G. Lawoe, *E. Java* (*1927*).

Japing, Christoffel Hendrik

(1891, Doetichem, Gld, Holland; x), Forest Officer, since 1915 in the employ of the D.E. Indian Forest Service; for some years stationed in the teak districts in Java; in Nov. 1919 transferred to Sumatra, successively stationed at Palembang, Koetaradja (Oct. 1922), and Medan (July 1926); in 1927 to Buitenzorg, and in 1929 to Sumatra again, *viz* at Fort de Kock, Palembang (1931), and Medan (1933); in 1934 back to Java, stationed at Bandoeng; in the same year appointed Inspector. He retired in 1938.

COLLECTING LOCALITIES. *N. Sumatra*, Atjeh: Langsa and Lho Seumaweh (*1923*); Takengon (*1927*).

COLLECTIONS. *Herb. Bog.* and *Herb. For. Res. Inst. Buitenzorg:* some tens of numbers in the bb. series (*cf. sub* Forest Research Institute, Buitenzorg).

Japing, H. W., *cf. sub* Forest Research Institute, Buitenzorg.

Jarck

a friend of the orchid grower W. SCHMIDT at Dresden, Germany, collected *Aerides jarckianum* SCHLTR in the Laguna near Manila (*Luzon, P.I.*). At the time JARCK was evidently a resident of Manila (*cf.* Orchis 9, 1915, p. 53).

Jasir, *cf. sub* Forest Research Institute, Buitenzorg.

Jaspers, W. E., *cf. sub ditto.*

Jatim, Mohd., *cf. sub ditto.*

Jee Koo, *cf.* KOO, C. JEE.

Jel(l)inek, Anton

horticulturist, attached to the expedition of the Austrian frigate 'Novara' (see below). Together with E. SCHWARZ (see there) he was to undertake

the botany department; other members were the geologist HOCHSTETTER (see there), the zoologist FRAUENFELD, and K. VON SCHERZER, the author of the statistical-commercial and the descriptive part of the expedition.[1]

ITINERARY. *Expedition in the 'Novara', 1857–59.*[1] Sailing from Trieste (Apr. 30, 1857); *via* Gibraltar, Madeira, Rio de Janeiro, Cape of Good Hope, islands of St Paul and Amsterdam, Ceylon, Madras, Nicobars; *Singapore* (Apr. 15–20, *1858*); *W. Java* (May 5–28): Batavia, Buitenzorg (13), Pondok Gedeh, Gadok, Megamendoeng, Tjipanas (14), G. Pangrango-Gedeh (15–16), Tjibodas, Tjiandjoer (16), Buitenzorg (17–19), Batavia (weighing anchor on the 29th); *Philippines, Luzon* (June 15–24): at Cavite, Manila, Laguna de Bay, Pasig River, Patero, Los Baños, *etc.;* sailing *via* Hongkong, Shanghai, Sydney, Auckland, Tahiti, Valparaiso and Gibraltar; back at Trieste (Aug. 26, 1859).

COLLECTIONS. *Herb. Vienna:* 2000 phanerogams and 1573 cryptogams 'Novara' Exp. + 190 *Algae* (bequeathed in 1897);[2] we do not know whether all of them were collected by JELINEK. Dupl. in *Herb. Imp. Gard. St Petersb.* (= *Leningrad*): several (from *Java* 159); *Herb. Berl.:* 200 *nos* of phanerogams, 140 cryptogams, and 59 vascular cryptogams; *Herb.* DECAND. (*Geneva*): 145 (8 from *Java*).

LITERATURE. (1) 'Die Weltumsegelung der k.k. Österreichischen Fregatte Novara' (PETERM. Mitt. 1859, p. 403–410).

cf. also Nat. Tijdschr. N.I. 21, 1860, p. 438–441.

'Reise der Oesterreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858 und 1859, unter den Befehlen des Commodore B. VON WÜLLERSTORF-URBAIR' (Wien 1861–75; 8 sections, narrative by VON SCHERZER). A popular edition of the narrative by VON SCHERZER was published too (Volksausgabe 1864–66, 2 vols).

(2) Botany in 'Botanischer Theil', 1st vol. (1870) of the 3rd sect. of above-mentioned work. Only 1 part was published, containing *Algae*, lichens, *Fungi, Myxomycetes, Hepaticae* and *Musci, Ophioglossaceae* and *Equisetaceae*, by GRUNOW, KREMPELHUBER, REICHARDT, METTENIUS, MILDE, and FENZL.

Dr SITZENBERGER: 'Nachtrag zur botanischen Ausbeute der Novara-Expedition' (Flora N.R. 44, 1886, p. 415–417; lichens of the Cape of Good Hope!).

Jellesma, Eeltje Jelles

(1851, Groedo, Soerabaja, Java; 1918, The Hague, Holland), since 1870 in the D.E. Indian Civil Service, stationed in Celebes; from 1892 till his retirement in 1903, Resident of Manado. He facilitated the investigation of the SARASINS and KOORDERS in the Minahassa.

Cyrtandra jellesmani KDS was named after him.

COLLECTIONS. *Herb. Bog.*, probably but few specimens; he sent *Vanda arcuata* J.J.S. in *c. 1899* to *Hort. Bog.*[1]

LITERATURE. (1) *cf.* Icon. Bogor. 3, 1909, p. 104; = *Vanda celebica* J.J.S. in Teysmannia 9, 1899, p. 205.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Jellinek, A., *cf.* JELINEK.

Jenkins

who is commemorated in the genus *Jenkinsonia* HOOK., is cited to have botanized in *Java.*[1] Probably FR. JENKINS, a collector in British India, is meant; we doubt the statement of LINDEMANN.

COLLECTIONS. *Herb.* LINDEMANN (U.S.S.R.): 16 *nos.*[1]

LITERATURE. (1) *cf.* Bull. Soc. Nat. Moscou 60^4, 1884, p. 307.

Jensen, Hjalmar

(1865, Odense, Fünen, Denmark; x), botanist, educated at Copenhagen; employed in the Laboratory for Plant Physiology at Copenhagen (1890–97), and at the Experiment Station for Agriculture at Karlsruhe (1898–1900); Botanist for tobacco research in the Botanic Gardens at Buitenzorg, 1900–12; Director of the Experiment Station for 'Vorstenlanden' Tobacco (Klaten, later Wedi, Centr. Java), 1912–18; Head of the Laboratory for Microbiology at Buitenzorg in 1918; in 1919 back to Europe and in 1923 appointed University Lecturer in Microbiology at Copenhagen. In 1922 he was attached to a Danish expedition to the Moluccas (see below), conducted by Dr TH. MORTENSEN (see there); he was assisted by mantri IBOET of the Botanic Gardens, Buitenzorg.

Author of agricultural, microbiological and botanical papers.[1]

Eria jenseniana J.J.S. is named after him.

COLLECTING LOCALITIES. *1900–12. Java.—W. Java:* G. Gedeh (*before 1910*); *Centr. Java: Nusa Kembangan* (*19 . .*).—MORTENSEN *Expedition, 1922.* Staying in *Ambon* (Febr. 8–March 14; for some days in the Bay of Saparoea) and the *Kei* (= *Kai*) *Islands* (March 17–May 23); evidently paying a visit to the *Aru islands;* after the sojourn in the Kai Islands, JENSEN returned to Java.

COLLECTIONS. *Herb. Copenhagen:* extensive collections of *W., Centr.*, and *E. Java* (coll. 1900–12), partly herbarium, partly dried parts of plants, and material in alcohol (especially rich). Some orchids from *Java* collected for J. J. SMITH, in *Herb. Bog.* Plants of the *Kai* expedition in *Herb. Copenh.:* 479 *nos;* 2nd set in *Herb. Bog.*, 3rd in *Herb. Leyden.* The collection contains many *Algae.*[2]

Some living plants from the MORTENSEN Expedition in *Hort. Bog.*

LITERATURE. (1) *E.g.:* 'Een knopdannelse paa Hypokotylen hos Jatropha curcas' (Biol. Arbejder tilegn. Eug. Warming 1911, p. 123–125, 3 fig.); 'Viviparie bij Phalaenopsis amabilis' (Trop. Nat. 4, 1915, p. 40–43, 2 fig.).

(2) *cf.* A. WEBER VAN BOSSE in Vidensk. Medd. Dansk Naturh. Foren. København. 81, 1926, p. 57–155, 43 fig.

BIOGRAPHICAL DATA. Teysmannia 29, 1918, p. i–xix, w. portr.; Meded. Proefstat. Vorstenl. Ta-

bak *no* 38, 1918/19, p. 3, portr.; portr. in CHRISTENSEN, Den Danske botanisks Historie 1, 1924–26, p. 853; portr. & bibliogr. in CHRISTENSEN, Den Danske botaniske litteratur 1880–1911, 1913, p. 145–146, and *l.c.* 1912–1939, 1940, p. 32–34 + portr.; BACKER, Verkl. Woordenb., 1936.

Jensen, Marius

conceived the idea of collecting sets of dried plants for sale, but seems not to have carried it out.

COLLECTING LOCALITIES. *Malay Peninsula:* neighbourhood of *Singapore* and Johore (Nov. *1901*) (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Copenhagen;* dupl. at *Kew.*

Jensma

made a study tour in the *Dutch East Indies* at the expense of the DETERDING Fund, in *1936.*

COLLECTIONS. Plants collected by him during the tour were dried at the Buitenzorg Herbarium and forwarded to him in Oct. 1936. He intended to take them to Holland. We do not know the present location.

Jentink

of Boea, Sidjoendjoeng subdiv., *Sumatra West Coast,* sent plants to *Hort. Bog.* in *1873.* Probably D. P. JENTINK, District Officer of the D.E. Indian Civil Service.

Jeppesen, Hans Leu

Danish planter, before World War II at Mount Austin Estate, Johore, *Malay Peninsula;* interested in orchids.

COLLECTIONS. Living orchids to *Hort. Sing.* (*c. 1910–35*); possibly some preserved in *Herb. Sing.*

In *1947* he collected at Zamboanga (*Mindanao, P.I.*), *1946–47* in Malacca (*Malay Penins.*), *c.* 100 specimens; in *Herb. Copenhagen* (sent for identification to Dr E. D. MERRILL in 1948).

Jespersen, J.

(1859, near Lemvig, Denmark; ?), Army Surgeon in the East Indies.

COLLECTIONS. *Herb. Copenhagen:* plants from *Banka* and *Java* (pres. *1889, 1891, 1899*).

Jesse, W. C., *cf. sub* Forest Research Institute, Buitenzorg.

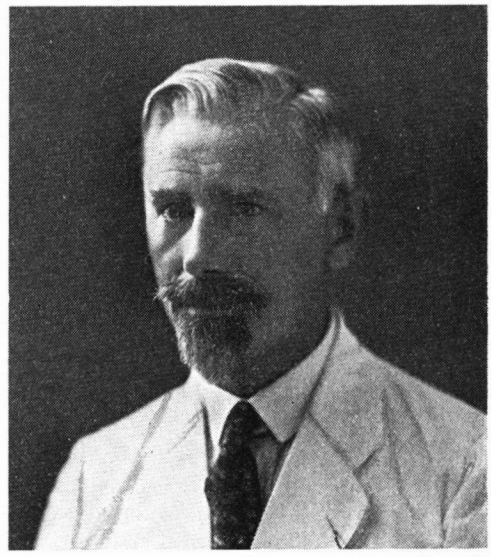
Jesselton

is cited by CAMMERLOHER[1] as the collector of *Fagraea fragrans, no* 9563, in *Br. N. Borneo.* Probably the plant was collected near the place Jesselton, whereas the number involved is evidently one of a series; the collector was probably one of the rangers or forest officers of the Forest Department Br. N. Borneo.

LITERATURE. (1) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 5, 1923, p. 319.

Jeswiet, Jacob

(1879, Amsterdam, Holland; x), botanist, educated at Amsterdam, Zürich and Berlin, who took his Dr's degree in the University of Zürich; Chief of the division of Cane-breeding of the Experiment Station for Java Sugar Industry at Pasoeroean (E. Java), 1912–25; in 1925 appointed Professor of Taxonomy and Plant Geography at Wageningen



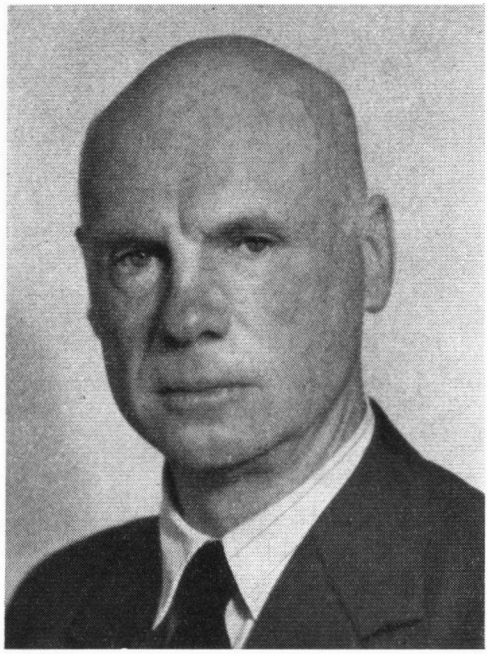
JESWIET

Agricultural College.[1] In 1946 he was dismissed on account of collaboration with the Germans during the years of occupation.

In his early Java years he collected with his wife H. J. HAGEDOORN (see there). He accompanied an American expedition to New Guinea, aiming at the collecting of unknown wild races of the sugar-cane, in 1928 (see below).

COLLECTING LOCALITIES. *1912. Centr. Java:* G. Slamat with Mrs JESWIET-HAGEDOORN (Nov. 28).—*1913. E. Java:* Lalidjiwo (March 23–25); G. Jang (Oct. 16–24) with C. A. BACKER; Sidoardjo; Goenoeng Grintjing (Oct. 27–28); Tjemara lantjang (Nov. 26).—*1914.* G. Tengger, Nongkodjadjar and vicinity with C. A. BACKER (Oct. 3–28), Klètak Pass (Oct. 3–5), G. Lawangan (Oct. 8).—*1915.* Djombang, tambaks (fish ponds) (Dec. 25).—*1917.* Kepoeh (May 6); in the lowlands (May 20); G. Semongkrong (June 3, ? 1917).—*1918.* G. Tengger (Ngadisari, Tjemara Lawang, Zandzee, Bromo forest, *etc.*) (Aug.).—*1920.* G. Lamongan with C. A. BACKER (March 27); Pasoeroean (Pekoentjen and Boehoe).—*1921.* Pasoeroean; G. Ardjoeno–Welirang (Aug.), Soekapoera on the NE. slope of G. Tengger (Sept. 18); Probolinggo (Ngepoeng); G. Semongkrong (Nov.).—*1922.* Pasoeroean (Pekoentjen); Loembang (Aug.); Kalimati. —*1923.* Pasoeroean (Pekoentjen *etc.*); Probolinggo; G. Ardjoeno; Banjoewangi, beach (Aug.); G.

Idjen (Kawah, Ongop Ongop, Gending Waloeh, Rendjengan, Sempol, G. Kendeng) (Aug.); G. Raoeng (Aug.); G. Smeroe (Sept.); Pasoeroean (Pekoentjen, Sidohardjo).—*1924.* Pasoeroean; G. Smeroe.—*1925.* Kepoeh, Pasoeroean (March), Grissee (Apr. 3), Pasoeroean (Apr.), Soekapoera



JOCHEMS

(gorge of Oemboelan, Apr. 12), Loemboeng Bajeman (Apr. 12), Grati (May), Kedawoeng (May), G. Semongkrong (May 6), Bangil (15), G. Penandjaän (16), Soerabaja (22), Soetji (22), Telaga Bodjar (22), Tangoelangan (22), Poedjon (22), Pasoeroean (June 5), Tosari (June 13), Pasoeroean (17), Soemberbrantas (19), Soekapoera (21), Kali Gombong (28), Pasoeroean (Pekoentjen, Gading, July 6), Soekapoera (8), Wijoe (12, 18), Poedjon (18), So(e)nggoriti (18), Soekapoera (19), Solo (19), Pasoeroean (July 28, Aug. 6), Kraksaän; *Madoera:* Sapoeloeh (Aug. 21), Amboenten (22), Karrenfelder Kepedi (23), SW of Talang, Soekalele (= Soekalila); *E. Java:* Sarangan (26); *Centr. Java:* Tjilatjap (28), G. Slamat (30), with C. A. BACKER on G. Slamat (Sept.); *W. Java:* G. Gedeh; Pasir Datar (Sept.), Tjibodas–Tjibeureum (4–5), Buitenzorg (6); *Sumatra East Coast:* Perbaoengan (13), Ampelas (14), Namoe Oekoer (15), Batang Serangan (15), G. Sibajak (18).—*1928. Trip to Australia and New Guinea.*[2] *S. & SE. New Guinea, Papua:* arrival at Port Moresby (May 25, collecting till June 28 in the vicinity); visit to Laloki River and Rauna (= Rona) Falls (July 8); by aeroplane to the Fly River, making camp (21); Kikori; Everill Junction (23), bank of the Fly above the junction (23), Strickland River (Central Fly region, 24), Davioemboe (= Daviumbu) (27), Lake Murray (27), Kiva camp (Strickland, 31), Everill Junction (Aug. 6), Devaam (Central Fly, 6), Separa (Lower Fly), Bramble Cay (island, 16), Daru (W of Fly, 18), Oriomo River (W of Fly, 18); back at Port Moresby (18); a fortnight's trip to Rigo River (Aug. 22–Sept.); Tinung.—*1929. Singapore* (May 10); *P. Weh:* Sabang (May); *Krakatau* (May 13); *W. Java:* G. Tangkoeban Prahoe (May), Lembang (May); *Bali:* Kintamani (June 30); *E. Java:* G. Tengger (July 5); G. Smeroe: Ajaq Ajaq (6), Ranoe Koembolo (7), above Radjopodo (9), Ranoe Pani (10), Ajaq Ajaq (10), Porrong (July 29); *N. Sumatra,* Atjeh:[3] Baleq (Aug. 8), Paja Djorok (8), Mepar (9), Laut Tawar (9), One One (9), Boer ni Tellong (10), Baleq (11), Boer ni Tellong (12), Tingkom (13), Takengon (13), Lho Soekon (14), Idi (14), Lho Seumawe (14); *P. Weh:* Sabang (Aug.).

COLLECTIONS. *Herb. Bog.:* coll. JESWIET-HAGEDOORN and many *E. Java* plants; *Herb. Pasoer.:* 99 *nos* from *E. Java; Herb. Wageningen:* coll. from *New Guinea* (*nos* 36–293, in 1000 specimens), *Java* and *Sumatra* (few from 1912–17, > 2000 *nos* coll. Aug. 1918–29) + lists; *Herb. Utrecht: Java* plants (1913); also dupl. in *Herb. Leyden,* and in *Herb. Univ. Amsterdam.*

LITERATURE. (1) J. JESWIET: 'Moeilijkheden, verbonden aan het plantengeographisch werk op Java' (Inaugural Address, Wageningen 1926).

(2) J. JESWIET: 'Landbouw bij de Papoea's, speciaal van suikerriet' (Tijdschr. K.N.A.G. 1930, p. 329, 772); 'Met de vliegmachine op zoek naar den stamvorm van het suikerriet op Nieuw-Guinea' (Tijdschr. Nieuw-Guinea 3, 1938/39, p. 425–427).

(3) J. JESWIET: 'De dennenbosschen van Atjeh' (lecture, *cf.* Tijdschr. K.N.A.G. 1931, p. 89–91).

BIOGRAPHICAL DATA. Wie is dat? ed. 1–4; portr. in Chron. Bot. 1, 1935, p. 27.

Jimenez, *cf. sub* Forestry Bureau, Manila.

Joakim, E. E. G.

Doctor of Law, councillor of the High Court of Justice at Batavia, *Java,* sent some plants (mainly cultivated) for identification to *Herb. Bog.* in the years *1932–34.*

Jochems, Sarah Cornelis Johannes

(1891, Vianen, Z.H., Holland; x), botanist, educated at Amsterdam University, where he took his Ph. Dr's degree in 1919. In the same year appointed Botanist at the Deli Experiment Station; since 1931 Director of the same institute. He returned to Europe in 1934 and was appointed teacher at the School for Colonial Agriculture at Deventer, Holland, in 1937.

Author of many small papers on the flora of Sumatra.[1]

COLLECTING LOCALITIES. From *1921–35. North Sumatra* and *Sumatra East Coast, e.g.:* from fallow tobacco fields; Brastagi (*1923*); in *1924:* Serdang, Takengon (Jan. 14 or 16–20),[2] Kĕtol and Lampahan (Jan. 22), Brastagi;[3] in *1926:* Belawan

and Serdang;[4] in *1927:* Brastagi, G. Rinteh, Karo Plateau; Tinggi Radja (*1928*);[5] at Lau Deboek Deboek (*1929*);[6] Karo Plateau (1929, *1932*).

COLLECTIONS. *Herb. Deli Exp. Stat. Medan;* many dupl. in *Herb. Bog.; Herb. Pasoer.:* 80 dupl. Many labels bearing high numbers, partly upwards of 5000; probably numbered in continuation of his European collections.

Some living plants in *Hort. Bog.* (pres. 1925).

LITERATURE. (1) in Trop. Nat. vols 11, 13 and 15–21.

(2) S. C. J. JOCHEMS: 'Carpesium cernuum L.' (*l.c.* 17, 1928, p. 134–135, 1 fig.).

(3) S. C. J. JOCHEMS: 'De Westenenk-paadjes van Brastagi' (*l.c.* 15, 1926, p. 65–71, 8 fig.; 16, 1927, p. 67–72, 7 fig.; 17, 1928, p. 17–22, 8 fig.); 'Die Verbreitung der Rafflesiaceen Gattung Mitrastemon' (Rec. Trav. Bot. néerl. 25a, 1928, p. 203–207).

(4) S. C. J. JOCHEMS: 'Het tjemara-strandbosch bij Perbaoengan (Sumatra's Oostkust)' (Trop. Nat. 18, 1929, p. 161–171, 9 fig.).

(5) S. C. J. JOCHEMS: 'De kalksinterterrassen bij den Tinggi Radja (Sumatra's Oostkust)' (*l.c.* 18. 1929, p. 21–30, 10 fig.).

(6) S. C. J. JOCHEMS: 'De plantengroei van de omgeving der warmwaterbronnen van den Boven-Petani op Sumatra's Oostkust' (*l.c.* 19, 1930, p. 25–31, 6 fig.).

Jodkes, *cf.* JODNER.

? Jodner

collected in *1870* in the environs of Padang, *Sumatra West Coast,* at Aer Manis, Apenberg, *etc.*

COLLECTIONS. Probably the whole of the collection, > 321 *nos,* in *Herb. Bog.* As we are unable to decipher the collector's name with certainty, the collection is inserted *sub* ANONYMOUS too.

Joeng (Djan), *cf. sub* Forest Research Institute, Buitenzorg.

Joengoes Mokodompit, *cf. sub ditto.*

Joesoef, *cf. sub ditto.*

John, A.

from Cairo, used his short sojourn at Buitenzorg (Aug. 1904), *Java,* both for collecting and becoming acquainted with the tropical flora by making trips in the environs.[1]

COLLECTIONS. *Herb.?*

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 29.

John, K. W.

collected plants in the *Philippines* (*cf.* SCHLECHTER in Orchis 5, 1911, p. 61, pl. 8).

John, Spenser St

Secretary of J. BROOKE (see there), whom he accompanied to Borneo in 1848, sailing with him for the East in H.M.S. 'Maeander' under command of Capt. H. KEPPEL; later (1855) appointed Consul General for Br. N. Borneo. In 1861 he was appointed deputy of the Republic of Haïti.

Author of some publications on Borneo.[1]

Pilea johniana STAPF and *Symplocos johniana* STAPF were named after him.

ITINERARY. *Philippines.* Twice visiting the *Sulu Islands,* both times Zamboanga (*Mindanao*) too, the first time in the 'Maeander' with Capt. H. KEPPEL and J. BROOKE in Dec. *1848.—1851. NW. Borneo, Sarawak:* starting from Kuching (March), by sea to the Lundu River; visit to the Batang Lupar and Lingga and Sakarang rivers; the Rejang River and the Kanowit; in April trip to the Baram River.—*1852.* Sarawak River, visiting limestone caves of Mt Rumbang, Samarahan River and the Caves of Sirih.—In *1856* leaving Sarawak and taking up residence in Brunei; journey up the Limbang River (Dec.); in Sept. *1857* ascending the Mandalam River (karst landscape), failing endeavour to reach Mt Molu; in Febr. *1858* 2nd attempt, this time in company with HUGH LOW, however, climbing Batu Rikan instead (limestone mountain of 3500 ft).—*Br. N. Borneo:* Mt Kinabula with Sir HUGH LOW (see there) (Apr. and July 1858, the last time collecting some days at Marei Parei); in Aug. 1858 from Brunei ascending the Limbang River and going by way of the Madihit River, Rawan River, Urud River, to the Upper Limbang (collecting '*Anoectochili* plants' on behalf of LOW on the Adang Range) and the Murud country.—Sailing along the coast of Sabah (= *Br. N. Borneo*) for topographical surveying.

COLLECTIONS. In his Enum. Born. Pl. 1921, MERRILL cites some *Nepenthaceae* collected by SP. ST JOHN.

LITERATURE. (1) 'Observations on the North-West Coast of Borneo' (Journ. Roy. Geogr. Soc. 32, 1862, p. 217–234; practically identical to Chapt. XI of the next book!); 'Life in the Forests of the Far East' (London 1862; chapts 8–10 on Kinabalu trips; he disposed of LOW's journals of the joint expeditions).

BIOGRAPHICAL DATA. *cf.* Capt. CH. HUNTER, The adventures of a naval officer, London 1905 (*non vidi*); BACKER, Verkl. Woordenb., 1936.

Joncheere, Gerardus Johannus de

(1909, Den Helder, N.H., Holland; x), since 1931 in the employ of the K.P.M. (Royal Packet Company) in the D.E.I.; since 1947 staying in Europe. He came to collecting ferns after the publication of the book on the ferns of Java by BACKER & POSTHUMUS.

COLLECTING LOCALITIES. *W. Java:* Batavia (*1940–41*); *E. Java:* Prigen (*1941*), collecting *Egenolfia bipinnatifida* near waterfall on the NE. slope of G. Ardjoeno; *W. Java:* Tjimahi, in prisoner's camp (*1942*).

COLLECTIONS. *Private Herbarium,* lost now.

Jones, J. W.

discoverer of *Luisa jonesii* J.J.S. (named in his honour) in Kedah, *Malay Peninsula.*

COLLECTIONS. Cult. in *Hort. Sing.* Material

was sent to J. J. SMITH at Leyden, type spec. in *Herb. Leyden.*

Jong, B. de, *cf. sub* Forest Research Institute, Buitenzorg.

Jong, Jan Kornelis de

(1895, Goedereede, Holland; x), zoologist who was educated and took his Ph. Dr's degree (1925) in the University of Amsterdam; Entomologist of the Deli Experiment Station (Medan, Sumatra), 1927–29; in June 1929 temporarily appointed in the Zoological Museum at Buitenzorg (Java); in the West Java Experiment Station at Buitenzorg, 1930–35; subsequently in the Marine Biological Laboratory at Batavia. After World War II he was stationed at the newly established Marine Biological Laboratory at Makassar, SW. Celebes.

Author of zoological papers.

COLLECTING LOCALITIES. *Lesser Sunda Islands. W. Flores* (Oct.–Nov. *1929*); *W. Flores:* environs of Mboera and Laboean Badjo (June *1937*).[1]

COLLECTIONS. *Herb. Bog.:* some *nos* collected in 1929 and 38 *nos* in 1937. On the second tour he was assisted by the Indonesian SOEHANDA (see there), who was in the employ of the Herbarium Buitenzorg.

LITERATURE. (1) J. K. DE JONG: 'Een en ander over Varanus Komodoensis OUWENS' (Nat. Tijdschr. N.I. 97, 1937, p. 173–209, w.ill.); 'Varanus Komodoensis OUWENS' (Natuur in Indië 1937, p. 15–18, w. ill.).

BIOGRAPHICAL DATA. Bijdr. Dierk. 27, 1939, p. 194.

Jong, Willem de

(1897, Balk, Fr., Holland; Sept. 18, 1944, drowned o/b s.s. Zuynio Maru as a P.O.W.), Horticultural Officer who joined the D.E.I. Government service in 1922; in the thirties stationed at Malang, E. Java.

COLLECTIONS. *Herb. Bog.:* 10 plants from *E. Java* (coll. Aug. *1933*) (pres. through the intermediary of the curator of Hort. Bog.).

Jongh, de

COLLECTING LOCALITIES. *Centr. Java:* Diëng Plateau (July *1912*); *W. Java:* Buitenzorg (*1917*).

COLLECTIONS. *Herb. Bog.;* probably but few numbers.

Jongh, Dr A. W. de

of Buitenzorg.

COLLECTIONS. *Hort. Bog.:* some *Java* grasses (pres. *1919*).

Jonker, Hagen Garreld

(1875, Veendam, Gr., Holland; 1917, The Hague, Holland), geologist, educated at Groningen University, where he took his Ph. Dr's degree in 1904; for some years Assistant at Groningen and Delft; in 1907 appointed Professor at the Technical College, Delft.

He made an expedition to Timor, accompanied by VAN ES and H. D. M. BURCK.[1] In Sept. 1916 he returned to Holland.

COLLECTING LOCALITIES. *Lesser Sunda Islands: Timor* (Jan. 6–May 14, *1916*).

COLLECTIONS. *Herb. Utrecht:* remaining part of the collection, the numbering of which, as far as known, runs to 845. The greater part was lost as the shipment of the cases containing the collecting tins (Schweinfurth method) was retarded at Priok on account of the war; on arrival in Holland several tins were corroded and the contents were worthless.

Some of the plants were preliminarily identified by VAN STEENIS in 1923.

LITERATURE. (1) *cf.* Report in Tijdschr. K.N.A.G. 1917, p. 135.

BIOGRAPHICAL DATA. De Ingenieur, Jan. 27, 1927; Encyclop. N.I. 2, 1918.

Joosten, H. J.

from Wellington, New Zealand, worked for some time in the Foreigners' Laboratory at Buitenzorg in the year *1921*. He collected plants in *Java* (*cf.* Versl. Pl. Tuin Buitenzorg for 1921, p. 2).

Joosten, Johannes Hubertus Leonardus

(1904, Venlo, L., Holland; x), studied horticulture at the Agricultural College, Wageningen; since 1928 appointed Consulting Agriculturist in the D.E.I., stationed in Java, respectively at Buitenzorg and Pasoeroean (1928), Malang (1929–30), Blitar (1930–32), Madioen (1932–35), and Batavia (1935– . .); in 1947 temporary Inspector of Agricultural Instruction.

COLLECTING LOCALITIES. *1928. E. Java:* Kraksaän and Pasoeroean (Sept. 19), Bangil (Oct.).

COLLECTIONS. *Herb. Bog.:* some *Loranthaceae.*

Jordana

is cited by MERRILL[1] as the collector of botanical material in the *Philippines.*

Probably identical with Don RAMÓN JORDANA Y MORERA (*cf. l.c.* p. 21) (1839, ? ; 1900, Madrid, Spain) who was for some years in the Philippines as an Inspector of the Forestry Bureau; while there he secured data for his work entitled 'Bosquejo geográfico é histórico-natural del Archipiélago Filipino' (Madrid 1885).

Quercus jordanae LAGUNA was named after him.

COLLECTIONS. In *Mus. Ultramarino Madrid:* extensive *Philippine* forestry herbarium secured and arranged by JORDANA.

LITERATURE. (1) In Bull. Bur. of Agric. Manila *no* 4, 1903, p. 30 and 38.

Joseph's collector, Ch.

About 1913 CH. JOSEPH, orchid grower at Buitenzorg, W. Java, employed a native collector. The latter brought home a large number of specimens of *Dendrobium tetraedre* LINDL., all with peloric flowers (*cf.* J. J. SMITH in Nat. Tijdschr. N.I. 88, 1928, p. 136).

Juch

COLLECTIONS. *Herb. Bog.: Psychotria expansa*

Bl. from the Lampong Districts in *S. Sumatra* (*cf.* Hasskarl, Retzia, in Nat. Tijdschr. N.I. 10, 1856, p. 18).

Jukes, Prof. J. Beete

accompanied H.M.S. 'Fly' under the command of Capt. F. P. Blackwood (1842–46) as a naturalist.[1] He made zoological and geological collections; the plants were probably collected by J. MacGillavry (see there for itiner., coll., *etc.*).

Literature. (1) J. B. Jukes: 'Narrative of the surveying voyage of H.M.S. Fly, *etc.*, in Torres Strait, New Guinea, and the islands of the Eastern Archipelago, during the years 1842–46; together with an excursion into the interior of the Eastern part of Java' (London 1847, 2 vols). Dutch transl. by W. R. Hoëvell: 'Togten van een Engelschman door den Indischen Archipel' (Zaltbommel 1853).

Biographical data. 'The letters of J. B. Jukes' edited with memorial notes by his sister (London 1871) (*non vidi*).

Jundak, C., *cf. sub* Forestry Bureau, Manila.

Junghuhn, Franz Wilhelm

(1809, Mansfeld, Germany; 1864, Lembang, Java), surgeon who, after some adventurous years, entered the D.E. Indian Army in 1835. Under the protection of his superior, Dr A. E. Fritze, he was soon permitted to devote himself entirely to the study of nature. In May 1839 his protector died, and when Junghuhn's temporary appointment as a member of the 'Natuurkundige Commissie' (from about 1838–39) was not continued, he decided to ask for his transfer to Sumatra. In 1840 he was instructed to make political, statistical, and biological investigations in the Batak Lands; the results were laid down in a book.[7] In 1842 he returned to Java; in 1845 he was honourably dismissed and appointed member of the 'Natuurkundige Commissie' (Commission for Natural Sciences); from Aug. 27, 1848–July 18, 1855 on furlough in Europe. In the latter year he returned to Java with the title of Inspector for Natural Science investigations; since 1857 put in charge of the direction of *Cinchona* culture, settling at Lembang.

He is the author of numerous books on the flora, climate and geology of Java.[1]

He is commemorated in several plant names.

Itinerary. *Java. 1835–40.*[2] Arriving in Batavia (Oct. 10, *1835*);[3] sailing by boat (Febr. 18, *1836*) to *Centr. Java:* Semarang; when learning his appointment at Djokja, he travelled thither *via* Oengarang, Ambarawa, Medona, Mondillang; making Djokja the centre of his excursions,[4] visiting G. Gambing, S. coast near the mouth of the Opak River and G. Mandjinnang, Imogiri, ruins of Brambanan, hills near Brambanan and Blitaran; mountains near Rankop (= Rongkap) (May 20–26), G. Seboe (Duizendgebergte), *etc.;* G. Merapi (from the S. side, Sept. 5–8); G. Merapi (from the N. side, Nov. 2 starting from Sello); G. Merbaboe (from Sello, starting Nov. 6; descending to Salatiga); forests on the S. slope of G. Merapi and G. Plawangan (Apr. *1837*).—*Travels with* Dr Fritze. *W. Java: via* Buitenzorg and Tjiandjoer to Wijnkoopsbaai (July 11–16, 1837); from Tjiandjoer to G. Kendang, Telaga Patengan and G. Patoeha (18–22); Tjisondari–G. Tangkoeban Prahoe (with Ass. Res. Nagel, 23–26); Bandoeng–G. Goentoer (with Nagel, see there; 28–29); Tjiseroepan–G.



JUNGHUHN

Papandajan (30–31); Telaga Bodas (Aug. 1–4); G. Galoengoeng (5–6); Tasikmalaja–G. Tjeremai (7–16); returning to Weltevreden (17–23).—From Batavia (Apr. 12, *1838*), *via* Megamendoeng, Tjiandjoer (14), Bandoeng, Cheribon (18); *Centr. Java:* Tegal, Pekalongan, Oengarang (23), G. Oengarang (24), to Semarang; E. slope G. Merbaboe (May 2); *E. Java:* ascending G. Lawoe via Balong (May 10–14); 2nd ascent of G. Lawoe (May 19) with Fritze and Johnston, to the east *via* Toempak, W. side of the Lawu; *Centr. Java:* Magelang; G. Soembing (June 1–2); G. Sindoro (3); G. Merapi (June 5–8, starting from Magelang); *E. Java:* to Madioen (13); G. Wilis (June 17, *via* Ponorogo and Telaga Ngebel); *via* Kediri to Soerabaja; mud-wells near Kalang-anjer and Poeloengang, Pasoeroean, Besoeki (July 1); G. Ringgit (2); G. Lamongan and Ranau Lamongan (4–5); G. Tengger *via* Soekapoera, Wonosari, Zandzee (6); from Soerabaja to *Centr. Java:* Pati, Semarang, Pekalongan and *via* Batoer (July 28) to G. Diëng (till Aug. 5); G. Slamat (starting Aug. 7 from Banjoemas *via*

Serajoe; back at Aug. 10). *W. Java:* G. Salak (Oct. 1838).[5]—*1839.* Visiting the following localities in *W. Java:* Tapos (March), Megamendoeng, Telaga Warna; G. Gedeh-Pangrango (with E. A. FORSTEN, see there, Apr. 1–4; with A. KINDER, July 24–Aug. 3; with Graaf VAN BENTHEIM and Mr VERMEULEN, Nov. 9–11, by way of Soekaboemi); Palaboean Ratoe (early in Oct.); *via* Tjiandjoer and Bandoeng (Oct. 17) to G. Malabar, G. Wajang (23) and G. Tiloe (24).[6]—*1840. Centr. Java:* Diëng Plateau (March 1–Apr. 4); G. Sindoro (Apr. 5).—*N. Sumatra,* Tapanoeli: Batak Lands (Sept. *1840*–March *1842*).[7] —*W. Java:* G. Gedeh (July *1842,* 10 days).—*1844.*[8] *W. Java:* Bantam (July–Aug.), starting from Batavia (July 27) and visiting Tangerang, Serang, Anjer and Tjiriengien.[9] *Via* Tjiandjoer and Bandoeng (Aug. 9–10), Tjitjalenka, Lelles, Garoet, G. Goentoer (11) *via* G. Poetri; G. Tjikorai (12–13); Wanakarta, Pawenang, Soemedang (16); Tampomas, Cheribon (17); *Centr. Java:* Tegal, Pekalongan (19), Semarang (20–21), Solo; *E. Java:* Ngawi (Sept. 11), Blitar, G. Kloet (16–17), Blitar; G. Kawi (19–21); Malang; G. Smeroe (24–27);[10] G. Tengger (Sept. 28–Oct. 5); Loemadjang, Poeger, Djember, Bondowoso; G. Raun (10–12); G. Ringgit; Banjoewangi; lava field of G. Baloeran; vicinity G. Idjen and crater, returning *via* Ongop Ongop (Oct. 18) to Banjoewangi; Bondowoso; G. Jang (Oct. 30–Nov. 2); Poeger (4), Lumadjang (5), Probolinggo (6); G. Lamongan (6); G. Ardjoeno (13–15); Ngantang; Kediri; *Centr. Java: via* Solo to Sel(l)o (pass Merapi–Merbaboe; Nov. 22), staying till Jan. 1845.—*1845. Centr. Java:* Selo (Jan.); G. Oengaran and environs; limestone hills near Bodja; Selokaton, Plantoengan, G. Prahoe; Diëng Plateau (Oct.–Nov.).—*1846. W. Java:* G. Kendeng (Koeningan, Cheribon Res.); Oedjoeng Koelon; *Centr. Java:* G. Sindoro (Apr. 5).—*1847. W. Java:* G. Wajang (Apr.), G. Patoeha (Apr.), Pengalengan (May); *Centr. Java: Noesa Kambangan* (May); G. Slamat (June 19–23); *W. Java:* Pengalengan (Dec.). —*1848. W. Java:* G. Tangkoeban Prahoe (June 17–19).—*1859.* G. Malabar.

Other localities in *Java,* on which no further data are known to me are: Depok, G. Telemojo.

In the H.B. series, *Herb. Bog.:* 1 *no* from *Banka;* possibly collected on the way to, or from, Sumatra.

LAM[11] cites a specimen collected in *Celebes pr.* Sadeng (in *Herb. Leyden*); this is certainly not collected by JUNGHUHN himself.

COLLECTIONS. *Herb. Leyden*;[12] including at least 669 *nos* from the second period (1855 onwards) and 49 *nos* of *Cinchona* material; *cf.* also *sub* entry 'Houtsoorten Gedeh'. But few dupl., numbered in the H.B. series, in *Herb. Bog.; Herb. Utrecht:* dupl. *Java* plants; in *Herb. Brit. Mus.:* 236 dupl. from *Java;* other duplicates in *Herb. Acad. Sci. St Petersb.* (= *Leningrad*) (with *Herb.* NEES), GRAY *Herb., Herb. Arn. Arbor.; Kew: Java* plants (pres. 1909); *Vienna* (with *Herb.* REICHENBACH): orchids from *Java; Breslau; Manila* (pres. 1911–12); *Herb.* MARTIUS (= *Brussels*); SENCKENB. *Herb.* (= now *Univ.*) *Frankfurt:* vascular cryptogams; *Herb.* DECAND. (*Geneva*); *Herb. Linn. Soc. Lond.: Java* ferns (pres. by DE VRIESE); authentic specimens of the *Plantae Junghuhnianae* were presented to the *Herb. Nederl. Overz. Bezitt.* of the 'Ned. Kruidk. Vereeniging' in 1851 (= *Ned. Bot. Vereeniging, Leyden*); *Herb. Univ. Amsterdam:* Malabar plants (coll. 1859), ? type specimens.

Besides in the below-cited papers,[13] plants of his were described by NEES VON ESENBECK, DOZY, MOLKENBOER, and HASSKARL.

LITERATURE. (1) *Viz:* 'Bijdragen tot de geschiedenis der vulkanen in den Indischen Archipel tot 1842' (Tijdschr. Neêrl. Ind. 5^1, 1843, p. 97–133, 185–227, 257–280, 613–626, 745–763; continued in Ind. Magazijn 1ste twaalftal, 1844, p. 41–83, 84–100, 163–176, 287–315); 'Physiognomie van de flora der toppen van Javasche bergen, benevens plantenbeschrijvingen' (Nat. en Geneesk. Arch. N.I. 2, 1845, p. 20–34; *cf.* also Flora 6, 1848, p. 584); 'Terugreis van Java naar Europa' (Zaltbommel 1851); 'Java, zijne gedaante, zijn plantentooi en inwendige bouw' (1850–54, 4 vols + atlas); transl. by HASSKARL: 'Java, seine Gestalt, Pflanzendecke und innere Bauart' (1852–54, 3 vols); 'Licht- en Schaduwbeelden uit de binnenlanden van Java' (Amsterdam 1854, and many other editions).

Papers published in Tijdschr. Neêrl. Ind. 4, 1841, Tijdschr. Nat. Gesch. & Physiol. 7, 1840, and elsewhere; many of them cited below; *cf.* also bibliography in 'Gedenkboek FRANZ JUNGHUHN' ('s-Gravenhage 1910) p. 313–344.

(2) *cf.* FR. W. JUNGHUHN: 'Topographische und naturwissenschaftliche Reisen durch Java' (Magdeburg 1845, + atlas) (digest in Flora N.F. 5, 1847, p. 479–495, 498, 517).

(3) *cf.* extract from a letter in Flora 19^2, 1836, p. 743–746.

(4) *cf. ditto* in *l.c.* p. 747–752.

(5) *cf.* Tijdschr. Neêrl. Ind. 1^2, 1838, p. 486–507, or Flora 23^2, 1840, p. 449–460, 465–477.

(6) F. JUNGHUHN: 'Uitstapje naar de bosschen van de gebergten Malabar, Wayang en Tilu op Java' (Tijdschr. Nat. Gesch. & Physiol. 8, 1841, p. 349–412); 'Beklimming G. Tiloe en andere Preangerbergen bij Pengalengan' (Nat. Tijdschr. N.I. 21, 1860, p. 221–245).

(7) F. JUNGHUHN: 'Die Battaländer auf Sumatra' (Berlin 1847).

(8) F. JUNGHUHN: 'Schetsen, ontworpen op eene nieuwe reis over Java, voor topographische en natuurkundige navorschingen, aan het einde van het jaar 1844' (Tijdschr. Neêrl. Ind. 7^1, 1845, p. 71–92, 123–203, 163–174 (plants), 184–203 (plants), 317–350; *ditto* in *l.c.* 7^2, 1845, p. 1–38, 203–250, 371–380); 'Reizen door Java, voornamelijk door het oostelijk gedeelte van dit eiland, opgenomen en beschreven in 1844' (Amsterdam 1852, 2 vols).

(9) *cf.* 'Brieven over Java, 1ste serie' (Tijdschr. Neêrl. Ind. 7^1, 1845, p. 205–240, 351–396).

(10) *cf.* Tijdschr. Neêrl. Ind. 6^3, 1844, p. 164 and Tijdschr. Ned. Ind. 11^1, 1849, p. 112–138.

(11) In 'The Verbenaceae of the Malay Archipelago' (Dr's Thesis, Utrecht/Groningen 1919) p. 90.

(12) S. H. KOORDERS: 'Kritische opmerkingen over de etiketteering van JUNGHUHN's botanische collecties in 's Rijks Herbarium' (in Gedenkboek

FRANZ JUNGHUHN 1809–1909, 's-Gravenhage 1910, p. 229–240, 3 fig.). The collection was sold to the Dutch Government (*cf.* Bot. Zeitung 8, 1850, p. 175).

(13) W. H. DE VRIESE: 'Ueber eine auf Sumatra von Dr F. JUNGHUHN entdeckte Casuarina' (Flora N.R. 2, 1844, p. 537–539); also Sumatra plants in Nat. en Geneesk. Arch. 4, 1847, p. 17–23; Ned. Kruidk. Arch. 1, 1848, p. 1–19 *etc.;* and in 'Plantae Indiae Batavae'.

F. A. W. MIQUEL *c.s.:* 'Plantae Junghuhnianae. Enumeratio plantarum quas in insulis Java et Sumatra *etc.*' (Lugd.Bat., Lipsiae, 1851–57; only 1 vol., published in 5 parts); *cf.* also F. G. WILTSHEAR: 'MIQUEL's Plantae Junghuhnianae' (Journ. Bot. 52, 1914, p. 44–45).

C. A. J. A. OUDEMANS: 'Annotationes criticae in Cupuliferas nonnullas Javanicas' (Amstelodami 1865, 4^0, 29 pp., 12 pl.; mostly collected by JUNGHUHN).

S. H. KOORDERS: 'Plantae Junghuhnianae ineditae' I–IV (Versl. gew. verg. Wis- en Natuurk. afd. Kon. Akad. Wet. A'dam 1908, p. 156–160; *l.c.* 1909, p. 780–782, 948–955; in 'Gedenkboek FRANZ JUNGHUHN' 1910, p. 153–198).

BIOGRAPHICAL DATA. De Dageraad 18, 1864, p. 415–462; Flora N.R. 22, 1864, p. 474–480; Nat. Tijdschr. N.I. 28, 1865, p. 342–356; Tijdschr. Ned. Ind. 4^1, 1866, p. 207–216; in JUNGHUHN, Licht- en Schaduwbeelden *etc.* (*l.c.* lit. 1) ed. 1867, p. 1–61; Tijdschr. K.N.A.G. 1908, p. 1409 (birthday), *l.c.* 1909, p. 1026, and *l.c.* 1910, p. 261, 863; 'Biographische Beiträge *etc.*' by M. C. P. SCHMIDT (Leipzig 1909); 'Gedenkboek FRANZ JUNGHUHN 1809–1909' ('s-Gravenhage 1910, incl. bibliogr. + portr.); Verh. Naturw. Ver. Preuss. Rheinl. u. Westfal. 66, 1910, p. 277–326; SIRKS, Ind. Nat. Onderz., Amsterdam 1915, p. 141–153 + portr.; Encyclop. N.I. 2, 1918; Trop. Nederl. 7, 1934, p. 315–317, 331–353; Mooi Bandoeng 2, 1934, p. 66–68; Onze Aarde 1935, p. 122–128; Tijdschr. K.N.A.G. 1935, p. 162–164, 313–318; BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 49, 1939, p. 444; *l.c.* 50, 1940, p. 193; *l.c.* 51, 1941, p. 355–356; *l.c.* 52, 1942, p. 392; *l.c.* 53, 1943, p. 243; Dr C. W. WORMSER: 'Franz Junghuhn' (Deventer 1943, 244 pp.);

Junius, François Johan

(1883, Makassar, Celebes; x), entered the D.E. Indian Civil Service in 1907; finally Resident of the Lampong Districts (*S. Sumatra*), from where he sent 3 orchids to *Hort. Bog.* in *1933;* retired in 1933.

Jupp, John

miner; climbed G. Stong in Kelantan, *Malay Peninsula* (Sept. *1922*).

COLLECTIONS. *Herb. Sing.:* a few plants (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

Jupp, W. O. (or W. D.)

of the China Borneo Company, resided for a period of some twenty years in *Br. N. Borneo.*

Diospyros juppi MERR. was named after him.

COLLECTIONS. The above-mentioned plant was collected by him in Sept. 1919, and was numbered 727.[1] *Possibly* numbered in the series of the Forest Department British North Borneo (see there, also for distribution of sets).

LITERATURE. (1) *cf.* MERRILL in Journ. As. Soc. Mal. Br. 1, 1923, p. 26.

Jussieu, A. L. de

(1748–1836), professor in the University of Paris.

COLLECTIONS. *Herb. Berl.:* 60 species, partly from *Java.*[1] As JUSSIEU himself never visited Java, this should be cited *ex Herb.* JUSSIEU.

LITERATURE. (1) *cf.* Beih. Bot. Centr. Bl. 34, 1917^1, p. 414.

Juta

of the D.E. Indian Forest Service, collected some plants at Lembaja (Goa) in *SW. Celebes* (June 20, *1941*).

COLLECTIONS. *Herb. Bog.*, presented through the intermediary of the For. Res. Inst. Buitenzorg; *not* inserted in the bb. series of that institute.

Kadir, Abdul

Field Assistant, Waterfall Gardens, *Penang.*

COLLECTIONS. In *Herb. Kuala Lump.*, numbered in the C.F. (see *sub* Conservator of Forests) series; collected in many parts of the *Malay Peninsula, 1896–1946.*

Kaempf

COLLECTIONS. *Herb. Berl.: New Guinea* orchids (with *Herb.* SCHLECHTER).

Probably identical with A. KEMPF (see there).

Kämpfer, Engelbert

(1651, Lemgo, N of Detmold, Germany; 1716, Lemgo, Germany), secretary of the Swedish Embassy to Russia and Persia.[1] Subsequently (since 1685) for 8 years surgeon in the employ of the Dutch E.I.C.; on his extensive travels he performed important investigations. He was back in Europe in Oct. 1693, took his degree in the University of Leyden (1694) and when back in Germany was later appointed physician of the Count of Lippe.

Author of a book on the geography and natural history of Japan.[2]

He is commemorated in the genus *Kaempferia* L.

ITINERARY. After taking leave of the Embassy, he arrived at Bender-Abassi (Persia) towards the end of 1685; after a serious illness he embarked (June 1688) on the Dutch fleet and sailed *via* Brit. India, Ceylon, and Bengal, to *Sumatra* (*1688*).—*W. Java:* Batavia (mid-Sept. *1689*–May 6, *1690*), intent upon the study of the flora, *e.g.* on *P. Edam.*[3] —Embarking (May 7, 1690) for Japan (and Siam); on the way thither touching at *P. Tioman* (E of the *Malay Peninsula*).[4]—Sailing from Decima (Oct. 31, *1692*) to Java again: Batavia (staying 2 months); returning (Febr. *1693*) *via* the Cape to Europe, arriving at Amsterdam in October.

COLLECTIONS. *Herb. Brit. Mus.* (with *Herb.* SLOANE);[5] also MSS.

LITERATURE. (1) This period resulted in his 'Amoenitates Exoticae' (1712); the 6th and last

part, containing the description and figuration of 500 plants, was lost before publication.

(2) 'Beschrijving van Japan' (1729). In this book he possibly made use of the notes of ex-Governor-General J. CAMPHUIS (*cf.* O. VAN HAREN: 'Leven van den g.g. JOANNES CAMPHUIS' 1772, p. 63).

(3) His 'Plantae in insula Edam repertae' in the Brit. Mus., SLOANE MS. 2910, p. 215–245.

(4) *cf.* Gard. Bull. Str. Settlem. 5, 1930, p. 84–85.

(5) *cf.* SEEM. Journ. Bot. 5, 1867, p. 250.

BIOGRAPHICAL DATA. HALLER, Bibl. Bot. 2, 1772, p. 23-24; SÉGUIER, Bibl. Bot., 1760, p. 95; Tijdschr. Neêrl. Ind. 2^2, 1839, p. 22–24; LASÈGUE, Mus. Bot. DELESS., 1845, p. 408–409; L. DE ROSNY: 'ENGELBERT KAEMPFER, sa vie, ses écrits, ses voyages' (in Variétés Orientales 1865; 3rd ed. 1872, p. 98–122); SEEM. Journ. Bot. 5, 1867, p. 250 (monument); Die Natur 20, 1871, p. 111–112, 118–120, 137–140; SIRKS, Ind. Nat. Onderz., Amsterdam 1915, p. 13–14; L. S. A. M. VON RÖMER, Historische schetsen, Batavia 1921, p. 90–95, pl. 53, 59; BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 51, 1941, p. 356; *l.c.* 53, 1943, p. 243.

Kärnbach, Ludwig

(1864, Kicin, NE of Posen, Germany; Dec. 1, 1896, or Febr. 1, 1897, at sea between the Schouten Islands and Friedrich-Wilhelmshafen), since 1885 in the Botanic Garden and student at the Botanical Museum, Berlin, accompanied O. KUNTZE to Turkestan (1886) and entered the service of the German New Guinea Company in April 1887; successively at various stations, at the outset at Butauèng; in Dec. 1891, after the discontinuation of Finschhafen Station, he returned to Berlin. In the employ of the East African Plantation Company he travelled to Sumatra and Borneo for the recruiting of coolies for Africa in 1892. In 1893 he was back in the 'Schutzgebiet' again, making one more voyage to Borneo, this time for the study of gutta-percha tapping. In July 1894 he quitted the service of the New Guinea Company and settled at Seleo (in Berlin-Hafen), starting a coconut plantation; he made several commercial tours on which botanical and ethnological collections were made.[1]

Oberonia kaernbachia KRÄNZL. and other plants were named after him.

ITINERARY. *NE. New Guinea*, former *Kaiser-Wilhelmsland. 1887.* Butauèng Station, from where making excursions into the interior; ascending the Lugaueng Mts (300 m alt.) (Dec.).[2]—*1888.* Kelana Station, from where exploring the *Purdy Islands* (Sept.–Dec.).—*1889.* Butauèng Station.—*1890.* In the 'Ottilie' (March) making a tour to the N. coast of the Huon Gulf in company with WINTER. *Gogol Expedition* with LAUTERBACH (itiner., liter., *etc.* see there) (Sept.–Dec.).—*1891.* Finschhafen Station. Probably in the same year sailing from Butauèng to Huon Gulf: *Mègim Isl.*, Tigedu, Oli Gedu, Taminu Gedu, Bugemgin, Bukaua; mouth of the Adler River (Bu Su), ascending the same to Lugamo, Lake Herzog; Samoa Hafen and back *via* Bukaua and Tigedu to Butauèng.[3]—*1892.* Visiting *Sumatra* and *Borneo* (see above); probably no collections were made.—*1893. NE. New Guinea.* Making tours by boat for the recruiting of coolies, partly to unknown regions, *viz* to the *Le Maire Islands* (May 21–28).[4] 2nd Tour (June 20–30): Friedrich-Wilhelmshafen, Finschhafen, N. coast Huon Gulf; landing near Oli Gedu at the W. side of Hänisch-Hafen, from where on foot to Taminu Gedu near Cape Gerhard; Bugemgin (Bukaua Distr.).[5] 3rd Tour with R. PARKINSON (July 12–20): *via Le Maire Islands* to Dallmann-Hafen; coastal villages Buut, Kafu and Soein; *Juo Isl.* (*Guap*), Berlin-Hafen, Seleo (Saliú), *Sainson Isl.*, *Sanssouci Isl.* (Angél), *Matty Isl.* (Wuvulu). By boat to the NE. coast (Aug.–Sept.) and *ditto* to the W. coast of *Neu Mecklenburg* (= *New Ireland*) (Dec.).[6]—*1894.* First half of the year in *Borneo*, to study the gathering of gutta-percha. *NE. New Guinea:* in July settling at Seleo (Berlin-Hafen); in the cutter 'Dora' making numerous tours.—*1895.* In Jan. sailing into the Langemak-Bucht near Finschhafen, from where making a fortnight-trip to the Sattelberg, for the first time discovering large quantities of gutta-percha trees in Kaiser-Wilhemsland.[7] —He died on a boat tour to the *Le Maire Islands* (Febr. 1, *1897*;[8] elsewhere it is stated to have been on Dec. 1, *1896*) (*cf. sub* Biogr. data).

COLLECTIONS. *Herb. Berl.:* 76 *New Guinea* siphonogams (pres. 1887–91, 1893–95)[9] and many cryptogams (138 *Algae*, 80 *Fungi*, 141 *Musci*, 120 *Hepaticae*);[10] samples and herbarium specimens of rubber and gutta-percha from *New Guinea.*[11] Also 49 *nos* + samples from *Borneo* and *New Guinea* in the *Show Mus. Berlin. Herb. Kew:* 25 *New Guinea nos* (pres. 1894); *Herb. Hamburg:* 11 *New Guinea Fungi; Herb. Bot. Gard. St Petersb.* (*Leningrad*): 20 *N.G. Hepaticae.*

LITERATURE. (1) L. KÄRNBACH: 'Ueber die Nutzpflanzen der Eingeborenen in Kaiser Wilhelmsland' (ENGL. Bot. Jahrb. 16, 1893, Beibl. 37, p. 10–19); 'Die bisherige Erforschung von Kaiser-Wilhelmsland und der Nutzen der Anlage einer Forschungs Station' (Berlin 1893).

(2) L. KÄRNBACH: 'Eine botanische Weihnachtsexkursion in Neu-Guinea' (Gartenflora 42, 1893, p. 4–7).

(3) L. KÄRNBACH: 'Eine Bootsfahrt durch den Huongolf in Kaiser Wilhelms-Land' (Deutsche Kolon. Zeit. 10, 1893, p. 170–173).

(4) *cf.* Nachr. Kais. Wilh. Land 9, 1893, p. 27–29, 43–45.

(5) *cf.* PETERM. Mitt. 41, 1895, p. 170.

(6) *cf.* Nachr. Kais. Wilh. Land 9, 1893, p. 42–45.

(7) *cf.* Notizbl. Berl. Dahl. 1895, p. 101–103.

(8) *cf.* Nachr. Kais. Wilh. Land 13, 1897, p. 23.

(9) F. KRÄNZLIN described many of his orchids (*cf.* Gartenflora 43, 1894, p. 115, and Oesterr. Bot. Zeitschr. 44, 1894, p. 163).

Other plants by SCHUMANN & LAUTERBACH in 'Flora d. Deutsch. Schutzgeb. i.d. Südsee' (Leipzig 1901), and in 'Nachträge zur Flora *etc.*' (Leipzig 1905).

(10) *Algae* by GRUNOW in SCHUMANN, Flora von Kaiser Wilhelmsland, 1889.

Fungi by P. HENNINGS in ENGL. Bot. Jahrb. 15, 1893, Beibl. 33, p. 4–8; *l.c.* 18, 1894, Beibl. 44, p. 22–40; *l.c.* 25, 1898, p. 495–509.

Hepaticae by F. STEPHANI in Hedwigia 33, 1894, p. 152–153.

(11) A. ENGLER: 'Ueber einige Guttapercha-Baüme von Kaiser-Wilhelmsland' (Notizbl. Berl. Dahl. 1, 1895/97, p. 101–103).

BIOGRAPHICAL DATA. Verh. Bot. Ver. Brandenburg 39, 1897, p. lix–lxi (the mentioned date of death is Dec. 1, 1896); Nachtr. z. Flora d. Deutsch. Schutzgeb. i.d. Südsee Heft 1, 1905, p. 20–21; BACKER, Verkl. Woordenb., 1936.

Kahar, A., *cf. sub* Forest Research Institute, Buitenzorg.

Kalik, *cf. sub ditto.*

Kalong

collected *Pilea rigidiuscula* C.B.ROB., *no* 1721, in *Sarawak* (*cf.* MERRILL, Enum. Born. Pl. 1921, p. 230). Evidently a native collector (F.G. = Forest Guard) of the Malay Forest Department, of whom dupl. are in *Herb. Edinburgh.*

Kalshoven, Louis George Edmund

(1892, Amsterdam, Holland; x), educated at Wageningen Agricultural College; since 1915 Forest Officer in D.E. Indian Government service, on the staff of the Forest Research Institute at Buitenzorg; in 1922 appointed Entomologist at the Institute for Plant Diseases (Buitenzorg), first stationed at Salatiga and since 1923 at Buitenzorg. In 1930 he took his Dr's degree at Wageningen; in 1931 appointed Chief of the Zoological Division of the above institute. After the Japanese capitulation he was temporarily put in charge of the Agricultural Experiment Station at Buitenzorg, and returned to Holland on recuperation leave in 1947; he returned to Buitenzorg early in 1948. He is especially interested in the life-history of the termites.

COLLECTING LOCALITIES. *1917. E. Java:* Klino, G. Pandan.—*1918. W. Java:* Tjikadjang; G. Salak with E. J. WIND (Nov. 20), Takokah (Nov. 25), Djampang (Nov. 30); Tjiwedeh on G. Patoeha (Dec. 13–15); G. Mandalagiri with E. J. WIND (Dec. 20).—*1919. E. Java:* Besoeki and Pasoeroean (Febr.); Karangpoetih, N of Malang (Oct.); in November: near Malang, G. Kidoel, teak forest E. Java and Besoeki, Kemiri Sanga near Boemboel. —*1921. Centr. Java:* Semarang, Kedoengdjati.—*1933.* In teak forests in *Java.*—*1936. W. Java:* G. Gedeh above Tapos (Mandalawangi; mid-1936).

COLLECTIONS. *Herb. Bog.; Herb. For. Res. Inst. Buitenzorg* (coll. 1917–19).

Kamaroeddin, *cf. sub* Forest Research Institute, Buitenzorg.

Kamel, George Joseph

(= GEORGIUS JOSEPHUS CAMEL or CAMELLUS) (1661, Brünn, Moravia, Austria; 1706, Manila, Luzon, P.I.), Jesuit priest in the Marianas (1683), later (1688) in the Philippines. He had some knowledge of pharmacy and opened a drug-store at Manila. He was interested in botany and sent dried plants, and figures of plants, to Europe.

The genus *Camellia* L. was probably named after him.

COLLECTIONS. *Herb. Brit. Mus.* (*Herb.* SLOANE vols 153, 231 and 233, mixed up with plants collected by others, *e.g.* LANDON, PLUMIER, *etc.*); originally sent to PETIVER and RAY, the first consignment dated Aug. 31, *1699.*[1]

MSS and drawings are preserved in the *Brit. Museum;* 260 unpublished drawings at Jesuit's College, *Louvain* (Belgium).[2]

He made geological collections too.

LITERATURE. (1) *cf.* PETIVER in Mus. Petiv. 1695, p. 44; *l.c.* 1702, p. 63; *l.c.* 1703, p. 94.

'De Faba S. Ignatii excerpta quaedam ex epistola P. Camelli ad J. Rayam & J. Petiverum' exhibita in Actis Angelicanis Societatis Regiae, A. 1699, p. 87, seqq. Act. Erudit. Lips. 1700, p. 552–554, *t.* 10 (*non vidi*).

cf. also Philos. Transact. 21, 1699, p. 2–4 and 88–94.

G. J. CAMELLUS: 'Herbarium aliarumque stirpium in insula Luzone Philippinarum primaria nascentium observatarum & descriptarum syllabus' (Appendix to RAY, Hist. Plant. 3, 1704, p. 1–42); 'Descriptiones fruticum & arborum Luzonis' (in *l.c.* p. 43–95).

J. PETIVER published figures of a number of Philippine plants based either on drawings or specimens sent to him by father KAMEL, in 'Gazophylacii naturae & artis' (1702–09).

'Tractatus de plantis Philippinensibus scandentibus, ad JACOBUM PETIVER, S.R.S. missus' (Philos. Transact. 24, 1704–05, 1707–22, 1763–73, 1809–09 *bis*, 1816–42).

(2) A volume containing KAMEL's figures and manuscript descriptions of the collection (abovementioned vols in *Herb.* SLOANE), Bibl. SLOANE 5288, was transferred to the Dept of Botany from that of MSS, in 1884. Other descriptions by KAMEL form SLOANE MSS 4078 and 4081.

'Herbarium aliarumque stirpium in insula Luzone Philippinarum primaria nascentium icones ab auctore delineatae *ineditae*', of which a syllabus in RAY, Hist. Plant., vol. 3 (*cf.* liter. *sub* 1), 260 *tab.*

BIOGRAPHICAL DATA. HALLER, Bibl. Bot. 2, 1772, p. 46; SPRENGEL, Hist. Rei Herbar. 2, 1808, p. 94–95; BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 15; BACKER, Verkl. Woordenb., 1936.

Kamerling, Zeno

(1872, Almelo, O., Holland; x), came with his parents to Sumatra (Padang) in 1879; from 1886–99 in Europe for his education, attending College at Wageningen, and studying botany at Amsterdam and Jena. In 1897 he took his Ph. Dr's degree at Munich, Germany, on the physiology and biology of the *Marchantiaceae;* 1897–99 Botanical Assistant at Jena, Munich and Hamburg; 1899–1905 Botanist-Agriculturist at the Sugar Experiment Station, Centr. Java (first at Kagok, Tegal; since 1900 at Pekalongan); 1905–11 teacher at secondary

schools, and subsequently at the 'Stovia' (Medical School), Batavia; 1911–13 Adviser Sugar Experiment Station Feder. Brazil. Reg. Campos; 1914–17 Lecturer in Tropical Cultures at Wageningen College; 1919–22 teacher at the 'Stovia' again; since 1923 University Lecturer in the biology and physiology of tropical plant life and agriculture at Leyden.

Author of a 'Leerboek voor de plantkunde voor Ned. Indië' (Haarlem 1915), and of several papers, mainly concerning the beach and mangrove flora.[1]

COLLECTIONS. *Sarcanthus duplicilobus* J.J.S. from G. Diëng (*Centr. Java*) in *Herb. Bog.* Probably he collected but few specimens. In *Herb. Leyden: Java Fungi.*

LITERATURE. (1) Z. KAMERLING & L. ZEHNTER: 'De Indische Natuur' (Alg. Nat. Wet. Bijbl. Arch. Java Suikerindustrie 1, 1900).

Z. KAMERLING: 'Botanische excursies in de omgeving van Batavia I. Vruchten en zaden, die men aan het strand vindt' (Teysmannia 1911, p. 112–130, 516–529, 2 pl.); 'Bekende merkwaardige Indische planten, *etc.*' (Nat. Tijdschr. N.I. 71, 1912, p. 81–96; 72, 1913, p. 249–254; 74, 1915, p. 116–120; the text partly by others, with coloured plates by K.).

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 188.

Kamoeliaan, P., *cf. sub* Forest Research Institute, Buitenzorg.

Kampen, Pieter Nicolaas van

(1878, Amsterdam, Holland; 1937, Leyden, Holland), zoologist, educated at Amsterdam University, who took his Ph. Dr's degree in 1904; pupil and Assistant of Prof. M. WEBER. From 1905–11 appointed in the D.E.I. Department of Agriculture at Batavia, finally Chief of the Fishery Station (later Laboratory for Marine Research); 1911–16 Assistant and private University Teacher in Zoology at Amsterdam; in 1916 University Lecturer in the same university, and from 1917–31 Professor at Leyden.

In 1907 he made a trip to the Aroe Islands to make an investigation into the position of the fishery of pearls and mother-of-pearl.[1] In 1910 he accompanied a military exploration detachment in Dutch NE. New Guinea (*cf. sub* GJELLERUP), returning seriously ill, and subsequently going back to Europe.

COLLECTIONS. *Hort. Bog.: Dendrobium bifolia* (coll. March 10, *1907*), from *Aroe Islands*, and several other living orchids.[2]

LITERATURE. (1) P. N. VAN KAMPEN: 'De paarl- en parelmoervisscherij langs de kusten der Aroe-eilanden' (Meded. Visscherij-station Batavia *no* 11, 1908).

(2) *cf. Orchidaceae* by J. J. SMITH in Nova Guinea vol. 8.

BIOGRAPHICAL DATA. Wie is dat? ed. 3, 1935; Javabode, July 5, 1937.

Kamphøvener, Bernhard Casper

(1813, Kjøge, Denmark; 1846, Brystsyge, Denmark), an apothecary apprentice who turned to botany in 1831. Since 1837 he was teacher in forest botany, and in later years he made several excursions in Europe. In 1844 he went to Christiania (= Oslo, Norway), and in the next year he accompanied the Danish expedition of the 'Galathea' (*cf.* itiner. *etc. sub* DIDRICHSEN). He left the expedition on account of his poor health in P. Penang (March 8, *1846*), from where he returned to Denmark by way of Bombay and Suez.

COLLECTIONS. *Herb. Copenhagen:* plants Galathea Expedition; *Herb. Berlin: East India* plants (Galathea Exp.); *Herb. Univ. Kiel: Java* plants; *U.S. Nat. Herb. Wash.:* 87 dupl. Galathea Expedition.

Some of his plants from Sambiliung, the numbers 2661 and 2794, are cited by MEZ[1] as collected in Borneo. The expedition did *not* touch Borneo, and the real locality is probably Sambelong, Nicobars.

It is almost certain that KAMPHØVENER has collected no plants at all in Malaysia. The collecting there must have been done by DIDRICHSEN or others.

LITERATURE. (1) *cf.* Pflanzenreich Heft 9, 1901, p. 44.

BIOGRAPHICAL DATA. Bot. Zeit. 3, 1845, p. 504 and 736; Bot. Tidskr. 12, 1880/81, p. 131; *l.c.* 21, 1897, p. 237–263; CHRISTENSEN, Den Danske botanisks Historie 2, 1924–26, p. 207–208.

Kampman, *cf. sub* Forest Research Institute, Buitenzorg.

Kandah bin Hj. Daud

joined the Forest Department *Malay Peninsula* in 1914; now retired. He partly collected in Selangor and Pahang; *cf. sub* Conservator of Forests series, Kepong.

Kanehira, Ryôzo

(1882, Okayama-Ken, Japan; Nov. 27, 1948, Tokyo, Japan), was educated at Tokyo Imperial University, taking his Ph. Dr's degree in 1920; in 1928 appointed Professor of Botany at Kyûshû Imperial University, Fukuoka. Towards the end of 1942 he came to Java; from March 1943 till the end of World War II Director of the Herbarium and Library of the Botanic Gardens at Buitenzorg.

Author of 'Formosan trees indigenous to the island' (1936), of a book (in Japanese) on the economic plants of the tropics, *etc.*

He is commemorated in *Psychotria kanehirai* MERR. & PERRY.

ITINERARY. *c. 1932. Celebes* and *New Guinea*, the Marianas and Carolines.—*Before 1934. Philippines: Mindanao,*[1] at Bayabas, Davao, *etc.*—*1937. NE. New Guinea & Bismarck Archipelago.* Leaving Ponape (Carolines) by steamer (Jan. 23), visiting several atolls S of Ponape; making stops at Kavieng (*New Ireland*) and Rabaul (near the Keravat Experiment Station *etc.*) in *New Britain;* Salamaua, from where flying to Wau, the gold-field in Morobe Distr.; return by the same boat, arriving Febr. 23 at Ponape.—*1940. Via Java* (Buitenzorg) to

NW. New Guinea,[2] mainly in the 'Vogelkop', with S. HATUSIMA (see there): Manokwari (arriving Febr. 20); Nabire (23–) (botanizing in the interior), at: Papaya (28), Chaban & Patema (29), Dal(l)man(n) (March 1–4), Patema (banks of Boemi River) (6), Sennen (6) and Boemi (10); Mo(e)mi (19), awaiting the permission of the D.E.I. Government for a trip to Angi Lakes; Waren, S of Manokwari (March 21, 23 and 27, Apr. 3); Arfak Mts and Angi Lakes (Apr. 4–11); Waren (19); leaving New Guinea on Apr. 23.—He collected a few plants in Johore (*Mal. Penins.*) and *Java;* no dates known to me.

COLLECTIONS. *Herb. Kyûshû Imp. Univers.:* 262 *nos* from *Mindanao* (2479–2740); coll. *1937*, 129 *nos* (39. .–41. .);[3] coll. *1940*, KANEHIRA & HATUSIMA ± 2851 *nos* (ranging between 11082–14936),[4] incl. 311 pteridophytes. *Herb. Bog.:* 1443 dupl. coll. *1940;* also dupl. in *Herb. Arn. Arbor.; Herb. N.Y. Bot. Gard.:* dupl. *Celebes & New Guinea* (*c. 1932*) and *Mindanao* (257).

LITERATURE. (1) R. KANEHIRA: 'A list of plants collected at Davao, P.I.' (Bult. Sci. Fak. Terkult. Kjusu Imp. Univers. Fukuoka, Japan 7, 1936, p. 228–238) (*non vidi*).

(2) R. KANEHIRA: 'New Guinea expedition' (3rd ed. in 1942; in Japanese, many ill.), and in Bot. Mag. Tokyo 55, 1941, p. 249).

(3) R. KANEHIRA & S. HATUSIMA: 'An enumeration of plants collected in the Territory of New Guinea, Australian Mandate' I–III (Bot. Magaz. Tokyo 52, 1938, p. 349–357, 409–416 and *l.c.* 53, 1939, p. 8–16; in total 5 fig.).

(4) 'The KANEHIRA-HATUSIMA collection of New Guinea plants' I–XXI (Bot. Magaz. Tokyo 55, 1941, p. 249–266, fig. 1–12; *l.c.* p. 295–308, fig. 13–23; *l.c.* p. 341–349, fig. 1; *l.c.* p. 385–392; *l.c.* p. 489–513, 5 fig.; *l.c.* 56, 1942, p. 1–13; *l.c.* p. 105–119, fig. 1–8; *l.c.* p. 157–171, fig. 1–9; *l.c.* p. 199–216; *l.c.* p. 249–264, fig. 1–10; *l.c.* p. 304–322, fig. 1–14; *l.c.* p. 355–373, fig. 1–6; *l.c.* p. 421–429, fig. 1–2; *l.c.* p. 471–491, fig. 1–10; *l.c.* p. 559–576, fig. 1–13; *l.c.* 57, 1943, p. 1–19; *l.c.* p. 63–83, fig. 1–15; *l.c.* p. 111–129, fig. 1–16; *l.c.* 147–153, fig. 17–22; *l.c.* p. 185–192, fig. 1–9; *l.c.* p. 215–234, 25 text fig.).

Kapellen, van der, *cf. sub* W. F. A. ZIMMERMANN.

Kapuno, F., *cf. sub* Forestry Bureau, Manila.

Karganilla, Edilberto
was assigned to Mt Maquiling (*Luzon*), during the summer-months of *1934*, to collect botanical specimens for *Herb. Manila.*

Karim, *cf. sub* Forest Research Institute, Buitenzorg.

Karma, *cf. sub ditto.*

Karno, R. M., *cf. sub ditto.*

Karsoem, *cf. sub ditto.*

Karstel, W. J. J., *cf. sub ditto.*

Karsten, Barta Jacoba
(1879, Haarlem, N.H., Holland; x), chemist, educated at Amsterdam University; Dr's degree in 1906 at Zürich, Switzerland; ex-Directress of a secondary Girl's school at Groningen; living in Java from Nov. 1934–March 1938; later settled at the Hague.



KANEHIRA

COLLECTING LOCALITIES. *1934–38. W. Java:* Bandoeng, Dago, G. Goentoer (*1937*); *Centr. Java:* Diëng (July 1937); *E. Java:* possibly from Tosari (Tengger).

COLLECTIONS. She presented (1937/38) 109 *nos* of phanerogams from *Java* to *Herb. Leyden.* The specimens are not numbered, nor dated.

Karsten, George Henry Hermann
(1863, Rostock, Germany; 1937, Halle, Germany), botanist, educated at Rostock (Ph. Dr 1885). He travelled to the Dutch East Indies (see below), and in 1894 to Mexico. On his return from the Indies he was appointed University Lecturer at Kiel; Extraordinary Professor at Bonn (1899–1909); Professor in the University of Halle, 1909–29.

His visit to the Malay region resulted in many papers.[1]

Several plants were named after him.

COLLECTING LOCALITIES. From Nov. *1888*–March *1890* staying in the D.E.I., for several months working in the Foreigners' Laboratory at Buitenzorg.[2] Most of the collecting was done in the year 1889, *viz* in the following localities: *N. Celebes*, Minahassa; *Moluccas:* principally in *Ambon, Buru* and *Ceram; W. Java:* G. Guntur, Situgunung; *Centr. Java:* Tjilatjap and *Nusa Kambangan.* On the voyage home *Singapore* was touched at.

COLLECTIONS. Many mosses and hepatics;[3]

phanerogams too. *Herb. ? Rostock.* He presented living plants and seeds to *Hort. Bog.*[4] Some alcohol material in *Herb. Leyden.*

LITERATURE. (1) G. KARSTEN: 'Ueber die Mangrove-Vegetation im Malayischen Archipel' (Vorl. Mitt. in Ber. D.B.G. 8, 1890, Gen. Vers. Heft p. (49)–(56); Bibl. Bot. *no* 22, 1891, 71 pp.); 'Morphologische und Biologische Untersuchungen ueber einige Epiphytenformen der Molukken' (Ann. Jard. Bot. Buit. 12, 1895, p. 117–195); 'Vegetationsbilder aus dem Malayischen Archipel' (KARSTEN u. SCHENCK, Vegetationsbilder 1. Reihe, Heft 2, 1903, Taf. 7–12); 'Mangrove Vegetation' (in *l.c.* 2. Reihe, Heft 2, Taf. 7–12): 'Asiatische Epiphyten' (in *l.c.* 14. Reihe, Heft 1, Taf. 1–6); 'Java', 'Vegetation der Molukken' and 'Der botanische Garten zu Buitenzorg' (FEDDE Repert. 14, 1916, p. 204–207, 207–208, 319–320; in FEDDE's Lichtbilder zur Pflanzengeographie und Biologie, Reihe 73–74, *nos* 361–370); *etc.*

(2) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 14–15; and VAN STEENIS in *l.c.* p. 66, 74, 82, 86, 91.

In the geographic names of the collecting localities, the German 'u' is used instead of the Dutch 'oe'.

(3) *Hepaticae* by SCHIFFNER in Nova Act. Leop. vol. 60, *no* 2.

(4) *cf.* Versl. Pl. Tuin Buitenzorg for 1889, p. 48–49, 61–62; *cf.* also Icon. Bogor *t.* 114B.

BIOGRAPHICAL DATA. Who's who 1913; portr. and bibliogr. in Festschrift z. 70. jährigen Geburtstag (Flora 128, 1933), p. 361–363; BACKER, Verkl. Woordenb., 1936; Ber. D.B.G. 55, 1938, Gen. Vers. Heft p. (220)–(230) w. portr. and bibliogr.; Chron. Bot. 4, 1938, p. 176–177 + portr. (p. 175).

Karta

Indonesian, temporarily in the employ of the Botanic Gardens at Buitenzorg. He attended KJELLBERG's expedition to Celebes, 1929–30, and after that was reluctant to do outdoor work.

ITINERARY. *1928.* With DAMMERMAN Expedition (see there) to *Bawean* (May 4–13). With BEUMÉE (see there) to Sibolangit, *Sumatra East Coast* (Dec.).—*1930.* With M. A. LIEFTINCK (see there) to the *Karimoendjawa Islands: P. Karimoendjawa* (Nov. 23–27; Nov. 23 also on *P. Mendjangan besar*); *P. Glèan* (= *P. Keleang;* 27); *P. Kemoedjan* (29–30).

COLLECTIONS. *Herb. Bog.:* 166 *Bawean nos,*[1] 81 *Sumatra nos,* and from *Karimoendjawa* the *nos* 167–420; *Herb. Leyden: Karimoendjawa* dupl.

Living plants in *Hort. Bog.*

LITERATURE. (1) *cf.* O. POSTHUMUS: 'Ferns of Bawean' (Proc. Roy. Ac. Sci. Amsterdam 32, 1929, 9 pp.).

Kartadikoesoemah, R., *cf. sub* Forest Research Institute, Buitenzorg.

Kartahamihardja, *cf. sub ditto.*

Kartamah, *cf. sub* A. RANT.

Kartapradja, *cf. sub* Forest Research Institute, Buitenzorg.

Kartodihardjo, *cf. sub ditto.*

Kartomidjojo, *cf. sub ditto.*

Kasoema, *cf.* G. M. CHARIDJIE KASOEMA.

Kassan, *cf. sub* H. N. RIDLEY, itinerary *1904.*

Kassim, Mohd., *cf. sub* Forest Research Institute, Buitenzorg.

Kassim bin Awang, *cf. sub* Conservator of Forests series, Kepong.

Kastalsky

is cited as the collector of *Kyllinga monocephala* ROTTB. in *Luzon* (*cf.* CLARKE in Philip. Journ. Sci. C. Bot. 2, 1907, p. 78).

Kastawi bin Jalil

(† 1920), plant collector of Singapore Botanic Gardens (for 33 years), collected in *Singapore Isl.* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5); collections in *Herb. Sing.*

Katarnida, *cf. sub* Forest Research Institute, Buitenzorg.

Kater, C.

at the time of TEYSMANN's visit to Borneo, in 1874, Resident of the Civil Service at Pontianak, *W. Borneo.*

COLLECTIONS. *Herb. Bog.:* 3 *nos* 'tengkawang' (*Dipterocarpaceae*) from *W. Borneo,* numbered in the H.B. series.

Living plants to *Hort. Bog.* (*1875–77*).

Kato, A.

collected with Y. YAMAMOTO (see there) *pr.* Tawao in *East Br. N. Borneo* (Oct. 25, *1939*).

Kaudern, Walter

(1881, Solna, Stockholm, Sweden; 1942, Göteborg, Sweden), ethnologist-zoologist, late Director of the Göteborg Ethnographical Museum. He travelled in Madagascar (1906/07 and 1911/12), and in Celebes (see below).[1]

Several plants were named after him.

ITINERARY. Leaving Göteborg with Mrs T. KAUDERN (Dec. 5, 1916); arrival at Batavia (Jan. 27, *1917*); *N. Celebes:* Djiko, on the SE. side of the peninsula (March 9), Goeroepahi (May 9–10), Motongkad (May 11–June 8), Goeroepahi (June 9–July 24), starting for Modajag (July 25), stay at Danau Lake (Aug. 23–26); journey by motorboat along the N. coast (Aug. 27–Sept. 13), touching at Bolaäng, Poigar, Paleleh, Bwool (= Boeol), *etc.;* Amoerang (Oct. 21–24); Manado and Tondano Lake (Oct. 28–Nov. 1); Danau Lake (Dec. 3–18); Goeroepahi (Dec. 21, 1917–Apr. 18, *1918*); departing from Djiko (Apr. 19) to the W. coast of *Centr. Celebes:* Paloe (arriving Apr. 26), Paloe Valley and

Koelawi (May 4–8), Kalawara (20–22); Koelawi (since May 24, headquarters during 9 months), from where making excursions, to Winatoe (June 18–19), Lindoe (June 24–25), Kantewoe (Sept. 7–Oct. 22, paying visits to Pangana, Peana, Benahoe, districts of Tobakoe, Banggakora and Tole); journey (22–24) from Kantawoe back to Koelawi (staying Oct. 25–Dec. 5); districts of Bada and Behoa (Dec. 6–19); Koelawi (Dec. 19–Jan. 23, *1919*); Toro (Jan. 24–25); Tamoengkolowi (26); Lindoe (29–31); Kalawari (Febr. 4–5); to Soerabaja (*E. Java*) and back again (Febr. 6–March 14); *Centr. Celebes:* Kalawari (March 15–20); Donggala (March 23–May 16); setting out (May 17) to Tawaili, Toboli and Parigi (Gulf of Tomini) (18–20); Pos(s)o (22–24); to the south *via* Koekoe to Tentena (staying May 27–June 1); Taripa (June 4–11); Tomata, Pakoe; Kolonedale (June 19–July 3); by steamer (July 4) to the *East Peninsula:* Loewoek (July 5–Sept. 5); sailing to Soekon (staying Sept. 7–15); Lamala (16–19); Loewoek (Sept. 25–Dec. 1); march to Biak, crossing to Poh, Pagimana, Lojnang (staying Dec. 7–25); Loewoek (Jan. 2–22, *1920*); *Banggai Archipelago:* at Oeliasan (Jan. 24–Febr. 23); voyage along the E. coast of Celebes to *Boeton* (= *P. Boetoeng*): Baoe Baoe (March 4–July 7, partly at Kraton); sailing from Makassar (July 8) to Soerabaja (12); sojourn in *Java* (July 12–Nov. 11), principally at Batavia for study; Nov. 12 sailing for the *Philippines* and back to Sweden *via* Suez (arriving Febr. 15, 1921).

COLLECTIONS. *Herb. State Mus. Stockholm:* 546 species (*nos* 1–535, some *a nos*, and some *s.n.*), mainly from secondary vegetation; on loan for elaboration at Leyden;[2] some dupl. in *Herb. Leyden.*

LITERATURE. (1) W. KAUDERN: 'I Celebes obygder' (Stockholm 1921, 2 vols, w. ill. & maps); 'Ethnographical studies in Celebes. Results of the author's expedition, 1917–20' (Göteborg 1925–44, 6 vols; itinerary in vol. 1).

(2) *Filices* by CHRISTENSEN in Svensk Bot. Tidskr. 16, 1922, p. 88–102.

Orchids by J. J. SMITH in *l.c.* 20, 1926, p. 470–482.

Loranthaceae by DANSER in Blumea 2, 1936, p. 37–39.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; portr. in posth. edited vol. 6, 1944, of the 'Ethnographical studies in Celebes'.

Kawakami, Takija

(1871, Prov. Jamagata, N. Hondo, Japan; 1915, Taihoku, N. Formosa), since 1901 Botanist of the Government of Formosa.[1]

Several plants were named after him, *e.g. Saccolabium kawakamii* J.J.S.

COLLECTING LOCALITIES. *1911. SE. Borneo:* Martapoera (Oct. 6); *SW. Celebes:* Makassar, and *prope* Maros (Oct.); *Centr. Java:* Djokja; *E. Java:* Soerabaja, Pasoeroean (Nov. 3.), Tosari, G. Bromo; Ngempit (or ? Kempit) and Kalibatoe (Nov.); *W. Java:* Buitenzorg, Tjibodas; Tjinjiroean (Dec. 4), Malabar. Plants of *Lombock* (= ? Lesser Sunda Isls), and the *Malay Peninsula:* Kuala Lumpur (Batu Cave *etc.*), *Singapore*, were collected too.

COLLECTIONS. *Herb. Taihoku;* dupl. in *Herb. Bog.*[2]

LITERATURE. (1) T. KAWAKAMI: 'A list of plants of Formosa' (1910).

(2) T. KAWAKAMI: 'On some Celebes plants' (Bot. Mag. Tokyo 26, 1912, p. 49–50).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Kawoenganten, *cf. sub* Forest Research Institute, Buitenzorg.

Keers, Wilhelmina Carolina

(1900, Ransdorp, N.H., Holland; x), botanist, educated at Utrecht University, passing the K IV examination in 1927; Assistant for Technical Botany at Delft, 1927–29; subsequently leaving for Java, and teacher in natural history at secondary schools in the D.E.I., respectively stationed at Malang (E. Java, 1929–31), Batavia (W. Java, 1931–34), Medan (Sumatra East Coast, 1934–36), from 1936–37 in Holland (on leave), at Batavia (1938–39), Soerabaja (E. Java, 1939–41), and at Batavia up to her internment by the Japanese.

She made some anthropological trips to the Karo-Batak Lands (Sumatra, 1934–36), the Timor Archipelago and Celebes (1937–38), which resulted in some anthropological papers.

COLLECTING LOCALITIES. *E. Java:* slope G. Kawi (Sept. *1930*); Pasoeroean (Nov. 1930; *1932*); *Sumatra East Coast:* Batak Lands (*1938*; on behalf of the philological studies of Mr VERHOEVEN on the Simeloengoen Bataks): Harangoal, Tiga Roenggoe and Raja.

COLLECTIONS. *Herb. Bog.:* a hundred of specimens; others returned after identification.

Kehding, F.

of the firm of KEHDING at Medan, Sumatra East Coast; in the eighties German consul.[1]

Luerssenia kehdingiana KUHN was named after him in the year 1882.

COLLECTING LOCALITIES. *1878–?88. Singapore* and the southern part of the *Malay Peninsula;* Perak and Malacca.—*Sumatra East Coast:* Langkat (*prob. before 1882*).

COLLECTIONS. FR. KEHDING sent plants from *Singapore* to BECCARI in 1879, collections dated Dec. *1878*[2] and July *1879. Probably* in *Herb. Florence.*

Some of his *Sumatra* ferns were described by CHR. LUERSSEN,[3] erroneously cited as coming from West, instead of East Sumatra.

LITERATURE. (1) F. KEHDING: 'Extracts from notes on Sultanate of Siak by H. A. HYMANS VAN ANROIJ' (Journ. Str. Br. Roy. As. Soc. *no* 17, 1887, p. 151–157); 'Sumatra in 1886 (Statistics concerning)' (*l.c. no* 18, 1887, p. 345–349).

(2) *cf.* BECCARI, Malesia, vol. 3 *sub Palmae* and other families.

(3) 'Zur Farnflora Hinterindiens und West-Sumatra' (Bot. Centr. Bl. 11, 1882, p. 26–31, 76–79).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Keinholz

is cited as the collector of *Dioscorea flabellifolia* PR. & BURK. at Puerto Galera, *Mindoro* (*cf.* PRAIN & BURKILL: 'Genus Dioscorea' 1936, p. 95). Rightly R. KIENHOLZ (see there).



KEITH

Keir, Walter

surgeon who *about 1699* sent plants from Johore in the Straits of *Malacca* and from China to PETIVER (*cf.* Mus. Petiv. 1695, p. 44); at present in *Herb. Brit. Mus.* (acq. with *Herb.* SLOANE).

Keith, Henry George

(1899, New Plymouth, New Zealand; x), studied forestry in the University of California (B. Sc. 1924); in 1925 appointed Assistant Conservator, since 1931 Conservator of Forests at Sandakan, *Br. N. Borneo*,[1] and later Director of Agriculture besides. After World War II he was back at Sandakan since June 1946.

Randia keithii C. E. C. FISCHER and *Dryobalanops keithii* SYMINGTON were named after him.

COLLECTIONS. *Herb. Sandakan; Herb. Kew;* in *Herb. Bog.*: 67 *nos* of duplicates collected by KEITH and others (pres. 1937).

LITERATURE. (1) Author of 'Forestry in the State of North Borneo' (1935) and of 'A preliminary list of North Borneo plant names' and additions (North Borneo Forest Records *no* 2, 1938).

Kelsall, Harry Joseph

Colonel of the Royal Artillery; stationed as a lieutenant in Singapore, from where he made several journeys of exploration.

Dendrobium kelsalli RIDL. was named after him.

ITINERARY. *Malay Peninsula. 1891.* Bt Etam at the head of the Langat Valley, Selangor (Jan. 1–6, 15–18).[1] Accompanying RIDLEY (see there) on an attempt to reach G. Tahan (June 23–Aug. 19).[2]—*1892.* With H. W. LAKE (itiner. see there) on the Sembrong Rivers, from Kuala Indau to Batu Pahat (Oct. 15–*c.* Nov. 6),[3] *e.g.* collecting on G. Janeng (N. Johore).—*1892* or *1893* (the latter year, mentioned by BURKILL, may be wrong). With H. W. LAKE mapping the Sg. Kahang and the Sg. Madek, collecting in the Ulu Kahang.

According to MERRILL,[4] KELSALL collected *Eria pendula* RIDL. in *NW. Borneo*, Sarawak; we do not know data on Borneo trips.

COLLECTIONS. *Herb. Sing.*[5]

LITERATURE. (1) H. J. KELSALL: 'Notes on a trip to Bukit Etam, Selangor' (Journ. Str. Br. Roy. As. Soc. *no* 23, 1891, p. 67–75; incl. plant list by RIDLEY).

(2) H. J. KELSALL: 'Account of a trip up the Pahang, Tembeling and Tahan Rivers, and an attempt to reach Gunong Tahan' (*l.c. no* 25, 1894, p. 33–49; on the vegetation *cf.* RIDLEY, *l.c.* p. 49–56).

(3) H. W. LAKE & H. J. KELSALL: 'A journey on the Sembrong River. From Kuala Indau to Batu Pahat' (*l.c. no* 26, 1894, p. 1–24; several lists, including plant list by RIDLEY, *cf. l.c.* p. 25–33).

(4) *cf.* MERRILL, Enum. Born. Pl., 1921, p. 173.

(5) *cf.* several plant lists by H. N. RIDLEY, mentioned above.

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; BACKER, Verkl. Woordenb., 1936.

Kempf, A.

after whom were named *Bulbophyllum* and *Oberonia kempfii* SCHLTR (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTING LOCALITIES. On the boundary of former *German*, and *Brit. New Guinea*, Waria region.

COLLECTIONS. *Herb. Berl.*: collection KAEMPF (see there); probably identical.

Kempter, Adolf

accompanied SCHLECHTER (see there) on his wanderings in former Kaiser-Wilhelmsland (*NE. New Guinea*), *e.g.* in the hinterland of Angriffshafen, since Sept. 16, 1907.

SCHLECHTER named several orchids after him (*cf.* BACKER, Verkl. Woordenb., 1936, *sub* adolphi and kempterianus).

COLLECTIONS. Possibly none.

Kennedy, Rev. C. Ernst

went to New Guinea in 1891 under appointment from the Australian Board of Missions (Anglican), served at Dogura (Oct. 11, *1891–1892*); from *1892* –Nov. *1894* lay missionary at Taupota in *SE. New Guinea*. After a visit of Mr WINTER on Nov.

21, 1894, he left the country on account of ill health; Mr W. thought him very unsuited for the positions he had been holding.[1]

Dendrobium kennedyi SCHLTR was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. He collected on behalf of F. VON MUELLER,[2] material *probably* in *Herb. Melbourne;* also in *Herb. Kew.*[3] He collected on the Stirling Range.[4]

LITERATURE. (1) *cf.* Ann. Rep. Br. N.G. for 1894/95, Brisb. 1896, p. 5.

(2) *cf.* Kew Bull. 1896, p. 42.

(3) *cf.* List of ferns in Ann. Rep. Br. N.G. for 1893/94, Brisb. 1894, p. 126, identified by J. G. BAKER; including fern collection of KENNEDY.

(4) *cf.* KRÄNZLIN in Oesterr. Bot. Zeitschr. 44, 1894, p. 337.

Kent, William

(1779, Haarlem, N.H., Holland; July 11, 1827, Limbangan, W. Java), gardener, in 1802 appointed Curator of the College garden at Harderwijk, Holland; dismissed in Oct. 1811 on account of discontinuation of the school; from January till July 1815 temporary Curator at Leyden. When REINWARDT went to Java in 1815, he was put at the disposal of the latter; in 1817 he became Curator of the newly founded Botanic Gardens at Buitenzorg; in 1825 appointed Assistant of the Inspector of Coffee Culture in Limbangan Regency (at present Garoet).

The genus *Kentia* BL. and several plant species were named after him.

ITINERARY. *1817–21. Malay Archipelago:* with REINWARDT (itiner., liter., *etc.* see there).—*1824. W. Java:* with BLUME (itiner. see there) on a tour of inspection to the Duizendgebergte, *etc.;* in Sept. he stayed behind at Wanyassa (= Wanajasa) in Krawang on account of illness.[1]

COLLECTIONS. Some of his *Java* plants were described by BLUME (in Flora Javae, *etc.*) and MIQUEL; they were collected on G. Salak and in Bantam. We did not met with specimens from outside Java. *Herb. ? Leyden.*

Living plants on behalf of *Hort. Bog.*

LITERATURE. (1) *cf.* in G. H. NAGEL: 'Schetsen uit mijne Javaansche portefeuille' (Amsterdam 1828).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936, *cf.* also *sub Addenda;* Ned. Kruidk. Arch. 50, 1940, p. 194; *l.c.* 51, 1941, p. 356–357.

Keppel-Garnier, H.

Reverend, Colonial Chaplain in *Penang,* and Mrs KEPPEL-GARNIER, from time to time presented living ornamental plants to *Hort. Sing.*

Mr HOLTTUM does not know of dried collections.

Kerbosch, Matthieu Gerard Jacques Marie

(1880, Venlo, L., Holland; x), pharmacist who took his Dr's degree in 1910, and subsequently was appointed Government Chemist of the Agricultural Department at Buitenzorg; in 1914 Assistant Director of the Government Cinchona plantation, Tjinjiroean, and since 1915 Director of that plantation and besides of the Cinchona Experiment Station at Pengalengan; retired in 1925.

COLLECTIONS. *Herb. Bog.:* dried material of cultivated *Cinchona* species (pres. 1916).

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 459.

Kerkhoven, A. E.

(1858, Avereest, O., Holland; 1924, The Hague, Holland), was educated at the Agricultural College, Wageningen, and the Technical College, Delft; he went to Java as employee on the tea estate Ardjasári (Malabar); in 1880 Manager of the same estate and afterwards Director of the concerning company. In 1906 he returned to Europe.

His special interest was entomology; his large collections were bequeathed to the Natural History Museum, Leyden.

Ficus kerkhovenii VALET. was named after him.

COLLECTING LOCALITIES. *W. Java:* G. Malabar; G. Goentoer (Sept. 27, *1897*).[1]

COLLECTIONS. *Herb. Bog.:* 35 *nos,* identified and listed;[1] *Herb. Sydney:* fruits of 13 species of *Java* plants (pres. 1899).

LITERATURE. (1) A. E. KERKHOVEN: 'De Goentoer na 50 jaren rust' (Teysmannia 8, 1898, p. 489–508, incl. plant list).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Kerkhoven, Eduard Julius

(1834, Twelloo near Deventer, O., Holland; Aug. 29, 1905, Sinagar, Priangan Res., Java), studied philosophy at Leyden, but did not finish his study; he went to the D.E.I. in 1861 and after a stay of 5 months in Billiton, was placed on Parakan Salak Estate in W. Java; since 1863 Estate-Manager at Sinagar, afterwards Director.

COLLECTIONS. In the years *1874, 1875* and *1877* he sent, probably living, plants to *Hort. Bog.*

BIOGRAPHICAL DATA. Weekbl. v. Indië 2, 1905, p. 528–529, + portr.

Kerling, Louise Catharina Petronella

(1900, The Hague, Holland; x), botanist, educated at Leyden University (Ph. Dr at Utrecht, 1928); Assistant at the Agricultural College, Wageningen, 1926–29; teacher in natural history at secondary schools in the D.E.I., *viz* at Djokjakarta (Centr. Java) 1929–35, Medan (Sumatra) 1936–39, and Djokjakarta once more 1939–42; on the staff of the Bot. Laboratory of the General Agricultural Exp. Station, Buitenzorg, 1942–43; after internment by the Japanese, she was evacuated to Australia in 1945. At present phytopathologist at the Agricultural College, Wageningen.

COLLECTING LOCALITIES. *Centr. Java:* kali Oerang, above Djokja (Sept. *1932*).—*Sumatra East Coast:* Simeloengoen, and near Toba Lake (*1938*).

COLLECTIONS. *Herb. Bog.:* specimen of *Cupressus benthamii* ENDL. (cult.) and some material from *Sumatra; cf.* also *sub* THUNG.

Kerr, Arthur Francis George

(1877, Kinlough, NW. Ireland; †), since the end

of the 19th century till 1931 physician in the service of the Government of Siam, and in charge of the Botanical section, Ministry of Commerce (1921–31).

Author of many papers relating to the vegetation and flora of Siam.[1]

Some plants, *e.g. Dipterocarpus kerrii* KING and *Loranthus kerrii* CRAIB were named after him.

COLLECTING LOCALITIES. Mainly in the Siamese Malay States, sometimes on the boundary of *Malaya: e.g.* in Perlis at Padang Besar (May *1919*) and G. Ina or G. Titi Basah on the Siam-Perak boundary (Aug. *1923*); *Langkawi Islands* (June 21, *1932*).

COLLECTIONS. *Herb. Kew*, and in *Herb.? Bangkok;* he numbered partly in the field, partly after study.[2]

LITERATURE. (1) For the greater part published in the Journ. Siam Nat. Hist. Soc. (= ? the later Journ. Thail. Res. Soc. Nat. Hist.) and in Kew Bull. Also author of: 'Early botanists in Thailand' (Journ. Thail. Res. Soc. Nat. Hist. 12, 1939, p. 1–27).

(2) Part of the results of his collecting was published by CRAIB in 'Florae Siamensis Enumeratio'.

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; BACKER, Verkl. Woordenb., 1936; 'Flore génér. de l'Indo-Chine', tome prélim. 1944, p. 43–44.

Kerr, William

(† 1814, Ceylon), a Kew gardener and botanical collector who travelled in China (Canton, 1803) and later in the Philippines and Java, and forwarded many exotic plants to England. In 1812 he was appointed Superintendent of the Botanic Garden on Slave Island near Colombo (in 1821 this garden was transferred to Peradeniya in Ceylon.

The genus *Kerria* A.P.DC. was named in his honour.

ITINERARY.[1] *1805.* Leaving Macao (Febr. 1) for the *Philippines* with Mr CAMPBELL: *Luzon,* Manila (Febr. 13–Apr. 1), helding endless discussions with the authorities, and dispatching living seeds and plants from Manila and vicinity to China; setting out (Apr. 2) to Antipolo in the mountains, making trips in the environs; to Cayinta, Pasig River, and St. Ann's (4); back to Manila (5); vicinity of Manila (visiting St. Ann's again on 15 and 17); to Pasig (6); Laguna, Bagumbayan, Muntinlupa, S. Pedro Tunasan, Biniang, Santa Rosa, Cabugao (7); Calamba, foot of Mt Maquiling (8); excursion in the wood near Calamba, Baños (9); to Mt Maquiling and back to Baños (10); in wood near Baños (12); to hot spring in the mountains (13); in vicinity of Laguna *etc.* (16–20); leaving Baños (21), Calauan, San Pablo de los Montes; collecting in the vicinity of San Pablo (Batangas Prov.) (22–23); Tiaong (23–24); Sariaya (25), Tayabas (26); excursions to the near mountain *etc.* (27–29); to Lucban (29); Mahayhay (30), excursion in the vicinity (June 1); Santa Cruz (1–10); Pasanjan (capital of Laguna), Lumban, Langas, Pangil, Siniluan (11); Mabitac, Santa Maria de Cabuan, Panay (12); Baras, Moron (14); to Manila *via* Cayinto and Pasig (15); small trips near Manila (26–end of the month); embarking for Macao (Sept. 2).—*Java* evidently was visited on another occasion, *probably about 1805* too.

COLLECTIONS. He sent living plants to England (the bulk arriving in poor condition), some of which might have been preserved in a herbarium. He was assisted by MAGANTE in the *Philippines,* and obtained a collection from S. Juan del Monte collected by an inhabitant.

LITERATURE. (1) *cf.* his autograph journal of a 'Botanical mission to the Island of Luconia in the year 1805' in the Library Brit. Mus., Bot. Dept.

BIOGRAPHICAL DATA. Gard. Chron. 16, 1881[2], p. 570; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 27, 1889, p. 215 and in 2nd ed. by RENDLE, 1931; Kew Bull. 1891, p. 304; Journ. Kew Guild 1897, p. 29; BRETSCHNEIDER, Hist. Bot. Disc. China, 1898, p. 189–191; BACKER, Verkl. Woordenb., 1936; COX, Planthunting in China, 1945, p. 49.

Kersting, Otto

(sometimes erroneously with the initial H. or W.) (1863, Riga, Latvia; ?), physician who made expeditions in Africa (1893–94) and New Guinea (see below); from 1897–1909 he stayed in W. Africa (Togo); in 1910 appointed 'Bezirksamtsmann' (bailiff) in Yap and ? subsequently in Kaiser-Wilhelmsland.

Several plants were named after him.

ITINERARY. *1896. Kaiser-Wilhelmsland Expedition* in *NE. New Guinea; cf. sub* LAUTERBACH (detailed itiner., liter., *etc.*) and TAPPENBECK.

COLLECTIONS. *Herb. Berl.:* coll. LAUTERBACH & KERSTING & TAPPENBECK 931 *nos.* We met with plants of his numbered upwards of 2000; ? in LAUTERBACH series.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Kessler, W.

of Garoet, collected some orchids in the environs of that place in *W. Java, i.e.* on G. Tjikorai and at Tjampaka Warna.

COLLECTIONS. *Herb.* and *Hort. Bog.* (pres. *1894–99*).

Kesslitz, Rainer

'Marine-Commissariats-Adjunct', accompanied the voyage of the Austrian ship 'Nautilus' under captain K. SPETZLER to eastern Asiatic waters from 1884–87.[1]

ITINERARY. *Voyage in the 'Nautilus', 1884–87.*[1] Leaving Smyrna (Oct. 20, 1884); Port Saïd, Aden; *S. Sumatra:* Benkoelen (Jan. 26–29, *1885*); *W. Java:* Batavia (Febr. 3–11); sailing (12) for *Singapore* (18–25 stay); *NW. Borneo,* Sarawak: casting anchor at Pinding (March 3–6), paying a visit to Kuching; Bangkok, Saïgon; *Labuan* (Apr. 16–18; visit to Brunei on the 18th); *Luzon:* Manila (23–28); Hongkong and the coast of China; Japan; Hongkong; *Singapore* (Nov. 5–11); *Malay Peninsula:* Malacca (13); *Sumatra East Coast:* De(h)li (15–18; visit to a tobacco plantation on the 16th); *Penang* (19–20); Rangoon; Moulmein; Siam; *Malay Pen-*

insula: Quedah (= Kedah) (21–22); *Penang* (24–30), in this period visit to Wellesley; *N. Sumatra:* Acheen (= Atjeh): Oleh-leh (Jan. 1–4, *1886*), from where visit to Kota-Radja; *Nias:* Goenoengsito(e)li (9–10); *Sumatra West Coast:* Padang (13–21), casting anchor near P. Pisang; *S. Sumatra:* Benkoelen (23–26); *W. Java:* road of Batavia (31–Febr. 5); *E. Java:* Soerabaja (Febr. 8–16; visit to Solo in *Centr. Java*, 15–16); *Bali:* Boeleleng (18–20); *Lombok:* Ampanam (= Ampenan) (21–22); *SW. Celebes:* Macassar (Febr. 25–March 2); sighting Salajar and Buton; *N. Celebes:* Kema (12–16); heading for the *Philippines* once more; *Mindanao:* Zamboanga (22); *Mindoro:* Paluan (29); *Luzon:* road of Manila (30–Apr. 5); Hongkong; Canton, coast of China, Corea, Wladiwostok, *etc.;* Japan; Hongkong; *Singapore* (Oct. 28–31); home voyage (weighing anchor Nov. 1) *via* Point de Galle, Aden, *etc.;* Pola (Jan. 18, 1887).

COLLECTIONS. *Herb. Vienna:* some hundred plants from China, Further India, *Borneo* and *Sumatra* (pres. 1889). In the report of the voyage no mention is made of excursions inland, so it will be mostly common stuff.

LITERATURE. (1) J. FREIHERR VON BENKO: 'Die Schiffs-Station der k. und k. Kriegs-Marine in Ost-Asien. Reisen S.M. Schiffe "Nautilus" und "Aurora" 1884–1888' (Wien 1892, 3 maps).

Keuchenius, Adriaan Anton Maximiliaan Nicolaas

(1894, ? Bandoeng, Java; March 23, 1940, Padang, Sumatra), agriculturist, educated at the Colonial Agricultural School at Deventer, Holland; since 1917 on the staff of the Experiment Station for Tea, Buitenzorg, Java; from 1926–32 stationed at Tandjong Karang in S. Sumatra; after European leave, since October 1933 till his death at Padang in West Sumatra.

COLLECTING LOCALITIES. *1917*–March *'26. W. Java:* at Tjinjiroean, Tjigombong, *etc.*—Apr. *1926*–Apr. *'32. S. Sumatra,* Lampong Districts.—Oct. *1933–40. Sumatra West Coast.*

COLLECTIONS. He occasionally sent plants to *Herb. Bog.* He made a herbarium of green manure plants, cultivated plants, plants from the Buitenzorg Botanic Gardens, *etc.* for the *West Java Experiment Station;* a set of dupl. in *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam.* Most of the *Java* specimens were collected on Sept. 23, *1926.*

LITERATURE. (1) *E.g.* 'Botanische kenmerken en cultuurwaarde als groenbemester van een 60-tal nieuwe soorten van Leguminosen' (Meded. Proefstation Thee *no* 90, 1924, p. 5–44, 14 pl.); and several small papers in 'De Bergcultures'.

BIOGRAPHICAL DATA. Bergcultures 14, 1940, p. 413, 471.

Keulemans

is cited as the collector of *Adenia* (*Passifloraceae*) and several *Convolvulaceae* on *Prinseneiland,*[1] situated off the coast of SW. Java; the cited material in *Herb. Leyden.*

Recently Dr S. J. VAN OOSTSTROOM suspected that something might be wrong regarding the collecting locality, though the concerned *Convolvulaceae* are all circumtropic. His supposition that the plants were rightly collected in Ilha do Principe, off the W. coast of Africa, is confirmed by another plant collected by KEULEMANS, *viz Ouratea nutans* (HIERN) EXELL, a local-endemic, confined to the Isle of Principe in the Bay of Guinea. The collector, J. G. KEULEMANS, accompanied the German ornithologist H. DOHRN on a voyage to the Cape Verde Islands and Ilha do Principe (Prins-eiland in Dutch). KEULEMANS was a well-known draughtsman of birds, who for several years was employed in the Leyden Museum of Natural History.[2]

LITERATURE. (1) *cf.* HALLIER in Meded. 's Rijks Herb. Leiden *no* 42, 1922, p. 10, and VAN OOSTSTROOM in Blumea 3, 1939, p. 337 *etc.*

(2) For more detailed data *cf.* S. J. VAN OOSTSTROOM & C. G. G. J. VAN STEENIS: 'Keulemans's collection from "Prinseneiland" (Java) is an unknown collection of plants from I. do Principe (W. Africa)' (MS. to be published in Bull. Bot. Gard. Buit. 3rd ser., vol. 18).

Keun, G. C.

Ranger in the Forest Department, collected in the *Malay Peninsula* during his term of service (*1906–17*) (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. ? Kuala Lump.*

Keyser

COLLECTIONS. *Herb. Sing.:* specimens of Bastard Teak and a remarkable scented wood from *Christmas Isl.* (Ind. Ocean) (pres. *1896*).

Keysser, Christian

(1877, Geroldsgrün, Bavaria, Germany; x), for many years evangelical missionary of the 'Neuendettelsauer Missionsgesellschaft' in New Guinea; he collected plants and animals on his trips in the interior. In 1929 he was awarded the honorary Dr's degree of the University of Erlangen with a view to his ethnological studies.

Author of a dictionary of the Kâte tongue, and an ethnographical paper.[1]

Several plants were named after him.

COLLECTING LOCALITIES & ITINERARY. *NE. New Guinea. 1909–10.* Trip from Inland-station through the mountains to Bukaua on the coast of Huon Gulf.—*1911.* Sattelberg.—*1912.* From the Sattelberg following the upper course of the Bulung River, sources of the Mongi, Saruwaged Mountains, climbing Titaknan (Luitpoldberg, 3780 m), and Bolan (4000 m) (Oct.)[2].—*1913.* Sattelberg (Apr.).—*1916.* Saruwaged Mts (June–July).

COLLECTIONS. *Herb. Berl.*[3]

LITERATURE. (1) CHR. KEYSSER: 'Aus dem Leben der Kaileute' (in NEUHAUSS: 'Deutsch-Neu Guinea' vol. 3, 1911, p. 3–242).

(2) CHR. KEYSSER: 'Die erste Ersteigung der östlichen Gipfel des Finisterregebirges (Kais. Wilh. Land)' (PETERM. Mitt. 59^2, 1913, p. 177–181, pl. 33–34, map 32); *cf.* also *l.c.* 60^2, 1914, p. 138.

(3) E. ROSENSTOCK: 'Filices novo-guineenses Bamlerianae et Keysserianae' (FEDDE Repert. 10, 1912, p. 321–343; *l.c.* 12, 1913, p. 162–181).

Plants of the 1st tour in the Saruwaged Mts by LAUTERBACH & FÖRSTER in FEDDE Repert. 13, 1914, p. 221–225, 239–242.

Orchids by SCHLECHTER in 'Orchidaceae novae et criticae' *decas* 64 (FEDDE Repert. 16, 1919, p. 214–219).

L. DIELS: 'Beiträge zur Flora des Saruwaged–Gebirges' (ENGL. Bot. Jahrb. 62, 1929, p. 452–501).

Many plants described in LAUTERBACH, Beiträge zur Flora Papuasiens (ENGL. Bot. Jahrb. 1912→).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Kiah bin Hadji Mohamed Salleh

a plant collector employed in the Botanic Gardens, Singapore.[1]

Eugenia kiahii HENDERSON is named after him.

COLLECTING LOCALITIES.[1] *Malay Peninsula: Singapore Isl.;* with NUR on G. Pulai and environs, in Johore (*1922*); with STRUGNELL (see there) in Pahang (? Aug. *1930*); *Br. N. Borneo:* with FURTADO on his Kinabalu trip (March–Apr. *1932*), joining the CLEMENS expedition; *Malay Peninsula:* with C. F. SYMINGTON (see there) on a trip to G. Tapis, near Kuantan, Pahang (June *1934*); near the new Mersing Road, Johore (Oct. *1936*); with L. MOYSEY on G. Padang (Trengganu, May 22–July 15, *1937*); Kedah and Perlis, at Kaki Bukit *etc.* (Apr.–May *1938*); Kedah, near Sungei Patani (Oct. 1938).

COLLECTIONS. *Herb. Sing.;* some dupl. in *Herb. Bog.*

LITERATURE. (1) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

Kiel, E. B., *cf. sub* Forest Research Institute, Buitenzorg.

Kienholz, (Aaron) Raymond

(1894, Bellingham, Minn., U.S.A.; x), botanist, taking his Ph. Dr's degree in 1922 in Illinois; from 1922–24 Professor of Botany in the Philippines; Instructor, later Associate, Dept of Botany, University of Illinois, Urbana, Ill. (U.S.A.), 1924–30; since 1931 Plant Physiologist Connecticut Experiment Station; at present State Forester for Connecticut.

Author of a paper on the vegetation of the Philippines.[1]

COLLECTING LOCALITIES. *Philippines. 1923.* During summer making a trip through the southern islands of the Archipelago, to make observations on, and collections of, the beach flora.—*1924.* Summer spent at Puerto Galera, N. coast *Mindoro* (collecting with PASCASIO).

COLLECTIONS. The collected material was identified by E. D. MERRILL; it was preserved in *Herb. Manila.*

LITERATURE. (1) 'An ecological-anatomical study of beach vegetation in the Philippines' (Proc. Amer. Philos. Soc. 65, 1926, Suppl. p. 58–100, 6 pl.).

BIOGRAPHICAL DATA. Amer. Men of Sci. 1933.

Kievit, H.

of Ambon, captain of the government steamer 'Tomalhaut', evidently brought home orchids from *E. Borneo* (Koetei), from *P. Watkoesa* (subdiv. of Ceram) and from Merauke (*S. New Guinea*).

COLLECTIONS. *Hort. Bog.:* orchids from abovementioned localities (pres. *1924* and *1926*, partly by Mrs KIEVIT).

Kievits, Dirk Baldus Jan

(1889, Nijkerk, Gld, Holland; x), agriculturist, educated at Wageningen Agricultural College; since 1912 in the employ of the Experiment Station for the Java Sugar Industry (Pasoeroean); stationed respectively at Djokja (1912–15), Banjoemas (1915–25), Djombang (1925–28), and at Banjoemas again (1928–32). Subsequently he retired and settled at Zeist, Holland.

COLLECTING LOCALITIES. *Centr. Java:* Banjoemas (*1923–25*), Kedoe (*1924*) and Banjoemas (*1931*).

COLLECTIONS. *Herb. Pasoer.:* 1396 *nos* (ranging from below 100 to upwards of 3500); some dupl. in *Herb. Leyden*, and in *Herb. Univ. Amsterdam.*

Kiler, Dr A. F., *cf. sub* STEWARDT.

Kimah

an Indonesian collector who in *1931* made a collection of plants in the Nature Reserve at Depok in *W. Java;* they were numbered in the series of VAN STEENIS, *nos* 5653–5679 (*leg.* KIMAH); in *Herb. Bog.*

Kimura, Kôiti (Kôichi or Kôitschi)

(1901, Tokyo, Japan; x), graduated in pharmacy at Tokyo Imp. University in 1927, taking his Dr's degree in 1937; Assistant in the Pharmacognostical Institute, Tokyo University, 1927–31; on the staff of the Shanghai Science Institute, 1931–39; Associate Professor Kyoto Imp. University, 1939–43; at the Makassar Science Institute in SW. Celebes, 1943–46; Lecturer in Pharmaceutical Botany and Pharmacognosy at Kyoto Imp. University, 1945–47, and besides at Doshisha Technical College from 1946 onwards; since 1947 Associate Professor of Kyoto University.

He made several expeditions, *viz* to China, the Bonin Islands (1926), and Malaysia (1937, see below).

ITINERARY. *Voyage to the Philippine Islands and the Malay Archipelago, 1937.*[1] *Philippines: Luzon*, Manila (June 24); *Cebu* (26); *SW. Celebes:* Makassar (30); *Lesser Sunda Islands, Bali* (July 1–10): at Kintamani, Bedoegoel, and Boeleleng; *Java:* from Banjoewangi (eastern part, July 11) to *W. Java:* Buitenzorg, Sindanglaja (18), Wijnkoops Bay (25), *Islands in the Bay of Batavia* (Aug. 3), staying till Aug. 7; *Singapore* (9–11); *Malay Peninsula:* Kuala Lumpur (12); Bangkok; *Penang* (19–21); Rangoon, Calcutta and Darjeeling.

During World War II, from *1943–45*, he collected in *Celebes.*

COLLECTIONS. *Private Herbarium* at Kyoto University: about a hundred of *Bali* plants; the few *Cebu* specimens lost; some in *Herb. Pharma-*

cogn. Inst. Kyoto Imp. Univ.; Herb. Bog.: Cebu and *Bali* plants, also duplicates.

The plants collected in *Celebes* during World War II were all left at Makassar.

Most of the plants were medicinal; some of the collections were from primary forests.

LITERATURE. (1) K. KIMURA: 'South Asia Biological Tour' (Sizen or Nature, quarterly magaz. of the members' Club of Shanghai Science Institute, 1937) (*non vidi*).

Kinder (de Camarecq), Albert Wilhelm

(1819, Weissig, Prussia, Germany; ?), joined the D.E.I. Government Service in 1839, stationed in Java, successively at Soerakarta (1839–41), Batavia (1841–46), Priangan Regencies (1846–47), Bagelen (1847–53); in 1853 appointed Assistant Resident at Soemedang and Soekapoera (Priangan), in 1858 Inspector of Agriculture, and from 1860–62 in the Civil Service at Soerabaja; from 1862–65 on European leave; in 1865 Resident of Cheribon; in 1866 Chief Inspector of Agriculture, and retired in the same year.

He climbed G. Gedeh-Pangrango in *W. Java* in company with JUNGHUHN (see there) (July 28–Aug. 3, *1839*).

COLLECTIONS. *Herb. Berl.:* vascular cryptogams from *Java* (pres. 1858);[1] fern dupl. in *Herb. Leyden.*

LITERATURE. (1) Several ferns described by KUHN in MIQUEL, Ann. Mus. Lugd. Bat., 4, 1868/69, p. 276 *seq.*; collected in the Prov. of Bagelen in *Centr. Java etc.*

King

is cited as the collector of *Scleria scrobiculata* NEES in the *Philippines* (*cf.* CLARKE in Philip. Journ. Sci. C. Bot. 2, 1907, p. 106).

In *Herb. Utrecht* are *Philippine* plants from G. KING (*ex* Calcutta). In all probability these are duplicates distributed by KING, but *not* collected by himself.

King, Copland

(? , Sydney, N.S.W., Australia; Oct. 1918, Sydney), missionary who served 25 years with the Anglican Mission; he resided in the Kumusi division, at Ambasi on the NE. coast of the SE. Peninsula of New Guinea. He specialized in ferns.

Marattia kingii COPEL. and other ferns were named after him.

COLLECTING LOCALITIES. From *c. 1893–1918. SE. New Guinea, Papua:* Kumusi River, Cape Vogel, Bartle Bay, Yodda, Ambasi, Cape Nelson, Collingwood Bay, Gira Track, Goodenough Bay, Waria River, Samarai, Port Moresby, Lakekamu River, *Woodlark Isl.*, Loane, Tamata, Taupota, Mt Tuan, Mt Gewagewa; visit to Waria & Yodda Goldfields and the Kumusi River (*1908 or 1909*);[1] visits to Mambare River Mission Station (*1910 or 1911*).[2]

COLLECTIONS. Principally ferns and orchids. He certainly collected as early as *1894*.[3] His later collections were sent to F. M. BAILEY,[4] and preserved in *Herb. Brisbane* (pres. 1904–18), including his legacy of ± 1000 sheets. *Herb. Sydney:* large number of pteridophytes (identified by ALSTON). *Herb. Bog.:* 101 *nos* of ferns (pres. 1910) which were sent for identification to Dr E. ROSENSTOCK.[5] He also submitted ferns to E. B. COPELAND,[6] and sent herbarium specimens of indigenous trees to Dr FOXWORTHY of the Philippine Islands for identification.[7] In *Herb. Manila:* 119 *New Guinea* plants (by exch. 1912/13) and 78 *ditto* for identification (1915); *Herb. Berkeley* (Cal.): *New Guinea* ferns; some specimens in *Herb. Brit. Mus.* In literature we met with numbers exceeding 1000.

LITERATURE. (1) *cf.* Ann. Rep. Papua for 1908/09, p. 111.

(2) *cf. l.c.* for 1910/11, p. 139.

(3) *cf.* KRÄNZLIN in Oesterr. Bot. Zeitschr. 45, 1895, p. 179.

(4) He described the orchids in Queensl. Agric. Journ. 16, 1906, p. 411, and in *l.c.* 19, 1907, p. 273–274, and many of the ferns in his series 'Contributions to the flora of New Guinea' in the above-mentioned periodical.

(5) 'Filices novo-guineenses Kingianae' (FEDDE Repert. 9, 1911, p. 422–427).

(6) Published in Philip. Journ. Sci. C. Bot. 6, 1911, p. 65–92; *l.c.* 7, 1912, p. 67–68; *l.c.* 9, 1913, p. 1–9 (an extract of the last-mentioned paper in Ann. Rep. Papua for 1913/14, 1914, p. 146–147).

(7) *cf.* Ann. Rep. Papua for 1909/10, 1911, p. 114.

BIOGRAPHICAL DATA. Legisl. Assembly N.S. W. Rep. Bot. Gard. & Domains for 1918, p. 10; and *l.c.* for 1919, p. 9; BACKER, Verkl. Woordenb., 1936.

King, Sir George

(1840, Peterhead, Aberdeenshire, Scotland; 1909, San Remo, Italy) reached Calcutta in March 1866 and joined the Indian Medical Service; in 1868 in charge of the Botanical Garden at Saharanpur, from 1871–98 Superintendent of the Royal Botanic Gardens, Calcutta; since 1891 besides Director of the Botanical Survey of India, and from 1871–95 Professor at the Medical College of Bengal; he retired in 1898.

In 1879 he went to Java in connection with *Cinchona* culture[1] and visited the Malay Peninsula on his voyage there and back.

Founder of, and chief contributor to, the Annals of the Roy. Bot. Gard. Calcutta. His papers are mainly dealing with the flora of the Malay Peninsula and British India.[2]

Several ferns were named after him.

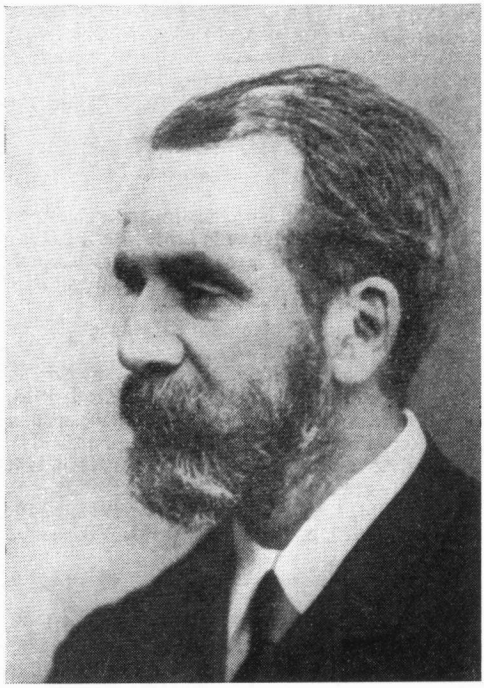
ITINERARY. *1879. Malay Peninsula: P. Penang* (Aug.), *Singapore*, and Johoro Bahru (Jaffaria) (Aug.–Sept.); *W. Java:* Tjinjiroean (on the slope of G. Malabar), G. Tangkoeban Prahoe (Oct. 13); *Malay Peninsula:* Malacca and *Penang* (Nov.).

He is cited to have collected *Pycnarrhena lucida* at Kota Djawa in Lampong Districts, *S. Sumatra;*[3] possibly on the way to or from Java.

COLLECTIONS. *Herb. Calcutta; Herb. Kew:* India, *Malaya, etc.* 8289 *nos* (pres. 1875–97); *Herb. Brit. Mus.:* 6391 Indian and *Malayan* plants (pres. at various intervals from 1886); *Herb. Berl.: Malay Archipelago* (coll. 1879); *Herb. Sing.:* 318 *nos* from

Perak (nothing is know of a visit to Perak!) and India (pres. 1893), also *nos* from *Java; Herb. Leyden; Herb.* DECAND. (*Geneva*); *Herb. Bot. Gard. St Petersb.* (= *Leningrad*): 172 from *Mal. Archipelago.*

Occasionally *Philippine* plants attributed to him are mentioned. As nothing is known of a voyage of



G. KING

his to the Philippine islands, it is supposed that these specimens are Calcutta duplicates distributed by KING, but *not* collected by himself.

LITERATURE. (1) G. KING: 'Cinchona cultivation in Java' (Ind. Forester 5, 1880, p. 422–428).

(2) *E.g.* KING & GAMBLE: 'Materials for a flora of the Malay Peninsula' (1889–1915, 5 vols, published in Journ. Asiat. Soc. Bengal 1889→).

(3) *cf.* DIELS in Pflanzenreich Heft 46, p. 49.

BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 1903, p. 158; *l.c.* 2, 1905, p. 172; Proc. Linn. Soc. Lond. 1908/09, p. 42–45; Kew Bull. 1909, p. 68–72, 193–197, incl. bibliogr.; Journ. Bot. 47, 1909, p. 120–122, w. portr.; CURTIS' Bot. Magaz. Dedications 1827–1927, p. 207–208 + portr.; Nature 79, 1909, p. 493–494; in Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

King's collector, Sir George, *cf. sub* H. H. KUNSTLER.

Kinsey, W. E.

joined the Government as Inspector of Mines in 1902; Assistant and afterwards Deputy Conservator of Forests, Negri Sembilan, Malay Peninsula (1905–27). See also *Addenda.*

COLLECTING LOCALITIES.[1] *1905–28. Malay Peninsula:* Negri Sembilan, in the north-eastern part, such as Triang and Pasoh; in many Forest Reserves, *e.g.* of Senaling Inas, Kepis, Bahau, Serting, at the Bemban, in the Ulu Petasih, about Durian Tawar. Almost entirely in Negri Sembilan.

COLLECTIONS.[1] *Herb. Kuala Lump.:* material of forest trees, numbered in the C.F. (see *sub* Conservator of Forests) series.

LITERATURE. (1) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

Kiriman

is cited by VAN OOSTSTROOM (in Blumea 3, 1939, p. 338) as a collector of plants in *Centr. Java*, s.f. Tandjong Modjo near Semarang, in June *1924.*

KIRIMAN is no collector's name, but the Malay word for consignment!

Kirk, Captain

COLLECTIONS. *Hort. Sing.:* living orchids from *NW. Borneo*, Sarawak (*1875*).

Kissling, Dr E.

presented botanical objects from Palembang (*S. Sumatra*): wood samples, fruits, *Myrmecodias, etc.* to *Herb. Berne* in *1903* (*cf.* Ber. Bot. Gart. Bern 1903, p. 7).

Kist, C. W.

a Doctor of Law, in 1883 Assistant Resident at Poerwokerto (*Centr. Java*), in 1894 stationed in the Priangan Regencies (*W. Java*).

COLLECTIONS. *Herb. Bog.:* material of *Dichopsis oblongifolia* (pres. *1883*); *Herb. Kol. Mus.* (= *Ind. Inst. Amsterdam*): material of *Tetranthera citrata* (pres. *1894*).

Kjellberg, G. K.

(1885, Stockholm, Sweden; 1943, Sweden), botanist from Lidköping, who travelled in many parts of Europe and made a botanical investigation of Celebes.

The genus *Kjellbergiodendron* BURR. and several Indonesian plants were named after him.

ITINERARY. *1929. P. Boeto(e)n(g)*: Baoe Baoe (Febr. 7–19), making trips to *P. Moena* (Febr. 9, 11, and 12) and Kaboengka (jungle); *SE. Celebes:* headquarters at Kendari (Febr. 22–Apr. 19), making trips in the neighbourhood: Kolaka; *via* Wawotobi–Asinoea–Sangona to the B. Watoewila and back *via* Asoloe–Wawotobi (March 14–Apr. 3); Laboeanperopa (forest on limestone) and mouth Sampara River; *SW. Celebes:* Pare Pare (May 4–7), Enrekang (9–14); Enrekang–Kalosi–Pasoei–Rante Lemo (May 15–18); headquarters at Rante Lemo (May 19–June 7), from where ascending the Latimodjong Mts, *viz* Bt Poka Pindjang and Bt Rante Mario (May 25–26, ± 3500 m alt.); through the Toradja Lands, Makale (June 17–18), to Todjamboe (June 22–July 15); Palopo (July 16–31; ill!); *Centr. Celebes:* Masamba (July 26); head-

quarters at Malili (Aug. 1–Dec. 5), making minor trips to Waroe Waroe, Lampea, Karebbe, Waraoe, Kawata, and larger tours to Towoeti Lake and environs (Aug. 13–Sept. 20), to the coast S of Malili, the northern part of the Mengkoka Mts (Oct. 2–Nov. 4), and to Matana Lake (Nov. 11–28); *SW. Celebes:* Todjamboe (Dec. 7–24), making trips to Rante Pao, Makale; Palopo; Pangkadjene (Jan. *1930*); G. Bonthain (Jan. 14–17).

COLLECTIONS.[1] The main set was in his *private* herbarium, now in *State Mus. Stockholm;* a complete set in *Herb. Bog.:* ± 4000 *nos; Herb. Berl.:* 1352 dupl. (purch. 1932/33); also dupl. in *Herb. Leyden.* The collection is numbered 1–4163, of which the *nos* 3186–3499 are wanting; *nos* 3500–3697 ferns only.

Dry material, material in alcohol, and herbarium of the same species, bear the same number.

LITERATURE. (1) J. J. SMITH: 'Orchidaceae selebenses Kjellbergianae' (ENGL. Bot. Jahrb. 65, 1933, p. 449–508).

KJELLBERG & CHRISTENSEN: 'Pteridophyta von Celebes gesammelt von G. KJELLBERG 1929' (ENGL. Bot. Jahrb. 66, 1933, p. 39–70).

Graphidineae by K. REDINGER in Ann. Mycol. 31, 1933, p. 168–180.

Violaceae by H. MELCHIOR in Notizbl. Berl. Dahl. 12, 1934, p. 205–207.

Dioscoreaceae by P. KNUTH in FEDDE Repert. 1934, p. 127–128.

Mosses by H. N. DIXON in Ann. Bryol. 7, 1934, p. 19–36.

M. BURRET: 'Eine neue Myrtaceengattung aus Celebes' (Notizbl. Berl. Dahl. 13, 1936, p. 101–106, fig. 5).

J. J. SMITH: 'Ericaceae selebenses Kjellbergianae' (ENGL. Bot. Jahrb. 68, 1937, p. 199–215).

F. FAGERLIND: 'Pandanus-Arten von Celebes, eingesammelt von Dr. G. KJELLBERG' (Bot. Notiser 1941, p. 173–182).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Kjellman, Dr, *cf. sub* ALMQUIST.

Klei

COLLECTING LOCALITIES. *W. Java:* G. Salak and the Tjiliwoeng.

COLLECTIONS. *Herb. Leyden.*

Some numbers of *Selaginella* (24 and 90) are cited by ALSTON.[1]

LITERATURE. (1) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1935, p. 436.

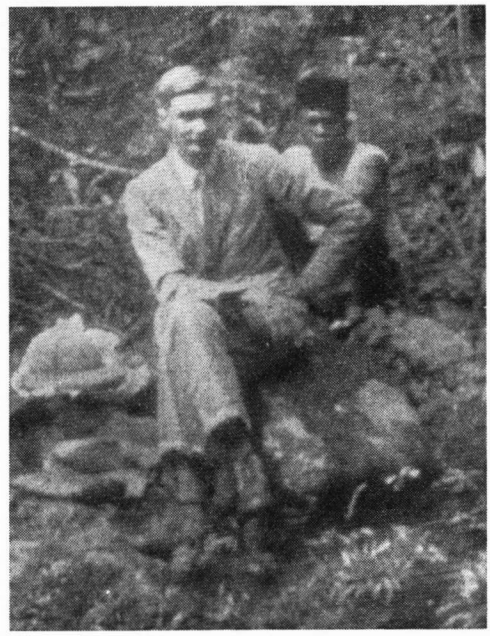
Klein

A plant of his is erroneously cited as from the Moluccas (in *Herb.* WILLDENOW = *Berlin*) (*cf.* PRAIN in Kew Bull. 1918, p. 97). The concerning plant was from Southern India!

Kleinhof(f), *cf.* KLEYNHOFF.

Kleinhoonte, Anthonia

(1887, Arnhem, Gld, Holland; x), passed the natural history examination (K IV) in 1920, and took her Ph. Dr's degree in 1928 at Utrecht University; Custodian of the Laboratory for Technical Botany of the Technical College, Delft. In 1932 she was granted the Buitenzorg Fund;[1] when staying in the D.E.I., she made some collecting tours, on one of which she discovered the genus *Elisma* to occur in Java.[2]



KJELLBERG

ITINERARY. *1932. W. Java:* Buitenzorg (end of March–July 7), making some minor trips, *viz* to the *Islands in the Bay of Batavia: P. Leiden* and *P. Purmerend* (May 11); Batavia, Wijnkoopsbaai, Tjibodas (staying 2 weeks, climbing G. Gedeh-Pangrango), Bandoeng, Tjinjiroean, G. Tangkoeban Prahoe, Kawah Kamodjan, G. Papandajan (May).—*Tour across Java etc.* (July 7—Aug. 12). *Centr. Java: Noesa Kambangan* and Diëng Plateau; *E. Java:* G. Idjen (July 25), G. Tengger (31), and visits to experiment stations (*e.g.* Ranoe Daroengan on the S. slope of G. Smeroe, July 28); *Bali* (Aug. 4).—*Sumatra* (Aug. 20–Sept. 3), *West Coast:* Fort de Kock, Haraukloof, Batang Paloepoeh, *etc.; via* Sibolga (Tapanoeli) to Medan (*East Coast*).

COLLECTIONS. *Herb. Delft* (Lab. f. Techn. Bot.): 1100 plants; *Herb. Bog.:* some duplicates and list of the collection. The plants from *Sumatra* number from 440–678.

LITERATURE. (1) *cf.* short report on the stay at Buitenzorg in Versl. Kon. Akad. Wet. Amsterdam 42, 1933, *no* 7, p. 98–99.

cf. also DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 52.

(2) *cf.* VAN STEENIS in Trop. Nat. 24, 1935, p. 54–56, 1 fig.

Kleiweg de Zwaan, Johannes Pieter

(1875, The Hague, Holland; x), studied medicine at Leyden, Amsterdam, Paris, and Berlin and took his Dr's degree in 1908;[1] successively University Lecturer in Medical Social History, honorary Professor of Anthropology and Medicine on behalf of the Colonial (= Indian) Institute (Amsterdam); and since 1924 Professor (previously Extraordinary) of Anthropology and Prehistory.

ITINERARY. *1907.* Tour in *Central Sumatra,*[1] *Java, Bali* and *Lombok* (for itiner. in Sumatra *cf. sub* A. MAASS).—*1910. P. Nias,* W of Sumatra (early in the year).[2]

COLLECTIONS. *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam:* herbarium + material in alcohol of *Sumatra* plants (pres. 1909).

In his book on Nias,[2] he mentions to have made a botanical collection there, which was brought back to Holland for identification;[3] the present location not known.

The *Sumatra* collection was identified by GRESHOFF and HALLIER; it mainly consisted of incomplete material of medicinal plants.

LITERATURE. (1) J. P. KLEIWEG DE ZWAAN: 'Bijdrage tot de anthropologie der Menangkabau-Maleiers' (Thesis, Amsterdam 1908, w. plts).

(2) J. P. KLEIWEG DE ZWAAN: 'Die Insel Nias bei Sumatra' (Haag 1913–15, 2 vols).

(3) *cf.* 'Die Insel Nias *etc.*' *l.c.* 1, 1913, p. 3.

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 196.

Klemme, Wilhelm

(born 1869), German forest officer, educated at Cornell University (U.S.A.); in the employ of the Forestry Bureau, Manila, P.I., 1902–18; in 1916 for some months acting Director of the same Institute.

Dysoxylum klemmei MERR. and other Philippine plants were named after him.

COLLECTING LOCALITIES. *Philippine Islands: Luzon (c. 1903–06),* Prov. of Tayabas *etc.*

COLLECTIONS. *Herb. Manila,* numbered in the F.B. (*cf. sub* Forestry Bureau) series. Duplicates in *Herb. Berl.; U.S. Nat. Herb. Wash.:* 121 *P.I.* plants; *Herb. Leyden.*

BIOGRAPHICAL DATA. Plant Life 2, 1946, p. 66.

Klerk, F. W. de, *cf. sub* Forest Research Institute, Buitenzorg.

Kleyn, W. M., *cf. sub ditto.*

Kleynhoff, Christiaan

(sometimes cited as KLEINHOFF, or KLEINHOF) (? , Sandau in Upper Silesia, Germany; 1777, Culemborg, Gld, Holland), surgeon, for three years employed in the West Indies, and since 1741 or 1742 in the service of the E.I. Company at Batavia; in 1762 he returned to Europe for good, settling in Holland. He owned a botanical garden at Batavia (possibly in Gang Chaulan), growing Malaysian and Chinese plants.

The genus *Kleinhovia* L. and other plants were named in his honour.

COLLECTIONS. He forwarded *Java* plants to N. J. BURMAN in the years *1757* and *1758.* In *Herb.* BURMAN = *Herb.* DELESS. (*Geneva*);[1] some in *Herb.* LINNAEUS = *Herb. Linn. Soc. Lond.;* and in *Herb. Leyden, e.g.* with *Herb.* REINWARDT.[2]

He discovered *Porana volubilis* N. L. BURM. and *Strophanthus caudatus* KURZ in Java.

LITERATURE. (1) Some described in BURMAN: 'Flora Indica' (Lugd. Bat. 1768).

(2) *cf.* Grasses in W. H. DE VRIESE: 'Plantae indiae batavae orientalis *etc.*' (Lugd. Bat. 1856/57), p. 101–113.

BIOGRAPHICAL DATA. GRESHOFF, Nuttige Ind. Pl., 1894, p. 48; BACKER, Verkl. Woordenb., 1936 (detailed data, *cf.* also *sub Addenda*); BOELMAN, Bijdrage tot de geschiedenis der geneeskruidcultuur in N.O.I., Leiden 1936, p. 46–47; specimen of handwriting in SP. SAVAGE, A catalogue of the Linnean Herbarium, London 1945, fig. 16.

Klink, Hans

(made a prisoner by Australian natives in Jan. 1915 and vanishing without a trace), an architect from Sydney, N.S.W., till 1915 leader of Morobe Station in former Kaiser-Wilhemsland, NE. New Guinea. He was to prospect for gold on the 2nd Ramu expedition.

Saurauia klinkii LAUT. & SCHUM. was named after him.

ITINERARY. *NE. New Guinea,* former *Kaiser-Wilhemsland. 1898.* With the *2nd Ramu expedition* (Apr. 3–Sept. 3) under E. TAPPENBECK (detailed itiner., liter., *etc.* see there); *cf.* also *sub* H. RODATZ. —*1899.* With H. RODATZ in the Bismarck Mts (± June).—With the *3rd Ramu expedition* (Sept. 28, *1899*–Jan. or Febr. *1900*) under C. A. G. LAUTERBACH (itiner. *etc.* see there); *cf.* also *sub* RODATZ.

COLLECTIONS. In *Herb. Berl.,* bought from the German New Guinea Company.[1]

LITERATURE. (1) *cf.* SCHUMANN & LAUTERBACH: 'Die Flora dei deutschen Schutzgebiete i.d. Südsee' (1901).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Klip, R. B. A. van der, *cf. sub* Forest Research Institute, Buitenzorg.

Kloppenburg, Ch.

COLLECTING LOCALITIES. *Centr. Java:* G. Prahoe (*1938*).

COLLECTIONS. Some plants for identification to *Herb. Bog.*

Kloss, Cecil Boden

(1877, Warwickshire, England; x), zoologist who made expeditions to the Anambas Islands,[1] to the Andamans and Nicobars, *etc.*, and subsequently in 1903 and 1907 was employed in the Botanical Gardens, Singapore. Later Sub-Director of the Museum at Kuala Lumpur, and in 1923 appointed Director of the Raffles Museum at Singapore; when pensioned off in 1931, he settled in London, continuing H.C. ROBINSON's work on birds.

Author of many zoological papers.

Several plants were named after him.

ITINERARIES & COLLECTING LOCALITIES. *1902. Pagi* (= *Pagai*) *Islands*, W of Sumatra, with Dr W. L. ABBOTT (see there).[2]—*Riouw Archipelago: Batam Isl.* (Sept. 15–23, *1905;* March 18–Apr. 3, *1906*)[3] and *Bintang Isl.* (= ? P. Bintan) (*c. 1907*). —*Malay Peninsula. 1908.* With RIDLEY (see there) and H. C. ROBINSON to Telom and Batang Padang valleys (Nov.).[4]—*1909.* Expedition to Temengor in Upper Perak with RIDLEY (see there) and H. C. ROBINSON (July)[5].—*1911.* With RIDLEY (see there) and H. C. ROBINSON on G. Tahan (July).[6]—*1912.* Mt Menuang Gasing, Selangor (Febr.), and Ulu Langat.[7]—WOLLASTON *expedition, 1912–13;*[8] *cf.* also *sub* WOLLASTON. Sailing from Ambon (Sept. 12, *1912*) to *Dutch S. New Guinea:* mouth of the O(e)takwa (18), ascending the same, part of the way; bivouac on the Setekwa;[9] starting the march (Jan. 17, *1913*) to the Carstensz Peaks; at the base of the summit (Jan. 30), the summit proper being blocked up by steep rocks and a wall of ice;[10] returning (Febr. 2) to Setekwa bivouac (staying March 12–Apr. 1);[11] leaving the O(e)takwa (Apr. 3).—*1914. Korinchi expedition*[12] with H. C. ROBINSON. *Singapore* (Febr. 11–14), Batavia (16–19); *Sumatra West Coast:* Padang (24–26); Painan (26), Balang Kapas (27), Indrapura and Tapan (28); Sungai Penoh (March 7–13); Siolak Daras (14–29); Sungai Kumbang (March 29–Apr. 23); Sungai Kring to Korinchi (= Kerintji) Peak and surroundings (Apr. 24–May 10); Sungai Kring (May 10–17); Siolak Daras (17); Sungai Penoh and Sandaran Agong (May 8–June 9); Panchoran Gading (June 12); Muara Sako (13); Tapan (14–15); Pasir Ganting (17–23); Emmahaven (24).—*Malay Peninsula. 1914.* About Rawang; Rantau Panjang (July 28).—*1915.* At Gurun and on Kedah Peak with H. C. ROBINSON (Nov.–Dec.).[13]—*1916. P. Rembia* and the *Sembilan Islands* (May); *P. Tioman* (June).—*1917.* G. Bintang in N. Perak (June); pass of Ginting Bidai and Ulu Langat (*c.* Oct.).—*1918.* Hill of Changkat Mentri (Sept.).—*1921.* Klang Gates (Jan.).[14]—*19 . . .* G. Muntahak.[15]—*1923.* In this year he presented a collection of plants from *Christmas Isl.* (Ind. Ocean) and the Cocos Isls to *Herb. Sing.* (collected by himself ?).—*1924. Mentawai Islands*, W of Sumatra (Sept.–Oct.): near the Government Stations at Siberut in *P. Siberut* and at Sioban in *P. Sipora.*—*1927. Br. N. Borneo* (July–Sept.): near Sandakan; Samawang River, Bettotan; *Banguey* (Aug. 31–Sept. 8); *Mallewalli Isls* (Sept. 8–9); *Balambangan Isl.* (9–14).—*1928. Br. N. Borneo:* Mt Kinabalu (June).[16]

COLLECTIONS. *Herb. Sing.*, including the *nos* 18651–19298 from *Br. N. Borneo; Herb. Kew:* plants from the *Malay Peninsula* (pres. 1915–19), dupl. *New Guinea* plants (pres. 1914) and dupl. *Mal. Penins.; Herb. Brit. Mus.:* 1714 phan. + 189 vasc. cryptog. + 1 hepatic from *New Guinea* (pres. 1914). Other duplicates in *Herb. Bog.:* ± 400 *Mentawai* plants, 655 ferns from *Sumatra* and also plants from *Borneo;* in Herb. *Manila; Herb. Berkeley* (Cal.): from *Borneo* (*c.* 600); *U.S. Nat. Herb. Wash.:* 95 *Sumatra* dupl. (with ROBINSON) and 23 *Mal. Penins.* (*ditto*).

The results of the expeditions to *New Guinea.*[17] *Sumatra,*[18] and *Mentawai Islands*[19] were published.

LITERATURE. (1) *cf.* Journ. Str. Br. Roy. As. Soc. *no* 41, 1904, p. 53–80.

(2) *cf.* Spolia Mentawiensia in Kew Bull. 1926, p. 56.

(3) *cf.* Journ. Str. Br. Roy. As. Soc. *no* 50, 1908, p. 61–71.

(4) *cf.* Journ. Fed. Mal. Stat. Mus. 4, 1909, p. 1–98.

(5) *cf.* Journ. Str. Br. Roy. As. Soc. *no* 57, 1910, p. 5–122.

(6) *cf.* Journ. Fed. Mal. Stat. Mus. 6, 1915, p. 127–202 (the year stated erroneously as 1912).

(7) H. N. RIDLEY & C. B. KLOSS: 'An expedition to Mt. Menuang Gasing, Selangor' (Journ. Fed. Mal. Stat. Mus. 6, 1915, p. 1–21); *cf.* also Journ. Linn. Soc. Bot. 41, 1913, p. 285.

(8) A. FR. R. WOLLASTON: 'Account of the 2nd expedition' (Geogr. Journ. Lond. 43, 1914, p. 248–273 + map; incl. chapt. on botany).

cf. Tijdschr. K.N.A.G. 1914, p. 388–394, 2 fig.; *cf.* also Itinerary by C. B. KLOSS in Transact. Linn. Soc. Lond. 2nd ser. 9, 1916, p. 2–9.

(9) *cf.* Tijdschr. K.N.A.G. 1913, p. 355.

(10) *cf. l.c.* p. 539–542 and 'Versl. Milit. Expl. Ned. N.G. 1907–15' (Weltevreden 1920) p. 30.

(11) *cf.* Tijdschr. K.N.A.G. 1913, p. 671.

(12) H. M. PENDLEBURY: 'Preface and itinerary of an expedition to Korinchi Peak, Sumatra, carried out in 1914 by H. C. ROBINSON and C. BODEN KLOSS' (Journ. Fed. Mal. Stat. Mus. 8, pt 1, 1936, p. 1–31, 1 map and pl. 1–15), *cf.* also *sub* 18.

(13) H. C. ROBINSON & C. BODEN KLOSS: 'The natural history of Kedah Peak' (Journ. Fed. Mal. Stat. Mus. 6, 1915/16, p. 219–244; mainly zoological).

H. N. RIDLEY: 'The natural history of Kedah Peak.' Botany (*l.c.* 7, 1916, p. 37–58).

(14) *cf.* RIDLEY in Journ. Fed. Mal. Stat. Mus. 10, 1922, p. 247–251.

(15) Several data on the Malay Peninsula derived from BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(16) *cf.* Journ. Fed. Mal. Stat. Mus. 16, 1931, p. 286 + map.

(17) H. N. RIDLEY: 'Report on the Botany of the Wollaston Expedition to Dutch New-Guinea' (Transact. Linn. Soc. Bot. 2nd ser. vol. 9, 1916, p. 1–264, pl. 1–6; incl. itinerary by C. B. KLOSS); *cf.* also HOOK. Icon. Plant. 1916, *t.* 3051–2, 3054–5, 3059–60, 3062, 3067.

H. N. DIXON: 'The mosses of the Wollaston Expedition to Dutch New Guinea 1912–13 with some additional mosses from Brit. New Guinea' (Journ. Linn. Soc. Bot. 45, 1922, p. 477–510, pl. 28–29).

(18) 'Results of an expedition to Korinchi Peak, Sumatra.' Botany by H. N. RIDLEY and others (Journ. Fed. Mal. Stat. Mus. 8, pt 4, 1917, p. 1–145, pl. 1–4); for the zoological results *cf. l.c.* pt 2–3.

(19) H. N. RIDLEY: 'The flora of the Mentawi Islands' (Kew Bull. 1926, p. 57–94).

R. E. HOLTTUM: 'Spolia Mentawiensia. Pteridophyta' (Journ. Mal. Br. Roy. As. Soc. 6, 1928, p. 14–23).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Kluit, C. W.

of Ardjoena Estate, Priangan (*W. Java*), collected the below-cited plant in Karang Toemaritis Division in Febr. *1936*.

COLLECTIONS. *Herb. Bog.:* material of *Houttuynia cordata* THUNB.

Kluppel, J. M.

Civil Administrator of the *Solor Islands* (*Lesser Sunda Islands*), stationed at Larantoeka, forwarded a collection of wood samples with herbarium, to the 'Natuurkundige Vereeniging' at Batavia, in the year *1872;* the dried material was seawater-damaged (*cf.* Nat. Tijdschr. N.I. 33, 1873, p. 191, 207).

Knaap, Wolbert Reinders

(1894, Appingedam, Gr., Holland; 1938, Djokjakarta, Java), since September 1921 veterinary surgeon in D.E.I. Government service; in 1926 stationed at Roeteng in W. Flores (Lesser Sunda Islands); since 1930 in Java.

COLLECTIONS. *Herb. Bog.:* 21 *nos*, principally grasses from *W. Flores* (coll. *1926*).

Knappert, M. H. C.

planter at Barabai (Amoentai Distr.) in *SE. Borneo*, sent dried material of *Diploknema sebifera* PIERRE to the *Kol. Mus. Haarlem* (at present *Ind. Inst. Amsterdam*) (*cf.* Arch. néerl. Sci. Nat. 19, 1884, p. 104–106, pl. 4).

Knight

is cited as the collector of lichens in *Thursday Island* (*cf.* F. M. BAILEY in Bot. Bull. Queensl. Dept Agr. *no* 13, 1896, p. 19 *seq.*), *viz* of the *nos* 268 and 324.

Lecanora knightiana MUELL. ARG. was named after him.

Knight, Valentine

Assistant in the Raffles Museum, Singapore (1902–22), who made various zoological expeditions and collected some plants in the *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Sing.*

Knij . . ., *cf.* KNY . . .

Knuth, Paul Erich Otto Wilhelm

(1854, Greifswald, Germany; 1899 (not 1900), Kiel, Germany), was appointed Professor of Botany at Kiel in 1895. He travelled for a year in Java,[1] Japan, and W. America, on his return being ill. He was especially interested in flower biology.[2]

ITINERARY.[3] *W. Java:* staying at the Foreigners' Laboratory, Buitenzorg (Oct. *1898*–March *1899*), collecting in the Botanic Gardens; making trips to Bandoeng (Dec. 26, *1898*), Tjibodas (Jan. 11–16, *1899*); *Islands in the Bay of Batavia, viz Agnieten Isls* (Febr. 27) and *P. Amsterdam* (28).

COLLECTIONS. Material in alcohol in the *Show Mus. Berl.*

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 23.

(2) Author of 'Handbuch der Blütenbiologie' (Leipzig 1898–99, 2 vols).

(3) Data derived from J. D. ALFKEN: 'Die von P. KNUTH auf seiner 1898/99 unternommene Reise nach Java, Japan und Kalifornien gesammelten Lepidopteren und Hymenopteren und die von diesen besuchten Pflanzen' (Abh. Naturw. Ver. Bremen 18, 1905, p. 132–142).

BIOGRAPHICAL DATA. Ber. D.B.G. 18, 1900, Gen. Vers. Heft p. (162)–(170), incl. bibliography.

Knijff, Tjepke Siebern Ariën

(1891, Gouda, Z.H., Holland; x), school-teacher, from 1919–37 serving in the D.E.I.; in the years 1923–25 successively stationed at Tondano and Makassar in Celebes, teaching at high schools (M.U.L.O.).

COLLECTING LOCALITIES. *N. Celebes:* Tondano and environs (*1923–24*); *SW. Celebes:* Makassar (*1925*).

COLLECTIONS. *Herb. Bog.:* 64 *nos N. Celebes, etc.;* in *1924* he presented seeds and living plants to *Hort. Bog.*

cf. also *sub* KRUYFF.

Kobbe, William H.

about 1907 Forest Officer in the employ of the Forestry Bureau at Manila, P.I.

Neonauclea kobbei ELM. was named after him.

COLLECTIONS. *Philippine* plants in *Herb. Manila;* dupl. in *Herb. Berl., Edinburgh, Leyden, etc.* Numbered in the F.B. (Forestry Bureau, see there) series.

Kobus, Jan Derk

(1858, Deventer, O., Holland; 1910, in the roads off Semarang, Java; buried at Pasoeroean, Java), at first Assistant in the Experiment Station at Wageningen, and subsequently chief of the lime and gelatine factory at Delft; since 1887 in the employ of the Experiment Station for Java Sugar Industry (Pasoeroean), from 1897 holding the post of Director.

In 1890 he was charged by the D.E.I. Government to collect varieties of the sugar-cane which were immune from sereh disease, in Brit. India; the imported ones were kept in quarantine in Banka till 1896.[1]

Microstylis kobi J.J.S. was named after him.

ITINERARY & LOCALITIES. *1890.* Visit to *Banka and adjacent Islands.*[2] Sailing from Pasoeroean (July 4); *Banka* (12–30): from Muntok (15) to Klapa, embarking on s.s. 'de Gier'; circumnavigating the island, visiting Toboali (trip to Lintang), the islands of *Lepar* and *Liat*, mouth of the Merawang River, Pangkal Pinang, Bakim and Kajoebesi. In later years he revisited the island on some occasions.—*E. Java:* G. Tengger (Oct. *1891, 1899*, in *1900* with J. P. LOTSY, *1910*), at Tosari, Bromo, Moengal Pass, Zandzee, Wonokitri, *etc.* —*Centr. Java:* Solo (*1910*).

COLLECTIONS. *Herb. Bog.: Banka* plants; several tens of *Java* plants, mainly from G. Tengger. Partly in *Herb. Leyden;* in *Herb. Pasoer.: c.* 10 *nos.*

From letters in the archives of Leyden Herbarium it is evident that he had Banka plants collected by an assistant in 1891.

LITERATURE. (1) *cf.* Arch. Suikerindustrie *no* 19, 1926, p. 583.

(2) J. D. KOBUS: 'Rapport over een door mij aan de eilanden Banka, Lepar en Liat gebracht bezoek' (Meded. Proefstat. O. Java *no* 25, 1890).

BIOGRAPHICAL DATA. In Cultura 1910 + portr.; Encyclop. N.I. 2, 1918; Arch. Suikerindustrie N.I. 1925, p. 337–338; BACKER, Verkl. Woordenb., 1936; portr. in Album *no* II of the 'Kon. Ned. Bot. Vereeniging'.

Koch, Jan Willem Reinier

(1860, Oisterwijk, N.Br., Holland; 1924, Winterswijk, Gld, Holland), physician, practising medicine at Nieuwveen, accompanied a New Guinea expedition under the auspices of the Royal Dutch Geographic Society (leaders R. POSTHUMUS MEYJES & E. J. DE ROCHEMONT); he collected anthropological, ethnological, botanical and zoological material. His stay in New Guinea resulted in a doctor's thesis.[1]

VALETON named some plants in his honour.

ITINERARY. *SW. New Guinea expedition, 1904–05.*[2] Preliminary reconnaissance of *S. New Guinea:* Merauke (Apr. 13, *1904*); in the 'Lombok' (16) to Cape Valsch at the W. point of *Frederik-Hendrik Isl.* (17–19); Merauke; *Thursday Isl.;* Merauke, setting out (28) to the *SW. coast; P. Poeriri* (30) and Wajětiri, exploring the rivers east of Poeriri, *viz* the Koepera-poekwa, the Néwěrip, the Inaboeka and the Tania (= Otakwa); KOCH stayed at Merauke till the beginning of the expedition proper. In the 'Lombok' from Merauke (Sept. 6) to the O(e)takwa; back at Merauke (17); meeting before the Oetakwa (Oct. 21); sailing in the 'Valk' (22) to the Mimika; anchoring in front of the Oeta (26); back to the Mimika; *W. New Guinea,* Vogelkop: Fak-fak (31); Dobo (*P. Wamar, Aroe Isls*) (Nov. 2–3); by way of the islets *Aidoema* and *Namatotte* to Etna Bay (arriving Nov. 6); going ashore (14), KOCH making bivouac at Kiroeroe; leaving Etna Bay in the 'Valk' (Febr. 18, *1905*); *S. New Guinea:* Merauke; sailing (March 20) to the Wamal River; southern entrance of Marianne Strait; ascending the Digoel River (26–31) in the 'Valk' and later (Apr. 2–10) in sloops; downstream again (Apr. 11), exploring the Idaha (= ? Ederah) (13–14); back at Merauke (Apr. 23).

COLLECTIONS. *Herb. Leyden:* ± 650 *nos* + material in alcohol; 2nd set in *Herb. Bog.;* no other duplicates.

According to VALETON less than 300 species (elsewhere he says 350!) were collected, 184 of which were identified by him and HALLIER.[3] The list of the collection in the Buitenzorg Herbarium enumerates the *nos* 1–720, for the greater part without identifications.

Most of the plants were collected near Merauke, many near Etna Bay and some near Digoel.

LITERATURE. (1) 'Bijdrage tot de anthropologie der bewoners van Zuidwest Nieuw Guinea' (Leiden 1908).

(2) J. W. IJZERMAN: 'Mededeelingen omtrent eene ontworpen expeditie naar de binnenlanden van Nieuw-Guinea' (Tijdschr. K.N.A.G. 1904, p. 339–355, map 8); *cf.* also *l.c.* p. 879–890; and p. 1102.



KOBUS

cf. 'De Zuidwest Nieuw-Guinea-expeditie 1904/05 van het Kon. Ned. Aardr. Genootschap' (Leiden 1908). Herein reports on the Natural History, Ethnography and Anthropology of the expedition by KOCH.

(3) *cf.* Report on the Natural History in *l.c.* p. 499–531 by J. W. R. KOCH, with Introduction and Appendix I (list of plants) by TH. VALETON (*l.c.* p. 532–537).

For lists of insects *cf.* Appendices II and III.

Plants of the expedition described by TH. VALETON in 'Plantae Papuanae' (Bull. Dép. Agr. Ind. néerl. *no* 10, 1907, 72 pp.; *cf.* also FEDDE Repert. 5, 1908, p. 377–397); and in Nova Guinea vol. 8.

BIOGRAPHICAL DATA. Portr. in 'De Zuidwest Nieuw-Guinea-expeditie 1904/05' (Leiden 1908), p. 435; BACKER, Verkl. Woordenb., 1936.

Koch, Otto

a nephew of Dr A. V. SCHADENBERG, a resident of Cebu (P.I.), and consul off duty. With SCHADENBERG (see there) he collected some plants in *Mindanao, about 1882.*

He made zoological collections in the *Philippines,* at least in *Cebu,* and *Mindanao.* In 1885 he was still in the Philippines.

Rhododendron kochii STEIN was named after him.

Kock, A. C. de

(1878, Haarlem, Holland; †), physician, since 1904 in the service of the D.E.I. Army; pensioned off in 1919. For 2 years attached to the Exploration Detachment in S. New Guinea, as successor of BRANDERHORST (see there).[1]

Several plants were named after him.

ITINERARY. *Dutch S. New Guinea* (Sept. *1910*–Febr. *1912*): setting out from bivouac on the Eilanden River (Jan. 25, *1911*) to the mountains; highest summit of G. Goliath, *c.* 3340 m alt. (Febr. 4–25);[2] the expedition was back at Merauke towards the end of March, on account of illness;[3] DE KOCK probably stayed behind on G. Goliath, judging from the labels he still collected on the highest summit of G. Goliath in the months of March and April (in Apr. once descending to 150 m), not before May leaving G. Goliath for good; exploration of the A River and the region W of it (with COCQ D'ARMANDVILLE & DUMAS) (probably not collecting); Tjemara bivouac and Ruimzicht bivouac (Dec.).—*1918. W. Sumatra*, Padang Highlands: Ampoe, Ophir Districts (Sept.).

COLLECTIONS. *Herb. Bog.: New Guinea* plants, numbered 1–230 + material in formalin,[4] and probably some from *Sumatra; Herb. Leyden: N.G.* dupl.

In *Hort. Bog.*: ± 200 living plants.[5]

Some of his orchids were described by J. J. SMITH.[6]

LITERATURE. (1) Author of 'Eenige ethnologische en anthropologische gegevens omtrent den dwergstam in het bergland van Zuid Nieuw Guinea (Goliathgebergte)' (Tijdschr. K.N.A.G. 29, 1912, p. 154–170, 1 pl.; *cf.* also p. 598).

(2) *cf.* Versl. Milit. Expl. Ned. N.G. 1907–15 (Weltevreden 1920) p. 42.

(3) *cf.* Meded. Encyclop. Bur. fasc. 11.

(4) *cf.* Versl. Milit. Expl. *etc. l.c.* p. 349.

(5) *cf.* Versl. Pl. Tuin Buitenzorg for 1911, p. 19.

(6) In 'Vorläufige Beschreibungen neuer papuanischer Orchideen' IV (Bull. Jard. Bot. Buit. sér. 2, vol. 2, 1911, p. 1–20) and in Nova Guinea vol. 8^2 and vol. 12^1.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Kock, Albert Hendrik Wendelin Baron de

(1808, Soerabaja, Java; 1891, ?), in 1841 Lieutenant Colonel, acting Resident of Palembang, S. Sumatra; since 1848 stationed in Java, finally Vice President of the Council of the D.E.I.; retired in 1860.

COLLECTIONS. He sent some fine *Calamus* specimens to *Hort. Bog.* (see letter from TEYSMANN to DE VRIESE, dated Nov. 27, *1847*, in the archives of Leyden Herbarium).

Koedijk, Mrs M. C.

of Premboen, Kedoe (*Centr. Java*), collected a *Taeniophyllum* at Blimbing near Malang (*E. Java*) in *1924;* in *Hort. Bog.*

Koek, E.

a resident of Singapore, contributed plants and seeds to the *Bot. Gard. Singapore* in *1879* and *1883*.

Koenig, Johann(is) Gerhard(us)

(1728, Lemenen, Ungernhof, Govt of Courland, Baltic; 1785, Jagrenathporum, Brit. India), studied pharmacy, biology and medicine, and for two years was a pupil of LINNAEUS; in 1768 he went to India in the employ of the Danish Mission as Surgeon and Naturalist at Tranquebar;[1] in 1774 he entered the service of the Nabob of Arcot, and in July 1778 was appointed Naturalist at the Madras establishment of the Hon. East India Comp., to which he was attached during the remainder of his life. He established the once famous botanical society 'United Brotherhood' by whom plants were examined and named, and to whom the discoveries by members at a distance were reported. One of the associates was WILLIAM ROXBURGH, whose botanical studies were guided by KOENIG.

After visiting various parts of India and Ceylon, he started on an expedition to Siam and Malacca in 1778, returning to India in 1779. In 1784 he went to Calcutta. Though not present himself, he took his medical degree at Copenhagen in 1773.

He is commemorated in several plant names.

ITINERARY.[2] Sailing by boat from Madras (Aug. 8, *1778*); *via* the Nicobars to *Malacca* (= *Malay Peninsula*): Selangor (Sept. 20); *P. Lumut* (22); harbour of Malacca (24–26); by boat to Siam (Bangkok, Inthia, *etc.*); back in *Malacca* (Febr. 16, *1779*), where he made excursions in the neighbouring country till Febr. 26; Selangor (March 4–6); P. Salang minor (28); past the Nicobars (Apr. 4); P. Kopran (May 1 and 3); several islands (4–6); Tarnah (May 8–30); P. Salang major (31); P. Jambu (June 4–5); Tarnah (June 5–12); P. Salang major (15); P. Jambu (June 16, 18, 19, 21), P. Salang major (20); sailing (Aug. 6) to *Malacca;* staying Aug. 11–Dec. 14 (Sept. 25 visiting the *Water Islands*); on board (Dec. 15); Quedar (= Kedah) (27–30).

COLLECTIONS. Distributed by WALLICH (see there) with the *Herb. E.I. Company.*[3] He bequeathed his manuscripts and plants to Sir JOSEPH BANKS; in due course they became a part of the *Brit. Mus.*[4] *Herb. Lund:* 346 specimens attributed to KOENIG. C. E. C. FISCHER recorded the results of his examination of these;[5] he has correlated them with the descriptions of KOENIG's plants published by RETZIUS,[6] where he quotes a number of specimens which he received from KOENIG. Only some specimens from Siam and *Malacca* were found back.[7] Other duplicates in *Herb. Linn. Soc. Lond., Herb. Vienna, Copenhagen,* and *Kiel;*[8] *Herb. State Mus. Stockholm* (with *Herb.* ABSTRÖMER, *etc.*); with *Herb.* BERGIUS in *Herb. Roy. Acad. Sci. Stockholm;*[9] and in *Acad. Sci. Leningrad.*

LITERATURE. (1) J. G. KOENIG: 'De remediorum indigenorum ad morbos cuivis regioni endemicos expugnandos efficacia' (D. Hafniae 1773).

(2) A translation of the diary, comprising the Journal and Notes from Aug. 1778, to Dec. 30, 1779, was published in the Journ. Str. Br. Roy. As.

Soc. *no* 26, 1894, p. 58–201 and *no* 27, 1894, p. 57–135, under the title 'Journal of a voyage from India to Siam and Malacca in 1779'. The MS. diary in Bot. Dept Brit. Museum.

(3) *cf.* WALLICH, Plant. Asiat. Rar. 3, 1832, postscript p. VII.

(4) The MSS are contained in 21 vols (*cf.* RENDLE in Journ. Bot. 1933, p. 143–153, p. 175–187; he gives an Index of Subjects, with reference to volume and page of the MSS in *l.c.* p. 145–146). Descriptions of the plants and animals observed and collected on the above-mentioned journey occur in several of the volumes of MSS in the Brit. Mus. The 'Definitiones plantarum novarum, Malacca 1779', a small separately paged MS., p. 131–294 has been bound up with vol. 19. For other Malacca plants *cf.* vol. 9, p. 257–316, and vol. 15, p. 137–169 and 171–177.

(5) In Kew Bull. 1932, p. 49–76.

(6) RETZIUS: 'Observationes Botanicae' (Lipsiae 1779–91, 6 prts).

(7) *cf.* KERR in Journ. Thail. Res. Soc. Nat. Hist. Suppl. 12, 1939, p. 3–8.

(8) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 331 and A. DECANDOLLE, Phytographie, 1880, p. 424.

(9) *cf.* Bot. Centr. Bl. 47, 1891, p. 232.

BIOGRAPHICAL DATA. LASÈGUE, Mus. Bot. DELESS., 1845, p. 557–558; Bot. Tidskr. 12, 1880/81, p. 72, and *l.c.* 17, 1890, p. 327 (bibliogr.); Biogr. Ind. BRITTEN & BOULGER in Journ. Bot. 36, 1898, p. 270, and in 2nd ed. by RENDLE, 1931; Gard. Chron. 1899[2], p. 252; in TRIMEN, Handb. Flor. Ceylon, pt 5, 1900, p. 373; CHRISTENSEN, Den Danske botanisks Historie, 1924–26, vol. 1, p. 118–119, vol. 2, p. 81–84 incl. bibliogr.; BACKER, Verkl. Woordenb., 1936; Journ. Thail. Res. Soc. Nat. Hist. Suppl. 12, 1939, p. 3–8.

Koens, Antoon Johannes

(1880, The Hague, Holland; x), school-teacher who came to the D.E.I. towards the end of 1908; temporary teacher in Natural History at the K.W. III school at Batavia, 1909–13; since 1914 transferred to the Department of Agriculture, at first teacher at the School of Agriculture at Buitenzorg, and at the end of the year Agricultural Officer in Benkoelen (Sumatra); then successively at Bondowoso, Bandoeng, Soekaboemi (since 1922 with the title of Consulting Agriculturist), Buitenzorg, Palembang (S. Sumatra, 1926–27); subsequently retired.

COLLECTING LOCALITIES. *1913. W. Java:* G. Poetri (May), S. slope G. Goentoer (15), Garoet (20), Kawah Manoek (23), Telagabodas (27), G. Goentoer (30); near Tjisoeroepan and G. Papandajan (June 8–10); G. Kendeng.—*1915. S. Sumatra,* Benkoelen (about March): Kroë, Negara Batin; Soekau; Ranau Lake; Kenali, slope G. Pesagi; Liwa; Kroë.[1]—*1916. Centr. Java* (probably *not* collected): hills near Progo (Oct. 26); Zuidergebergte (hills near the south coast) near Kretek (28).[2]

COLLECTIONS. *Herb. Bog.:* 496 *nos* from *W. Java,* 10 from *S. Sumatra.*

LITERATURE. (1) A. J. KOENS: 'Een tochtje in Zuid Sumatra' (Trop. Nat. 5, 1916, p. 130–134, 167–170).

(2) A. J. KOENS: 'Twee geologische excursies' (Trop. Nat. 6, 1917, p. 22–24, 38–43).

Koernicke, Max Walther

(1874, Bonn, Germany; x), cytologist, pupil of Prof. STRASBURGER; in 1896 appointed Assistant at Bonn University (Dr's degree in 1897); in 1900 Lecturer at Bonn University and at the Agricultural College, Poppelsdorf; when awarded the German Buitenzorg Stipendium, he made a voyage to Java in 1906/07; in 1908 Professor of Botany at the Agricultural College, Bonn-Poppelsdorf; in 1910 voyage to Ceylon, S. India and Egypt, and in 1933/34 for the second time to the Dutch East Indies (subsidized by the A. v. GWINNER Stiftung); he resigned in 1939 as Director of the Institute for Agricultural Botany. After the war he continued his work at Honnef/Rhein.

ITINERARY.[1] *1st Voyage, 1906–07.*[2] *W. Java:* Batavia; Buitenzorg, staying at the Foreigners' Laboratory from Oct. 1906–March 1907; visiting Tjibodas (on the slope of G. Gedeh); *Centr. Java:* Djokjakarta, Klaten; *E. Java:* Soerabaja, Tosari and G. Bromo (Tengger); *W. Java:* Anjer; *S. Sumatra:* Telok Betong and vicinity; *Malay Peninsula: Singapore,* visiting mangrove forest and rubber estates in Malacca with RIDLEY; Ceylon.—*2nd Voyage, 1933–34.*[3] *P. Weh:* Sabang, Anak Laut (Aug. 6, *1933*); *Sumatra East Coast:* Belawan (7); *Singapore* (8–11), visiting Bt Timah with HOLTTUM); *W. Java:* Tandjong Priok–Buitenzorg (13); Batavia, Passar Ikan (28); coral islands Bay of Batavia: *P. Onrust, Edam,* and *Haarlem* (30); Salabintanah–Soekaboemi (31); Buitenzorg (Sept. 1–26); Tjibodas (27–Oct. 5), visiting Lebak Saät–G. Pangrango (Oct. 1) and crater G. Gedeh (2); back to Buitenzorg (6); *Krakatau Group* (10–. .); Tandjong Priok (20); Buitenzorg (22); Tea Estate Tjikopo (Nov. 5); Bandoeng (16); Tjinjiroean (Cinchona plantation) (17); Lembang, Tangkoeban Prahoe (18); Kawa Kamodjan–Garoet (19); G. Papandajan–Tjisoeroepan (20–21); S. coast, Tjilauteureun–Tjisoeroepan (22); Garoet–Djokja (23); *Centr. Java:* Djokja (24); Solo–Djokja (26); Klaten, Tobacco Exp. Station (27); Djokja–Batavia–Buitenzorg (30); *W. Java:* Batavia–Buitenzorg–Batavia (Dec. 7–14); Batavia–Soerabaja (15); sailing (16) for *Bali* (*Lesser Sunda Islands*); *Bali:* Boeleleng–Singaradja–Den Passar–Gjanjar–Kloenkoeng–Karangasem–Besakih–Bangli–Kintamani–Sangsit–Boeleleng (17–21); sailing for Makassar (22); *SW. Celebes:* Makassar, Maros and Bantimoeroeng (23–28); sailing *via* Paré Paré (29), Donggala (30), Toli Toli (31), along the N. coast of Gorontalo (Jan. 1–2, *1934*), to *N. Celebes:* Manado (3); G. Sopoetan–Kakas (4); Kakas–Langowan–Manado (5); Tomohon (6); Lake Lino (7); Manado (8); G. Lokon (9); Manado (10); Manado–Ternate (11); *Ternate* (12), to Verbrande Hoek; sailing for *Batjan(g)* (14); *Boeroe:* Namlea (15); *Ambon* (16–18); to *Banda Neira* (19); *Banda* (20); *Noesa Laut, Saparoea, Ambon* (22); Ambon–Ceram (22–25); *W. Ceram:* Lok(k)i–*P. Kasa*–Ani (26);

Loki–Ambon (27); *Ambon*–Kati Kati (27–30); *Boeroe:* Leksoela–Malilai (31); Makassar (*SW. Celebes*, Febr. 2); *Bali:* Singaradja (4), Den Passar (6), Sangeh–Bang Kasa (7–8); to Oeboed (9); Tampak Siring (10); Singaradja (11); *E. Java:* Soerabaja (12); Probolingo–Pasoeroean–Malang (13); *Centr. Java:* Djokja (14); Djokja–Gamping (15); *W. Java:* Batavia (16); Buitenzorg (17–25); Batavia (26); sailing from Priok (March 1), *via* Benkoelen (*S. Sumatra*, 3); and *Sumatra West Coast:* Padang (4), Fort de Kock (5), Pajacombo and Harau-Kloof (6); Sibolga (Tapanoeli) and to Prapat on Toba Lake (8); Prapat (9); Prapat–*Sumatra East Coast:* Brastagi (10); to Medan (11); Sibolangit (15); Soengei Poetih (17); 'Liberta'–Medan (18): Medan–Belawan–sailing for Sabang (24); *P. Weh:* Sabang (25), and homeward bound *via* Egypt.

COLLECTIONS. Few. In *1906/07* he collected botanical pharmaceutical objects for the *Show Mus. Berl. Dahl.* and besides he collected 100 ferns on behalf of F. WIRTGEN, Naturhist. Ver. f. Rheinl. u. Westfalen, *Bonn* ('Ausserrheinisches Herbarium', in 1936 incorp. in *Herb. Berlin*); liverworts from Tjibodas on behalf of K. GOEBEL (Munich) in *Herb. Univ. Bonn.* The material is probably all lost now.

A fern from *Java* (coll. Dec. 1906) in *Herb.* BONAPARTE (*Paris*).[4]

He collected a few *Algae* too, *e.g.* at Maros in *SW. Celebes* (1933).

A living *Amorphophallus titanum* from *Sumatra* in *Hort. Univ. Bonn.*[5]

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 31 and 53.

(2) M. KOERNICKE: 'Eine botanische Studienreise nach Java' (Deutsch. Kolon. Blatt 18, 1907, p. 678–680; on economic plants!).

His investigations resulted in 'Biologische Studien an Loranthaceen' (Ann. Jard. Bot. Buit. Suppl. 3, pt 2, 1910, p. 665–698, pl. 26–27); 'Ueber die extrafloralen Nectarien auf den Laubblättern einiger Hibisceen' (in Flora N.F. 11, 1918).

(3) M. KOERNICKE: 'Streifzüge durch den malaiischen Archipel' (Jahresber. 1934 der Ges. Freunde u. Förd. Univers. Bonn); 'Eindrücke auf meiner Forschungsreise 1933/34 in dem malaiischen Archipel' (Bonn 1934, 19 pp.); 'Skizzen aus dem Pflanzenleben des Malaiischen Archipels' (Ber. D.B.G. 55, 1937, p. 393–400).

(4) *cf.* BONAPARTE, Notes ptéridol., fasc. 2, 1915, p. 157.

(5) M. KOERNICKE: 'Amorphophallus titanum BECC.' (FEDDE Repert. Beih. 101, 1938, p. 180–206, pl. 19–29); 'Amorphophallus titanum im botanischen Garten der Universität Bonn' (Bonner Mitt. Heft 17, 1938).

BIOGRAPHICAL DATA. Who's who 1913.

Koesen, *cf. sub* KROESEN, C. A.

Koesnoe, *cf. sub* Forest Research Institute, Buitenzorg.

Koesnoe, M., *cf. sub ditto.*

Koesnoen, E., *cf. sub ditto.*

Koesoemobroto, *cf. sub ditto.*

Kohar, *cf. sub ditto.*

Kohmann, Dr

is cited as the collector of *Wendlandia glabrata* DC. near Batavia in *1838*.[1] The specimen concerned is *no* 566 of his collection and is preserved in the *Herb. Brit. Mus.*

The name KOHMANN is probably wrong for KOLLMAN (see *sub* G. J. A. KOLLMANN), part of whose plants came to the Brit. Museum with *Herb.* SHUTTLEWORTH.

LITERATURE. (1) *cf.* COWAN in Not. Roy. Bot. Gard. Edinb. 16, 1932, p. 276 and in Bull. Jard. Bot. Buit. sér. 3, vol. 14, 1936, p. 20.

Kollmann, George Joseph August

(1796, Würzburg, Germany; March 8, 1839, Padang, Sumatra), surgeon, joined the D.E.I. Army in 1821, sailing for Java in August 1822, stationed at Buitenzorg; 1835–36 on European leave; from 1837 onwards stationed in Sumatra West Coast.

Phyllanthus kollmannianus M.A. was probably named after him.

COLLECTIONS. In *Herb. Munich:* some hundreds of *Java* plants;[1] in *Herb.* MARTIUS (= *Brussels*): 60 *Java* plants; in *Herb. Brit. Mus.: Java* plants (with *Herb.* SHUTTLEWORTH in 1877);[2] *Herb. N.Y. Bot. Garden* (with *Herb. Columbia Univ.*): *Java* plants *1838* (w. *Herb.* MEISNER), with yellow labels, *ex* WALLICH *Herb.* (according to WITTROCK).

Many Java plants are cited in the monographies in Pflanzenreich; specimens cited from *Herb. Vienna, Monaco, Herb. Hal.* (? Halle); DECAND. and BOISS. (*Geneva*). WARBURG cites some plants *s.n.* from *Borneo* from a certain KOLLMANN.[3] *cf.* also *sub* KOHMANN, and M. H. J. KOLLMANN.

Some old documents and letters in the archives of the Leyden Herbarium throw a peculiar light on this plant collector. In June 1836 (evidently when on leave) KOLLMANN offered for sale to the Dutch Government a large collection (about 4200 species in numerous specimens + *Hepaticae, Musci,* and lichens) of dried plants. As no decision came off, BLUME had them sent from Amsterdam to Leyden at his own expense. A first inspection brought a great surprise as it seemed hardly without doubt that among the plants were numerous specimens collected by BLUME himself and by ZIPELIUS. BLUME took care to open the other cases in the presence of two witnesses (one of which E. A. FORSTEN) on Febr. 10, 1837. It was verified that only a very small part (about one tenth) of the collection was collected by KOLLMANN himself in the vicinity of Buitenzorg and in the Botanic Garden, most of these species being common stuff. The bulk partly consisted of plants collected by BLUME, evidently the duplicates left by the latter at Buitenzorg when leaving Java in 1826, and besides part of the latter's collection which had mysteriously disappeared before his departure. The other part were plants collected by ZIPELIUS, of which no set as yet was in the Leyden Herbarium, though a written catalogue of it was present there A complete set

and numerous duplicates of these were included in the collection KOLLMANN offered for sale, mostly with ZIPELIUS's original labels. As evidence, several of the labels, written in BLUME's, KENT's (BLUME's Curator) and ZIPELIUS's handwriting, are attached to the proces verbal made up by the witnesses.

As BLUME rightly considered that part of the collection as defalcated government property, he held back all those specimens and sent the remaining tenth back to Germany, where some friends of KOLLMANN, after his return to the Indies in 1836, had offered their intermediary in case the Dutch Government was not willing to buy. As the first offer was made to Holland, and only about one tenth of the plants were returned to Germany, it is probable that the KOLLMANN plants found in other herbaria are those common plants collected by K. himself. It is still unknown how and when BLUME's plants *etc.* came into KOLLMANN's possession.[4]

LITERATURE. (1) *cf.* Anz. Münch. Gelehrt. 31, 1850, p. 726; Flora N.R. 9, 1851, p. 7; and HOOK. Lond. Journ. Bot. & Kew Gard. Misc. 3, 1851, p. 71.

(2) *cf.* 'History of the Collections of the British Museum' 1, 1904, p. 105.

(3) *cf.* 'Monographie der Myristicaceen' (Nov. Act. Acad. Naturforsch. 68, 1897, p. 640).

(4) More detailed data in M. J. VAN STEENIS-KRUSEMAN: 'KOLLMANN's collection of Javan plants' (MS. to be published in Bull. Bot. Gard. Buit. 3rd ser., vol. 18).

Kollman, Michiel Herman Joseph

(1824, Buitenzorg, Java; 1897, Nice, France), was educated in Holland and after his return to Java placed in the General Secretary's Office at Buitenzorg; in various functions he was stationed successively in Bantam (1845), at Pandeglang, Semarang, Besoeki, Keboemen and Ledok;[1] in 1864 appointed Director of Agriculture, in 1866 Director of the Civil Service; finally Resident of Pekalongan (1871–76).

Phyllanthus kollmannianus M.A. was named after him, according to BACKER (Verkl. Woordenb., 1936), but it seems more probable that the species was named in honour of G. J. A. KOLLMANN (see there).

COLLECTIONS. According to BACKER (*l.c.*) he collected plants, amongst which the above-mentioned species. In 1856 he offered botanical objects to the 'Natuurkundige Vereeniging' at Batavia.

Probably he collected but little botanical material, and the generally cited botanical collector KOLLMANN is G. J. A. (see there).

LITERATURE. (1) Author of 'Scheikundig onderzoek van eenen kalksteen af komstig van Rangka (Karang-Bollongsche gebergte) in de Res. Bagelen' (Nat. Tijdschr. N.I. 25, 1863, p. 209–218).

Koning, Ary de

(1877, Rhoon, Z.H., Holland; †), schoolmaster, first in Holland, and from 1908–27 in the D.E.I.; in 1913 Head of the School of Agriculture at Buitenzorg, Java.

COLLECTING LOCALITIES. *E. Java:* G. Idjen (March *1913*).

COLLECTIONS. *Herb. Bog.*

Koo, Chang Jee

(† 1932, Kuching, Sarawak), a Chinaman, clerk and taxidermist of the Sarawak Museum at Kuching, *NW. Borneo.* According to MJÖBERG[1] in the employ of the Museum since its foundation in 1891. He retired in 1927.

COLLECTIONS. *Herb. Sarawak:* from Mt Poi (July *1908*), *etc.*

LITERATURE. (1) *cf.* E. MJÖBERG: 'Borneo, het land der koppensnellers' p. 157–158, w. portr.

Kools, J. F., *cf. sub* Forest Research Institute, Buitenzorg.

Koopal, Sjoerd Arjen

(1884, Dongjun near Franeker, Fr., Holland; x), chemist, educated at Leyden University (Ph. Dr, *c.* 1911); teacher at Maastricht, and subsequently going to Brazil; about 1917 he went to Java as a teacher at the Medical School (N.I.A.S.) at Soerabaja; retired in 1938.

He was a colleague and friend of A. RANT (see there), with whom he made several excursions.

COLLECTING LOCALITIES. *E. Java:* G. Kawi (Oct. 25, *1930*).

COLLECTIONS. *Herb. Bog.:* some plants (*ex Herb.* RANT).

Kooper, Willem Johannes Cornelis

(1888, Leyden, Z.H., Holland; 1945, ? , Holland), botanist, educated at Utrecht University, where he took his Ph. Dr's degree when on European furlough in 1927.[1] After having been Custodian of the Botanical Museum, Utrecht, he went to the D.E.I. as Group-Adviser of the Experiment Station for the Java Sugar Industry at Pasoeroean, 1921–26; subsequently Agricultural Adviser of the International Credit and Commercial Company Rotterdam (Internatio) at Semarang, 1927–33; after his retirement he returned to Holland and settled at Utrecht as a psycho-analyst.

COLLECTING LOCALITIES. *E. Java. 1923.* Pandaän, *s.f.* Alkmaar, Pasoeroean (G. Semongkrong, Bangil, Probolinggo, Modjokerto, *etc.*).—*1924.* Kediri, Bangil.—*1925.* Soember Brantas, Batoe.—*1926.* G. Tengger.—*1927–33. Centr. Java:* in Soebah (Aug. *1932*), *etc.*

COLLECTIONS. *Private Herbarium:* > 3065 *nos; Herb. Pasoer.:* 103 *nos* (also A *nos*) (1923–26); *Herb. Bog.:* dupl. from Pasoer. + 130 *nos* (pres. 1932/33); a few in *Herb. Univ. Amsterdam.*

LITERATURE. (1) W. J. C. KOOPER: 'Sociological and ecological studies on the tropical weed-vegetation of Pasuruan (the island of Java)' (Rec. Trav. Bot. néerl. 24, 1927, p. 1–256; thesis, Utrecht).

Koopman, Jan

(1904, Ten Post, Gr., Holland; x), school-teacher who went to Java in 1926; successively stationed at Ponorogo (1926–29), Grissee (1929–30), and Soe-

rabaja (1930); in the latter place securing the elementary certificate for natural history; subsequently High School (M.U.L.O.) teacher at Modjokerto. After his European leave in 1932/33 (studying for a year at Groningen University), stationed respectively at Poerworedjo, Oengaran, Malang, and Salatiga (till the war). After the Japanese capitulation he was evacuated to Holland, but expects to return to Java before long.

COLLECTING LOCALITIES. In all the abovementioned places in *Java;* only plants from *E. Java:* Grissee, Soerabaja and Modjokerto, collected in *1929–32*, still extant.

COLLECTIONS. *Herb. Groningen:* about 80 *nos.* His *private herbarium*, collected in far more localities, was lost during World War II.

Koopman, Marinus Johannes Frans

(1910, Zierikzee, Z., Holland; x), was educated at Wageningen Agricultural College; since 1936 Forest Officer in the employ of the D.E.I. Forest Service, stationed at Buitenzorg at the Forest Research Institute; in 1941 transferred to Pemalang (Centr. Java) and shortly after placed at the disposal of the commander in chief of the D.E.I. Army.

COLLECTING LOCALITIES. *1937. W. Borneo:* G. Bala near Andjoengan (Oct. 13); *W. Java:* Pandeglang.

COLLECTIONS. *Herb. Bog.: Rhizanthes* prob. *zippelii* (BL.) SPACH from *Borneo; Herb. For. Res. Inst. Buitenzorg:* 4 Ja. *nos* (*Java*).

Koorders, Sijfert Hendrik

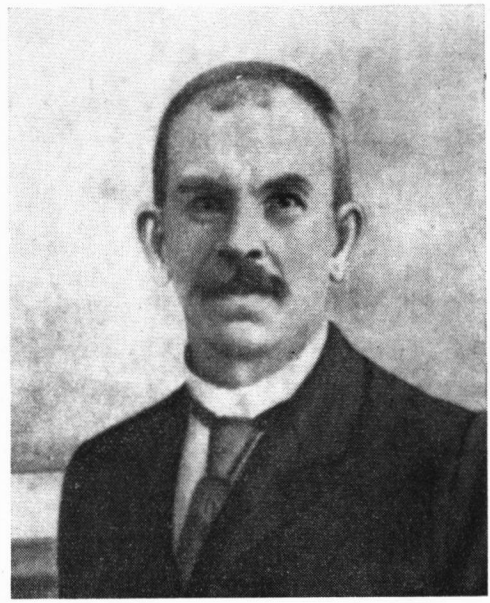
(1863, Bandoeng, Java; 1919, Batavia, Java), Forest Officer, since 1885 in the employ of the D.E.I. Forest Service, stationed in Java. He soon (1888) started the investigation on the forest flora of Java.[1] In Sept. 1892 he was stationed at the Buitenzorg Herbarium; in 1895 he visited many European herbaria, for the compilation of a flora of the Javan mountains.[2] In Oct. 1897 back in Java again and since 1898 working at the Herbarium once more; after the appointment of TH. VALETON as Chief of the Herbarium (1903), he was at his own request replaced in the Forest Service, stationed at Bagelen; in 1906 on sick-leave to Europe; in 1910 placed at Buitenzorg again for the continuation of his work.[3] In 1912 he founded the Society for Nature Preservation in the D.E.I.

Several Malaysian plants were named after him.

COLLECTING LOCALITIES. *1885. Centr. Java:* G. Moerija (= Moerjo) (during a month).[4]—*1886.* Teak forests in (D)Japara Residency, near Ngarengan and Pasokan. *Karimon-djawa Isls* (Nov.19–Dec. 13):[5] leaving Djapara (Nov. 18); *P. Batoe* (21); *P. Karimondjawa* (22); *via P. Kamoedjan* (22) to *P. Bengko(ew)ang* (23–24); *P. Parang* (24–25); *P. Kombang, P. Njamo(e)k, P. Katang* and *P. Kembar* (26); *P. Parang* (26–27); *P. Minjawahan* (= *Menjawakan*) (27–28); *P. Tjemara besar* and *P. Tjemara ketjil* (28); *P. Karimondjawa* (Nov. 29–Dec. 7), making trips to G. Kramat (Dec. 1), G. Moto (3), *P. Sintok, P. Tengah* and *P. Ketjil* (4), and G. Pasarehan (7); *P. Genting* (8–9); *P. Sroeni* and *P. Sambangan* (9), *P. Goendoel* and *P. Tjendikian* (9), *P. Karimondjawa* (10–11), making a trip to a small teak forest at the SW. foot of G. Gendera (11).—*1887. Centr. Java:* forest region Semarang–Vorstenlanden.—*1888. Centr. Java:* summit G. Merbaboe (Oct. 15); *E. Java:* forest region Probolinggo–Besoeki (Dec.).—*1889.* Forest region Probolinggo–Besoeki (– Nov.); *Noesa Baroeng* (S of Poeger).—*1890. N. Sumatra,* Atjeh: Oleh-leh (Jan. 23), collecting a little in the surroundings of Kota Radja and mainly (in Febr.) on the islands *P. Weh* (Sabang) and *P. Bras. W. Java:* near Palaboean Ratoe (Wijnkoopsbaai), G. Gedeh (Tjibodas), Djampang Tengah, Djampang Koelon, Soekaboemi, Soemedang, Kendeng Mts (S of Bandoeng).—*1891.* IJZERMAN *Expedition to Centr. Sumatra,* from Padang (W. coast) to Siak (E. coast):[6] Benkoelen (Febr. 8); Sitangkei–along the Ombilin–Tandjoeng Ampaloe (Febr. 16; KOORDERS staying already for some time); Tandjoeng Ampaloe–Moeara Palangkei, on the river Palangkei–Sidjoendjoeng (17); KOORDERS and BAKHUIS returning to Moeara Palangkei, to reach Padang Tarab, marching along the Kwantan River; Mokko-Mokko Cave (18); Mokko-Mokko, collecting most of the forest trees (19); Mokko-Mokko–Silakat–Paloekahan–Doerian Gadang–Siloeka–Tapoes (20) (botanizing near Tapoes, collecting important material); Tapoes–Limpatan rapid, collecting on the sand strip Poelau Paoeh (less than 100 m alt.) and in the forest (21); Poelau Paoeh–Soengei Pingai–Aoer Doeri–Padang Tarab–Tandjong Kalong (22); Padang Tarab (22–24); rowing up the Kwantan from Padang Tarab past the mouth of the Batang Binoeang along the Loeboek Bintar rapid (luxurious plant growth), past the Soengei Banjawan to the island of Tampoeroeng near Loeboek Ambatjang (25); Loeboek Ambatjang (26), from where in NNE. direction to Sarassak (27); Sarassak–Galawan in the neighbourhood of Logei (28); vicinity of Logei, collecting the quartz sand flora from the valleys of the Sg. Batoeng and Sg. Galawan (March 1); forest near Logei; along the bank of Sg. Koening (3–4), crossing the Sg. Djakei (5) and Sg. Tesso (6); bivouac on the Sigati (7–10); through inundated forest, making herbarium of trees on stilt-roots (11–12); back to the start (13); Tasik (14); bivouac on the Sigati (15); *via* Laboe, Dajoeng, Sg. Timoen and Loeboek Mambang (16); Langgam on the Kampar (17–19), crossing the Kampar (20); swampy land (curious forms of aerial roots (21–22); through all kinds of forest *etc.* (23–24); Tjoebadak–Sg. Barambang (25); Bandar Pondok Pandjang–Tapian Toepati–Sg. Dolei; when proceeding, the misery of the Sigati forests and the 'rawangs' along the Kampar repeated itself, and the expedition returned to Dolei and Tapian Toepati (26); taking another direction (27), starting-point *c.* 11 km S of Boewatan which was approached within 2 km (28); proceeding (29–30); Siak (March 31–Apr. 1); along the river Siak to Bengkalis (2); sailing for Singapore (3). *W. Java:* G. Gedeh, Tjiandjoer, Djampangs, P(e)laboean (Wijnkoopsbaai), Bandoeng and Tomo; *Centr. Java:* Tegal, Margasari, G. Slamat, G. Prahoe (Diëng), Soebah, Grinsing, Bagelen, Kedoe, G.

Kembang, G. Sindoro (Oct.), Tjilatjap, *Noesa Kambangan.—1892. W. Java*, Bantam (June 2–Aug. 6):[7] Batavia–Serang (June 2), Serang–Tjilegon–Anjar (3); Serang–Tjomas (Kedoemoes) (4), Danau Swamp (5), Tjomas–Tjimanoek (6), G. Poelasari (9), S. Karang (11), forests of G. Poelasari (12–17), G. Karang (18), Tjimanoek–Menes–Tjaringin (20), Menes (21–23), Tjemara (S. Bantam) (24); forests near Tjemara, Batoe Hidoeng and Oedjoeng Koelon (June 25–Aug. 6); *E. Java:* G. Pandan (Nov.15).—*1893.*[8] *W. Java:* Priangan Res.; *Centr. Java:* Pekalongan Res.; *E. Java:* Besoeki Res..—*Tour in the Minahassa, 1894–95.*[9] On his way thither visiting *Lombok* (Dec. *1894*, half a day); *via* Makassar and Donggala to *N. Celebes*, Minahassa: Kema (Dec. 22–23); from Kema (24) *via* Ajermadidi to Manado; Manado–Lota–Kakaskasen–Tomohon; G. Lokon (Jan. 7, *1895*); G. Masarang (in the short itinerary in the cited report, the ascent took place after that of the Lokon; in the detailed description of this tour the date mentioned is Dec. 10, 1894, which cannot be true; so we may presume that it rightly should be Jan. 10, 1895); Tondano–Sawangan–Ajermadidi–Manado; Manado–Maoembi–Ajermadidi; G. Klabat (Jan. 17–19); Sawangan–Tondano; *via* Tondano Lake to Kakas; Kakas–Langowan–Tompaso–Sonder–Kakas (25–27); Kajoewatoe; primary forests of Pinamorongan and Pingsan; Langowan–G. Kelolonde–Kakas–Pangoe–Kawatak Ridge–Ratahan–Loboe–Ranoeketan, making some botanical excursions, *e.g.* to the Mahatoes Mts (March 25) *via* Ratahan–Bèlang–Ratatotok–Lowongon Totok; Tombatoe–Tonsawang–Amoerang; region on the opposite side of the Rano-i-apo, *viz* Amoerang–Tehep–Pakoëoere; climbing the summits of Lolomboelan Mts *via* Bojong (Apr. 9), descending the E. slope and *via* Malola to Motoling (12); Motoling–Karoa–Koemeloemboeai–Pakoëoere–Tehep–Amoerang–Lelema (in Sonder Distr.); Lelema–Moente–Manembo-nembo Mts and back; Lelema–Tangkoene–Sonder;[10] Sonder (May 2)–Tombasian atas–G. Sopoetan (May 5 on the summit)–Sonder; along crater (lake) of Linow–Tomohon–the Empong; Manado (16–18); sailing for Java (19) *via* Kwandang, Palele, Pare-Pare and Makassar (*SW. Celebes*).—*1896* (May–June).[11] *Centr. Java:* Pekalongan; *E. Java:* Madioen, Pasoeroean and Kediri.—*1898.*[12] *W. Java:* Pangentjongan and Tjibodas; *Centr. Java: Noesa Kambangan*, Kedoeng Djati (Semarang Res.), Telawa (Solo Res.); *E. Java:* Ngebel, Gadoengan, Pagoer and Pantjoer.—*1899.*[13] *W. Java:* Palaboean Ratoe; *Centr. Java:* near Pagergoenoeng on G. Andoeng, Sepakoeng (G. Telemojo) and Rawah Pening, Soebah, Ngarengan, Ngandang and Blora; *E. Java:* G. Ardjoeno, G. Tengger (Ngadisari and Tosari), Tjoromanis.—*1900.*[14] *W. Java:* Depok, Salk (Batavia), Takoka, Tjibodas, Tjigenteng (S. Priangan); *Centr. Java:* Pringombo, *Noesa Kambangan; E. Java:* Ngebel Saradan.—*1901. Centr. Java:* Pringombo, *Noesa Kambangan*, Sepakoeng–Telemojo.—*1902. W. Java:* Takoka, Gegerbintang (Dec.). —*1915. W. Java:* G. Papandajan (Febr. 17).—*1916. E. Java:* Jang Plateau (Aug.).

Between *1888–1903* he collected also in the following localities (no exact dates known)[15] in *W. Java: P. Noordwachter* (Bay of Batavia); Forest Reserves of Takoka, Parakansalak–Tjisalak–G. Endoet, Tjibodas–G. Gedeh-Pangrango, Palaboeanratoe, Tjigenteng–Tjisondari, Tomo–Soemedang,



KOORDERS

Pangentjongan – Garoet – G. Galoenggoeng; in *Centr. Java:* Forest Reserves of Soebah–Pelen, Pringombo–G. Midangan, *Noesa Kambangan*–Tjilatjap, Sepakoeng–G. Telemojo–Oengaran II, Geboegan–G. Oengaran III, Kedoengdjati–Tjandiroeboeh–Glapan–Telawa, Karangasem–Dersemi; in *E. Java:* Forest Reserves of Djatipoewon–Poerwodadi, Ngebel–G. Wilis, Saradan–G. Pandan, Gadoengan–Pare–G. Keloet, Poeger–G. Watangan–S. coast, Tjoeramanis–Simpolan, Pantjoer–G. Raoen–Idjen–Kendeng II, Pantjoer–G. Raoen–Idjen–Kendeng III, Rogodjampi–Banjoewangi–Badjoelmati–Gradjagan.

COLLECTIONS. *Herb.* KOORDERS, in *Herb. Bog.*, in total *c.* 40.000 *nos*;[15] some of his collections inserted in the *herbarium generale*, *viz* the Semarang and Djapara collection (1886), that from *Karimon Djawa* (231 *nos*, 1886) and from G. Merbaboe (1888); from *Celebes c.* 3500 specim. (1375 species, partly with material in alcohol),[16] many living plants (*Hort. Bog.*), *etc.*

Duplicates in various other herbaria; at *Leyden* (from Diëng Plateau, *Centr. Java, etc.*); *Kew:* 1366 *nos* (pres. 1894–98) and other dupl. (pres. 1913); *Berl.:* 1333 *nos* (pres. 1894–1903) and 479 *nos* material in alcohol from *Java; Manila:* 150 *nos Java; Utrecht: Java* plants (1897–99, 1919); *Groningen:* some dupl. of *Theaceae* and of *Saurauia.*

From Dec. 1884–March 1885 he made a herbarium of cultivated plants in the Buitenzorg Botanic Gardens, which was destroyed by insects *etc.*

He employed native collectors, but collected himself too.

Many living plants in *Hort. Bog.*

LITERATURE. (1) *cf.* Versl. Pl. Tuin Buitenzorg for 1892, p. 8–9; *l.c.* for 1893, p. 78–90; and *l.c.* for 1894, p. 68–81.

S. H. KOORDERS: 'Zakflora voor Java. Sleutel tot de geslachten en familiën der woudboomen van Java' (Batavia 1893, 120 pp.).

S. H. KOORDERS & TH. VALETON: 'Bijdragen tot de kennis der boomsoorten van Java' ('s-Gravenhage 1894–1914, 13 vols).

S. H. KOORDERS & TH. VALETON: 'Atlas der Baumarten im Anschluss an die "Bijdragen tot de kennis der boomsoorten van Java"' (Leiden 1913–18, 4 vols).

(2) S. H. KOORDERS: 'Exkursionsflora von Java, mit besonderer Berücksichtigung der im Hochgebirge wildwachsenden Arten' (Jena 1911–12, 3 vols + 1 vol. atlas, 1913–37); *cf.* also C. A. BACKER: 'Kritiek op de Exkursionsflora von Java' (Weltevreden 1913, 67 pp.), and S. H. KOORDERS: 'Opmerkingen over eene Buitenzorgsche kritiek op mijne Exkursionsflora von Java' (Batavia 1914, 201 pp.).

S. H. KOORDERS: 'Flora von Tjibodas, umfassend die Blütenpflanzen, welche in der botanischen Tjibodas-Waldreserve und oberhalb derselben auf den West-Javanischen Vulkanen Pangerango und Gede wildwachsend vorkommen' (Batavia 1918).

(3) Author of numerous other papers on the flora of Java, *cf.* bibliography in Tectona 13, 1920, p. 459–480.

(4) S. H. KOORDERS: 'Goenoeng Moerija' (Nat. Tijdschr. N.I. 47, 1887, p. 260–275).

(5) S. H. KOORDERS: 'Verslag van een dienstreis naar de Karimon Djawa-eilanden' (Nat. Tijdschr. N.I. 48, 1888, p. 20–132).

(6) *cf.* J. IJZERMAN: 'Dwars door Sumatra' (Haarlem/Batavia 1895, + ill. & map).

S. H. KOORDERS: 'Vaartocht langs de Kwantan van Moeara Palangkei naar Padang Tarab' (in IJZERMAN, Dwars door Sumatra, *l.c.* p. 220–241); 'Losse schetsen der vegetatie van Equatoriaal Sumatra' (in 'Dwars door Sumatra' *l.c.* p. 507–536); 'Die Vegetationsschilderung eines rezenten tropischen Wald-Sumpfflachmoores' (Jahrb. Preuss. Geol. Landsanst. 30, 1909, p. 398–443).

In a letter to TREUB, dated Nov. 1, 1893, BOERLAGE mentions the existence of a MS. of KOORDERS + notes by him on the Sumatra collection, the whole accompanied by drawings, waiting for publication.

(7) *cf.* Typed report in the For. Res. Inst. Buitenzorg.

(8) *cf.* 'Onderzoek der Boschboomflora op Java' in Versl. Pl. Tuin Buitenzorg for 1893, p. 78–90.

(9) *cf.* Versl. Pl. Tuin Buitenzorg for 1894, p. 69.

S. H. KOORDERS: 'Verslag eener botanische dienstreis door de Minahassa' (Meded. 's Lands Plantentuin *no* 19, 1898, p. 1–716); 'Eenige aanvullingen en verbeteringen van mijn verslag eener botanische dienstreis door de Minahassa' (Nat. Tijdschr. N.I. 61, 1901, p. 250–261).

(10) S. H. KOORDERS: 'Iets over een vindplaats van fossiele planten en dieren bij Sonder in de Minahassa' (Tijdschr. K.N.A.G. 12, 1895, p. 395–398).

(11) *cf.* Versl. Pl. Tuin Buitenzorg for 1896, p. 79–80.

(12) *cf.* Versl. *l.c.* for 1898, p. 53.

(13) *cf.* Versl. *l.c.* for 1899, p. 71.

(14) *cf.* Versl. *l.c.* for 1900, p. 110.

(15) *cf.* 'Systematisches Verzeichnis der zum Herbar KOORDERS gehörenden, in Niederländisch-Ostindien, besonders in den Jahren 1888–1903 gesammelten Phanerogamen und Pteridophyten nach den Original-Einsammlungsnotizen und Bestimmungs-Etiketten unter Leitung von Dr S. H. KOORDERS zusammengestellt und herausgegeben von Frau KOORDERS-SCHUMACHER' (Buitenzorg 1910–14; the 1st part dealing with Java; pts 2–5 with Sumatra, Celebes, Lombok and other islands + general remarks).

(16) Papers on the Celebes collection:

H. CHRIST: 'Die Farnflora von Celebes' I (Ann. Jard. Bot. Buit. 15, 1898, p. 73–186, pl. 13–16; together with collections of others).

J. J. SMITH: 'Einige neue Orchideen von Celebes' (Nat. Tijdschr. N.I. 58, 1898, p. 358–363).

R. A. ROLFE: 'New orchids (Selebes)' *Decad.* 23 & 24 (Kew Bull. 1899, p. 126–133).

S. H. KOORDERS: 'Enumeratio specierum phanerogamarum Minahassae' (*cf.* reports mentioned above *sub* 9 and Nat. Tijdschr. N.I. 63, 1904, p. 76–89, 90–99); 'Supplementen op het eerste overzicht der Flora van N.O. Celebes' (Batavia, pt 1, § 1–2, 1918–20, p. 1–30, 31–50, pl. 1–10, 11–14 (the 2nd reprinted from Bull. Jard. Bot. Buit. sér. 3, vol. 2, 1920, p. 242–260, pl. 4–7); pt 2, 1922, pl.1–127; pt 3, 1922, p. 1–60).

HARMS in Ann. Jard. Bot. Buit. 19, 1904, p.12–18.

BIOGRAPHICAL DATA. Tectona 5, 1912, p. 895–906; Ned. Kruidk. Arch. 29, 1919, p. 73; Tectona 13, 1920, p. 377–504, incl. portr. and bibliogr.; *l.c.* 30, 1937, p. 217–218; Trop. Nat. 8, 1919, p. 177; Bull. Jard. Bot. Buit. sér. 3, vol. 2, 1920, p. 237–241; Tijdschr. K.N.A.G. 1920, p. 118, 240; BACKER, Verkl. Woordenb., 1936.

Koppel, Cornelis van de

(1891, 's-Gravenland, N.H., Holland; x), Forest Officer, since 1913 in the employ of the D.E. Indian Forest Service; till 1920 stationed in various places in Central Java; 1921–27 in charge of the Forest Administration of Celebes, stationed at Makassar, making a special study of forest products (copal and rattan).[1] He went on furlough in 1927 and made study tours in Europe and the U.S.A.; in 1930 appointed Head of the Museum and Inquiry Office for Economic Botany at Buitenzorg as successor of K. HEYNE (see there). He retired about 1936. In 1938 he was appointed to a post at the Colonial (= Indian) Institute, Amsterdam; at present in the Office of Oversea Territories, The Hague.

Shorea vandekoppeli PARIJS was named after him.

COLLECTING LOCALITIES. *1922. SW. Celebes:* Sindjei; *P. Djampea; SE. Celebes:* Kendari; *Boeton* Division.—*1923. E. Celebes:* subdiv. of Banggai.—*1930. W. Sumatra*, Tapanoeli (July): Balige, Toba, Batak Lands, Hoeta Padang, *etc.*

COLLECTIONS. *Herb. Bog.:* 40 *nos* of *Styrax* (2 of which A *nos*) from *Sumatra;* and dupl. F.R.I. In *Herb. For. Res. Inst. Buitenzorg:* plants from *Celebes, P. Djampea* and *Boeton*, numbered in the bb. series.

LITERATURE. (1) Author of: a typed report on a trip to Polewali, Mamasa and Madjene (Apr.–May 1924) (in For. Res. Inst. Buitenzorg); 'Winning van copal in het Gvt. Celebes en Ond., de uitvoer hiervan uit Makassar, en eenige details over het gebruik van copal' (Tectona 19, 1926, p. 525–574, 4 fig., 1 map; Engl. summary); 'De rotan van Celebes' (*l.c.* 21, 1928, p. 61–94, 8 fig., 1 map; Engl. summary).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Korep, *cf. sub* Forest Research Institute, Buitenzorg.

Kornas(s)i

(†), for several years 'mantri' in the Botanic Gardens, Buitenzorg.

COLLECTING LOCALITIES. *1910. Noesa Kambangan* (S of Centr. Java) (Nov. 17–29) with SAREAN.—*1911. Banka* (Aug.–Dec.).—*1912. Noesa Kambangan* (S of Java): G. Klètjèr.[1]—*1913.* Leaving Buitenzorg (July 2) for *Dutch N. New Guinea* as assistant of Dr JANOWSKI (itiner. *etc.* see there). In the course of the year *1914* invalided home.—RUTTEN *Expedition, 1917–18.*[2] *Moluccas, Ceram:* Wahai (arriving Aug. 18, 1917), for localities *etc. cf. sub* RUTTEN; visit to *Ambon* (Apr. 1–25, 1918); back at Buitenzorg (Aug. 21).—*W. Java*: environs Buitenzorg (*1920*); Soebang (*1926*).

COLLECTIONS. *Herb. Bog., cf.* also *sub* JANOWSKI and RUTTEN. *Herb. Leyden:* dupl. of *New Guinea* and the *Moluccas; Herb. Utrecht:* dupl. *Ceram* (1918).

In *Hort. Bog.:* 240 living plants from *Ceram;* others from *Noesa Kambangan, Banka, etc.*

LITERATURE. (1) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 1, 1918, p. 370 and Versl. Pl. Tuin Buitenzorg for 1919, p. 224.

(2) *cf.* Versl. *l.c.* for 1918, p. 228.

Korthals, Pieter Willem

(1807, Amsterdam, Holland; 1892, Haarlem, Holland), botanist, working for some time in the Herbarium at Leyden; in July 1830 appointed member of the 'Natuurkundige Commissie' (Commission for Natural Sciences) for the D.E.I., making several tours in the Malay Archipelago. In 1837 he returned to Holland and was pensioned off in 1843.

The genera *Korthalsia* BL. and *Korthalsella* v. TIEGH., and several plant species were named after him.

ITINERARY.[1] *1831. Java.* Arrival on Apr. 13; in May the 'Commissie' made a trip along the north coast and returned by way of the south coast.[2]—*W. Java:* leaving Buitenzorg (July 2); to Tjieboerajoet, making trips on G. Salak, to the Tjibadak River, *etc.* (3–5); *via* Tjigombong to Tjitjoeroeg (staying 6–16), making trips to Tjisaät



KORNAS(S)I

(8), Ciceroa (= Tjisaroea) (9), Tjibodjong, *etc.;* Pas(s)i(e)r Tankil (17); kp. Pasawahan babakan (18); with MACKLOT and v. OORT *via* Tjiboendoe(r) (20) to Pondok Tenga, climbing and staying on the summit of G. Salak (21–22),[3] descending the W. slope to G. Berbakti (or Probakti) and visiting the NE. slope too; back to Tjitjoeroeg (23); to Tjitjadas and Tjibodjong (29–30); Bodjong ouring (Aug. 8); back to Tjitjoeroeg (9); to Nag(a)rak (13), kp. Tjimahi (14), dessa Goenoeng Parang (15), Kalikki and foot G. Gédé (16); Lomodoehoer (20), Pas(s)ir Pogor (21), Passir Ipis (24), coffee plantations in the environs (25), Pesser Distr. (26); G. Kentjana (Sept. 2), kp. Tjipadang Goenoeng (2), Tjibelang River, *etc.;* trip to G. Gédé with S. MÜLLER (8):[4] Kandang Badak, Pondok Sella (9) and Aloen(g) Aloen(g), G. Goemoeroe (10), descent along the crater rim (11); bivouac on a plain with a kind of pond, making trips to Tjikoendoel (12), the crater and G. Batoe (13), hot springs (14) and Kandang Badak; Rawah Tjibeureum (16), and falls of Tjibeureum (17), cave (18), and descent (19); Tjiputri (21), hot spring Tjitjama (22), coffee plantations (23), G. Hallang (25); Tjanjor (= Tjiandjoer) (27); to the NE. part of Tjiputri (Oct. 4), the Lawon Datar, Tjihe(e)rang, G. Putri (8), Tjibadak and Laboea Boelan (9); Mandi(e) (11), G. Karang (12), Tjikallong (13), G. Sombone and G. Gambier;

Bantar Koening (14), Tjikoerai and Patjet (15); returning to Buitenzorg *via* Telaga Warna (29); from Padjet (= Patjet) to Tj(i)andjo(e)r (Nov. 12), Mandi(e) (13), Darangdang, Parongkallong; to Waniasa (= Wanajasa) and environs (15); to Pouriakarta (= Poerwakarta) and Tjikao (29); G.



KORTHALS

Boerangrang (Dec. 1–2); valley of the Tjibagon and summit Boerangrang (2); exploring the N. side of the plain near B. Kokosan (3); near some lakes (4–5); Tjimahi River (6); back to Waniasa (7), exploration of the environs (9–14), G. Toemoegoe, tea plantations on Pas(s)i(e)r Nagara Tjina, *etc.;* at Kambang Koening (15–18) *via* Passawehan; to Tjikao (17); till Febr. 23, *1832*, exploring the environs, G. Soeroet (Febr. 22), *etc.*; to Krawang (24); to Poerwakarta (March 11); to Tjikao (14) and Krawang, making headquarters there; upstream the Tjitaroem by proa (Apr. 3–17) *via* Tampil, G. Kroet, trip to S of Pangewellan (12), Pas(s)ir Benting (13), fall (tjoeroeg, 15); to Poerwakarta (18), Kambang Koening (19); to Kandang Sampie (24), G. Singoegoe (26), G. Boeloet (27); to Wangan (29); back to K. Sampie (May 1) *via* Tagal malacca; G. Tjikidang (6), G. Parang (8), G. Kradat (9), Simpurrum (12–14) and back to Tjikao (14); by proa to Tan(d)jong Poera (22); *via* Becassie (= Bekasi) to Batavia (23); Buitenzorg (May 29–July 5); Tji(e)trap (6), Tjilingse (= Tjileungsir) (7), Tjikao (8); G. Parang and Tjiceroa (= Tjisaroea) (15), Darangdan (16), Radjamandala (17), Bandoeng (18); to Limbang (= Lembang) (24); back to Bandoeng (30), and to Limbang once more (31); visit to a fall (Aug. 3), trips to the valley of the Tjihidung (4); G. Tangkoeban Prahoe (5–8, summit too); Tjikidang River and Pas(s)ir Malang (source) (9), Djamboe Diepa (11); to Limbang Tjimahi (12); to Radjagoela and G. Poeloesari (28), Manglayan (29), *etc.;* G. Tangkoeban Prahoe (Sept. 3), rawah near the Tjihidung (4); Tjipaganti (16); lime-kiln Tjilokot (Karang Penganti) near the Tjipadararang (17); indigo-factory Tjiari in Maleber Distr. (18–19); back to Bandoeng (20); to Limbang (21); Bandoeng (25–27); Limbang (28– . .); in Oct. to Bandoeng; Oct. 13 to the southern districts *via* Lewi Gadja, G. Gabus and kp. Tjibeling (14), Pajandongan (15), Bobantjon (16–21); trip to G. Patoeha (22–25), and back to Bobantjon (25); exploring the environs, G. Tambakh Roejong (Nov. 1), *etc.;* to Tjidammer (10) and proceeding to ?Kawah Tjiwidé (11) and back to the Tjiceroa; return at Bobantjon (12); to Banjarang (= Bandjaran) *via* G. Tiloe and Gombong; rawahs (swamps) W of Bandjaran (R. Papandajan, R. Goemoeroe, R. Tambakkan) and to Bandoeng (16); to Bandjaran (18); promontory of the Malabar and Tjiparay (19); Tagal Tenga (23); G. Goeha (24); *via* Kollelega to Tjiparay (28), and Tjiseroepan (= Tjisoeroepan); visit to plain in the north (Dec. 2); G. Papandajan (3), crater; trip to S. slope Papandajan (7) and other excursions; in southern direction, Tjikadjang and Pakingin (14); kp. Bomboelan (15), S of Bomboelan (16), E of Bomboelan (17); Tjikendang on the S. coast (20), beach (21), Tjipassireang (= Tjipasarangan) and Tjilaut Eur(e)un, Tjipam(e)un(g)p(e)uk (22); excursions on the beach *etc.* (23–28); leaving Tjipamunpuk (29), following the beach to Tjiboebaloekan (= Tjibabaloekan) (fortnight's stay); trip to Santiang (30). —*1833.* Santiang and environs (*Rafflesia patma!*); from Tjiboebaloekan (Jan. 10) to Marocco; *via* Toblong to Tjigintang (11); Tjiseroepan (Jan. 15–March 2), visiting Garoet (Febr. 6), G. Papandajan crater (12), Pas(s)ir Kiamis (Kollelega) (16) and crater; foot G. Goentoer (March 3), Lake Bagendit (4), Trogon (5); Limbangan (8), Leles (9), Majalaya (11), Tjayunan (12); G. Boejong, stay at Tjilantjang (18 onwards), N. slope G. Simpang (20), G. Simpang Fall, *etc.;* to Bandoeng (Apr. 21) Tjipaganti (22), Wanakarta (24), to Telaga Bodas (29) *via* Sagranten; Garoet (May 6); G. Telaga Bodas (7), visit to the crater (10, 12–15), G. Tjandawartha (18); Garoet (20), Telaga Bodas (21), Tjisankan (22); Leles (26), Bandoeng (27), Tj(i)andjo(e)r and Buitenzorg (28); to Batavia (31), embarking (June 3) for *Sumatra West Coast*[5] with S. MÜLLER, v. OORT and v. GELDER: Padang (20), setting out (23) to Oelakan and Ambadjang (24); Priaman (25–26), Passer Koedoe (27), Malela (28–29); stay at Fort de Kock (from June 30 onwards), trips to Bierro (July 4), Tjandong (5), de Kloof (11), cave and Kaman (14), *etc.;* fort Boekit Kandiki (Tanjong Allam) (17–21), some trips, collectors to G. Myrapi (= Marapi) (20); to Pag-

geroedjoeng (22), excursion to Boekit Bessie (23), and in northern direction (24); proceeding (25) to Pamawang, exploring the environs (26–27); to kotta Semawang (28), visits to Talagabanta, Tambang dalam mine (in Boekit tiga banta), Dano Semawang (30); to Tambangang (31); to Kajoetanam (Aug. 1) and proceeding to Padang (2); to Boengoes Bay (29), S of Padang, partly by boat; to Loeboealon (Sept. 12); to Kajoetanam (13), Djalan djawie (14); stay at Goenong, exploration of Djalan boekit Toedjoe (16) and to Kajoetanam; return to Goenong *via* the Ambadjang (17), Tambangan (19), Goegoek Si(e)gandang (20); Fort de Kock (21–23), visit to Panta (23); back to Siegandang (23); *via* Boekit Serongang and the valley of the Batang Ayer poeti (24), exploration of the Ané Valley, Bazar (= ? Pasar) Koeban, and to Kajoetanam (25); P. Koeban (29); back to Goegoer Siegandang (30); to Fort de Kock (Oct. 1) and proceeding to Pantar; back to Fort de Kock (2); to Padang (4), stay at Tambangan, collecting till Oct. 26, after that date much illness of KORTHALS and the Indonesian collectors.—*1834.* Padang; to Paauw (Jan. 22); to Loeboe Kelangan (27–28) and back to Paauw; trip to Limong manies (Febr. 17); Febr. 25 for some time to Padang bessie; ill at Padang (March 4–Apr.); setting out (Apr. 23) to the Padangsche Bovenlanden (Highlands), 1st day to Doekoe; to Loeboe allong (= Loeboekaloeng) (24), Kajoetanam (25); Goegoek Si(n)gandang (26–May 13), making several trips to G. Myrapi (= Marapi), to Boekit Tingi, *etc.;* to Batang Singalang (May 14) for some time, excursions to the banks of the Ané River *etc.;* Padang (June 25–July 16); Batang Singalang (July 18–Aug. 26); to Fort van der Capellen (27); to 50 kotta's (30) following a road E of Tandjong Alam; Pajokombo (31), Fort Veldman (Sept. 2), Fort van den Bosch, Goegoe Ganting (3), Fort Raaf (5–6); to Boa Penyan (7), summit of the Marapalm (8); Padang (Sept. 10–Oct. 16); back to Batang Singalang (Oct. 17), trips in the environs; to Padang Pandjang (30); to Fort van der Capellen (Nov. 7), Soeroeasso (= Saroeaso) (10); G. Myrapi (= Marapi) and crater (11–15); descent (16) to Fort van der Capellen; to Padang Pandjang (20); *via* Goegoet Si(n)gandang to Fort de Kock (22); to Matoea (23); Meninjoe (= Manindjau) Lake (24), 10 kotta's; back to Matoea and Fort de Kock (25); to Pajokombo (27); back at Padang (Dec. 2).[6]—*1835.* Padang; to Padang Bessie (Jan. 11); to Padang (Febr. 19); to Padang Bessie (24); to Padang (March 8); to the Melintang Mts (Apr. 5–17, May 6–27), at Padang (Apr. 18–May 5); to Padang (May 28); by boat to the south (June 29), visit to *Poeloe Mara(k);* on land between Boengoes and Indrapoera, stay at Pemang, and exploration of *Tjinko Isl.;* trips to Tambang (July 8) (gold-mine from the time of the E.I.C.), Tjinko (10), *etc.;* by boat (11) to Indrapoera,[7] stay at Pas(s)ir Ganting (12–30), and trips to the Salaut River (21), Ayer Batang (23), *etc.;* by boat (31) *via P. Tjinko* (Aug. 3) to Padang (4); to Padang Bessie (Sept. 7) for a longer stay; trip to the foot of G. Melintang (8); Oct. 1 return to Padang; trips to Ayer manis, G. Padang, *etc.;* to Oedjoeng Karang (Nov. 1), exploration of the environs, G. Nangalau (9), *etc.;* to Doekoe (28), exploration of the environs; to Padang (Dec. 17).[8] He is cited as a collector on *P. Pisang*[9] on an unknown date (possibly in fact collected by HORNER, see there). —*1836.* By boat (Jan. 9) to *S. Sumatra: Rat Island* (*P. Tikoes*) (14), Benkoelen (15–22); and proceeding to Java; *W. Java:* Batavia (28); to Buitenzorg (Febr. 5); to Padjet (= Patjet) (May 9) and to G. Gédé with HORNER & S. MÜLLER:[10] from Tjimadjan (10) to Kandang Badak; crater rim and Aloen Aloen (11); crater (12); to Batavia (July 6), embarking for Borneo (10); *SE. Borneo* with HORNER & S. MÜLLER: Ban(d)jermas(s)in(g) (28); to Martapoera (Aug. 6) by boat, returning the 8th; upstream the Doesoen or Barito River *via* Marabahan (20), Rantouw Boebaai and Palankau (22), Kwala Pattay (= Patai) (24–25) and lakes in the vicinity, Kwala Poenin (26), Lake Kambat (27), Tandjong petong (28), lakes in the vicinity (29–30), Telioek (31), Poeloe betjabang (Sept. 1), Telok betong and Lake Lomoeto (2), Mampon and Tan(d)jo(e)ng Java (= Djawa) (3), Marawan and G. Rantau (alt. less than 150 ft) (4), Terossan and Mantalet (= Montalat) (5), Si(e)kan and Loenjau (6), Tawan (8), Lanan and Loentoentoer (9); S. Tewe (10), Jammoet (11), Pilas and downstream the Tewe (12); back at Loentoentoer (13); Prarawin Mts (new genus *Prarawinia*) and Lanan (14); Tawan, Loenjau and Siekan (15); Mantalet (= Montalat), Troessan, G. Rantau, Marawan, Tanjong Java (16); vicinity of Tanjong Java (17); Dano kalakiën (= ? Kalahin), ? Talia (= ? Talioe) (18); Tanjong Petong, Moara Karrau (= S. Karau) and Lake Lampoer (19); Moara (= S.) Poenin, Pattay (= Patai) (22); Danau Horong, Padang Balangeran, Hamaban (23); Pamingir (25); S. Harimon, S. Kambé, *etc.*, Tanjong Benawa (26), S. Ninjaman; *via* Maraban returning to Banjer (= Bandjermasin) (Oct. 1);[11] to Martapoera (14); to Oedjoeng Moerong (20); Tanah La(w)oet Lands: Padang Goenoeng Koepang, G. Pamatton (21), staying some days and visiting the summit (22); to Apat (24) on the S. Riam Kanan and proceeding to Riam Arinawa and Batoe boeloe; Apat (25), Martaraman (26), Martapoera (27); Indonesian collectors on G. Tirin near G. Lawak; to Bandjermasin (Nov. 1); by boat (5) to Martapoera; *via* Oedjoeng Moerong to Banjawiran on G. Pamatton, G. Lawak and Tjambé (7); Padang Pantan, Padang Oedjoeng, Padang Bonjo, Poeloe Sampé (8); Pati Pati (= Batibati) (9), Bassan (10), G. Sakoembang (11); Bt Tampoeran, Padang Kataman, Hapoetoet, Blimbing, Melantong, Haballang (13); Batoe-Betjantan, Haballang River, S. Tandoei, climbing a ridge (14); foot of the Kamokus, and back to Batoe-Betjantan (15); back to Haballang (16); along S. Naman to G. Pamatton in Balaran (19); from Haballang to Palei-ari (= Pelaihari) and Panjeratan (21); to Taboniau or Taboenjau (= Tabanio) on the coast, and back to Panjeratan (22); to Poeloe Lampei by way of Padang Loear and Padang ? Bassor (23); environs Poeloe Lampei: Padang Petjakan (29), Poeloe beroeang, *etc.;* from Poeloe Lampei (30) downstream the Kaboen-

jan and back to Bandjermasin;[12] leaving Borneo by boat (16); Sabangon (22), passing Kottaringin (25); on land on *P. Talango* (Sapoedi Isls, E of Madoera) (30), visit to kp. Baroen and G. Moengo.— *1837. Madoera:* Kileangat (= Kaliangat) and Maringin (= Marengan) (Jan. 2); Madoera Straits; anchoring in the roads of Soerabaja (8); journeying by land along the north coast of *E. Java: via* Grissee, Manjer, Sidayo, Pantjang, Sentol, Genting, Toeban (17), Tambak raja, Goeloe, Sarang, Talang; *Centr. Java:* Lassem, Rembang (18); proceeding to Tressie, Mahoenan, Pati, Pojampo, Tjikoela, Koedoes, Jedo, Demak, Semarang (19); the 21st *via* Toegoe, Kandal (= Kendal), Wilerie (= Weleri), Gombong, Pekalongan; from Pamalang (22) to Tagal; *via* Limbangan to *W. Java:* Cheribon (23); *via* Gempoel, Tjikeroe, P. Batoeroejoek to Priangan Regencies, Sumedang (24); Bandoeng (25); *via* Tjimahi, Pad(d)alarang, Tjipatat, to Tjiandjo(e)r; to Buitenzorg (27); Apr. 3 last visit to the Botanic Gardens and in the evening with S. MÜLLER to Batavia; sailing for Holland (Apr. 12), *via* Sunda Straits, the Cape, St Helena (some trips); at Hellevoetsluis (Aug. 21).

COLLECTIONS. Bequeathed to *Herb. Leyden:* > 5816 *nos*[13] and material in alcohol; some duplicates in *Herb. Bog., Utrecht, Groningen, Berl.* (*Sumatra & Borneo*), *N.Y. Bot. Gard., Vienna* (orchids from *Borneo* with *Herb.* REICHENBACH), *Manila, Munich, Bot. Gard. St Petersburg* (= *Leningrad*); *Herb. Caen; Herb. Copenhagen* (*Sumatra, Java, Borneo*); *Herb.* MARTIUS (= *Brussels*); *Herb. State Mus. Stockholm.*

When returning to Holland in 1837 he brought home a large amount of seeds, fruits, and plants for *Hort. Lugd. Bat.* (*Leyden*).

Numerous unpublished plates from Java and elsewhere, made by his draughtsman F. FIEVEZ *dit* MALINES and others, in *Herb. Leyden.*

LITERATURE. (1) *cf.* unpublished Diary (July 1831–Aug. 1837) in Herb. Leyden.

(2) *cf.* SIRKS, Indisch Natuuronderzoek, Amsterdam 1915, p. 117.

(3) *cf.* Flora 23[2], 1840, p. 458.

(4) P. W. KORTHALS: 'Waarnemingen aangaande den berg Gede op Java' (Ned. Kruidk. Arch. 1, 1848, p. 117–133).

(5) P. W. KORTHALS: 'Geognostische opmerkingen op eene reis in July 1833 (in de Padangsche Bovenlanden)' (Tijdschr. Nat. Gesch. & Physiol. 1, 1834, p. 190–192); and *cf.* Extract from a letter to BLUME (*l.c.* p. 290–294).

(6) *cf.* S. MÜLLER: 'Berigten over Sumatra' (De Gids, afd. Wetensch. Bijdr. 1837, p. 1–35); *cf.* also *sub* 7.

(7) *cf.* Extracts from letters in Tijdschr. Nat. Gesch. & Physiol. 3, 1836, p. 7–15.

(8) Other papers relating to Sumatra by KORTHALS are: 'Aanteekeningen over de vijftig kotta's in de Padangsche bovenlanden' (Tijdschr. Nat. Gesch. & Physiol. 2, 1835, p. 6–26); 'Topographische schets van een gedeelte van Sumatra' (Leiden 1847, w. profile-map); 'Coup d'œil sur la constitution physique et la végétation d'une partie de l'île de Sumatra' (Le Moniteur 1, 1846/47, p. 205); 'Blik op de natuurlijke gesteldheid en vegetatie van een gedeelte van Sumatra' (Ned. Kruidk. Arch. 1, 1848, p. 58–83).

VAN OORT & KORTHALS: 'Verslag van eenen togt van Padang naar de Boengas en Setans of houtbaaijen' (Tijdschr. Neêrl. Ind. 4[1], 1842, p. 451–461; no dates mentioned!).

cf. also MSS and letters in Herb. Leiden.

(9) *cf.* MIQUEL, Ann. Mus. Bot. Lugd. Bat. 3, p. 263.

(10) *cf.* Verh. Bat. Gen. K. & W. 17, 1839, p. 3.

(11) *cf.* Extract from a letter in Alg. Konst- en Letterbode 1837[1], p. 387–393.

(12) *cf. ditto* in *l.c.* 1837[2], p. 244–249.

cf. also Tijdschr. Nat. Gesch. & Physiol. 3, 1836, Boekbeschr. en Lett. Ber. p. 192 and Ned. Kruidk. Arch. 1, 1846, p. 20–45 ('Aanteekeningen over een gedeelte van Borneo's Zuid-Oostkust *etc.*').

Geological report in Verh. Bat. Gen. K. & W. 17, 1839, p. 89–119.

(13) MS. botanical notes in Herb. Leyden.

Many of his plants described in KORTHALS: 'Kruidkunde' (in C. J. TEMMINCK: 'Verhandelingen over de Natuurlijke Geschiedenis der Nederl. overzeesche bezittingen. Botanie' 1839–44) p. 1–259, pl. 1–70.

Ferns from S. Borneo described in Ann. Mus. Bot. Lugd. Bat. (1863–69) by METTENIUS, MIQUEL, and KUHN. Also other plants in MIQUEL Ann. *l.c.*

cf. also W. H. DE VRIESE in 'Plantae indiae batavae orientalis quas, *etc.*' (Lugd. Bat. 1856/57); and C. A. J. A. OUDEMANS in 'Annotationes criticae in cupuliferas nonnullas javanicas' (Amstelodami 1865, 12 pl.).

BIOGRAPHICAL DATA. PRITZEL, Thes. Lit. Bot., 1872; Encyclop. N.I. 2, 1918; BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 49, 1939, p. 445; *l.c.* 50, 1940, p. 194.

Kosim, *cf. sub* Forest Research Institute, Buitenzorg.

Koster, J. H.

in 1938/39 chief of the post office at Koepang, Timor.

COLLECTIONS. Through his intermediary *Herb. Bog.* got material of a remarkable species of *Neoalsomitra* from *Timor* (*1938–39*). During his leave KOSTER saw a manuscript at Lisbon by Frey ALBERTO DE SAN THOMAS, entitled: 'Virtudes de algunas plantas, folhas, frutas, cascas e raizes de diferentes arvores e arbustos da Ilha de Timor', containing a description of the above-mentioned plant on p. 42, accompanied by a hand-coloured plate. The MS. probably dates from about 1750.

Koster, P., *cf. sub* Forest Research Institute, Buitenzorg.

Kostermans, André Joseph Guillaume Henri

(1907, Poerworedjo, Java; x), botanist, educated at Utrecht University, taking his Ph. Dr's degree in 1936 on a systematic paper on Surinam *Lauraceae*. In 1938 he was granted the Buitenzorg Fund, and accordingly went to Java; teacher in natural history at Batavia till 1940; end 1941 appointed

Assistant for Systematic Botany at the Agricultural College, Buitenzorg. From 1942–45 P.O.W. of the Japanese, lastly in Siam. Early in 1946 he made an expedition in Siam with BLOEMBERGEN and DEN HOED (see those), proceeding on his own, returning to Java in Sept. 1946. Subsequently he was sent out on a study and collecting tour in Siam and Indo-China, being back in Java in June 1947. At present on the staff of the Forest Research Institute, Buitenzorg.

Author of several taxonomic papers, especially on *Lauraceae, Malpighiaceae,* and *Labiatae.*

Cryptocarya kostermansiana C. K. ALLEN was named after him.

COLLECTING LOCALITIES. *1938. Malay Peninsula:* in swamp and peat forest; *E. Java:* G. Raoeng, G. Idjen-Merapi, G. Jang, G. Baloeran; *W. Java,* islands in the Bay of Batavia and Bantam: *P. Leiden, P. Babi, etc.; Centr. Java: Noesa Kambangan* (Nov. 20–23) with C. VAN WOERDEN (see there).—*1948. Dutch West New Guinea:* forest exploration in the plains on the W. coast of Geelvink Bay, S of Manokwari (June–Oct., about 4 months); trips were made to the Namtoei Mts in search of the 'Massooi' tree, and to Angi Gita Lake in the Arfak Mts (12 days).

COLLECTIONS. *Herb. Bog.;* including 200 *nos,* mostly phanerogams, from *Noesa Kambangan.* The other collections 1938 also in *private Herbarium.* The collector failed to make sufficient notes *in situ* and did not know himself the localities of the plants collected in the islands near W. Java, so plants of several islands are mixed up. *Herb. For. Res. Inst. Buitenzorg:* 500 wood samples + herbarium material from *New Guinea;* in due time dupl. will be presented to *Herb. Bog.*

Kottman, H. Ph.

of Tjitjalengka, *W. Java,* sent orchids to *Hort. Bog.* in *1898.*

Kotze, Stefan von

till 1891 in the service of the German New Guinea Company; at first Assistant of the 'Stationsverwaltung' at Finschafen; later Acting Surveyor, a job about which he did not know anything according to what he says himself.[1]

ITINERARY. *NE. New Guinea,* former *Kaiser-Wilhelmsland.* In Jan. *1888* he made some tours from Butaueng with C. HUNSTEIN (see there); with some others sailing in the 'Samoa' (Febr. 16) to Kelana, for the foundation of an agricultural station which was discontinued as soon as July next year (*cf.* also *sub* HUNSTEIN).

COLLECTIONS. *Araucaria hunsteinii* K.SCH. together with HUNSTEIN; probably in *Herb. Berlin.*

LITERATURE. (1) Author of: 'Aus Papuas Kulturmorgen' (Berlin 1905). For a biologist this book is of no value, it mainly contains critique on the bureaucracy in New Guinea, on the colonization plans for German peasants, and on the policy of Berlin.

Kowald

COLLECTIONS. Mosses from Mt Yule, *E. New Guinea* (*cf.* Ann. Bryol. 10, 1937, p. 18). Till now no phanerogams known.

Kraemer, Augustin Friedrich

(1865, Los Angeles, Chili; †), medical man, educated at Tübingen and Berlin; since 1889 Fleet-surgeon, and studying zoology at Kiel; from 1893 onwards he accompanied several voyages; in 1906/07 in charge of the ethnology department on the voyage of S.M.S. 'Planet' (see below); in 1907 exploring with his wife in the Bismarck Archipelago and the Carolines; in 1909 Leader of the Hamburg Pacific Expedition to the Carolines o/b the 'Peiho'; subsequently appointed Director of the Museum for Ethnography at Stuttgart; since 1919 Lecturer in Ethnology at Tübingen University, and since 1925 Honorary Professor.

Actinophloeus kraemerianus BECC. was named after him.

ITINERARY. *Voyage in the 'Planet', 1906–07,* under Capt. Lt LEBAHN.[1] Sailing from Kiel (Jan. 21, *1906); via* the Cape of Good Hope (making a trip in S. Africa) and Ceylon to *W. Sumatra: Simalur* (= *Simeuloeë,* island off the coast) (July 20–22); Padang (25–29), making a trip to Fort de Kock; *Mentawei Islands,* between N. and S. Pag(a)i (30); *W. Java:* Batavia (Aug. 3–7), making a trip to Buitenzorg; *SW. Celebes:* Makassar (18–23); *Ambon* (Aug. 29–Sept. 3); *North New Guinea:* Wanimo (Sept. 14); *Matty Isl.* (= *Wuvulu Isl.*) (15); *Hermit Islands,*[2] KR. was dropped at *Luf* (staying Sept. 17–27), from where he made some minor tours to Djaron and Mono; *Admiralty Islands* (visiting Loniu and Dalalou); *Bismarck Archipelago, Neu Pommern* (= *New Britain*): Herbertshöhe (Oct. 13), Matupi (15), where KR. left ship, to start an expedition to the Carolines; the 'Planet' left for Hongkong (Jan. 5, *1907*), touching at several places in the *Bismarck Archipelago,* Yap, Palau Isls; Manila (*Luzon, Philippines*) (Febr. 8–12); after one-month stay at Hongkong, back to the Pacific again, the ship remaining destined for marine research (*cf.* STEPHAN and SCHLAGINHAUFEN); KRAEMER back at Kiel, Germany, in Sept.—*1908–09.*[3] Sept. *1908* sailing with his wife from Germany, to replace the deceased E. STEPHAN (see there); joining SCHLAGINHAUFEN (see there) at Muliama (Nov. 7) in the *southern part* of *New Ireland;* tour in the hinterland of Muliama, visiting Fätlampe, Umfut, Varanlisz, Ginagui, Barmala, Putnakapsi, Ule, basin of the Malumfi and back to Muliami; visit to Piglinbui, Kambamba, Varanat, and Maron; Dec. 15 *via* Piglinbui, Mau, Varankansau, Sena, Kombon, to Rukalilik; Kandaus, Kapsilli, Samo, Hipakát, Pangidumkúp, Porpop, Nókon (16); Himahul, Matambauri, Hilong, Ngórngor, Kubil to Kudukudu (17); Barabulbulut, Matanahárahara, Súmudu, Kapalamás, Cape Ball, Tahanapap, Ulehirre, Arapulút, Sohun, Rangúsgus, to Namatanai (19); crossing Nabutu Bay to the Koko River, and *via* Dahanna to Dahálaba (21); Veinigogo, Lamanakura Cave, Maraketam, Lingbilä, Billo, Karu (22); Busso, Bokalis, Kunári, Mila, Silom, Kaipulut (23); Bulala, Lemeris, Kandan Bay, Katambu, Kandan, Loasigi (24); Malom,

Panagundu (25); Lamasong, staying at resthouse Tangatupi in *central part* of the island, paying visits to Panagundu, and *via* Bampit to (H)Amba (Febr. 17, *1909;* staying for some time); by boat to Simpsonhafen (= Rabaul) (leaving 27, arriving 28); stay on the volcano island *Matupit* (–March 1); sailing for the *W. coast of New Ireland*, landing at Ulaputúr (March 2); by sailing proa to Labúr(r); on foot to Rebehén, Rehenedél, Rahér, Gúrumut, Gogola (3); Komálu, Konogogo (4); Lüngulam, Kono, Makasanap, Gunáon, Kolágunon, Dakén, Komálabu (5); Lamban, Dampét, Cape Kasepmalum, Mäsi (7); Kololomboi, Kinepú (8); Lelet, Gúlumbe, Mámbo, Ugana, Lambu (9); Lemau, Tämbin (10); *via* the pass to the *E. coast* (12), visiting Länguslom, Kónombin and Panagundu on the way to resthouse Tangatupi near Lamasong; setting out on a trip to the *south* (Apr. 3) *via* Lámbusso; Loásigi (4); Kandan, Lemeris (5), in the latter place attending native feasts (6–9); trip to Pénatnkin and Tápanot (10); back to Lamasong and proceeding to Kandan (11); Katéndan; to promontory (14), visiting Buä (250 m alt.); Tégerot (15) and back to Mamau; Katéndan and Panagundu (16); back at resthouse Tangatupi; stay at (H)Amba (20–. .), visiting Lessu, Langania; return at Tangatupi; setting out (23) on a tour to the Lelet Mts *via* Panagundu, Kándan (25); Bukanking (500 m), Levinko (800 m), Katuru, Kananbe (1000 m) (= evidently the W. slope of Mt Busokambang, Schleinitz Mts) (26); climbing Mt Lurun (*c.* 1350 m) (27); to Lenkámen (28); back to Kananbe, Levinko, Kandan (30); Loasigi, Lambusso (May 1); Katèndan (2), Tangatupi (4); back at Lamasong; Lambusso (5–7); march to *the north*, *via* Limba, Fuar, Lakurdemau, Lakurdefanga, *etc.*, reaching Kävieng on the 20th; visit to Golangit; June 3 sailing for Rabaul; subsequently to the Carolines o/b the 'Peiho', returning in Germany in Sept. 1910.

COLLECTIONS. *Herb. Berl.: Hermit Islands* 97 *nos*, probably in a bad state and fragmentary;[2] small collection from *Neu Mecklenburg* (= *New Ireland*) (1908–09) and *Neu Pommern* (= *New Britain*) (1909); *Herb. Leyden:* dupl. *Bism. Archip.*

Mrs E. KRAEMER-BANNOW made about 100 drawings of flowering plants in 1908–09, which were identified by Prof. G. VOLKENS.

LITERATURE. (1) *cf.* 'Forschungsreise S.M.S. "Planet" 1906/07' (edited by the 'Reichs-Marine-Amt' Berlin 1909, 5 vols; Itinerary in vol. 1; vol. 5 dealing with Anthropology and Ethnography by KRAEMER).

(2) A. KRAEMER: 'Beiträge zu einer Monographie der Hermit-Inseln (Luf-Archipel)' (in 'Forsch. Reise Planet' *l.c.* vol. 5, p. 58–122; p. 117–122 dealing with the flora).

(3) E. KRAEMER-BANNOW: 'Bei kunstsinnigen Kannibalen der Südsee. Wanderungen auf Neu-Mecklenburg 1908–1909' (Berlin 1916, w. ill. & maps; *cf.* remarks on the flora on p. 268).

A. F. KRAEMER: 'Neu Mecklenburg' (1925) (*non vidi*).

cf. 'Die deutsche Marine-Expedition 1907/09' in Deutsch. Kolon. Blatt 20, 1909.

BIOGRAPHICAL DATA. Wer ist's ? 1935.

Kramer, Frans

(1894, Leeuwarden, Fr., Holland; 1943, at the Japanese Kempetai, Batavia, Java), was educated at Wageningen Agricultural College and took his Dr's degree in 1926;[1] he attended the Commercial College at Rotterdam too; from 1918–34 Forest Officer in the D.E.I., stationed in Java, for several years in the Forest Research Institute (Buitenzorg); higher official in the Agricultural Department at Batavia, 1934-35; since December 1935 president of the General Agricultural Syndicate. He was taken prisoner by the Japanese in December 1942.

Author of several papers in the periodical 'Tectona'.

COLLECTING LOCALITIES. *W. Java*, Priangan Res.: Tjiwideh and G. Patoeha (*1919*); *E. Java*: Kediri, in teak forest (Febr.–Sept. *1922*); *W. Java:* G. Gedeh (*1922–23*).

COLLECTIONS. *Herb. Bog.:* > 106 *nos*, partly in the series of BEUMÉE; *Herb. For. Res. Inst. Buitenzorg:* few *nos* in the Ja. series; *Herb. Pasoer.:* 1 *no* from G. Gedeh.

LITERATURE. (1) F. KRAMER: 'Onderzoek naar natuurlijke verjonging en den uitkap in Preanger gebergtebosch' (Thesis, also published in Meded. Proefstat. Boschw. *no* 14, 1926, with 15 fig., map, *etc.*).

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 461.

Kramer, Wouter Hendrik de

(1897, Haastrecht, Z.H., Holland; x), entered the D.E. Indian Government service as a schoolmaster in 1922; in 1932 he passed the natural history examination (K IV) at Leyden, and returned to Java in December of that year as a teacher at secondary schools, first at Semarang, later at Bandoeng; in 1945, after World War II he was replaced at Bandoeng.

COLLECTING LOCALITIES. *E. Java:* Sarangan (Oct. 21, *1934*); G. Lawoe (June *1936*).

COLLECTIONS. *Herb. Bog.:* only few plants.

Krasnov, Andrej Nikolaevic

(1862–1914), professor at Kharkov, visited Buitenzorg in *1892* on his way back to Russia from a journey to Sachalin and Japan, during which he made plant-geographical studies. He stayed in *Java* for 4 weeks and brought home a collection of plants obtained with the help of the Botanic Gardens at Buitenzorg (*cf.* Versl. Pl. Tuin Buitenzorg for 1892, p. 27).

BIOGRAPHICAL DATA. Trav. Mus. Bot. Acad. Imp. Sci. St Pétersb. 4, 1908, p. 53–54 (in Russian).

Krause, Max Paul Fritz

(1872, Berlin, Germany; 1926, Bremen, Germany), brother-in-law of R. SCHLECHTER (see there). In 1892 he set out to Singapore, where he worked for some months in the German consulate; subsequently he went to Bindjei Estate (Deli, Sumatra East Coast), of which he finally became Head-Manager in 1912. In 1913 he returned to Germany, being appointed Director of a Tobacco Company.

Appendicula krauseana SCHLTR was named after him.

COLLECTIONS. Some *Sumatra* orchids.[1] He probably sent the material to SCHLECHTER, and it will have gone with the latter's herbarium to *Herb. Berl.*

LITERATURE. (1) *cf.* Mém. Herb. BOISS. 21, 1900, p. 43 and 77; and Oesterr. Bot. Zeitschr. 1900, *nos* 7–8.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Kreke, Marie C. A. van der

passed the pharmaceutical examination at Amsterdam in 1912; from 1913–17 Chemical Assistant at Amsterdam University, and subsequently attached to the chemical factory at Naarden; 1920–24 appointed in the Chemical division of the Sugar Experiment Station at Semarang (Centr. Java), and in 1924 *ditto* at Pasoeroean (E. Java); 1925–32 Chief of the Laboratory for Analysis of the Chemical division; after return to Holland she settled as a pharmacist at Leerdam.

COLLECTIONS. *Herb. Pasoer.:* 2 *nos* from G. Lawoe in *E. Java* (*1927*).

Kreulen, D. J. W.

(1899, Zutfen, Gld, Holland; x), after secondary education at Zutfen, attended the Technical School at Dordrecht; from 1920–22 Chemical Engineer of the sugar factory Gempolkrep at Modjokerto (E. Java). He returned to Holland on account of his health, and entered the service of the Coal-trade Co. Ltd at Rotterdam as a chemist. In 1924 he founded a private laboratory for Fuel and Oil Research in the same town. Since 1932 he is besides Lecturer at Utrecht University.

He is the author of numerous papers on coal and oil chemistry.

COLLECTING LOCALITIES. *E. Java:* environs of Modjokerto and Poedjon near Malang (*c. 1920–21*).

COLLECTIONS. His collection was sent for identification to *Herb. Bog.* in Jan. 1921; from various plants duplicates were kept at Buitenzorg, the highest number was 86; the remaining part in *private herbarium*, which was presented later to the well-known Dutch amateur botanist Dr A. W. KLOOS.

Kroesen, Cornelis Alexander

(1854, o/b H.M.S. Vesuvius; 1911, The Hague, Holland), joined the D.E. Indian Civil Service in 1875; in 1892 Assistant Resident at Palembang (S. Sumatra); in 1899 appointed Resident of the Southern and Eastern Divisions of Borneo, and in 1903 Governor of Celebes; he retired in 1906.

COLLECTIONS. He sent material of *Pandanus megacarpus* MARTELLI *n.sp.* from the island *Salayar* (= *Salajar*) to MARTELLI in *1904*. In *Herb.* MARTELLI (= *Florence*).[1]

LITERATURE. (1) *cf.* Webbia 4, 1913, p. 406 (wrongly cited as KOESEN).

Kroesen, Johannes Alexander

(1857, Semarang, Java; 1936, Arnhem, Gld, Holland), came out to Java in 1881 and was put at the disposal of the General Secretary; later in the Civil Service; retired in 1911.

When Assistant Resident at Merauke, *Dutch S. New Guinea*, he sent living plants of *Piper methysticum* to *Hort. Bog.* in *1905*.

BIOGRAPHICAL DATA. Portr. in 'De Zuidwest Nieuw-Guinea-expeditie 1904/05' (Leiden 1908) p. 476.

Krol, P. D.

COLLECTIONS. *Paphiopedilum victoriae-mariae* HOOK. *f.* cult. in *Hort. Tjibodas*, from Pageralam, Tea estate G. Dempo in Palembang, *S. Sumatra.*[1] Orchids from G. Dempo presented to *Hort. Bog.* in *1932*.

LITERATURE. (1) *cf.* J. J. SMITH in Bull. Jard. Bot. Buit. sér. 3, vol. 14[2], 1937, p. 160.

Krug, B.

collected plants on *P. Weh*, N of Sumatra, *e.g.* at Sabang; evidently preserved in *Herb. Berl.*, at least the *nos* 7 (*Ixora sabangensis* BREM.), 63 (*Cyperus kyllingia* ENDL.) and 66 (*Selaginella mayeri* ALST.).

Plants from a certain BERTRAM KRUG, Government Gardener at Tsingtau, from China (*a.* 1905–13) in *Herb. Berl.* He may be the collector of the above-mentioned plants too.

Krukoff, Boris Alexander

(1898, Minusinsk, Yeniseisk, Siberia; x), was educated at the Imperial University of Kazan, Russia, and later received a B.S. degree at the N.Y. State College of Forestry, Syracuse University (1928). After finishing his study he spent many years in plant exploration in S. America, Spain, and Africa. From October 1930 in Sumatra, connected with the Continental Rubber Co. in Sumatra East Coast, remaining 4 months, coming back again in August 1932. Since long associated with the N.Y. Botanical Garden while working on his collections; in June 1940 appointed Honorary Curator of Economic Botany, N.Y. Botanical Garden; at present Director of Research, Experimental Plantations, Inc., with headquarters at the N.Y. Bot. Garden.

He published some systematic botanical papers and some on fish- and arrow-poison.

Evodia krukovii MERR. was named after him.

COLLECTING LOCALITIES. *Sumatra*, in ? Tapanoeli, and East Coast Res., Asahan: W of Kisaran, Continental Plantat. Co. Estate, Hoeta Padang (Dec. 2–4, 15, 21, 22, *1930*); *Malay Peninsula: Singapore*, Bot. Gardens (Jan. 10 and 12, *1931*); *Sumatra East Coast*, Asahan: at Hoeta Padang (Nov.–Dec. *1932*) and Sg. Masihi (Oct.–Nov. 1932).

COLLECTIONS. The former collection (*1930*) (*nos* 200–351) was distributed by the *Syracuse University*. The herbarium specimens of the latter, *nos* 4000–4462 (*1932*), by the *N.Y. Bot. Gard.* (including a few specimens from *Singapore*, *viz nos* 4360–4388), and the woods by the *Univ. of Michigan;*[1] 2nd set in *Herb. Arn. Arbor.*, 3rd in *Herb. Univ.*

Michigan, 4th in *Bur. Sci. Manila*, 5th at *Berlin*, 6th at *Leyden*. Also dupl. at *Geneva* (387), *Brussels; Herb. Sing.*: 377 *nos* (purch. 1935); *Herb. Bog.*: several dupl. coll. 1932 (pres. 1937); also dupl. in GRAY *Herb.* (27) and *Herb. Leningrad* (pres. 1936); *U.S. Nat. Herb. Wash.*: 129 *Sumatra* dupl. (*nos* 201–351).

The collection *1930* is numbered from 200–351 (277–284 missing), the second (*1932*) between 4000 and 4462; in total *c.* 600 *Sumatra* numbers.

Some of the plants were described by MERRILL;[2] the woods have been studied by A. B. COCKRELL at the Univ. of Michigan and form the material of his thesis; the 2nd collection of wood samples amounted to 288 *nos*.

LITERATURE. (1) *cf.* H. H. BARTLETT in Nat. & Appl. Sci. Bull. Univ. Philip. 4, 1935, p. 228.

(2) In 'New Sumatran Plants' III–IV (Pap. Michig. Acad. Arts & Lett. 23, 1937, p. 177–202 and *l.c.* 24, 1938/39, p. 63–92).

BIOGRAPHICAL DATA. Journ. N.Y. Bot. Gard. 1940, p. 199; Amer. Men of Sci. 1944, p. 1004.

Krul, G.

of Toengkal, Sumatra Tobacco Company, Palembang (*S. Sumatra*), sent living palms to *Hort. Bog.* in *1890*.

Kruyff

is cited by KOSTER[1] as the collector of the *nos* 21, 52 and 64 in *Celebes;* specimens in *Herb. Bog.*

The name was misread, the collector of the cited plants is TJ. S. A. KNIJFF (see there).

LITERATURE. (1) *cf.* Blumea 1, 1935, p. 351.

Kruyne, B., *cf. sub* Forest Research Institute, Buitenzorg.

Kruyt, Albert Christiaan

(1869, Soerabaja, Java; 1949, The Hague, Holland), since 1892 missionary in Central Celebes (Poso); in 1913 he was awarded the Honorary Dr's degree in theology at Utrecht University; from 1924–30 he travelled in Central Celebes for scientific purposes.

He was the author of numerous ethnographical papers on Celebes.[1]

COLLECTIONS. *Herb. Bog.*: material of a *Castanea* (pres. *1920*) and a grass (pres. *1922*) from *Celebes*.

LITERATURE. (1) Mainly published in 'Mededeelingen vanwege het Nederlandsche Zendelinggenootschap' between 1892 and 1898 and in 'Tijdschrift K.N.A.G.' between 1898 and 1932.

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 213.

Kryshtofovich, African Nikolaevic

(1885, Pavlograd, Russia; x), geologist, working for the Standard Oil Co. in the Philippines, is cited as the collector of some plants in the *Philippines*, on Mt St. Thomas *etc.* in *Luzon* (*cf.* CHRISTENSEN in Dansk Bot. Ark. 6, 1929, p. 69).

Kubary, Johann Stanislaus

(1846, Warschau, Poland; 1896, Ponapé, Carolines), when a medical student, in 1863, had to emigrate to Hamburg on account of the revolution. He made the acquaintance of J. C. GODEFFROY who appointed him as collector on behalf of the South-Sea Museum. In 1868 he set out on his first voyage to the Pacific, visiting many islands and staying for a longer sojourn on Ponapé and Samoa. Till September 1879 he was attached to the Museum, and subsequently owned a plantation at Ponapé, which enterprise became a failure; he went to Japan in March 1882, and was for some months connected with the Tokyo Museum. In 1883 he planned to make ethnological collections in Guam and Palau for the Leyden Museum, which miscarried too, and then he was appointed collector for the Ethnological Auxiliary Committee of the Ethnographical Museum, Berlin, till September 1885.[1] Subsequently interpreter on German warships to New Britain, taking over the commercial station Kurakakaul on the north coast, and later in the employ of the German New Guinea Company in former Kaiser-Wilhelmsland as leader of Constantinhafen Station After expiry of his contract, at the end of 1891, he returned to Europe, but was appointed in New Guinea again for a second period from April 1892–1895. When finally dismissed he sailed to Ponapé (by way of Manila), where he died shortly afterwards.

ITINERARY. *1884*. Accompanying a tour of D. D. O'KEEFE, from Yap (Jan. 13) to the *Mapia Islands* (= *St Davids Islands*), N of Dutch W. New Guinea (Jan. 21).[2]—*1885*. *Neu Pommern* (= *New Britain*): landed at Matupi (Oct.); Kurakakaul.—*1886–91* and *1892–95*. *NE. New Guinea* (former *Kaiser-Wilhelmsland*). In April *1887* he undertook some tours with the missionary J. W. THOMAS (of the 'Rheinische Missions Gesellschaft') in the vicinity of Constantinhafen. On another tour he landed at Gorima (Nov. 8, 1887); mouth Gogol River; Astrolabe Plain and neighbourhood.[3]

COLLECTIONS. He mainly collected ethnological objects, snails and birds.[4] In *Herb. Hamburg* (with *Herb. Mus.* GODEFFROY): South Sea plants. Part of his plants might have been sent to *Herb. Berl.* with the New Guinea Company herbarium.

The collections were worked out by K. SCHUMANN.[5]

LITERATURE. (1) J. S. KUBARY: 'Ethnographische Beiträge zur Kenntnis des Karolinen-Archipels' (Leiden 1905, p. 79–144) (*non vidi*).

(2) KUBARY stated that the trip took place in 1885; WICHMANN was able to correct the year by means of a contract in the archives of Ternate (*cf.* Entd. Gesch. N.G. 2, p. 330, footnote 4).

(3) *cf.* Nachr. Kais. Wilh. Land 1888, p. 60–64.

(4) For papers on these collections *cf.* WICHMANN, Entd. Gesch. N.G. 2^2, p. 833–834.

(5) In 'Die Flora von Kaiser Wilhelmsland' (Berlin 1889) and in 'Die Flora der deutschen ostasiatischen Schutzgebiete' (ENGL. Bot. Jahrb. 9, 1888, p. 189–223).

BIOGRAPHICAL DATA. Ann. d. k.k. Hofmus. Wien 8, 1890, p. 192–193, incl. bibliogr.; Intern. Arch. f. Ethnogr. 10, 1897, p. 132–136.

Kubota, K.

owner of an Orchid Nursery at Pontianak, *W. Borneo.*

COLLECTIONS. Living plants with COOMANS DE RUYTER (see there) to *Hort. Bog.* in *1929.*

Kuhl, Heinrich

(1796, Hanau on the Main, Germany; Sept. 16, 1821, Buitenzorg, Java), a pupil of Prof. VAN SWINDEREN at Groningen University, was appointed member of the 'Natuurkundige Commissie' (Commission for Natural Sciences) for the D.E.I. in 1820, together with his friend J. C. VAN HASSELT. In the same year they departed to Buitenzorg, where KUHL died within 9 months after his arrival. Both of them are buried in the cemetery of the Botanic Gardens, Buitenzorg.

He is commemorated in the genera *Kuhlia* REINW. and *Kuhlhasseltia* J.J.S., and in many plant species.

ITINERARY. On the voyage to the East he visited Madeira,[1] the Cape of Good Hope and the Cocos Islands. Together with J. C. VAN HASSELT he explored *W. Java*, principally Bantam: G. Karang and G. Poelasari (Dec. *1820*); Pangang donggang (Jan.); environs of Buitenzorg, G. Salak and probably Koeripan (lime-depositing wells between kp. Rompin and Waroe); G. Gedeh-Pangrango (July–Aug. *1821;* July 20 at the base of the Pangrango).[2]

COLLECTIONS. *Herb. Leyden:* large collection (incl. Madeira plants); only very few duplicates in *Herb. Bog.* (one number inserted in the H.B. series).

For papers relating to his collections see J. C. VAN HASSELT *sub* Liter. note 3.

Mohria caffrorum, and other ferns, probably collected by him and VAN HASSELT near the Cape, were described by BLUME among species from Java. METTENIUS was already acquainted with that mistake.[3]

LITERATURE. (1) *cf.* Short description in Flora 4[1], 1821, p. 225–232.

(2) *cf.* Extracts from his letters in Alg. Konsten Letterbode 1822[1], p. 99–104, 149–153 and in Flora 5[1], 1822, p. 202–206 (on G. Pangrango); and in Isis 10, 1822[1], p. 108–113, 472–476; and *l.c.* 11, 1822[2], p. 893–902. The contents are mainly zoological.

cf. also HASSKARL in Verh. Bat. Gen. K. & W. 17, 1839, p. 5, and Flora 30, p. 526.

(3) *cf.* BACKER & POSTHUMUS: 'Varenflora voor Java' (1939) p. 144, footnote 1.

BIOGRAPHICAL DATA. Flora 5[1], 1822, p. 238–240; Isis 11, 1822[2], p. 902–904; Alg. Konst- en Letterbode 1823[2], p. 321 and *l.c.* 1829[1], p. 369–370; Catal. Scient. Pap. 3, p. 764; Album der Natuur 1903, fasc. 1, p. 1–22 and fasc. 2, p. 60–88; SIRKS, Ind. Nat. Onderzoek, Amsterdam 1915, p. 99–104 + portr.; Encyclop. N.I. 2, 1918; BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 51, 1941, p. 358–359.

Kulescha, Michael Jossiphowitcz

(1878, Brest-Litowsk, Grodno, Russia; x), veterinary surgeon, educated at Dorpat; teacher at a secondary school at Belsk, 1906–11; in 1914 passing the examination in agriculture at Kieff; 1914–17 veterinary surgeon at the front; 1917–20 teacher in agro-chemistry at Kieff Technical College; 1920–21 Chemistry Engineer of the s.f. Djatiwangi in



KUHL

Java and subsequently Group-Adviser in the employ of the Experiment Station for the Java Sugar Industry (Pasoeroean), successively stationed at Pekalongan 1922–28, Pasoeroean 1928–32, and Koedoes 1932–33. After that he sailed for France and settled in the vicinity of Nice as agriculturist.

COLLECTIONS. *Herb. Pasoer.:* 29 *nos* from Pekalongan in *Centr. Java*, mainly collected in *1923*, 1 specimen in *1925*; some dupl. in *Herb. Univ. Amsterdam.*

Kunhl

sent specimens of *Coffea bengalensis* ROXB. from Wonolèlo, Bandoeng (Jan. *1907*), *W. Java*, to *Herb. Bog.*

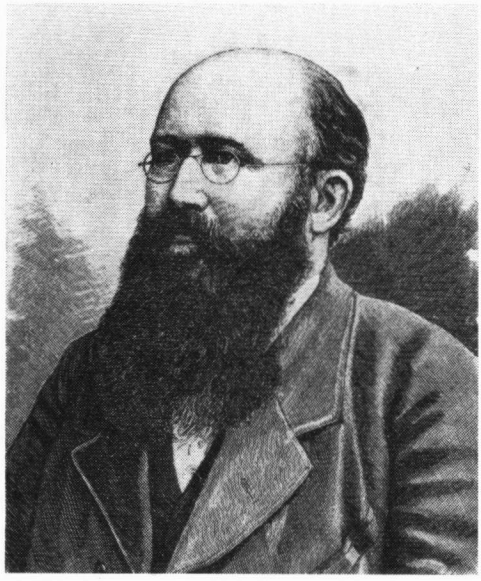
Kunstler, Hermann H.

(? died in Australia), a German explorer from Australia, who was visiting the Malay Peninsula and was engaged through the influence of Sir HUGH LOW, to collect for the Calcutta Royal Botanic Gardens, chiefly in Perak. The exact date of his appointment is not known.

Several plants are named after him.

ITINERARY. *1880. Malay Peninsula.*[1] *Singapore* (June–Aug.), collecting on G. Panti in Johore (June); G. Bintang and Bt Bingarang (*Rhio = Riouw*) (July); *1st expedition to Gopeng District* in Perak (Aug.–Dec.), making trips to Sg. Raya (Oct.), Kota Bahru (Nov.) and the Kinta River (Dec.).—*1881–83. Singapore* (Jan. *1881*); *Penang*

(Febr.–Apr.); Prov. of Wellesley (Apr.); *Penang* and Kedah (May); Perak, Larut Distr., Taiping (June *1881*–June *1882*), visiting most of the peaks of the Larut Hills, Gopeng (Sept. and Nov.), about May 1882 collecting at 'Sunki Perak' (which according to NARAYANASWAMI[1] probably ought to be taken as 'Sg. Larut'; elsewhere the locality



KUNTZE

Sungkei River is mentioned); Ulu Selama (July 1882); return to Taiping, Larut (Aug. *1882*–Apr. *1883;* ascending G. Bubu in March 1883); *Penang* and Larut (May 1883); *2nd expedition to Gopeng* (*Kinta*) *Distr.* (June–Aug.); *Penang* (Aug.–Sept.), also visiting the adjacent islands; Larut, top of G. Hijou (Oct.); *Penang* (Nov.); return to Taiping (Dec.).—*1884. 3rd expedition to Gopeng*, Chanderiang and other places in Central Perak between March and May; Larut, Taiping (June–Dec.).—*1885–86.* G. Bujong Malaka (sometimes written as G.M. and mistaken for G. Mesah, according to NARAYANASWAMI) (Jan. *1885*); Larut (Febr.); G. Bubu (March); Larut (Apr.); *4th expedition to Gopeng* and Batang Padang Districts (May–Sept.), climbing G. Bubu (May), G. Pondok (May–June), crossing Batang Padang Distr. (July), lower slopes of G. Batu Puteh (Aug.); Gopeng and Kinta Distr. (Sept.–Oct.); Taiping (Nov. *1885*–Febr. *1886*); *5th expedition, to Selangor and beyond* (March–Sept. 1886), visiting Ulu Selangor (March), Ulu Kerling (March–May), Ulu Bubong (June–Aug.), Ulu Kal, Slim, Selangor, Bubong (Aug.), Ulu Bubong (Sept.), P.P. (according to NARAYANASWAMI = Pahang Path or Semangko Pass) (Sept.) and Ulu Kal (Sept.).

COLLECTIONS. *Herb. Calcutta: c.* 11000 *nos;* the first collection was received at Calcutta in April 1881. Duplicates in *Herb. Sing., Herb. Edinburgh, Herb. Berl.* (*sub* KING's collector), and *Herb. Leyden.*

Many of his plants are labelled 'KING's collector'; he himself employed collectors, *e.g.* HARISON, a Kling, afterwards employed by L. WRAY.

Some of his Kinta collections were mislabelled at Calcutta 'Larut' (printed), though they were carefully annotated with descriptive notes and localities; some of his *1886* collections were collected in the State of Selangor, but mislabelled 'Perak'. He numbered after partial study. He used abbreviations of place-names, such as G.M. for G. Bujong Malaka, K.D. for Kinta District, B.P.D. for Batang Padang District, C.P. for Central Perak, U.K. for Ulu Kerling, N.U.B. for near Ulu Bulong, and P.P. for Pahang Path.[1]

LITERATURE. (1) Most data derived from BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5 and from V. NARAYANASWAMI: 'Provenance of early Malayan plant collections' (Journ. & Proc. As. Soc. Bengal N.S. 27, 1931, p. 328–339; diary on p. 333).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Kuntze, Carl Ernest Otto

(1843, Leipsic, Germany; 1907, San Remo, Italy), merchant-botanist who made a voyage round the world (see below), during which the Malayan region was visited. Later he travelled in Turkestan, S. America (1891–92), and in Africa (1894).[1] In 1905 he settled at San Remo.

Several plants were named after him.

ITINERARY. *Voyage round the world, 1874–76.*[2] Visiting West India, America, China, Annam, Cochin-China; in *1875* in the Malaysian region: *Singapore; Java* (May 2–Sept. 27), *viz* in *W. Java:* Batavia; Buitenzorg (May 12–13), visiting Kuripan *etc.;* departing for Sindanglaja (24), Tjibodas, G. Gedeh–Pangrango (30) and Telaga Warna; Tjiandjur (June 5); Wijnkoopsbaai, Palabuan Ratu, *etc.* (10–16); Sukabumi (17–21); S. Priangan (= prob. S of Sukabumi) (June 22–July 1); Sukabumi (2); *via* Tjiandjur to Bandung, visiting G. Tangkuban Prahu (10), Pengalengan and Tjinjiruan (12); Cheribon (17–19); *Centr. Java:* Pekalongan, Semarang; Demak (28), Purwodadi, Kuwu, Demak, Semarang (31); Magelang (Aug. 6), Borobudur, G. Sumbing (13), Wonosobo, Diëng Plateau (Aug. 16–19, ascending G. Prahu on the 18th); Djokja, Solo; *E. Java:* Madiun (26), Pulong, Pudak; Dorowati on G. Wilis (28), Ponorogo; Surabaya (Sept. 2–9); Probolinggo, G. Tengger (Bromo, 14); Malang (16); Surabaya (17–19); by sea to Batavia; *Malay Peninsula: Singapore* (Oct. 1); Johore (2–8); *Singapore* (9); *Penang* (12); home voyage *via* Calcutta, Brit. India (Himalaya), Aden and Egypt; back at Leipsic (Febr. 1876).

COLLECTIONS. His collection 1874–76 amounts to *c.* 7700 plants in 30.000 specimens,[3] at present in *Herb. N.Y. Bot. Gard.*[4] Duplicates at *Munich; Herb. Kew:* 1140 *nos* (pres. 1887–94); *Herb. Berl.:* 330 *nos* voyage 1874–76 and 35 *nos* in the *Show Mus ; Herb. Vienna* (with *Herb.* REICHENBACH): orchids

from the *East Indies; Herb. Leyden; U.S. Nat. Herb. Wash.:* 13 *Java nos; Herb. Edinb.:* 1 bundle of plants.

LITERATURE. (1) *cf.* data in Journ. N.Y. Bot. Gard. 9, 1908, p. 19–21.

(2) O. KUNTZE: 'Um die Erde. Reiseberichte eines Naturforschers' (Leipzig 1881, 2nd ed. 1888). Some of the mentioned dates are wrong.

(3) O. KUNTZE: 'Revisio generum plantarum omnium atque cellularium multarum secundum leges nomenclaturae internationales cum enumeratione plantarum exoticarum in itinere mundi collectarum' (Leipzig, London, 1891–98, 2 vols).

C. A. BACKER: 'A revision of KUNTZE's types of new Javan species' (Brittonia 3, 1938, p. 75–90).

(4) N. L. BRITTON: 'The herbarium of the late Dr OTTO KUNTZE' (Journ. N.Y. Bot. Gard. 9, 1908, p. 19–21).

BIOGRAPHICAL DATA. *Curriculum vitae* in O. KUNTZE, Monographie der Gattung Cinchona (Thesis; in the copy of the Library at Buitenzorg this *Curr. vitae* was wanting); Deutsche Rundschau f. Geogr. u. Statist. 11, 1889, p. 572–574, w. portr.; bibliogr. in O. KUNTZE, Revisio generum plantarum *etc.* 1, 1891, p. clvi; URBAN, Symb. Antill., 3, 1902–03, p. 70–71; Journ. Bot. 45, 1907, p. 127; Kew Bull. 1907, p. 100–101; Orch. Review 15, 1907, p. 66–67; Gard. Chron. 3rd ser. 41, 1907, p. 105.

Kurz, Wilhelm Sulpiz

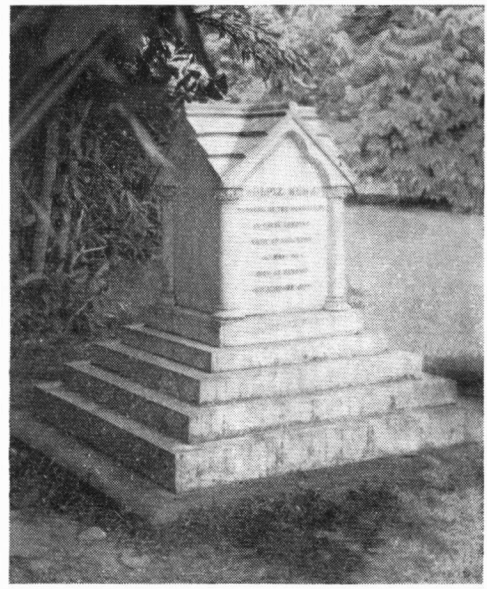
(May 5, 1834, Augsburg, Germany; Jan. 15, 1878, Penang, W of the Malay Peninsula), joined the D.E.I. Army in 1856 under the fictitious name of JOHANN AMANN.[1] From 1859–63 he worked in the Botanic Gardens at Buitenzorg, assisting TEYSMANN with the identification of plants; subsequently he was discharged from military service, sailed for British India and then (end 1864) was employed by the Government of India in the Botanic Gardens, Calcutta, as Curator of the Royal Herbarium. But for his death, he would have been made a honorary doctor at Munich.

Author of many botanical papers, mainly relating to the flora of British India.[2]

Several plants were named in his honour.

COLLECTING LOCALITIES. *1857–58. Banka:* in the environs of Batoeroessah.[3]—*1859–63. W. Java:* Buitenzorg, Toegoe, Telaga Warna, on G. Pangrango, G. Mandelawangi, G. Pantjar, *etc.*[4] He visited *Singapore* (Dec. 1863) on his way to Brit. India.[5]

COLLECTIONS. *Herb. Leyden: Malaysian* collections; partly also in *Herb. Bog.*, some numbered in the H.B. series; *Herb. Utrecht.* The *Banka* collections[3] were sent to the 'Natuurkundige Vereeniging' at Batavia, and subsequently handed to TEYSMANN, who forwarded the cryptogams and *Filices* to VAN DER SANDE LACOSTE and R. B. VAN DEN BOSCH, and the phanerogams to MIQUEL.[6] Both at Leyden and Utrecht, KURZ's collections are mislabelled J. AMAND (see there). In *Herb. Berl.:* large collection from *Java* (*a.* 1860–61) and mosses from *Banka* (*a.* 1858); the latter, we may assume, erroneously stated to have originated from J. AMAND (see there); also *Java* plants in *Herb. Vienna. Herb. Calcutta:* Brit. India collections, including a number of *Malayan* species, from *Singapore etc.; Herb. Kew:* 1528 *nos* (pres. 1867–78); *Herb. Brit. Mus.:* 432 cryptogams of Burma (pres. 1874) and other specimens (acq. with *Herb.* HAMPE and STEPHANI); *Herb. Munich; Herb.* LINDEMANN (U.S.S.R.): 5 *nos.*



MONUMENT IN HONOUR OF KURZ IN THE ROY. BOT. GARDENS, CALCUTTA

LITERATURE. (1) *cf.* Nat. Tijdschr. N.I. 27, 1864, p. 15, and 403.

(2) 'On some new or imperfectly known Indian plants' (Journ. Asiat. Soc. Bengal 39, 1870, p. 61–91; transl. by HASSKARL in Flora 1871, with annotations); 'Forest Flora of British Burma' (1877, 2 vols); *etc.; cf.* also *sub* 3.

(3) J. AMANN: 'Opsomming der vaatkryptogamen van het eiland Bangka' (Nat. Tijdschr. N.I. 23, 1861, p. 399–412; based on the collections of KURZ, TEYSMANN, HUGUENIN, and ALTHEER).

S. KURZ: 'Korte schets van het eiland Bangka' (*l.c.* 27, 1864, p. 142–235; *cf.* also in Bot. Zeitung 23, 1865, p. 6–8, 15–19, 203–204); 'Eenige kruidkundige mededeelingen' (Nat. Tijdschr. N.I. 28, 1865, p. 164–168).

(4) W. NYLANDER: 'Lichenes, quos KURZ legit in insula Java' (Flora N.R. 24, 1866, p. 129–135).

cf. Ann. Cons. Jard. Bot. Genève 21, 1919/22, p. 273.

(5) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(6) *cf.* Nat. Tijdschr. N.I. 16, 1858/59, p. 334, 349–351, 410.

BIOGRAPHICAL DATA. Flora N.R. 36, 1878, p. 113–119, incl. bibliogr.; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 27, 1889, p. 246 and in

2nd ed. by RENDLE, 1931; Encyclop. N.I. 1, 1917, p. 397; BACKER, Verkl. Woordenb., 1936. Place and year of birth differ in the various references; on the monument erected in his honour in the Calcutta Botanic Gardens the above-mentioned dates are engraved.

Kuyper, H. P.

(1876, Heerenveen, Fr., Holland; Jan. 11, 1909, Buitenzorg, Java), botanist, from 1905–07 Assistant in the Experiment Station for Rice *etc.* at Buitenzorg; since 1907 till his death Head of the Botanical Laboratories there. He made several official tours in Java.

Some orchids were named after him by J. J. SMITH.

COLLECTING LOCALITIES. *S. Sumatra:* Palembang (June–Sept. 1, *1905*);[1] *E. Java:* Malang (*1907*).[2] In *1908* he made a journey through *Java*, collecting at Telaga Bodas, *etc.*

COLLECTIONS. *Herb. Bog.* He evidently brought home living orchids, which were partly cultivated in *Hort. Bog.*

LITERATURE. (1) Author of 'De katoencultuur in de Res. Palembang' (Teysmannia 1906, p. 377–400); and of a report on the cotton culture in Palembang in Versl. Pl. Tuin Buitenzorg for 1906, p. 251–273.

(2) *cf.* Bull. Jard. Bot. Buit. sér. 2, *no* 14, 1914, p. 32 and *l.c.* sér. 3, vol. 9, 1927, p. 46.

BIOGRAPHICAL DATA. Teysmannia 20, 1909, p. 1–2; portr. in Ann. Jard. Bot. Buit. 45, 1935, pl. 2, and in Album *no* II of the 'Kon. Ned. Bot. Vereeniging'; BACKER, Verkl. Woordenb., 1936.

Kuyper, Jan

(1884, Heerenveen, Fr., Holland; x), botanist who was educated and took his Ph. Dr's degree at Utrecht University in 1909. Subsequently he was awarded the Buitenzorg Fund and came to the D.E.I to get acquainted with the tropical cultures, spending some time in the Foreigners' Laboratory at Buitenzorg, engaged in physiological research.[1] From 1910–13 Botanist in the employ of the Department of Agriculture in Surinam, at Paramaribo; 1914–26 Botanist, and later Sub-Director, of the Experiment Station for Java Sugar Industry at Pasoeroean; 1926–31 Director of the Deli Experiment Station at Medan (Sumatra); from 1932–49 Extraordinary Professor of Agronomy at Groningen University.

COLLECTING LOCALITIES. *1910. W. Java:* staying at Buitenzorg *etc.* (Jan. 23–July 2), collecting near Bandoeng, at Andamansari, *etc.*—*1915.* ? G. Tengger in *E. Java.*—*Sumatra East Coast:* foot of the Piso Piso (Dec. 26, *1928*); Medan (*1929*).

COLLECTIONS. *Herb. Bog.:* mainly orchids; in 1929 he discovered *Utricularia bifida* L. near Medan.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 34; *l.c.* p. 91; and Versl. Gew. Verg. Wis- en Nat. afd. Kon. Akad. Wet. A'dam 24 Sept. 1910, p. 350–351.

BIOGRAPHICAL DATA. Jaarb. Rijksuniv. Groningen 1933, p. 48–49; Wie is dat? ed. 3–4.

Kyber, *cf. sub* STEWART, I.

Laag, Ch. H. ter

(1890, Paramaribo, Surinam; x), entered the D. E.I. Civil Service in 1913, passed several ranks and finally was appointed Resident; he was successively stationed in N. Celebes (1913–21), in Bali and Lombok Residency (1924–26), in Sumatra (1926–29; in 1928 for 8 months in Bali again), at Batavia (1929–31), in S. Celebes (1932–35), at Batavia again (1935–36), and finally in Celebes and Dependencies (1937–41; interrupted by a short furlough in 1939). In 1941 he was pensioned off.

COLLECTIONS. *Herb. Bog.:* material of *Dipterocarpus*, collected at Karangasem (*Bali*) in Sangeh Reserve in *1927.* This date does not correspond with his term of service in Bali, so it might be that the year of collecting rightly should be *1926!*

Laan, Engbertus van der

(1891, Leeuwarden, Fr., Holland; x), was educated at Wageningen Agricultural College; since 1916 Forest Officer in the employ of the D.E.I. Forest Service, at first stationed in the teak districts of Java, and towards the end of 1924 transferred to SE. Borneo (Bandjermasin); since 1927 in Java again, successively in the teak districts, at Madioen (1933–35) and Semarang; retired in 1936.

Author of some excellent papers on Borneo forests[1] and of many typed reports on SE. and NE. Borneo.[2]

COLLECTING LOCALITIES. *E. Java:* N. Kediri (Oct. *1918*); *Centr. Java:* Pati, G. Temoeloes (Nov. *1928*).

COLLECTIONS. *Herb. Bog.:* 1918 collection on behalf of BEUMÉE (see there) and numbered in the latter's series. *Herb. For. Res. Inst. Buitenzorg:* 1 *no* from Pati.

LITERATURE. (1) E. VAN DER LAAN: 'De bosschen van de Zuider- en Oosterafd. van Borneo' (Tectona 18, 1925, p. 925–952, 1 map); 'Analyse der bosschen in de onderafd. Pleihari van de afd. Bandjermasin der Zuider- en Oosterafd. van Borneo' (*l.c.* 19, 1926, p. 103–123, 1 map); 'De bosschen van de onderafd. Tanah Boemboe van de afd. Zuidoostkust der Res. Zuider- en Oosterafd. van Borneo' (*l.c.* 19, 1926, p. 215–238, 1 map); 'De analyse der bosschen van de eilanden Poeloe Laoet en Seboekoe der Res. Zuider- en Oosterafd. van Borneo' (*l.c.* 20, 1927, p. 19–36, 1 map).

(2) In the Forest Research Institute, Buitenzorg.

Labillardière, J. J., *cf.* BILLARDIÈRE, J. J. H. DE LA

Labitag, G. J., *cf. sub* Forestry Bureau, Manila.

Labohm, Johan Frederik

(1877, Amsterdam, Holland; x), since 1903 Forest Officer in the employ of the D.E.I. Forest Service, stationed successively in the districts Soerabaja-Pasoeroean and S. Soerabaja; since 1913 in the teak districts of Central Java; in 1915 transferred to SE. Borneo (Bandjermasin), and since 1922 in Java again; he retired in 1932.

COLLECTING LOCALITIES. *1915. Centr. Java:*

(D)Japara.—*c. 1916–20. SE. Borneo:* Sampanahar, Sepoea, Tandjong, Pleihari, Sampit, Balikpapan, Boentok, Martapoera, Asem Asem, *P. Laoet*, Samarinda, *etc.—1922. W. Java:* G. Salak above Masing (May).—*1931. W. Java:* Garoet.

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg:* large collection of *Borneo* plants, numbered in the bb. series; *Herb. Bog.:* duplicates, also from *Java*.

Lach de Bère, Philip Frederik Lambertus Christiaan

(1859, Rau, D.E.I.; 1936, Vucht, N.Br., Holland), joined the D.E. Indian Army in 1880 as a 2nd lieutenant; finally with the rank of Lieutenant Colonel; retired in 1906.

COLLECTIONS. From time to time he collected orchids, *viz* in *Ceram* and *Ambon*. His wife collected some plants too.

Ladage, P., *cf. sub* Forest Research Institute, Buitenzorg.

Ladia, O. A., *cf. sub* Forestry Bureau, Manila.

Lagesca, T., *cf. sub ditto*.

Laguna, *cf. sub ditto*.

Lahaie, Félix de

(sometimes DELAHAYE or LAHAYE) (1767, Caumont (S.-Inf.), France; 1829, Montreuil, France), student gardener in the 'Jardin des plantes' at Rouen; 5 years later in the 'Jardin du Roi' at Paris, and Director of the Botany School there; gardener of the expedition in 'La Recherche' and 'L'Espérance', 1791–94 (itiner. *etc. cf. sub* BILLARDIÈRE; *cf.* also *sub* VENTENAT). LAHAIE was not interned at Semarang; when LA BILLARDIÈRE had to go to the latter place, he left the bread-fruit trees in his care.[1] He returned to France not before 1797, departing from Java on Jan. 9 of that year, staying some time in Île de France. In 1798 chief gardener of the Empress JOSÉPHINE at Trianon; in 1805 at Malmaison; in 1826 the garden was sold and LAHAIE became manager of a horticultural establishment at Montreuil, near Versailles. His large herbarium was scattered after his death.

He is commemorated in an islet and a cape in the D'Entrecasteaux Islands.

COLLECTING LOCALITIES. According to his journal[2] he collected in the following Malaysian localities: *New Ireland* (*Bismarck Archipelago*) (July 17–24, *1792*); *Ambon* (Sept. 6–Oct. 12, 1792); *Waigeo(u)* (Aug. 15–23, *1793*); *Bouro(u)* (= *Boeroe*) (Sept. 3– ? 15, 1793); *E. Java:* Soerabaja (Oct. 29, 1793–Aug. *1794*); *Java* (*1794–96*); *W. Java:* Batavia (June *1796*–Jan. *1797*). The dates given for *Waigeo* and *Boeroe* do not agree with those of DE LA BILLARDIÈRE!

COLLECTIONS. *Herb. Paris:* 1180 plants + journal (purch. 1879 from an antiquarian!).[2] His original herbarium consisted of 2699 plants, including the *nos* 699–786 from *New Ireland*, *nos* 787–1113 from *Ambon*, *nos* 1517–1669 from *Boeroe*, *nos* 1670–1962 from Soerabaja *(E. Java)*, *nos* 1963–2296 from *Java*, *nos* 2297–2419 from Batavia (*W. Java*), and the subsequent numbers from Île de France.

Herb. DELESS. (*Geneva*): plants collected by LAHAIE in *Ambon* and *Boeroe* (pres. with *Herb.* P. E. VENTENAT); *Herb.* DECAND. (*Geneva*); *Herb. Mus. Neuchâtel* (*Java* and Mauritius).[3]

LASÈGUE already mentioned that he brought home an extensive collection of living and dried plants.[4] After his death a small seed collection went to the Nat. School of Horticulture at Versailles.

LITERATURE. (1) *cf.* J. J. DE LA BILLARDIÈRE: 'Relation du voyage à la recherche de LA PÉROUSE ... pendant les années 1791 et 1792 *etc.*' vol. 2, 1799, p. 320.

(2) A. GUILLAUMIN: 'Un membre méconnu de l'Expédition à la recherche de LA PÉROUSE: le Jardinier LAHAIE' (Bull. Mus. Hist. Nat. Paris 1910, p. 356–358); 'Notice complémentaire sur le jardinier DELAHAYE (*alias* LAHAIE)' (*l.c.* 28, 1922, p. 109–110).

cf. MS. 'Catalogue-Journal de botanique' in Arch. Herb. (Phanérog.) Paris.

(3) *cf.* SYDOW, Deutscher Botaniker Kalender, 1899, p. 171.

(4) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 78, 307, 308.

LAHAIE: 'Notes des graines récoltées dans le voyage autour du monde' (MS. in Libr. Nat. Hist. Mus. Paris).

BIOGRAPHICAL DATA. LE TEXNIER: 'Le Jardin de la Malmaison. JOSÉPHINE, DELAHAYE et BONPLAND' (in 'Notices sur les jardiniers célèbres et les amateurs de jardins', Paris 1906; repr. from the 'Moniteur d'Horticulture'); Bull. Mus. Hist. Nat. Paris 1910, p. 356–358; and *l.c.* 28, 1922, p. 109–110.

Lahari, *cf. sub* Forest Research Institute, Buitenzorg.

Lahidin

native assistant of JAHERI on the NIEUWENHUIS expedition (see both) to *Borneo* in the years *1896–97*. His name might occur on some of the labels.

Lake, Harry W.

miner and surveyor who explored Johore in the Malay Peninsula and made a crossing of it from east to west.

ITINERARY. *Malay Peninsula. 1891.* Crossing Johore from E to W,[1] leaving Johor Baharu (= Johore Bahru) (Aug. 2) o/b a steamer bound for Kuala Indau (11); upstream; junction of Indau and Indau Sembrong (14); Batu Gajah, G. Janeng; upstream again (21–23, highest point navigable); 2 days' journey towards the SW to the base of G. Besar and G. Chabang-tiga; crossing the Tenany Hills (Sept. 1) into Ulu Segamat; northward towards Keratong and the Jekati River; 5 weeks later returning to Johor Baharu by way of Muar and the west coast.—*1892.* With H. J. KELSALL (see there) and plant collector MAT, crossing Johore for the second time (from Oct. 15–*c.* Nov. 6):[2]

leaving Johore Bahru by boat (Oct. 15), and the same evening anchoring at Tg Surat at the mouth of the Johore River; Tg Tenggaroh on the E. coast (16), LAKE making a rapid survey of the S. Tenggaroh; Kuala Indau (or Endau) (17), ascending the river till Kuala Sembrong, and subsequently the Indau; KELSALL climbing G. Janeng (20), while LAKE explored the rivers Mas and L'makan (= S. Emas and S. Lemakoh); back at Kuala Sembrong (21); journey up the Indau Sembrong River (starting the 23rd); Kuala Kahang (24); LAKE up the Kahang River with plant collector, while KELSALL explored the Madek River; upstream the Sembrong (30); crossing the watershed by land and from kp. Simpai on the Batu Pahat Sembrong going downstream to Patu Pahat (4); in the latter place staying for some days; G. Pulai (end of the year) (with MAT ?).—*1893.* With H. J. KELSALL mapping the Sg. Kahang and the Sg. Madek, collecting in the Ulu Kahang.[3]

COLLECTIONS. *Herb. Sing.* During the expedition *1892* he was accompanied by a plant collector; probably no collections were made on the other trips.

LITERATURE. (1) H. W. LAKE: 'A journey to the source of the Indau' (Journ. Str. Br. Roy. As. Soc. *no* 25, 1894, p. 1–9).

(2) H. W. LAKE & H. J. KELSALL: 'A journey on the Sembrong River. From Kuala Indau to Batu Pahat' (Journ. Str. Br. Roy. As. Soc. *no* 26, 1894, p. 1–24; several lists, including plant list by H. N. RIDLEY in *l.c.* p. 25–33).

(3) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 187.

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

Laleno, N., *cf. sub* Forest Research Institute, Buitenzorg.

Lam, Herman Johannes

(1892, Veendam, Gr., Holland; x), botanist, educated at Utrecht University, where he took his Ph. Dr's degree in 1919; Assistant at the Buitenzorg Herbarium, 1919–32; Chief of the Foreigners' Laboratory, Buitenzorg, and besides Extraordinary Professor at Batavia Medical College, 1932–33; since 1933 Director of the Rijksherbarium and Extraordinary Professor (in 1945 Ordinary) in the University, Leyden.

Besides of the below-cited literature, author of many systematic, plant-geographical, morphological, and other papers.

Several plant species and the genera *Lamechites* MARKGR. and *Lamiofrutex* LAUT. (= *Vavaea*) were named after him.

COLLECTING LOCALITIES & ITINERARIES. *1919. W. Java:* above Gadok (Aug. 9); G. Salak (Sept. 14); probably in this year visiting G. Bondo, Pasir Bondo and G. Pantjar (Sept. 21); G. Gedeh, Kandangbadak (Oct. 15).—*1920. W. Java:* G. Mandalagiri (March 23–26, 29–31 and Apr. 2); G. Djaja (March 27, Apr. 1); Garoet (March 27); G. Papandajan (March 28).—VAN OVEREEM *Expedition, 1920–21.*[1] *Dutch North New Guinea* with mantri AJOEB (see there): Pionier bivouac, Mamberamo (June 13, *1920;* LAM and some other participants not joining the expedition before then); Otken River; setting out (Aug. 8) to Prauwen bivouac (Edi Falls, Van Rees Mts, Meervlakte), arriving the 14th; Doorman River; setting out (Sept. 18) to Brug bivouac; proceeding (28) to G. Boetak (Idenburg River); Radio bivouac (3260 m), Doorman summit (Oct. 16), climbing the summit (3550 m); descending (29) on account of food shortage; ascending again (Nov. 7); staying 4 days at Beek bivouac (2400 m), and proceeding to Radio bivouac (arrival on the 14th); descending (17) to Dika bivouac (Swart River) (19); Prauwen bivouac (Dec. 5–24); Pionier bivouac (28); sailing (Jan. 12, *1921*) for *Ambon* and ascending G. Api on *Banda* (Jan., not collecting).[2] —*1922. W. Java:* Depok (Sept. 17); *Centr. Java:* G. Slamat (Nov. 19–22);[3] *W. Java:* G. Tjeremai (Dec. 24–26).[4]—*1923. Islands in the Bay of Batavia (Klein Kombuis, Enkhuizen, Kerkhof)* (Apr. 20–22). —*1925. W. Java:* Buitenzorg (March 30); Tjiboerial (Apr. 10); G. Salak (May 20–21); tea estate Tjianten (June 21); G. Tjibodas, Tjampea (July 19); Buitenzorg (Aug. 20).—*Expedition to Celebes, Moluccas, etc., 1926* (March 31–July 20).[5] *N. Celebes:*[6] arrival at Manado (Apr. 12); by car along the coast to Tanahwangko (13); to Ratahan *via* Tomohon (14); G. Manimporok (15); Bélang on the Gulf of Tomini (16); crossing the Minahassa by car *via* Tombatoe, Toempaän, Kawangkoan, Rembokken (Lake Tondano), Tondano, Sarangan, Ajermadidi and back to Manado (17); by steamer (departing in the evening of the 19th) *via Groot Sangi(he)* (Taroena) (20) to the *Talaud Islands: P. Karakelong* (Apr. 21–May 16),[7] making trips from Beo (Apr. 21–28); by proa to Lobo (29), along Koeala Bahewa (= K. Lobo or K. Rae), past the tributary K. Malaboe and making bivouac at Tatamboewe (Apr. 30–May 11), returning to Lobo along the Koeala, arriving the 15th; *via Noesa Maraloem* (=*P. Jolly*) back to Beo (16), staying till the 19th; *P. Salebaboe* (May 20–25): Liroeng, G. Ajambana (22 and 23 on the summit); *via* the small lakes Danon Timbalang'a and Danon Bindoek back to Liroeng (24); *P. Kaboeroeang* (= *Kabroeang*) (May 26–27); landing at Mangarang (26) and excursion in eastern direction till half-way the island (G. Boewidoewawi), Koeala Ampas; *P. Salebaboe:* collected at Moronge near Lota Swamp (28); *P. Karakelong* (May 29–June 9): landing at Poeloetan; G. Piapi (May 31–June 1 on the summit); on foot *via* Poeloetan and Dahang to Beo (June 4–9); *P. Miangas* (June 11–12);[8] *Nenoesa* (= *Nanoesa*) *Islands: P. Merampi* (June 13), *P. Garat* (14); *P. Morotai* (June 16–July 1): Wajaboela (16–17); to Pilowo (18); Doro-Doro, Goegoeti bivouac (20–26); Marilako (27–29); Wajaboela (July 1); *via* Djailolo in *Halmaheira,* and *Ternate* (2–5), to *Tidore* (July 6–9): climbing the Peak (8); *via Ternate* (10–11), *Batjan* (13), *Ambon* (14), and Makassar (*SW. Celebes*) (16), back to Priok (arriving July 20).—*1928. W. Java:* Tjigombong (March 18); Wates (Oct. 7).—*1930.* Tjikopo (Sept. and Nov. 9); G. Salak (Dec. 25).—*1931. P. Hoorn* (Bay of Batavia); Priangan (Apr. 4); Megamendoeng (July 28);

G. Salak (Aug. 3); Tjikopo (Oct. 18); *E. Java:* Madioen, Sarangan (Dec.); *Centr. Java:* Bandjarnegara.—*1932. W. Java:* Bolang, Tjikasoengka (Febr. 21); Geger Bintang and Tjisaroea Zuid (South) (June 19); Tjigombong (July 10).—*1933.* Pondok Gedeh (Jan. 8); Mountain Garden Tjibodas (Jan. 27).

COLLECTIONS. *Herb. Bog.:* in total 3850 *nos;* the *Java* numbers provided with a J., the *New Guinea* collection amounting to 1711 *nos* (including *Fungi,* lichens and *Algae*),[9] 983 *nos* from *Talaud* and *Nanoesa Islands,* 228 from *Morotai* and a small collection from *N. Celebes* and the Peak of *Tidore;*[10] *Herb. Leyden:* dupl. from *Java, New Guinea, Celebes,* and the *Moluccas; Herb. Utrecht: New Guinea* (1920) and *Java* (1925) plants.

His orchid collection from the *Moluccas* was studied by J. J. SMITH.[11]

According to the herbarium lists,[12] the collecting on the Doorman summit (New Guinea) took place daily between Oct. 1st and Nov. 18th; this does not agree with the interruption recorded in literature.

He collected wood samples in *Celebes, Talaud* and *Morotai.*

Living plants from *Morotai* and *P. Karakelong* in *Hort. Bog.*

LITERATURE. (1) 'Mamberamo'. De expeditie naar Centraal Nieuw Guinea (Het Indische Leven, August 1920); 'De wetenschappelijke expeditie naar Nieuw-Guinee' (Bandoeng 1921, 7 pp.).

H. J. LAM: 'Iets over de botanische resultaten van de Noord-Nieuw-Guinea expeditie 1920' (Teysmannia 32, 1921, p. 289–326 and rectification in *l.c.* 33, 1922, p. 54); 'Nieuw Guineesche aspecten' (Trop. Nat. 11, 1922, p. 38–45, 10 fig.); 'Iets over den akkerbouw bij een papoeastam in Centraal Nieuw-Guinea, benevens enkele opmerkingen over land en flora van dat eiland' (Hand. 2e N.I. Natuurwet. Congr. 1922, p. 156–161); 'Vegetationsbilder aus dem Innern von Neu-Guinea' (in SCHENCK & KARSTEN, Vegetationsbilder, 15. Reihe, Heft 5–7, 1924); 'Fragmenta Papuana' I-VII (Nat. Tijdschr. N.I. 87, 1927, p. 110–180; *l.c.* 88, 1928, p. 187–227, 252–324; *l.c.* 89, 1929, p. 67–140, 291–388; in total with 93 fig.; transl. into English by L. M. PERRY in Sargentia 5, 1945, 196 pp., 32 fig., 2 maps); 'Materials towards a study of the flora of the island of New Guinea' (Blumea 1, 1934, p. 115–159, 3 fig.); 'De vegetatie en de flora van Nieuw-Guinee' (Nieuw Guinee 1, 1935, p. 187–210, fig. 36–43, 1 map).

(2) *cf.* Tijdschr. K.N.A.G. 1922, p. 597–604.

(3) H. J. LAM: 'Aanteekeningen betreffende een bestijging van den G. Slamat' (Trop. Nat. 13, 1924, p. 17–25, 6 fig.).

(4) H. J. LAM: 'Een bestijging van den G. Tjaremé' (Trop. Nat. 14, 1925, p. 2–10, 2 fig.).

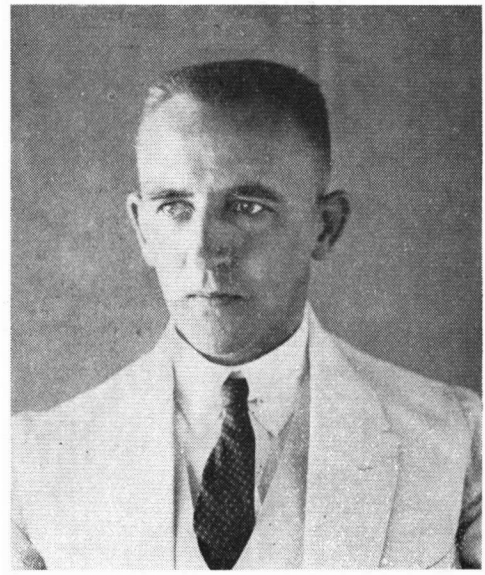
(5) Extracted from his diary, deposited at the Buitenzorg Herbarium.

L. B. HOLTHUIS & H. J. LAM: 'A first contribution to our knowledge of the flora of the Talaud Islands and Morotai' (Blumea 5, 1942, p. 93–256).

(6) H. J. LAM: 'Botanische aanteekeningen van den Minahassa' (Trop. Nat. 20, 1931, p. 209–219, 6 fig.).

(7) H. J. LAM: 'Een plantengeographisch dorado' (Hand. 4e N.I. Natuurwet. Congr. 1926, p. 386–397).

(8) H. J. LAM: 'Mianghas, the disputed isle' (Interocean 9, 1928, p. 195); 'Miangas (Palmas)' (Ind. Comité Wet. Onderz. 6, Batavia 1932; with plant list).



LAM

(9) Descriptions of new plants in Nova Guinea vols 14 and 18, and in Beitr. z. Flor. Papuas. from *no* 11 onwards (= ENGL. Bot. Jahrb. 59, 1925→). Bryophytes by H. REIMERS in Hedwigia 69, 1929, p. 114–136.

(10) Systematic part of 'A contribution to the flora of the Talaud Islands and Morotai' by L. B. HOLTHUIS in Blumea 5, 1942, p. 146–256.

(11) In 'On a collection of Orchidaceae from the northern Moluccas' (Bull. Jard. Bot. Buit. sér. 3, vol. 11, 1930, p. 67–81).

(12) Lists of the collections in Herb. Buitenzorg.

BIOGRAPHICAL DATA. Wie is dat? ed. 3–4; portr. in Ann. Jard. Bot. Buit. 45, 1935, pl. 3, and in Chron. Bot. 1, 1935, p. 27; BACKER, Verkl. Woordenb., 1936; *Curr. vitae* in Rijksherbarium Leiden.

Lamarck, J. B. A. P. de

COLLECTIONS. In *Herb. Berl.:* 100 spec. from the *Philippines etc.* (*cf.* Beih. Bot. Centr. Bl. 34, 1917[1], p. 415). This rightly should be *ex Herb.* LAMARCK.

Lamartinière, *cf.* MARTINIÈRE, DE BOISSIEU LA

Lambach, P. J.

COLLECTING LOCALITIES. *1913. Sumatra*

West Coast: Padang Highlands with GRASHOFF (see there).—*1916. S. Sumatra:* Palembang, Lematang Oeloe.[1]

COLLECTIONS. *Herb. Bog.* and *Herb. For. Res. Inst. Buitenzorg* (with original labels): collection *1916* made on behalf of K. HEYNE (see there), *nos* 1200–1361.

LITERATURE. (1) *cf.* Jaarb. Dept Landb. Nijverh. & Handel (Buitenzorg) 1916, p. 122.

Lambak bin Omar

Ranger in the Forest Department, Malay Peninsula, since 1903; now retired.

COLLECTING LOCALITIES. *Malay Peninsula:* in Pahang, Rumpin; Kuantan (*1931*); mainly in E. Pahang.

COLLECTIONS. *Herb. Kuala Lump.*, numbered in the C.F. (see *sub* Conservator of Forests) series. Evidently duplicates at *Kew* and *Singapore.*

Lambert

is cited as the collector of plants in the *Moluccas* in *1816*,[1] which are said to be preserved in *Herb.* DECAND. (*Geneva*), and of a *no* 135 from *Singapore.*[2] The plants mentioned are probably *ex Herb.* A. B. LAMBERT, but not collected by himself. Part of the latter's herbarium is preserved in the *Brit. Mus.* (purch. in 1842; mainly coll. RUIZ & PAVON from America);[3] and in *Herb.* DELESS. (*Geneva*). 'Catalogue of the sale' in Brit. Museum and at Kew.

LITERATURE. (1) *cf.* Pflanzenreich 46, p. 291.
(2) *cf. l.c.* 103, 1938, p. 279.
(3) *cf.* The History of the collections . . . of the British Museum' 1, 1904, p. 87.

Lambert, William Henry

(1911, Quilcene, Wash., U.S.A.; x), forest officer, educated at the University of Washington, Seattle (B.S.F. in 1932); eight years in the employ of the U.S. Forest Service; for 5½ years in C.A.C., U.S. Army, of which 2½ in the islands of the Western Pacific. At present Professor of Military Science and Tactics at the University of San Francisco, Cal.

He made military expeditions into the interior of New Guinea in 1944, and in the Philippine Islands in 1945–46.

COLLECTING LOCALITIES. *1945. Philippine Islands, S. Mindoro:* in vicinity of San Jose (June–Nov.).[1]

COLLECTIONS. *U.S. Nat. Herb. Wash.: c.* 125 specimens, each in duplicate, numbered 1–125.

LITERATURE. (1) W. H. LAMBERT: 'A Forester's observations in Mindoro' (Journ. Forestry, Jan. 1947); 'Pipeline of Pandan' (Amer. Forests, Nov. 1945).

Lambton, Reverend Alfred Harbord

(1887, 'in the bush', North Queensland, Australia; x), was educated in Queensland, going to St Francis Theological College at Brisbane; in 1912 ordained Deacon in the Church of England, next year made a priest; worked in North Queensland (until 1923), spent one year as Chaplain in Egypt and Palestine in 1918 during World War I. In 1923 he went to New Guinea as a missionary; from 1923–33 stationed at Dogura, Eastern Division of Papua; in 1933 he opened a new Station named Sefoa, situated at Cape Nelson on the NE. coast of Papua. In 1936 he was compelled to resign owing to very serious eye trouble; at present Rector of Charters Towers, Queensland.

COLLECTING LOCALITIES. *1923–36. SE. New Guinea,* Territory of *Papua:* near Goodenough Bay in the mountains, NE. Division.

COLLECTIONS. In *Herb. Brisbane. Pleiogynium papuanum* WHITE *n.sp.*, type of which in *Herb. Brisbane,* co-type in *Kew* and dupl. in *Herb. Berl., Arn. Arbor.* and *Herb. Bog.*[1]

LITERATURE. (1) *cf.* Proc. Roy. Soc. Queensl. 45, 1933, p. 27–28, pl. 3.

Lamington, Lord

(= CH. W. A. NAPIER ROSS COCHRANE BAILLIE) (1860–1940), English statesman who travelled in Siam and Honkong; from 1896–1901 Governor of Queensland. He returned to England in 1901 and filled the office of Governor of Bombay from 1903–07.

F. M. BAILEY named some plants after him.

COLLECTING LOCALITIES. *SE. New Guinea:* arrival at Port Moresby with Sir W. MACGREGOR and H. M. NELSON (Apr. 25, *1898*); boat tour along the coast (itiner. and liter. *cf. sub* F. M. BAILEY), LAMINGTON making a short cut from Milne Bay to Mullin's Harbour (May 2).

COLLECTIONS. *Herb. Brisbane:* some plants collected during the above-mentioned trip (for literature concerning the plants *cf. sub* F. M. BAILEY).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Lammers, L. R., *cf. sub* Forest Research Institute, Buitenzorg.

Lampe, M., *cf. sub ditto.*

Lamson-Scribner, F., *cf.* SCRIBNER, F. LAMSON

Lamster, Johann Christian

(1872, Maastricht, L., Holland; x), came as a 2nd lieutenant to the D.E.I. in 1895; on the staff of the Topographical Service there, 1902–14; placed at the disposal of the Forest Service in 1917 and appointed Head of the Brigade for Forest Reconnaissance in the islands outside Java, stationed at Batavia;[1] in March 1920 he resigned. For some time teacher at a secondary school at Batavia; in 1921 appointed Custodian in the Museum of the Batavian Society for Arts & Sciences. In 1924 he returned to Holland, and was appointed Custodian of the Colonial Institute at Amsterdam; in 1936–38 acting Director of the Ethnology Division.

COLLECTING LOCALITIES. *W. Borneo:* Sambas (Dec. *1916*).—*N. Sumatra,* Atjeh: Longha (*19 . .*).

COLLECTIONS. *Herb. Bog.:* 2 *Borneo* species. In *Hort. Bog.*: some living orchids for J. J. SMITH.

LITERATURE. (1) Author of 'Onderzoek van Wildhoutbosschen' (Weltevreden); 'Een uitbarsting van de modderwel Kesångå' (Tijdschr. K.N. A.G. 1929, p. 368); a typed report on the exploration of Bajoeng-Lintjer, Palembang and S. Djambi 1917–18 (in the For. Res. Inst. Buitenzorg).

BIOGRAPHICAL DATA. Javabode March 1, 1938; Persoonlijkheden in Nederland, 1938, + portr.

Landman, Sylvany

gathered plants at Doole on the island of *Flores* (*Lesser Sunda Isls*) on Nov. 13–14, *1679*. The specimens are with *Herb.* PETIVER & SLOANE in the *Brit. Mus.*, they are mostly referred to RAY. He must be identical with SYLVANUS LANDON (see below), who is cited to have collected in *Flores*.

Landon, Sylvanus

(*fl.* 1679–1701), surgeon who brought plants to PETIVER, from Spain, Azores, *Borneo*, and *Flores* (*cf.* Mus. PETIV., 1695–1703, p. 45, 94; and *l.c.* 1702, p. 63). *Herb.* PETIVER with *Herb.* SLOANE in *Brit. Museum*. Probably also some dupl. from *Borneo* in *Herb. Acad. Sci. Leningrad* (with PETIVER plants, pres. before 1768).

cf. also *sub* LANDMAN.

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 27, 1889, p. 247, and in 2nd ed. by RENDLE, 1931.

Lands (or Lando), R. E.

COLLECTIONS. A serviceman during World War II, sent two orchids in alcohol from *New Guinea* and the *Philippines* to *U.S. Nat. Herb. Wash.*

Lane-Poole, Charles Edward

(born 1885), Commonwealth Inspector-General of Forests, who in 1922–24 made explorations in New Guinea, which resulted in an excellent book on the forests of that island.[1]

Spathoglottis lane-poolei ROGERS and *Hoya poolei* WHITE & FRANCIS were named after him.

ITINERARY. *1922–23.*[2] *SE. New Guinea, Papua:* forests near the Vanapa River; Veimauri River (May–June *1922*); Aroa River, Northern Division; Sopita, Buna Distr., Hydrographers Range (Aug.) and Embi Lake (Aug.); Baroi River (Oct.–Nov.); Purari Delta (Oct.); Kikori River; Vailala River; Ubua Mts near Laruna (Centr. Division); Upper Mamai; Mt Obree (Febr. *1923*); Jorobaiva, Centr. Division (Febr.). *Sarawaket Expedition* in *NE. New Guinea*, Mandated Territory: Finschhafen (Nov. 4, 1923); by boat (Nov. 7) to Helsbach and on foot to Sattelberg; Nganduo–Junzain–Joangey–Tobu (Nov. 8–13), Ogeramnang; summit of Sarawaket (Nov. 19); back (20) *via* Joangey, staying at Sattelberg.—*1923–24.*[3] *NE. New Guinea*, Mandated Territory: Finschhafen Distr. (Dec. *1923*). *Expedition to the Bismarck Range:* from Madang along the coast to Erema Hafen; Keku, proceeding west to the Ramu; Mountung (Febr. 15, *1924*); return to the Ramu (Febr. 19); Ongoruna, Doriba, Hanep, Kohu; back *via* Ongoruna–Kwato–Erema–Madang (Febr. 28–March 4) to get the supplies himself; sailing from Madang (March 12) to Bogadjim; Kwato; the Mindjim (15); Kohu (19–23), Amage; Ramu (Entapotowup) (26); back at Kohu (28); Hanep (31); Waimeriba (Apr. 4); Korike, Koromo; following the Kirei River; ascending Mt Otto (3500 m) (Bismarck Range) (Apr. 8); returning *via* Waimeriba–Kohu (9–11); Kaduba, Kwato (13); Madang (15).—In *1924* he also collected at: Malu (Middle, and Lower Sepik River) (July); *New Han(n)over:* Likdin (Aug.), Mavelo River (Sept.); *New Ireland* (northern half); *New Britain* (north coast and near Wide Bay inland).

COLLECTIONS. In total > 788 *nos*, in *Herb. Brisbane;* dupl. in *Herb. Arn. Arbor.*, *Kew* (pres. 1926), and some in *Herb. Bog.*

The collection made in *Papua* consists of 410 *nos*, mostly timber trees (153 sterile).[4]

The collection of the Sarawaket expedition is numbered 501–588. The expedition to the Bismarck Range ended rather badly, LANE-POOLE lost his herbarium assistant, all his specimens and a large portion of his notes, including his diary covering the early part of the journey from Stephansort to the Ramu.

Part of the collections was elaborated.[5]

LITERATURE. (1) C. E. LANE-POOLE: 'The forest resources of the territories of Papua and New Guinea' (Parliam. Commonw. Austr. 1925); *cf.* also 'Forests of Papua and New Guinea' (Imp. For. Journ. 4, 1925, p. 206–234).

(2) *cf.* 'The forest resources *etc.*' *l.c.* p. 175–181.

(3) *cf. ditto l.c.* p. 181–200.

(4) *cf.* Ann. Rep. Papua for 1922/23, p. 11.

(5) Orchids by R. S. ROGERS in Transact. & Proc. Roy. Soc. South Austr. 49, 1925, p. 254–265 and some in *l.c.* 54, 1930, p. 37–47.

C. T. WHITE: 'Two Papuan species of Ardisia' (Journ. Bot. 65, 1927, p. 248).

C. E. LANE-POOLE & W. D. FRANCIS in Proc. Roy. Soc. Queensl. 38, 1927, p. 225–261 and *l.c.* 39, 1928, p. 61–70.

cf. also A. C. SMITH in Journ. Arn. Arbor. 22, 1941, p. 497–528; and C. T. WHITE in *l.c.* 23, 1942, p. 79.

BIOGRAPHICAL DATA. Who's who.

Lang, F. M.

Government Veterinary Surgeon at Waingapoe, Soemba, Lesser Sunda Islands.

COLLECTIONS. *Herb. Pasoer.:* 15 *nos* from *Soemba* (coll. *1922–23*).

Lang, Martha C. L.

(1875, Buitenzorg, Java; x), from 1910–32 in the employ of the Buitenzorg Herbarium, finally as Custodian. After her retirement still living at Buitenzorg.

Some ferns were named after her.

COLLECTING LOCALITIES. *W. Java:* Tjibodas (slope G. Gedeh) (Sept. *1913*) and probably at Tjiapoes (G. Salak) (by LANG without initials!).

COLLECTIONS. *Herb. Bog.:* a few plants.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936, *sub* marthae.

Langlassé, Eugène

(† Jan. 16 or 19, 1900, Buenaventura, Colombia), horticulturist who travelled in Cochin-China, the Malay region (see below),[1] and some years later in Mexico (1898–99), and Colombia. He died from yellow fever.

Some plants were named after him.

ITINERARY.[2] *1894–95. W. Borneo* (May 31–June 25, *1894*), visiting: Silat (on the Upper Kapuas), Mt Hjang, Mt Sagu, Silat River, Mt Glam, Kapuas River, Sintang; *Singapore Isl.* (July 10–Aug. 17), visiting: Bt Timah, Kranji and forest near Kranji, Bt Mandi, Chan Chu Kan, *etc.; Île Ste Barbe* (situated half-way Lingga and Pontianak in W. Borneo, a little N of the equator; = *? P. Pedjantan*) (Aug. 26–Sept. 4); *Singapore Isl.* (Sept. 15–18), on Bt Mandi and Bt Timah; *Philippines, Luzon*(Oct. 15–Jan. *1895*), visiting: Pagsajan, Paete (hill), Botocan Fall, Majayjay, Mt Banajao (Oct. 24–Nov. 4, and in Jan. *1895*), hill of San Matiquiou, Monte de Pieda.

COLLECTIONS.[2–3] *Herb. Paris: nos* 1–96 from *Borneo, nos* 1–215 and 285–335 from *Singapore, nos* 206–297 from *Île St Barbe, nos* 1–166 from *Luzon. Herb.* DECAND. *(Geneva):* 454 *nos* from *Borneo* and *Singapore*, 151 from the *Philippine Islands, including no* 297 *(Piper langlassei DC.)* from Luzon.[4] Some dupl. in *Herb.* BOISS. *(Geneva).*

Plants from Mexico and Columbia in *Herb. Paris*, dupl. in *Herb. Berl.* (1200 *nos*), in *Kew* (211 *nos*), and in several other European and American herbaria.

LITERATURE. (1) E. LANGLASSÉ: 'Les palmiers utiles, aux îles Philippines' (Rev. Horticole 1896, p. 462–464); 'Emploi des Bambous en Malaisie' (in *l.c.* 1897, p. 243–244); and other papers.

(2) *cf.* Data in Arch. Herb. (Phanérog.) Paris.

(3) *cf.* Bull. Mus. Hist. Nat. Paris 22, 1916, p. 410–416.

(4) *cf.* Ann. Cons. Jard. Bot. Genève 2, 1898, p. 273; and letter from LANGLASSÉ (dated June 1, 1895) in the archives of the Conserv. Bot. Geneva.

BIOGRAPHICAL DATA. Bull. Soc. Bot. France 47, 1900, p. 117–119; Rev. Horticole 1900, p. 414; BACKER, Verkl. Woordenb., 1936.

Langsa, G. C. O., *cf. sub* Forest Research Institute, Buitenzorg.

Lanjouw, Lodewijk Roelof

(1914, Deventer, O., Holland; x), educated at the Horticultural School at Boskoop, Holland; since 1939 Assistant Botanist at the Buitenzorg Herbarium, resigning in 1947.

COLLECTING LOCALITIES. *W. Java:* G. Toegoe (Abjar) near kali Tjinangsi (Oct. *1940*).

COLLECTIONS. *Herb. Bog.:* few numbers.

Lanschot

is cited by F. P. JONKER[1] as the collector of *Burmannia longifolia* BECC. on Mt Boeroe in *Celebes*. The cited plant in *Herb. Leyden*.

Upon examination the label turned out to have been written in the illegible handwriting of J. J. SMITH; the real collector was RACHMAT (see there) on Mt Boesoe in *Celebes* (Aug. *1913*).

LITERATURE. (1) *cf.* 'A monograph of the Burmanniaceae' (Thesis, Utrecht 1938) p. 62.

Laren, P. M. van

Assistant Resident of Tjiriengien, collected some plants in Kediri, *E. Java, about 1860.*

COLLECTIONS. The material was originally sent to the 'Natuurkundige Vereeniging' at Batavia, from where it was forwarded to BINNENDIJK at Buitenzorg.[1] If preserved, *probably* at *Buitenzorg* or *Leyden*.

LITERATURE. (1) *cf.* Nat. Tijdschr. N.I. 21, 1860, p. 325.

LaRue, Carl Downey

(1888, Williamsville, Ill., U.S.A.; x), from 1917–20 botanist in the employ of the U.S. Rubber Company, staying for some time in Sumatra East Coast (Kisaran), Instructor in Botany at Michigan University, 1920–23; Specialist in Rubber Investigations attached to the Amazon Expedition of the U.S. Dept of Agriculture, 1923–24; since 1924 Assistant Professor in the University of Michigan. In 1940 he went to Bolivia as a rubber expert; at present Professor at Michigan University.

Memecylon laruei MERR. was named after him.

COLLECTING LOCALITIES. *1918. Sumatra East Coast:* Asahan and Karo Plateau (*cf. sub* H. H. BARTLETT).—He visited *W. Java, e.g.* Tjibodas (Oct. 22–23, *1919*).

COLLECTIONS. *cf. sub* H. H. BARTLETT, also for literature. He sent specimens (? living) to *Singapore* in *1918*.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Lasquety, P., *cf. sub* Forestry Bureau, Manila.

Lassacquère, G. de

temporary Civil Administrator on *P. Japen*,[1] north of Dutch New Guinea, collected a *Dipterocarpacea* near Ansoes (Oct. *1931*), which is preserved in *Herb. Bog.;* in *1932* he presented living plants to *Hort. Bog.*

LITERATURE. (1) Author of 'Memorie van overgave onderafd. Jappen-groep' (1932).

Lasses, M.

is cited as the collector of *Turraea billardieri* BENN., *no* 32, from *SE. New Guinea*.[1] The specimen is preserved in *Herb.* DECAND. *(Geneva)* (pres. by F. v. MUELLER, Melbourne). As no other data concerning this collector are known to us, the label might have been misread, *e.g.* for W. G. LAWES, the initial M. standing for 'Monsieur'.

LITERATURE. (1) *cf.* C. DECANDOLLE in Bull. Herb. BOISS. sér. 2, vol. 3, 1903, p. 163.

Latif, Soetan Mahmoed

(1892, Priaman, Sumatra; x), got his education as agriculturist in Holland; Agricultural Officer in Sumatra, 1915–20; planter, and subsequently Labour Controller of the Inspection of Labour in the

Outer Possessions, 1929–33; before the war Head of an Indonesian school for agriculture at Kajoe Tanam, SW of Padang, Sumatra. Orchid amateur.

Oberonia latifii J.J.S. was named after him.

COLLECTING LOCALITIES. *1932. Riouw-Lingga Archipelago: P. Batan* (= *Batam*) (May 8); *P. Penoeba* (July); *P. Bintan:* Tandjong Pinang (Oct.). Also in part of the Riouw-Lingga Residency on the mainland of *Centr. Sumatra* (Indragiri): Sg. Katiman.—*1933–39. Sumatra West Coast:* G. Tandikat (Dec. 25, *1935*); Bt Ambatjang (between Padang Pandjang and Kajoe tanam) (Apr. *1936*);[1] watershed between Asam Poelau and Lake Singkarak (July 1936); Ngalau Oere, 600 m alt. (July 17, *1939*); *etc.*

COLLECTIONS. *Herb. Bog.:* > 100 *nos*, principally orchids; some in *Herb. Leyden.*

LITERATURE. (1) S. M. LATIF: 'Onze wandelingen in de natuur' (Sekola Ekonomi Inst. v. Prakt. Landbouw- en Handelsonderwijs, Kajoe Tanam, S.W.K., Peroespektoes 1937, p. 21–27, 5 fig.); 'Boschwandelingen om orchideeën' (in Sumatra Bode 1937).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936, *sub Addenda.*

Latterman, M.

of Rotterdam Estate B, Medan, Sumatra East Coast, forwarded a living orchid and *Rhododendron* from *Sumatra* to *Hort. Bog.* in *1908.*

Latuperisa, Lt, *cf. sub* Forest Research Institute, Buitenzorg.

Laurens

after whom J. J. SMITH named *Dendrobium laurensii* (*cf.* BACKER, Verkl. Woordenb., 1936); *cf.* also the next two entries.

COLLECTING LOCALITIES. *Moluccas: Halmahera* (*1910*).

COLLECTIONS. *Hort. Bog.:* 40 living orchids (pres. 1910), partly preserved in *Herb. Bog.*

Laurens

COLLECTIONS. *Herb. Bog.: Vatica teysmanniana* BURCK *s.n.* from *Bengkalis*, E of Sumatra (*cf.* VAN SLOOTEN in Bull. Jard. Bot. Buit. sér. 3, vol. 9, 1927, p. 92); *cf.* also preceding entry.

Laurens, H.

of Kalianda, ? Lampong Distr. (*S. Sumatra*); cf. also the two preceding entries.

COLLECTIONS. *Herb. Kol. Mus.* (= *Ind. Inst.*) *Amsterdam:* some dried material (pres. *1897*).

Lauterbach, Carl Adolf Georg

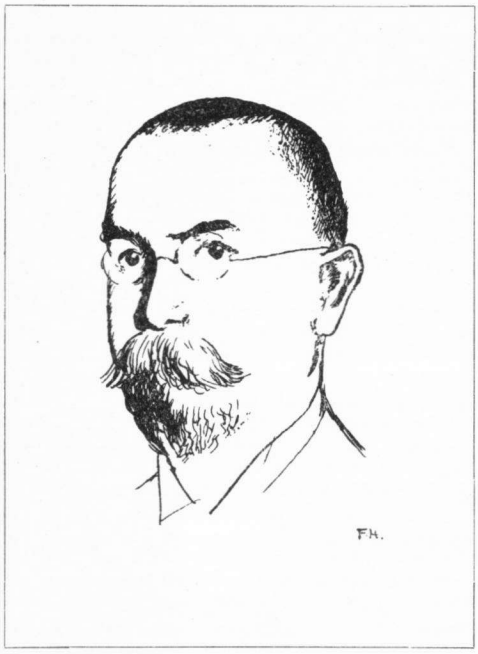
(1864, Breslau, Germany; 1937, Stabelwitz near Breslau, Germany), rural economist, owner of an estate at Stabelwitz near Breslau, who made some New Guinea expeditions. From 1899–1903 (1905 according to the below-cited German biography) Director of the German New Guinea Company.

The 'Beiträge zur Flora von Papuasien' published in ENGL. Bot. Jahrb. (1912 →) were edited under his auspices, he himself being one of the contributors. Besides, he is the author of many papers pertaining to the vegetation of New Guinea.[1]

He is commemorated in several plant species and in the genus *Lauterbachia* PERK.

ITINERARY. *Voyage round the world via* America, Hawaii, New Zealand (Aug.–Sept. 1889), Victoria (Oct.), New South Wales (Nov.), visiting *Thursday Isl.* (Jan. 3, *1890*) and *Java:* some 10 days at Buitenzorg (Jan.), in *E. Java* climbing G. Ardjoeno (Febr. 12–13); in March 1890 sailing for former *Kaiser-Wilhelmsland, NE. New Guinea:*[2] arriving in April, originally with the intention of exploring the Kaiserin Augusta River, which plan was abandoned, however; Finschhafen (May 1), Butauèng (3); *Bismarck Archipelago: Neu Pommern* (= *New Britain*), Blanche Bay; *Kerawara Isl.* (May 14); *New Britain*, at Ralum (14–21), Cape Gazelle, Mt Mutter (28), Mt Kaje (29), Mt Mutter (June 3), *etc.*, and sailing for *Nusa Isl.* (arriving June 11); back to the mainland of *NE. New Guinea:* Finschhafen (July 1– . .) and neighbourhood; Sattelberg (July 22–27); by boat to the Huon Gulf (early in Aug.); Bonga near Finschhafen (26–27); *Tami Islands* (28); Finschhafen (Sept.–early in Oct.); Astrolabe Bay, Konstantinhafen (Oct. 11). —*Gogol Expedition, 1890,*[3] to former *Kaiser-Wilhelmsland, NE. New Guinea.* Starting (Oct. 15) in company with KÄRNBACH; the Gogol River proved to be innavigable and so the expedition was made by land; break-up into the interior (not before Nov. 6); the party came to a stand-still on account of illness (26); KÄRNBACH made an attempt to proceed with part of the members, but returned the same day (29), completely exhausted; returning (Dec. 1), making camp at the mouth (Dec. 4) (in total covering 70 km); passage to Konstantinhafen (9); sailing from New Guinea (Jan. 1891) back to Germany.—*1896. Kaiser-Wilhelmsland Expedition.*[4] Embarking at Genoa (March 10); Friedrich Wilhelmshafen (Apr. 23); while E. TAPPENBECK put the finishing hand to the equipment, LAUTERBACH and O. KERSTING set out from Erima Station (Astrolabe Bay) for an ascent of the Oertzen Mts (Taju Mana) (May 12–18; the 16th on the summit); the whole expedition starting from Erima (May 30) in western direction, partly by way of the Nuru Basin (Elisabeth River); KERSTING and TAPPENBECK returning (June 6) to Stephansort to fetch stores, while LAUTERBACH undertook an ascent of the Sigaun; KERSTING back in bivouac again, LAUTERBACH breaking up to the coast to lend a hand to TAPPENBECK; after re-union proceeding downstream in western direction (July 6); reaching the Ramu (10), making camp at the base of the Bismarck Mts; downstream by canoe (Aug. 3–15), returning on account of shortness of food; bivouac at the base of the Bismarck Mts (Sept. 3) (in the meantime it had become evident that the Ramu River was identical with the 'Ottilienfluss' which was discovered by VON SCHLEINITZ in 1886); LAUTERBACH and KERSTING ascending a summit of 990 m alt. of the promontory of the Bismarck Mts (Sept. 4–6); return by the same way (8); back at Stephansort (16); *Neu Pommern* (= *New Britain*): Herbertshöhe (Oct. 13–20); voyage home, possibly

via Java (according to BACKER, Verkl. Woordenb., 1936, LAUTERBACH paid a 2nd visit to that island in this year), *Singapore* (Nov. 9); Genoa (Dec. 9).[5] —*1899. Moluccas: Ambon* and *Bandaneira* (Aug); *3rd Ramu Expedition*,[6] to former *Kaiser-Wilhelmsland, NE. New Guinea* (with RODATZ and KLINK):



LAUTERBACH

mouth of the Ranu (= Ramu) (Sept. 28); main station near Arumene (Oct. 10), and proceeding by canoe; it is evident from his collections that he stayed near the Ramu in Oct., Nov. 4 in the Bismarck Mts, Nov. 20 near the Schumann River, and back at the Ramu mouth on Dec. 19; in Jan. or Febr. *1900* the expedition returned to Astrolabe Bay. He probably sailed for Germany shortly after, as in the meantime he was appointed Director of the New Guinea Company.—According to the cited German biography he set out once more on a tour of inspection in *1902*, but returned to *Singapore* on account of illness.

COLLECTIONS. *Herb. Berl.:* 1500 *nos* of siphonogams from *Kaiser-Wilhelmsland* (1890–91 coll.) and together with KERSTING & TAPPENBECK 931 *nos* (1896); 67 *Fungi* from *New Guinea* and *New Hanover;* 173 mosses from *New Guinea*, Australia and *Java;* 200 *nos* of siphonogams from the *Moluccas* and *New Guinea* (1899). Probably the specification is rather rough, so he may have collected siphonogams in *Java* too.

New Guinea dupl. in *Herb. Bog.* (128), *Brit. Mus.* (108), *Kew* (20); *Herb. Bot. Gard. St Petersb.* (= *Leningrad*) (7); some in *U.S. Nat. Herb. Wash.; Herb. Leyden* (*New Guinea, Ambon, Bandaneira*). In *Herb. Breslau: c.* 25.000 specimens from *New Guinea* and the Pacific (pres. *c.* 1938, probably bequest of his private collection).

Several papers are based on his collection;[7] besides botanical, he made ethnological and zoological collections.[8]

LITERATURE. (1) C. A. G. LAUTERBACH: 'Die geographischen Ergebnisse der Kaiser Wilhelmsland Expedition' (Zeitschr. Ges. Erdk. Berl. 33, 1898, p. 141–177 + 2 maps); 'Neuere Ergebnisse der pflanzengeographische Erforschung Neu-Guineas' (ENGL. Bot. Jahrb. 45, 1911, Beibl. 103, p. 22–27, w. map); 'Die Pflanzenformationen einiger Gebiete Nordost-Neu Guineas und des Bismarck Archipels' I–IV (ENGL. Bot. Jahrb. 62, 1928, p. 284–304, 452–501, 550–569 and *l.c.* 63, 1929, p. 1–28, 419–476); papers on the collections of PEEKEL and KEYSSER (see there) and some papers relating to agriculture (*e.g.* in Deutsch. Kolon. Zeit. Berlin N.F. 11, 1898, p. 325 *seq.* and Zeitschr. f. trop. Landwirtsch. Berlin 1, 1897, p. 11, 123–129 and 155–160).

(2) *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea vol. 2^2, who extracted the dates from SCHUMANN & LAUTERBACH: 'Flora der Deutschen Schutzgebiete in der Südsee' (1901).

(3) C. A. G. LAUTERBACH: 'Eine Expedition zur Erforschung des Hinterlandes des Astrolabe Bai' (Nachr. Kais. Wilh. Land 7, 1891, p. 31–62).

(4) *cf.* Verh. Ges. Erdk. Berlin 24, 1897, p. 51–69, 1 pl.; Nachr. Kais. Wilh. Land 12, 1896, p. 36–44; *l.c.* 13, 1897, p. 52–55 and *l.c.* 14, 1898, 51–59; Zeitschr. Ges. Erdk. Berl. 33, 1898, p. 141–177 w. 2 maps).

(5) *cf.* Deutsch. Kolon. Blatt 8, 1897, p. 5.

(6) Only scanty data on this expedition are known, even WICHMANN could obtain no further information.

(7) V. F. BROTHERUS: 'Musci novi papuanae' (ENGL. Bot. Jahrb. 17, 1893, p. 476–481).

W. SCHMIDLE: 'Epiphylle Algen nebst einer Pitophora und Dasya aus Neu Guinea' (Flora 83, 1897, p. 304–326).

A. ENGLER: 'Beiträge zur Kenntnis der Araceae' (ENGL. Bot. Jahrb. 25, 1898, pp. div.).

P. HENNINGS: 'Fungi novoguineenses' (ENGL. Bot. Jahrb. 18, 1894, Beibl. 44, p. 22–40 and *l.c.* 25, 1898, p. 495–509).

SCHUMANN & LAUTERBACH: 'Die Flora der deutschen Schutzgebiete in der Südsee' (Leipzig 1901).

'Beiträge zur Flora von Papuasien' (in ENGL. Bot. Jahrb. 1912–→).

(8) For literature based on his collections of birds *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea vol. 2^2, p. 829.

BIOGRAPHICAL DATA. Ber. D.B.G. 55, 1938, Gen. Vers. Heft p. (231)–(247) (this biography by HUB. WINKLER unfortunately is rather untrustworthy); BACKER, Verkl. Woordenb., 1936; Chron. Bot. 4, 1938, p. 76–78 + portr.

Lawes, William George

(1839, Aldermaston, Berks, England; 1907, Sydney, N.S.W., Australia), missionary, educated at Bedford, was ordained in 1860 and appointed to

Samoa as agent of the London Missionary Society, and stationed on Niué (Savage Isl.), 1861–74; appointed to the New Guinea Mission, arriving Nov. 21, 1874, settling on the shore between the villages Hanuabada and Elewara.[1] He made several journeys of exploration, partly from Somerset. In Dec. 1894 he left Port Moresby and settled at Vatorata near Kapa Kapa; in 1906 he retired from active service, moving to Sydney in April. In 1895 the degree of D.D. was conferred upon him by the University of Glasgow.

Author of a grammar of the Motu language, *etc.*

He is commemorated in some plant names.

ITINERARY. *SE. New Guinea*, Dec. *1874*–Dec. *1877*. Principally at Port Moresby and Hood Bay, making journeys into the Koiari Distr. and along the coast to the east.—*1875*. With MACFARLANE (see there) tour by boat in eastern direction to Hood Bay (July). With OCT. C. STONE to the Laloki River (Nov.);[2] in the same month a journey in eastern direction with STONE. 2nd Trip to the Laloki River (Dec. 7); back at Port Moresby (16). —*1876*. With MACFARLANE (itiner., liter., *etc.* see there) by boat ('Ellengowan') along the SE. coast (March.–Apr.). Sailing from Somerset in the schooner 'Mayri' (Dec. 27) for a tour to New Guinea, Port Moresby.—*1877*. From Port Moresby (Jan. 6) in eastern direction; Hood Bay, discovering the Kemp Welch River; returning to Somerset *via* Port Moresby, Bura, *Darnley Isl.* and *Murray Isl.*, returning to Somerset early in Febr.—From April 14, 1878–Sept. 30, 1880, visit to England.—*1881*. With J. CHALMERS *via* Hall Sound to Delena (= ? Elema of CHALMERS) headquarters (Oct.), exploring Maiva and Kevori Districts.[3]—*1882*. In the 2nd quarter of the year from Maiva to Oiapu Distr. (NW of Possession Cape), passing the Ridgley Range. Towards the end of the year with CHALMERS to Sogeri Distr. *via* the Laloki (Rauna Fall).[4]—*1884*. *cf. sub* CHALMERS.—In *1893* still collecting.

COLLECTIONS. *Herb. Melbourne.*[5] In *Herb. Berl.*: *New Guinea* mosses (*a.* 1881).

LITERATURE. (1) W. G. LAWES: 'Notes on New Guinea and its inhabitants' (Proc. Roy. Geogr. Soc. Lond. N.S. 2, 1880, p. 602–616, incl. descript. of the vegetation; *cf.* also *l.c.* p. 216); 'Ten years at Port Moresby' (Chron. Lond. Miss. Soc. 1885, p. 85–92).

cf. also in PETERM. Mitt. 25, 1879, p. 280.

(2) *cf.* STONE in Proc. Roy. Geogr. Soc. Lond. 20, 1875, p. 266–272.

(3) *cf.* Proc. Roy. Geogr. Soc. Lond. N.S. 4, 1882, p. 160.

(4) W. G. LAWES: 'An excursion in the interior of New Guinea' (*l.c.* 5, 1883, p. 355–358).

(5) Some plants described in F. VON MUELLER, Descr. Not. Pap. Pl., 1, pt 6, 1885 (from Port Moresby, Jervis Isl. and Astrolabe Range); in Vict. Naturalist, Dec. 1884 and in *l.c.* 1, 1885, p. 168; and in WING'S Southern Sci. Record 2, 1882, p. 229.

Some mosses by GEHEEB in Bibl. Bot. Heft 13, 1889.

BIOGRAPHICAL DATA. V. A. BARRADALE: 'The story of William George Lawes' (London, Lond. Miss. Soc., no date); J. KING: 'W. G. Lawes of Savage Island and New Guinea' (London, Relig. Tract Soc., 1909); 'A Register of Missionaries, Deputations, *etc.*' (London, Lond. Miss. Soc., 1923) p. 75–76; BACKER, Verkl. Woordenb., 1936.

Lawick, van

COLLECTIONS. *Herb. Pasoer.*: 2 plants from SE. Bolongbendo (Modjokerto), *E. Java*.

Lawick, C. N. van, *cf. sub* Forest Research Institute, Buitenzorg.

Lawson, J. A., = pseudonym of W. E. ARMIT (see there).

Lay, George Tradescant

(† 1845 or 1847, Amoy, China), naturalist on Capt. BEECHEY's voyage in the 'Blossom' (1825–28),[1] which did not operate in Malaysian waters; in 1836 to China, as Agent of the British and Foreign Bible Society. In the latter year an American expedition to China was planned by some rich American Houses; a small vessel, the 'Himmaleh' was bought and sent from New York for a voyage of exploration, principally for the purpose of aiding missionaries circulating religious books on the coasts of China *etc.* The ship arrived at Macao in August 1836; LAY accompanied the expedition (see below).[2] After returning from the cruise in 1837 he resided at Macao and became a learned sinologist, subsequently entering the British Consular Service; in 1843 appointed British Consul at Canton, in 1844 transferred to Fu Chow, and in 1845 to Amoy.

He is commemorated in the genus *Layia* HOOK. & ARN.

ITINERARY. *Voyage in the 'Himmaleh', 1836–37.*[2] Left Macao Roads (Dec. 3, *1836*); *Singapore* (Dec. 15–Jan. 29, *1837*), LAY paying a visit to Malacca (*Malay Peninsula*); sailing (Jan. 30) past Carimata (= Karimata) Islands, and along the southern shores of Borneo; arrived at Tanakeke (= *P. Tanakeke*, off the SW. point of Celebes) (Febr. 7), hovering about the eastern side of the island until the 10th (LAY *etc.* to Makassar to call a pilot); *SW. Celebes:* Makassar (Febr. 10–March 5);[3] *P. Tanakeke* (March 6); departing (7), cruising to Bontain or Bounthain (= Bonthain); along the southern and eastern sides of Celebes, past the islands of Salayer, Booton (= Boeton) (March 11), and the Hula groups, to the *Moluccas:* anchored in the harbour formed by *Ternate*, *Tidore* and *Gilolo* (= *Halmahera*) (25–), visiting the Sultan of Ternate (31); *Philippines:*[4] *Mindanao*, Zamboanga (Apr. 23– . .), climbing the summit of the mountain (25); *Borneo*, evidently visiting Brun(e)i and the *Island of Labuan* (prob. staying from end of Apr.–May); returned to China in July 1837.

COLLECTIONS. *Herb. Brit. Mus.*: a small collection of plants from Macao collected on BEECHEY's voyage in 1827, and *Philippine* plants (probably coll. *1837*).

The final section on 'Natural History' of LAY's

book[2] describes birds and plants from several of the above-mentioned localities, so we may assume that material was collected, which probably is in the British Museum too.

E. VON MARTENS, when dealing with the molluscs of the 'Preussische Expedition nach Ost-Asien', cites specimens collected by L. C. LAY on BEECHEY's voyage in *Timor* and *N. Celebes* (Menado). This is certainly a mistake; nor were these places visited on the voyage in the 'Himmaleh'.

LITERATURE. (1) G. T. LAY & E. T. BENNETT, Fishes in 'The zoology of Captain BEECHEY's Voyage' 1839, p. 41–75; pl. 15–23.

(2) G. T. LAY: 'Notes made during the voyage of the Himmaleh in the Malayan Archipelago' (vol. 2 of 'The claims of Japan and Malaysia upon Christendom, exhibited in Notes and Voyages made in 1837 from Canton, in the Ship Morrison and Brig Himmaleh, under direction of the Owners' (2 vols, New York, E. French, 1839; author of the 1st volume is C. KING) (*non vidi;* data received by the courtesy of the Missionary Research Library, New York).

(3) G. T. LAY: 'Sketches of the Natural History of Macassar *etc.*' (Chinese Repository 6, 1838, p. 449–460).

(4) G. T. LAY: 'Review of BLANCO's Flora de Filipinas' (*l.c.* 7, 1838, p. 422–437).

BIOGRAPHICAL DATA. BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 290–294; Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931.

Lay Ong Siong, *cf. sub* Forest Research Institute, Buitenzorg.

Layard, E. L.

Plants of his, mostly *Filices*, from the *Malaysian region* in *Herb. Univ. Manchester* (*cf.* 'A brief account of the Gen. Herb. formed by J. C. MELVILL' 1904, p. 13). He also collected in Fiji and other Pacific Islands.

Laycock, John

professional orchid collector.

COLLECTING LOCALITIES. *N. Central Sumatra:* principally at Brastagi (*1928*).—*S. Sumatra:* Palembang, Lahat and Pageralam.[1]—In *1929* short collecting trip through *Java* to the *Lesser Sunda Islands: Bali, Lombok, Sumbawa, Flores, Timor* and the islands in those regions.[2]—*SW. Celebes:* vicinity of Makassar; *N. Celebes:* Manado, Kwandang; *Centr. Celebes:* Donggala; *Moluccas: Ambon, Buru* and *N. Halmahera.*[3]—He made a trip by boat to *N. New Guinea,*[4] touching at *Sorong,* Manokwari, Wasior, *P. Japen* (Seroei), Hollandia, and Bosnik (*Schouten Islands*).

COLLECTIONS. He brought home living orchids only; in *Hort. Sing.* (pres. 1931), and probably elsewhere.

LITERATURE. (1) J. LAYCOCK: 'A failure in orchid collecting (Lahat & Palembang)' (Orch. Review 38, 1930, p. 201–203).

(2) J. LAYCOCK: 'Java to Timor' (*l.c.* p. 10–14).

(3) J. LAYCOCK: 'Orchids in Celebes and Moluccas' (Mal. Orch. Review 1, *no* 2, 1932, p. 9–12).

(4) J. LAYCOCK: 'A trip to New Guinea' (Orch. Review 39, 1931, p. 68–71).

Leach

sent specimens of plants and timbers from *Christmas Island,* S of Java, to *Singapore* in *1897.*

Leaño, *cf. sub* Forestry Bureau, Manila.

Leaño, J. A.

an Agricultural Assistant in *Br. N. Borneo,* murdered by the Japanese.

COLLECTIONS. In *Herb. Sandakan.*

Leber, Alfred

(1881, Antwerp, Belgium; ?), German physician, educated at Heidelberg, Munich and Berlin (M.D. 1905); Assistant at Paris, Heidelberg and Berlin; scientific researches in Dalmatia and Istria, and subsequently University Lecturer at Berlin; member of an expedition to Samoa, the Marshall Islands, the Carolines and Mariannes; scientific research in the Batak Lands, N. Sumatra; Professor at Göttingen University; in 1913 leader of a medical-demographical expedition to New Guinea; during part of World War I in Sumatra East Coast, staying at Buitenzorg (*W. Java*) from July until Aug. *1915.* In 1916 he settled at Malang in E. Java, where he still lived at the outbreak of World War II; in May 1940 he was interned as one of the Nazi foremen. The Germans were transported to Br. India later; one of the ships was torpedoed.

COLLECTIONS. Material of herbs, edible fruits and spices, collected during his stay at Buitenzorg; his main interest was official herbs of the natives.[1] About the location of his collection nothing is known to me.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 41.

BIOGRAPHICAL DATA. Persoonlijkheden in Nederland, 1938, + portr.

Léclancher, Charles Réné Augustin

(1804, Alessandria, Piemont, Italy; 1857, Cherbourg, France), Frenchman, educated at Caen; surgeon on several warships, 1828–54; he made zoological and botanical collections.[1] He accompanied voyages in 'La Vénus' (1836–39), 'La Favorite' (1841–44), and in 'La Bayonnaise' (1846–50), the two latter ships visiting the Malaysian region.

He finally was marine librarian at Cherbourg.

ITINERARY. *Voyage in 'La Favorite', 1841–44.*[2] Touching at: Santa Cruz, Teneriffe, Île de Bourbon, Bombay, Aden, Pondicherry, Madras, *etc.; Sincapour* (= *Singapore*) (June 24–26, *1842*); Macao, Hongkong, China, Macao; *Philippines, Luzon:* Manila (Febr. 16–Apr. 6, *1843*); Soog, *Sulu Isl.* (Apr. 17–28); *N. Celebes:* Manado (May 17–June 3); *SW. Celebes:* Bonthain (June 13–16), Macassar (June 17–July 4); *E. Java:* Bezoekie (= Besoeki) (July 10–21); Passarouang (= Pasoeroean) (24–28); Sourabaya (July 28–Aug. 11); *Centr. Java:* Samarang (16–29); *W. Java:* Batavia (Sept. 1–17), Anjer (20–23); Île de Bourbon, the Cape, St Hele-

na, Brest.—*Voyage in 'La Bayonnaise', 1846–50.* No route known.

COLLECTIONS. In *Herb. Paris.*

LITERATURE. (1) *cf.* MEYER & WIGLESWORTH: 'The birds of Celebes *etc.*' 1, 1898, p. 3; BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 524–525.

(2) *cf.* 'Points visités par la Corvette la Favorite 1841, 1842, 1843, 1844' (MS. list in Arch. Nation. Paris).

BIOGRAPHICAL DATA. Bull. Soc. Linn. Normandie 3, (1857/58) 1858, p. 57–98.

Leclanches

is cited as the collector of *Kyllinga monocephala* ROTTB. in *Luzon* (*cf.* CLARKE in Philip. Journ. Sci. C. Bot. 2, 1907, p. 78); probably misread for CH. R. A. LÉCLANCHER (see there).

Lecomte, Henri

(1856, Saint Nabord near Épinal, Dept Vosges, France; 1934, Paris, France), from 1884–1904 teacher in natural history at Paris, and from 1906 until his retirement in 1931 Professor of Botany and Director of the Natural History Museum at Paris. He travelled in the French Congo, Egypt, Morocco, and the Far East; together with his collaborator Dr A. FINET (see there) he visited Java.[1] The 'Flore Génér. de l'Indochine' was edited by him.

A *Viola* and other plants were named after him.

COLLECTING LOCALITIES. *1911.* Visiting *Singapore* Botanic Gardens; *W. Java:* Buitenzorg, 5 weeks' stay (Aug.–Sept.),[2] visiting Tjibodas on the slopes of Mt Gedeh, and Mt Salak.

COLLECTIONS. *Herb. Paris:* 500 *nos* from *Java* coll. LECOMTE & FINET.

LITERATURE. (1) H. LECOMTE: 'Voyage botanique en extrême Orient' (Mém. Soc. Hist. Nat. Autun vol. 25–26, 1912–13, 77 pp., 21 fig.); 'Le jardin botanique de Buitenzorg' (Bull. Mus. Hist. Nat. 18, 1912, p. 86–91).

(2) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 36.

BIOGRAPHICAL DATA. Bull. Soc. Bot. Fr. 81, 1934, p. 472–474; Chron. Bot. 1, 1935, p. 125 + portr.; BACKER, Verkl. Woordenb., 1936; in 'Flore génér. de l'Indo-Chine' tome prélim. 1944, p. 44 + portr. pl. XII.

Ledeboer, A. J. M.

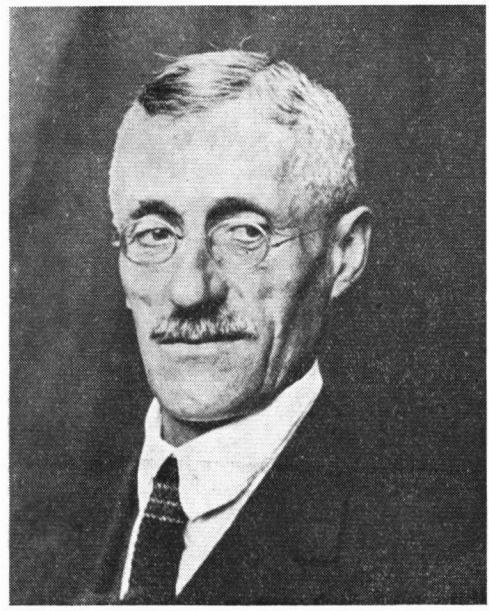
(† during Japanese occupation in Java, betw. 1942–45), well-known planter and hunter; estate-manager in Banjoewangi, E. Java. He had part of the Jang Plateau on long lease, while another part was under his supervision. Under his care the yearly fires were stopped, the grass plains were partly reafforested and deer were protected to a large degree.

COLLECTIONS. *Herb. Bog.:* material of *Rafflesia zollingeriana* KOORD. collected in S. Banjoewangi, *E. Java* (Oct. *1934*).

Ledeboer, H. F., *cf. sub* Forest Research Institute, Buitenzorg.

Ledermann, Carl Ludwig

(1875, Neuchâtel, Switzerland; x), horticulturist, at first in the employ of the Botanic Garden at Victoria (Cameroons West); botanist attached to a German expedition (see below) under command of A. STOLLÉ, the expenses being paid by the



LEDERMANN

'Reichskolonialamt' (Dept of Colonies), by the Berlin Royal Museum and by the 'Deutsche Kolonial-Gesellschaft'. In the following years (1913–14) he travelled in the Carolines and the Palau Islands.

Litsea caroli TESCH. and other plants were named in his honour.

ITINERARY. *Kaiserin Augusta-Fluss Expedition* (or *Sepik Expedition*), *1912–13*,[1] in former *Kaiser-Wilhelmsland, NE. New Guinea:* Madang (Friedrich-Wilhelmshafen) (mid-Febr. *1912*); ascending the Kaiserin Augusta River or Sepik in the 'Komet' (end of Febr.), making bivouac above Malu (March 3); Peilungsberg (coll. *nos* 6881–6939); march to Zuckerhut (Apr. 16–22) (*nos* 7031–7127); setting out (Apr. 28) to Pioniers bivouac of LEONH. SCHULTZE's expedition, with the intention to explore the southern tributaries of the Sepik; Maifluss (= Mai River), 9-day tour by motor-launch, ascent of the Pfingstberg (400 m alt.); Friedafluss and ascent of a hill of 300 m alt.; Aprilfluss (June 9–19) and ascent of the Pyramide (500 m alt.); navigation on Leonhard Schultze-Fluss (June 21–29) and ascent of the Schichtberg; headquarters at Malu (July); ascending the Sepik and the 'Schwarze Flüszchen' (= black rivulet) to the 'Seerosensee' (Water-lily Lake), from where passing a steep ridge in Hunstein Valley to the base of Hunsteinspitze; Hunsteinspitze (1350 m alt.) (*nos* 8150–8534); en-

virons of Malu and Aprilfluss (Sept. 3–23) (*nos* 8536–8843); passing the Kamelsrücken (24) to the Etappenberg (850 m alt.), staying a month (*nos* 8864–9595); passing the Bambusberg (600 m) to bivouac 18 (165 m alt., on a tributary of the Aprilfluss) (Nov.); a fortnight-stay in bivouac 18 (*nos* 9602–9854); Lordberg (1000 m alt.) (Dec.) (*nos* 9861–10378); headquarters at Malu (Christmas–Febr. 10, *1913*) (–*no* 10906); march to Hunsteinspitze (Febr. 11–March 17), 17 days' stay on the summit (*nos* 10907–11526); ill (March 29–May 20), transported to Friedrich-Wilhelmshafen; from Malu to the Töpferfluss, from where to the Lehmfluss; Regenberg, Schraderkette (= Range), Hollrungberg (1500 m) (between 1800 and 2200 m alt. coll. *nos* 11577–12220); back at Malu (end of June); Hügellager (= hill bivouac) Sepik (*nos* 12252–12350) and Felsspitze (*nos* 12352–13131) (July 8–Aug. 29), ascending the Sepik to above Mäanderberg; breaking camp (early in Sept.) and back to Friedrich-Wilhelmshafen and Europe, visiting Tjibodas (*W. Java*) in April *1914*.

COLLECTIONS. *Herb. Berl.:* 6639 *nos* of siphonogams 'Sepik Exp.' (*nos* 6469–13134; partly specified in the itinerary), *Algae*,[2] *Fungi*, lichens, *Musci*, and 39 *nos* of material in alcohol in the *Show Mus. Berl.*

His collection was the main basis for the 'Beiträge zur Flora von Papuasien' (ENGL. Bot. Jahrb. 1912–→).[3]

Duplicates in *Herb. Leyden:* 494 *nos* from *New Guinea; Herb. Kew: N.G.* plants (pres. 1923); *Herb. Sing.;* some dupl. of grasses in *U.S. Nat. Herb. Wash.*

Besides in New Guinea, he made collections in the Congo (1904–06), Cameroons (1908–09), in the Carolines and Palau Islands (1913–14).

LITERATURE. (1) C. L. LEDERMANN: 'Einiges von der Kaiserin Augusta Fluss Expedition 1912' (ENGL. Bot. Jahrb. 55, 1919, Beibl. 4, Ber. Freien Ver. f. Pflanzengeogr. u. syst. Bot., p. 33–44).

cf. also Zeitschr. Ges. Erdk. 1912, p. 377–379, 457–459; *l.c.* 1913 p. 138–145, 298–301, 561–563, 638–640, 713–719; *l.c.* 1914, p. 249–277, with maps; *l.c.* 1924, Erg. Heft I, with maps; Tijdschr. K.N. A.G. 1913, p. 543–547; Mitt. Deutsch. Schutzgeb. 1917, Erg. Heft 12, with map.

(2) *Cyanophyceae* by P. FRÉMY in Ann. Crypt. Exot. 5, 1932, p. 190–197, 10 fig.

(3) *cf.* also E. ULBRICH: 'Zwei neue Hibiscus-Arten aus Neu Guinea' (Notizbl. Berl. Dahl. 14, 1939, p. 367–368).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936 (*sub* caroli).

Ledesma

is cited in MERR., Enum. Philip. Fl.Pl., as collector of *Philippine* plants, *viz* of the *nos* 1, 51, 103, 2317; also *s.n.*

Ledoux, J. A.

planter of Kota Tinggi, Johore, *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Sing.:* plants from the neighbourhood of Kota Tinggi (pres. *1910 and later*). He twice climbed G. Panti, *viz* in *1910* with RIDLEY, and in March *1925* with HOLTTUM.

Ledru, J. B.

collected mosses at Pontianak in *W. Borneo* (July *1897*), which are evidently at *Geneva;*[1] 7 duplicates at *Leningrad* (*Bot. Gard.*), and possibly at *Kew.*[2]

He is not to be confused with ANDRÉ PIERRE LEDRU, naturalist attached to BAUDIN's 2nd expedition 1796–98 (see *sub* BAUDIN), which did not operate in Malaysian waters.

LITERATURE. (1) *cf.* Ann. Cons. Jard. Bot. Genève 3, 1899, p. 3.

(2) Some of his mosses described by H. N. DIXON in 'On a collection of Bornean mosses made by the Rev. C. H. BINSTEAD' (Journ. Linn. Soc. Bot. 1916, 32 pp., 2 pl.).

Leefmans, Salomon

(1884, Leeuwarden, Fr., Holland; x), a zealous lover of nature who was unable to attend college for financial reasons, but nevertheless succeeded in acquiring a considerable knowledge of natural history, especially entomology. From 1911–12 Zoological Assistant of the Deli Experiment Station (Medan, Sumatra); in 1912 he came to Java as Entomologist in the employ of the H.V.A. (Handelsvereeniging Amsterdam), stationed at Bendo Redjo Estate near Blitar (E. Java); since the end of 1914 on the staff of the Institute for Plant Diseases at Buitenzorg (W. Java), since 1927 chief of the same institution. In 1928 he got a honorary Dr's degree at Wageningen Agricultural College. He was pensioned off in 1934, returned to Holland, and was appointed Lecturer in Applied Entomology in the University of Amsterdam in 1937.

COLLECTING LOCALITIES. *E. Java:* G. Tengger, Tosari and G. Bromo (Apr. *1913 or 1914*).[1]—*W. Java:* G. Patoeha and Telaga Patengan (March *1916*); Soekasari (March 1916).—*Sumatra West Coast:* G. Singgalang (Apr. 14, *1918.*)—*Centr. Java:* Klaten (Aug. *1922*).—*1924. SW. Celebes:* Makassar, Maros and Bantimoeroeng (Apr.);[2] *SE. Borneo:* Balikpapan (Apr. 14); *N. Celebes:* Manado (Apr.); *Talaud* (*P. Karakelong*) & *Sangir* (= *Sangihe*) *Islands* (*P. Sangihe*, at Tahoena or Taroena and Petak) (Apr. 23–May 7). — *SW. Celebes:* Makassar, Maros and Bantimoeroeng (Apr. *1925*).[2]

Besides he collected at Poerworedjo (Kedoe) in *Centr. Java* and at Lampegan, G. Rosa Estate in *W. Java;* respectively in *1923* and *1915.*

He made an excursion to the *Duizendeilanden* in the *Bay of Batavia*, N of *W. Java*;[3] probably no collections were made. He visited Tjibodas (*W. Java*) many times.

COLLECTIONS. *Herb. Bog.:* > 33 *nos*, incl. 22 *nos* from Poerworedjo (Kedoe), *Centr. Java; Herb. Pasoer.:* many plants from *Talaud* & *Sangihe Islands*, of which partly duplicates in *Herb. Bog.*, and *Leyden.*

LITERATURE. (1) S. LEEFMANS: 'Van Tosari en het Tengger gebergte' (Trop. Nat. 3, 1914, p. 45–47,

81–88, w. fig.); 'Naar het Bromobosch en den vulkaan Bromo' (*l.c.* p. 76–80, 4 fig.).

(2) S. LEEFMANS: 'Herinneringen aan het natuurmonument Bantimoeroeng bij Makassar' (*l.c.* 16, 1927, p. 93–101, 8 fig.).

(3) S. LEEFMANS: 'Een excursie naar de Duizendeilanden' (*l.c.* 9, 1920, p. 141–148, 4 fig.; under the pseudonym 'Landrot').

BIOGRAPHICAL DATA. Landbouw 4, 1928/29, p. 499–500 and *l.c.* 9, 1933/34, p. 577–581; Wie is dat? 1935; Persoonlijkheden in Nederland, 1938.

Leeftroode

COLLECTIONS. *Appendicula reflexa* BL. from *Noesa Kambangan*, S of Java. The material is *not* at Buitenzorg.

Leenart, Theodoor Alphons

(1907, Mr Cornelis, Java; betw. 1942–45, in a Japanese prisoner camp), attended the Colonial School of Agriculture at Deventer, Holland; since 1929 Assistant Pedologist (Bodemkundig ambtenaar) at the Institute for Soil Science, Buitenzorg.

COLLECTING LOCALITIES. *1941. SE. Borneo:* Pleihari District, between Djorong and Kintap in open savannahs (May 13–20), near Assem River; *E. Java:* Bodjonegoro Residency (Aug. 6–Sept. 4), in teak forests *etc.*

COLLECTIONS. *Herb. Bog.:* 30 *Borneo* plants and 89 (*nos* 31–119) from *Java.*

Leer, Abraham van

(1895, The Hague, Holland; x), was for some years in the employ of the Dutch-American Life-insurance Company, The Hague; from 1920–34 in the service of the Experiment Station for the Java Sugar Industry at Pasoeroean (E. Java), successively as bookkeeper, Librarian and Assistant Secretary; from 1935 editor of the 'Soerabaiaasch Handelsblad'. Since end 1947 Librarian of the Buitenzorg Library.

COLLECTIONS. *Herb. Pasoer.:* 88 *nos* from G. Lawoe (Sarangan) in *E. Java* (coll. *1928*); some dupl. in *Herb. Bog.*

Leer, Jacob Mozes van

(1812, Gorredijk, Fr., Holland; ? , ?), surgeon, first in the Dutch Army, from 1843–58 Medical Officer in the D.E. Indian Army.

Payena leerii KURZ was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. In *1852* he sent material of the above-mentioned plant from Palembang (*S. Sumatra*) to the 'Natuurkundige Vereeniging' at Batavia, from where it was forwarded to *Buitenzorg.*[1]

LITERATURE. (1) *cf.* Nat. Tijdschr. N.I. 6, 1854, p. 116, and *l.c.* 10, 1856, p. 101–103.

Leersum, Pieter van

(1854, Utrecht, Holland; 1920, Amsterdam, Holland), pharmacist, educated at Utrecht University; Chemist for the Cinchona culture in Java since 1884; in 1892 appointed Director of the Government Cinchona-plantation, Bandoeng, Java; retired in 1915.

COLLECTIONS. *Herb. Leyden; Herb. Kol. Mus.* (= *Ind. Inst. Amsterdam*): 23 *nos Cinchona* herbarium (pres. *1896*); *Herb. Groningen:* 26 species and varieties of *Cinchona* (pres. *1897*).

Leeuw, Hendrik Adriaan Lodewijk de

(1896, Bussum, N.H., Holland; x), since 1919 Forest Officer in the employ of the D.E. Indian Government; he served in Java, except in the years 1926–31 when he was stationed in Banka.[1]

COLLECTING LOCALITIES. *P. Kangean,* N of Bali (Nov. 20, *1923*).—*E. Java:* Idjen Plateau (Dec. 1923–Jan. *1924*).—*Banka:* 'padangs' in S. Banka, kp. Serdang (Jan. *1927*) and in N. Banka, kp. Mapor (Jan. 1927); G. Maras (*1928*).—*Billiton:* Tandjong Pandan, 'padangs' (1928).—*W. Java:* neighbourhood of Soekaboemi (*1936–38*).

COLLECTIONS. *Herb. Bog.:* plants from Idjen Plateau, *Java,* numbered in BEUMÉE's (see there) series, 47 *nos* of *Banka* plants and 3 from *Billiton, etc.. Herb. For. Res. Inst. Buitenzorg:* some *nos* from *W. Java,* numbered in the Ja. series (*cf. sub* Forest Research Institute).

Some living plants from *Banka* to *Hort. Bog.* (1927).

LITERATURE. (1) Author of 'Het boschbedrijf, meer in het bijzonder de boschverjonging op Banka en Billiton' (Tectona 29, 1936, p. 915–927).

Leeuw, Pieter Helenus Wilhelmus de

(1891, Barneveld, Gld, Holland; x), since 1914 Forest Officer in D.E. Indian Government service; stationed in Java, except in the years 1926–28 when he was at Pontianak in W. Borneo.

COLLECTING LOCALITIES. *W. Borneo* (*1928*). —*W. Java:* Indramajoe, 'siïl' (grass) plains (*c. 1934*).

COLLECTIONS. *Spathoglottis affinis* DE VR. from Indramajoe (*Java*) in *Herb. Bog.. Herb. For. Res. Inst. Buitenzorg* (see there): 117 *Borneo nos* (in the bb. series).

Leeuwen, van

COLLECTIONS. *Chloris barbata* SW. collected near Soerabaja in *E. Java,* in *Herb.* DE VRIESE = *Leyden* (*cf.* MIQUEL, Plant. Jungh., 1853, p. 353).

Leeuwen, Willem van

(1912, Utrecht, Holland; x), educated at the Agricultural College, Wageningen; on the staff of the Soil Science Institute at Buitenzorg (Java), 1939–41; subsequently employed on a Cinchona Estate in Priangan Residency. At present on the Managing-board of the KOCH Lands (Priangan Res.).

COLLECTIONS. *Herb. Bog.:* small collection made in 'Het Stervende Land' (poor eroded country),[1] near the Tjiloetoeng *etc.,* W of G. Tjareme, Cheribon Res., *W. Java,* in *about 1940.*

LITERATURE. (1) W. v. LEEUWEN: 'Aanteekeningen over erosie' (in Versl. 28ste Verg. Proefstat. Pers., Maart 1941).

Leeuwen, Dr W. M. van, *cf. sub* DOCTERS VAN LEEUWEN, W. M.

Lefèbre, H. (J.)
Curator of the Mountain Botanic Garden at Tjibodas, W. Java, from Sept. 1889–Sept. 1893 (temporarily relieved at his own request from Febr.–June 1892); towards the end of 1893 he was transferred to the Botanic Gardens, Buitenzorg.

COLLECTIONS. *Herb. Bog.:* > 112 *nos*, including ferns, from Tjibodas and vicinity (coll. *1889–93*); dupl. in Herb. *Leyden*. He evidently collected 29 *nos* of mosses too.[1]

LITERATURE. (1) J. CARDOT: 'Note sur deux collections de Mousses de l'Archipel Indien' (Rev. Bryol. 1901, p. 112–117).

Lefèvre, J. J.
surveyor (sergeant-major) of the Topographical Service, assisted in plant collecting during the expedition of ABENDANON (see there) in *Celebes* in *1909–10; cf.* also *sub* R. M. AMAD.
His name might occur on the labels.

Lehmann, Victor
COLLECTING LOCALITIES. *S. Java:* near Babakan (in *? Centr. Java*) (*1887*).—*P. Bras* near N. Sumatra (*1889–90*).—*W. Java:* Sindanglaja (Febr. *1890*).
COLLECTIONS. *Herb. Berl.:* 186 *nos* from above-mentioned localities.

Lehunte, *cf.* HUNTE.

Leiberg, John Bernhard
(1853, Malmö, Sweden; 1913, Leaburg, Oregon, U.S.A.), came to the United States (Iowa) as a boy of thirteen; later he moved to the West. For several years he was connected with the U.S. Dept of Agriculture, spending a year (1904) in the Philippine Islands in the employ of the Bureau of Forestry. Later, he spent another year there on his own account, studying the flora. In 1909 he made a trip around the world with his wife, especially visiting the East Indies.
He is commemorated in *Habenaria leibergii* AMES.
COLLECTING LOCALITIES. *Philippines, Luzon:* Lamao Forest Reserve (*e.g.* in July *1904*).[1]—*1909. Luzon:* Legaspi (Apr.–May), Tignaon Valley (May), *Polillo Isl.* (May), Lobayet River, Tayabas Prov., Mt Mariveles (July).
COLLECTIONS. *Herb. Manila:* 160 *nos* from the Lamao Forest Reserve, collected on behalf of the Forestry Bureau. In literature we met with plants of his numbered above 6000, possibly in the For. Bur. series (see there). Evidently he collected mosses too.[2]
In *Herb. Kew:* 39 mosses collected by JOHN B. LEIBURG in N. America (pres. 1890); the collector's name was probably misspelled.
His collection of flowering plants was presented to the *Univ. of Oregon*, his other collections went to the *U.S. Nat. Herb. Washington*.
LITERATURE. (1) *cf.* Philip. Journ. Sci. 1, 1906, Suppl. 3.
(2) R. S. WILLIAMS: 'Mosses of the Philippine and Hawaiian Islands collected by the late J. B. LEIBERG' (Bull. Torr. Bot. Club 42, 1915, p. 571–577).
BIOGRAPHICAL DATA. Bot. Notiser 1913, p. iv; Bryologist 18, 1915, p. 47–48; KROK, Bibl. Bot. Suec., 1925, p. 386–387.

Leij . . ., *cf.* LEY . . .

Leman, *cf. sub* Forest Research Institute, Buitenzorg.

Lemann
COLLECTIONS. *Burmannia coelestis* DON from *Malacca*, without locality and *s.n.* in *Herb.* BOISS. (*Geneva*), and *Kew* (*cf.* JONKER: 'Monograph of the Burmanniaceae', Thesis 1938, p. 123). = ? LENNON.

Lenmore
= probably J. LENNON, see there.
COLLECTIONS. *Santiria laevigata* BL. from *Singapore*, Govt House domain in *Herb. ?* (*cf.* LAM in Bull. Jard. Bot. Buit. sér. 3, vol. 12, 1932, p. 385).

Lennon, J.
Assistant Curator, Botanic Gardens, Singapore, *1921–35*.
COLLECTIONS. He collected a little in *Singapore*. Material probably in *Herb. Sing.*

Lenormand
is cited as the collector of *Selaginella plana* (DESV.) HIERON. from *Timor*.[1] This rightly should be *ex Herb.* LENORMAND.
SÉBASTIAN RENÉ LENORMAND[2] was the owner of an extensive herbarium, mainly consisting of *Algae*. He himself never left France, but bought extensively from collectors from all parts of the world. This was communicated too by M. MESLIN of the University of Caen, Normandy, France, where the LENORMAND Herbarium is preserved, to Miss AGNES CHASE in 1935. The plants distributed with LENORMAND on the label are from the LENORMAND *Herbarium*. Several in *Herb. Paris*.
LITERATURE. (1) *cf.* ALSTON in Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1935, p. 437.
(2) *cf.* J. MORIÈRE: 'Notice biographique sur S. R. LENORMAND' (Caen 1873).

Leon, J. B.
Assistant Resident of Banda Neira (Moluccas), forwarded orchids from *P. Pandjang* near Fak Fak (*SW. New Guinea*), *Ceram*, *W. Borneo*, *Wetar*, *Boeroe* and *Tanimbar Islands* to *Hort. Bog.* in *1908*.

Leon, de, *cf. sub* Forestry Bureau, Manila.

Leopold, King of Belgium
when crown prince, made a voyage to the Dutch East Indies in company with his wife, the late ASTRID, and with Professor V. E. VAN STRAELEN (see there for itiner., collect., *etc.*), Director of the Royal Museum of Natural History, Brussels.

Lepont
collected *Hyptis brevipes* POIT. in *Celebes* (*cf.* MIQUEL, Flora Ned. Ind. 2, 1859, p. 959).

Le Roux, Ch. C. F. M., *cf.* ROUX, Ch. C. F. M. LE

Leschenault de la Tour, Louis Théodore (1773, Châlons-sur-Saône, France; 1826, Paris, France), botanist, naturalist of Capt. BAUDIN's (see there) last exploring expedition (see below).[1] In June 1803 he fell ill in Timor, and stayed behind when the expedition left that island; after recovery he went to Java, making botanical investigations in that island and Madoera with support of NICOLAUS ENGELHARD, then Governor of the NE. coast of Java. In 1806 he sailed for America, returning to France in July 1807. In 1816 he came to Pondicherry as '*inquisitor rerum naturae*' and in the next years made extensive travels in British India, Bengal, Ceylon, *etc.*,[2] returning at Nantes towards the end of May 1822.[3] Finally he made a voyage to Brazil, Guiana and Surinam in 1823–24.[4]

He is commemorated in several Malaysian plant species and in the genus *Leschenaultia* R.BR.

ITINERARY. *Voyage in* '*Le Naturaliste*' *and* '*Le Géographe*', *1800–04.*[1] *cf.* also *sub* GUICHENOT, RIEDLÉ and SAUTIER. Sailing from Hâvre (Oct. 19, 1800); the Canaries (Teneriffe); Île de France; New Holland; *Dutch Timor* (Aug. 21–Nov. 21, *1801*);[5] Port Jackson, Van Diemensland, Arnhemsland, *etc.; Dutch Timor* (May 6–June 2, *1803*),[5] some of the members making larger tours, *e.g.* to Babao and Olinama; as RIEDLÉ and SAUTIER had died during the first visit to Timor and as LESCHENAULT stayed behind in the latter island in 1803, the next part of the voyage was only accompanied by GUICHENOT: Île de France; Cape of Good Hope; arrival at Lorient (March 25, 1804).—*1803–06. Java & Madoera.* Of his sojourn in these islands only very few data are known; in *1805* he evidently visited G. Idjen in *E. Java* (Sept. 20–21),[6] and Tingar (= Tengger) Mts (Nov. 4–7):[7] from Passourouang (= Pasoeroean) (4) *via* Poussepo (= Poespo), and Bali-dono to Tosari; Adihono (= Ngadiwono), Ligo Mohio (collecting plants, incl. a new species of *Quercus*, earlier observed on Mt Idjen and Mt Moria) (= Moerjo in *Centr. Java*); Dassar (Sand Sea) (6), *via* Mong'hal (= Moenggal) Pass; climbing Bromo Volcano; Ledombo (Ider-Ider); returning to Pasoeroean *via* Grati (7). He evidently visited Koping (= Gopeng) near Semarang in *Centr. Java*, and G. Tangkoeban Prahoe in *W. Java* too.

COLLECTIONS. *Herb. Paris*, incl. *c.* 900 *Java* species; the *Timor* plants were elaborated together with those of GUICHENOT, RIEDLÉ and SAUTIER.[8] Duplicates in *Herb. Leyden*, *Herb.* DECAND. & DELESS. (*Geneva*), and apparently some at *Kew* too.[9]

His manuscripts on India and Ceylon are partly preserved in the Libr. Nat. Hist. Mus. Paris;[10] others in the archives of the Herb. (Phanérog.) Paris.[11]

According to HORSFIELD (*cf.* Verh. Bat. Gen. K. & W. 7, 1814, Meded. X, p. 5) he made a private collection of objects of Natural History for the Governor of the NE. coast of Java (= N. ENGELHARD).

LITERATURE. (1) F. PÉRON: 'Voyage de découvertes aux terres Australes exécuté *etc.* sur les corvettes Le Géographe, Le Naturaliste et la goelette Le Casuarina, pendant les années 1800–1804' (Paris 1807–16, 2 vols + atlas).

(2) *cf.* Flora 4², 1821, p. 663–667.

(3) L. TH. LESCHENAULT DE LA TOUR: 'Relation abrégée d'une voyage aux Indes Orientales' (Mém. Mus. Hist. Nat. Paris 9, 1822; not dealing with the Malaysian region).



LESCHENAULT DE LA TOUR

cf. also LASÈGUE, Mus. Bot. DELESS., 1845, p. 430–432.

(4) *cf.* MARTIUS, Flora Brasiliensis.

(5) LESCHENAULT DE LA TOUR: 'Description de la ville de Coupang et de ses environs, sur la côte sud-ouest de l'île de Timor; extrait d'un voyage inédit aux Indes orientales' (in M. MALTE-BRUN, Annales des Voyages *etc.*, 2nd ed., 16, 1811, p. 279–306).

(6) L. TH. LESCHENAULT DE LA TOUR: 'Notice sur un lac d'acide sulfurique qui se trouve au fond d'un volcan du Mont-Idienne, situé dans la provence de Bagnia-Vangni, côté orientale de l'île de Java' (Ann. Mus. Hist. Nat. 18, 1811, p. 425 *seq.*). Transl.: 'Nachricht von einem Schwefelsäure See im Innern eines Vulkans am Mont-Idienne, in der Provinz Bagnia-Vangni, auf der östlichen Seite der Insel Java' (appendix to T. S. RAFFLES, Die Vulkane auf Java, in Sammlung von Arbeiten Ausländischer Naturforscher über Feuerberge und verwandte Phänomene 2, 1825).

(7) LESCHENAULT DE LA TOUR: 'Description des montagnes de Tingar, district de Passourouang

dans l'île de Java' (in M. MALTE-BRUN, Annales des Voyages *etc.*, 2nd ed., 14, 1811, p. 314–334; letter to Governor N. ENGELHARD).

(8) J. DECAISNE: 'Herbarii timorensis descriptio' (Nouv. Ann. Mus. Hist. Nat. Paris 3, 1834, p. 333–501, pl. 16–21; reprinted Paris 1835).

(9) *cf. Atalantia trimera* OLIV. from Timor in Meded. 's Rijks Herb. Leiden *no* 69, 1931, p. 10.

(10) *cf.* Bull. Mus. Hist. Nat. Paris 1, 1895, p.27.

(11) Including: 'Journal Botanique de l'île de Java des plantes observées par Mr LESCHENAULT DE LATOUR' (folio MS. with descriptions of 712 plants); 'Plantes dessinées et écrites par THÉODORE LESCHENAULT, botaniste attaché à l'expédition de découvertes, commandée par le Captne de Vaisseau BAUDIN' (4 note-books containing descriptions and drawings; probably not from the Malaysian region).

BIOGRAPHICAL DATA. PRITZEL, Thes. Lit. Bot., 1872; WITTROCK, Icon. Bot. Berg., 1903, p. 114–115, and *l.c.* 2, 1905, p. 107; MAIDEN in Journ. Austr. Ass. Adv. Sci. Adelaide Meeting 1907, p. 18; Journ. & Proc. Roy. Soc. N.S.W. 43, 1910, p. 134–135; BACKER, Verkl. Woordenb., 1936.

Lesger, B. & W.

one of them Manager of Timbang Langkat Estate in Sumatra East Coast.

COLLECTING LOCALITIES. *1917–18. Sumatra East Coast:* in the higher regions of G. Sibajak (1918), *etc.*

COLLECTIONS. *Herb. Bog.:* from 1917 a 30 *nos*, and a 2nd collection in 1918.[1] The plants were originally sent to the Garden at Sibolangit in Sumatra East Coast (branch of the Botanic Gardens, Buitenzorg), from where they were forwarded to *Herb. Bog.*

LITERATURE. (1) *cf.* Versl. Pl. Tuin Buitenzorg for 1917, p. 12, and *l.c.* for 1918, p. 231.

Lesson, Pierre Adolphe (= A. Lesson)

(1805, Rochefort, France; ?), surgeon-botanist on the French expedition of 'L'Astrolabe' under command of Capt. DUMONT D'URVILLE (see there). The bulk of the plants brought home by the 'Astrolabe' were collected by LESSON.

ITINERARY. *Voyage in 'L'Astrolabe', 1826–29.*[1] Sailing from Toulon (March 28, 1826); Gibraltar, Teneriffe, Port Jackson, New South Wales, Tasman Bay, New Zealand, Tonga Islands, Viti Islands; *Bismarck Archipelago: New Ireland*, Carteret Harbour (July 7–18, *1827*), visiting the *Cocos Islands;* along the *N. coast of New Guinea:* discovery of the entrance of Humboldt Bay (Aug. 12); Port Doré (Aug. 25–Sept. 6); *Ambon* (Sept. 24–Oct. 10); passing the straits of Ombai, Timor and Simao (= Semaoe) to Tasmania, New Zealand, New Hebrides, the Marianas, *etc.;* N of Waigeo(u), passing the straits of Gebeh and Kekek; *Boeroe:* Kajeli (June 30–July 6, *1828*); *Ambon* (July 10–18); *N. Celebes*, Minahassa: Manado (July 27), by land to Tondano, returning to Manado (31) *via* G. Empong; sailing for Batavia (Aug. 4); *W. Java:* Batavia (Aug. 29–Sept. 1), Anjer (Sept. 5); Île de France; Cape of Good Hope; Toulon (Apr. 2, 1829).

COLLECTIONS. *Herb.* DECAND. (*Geneva*): 107 plants from the 'Astrolabe'; *Herb. Paris:* New Zealand plants;[2] *Herb. Vienna:* New Zealand plants collected by LESSON (no initials mentioned). Duplicates in *Herb. Berl.:* Astrolabe voyage 1826–29, from *Ambon, etc.*

The total collections of this expedition amount to 1600 species in 6000 specimens (a small part collected by DUMONT D'URVILLE,[3] and GAIMARD).

The collection was elaborated by RICHARD.[4] HASSKARL mentioned one of the *New Guinea* plants (in his paper on the *Commelinaceae*) 'in *Herb.* (RICH.) *comitis de* FRANQUEVILLE'; probably with *Herb.* RICHARD and FRANQUEVILLE in *Herb. Paris.*

LITERATURE. (1) J. S. C. DUMONT D'URVILLE: 'Voyage de la corvette L'Astrolabe, exécuté par ordre du roi pendant les années 1826, 1827, 1828, 1829, *etc.* Histoire du voyage' (Paris 1830–33).

cf. also 'Kort berigt der ontdekkingsreize van de Astrolabe *etc.*' (Alg. Konst- en Letterbode 1830[2], p. 4–10, 21–24).

(2) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 313–314.

(3) *cf. ditto l.c.* p. 378–379.

(4) A. RICHARD: 'Voyage de découvertes de L'Astrolabe . . . pendant . . . 1826–29 sous le commandement de J. S. C. DUMONT D'URVILLE.' Botanique (for dates of issue *cf.* Ann. Mag. Nat. Hist. 8, 1901, p. 333) vol. 1 'Essai d'une flore de la Nouvelle-Zélande' (Paris 1832); vol. 2 'Sertum Astrolabianum' (Paris 1834). The latter volume consists of a catalogue of plant species collected in the more important localities visited during the expedition; the list of *Ambon* contains 53 phanerogams, that of *Boeroe* 25, of *Celebes* 29; Atlas, 1833, 39 pl.

Lesson, René Primivère (= P. Lesson)

(1794, Rochefort, France; 1849, Rochefort, France), elder brother of the former, pharmacist-naturalist (principally zoologist) on DUPERREY's expedition in the 'Coquille' (see below). Afterwards he was appointed professor at the Medical College, Rochefort.

Some ferns were named in his honour.

ITINERARY. *Voyage in 'La Coquille', 1822–25:*[1] *cf. sub* J. S. C. DUMONT D'URVILLE, who was in charge of the botany department. Apparently LESSON collected at least in the vicinity of the Bay of Doré in *Dutch N. New Guinea*, and in *Ambon.*

COLLECTIONS. *Herb. Paris.* Duplicates in *Herb. Berl.* (with *Herb.* KUNTH) and in *Herb. Leyden.* In *Herb. Vienna:* New Zealand plants collected by LESSON (without initials). For literature on the plant collections see *sub* DUMONT D'URVILLE. The zoological results of the expedition were published by LESSON and P. GARNOT (1826, 1830), the work is unfinished, however.

LITERATURE. (1) R. P. LESSON: 'Voyage médical autour du Monde, exécuté sur la corvette La Coquille' (Paris 1829) (*non vidi*); 'Voyage autour du monde sur la corvette la Coquille' (Paris 1838–39, 2 vols).

cf. also *sub* DUMONT D'URVILLE.

BIOGRAPHICAL DATA. PRITZEL, Thes. Lit. Bot., 1872; WITTROCK, Icon. Bot. Berg., 1903, p.

115, and *l.c.* 2, 1905, p. 107; BACKER, Verkl. Woordenb., 1936.

Lete, Rafael
a Spaniard, pharmacist, who collected in *Luzon, e.g.* in Union Province.
COLLECTIONS. *Herb. Manila:* > 550 *nos* (pres. *c. 1916–17*); 131 dupl. in *Herb. Berkeley* (Cal.) (pres. 1927). Several are cited by MERRILL in Enum. Philip. Fl. Pl.

Lett, A.
Protestant Missionary at Sikaping, *Mentawai* (W of Sumatra), sent a *Coelogyne sp.* to *Hort. Bog.* in *1908*.

Leuterio, *cf. sub* Forestry Bureau, Manila.

Levyssohn Norman, Mrs
of Buitenzorg, presented plants to *Hort. Bog.* in the years *1872* and *1874*.

Lewandowsky, B.
probably a functionary of the German New Guinea Company. He was instructed by LAUTERBACH to collect plants.
COLLECTING LOCALITIES. *1899.* Former *Kaiser-Wilhelmsland, NE. New Guinea:* in the neighbourhood of Stephansort (Aug.), *etc.*
COLLECTIONS. *Herb. Berl.:* 57 *nos* purchased from the German New Guinea Company;[1] dupl. in *Herb. Leyden* and in *Herb. Bog.* (pres. 1902, *cf. sub* ZEWANDOWSKY).
LITERATURE. (1) Partly described in SCHUMANN & LAUTERBACH: 'Flora der Deutschen Schutzgebiete i.d. Südsee' (1901).

Lewe
is cited by Miss KOSTER[1] as the collector of *Vernonia arborea* HAM. *var. obovata* MOORE, *no* 36, in Sarawak, *NW. Borneo*.
cf. also *sub* LOWE and LOW, as the name is probably misread. The above-mentioned plant is preserved in *Herb. Kew*.
LITERATURE. (1) In Blumea 1, 1935, p. 392.

Lewis
Possibly J. E. A. LEWIS, in 1901/02 acting Curator of the Sarawak Museum during absence on leave of R. SHELFORD.
COLLECTIONS. *Herb. Sing.:* Sarawak (*NW. Borneo*) plants (pres. *1908*). Some of his plants are cited by MERRILL in Enum. Born. Pl. 1921.

Lewis, W. T.
an Uncovenanted Official in Bencoolen, from 1806 to 1824. He was transferred to the Straits, and made Head of the Land Department at Malacca. In 1840 he became Assistant in Penang, then Resident Councillor of Malacca, and finally, in 1855, Councillor of Penang. He held the latter position until his retirement in 1860.[1]
A friend of GRIFFITH; the latter named some plants after him.
COLLECTIONS. Plants from the *Malay Peninsula* (*1844–45*) and *Penang* (*1845*), sent to GRIFFITH (see there).
LITERATURE. (1) *cf.* Journ. Mal. Br. Roy. As. Soc. 3, 1925, p. 96.
BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; BACKER, Verkl. Woordenb., 1936.



R. P. LESSON

Leijen, van
of Batavia, sent plants to *Buitenzorg* in *1872*.
He might be identical with K. VAN LEYEN, then educationalist at the Gymnasium K. W. III at Batavia.

Liautaud, Augustin Pierre Joseph Louis
(1812, Toulon, France; 186., ?), surgeon who was for 28 years in the employ of the French Navy, and retired in 1860. He accompanied the voyage of the 'Danaïde' (1839–43),[1] and received his instructions for botanical collecting from GAUDICHAUD.[2] Notwithstanding his good intentions botany was much neglected during the expedition and the results were pretty poor. The zoological collection was made with JAURÈS, a naval officer.
ITINERARY. *Voyage in 'La Danaïde', 1839–43.*[1] Only partly known. Sailing from Callao (Oct. 29, *1839*); Guiayaquil; Panama (Dec. 25); in *1841* from *Singapore* to *Luzon* (*P.I.*): Manila (arrival June 2); entering the harbour of Cavite (5); July 10 still at Manila; from Macao (Aug. 30); Hongkong (leaving Sept. 5); Amoy *etc.*, on the coast of China; Chusan; Macao (early Nov.); after some days sailing for *Luzon* (Manila) once more.

COLLECTIONS. *Herb. Paris:* 173 botanical specimens and medicinal herbs, including some from the *Philippines;* inadequate for identification.

LITERATURE. (1) Some reports by Capt. J. DU CAMPE DE ROSAMEL in Ann. Marit. et colon. 1840 and 1842.

(2) E. T. HAMY: 'LIAUTAUD et GAUDICHAUD. Note pour servir à l'histoire des collections de La Danaïde (1839–43)' (Bull. Mus. Hist. Nat. Paris 12, 1906, p. 439–442).

BIOGRAPHICAL DATA. Bull. Mus. Hist. Nat. Paris 12, 1906, p. 440.

Lichtenstein

According to LASÈGUE (Mus. Bot. DELESS., 1845, p. 328) the herbarium of the late Sir W. J. HOOKER contained *Java* specimens, collected by SPANOGHE (see there), LICHTENSTEIN, *etc.* The only LICHTENSTEIN known to the author is professor HENRI LICHTENSTEIN of Berlin, who made botanical collections in S. Africa (1803–06). The statement of LASÈGUE may be a mistake, or the herbarium of LICHTENSTEIN may contain *Java* specimens collected by others.

Lieftinck, Maurits Anne

(1904, Amsterdam, Holland; x), entomologist, studying for several years at Amsterdam University; since 1929 on the staff of the Buitenzorg Zoological Museum, from 1940 onwards Head of that institution.

Author of many entomological papers.

COLLECTING LOCALITIES. *Karimoendjawa Islands (1930;* collected by KARTA, see there); *W. Java:* G. Pantjar (Aug. *1931*); *S. Sumatra,* Lampong Districts (Dec. *1934*–Jan. *1935*); G. Tanggamoes[1] (Jan. 1–2) and the 'Giesting'; *W. Java:* Telagasaät (Poentjak) (Febr. 3, 1935); *S. Sumatra:* Lampong Districts, 'Giesting' (end of Dec. *1939*).

COLLECTIONS. *Herb. Bog.:* 49 specimens from *S. Sumatra* and very few from *Java.*

LITERATURE. (1) M. A. LIEFTINCK: 'De sneeuwkoningin van Tanggamoes' (Gedenkboek Dr J. P. Thysse, De Levende Natuur 1935, p. 167–169).

Ligtvoet

probably orchid amateur.

COLLECTING LOCALITIES. *E. Java:* Wlingi; *W. Java:* Manondjaja (near Tjiamis) (*1874*); Soekaboemi (by J. LIGTVOET, ? identical) (*1898–1900*).

COLLECTIONS. Orchids in *Hort. Bog.,* partly cited by J. J. SMITH and inserted in *Herb. Bog.*

Lilles, Leonardo

collected *Gmelina philippinensis* CHAM. in *Luzon,* Bataan Prov., Lamao (March *1909*) (*cf.* HALLIER in Meded. 's Rijks Herb. Leiden *no* 37, 1918, p. 60).

Lim Boon Keng, Dr

a member of the Gardens Committee, *Singapore,* collected a little in the latter island (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Sing.* (pres. *1920*).

Linden, Auguste Charles Joseph

(1850, Luxemburg; 1894, Luxemburg), son and co-operator of the famous horticulturist J. J. LINDEN. He served for 10 years as an officer in the Belgian army which he left in 1885, subsequently travelling in the Malay Archipelago (1886), the Congo, and Spain. Some time after his return home he lost an arm, and he was quite an invalid for the last years of his life.

Vanda lindeni RCHB. *f.* was named after him.

VISITED LOCALITIES.[1] *1886. Moluccas: Ternate, Batjan,* Gilolo (*Halmahera*), *Morotai,* and several localities on the coast of *New Guinea* and the island *Sandor* (= ?). Evidently he visited other islands too.

COLLECTIONS. He brought home living orchids, *e.g.* from the *Moluccas.*[2]

MERRILL in Enum. Born. Pl. 1921 cites a certain LINDEN as the collector of some orchids in *Borneo;* in Enum. Philip. Fl. Pl. 1, p. 420 an orchid from the *Philippines* is cited.

LITERATURE. (1) *cf.* Gartenflora 43, 1894, p. 534 *seq.*

(2) *cf.* Gard. Chron. 1886[2], p. 70 note.

BIOGRAPHICAL DATA. Orchid Review 2, 1894, p. 258; Gartenflora 43, 1894, p. 534–535; BACKER, Verkl. Woordenb., 1936.

Lindgreen, J. J.

in 1857 Military Surgeon in *Banka,* stationed at Muntok.[1] He collected some plants in that island.[2]

COLLECTIONS. *Herb. ? Bog.*

LITERATURE. (1) Author of 'Geneeskundige topographie van Muntok' (Geneesk. Tijdschr. 5, 1857, p. 839–889, incl. plant list on p. 845–856).

(2) *cf.* TEYSMANN in Nat. Tijdschr. N.I. 27, 1864, p. 157–258.

Link, F.

is cited by MERRILL in Enum. Philip. Fl. Pl. as the collector of *Philippine* plants, *e.g.* the *nos* 212 and 215 from *Jolo.* ? Possibly *ex Herb.* H. FR. LINK (biogr. data in BACKER, Verkl. Woordenb., 1936).

Lister, Joseph Jackson

(1857, Leytonstone, England; 1927, Grantchester, Cambridge, England), of St John's College, Cambridge; volunteer naturalist o/b H.M.S. 'Egeria', embarking at Colombo (Ceylon).

Commemorated in *Phreatia listeri* ROLFE.

ITINERARY. *Voyage in the 'Egeria', 1887.*[1] Leaving Batavia (Sept. 27); *Christmas Island* (arriving Sept. 30, staying about 1 week), being unable to penetrate into the centre of the island.[2] Seemingly afterwards visiting the Pacific Islands.

COLLECTIONS. *Herb. Kew: Christmas Isl.,* 88 *nos* (52 phaner.);[3] also plants from the Pacific Islands, *etc.* He made zoological collections too.

LITERATURE. (1) Capt. PELHAM ALDRICH: 'Report on Christmas Island (Indian Ocean), H. M.S. Egeria' (Admir. Reports, w. map) (*non vidi*).

(2) J. J. LISTER: 'On the Natural History of Christmas Island in the Indian Ocean' (Proc. Zool. Soc. Lond. for 1888, p. 512–531); *cf.* also Nature

37, 1888, p. 203–204 (letter by LISTER with postscript by WHARTON), and *l.c.* p. 222.

(3) W. B. HEMSLEY: 'Report on the botanical collections from Christmas Island, Indian Ocean, made by Capt. J. P. MACLEAR, Mr J. J. LISTER, and the Officers of H.M.S. Egeria' (Journ. Linn. Soc. Bot. 25, 1889/90, p. 351–362).

BIOGRAPHICAL DATA. Journ. Bot. 65, 1927, p. 83; in Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931.

Lister Turner, Reverend R., *cf.* TURNER, R. LISTER

Lit, J. A., *cf.* sub Forest Research Institute, Buitenzorg.

Lith, Pastoor van

priest at Moentilan in *Centr. Java*, repeatedly sent living, especially ornamental, plants to *Hort. Bog.*, in the years *1908–17*.

Little, Dr

COLLECTIONS. *Hort. Sing.:* 19 plants (in the Gard. Rep. no provenance mentioned) (pres.*1884*).

Little, A.

is cited as the collector of *Eulophia chrysoglossoides* SCHLTR in *Br. N. Borneo* (*cf.* Bull. Herb. BOISS. sér. 2, vol. 6, 1906, p. 453); preserved in *Herb.* SCHLECHTER = *Berlin*.

Lix

collector, sent to New Guinea by the Natural History Museum at Paris in 1890.

COLLECTING LOCALITIES. *1890. SE. New Guinea:* Mt Yule; Nikura and Nabuapaka (S. coast).

COLLECTIONS. Probably at *Paris*, mainly zoological, but at all events mosses too.[1] The latter in *Herb.* BESCHERELLE (= ?).

LITERATURE. (1) *cf.* V. F. BROTHERUS: 'Some new species of Australian mosses described' (Öfv. Finska Vet. Soc. Förh. Helsingf. 40, 1897/98, p. 175, 187).

For literature on his collections of fishes and birds *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea 2^2, p. 835.

Lizardo, *cf. sub* Forestry Bureau, Manila.

Llanos, Antonio

(1806, Sarriegos, Leon Prov., Spain; 1881, Calumpit, Luzon, P.I.), an Augustinian Roman-Catholic priest, since 1829 missionary in the *Philippines*. He collected plants on behalf of the 2nd edition of BLANCO's Flora (see *sub* BLANCO).

Author of several papers on the Philippine flora.[1]

He is commemorated in the genus *Llanosia* BLANCO and in several plant species.

COLLECTIONS. *Herb. Bot. Gard. Madrid:* 400 *nos* of *Philippine* plants BLANCO & LLANOS[2] (according to MERRILL this statement is wrong, *cf. sub* BLANCO and *sub* ANONYMOUS); *Herb.* DECAND. (*Geneva*): 291 *nos Philip.; Herb.* DELESS. (*Geneva*): 46 *nos ditto;*[3] some dupl. in *Herb. Leyden.*

LITERATURE. (1) For the most part short and unimportant in the period 1851–75; the most important: 'Fragmentos de algunas plantas de Filipinas, no incluidas en la Flora de las islas de la 1.ª ni de la 2.ª edición *etc.*' (1851, p. 1–125). His most important papers were reprinted in the 3rd edition of BLANCO, Flor. Filip.; MERRILL gives a detailed list of LLANOS's papers in 'Discussion and bibliography of Philip. Fl. Pl.' (in Enum. Philip. Fl. Pl. vol. 4) 1926, p. 202.

cf. also MERRILL in Bull. Philip. Bur. of Agric. Manila *no* 4, 1903, p. 12–13 and his 'Species Blancoanae', a critical revision of plants described by BLANCO and LLANOS (Bur. Sci. Publ. 12, 1918, p. 1–423, w. map).

(2) *cf.* A. DECANDOLLE, Phytographie, 1880, p. 397 and 428; COLMEIRO, Bosquejo Hist. Jard. Madrid, 1875, p. 88.

(3) *cf.* Bull. Herb. BOISS. 4, 1896, p. 104.

BIOGRAPHICAL DATA. Encicl. Univ. Illustr. 31: 1014 (*non vidi*); BACKER, Verkl. Woordenb., 1936.

Lobb, Thomas

(1820, Cornwall, England; 1894, Devoran, Cornwall, England), employed by the firm of Messrs VEITCH, Exeter, in the years 1843–60, to collect plants of horticultural value. As the result of exposure in his work, he lost one of his legs, which induced him to settle at Devoran in Cornwall.

He is commemorated in the genus *Lobbia* PLANCH. and in several Malaysian plant species.

COLLECTING LOCALITIES.[1] It is recorded that he proceeded to *Singapore* in *1843*, and visited *Java* and adjacent islands. The first collecting dates from the Malaysian region, known to me, are from 1845; LOBB may have collected elsewhere in the meantime.—*1845. Malay Peninsula: Singapore, Penang*, Kedah Peak, Malacca.—*1845–46. W. Java:* Bantam, Mt Salak, Mt Seribu (W of Buitenzorg), Panarang, Mt Asapan near Bantam, Mt Pangrango; Mt Papandajan; *? Bali* (?).—By a 2nd agreement he left England for Calcutta (Dec. 25, 1848), collected in Br. India and Burma and afterwards in the southern parts of the *Malay Peninsula*, on Mt Ophir (*1849*) (also visited in ? 1848) *etc.; North Borneo* (*Labuan* and Sarawak); subsequently visiting the *Philippines*, collecting in the neighbourhood of Manila (*Luzon*) (according to Hort. Veitchii in *1848!*).—*Malay Peninsula: Singapore* and short visit to Sarawak (*1852*); *Java* and *Noesa Kambangan* (*? 1854*); Mt Ophir (*1854*); *Borneo* (1854); *Sumatra* (*1855*); *Br. N. Borneo*, attempt to reach Mt Kinabalu (*1856*), but forced by the natives to return when at Kiau (2800 ft alt.).

COLLECTIONS. He collected dried plants, which were sold in sets after determination;[2] these often bear incorrect localities.[3] The *Java* plants are numbered 1–276, those from *Singapore* 277–333, at least of the collection up to 1846. But here too errors occur, as *no* 263, *Xyris lobbii*, which accordingly ought to come from Java, came surely either from the Malay Peninsula or Moulmein! A large *Singapore* collection was lost by shipwreck.

In *Herb. Brit. Mus.:* 131 plants from *Java* (purch.

1846); 213 from *Java*, *Penang*, and *Singapore* (purch. 1847); 48 plants (purch. 1848) (elsewhere the statement: 711 plants from *Malaysia* purch. 1846–48!);[4] *Singapore* plants (acq. with *Herb.* SHUTTLEWORTH) (1877); 819 plants from the *Eastern Archipelago* (pres. by H. J. VEITCH in1888); 400 *Borneo* plants, chiefly ferns and *Nepenthes* (purch. 1894). *Herb. Kew:* from *Malaya*, *Singapore* and *Java* (acq. 1854–98), *nos* 1–486, and 900.[5] Duplicates at *Cambridge;* in *Herb. Oxford Univ.* (with FIELDING *Herb.*): *Singapore* and *Java; Berl.* (only few?); *Herb.* DELESS. (*Geneva*): 243 *nos* from *Java* (pres. 1845–48); *Herb. Sing.:* from India, *Malacca* (exch. 1889); *Herb. Univ. Dublin; Herb.* TURCZANINOW (= *Univ. Kharkov*); *Herb. Florence: Java* plants; *Herb. Vienna: Java*,[6] and orchids from *Java* and *Borneo* with *Herb.* REICHENBACH; *Herb. Paris:* some from *Java; Herb. Bot. Gard. St Petersb.* (= *Leningrad*): '*Plantae javanenses*'; *Herb. Utrecht: Java* (1846); *Herb. Edinburgh: Java* (1846).

LITERATURE. (1) The mentioned data were occasionally collected in literature, mainly in 'Hortus Veitchii' (1906) and in the cited biographies. The results are hardly satisfactory.

(2) *cf.* 'Mr. THOS. LOBB's Java plants' (HOOK. Lond. Journ. Bot. 5, 1846, p. 198.

J. E. PLANCHON: 'Catalogue of the first series of plants of Java collected by THOM. LOBB, sets of which have been announced for sale by Mr. HEWARD, Young Street, Kensington' (*l.c.* 5, 1846, p. 246–250); 'Catalogue of Malayan plants collected by THOM. LOBB *etc.*' (*l.c.* 6, 1847, p. 469–473). This catalogue was discontinued.

(3) *cf.* Hortus Veitchii 1906, p. 41.

cf. E. D. MERRILL: 'Genera and species erroneously credited to the Philippine flora' (Philip. Journ. Sci. C. Bot. 10, 1915, p. 171–194), and 'A discussion and bibliography of Philip. Flow. Plants' (Manila 1926, p. 76; MERRILL even suggests: 'The labels of LOBB's specimens seem to have been purposely falsified as to the localities in which they were collected').

cf. also RIDLEY in Journ. Str. Br. Roy. As. Soc. *no* 25, 1894, p. 166 (erroneously WILLIAM LOBB!).

(4) *cf.* 'History Coll. Brit. Mus.' vol. 1, 1904, p. 89 and 163.

(5) Some plants described by J. D. HOOKER in 'Illustrations of the floras of the Malayan Archipelago, and of tropical Africa' (Trans. Linn. Soc. Lond. 23[1], 1860, p. 155–172, pl. 20–28).

(6) *cf.* Ann. k.k. Naturhist. Hofmus. Wien 11, 1896, p. 20.

BIOGRAPHICAL DATA. Journ. Bot. 32, 1894, p. 191, and Biogr. Index BRITTEN & BOULGER in *l.c.* 36, 1898, p. 271, and in 2nd ed. by RENDLE, 1931; Cottage Gardener 13, p. 274 (*non vidi*); Gard. Chron. 15, 1894, p. 636; Hortus Veitchii 1906, p. 41–44; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; BACKER, Verkl. Woordenb., 1936; Nature 149, 1942, p. 438; Journ. Roy. Hort. Soc. 67, *no* 2, 1942; Chron. Bot. 7, 1943, p. 357; Journ. Roy. Hort. Soc. 73, 1948, p. 285–286.

Loddiges

is cited as the collector of a *no* 273, *Dendrobium scopa* LINDL., in the *Philippines* (*cf.* MERRILL, Enum. Philip. Fl. Pl., 1, p. 354).

No collector of this name is known to the author, but two English nurserymen, *viz* CONRAD LODDIGES (1738; 1826, Hackney near London, England), who is commemorated in the genus *Loddigesia* SIMS,[1] and GEORGE LODDIGES (1784 or ? 1786, Hackney; 1846, Hackney), who is commemorated in *Cattleya loddigesii* LINDL.[2] By the firm of LODDIGES several books were issued.[3] As to collecting localities they yield the following data: *Sumatra* (*1835, 1840–41*); *Malay Peninsula: P. Dinding* (= *Pangkor Isl.*) (*1835*), *Penang* (*1838–39*), *Singapore* (*1839–40*), Mt Ophir (*1840*); *Java* (*1838–39*); *Philippines* (incl. Manila) (*1836–39, 1841*). Part of these data correspond with those of CUMING (see there), one of the firm's collectors; others do not, *viz: P. Dinding* (= *Pangkor Isl.*) (*1835*), *Java* (*1838–39*), *Sumatra* (*1835* and *'41*) and Manila (*1841*). Evidently other collectors were employed too.

COLLECTIONS. *Herb. Kew:* specimens of cultivated plants from CONRAD and GEORGE LODDIGES (pres. 1831–46); in *Herb. Munich* (with *Herb.* ZUCCARINI); *Herb.* MARTIUS (= *Brussels*): 120 from Tasmania.

LITERATURE. (1) *cf.* PRITZEL, Thes. Lit. Bot., 1872.

(2) *cf.* PRITZEL, *l.c.;* SALOMON, Nomenclator der Gefässkryptogamen *etc.*, 1883, Appendix; and BACKER, Verkl. Woordenb., 1936.

(3) 'Catalogue of plants in the collections of CONRAD LODDIGES and Sons' (London 1814–36); 'The botanical Cabinet, *etc.*' (London 1817–33, 20 vols); 'Orchidaceae in the collection of CONR. LODDIGES and Sons, arranged to Dr LINDLEY's Genera and Species; with their native countries and years of introduction' (London 1842); 'Palms in the collection of C. LODDIGES and Sons, with their native countries' (London 1845).

Loeb, Edwin M.

(1894, New York City, U.S.A.; x), took his Dr's degree at Yale University in 1922; Research Associate of the University of California; he made a study tour under a grant by the GUGGENHEIM Brothers of N.Y. City, to the *Pagai Islands* (southern group of the Mentawei Islands, W of Sumatra) in *1926*, staying from March till July[1] in *N. Pageh* (= *Pagai*), collecting in the south tip.

COLLECTIONS. *c.* 130 *nos* in *Herb. Berkeley* (Cal.); dupl. elsewhere.

LITERATURE. (1) Author of 'Mentawei religious cult' (Univ. of Calif. Publ. in Amer. Arch. & Ethn. 25, 1929, p. 185–247, pl. 69–73); 'Sumatra, its history and people' (Wiener Beitr. z. Kulturgesch. und Linguistik 3, 1935).

BIOGRAPHICAL DATA. American Men of Science.

Loenen, Frederik Christiaan van

(1907, Fort de Kock, Sumatra West Coast; x), educated at Wageningen Agricultural College, since 1937 appointed Pedologist at the Institute for Soil Science, Buitenzorg. Most of his pedological

investigations were made in Celebes, but some in Borneo and Sumatra too.

COLLECTIONS. *Herb. Bog.:* plants from the environs of Pengaron in *SE. Borneo* (coll. Febr. *1938*).

Lörzing, Julius August

(1872, Häselrieth, Thüringen, Germany; June 7, 1945, in Japanese prisoner camp near Semarang, Java), came as a private soldier to the D.E.I. in 1896; in 1903 he set to work in the employ of the Forest Service; in 1915 he was instructed to lay out a botanical garden at Sibolangit in E. Sumatra (a branch of the Buitenzorg Garden).[1] He retired in 1924, and subsequently got the supervision of the municipal parks at Medan, Sumatra East Coast.

Beside of the below-cited papers, he is the author of some others relating to forestry. Several Malaysian plants were named in his honour.

COLLECTING LOCALITIES. *Centr. Java:* G. Muria (= Moerjo) (*190.*, possibly no collections made);[2] Kedoe Residency (*1911*),[3] also G. Diëng; G. Soembing (Nov. 6, 19 and 28, 1911), *etc.;* G. Soembing, G. Sindoro, and G. Tlerep (*1912*).—*1914. E. Java:* Kediri (Febr. 6–7), G. Wilis (E. slope and E. summit) (Febr. 8–18),[4] Toeloengagoeng (19–20), Sripit to Prigi (21), Prigi and neighbourhood (S. coast) (Febr. 22–March 1), Watoelima and Toeloengagoeng (March 2); *Centr. Java:* Moentilan and Djokja (4); *W. Java:* limestone hills W of Padalarang (March 14), Tjileunji near Bandoeng (15), Batoedjadjar–Tjisandawoet (16), to Tjatjaban (17), G. Semboeng (18–22; visiting G. Tambakroejoeng on the 20th); Lebakmoentjang–Baroetoenggoel–Telaga Patengan on G. Patoeha (23); G. Patoeha (23–29),[5] visiting Rantja Walini, Telaga Patengan, Rantjabali, Rantjasoemi, Kawa Patoeha, the summit (28); near Tea Estate Indragiri, on the Tjiparaj (river) and forest at the base of G. Kikoekoer (30); W. Patoeha (31); Tjibodas and slopes G. Gedeh (May 6–17, 19–24), climbing G. Gedeh-Pangrango (17–19).—*Sumatra East Coast* (*since* Sept. 13, *1914*): *environs of Medan*, near Belawan, Rantau Pandjang, Serdang, Perbaoengan, Loeboekpakam, Gedong Djohore, Senembah, Soenggal, Oelarperbaoengan, Tandjong Morawa, Bandarbaroe, Tebingtinggi, *P. Berhala* (Nov. 1–2, *1919*), Pantei Tjermin (*1920*) and principally at *Sibolangit and neighbourhood; in the highlands* (partly in *Tapanoeli Res.*), *e.g.* Karo Lands (Raja, Deleng Koetoe) (March 13–16, *1917*), Brastagi (Aug. *1918*); Karo Lands (Sibajak); Kabandjahe, Lingga, Asahan, E of Balige, Toba Lake (May *1919*), Habinsaran, Prapat, Pangoeroeran, Piso-Piso; in *1920:* Karo Lands, the Siboeatan, N. Sibajak, Bandjalinggi, Toba Lake, Habinsaran; in *1921:* G. Sinaboeng (Jan. 19), G. Pinto (22), G. Sibajak (23), the Siosar, near Boeloetjina (NW. Deli); in *1922:* western part of the Karo Lands and G. Singgalang (May 25–26), G. Sibajak (June 18); in *1923:* G. Sibajak (Jan. 27), Upper Bila Plain (Apr.), SE. Toba Lake and course of the Upper Asahan (May); Petani Valley; in *1924:* Kota Tjané (May 18–19), G. Seriboe (May 21–22); in *1925:* Bila (Apr.).[6]

COLLECTIONS. *Herb. Bog.: Java* (lists existing, *nos* 1–2453; 1501–1700 not used) and *Sumatra* plants. Of the latter collection a list exists of the *nos* 3001–11629, of which the *nos* 10200–10999 were left a blank; on the suggestion of the Head of the Buitenzorg Herbarium this *Sumatra* collection was numbered from 3000 upwards;[7] dupl. in *Herb. Leyden; Herb. Utrecht: Java nos* (1914), and from *Sumatra* (1917–18); *Herb. Univ. Amsterdam: Sumatra* dupl. with carbon-copied labels.



LÖRZING

Sets of dried plants of his were offered for sale by OSW. WEIGEL; one of them was in *Herb. Manila:* 220 (purch. 1930). He was the owner of a large *private herbarium* which in January 1942 was brought to the A.V.R.O.S. Experiment Station at Medan; Febr. 1950 it was transferred to Buitenzorg. It was accompanied by a manuscript (not wholly completed) on the flora of Sumatra and Java.

In *1919* he employed the native collector GALOENGI (see there).

Living *Sumatra* plants in *Hort. Bog.* (pres. 1917).

A new *Gentiana* was described by RIDLEY.[8]

LITERATURE. (1) J. A. LÖRZING: 'De afdeeling Sibolangit van 's Lands Plantentuin (Oostkust van Sumatra)' (Tectona 14, 1921, p. 693–711).

(2) J. A. LÖRZING: 'Ein Ausflug nach dem Muria-gebirge' (Urania 1909) (*non vidi*).

(3) J. A. LÖRZING: 'De grot van Goewa Lawa bij Ngalean' (Trop. Nat. 3, 1914, p. 172–177).

(4) J. A. LÖRZING: 'Botanische verkenningen en tochten in het Willis-gebergte' (Trop. Nat. 3, 1914, p. 97–102, 120–123).

(5) J. A. LÖRZING: 'De Patoeha en zijn omgeving' (Trop. Nat. 6, 1917, p. 81–86 and *l.c.* 10, 1921, p. 97–105, 134–141, fig. 1–15b).

(6) J. A. LÖRZING: several small papers in the 'Sumatra Post' 1924 and 1925.

(7) *cf.* Versl. Pl. Tuin Buitenzorg for 1918, p. 12.

(8) *cf.* Kew Bull. 1939, p. 30–31.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Loggers, O. J.

(1891, W. Kapelle, Z., Holland; x), planter, on Sawo Djadjar Estate, 1930–33; Manager of Kendeng Lemboe Estate at Glenmore (E. Java), 1933–35; since 1935 Director of BIRNIE's Administration Office Ltd at Djember (E. Java). In 1947 stationed at Batavia.

COLLECTING LOCALITIES. *1931–41. E. Java:* at Batoe (*1933*); Watangan Mts (near Poeger) (Oct. 18, *1936*); G. Majang (Aug. 11, *1940*); *etc.*

COLLECTIONS. *Herb. Bog.*: principally orchids, *c.* 80 *nos;* also in *Hort. Bog.*

Loher, August

(? , Simbach, Bavaria, Germany; 1930, ?), since 1889 a resident in the Philippines, earning his living as wholesale dealer in pharmaceutical remedies.

Author of some small papers on Philippine plants.[1] Several plants were named after him.

COLLECTING LOCALITIES. *Philippines. 1889–96. Luzon,* eastern Rizal and adjacent Tayabas.—*1908–15.*[2] *Luzon:* mostly from Rizal Prov., *viz* at Montalban, Balacbac, Balintangan, Angilo, Mabiluang, Bantol, Puray, Guinuisan, Pinauisan, Sumag, Paningtingan, Siya Bundoc, and Lucutan; also from the Umirey region in Tayabas Prov. contiguous to the eastern boundary of Rizal Province; from the Caraballo Mts in Nueva Vizcaya Prov.; *Mindanao:* vicinity of Lake Mainit, Surigao Prov.; *Polillo Island.—SE. New Guinea:* Port Moresby (Apr. *1910*).[3]

COLLECTIONS. *Herb. Kew:* collection *1889–1896*, numbering over 5200; *P.I.* plants (pres. 1906–07), and dupl. of Herb. Manila (pres. 1925). Duplicates of the collection *1889–1896* in *U.S. Nat. Herb. Wash.* (> 2300), *Univ. Munich, Calcutta, Manila* (243 *nos* pres. by Washingt. and Kew, 1907–11), *Herb.* BING (= *Paris*), a few *nos* in *Herb.* Dr LEON GUERRERO (coll. of *San José, Manila*), *Herb. Berl.* (219 *nos*, pres. 1903), *Herb. N.Y. Bot. Gard.* (60, pres. by Washingt.), *Herb. Leyden;* in *Herb. Paris:* dupl. from *Centr. Luzon*, possibly with *? Herb.* F. BING (pres. 1903).[4]

His extensive collections made *posterior to 1906*, were presented to *Herb. Manila* in 1923 (*nos* 12000–15170; for the older collections see above), the 1st duplicate going to *Munich;* other duplicates in *Herb. Berl.:* 790 *nos* (pres. 1912);[5] *Herb. Berkeley* (Cal.) (co-types); orchids in O. AMES *Herb.* (Cambr., Mass.).

Some papers were based on his collections.[6]

He sent living orchids to the *Munich Bot. Garden.*[7]

LITERATURE. (1) Author of 'New or noteworthy plants' (Gard. Chron. 3rd ser. vol. 21, 1897, p. 339, 416; *l.c.* 22, 1897, p. 1; *l.c.* 46, 1909, p. 34 and 47, 1910, p. 66); 'Orchids notes and gleanings' (*l.c.* 22, 1897, p. 121); 'Lophopetalum toxicum LOHER' (in Icon. Bogor. 1, 1897, p. 55–65, pl. 16).

(2) *cf.* Philip. Journ. Sci. 27, 1925, p. 21.

(3) *cf.* ENGL. Bot. Jahrb. 56, 1920/21, p. 275 and *l.c.* 61, 1927, p. 185.

(4) *cf.* in Bull. Mus. Hist. Nat. Paris 19, 1903, p. 296–302.

(5) *cf.* C. B. ROBINSON in 'The history of botany in the Philippine Islands' (Journ. N.Y. Bot. Gard. 7, 1906, p. 104–112) p. 109; and MERRILL in 'A discussion and bibliogr. of Philip. Flow. Plants' (Manila 1926) p. 52.

(6) H. CHRIST: 'Filices Insularum Philippinarum (coll. de M. A. LOHER)' (Bull. Herb. BOISS. 6, 1898, p. 127–154, 189–212, pl. 2–4 and *l.c.* sér. 2, vol. 6, 1906, p. 987–1011).

J. PERKINS: 'Enumeration of some of the recently collected plants of LOHER, *etc.*' (in Fragm. Flor. Philip. 1904, p. 4–66, 77–202).

E. D. MERRILL: 'New species of Philippine plants collected by A. LOHER' (Philip. Journ. Sci. 27, 1925, p. 21–59).

(7) *cf.* KRAENZLIN in Ann. k.k. Naturhist. Hofmus. Wien 30, 1916, p. 55–65.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Lohman

is cited as the collector of *Ceratophyllum submersum* L. in Pekalongan-Tegal Prov. in *Centr. Java* (*cf.* KOORDERS, Exkurs. Flora, 2, p. 217).

Long, Frank Reginald

born and educated at Winchester, England, where he received a thorough training in all the departments of Messrs HILLIER & Sons, Nurseries, and subsequently at Kew. In charge of the Hill Garden, Taiping, *Malay Peninsula*, 1908–10, when Superintendent of Government Plantations, Perak (F.M.S.). After the rubber boom he resigned and took up planting in 1912. In 1921 he left the Malay Peninsula for health-reasons, settled in S. Africa where he joined the Port Elisabeth Parks Department from 1922–25, when he was appointed Beach Manager; in 1929 Superintendent of Parks besides.

COLLECTIONS. *Herb. Kew:* a bundle of plants from the Taiping Hills (pres. *1909*).

Hort. Sing.: living plants (pres. *1909*).

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; Gard. Chron. 3rd ser. 99, 1936, p. 82 + portr.

Long, Howard

school-teacher, collected in *Negros, P.I., about 1903;* in *Herb. Manila.*

Longman

collected seeds or fruits of *Alsomitra* in the *Aroe Islands;* material in *Herb. Kew* (*cf.* Ann. Bot. N.S. 6, 1942, p. 96).

Loo, van der
collector of *Dendrobium tenellum var. flavescens* J.J.S. near Wlingi, *E. Java* (*1898*). He presented orchids to *Hort. Bog.* in that year.

Loogen, Jan Gerrit Tobias
(1907, Soerabaja, Java; June 24, 1944, drowned during a transport of P.O.W.'s to Japan), was educated at the Agricultural School at Deventer, Holland; planter on Bah Kapoel Estate, Pematang Siantar (Sum. East Coast), 1929–32; manager of a dairy farm at Semarang, Centr. Java, 1932–35; in the latter period passing the final examination of the secondary school as outside-candidate, with the intention to go in for botany in Holland; during the slump he thought better of it and became a planter in the employ of the Internatio, successively stationed on Sringin Estate (Bodja) (some months), and Selokaton, 1936–41, both in Centr. Java; from mid-1941 till the outbreak of the war on Molio Ardjo near Dampit (Malang, E. Java).

COLLECTING LOCALITIES. *Centr. Java:* neighbourhood of Semarang (*1932*); Diëng Plateau, G. Prahoe (*1936–38*); Selokaton Estate (*1937–38*); *W. Java:* G. Papandajan, Tegal Aloen Aloen (Sept. *1938*); *E. Java:* G. Jang (Aug. *1939;* ? collected);[1] *Centr. Java:* G. Soembing (March 23, Nov. *1940;* Oct. *1941*); *E. Java:* S. slope G. Smeroe (Aug. or Sept. *1941*).

COLLECTIONS. In *Herb. Bog.*

When the draughtsmen of the Buitenzorg Herbarium were working on the 'Javan mountain plants in colours' (unpublished), he many times sent valuable living material, not available in West Java.

LITERATURE. (1) J. G. T. LOOGEN: 'Herinneringen aan het Jang Hoogland' (Trop. Nat. 29, 1940, p. 151–155, 6 fig.). See also *Addenda.*

Loos, Dr Hendrik
(1891, Rotterdam, Z.H., Holland; Dec. 23, 1942, in a Japanese concentration camp, Medan, Sumatra), agriculturist, educated at Wageningen Agricultural College; Assistant in the employ of the Bak. Lias Rubber and Tobacco Co. Medan (Sumatra), 1915–16; since 1916 teacher in D.E. Indian Government service, stationed successively at Koetaradja (1916), Langsa (1917), Padangsidimpoean (1917–19), Balige (Toba, Batak Lands, 1919–21), in Sumatra; subsequently at Buitenzorg (1921–24, since 1922 Consulting Agriculturist), Medan (Sumatra) (1924–26), Bondowoso (E. Java, 1926–31), Buitenzorg (1932–36, since 1933 Inspector), Batavia (1936–37, in charge of the inspection of the western part of the Outer Possessions) and Medan (since 1938).

COLLECTING LOCALITIES. *E. Java:* Besoeki (*1927*); *W. Borneo:* between Pemangkat and Pontianak with G. A. DE MOL (see there) (end of *1931 or early in 1932*).

COLLECTIONS. *Herb. Bog.:* epiphytes and parasites from *Java; Borneo* plants numbered 151–166 (in continuation of the collections of G. A. DE MOL and BAL!).

BIOGRAPHICAL DATA. Landbouw 19, 1946, p. 6–7.

Lopez
? identical with J. LOPEZ of the Forestry Bureau, Manila.

COLLECTIONS. *Herb. Manila:* 13 specimens from Baguio and Taal, *Luzon,* collected with WELLS (pres. *1925*).

Lopez, J., *cf. sub* Forestry Bureau, Manila.

Lorentz, Hendrikus Albertus
(1871, Oudewater, Z.H., Holland; x), Doctor of Law, member of the WICHMANN (see there) Expedition to Dutch N. New Guinea in 1903, and subsequently leader of two expeditions to the southern part of that island in 1907, and 1909–10 (itiner., liter., *etc. cf.* respectively *sub* G. M. VERSTEEG and L. S. A. M. VON RÖMER). When returning from Wilhelmina summit in 1909, LORENTZ had a severe fall; the march back to Alkmaar bivouac was a long tale of misery, extensively dealt with in his book.[1] After return in Holland he passed the examination for the consular service and subsequently was stationed in S. Africa.

Several plants were named after him.

COLLECTING LOCALITIES. *1909. Dutch S. New Guinea:* Wichmann Mts (end of Oct.–Nov. 2); Hubrecht Valley (Nov. 3); Mt Wilhelmina (170 m below the summit, Nov. 8).

COLLECTIONS. Together with HABBEMA (see there) he collected 7 plants, two of which from the summit of Mt Wilhelmina, on behalf of the botanist VON RÖMER who did not accompany this part of the expedition. In *Herb. Bog.* (for dupl. *cf. sub* L. S. A. M. VON RÖMER); *Herb. Leyden: New Guinea Charophyta* (coll. *1907*).

LITERATURE. (1) Mr H. A. LORENTZ: 'Zwarte menschen—Witte bergen' (Leiden 1913).

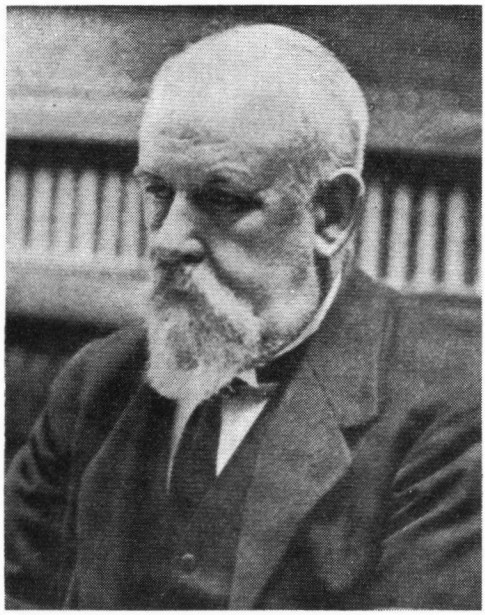
BIOGRAPHICAL DATA. Jaarb. Rijksunivers. Utrecht, 1892–93, p. 93; Wie is dat? 1935, p. 232; BACKER, Verkl. Woordenb., 1936 (year of birth erroneously stated to be 1869).

Loria, Lamberto
(1855, Alexandria, Egypt; 1913, Rome, Italy), explorer-ethnographer who brought together extensive zoological, anthropological, and ethnological collections in New Guinea.[1] In 1906 he founded the Italian Ethnographical Museum at Florence, in 1910 the Italian Ethnographical Society and in 1912 the periodical 'Lares'.

Some plants were named after him.

ITINERARY. *SE. New Guinea, Papua.* Sailing from Genoa (end 1888) with his assistant GIULIANETTI (see there); staying some days in *P. Penang; via Thursday Island* to Port Moresby (June 10, *1889*); by cutter (July 3) to Kapa-Kapa (4); on foot to Rigo Station, collecting in the neighbourhood, as well as in that of Saroa; Port Moresby; Rigo (Aug. 3–6); embarking (7) for Beagle Bay (8); visiting Trupara, Papaka, Kamali and Kalo (25); on foot to Kerepunu (30); by cutter to Aroma; *Suau* (Sept.); sailing for Cooktown in Australia (Oct.); sailing (Nov. 20) for Samarai, proceeding (Dec. 16) to Porlock Bay; Lina Bay (Jan. 1, *1890*), being seriously incommoded by the natives;[2] *Fergusson*

and *Goodenough Island;* Milne Bay (Jan. 26); *Fergusson Isl.; Trobriand Isls* and *Woodlark;* Samarai; to Cooktown (Apr.); sailing for Italy in November.[3]—*2nd Voyage* with GIULIANETTI.[4] *Thursday Isl.* (May 14, *1891*); Port Moresby; Kapa-Kapa (probably as early as May 27); Lakumi (Sept. 7–



LOTSY

19); Ugibago, Mt Obree; neighbourhood of St Joseph River (Nov.–Dec.); S. side of Astrolabe Range (Febr. 18, *1892*); Meroka (July 1–Oct. 31). The localities mentioned by himself are the following: basins of Kemp Welch River, St Joseph River, Purari River, and on the plateau N of the Astrolabe Range.[5]—*1894.* For a longer stay on *Kwato Isl.* near Samarai; occasionally visiting Logia (Heath Isl.)[6] and *Dobu Isl.* (end of the year).—*1895.* Longer stay in *Kwato Isl.*—*1896.* Back at Sydney (Sept. 10), and sailing for Italy.[7]

COLLECTIONS. *Herb. Berl.:* principally orchids, with *Herb.* SCHLECHTER (pres. 1913), collected with GIULIANETTI. He collected *Algae*[8] and *Musci*[9] too; some of the latter in *Herb.* DELESS. (*Geneva*) (pres. 1898).

LITERATURE. (1) Many ornithological and entomological papers, based on his collections, are cited in WICHMANN, Entd. Gesch. N.G., in Nova Guinea 2^2, p. 528. His entomological collections are preserved in the Mus. Civ. Stor. Nat. Genova.

(2) Evidently not without reason. According to WICHMANN he opened graves and pillaged whole villages. From some islands he brought 4–500 skulls. Governor Sir W. MACGREGOR laid an embargo on the robbed objects, and that time left it at that.

(3) *cf.* G. DORIA in Boll. Soc. Geogr. Ital. 27, 1890, p. 479-492, 559–586 and *l.c.* 34, 1897, p. 156–157 and G. CORA in Cosmos 10, 1889–91, p. 155 *seq.*).

(4) Data partly derived from his collections; they do not agree and are given with all reserve.

(5) *cf.* Boll. Soc. Geogr. Ital. 29, 1892, p. 50–51 and *l.c.* 34, 1897, p. 156–161.

(6) L. LORIA: 'Notes on the ancient war customs of the natives of Logea and neighbourhood' (Ann. Rep. Br. N.G. for 1894/95, p. 39–43).

(7) *cf.* PETERM. Mitt. 1896, p. 267 and Verh. Ges. Erdk. Berl. 23, 1896, p. 513.

(8) *Algae* by BORZI in Nuova Notarisia 1892.

(9) Mosses by V. F. BROTHERUS in Öfv. Finska Vet. Soc. Förh. 42, 1899/1900, p. 91–128.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Lorrain, W. B.

medical man who is cited as the collector of *Polypodium heterocarpum* (*cf.* Verh. k.k. Zool. Bot. Ges. Wien 1875, p. 598), and of *Davallia lorrainii* HANCE, both in *P. Penang* (*cf.* Ann. Sci. Nat. V, 5, 1866, p. 251). A strenuous collector of ferns in that island! *Penang* ferns of Dr LORRAINE (written with 'e' at the end) were sold with the Herbarium of WM GOURLIE of Glasgow in 1858.

Los, *cf. sub* Forest Research Institute, Buitenzorg.

Lot Obi, *cf. sub ditto.*

Lotsy, Johannes Paulus

(1867, Dordrecht, Z.H., Holland; 1931, Voorburg, Z.H., Holland), botanist who took his Ph. Dr's degree at Göttingen; subsequently Lecturer at JOHNS HOPKINS University of Baltimore, U.S.A.; from 1896–1900 attached to the Cinchona Experiment Station (Tjinjiroean, Bandoeng, Java), in 1899 temporarily stationed at Tjibodas.[1] When back in Europe he founded the 'Association internationale des Botanistes' and was appointed editor of the 'Botanisches Centralblatt'. In 1904 Lecturer in Systematic Botany at Leyden University, and from 1906–09 besides Director of the State Herbarium (Rijksherbarium); from 1909–19 Secretary of the 'Hollandsche Maatschappij van Wetenschappen'.

He made investigations on *Balanophoraceae,* and besides of his excellent works on taxonomy and genetics,[2] he is the author of some papers on Javan plants.[3]

Oberonia lotsyanus J.J.S. was named after him.

COLLECTING LOCALITIES. *W. Java:* Priangan Residency (*1896–1900*), at Tjibodas (May 22–23, *1897*); Tjikopo, *etc.; E. Java:* G. Tengger, Tosari (May–June *1900*), partly with J. D. KOBUS (see there).

COLLECTIONS. Partly in *Herb. Leyden,* with material in alcohol; some specimens in *Herb. Bog.* Especially *Balanophoraceae.*

LITERATURE. (1) *cf.* Versl. Pl. Tuin Buitenzorg for 1899, p. 112–115.

(2) *Viz:* 'Vorträge über botanische Stammes-

geschichte' (Jena 1907–11, 3 vols); 'Vorlesungen über Descendenztheorien mit besonderer Berücksichtigung der botanischen Seite der Frage' (Fischer Jena, 1909, 2 vols); 'Evolution by means of hybridization' (The Hague 1916); 'Over Oenothera lamarckiana als type van een nieuwe groep van organismen, die der kernchimeren, *etc.*' ('s-Gravenhage 1917); 'Evolution considered in the light of hybridization' (lectures at the Univ. Colleges of the New Zealand University, 1925); and many papers in Genetica, Zeitschr. f. ind. Abst. u. Vererb. lehre, *etc.*

(3) J. P. LOTSY: 'Rhopalocnemis phalloides JUNGH., a morphological-systematical study' (with TH. VALETON in Ann. Jard. Bot. Buit. 17, 1901, p. 73–101, pl. 3–14); 'Photographies de plantes intéressantes'. Pflanzen des javanischen Urwaldes (Rec. Trav. Bot. néerl. 1, 1904, p. 131–134, *t.* 3, p. 306–307, *t.* 8; *l.c.* 2, 1905, p. 175–176, *t.* 2, and p. 282, *t.* 7; *l.c.* 3, 1906, *t.* 6); 'Die Monocotylenflora von Java' (1904).

BIOGRAPHICAL DATA. Genetica 13, 1931, p. i–xx, w. portr. & bibliogr.; Vakbl. Biologen 13, 1931/32, p. 57; Wie is dat? 1931; BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 49, 1939, p. 446; *l.c.* 50, 1940, p. 196; *l.c.* 51, 1941, p. 361.

Loudon, C. N.

is cited as the collector of *Pollinia grata* HACK. at Waigani, *New Guinea* (*cf.* WHITE in Proc. Roy. Soc. Queensl. 34, 1922, p. 15).

Loudon, Hugo

presented a living plant of *Cissus scariosa* with *Rafflesia* to *Hort. Bog.*, some years *before 1850* (*cf.* letter from TEYSMANN TO DE VRIESE, dated July 23, 1850, in the archives of Leyden Herbarium).

Louisa, I., *cf. sub* Forest Research Institute, Buitenzorg.

Loupattij, Elli

Indonesian from the Moluccas, who was in the employ of P. J. EYMA (see there) since his Ceram expedition 1938.

COLLECTIONS. In the *New Guinea* collection, EYMA *1939*, the *nos* 5401–5438, from trips in the environs of Enarotali made in October, are *leg.* E. LOUPATTIJ.

Low, Henry Stuart

(1826, Clapton, London, England; 1890, Clapton), brother of HUGH LOW (see there), with whom he had a meeting at Singapore in December 1844.[1] Early in the sixties of the 19th century he became associated with the firm of HUGH LOW & Co.[2]

He is cited as the collector of *Dendrobium microglaphys* RCHB. *f.* from *Borneo* in *1865*.[3]

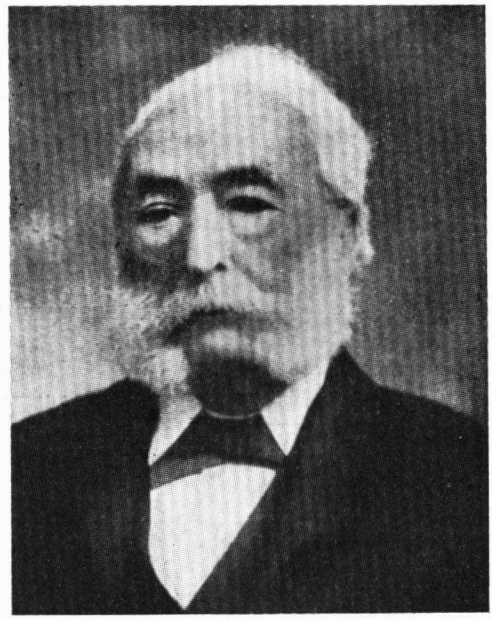
LITERATURE. (1) *cf.* R. E. ARNOLD in Orch. Review 40, 1932, p. 165.

(2) *cf.* BACKER, Verkl. Woordenb., 1936, p. 338 *sub* lowei.

(3) *cf.* J. J. SMITH in Bull. Jard. Bot. Buit. sér. 3, vol. 9, 1928, p. 487.

Low, Sir Hugh

(1824, Clapton, London, England; 1905, Alassio, Riviera, Italy)[1] obtained an appointment in the Hon. East India Company and travelled with Mr (Sir) JAMES BROOKE, which ended in his quickly resigning his Indian appointment and joining the



HUGH LOW

Rajah as a secretary. Early in 1845 he sailed from Singapore to Sarawak.[2] In 1848 BROOKE became Acting Governor of Labuan; Low accompanied him and was appointed Colonial Treasurer of the island. Later, 1877–89, Resident of Perak, residing at Taiping, and then taking a special interest in economic plants. In Borneo he mainly hunted for orchids, and '*boenga lau*' (from Low) became the common vernacular name for those plants in W. Borneo and the Anambas and Natoena Islands.

Several plants were named in his honour.

ITINERARY & COLLECTING LOCALITIES. Sailing from the West India Docks on July 17, apparently in 1844; staying at *Singapore* (end of Nov. *1844*–Jan. 6, *1845*) on his way to *NW. Borneo:* Sarawak (Jan. 14 or 16); trip with BROOKE (see there) to Sinjawang (31), Toendoeng (Febr. 1), Rahat, valley of the Nawang (2), Rahat (3), and back at Sarawak (4). In the same year (1845) he explored the Sarawak River and its tributaries.[3]—In the *following years* probably visiting many places in Sarawak, *e.g.* Mt Penrissen.—From *1848–c. 77* in *Labuan*, from where he visited Lawas and Brunei in *NW. Borneo*, and made the 1st ascent of Mt Kinabalu in *Br. N. Borneo* (March *1851*, summit on the 11th),[4] climbing the mountain a 2nd and 3rd time with SP. ST JOHN (see there) (Apr. (Low not on the

summit) and July *1858*);[4] in Febr. 1858 climbing the Batu Rikan near the Mandalam River with Sp. ST JOHN.—*Malay Peninsula:* at Taiping Hills with MURTON (see there)(Oct. 19–22, *1877*); Kedah Peak with BOXALL (*1880*); Taiping (*1881*).[5]—*c. 1882* he paid a visit to the Botanic Gardens at Buitenzorg, *W. Java.*

COLLECTIONS. *Herb. Kew:* complete set; duplicates at *Cambridge;* dupl. *Borneo Hepatic.* in *Herb. Leyden.* In 1881 he sent a collection specimens of forest trees in Taiping to CANTLEY, at that time on leave at Kew, for identification.[5]

His *Borneo* plants were identified by Sir J. D. HOOKER and O. STAPF;[6] the paper of ARNOLD (see liter. *sub* 2) mainly concerns the discoveries of Low, as described in his original diary.

Many living plants were sent to his father at the Clapton Nursery, London.

LITERATURE. (1) According to MOULTON in Sarawak Mus. Journ. 2, 1915, p. 142, Low retired in 1884 and died on the 18th of April, 1895. Probably he is wrong and I have relied on the biographies.

(2) H. LOW: 'Sarawak, its inhabitants and productions being notes during a residence in that country with his Excellency Mr. BROOKE' (London 1848, w. ill.).

R. E. ARNOLD: 'Sir HUGH LOW in Sarawak' (Orch. Review 40, 1932, p. 163–166, 208–211, 236–238, 267–270, 292–294).

(3) *cf.* POSEWITZ, Borneo, 1889.

(4) *cf.* 'Notes of an ascent of the Mount Kina-Balow' (Journ. Ind. Arch. & East. Asia 1852, p. 1–17); *cf.* also literature *sub* SP. ST JOHN; itinerary Kinabalu trips in Sarawak Mus. Journ. 2, 1915, p. 139–144.

(5) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 154.

(6) New species from the Kinabalu *etc.* by J. D. HOOKER in Icon. Plant. 9, 1852, *t.* 883–898; and in Transact. Linn. Soc. Bot. 22, 1859 and 1860, and 23, 1860.

O. STAPF: 'On the flora of Mount Kinabalu, in North Borneo' (Trans. Linn. Soc. Lond. 2nd ser. Bot. vol. 4, 1894, p. 69–263, pl. 11–20).

W. J. HOOKER edited 'Botanical extracts from Mr. Low's 'History of Borneo'' in CURTIS's Bot. Magaz. 3rd ser. vol. 4, 1848, suppl. p. 16–21, 24–35 (economic plants!).

BIOGRAPHICAL DATA. Proc. Linn. Soc. Lond. 117th Sess. Oct. 1905, p. 39–42; Agric. Bull. Str. & Fed. Mal. Stat. 4, 1905, p. 239; Orch. Review 13, 1905, p. 182–183; Gard. Chron. 3rd ser. 37, 1905, p. 264–265; Journ. Bot. 43, 1905, p. 192 and 3rd suppl. Biogr. Index BRITTEN & BOULGER p. 8 in *l.c.* 46, 1908, and in 2nd ed. by RENDLE, 1931; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; BACKER, Verkl. Woordenb., 1936.

Low, James

(† 1852), Lieutenant-Colonel in the Madras Army, who joined the Penang establishment in 1818, and later (1823–40) was in civil charge of Province Wellesley; subsequently Assistant Resident at Singapore; in 1850 returned to Europe.

Author of 'A dissertation on the soil and agriculture of Penang'.

COLLECTING LOCALITIES. *Malay Peninsula,* Kedah: Kedah Peak (*1836*).

COLLECTIONS. *Herb. Kew:* a few plants.

BIOGRAPHICAL DATA. Dict. Nat. Biogr. 34, p. 183; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

Lowe

is sometimes cited as the collector of plants in the *Malay Peninsula* and *Borneo.* Small collection from *Borneo* in *Herb.* HOOKER (= *Kew*) (*cf.* HOOK. & THOMS., Flora Ind., 1, p. 71). Wrong for Low (see *sub* HUGH LOW).

Lucas, C. W. O., *cf. sub* Forest Research Institute, Buitenzorg.

Ludeking, E. W. A.

Medical Officer in the D.E. Indian Army, whose special interest was zoology, and who made extensive collections on behalf of the Natural History Museum at Leyden.[1] Since 1853 stationed in West Sumatra;[2] in the course of 1861 transferred to Ambon,[3] from where he made zoological collecting tours in the Moluccas and the Aroe Islands. In 1867 he went on furlough and returned to the Indies in 1869.

COLLECTING LOCALITIES. *Sumatra West Coast,* Padang Highlands: G. Singgalang and G. Merapi (*c. 1859*).

COLLECTIONS. Preliminary identification by TEYSMANN;[4] S. BINNENDIJK forwarded the collection to MIQUEL (since 1859 professor at Utrecht); in total *c.* 100 numbers. The present location is not known to the author.

LITERATURE. (1) *cf.* A. GIJZEN: 's Rijks Mus. Nat. Hist. 1820–1915' (Thesis Leiden, Rotterdam 1938) p. 132–135.

(2) E. W. A. LUDEKING: 'Een reisje door de Padangsche Bovenlanden' (Biang Lala 2^2, 1853, p. 135–159); 'Natuur- en geneeskundige topographische schets der ass. res. Agam' (Geneesk. Tijdschr. N.I. 9, 1862, p. 1–153; incl. plant list on p. 21–22); the latter paper reprinted under the title 'Natuur- en geneeskundige topographie van Agam (S.W.K.)' ('s-Gravenhage 1867; plant list on p. 23–24).

(3) E. W. A. LUDEKING: 'Schets van de residentie Amboina' ('s-Gravenhage 1868).

(4) *cf.* Lists in Nat. Tijdschr. N.I. 20, 1859/60, p. 323 and in *l.c.* 22, 1860, p. 89–90.

cf. also *sub* 2.

Ludin bin Bet

joined the Forest Department Malay Peninsula in 1913, and mainly collected in Negri Sembilan (*Malay Penins.*) and Brunei (*NW. Borneo*); *cf. sub* Conservator of Forests series, Kepong.

Lütjeharms, Wilhelm Jan

(1907, Alkmaar, N.H., Holland; x), mycologist, educated at Amsterdam University and taking his Ph. Dr's degree at Leyden (1936). Since 1929 Assistant, later Custodian, at Leyden University; in

1936 he got the disposition of part of the Buitenzorg Fund and made a voyage to Java;[1] in 1937 appointed Professor of Botany at Bloemfontein in S. Africa.

COLLECTING LOCALITIES & ITINERARY. *1936. Java* (March 8–Aug. 22, interrupted by a trip to P. Enggano, see below): at Buitenzorg, Tjibodas, Koeripan, Selabintana, Plosokerep, Bay of Serang (S. coast near Blitar), Tosari (G. Tengger), Ranoe Daroengan (S. slope G. Smeroe), Djokja and neighbourhood, Parangtritis (S. coast),[2] G. Tangkoeban Prahoe, G. Papandajan.—*P. Enggano*, W of Sumatra: base bivouac at Meok (since May 24), interrupted by a stay at Boewa-Boewa (May 28–June 17) and in *P. Doea* (June 29–July 4), from where visiting *P. Merbau* (June 30); departing from Malakoni (July 11).

COLLECTIONS. *Herb. Leyden:* 3400 specimens from *islands W of Sumatra;* in total *c.* 1800 *nos*, 3591–5436, including 548 phanerogams, many cryptogams, principally *Fungi* (from *Java* too). But for the *Fungi*, the collection is mainly from *P. Enggano*.[3] Duplicates in *Herb. Bog.; Herb. Kew:* from *S. Sumatra* (rightly: *islands W of Sumatra!*); *N.Y. Bot. Gard.:* 114 plants from *S. Sumatra* (= *isls W of Sumatra*).

He was assisted by a 'mantri' of the D.E.I. Forest Service, MOEHANTAR, in collecting 159 bb. *nos* on behalf of the *Forest Research Inst. Buitenzorg.*

Living plants from *P. Enggano* in *Hort. Bog.*

LITERATURE. (1) W. J. LÜTJEHARMS: 'Voorloopig verslag van de botanische onderzoekingen gedaan aan 's Lands Plantentuin te Buitenzorg' (Versl. Gew. Verg. Wis- en Nat. Afd. Kon. Akad. Wet. A'dam 1937, p. 43–44).

(2) W. J. LÜTJEHARMS: 'Iets over de duinen van Parangtritis' (Trop. Nat. 26, 1937, p. 85–92, 12 fig.).

(3) W. J. LÜTJEHARMS & S. J. VAN OOSTSTROOM: 'Two new Lecythidaceae and two new Apocynaceae from Malaysia' (Blumea 3, 1938, p. 95–105).

O. POSTHUMUS: 'On the Pteridophytes of Enggano' (MS.).

BIOGRAPHICAL DATA. Wie is dat? 1938, p. 267; Ned. Kruidk. Arch. 50, 1940, p. 196.

Lummel, Louise Elisabeth Aegidia van

(1903, Batavia, Java; x), zoologist, educated at Utrecht University (Ph. Dr 1930), who subsequently came to Java, working for some time (March 1931–Oct. '32)[1] on P. Onrust[2] in the Bay of Batavia; from 1932–33 Assistant at the Medical College, Batavia, and later teacher in Natural History at Medan (Sumatra). When returned to Holland, she took up the veterinary study.

COLLECTING LOCALITIES. *W. Java*, Bay of Batavia: islands of *Purmerend* and *Kerkhof* (Sept. *1932*).

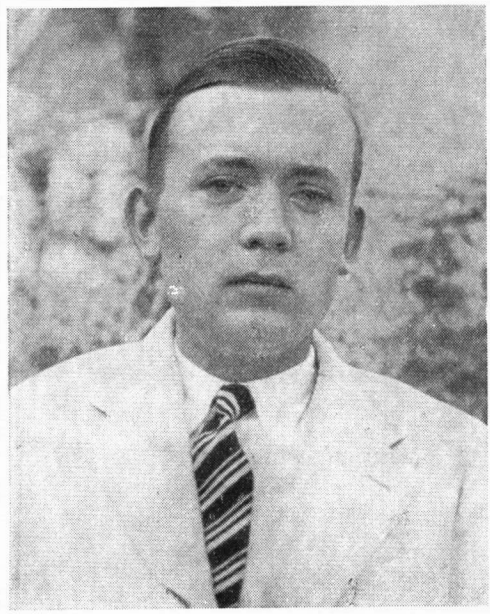
COLLECTIONS. *Herb. Bog.:* 5 *nos* of seagrasses.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 52.

(2) *cf.* The Lloyd Mail Aug. 1932, p. 118.

Lundquist, Erik

(1902, Västra, Sweden; x), Forest Officer, from 1930 onwards at intervals in temporary employ of the D.E. Indian Forest Service; stationed in Banka 1930–32, exploring NE. Borneo 1933–34,[1] and the 'panglong' regions in Central Sumatra in 1934;[2] in 1941 he conducted a New Guinea expedition in the employ of the Dutch New Guinea Company.



LÜTJEHARMS

COLLECTING LOCALITIES. *1933. NE. Borneo. 1941. W. & SW. New Guinea* (western part = Vogelkop): Inanwatan, Fak Fak and Mimika.

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg:* bb. *nos* from *Borneo* and *New Guinea; Herb. Bog.: New Guinea* plants (coll. by AËT, see there).

LITERATURE. (1) Author of a typed report: 'Waarnemingen betreffende boschgesteldheid Borneo 1933' and 'Eindrapport Borneo 1933–34' (in For. Res. Inst. Buitenzorg).

(2) Author of a typed report on reconnaissance in 'panglong' regions Indragiri-Kateman and Bengkalis in May 1934 (in For. Res. Inst. Buitenzorg).

Lux, W.

COLLECTIONS. *Hort. Bog.:* living orchids from *Ambon* (pres. *1900*).

Possibly identical with J. G. W. LUX, then District Officer in Ambon.

Luytjes, Abraham

(1895, Den Helder, N.H., Holland; x), was educated at Wageningen Agricultural College; from 1919–26 Forest Officer in D.E.I. Government service, stationed in Sumatra[1] at Oud-Agam (Tapanoeli) in 1919, at Koetaradja (Atjeh) in 1921, at Pangkalan Brandan in Oct. 1922, at Laboean

Bilik in Jan. 1923 and at Pangkalan Brandan again in March 1923; in Febr. 1924 transferred to Central Java, Pekalongan-Kendal District and since October 1924 in the Head Office, Buitenzorg. Since 1926 employed in the Division of Agriculture of the Department of Economic Affairs, Batavia; since 1938 chief of that Division; in 1947 Sub-Director of the Department.

COLLECTING LOCALITIES. *Sumatra West Coast:* Agam (*1921*); *Sumatra East Coast:* Laboehan Batoe, Asahan and Langkat (*1923*); *W. Borneo:* Mont(e)rado (Oct. *1927*).

COLLECTIONS. *Herb. Bog.: Nepenthes gracilis* KORTH. from *Borneo. Herb. For. Res. Inst. Buitenzorg* (see there): some tens of bb. *nos* from *Sumatra;* dupl. in *Herb. Bog.*

LITERATURE. (1) A. LUYTJES: 'De vloedbosschen in Atjeh' (Tectona 16, 1923, p. 575–591); 'Een en ander over den begroeiingstoestand van N. Sumatra en over het voorkomen van den Pinus Merkusii in dit gebied' (*l.c.* 17, 1924, p. 1–30, 6 fig., 1 map); typed report on Laboehan 1923 in For. Res. Inst. Buitenzorg.

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 463.

Lyon, Mrs, *cf. sub* Bureau of Science, Manila.

Lyon, William S.

(1852, White Plains, New York, U.S.A.; 1916, Manila, Luzon, P.I.), from 1902–16 gardener in the employ of the Philippine Bureau of Agriculture, Manila.

Mucuna lyonii MERR. and other Philippine plants were named after him.

COLLECTIONS. Cited by MERRILL as the collector of several plants (numbered between 1 and 165), mainly orchids, from *Luzon.* In *Herb. ? Manila; Herb.* O. AMES (Cambr., Mass.) (from *Mindoro* and *Luzon*).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Maanen, A. C. van

of Redjowinangoen, *Centr. Java,* sent fruit-clusters of *Plectocomia elongata* BL. to *Herb. Bog.* in *1911;* living plants to *Hort. Bog.* in *1903.*

Maarseveen, H. J. A. van

District Officer at Sidjoendjoeng, Padang Highlands (*Sumatra West Coast*), sent living plants to *Hort. Bog.* in *1878.*

Maass, Alfred

ethnologist who made a tour to the Mentawai Islands with Dr MORRIS, and some Sumatra expeditions; the last one together with KLEIWEG DE ZWAAN (see there) for anthropological investigations.

ITINERARY. *1897.* From Emmahaven (July 28) to the *Mentawai Islands,* W of Sumatra: Sioban on *P. Sipora* (written by MAASS as Si Oban on Süd-Pora), staying in the island till Sept. 22, without crossing it. Practically spoken he visited only the cultivated part of the island.[1]—*Before 1904. Sumatra West Coast,* Padang Highlands: lakes of Maninjau and Singkarak; *S. Sumatra:* Benkulen, Kepahiang, Pasar Tjurup, Muara Bliti, Palembang.[2]—*1907.* Through *Central Sumatra:* Padang (Febr. 9); Fort de Kock; Alahan Pandjang, Si Djindjing; basin of the Upper Batang Hari; from Sidjundjung *via* Taluk and G. Sahilan to Siak, from where departing July 30.[3]

COLLECTIONS. A few plants from *Sipora* (*Mentawai Isls*).[4] In the same island he collected butterflies on behalf of Dr HAGEN (see there). Probably he made no, or hardly any, botanical collection in *Sumatra.* As far as possible TREUB provided him with the Latin names of medicinal plants, based on a list of vernacular names only. By the intermediary of Dr JENSEN a collection of medicinal plants was collected by 'doekoens' (medicine-men) and sent to Holland; they were identified by GRESHOFF and HALLIER. In some cases the classification was impossible, probably due to bad and sterile material.[5]

He might have collected some *Fungi* in *Sumatra.*[6]

LITERATURE. (1) *cf.* Verh. Ges. Erdk. Berl. 24, 1897, p. 424–425 (preparation) and *l.c.* 25, 1898, p. 177–190.

A. MAASS: 'Bei liebenswürdigen Wilden' (Berlin 1902).

(2) A. MAASS: 'Quer durch Sumatra' (Berlin 1904; 2nd ed. 1917).

(3) A. MAASS: 'Durch Zentral Sumatra' (Berlin/Leipzig 1910–12, 2 vols); *cf.* also PETERM. Mitt. 53, 1907, p. 215, 292).

(4) *cf.* Kew Bull. 1926, p. 56.

(5) *cf.* 'Durch Zentral Sumatra' *l.c.* vol. 2, p. 158.

(6) *cf. l.c.* vol. 2, pt 3, Zoologica and Botanica (list containing 21 species of tree *fungi* by P. MAGNUS).

Mabesa, Calixto

(1892, Hiligaran, Occ. Negros, P.I.; x), Forest Ranger in the Philippines, 1915–20; B.S.F. and M.F. Syracuse University; since 1925 Forester; in 1934 appointed Assistant Professor of Wood Technology, School of Forestry, and Assistant Chief Div. of Delimitation and Improvement, Bureau of Forestry.[1]

He is commemorated in *Clerodendron mabesae* MERR., *etc.*

COLLECTIONS. ? Identical with the collector in the F. B. series (*cf.* Forestry Bureau, Manila).

LITERATURE. (1) Author of 'Two tree species occasionally found in the mangrove swamps not previously reported' (Makiling Echo 13, 1934, p. 113).

BIOGRAPHICAL DATA. Nat. Research Counc. P.I. Bull. *no* 7, 1935, p. 847, incl. bibliogr.

Macanalan

COLLECTIONS. He collected plants at Aitape, *NE. New Guinea,* in Nov. *1944.* Material in *Herb. Brisbane;* dupl. of trees in *Herb. Arn. Arbor.* Numbered in N.G.F. (= New Guinea Forces, see there) series.

MacArthur, Sir William

(1800, Parramata, Australia; 1882, Camden

Park, N.S.W., Australia), son of Capt. JOHN MACARTHUR; botanist, horticulturist and agriculturist. He sent his gardener J. (or ? P.) REEDY (see there) with MACLEAY'S 'Chevert Expedition' to New Guinea (*cf. sub* Sir W. MACLEAY). Probably he himself never was in New Guinea.

Several plants were named after him.

COLLECTIONS. *Herb. Kew* and *Brit. Mus.:* Australian plants. Plants from the 'Chevert Expedition' in *Herb. Melbourne.*

BIOGRAPHICAL DATA. MAIDEN in Journ. & Proc. Roy. Soc. N.S.W. 42, 1908, p. 111-112; portr. in Rep. Australas. Assoc. Advanc. Sci. 13, 1912, pl. 21.

MacClure, Floyd Alonzo

(1875, Sidney, Ohio, U.S.A.; x), was educated at Ohio State College, taking his Ph. D.'s degree in 1935. From 1919 attached to the Canton Christian College (Lingnan Univ.), since 1931 full professor. Since 1936 Senior Botanist Bureau of Plant Industry, Washington. He visited Baguio, Luzon, on a vacation.

He is commemorated in *Premna maclurei* MERR.

COLLECTIONS. *Herb. Manila:* 223 plants from Baguio, *Luzon* (pres. *1925*), and from some other localities. He is cited as the collector of a fern *no* 16058 on Mt St. Thomas, *Luzon* (*cf.* CHRISTENSEN in Dansk Bot. Ark. 6, 1929, p. 69), evidently numbered in the series of the Bureau of Science or Bur. of Forestry at Manila. Dupl. in *Herb. N.Y. Bot. Gard.*

BIOGRAPHICAL DATA. Amer. Men of Sci. 1938.

MacCormick, Robert

(1800–90).

COLLECTIONS. *Herb. Brit. Mus.*, formed during the Arctic and Antarctic expeditions, 1827–53. Further data unknown.

MacDonald, John

Superintendent for Works, Port Moresby, Head Goaler, appointed since 1897.

ITINERARY. *SE. New Guinea, Papua. 1898.* Cutting tracks inland, from Port Moresby *via* Mt Warirata to Tabure, and to Brown River *via* Laloki and Goldie junction and Mt Keith; returning (end of Apr.) with W. MACGREGOR from Brown River (= Naoro) to Port Moresby.[1]—*1899.* Tour *via* the Laloki and Brown River, for tracing out a road from Port Moresby to Yodda Valley; returning July 4.[2]

COLLECTIONS. Mosses from Owen Stanley Range (*a. 1899*) in *Herb.* BINSTEAD (= *Kew*).[3] Possibly no phanerogams.

LITERATURE. (1) *cf.* Ann. Rep. Br. N.G. for 1897/98.

2) *cf. l.c.* for 1898/99, Victoria 1900, p. 41–45.

3) *cf.* Journ. Linn. Soc. Bot. 45, 1922, p. 502.

MacFarlane, Samuel

(1837, Johnstone, England; 1911, Southport, England), Reverend of the London Missionary Society, educated at Bedford; appointed to the Loyalty Islands, ordained in 1858, and stationed on Lifu. In July 1874 he arrived at Somerset, the headquarters of the New Guinea Mission; in 1877 he settled on Murray Island. From 1874 onwards he made numerous voyages of inspection, and of exploration of the coast and rivers of the mainland. In 1887 the degree of L.L.D. was conferred upon him by the University of St Andrew's, and in the same year he withdrew from the New Guinea Mission and the foreign work of the Society; till 1892 a Deputation Agent in England, after which he retired from active work.[1]

He is commemorated in *Dendrobium macfarlanii* F.v.M.

ITINERARY. *SE. New Guinea. 1871.* With A. W. MURRAY sailing from Maré (one of the Loyalty Islands) to *E. New Guinea*, visiting several neighbouring islands and points on the mainland; sailing from Redscar Bay (Aug. 7); returned to Lifu (Nov. 2).[2]—*1874.* From Somerset (Sept. 22) with M. MURRAY to visit Redscar Bay and islands in the Straits (returning Oct. 8). From Cape York by boat, touching at several islands in Torres Strait (Oct. 15–20), *e.g. Jervis* and *Banks Island.*[3]—*1875.* From Somerset making some tours in the 'Ellengowan': *Darnley Island* (mid-Jan.), crossing the island and climbing the highest mountain; Port Moresby; *via* Bura to Lea-Lea and Caution Bay; *Yule Island.*[4] To Port Moresby again (March 20); Manu-Manu; *Yule Island;* Somerset (Apr. 1).[5] Islands in Torres Strait (Apr. 10–May 2): *Banks Isl., Jervis Isl., Dauan* and *Saibai, Boigu* (*Talbot Isl.*); *Murray Isl.* (May 16); sailing (June 12) for Port Moresby *via* Ugar, Erub and *Yule Isl.* (staying 22–30); tour by boat in eastern direction to Hood Point, with LAWES.[6] Sailing from Somerset (Aug. 25); Boigu (30); ascending the Mai Kusa (= Baxter River) (31) with O. C. STONE.[7] With H. M. CHESTER and L. M. D'ALBERTIS to the *Fly River:* leaving Somerset (Nov. 29); mouth Binaturi (Dec. 2); *Dalrymple Isl.* (*Damut*) (4); *Param* (*Bampton Isl.*) (5); mouth Fly delta (6); ascending the Fly to Ellengowan Island; downstream (15–21); back at Somerset (28).[8]—*1876.* In the 'Ellengowan' from Somerset (March 21) to Port Moresby; long tour along the SE. coast in company with W. G. LAWES and others: Hood Bay (Apr. 4), Shallow Bay, Cloudy Bay, Orangerie Bay, Isabel Bay, Farn Bay, Catamaran Bay, China Strait, Possession Bay; Port Moresby (Apr. 22–29); *via Yule Island* back to Somerset.[9] Islands in the Torres Strait (Aug. 2–21): *Banks Isl., Jervis Isl., Murray Isl., etc.*[10]—*1877.* Sailing with CHALMERS from Sydney (Sept. 20) on a New Guinea tour (itiner. *cf. sub* CHALMERS). Accompanied CHALMERS to *Stacey Isl.*, off South Cape, leaving Dec. 4 to return to Murray Island (arrival 15).—*1882.* After an interval of some years revisiting the Fly River.—*1883.* Milne Bay (Apr., Sept., Nov.).—*1885.* Mouth of the Fly River (July), with C. H. HARTMANN (see there).

COLLECTIONS. *Herb. Melbourne;* some plants described by F. VON MUELLER.[11] Grass dupl. in *U.S. Nat. Herb. Wash.*

LITERATURE. (1) Author of 'Among the Cannibals of New Guinea' (London 1888); 'Notes

from New Guinea' (Athenaeum Dec. 1876, p. 725–726); *etc.*

(2) A. W. MURRAY & S. MACFARLANE: 'Journal of a missionary voyage to New Guinea' (London 1872) (*non vidi*).

(3) *cf.* Chron. Lond. Miss. Soc. 1875, p. 44–52.

(4) *cf. l.c.* p. 209–214.

(5) *cf. l.c.* p. 215–217.

(6) *cf. l.c.* p. 218–243.

(7) *cf.* O. C. STONE in Proc. Roy. Geogr. Soc. Lond. 20, 1875, p. 92–109.

(8) S. MACFARLANE: 'Ascent of the Fly River, New Guinea' (Proc. Roy. Geogr. Soc. Lond. 20, 1876, p. 253–266); *cf.* also in Chron. Lond. Miss. Soc. 1876, p. 93–97.

(9) *cf.* Proc. Roy. Geogr. Soc. Lond. 21, 1876/77, p. 350–360, and Globus 30, 1877, p. 140–142, 150–153.

(10) *cf.* Chron. Lond. Miss. Soc. 1877, p. 12–14.

(11) In 'Descr. Not. Pap. Pl.' vol. 1, pts 2–3.

BIOGRAPHICAL DATA. In 'A Register of Missionaries, Deputations, *etc.*' (London, Lond. Miss. Soc., 1923) p. 72–73; BACKER, Verkl. Woordenb., 1936.

MacGill, Capt. Hilton

at sea, and later a planter in Kelantan, *Malay Peninsula* (*1904–13*), where he collected plants in the neighbourhood, on the banks of the Kelantan River, *etc.*

COLLECTIONS. On behalf of RIDLEY (see there); in *? Herb. Sing.*

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

MacGillivray

Manager of the cigarette factory Djatironggo at Ambarawa, *Central Java.*

COLLECTIONS. *Herb. Bog.*, probably but few plants (pres. *1904*).

MacGillivray, John

(1822, Aberdeen, Scotland; June 6, 1867, Sydney, Australia), eldest son of Professor WILLIAM MACGILLIVRAY (Aberdeen). He spent his early days at Edinburgh, and from boyhood had a lively interest in natural history. He was intended for the medical profession, and had all but completed his studies, when he was offered the appointment of naturalist on board H.M.S. 'Fly'. He accompanied several other expeditions to the Malaysian and Pacific region and made important, especially zoological, collections. After the expedition of the 'Herald' he was dismissed, returned to New South Wales and accepted engagements for exploring the flora and fauna of several Polynesian islands.

Alsophila macgillivrayi BAK. and *Grevillia gil(l)ivrayi* HOOK. were named after him.

ITINERARY. *Voyage of H.M.S.'Fly' and 'Bramble', 1842–46.*[1] *cf.* also *sub* J. B. JUKES. Sailing from Falmouth (Apr. 11, 1842); *via* Madeira, Teneriffe, Cape of Good Hope, St Paul, Australia; *Timor:* Kupang (Sept. 2, *1843;* short stay); Australia; from Port Essington (Oct. 3, *1844*) passing the Lesser Sunda Islands to *E. Java:* Surabaya (Oct. 19), trip to Grissek (= Grissee) on the coast (23); Pasuruan (Nov. 9), Probolinggo, Klakka, Lumadjang(Lamajang),Tampa, Kedimangan,Kandangan, Lodo Ombo (Nov. 17), Ider-Ider, Zandzee, Bromo (G. Tengger), Wonosari (meeting ZOLLINGER), Tosari, Pakis, Malang (21), Batu and ruines of Majopahit (= Modjopait) and back to Surabaya (27); Grissee; *Madura* (Dec. 10); sailing from Surabaya (Jan. 12, *1845*); Torres Strait, *S. New Guinea* (–June 2) and Australia; *Lombok* (June); *Malay Peninsula: Singapore* (July 5); proceeding to Malacca (remaining a week); return to *Singapore* (staying a fortnight), making an excursion to Bt Timah, and landing for about half an hour on the mainland of Johore (off the SE. point of Singapore); leaving Singapore (Aug. 3); *W. Java:* Anjer (Aug. 19–20); Cape of Good Hope; St Helena; Spithead (June 19, 1846).—*Voyage in H.M.S. 'Rattlesnake', 1846–50.*[2] Sailing from Plymouth (Dec. 11, 1846); *via* Madeira, Rio de Janeiro, Simon Bay, Mauritius, Australia; the Louisiade Archipelago (June *1849*); Duchateau Islands, Duperré Islands, Brumer Islands, *Dufaure Island*; along the *SE. coast* of *New Guinea* (end of Aug. *1849*): Orangerie Bay (Sept. 4–10); the largest of the *Pariwari* (= *Wari-Wari*) *Islands* (Sept. 21); *Yule Island* (26–27); Cape York; completing survey of the Torres Strait; sailing from Cape York (Dec. 3); *islands of the Torres Strait;* Treacherous Bay (11); between Direction Cape and Redscar Bay (Dec. 21–), *Pariwari Isl.;* sailing from Redscar Bay (31) *via* the Louisiade Arch. to Sydney (death of commander Capt. STANLEY); leaving Sydney (May 2, 1850); home voyage *via* New Zealand, Cape Horn, Falkland Islands, Azores; back in England (Oct. 5).—*In H.M.S. 'Herald', 1852–61,* under command of Capt. DENHAM.[3] Surveying the Pacific Islands, Torres Strait (*1859*), *S of New Guinea* (*cf.* also *sub* MILNE), *etc.*

COLLECTIONS. *Herb. Brit. Mus.:* 795 plants from *islands* of the South Atlantic and *Pacific Oceans* (purch. 1855–63); *Herb. Kew:* Australia, 1850 ? *nos* 1–256. In both herbaria also plants from other parts of the world.

Herb. Berl.: New Caledonia plants (*a.* 1858) and vascular cryptogams, Voyage of the 'Herald' (*a.* 1845–51; this statement cannot be true, as the years do not correspond with those of that expedition); *Herb.* DECAND. (*Geneva*): New Caledonia plants.

A MS. catalogue of botanical specimens collected in 1846–49 (Voyage Rattlesnake) is preserved at Kew. It contains the *nos* 444–454 coll. in Pèg Isl. (Louisiade Arch.) on June 16, *nos* 455–471 on Sud-Est Island of Louisiade Arch. (coll. June 26, 27, 30), and *nos* 472–478 from Islands off Redscar Point, *New Guinea* (coll. Sept. 21), all in 1849.

LITERATURE. (1) J. B. JUKES: 'Narrative of the surveying voyage of H.M.S. Fly, *etc.*, in Torres Strait, New Guinea, and the islands of the Eastern Archipelago, during the years 1842–46; together with an excursion into the interior of the eastern part of Java' (London 1847, 2 vols); Dutch transl. by W. R. HOËVELL: 'Togten van een Engelschman

door den Indischen Archipel' (Zaltbommel 1853).

(2) 'Note on Capt. OWEN STANLEY's explorations in the Pacific Ocean Archipels Louisiade and New Guinea' (Journ. Roy. Geogr. Soc. Lond. 21, 1851, p. 13).

J. MACGILLIVRAY: 'Sketch of the natural history of such portions of the Louisiade Archipelago and New Guinea, as were visited by H.M.S. Rattlesnake, June to September, 1849' (in *l.c.* p. 15–18).

J. MACGILLIVRAY: 'Narrative of the voyage of H.M.S. Rattlesnake, commanded by the late Capt. OWEN STANLEY, during the years 1846-50. Including discoveries and surveys in New Guinea, the Louisiade Archipelago, *etc.*' (London 1852, 2 vols with several appendices, not relating to botany).

'T. H. HUXLEY's diary of the voyage of H.M.S. Rattlesnake' (London 1935; edit. by JULIAN HUXLEY).

(3) Capt. H. M. DENHAM: 'The Herald's voyage 1852–61' (Proc. Roy. Geogr. Soc. Lond. 6, 1861/62, p. 221–222).

Letters from J. MACGILLIVRAY in HOOK. Journ. Bot. & Kew Gard. Misc. 5, 1853, p. 279–282; *l.c.* 6, 1854, p. 353–363; *l.c.* 7, 1854, p. 303–306.

BIOGRAPHICAL DATA. SEEMANN Journ. Bot. 5, 1867, p. 316; MAIDEN in Journ. Austr. Ass. Adv. Sci. Brisbane meeting 1909, p. 379–380, w. portr.

MacGregor, Richard Crittenden

(1871, Sydney, Australia; Dec. 30, 1936, Manila, Luzon, P.I.), ornithologist, educated at Stanford University; recorder and Deck officer of the U.S. Coast and Geodetic Survey, Washington, D.C., 1899–1901; since 1901 Chief, Div. Gen. Zool. and Ornithol. of the Bureau of Science, Manila.

Author of many ornithological papers,[1] assistant editor of the Philippine Journal of Science and joint author of 'Distribution of life in the Philippines'.[2]

Columbia macgregorii MERR. and other Philippine plants were named after him.

COLLECTING LOCALITIES. *Philippines. 1905. Mindoro:* Mt Halcon (March–May).[3]—*1906. Bohol* (June); *Cebu.—1907.* With FÉNIX (see there) on the islands *Batan* (May), *Sabtan, Babuyan, Camiguin* and *Y'Ami* (greater part of June and July).—*1909. Luzon,* Mt Pulog (July 2–5); Island of *Polillo* (Sept.–Nov. 19).—In subsequent years in *Luzon,* Nueva Vizcaya Prov. and Ifugao subprov. (*1912 or '13*); Isl. *Biliran* (*1913 or '14*); *Luzon,* Laguna Prov. (*1915*); *Panay* (*1918*); *Palawan* (*1925*).

COLLECTIONS. Material from the *Batanes* and *Babuyanes Islands,*[4] Mt Pulog[5] and from the isle of *Polillo,*[6] form a part of the Bur. Sci. (B.S.) series in *Herb. Manila.* From other localities in *Manila* too. Dupl. in *Herb. Berl.;*[7] *U.S. Nat. Herb. Wash.:* 342 *P.I.; Herb. Sydney; Herb. Leyden.*

LITERATURE. (1) *E.g.* of 'A manual of Philippine Birds' (Manila 1909).

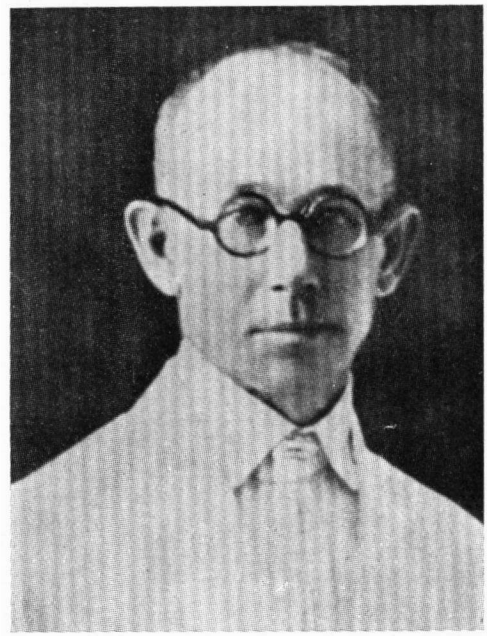
(2) In Philip. Isl. Bur. of Sci. Monogr. *no* 21, 1928.

(3) *cf.* plants in Philip. Journ. Sci. C. Bot. 2, 1907, p. 251–309, 311–337.

(4) E. D. MERRILL: 'On a collection of plants from the Batanes and Babuyanes Islands' (Philip. Journ. Sci. C. Bot. 3, 1908, p. 385–442, w. map).

(5) *cf.* E. D. MERRILL & M. L. MERRITT in 'The Flora of Mt. Pulog' (*l.c.* 5, 1910, p. 287–401).

(6) *cf.* C. B. ROBINSON: 'Botanical notes upon the island of Polillo' (*l.c.* 6, 1911, p. 185–228).



R. C. MACGREGOR

(7) A. KNEUCKER: 'Bemerkungen z.d. Cyperaceae (exclus. Carices) et Juncaceae exsiccatae. 8. u. 9. Lief.' (Allg. bot. Zeitschr. 17, 1911, Beilage 48, p. 1–12).

BIOGRAPHICAL DATA. Nat. Res. Counc. P.I. Bull. *no* 7, 1935, p. 693–696, incl. bibliogr.; Science, March 12, 1937, p. v–xiv, incl. bibliogr.; Philip. Journ. Sci. 63, 1937, p. 359–361 + portr.; BACKER, Verkl. Woordenb., 1936; Auk 55, 1938, p. 163–175, incl. bibliogr. + portr. (pl. 7).

MacGregor, Sir William

(1846, Towie, Upper Donside, Scotland; 1919, Aberdeen, Scotland), a medical man, appointed Administrator of the British Crown Colony of New Guinea in June 1888, in 1895 Lieutenant Governor of Papua. During his term of office, he explored many parts of New Guinea and collected natural history objects; several of his minor tours were punitive expeditions. In 1901–02 Governor of Lagos; in 1904 transferred to New Foundland till 1909; in 1909 Governor of Queensland, retiring in 1914.[1] He conducted an expedition to Labrador.

He is commemorated in several plant names.

ITINERARY. *SE. New Guinea.* Arrival at Port Moresby (Sept. 4, *1888*); Port Moresby–Kerepunu (21–27); Louisiade Archipelago, *D'Entrecasteaux Islands, etc.;* Milne Bay (Dec. 1888–Jan. *1889*);

with ENGLISH (Jan. 14) from E. side of the Ansell Peninsula walking across it to Chads Bay.[2]—In the 'Albatross' (Jan. 22) to Maivara on the W. point of Milne Bay, *to cross the southeastern Peninsula* of New Guinea; reaching Mullin's Harbour (end of Jan.).—Embarked (Jan. 29) to Logia



SIR W. MACGREGOR

(Heath Isl.); *Stacey Isl.* (*Suáu*) (Febr. 2); Port Moresby.—From Port Moresby in a cutter to Kerepunu; on foot to Rigo; Húla and Kalo (20); Kwaipo Ropu (21) and many villages in the neighbourhood (till March 10); return to Port Moresby. —From Port Moresby (March 21) to Manukoro Distr.; Kaile (24–25); Port Moresby (26).[3]—To Borobaba and Bura (= Boëra) (Apr. 9); Morobada (= Manu-Manu) (10); mouth Wai Mauri (= Veimauri River); Doura; Kabadi; Port Moresby (15).[4]—*To Owen Stanley Range:*[5] from Port Moresby (Apr. 20) by boat to Vanapa River, reaching the highest point navigable on the 27th; J. B. CAMERON was sent back to Port Moresby to fetch stores and carriers, MACGREGOR in the meanwhile making trips in the environs, and climbing Mt Gleeson; breaking camp (May 17); *via* Mt Guba, Mt Caesar, Mt Kowald; along the bed of the Vanapa (21–23); spur of Mt Belford (summit on the 24th); crossing St Joseph River (26); spur of Mt Musgrave, ascending the mountain to 7180 ft (29), then in eastern direction to 8000 ft and descending the N. slope; Mt Knutsford (June 6); Mt Douglas (10); *Mt Victoria* (11–12), the NW. summit of Owen Stanley Range; bivouac Mt Knutsford (16); back at the coast (24).—From Port Moresby (July 2) to the islands St Aignan (5–7) and Sud-Est.[6]—Boat tour to Aroma (July 18–20).[7]—*Exploring the Fly River etc.:*[8] mouth of the Fly (Nov. 21); *Isl. Kiwai* (Nov. 22–Dec. 10); ascending the river; bivouac at 5°31′ S, 605 miles from the mouth (23); proceeding another 5 miles on foot; returning (24); Kiwai (Febr. 2, *1890*); departing with CHALMERS (9), for an exploration of the left and right bank of the Fly Delta; Tait River (= Oriomo), ascending it part of the way; proceeding along the coast (17); ascending part of the Binaturi; *ditto* of the Kawa Kusa (Pahoturi) (21); Isl. *Dauan;* preparing for a tour by boat *to the western boundary of the colony* with CHALMERS and CAMERON: sailing from *Dauan* (Febr. 26); Thomson Bay (March 2), Heath Bay and Morehead River; *Dauan* (17); back to Port Moresby.—*Exploring St Joseph River..:*[9] sailing from Port Moresby (Apr. 22); mouth St Joseph (26); proceeding to Ina Waí (28); by land to Ina Wi, Aipiana, Amo-Amo, Rarai, Ngawaúni; crossing the river to Ina Wabui (Taéna) (May 3); exploring the hills N of Ina Wabui (4–5); return; *Yule Isl.* (9); Maiva Distr. (11) and back to Port Moresby.—*Basin of St Joseph River:*[10] from Port Moresby (May 22) *via Yule Isl.* to Maiva; Báihapa, Amo-Amo (29), Aipana, Ina Wáia (June 1), Ina Wabui (2), Bioto (3); back to Port Moresby, after visiting Kabadi Distr.—Insp. *eastern end of the Possession:*[11] to Kerepunu (June); *Toulon Isl.* (27); *Isl. Mairupara, Suáu* (28); Samarai; Teste Isl. (July 4); St Aignan Isl. (5); Sud-Est Isl. (8); Rossel Isl.; Woodlark Isl.; *Trobriand Isls;* Laughlan Isl. (17); anchoring near Awaiama in Chads Bay (23) and exploring Tapota Distr., W of it; sailing in northern direction (27) along the coast, touching at several small villages; Phillips Harbour; exploration west coast Collingwood Bay (30) to the other side, Keppelpoint; Port Hennessey; Holnicote (Gona) Bay; Robinson Bay; the remaining part of the coast as far as the German boundary; after return, sailing for Australia: Cooktown (Aug. 16), Brisbane (staying to regain his health from Aug. 25–Oct. 15).—From Port Moresby (Nov. 14) to the lower course of *St Joseph River,* to found a government station at Aipiana; Amo-Amo (18); Rai-Rai (21); Ngawaúni (22); Mt Auonganga (23); returning (Dec. 1); Ina Wi (4); *Yule Isl.* (5); Port Moresby. BELFORD (see there, for liter. too) proceeding to *Mt Yule.*[12]—Hinterland of Port Moresby, Koiari Distr. (Dec. 20–24), reaching Taburi.[13]—*Eastern end of the Possession:*[14] from Port Moresby (Dec. 27), *via* Kerepunu and *Toulon Isl.* to Samarai (30); Kwato Isl.; Heath Isl.; *Dufaure Isl.* (Jan. 3–5, *1891*); crossing to the mainland Suabina; Mullens Harbour, from where by land (7) to Sila-Sila (N. coast Ellengowan Bay); by boat (Jan. 8–11) along the coast in western direction, through the strait between the coast and Dufaure Isl. and along the south coast of Isl. Isidau, touching at several villages; Samarai (12).—To the Louisiade Archipelago: Sud-Est Isl., Misima, Laughlan Isl. (Jan. 21), East Isl.; Milne Bay (Mita) (25), visiting several villages in the neighbourhood; Maivara Distr. (27), Waga-Waga and Samarai; when returning to Port Moresby, going ashore in Meikle Bay (Febr. 9), from where on foot to Sila-Sila; and

to Were-Were (= Wer-Weri) (10).[15]—Inspection *Western Division:*[16] sailing (March 2); Mabudauan (6); navigating the Paho Turi (7), march into the interior; Boigu (12); exploration of the Mai Kusa and the Wasu Kusa (13–15); sailing to Thompson Bay; Mabudauan (18); once more in western direction (21), visiting Kadawa and Mawata (mouth of the Binaturi), Masingara and Badu Distr.; sailing to Turi-Turi; Isl. *Daru* (23); Isl. *Párama* (24); mouth of the Fly River, visiting several small islets; exploring the delta (till Apr. 2); Kiwai; Port Moresby.—*South coast of the eastern part of the colony:*[17] sailing (May 28); Kerepunu; Dedele Point; Robinson River; River Rig Wina; anchoring at the W. side of Table Point (June 1), visiting Magaubu; *Amazon Isl.*; Mayri Bay; ? ascent of Mt Goldie (according to WICHMANN; not mentioned in the Ann. Rep. *l.c.!*); Millport Harbour; excursion to limestone hills (80 ft alt.) situated near the western entrance of Losoa Bay (June 5); Port Glasgow (5); Isl. *Baibara* (9); Samarai (11); sailing for the E. coast (12), Chads Bay; Taupota Distr. (13); Agonái Distr. (15); Bartle Bay; *Normanby Isl.; Goulvain Isl. (Dobu)* (19); *Fergusson Isl.* (22); back to Samarai (24); departing (26) to the Louisiade Archipelago; back at Samarai (July 10). —From Samarai (July 13) to *Dobu; Fergusson Isl.* (14–17); *via* Isl. *Nuama* to *Trobriand Islands;* back to Samarai (first days of Aug.).[18]—*Crossing the SE. Peninsula:*[19] from Samarai (Aug. 7) to Maivara, Milne Bay, and *via* Buhutu Distr. to Tamoro, Mullens Harbour; from Tamoro by canoe (10) *via* Were-Were (= Wer-Weri) to Dahune; going ashore at the mouth of the Nigo-Nigo (11) in the western part of Orangerie Bay, afterwards visiting Laimotu, Wari, *etc.;* passing the night near Waibada River; back to Port Moresby.—Inspection *Mekeo District:*[20] sailing from Port Moresby (Sept. 1); *Yule Isl.*, Hall Sound, St Joseph River; Port Moresby (20).—Visit to *Mekeo District* (Dec. 9–13).[21]—*Eastern Portion of the Possession:*[22] by boat (Dec. 17) to Kapa-Kapa, Hula, Kalo; Aroma and Kaiwala (18); the islands *Laraoro, Suáu, etc.;* Isl. *Dobu* (22); *Fergusson Isl.;* Bartle Bay; *Duchess Isl.; Normanby Isl.; Dobu* (28); *Normanby Isl.; Dobu* (Jan. 3, *1892*); *Welle Isl.* (*Sanaroa*); *Fergusson Isl.; Dobu* (6); *Fergusson Isl.; Trobriand Islands;* Woodlark Isl. (14); Isl. *Gawa*, Kiriwina; Hughes Bay (21); *Dobu* (22); *via* Sewa Bay to Samarai (23); Louisiade Archipelago; Samarai (Febr. 6).—Visit *Western Division:*[23] sailing (Febr. 29); Toaripi; Mabudauan (March 3); Fly River mouth; Maipani; mouth of the Gama Oromo and of the Gawai (12); Port Bevan; ascent of Mt Aird; Isl. *Goari Bari;* Omati River; trip into the interior; Airo or Airori River, Wai Roro River (26); *via* Bebéa to Mabudauan (28); ascending the Mai Kusa River (Apr. 5); Morehead River; to the Dutch boundary (8) and past it (9); back *via Jervis Isl.* (*Mabuiag*) to Port Moresby.—Departure (June 8) to Mabudauan (11); Boigu; the Mai Kusa (13); landing between Thompson Bay and Morehead River; Boigu; *Dauan* (24).[24]—*Eastern end of the Possession:*[25] departing from Port Moresby (July 6); Tupuselei, Kapa-Kapa; march to Rigo and *via* Saroa to Gosoru; proceeding to Libikina (8); Imoa Gola (Wabaraba Distr.) (9); Waikuni on the Vanigera (10) and by canoe to the mouth, passing the night at Kalo; Kerepunu (12); Aroma Distr.; embarking again (16); Samarai (21); visiting many islands (July 24–Aug. 10) E of it; from Samarai (16) to *Normanby Isl.; Dobu; Mosquito Isl., etc.*—*Country W of Port Moresby:*[26] from Port Moresby (Oct. 8); Buro (= Boera); *Yule Isl.;* Delena (Hall Sound); Mekeo Distr. near St Joseph River; Freshwater Bay (24); back to Port Moresby.—Inspection *Gulf of Papua,*[27] from Hall Sound to Port Bevan: sailing (Jan. 9, *1893*); Toaripi; Lakekamu River; ascending the Mapu and several other rivers part of the way; back at Kauaheri (30), and on foot to Orokolo; exploring the Purari Delta, Kaimari Distr.; Port Romilly; the Wame (delta branch of the Baroi); the Kaipana (Stanhope River, near Bevan); Aia River; Era Bay; Port Bevan (Febr. 19); *Thursday Isl.* (20) for an interview with the Dutch (*cf. sub* BENSBACH) in connexion with the delimitation of the boundary between British and Dutch New Guinea: to the Fly Delta (March 9); *Wabuda Isl.* (13); *Kiwai Isl.*—May 9 to *Mekeo Distr.; Yule Isl.*, Hall Sound; ascending St Joseph River; mouth of the Toutou (= Tau-Tau); back to Port Moresby.—*Eastern end of the Possession:*[28] departing from Port Moresby (June 26); Kaile, Kapa-Kapa, Rigo, Kerepunu; Aroma Distr.; Samarai (July 17); Louisiade Archipelago; Hulá (23); Rossel Isl., Sud-Est Isl.; Samarai (Aug. 3); to the *D'Entrecasteaux Isls* (9); *Fergusson Isl.* (21); *Dobu; Trobriand Isls.;* Woodlark Isl.; Laughlan Isl. and many others; proceeding to the NE. coast: Bartle Bay, Goodenough Bay, Porlock Bay, Dyke Acland Bay, Gona Bay (Holnicote), Kumusi mouth, Douglas Harbour (Sept. 29), Cape Nelson (Oct. 5), Maki-Maki (Maisina Distr.), Phillips Harbour and back.—Visit to *Purari District:*[29] from Port Moresby (Dec. 27); Apiope at the mouth of the Ai Wai; ascending the Ai Wai, the Auri and the Purari; back at Apiope (Febr. 1, *1894*); in eastern direction to Iare (3); Koriki (4); back to Apiope, from where (7) to Maipua; Orokolo; returning (Febr. 18) to Port Moresby.—Visit to the *NE. & S. coast, several islands, S. coast and Mekeo District:*[30] from Port Moresby to Samarai; *via* Wedau (Febr. 24) and Paiwa to the coast between Cape Vogel (Ipote) and Firtree-Point, exploring the latter; Pibubu on the Mobiri (March 1) and proceeding to the Kwagira; back on board (5); sailing to Ikore, N of the Clyde River, making bivouac; ascending the delta branches of Clyde River (= Mambare); Douglas Bay; Ope (Opera) (16); the Kumusi (17); back on the beach (21); Gona (= Holnicote) Bay (23); the Basari; Dyke Acland Bay (27); the Kewoto; the Umunda; the Musa (Apr. 3–11); Porlock Bay; the Dako (13); Phillips Harbour; Cape Vogel (Ipote); Paiwa; Samarai (16); departing to the S. coast (Apr. 19); near Table Bay: bivouac at Dawara, march along the coast to Batimata (= Parimata) Point (23), Dedele and from there (26) inland; back at Samarai (middle of May). Visit to the islands: *Dobu* (*Goulvain Isl.*) *via* East Cape; Isl. *Tewara;* Isl. *Urasi; Trobriand Isls* (May 20); Wood-

lark Isl.; Laughlan Isl.; *Fergusson Isl.;* Teste Isl. (Ware) (31); Sud-Est Isl. (June 2); Rossel Isl. and others; back to Samarai (12). Before returning to Port Moresby, visiting the following places on the south coast: Dedele (June 15), Domara (Cloudy Bay) and Eaula, Wererupu, Galoma, Keapara in Kalo, Kemali and Hula. To *Yule Isl.* (26); boat tour to Mekeo Distr.—*1895.* After his return from England he visited several stations: Isl. *Daru* (June); Rigo Distr. (June 20–July 5); near Roko and Isl. *Tauko* near Port Moresby (July 6); *Amazon Isl.* (*Laraoro*) (14); Wabumari Bay (15), and on foot to Sila-Sila; Samarai (16); to *Dobu* (20); *Fergusson Isl.* (22); *Dobu* (24); *Fergusson Isl.* (26), crossing it from Hughes Bay to Seymour Bay; *Dobu* (31); coast-villages of *Fergusson Isl.* (Aug. 1); *Normanby Isl.* (2); Samarai (3); Murawawa Bay (a bight of Goodenough Bay) (10); march from Kaiboda to Kwamana; mouth *Mambare River;* ascending it to half-way the inflow of the Tamatara; to the Musa (towards the end of Aug.), returning not before Sept. 23; ascending the Mambare, exploring the vicinity; junction with the Tamatara (Oct. 7); back to the coast, ascent of *Kumusi River* (Oct. 13–21); mouth of the Mambare (22); Porlock Harbour (25); Collingwood Bay; back to Samarai.[31]—To the *Louisiades and neighbouring groups* (Nov. 1–15), also *Trobriand Isls* (7). Departure for Rigo, from where (Nov. 21) an inspection to the inland portion of *Rigo Distr.* with ENGLISH (see there); back by raft downstream the Vanigera (= Wanigela = Kemp Welch River); Kapa-Kapa (29); Port Moresby.[32]—*Western Division:*[33] from Port Moresby (Dec. 13); *via* the mouth of the Wai Lala to Isl. *Daru* (14); bivouac at the junction of the Guepupu and Binaturi; Suve-Suve (= Suwe-Suwe), Turupo and Kedari Districts; Mawata (25), Masingara; downstream the Mawata (30); Isl. *Boigu,* the Wasu Kusa; *Morehead River* (Jan. 1, *1896*), ascending it part of the way; put in a 1000 miles east of the mouth; Isl. *Paramá* (Jan. 18); mouth Werara Turi; Sui, west entrance of the mouth of the Fly (21), Sumai (south coast *Kiwai Isl.*); Wabuda (24); ascending the Bamu part of the way (29); Gana River; Aird River, going upstream to the Aird Mts (31); Orokolo (Febr. 1); Apiope; mouth of the Baroi; ascending the Omati, the Bebéa and the Bamu River; left bank of the Fly; back to *Daru* (12).—Visit of inspection to *Mambare River District, etc.:*[34] Samarai (March 24); Isl. *Kwato,* Cape Vogel; Mambare River (29), ascending it to Tamata Station (30), the same day going downstream again; surveying the mouth and along the coast (Apr. 1); mouth of the Waria (3); mouth Ope (5); Goodenough Bay (6); *via* Wamira and *Killerton Isls* (mission station), back to Samarai (9); Conflict Isls (Baga Warina) (11); *via* St Aignan Isl. to the south coast; Gwaibumata Point opposite Toulon Isl. (20–21); Dedele and Domara (22); Hulá (24); Port Moresby. Departing again (29) on an expedition with GIULIANETTI, undertaken to repel Tugeri invaders: Orokolo (30); Isl. *Daru;* Isl. *Marakara* and Isl. *Saibai* (May 8), camping on the latter; Isl. *Boigu* (11); ascending the Wai Kusa (13) to near the junction with the Mai Kusa; back to Boigu (May 16).—Inspection to the *Mekeo District:*[35] departing from Port Moresby (June 15); Delena; *Yule Island;* Mekeo (June 19); downstream the St Joseph River to Hall Sound; Ethel River (Kiwa); Aroma (July 3); discontinuing the journey on account of illness. After recovery, from Port Moresby to *Dufaure Isl.;* the Louisiades; Samarai (July 29).—From Samarai to the mouth of the Mambare for a successful endeavour to cross the *SE. Peninsula:*[36] ascending the Mambare (Aug. 6–10); proceeding on foot, Clunas River, Simpson River; 'Simpson's Store' on the Otawia (14); bivouac at Tjirima, MacLaughlin River (20); setting out (Sept. 1) for an ascent of *Mt Scratchley* (resp. Sept. 12 and 14 reaching tops); ascent of *Mt Victoria* (summit on the 20th); SW. foot of Mt Knutsford (29); Mt Musgrave (Oct. 1, up to 2000 ft); passing the Lido (Oct. 3); Mt Guba (10); reaching the coast near Vanapa mouth (13).—From Port Moresby (Nov. 9); visiting Rigo Distr. and *Suáu;* Samarai (departing Nov. 13); mouth of the Musa (15), ascending it till just behind Gewadura (passing the village on the 29th); going to the coast with a wounded member of the expedition and proceeding to the mouth of the Mambare (Dec. 8); Tamata Station (9); Samarai (17); Isl. *Kwato* (Christmas).—*1897. Western Division:*[37] from Port Moresby (Febr. 8); Isl. *Daru; Warrior Isl.* (Tutu or Tud) (18); *Saibai* (26); west bank of the Wasu Kusa (27); bivouac on the west bank of Morehead River (March 1), ascending the river (till March 5) to 8 miles above Bangu; Isl. *Boigu* (8); Isl. *Daru* (–13); Saguana; mouth of the Bamu (16); Orokolo (18); Port Moresby (22).–*NE. coast:*[38] from Samarai (Apr. 10); Cape Vogel; Porlock Bay (11); going up the Mambare (15); Tamata Station (17); proceeding (18), and back to the mouth; ascending again (30) to 2 miles short of Peu; Tamata Station (May 2); back to the mouth (12); mouth of the Gira (18), ascending the river (till 26) and returning (27); by land to the Mambare mouth; Tamata Station (June 4); downstream to Apotji (7), and by land in search of the Gira *via* Apotji River, crossing Wade River (13) to Diware; by boat (15) to the mouths of the Gira and Mambare; returning (21) to Samarai *via* Douglas, Porlock, and Jasa-Jasa harbours. To *Kiriwina* (*Trobriand Isls*) (July 3).—District *between Port Moresby and the Headwaters of the Goldie and Brown rivers:*[39] from Port Moresby (Aug. 2); Bomena, summit of the War(r)i(r)ata; descent to Taburi (4), to Sogeri Distr.; Umuni on the Ewofa (6); Mt Sefidubu (7); Wamai; Brown River (10); Gnianumu; Baura; Hagari; following the bed of the Ruguoa; bivouac on the slope of Mt Service (2000 feet); following the valley for another 4 miles (25); return (28), following the same route to Port Moresby.—*Owen Stanley Range:*[40] from Port Moresby (Sept. 18); Vanapa River; going upstream from Morabi to Doura (20); Kone (21); Towiro bivouac (22); Exton (= Exter) River; Suku (25); Amaseba (26); bivouac near the Wetapu (27); following the river (28) and climbing to Iritumini; gold-diggers bivouac (Sept. 30–Oct. 8), Goromani Ridge; with GIULIANETTI and ENGLISH (see those) to the *Wharton Range*

(setting out Oct. 9), bivouac of the former (18–26); Mambare (17); a summit of *Mt Scratchley* (20–27); MacLaughlin River (29); Mambare (30); Tamata Station (Nov. 6); downstream (7).—*1898. Western Division:* from Port Moresby (March); Isl. *Daru* (–March 22); *Saibai*, Bugi, Yobu Point, *Walarter* and *Deliverance Isl.;* bay W of Walarter; *Saibai; Daru* (30); Saguana, Giavi (= Giwoi) (Apr. 4); Isl. *Wabuda* (5); left bank Fly River; ascent of the mouth of the Bamu (7); following the course of the Wawoi; downstream again (10); Port Moresby (14). *Central Division:* from Port Moresby (Apr. 18) to the S. side of the Laloki; western spurs of Mt Lawes (19); Brown River (20), following it to the mouth of the Rugua; Port Moresby.[41]—With Lord LAMINGTON (see there), Sir H. M. NELSON and F. M. BAILEY (see there) to Isl. *Tauko* (Apr. 25); Mt Warirata (= Werirata); in the 'Merrie England' (28) *via* Tupuselei to Kapa-Kapa, Vatorata and Aroma; Dedele (30); *Dufaure Isl.* (= *Magula Isl.*) (May 1); Samarai (3); Milne Bay (4); Mita, Awaiama and Baunia Bay (5); Dogura (6); Phillips Harbour; Porlock Bay (7); mouth of the Mambare (8), upstream (9) to Tamata Station (10); proceeding (11) and back to the mouth (12); mouth of the Gira, ascending the river (14) to Tabara (16); mouth of the Ope (17); mouth of the Kumusi; Bafare (19); mouth of the Musa (20), going upstream for 15–20 miles; Port Hennessey (23); Jasa-Jasa (25); Dogura (26); Samarai.[42]—*Eastern portion and NE. coast:*[43] from Samarai (June 8) to the Louisiades and the *D'Entrecasteaux Islands*, visiting *Tubi-Tubi* (*Slade Isl.*), *Dobu, Mohu, Kiriwina, etc.;* Hughes Bay (18), *Fergusson Isl.; Isl. Wagipa* (*Dodogésa*) (24) near Goodenough Isl.; heading for the NE. coast: Jasa-Jasa Bay (26); *Sydney Isls;* Phillips Harbour; *Hardy Isls* (*Sinipari*) (28); Porlock Harbour (29); mouth of the Mambare (30); Tamata Station (July 2); Gona Bay (9); Kevoto (10); MacLaurin Harbour (11); Firtree Point (12); Dogura (13), Samarai (16); Port Glasgow (18); Vatorata (20); Rigo (21) and return to Port Moresby.—Inspection *road between Port Moresby and the Main Range* (July 26–31):[44] bivouac at the junction of the Goldie and the Laloki River; climbing Hospital Hill (28); Brown River and return to Port Moresby.—*Lower portion of the Brown River:*[45] by boat (Aug. 10) to Red Scar Point; with A. C. ENGLISH (11) to Galley Reach, afoot; from the mouth of the Naoro (= Brown River) going upstream (12); junction with the Laloki (13); ascending both rivers part of the way, but meeting with insuperable difficulties; bivouac on Isl. *Sepa;* by land (24) to a farm on Astrolabe Range.—Sept. 1 leaving New Guinea.

COLLECTIONS. *Herb. Melbourne,*[46] cryptogams too.[47] Duplicates in *Herb. Kew:* 80 *nos* from Owen Stanley Range, plants from the Louisiades and a complete set of the vascular cryptogams from Mt Knutsford, Mt Musgrave and Owen Stanley Range; *Herb. Berl.:* from Owen Stanley Range (pres. 1902), mosses, orchids (with *Herb.* SCHLECHTER); *U.S. Nat. Herb. Wash.:* 24 *N.G.* dupl. of grasses; *Herb. Leyden.*

LITERATURE. (1) Author of: 'British New Guinea. Country and people' (London 1897; chapt. 3 on the 'Flora').

(2) *cf.* B. H. THOMSON: 'New Guinea: Narrative of an exploring expedition to the Louisiade and D'Entrecasteaux Islands' (Proc. Roy. Geogr. Soc. Lond. N.S. 11, 1889, p. 525–542, map).

(3) *cf.* Further Corresp. resp. Br. N.G. Aug. 1889, Lond. 1890 and Ann. Rep. Br. N.G. for 1888/89, Brisb. 1890, p. 9–18.

(4) *cf.* Further Corresp. resp. Br. N.G. April 1891, p. 8–10.

(5) *cf.* Ann. Rep. Br. N.G. for 1888/89, Brisb. 1890, App. D. p. 37–48; 'Journey to the summit of the Owen Stanley Range, New Guinea' (Proc. Roy. Geogr. Soc. Lond. N.S. 12, 1890, p. 193–223); for collections *cf.* below *sub* 46 and 47.

(6) *cf.* Ann. Rep. Br. N.G. for 1889/90, Brisb. 1890, p. 25–26.

(7) *cf. l.c.* p. 27.

(8) *cf.* Ann. Rep. Br. N.G. for 1889/90, Brisb. 1890, p. 36–75; Proc. & Transact. Queensl. Br. Roy. Geogr. Soc. Australasia 1889/90, V, 1890, p. 61–67, 94–100.

(9) *cf.* Furth. Corresp. resp. Br. N.G. April 1891 (C. 6323) p. 150–165, 175–180; Ann. Rep. Br. N.G. for 1889/90, Brisb. 1890, p. 76–83.

(10) *cf.* Ann. Rep. *l.c.* p. 87–91 and Ann. Rep. *l.c.* for 1890/91, Brisb. 1892, p. 25–26.

(11) *cf.* Ann. Rep. Br. N.G. for 1889/90, Brisb. 1890, p. 92–93 and *l.c.* for 1890/91, Brisb. 1892, p. 1–18.

(12) *cf.* Ann. Rep. Br. N.G. for 1890/91, 1892, p. 19–24.

(13) *cf. l.c.* p. 26–27. (14) *cf. l.c.* p. 28–30.

(15) *cf. l.c.* p. 31–33. (16) *cf. l.c.* p. 42–54.

(17) *cf. l.c.* p. 57–70.

(18) *cf.* Ann. Rep. Br. N.G. for 1891/92, Brisb. 1893, p. 1–7.

(19) *cf. l.c.* p. 9–11. (20) *cf. l.c.* p. 15–20.

(21) *cf. l.c.* p. 20–22. (22) *cf. l.c.* p. 22–33.

(23) *cf. l.c.* p. 34–50. (24) *cf. l.c.* p. 50–53.

(25) *cf.* Ann. Rep. Br. N.G. for 1892/93, Brisb. 1894, p. 1–14.

(26) *cf. l.c.* p. 15–20. (27) *cf. l.c.* p. 20–38.

(28) *cf.* Ann. Rep. Br. N.G. for 1893/94, Brisb. 1895, p. 1–21.

(29) *cf. l.c.* p. 22–29.

(30) *cf. l.c.* p. 30–37, 40–41, 43–44.

(31) *cf.* Ann. Rep. Br. N.G. for 1895/96, Brisb. 1897, p. 1–15, 22–30.

(32) *cf. l.c.* p. 30–35. (33) *cf. l.c.* p. 38–49.

(34) *cf. l.c.* p. 49–56.

(35) *cf. l.c.* p. 56–60 and Ann. Rep. for 1896/97, Brisb. 1898, p. 1–2.

(36) *cf.* Ann. Rep. Br. N.G. for 1896/97, Brisb. 1898, p. 4–14, xi–xii and App. 6; see also in Nature 55, London 1896/97, p. 157–158, and *l.c.* p. 247; Journ. Manchest. Geogr. Soc. 12, 1896, p. 201–203; Geogr. Journ. Lond. 11, 1897, p. 93–94, 449–450; Proc. & Transact. Queensl. Br. Roy. Geogr. Soc. Australasia 1896/97, Brisb. 1898, p. 43–50.

(37) *cf.* Ann. Rep. Br. N.G. for 1896/97, Brisb. 1898, p. 23–25.

(38) *cf. l.c.* p. 25–39.

(39) *cf.* Ann. Rep. for 1897/98, Victoria 1899, p. 1–7.

(40) *cf. l.c.* p. 19–29, App. B.; Geogr. Journ. Lond. 1898, p. 417–418.
(41) *cf.* Ann. Rep. Br. N.G. for 1897/98, Vict. 1899, p. 39–42.
(42) *cf. l.c.* p. 42–45, 131–133, and p. 137–145 (plants, copied from Queensl. Agric. Journ. 3, 1898).
(43) *cf. l.c.* p. 45–50. (44) *cf. l.c.* p. 54.
(45) *cf. l.c.* p. 55.
(46) *cf.* Letter from F. VON MUELLER in Gard. Chron. ser. 3, vol. 6, 1889, p. 330.

F. VON MUELLER: 'Brief report on the Papuan Highland plants, gathered during Sir W. MACGREGOR's expedition in May and June 1889' (Ann. Rep. Br. N.G. for 1888/89, Brisb. 1890, App. I, p. 66–67); 'Records of observations on Sir WILLIAM MACGREGOR's highland plants from New Guinea 1889' (Transact. Roy. Soc. Victoria 1^2, 1889, p. 1–45); 'The mountains of New-Guinea' (Gard. Chron. ser. 3, vol. 6, 1889, p. 330 (letter); 'Highland plants from New Guinea' (Nature 42, 1890, p. 382–383; reprinted from the article in the Transact. Roy. Soc. Vict.); 'Some scientific results of Sir WILLIAM MACGREGOR's recent expedition to the Owen Stanley-Range' (Proc. Roy. Geogr. Soc. Lond. N.S. 1890, p. 616–618); in 'Descr. Not. Pap. Pl.' pt 9, 1890 (from Fly River, Mai Kusa, Hynes River, Kapa-Kapa); in Vict. Naturalist 7, 1891, p. 143–144 and *l.c.* 13, 1896, p. 53–55 (from Holnicote Bay, near Cape Caution and Mambare River); 'Remarks on a wild banana of New Guinea' (*l.c.* July 1896); 'Notes on botanical collections' (Bot. Centr. Bl. 50, 1892, p. 193–195, and *l.c.* 60, 1894, p. 225–228; from Mt Dayman, *etc.*).

Some orchids by FR. KRÄNZLIN in Oesterr. Bot. Zeitschr. Wien 44, 1894, in 'Orchidaceae Papuanae'.

W. O. FOCKE: 'Ueber einige Rosaceen aus den Hochgebirgen Neu-Guineas' (Abh. Naturwiss. Ver. Bremen 13, 1894, p. 161–166).

F. M. BAILEY in Bot. Bull. Queensl. Dept Agric. *no* 13, 1896, p. 33–34; *l.c. no* 14, 1896, p. 15–16; Queensl. Agric. Journ. 3, 1898, p. 282.

(47) J. G. BAKER: 'Vascular cryptogams of New Guinea, collected by Sir W. MACGREGOR' (Journ. Bot. 28, 1890, p. 103–110).

F. STEPHANI: 'Hepaticarum species novae' (Hedwigia 32, 1893, p. 139, 211, and *l.c.* 33, 1894, p. 154, 162).

V. F. BROTHERUS: 'Some new species of Australian mosses described' (in Öfv. Finsk. Vet. Soc. Förh. 37, 1894/95, *l.c.* 40, 1897/98, and *l.c.* 42, 1899/1900).

BIOGRAPHICAL DATA. Portr. in J. P. THOMSON, British New Guinea, 1892; Kew Bull. 1920, p. 31–32; several data in MONCKTON, Some experiences of a New Guinea Resident Magistrate, vol. I (Penguin series); BACKER, Verkl. Woordenb., 1936.

Machado, Alfred Dent

(† June 12, 1910), police-officer; later miner, employed at the Tomo Gold Mines (1892–93); for a short time on the staff of the Botanic Gardens, Singapore (1902–03), subsequently a planter in Perak and in 1909 again at Singapore, with the United Rubber Estate.

Saccolabium machadonis RIDL. (= *Sarcanthus* – J.J.S.) and other plants were named after him.

COLLECTING LOCALITIES. *Malay Peninsula:* around Tomo, Perak (*1892–93*); region of Legeh (Siam) (*1893, 1896*); Pahang (*1896*); Batu Pahat, Johore, with H. N. RIDLEY (see there) (Oct. 31–Nov. 17, *1900*) and in *1903* mainly in Pahang: Pahang Track (Semangko Pass) (May); Kamuning Estate near Sg. Siput; upon the Jelai (May) and about Kuala Lipis.[1]

He made an earlier expedition to the headwaters of the Jelai in *1900*, but it is uncertain whether he collected.[2]

COLLECTIONS. *Herb. Sing.:* several small collections. He sent living plants to *Hort. Sing. till 1909*, in 1896 the new genus and species *Spatholirion ornatum* RIDL.

In *Perak State Mus.:* collection of fibres, medicinal plants, *etc.* (pres. 1906).

LITERATURE. (1) According to BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 163, the collecting about Kuala Lipis took place in 1923; this statement is corrected in the reprint of the paper!

(2) A. D. MACHADO: 'The hot springs of Ulu Jelai (Pahang)' (Journ. Str. Br. Roy. As. Soc. *no* 33, 1900, p. 263–264; no data or plants mentioned).

BIOGRAPHICAL DATA. Agric. Bull. S.S. & F. M.S. 9, 1910, p. 328–329; BACKER, Verkl. Woordenb., 1936.

Machmoed, A. B., *cf. sub* Forest Research Institute, Buitenzorg.

Mackay, Colonel J. A. Kenneth

chairman of the Royal Commission to inquire into and report upon the conditions including the methods of Government, of the territory then known as British New Guinea and the best means for their improvement.

ITINERARY. *Brit. New Guinea, Papua. 1906.* Departing from Sydney (Sept. 1) to Port Moresby; sailing round the whole coast-line, visiting all the important groups of *islands of the territory*, including a march from Buna Bay across the island and over the Owen Stanley Range to Port Moresby: Kerepunu, Samarai, islands E of New Guinea, Cape Nelson, Tamata, Buna Bay; by land *via* Kumusi River, the Mambare, Kokoda, Yodda fields, across the main Range, Kagi, Sogeri, Ro(u)na Falls, Port Moresby; back at Brisbane (Dec. 6).[1]

COLLECTIONS. In his book[2] he mentions that orchids were brought from Owen Stanley Range; probably living material. They might have been collected by MACKAY himself or by BELFORD (see there).

LITERATURE. (1) Col. J. A. KENNETH MACKAY: 'Across Papua, being an account of a voyage round and a march across the territory of Papua, with the Royal Commission' (London 1909).

(2) *cf. l.c.* p. 130.

Macklot, Heinrich Christian

(1799, Frankfurt a/M, Germany; May 12, 1832, Poerwakarta, Java), pharmacist, later promoted surgeon, who at first was on the staff of the Natural

History Museum at Leyden and in 1823 was appointed a member of the 'Natuurkundige Commissie' for the Dutch East Indies, where he did not arrive before June 1826. He made zoological investigations in West Java[1] and visited *New Guinea* and *Timor* in *1828–29* in the corvette 'Triton' (*cf.* ZIPELIUS).[2] In May *1831* he made a journey along the N. coast of *Java* and back *via* the S. coast; on July 22 of the same year he climbed G. Salak in *W. Java*.

The results of his work were lost by fire during the revolt of the Chinese at Poerwakarta from May 8–9, 1832; he himself was murdered some days later. A monument in his honour was erected and can be found behind the house of the District Officer at Krawang, near the right bank of the Tjitaroem; it is embraced by a banyan tree (BACKER MS.).

The genus *Macklottia* KORTH. was named in his honour.

COLLECTIONS. His entomological collections in the Museum at Leyden. Botanical collections might have been made.

LITERATURE. (1) H. C. MACKLOT: 'Uittreksels uit brieven van Java aan den Heer TEMMINCK, Directeur van 's Rijks Museum' (VAN HALL Bijdr. t. d. Nat. Wet. 2, 1827, p. 315–328, together with BOIE, wholly zoological!).

(2) *cf.* Letters on the voyage to Timor, dated Oct. 7, 1828 (in *l.c.* 4[1], 1829, p. 298–309).

H. CHR. MACKLOT: 'Verslag van het land, de bewoners en de voortbrengselen ... van Nieuw-Guinea (H. M. korvet Triton)' (in *l.c.* 5, 1830, p. 142–182).

cf. also *sub* ZIPELIUS.

BIOGRAPHICAL DATA. Alg. Konst- en Letterbode 1832[2], p. 209 and *l.c.* 1837[2], p. 146; Natuurk. Tijdschr. N.I. 60, 1901, p. 38; Encyclop. N.I. 2, 1918; BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 52, 1942, p. 396.

Maclay, N., *cf. sub* MIKLUCHO MACLAY, N.

MacLear, Capt. John Fiot Lee Pearse

accompanied the expedition of the British surveying ship 'Alert' (1878–82), under command of Capt. Sir G. NARES (itiner. *etc. cf. sub* R. W. COPPINGER) and subsequently was appointed successor of the former.

He was commemorated in *Dicliptera macleariі* HEMSL.

ITINERARY. *In H.M.S. 'Flying Fish': Christmas Island* (Dec. *1886*–Jan. *1887*).[1] The ship operated in Banka Strait (N of the Minahassa in N. Celebes) in Aug. 1885 and June 1886 (*cf. sub* S. J. HICKSON).

COLLECTIONS.[2] *Herb. Kew:* 23 *nos* from *Christmas Island;* nearly all botanical specimens collected were destroyed by insufficient drying.

LITERATURE. (1) *cf.* Letter from Christmas Isl., dated Jan. 13, 1887 (Nature 36, 1887, p. 13, with introd. by W. J. L. WHARTON *l.c.* p. 12–13), and 'General report on the collections of H.M.S. Flying Fish' (Proc. Zool. Soc. 1887, p. 508 *seq.*).

(2) W. T. THISELTON DYER: 'Note on the flora of Christmas Island' (Nature 36, 1887, p. 78).

W. BOTTING HEMSLEY: 'Report on the botanical collections from Christmas Island, Indian Ocean, *etc.*' (Journ. Linn. Soc. Bot. 25, 1890, p. 351–362).

MacLeay

is cited as the collector of *Hymenolepis callifolia* CHRIST *var. paltonioides* from *Borneo* (*cf.* Dansk Bot. Ark. 6, 1926, p. 67); material in *Herb. Kew.*

He might be identical with ALEXANDER MACLEAY (see there).

MacLeay, Alexander

(1767, Ross-shire, Scotland; 1848, Sydney, Australia), amateur entomologist; 1798–1825 secretary of the Linnean Society, 1825–36 (or '37) Colonial Secretary of N.S. Wales. In the early days the Sydney Botanic Garden was under his official care.

The genus *Macleaya* R.BR. and many other Australian plants were named after him.

COLLECTIONS. Entomological collections in the Brit. Mus. and *p. p.* at Sydney. *Herb. Kew:* Tasmania plants (pres. 1859–73), including 357 ferns and 630 *Algae.*

A certain MACLEAY is cited as the collector of *Hymenolepis callifolia* CHRIST *var. paltonioides* from *Borneo,*[1] material of which at *Kew* too. According to BACKER (Verkl. Woordenb., 1936), A. MACLEAY is the collector of *Lecanopteris macleayii* BAKER in *Java.* He might have collected both plants on the way to or from Australia.

LITERATURE. (1) *cf.* Dansk Bot. Ark. 6, 1926, p. 67.

BIOGRAPHICAL DATA. Proc. Linn. Soc. Lond. 2, 1849, p. 45; MACLEAY Memorial Volume, Sydney 1893, p. vii–ix; J. D. MILNER, Catalogue portraits at Kew, 1906, p. 81; MAIDEN in Journ. & Proc. Roy. Soc. N.S.W. 42, 1908, p. 112–113; in Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936; Proc. Linn. Soc. N.S.W. 67, 1942, p. v–vii.

MacLeay, Sir William John

(1820, Wick, Scotland; 1891, Sydney, N.S.W., Australia), a nephew of the former, inhabitant of New South Wales since 1839, conducted and fitted out at his own expense an Australian expedition (see below), accompanied by representatives of various branches of science (see also *sub* J. REEDY). Notwithstanding his Parliamentary career, he set himself to the advance of the study of natural history in New South Wales; founder of the MACLEAY Museum.

ITINERARY. *1875. 'Chevert' expedition.*[1] Sailing from Port Jackson (May 18); *Sue Island; SE. New Guinea:* exploring Binaturi River (= Katau or Katow River) (July 2–10); *Islands in Torres Strait,* incl. *Darnley Isl.* (July 31–Aug. 12); mainland of New Guinea opposite Yule Isl., Hall Sound, ascending Ethel River (= ? Baxter River); Somerset (Sept. 8).

COLLECTIONS. *Herb. Melbourne:* plants of the 'Chevert' expedition, possibly collected by REEDY only.[2]

LITERATURE. (1) *cf.* Nature 13, 1875, p. 153–154; PETERM. Mitt. 22, 1876, p. 84–87; Gard.

Chron. 1876[1], p. 52; W. MACLEAY: 'Notes on the zoological collections made in Torres Straits and New Guinea' (Proc. Linn. Soc. N.S.W. 1, 1876, p. 36–40); *cf.* also other papers in *l.c.* 1876 and 1877.

cf. Extract from his Journal in 'MACLEAY Memorial volume' Sydney 1893, p. xxxii–xxxv (copied from Sydney Morning Herald of Oct. 11, 1875).

(2) Some plants described by F. VON MUELLER in Descr. Not. Pap. Pl., *e.g.* in pt 1, 1875.

BIOGRAPHICAL DATA. Proc. Linn. Soc. N.S. W. 6, 1891, p. 707–716, and *l.c.* 67, 1942, p. ix–xv; in MACLEAY Memorial volume, Sydney 1893, p. xii–li.

MacNair, Major John Frederick Adolphus

(† 1910), Colonial Engineer and Surveyor-General, Straits Settlements;[1] officiating H.M. Commissioner, Perak; in 1881–82 officiating as Lieutenant-Governor of Penang.

Author of a report on the principal timber trees of the Peninsula; it recommended the creation of a Forest Department.

COLLECTIONS. He collected specimens of timber trees in *Penang*, herbarium of which was sent for identification to CANTLEY (*1881–82*).[2] *Probably* preserved at *Kew* or *Singapore*.

Hort. Sing.: seeds and ferns (pres. *1879*).

LITERATURE. (1) Author of 'Perak and the Malays: "Sarōng" and "Krs"' (1878, w. map & pl.).

(2) *cf.* CANTLEY's Report on the Forests of the Str. Settlem., App. E, 1883.

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

Mactier, Dr W. F.

COLLECTIONS. *Herb. Edinburgh:* ferns from *P. Penang*.

He is cited as the collector of *Asplenium mactieri* BEDD. in that island (*cf.* Journ. Bot. 26, 1888, p. 3).

Made Djingga, I., *cf. sub* Forest Research Institute, Buitenzorg.

Madrid, *cf. sub* Forestry Bureau, Manila.

Maëngkom, J., *cf. sub* Forest Research Institute, Buitenzorg.

Maeso, José Peréz

is mentioned by A. MARCHE (see there), to have accompanied him on a trip along the E. coast of *Palawan etc.* in Nov. *1883*, and to have made large botanical collections.

He is the author of a paper on the vegetation of the Philippines.[1]

Agrostistachys maesoana VIDAL was named after him.

COLLECTIONS. Though MAESO plants are never cited, VIDAL, when dedicating the above-mentioned plant, says: 'Dedico esta especie al Auxillár botánico D. José Peréz MAESO quien hallo los primeras ejemplares'. He cites under his number 897 a collection from Paragua = *Palawan*. Thus Dr MERRILL supposes that the MAESO collections were distributed under VIDAL labels, like so many others (for the present location see *sub* VIDAL).

LITERATURE. (1) J. P. MAESO: 'Aspecto de la vegetacion filipina' (Anal. Real Soc. Espan. Hist. Nat. 16, 1887, p. 443–464).

Magingi, *cf. sub* Forestry Bureau, Manila.

Magistrado, *cf. sub ditto*.

Magluyan, I., *cf. sub ditto*.

Magnus, Paul Wilhelm

(1844, Berlin, Germany; 1914, Berlin), well-known mycologist, since 1880 professor at Berlin; he travelled in *Java*, staying for a few weeks at Buitenzorg in February *1909*.[1]

Lycopodium magnusianum HERT. was named after him.

COLLECTIONS. ?

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 33; and *l.c.* p. 100, 101.

BIOGRAPHICAL DATA. Ber. Naturw. Mediz. Ver. Innsbr. 36, 1917, p. iii–vii (*non vidi*); Ber. D.B.G. 32, 1914, p. (32)–(63), incl. bibliogr. + portr.; BACKER, Verkl. Woordenb., 1936.

Maharadja, Soetan, *cf. sub* Forest Research Institute, Buitenzorg.

Mahasan

collected at Singkawang in *W. Borneo* (Jan. 12, *1932*); in *Herb. Bog.*

Mahidin, A. B., *cf. sub* Forest Research Institute, Buitenzorg.

Mahlmeister

an Overseer of the D.E.I. Forest Service, collected in the *Kangean Islands*, E of Madoera: *P. Saoebi* (March 11–27, *1919*); plants in *Herb. Bog.*: > 14 *nos*.

Mahmoed, *cf. sub* Forest Research Institute, Buitenzorg.

Mahmood bin Ali

joined the Forest Department *Malay Peninsula* in 1914, and mainly collected in E. Pahang; *cf. sub* Conservator of Forests series, Kepong.

Mahony, John

Justice of the Peace for the Island of Sud-Est, Louisiade Archipelago.[1]

COLLECTIONS. He collected *Melicope mahonyi* BAIL.[2] in the above-mentioned island. The species was named in his honour. Though Sud-Est Island is *not* within the region dealt with in this book, it is nevertheless mentioned, as he might have collected in the mainland of New Guinea and adjacent islands too.

LITERATURE. (1) *cf.* Ann. Rep. Br. N.G. for 1893/94, Brisb. 1894, p. xxii.

(2) *cf.* Queensl. Agric. Journ. 6, 1900, p. 287.

Maier, Raoul Eduard Philip

(1887, Batavia, Java; x), in 1907 appointed a 2nd lieutenant in the D.E. Indian Topographical Survey, finally in the rank of Lieutenant Colonel; retired in 1934.

Dendrobium maierae J.J.S. was named after his wife N. MAIER-ULJEE.

COLLECTING LOCALITIES. *Lesser Sunda Islands. Alor* (Dec. *1909* and Jan. *1910*).[1]—*1918. Bali:* Brambang (July 3); G. Kelatakan (July 12–14); G. Pala (Sept. 4–19); G. Batoe Kaoe (Oct. 6–14); G. Patas (Nov. 22–24).[2]

COLLECTIONS. *Herb. Bog.: c.* 350 *Bali nos* (assisted by mantri SARIP, see there), and a few from *Alor; Bali* dupl. in *Herb. Leyden.*

LITERATURE. (1) *cf.* J. J. SMITH in Bull. Jard. Bot. Buit. sér. 2, *no* 13, 1914, p. 50.

(2) R. E. PH. MAIER: 'West-Bali' (Jaarversl. Topogr. Dienst 1918, p. 111–131, 1 map).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Mail

a Forest Guard; *cf. sub* Forest Department, British North Borneo.

Mailänder, Karl

(1880, Harburg, Schw., Germany; x), protestant missionnary of the 'Neuendettelsauer Missionsgesellschaft', came to former German New Guinea in 1904, and was stationed at Zaka, Morobe (= Adolf Hafen).

COLLECTING LOCALITIES. *NE. New Guinea:* Waria Distr., Zaka (in Sept. *1913*). In the same year he made 2 tours with the missionaries PILHOFER and FLIERL, the 1st: from Zaka, ascending the Mou River, crossing the coastal mountains to the Waria to near the tributary Bubu, middle course of the Waria; the 2nd: ascending the Waria River, crossing the watershed (2400 m alt.) between the Waria and the Markham River, and to Wate Valley, upper course of the Wotut, southern tributary of the Markham, subsequently along the Pale River to the lower course of the Markham.[1]

COLLECTIONS. *Herb. Berl.:* > 28 *nos* (pres. 1914/15).

LITERATURE. (1) *cf.* PETERM. Mitt. 1915, p. 21 and 63, w. map.

Main, *cf. sub* DJAMHARI.

Main, T. Wilson

(1879–1944), came from the Botanic Gardens, Glasgow, in 1901 to Kew Gardens as a Student Gardener; in 1903 subkeeper in the Arboretum; left for the Malay Peninsula in 1906 as Superintendent at Batu Tiga, Selangor Rubber Centres; in charge of the Hill Garden, Taiping, 1907; Assistant Singapore Botanic Gardens, Apr. 1908–May 1910; subsequently on a rubber estate once more. He returned to England in 1920; employed as Estates Bailiff Tregenna Park Hotel St Ives, Cornwall from 1922–31; in charge of Finsbury Borough Parks *etc.*, London, from 1935.

COLLECTIONS. He collected in the *Malay Peninsula;* in *Herb. Sing.; Herb. Perak Mus.:* 66 *nos* (pres. 1906), incorporated in *Singapore* now.

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

Maingay, Alexander Car(r)oll

(1836, Great Ayton, Yorkshire, England; Nov. 14, 1869, Rangoon, Burma), in 1858 graduated in medicine at Edinburgh; in 1859 in Br. Indian Medical Service in Bengal, in 1860 transferred to China and from Dec. 1862–68 magistrate in charge of the jail at Malacca; since 1868 Superintendent of jail at Rangoon, where he was murdered during a mutiny of the prisoners.[1]

He is commemorated in several plant names.

COLLECTING LOCALITIES. Dec. *1862*–early part of '*68. Malay Peninsula:* Malacca, *Penang* and *Singapore;*[2] on Mt Ophir (*1864*[3] and Aug. *1867*); passing through *Singapore* (Sept. 1867).[4]

COLLECTIONS. *Herb. Kew:* 2585 *nos*, including those from China and Japan, *c.* 1600 species of *Malayan* plants, and large collections of *Malacca* lichens; *Herb. Calcutta:* 1326 *Malacca* species (purch. 1872/73). Duplicates in *Herb. Leyden:* more than 700 *Malacca* specim. (pres. 1872); *Herb. Brit. Mus :* 323 plants from *Malaya* (purch. 1871); *Herb. Berl.:* 465 *nos* from *Malacca* and Further India; *Herb.* DECAND. (*Geneva*); *Herb. Cambridge* (with *Herb.* BABINGTON).

He rarely recorded the places from where the specimens came.[2] His notes on plants and drawings are preserved at Kew. At Kew his field *nos* were partially replaced by herb. numbers.

To my knowledge only one paper was based on his collection;[5] many descriptions of plants of his are dispersed in literature.[6]

He presented fruits and seeds from *Malacca* to *Hort. Bog.* in *1868.*

LITERATURE. (1) *cf.* Extracts of some letters in Transact. Bot. Soc. Edinburgh 11, 1873, p. 345–351.

(2) *cf.* RIDLEY in Journ. Str. Br. Roy. As. Soc. *no* 25, 1894, p. 167.

(3) *cf.* Account in Singapore Free Press of March 10, 1864.

(4) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 190.

(5) D. OLIVER: 'Descriptions of the new genera of plants in the Malayan herbarium of the late Dr A. C. MAINGAY' (Transact. Linn. Soc. 28, 1873, p. 515–518).

(6) See *e.g.* HOOK. Icon. Plant., since 1886.

BIOGRAPHICAL DATA. Transact. Bot. Soc. Edinb. 11, 1873, p. 36–40; BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 679; Ann. Naturh. Mus. Wien 44, 1930, p. 441, note 2; BACKER, Verkl. Woordenb., 1936.

Mairuku, F. J. D., *cf. sub* Forest Research Institute, Buitenzorg.

Maitland, A.

COLLECTIONS. *Herb. Bog.:* 2 *Fungi* and *Rhopalocnemis* from Goenoeng Kentjana (Bantam) in *W. Java* (coll. *1929*).

Majid bin T. Muda
joined the Forest Department *Malay Peninsula* in 1925; now retired. He collected mainly in S. Perak; *cf. sub* Conservator of Forests series, Kepong.

Makboel, *cf. sub* Forest Research Institute, Buitenzorg.

Makil, J., *cf. sub* Forestry Bureau, Manila.

Malessij, D., *cf. sub* Forest Research Institute, Buitenzorg.

Malinka, G. M., *cf. sub ditto.*

Mallonga, *cf. sub* Forestry Bureau, Manila.

Mamahit, F. J.
in temporary employ of the D.E. Indian Forest Service.
COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg:* bb. *nos* from *SW. Celebes* (*1938–40*); *Herb. Bog.:* dupl. bb. *nos*, and herbaceous plants from Mamasa, *Centr. Celebes* (Febr. *1941*) through the intermediary of the said institute.

Manalo, A.
COLLECTIONS. *Herb. Manila*, at least partly collected in the For. Bur. (F.B.) series (from *Palawan*). Dupl. in *Herb. Berl.* (Beih. Bot. Centr. Bl. 34[1], 1917, p. 372); *U.S. Nat. Herb. Wash.* (35); *Herb. Leyden.*

Manaloe, J., *cf. sub* Forest Research Institute, Buitenzorg.

Manan, Abd., *cf. sub ditto.*

Maneja, C., *cf. sub* Forestry Bureau, Manila.

Mangaradja Ginagan, *cf. sub* Forest Research Institute, Buitenzorg.

Mangopang, S., *cf. sub ditto.*

Mangubat, Leoncio, *cf. sub* Bureau of Science, Manila.

Manoerang, W., *cf. sub* Forest Research Institute, Buitenzorg.

Manuel, *cf. sub* Forestry Bureau, Manila.

Marah Napi, *cf. sub* Forest Research Institute, Buitenzorg.

Marahasan, *cf. sub ditto.*

Marasan, *cf. sub ditto.*

Maratan, *cf. sub ditto.*

Marave
COLLECTIONS. *Euphorbia capillaris, nos* 45 and 49 from Manila and vicinity, *Luzon, P.I.* (*cf.* MERRILL, Enum. Philip. Fl. Pl.).

Marcaide, F. de
COLLECTIONS. He sent Manila (*Luzon*) orchids to the Botanic Gardens *Singapore* in *1878.* Probably living specimens only.

Marche, Alfred.
French explorer, collector of mainly ethnographical, anthropological, and zoological objects. Before his Philippine travels, he visited W. Africa.
ITINERARY.[1] *1st Voyage to the Philippines, 1879–81.* Embarking at Toulon (July 20, *1879*); *Singapore* (Aug. 22–27); *P. Pinang* (= *Penang*) (30), from where making a trip to the *Malay Peninsula:* Prov. Wellesley (Oct. 22), Larut (23), Kuala Kangsar (24), district of the 'orang sakai' with H. LOW (arriving Nov. 7), and *via* Batang-Padang and the Perak River back to the coast, and *Penang* (Nov. 18); *Singapore* (Nov. 22–Dec. 1); *Philippines, Luzon:* Manila (arrival Dec. 9); Jala-Jala (Dec. 25–Jan. 17, *1880*); trip to the coast opposite Polillo, with S. VIDAL, *via* Santa Maria, Siniloan to Binangonan de Lampon, Febr. 4 back at Jala-Jala; excursion to Boso-Boso (or Bosu-Bosu, mountains N of Laguna de Bay), and to the mines at Angat (with VIDAL); back to Manila, setting out (Apr. 20) to the region SE of the town (with VIDAL): by boat to Santa Cruz, and proceeding on foot to Pagsa(n)jan, Mahayhay (21) and Lugban; trip to Sampaloe; *via* Tayabas to Sariaya, making base camp till May 23; *via* Candelaria (24), Tiaon, to Dolores, making another base camp; ascent of Mt San Cristobal (June 1), and trips in the environs of Dolores; back in northern direction *via* San Pablo and Calauan to Laguna de Bay; Manila (July 19–Aug. 15, earthquakes *etc.*); trip to the north: by boat to Lingayen Bay, debarking at Sual (17), and making some trips in the environs to Dagupan, Mangaldan, San Jacinto, Manroy, Binalalang, San Manuel, Asigan, Urdanete, San Carlos, Malasigni, Bajamhang, and Alcala, returning to Lingayen; Sept. 3 along the coast heading north to San Fabian, Santo Thomas, Agoo, and Aringay, from where visiting the Igorottes of Benguet Prov. going in eastern direction (Sept. 6–) *via* Bonga, Galiano and Trinidad (or La Trinité), and back *via* Tagudin (Ilocos Sud), Santa Cruz, Candon; from Candon (21) in SE. direction to Lepanto Distr. and the central chain, visiting Salcedo, Lingay, Cervantes, Mt Data, back at Cervantes (28), Cayan, and back to the coast; from Candon (Oct. 6) in N. direction to Santiago, Santa Maria, Narvacan, Vigan, Masingal, Lapog, Sinay, Batag (or Badog), Loag, Pasuquin; back in S. direction to Salomague, and by boat to Lingayen Gulf, debarking at Sual; partly by sea, partly by land, to Laminosa (Zambales Prov.); from Sual crossing to Manila *via* Lingayen, San Carlos, Tarlac, Bacolor, Bulacan; crossing the lake to Tunasan, and foot Mt Maquiling; trip to Pagsajan (Dec. 15), Lumbang, Longos, Paeté, Paquil, Siniloan, Binangonan (21); back at Manila (30); from Manila (Jan. 6, *1881*) to Taal Volcano in Bombon Lake, climbing it; to the Ca-

marines and Albay Peninsula (SE. Luzon): by boat (20) to Abra de Pasacoa, and proceeding into the interior, Nueva Cacéras (or Naga), Limanan Caves, Yriga, Daraga (near Albay), Legaspi, and in N. direction to Tabaco; back at Manila (March 20); setting out (Apr. 13) to *Marinduque* (isl. S of SE. Luzon, E of Mindoro); debarking at Boac, visiting several caves (20–25), by boat to Gazan (S of Boac), crossing the island (May 2) to Santa Cruz de Nano (staying till July 4); back at Manila (July 12); to Isl. *Catanduañes* (Aug.) (E of SE. Luzon), crossing from Tabaco (25), debarking at Codon, proceeding to Tacloban, making trips in N. direction as far as Caramoran, and in S. direction to Birac (or Virac) and environs; by boat to Legaspi and Manila, and sailing (Dec. 15) for France.—*2nd Voyage to the Philippines, 1883–85.* Arriving in *Luzon:* Manila (Jan. 14, *1883*); stay at Jala-Jala (Jan. 28–), making trips along the coasts of Laguna de Bay; back to Manila; setting out (May 9) to Isl. *Marinduque* (arriving 10); sailing from Santa Cruz (29) to Laguimanoc in *S. Luzon,* and (June 6) to *Palaouan* (= *Palawan*), debarking at Puerto Princesa, making excursions to Bay of Honda, Tapul River and Bahele River (June–Aug.); by boat (Sept. 14) to *Dumaran Isl.* (E of N. Palawan), *Cuyo Isl.* (20); returning (Oct. 3) to Puerto Princesa *via Dumaran;* setting out (Nov. 2) on a boat tour (22 days) along the E. coast to *Dumaran Isl.* and further to the north, visiting the islands *Maitiaguit* (Nov. 18 and 19, making some trips), *Icadambanuan,* and *Paly;* back at Puerto Princesa (23); in Dec. trips in the environs; in Jan. *1884* a fortnight's rest on account of dysentery; to Manila for shipment of collections, and sailing to isl. *Balabac, Soulou* (= *Jolo*), *Basilan* (Febr. 20), Zamboanga (*Mindanao,* 20), *Soulou* (hunting a few hours in the environs), and *Balabac* (staying March 10–Apr. 5, hunting *etc.*); *Palawan:* Puerto Princesa, leaving (Apr. 8) for trip to River Yguahit (in S. direction); trip by boat (21) to Tapul, crossing the island to Ulugan Bay on the W. coast (arriving 24), next days exploring the bay; to the *Calamianes* (June 4); *Culion* (5–17), *Busuanga* (18–Oct. 6), in the latter island making several trips in the interior, to the N (Aug. 20), visiting the islands *Peñon de Coron* (20–25), *Mayao-Payao* (27), *Dibatac,* and returning to Mal(a)bato in *SE. Busuanga;* by boat (Oct. 7) to *Culion,* proceeding (8) to Manila; to *Jolo* (*Soulou Islands*) (27), and (30) *via* the islands *Siassi, Tara* (Nov. 15), *Lapac* (20), to *Bongoa,* making explorations and visiting isl. *Simonor* (Dec. 3); back to *So(u)lo(u)* (8, debarking 10); sailing (26) for *Palawan* (arriving 30), Puerto Princesa; embarking (Jan. 1, *1885*) for Manila, and with broken health to *Singapore* (arriving Febr. 28), returning to France *via* Cochin-China, arriving at Marseilles (Apr. 25).

COLLECTIONS. He mainly made zoological and anthropological collections. *Herb. Paris: Philippine* plants, > 450 *nos.*[2] He might have collected in Malacca too.

LITERATURE. (1) A. MARCHE: 'Letters' (dated Sept. 20, 1880, Nov. 15, 1880, and Aug. 2, 1881) (Bull. Soc. Géogr. commerc. Paris 3, 1880/81, p. 51–52; *l.c.* p .187; *l.c.* 4, 1881/82, p. 142); 'Voyage à la presqu'île de Malacca et aux Philippines' (Bull. Soc. normand. Géogr. 4, 1882, p. 273–287); 'Luçon et Palaouan' (Tour du monde 51, 1886, p. 177–224 (first voyage); *l.c.* 52, 1886, p. 369–416 (2nd voyage); and Paris 1887); 'Rapports sur l'île



MARCHE

de Paragua (Palawan), sur l'Archipel des Calamianes' (Arch. d. Miss. Scient. sér. 3, vol. 14, 1888, p. 351–390, w. maps).

The itinerary is not very satisfactory, M.'s reports lack clearness, and often data from different papers do not agree.

(2) Some plant lists of his 2nd voyage in Arch. Herb. (Phanérog.) Paris.

Marco Polo, *cf. sub* POLO, M.

Marcovitch, Prof. Dr B. B.

Chief of the Subtropical Division of the Institute of Applied Botany, Leningrad, paid a visit to Buitenzorg (*Java*) during August and September *1926,* making a study of tropical crops.[1]

COLLECTIONS. He collected *Polygonum pulchrum* BL. at Sabang, *P.Wé* (= *Weh*) (July 29, *1926*); specimen in *Herb. Bog.* Probably he collected other plants too, but presented the abovementioned plant to the Buitenzorg Herbarium, as DANSER at that time was engaged on the monograph of the Malaysian *Polygonaceae.*

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 47.

Mardjoe, *cf. sub* Forest Research Institute, Buitenzorg.

Mareman, *cf. sub ditto.*

Mariano, *cf. sub* Forestry Bureau, Manila.

Mariko, Mas, *cf. sub* Forest Research Institute, Buitenzorg.

Maroeto, R., *cf. sub ditto.*

Marquez, *cf. sub* Forestry Bureau, Manila.

Marsden, William

(1754, Verval, Wicklow, Ireland; 1836, Edgegrove, Hertfordshire, England), orientalist and numismatician, left Dublin in December 1770, arriving at Fort Marlborough, Bencoolen (*S. Sumatra*), on May 30, *1771*, in the service of the British East Indian Company, first as a clerk, afterwards (Oct. 1776) as secretary.[1] In July 1779 he returned to England and subsequently was appointed second (1795–1807) and later First Secretary of the Admiralty.

He is commemorated in the genus *Marsdenia* R.Br. and in *Ixora marsdenii* Ridl.

Collections. Plants from *Sumatra* in *Herb.* Banks = *Brit. Mus.;* dupl. at *Kew.*

Literature. (1) W. Marsden: 'The history of Sumatra' (London 1783; 2nd ed. 1784; 3rd ed. 1811).

Biographical data. 'A brief memoir of the life and writings of the late William Marsden, D.C.L., F.R.S., *etc.* written by himself. With notes from his correspondence. Together with Maon and Moriat, a Tragedy (written in the years 1776 and 1777, during the author's residence in Sumatra, and never before published)' (London 1838, 2 vols in one); Dict. Nat. Biogr. 36, 1893, p. 206; Buckland, Dict. Ind. Biogr., 1906; Encyclop. N.I. 2, 1918; in Biogr. Index Britten & Boulger, 2nd ed. by Rendle, 1931; Backer, Verkl. Woordenb., 1936; Bijdr. Taal-, Land- en Volkenk. 98, 1939, p. 517–528 (in connexion with linguistics).

Marshall, H. B.

prospector and planter in various parts of Borneo and later in P. Bintang in the Riouw Archipelago; retired to England in 1920.

Collecting localities. *NW. Borneo:* Sarawak and Brunei.

Collections. *Herb. Sing.:* a few plants (pres. *1913–14*). *Hort. Sing.:* living material (pres. *1909*).

Martaädmadja, *cf. sub* Forest Research Institute, Buitenzorg.

Martelino, A.

was temporarily employed for field work by the Bureau of Science, Manila, during school vacation in *1919*.

Collections. *Herb. Manila;* numbered in the B.S. (see Bureau of Science) series.

Martens, (Carl) Eduard von

(1831, Stuttgart, Germany; 1904, ?), physician-zoologist, authority on conchology, educated in the universities of Tübingen, Stuttgart and Munich (Ph. Dr Tübingen 1855); in the latter year Assistant at the Berlin Zoological Museum, of which Custodian in 1859; in 1872 Dr Ph. *Hon. causa* at Rostock University; in 1873 University Lecturer at Berlin, in 1874 Extraordinary Professor; from 1883–87 temporary Director of the Zoological Museum.

In 1860 he undertook the zoology department of a Prussian expedition to E. Asia (see below). In March 1862, when the expedition returned to Europe, von Martens stayed behind and travelled for another 15 months in the Malay Archipelago.

Author of the zoological results of the expedition.[1]

Itinerary. *'Preussische Expedition nach Ost-Asien', 1859–62, in the 'Thetis'.*[1] Visiting *Java, Singapore,* the *Philippines, Celebes,* and *Banka* (for detailed itiner. *cf. sub* Wichura; v. M. embarked on Febr. 20, 1860).—*Subsequent tour in the Malay Archipelago, 1862–63.*[2] Sailing from *Singapore* (March 15, *1862*); *Banka* (17–25); *S. Sumatra* (March 26–June 30): from Palembang to Benkoelen, at Lahat (G. Serillo), Moeara Enim, Kepahiang and a visit to *P. Tikoes* (off the coast of Benkoelen); *SW. Celebes:* Makassar (July 20–22); *N. Celebes* (July 25–27); Manado, Tondano and Kema; *Moluccas:* from July 28–Sept. 28 visiting *Ternate, Batjan, Halmahera* (Dodinga); Oct. 1–Dec. 1 visiting *Ambon, Boeroe* and *Ceram* (Wahai); sailing from *Ambon* (Dec. 2), for a visit to *Banda* and *the Lesser Sunda Islands:*[3] *Banda Islands* (Neira, 3–4); *Port. Timor,* Dilly (7, making a trip); *Timor,* Koepang (Dec. 9–Jan. 5, *1863*), making tours in the environs, and visiting Atapupu and hinterland (20–22); *via Solor* (Lamakwera, Jan. 10) sailing for *Flores* (Larantuka, 10–26), making excursions in the environs and visiting the opposite coast of *Adenare* (= *Adonara,* landing at Wuri, staying 15–17), to the slope of the Illimandiri (20), *etc.;* on the way back touching at *Adonara* (Lamahalla, 27); *Timor,* Koepang (31–Febr. 9), making trip to Babauw (Febr. 1) and Okabiti (2) and back; sailing from Koepang (10) to *SW. Celebes:* Makassar (14); *E. Java:* Soerabaja (19); *W. Java:* Batavia (March 5); *W. Borneo* (March 13–June 13): Singkawang, Sambas River, Benkayang, Loemar, Mand(h)or, Sepang, Panglibang near Montrado; Pontianak (Apr. 29),[4] next day going upstream the Kapoeas; Sintang (May 3–10), and proceeding to Selimbouw *etc.;* Danau Sriang, P. Matjan (= P. Madjang, *cf. sub* Teysmann) (May 18–28), the 24th making a trip to the N. side of the lake to G. Lempai in the Batang Lupar Mts; downstream to Silat, and proceeding to Sintang (arriving 31).—Finally he visited Ceylon and sailed from Aden (July 27) for Europe.

Collections. *Herb. Berl.:* 125 *nos* of phanerogams of the 'Preussische Expedition', and a large collection of cryptogams; 16 portfolios of phanerogams and ferns (pres. 1904); dupl. in *Herb. Leyden.* The bulk of the collection consists of *Algae*[5] and *Filices;*[6] possibly the phanerogams were collected during the subsequent tour only. Duplicate *Algae* trop. Asia in *Herb. Kiel, Hamburg,* and *Leyden.*

LITERATURE. (1) 'Die Preussische Expedition nach Ost-Asien' (Berlin 1864–73, 7 vols + atlas; containing 4 vols Itinerary, 2 vols Zoology and 1 vol. Botany (see *sub* 5).

J. KREYHER: 'Die Preussische Expedition nach Ostasien in den Jahren 1859–1862. Reisebilder aus Japan, China und Siam' (Hamburg 1862).

(2) The cited data were extracted from the zoological volumes of above-mentioned work; probably the last mentioned date of every stay must be taken as the day of departure!

(3) E. v. MARTENS: 'Banda, Timor und Flores. Tagebuchnotizen' (Zeitschr. Ges. Erdk. Berl. 1889, p. 83 *seq.*).

(4) E. v. MARTENS: 'Im Binnenlande von Borneo' (Zeitschr. Ges. Erdk. Berl. 8, 1873, p. 193–210).

(5) G. VON MARTENS: 'Die Preuss. Exp. n. Ost-Asien. Die Tange' (Berlin 1866, p. 1–152, pl. 1–8; this vol., dealing mainly with *Algae*, is the only botanical part published). It includes an Appendix, an enumeration of other water plants collected by E. VON MARTENS.

(6) Ferns by M. KUHN in MIQUEL, Ann. Mus. Bot. Lugd. Bat. 4, 1868/69, p. 276 *seq.*

BIOGRAPHICAL DATA. PRITZEL, Thes. Lit. Bot., 1872; Arch. f. Naturgesch. 67, 1901, Beih. p. vi–viii, incl. portr. and bibliogr. (Festschrift for his 70th birthday); Nachr.-Bl. deutsch. malakozool. Ges. 37, p. 6–10 (transl. in Journ. Conchol. 11, p. 171–173 + portr.).

Martin

coffee-planter in Java and manager of an estate in Sarawak, NW. Borneo.

Shorea martiniana SCHEFF. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. In the years *1866–69* he sent several cases containing important plants from *NW. Borneo* (Sarawak) and from *Dutch W. Borneo* (Sambas), among which many species of *Shorea*, pinang and rattan, to Buitenzorg.[1] Material of some specimens was inserted in the H.B. series of *Herb. Bog.* Material in alcohol in *Herb. Leyden.*

LITERATURE. (1) *cf.* Nat. Tijdschr. N.I. 31, 1870, p. 350, and *l.c.* 32, 1873, p. 408.

Martin, *cf. sub* Forest Research Institute, Buitenzorg.

Martin, (Johann) Karl (Ludwig)

(1851, Oldenburg, Germany; 1942, Leyden, Holland), geologist and mineralogist, educated in Germany, who took his Ph. Dr's degree in 1874 at Göttingen; 1877–1921 Professor of Palaeontology, Geology and Mineralogy in the University of Leyden (Holland), since 1878 besides Director of the Geological Museum.

The fifth volume of the Leidsche Geol. Meded. was dedicated to him.

ITINERARY. *Moluccan Expedition, 1891–92.*[1] Sailing from Genoa (Sept. 24, *1891*); *Java:* Batavia (Oct. 24), staying a week at Buitenzorg and subsequently embarking (Nov. 3) to *Ambon* (arriving the 27th): setting out (Dec. 5) for the first extensive tour to Soja, Hatalai and Ema, to the Bay of Hurukila, and along the beach to Lea Hari, by sea to Tandjung Hutu Muri and Hutu Muri, by land to Rutung and returning (10) across Leitimor Peninsula; through Hitu (13–17); Rumatiga, crossing to Hitu, ascent of the Wawani (highest summit Tunahuhu, 903 m alt.) (16), and back to Rumatiga (17); trip to the isthmus of Passo (18); *Saparua* (Dec. 22, 1891–Jan. 29, *1892*); *Nusalaut* (Jan. 30–Febr. 2); *Saparua* (Febr. 3–5); *Haruku* (5–9); *Saparua* (9–10); *Ambon* (11–15); *Seran* (= *Ceram*): Hatusua (16–18), by 'orembai' (kind of proa) to Kaibobo (19), exploring Piru Bay, by sea to Piru (21), and Ruïn (22), making a trip inland and proceeding by boat to Lok(k)i; Luhu (23–25), crossing to Kambello (26), by sea to Tandjung Sial and Tandjung Lauma, and back to Hatusua (29) *via P. Kasa; via* Kairatu (March 3) to Honitetu and the neighbouring Rumatiga (5), from where returning (6) on account of the hostile attitude of the natives to Kairatu and Hatusua; by 'orembai' (evening of the 9th) to Ruïn and crossing to Katania; *P. Buano* (= *Boano*) (10–12); Nuniali on the N. coast (14), and inland to Wakollo; back at Nuniali (15); by boat *via* Kawa (16) to Katania (17), and back to Hatusua; sailing (21) *via* Paulohi (23) to Amahei (= Amahai) (24–26), to Makariki (27) and Rumasosal (28) (the latter two places on Elpaputih Bay); crossing to the north, Sawaï Bay (= Seleman Bay): *via* the watershed G. Lumute (Apr. 2 summit), reaching the N. coast (3) at a point somewhat W of Pasania; on foot along the coast to Slemann (= Seleman) (4); by proa to Wahaï (5), and to Sawaï (8) and back to Wahaï (10); to Ajer Besar (19), the Toluarang (20), following it downstream to Pasahari (21), and by boat back to Wahaï (22); by boat to Hatusua (26) and back (27), and proceeding to Amahei (28); *Buru:* Kajeli (arriving Apr. 30), making minor tours in the vicinity, along the beach, in the river beds, to Kakusan (May 6–7), by boat to Leliali and back (12–13); Waëpote (= Waepoetih) (16–18), and in southeastern direction: Wakollo, near Lake Wakollo (= Lake Rana) (25–28) and proceeding to Kawiri on the south coast (June 2); Tifu (3–4), Mefa (5–6) and from Tifu (7) by boat *via* Foggi (8) (W. Miting, collecting *Trichosanthes n. sp.*), *P. Foggi*, *P. Tenga(h)* and *P. Tomahu*, Bara (11–12), Wa(ë)mangi (13–14), Wamlana (14–15), Waëpote (15), back to Kajeli (17); to the Waë Apu (= Wai Apoe) (18), ascending it and on foot to Wabloï; proceeding upstream, partly on foot to Bamang (20), returning the same day to Kajeli; tour to the Batubua (= Batakboeal) (24–27; according to MARTIN the summit is 1410 m alt., according to the newest atlas 1731 m, so it seems possible that he did not reach the summit proper), collecting *Dacrydium elatum* WALL., *Nepenthes boschiana* KORTH., *etc.*; Kajeli (June 27–July 6); *Ambon* (July 7–22, ill!); returning *via* Makassar to Batavia (arrival Aug. 1), and sailing for Europe on the 10th.

COLLECTIONS. *Herb. Leyden: Hepaticae* and phanerogams. Probably the collection is but small and the material incomplete.

LITERATURE. (1) K. MARTIN: 'Reisen in den

Molukken, in Ambon, den Uliassern, Seran (Ceram) und Buru. Eine Schilderung von Land und Leuten' (Leiden 1894, w. 50 pl., 1 map, *etc.*). The geological part was published in 1903.

cf. also Verh. Ges. Erdk. Berl. 1894, p. 506–512, pl. 12.

BIOGRAPHICAL DATA. Leidsche Geol. Meded. 5, 1931, p. i–iv, 1–20, w. bibliogr. and 2 portr.; Wie is dat? 1938, p. 274; UMBGROVE in Geologie en Mijnbouw, Nov.–Dec. 1942.

Martinez

COLLECTIONS. *Philippine* plants, partly with B. S. (see *sub* Bureau of Science, Manila), partly with P.N.H. (*Phil. Nat. Herb.*, see there) *nos.*

Martinière, de Boissieu la

from Montpellier, France, surgeon-botanist on the 'Astrolabe', during the expedition in 'La Boussole' and 'L'Astrolabe' under command of J. F. DE G. LA PÉROUSE, 1785–88; ships and crew of this expedition were lost.[1] Gardener-botanist was J. N. COLLIGNON (see there), who sailed on the 'Boussole'.

MARTINIÈRE is commemorated in the genus *Bossiaea* VENT.

ITINERARY. *Voyage in 'La Boussole' and 'L'Astrolabe', 1785–88.*[1] Sailing from Brest (Aug. 1, 1785); *via* Madeira, the Canaries, Teneriffe, St. Catherine, Conception Bay (Chile), Easter Isl., Sandwich Isls, Alaska, California; Macao (Jan. 2, *1787*); *Philippine Islands, Luzon:* Port de Marivelle (Febr. 21–24), at Cavite and visits to Manila (Febr. 28–Apr. 8/9); coast of Siberia, Kamchatka, Samoa Isls (part of the crew massacred in Maouna Isl., COLLIGNON wounded on Dec. 11); Fiji Isls, Norfolk Island (1788); Australia: Botany Bay; New Caledonia; Santa Cruz Isls (shipwrecked on the reefs of Vanikoro).

COLLECTIONS. Collections and journals from various places were sent to France. Some unpublished letters in Libr. Nat. Hist. Mus. Paris.

M. GONSOLES CARVAGNAL, intendant of the Philippines, presented objects of the three kingdoms of nature, from his private natural history cabinet, to the expedition.

LITERATURE. (1) L. A. MILET-MUREAU: 'Voyage autour du monde *etc.*' (Paris 1797, 4 vols + atlas; containing the itinerary as far as known). Translated into English (London 1799, 2 vols + atlas, and 1807), and into Dutch (Amsterdam 1801–04, 3 vols in one).

cf. also A. GUILLAUMIN in Bull. Mus. Nation. Hist. Nat. 2e sér., vol. 20, 1948, p. 96–100.

Martinoes, *cf. sub* Forest Research Institute, Buitenzorg.

Martodihardjo, *cf. sub ditto.*

Martohardjo, *cf. sub ditto.*

Martono, R., *cf. sub ditto.*

Marzoeki, *cf. sub ditto.*

Masias, *cf. sub* Forestry Bureau, Manila.

Masoko,, F. A., *cf. sub* Forest Research Institute, Buitenzorg.

Mason, Rev. Francis

(1799, York, England; 1874, Rangoon, Burma), missionary in Burma from 1830. He evidently collected plants in Burma (*cf.* card index BURKILL). There is a possibility that he is the man who was mentioned by LASÈGUE (under MASSON)[1] as the collector of *Sumatra* plants.

LITERATURE. (1) *cf.* Mus. Bot. DELESS., 1845, p. 328.

Massart, Jean

(1865, Ettersbeek, Brussels, Belgium; 1925, Houx-Yvoir, Belgium), educated in the University of Brussels, took his Ph. Dr's degree in 1894; Professor of Botany in the University of Brussels, besides Custodian of the 'Jardin Botanique de l'Etat' (1902 onwards). He travelled in Java and Sumatra, making a study of the tropical flora.[1]

Pellionia massartianus BOERL. MS. was named after him.

ITINERARY.[2] *Sumatra West Coast:* Padang (July *1894*); *Java* (Aug. *1894*–Febr. *1895*), principally in *W. Java:* Buitenzorg, Tandjong Priok, Salak kloof (= gorge) (Aug. and Nov. 1894, March 1895); Tjibodas (5 weeks' stay, *c.* Jan./Febr. 1895), G. Gedeh-Pangrango; Poentjak (Febr.) with HALLIER; Garoet (Febr. 18), G. Papandajan, Kawah Manoek; in *E. Java: P. Ketapang* near Probolinggo (Aug. 1894); *Sumatra West Coast:* Padang (March *1895*).

COLLECTIONS. *Herb. Brussels. Univ.* Some duplicates in *Herb. Bog.*, and in *Herb. Leyden.* Principally *Algae*, lichens, mosses and *Fungi.*[3]

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 20.

(2) J. MASSART: 'Un botaniste en Malaisie' (Bull. Soc. Roy. Bot. Belge 34, 1895, p. 151–343, pl. 3–10); 'Notes javanaises: le jardin botanique de Buitenzorg; la journée d'un botaniste' (Rev. Univ. Bruxelles 1, 1896, *nos* 1–2); 'Les forêts vierges de Java' (Les naturalistes belges 1920, p. 5–6).

(3) J. CARDOT: 'Contribution à la flore bryologique de Java. Mousses récoltées par M. J. MASSART' (Ann. Jard. Bot. Buit. Suppl. 1, 1897, p. 1–31).

É. DE WILDEMAN: 'Observations sur les algues rapportées par M. MASSART d'un voyage aux Indes néerlandaises' (*l.c.* p. 32 *seq.*, pl. 8–23).

N. PATOUILLARD: 'Enumération des champignons récoltées à Java par M. MASSART' (*l.c.* p. 107–127, pl. 24–25).

A. M. HUÉ: 'Lichens récoltés par J. MASSART' (Ann. Jard. Bot. Buit. 17, 1901, p. 171–194).

BIOGRAPHICAL DATA. Transact. & Proc. Bot. Soc. Edinb. 29, 1926, p. 308; Bull. Soc. Roy. Belg. 59, 1926, p. 7–10, w. portr.; BACKER, Verkl. Woordenb., 1936.

Massie, J. B., *cf. sub* Forest Research Institute, Buitenzorg.

Massink, A.

COLLECTIONS. *Hort. Bog.:* living orchids from Palembang, *S. Sumatra*, collected in Aug. *1900; p. p.* in *Herb. Bog.*[1]

LITERATURE. (1) *cf.* Icon. Bogor. *t.* 221.

Masson

According to LASÈGUE (Mus. Bot. DELESS., 1845, p. 328), *Sumatra* plants of his are in *Herb.* Sir W. J. HOOKER (= *Kew*). Probably FRANCIS MASON (1741–1805)[1] is meant, a gardener of the Roy. Gardens at Kew, who made collecting tours in Africa, Madeira, the Canaries, the Azores, W. India, Portugal, Spain and N. America. He is known to have had a private herbarium (according to Journ. Linn. Soc. Bot. 45, 1920, p. 41–42, the present location of it is unknown). As there are no indications that he visited Sumatra himself, it seems probable that either the statement on Sumatra plants is incorrect, or that the plants were collected by another and inserted in *Herb.* MASSON; *cf.* also *sub* MASON, Rev. FR.

LITERATURE. (1) *cf.* Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Mat

a plant collector in Singapore, *1888–97*, who accompanied LAKE & KELSALL (see those) in *1892*, visited G. Pulai (Johore; probably with LAKE in 1892), and accompanied BECHER (see there) up the Tahan River (Pahang) in *1893* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Sing.:* plants from the *Malay Peninsula.*

Mat Sani bin Wagi

joined the Forest Department *Malay Peninsula* in 1919, and mainly collected in W. Pahang; *cf. sub* Conservator of Forests series, Kepong.

Matatula, A., *cf. sub* Forest Research Institute, Buitenzorg.

Mataya, R., *cf. sub* Forestry Bureau, Manila.

Matheeuwissen, W. Th.

of Rotterdam, Holland, sent dried specimens of various *Palaquiums* to the *Herb. Kol. Mus.* (= *Ind. Inst. Amsterdam*) (pres. *1909*). Collected himself?

Matthew, Charles Geekie

(1862, Newmiln, Perth, Scotland; 1936, Pertshire), fleet-surgeon who joined the Royal Naval Medical Service in 1889; he saw a great deal of service in the eastern waters and spent a large part of his spare time in collecting ferns. He retired in 1909, but during the winters of 1911–13 he returned to Malaysia to continue his botanical collecting; in 1912 he visited the Buitenzorg Botanic Gardens.

Author of some papers dealing with ferns.[1]

Aglaia matthewsii MERR. and other plants were named after him.

ITINERARY. *1903–04.* Visiting Japan, China and *Malaya* (according to BURKILL[2] visiting the Straits Settlements in 1904).—*1906–08.* Visiting Japan, China; *Malay Peninsula: Penang* (Dec. 27, 1906); G. Hijau near Taiping (Febr. 6, 1908); *Philippines: Luzon* (March 1907), on Mt Maquiling *etc.;* Honolulu.—*1911–13* (during the winters) in '*Malaya*'. *Malay Peninsula* (without date): Johore; *Penang* Hill; Perak, Maxwell's Hill, G. Pondok; *Singapore:* Bt Timah; Selangor: Batu Caves; *W. Sumatra:* G. Singgalang (Febr. 1912); *W. Java:* G. Salak (Dec. 15, 1912) and G. Gedeh-Pangrango (Dec. 19); *W. Sumatra* (1912 or ? 1913): Mt Merapi, Mt Tandikat, Mt Sago, Indrapoera and in Jan. 1913: Padang Pandjang, Fort v. d. Capellen, G. Singgalang (Jan. 16); *Malay Peninsula* (1913): *Singapore Isl., Penang;* Perak, Taiping; near Kuala Lumpur (Selangor).

COLLECTIONS. *Herb. Kew:* ferns (pres. 1908) and fern collections amounting to 2000 sheets (pres. 1928).[3] Duplicates in *Herb. Bog:* 191 *nos* from *Java, Sumatra* and *Mal. Penins.; Herb. Utrecht; Herb. Leyden.*

LITERATURE. (1) CH. G. MATTHEW: 'Enumeration of Chinese ferns' (Journ. Linn. Soc. Bot. 39, 1911, p. 339–393); 'Additions to RIDLEY's List of ferns of the Malay Peninsula' (Journ. Fed. Mal. Stat. Mus. 6, 1915/16, p. 255–256).

(2) *cf.* Gard. Bull. Str. Settlem. 4, 1927, p. 128.

(3) H. CHRIST: 'Some new species of Malesian and Philippine ferns' (Journ. Linn. Soc. Bot. 39, 1909, p. 213–215).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; Kew Bull. 1936, p. 189.

Maule, William M.

Officer of the Forestry Bureau, Manila, P.I., collected 30 plants in Prov. of Zambales, *Luzon;* F.B. *nos* in *Herb. Manila* (pres. 1903/04); 25 dupl. *Luzon* in *U.S. Nat. Herb. Wash.*

M(e)aurevert

from Pondicherry in Bengal, draughtsman, from 1823–26 attached to the 'Natuurkundige Commissie' (Commission for Natural Sciences) for the D.E.I.

Goodyera maurevertii BL. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. Cited as collector of the abovementioned orchid on G. Karang in Bantam, *W. Java* (in March *1823*, when accompanying J. C. VAN HASSELT, see there). *Probably* in *Herb. Leyden.*

Maweikere, N., *cf. sub* Forest Research Institute, Buitenzorg.

Maxwell, Mrs

wife of F. R. O. MAXWELL, of the English Civil Service in Sarawak (*NW. Borneo*).

Porphyroglottis maxwelliae RIDL. was named after her, as she discovered the orchid in the Sarawak forests, and cultivated it in her garden; Mr EVERETT transmitted material to RIDLEY (*cf.* BACKER, Verkl. Woordenb., 1936).

Mayer

COLLECTIONS. *Herb. Vienna:* 100 *Malacca* plants (purch. 1897); *cf. sub* S. MAYER.

Mayer, J.

according to BURKILL (in corrected reprint of his paper in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5) a pharmacist who sold some sets of *Singapore* plants. The initial is wrong and rightly should be S. (*cf. sub* S. MAYER).

Mayer, L. Th.

of Darmajoe redja, Bandjarnegara, *Centr. Java*, presented 13 *nos* of wild plants to *Herb. Kol. Mus.* (= *Ind. Inst. Amsterdam*) in *1911*.

Mayer, Sebastian

pharmacist, Director of the 'Schlesische Botanische Tauschverein', returned in Germany from a voyage to the East Indies, after an absence of three years, in Sept. 1897.[1] A new voyage was planned. He is cited in literature as a collector of plants in the Malay Peninsula. According to BACKER he collected in British India in the years 1896–97, but we suspect that most or all of the collecting was done in the Malay Peninsula (*cf.* also *sub* J. MAYER and MEYER).

Selaginella mayeri HIER. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTING LOCALITIES. *Malay Peninsula:*[2] *Singapore* (July *1895 etc.*), Bt Timah, *etc.*; for *1896 cf. sub* MEYER.

COLLECTIONS. The collections were presented to the '*Schlesische Bot. Tauschverein*'.[1] *Herb. Berl.: Plantae ex India extra Gangem* 230 *nos* (pres. 1898). The plants cited from the *Malay Peninsula* probably at *Berlin*, at least the plant mentioned by VAN OOSTSTROOM, bearing the number 'Schlesische Bot. Tauschverein 122'. MEZ cited the *nos* 806 and 961.

For other numbers of the Schlesische Bot. Tauschverein *cf. sub* MEYER.

In *Herb. Vienna:* 100 *Malacca* plants from MAYER without initials, probably identical.

LITERATURE. (1) *cf.* post-card in the archives of Herb. Leyden.

(2) *cf.* MEZ in Pflanzenreich 9, 1901, p. 122 and 294; WINKLER in ENGL. Bot. Jahrb. 49, 1913, p. 376; SCHELLENBERG in Pflanzenreich 103, 1938, p. 145; VAN OOSTSTROOM in Blumea 3, 1939, p. 305.

Mayr, Ernst

(1904, Kempten, Bavaria, Germany; x), zoologist, at first on the staff of the Zoological Museum, Berlin, later Associate Curator of the American Museum of Natural History, New York. He made a collecting trip to New Guinea and later was a member of the WHITNEY South Sea Expedition (1929–30), visiting the Solomon Islands.

Author of ornithological papers.[1–2]

Several plants were named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

ITINERARY. *New Guinea expedition, 1928–29.*[1–2] *Dutch N. New Guinea* (incl. Vogelkop):[1] sailing from Java (March *1928*); Manokwari and neighbourhood (Apr. 5–10); to Momi (Wariap) (Apr. 12), penetrating into the mountains, G. Taikbo (1400 m), descending to Siwi; to and fro Momi (May 4–10); Siwi (till May 25); Ninei (800 m); summit G. Mundi to Ditschi (1200 m); G. Lima (2870 m); Anggi Lakes and surrounding mountains (Arfak!) upwards to 2400 m (June 9); G. Dohoidjoko (and Hoidjosera); leaving the lake (16) and *via* Dohunsehik to Ditschi; Momi (24) and by canoe to Manokwari; from Momi (July 4) to Wasior (Wandammen) *via* Rumperbon (Amperbon) and Mios-War; to Wandamen Mts (6; Mt Wondiwoi); G. Moari (Mori Salvadori) turned out to be situated in the Arfak Mts near Oransbari between Andai and Momi; leaving the Vogelkop; Lake Sentani; departing from I(f)far (Aug. 18) to the Cyclop(s) Mts, climbing the summit (2170 m) more than once; back at I(f)far (Sept. 14), collecting in lowland and savannahs; to Hollandia (Oct.); sailing (Oct. 21) to *NE. New Guinea*, former Kaiser-Wilhelmsland,[2] collecting in the Saruwaged (= Sarawakat) Mts: *via* Aitape to Rabaul; Finschhafen (Dec. 8); Sattelberg (Dec. 14–Jan. 6, *1929*); breaking camp and *via* Bolingbangeng to Nganduo (7); Junzaing (8), exploring the neighbourhood; return (18–20) to the coast; back at Junzaing (Jan. 24–Febr. 1); Joanggeng (1300 m)—Mongi Valley (3); Kulungtufu (3–7); Tobou (8), passing the watershed between the rivers Kua and Burrum (2000 m) (9); Ogeramnang (1785 m) (Febr. 9–March 3); past Burrum Valley to Kalde (1600 m) (March 4); penetrating into the mountains, grass plain of Dabezang (5); junction mountain rivulets Mongi and Busu, making camp (2600 m) (6–12), climbing the summit Titaknan (nearly 4000 m) (8–9); return, Ogeramnang (March 15–Apr. 3), spending much time on the collecting of plants; *via* Ebaba and Sopa to the coast, Bitala (= Hänischhafen) (6), and by cutter (9) to Finschhafen; by boat (27) to Salamoa; short tour in the Herzog Mts (S of Markham River):[2] from Malalo (May 7), Dawong (1400 m) (10) in the Kaidemo or Snake River Valley, returning (June 3) to the coast; embarking at Salamoa (12).

COLLECTIONS. *Herb. Berl.:* 816 *nos* from *New Guinea* (purch. 1930/31);[3] *Herb. Bog.:* 650 *New Guinea nos* (only from the Dutch part ?) (pres. 1928); dupl. in *Herb. Leyden*.

The *nos* 428–461 from Wasior and Wandammen were lost.

LITERATURE. (1) E. MAYR: 'My Dutch New Guinea Expedition' (Novit. Zool. 36, 1930, p. 20–26); 'A tenderfoot explorer in Dutch New Guinea' (Amer. Mus. Journ. Nat. Hist. 32, 1932, p. 83–97).

(2) E. MAYR: 'Die Vögel des Saruwaged- und Herzoggebirges (NO-Neuguinea)' (Mitt. Zool. Mus. Berl. 17, 1931, p. 639–723; itinerary *cf.* p. 640–646).

(3) Palms by BURRET in Notizbl. Berl. Dahl. 11, 1933, p. 704–713.

Orchids by J. J. SMITH in ENGL. Bot. Jahrb. 66, 1934, p. 161–215.

In 'Beitr. Flor. Papuas.' (ENGL. Bot. Jahrb. 69, 1938 →).

Ericaceae by J. J. SMITH in Nova Guinea vol. 18 (coll. Arfak and Cyclop(s) Mts).

Mayr, Heinrich

(1856, Munich, Germany; 1911, ? Munich, Germany), took his degree in political science in 1884,

and subsequently his Ph. Dr's degree in 1886; in the latter year he made a study tour to the U.S.A. in connexion with the problem of introducing economic American trees in Germany (Bavaria), on the way back visiting Japan, China, *Java* (Buitenzorg), and British India; 1887–91 professor at Tokio; 1891–93 Forest Officer in Germany; since 1893 professor at Munich. In 1902 he made a second tour round the world.

COLLECTIONS. At Buitenzorg he made a dried collection of economic plants.[1] In *Herb. ?*

LITERATURE. (1) *cf.* Versl. Pl. Tuin Buitenzorg for 1886; and DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 13.

BIOGRAPHICAL DATA. Tectona 4, 1911, p. 887–889.

Mayr, H. O.

evidently for some time Forest Officer in D.E. Indian Government service, stationed at Fort de Kock; subsequently in the employ of the 'Soesoehoenan' at Solo.

COLLECTIONS. *Herb. Bog.:* a specimen of *Brugmansia* from the Barisan Mts, 2 km S of Padang Pandjang, *Sumatra West Coast.*

Mead, John Phillips

(1886, London, England; x), Assistant Conservator of Forests *Malay Peninsula*[1] *since 1907;* in 1916 in Imperial Service, in 1918 in Sudan (Africa); in June *1919* appointed Conservator of the newly established Forest Department *Sarawak;*[2] in 1926 temporary Forest Adviser to Fiji. In *1928* in the *Malay Peninsula* again; since 1930 Director of Forests, and in 1935 Director & Adviser on Forestry S.S. and F.M.S.; retired in 1940. In 1945 he returned to the Peninsula with British Military Administration for three months, as Lieutenant-Colonel.

In the years 1935–38 he made visits of inspection in Johore, Kedah, and Kelantan.

Shorea meadiana SYMINGTON was named after him.

COLLECTIONS. *Malay Peninsula* and *Sarawak* plants, at least partly, in C.F. (= Conservator of Forests) series, in *Herb. Kuala Lumpur.* In 1926/27 he collected in Fiji.

LITERATURE. (1) Author of 'The mangrove forests of the Westcoast of the Fed. Mal. States' (1912).

(2) *ditto* of 'Forestry in Sarawak' (Emp. For. Journ. 4, 1925, p. 92–99, 3 pl.).

BIOGRAPHICAL DATA. Malayan Forester 9, 1940, p. 101–102.

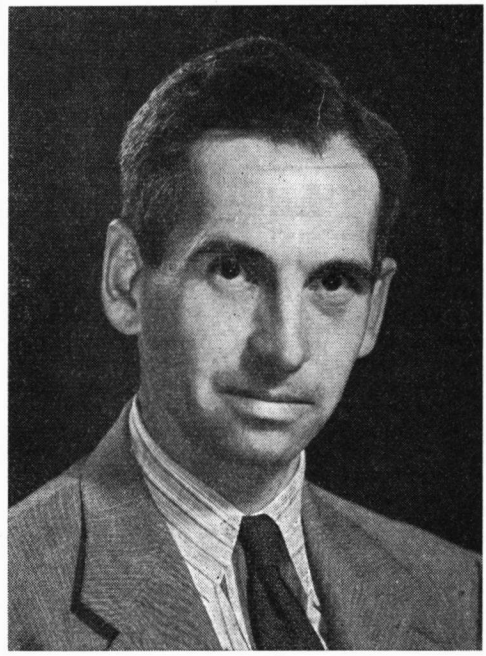
Mearns, Edgar Alexander

(1856, Highland Falls, New York, U.S.A.; 1916, Washington, D.C., U.S.A.), surgeon; major in the Medical corps U.S. Army, 1883–1909; prominent zoologist. He was a member of the ROOSEVELT South African Expedition.

Author of many zoological publications.

The genus *Mearnsia* MERR. and some plant species were named in his honour (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTING LOCALITIES. *Philippines. Luzon:* around Baguio; *Mindanao,* Zamboanga: with W. I. HUTCHINSON on Mt Malindang (May *1906*). —*Mindoro:* with HUTCHINSON and MERRILL, starting from Calapan (Oct. 31, 1906); Mt Halcon (Nov. 22 on the summit); back at Calapan (Dec. 7).[1]—On the islands of *Batan* and *Fuga* (June *1907*).[2]



H. MAYR

COLLECTIONS. *Herb. Manila,* numbered in the Bur. Sci. and in the For. Bur. series; also plants together with HUTCHINSON. Dupl. in *Herb. Berl.; U.S. Nat. Herb. Wash.:* 591 *nos* (1st set *Mindanao* coll.), and 96 with HUTCHINSON.

LITERATURE. (1) *cf.* Philip. Journ. Sci. A. vol. 2, 1907, p. 187–199.

(2) *cf.* MERRILL in Philip. Journ. Sci. C. Bot. 3, 1908, p. 388.

Meaurevert, *cf. sub* MAUREVERT.

Medina, *cf. sub* Forestry Bureau, Manila.

Meegan, William J.

representative of the Beechnut Packing Co., New York; he was interested in getah specimens, such as 'djeloetoeng' (*Dyera*), and accompanied the Forest Officer VAN MEURS on a trip to the Kapoeas and Kahajan rivers in *SE. Borneo* in *1923.*

COLLECTIONS. *Herb. Bog.: nos* I–XXIII, gutta-producing plants from *SE. Borneo* (Febr. 1923).

Meer, van der

probably P. J. F. L. VAN DER MEER, a resident

of *Ternate*, who made cultivation experiments.

COLLECTIONS. He sent plants to *Buitenzorg* in *1875*.

Meer, Pieter van der

(1908, Rotterdam, Holland; x), school-teacher who came to Java in 1931; for 3 years stationed at Batavia, 3 years at Tjimahi, and subsequently at Batavia again. After World War II evacuated to Holland, living at Rotterdam; at present back at Batavia (see also *Addenda*).

COLLECTING LOCALITIES. *1939–41. W. Java: Islands in the Bay of Batavia: Purmerend* and *Kerkhof;* Moeara Heemraad; environs of Batavia.

COLLECTIONS. Partly together with G. DEN HOED (see there, also *sub* liter.); some dupl. in *Herb. Bog.*. *Private Herb.*: *c.* 800 *nos*, mainly weeds.

Meer Mohr, Johannes Carolus van der

(1892, Pagongan, Centr. Java; x), entomologist who studied at Amsterdam University; on the staff of the Institute for Plant Diseases, Buitenzorg, 1918–21; teacher in natural history at a secondary school at Soerabaja, 1921–22; in 1925 Assistant, and from 1934-39 Director of the Deli Experiment Station at Medan (Sumatra East Coast). Since 1946 Head of the Public Library, Civilian Welfare, Medan.

Author of many entomological papers, and of several papers in 'De Tropische Natuur'.

COLLECTING LOCALITIES. *W. Java:* Cheribon (May *1920*); G. Tjeremai (June 1920); *Centr. Java:* Diëng Plateau (*1924*); *Sumatra East Coast: P. Berhala* in Malacca Strait (Aug. *1926*, Aug. *1927*);[1] *E. Java:* G. Tengger (July 1927); *Sumatra East Coast:* upper course of the Asahan River (*1928*); *Sumatra*, Tapanoeli Res. (*1929*); collecting species of *Nepenthes* in *1931* (? Toba Plain, Tapanoeli); *Sumatra East Coast:* Deli (*1935 and later*).[2–3]

COLLECTIONS. *Herb. Bog.* and *Herb. Deli Exp. Stat. Medan;* dupl. in *Herb. Leyden*. The collection includes 102 *nos* from *P. Berhala* (1926–27), 26 from Tapanoeli (1929), and 30 from G. Tjeremai, *W. Java*. In total about 150 *nos*.

The plants collected between *1935–40* on Samosir, in the Dairi Lands, *etc.* were lost during the Japanese occupation.

LITERATURE. (1) J. C. VAN DER MEER MOHR: 'Poeloe Berhala' (Trop. Nat. 17, 1928, p. 85–97, 9 fig.).

(2) J. C. VAN DER MEER MOHR: 'Een nieuw element in de flora van Deli' (*l.c.* 25, 1936, p. 96–99, 3 fig.).

(3) J. C. VAN DER MEER MOHR: 'Nieuwe gegevens over de verspreiding van een 3-tal plantensoorten op de Oostkust van Sumatra' (Chron. Naturae 103, 1947, p. 165).

Meeter, Y.

Manager of the tin mines at Merawang, *Banka*, sent products and herbarium material to *Herb. Bog.* (*1888*), > 117 *nos*.

Meh

cf. sub Conservator of Forests series, Kepong.

In *Herb. Edinburgh* dupl. F.G. (= Forest Guard) MEH of the Malaya Forest Dept.

Méhpéh, *cf. sub* Forest Research Institute, Buitenzorg.

Meij . . ., *cf.* MEY . .

Meindersma, Harm Wigger

(1894, Deventer, O., Holland; x), Forest Officer, in 1920 on the staff of the Forest Research Institute, Buitenzorg, and subsequently stationed elsewhere in Java, and for 2 years in Sumatra (Bengkalis, Nov. 1923–25). He retired in 1940.

He was especially interested in mangrove forests.[1]

COLLECTING LOCALITIES. *Centr. Java:* Isl. of *Noesa Kambangan* and near Tjilatjap (Sept. 16–22, *1920*); *W. Java:* Bantam (*192 .*); *Centr. Java* (*1932*).

COLLECTIONS. *Herb. Bog.*: *nos* M.1–M.37 from *Noesa Kambangan* and Tjilatjap, and possibly some dupl. from other localities. *Herb. For. Res. Inst. Buitenzorg:* Ja. *nos* (partly former M. *nos*).

Hort. Bog.: living plants from mangrove forest, *Centr. Java* (pres. 1922).

LITERATURE. (1) H. W. MEINDERSMA: 'Eenige bijzonderheden over mangrove-bosschen' (Trop. Nat. 12, 1923, p. 25–31, 39–46, 70–77, 10 fig.); typed report on the mangrove forests in N. Palembang (1922) in For. Res. Inst. Buitenzorg; with J. H. BECKING & L. G. DEN BERGER: 'Vloed- of mangrove-bosschen in Ned. Indië' (Tectona 15, 1922, p. 561–611).

Meissner, A. M.

of Tjiandi, Semarang (*Centr. Java*), sent plants to *Hort. Bog.* in *1878*.

Melegrito, F.

Forest Ranger, collected with CASTRO (see there) for the Forest Department, *Br. N. Borneo* (see there); 115 dupl. in *U.S. Nat. Herb. Wash.*

Mella, *cf. sub* Forestry Bureau, Manila.

Mendoza, *cf. sub* Forestry Bureau, Manila.

Mendoza, Demetrio, *cf. sub* Philip. National Herbarium.

Mente, Frans Lodewijk

(1894, Gajan (Blora), Rembang, Java; x), 'Bosch-architect', since 1912 in the employ of the D.E. Indian Forest Service; during his term of office stationed in Central and East Java.

COLLECTING LOCALITIES. *E. Java*, Besoeki Res.: between the rivers Tanggoel and Petoeng (June *1920*); environs of Djember (*1924*).

COLLECTIONS. *Herb. Bog.*: plants collected in 1920 (probably the *nos* 1676–1696), numbered in the series of BEUMÉE (see there); dupl. of the F.R.I. (coll. 1924). In *Herb. For. Res. Inst. Buitenzorg* (see there): Ja. *nos* from Djember (1924).

Mentel, C. D. *cf. sub* Forest Research Institute, Buitenzorg.

Mentzel, Richard

German forest officer and reservist officer of Berka; leader of the first expedition under the auspices of the German New Guinea Company. Since July 1886 'Vorsteher' of Finschhafen Station.

Illipe mentzelii KRAUSE was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

ITINERARY. *NE. New Guinea, former Kaiser-Wilhelmsland. 1885.* Arriving in Java in August, recruiting coolies; *Samarai Isl.* in China Strait, E of New Guinea (Nov. 1); Killerton Isl. (C. HUNSTEIN embarking here); Finschhafen (Nov. 5), founding a station.[1]—*1886.* With GRABOWSKY and HUNSTEIN near the Kaiserin Augusta (= Sepik) River (Apr. 4);[2] with HOLLRUNG on a trip near Finschhafen.

COLLECTIONS. *Herb. Berl.: Orchidaceae* and *Asclepiadaceae* with *Herb.* SCHLECHTER, other plants probably with the herbarium of the German New Guinea Company.[3]

LITERATURE. (1) *cf.* Nachr. Kais. Wilh. Land 1, 1885, p. 6, 18 and *l.c.* 2, 1886, p. 6.

(2) *cf. l.c.* 2, 1886, p. 67 and 76.

(3) Plants of his described by SCHUMANN in 'Die Flora von Kaiser Wilhelmsland' (Beih. z.d. Nachr. Kais. Wilh. Land 1889, p. 1–137); *cf.* also in ENGL. Bot. Jahrb. 9, 1888, p. 189–223.

Mercado, Ignatio

(1648, Parañaque, P.I.; 1698, Bauan in Luzon, P.I.), Augustinian friar working in several places in the *Philippines;* he collected and drew plants.

Author of a book on Philippine medicinal plants.[1]

He is commemorated in the genus *Mercadoa* NAVÉS (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. No record of any collections of this pre-Linnean collector.

LITERATURE. (1) 'Libro de medicinas de esta tierra y declaraciones de las virtudes de los orboles y plantas que están en estas islas Filipinas' (revised and illustrated by P. FR. CELESTINO FERNANDEZ-VILLAR in BLANCO, Flor. Filip. ed. 3, 4^2, 1880, VI, p. 1–63). For particulars on his MS. *cf.* MERRILL in Bull. Bur. of Agric. Manila *no* 4, 1903, p. 10–11.

Merrill, Dana True

(1876, East Auburn, Maine, U.S.A.; x), twin brother of E. D. MERRILL (see below), graduate of the University of Maine. He entered the U.S. Army as a private in the Spanish-American war, being commissioned later as a lieutenant, remaining in the army until he retired as Brigadier General in 1940. He is living now at Fort Thomas, Ky. He served in the Philippines from 1900–1902.

COLLECTING LOCALITIES. *1901. Philippines Luzon,* Pampanga Province.

COLLECTIONS. *U.S. Nat. Herb. Wash.:* 14 grasses, collected at the request of his brother.

BIOGRAPHICAL DATA. Who's who in America 21, 1940, p. 1804, and in earlier editions.

Merrill, Elmer Drew

(1876, East Auburn, Maine, U.S.A.; x), from 1899–1902 Assistant Agrostologist in the U.S. Department of Agriculture, Washington; from 1902–23 at first Botanist, since 1919 Director of the Bureau of Science, Manila, Luzon (P.I.); 1924–29



E. D. MERRILL

Dean of the Agricultural Experiment Station of the University of California; in 1930 appointed second Director in Chief of the New York Botanical Garden, and in 1935 Director of the Arnold Arboretum, Jamaica Plain, Mass., Professor of Botany and Administrator of Botanical collections of Harvard University; at present retired.

Author of an enormous amount of papers on the flora of N. America, the Philippines, Sumatra, Borneo, the Moluccas, the Marianas, China, *etc.*[1]

The genus *Elmerrillia* DANDY, other genera, and many plant species were named in his honour.

COLLECTING LOCALITIES. In *1902* he paid a visit to *W. Java:* Buitenzorg (Sept. 15–Nov. 13),[2] but no collection was made; and to *Labuan* (collected).[3]—*Philippines.* In general *all over the islands (1902–24).* In *Culion* (Dec. *1902,* Febr. *1903*); *Palawan* (Febr. 1903); *Isl. of Paragua* (Febr. 1903); *Masbate* (Aug. 1903); *Luzon:* Prov. of Bataan, Pampanga, Rizal, Tarlac, Tayabas, Camarines Sur (*c.* 1903/04); Lamao Forest Reserve (June and Oct. 1903, Jan. *1904,* March *1905*);[4] *Mindoro:* trips up the Baco River (1903 and 1905); *Semeraru* (June–July 1905); in Oct. *1906* visiting the islands *Balut, Bucas, Cajoagan, Cagayan de Sulu, Lumbacan* (near Balabac), *Palmas* (= *Miangas*), and *Sa-*

mar; Mindoro: Mt Halcon (Nov. 2–Dec. 2, 1906; Nov. 22 on the summit);[5] *Luzon:* Mt Pulog (May 11–13, *1909*);[6] near Manila (1909–10); *Negros:* Ca(n)laon Volcano (Apr. 1910); *Comiran* (Sept. 1910); *Cavil(l)i Isl.* (Sept. *1911 or ? 1910*); *Mindanao* (Nov.–Dec. 1911); *Palawan* (Apr. 7–June 7, *1913*); evidently visiting *W. Java, viz* Tjibodas (slope G. Gedeh; Jan. 25, *1914*) *not* collecting; *Luzon:* vicinity of Baguio (6 weeks in 1913 or '14) and vicinity of Manila; Taal Volcano (*1916* and early part of *1917*); and in *1918*: Laguimanoc, Tayabas Prov., Mt Pinagtubo, Zambales Prov.; *Palawan* (Oct. *1922*); and certainly elsewhere.

COLLECTIONS. *Herb. Manila.*[7] Duplicates in *Herb. Kew, Paris, Edinburgh, Berl., Leyden, Utrecht, Groningen* (300, purch. 1918), *Vienna, Lund, U.S. Nat. Herb. Wash.* (*c.* 4300), *N.Y. Bot. Gard., Sing.*, GRAY *Herb.; Herb. Sydney:* 1215 *nos* (1906); *Herb.* DELESS. (*Geneva*): 1000 *nos* (1911/12), 1400 *nos* (acq. 1922/23), 73 *nos* (acq. 1933); *Herb.* DECAND. (*Geneva*); *Herb. Frankfurt: 'Plant. ins. Philip.' Cent.* 11–12 (purch. 1913); *Herb. Calcutta, Brisbane, Melbourne, Tokio, Leningrad, Univ. Zürich.*

The collection of the Lamao Forest Res. amounts to 575 *nos.*[4]

He collected too for the 'Species Blancoanae' (see *sub* BLANCO).

LITERATURE. (1) Many papers cited under the collectors involved; the most important are: 'A Flora of Manila' (Bur. Sci. Publ. 5, 1912, p. 1–490); 'An interpretation of Rumphius' Herbarium Amboinense' (Bur. Sci. Publ. 9, 1917, p. 1–595, w. map); 'Alabastra borneensea' (Journ. Str. Br. Roy. As. Soc. *no* 77, 1917, p. 189–247); 'Species Blancoanae. A critical revision of the Philippine species of plants described by BLANCO and by LLANOS' (Bur. Sci. Publ. 12, 1918, p. 1–423, w. map); 'A bibliographic enumeration of Bornean plants' (Journ. Str. Br. Roy. As. Soc. Spec. *no* 1921, 637 pp.); 'An enumeration of Philippine flowering plants' (Manila 1923–26, 4 vols); 'A bibliography of Eastern Asiatic Botany' (1938; with E. H. WALKER).

List of papers in Nat. & Appl. Sci. Bull. Philip. 1, 1931, p. 407–412.

(2) E. D. MERRILL: 'Report on investigations made in Java in the year 1902' (Philip. Bur. For. Bull. 1, 1903, p. 1–84, pl. 1–10).

(3) *cf.* MERRILL, Bibliogr. Enum. Born. Pl., 1921, p. 10.

(4) E. D. MERRILL: 'The flora of the Lamao Forest Reserve' (Philip. Journ. Sci. 1, 1906, Suppl. p. 1–141).

(5) E. D. MERRILL: 'The ascent of Mt Halcon, Mindoro' (*l.c.* sect. A. 2, 1907, p. 179–203, 1 pl.); 'The flora of Mt Halcon, Mindoro' (*l.c.* C. Bot. 2, 1907, p. 251–309).

E. B. COPELAND: 'Pteridophyta halconensia; a list of ferns and fern-allies collected by E. D. MERRILL on Mt Halcon, Mindoro' (*l.c.* C. Bot. 2, 1907, p. 119–150, pl. 1–4).

O. AMES: 'Orchidaceae Halconenses' (*l.c.* p. 311–337).

V. F. BROTHERUS: 'Musci Halconenses' (*l.c.* p. 339–343).

(6) E. D. MERRILL & M. L. MERRITT: 'The flora of Mt Pulog' (*l.c.* C. Bot 5, 1910, p. 287–401, pl. 1–4, map).

(7) Besides the above-mentioned papers, *cf.* also J. PERKINS in Fragm. Flor. Philip. 1904, p. 4–66, 77–202; and A. KNEUCKER: 'Bemerkungen zu den Cyperaceae (exclus. Carices) et Juncaceae exsiccatae 8. u. 9. Lief.' (Allg. Bot. Zeitschr. 17, 1911, Beil. *no* 48, p. 1–12).

BIOGRAPHICAL DATA. Journ. N.Y. Bot. Gard. 31, 1930, p. 6–10, w. portr.; BACKER, Verkl. Woordenb., 1936, *cf.* also *sub Addenda;* Chron. Bot. 2, 1936, p. 328 + portr.; 'Merrilleana' in *l.c.* 10, 1946.

Merritt, Melvin Leroy

(1879, West Union, Iowa, U.S.A.; x), B.S.A. and M.S.A. from Iowa State College, Ames, Iowa; Instructor in Horticulture, Iowa State College, 1903–04; Forest Officer of the Bureau of Forestry, Manila, P.I., 1905–09;[1] in the U.S. Forest Service, 1910–43; retired in 1943. At present Field Representative, Logging Underwriting & Inspection Association, Portland, Oregon.

Some Philippine plants were named after him.

COLLECTING LOCALITIES. *Philippines. Mindoro:* Mt Halcon (June *1906*), upwards to 7250 ft, not reaching the summit;[2] *Luzon:* Mt Pulog (Jan. 2–8, *1909*).[3]

COLLECTIONS. *Herb. Manila:* large collections, numbered in the F(or). B(ur). (see there) series, partly collected with DARLING, and CURRAN; dupl. in *U.S. Nat. Herb. Wash.:* 162 *P.I.* plants coll. with CURRAN.

Plants of his described by MERRILL.[2–3]

LITERATURE. (1) Author of 'The forests of Mindoro' (Philip. Bur. For. Bull. 8, 1908, p. 1–51).

(2) *cf.* Philip. Journ. Sci. sect. A, 2, 1907, p. 186–187. Plants in *l.c.* C. Bot. 2, 1907, p. 251–309, and 311–337.

(3) E. D. MERRILL & M. L. MERRITT: 'The flora of Mt Pulog' (*l.c.* C. Bot. 5, 1910, p. 287–401, pl. 1–4, map).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; Amer. Men of Sci. 1938.

Mertens, Karl (or Carl) Heinrich

(1796, Bremen, Germany; 1830, St Petersburg, Russia), volunteered in the army, fighting against Napoleon from 1813–15; studied classic languages at Bremen, and practised botany too; in 1817 he went in for medicine, first at Göttingen, later at Halle. Surgeon on a Russian expedition under command of Captain LÜTKE (see below). Subsequently Assistant at the Petersburg Academy; author of some zoological papers in the Mémoires of that institution.

The genus *Mertensia* H.B.K. and other plants were named in his honour.

ITINERARY. *Voyage in the 'Senjawin'* (or *Seniavin*), *1826–29.*[1] Leaving Kronstadt (Sept. 1, 1826), sailing *via* Portsmouth, Teneriffe, Rio de Janeiro, the Canaries, Cape Horn, Valparaiso, Sitka, New Archangel (staying 5 weeks), the Carolines (Dec. 4, 1827–early in 1828), discovering Ponape, Mortlock

Islands, the Marianas (Guam), the Carolines, Bonin-Sima Islands, Kamschatka (June), the Carolines again; arriving at Manila (*Luzon, Philippines*)[2] on Jan. 13, *1829*, weighing anchor again on Jan. 30; passing Sunda Straits (9 days! Febr. 13–22), and *via* St Helena back to Kronstadt (Sept. 6).

COLLECTIONS. 2500 Herbarium specimens from the voyage, incl. many ferns, and numerous *Algae* too. According to A. DECANDOLLE (Phytographie, 1880) herbarium of MERTENS *fil.* (HENRI) of the KOTZEBUE expedition in *Herb. Roy. Acad. Petersburg* (= *Acad. Sci. Leningrad*). This statement is wrong, in so far as MERTENS did not accompany KOTZEBUE's expeditions (*cf.* resp. A. VON CHAMISSO and J. F. ESCHSCHOLZ), but that of LÜTKE.

His collection is partly in *Herb. Acad. Sci. Leningrad* (1000–1200 sp.) and partly in the *Bot. Gard. Leningrad.*[3] Dupl. in *Herb.* LINDEMANN (U.S.S.R.): 16 *nos;* in *Herb. Munich* (with *Herb.* ZUCCARINI); in *Herb. Oxford* (with *Herb.* FIELDING).

LITERATURE. (1) FR. LÜTKE: 'Voyage autour du monde sur la corvette "Le Séniavine" 1826–29' (Paris 1835–36, 3 vols + atlas, transl. from Russian). Herein K. H. MERTENS: 'Notices sur les îles Carolines' (*l.c.* vol. 3, 1836, p. 132–144).

F. H. VON KITTLITZ: 'Vierundzwanzig Vegetations-Ansichten von Küstenländern und Inseln des Stillen Oceans aufgenommen in den Jahren 1827–29 auf der Entdeckungsreise des Kais. Russischen Corvette "Senjawin" unter Capt. LÜTKE' (Siegen, 1844–45, + atlas pl. 1–24). Transl. by B. SEEMANN: 'Twenty-four views of the vegetation of the coasts and islands of the Pacific, with explanatory descriptions, taken during the exploring voyage of the Russian corvette "Senjawin" under the command of Capt. LÜTKE, in the years 1827, 1828 and 1829' (London 1861, w. pl. 1–24) (pl. 23–24 relating to Luzon).

cf. also some papers (copied from letters) in Linnaea 4, 1829, p. 43–73 and 5, 1830, p. 60–71 (not dealing with the Malaysian region).

(2) A certain MERTENS is cited by MERRILL in Bull. Bur. of Agr. Manila *no* 4, 1903, p. 30, as the collector of botanical material in the Philippines. This one?

(3) *cf.* HOOK. Comp. Bot. Magaz. 2, 1837, p. 343; Bull. Acad. Sci. Petersb. 7, 1864, suppl. 2, p. 1–10; ENGL. Bot. Jahrb. 9, 1888, p. 442.

BIOGRAPHICAL DATA. Bull. Acad. Sci. Pétersb. suppl. 1, p. 8; Compt. Rend. Acad. Pétersb. 1830, p. 11; LÜTKE, Voyage *l.c.* 3, 1836, p. 337–352; Bull. Soc. Nat. Mosc. 46[2], 1872, p. 83; PRITZEL, Thes. Lit. Bot., 1872; BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 322; BACKER, Verkl. Woordenb , 1936 (gives 1795 as year of birth).

Merton, Hugo

(1879, Frankfurt a/M, Germany; ? 1939, London, England), since 1920 Professor of Zoology in the University of Heidelberg, where he took his Ph. Dr's degree in 1904.

He made a zoological expedition to the Aroe and Kai Islands in company with J. ROUX (see there) of Basel, Switzerland.

He migrated to London before the outbreak of World War II.

ITINERARY. (1) *Via Singapore* (end Nov.–Dec. *1907*) and *Java* (Dec. 8–Jan. 5, *1908*) to the *Aru Islands* (4 months' stay); making headquarters at Dobo on *P. Wamar* (arriving Jan. 22) and visiting



MERRITT

many other islands: *W. Trangan* (Febr. 5–28), principally at Ngaiguli and making trips to Fatural (6), Marafenfen, Feruni, Popdjetur (9–12), Ngaiboor (19, by boat); excursions on *P. Wamar* (till March 12); to Sg. Manumbai (12), between *P. Wokam* and *Kobroör*, visiting Sg. Waskai and Sg. Kololobo; *Maikoör:* Sg. Maikoör; *Trangan:* Erersin, Ngarangarin; *via* Sg. Manumbai to the eastern islands: *Meriri* (= *Mariri*) (March 31); *P. Barkai* (= *P. Workai*): Gomo Gomo, Baimun, Longar, Apara; *P. Lola; via* Sg. Barkai (= Workai), going ashore near Fonum and Batu Bandera; trip to *Wokam* and *P. Udjir; Kei* (= *Kai*) *Islands* (1-month stay); *Klein Kei* (Nuhu-Tawun and Kei Dulah) and *Groot Kei* (Nuhu-Jut = Noehoetjoet); sailing from Tual (June 24) *via* Java (staying a fortnight), back to Germany (arriving mid-Aug.).

COLLECTIONS. *Herb. Senckenb. Ges.* (now in *Univ.*) *Frankfurt: Myrmecodia sp.* (pres. 1908/09). The occurrence of myrmecophilous plants is one of the dominant features of the vegetation in *S. Trangan*, so we suppose the collecting was done in that island.

LITERATURE. (1) H. MERTON: 'Forschungsreise in den Südostlichen Molukken (Aru- und Kei-Inseln)' (Abh. Senckenb. Ges. Frankf. 33, 1911, p. 1–208, w. many plts).

Mertowardojo, M., *cf. sub* Forest Research Institute, Buitenzorg.

Mesa, A. de, *cf. sub* Forestry Bureau, Manila.

Mesoerip, *cf. sub* Forest Research Institute, Buitenzorg.

Mess, H. A.

Assistant Resident at Painan, Padang Highlands (*Sumatra West Coast*), sent plants to *Hort. Bog.* in *1868*.

Metselaar

COLLECTIONS. *Herb. Bog.:* specimen of *Elephantopus scaber* L. *var. sinuatus* MIQ. *s.n.* from Modjokerto, *E. Java* (*cf.* KOSTER in Blumea 1, 1935, p. 463).

Meurs, L. van, *cf. sub* Forest Research Institute, Buitenzorg.

Meyboom, P., *cf. sub ditto*.

Meyen, Franz Julius Ferdinand

(1804, Tilsit, E. Prussia, Germany; 1840, Berlin, Germany), a plant physiologist[1] who originally studied medicine (M.D. in 1826). He served as a surgeon on a German voyage round the world (see below). When back in Europe, he was appointed professor at Berlin.

He is commemorated in the genus *Meyenia*.

ITINERARY. *Voyage in the 'Prinzess Louise', 1830–32.*[2] Sailing from Hamburg (Sept. 7, 1830); Brazil, Cape Horn, Chili, Peru, China; *Philippines, Luzon:* bay of Manila at Cavite (Sept. 14, *1831*), Manila (15), to St. Matheo (21) and trips in the environs, back to Manila (24), by land *via* Santa Ana to Pasig (29), by boat to Laguna de Bay and Hali-Hali (30), Isl. *Talim* (Oct. 1), Mt Sembrano (5), Rio Tabacuano (7) and back to Manila (9); departing (15) to China; passing Sunda Strait; Cape of Good Hope, St Helena; back at Cuxhafen (Apr. 19, 1832).

COLLECTIONS. *Herb. Berl.:* 1353 species (2188 specimens) of the voyage in the 'Prinzess Louise' (purch. 1842).[3] *Herb. Brit. Mus.:* mosses and hepatics from *Luzon* (with *Herb.* HAMPE); *Herb. Univ. Kiel:* collection from Chili and the *Philippines; Herb. Leyden: Algae;* dupl. of grasses in *Herb. Acad. Sci. Leningrad* (pres. with TRINIUS *Agrostotheca* in 1841); *Herb.* MARTIUS (= *Brussels*).

LITERATURE. (1) Author of 'Phytotomie' (Berlin 1830); 'Neues System der Pflanzen-Physiologie' (Berlin 1837–39); and of many other publications, *cf.* PRITZEL, Thes. Lit. Bot., 1872.

(2) F. J. F. MEYEN: 'Reise um die Erde auf dem Kön. Preuss. Seehandlungs-Schiffe Prinzess Louise, commandirt von Capitän W. WENDT in den Jahren 1830, 1831 und 1832' (Berlin 1834–35, 2 vols).

(3) F. J. F. MEYEN: 'Observationes botanicae. Beiträge zur Botanik gesammelt auf einer Reise um die Erde' (Nova Acta Leop. Car. Nat. Cur. vol. 19, suppl. 1, 1843, xxxii + p. 1–512, pl. 1–13; contributed by MIQUEL, NEES VON ESENBECK, *etc.*).

For the Chinese species *cf.* MERRILL in Journ. Arn. Arbor. 18, 1937, p. 54–77.

In the *sub* 2 mentioned book MEYEN incidentally named and described plants.

A remaining part of the collection was worked out in WARBURG, Monsunia, 1900.

BIOGRAPHICAL DATA. MEYEN, Observ. botan. *etc., l.c.* p. xiii–xxxii; Tijdschr. Nat. Gesch. & Physiol. 8, 1841, boekbeschouwing *etc.* p. 3–38; PRITZEL, Thes. Lit. Bot., 1872; BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 302–303; BACKER, Verkl. Woordenb., 1936.

Meyer

According to FURTADO (*in litt.*) a pharmacist at Singapore in 1896, who obtained a large number of herbs and shrubs growing as weeds and escaped in the vicinity of Singapore Botanic Garden, which he sent to Europe, mostly to *Berlin*.

We met with the following plants of his, cited in literature: Schles. bot. Tauschver. *nos* 298 and 800 (from *Singapore*, Apr. and Aug. *1896*)[1] and *Burmannia longifolia* BECC. *s.n.* (from *Singapore*).[2] At least the latter specimen in *Herb. Berl.* too.

The correct name of this collector is S. MAYER (see there).

LITERATURE. (1) *cf.* Pflanzenreich 98, 1932, p. 697.

(2) *cf.* JONKER, Monograph Burmanniaceae, Thesis Utrecht, 1938, p. 61.

Meyer, Frau Prof. A.

Zürich, Switzerland, presented 37 *nos* of *Java* plants (prob. phanerogams) to *Herb. Univ. Zürich* in *1900*. It is not mentioned whether they were collected by herself.

Meyer, Adolf Bernhard (actually Aron Baruch)

(1840, Hamburg, Germany; 1911, Berlin, Germany), physician who studied natural history too. When his education was finished he made some travels at his own expense. Since 1874 appointed Director of the Royal Zoological, Anthropological and Ethnographical Museum, Dresden; his interests went especially in those directions,[1] botany was not his object.

He has been much criticized, even by his compatriots;[2] it is a fact that he contradicts himself in many cases.

Eriolopha meyeri RIDL. was named after him.

ITINERARY. *1870–71. SW. Celebes:* Makassar (Nov. 1870); *N. Celebes:* Minahassa[3] and neighbouring islands (Nov. 1870–July 1871), visiting *Sangi(he) Isl.* and *P. Raoeng* (March 30, 1871); Gorontalo and environs (G. Boliohoeto)[4] and the Bay of Tomini and the *Togean Islands* (= *Schildpad Isls*) (July–Sept.); *SW. Celebes* (Sept.–Nov.).—*1871–72. Philippines*, and subsequently for a short stay in Europe.—*1873*. Leaving Vienna (Nov. 14, *1872*); *Singapore* (Dec. 17–31); *SW. Celebes:* Makassar (Jan. 8–26, *1873*); *N. Celebes:* Gorontalo, Kema; *Ternate* (Febr. 2–March 3); *Dutch NW. New Guinea* (Vogelkop):[5] Bay of Doré (March 13); *P. Nufôr* (= *? Noemfoor*) (20–22); Mysore (= Supiori, *Schouten Isls*); Jobi, Bay of Ansus (*P. Japen*) (Apr. 8–29); circumnavigating Geelvink Bay, Rubi (May 3–16); crossing from Jerakobe (Geelvink

Bay) to Jakati (Maccluer Gulf) (June 10–13);[6] Bay of Andai (21), organizing 2 trips to the Arfak Mts (respectively June 24–July 4, and July 9–15; according to MEYER the 2nd time Hattam was reached, WICHMANN[2] denies it) in which he did not participate himself on account of illness; leaving Andai (July 17) for *Ternate*, sailing (Aug. 7), touching at various islands of the *Moluccas*, *Timor* (16), Makassar (20), *Java* and *Singapore* on the home voyage to Vienna (arriving Oct. 10).

COLLECTIONS. *Herb. Berl.:* 122 *nos* of siphonogams from *Celebes; Herb. Kew:* 11 *New Guinea nos* (near Geelvink Bay, Olifantsberg);[7] *Mus. Hamburg:* fruits in alcohol from *N. Celebes* (pres. 1902); *Herb. Vienna: Luzon* plants *etc.* Collections of his might be at Dresden too.

His labels are untrustworthy.[2]

LITERATURE. (1) Author of many papers on the Malay Archipelago in the publications of the Dresden Museum. He wrote on the avifauna of Celebes together with L. W. WIGGLESWORTH (1898).

(2) *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea vol. 2, p. 167–178 (partly copied by BACKER in Verkl. Woordenb., 1936); STRESEMANN in Journ. f. Ornithol. 87, 1939, p. 305; *cf.* also Ind. Gids 10^2, 1888, p. 1393.

(3) A. B. MEYER: 'The Minahassa auf Celebes, Sammlung gemeinverständlicher wissenschaftlicher Vorträge' (edited by R. VIRCHOW and F. HOLTZENDORFF, 2. Series, Heft 262, 1876).

(4) According to WICHMANN the ascent is fictive; MEYER says to have climbed the mountain in company with RIEDEL (see there), but WICHMANN believes MEYER and RIEDEL to be birds of a feather!

(5) A. B. MEYER: 'Bericht über eine Reise nach Neu Guinea, unternommen in den Jahren 1872 und 1873' (Mitt. k.k. Geogr. Ges. Wien 16, 1873, p. 481); 'Auszüge aus den auf einer Neu-Guinea Reise im Jahre 1873 geführten Tagebüchern als Erläuterung zu den Karten der Geelvink-Bai und des MacCluer-Golfes' (Dresden 1875, w. maps; *cf.* p. 18–19 for list of his papers on New Guinea, partly relating to zoology); 'Anthropologische Mittheilungen über den Papuas von Neu-Guinea. Aeusserer physischer Habitus' (Batavia 1875).

(6) WICHMANN stated the crossing to be fictive too (*cf.* PETERM. Mitt. 1904, Lit. Ber. *no* 771); NIERMEYER, however, thought this to be unproved (*cf.* Tijdschr. K.N.A.G. 1905, p. 499).

(7) M. KUHN: 'Bemerkungen über einige Farne von Celebes' (Verh. k.k. Zool. Bot. Ges. Wien 1875, p. 593–602).

D. OLIVER: 'List of plants collected in New Guinea by Dr A. B. MEYER, sent to Kew, December 1874' (Journ. Linn. Soc. Bot. 15, 1877, p. 29–30). For some beach plants the locality 'Olifantsberg' is given!

BIOGRAPHICAL DATA. Encyclop. N.I. 2, 1918; BACKER, Verkl. Woordenb., 1936.

Meyer, Emanuel

a Swiss, member of the 'Naturforschende Gesellschaft Basel', who published a flora of Switzerland; he might have collected plants in *Java* (G. Gedeh-Pangrango) in *1842;* in 1844 he made collections in Texas. There remains the possibility that his *Java* specimens were ZOLLINGER plants (in that case the year of collecting was probably 1844). ZOLLINGER stayed at first with A. J. MEYER at Tjikoja Estate, who might have been a relative of EMANUEL MEYER.

COLLECTIONS. Specimens from *Java* with *Herb.* MEISNER (Basel) in *Columbia Herb.* = *N.Y. Bot. Gard.*

Meyer, J.

District Officer, Goenoeng Kentjana, Bantam (*W. Java*), sent some living orchids to *Hort. Bog.* in *1885–87.*

Meyer, Robert

(1891, St Louis, Missouri, U.S.A.; x), for a short time horticulturist and plant collector of the Bureau of Forestry at Manila, after which he was dismissed.

Alangium meyeri MERR. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936); other plants too.

COLLECTING LOCALITIES. *Philippines. Luzon:* Mt Mariveles (Nov. 22, *1904*); Lamao Forest Reserve (Dec. 1904–June *1905*).[1]

COLLECTIONS. *Herb. Manila*, numbered in the F(or) B(ur). (see there) series, 435 *nos* from Lamao Forest Reserve; dupl. in *Herb. Berl.; U.S. Nat. Herb. Wash.:* 414 *Philippine* plants; *Herb. Paris.*

LITERATURE. (1) *cf.* MERRILL in Philip. Journ. Sci. 1, 1906, Suppl. 3.

Meyer, W. C.

captain of the government steamer 'Zeemeeuw', at Ternate, presented a collection of *New Guinea* orchids to BOERLAGE and J. J. SMITH (see those) on their tour in the Moluccas in *1900.* In *Hort. Bog.*

Some were described by J. J. SMITH in Nova Guinea vol. 8.

Meyer-Darcis, G., *cf. sub* ANONYMOUS, Sumatra.

Meijer Drees, Ebertus

(1909, Spijkenisse, Z., Holland; x), was educated and took his Dr's degree at Wageningen Agricultural College; since 1936 in the employ of the D.E. Indian Forest Service, placed at the disposal of the Director of the Forest Research Institute at Buitenzorg,[1] save for a short interruption, when he was stationed at Tjepoe (teak forests, Rembang Res.). With CH. VERSTEEGH (see there) he accompanied the ARCHBOLD Expedition 1938–39 to New Guinea (*cf. sub* BRASS); after some disaccord MEIJER DREES left the expedition in September 1938; his work was continued by VERSTEEGH. After World War II he was stationed in Timor, and at Buitenzorg; subsequently on leave in Holland; in 1949 he returned to Indonesia.

He is commemorated in the moss *Blindia meyerdreesii* BARTRAM.

COLLECTING LOCALITIES. *1936–37. W. Java. —1938. Dutch N. New Guinea:* with the ARCHBOLD

Exp. (*cf. sub* BRASS, June till Sept.): in the subdivision Hollandia from coastal localities and the Idenburg River, Bernhard bivouac, Roode rivier (= Red River), *etc.* Before his departure he assisted in general botanizing on Mt Wilhelmina.—*1939. SW. Celebes.—1941. SE. Borneo.—c. 1946–47. Timor* (Dutch and Portug. part).

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg:* some from *Java* (Ja. *nos*), *Celebes* and *Borneo;* 647 *New Guinea nos*, partly together with BRASS (literature see there); and *Timor* plants. The plants collected with BRASS, in *Herb. Arn. Arbor.*, are mislabelled BRASS & MYER DREES (instead of MEIJER DREES), and consequently cited in this way in the Journal of the Arnold Arboretum. *Herb. Bog.:* 301 dupl. of *New Guinea* plants (*nos* 252–663).

LITERATURE. (1) Author of 'Plantensociologie, boschbouw en houtteelt' (Tectona 31, 1938, p. 166–205).

Meyier, S. de

(† *c.* 1940, Patjet, Sindanglaja, Java), of the coffee estate Segoenoeng at Modjokerto, E. Java. Later owner of a dairy farm at Patjet, W. Java.

COLLECTIONS & LOCALITIES. *Herb. Bog.:* some tens of orchids (pres. *1917–19*), collected at Segoenoeng, on the W. slope of G. Andjasmoro, and elsewhere in *E. Java.*

Meys, H. G. W., *cf. sub* Forest Research Institute, Buitenzorg.

Meys, P. C. J., *cf. sub ditto.*

Meijwes, J.

of Doreh in the 'Vogelkop', *Dutch NW. New Guinea*, sent some plants to *Hort. Bog.* in *1898.*

Michielsen, Willem Jan Marie

(1844, Breda, Holland; 1926, The Hague, Holland), joined the D.E. Indian Civil Service in 1868; in 1874 he was stationed at Palambajan, Padang Highlands (Sumatra West Coast), in 1894 he was Resident of Deli (Sumatra East Coast); in 1898 Governor of Sumatra West Coast; retired in 1904.

COLLECTIONS. *Hort. Bog.:* plants from Padang Highlands, *Sumatra West Coast* (pres. *1874*), and a *Grammatophyllum sp.* from *Sumatra East Coast* (pres. *1894*).

Micholitz (sometimes spelled **Micholicz**), W.

(1854–1932), for many years plant collector in the employ of the firm of J. SANDER & Sons, St Albans near London. He made entomological collections too. He lost all his savings as a result of the monetary deflation in Germany, following the war, and consequently straitened circumstances attended his late years.

Some plants (mostly orchids) were named after him.

COLLECTING LOCALITIES.[1] *1884–85. Philippines.*—In *1891* visiting the *Moluccas: Banda* and *Timorlaut* (= *Tanimbar Islands*), and on his way thither visiting S(e)krú (Skroe) on the *W. coast of New Guinea.*—*Sumatra West Coast:* mountains near Padang (Nov. 1891–Febr. *1892*).—*Natuna Islands* (*c.* Aug. 1892).—*Ambon:* Hitoe, G. Wawani (*189* .).—*1893–98. NE.* and *SE. New Guinea* (*Papua*) & *Bismarck Archipelago:* Simbang near Finschhafen (June 1893), Friedrich Wilhelmshafen (June–Sept.), *Duke of York Island* (*Neu Lauenburg*) (Oct. 1893), *Mioko* and *New Ireland* (Oct. 1893), Ataliklikun Bay (= prob. Kambair-Bucht) (Dec.); *New Britain* (Dec. 1893); *New Ireland:* between Cape Carteret and Praslin-Hafen (Kambotorosch) (Jan. *1894*), *Normanby Isl.*, Milne Bay, Cloudy Mts (1894), Stirling Range, Suan, mountains near Mita in the vicinity of Milne Bay (2000 ft, Febr. *1895*), Simbo (Solomon Isls, Oct. 1897), Louisiade Archipelago (Apr. and May *1898*), *Thursday Isl.—NW. Borneo: Labuan* and Sarawak (?).—*Probably* collecting *till about 1908* (see *sub* collections).

COLLECTIONS. Principally orchids and mosses.[2] *Herb. Berl.:* mosses from *Kaiser-Wilhelmsland* (= *NE. New Guinea*), *Neu Pommern* (= *New Britain*), *Neu Mecklenburg* (= *New Ireland*), *Sumatra, Banda, Timorlaut* (= *Tanimbar*) and the *Philippines;* orchids from *Neu Pommern* and *Neu Mecklenburg.*[3] *Herb. Kew:* some plants presented by KRÄNZLIN;[4] 12 *nos* from *New Guinea* and the Louisiades (pres. 1898) and *Sumatra* orchids (pres. by SANDER in 1905); *Herb. Sing.:* plants from the *Papuan* regions (pres. 1898), from *Labuan* (pres. 1899), *Tanimbar* (pres. 1902), *Borneo* (pres. 1903), *Philippines* (pres. 1908); *Herb. Vienna:* with *Herb.* REICHENBACH.

Hort. Sing.: living *East Indian* and *Philippine* orchids (pres. 1903–09); *Hort. Bog.:* living orchids from G. Wawani, *Ambon* (pres. 1895), and from *Sumatra* (pres. 1906).

LITERATURE. (1) Only very few data concerning his travels are known; the above-cited ones were occasionally collected in literature and are given with all reserve, they are certainly incomplete.

(2) Descriptions of orchids in ENGL. Bot. Jahrb. 17, 1893, p. 482–487 (*W. Sumatra*); Gartenflora 43, 1894, p. 114; Oesterr. Bot. Zeitschr. 44, 1894 and 45, 1895; H. G. REICHENBACH: 'Xenia Orchidacea' (continued by F. KRÄNZLIN) 3, Leipzig 1900, p. 100–101, *t.* 256; ENGL. Bot. Jahrb. 44, 1910, Beibl. p. 25–26.

Descriptions of mosses by BROTHERUS in Öfv. Finska Vet. Soc. Förh. 35, 1892/93; *l.c.* 37, 1894/95; *l.c.* 40, 1897/98; *l.c.* 42, 1899/1900.

cf. also SCHUMANN & LAUTERBACH in 'Flora d. Deutsch. Schutzgeb. i.d. Südsee' (Leipzig 1901) and in 'Nachträge' to the latter (1905); Journ. Str. Br. Roy. As. Soc. *no* 38, 1902, p. 207 (*Balanophora* from *Tanimbar Islands*); J. VALCKENIER SURINGAR in Nova Guinea 8, 1912, p. 700 (*Cyperaceae*).

(3) In Beih. Bot. Centr. Bl. 34[1], 1917 (history of the collections of Herb. Berlin).

(4) *cf.* Kew Bull. 1896, p. 42.

BIOGRAPHICAL DATA. Gard. Chron. 3rd ser. 92, 1932, p. 487; BACKER, Verkl. Woordenb., 1936.

Middelaer, Frederik Hendrik Victor

(1890, Djokjakarta, Java; x), entered the D.E. Indian Government service in 1914, in the course of years filling various administrative posts,

mostly at Buitenzorg; finally Sub-Director of the Department of Economic Affairs.

COLLECTIONS. *Herb. Bog.: Epipogium roseum* from G. Boender (Salak) in *West Java* (coll. June *1935*).

Middendorp, W. A.

Amsterdam, Holland, presented a collection of herbarium from the Karo Lands (*Sumatra East Coast*) to the *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam* in 1920.

This was a duplicate set of a collection made in *1919* by the native collector GALOENGI (see there) on behalf of LÖRZING. At the time MIDDENDORP was District Officer there.

Miehe, Hugo Robert Heinrich August

(1875, Braunschweig, Germany; 1932, Berlin, Germany), took his Ph. Dr's degree at Bonn in 1899; since 1908 Professor of Botany at Leipsic and subsequently from 1916 onwards at the Agricultural College, Berlin; in the latter place in addition Director of the Botanical Institute of the said College. He made a voyage to *Java* and stayed at Buitenzorg from Sept. *1909*–March *1910*.[1] His sojourn in the tropics resulted in some papers.[2]

COLLECTIONS. He collected at least at Depok (*W. Java, 1910*) (*cf.* Rec. Trav. Bot. néerl. 15, p. 41). The cited material was sent to H. HALLIER, then at *Leyden*.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 34.

(2) H. MIEHE: 'Javanische Studien' (Abh. Math. Phys. Kl. Kön. Sächs. Ges. Wiss. 32, 1911, p. 299–431, 26 textfig.); 'Tabakbau in den Vorstenlanden' (Tropenpflanzer 15, 1911, p. 467–469, 559–569, 605–628); 'Ameisenpflanzen' (Handwörterbuch d. Naturwiss. 2nd ed. 1, 1931, p. 22–231).

BIOGRAPHICAL DATA. Ber. D.B.G. 50, 1932, p. 87, (163)–(170), incl. bibliogr. + portr.; Wer ist's, ed. 1.

Miftah, M., *cf. sub* Forest Research Institute, Buitenzorg.

Miguel, G.

collected in *Palawan, P.I., cf. sub* Forestry Bureau, Manila.

Mij . . ., *cf.* MY . . .

Miklucho-Maclay, Nikolaj Nikolajewitsch

(1846, Ukraine, Russia; 1888, St Petersburg, Russia), geographer-ethnologist, educated at Petersburg and in Germany. He made extensive travels under the auspices of the Imperial Court and the Imperial Geographic Russian Society of Petersburg, *viz* to N. Africa and the Red Sea and subsequently in the Malaysian and Pacific regions (see below). In 1886 he finally settled at Petersburg.

He did his utmost to found zoological stations, in which he succeeded at Sydney only; in the latter place he founded besides a museum which was named in his honour.[1]

He published many small communications on his travels and studies, but as his notes were in a very confused state, they never resulted in a proper compilation. He is characterized by WICHMANN as a braggart of little importance.[2]

He is commemorated in the Maclay Coast (being the first European who went ashore there), and in the plant species *Illipe maclayana* F.v.M.

ITINERARY. *1st Voyage to New Guinea, 1871–72*.[3] Sailing *via* Madeira, the Canaries, Morocco, S. America, Tahiti and the Samoa Isls and *New Ireland* to the *NE. coast of New Guinea:* Astrolabe Bay (Sept. 19, *1871*), discovering a small bay which he named Konstantinhafen, and settling in the neighbourhood at Garagassi; trips to Bogadjim, Isl. *Bilibile* and Jambom; tour by boat along the W. coast of Astrolabe Bay (Aug. *1872*); Dec. 25 he was picked up in a suffering state by a ship which was in search of him; laid up with illness for 6 weeks in *Ternate;* sailing *via* Tidore to the *Philippines:* touching at *Cebu* and staying in *Luzon* (March 21–Apr. *1873*), making a trip to Limai; till Hongkong he was a guest on the 'Isumrud'.—*2nd Voyage to New Guinea, 1874*.[4] Sailing from Ambon to Gisser (= Geser), *via* Goram (= Gorong) and Watu Bèla (= Watoebela), through Nautilus Strait to the N. coast of *P. Adi* and the E. coast of *P. Namatote* (Febr. 27) (both situated S of Dutch W. New Guinea); *Dutch SW. New Guinea* (Vogelkop): Triton Bay, visiting Warika, and reaching Lake Kamaka; *P. Aiduma, Kajuh Merah* and *Lakahia;* Etna Bay, trips in the neighbourhood of Timbona; *P. Aiduma;* sailing (Apr. 25) *via Ceram Laut Isls; Ambon* (end of May).—In the same year stay at Buitenzorg, *W. Java*, for recovery of his health.—*Malay Peninsula, 1874–75*.[5] In Nov. 1874 visiting Johore, going up the Indau River to Mt Janeng, then turning towards the Pekan; Johore Bahru (Febr. 2, *1875*); from Singapore to Bangkok (Siam); interior of the *Malay Peninsula* (June–Oct.), Pahang and Kedah; *W. Java:* Buitenzorg (Nov. 1875–Febr. *1876*).—*3rd Voyage to New Guinea, 1876–77*.[6] Sailing from Cheribon (Java) (Febr. 18, *1876*) in the 'Seabird': *P. Gebe* (March 8); *Mapia Isls* (13); Palu Isls; Carolines; *Admiralty Isls* (May 26); *Hermit Isls; Echiquer Isls;* Astrolabe Bay (June 27), Konstantinhafen, residing at Bongu (staying till Nov. 11, *1877*), making many trips; *via* Palau Islands to the *Philippines: Mindanao*, Zamboanga (Jan. *1878*); along the W. coast of Borneo to *Singapore* (Jan. 19), and sailing for Sydney (arriving mid-July).—*Southsea Voyage, 1879–80*.[7] Sailing from Port Jackson (March 1879); New Caledonia; New Hebrids; *Admiralty Isls;* Solomon Isls and finally visiting the *islands near SE. New Guinea* and those in Torres Strait. With regard to the New Guinea part of the voyage the following data are known: *Luf* (July *1879*); between *St Matthias* and *Neu* (= *New*) *Hannover* (Nov. 12); Isl. Simbo (Solomon Isls) (Dec. 10); Isl. *Samarai* in China Strait (end of Jan. *1880*), leaving the boat, staying for some time and departing to *Papua:* Port Moresby; with CHALMERS several trips to coastal villages, visiting Kalo, Kerepunu, Aroma, *etc.; Thursday Isl.* (May), from where visiting *Jervis Isl. etc.—SE. coast New Gui-*

nea, 1881 (Aug.–Sept.), on an English warship: Port Moresby, Kalau (Hood Bay), Keppel Bay, Port Moresby.—In *1882* from Sydney back to St Petersburg (arriving early in Oct.); back at Sydney in Dec. to finish his activities at the Zoological Station; *Java:* Batavia (Febr. *1883*), where he succeeded in persuading the commander of the Russian corvette 'Skobeleff', to touch at the Astrolabe Bay (*NE. New Guinea*) (March, 10 days' stay); *via* the *Admiralty Islands, Hermit Islands* and Palau Isls to the *Philippines: Luzon*, Manila; he left the ship and sailed *via* Hongkong to Sydney (arriving July or Aug.).—In *1886* back to Petersburg, next year returning once more to Sydney, to fetch his family.

COLLECTIONS. Ethnological collections from *New Guinea* at St Petersburg (= Leningrad). He collected plants on the Maclay Coast, near Astrolabe Bay and the Finisterre Mts, described by F. VON MUELLER.[8] In *Herb. ? Melbourne.*

We have no data as to his collecting plants in other islands, probably he did not.

LITERATURE. (1) Dr O. FINSCH: 'NIKOLAUS VON MIKLUCHO-MACLAY, Reisen und Wirken' (Deutsche Geogr. Blätt. 11, 1888, p. 270–309).

(2) *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea 2[1]; in the itinerary I made use of many data mentioned in this book.

MIKLUCHO-MACLAY is the author of papers published in the Nat. Tijdschr. N.I. 1873–76; Tijdschr. Taal-, Land- en Volkenk. 1876; PETERM. Mitt. 19, 1873 and 20, 1874; Deutsche Kolon. Zeit. N.F. 2, 1889, p. 77; *etc.*

(3) N. MIKLUCHO-MACLAY: 'Mijn verblijf aan de oostkust van Nieuw Guinea in de jaren 1871 en 1872' (Nat. Tijdschr. N.I. 33, 1873, p. 114–126); 'Ethnologische Bemerkungen über die Papuas der Maclay-Küste in Neu Guinea' (*l.c.* 35, 1875, p. 66–93).

(4) N. MIKLUCHO-MACLAY: 'Meine zweite Excursion nach Neu Guinea' (Nat. Tijdschr. N.I. 36, 1876, p. 148–179); 'Incidents of travel in Papua-Kowiay, New Guinea' (Proc. Roy. Geogr. Soc. Lond. 19, 1875, p. 517–521).

(5) N. MIKLUCHO-MACLAY: 'Ethnologische Excursion in Johore' (15 Dec. 1874–2 Febr. 1875) (Nat. Tijdschr. N.I. 35, 1875, p. 251–258); 'Ethnological excursions in Malay Peninsula, Nov. 1874 to October 1875' (Journ. Str. Br. Roy. As. Soc. *no* 2, 1878, p. 205–221).

(6) *cf.* PETERM. Mitt. 34, 1878, p. 407–408.

(7) N. MIKLUCHO-MACLAY:' Kurze Zusammenstellung der Ergebnisse anthropologische Studien während einer Reise in Melanesien (März 1879 bis April 1880)' (Zeitschr. Ethnol. Berl. 12, 1880, p. 374–375).

(8) In Vict. Naturalist 1, 1885, p. 168 and in 'Descr. Not. Pap. Pl.'.

N. DE MIKLUCHO-MACLAY: 'List of plants in use by the natives of the Maclay-coast, New Guinea' (Proc. Linn. Soc. N.S.W. 10, 1885, p. 346–354) with Appendix by F. VON MUELLER: 'Edible fruits from the Maclay-coast, New Guinea' (*l.c.* p. 355–358).

BIOGRAPHICAL DATA. E. S. THOMASSEN: 'Biographical sketch of . . .' (Brisbane 1882, + map); Deutsche Geogr. Blätt. 11, 1888, p. 270–309, incl. bibliogr.; Tijdschr. K.N.A.G. 1889 (afd. Versl. & Aardr. Meded.) p. 320–321, 322; Nat. Tijdschr. N.I. 49, 1890, p. 28–30; Encyclop. N.I. 2, 1918; BACKER, Verkl. Woordenb., 1936; Geogr. Journ. Lond., 1938, p. 494; F. S. GREENOP: 'Who travels alone' (? Australia, publ. after the war).

Miller

is cited as the collector of material of a *Sapindacea* from *Malacca, s.n.*, in *Herb. Calcutta* (*cf.* RADLKOFER in Act. d. Congr. Internat. d. Bot. *etc.* à Amsterdam 1877, 1878, p. 39), and of a *Myristicacea* from *Malacca*, in *Herb. Leyden* and *Munich* (*cf.* WARBURG, Monogr. Myristic., 1897, p. 604); *cf.* also below.

Miller, Charles

(1739, Chelsea, England; 1817, London), son of a botanic gardener, himself first Curator of Cambridge Botanic Garden (1762–70), settled at Bencoolen as a servant of the English East India Company (1770–72).[1]

ITINERARY. *1770. SW. Sumatra,* Bencoolen.[2] Visiting the interior, proceeding from Fort Marlborough (Sept. 19) to Bantiring on the Bencoolen River, thence to Pagat-raddin, Kadras, Gunong Raja, G. Ayu, Kalindang and Jambu, where he ascended the hills forming the boundary of the Company's district. The first dusun on the other side is named Kalubar and situated on the banks of the river Musi; Kapiyong (= Kepahiang), Paramuh; the setting in of the rains occasioned his return to the hills, on the 10th of October, stopping at Tabat Bubut, Beyol Bagus, Gunong Raja, Ayer Bagus, Bencoolen River, Bentiring, Fort Marlborough (Oct. 18).—*1771.* Trip to *P. Enggano.*[3] In March exploring the productions of this island.—*1772.* Journey into the country, *W. Sumatra,* Tapanoeli.[4] From *Pulo Puchong* (June 21) in boats to the mouth of Pinang Suri River; going up the river, Lumut; Satarong, Tappolen, Sikia, Sa-pisang (Batang-tara River); July 1 following nearly the course of the Batang-tara (= Batangtoroe) towards the hills; Kota Lambong (4), Terimbaru (5), departing (7) to Sa-masam, Batang Onan (10), Panka-dulut (11); leaving Batang Onan (14) in order to return *via* Koto Moran, Sa-masam, Sa-pisang and down the Batang-tara River to the sea; returning to *Pulo Puchong* (22).

COLLECTIONS. *Herb.* BANKS = *Brit. Mus.* Probably also in *Herb.* LINNAEUS.[5]

cf. also *sub* MILLER.

LITERATURE. (1) CH. MILLER: 'An account of the Islands of Sumatra' (extr. from several letters) (Philos. Transact. 68, 1778, p. 161–179).

(2) *cf.* MARSDEN: 'History of Sumatra' (1811) p. 363–364.

(3) *cf. l.c.* p. 465.

(4) *cf. l.c.* p. 369–373, extr. of Philos. Trans. *l.c.*

(5) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 358.

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 27, 1889, p. 374, and in 2nd ed. by RENDLE, 1931.

Millett, Charles

about 1825–34 official in the service of the English East India Company, stationed at Canton, Ceylon, Malabar, Macao, *etc.* In 1831 he travelled to Java, in the western part of which island he collected plants, employing natives; when visiting the other parts of Java time failed him to do that.

He is commemorated in the genus *Millettia* W. & A. and in the fern *Dryopteris millettii* CHRISTENSEN.

ITINERARY. From his letters to Sir W. J. HOOKER it is evident that he was at Canton on Nov. 13, 1830; at Batavia (*W. Java*) on May 20, *1831* and back at Canton again on Dec. 18, 1831.

In *W. Java* he collected on G. Salak, G. Gedeh and at Batavia.

COLLECTIONS. He is said to have collected in *Java* together with SPANOGHE (see there).

Ferns on behalf of HOOKER, in *Herb.* HOOK. = *Kew*;[1] also China plants.

LITERATURE. (1) *cf.* HOOK. & THOMS., Flora Ind. 1, p. 71; TRIMEN, Handb. Flora Ceylon pt 5, 1900, p. 374.

BIOGRAPHICAL DATA. BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 298–301; BACKER, Verkl. Woordenb., 1936.

Mills, G. R.

planter; collected at Batu Gajah (Perak), *Malay Peninsula*, in *1925 and subsequently* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Sing.*

Millspaugh, Charles Frederick

(1854, Ithaca, New York, U.S.A.; 1923, Chicago, Ill., U.S.A.), physician who was in practice for 9 years. His main interest was in plants[1] and he was appointed Professor of Botany in the University of West Virginia in 1891, and in 1893 Curator of Botany in the Field Museum of Natural History, Chicago.

ITINERARY. *1911–12.* Setting out (Aug. 1911) on a voyage, during which the following localities were visited: Honolulu, Japan, Shanghai; *Philippines, Luzon:* Manila and Los Baños (9 days' stop); *W. Java:* Buitenzorg (Dec.), staying at the Foreigners' Laboratory;[2] Burma, Calcutta, India, Ceylon and return *via* Europe.[3]

Evidently he visited the *Malay Peninsula* too (*cf. sub* Collections), probably when going to or from Java, or on both occasions.

COLLECTIONS. *Herb. Field* (= *Nat. Hist.*) *Mus. Chicago:* herbarium and economic specimens from *Java, Philippine Isls, Str. Settlements, etc.;* in 1916, 636 *Philip.* plants were presented.

LITERATURE. (1) Author of 'American Medicinal plants' (1887, 10 vols).

(2) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 37.

(3) *cf.* Report Field Mus. Nat. Hist. Chicago for 1912, p. 207–208.

BIOGRAPHICAL DATA. Who's who 1913; portr. in Rep. Field Mus. Nat. Hist. Chicago for 1923; Bot. Gaz. 77, 1924, p. 228–230, w. portr.; Amer. Men of Sci., ed. 2, 1906.

Milne, William Grant

(?, Scotland; May 3, 1866, Creek Town, Africa), a gardener of the Edinburgh Botanic Garden, undertook the botany department of the Admiralty expedition in the 'Herald' (see below); in the years 1862–66 he collected in W. Africa.

Some plants were named after him.

ITINERARY. *Voyage in the 'Herald', 1852–61.*[1] *cf.* also *sub* J. MACGILLIVRAY. Surveying the Pacific Islands, and Torres Strait, *S of New Guinea.*

COLLECTIONS. *Herb. Kew:* plants of the voyage of the 'Herald', possibly including some from Torres Strait; at *Cambridge* (with *Herb.* LEMANN). Africa plants in *Herb. Brit. Mus.*

LITERATURE. (1) Capt. H. M. DENHAM: 'The Herald's Voyage 1852–61' (Proc. Roy. Geogr. Soc. Lond. 6, 1861/62, p. 221–222).

Letters from MILNE in HOOK. Journ. Bot. & Kew Gard. Misc. 7, 1855, p. 151–155, and *l.c.* 9, 1857, p. 106–115.

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 27, 1889, p. 375, and in 2nd ed. by RENDLE, 1931; MAIDEN in Journ. Austr. Ass. Adv. Sci., Brisbane meeting 1909, p. 381; BACKER, Verkl. Woordenb., 1936.

Milsum, John Noel

(1890, England; x), former Student Gardener at Kew, since 1913 or '14 officer in the Agricultural Department Straits Settlements & Fed. Malay States (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Kew, Kuala Lump.* and *Sing.* According to Mr HOLTTUM (*in litt.*) he collected at various times a considerable number of specimens of native and cultivated plants in the *Malay Peninsula.*

Mindam, *cf. sub* Forest Research Institute, Buitenzorg.

Miranda, D. P., *cf. sub* Forestry Bureau, Manila.

Miras, *cf. sub ditto.*

Mitchell, A. S.

Extra Assistant Conservator of Forests, Fed. Malay States, 1907–. . ., collected in the *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Kuala Lump.*, at least partly numbered in the C.F. series (see *sub* Conservator of Forests); dupl. in *Herb. Edinburgh.*

Mitchell, F. J.

Ranger in the Forest Department (1915–22), collected in the *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Kuala Lump.*, numbered in the C.F. series (cf. *sub* Conservator of Forests).

Mjöberg, Eric P.

(1882, Hallands-Ås, Sweden; July 8, 1938, Stockholm), zoologist-ethnographer; from 1910–13 in Australia; in the employ of the Deli Experiment

Station, Medan (Sumatra), 1919–Jan. '22; Director of the Sarawak Museum at Kuching (NW. Borneo), 1922–24;[1] leaving Borneo in 1926.

Vaccinium mjoebergii J.J.S. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936, *Addenda*).

ITINERARY.[1] *NW. Borneo*, Sarawak. *1922. Murud Expedition:*[2] leaving (Sept. 6) for Baram Station; Lio Matu (19); Panglah; in northern direction (Oct. 8); Tapo Boan's village; Dalam Bah, Pah Trap; foot of Mt Murud (Oct. 19–Nov. 1), climbing the top ridge (Nov. 2) and moving camp to an alt. of 6000 ft (6); starting (8) for the top of the mountain (6 days' stay on the summit); descent: Pah Trap (27); Pamour, Mein; Tamabo Tingan (Dec. 2–3); Lio Matu (8–12); Baram Station (Dec. 18).—*1923.*[3] *Mt Dulit Expedition:* leaving Baram Station (Jan. 10); following the Tinjar River; foot Mt Dulit (13); camp at 4000 ft alt. (4 weeks); back at Baram Station (Febr. 12). *Bidi Caves* (June). *Mt Poi Expedition:* proceeding (Oct. 13) to Lundu; starting for Mt Poi (16); camp at 4300 ft (17–28); camp at 5200 ft (Oct. 29–Nov. 7), climbing the highest peaks; returning to Lundu (8); starting for Simatan (13); camp near foot Mt Poi (15–21); Simatan (22); Lundu (24).—*1922–24.* Other collecting localities in these years: Mt Matang, Mt Penrissen, Gadin, chiefly from the higher altitudes; vicinity of Kuching, Lundu, Sadong and Santubong.—*1925–26. Expedition to Mt Tibang* (1700 m alt.) (= Bt Batoe Tibang or G. Tiboeng): proceeding from Samarinda (Sept. 1925) in *Dutch E. Borneo;* Long Iram; going up the Mahakam to Sg. Boh; ascending Sg. Boh; crossing the watershed; Long Nawang; breaking camp (Nov. 2) and setting out to Mt Tibang *via* Pajau; Mt Tibang (3 weeks' stay); Pajau (till mid-Dec.); Long Nawang; downstream the Kajan River to the coast (*NE. Borneo*), Boeloengan; visiting *P. Maratoea* (E of Borneo); Kemanis Caves near the Birang River in Berau Distr., starting from Tandjong Rěděb (March); trip to Pasir, S of Balikpapan (*SE. Borneo*); sailing (mid-May) for Bandjermasin and returning to Europe *via* Java and Singapore.

COLLECTIONS. In his book on Borneo (*l.c.* p. 56) he mentions his collections of about 15000 specimens of flora and fauna of *Sumatra*. His zoological collection went to the Nat. Hist. Mus. at Leyden; as to the location of the botanical *Sumatra* collection no further data are known.

Herb. Sarawak: chiefly ferns; from Mt Dulit and Murud 318 sheets of cryptogams, 178 phanerogams; from Mt Poi 115 sheets of ferns and 90 of phanerogams (70 *Orch.*). In *Herb. Manila* (pres. 1923) and in *Herb. Berkeley* (Cal.);[4] both fragmentary collections, type specimens in *Herb. Berkeley*, so far as available a set of dupl. in *Brit. Mus.* The orchids were sent to O. AMES *Herb.*, ferns to *Herb.* BONAPARTE (= *Paris*) (pres. 1923).[5] Other dupl. in *Herb. Bog.:* 127 *nos* of ferns and orchids from G. Tiboeng (pres. 1925–26) and some duplicates (pres. by MERRILL); *Herb.* FARLOW: mosses from Mt Tibang;[6] *U.S. Nat. Herb. Wash.:* 43 dupl. *Borneo* and *Sarawak;* also dupl. in *Herb. N.Y. Bot. Gard.*

LITERATURE. (1) E. P. MJÖBERG: 'Borneo, huvudjägarnas land' (Stockholm 1927); transl. into Dutch, German, and English; into English under the title: 'Forestlife and adventures in the Malay Archipelago' (1930).

(2) E. P. MJÖBERG: 'An expedition to the Kalabit Country and Mt. Murud, Sarawak' (Geogr. Review 15, 1925, p. 411–427, fig. 1–10); *cf.* also Sarawak Gazette, April 3rd, 1923.

(3) *cf.* Rep. Sarawak Mus. for 1923.

(4) E. D. MERRILL: 'A collection of plants from Sarawak' (Sarawak Mus. Journ. 3, 1928, p. 513–557; 157 species of which 30 new ones).

(5) *cf.* BONAPARTE, Notes ptéridol., 14, 1923, p. 477–488.

(6) Mosses by E. B. BARTRAM in Philip. Journ. Sci. 61, 1936, p. 235–252.

Mochtar, *cf. sub* Forest Research Institute, Buitenzorg.

Modigliani, Elio

(1860–1932), anthropologist-zoologist who travelled in Sumatra and some islands west of it, between the years 1886–94.

ITINERARY. *1886. W. Sumatra* and *P. Nias.*[1] Staying in *W. Java*, Batavia (March 15–23); Padang; Siboga (arriving Apr. 1); G. Sitoli on *Nias* (Apr. 14–);[2] *P. Nakko* (= *? Hinako Isls*) (June 27);[3] G. Sitoli on *Nias* (Aug.); *via* Padang and Koetaradja (N. Sumatra) to Singapore.—*1890–91. N. Sumatra*, Batak Lands.[4] Tapanoeli: Padangsidimpoean (Oct. 4, 1890), Siboga (Oct. 8), Pangheran Pisang (10), Taroetoeng (12–14); Batak Lands: Si Borong Borong (15), Balige (Toba) (Oct. 16–Nov. 17), Si Rambè (Nov. 19–Dec. 18), Bandar Pulo (= Bandar poelau), Tandjong Balai (Jan. 4, *1891*), Balige (Jan. 25–March 2); back to Siboga (staying March 14–Apr. 3); Padang (Apr. 16); *via* Benkoelen to *P. Enggano.*[5]—*1894. Mentawai Islands:*[6] *Sipora.*

COLLECTIONS. *Herb. Geneva:* 10 *Musci* from *P. Enggano* (purch. 1898). He evidently collected hepatics in *Enggano* too;[7] as to phanerogams no data are available.

His entomological collections are in Mus. Civ. Stor. Nat., *Genoa.*

LITERATURE. (1) E. MODIGLIANI: 'Escursione nell' isola Nias (a Ovest di Sumatra)' (Boll. Soc. Geogr. Ital. 23, 1886, p. 781–787, 854–862); 'Un viaggio a Nias' (Milano 1890).

(2) *cf.* Giorn. Soc. Lett. Conserv. Scient. fasc. 7 (*non vidi*).

(3) *cf.* Boll. Soc. Geogr. Ital. 1886.

(4) E. MODIGLIANI: 'Il lago Toba e il paese dei Batacchi nell' isola di Sumatra' (Boll. Soc. Geogr. Ital. 28, 1891, p. 201–226); 'Fra i Batacchi indipendenti' (*l.c.* p. 367–384); 'Fra il lago di Toba e Bandar Pulo' (*l.c.* p. 588–606, 633–664, w. pl.); 'Fra i Batacchi indipendenti' (Roma 1892).

(5) E. MODIGLIANI: 'L'isola delle donne. Viaggio ad Engano' (Milano 1894).

(6) E. MODIGLIANI: 'Materiale per lo studio dell' isola Sipora (Mentawei)' (Boll. Soc. Geogr. Ital. 35, 1898, p. 256–299, fig. 1a–13a).

(7) *cf.* VERDOORN in Ann. Bryol. suppl. vol. 4, 1934, p. 178.

Moechtaroeddin, *cf. sub* Forest Research Institute, Buitenzorg.

Möller, Hjalmar August

(1866, Ystad, Sweden; †), bryologist from Lund, Sweden (Ph. Dr 1903), visited Burma and Java in 1896/97.[1] He was a teacher of natural history first, but was later on the staff of the Government Museum for palaeobotanical researches. In the International Addressbook of Botanists, he is mentioned as Lecturer at Stocksund. See *Addenda.*

COLLECTING LOCALITIES. *1897. W. Java* (Jan.–Sept.): Buitenzorg, Tjileboet, G. Salak, Tjisaroea, G. Gedeh-Pangrango (Tjibodas, Tjibeureum, *etc.*), G. Tjibodas, *P. Edam* (Bay of Batavia), Tjibadak, Tjitjerouk (= ? Tjitjoeroeg), Palaboean Ratoe and Tjisolok, Tjitaroem River, Zandbaai (Aug. 6, with E. NYMAN), G. Papandajan, Pantjar. —*Malay Peninsula* (Sept., when returning to Europe):[2] *Singapore* (8 days) and *Penang* (Sept. 21).

He evidently collected in *W. Sumatra* too, *viz* at Padang near Emmahaven (*cf.* Hedwigia *l.c. sub* Liter. 3, p. 318, 320), possibly on the outward voyage in January.

COLLECTIONS. *Herb. Univ. Lund:* cryptogams and other plants.[3] Duplicates in *Herb. State Mus. Stockholm; Herb. Berl.:* 180 *nos* of *Java* mosses; *Herb. Leyden: Java Algae;* few dupl. in *Herb. Univ. Amsterdam* (*via* Berl. Bot. Tauschverein), and *Herb. Brussels.*

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 21–22.

(2) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 128.

(3) HJ. MÖLLER: 'Cladopus nymani *n.gen.n.sp.* Eine Podostemonacée aus Java' (Ann. Jard. Bot. Buit. 16, 1899, p. 115–132, pl. 12–15); 'Beiträge zur Moosflora Javas, Straits Settlements und Birmas' (Hedwigia 60, 1919, p. 313–330).

BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 2, 1905, p. 46, *t.* 114; KROK, Bibl. Bot. Suecana, 1925, p. 517–518, incl. bibliogr.

Moenah, Pa, *cf. sub* Forest Research Institute, Buitenzorg.

Moerah, R., *cf. sub ditto.*

Moesa, *cf. sub ditto.*

Moet, F. F.

of *Java*, sent 5 plants to *Hort. Sing.* in *1883.*

Moha, S., *cf. sub* Forest Research Institute, Buitenzorg.

Mohamad, *cf. sub ditto.*

Mohnike, Otto Gottlieb Johan

(1814, Stralsund, Germany; 1887, Bonn, Germany), since the end of 1844 Medical Officer in the D.E. Indian Army; retired in 1869. During his term of office he was stationed in several islands of the Malay Archipelago, *viz* in Java, Sumatra, Borneo, Celebes, and the Moluccas. In 1849, when in Japan (stationed in Decima), he was instructed to make investigations and collections in the interest of the natural sciences.[1] He specialized in beetles.

DATA on his stay in various islands of the *Malay Archipelago, etc.*[2] *Centr. Java:* Karangbolang (*1845*); Diëng Plateau (*1846;* by chance together with JUNGHUHN); *Banka* (end of Aug.–Oct. 2, *1847*); *S. Sumatra*, Palembang Res. (Oct. 1847–Jan. 2, *1848*), visiting Danau Itam and Danau Louar (Nov. 7–18, 1847), *etc.;* failure of a voyage by proa to Moeara Kompeh (Jan. 1848), returning to Palembang again (19); Batavia (March 8), where he was appointed physician in Decima near Nagasaki, Japan; *W. Borneo* (*1851–54*): Sambas, Pontianak and inland; *Ambon* (*1854–60*), ascending G. Api, *Banda* (Oct. 6, 1854); *Sumatra* (*1861–. .*), in the Lampong Districts (*1862*), and crossing from Palembang to Benkoelen (visiting G. Krekil near Lahat) (1862); *Banka* (1862); Siak River in *Sumatra East Coast* (*1863*).—In *Java* he visited besides, probably in the first years: Rawa Lakbok in *W. Java; Noesa Kambangan* and Wawar in *Centr. Java;* and the Zandzee of G. Tengger in *E. Java.*

COLLECTIONS. His collection of *Cetonidae* about 1877 *via* E. T. HIGGINS, and in 1880 *via* J. THOMSON, to R. OBERTHUR (Rennes).[3] *No* zoological collections of his in the Museum of Leyden.

With a view to numerous botanical particulars mentioned in his books, it seems probable that he was in possession of a private herbarium, but data are lacking.

His Japanese plants are in *Herb. Leyden.*

LITERATURE. (1) *cf.* Koloniaal Verslag for 1853, p. 95.

(2) *cf.* O. G. J. MOHNIKE: 'Banka und Palembang nebst Mittheilungen über Sumatra im Allgemeinen' (Münster 1874); 'Blicke auf das Pflanzen- und Thierleben in den Niederländischen Malaienländern' (Münster 1883).

(3) *cf.* Entomol. Beihefte II–IV, Berl. Dahl. 1935–36, p. 180.

BIOGRAPHICAL DATA. Encyclop. N.I. 2, 1918; L. S. A. M. VON RÖMER, Historische schetsen, Batavia 1921, p. 114–118.

Mol, D., *cf. sub* Forest Research Institute, Buitenzorg.

Mol, Gustaaf Alexander de

(1893, Wisch, Gld, Holland; x), for many years a schoolmaster, attented Wageningen Agricultural College, and was appointed Consulting Agriculturist in the D.E.I. towards the end of 1923; from 1924–26 stationed at Bandoeng (W. Java), 1926–29 at Koetaradja (N. Sumatra), 1931–33 at Pontianak (W. Borneo),[1] 1933 at Buitenzorg (Java); in 1934 temporarily in charge of the Agricultural schools at Malang and Soekaboemi; in 1941 promoted to Inspector of the Agricultural Service; retired in 1946.

COLLECTING LOCALITIES. *W. Borneo*: Ngabang (Apr. *1931*); in coconut plantations *etc.* (Sept. 1931, with A. J. BAL); coastal region between Pemangkat and Pontianak (end 1931 or early in *1932*

with H. Loos); in 1932 in the subdivision of Semitau.

COLLECTIONS. *Herb. Bog.:* 42 *nos* near Ngabang, *viz* 121–150 with BAL, 151–166 with Loos, and 167–169; a *no* 28 of Semitau Subdivision (pres. through the intermediary of the For. Res. Inst. Buitenzorg in Jan. 1933). *Herb. For. Res. Inst. Buitenzorg* (see there): *W. Borneo* plants (pres. 1932).

He presented living orchids to *Hort. Bog.* (*c.* 1933), *probably* from *Borneo* too.

LITERATURE. (1) G. A. DE MOL: 'Inzameling van was en honing in het merengebied van de Westerafd. van Borneo' (Landbouw 9, 1933, p. 80–86).

Mol, Willem de

(1897, Gouda, Z.H., Holland; Febr. 1942 killed on the W. coast of Java), was educated at the Agricultural College, Wageningen; from 1923–24 Assistant at Wageningen (Dr in 1924); in Dec. 1924 departing for the D.E.I., and since selectionist and biologist of the Deli Batavia Comp., Timboang Estate, Langkat (Bindjei), Sumatra East Coast.

COLLECTIONS & LOCALITIES. *Herb. Bog.:* 9 *nos* from the Karo Lands, *Sumatra East Coast,* collected *about 1930* (pres. through the intermediary of the Deli Exp. Stat. in 1932).

Molengraaff, Gustaaf Adolf Frederik

(1860, Nijmegen, Gld, Holland; 1942, Wassenaar, Z.H., Holland), geologist, educated at Leyden and Utrecht (Ph. Dr 1886); continuing his study at the University of Munich, 1887–88; Lecturer in Geology *etc.* (1888–91) and subsequently Professor (1891–97) at Amsterdam; Government Geologist of the S. African Republic, 1897–1902; Consulting Geologist at Johannesburg, 1902–05; Professor at the Technical College of Delft, 1906–30.

He made an expedition in Borneo (see below), making a small botanical collection after the departure of HALLIER.[1]

ITINERARY. *Borneo Expedition, 1893–94.*[1] For the 1st part of the expedition *cf. sub* H. HALLIER and A. W. NIEUWENHUIS.[2] After the departure of HALLIER, from Poetoes Sibau (June 15, *1894*) to the mountainous country of Upper Embalau; Na Boengan (23); Na Boelit (28), Pangkalan Mahakkam (July 3); Sg. Penanei (14) (on the way climbing Bt Betoeng = Bt Lekoedjan); back to Pangkalan Mahakkam (18); Poetoes Sibau (22);[3] from Smitau (Aug. 7) to the mountainous country between Oeloe Seberoeang and Oeloe Embahoe; Bt Oejan (10); Batoe Raoeng (11); Bt Pijaboeng (summit on the 15th); Bt Ampan and back to S(e)mitau (19); Sintang (20); Nanga Pinoh; Sintang (–Sept. 2); Smitau; Boenoet (5); Na Sebelit; Bt Oendau; Bt Sekoedjan *pr.p.;* Bt Loeboek (11); Lematak, Goeroeng Pelai, the Pangkalan Kapala Riam, Goeroeng Nakan, Goeroeng Benoewang (15); near the Pangkalan Paneh, proceeding by land (16); ridge Bt Beransa; the Babar Hantoe; Madi Mts; Sg. Paneh (22); Bt Sedaroeng (30); Na Moribooi; *G. Raja* (summit Oct. 5–6) and *Bt Tjondong* in the Schwaner Mts; Moribooi (9); the Oeloe Kowin (12); Sg. Samba (17); mountain excursion in the vicinity of Toembang Habangooi; Bt Tandok (21); going down the Katingan (= Mendawai) to the Java Sea; from Pegattan (Oct. 30) to Bandjermasin (Nov. 1) by boat, and from there returning to Java. Before setting out on the home voyage, he was once more at Sintang with a view to the collections.[4]

COLLECTIONS. *Herb. Bog.:* 25 *nos* from Bt Raja (2000 m alt.) and Bt Tjindong or Tjondong (1000 m), numbered in continuation of those of HALLIER and accordingly upwards of 3000. Evidently the collection included some ferns.[5]

LITERATURE. (1) Author of: 'Die niederländische Expedition nach Zentral-Borneo in den Jahren 1893 und 1894' (PETERM. Mitt. 1895, p. 201–208, pl. 14); 'De Nederlandsche expeditie naar Centraal-Borneo in 1894' (Hand. Ned. Natuurk. en Geneesk. Congr. 5, 1895, p. 498); 'Borneo Expeditie. Geologische verkenningstochten in Centraal Borneo (1893–1894)' (1900, + atlas, 3 maps, 56 pl. and 89 textfig.); 'Iets over de rivieren van het eiland Borneo in verband met zijn geologische gesteldheid' (Hand. Ned. Nat. en Geneesk. Congr. 12, 1909, p. 700); and several other geological papers on the Dutch East Indies.

(2) *cf.* also Tijdschr. K.N.A.G. 1894, p. 642–643 and 858–859; and Bull. Mij Bevord. Natuurk. Onderz. Ned. Kolon. *nos* 12 and 13.

(3) *cf.* Tijdschr. K.N.A.G. 1894, p. 1008–1012 and Bull. Mij *l.c. no* 15.

(4) *cf.* Tijdschr. K.N.A.G. 1895, p. 113–133.

(5) *cf.* CHRIST in Ann. Jard. Bot. Buit. 20, 1907, p. 92–140.

BIOGRAPHICAL DATA. Tijdschr. K.N.A.G. 37, 1920, p. 575 and *l.c.* 59, 1942, p. 471–473; Wie is dat? 1935, p. 254; Geologie en Mijnbouw 2, 1940, p. 41 + portr. and *l.c.* p. 283, portr. p. 285; Jaarb. Ned. Akad. Wet. Amsterdam 1941/42, p. 185–191 + portr.; Ned. Kruidk. Arch. 51, 1941, p. 363; *l.c.* 52, 1942, p. 398.

Molhuysen, Petrus

COLLECTING LOCALITIES. *E. Java. 1902.* Pasoeroean (Oct.).—*1903.* Besoeki (Jan., Febr., May), Panaroekan (July), Pasoeroean (Aug.), Lawang (Sept.), G. Tengger (Nov.–Dec.).—*1904.* Besoeki (Jan.), Lawang (Apr., June), G. Lamongan (Sept.), Panaroekan (Oct.), Lawang (Oct.), G. Lamongan (Oct.–Nov.; numerous plants), Lawang (Nov.), G. Lamongan (Dec.).—*1905.* Lawang (Jan.), Panaroekan (Febr.), Lawang (Febr.), Besoeki (Febr.), Panaroekan (Apr.), Lawang (Apr.–July), Panaroekan (Aug.), Lawang (Sept.), Bekassi (in *W. Java*) (Oct.).—*1906.* Lawang (Jan.), Panaroekan (Apr.), Lawang (July), G. Lamongan (Oct.–Dec.).—*1907.* G. Lamongan (Jan.), Bodo Gendo (Jan.), Nongkodjadjar (Aug.).—*1911.* Besoeki (May).—*1912.* Lawang (Jan., Dec.).

COLLECTIONS. *Herb. Wageningen:* 123 *nos* (incl. ferns); dupl. in *Herb. Univ. Amsterdam,* and *Utrecht; Herb.* DELESS. (*Geneva*): 10 *nos.*

His collections include several plants from Africa *etc.*, which certainly are *not* native in E. Java.

Molina, *cf. sub* Forestry Bureau, Manila.

Molisch, Hans

(1856, Brünn in Mähren, Austria; 1937, Vienna, Austria), biologist, educated in the University of Vienna (Ph. Dr 1879); after his graduation, Assistant of WIESNER and subsequently Lecturer; from 1889–94 Professor at Graz Technical College, then Professor at Prague and since 1909 at Vienna; from 1922–25 Visiting Professor at the Imperial University of Sendai, Japan; after his retirement he stayed at Vienna.[1]

At the end of the 19th century he made a voyage round the world (see below); in 1928–29 he revisited Calcutta at the request of CH. BOSE.

ITINERARY.[1] Sailing (Sept. *1897*) *via* Bombay, Colombo, Kandy, and *Singapore* (Nov. 10), to *W. Java* (staying Nov. 14, 1897–end of Jan. *1898*):[2] working in the Foreigners' Laboratory at Buitenzorg,[3] making a trip to Djokja (*Centr. Java*) and to Tjibodas and G. Gedeh (departing thither on Jan. 7, climbing the summit on the 18th); *via* Japan and the U.S.A. returning to Europe (1898).

COLLECTIONS. In his 'Erinnerungen *etc.*'[1] the following statement is found, concluding the narrative of the ascent of Mt Gedeh: 'Nun ging es an das Auspacken der gesammelten Schätze, an das Trocknen und Konservieren der mitgebrachten Pflanzen.' In the same book (*l.c.* p. 67) he mentions the collecting of *Algae*.

There is no certainty about the location of his collections; as he was at that time professor at Prague University, they might be in the herbarium there.

LITERATURE. (1) Author of many papers on general biology and physiology and of: 'Biologische Forschungen in Indien' (Vortr. Ver. Verbr. Naturw. Kenntnis Wien 70, 1930, p. 89–102); 'Als Naturforscher in Indien' (Jena 1930); 'Erinnerungen und Welteindrücke eines Naturforschers' (Wien/Leipzig 1934; for Java *cf.* p. 54–76); *cf.* also *sub* 2.

(2) H. MOLISCH: 'Botanische Beobachtungen auf Java' (Sitz. Ber. Kais. Akad. Wiss. Wien Math. Naturw. Cl. 107, 1898, p. 747–776, 977–994, 1247–1271 and *l.c.* 108, p. 479–490); 'Eine Wanderung durch den javanischen Urwald' (Popul. biol. Vorträge, 2nd edit. 1922, p. 14–28).

(3) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 22.

BIOGRAPHICAL DATA. Who's who 1913; *cf.* 'Erinnerungen und Welteindrücke *etc.*' *l.c. sub* Liter. 1; Wie is dat? 1935; Plantphysiology 1937, p. 566–567 and 889–890; Ber. D.B.G. 56, 1938, Gen. Vers. Heft p. (161)–(199), incl. bibliogr.; Ann. Jard. Bot. Buit. 48, 1938, p. 121–122; Chron. Bot. 4, 1938, p. 69 (photogr.), 78–79 (portr.).

Monahan

Philippine collector in *Luzon*.

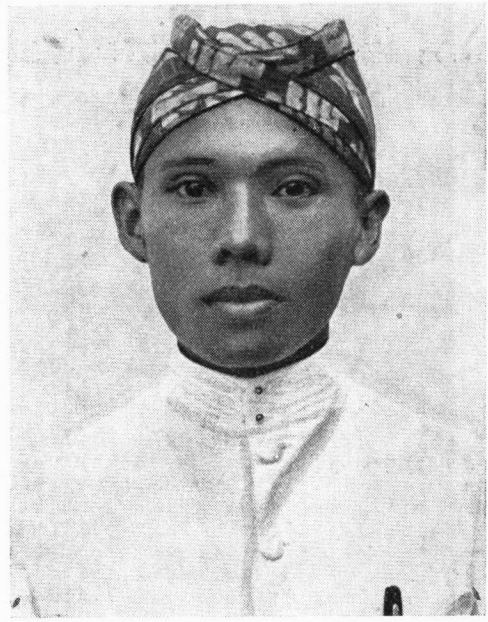
Monarka

Ranger in the employ of the Forest Dept. *Br. N. Borneo* (see there).

Monchy, P. de

(1861, Rotterdam, Z.H., Holland; Oct. 29, 1931, Buitenzorg, Java), came to the D.E.I. in 1888, at the same time as BOERLAGE (see there); at first volunteer and in temporary service, since 1894 Curator of the Herbarium at Buitenzorg; pensioned off in 1910.

Ixora demonchyana VALET. was named after him.



MONDIH

COLLECTING LOCALITIES. *W. Java:* Tjibodas (May 25, *1890*); G. Gedeh-Pangrango (Aug. 23, 1890); Tjipetir (May 8, 1890); Depok and Tjampea (with BURCK in *1891*); G. Salak; Krawang (June 1891); Bt Toengoel; environs of Buitenzorg, near Kota Batoe, *etc.; Centr. Java:* G. Slamat (with F. A. F. C. WENT in May *1892*).—*1897*.[1] Towards the end of Jan. visiting Tjigenteng, Pangentjongan (and Telaga Bodas) and *Noesa Kambangan* (S of Centr. Java); *Centr. Java* (Apr.): Pringombo, Djati, Loebah and trip to Telawa and Soebah (coll. on the beach); *Centr. Java* (June): Ambarawa and Telemojo and *via* Kedong Djati to Karang Assam; *E. Java* (Aug.): Banjoewangi, Pantjoer, Rogodjampi and Idjen Plateau.

COLLECTIONS. *Herb. Bog.*, incl. 200 *nos* from Krawang and 200 from G. Slamat. The latter probably labelled A. DE MONCHY, Tegal.

LITERATURE. (1) *cf.* Versl. Pl. Tuin Buitenzorg for 1897, p. 85–87.

BIOGRAPHICAL DATA. Buitenzorgpost 1931 († 29 Oct.); BACKER, Verkl. Woordenb., 1936.

Mondih

'mantri' in the employ of the Buitenzorg Herba-

rium; in 1931 temporarily placed at the disposal of the Forest Officer in W. Borneo, J. P. SCHUITEMAKER (see there).

COLLECTING LOCALITIES. *1931. W. Borneo* (March 11–16): neighbourhood of Pontianak, near Sg. Raja and Sg. Poetat; *Karimata Islands: P. Penebangan* (March 19–20), *P. Tiangbalai* (21–22), *P. Karimata* (23), *P. Seroetoe* (24–25), *P. Karimata besar* (25–26) and from March 27–28 visiting *P. Pelobang, Boeroeng* and *Penebangan;* returning to *W. Borneo:* Pontianak (March 31), collecting near kp. Andjongan (Apr. 5–6, visiting G. Bala) and near kp. Mandor (Oetan Kopiang and Oetan Laosengkong) (Apr. 7–8).

COLLECTIONS. *Herb. Bog.:* 234 *nos* from *Borneo* and 151 from *Karimata Islands.* Duplicates in *Herb. Leyden* and *Utrecht.*

Money, Percy John

Reverend of the Anglican Mission, Collingwood Bay, whose services were kindly placed at the disposal of the Resident Magistrate of the Northern Division of Brit. New Guinea, C. A. W. MONCKTON, by the Bishop of New Guinea, on a trip to Mt Albert Edward (see below).

ITINERARY. *Papua, E. New Guinea. Trip to Mt Albert Edward, 1906.*[1] Setting out from Ioma Station (Apr. 17); Gira River; Aikora River; starting over the mountains (22); Chirima River; Wharton Chain; climbing main and highest peak of Mt Albert Edward (May 20); return journey, back at Ioma on the 28th.

COLLECTIONS. The plants collected during above-mentioned trip were sent by MONEY to the *Bot. Gard. Sydney.* It is not clear whether they were collected by him or by one of the other members.

MONCKTON was especially geologically interested; the expedition made zoological collections too.

LITERATURE. (1) C. A. W. MONCKTON: 'Report on ascent of Owen Stanley Range, Papua' (Ann. Rep. Brit. N.G. for 1905/06, 1907, p. 85–93, w. maps; including some notes on the flora); 'Last days in New Guinea' (Londen 1922).

Mongula, A., *cf. sub* Forest Research Institute, Buitenzorg.

Moningka, P., *cf. sub ditto.*

Monoarfa, *cf. sub ditto.*

Monod de Froideville, Charles

(1896, The Hague, Holland; x), since 1918 officer of the Civil Service in the D.E.I., stationed successively in Djambi (Centr. Sumatra) 1919–24, in Lampong Districts (S. Sumatra) 1924–25, in Tapanoeli (W. Sumatra) 1926–32; Assistant Resident of Boetoeng and Lawoei (Celebes & Dependencies) 1933–36, at Pare Pare (SW. Celebes) 1936–37, at Makassar 1937–39. Towards the end of 1939 he went on furlough and till 1945 was involuntarily kept in Europe on account of the war. In 1946 lieutenant-colonel, Neth. War Crimes Liaison Section, Singapore; subsequently at the Parquet of the Attorney-General, Batavia; retired in Nov. 1948.

Numerous plants are named after him (*frigidurbis, monodii,* and *psychropolitanus*) (*cf.* BACKER, Verkl. Woordenb., MS. note).

COLLECTING LOCALITIES. *1937–39. SW., SE. and Centr. Celebes: P. Boeton, P. Moena* (1938), *P. Tanah Djampea* (S of Salajar) (Apr. 1939); Mamboeliling, the central mountainous country; Rante Karoea, mountains N of Makale; Bawa (= Wawa) Kraeng (Bonthain) (1937); Lompo Batang (S. peak of Bonthain; Whitsun, June 5–6, 1938); Mamasa, Kalosi, Malino, Palopo, Makale, Tjenrana, Pare Pare, Makassar, Madjene, Djeneponto, Bone, Malakadji, Tjamba Road, Walanae, Rante Pao, Todjamboe Road, Tomonga, Soppeng, beach near Saponda (Kendari, *SE. Celebes*), *etc.—Malay Peninsula:* Port Dickson, Negri Sembilan (*1946*).

COLLECTIONS. His *private herbarium* was presented to *Herb. Leyden* in 1943, > 474 *nos;* duplicates of most plants in *Herb. Bog.:* 280 *nos.*

His special interest being *Leguminosae,* he numbered them separately, *viz* 1–104; plants from the central mountainous country numbered 105–175 and those from the mountains N of Makale 176–208; from G. Bonthain respectively 209–216 and 217–256. See also *Addenda.*

LITERATURE. (1) H. J. LAM *c.s.:* 'Contributions to our knowledge of the Flora of Celebes (coll. C. MONOD DE FROIDEVILLE) and of some other Malaysian islands' (Blumea 5, 1945, p. 554–599, deals with 148 species).

Montano, Dr J.

made an anthropological voyage to the Malay Peninsula, Borneo and the Philippines, partly with Dr PAUL REY, in the years 1879–81.[1]

ITINERARY.[1] *Voyage 1879–81.* Sailing from Toulon (May *1879*); *Singapo(u)re* (June 19 arrival); trip into the interior of the *Malay Peninsula,* at Kessang, 40 km NE of Malacca (June 29–July 10); sailing (July 16) for the *Philippines, Luzon:* Manila (arrival end of July), to Balanga on the other side of the Bay of Manila, Sierra de Mariveles; *SE. Luzon:* Albay Prov., *Cagraray Isl.,* after 1½ months returning to Manila; sailing (Nov. 5) for *Soulou* (= *Jolo*) (stay from Nov. 15, 1879–Jan. 18, *1880*), crossing the island to Maïboun; *Br. N. Borneo:* Sandakan Bay (Jan. 22 or 25–Febr. 16), visiting Elok Poora (or Pura) and the Sagaliud River; *Soulou* (= *Jolo*) (March 4–Apr. 5; MONTANO ill); *Mindanao:* Davao (Apr. 11–Nov. 3), crossing the island from S to N, returning to Davao along the coast; in Oct. climbing Mt Apo (fortnight's trip); Nov. 4 to Butuan and Surigao; exploring the interior of the island and the N. and E. coasts (till Febr. 22, *1881*): mouth of the Rio Tagum (Nov. 6, 1880), Bincungan, Rio Tagum (7); Babao, Rio Sahug (8); Kalibuhasan, Rio Sahug (10); Rio Sahug (11–20), visiting Nagta, Daug, and Tilacan; source Rio Sahug, Husig (21); Mt Hoagusan (22), Rio Agusan (23–26); Bunauan (27–30); Mt Bunauan (Dec. 1); Bunauan (1–4); Butuan (5–15); Bay of Butuan (16–23); Tubay (24); beach of Ba-

guian (25), Mt Baguian (25), Jabonga (25), Lake Maïnit (26), Maïnit (27), Tubay (30–31); Davao (Febr. 22–March 24, 1881); back to France.

COLLECTIONS. *Herb. Paris*, at least *Philippine* plants (a *no* 203 cited in literature!). He collected wood samples for the Museum.

LITERATURE. (1) J. MONTANO: 'Lettre au Dr HAMY' (Bull. Soc. Géogr. Paris sér. 6, 19, 1880, p. 353–362); 'La rivière Sagaliud et les Bouli Doupis (Ile de Bornéo)' (*l.c.* sér. 6, 20, 1880, p. 182–191); *cf.* also *l.c.* sér. 7, 1, 1881, p. 266–269 (on the voyage of MONTANO and PAUL REY); 'Une mission aux îles Malaises' (*l.c.* sér. 7, 2, 1881, p. 465–483 + map); 'Rapport *etc.* sur une mission aux Iles Philippines et en Malaisie (1879–1881)' (Arch. d. Miss. Scient. et Litt. 3. sér. vol. 11, 1885, p. 271–479, pl. 1–34 + map); 'Voyage aux Philippines et en Malaisie' (1886).

cf. also Review by J. E. TENISON-WOODS in Journ. Str. Br. Roy. As. Soc. *no* 15, 1885, p. 139–145.

Monteiro, *cf. sub* Forest Research Institute, Buitenzorg.

Monterie

Doctor of Law, Bandoeng (W. Java), presented a collection of 56 *nos* from Poentjak Gede (G. Malabar) in *W. Java* to *Herb. Bog.* in *1913;* dupl. in *Herb. Leyden.*

Montero, S., *cf. sub* Forestry Bureau, Manila.

Montigny, Ch. de

about 1850 Consul of France at Shanghai, China. He visited Siam and the northern part of China on a diplomatic mission, making zoological and botanical collections. He evidently visited the Malaysian region on several occasions.[1]

COLLECTING LOCALITIES.[2] *Between 1847–55.* In *Java* (3 days in 1847; at Anjer in W. Java, between 1852–54); in *Singapore* (at least in 1847); possibly in Celebes;[1] the *Philippines* (at least plants coll. *1855*).

In a letter of July 1, 1850, he mentions a rapid passage through the islands of Malaysia ('Océanie Malaise').[3]

COLLECTIONS.[3] *Herb. Paris:* some cases with dried plants, wood samples, seeds, *etc.* He sent living plants to Paris, including gutta-percha and *Nepenthes.* In Java he collected zoologically too.

LITERATURE. (1) Author of some MS. consular reports: 'Riz de montagne de Java'; 'Riz de montagne des Iles Célébes' (in Arch. Nation. Paris).

(2) *cf.* MS. list: 'Note des plantes receuillies dans l'intérieur de Java et dans les forêts vierges de Singapour et de la Malaisie pendant l'année 1847' (in Arch. Nation. Paris). The list contains 21 Java plants and 26 from Malaysia.

(3) *cf.* Documents, letters, *etc.* in Arch. Nation. Paris.

Moore, Chas.

= ? CHARLES MOORE (1820, Dundee, Scotland; 1905, Sydney, N.S.W., Australia), Director of the Botanic Garden at Sydney, 1847–96. Writer on the flora of Australia. In 1850 he made an expedition to some South Sea islands (New Hebrides, Queen Charlotte group, Solomon Islands and New Caledonia). He might have collected in the Bismarck Archipelago too.

COLLECTIONS. CHAS. MOORE is cited as the collector of ferns in *New Britain* and *Duke of York Island* in *1879*, specimens of which in *Herb.* BONAPARTE (= *Paris*) (*cf.* BONAPARTE, Notes ptéridol., fasc. 1, 1915, p. 188 and *l.c.* fasc. 5, 1917, p. 123). These might be duplicates coll. by J. DUFF or others and sent under MOORE's name as Director of the Herbarium.

BIOGRAPHICAL DATA (on CHARLES MOORE). Journ. Kew Guild 1905, p. 264–266 + portr.; Journ. & Proc. Roy. Soc. N.S.W. 42, 1908, p. 114–115; Transact. & Proc. Bot. Soc. Edinb. 23, 1908, p. 212–213.

Moorhouse, S. W.

in the Forest Department, Negri Sembilan, Straits Settlements; he resigned his appointment in 1905 (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Sing.:* rattans.

Moquette, J. P.

(1856, Goor, O., Holland; 1927, Weltevreden, Java), came to Java in 1873, where he was for more than 30 years in the employ and finally manager of sugar factories; in 1905 appointed Agriculturist in the Agricultural Institute at Buitenzorg, resigning as soon as 1906. After that he gave up agriculture and in 1913 he entered the service of the Archaeological Department, Batavia.

J. J. SMITH named some orchids after him.

COLLECTIONS. *Herb. Bog.:* orchids, at least from *W. Java;*[1] from *E. Java* living material to *Hort. Bog.* (pres. *1896–97*).

He is cited by MERRILL (Enum. Born. Pl. 1921) and J. J. SMITH as the collector of *Borneo* orchids. We do not know whether he collected them himself or acquired them by purchase.

LITERATURE. (1) *cf.* J. J. SMITH in Bull. Dép. Agric. Ind. néerl. *no* 13, 1907, p. 50.

BIOGRAPHICAL DATA. Arch. Suikerind. N.I., 1923[1], p. 583–585; BACKER, Verkl. Woordenb., 1936.

Moraux-Baas Becking, Louise Hermine

(1881, Brummelen, Gld, Holland; x), was a horticultural student in a nursery at Naarden-Bussum; subsequently Assistant and later Custodian of Prof. VALCKENIER SURINGAR at Wageningen, where she regularly attended college. In 1921 she married A. MORAUX and followed her husband to Sumatra East Coast, where she laid out a garden which harboured a living collection of plants. After World War II she was evacuated to Holland.

COLLECTING LOCALITIES. *Sumatra East Coast. 1922.* Batu Rata.—*1923.* Serdang (Batu Lokong), Brastagi, Karo Highland, Gallia Estate (Serdang), Batu Rata.— *1924.* Batu Rata, Brastagi, Sibajak ,Lau Deboek Deboek.—*1925.* Sibolangit (Apr.).—*1928.* Batu Rata.

COLLECTIONS. *Herb. Wageningen:* 22 plants, mostly common species.

Moresby, John

captain of H.M.S. 'Basilisk', made many tours to New Guinea (see below).

ITINERARY. *Tours in the 'Basilisk', 1871–74.*[1] Visiting the following localities near and in *E. New Guinea:* islands in the Torres Straits, *Moresby Isl. etc.*, Redscar Bay and E of it, Port Moresby, Farfax Harbour, Edith River, E. coast of New Guinea, *Yule Island,* Hall Sound, Hilda and Ethel River, Milne Bay, Teste Isl., *D'Entrecasteaux Isls; NE. & N. coast:* Collingwood Bay, Dyke Acland Bay, Huon Gulf (Markham River), Astrolabe Bay (termination of the survey), Humboldt Bay, Threshold Bay. He returned to Europe *via* Ambon and Singapore.

COLLECTIONS. F. VON MUELLER mentions a *Bryophyllum calycinum* (cultivated) from *New Guinea,* obtained during Capt. MORESBY's discovery voyage;[2] the specimen was sent to him through the intermediary of RICHARD MERRICKS Esq. of the Naval Depot of Auckland. If material is extant, *probably* in *Herb. Melbourne.*

LITERATURE. (1) J. MORESBY: 'Discoveries in Eastern New Guinea by Capt. Moresby and the officers of H.M.S. Basilisk' (Journ. Roy. Geogr. Soc. 45, 1875, p. 153–170, map; and in Proc. Roy. Geogr. Soc. 19, 1875, p. 225–241, Discuss. p. 241–244); 'New Guinea and Polynesia. Discoveries and surveys in New Guinea and the D'Entrecasteaux Islands. A cruise in Polynesia and visits to the Pearl-shelling Stations in Torres Strait of H. M.S. Basilisk' (London 1876).

(2) *cf.* Descr. Not. Pap. Pl., p. 107.

Morgan, Jacques Jean Marie de

(1857, Huisseau-sur-Cosson (Loir-et-Cher), France; 1924, Marseille, France), mining engineer, especially attracted by geology and palaeontology; visited the gold-mines of Transylvania, and prospected for diamonds in the Indies; in 1884 study of the tin-mines in the Malay Peninsula;[1] subsequently employed in the Caucasus (1887–88), Persia (1889 onwards), Egypt (1892 onwards); for a scientific exploration in Persia again from 1897–1912; finally returned to France, studying his palaeontological collections.

ZEILLER named some species of ferns in his honour.

ITINERARY.[1] *1884. Malay Peninsula.* In total exploring for about 8 months, of which most of the time in *Perak, viz* from about February onwards. He besides explored in *P. Penang,* Prov. of *Wellesley,* and the Khaman Distr. in Patani. From the *Perak trip,* during which botanical collections were made, the following dates are known: setting out from Klian Lalang (July 16); Penkalan Pégou on the S. Raya (17), Kapayan (18), G. Lano in Oulou Kinta and back to Kapayan (19); ascending the river by proa as far as navigable (20), Klian Djouan (21), making base camp; exploring S. Raya, Lou and Sindjou (22–23), to Tchangkat Kabong, and back to Klian Djouan; trip to G. Tchabang (24–27), following S. Djouan, S. Kandis, climbing G. Kandis (staying on the summit, 25–26), descending S. Raya (27), back at Klian Djouan (30); to Ipoh (31); visit to the caves of G. Tchöra (Aug. 1); along the left bank of Kinta River to Kapayan, Tandjou Rinkong, Klian Kindin (2); following S. Kandis (3); Löbou Kéla (4); Tchangkat Kouala Riam (5), G. Riam (6); to summit G. Kerbou and back (7–8); Tchangkat Kerbou (9–12), collecting on G. Sönoï, and proceeding to Tchangkat Göcham (12); G. Tchano, and Tchangkat Tchano (13); Tchangkat Tchabang or Simpah (14–18), collecting in the environs (hot spring *etc.*); S. Kerbou, S. Plus(s), C. (= kampong) Lassa (19), staying some days, exploring the environs, G. Tchéhèl (24); S. Tchiah, S. Gniong, S. Piah, S. Tomiöl, S. Trap, S. Piah (27); descending S. Piah (28) and proceeding on foot to Léyôn or Lano; following S. Klo, S. Manghö to Kouala Dalla (30); Kouala Könderong (Sept. 1), kp. Padang (2), kp. Körney (3–4), and return to Telok Kouning (4).

COLLECTIONS. 54 Ferns[2] (coll. July–Aug. 1884) and also an amount of phanerogams. The latter were given for study to Mr FRANCHET; possibly a publication resulted. The ferns were *probably* presented to *Kew* in 1885, by R. ZEILLER (see there), the elaborator of the collections. Ferns of his from Persia in *Herb.* BONAPARTE (= *Paris*).

He made zoological collections too.

LITERATURE. (1) J. DE MORGAN: 'Exploration dans la presqu'île Malaise (royaumes de Pérak & de Patani)' (Paris 1886; reprinted from Bull. Soc. normand. Géogr.).

(2) R. ZEILLER: 'Fougères receuillies dans la péninsule malaise par M. DE MORGAN' (Bull. Soc. Bot. Fr. 32, 1885, 12 pp.).

BIOGRAPHICAL DATA. Rev. Archéol. 1924, 19 pp. + portr.; Bull. Mus. Hist. Nat. Paris 30, 1924, p. 437–440; Bull. Soc. géol. Fr. 25, 1926, p. 437–447, incl. geol. bibliogr.; L'Anthropologie 38, 1928, p. 317–345.

Morin, H.

teacher in natural history at the Luitpold Gymnasium at Munich, entomologist, paid a visit to the D.E.I. (see below), chiefly to obtain material to make illustrations for the new edition of 'BREHM's Tierleben'. He spent part of his time in the Foreigners' Laboratory at Buitenzorg.[1]

ITINERARY.[2] *1907. W. Java:* arrival at Buitenzorg (Apr. 23); G. Salak (May 12); Tangkuban Prahu (May 19); Tjibodas (May 23–June 7), climbing G. Gedeh-Pangrango (May 28); mangrove forest near Tandjong Priok (June 10); Tjidadap (June 16–); at Buitenzorg (till the end of June); *Centr. Java:* Djokjakarta (to study the culture of sugar-cane); S. coast near Pundung (also at Karangtritis, = probably Parangtritis); *E. Java:* Soerabaja (July 2), and proceeding to G. Tengger (Tosari, Bromo, *etc.*); *Nusa Kambangan* (July 7–); *W. Java:* Buitenzorg (till the 16th); Batavia, making a trip to Labuan in Bantam; sailing (20) for *Singapore; P. Penang; Sumatra East Coast:* Deli, visiting Kwala Binjei, Tandjong Morawa (Aug.), and

Bandar Baru; *P. Penang* (Aug. 20–21); Ceylon (–Sept. 8).

COLLECTIONS. In his books[2] MORIN mentions the collecting of plants *etc.*, evidently on behalf of the *Luitpold Gymnasium, Munich.*

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 31–32.

(2) H. MORIN: 'Unter der Tropensonne. Streifzüge auf Java, Sumatra und Ceylon' (München); 'Am Indischen Strand' (München 1909).

Morris, Dr

It seems possible that he collected plants with A. MAASS in *Sipora* (*Mentawai Isls*) in *1897*, as MAASS (see there) in his publications on the trip is often using the plural 'we'.

Morrow, James

(1820, Palmetto State, S. Carolina, U.S.A.; 1865, Willington, S. Carolina, U.S.A.), was educated at the University of Georgia, at Athens (B.A. 1843); studied medicine at the University of Pennsylvania (M.D. 1846), from 1848–49 he pursued graduate studies in the Medical College of the State of South Carolina; he seems to have practised at Charleston. He accompanied PERRY's Expedition to Japan (see below) as Agriculturist; after coming home to South Carolina he probably returned to a practice at Charleston; at the end of 1860 appointed Assistant Surgeon in the fort on Morris Island, in 1861 assigned under the Confederate Army to James Island; in June 1865 to Willington.

He was commemorated in *Lonicera* (*Xylosteum*) *morrowi* A. GRAY, and in *Carex morrowi* BOOTT.

ITINERARY. PERRY's *Expedition to Japan, 1852–55.*[1] Commodore PERRY departed from Norfolk, Virginia, on Nov. 24, 1852, o/b the U.S.S. 'Mississippi', and sailed *via* Madeira, St Helena, Cape Town, Mauritius, Point de Galle, and *Singapore*, to Hongkong. Dr MORROW was not appointed until after the Commodore had sailed; he was assigned to the sloop-of-war 'Vandalia',[2] which left Delaware Bay (March 6, *1853*) and sailed *via* Rio de Janeiro, and the Cape of Good Hope; touching at *W. Java:* anchoring in Mew Bay (= Meeuwenbaai, near the SW. extremity) (June 19–27), some excursions on shore (20, 21, 23), crossing to *Mew Island* (? 21), and sailing (28) past Anger-Point (= Anjer); *Singapore* (July 3–11), making several trips; to Macao (establishing headquarters there, with PERRY); Canton, Whampoa, Honan, Great Lew-Chew (= Okinawa), Japan, and back to China; homeward bound aboard the naval storeship 'Lexington' *via W. Java:* Anger Point (= Anjer) (Nov. 4–6, *1854*); down the Straits of Sunda; Cape of Good Hope, St Helena; Brooklyn Navy Yard (Febr. 16, 1855).

COLLECTIONS. He brought home dried and living plants (including some from *Java*), and collected seeds of crop plants. The dried collections were partly sent to ASA GRAY of Harvard University;[3] the specimens had to be returned to the U.S. Patent Office (= *U.S. Nat. Herb. Wash.*) after the classification. The Japanese plants were collected with S. WELLS WILLIAMS, of the American Mission at Macao.

LITERATURE. (1) M. C. PERRY: 'Narrative of the expedition of an American squadron to the China Seas and Japan' (Washington 1856, vol. 2).

(2) A. B. COLE: 'A scientist with PERRY in Japan. The journal of Dr JAMES MORROW' (Chapel Hill 1947, w. ill.).

(3) A. GRAY: 'Account of the botanical specimens. List of dried plants collected in Japan, by S. WELLS WILLIAMS, Esq., and Dr. JAMES MORROW' (in 'Narrative *etc.*', Washington 1856, vol. 2, p. 303–332). W. S. SULLIVANT reported on the mosses, W. H. HARVEY on the *Algae*, Dr BOOTT on the *Carices*, D. C. EATON on the ferns.

BIOGRAPHICAL DATA. A. B. COLE, A scientist with PERRY in Japan, 1947, Introduction p. i–xxvi + portr., and App. xiv–xx, p. 253–268.

Mortensen, Dr Ole Theodor Jensen

(1868, Harløse ved Hillerød, Denmark; x), Head-Curator of the Dept of Invertebrates, Carlsberg Institute, Copenhagen, 1917–33, was the leader of the Danish expedition to the Kai Islands in 1922, sent out by the Rask-Ørsted Fund at Copenhagen.[1]

ITINERARY. *1922. Moluccas. cf. sub* HJ. JENSEN and IBOET. After the departure of JENSEN, MORTENSEN visited *Banda* (May 31–June 21); Makassar (*SW. Celebes;* June 27–29); Java Sea and Sunda Strait (July 13–Aug. 8); Tjibodas and Buitenzorg in *W. Java;* Sunda Strait again (1st week of Sept.).[2]

COLLECTIONS. *cf. sub* HJ. JENSEN and IBOET. MORTENSEN collected plants too, particularly marine phanerogams: in *Herb. Copenhagen.*

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 45.

(2) TH. MORTENSEN: 'The Danish Expedition to the Kei Islands in 1922' (Vidensk. Medd. Dansk naturh. For. 76, p. 55–99; exclusively dealing with marine investigations); 'Lands Plantentuin, Buitenzorg' (Nat. Verden 22, p. 17–23, 5 fig.).

BIOGRAPHICAL DATA. Biogr. Leksikon 16, p. 148–150; in CHRISTENSEN, Den Danske botaniske litteratur 1912–1939, 1940, p. 91.

Moseley, Henry Nottidge

(1844, Wandsworth, Surrey, England; 1891. Parkstone, Dorsetshire, England), zoologist who studied medicine and natural science at Oxford, Vienna, London and Leipsic; member of the famous Challenger Expedition round the world (see below). In 1877 he made a voyage to California and Oregon, and was appointed Professor of Anatomy at Oxford in 1881.

Some plants were named after him.

ITINERARY. *Expedition in the 'Challenger', 1872–76.*[1] Sailing from Portsmouth (Dec. 21, 1872) *via* Madeira, Teneriffe, the West Indies, Madeira, Cape Verde Islands, Brazil, Tristan da Cunha, Cape of Good Hope, Kerguelen Island, Antarctic region, Australia, Friendly Isls, Fiji Isls, New Hebrides, Raine Island (Aug. 31, *1874*); Islands of the Torres Strait (*S of New Guinea*); *Aru Islands:* Dobo on *P. Wamar* (Sept. 16–22, making some excur-

sions on *P. Wokam, Wanumbai, etc.*); *Kei* (= *Kai*) *Islands:* Klein and Groot Kei (Sept. 24–25); *Banda* (Sept. 29–Oct. 1), G. Api being climbed by part of the expedition; *Ambon* (Oct. 4–9); *Ternate* (Oct. 15–16), climbing the Peak; *Philippines: W. Mindanao*, Zamboanga (Oct. 23–25); *Panay*, Ilo-Ilo (Oct. 28–30); *Luzon*, Manila (Nov. 4–10); Hongkong; back in *Luzon*, Manila (Jan. 11–14, *1875*); *Cebu* (Jan. 18–23); *Camiguin* (Jan. 26); *W. Mindanao*, Zamboanga (Jan. 30–Febr. 2); *Malanipa, Malamaui; Basilan* (Febr. 4–5); *North New Guinea:* sailing past the mouth of the Ambernoh (= ? Mamberamo) River (fishing up floating seeds and other botanical material) (Febr. 22); Humboldt Bay (23–24); *Admiralty Islands* (March 3–9)[2] at Nares Harbour, exploring NW. corner of the main island; March 10 sailing for Japan; Sandwich Islands, Hawaii, Sandwich Isls; Juan Fernandez; S. America: Valparaiso, Strait of Magellan, Falkland Isls, Montevideo; Cape Verde Isls; Spithead (May 24, 1875).

COLLECTIONS. *Herb. Kew:* Challenger Expedition 1398, *etc.* (directly dispatched from various ports); *Herb. Brit. Mus.:* 2704 plants Challenger Exp. (pres. 1877/78);[3] *Herb. Berl.:* 94 dupl., according to the statement none from the Malaysian region); *Herb. Vienna:* orchids of the Exp. (with *Herb.* REICHENBACH); *Herb. Cambridge* (with *Herb.* BABINGTON): Challenger Exp., Tristan Group; *Herb. Bot. Gard. St Petersb.* (= *Leningrad*); *Herb. Edinb.:* 24 dupl. *Admiralty Isls etc.* (pres. 1875/76).

The material is in a bad state; the collection was partly identified.[4]

Letters and other documents relating to the expedition in the Library at Kew.

LITERATURE. (1) Sir C. W. THOMSON & J. MURRAY: 'Report on the scientific results of the voyage of H.M.S. Challenger during the years 1873–76, *etc.*'; including the 'Narrative of the Voyage' vol. 1 (2 parts) (1885).

W. J. J. SPRY: 'The cruise of H.M.S. Challenger' (London 1877); 'Die Expedition des Challenger. Eine wissenschaftliche Reise um die Welt' (transl. from English; Leipzig 1877).

H. N. MOSELEY: 'Notes by a naturalist on the "Challenger", being an account of various observations during the voyage, *etc.*' (London 1879). The data given by him sometimes do not agree with those mentioned in the 'Narrative' (*l.c.* see above).

MOSELEY's autograph Journal of natural history observations made during the voyage was presented in 1883 to the Library of the British Museum.

J. W. HEDGPETH: 'The voyage of the Challenger' (Scient. Monthly 63, 1946, p. 194–202, incl. list of all published journals!).

(2) H. N. MOSELEY: 'Notes on plants collected and observed at the Admiralty Islands' (Journ. Linn. Soc. Bot. 15, 1877, p. 73–80) and 'Notes on the various plants made use of as food and as implements, clothing, *etc.* by the natives of the Admiralty Islands' (*l.c.* p. 80–82); *cf.* also 'Report on the scientific results *etc.*' (vol. 1, pt 4, 1885, p. 227–275 and p. 307).

(3) *cf.* Journ. Bot. 1878, p. 179.

(4) Orchids, ferns, *Fungi, Algae, Musci, Hepaticae, etc.*, *cf.* Journ. Linn. Soc. Bot. 14–16, 1875–78.

W. B. HEMSLEY: 'Report on the scientific results of the voyage of H.M.S. Challenger during the years 1873–76. Botany' (vol. 1, London 1884–85). Herein: 'The botany of the South-eastern Moluccas' (*l.c.* vol. 1, pt 3, 1885, p. 101–226); 'Seeds and seedvessels from the sea-beach of the Arrou Islands' (*l.c.* vol. 1, pt 4, 1885, p. 296–298), *etc.*

The diatoms of the expedition are dealt with in Botany vol. 2, 1886.

cf. also HOOK. Icon. Plant. 17, 1887b, *t.* 1694.

BIOGRAPHICAL DATA. Memoir in MOSELEY, Notes by a naturalist *etc.*, ed. 2, with portr.; Proc. Linn. Soc. 1890–92, p. 72; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 36, 1898, p. 443–444, and in 2nd ed. by RENDLE, 1931; URBAN, Symb. Antill., 3, 1902–03, p. 90–91; BACKER, Verkl. Woordenb., 1936.

Moszkowski, Max

(1873, Breslau, Germany; x), physician who travelled in Ceylon and Sumatra in 1907 and later in New Guinea. He made extensive zoological collections, measured skulls, *etc.*

Several plants were named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

ITINERARY. *1907.* He or his collector (*cf. sub* GRASHOFF) was in Djambi (*Centr. Sumatra*) in April. *Sumatra East Coast* (May–June):[1] Siak, Mandau River (up to kp. Balai) and tributaries, Rokan River, Tasik Sorei Lake; ascending the Tapung Kanan (to past Danau Lantjang); the Tapung Kiri; Rokan region; Bt Seligi on the boundary of Siak and Rokan region; to Fort de Kock (*Sum. W. Coast*), and back to the Rokan region; mountain villages on the Rokan Kiri; Rokan Kanan, downstream to Kapanuhan, and from there to Rokan Kiri; through the forest to the Mandau River.—*1910–11. Dutch N. New Guinea:*[2] Cape d'Urville (May 18, *1910*); mapping Wier (= Wair) River; Mamberamo region; short visit to the Van Rees Mts (July); headquarters on the Naumoni River; accident above the Edi Falls, losing everything (Sept. 24); going back (26) to Manokwari, where equipped again, though primitively; Naumoni bivouac (Oct. 6); passing the Edi Falls (Oct. 24) to the Van Rees Mts; mouth of the Zuid River (= Van Daalen River) (Nov. 14), ascending the same and making camp upstream; proceeding (27), returning Dec. 4, his endeavour to reach the snow-mountains failing on account of food shortage; going up a contributary of the Zuid River, returning Dec. 30; junction of the Zuid River with the Mamberamo (Jan. 1, *1911*); Naumoni bivouac (5); mouth of the Mamberamo (10).

COLLECTIONS. *Herb. Berl.:* 139 *nos* from *Sumatra* (bad material + about 20 in the *Show Mus.*) and 433 from *New Guinea; Herb. Leyden: New Guinea* dupl.

The bulk of the *Sumatra* material consists of sterile economic plants.[3] GRASHOFF (see there) collected *Sumatra* plants on his behalf.

An important part of the *New Guinea* collection was lost in January 1911, when descending the Edi Falls. A number of plants were described in the

'Beiträge z. Flora Papuasiens' (ENGL. Bot. Jahrb. 1912→).

LITERATURE. (1) M. MOSZKOWSKI: 'Biologische Notizen aus Zentralsumatra' (Sitz. Ber. Ges. Naturf. Freunde 1908, *no* 4, p. 69–89, 6 fig.); 'Reisen in Ost- und Central Sumatra' (Zeitschr. Ges. Erdk. Berl. 1909, p. 583–608, with 2 maps, pl. 9–10 indicating route); 'Auf neuen Wegen durch Sumatra' (Berlin 1909; with appendices on the zoological collection, the indigenous economic trees (*l.c.* p. 308–311) and the more important medicinal and magic plants (*l.c.* p. 311–312); 'Langs nieuwe wegen door Sumatra' (De Aarde en haar volken 1917, p. 225–279; derived from the former paper!).

(2) M. MOSZKOWSKI: in Zeitschr. Ges. Erdk. Berl. 42, 1910, p. 948–953; 'Vorläufiger Bericht über die Deutsche Mamberamo-Expedition in Niederländisch-Neu-Guinea' (Zeitschr. Ges. Erdk. Berl. 1911, p. 185–192); 'Expedition zur Erforschung des Mamberamo in Holländisch Neu-Guinea' (*l.c.* 1912, p. 271–288, 365–377, pl. 3–5); 'Ins unerforschte Neuguinea, Erlebnisse mit Kopfjägern und Kannibalen' (Ullstein Verlag Berl. Wege zum Wissen, 1928).

cf. also Tijdschr. K.N.A.G. 1910, p. 1256–1257; 1911, p. 323; 1912, p. 535–538.

(3) M. MOSZKOWSKI: 'Botanische Notizen aus den sumatranischen Urwäldern' (Notizbl. Berl. Dahl. 5, 1908, p. 80–82). See also E. GILG: 'Bemerkungen zu den "Botanischen Notizen" des Herrn Dr MOSZKOWSKI' (*l.c.* p. 82–84).

Motley, James

(? , ? Isle of Man, near Ireland; 1859, murdered by Mohammedan natives at Bangkal near Bandjermasin, Borneo), a civil engineer who went to Labuan (1851 or '52)[1] in connexion with coal-mining there and in 1854 was appointed Superintendent of the coal-mining operations of a private company in the territory of the Sultan of Bandjermasin of the mine 'Julia Hermina' near kp. Kalangan, N of Banjoe (Banyu) Irang, SE. Borneo.

He is commemorated in *Barclaya motleyi* HOOK. *f.* and in several other plant names.

LOCALITIES.[2] *1851–54. NW. Borneo: Labuan* and the adjacent coasts of Borneo.[3] About *1852* visiting *Singapore.*[4]*—1854. Centr. E. Sumatra:* when on the way from Singapore to Sumatra in a 'sampan' (Jan. 16), touching at *c.* 30 islets of the *Riouw-Lingga Archipelago*, not reaching Sumatra, however; making a 2nd endeavour (Jan. 24) with a large proa, sailing into the northern mouth of the Indragiri (= Koeantan) (26); going up to P. Pullas (27); passing the contributary Chenaku (= Tjenako); settlement Pulo Jumahat; P. Kamudi; P. Lys (30); kp. Seligi; Rangat (= Rengat) (till Febr. 3). *W. Java:* coming to Java for the 1st time (*c.* July) to arrange all matters with the Dutch company which worked the mines of the D.E.I.; when having to remain 6 weeks, he took the opportunity of going into the mountains, first spending several days in the Botanic Garden at Buitenzorg; staying a week at Ivegoe (4000 ft, situated 20 miles from Tjipanas; this is probably Toegoe); Chepanas (= Tjipanas); G. Gedeh-Pangrango (Tjibodas, summit G. Pangrango and Tjibeureum); visiting Java for the 2nd time (Oct.), staying with Dr BURGER at Batavia, when on the way to Borneo.[5]*—1854–59. SE. Borneo:* in the environs of Bandjermasin, collecting on 'padangs', *etc.*

COLLECTIONS. *Herb. Kew* (pres. 1852–64), probably partly sent by himself,[2] but too by E. BARBER SCOTT (sometimes E. BARBER, or E. BARBOUR) who, after MOTLEY's departure from Labuan, purchased his collections made till 1854 and presented them to Kew, 1300 *nos* in all. Also in *Herb. Cambridge. Frullanias* in *Herb. N.Y. Bot. Gard.*

In *Sumatra* and *Java* he especially collected mosses, hepatics and lichens, as it was impossible during his hurried trips to dry other plants. In 1854 he started making sets of grasses, *Cyperaceae* and ferns, but collected other cryptogams and phanerogams too. He cultivated many *Borneo* orchids, making herbarium specimens when flowering.

Part of his collections will have been lost by fire at the time of the murder.

He was interested in economic plants too; several plants were described.[6]

LITERATURE. (1) According to HOOK. Journ. Bot. & Kew Gard. Misc. 4, 1852, p. 201, he was in *Labuan* as early as May 1851, from where he sent material of the camphor-tree to W. J. HOOKER.

(2) Extracts of letters of J. MOTLEY to W. J. HOOKER and W. MITTEN giving details on various trips in the Malayan Islands, in HOOK. Journ. Bot. & Kew Gard. Misc. 7, 1855, p. 39–47, 78–84, 161–172, 257–269, 289–296 and *l.c.* 9, 1857, p. 148–153.

(3) J. MOTLEY & L. L. DILLWYN: 'Contributions to the natural history of Labuan and the adjacent coasts of Borneo' (1855; dealing with mammals, birds and reptiles); *cf.* also MOTLEY in Journ. Ind. Archip. 1852.

(4) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 190.

(5) *cf.* Abridged translation of MOTLEY's letters on Java in DE VRIESE: 'Tuinbouwflora' (2, 1855, p. 334–339). This extract erroneously leads one to suppose that the visit to the mountains took place during the 2nd stay!

(6) W. J. HOOKER: 'On the Camphor-tree of Borneo and Sumatra, Dryobalanops camphora COLEBR.' (HOOK. Journ. Bot. & Kew Gard. Misc. 4, 1852, p. 200–206, pl. 7–8).

J. D. HOOKER: 'Illustrations of the floras of the Malayan Archipelago, and of tropical Africa' (Transact. Linn. Soc. Lond. 23[1], 1860, p. 155–172, pl. 20–28).

W. H. DE VRIESE: 'Aanteekeningen betreffende getahpertja boomen (Sapoteën), en getahpertja van Zuidoostelijk Borneo, naar aanleiding van ontdekkingen van JAMES MOTLEY' (Nat. Tijdschr. N.I. 21, 1860, p. 299–315).

BIOGRAPHICAL DATA. Nat. Tijdschr. N.I. 18, 1859, p. 455 and *l.c.* 21, 1860, p. 299 and 369; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 28, 1890, p. 52, and in 2nd ed. by RENDLE, 1931; Journ. Str. Br. Roy. As. Soc. *no* 79, 1918, p. 37–38; BACKER, Verkl. Woordenb., 1936.

Moulton, John Coney

(1886, St Leonards in the West-Country, Eng-

land; 1926, London, England), major in the British Army, amateur entomologist-ornithologist-mammologist; Curator of the Sarawak Museum, 1905–15, and founder of the Sarawak Museum Journal in 1911; joining his regiment from 1915–16 serving in India, coming to Singapore serving as staff officer until 1919. In July 1919 he was appointed Director of the Raffles Museum and Library, Singapore, resigning in 1923, to return to Sarawak as Chief Secretary of the Government, *etc.* He took his D.Sc. (Oxon.) in 1924. According to the obituary, he visited Borneo twice while in charge of the Raffles Museum.

Besides the below-mentioned papers, he published on Borneo birds in the Sarawak Gazette, 1913–14.

The genus *Moultonianthus* MERR. and many species of plants were named after him.

COLLECTING LOCALITIES. *NW. Borneo*, Sarawak. *1909.* Banting and Simanggang Distr. (May); Lawas Distr. (Aug.–Sept.); Mt Penrissen (end of Nov.).[1]—*1910.* Up the Limbang River, in an endeavour to reach Mt Batu Lawi (March–Apr.); short excursions to Bintulu and the Samarahan Distr. (10 days each); Mt Matang, Santubong and Upper Sarawak (day or 2 each).—*1911. Expedition to Mt Batu Lawi* on the headwaters of the Limbang River:[2] leaving Kuching (May 2), Limbang (5), up-river journey from Bidang (7–16), reaching upper waters of the Madihit (17), overland journey, climbing Mt Turan, Mt Derian, Mt ? Selinguid; Batu Lawi (29–30), reaching 600 ft below the summit; Kalabit (June 3); the Dayak collectors returning down the Mahidit and Limbang River; MOULTON to the Seridan River behind the Molu Range, down the Mago River, across country to a tributary of the Apoh and down into the main Baram River (15), spending a month at Claudetown; Kuching (July 17). Mt Klingkang at the head of the Simunjan River (Oct.); Mt Matang, Santubong and Satang.—*1912.* Fortnight on Mt Serambu (Jan.).—*1913.* Mt Poi (Apr. 15–20; also on the summit, G. Rumput);[3] *Expedition to Mt Kinabalu* (*Br. N. Borneo*) *via* Tampassuk Road, Kiau (Aug. 8–Oct. 16),[4] reaching the summit Aug. 25, staying 6 weeks on the mountain at different altitudes, making camp near the summit (Pakka camp) (5 days), at Kamborangah (5 days), Lobong (Sept. 3, staying a week), at the entrance of the Minitindok Gorge, exploring the NW. spur (Marei Parei), and returning to Kiau, *etc.*—*1914.* Headwaters of the Sadong River and Mt Merinjak, return journey across the foot of Mt Penrissen and down the Sarawak River.[5] Upper Baram River, reaching the first Kalabit village at the head of the Akar River, but having to return on Nov. 19; staying 11 days on Mt Merinjak on the Dutch border.—*1920.* 2nd Attempt to reach the Kalabit Country (Oct.), which neither met with success, and the expedition soon returned;[6] according to MJÖBERG he was about Lio-matu and on the mountains to the north of it.

On G. Lingga, situated 4 miles from the sea and 100 from Kuching, he had collecting done at 2–3000 ft by 2 Dyak collectors.

COLLECTIONS.[7] In *Herb. Sarawak*, including many ferns; from Mt Kinabalu 120 *nos;* he also employed native collectors. Dupl. in *Herb. Sing.* and some in *Herb. Bog.; Herb. Manila: c.* 3000 specimens, collected by Dyaks (1911–15) and 296 MOULTON dupl. (pres. 1921). Other collections by the Dyak collectors made at the expense of Prince BONAPARTE (= *Herb. Paris*) (1914–. .) and *Herb. Sing.* (1914–. .); *U.S. Nat. Herb. Wash.:* 4 *Borneo* plants.

LITERATURE. (1) J. C. M.: 'Mount Penrissen' (Sarawak Gazette 40, 1910, p. 5–7).

(2) J. C. MOULTON: 'An expedition to Batu Lawi' (Sarawak Gazette 41, 1911, p, 148–151); 'An expedition to Mount Batu Lawi' (Journ. Str. Br. Roy. As. Soc. *no* 63, 1912, p. 1–104 + map, incl. lists of plants *etc.*).

(3) J. C. MOULTON: 'Some notes on a short collecting trip to Mt. Poi, Sarawak, undertaken recently by the Raffles Museum, Singapore, and the Sarawak Museum' (Journ. Str. Br. Roy. As. Soc. *no* 65, 1913, p. 1–12).

(4) J. C. MOULTON: 'A collecting expedition on Mt. Kinabalu' (Sarawak Gazette 43, 1913, p. 248–250, 262–264); *cf.* also in his 'An account of the various expeditions to Mt Kinabalu' (Sarawak Mus. Journ. *no* 6, 1915, p. 137–176, 1 map and literature).

(5) *cf.* Zoologist for Oct. and Nov. 1914; Sarawak Gazette 44, 1914, p. 136–137.

(6) *cf.* Rep. Sarawak Mus. for 1914, 1915, p. 3 and Rep. Raffles Mus. for 1920.

(7) H. N. RIDLEY: 'Some plants collected on Mr. MOULTON's expedition to Batu Lawi (Borneo)' (Journ. Str. Br. Roy. As. Soc. *no* 63, 1912, p. 59–63).

F. O. BOWER: 'Studies in the Phyl. of Filicales V. Cheiropleuria bicuspis (BL.) PR., and certain other related ferns' (Ann. Bot. 29, 1915, p. 495–529; material coll. by MOULTON on Mt Poi in Apr. 1913).

Ferns (collected by the Dyak collectors and partly by MOULTON) in BONAPARTE, Notes ptéridol., fasc. 1, 1915, p. 211–212; *l.c.* 4, 1917, p. 107–112; *l.c.* 7, 1918, p. 397–405; and *l.c.* 13, 1921, p. 221–226 (coll. MOULTON 1920).

cf. also Sarawak Mus. Journ. 2, 1915, p. 177 and *l.c.* 2, 1916, p. 277–286; Not. Roy. Bot. Gard. Edinb. 8, 1915, p. 349–356 and *l.c.* 13, 1921, p. 188; and Journ. Str. Br. Roy. As. Soc. *no* 85, 1922 (collection Upper Baram).

BIOGRAPHICAL DATA. Who's who 1913; Journ. Mal. Br. Roy. As. Soc. 4, 1926, p. 264–265; BACKER, Verkl. Woordenb., 1936.

Mousset, J. P.

of Nongkodjadjar (G. Tengger, E. Java), owner of a nursery (*cf. sub* BUYSMAN), sold sets of plants, collected by him in the neighbourhood.

Some plants were named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTING LOCALITIES. *190.–191. . E. Java:* principally on G. Tengger, also on G. Kawi; *Centr. Java:* Poerwodadi.—According to Miss KOSTER,[1] he collected on *P. Alkmaar* in the Bay of

Batavia, *W. Java;* as nearly all of the collecting was done in E. Java, it seems rather out of the way, the locality might be the s.f. Alkmaar in *E. Java.*

COLLECTIONS. About 1200 *nos*, probably in many specimens. *Herb. Stockholm:* Tengger plants; *Herb. Berl.:* 50 *nos* of ferns and 223 siphonogams; *Herb. Bog.; Herb. Leyden: Java* ferns and phanerogams (purch. from C. MÜLLER); *Herb. Wageningen:* 98 phaner. and 112 ferns G. Tengger (coll. 1910–13) (purch. from C. MÜLLER); *Herb. Univ. Amsterdam: 'Herb. javan.'* (purch. from C. MÜLLER); *Herb.* BONAPARTE (= *Paris*): *Java* ferns;[2] *Herb.* DELESS. (*Geneva*): 160 *nos* from *Java* (purch. 1922/23); *U.S. Nat. Herb. Wash.:* 237 *Java* plants, incl. 143 *Filices Javae exsicc.* ROSENSTOCK; *Herb. Turin:* 14 *Java* ferns; several fern dupl. in *Herb. Sydney.*

As he sold sets of plants, they are likely elsewhere too. In the years 1925/26 Tengger plants were offered for sale by TH. OSW. WEIGEL; in his advertisement no collector's name was mentioned, but it seems probable that the plants were collected by MOUSSET.

LITERATURE. (1) *cf.* Blumea 1, 1935, p. 413 (*no* 527a, *Vernonia cinerea* (L.) Less. *var. parviflora* (BL.) DC.).

(2) Several described in BONAPARTE, Notes ptéridol.

Moxon, Captain

COLLECTIONS. *Herb. Calcutta* (after dispersal of the E.I.C. Herb.): small collection of rare and interesting *Malacca* plants.[1] Evidently some duplicates in *Herb. Bog.*[2]

LITERATURE. (1) *cf.* Journ. As. Soc. Beng. 25, 1856, p. 411; HOOK. Journ. Bot. & Kew Gard. Misc. 9, 1857, p. 35.

(2) *cf.* DANSER in Bull. Jard. Bot. Buit. sér. 3, vol. 9, 1928, p. 370.

Moysey, Louis (or Lewis)

came to the Malay Peninsula from India, and now has left; amateur botanist.

Licuala moyseyi FURTADO was named after him.

COLLECTING LOCALITIES. *Malay Peninsula:* near Kota Tinggi, Johore (*c. 1935–36*); G. Padang in Trengganu (*c.* May *1937*).[1]

COLLECTIONS. *Herb. Sing.*, from G. Padang collected together with KIAH (see there). Probably in *Herb. Harvard Univ.* (*Arnold Arbor.*, GRAY, and FARLOW) too.[1]

LITERATURE. (1) *cf.* Chron. Bot. 4, 1938, p. 251.

Mudispacher, *cf. sub* Conservator of Forests series, Kepong.

Müller, Ir

COLLECTIONS. *Herb. Bog.:* 20 *nos* of orchids from Tapanoeli, *W. Sumatra*, collected in *1937.* Possibly identical with Dr K. W. MÜLLER (see there).

Müller, C., *cf. sub* MOUSSET.

He probably sold the latter's *Herb. javanicum*, about 1913.

Mueller, Sir Ferdinand Jacob Heinrich von

(1825–96) (biogr. data *cf.* BACKER, Verkl. Woordenb., 1936, *sub* ferdinandi muelleri). Sometimes he is cited as the collector of *New Guinea* plants. He himself *never* was in that island, but distributed many duplicates, including New Guinea plants from several collectors, from the *Melbourne Herbarium.* In a similar manner 4220 plants from Australia and New Guinea were presented by VON MUELLER at various dates from 1863 onwards to the *Herb. Brit. Mus.*, though part of the Australia plants might have been collected by himself. According to WARBURG his labels often lack the name of the actual collector.[1]

LITERATURE. (1) *cf.* Ber. D.B.G. 15, 1897, Gen. Vers. Heft p. (60).

Müller, George

(1790, Mainz, Germany; about Jan. 1826, near the Upper Kapoeas, Borneo), ex-engineer in the army of Napoleon, who came to the D.E.I. towards the end of 1816, to enter the military force as captain of the infantry, probably not arriving in Java before mid-1817. In September 1818 he accompanied a military expedition to Sambas in W. Borneo, where he was appointed Acting Resident in 1818. In 1819 or 1820 appointed Inspector of the nutmeg and clove plantations in Banda, not reaching the island before the end of 1820 or early in 1821, owing to a lot of trouble, and even then at his own expense! In 1822 he sailed for West Borneo, as Inspector of the Interior, to make natural history and topographical investigations.[1]

ITINERARY. *W. Borneo. 1822.* To Pontianak (Nov. 8) and by sea to the Bay of Succadana (= Soekadana); Simpang (16) and going up the river to the village of that name: setting out (26) to Matan; Katapan or Matan River (29); Bengadong; at the mouth again (Dec. 4); Bay of Datoe (Dec. 10–15); Bay of Soekadana, Simpang; leaving the mouth of the Simpang (24) and following the Mendauw (= ? S. Mendawak), taking a short cut to Pontianak (Dec. 30).[2]—*1823.* Going up part of the Sambas River (end of June) and back to Panakat (= Pamangkat); by sea to the North, Paloh, Likoe, Tg Api (July 7), Tg Datoe(k), mouth of the Redjang River, (touching at Tg Datoek again on the home voyage between Aug. 10 and 12);[3] Sambas (till the end of Nov.); surveying the mouth of the Sg. Sambas and the adjacent coasts (till Dec. 14); Pontianak (Dec. 27, 1823–*c.* Jan. 25, *1824*).[4]—*1824.* Leaving Pontianak (*c.* Jan. 25), ascending the Kapoeas; Succalanding (= Soekalanting) (27–28); P. (D)Jamboe (31); surveying some small lakes; kp. Tajan (Febr. 4–6); surveying some lakes again; Meliau (8); Sanggouw (= Sanggau) (12); Sekadou(w) (21); Sintang (March 6); Si(l)lat (18); Tauang or Swait (= Soehaid); ascending the Sg. Tauang (= Sg. Tawang) and surveying several lakes, including Danau Sintarrong (= Sentaroem ?); Salimbouw (= Selimbau) (Apr. 3–4); D(j)onkong (6); Boen(n)oet (8); mouth of the S. Sibau (13), returning to Pontianak on account of difficulties risen, after having performed several soundings on the way thither; Meliau (July 15) and after that

staying at Pontianak (till mid-Aug.).[5] In the same year he returned to Java (Batavia), where he was unable to work out his notes on account of illness. —*E. Borneo. 1825.* Sailing from Soerabaja (May); touching at several places and surveying the coast of E. Borneo; Kottee (= Koetei) was reached not before 4 months later; navigating the Kottee River (= Mahakam) for about 2 months, to Kajong or Ledjoe and proceeding by land to the Kapoeas River (the journey covering a good month); downstream the Kapoeas by proa, where M. was probably murdered in Jan. 1826 (testimony of a Javanese).[6]

COLLECTIONS. On behalf of BLUME, probably in *Herb. Leyden.* Plants of his were described by both BLUME and MIQUEL.[7]

LITERATURE. (1) C. L. BLUME: 'Toelichting aangaande de nasporingen op Borneo van G. MÜLLER' (De Indische Bij 1, 1843, p. 103–176).

G. MÜLLER: 'Proeve eener geschiedenis van een gedeelte der Westkust van Borneo' (*l.c.* p. 197–319, 321–375).

(2) *cf.* De Indische Bij 1, 1843, p. 219–258 (the year of the trip erroneously stated as 1823).

(3) BLUME in *l.c. sub* 1, published notes of MÜLLER on Somoratou, Sarawak, Sadong, Kali Lupar, Sanibas and Melanauw; evidently partly from inquiries. According to POSEWITZ (in 'Borneo' 1885), M. surveyed kali (= river) Redjang.

(4) *cf.* Indische Bij 1, 1843, p. 129–152.

(5) *cf. l.c.* p. 154–162.

(6) *cf. l.c.* p. 166–171.

(7) *cf.* MIQUEL, Analecta botanica indica, *pars* 1.

BIOGRAPHICAL DATA. 'Massacre of Major MULLEN (so written) and his party' (in J. H. MOOR: 'Notices of the Indian Archipelago, and adjacent countries, *etc.*', Singapore 1837, p. 62–63; copied from the Sing. Chron. May 1831); De Indische Bij 1, 1843, p. 177–196, *cf.* also p. 173–174; Tijdschr. Ind. Taal-, Land- en Volkenk. 3, 1855, p. 487–494; Tijdschr. Ned. Ind. 18^2, 1856, p. 287–312; Encyclop. N.I. 2, 1918.

Müller, Dr K. W.

German, for several years on the staff of the Research Department Office HARRISON & CROSFIELD, Paya Pinang Estate (Tebing Tinggi, Deli, Sumatra). At the outbreak of World War II he was dismissed by the English firm and worked for some time with the Rubber Restriction. He must have been interned by the Dutch in 1940. In his spare time he made trips to Tapanoeli, Island of Nias, *etc.*

COLLECTIONS. *Herb. Bog.:* 2 *nos* from Aek Loba East, Upper Asahan, *Sumatra East Coast* (Febr. *1933* coll.); *cf.* also *sub* Ir MÜLLER.

Müller, Salomon

(1804, Heidelberg, Germany; 1864, Freiburg, Baden, Germany), arrived at Batavia in 1826 and was placed at the disposal of BOIE and MACKLOT of the 'Natuurkundige Commissie' (Commission for Natural Sciences) as taxidermist; in 1835 appointed as a member of the 'Commissie'. In April 1837 he returned to Europe; after his return he worked out the results of his investigations.[1] When the Commission was discontinued in 1850, he was pensioned off.

ITINERARY. *1826–27. Java;* ascent of G. Pangrango in *W. Java* (1827).—*1828–29. Voyage in the corvette 'Triton'* (detailed itiner. and liter. *cf. sub* ZIPELIUS and MACKLOT) to *New Guinea* and *Timor.* In the latter island the members of the 'Natuurkundige Commissie' were left behind at Koepang in Oct. 1828, to stay there a good year. MÜLLER gave a description of the following trips (*cf.* Timor *sub* Liter. 1): with MACKLOT in eastern direction following the seashore to Manikie (Nov. 1, *1828*); sojourn at Babauw (= Babao), Pritti (= Pariti) and neighbouring regions (end of Nov.–Dec.); from Pariti making several tours to the neighbouring mountains; Amarassie and Amabie; penetrating into the interior with MACKLOT and VAN OORT (Aug. 23, *1829*), from Babao past Noekoeroes, near the river Oeël, to the foot of Fatoe Benkoole; Kota Amarassie (26); to the Noi Noni (Gold River) (27); Pasie; following a flat ridge along the Netem Oeët; *via* Nefo to Molo (30); plain of Wienoto at the SW. side of G. Mieomaffo (Sept. 7–30): Masimata (army camp of Ambenoe) (till Oct. 2); dry bed of the Noi Lelo, mountain plain Kelamnela, 2 small plains W of it, Kekkoen and Bakasiesie; Fatoe Neitassie and basin-shaped valley Anabahat (till Oct. 4); western side of Netem Malieas, a plain traversed by the Soepoe; proceeding in western direction to the rock Lelogama; along river Oben; banks of the Noi Nitie (Oct. 7–9); to Pariti (10). *P. Kambing,* N of Timor, was visited too (1829).—*1831.* N. coast of *Java; W. Java:* G. Gedeh with KORTHALS (see there) (Sept.).—*1832. W. Java:* Tjassem (= Tjiasem) (Apr. 29), Pamanoekan (May); Lembang, climbing G. Tangkoeban Prahoe (Sept. 15–19).[2]—*1833. W. Java:* with VAN OORT in Priangan Res.[3] at Lewie Gadja (Jan. 3–14); Tji(e)li(e)lin (15–19), on G. Loemboeng *etc.;* Tjiewiedé (= Tjiwidej) (Jan. 20–Febr. 9), climbing G. Patoeha (Jan. 30); Gamboeng (Febr. 10), on the slope of G. Tiloe; Bandjaran (Febr. 11–March 10), G. Tangkoeban Prahoe, Lembang; Bandoeng; G. Malabar (Apr.).—*1833–35. Sumatra West Coast.* With KORTHALS (itiner. *etc.* see there; only partially identical); VAN OORT too accompanied this tour till his death. MÜLLER made a trip by boat (Jan. 1834) to Boengoes Bay, and back to Padang (Apr.); early in May he joined KORTHALS *c.s.* on the Singalang; end of Nov. with the latter to the Padang Highlands for the ascent of G. Merapi and a visit to the 10 kottas; after return at Fort de Kock, alone to Pajakombo and to the 50 kottas in the Padang Highlands.[4]—*1836. W. Java:* G. Gedeh-Pangrango (May) with KORTHALS and HORNER.[5] In the same year (July 28–Dec. 17) with both of them to *SE. Borneo* (*cf.* detailed itiner. *etc. sub* KORTHALS). M. collected on the Troe and Palandau River, a tributary of the Kar(r)au.

COLLECTIONS. Mainly zoological, but he collected some plants too, to my knowledge in *SE. Borneo* (Doesoen Lands) only. *Probably* in *Herb. Leyden.* Some dupl. in *Herb. Munich.*

Plants of his were described by BLUME, MIQUEL and KORTHALS.

LITERATURE. (1) Many of his treatises were published in TEMMINCK, Verh. Nat. Gesch. d. Nederl. Overz. Bezittingen, 1839–44, vol. Land- en Volkenkunde, *e.g.*: 'Over Nieuw Guinee' (*l.c.* p. 1–80; report on the voyage in the 'Triton' and descriptions of the vegetation from observations of the late ZIPELIUS in SW. New Guinea near Triton Bay); 'Over Celebes, Boeton, Ambon en Banda *etc.*' (*l.c.* 83–128); 'Over Timor *etc.*' (*l.c.* p. 131–312); 'Over Zuid Borneo' (*l.c.* p. 323–446); 'Gezigten van bergen, kraters en eilanden van Java, Sumatra en de straat Sunda' (*l.c.* p. 447–469). Besides, author of 'Über den Charakter der Tierwelt auf den Inseln des Indischen Archipels, ein Beitrag zur zoologische Geographie' (Arch. f. Naturgeschichte 12, I, 1846); 'Reizen en onderzoekingen in den Indischen Archipel, tusschen de jaren 1828 en 1836' (Amsterdam 1857, 2 vols, edited by the Kon. Inst. Taal-, Land- en Volkenk.).

(2) *cf.* Verh. Bat. Gen. K. & W. 16, 1836, p. 131–156.

(3) S. MÜLLER & P. VAN OORT: 'Aanteekeningen gehouden op eene reize over een gedeelte van het eiland Java in den aanvang van het jaar 1833' (Verh. Bat. Gen. K. & W. 16, 1836, p. 83–156).

(4) S. MÜLLER: 'Aanteekeningen over de natuurlijke gesteldheid van een gedeelte der westkust en binnenlanden van Sumatra' (Tijdschr. Nat. Gesch. & Physiol. 2, 1835, p. 315–355); 'Berigten over Sumatra' (De Gids, afd. Wetensch. Bijdr., 1837, p. 1–35); 'Bijdragen tot de kennis van Sumatra, bijzonder in geschiedkundig en ethnographisch opzigt' (Leiden 1846).

'Fragmenten uit de reizen en onderzoekingen op Sumatra, gedaan op last der Ned. Ind. Regeering (1833–1838), door S. MÜLLER en L. HORNER, Leden der Natuurkundige Commissie in Ned. Ind. en bewerkt door eerstgenoemde' (Tijdschr. Taal-Land-, en Volkenk. 2, 1854, p. 212–271; *l.c.* 3, 1855, p. 65–72, 193–249, 313–388).

(5) *cf.* Verh. Bat. Gen. K. & W. 17, 1839, p. 3.

BIOGRAPHICAL DATA. Encyclop. N.I. 2, 1918; BACKER, Verkl. Woordenb., 1936, *sub* mulleri and muelleri).

Mullem, D. van

(1863, Hellevoetsluis, Z.H., Holland; 1941, Depok, Java), went to the D.E.I. in 1888 and was appointed Assistant on a tobacco estate of the Rotterdam-Siak Planting Comp.; shortly after he settled in Java, first as draughtsman of an irrigation-brigade at Cheribon and subsequently employed in the sugar and coffee-culture. Also ex-teacher at a technical school at Batavia. Since 1915 living at Depok, south of Batavia.

Arachnis vanmullemii J.J.S. was named after him.

COLLECTING LOCALITIES. *Java, till 1931; Ceram:* Piroe (June *1928*).

COLLECTIONS. *Herb. Bog.:* 3 *nos* from *Ceram*, and probably other plants.

He repeatedly sent plants to *Hort. Bog.*, mainly orchids and teratological specimens.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Muller, L.

District Officer who sent some species of pepper to *Herb. Bog.* in *1890*.

Muller, S., *cf.* MÜLLER, S.

Muller de Montigny

COLLECTIONS. *Herb. Bog.:* some plants from Djampangkoelon on the S. coast of *W. Java* (June 19, *1900*), one of them numbered in the H.B. series, the others in the *Herb. bot. var.* series of KOORDERS.

Muñoz, José

is cited as the collector of 2 cultivated grasses in *Negros, P.I.* (*1904*) (*cf.* Philip. Journ. Sci. vol. 1 Suppl., 1906, p. 358, 365).

Murphy

COLLECTIONS. *Herb.* DELESS. (*Geneva*): 112 *New Guinea* plants (pres. between *1919–21*).

Murton, Henry James

(1853, Cornwall, England; 1881 or 1882, Bangkok, Siam), gardener, trained at Kew, 1872–73; from 1875–80 Superintendent of the Singapore Botanic Gardens. After his dismissal he went to Bangkok in 1881 and received an appointment in the Royal Gardens there.

Author of a Catalogue of the Singapore Botanic Gardens;[1] his MS. on the Flora of Singapore got lost.

The genus *Murtonia* CRAIB and some other species of plants were named in his honour.

ITINERARY. *Malay Peninsula. 1876.* Expedition to Kedah (Quedah), *Penang*, and the neighbouring States (foot of Kedah Peak) (early in the year).—*1877.* G. Pulai (SW. Johore) with BURBIDGE (Aug.). *Trip in Perak:*[2] starting from Singapore (Oct. 9); *Penang* (14); Matang (15); Taiping; setting out (Oct. 19) for the ascent of Taiping Hills with LOW; descent (22) back to Taiping; Bt Gantang (25); Gapis (26); Bt Pondok (27–28); leaving Gapis for Kwalla Kangsa (= Kuala Kangsar) (staying 30–31); G. Sayong (Nov. 1); Kwalla Kangsa; Gapis (4–6); *via* Bt Gantang and G. Chey (8), to the peak of G. Bubo (= Bubu) (10); Gapis (14); Kwalla Kangsa (15); Blanja (16–18); Kinta (19–20); Pankalan Bahru (21); G. Maisa, Qualla Dipang (22); left bank Kampar River, limestone hills (23); Nasi Sabut (24); leaving Qualla Dipang down the river to Palei (26); Bujong Malacca (26–27); Qualla Dipang-Kinta (28); around Kinta (29–30); Epoo (= ? Ipoh) (Dec. 1), Jellapong; Sunghie (= Sungei) Meru, S. Akhar and S. Bawya, Kwalla Kangsa (staying 2–4); Sayong, G. Panjang (5); leaving for Taiping (6); Hijou Range (8–9), Taiping, Matang; *Penang* (11); Singapore (16).—*1879.* In May a short trip up the Muar River (Kedah).—In the years *1875–81* many times collecting in *Singapore Island.*

COLLECTIONS. *Herb. Kew:* 318 *nos* (pres. 1878–82), incl. 140 Siam plants. According to KERR (see below-cited biogr.) apparently no duplicates. He destroyed what he had retained at Singapore.[3] A few plants, chiefly ferns, in *Herb. Sing.*[4]

Living plants presented to *Hort. Bog.* in *1879*.

LITERATURE. (1) *cf.* Rep. Bot. Gard. Sing. for 1875, App. IV, and 'Catalogue of the plants under cultivation in the Botanical Gardens, Singapore, Straits Settlements' (Govt Printing Office, Singapore, 1879).

(2) *cf.* Str. Settlem. Govt Gazette Febr. 22, 1878.

(3) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 128.

(4) *cf.* RIDLEY in Journ. Str. Br. Roy. As. Soc. *no* 33, 1900, p. 35.

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 36, 1898, p. 444, and in 2nd ed. by RENDLE, 1931; Journ. Kew Guild 1899, p. 32 (portr.); BACKER, Verkl. Woordenb., 1936; KERR in Journ. Thail. Res. Soc. Nat. Hist. Suppl. 12, 1939, p. 18–19.

There is discrepancy as to his year of death, according to the first two references it is 1881, according to KERR 1882; as KERR especially dealt with the Siam period of MURTON's life, he may be right; his statement that M. died at the age of twenty-six does not agree, however, with the year of birth.

Musgrave, Mrs

? wife of A. MUSGRAVE, Government Secretary of P. Moresby, SE. New Guinea.

Endotrichella musgraveae was probably named after her.[1]

COLLECTIONS. Mosses from *Brit. New Guinea = Papua* (*1897*), in *Herb.* BINSTEAD (= *Kew*).[2]

Up till now no evidence of collections of phanerogams.

LITERATURE. (1) *cf.* Öfv. Finska Vet. Soc. Förh. 42, 1899/1900, p. 91–128.

(2) *cf.* Journ. Linn. Soc. Bot. 45, 1922, p. 502 and 504.

Musschenbroek, Samuel Cornelis Jan Willem van

(1827, The Hague, Holland; 1883, Leyden, Holland), Doctor of Law, educated at Leyden University; in 1855 he came out to the D.E.I. as official in the Civil Service; for a long time stationed in Kedoe (Centr. Java), from 1867–73 Assistant Resident at Buitenzorg (W. Java), subsequently Resident of Ternate (Moluccas), and from 1875–76 at Manado (N. Celebes). He had a keen interest in natural sciences.[1]

He is commemorated in *Ptychosperma musschenbroekiana* BECC. as a token of gratitude for the assistance given to BECCARI, when travelling in the Moluccas.

COLLECTIONS. From *Ternate* he sent plants to *Hort. Bog.* (acq. *1876*).

He collected in all fields of natural history, but specially ornithologically.

LITERATURE. (1) Author of 'Oost-Indische houtsoorten' (Volksvlijt 1867, p. 269–289; botanical and vernacular names); 'Iets over de fauna van Noord-Celebes en zijn naaste omgeving' (Nat. Tijdschr. N.I. 36, 1876, p. 376–384).

BIOGRAPHICAL DATA. Ind. Gids 5^2, 1883, p. 1014; Tijdschr. K.N.A.G. 2nd ser. 4, 1887, p. 176–206, 320–382; Encyclop. N.I. 2, 1918; BACKER, Verkl. Woordenb., 1936.

Mijer, Pieter

(1812, Batavia, Java; 1881, Scheveningen, Z.H., Holland), from 1866–72 Governor-General of the D.E.I.

COLLECTIONS. *Herb. Bog:* material of *Rafflesia patma* BL.; *Hort. Bog.:* living specimens of 'Widjojo Koesomo', both collected on a voyage through *Java* in *1868*.

BIOGRAPHICAL DATA. Levensber. Mij d. Ned. Letterk. 1884, p. 71; Encyclop. N.I. 2, 1918.

Mijer Jr, P.

District Officer in the division of Agam, Fort de Kock (*Sumatra West Coast*), sent plants to *Hort. Bog.* in *1871*.

Myer Drees, *cf.* MEIJER DREES, *sub* Collections.

Mijnbouw Mij Billiton, *cf. sub* Forest Research Institute, Buitenzorg.

N.G.F., *cf. sub* New Guinea Forces.

Nagel

(sometimes erroneously NAGLER). Probably identical with the official of the D.E.I. Civil Service C. WILHELM AUGUST NAGEL (see below *sub* Collections) who climbed G. Goentoer in July 1837 in company with JUNGHUHN and once more on Aug. 9, 1844; *cf.* also *sub* G. H. NAGEL!

Several plants were named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. *Herb. Berl.:* lichens and 425 *nos* of siphonogams from *Java* (pres. 1858). Some of them described in WARBURG, Monsunia (1900).

ZOLLINGER acquired plants from the inheritance of the murdered (± 1845/46) Assistant Resident VAN NAGEL who made all of his collections in Priangan Regency.[1] This is evidently the W. A. NAGEL of the registers of the Dutch Government (1793 or 1794, Hoyel, Hannover, Germany; Jan. 3, 1846, ? , Java), who came out to Java in 1819, was in various functions at Bandoeng and Tjiandjoer, and in 1832 appointed Assistant Resident of the Civil Service at Bandoeng; on Dec. 26, 1845 an attempt on his life was made of which he died shortly after. Probably the initial C was dropped by mistake, as C. W. A. NAGEL is mentioned in the Official Almanac of the Dutch East Indies as Assistant Resident at Bandoeng in the forties of the 19th century.

LITERATURE. (1) *cf.* Bot. Zeitung 6, 1848, p. 606.

Nagel, Alexander Louis Hendrik Adriaan

(1831, Amsterdam, Holland; 1867, o/b during the home voyage to Holland), joined the D.E.I. Government Service in 1851, placed at the disposal of the Director of Agriculture; in 1855 stationed in Priangan Residency, in 1856 transferred to Kedoe; in 1859 appointed District Officer of the Civil Service in the Lampong Districts (S. Sumatra); in

1863 District Officer at Makassar (SW. Celebes), and since July 1865 Assistant Resident at Montrado (W. Borneo).

He was evidently interested in caoutchouc-yielding trees.[1]

COLLECTIONS. He sent material from *Sumatra* to the 'Natuurkundige Vereeniging' at Batavia (pres. *1860–61*);[2] and young plants of 'kelajangan' from *W. Borneo* to TEYSMANN, *before 1868*.[3]

LITERATURE. (1) Author of 'Iets over den Gom-elastiek boom (pohon kekaret) en de Boenoet' (Nat. Tijdschr. N.I. 22, 1860, p. 383–385).

G. A. VAN DELDEN & A. NAGEL: 'Recherches sur les arbres, qui produisent la gomme-élastique dans l'île de Sumatra' (Journ. Bot. néerl. 1, 1861, p. 263–268).

(2) *cf.* Nat. Tijdschr. N.I. 22, 1860, p. 385 and *l.c.* 24, 1862, p. 100.

(3) *cf. l.c.* 30, 1868, p. 462–463.

Nagel, C. Wilhelm August, *cf. sub* NAGEL.

Nagel, Gerard Hendrik

(1795, Deventer, O., Holland; ? , ?), departmental clerk of the Civil Medical Service in the Dutch East Indies; on European leave from 1826–28, and subsequently dismissed; entered D.E.I. Government service once more in 1837, and was granted an aid in 1848.

From 1824–25 he resided at Buitenzorg and made some tours of inspection in company with BLUME (itiner. *etc.* see there), who worked in the same department.

Author of some booklets on Java.[1]

COLLECTIONS. M. KUHN described a fern collected by a certain NAGEL on the limestone hills at Koeripan in *W. Java, no* 435; in April *1824* that locality was visited by G. H. NAGEL in company with BLUME. As all plants collected by NAGEL are cited in literature without mentioning his initials, we assume that no initials are on the labels either. In that case it will be difficult to settle *which* NAGEL is the real collector. Maybe G. H. NAGEL is not in his place in this list at all; the possibility that he, and not C. W. A. NAGEL, is the collector of the collection NAGEL at Berlin, seems rather small.

C. W. A. NAGEL (see sub NAGEL) is supposed to have collected in Priangan Regency only and the cited locality being outside it, G. H. NAGEL might be the actual collector, though the high number is somewhat suspicious for someone of whom no other collections are known.

LITERATURE. (1) G. H. NAGEL: 'Schetsen uit mijne Javaansche portefeuille' (Amsterdam 1828); 'Javaansche tafereelen' (Amsterdam 1829).

Nagel, L.

COLLECTIONS. *Hort. Bog.:* living orchids and other plants from Garoet in *W. Java* (pres. *1894*), from Djolotigo, Pekalongan (*Centr. Java*) (pres. *after 1900*), and in *1919* a *Vandopsis* from *Celebes* (collected himself ??).

Nagler, *cf. sub* NAGEL.

Nahapit

sent plants from Batavia (? with C. DE GROOT) to the Botanic Gardens at Buitenzorg, *Hort. Bog.*, in *1869*.

Naimoen, *cf. sub* Forest Research Institute, Buitenzorg.

Nainggolan, F. J.

in 1931 a resident of Peureula(k), E. coast of Atjeh (N. Sumatra), and in 1937 of Medan (Sumatra East Coast).

Author of some papers dealing with animals, in 'De Tropische Natuur' for 1931 *seq.*

COLLECTIONS & LOCALITIES. *Herb. Bog.:* some *nos* from Atjeh, *N. Sumatra*, collected in April *1931*, at Djoeloe Rajeu, (B.P.M., sub-division of Idi), *etc.*

Najoan, M., *cf. sub* Forest Research Institute, Buitenzorg.

Nakai, Takenos(h)in

(1882, Yamaguchi, Japan; x), botanist, educated at Tokyo Imperial University, who took his Ph. Dr's degree in 1914; successively Assistant, Lecturer, Curator of Botanic Gardens, Assistant Professor (& Curator), Professor of Plant Taxonomy (1927), and Director of Botanic Gardens (1931) of the Imperial University of Tokyo. From 1943–45 he acted as Director of the Buitenzorg Botanic Gardens.

Author of numerous taxonomical papers, including the 'Flora sylvatica Koreana'.

Several plants of eastern Asia were named after him.

ITINERARY. In Jan. *1919* he visited *Singapore*, and in Febr. *W. Java:* Batavia (Febr. 2–3), Buitenzorg (4–11), Tjibodas (slope Mt Gedeh) (12–14), Bandoeng (15–17) and Tjinjiroean (16), Buitenzorg (18–20), Batavia (21–23).

COLLECTIONS. *Herb. Tokyo Imp. Univers.:* 138 *nos* of *Pteridophyta*,[1] and 30 phanerogams from Mt Gedeh-Pangrango (from region above Kandang Badak only).

LITERATURE. (1) He proposed the new genus *Pneumatopteris*, *cf.* Tokyo Bot. Magaz. 47, 1933, p. 179.

BIOGRAPHICAL DATA. Memorial book published on the occasion of his retirement as professor (1943, w. col. portr.).

Nalang, *cf. sub* Forest Research Institute, Buitenzorg.

Nano, J. F., *cf. sub* Forestry Bureau, Manila.

Nanson, William

a lawyer of Singapore (*fl. c.* 1897–1905) with an interest in orchids (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Hort. Sing.:* orchids, from *P. Tioman*, Johore, *etc.*, *Malay Peninsula*. In his own garden he cultivated *Borneo* orchids too (*cf.* RIDLEY in Journ. Linn. Soc. Bot. 31, 1896, p. 279).

Napier, Sir Walter J.

a lawyer of Singapore and Attorney General (1908–09); on the Singapore Gardens Committee (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS & LOCALITIES. *Herb. Sing.:* plants from different places in the *Malay Peninsula*, collected at Taiping (*190 .*), *etc.*

Napier Ross Cochrane Baillie, Ch. W. A., *cf.* LAMINGTON, Lord.

Narusawa, S.

COLLECTING LOCALITIES. *W. Sumatra*, Tapanoeli: *prope* Sibolga with Y. YAMAMOTO (see there) (July 20, *1939*).

Nasiran, M., *cf. sub* Forest Research Institute, Buitenzorg.

Natadiredja, *cf. sub ditto.*

Natadiwangsa, *cf. sub ditto.*

Natamihardja, *cf. sub ditto.*

Natapoera, *cf. sub ditto.*

Natividad, *cf. sub* Forestry Bureau, Manila.

Natwiri(j)a, *cf. sub* Forest Research Institute, Buitenzorg.

Nauen, John Charles

(1903, Coventry, England; Oct. 1943, as P.O.W. in Siam), Student Gardener at Kew; horticulturist in Bermuda, 1928–35; Assistant Curator Gardens Department Singapore, 1935–39; in Penang, 1939–41.

COLLECTIONS. *Herb. Sing.:* from *Penang* and various localities in Kedah and Perak, *1940–41.*

BIOGRAPHICAL DATA. Gard. Bull. Singap. 11, 1947, p. 266.

Naumann, Friedrich Carl

(1841, Ehrenbreitstein, Germany; 1902, Kloster Lausnitz, Germany), studied natural sciences and medicine at Berlin and Heidelberg, taking his Dr's degree in 1865; fleet-surgeon on the voyage of the 'Medusa' to Eastern Asia and on the voyage of the 'Gazelle' (see below); from the latter voyage returning with broken health. In 1877 he settled as practitioner at Gera in Germany.

Several plants were named after him.

ITINERARY. *Voyage in the 'Medusa', 1868–71. Via* England, Madeira, Canaries, Rio de Janeiro, Cape of Good Hope, *Sunda Archipelago*, China and Japan, returning to Kiel.—*Voyage in the 'Gazelle', 1874–76.*[1] Sailing from Kiel (June 21, 1874); Madeira, Liberia, Ascension, mouth of the Congo, Cape of Good Hope, Kerguelen, St Paul and Amsterdam, Mauritius, NW. Australia; *Dutch Timor:* Koepang (May 14–16, *1875*); Taimanain Mts, N. side of the bay of Koepang (23–24); Pariti (24); Koepang (26); Atapopa (N. coast Dutch Timor), making trip inland (27); *Ambon* (June 2–10) making a trip to a sandstone cave, S of the town; *West Dutch New Guinea*, Vogelkop: Gulf of MacCluer, anchoring in the Sisir Gulf (= Segaar or Sekar Bay), then named Gazelle-Hafen (June 15–20); *Bismarck Archipelago* (July–end of Aug.), visiting several coastal villages and exploring in *Neu Hannover* (= *New Hanover*) (July 19–26; W. and S. coast, at Nordhafen, Wasserhafen, *etc.*, trip in the mountains), *Neu Mecklenburg* (= *New Ireland*) (July 30–Aug. 5; W. coast to the SE. end), and in *Neu Pommern* (= *New Britain*) (12–16; Blanche Bay, Gazelle Halbinsel, climbing 2 volcanoes) and in *New Ireland* again (18; Carteret-Hafen, Sulphur Bay); Solomon Islands (25–28; Bougainville Isl.);[2] proceeding to Australia, Queensland, New Zealand, Fiji, Tonga, and Samoa Islands and passing the Straits of Magellan to the Azores; back at Kiel (end of Apr. 1876).

COLLECTIONS. *Herb. Berl.;* the results of the 'Gazelle' were published.[3] Also in *Herb.* HAUSSKNECHT (*Herb.* BOISS. (*Geneva*), *Kew* or *Leningrad*).

LITERATURE. (1) 'Die Expedition S.M.S. Gazelle' (in Ann. d. Hydrogr. und marit. Meteorologie 1874; *l.c.* 1875, and *l.c.* 1876, p. 1–14) (*pr. p. non vidi*). In the latter volume besides several scientific observations and hydrographical contributions by VON SCHLEINITZ.

'Die Forschungsreise S.M.S. Gazelle in den Jahren 1874 bis 1876 unter Kommando des Kapitän z. See Freiherr VON SCHLEINITZ' (herausgegeben von dem Hydrographischen Amt des Reichsmarines-Amts zu Berlin; 5 vols, 1889–1890). Itinerary of the voyage (Reisebericht) in *l.c.* vol. 1, 1889.

For the stay in the Malaysian region *cf.* also letter by NAUMANN to Dr PRAHL in Zeitschr. Ges. Erdk. Berl. 11, 1876, p. 138–142; 'Ueber Land und Leute an der MacCluer Bay, New Guinea, und in Melanesien' (Verh. Berl. Ges. Anthropol. 1876, p. (67)–(69)); in Verh. Bot. Ver. Prov. Brandenburg 18, 1876 A, p. 26–38, 38–51.

(2) F. C. NAUMANN: 'Ueber den Vegetationscharakter der Inseln des Neu-Britannischen Archipels und der Insel Bougainville' (ENGL. Bot. Jahrb. 6, 1885, p. 422–426).

cf. also TH. STUDER (member of the expedition too!): 'Ein Besuch auf den Papua-Inseln nördlich von Neu Guinea' (Deutsche Geogr. Blätt. 1, 1877, p. 182–200; incl. description of the vegetation!).

(3) 'Ueber Meerphanerogamen des indischen Oceans und indischen Archipels'. Mitgetheilt aus Briefen des Dr F. NAUMANN (Bot. Zeit. 33, 1875, p. 760–765).

P. ASCHERSON: 'Beitrag zur Kenntnis der Seegräser des Stillen und Indischen Ozeans' (aus Briefen des Dr NAUMANN mitgeteilt) (Verh. Bot. Ver. Brandenburg 1876, p. 52–63).

Lichens by J. MÜLLER in ENGL. Bot. Jahrb. 4, 1883, p. 53 *seq.* and in *l.c* 1884.

Cyperaceae by C. BÖCKELER in *l.c.* 5, 1884, p. 89 *seq.*

Gramineae by E. HACKEL in *l.c.* 6, 1885, p. 233 *seq.*

Orchidaceae by F. KRÄNZLIN in *l.c.* 7, 1886, p. 435–443.

Siphonogams in *l.c.* 7, 1886, p. 444–480.

A. ENGLER: Forschungsreise S.M.S. Gazelle. 'Botanik' (with ASKENASY, VON THÜMEN, KUHN and other botanists) (Die Forschungsreise S.M.S. Gazelle vol. 4, 1889). Herein A. ENGLER: 'Übersicht über die botanischen Ergebnisse der Gazelle-Expedition' (p. vi–xvi).

BIOGRAPHICAL DATA. Mitt. Thür. Bot. Ver. 19, 1904, p. 1–7, incl. bibliogr. (the name probably by mistake 'Ferdinand'); SCHUMANN & LAUTERBACH, Nachtr. Fl. Deutsch. Schützgeb. Südsee, 1905, p. 25–26; BACKER, Verkl. Woordenb., 1936.

Nauta, G. J. E.

captain of the Artillery who collected fodder grasses at Fort Willem I, near Ambarawa in *Centr. Java* (*1900*).

COLLECTIONS. *Herb. Bog.*: 35 (or more ?) grasses. They were identified by BOERLAGE; a list containing about 60 vernacular and Latin names was published.[1]

LITERATURE. (1) In Teysmannia 11, 1901, p. 489–492 (more than 60 species!).

Navaro, Pedro

Franciscan friar who is cited as the collector of a plant in the mountains of Basei in *Leite* (=*Leyte*), *P.I.* (*cf.* HIERONYMOUS, Rafflesia Schadenbergiana GOEPP. *etc.*, Breslau 1885, p. 8).

Navarro, G., *cf. sub* Forestry Bureau, Manila.

Naves, Andres

(1839, Cortina in Asturias, Spain; 1910, Valladolid, Spain), an Augustinian friar who collected plants in the Philippines together with his colleague C. FERNANDEZ-VILLAR (see there).[1]

Clerodendron navesianum VIDAL was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. Lost by fire in 1899, in the burning of the Guadalupe convent near Manila. Possibly duplicates of his collections were sent to Madrid before then.

LITERATURE. (1) Together they edited the 3rd edition of BLANCO, Flora de Filippinas, adding a name list (Novissima Appendix) of all Philippine plants known at that time.

A. NAVES: 'Prosopis vidaliana' (1877, p. 1–19, *t.* 1–2). (*non vidi*).

Nawaschin, Sergej Gawrilowitsch

(1857, Zarewstschina, Russia; 1930, Detskoje Selo, Leningrad, U.S.S.R.), Assistant Professor of Agriculture, Academy & University of Moscow, 1883–88; in the University of St Petersburg, 1888–94; subsequently Professor of Botany in the University, Keeper of the Botanic Garden, Lecturer in Botany at the Polytechnical Institute, Kiew, S. Russia. In 1915 he went to Tiflis for his health, working at a small bacteriological Station, where he lectured too. In 1923 he was appointed Director of the Research Institute of K. A. TIMIRJASEFF at Moscow; from 1929–30 living at Deskoje Selo (Leningrad), working for the Academy of Science.

He was sent out to *Java*, by the Imperial Academy of Sciences, St Petersburg, staying for four months till April *1899* at Buitenzorg.

COLLECTIONS. He occupied himself in the first place with critical collecting of material for future more detailed researches on floral development, specially of families of monocotyledons.[1] The greater part of the material probably collected in Hort. Bog.



NEDI

LITERATURE. (1) S. G. NAWASCHIN: 'Notice on the scientific mission to Buitenzorg in the island Java' (Bull. Acad. Sci. St Petersb. 13, 1900, p. 517–525; in Russian).

cf. DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 23–24.

BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 2, 1905, p. 189, *t.* 122; Act. Hort. Bot. Jurjew 9 (1908), 1909, p. 216–241, w. portr. (Russian); Who's who 1913; Journ. Soc. Bot. Russie 13, 1928, p. 1–18 + portr.; Ber. D.B.G. 49, 1931, p. (149)–(163), incl. bibliogr. + portr.; Proc. Linn. Soc. 1930/31, p. 188–191.

Neal, G. E.

Ranger in the Forest Department Straits Settlements, 1911–24; collected in Pahang, *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *? Herb. Kuala Lump.*, or *? Sing.*

Nedi

'mantri' of the Herbarium at Buitenzorg, who

attended G. A. L. DE HAAN (see there) on the first part of his stay in the Moluccas.

COLLECTING LOCALITIES. *Moluccas, 1937. Batjan:* Masoeroeng, G. Damar (200 m) (Aug. 11–13); Waringin, Kali Sajoeang and G. Kewasa (14–17); Laboeha (Aug. 19–Sept. 2); kp. Inggoi (near kali Inggoi) (3); Amasing (9–12); *Halmaheira:* Djailolo (Sept. 28–30); (So)-Soepoe (Oct. 1–3), kp. Taroeba, kp. Todahe, *etc.;* kp. Toegoeair (6); kp. Bigadoe (11); Djiko djira and Lebengon (12–13); Kaoe (16–19); kp. Koesoe (20–24); *Obi:* Laiwoei (Oct. 30–Dec. 5), collecting at kp. Boeton, kp. Baoe, kp. Doeri, kp. Djiko Dolong, kp. Boeloe, Telaga, Kali Kasna, G. Dihoeroe, G. Damar Manomang (Nov. 17–19), *P. Bisa* (Nov. 26–27); *P. Santari* (28); kp. Baroe (29); kp. Woei (Dec. 4–5); *P. Tapa(t)* (Dec. 8); *Batjan:* Laboeha (11).

COLLECTIONS. *Herb. Bog.:* in total 714 *nos, viz* from *Batjan nos* 1–166, *Halmaheira nos* 167–470, *Obi nos* 471–628, *P. Bisa nos* 629–650, *P. Santari* 651–667, *Obi* 668–700, *P. Tapa* 701, *Batjan* 702–714.

Née, Luis

(born in France), botanist of a Spanish expedition round the world (see below), partly accompanied by HAENKE and PINEDA. In 1784 he founded a Botanical Garden at Pamplona (Spain).

Author of some small botanical papers.[1]

He is commemorated in the genus *Neea* RUIZ & PAV.

ITINERARY. '*Malaspina*' *Expedition, 1789–94.*[2] Leaving Cadiz (July 30, 1789) for America, exploring part of it; sailing (Dec. 1791) *via* the Marianas to the *Philippines: Luzon* (March–Dec. *1792*) (detailed itiner. *cf. sub* HAENKE); 2nd stay in America; returning in Spain in Sept. 1794.

COLLECTIONS. *Herb. Bot. Gard. Madrid:* ± 10.000 *nos*, no duplicates distributed.[3] His drawings and MSS are at Madrid too.[4] Ferns in *Herb.* CAVANILLES (*Madrid*).[5]

Four thousand of the collected specimens were considered new. Much of the collection of NÉE at Madrid still remains unidentified. A few species were described from his Philippine material by CAVANILLES and still fewer by LAGASCA and by himself.[6] Several of the localities mentioned on the labels are false.[7]

LITERATURE. (1) L. NÉE: 'Del abacá, que es la Musa textilis' (Anal. Cienc. Nat. 4, 1801, p. 123–130); 'De la Pistia Stratiotes' (*l.c.* 5, 1802, p. 76–82); 'Del Buyo' (*l.c.* 6, 1803, p. 289–297; and some in KONIG & SIMS Ann. Bot. 1, 1805 and 2, 1806.

(2) P. NOVO Y COLSON: 'Viajo político-científico alrededor del mundo por las corbatas Descubierta y Atrevida al mando de los capitanes de navió D. ALEJANDRO MALASPINA y Don JOSÉ DE BUSTAMANTE & GUERRA desde 1789 a 1794' (1885) (*non vidi*).

(3) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 348, 451–452; MERRILL in Philip. Journ. Sci. C. Bot. 7, 1912, p. 365.

(4) *cf.* COLMEIRO, La botanica y los botanicos *etc.*, 1858, p. 48–49.

(5) *cf.* CHRISTENSEN in Dansk Bot. Ark. 9, 1937, p. 4–5. A certain number of the collected ferns, were described and published by CAVANILLES in his 'Descripcion de las Plantas' (1802–03).

(6) *cf.* MERRILL in 'Discussion and Bibliography of Philip. flow. plants' (Manila 1926, Enum. Philip. Fl. Pl. vol. 4) p. 47, who mentions in this connexion A. J. CAVANILLES: 'Icones et descriptiones plantarum, quae aut sponte in Hispania crescent, aut in hortis hospitantur' 1–6 (1791–1801), *t.* 1–600. The latter work mostly deals with S. American plants.

(7) *cf.* E. D. MERRILL: 'Genera and species erroneously credited to the Philippine flora' (Philip. Journ. Sci. C. Bot. 10, 1915, p. 171–194).

BIOGRAPHICAL DATA. COLMEIRO, La botanico y los botanicos *etc.*, 1858, p. 183; Catal. Scient. Pap. 4, p. 582–583; URBAN, Symb. Antill., 3, 1902–03, p. 92.

Neij . . ., *cf.* NEY . . .

Nelson, David

(† July 20, 1789, Koepang, Timor, Lesser Sunda Islands), gardener of the Botanic Garden at Kew; Assistant Botanist attached to COOK's 3rd and last voyage (see below), during which both COOK and W. ANDERSON, the latter originally in charge of the botany department, died. In 1787 he accompanied the notorious voyage of the 'Bounty' under command of Capt. BLIGH (see below); when he died after a month's stay in Timor, he was buried in the same grave as ZIPELIUS and RIEDLÉ.

He is commemorated in the genus *Nelsonia* R.BR.

ITINERARY. *Voyage in the* '*Resolution*' and '*Discovery*', *1776–80.*[1] So-called COOK's *3rd Voyage*. Sailing from Plymouth (July 12, 1776); Teneriffe, Cape of Good Hope, Kerguelen, Van Diemensland, New Zealand, Tahiti, Friendly Islands and other Pacific Isls, Society Isls, Sandwich Isls, coast of N. America and E. Asia, Japan, Macao, Canton, P. Condor; passing Banka Strait to Sunda Strait (Febr. *1780*); *Krakatau* (*c.* 10–17), *Prinsen Isl.* (18); home voyage *via* the Cape and St Helena; back at Lenore (Oct.).—*Voyage in the* '*Bounty*', *1787–89.*[2] Leaving Spithead (Dec. 23, 1787), *via* Teneriffe, Tierra del Fuego, Cape of Good Hope, New Holland, Tahiti; the *mutiny* took place when passing S of Tofua, BLIGH and 18 others were set adrift in an open cutter, in which they reached *Timor* (Coupang, June 14, *1789*), where NELSON died on the 20th. BLIGH purchased the schooner 'Resource', reached Batavia on Oct. 1, returning to England on March 14.

COLLECTIONS. *Herb.* BANKS = *Brit. Mus.:* Australian, Cape and *Timor* plants. No list of his plants is preserved, but they are referred to incidentally;[3] also mentioned in the SOLANDER (see there) MSS.

Possibly plants were collected in Sunda Strait in 1780.

LITERATURE. (1) J. COOK: 'A voyage to the Pacific Ocean. Undertaken by the command of his Majesty, for making discoveries in the Northern Hemisphere *etc.* in his Majesty's Ships the Resolution and Discovery in the years 1776–80' (Lon-

don 1784, 3 vols + atlas; the 3rd vol. by J. KING). As the original edition was not available in Java, the French translation was used.

(2) 'A voyage to the South Sea undertaken by command of his Majesty for the purpose of conveying the breadfruit tree to the West Indies, in his Majesty's ship the Bounty, commanded by Lt. W. BLIGH, including an account of the mutiny o/b the said ship, and the subsequent voyage of part of the crew, in the Ship's Boat, from Tofoa, ..., to Timor, a Dutch settlement in the East Indies' (London 1792). The narrative was reissued under the title 'BLIGH and the Bounty. His narrative of the voyage to Otaheite with an account of the mutiny and on his boat journey to Timor', with a preface by L. IRVING (London 1936).

(3) J. BRITTEN: 'WILLIAM ANDERSON and the plants of COOK's third Voyage' (Journ. Bot. 54, 1916, p. 345–352; *cf.* also *l.c.* 55, 1917, p. 54). P. 351–352 of the first item deal with NELSON's plants.

BIOGRAPHICAL DATA. Gard. Chron. 1881[2], p. 267; Kew Bull. 1891, p. 297; MAIDEN in Journ. Roy. Soc. Tasmania 1909, p. 15–16; Journ. Bot. 54, 1916, p. 351: Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Nengneng

= probably NONGNONG (see there). He is cited as the collector of a plant at Depok, *W. Java* (Oct. *1918*) (*cf.* HALLIER in Meded. 's Rijksherb. Leiden *no* 42, 1922, p. 13).

Nera, *cf. sub* Forestry Bureau, Manila.

Netohardjo, R., *cf. sub* Forest Research Institute, Buitenzorg.

Netscher, E.

probably ELISA NETSCHER (1825, Rotterdam, Holland; 1880, Batavia, Java) who came to the D.E.I. with his parents, when still a child; when 10 years old he returned to Holland for his education, to go back to the Indies again in 1842. Since 1848 working in the division Police Affairs of the General Secretariate at Buitenzorg; on account of his merit as a linguist, he had to accompany various higher officials on tours to Riouw (1849, 1856 and 1857),[1] Celebes (1858 or 1859), *etc.* In 1861 he was appointed Resident of Riouw, in 1870 Governor of Sumatra West Coast[2] and in 1878 Member of the Council of India ('Raad van Indië').

ITINERARY. *1861. Riouw-Lingga Archipelago.*[3] Sailing from the roads of Riouw (Sept. 23) to Sg. Doewara on *Lingga;* by land to Dai (26); Bt Tjengké (28); kp. Merawang (29); to Sg. Boeloe on the N. coast of *Singkep* (Oct. 1), bay of Sekana; *E. coast* of *Centr. Sumatra:* Reteh between Djambi and Indragiri, and the Sg. Reteh.

COLLECTIONS. A certain E. NETSCHER sent dried material from Kediri, *E. Java*, to the 'Natuurkundige Vereeniging' at Batavia in *1859.*

NETSCHER, without initials, sent plants from Padang, *Sumatra West Coast*, to *Buitenzorg* (*Herb.* or *Hort. ?*) in *1872–73.* Living plants from Riouw-Lingga were presented to *Hort. Bog.* in *1867.* Probably the whole is of little importance.

LITERATURE. (1) E. NETSCHER: 'Houtsoorten van Riouw' (Nat. Tijdschr. N.I. 3, 1852, p. 345 *seq.;* vernacular names with notes concerning the use); 'Beschrijving van een gedeelte der Res. Riouw' (Tijdschr. Taal-, Land- en Volkenk. 1, 1853, p. 108–176, 177–270).

(2) E. NETSCHER: 'Padang in het laatst der 18e eeuw' (Batavia 1880).

(3) E. NETSCHER: 'Togtjes in het gebied van Rhiouw en onderhoorigheden' (Tijdschr. Ind. Taal-, Land- en Volkenk. 12, 1862, p. 231–254).

BIOGRAPHICAL DATA. Ind. Gids 1880[2], p. 180–184; Tijdschr. K.N.A.G. 4, 1880, p. 382–385; Encyclop. N.I. 3, 1919.

Netscher, Franciscus Henricus Johannes

(1817, Rotterdam, Holland; ? , ?), joined the D.E.I. Government service in 1836, first at Soerabaja and since 1837 at Madioen, both in E. Java; in 1846 appointed Assistant Resident at Rau, Sumatra West Coast, and in 1847 *ditto* at Tanah Datar in the same government;[1] since 1853 Resident of Tapanoeli (W. Sumatra); from 1856–57 on European leave, returning in the latter year to Java as Inspector of Agriculture; in 1858 Resident at Pekalongan, in 1862 *ditto* at Rembang, both in Centr. Java; in 1862 on sick leave to Europe and pensioned off in 1864.

COLLECTIONS. He presented natural history objects to the 'Natuurkundige Vereeniging' at Batavia, in the years *1852–53.*

LITERATURE. (1) F. H. J. NETSCHER: 'Reis door de grensdistricten der Padangsche Bovenlanden' (Tijdschr. Ind. Taal-, Land- en Volkenk. N.I. 6 (N.S. 3), 1857, p. 166 *seq.*).

Neuhauss, Prof. Richard Gustav

(1855, ? ; 1915, Gross-Lichterfelde, Germany), educated at Leipsic (Med. Dr 1883); made his first world voyage in 1884; physician at Berlin; from 1908–10 he made an anthropological and ethnological exploring voyage in former German New Guinea (see below); he brought an equipment for making botanical and zoological collections. He was especially interested in photography.

ITINERARY. *NE. New Guinea*, former *Kaiser-Wilhelmsland* (Oct. *1908*–June *1910*).[1] With his wife arriving at Friedrich Wilhelmshafen (end Oct. *1908*), staying 3 weeks; coastal voyage by boat to Potsdamhafen, Hansabucht, Dallmannhafen, islands *Muschu, Valis, Angel, Seleo,* and *Tumleo,* government station Eitape (= Berlinhafen); *via* Stephansort to Finschhafen and Sattelberg (arrival Dec. 8, making it his headquarters for several months); Jan. *1909* making a trip in western direction, crossing Bubui (or Mape) River, and along Bulesom River to mission station, *etc.*, returning after 23 days; from Sattelberg (March 15) *via* Finschhafen to Huon Gulf (Bukaua); coastal voyage to the English boundary and back to Bukaua; expedition to Markham River with MAILÄNDER, KEYSSER, *etc.* (end of Apr.), on account of hostilities of the population ascending the river no more

than 20 km, subsequently returning to Bukaua; renewed attempt on June 4, this time ascending 70 km to a junction with a tributary (source in Kraetke Mts), and returning; trip to Tami colony Taminugetu; leaving Bukaua (July 14); short stay at Finschhafen, and proceeding to Friedrich Wilhelmshafen; boat tour in the 'Siar' in NW. direction (July 28), entering Kaiserin Augusta River, returning at the mouth on Aug. 6; to Berlinhafen; anchoring at Sissanu (Eissano) (Aug. 8), 45 km W of Eitape, staying for 6 weeks, making trips to Ramo village *etc.*; by boat to Eitape (Sept. 15); return to Finschhafen; leaving (Nov. 1) for Sialum at the foot of Cromwell Mts near Cape König Wilhelm (3); trip to Kelana (mid-Nov.); to the *Siassi Isls* (mid-Dec.); to Logaueng on foot; from Finschhafen (Jan. 11, *1910*) by boat to Kela (16), proceeding in S. direction to Braunschweighafen (19, paying a visit to *Ton Isl.*); to the mouth of the Nassau River, going upstream along its banks for several hours; at Malalo (Kela) (Jan. 24), finding accomodation at the mission station, and making trips to Kela Halbinsel (peninsula), to Markham River (March 17 by boat to the mouth, following the river, part of the way on foot, and returning to Malalo on the 26th); trip to Waria River (29), Braunschweighafen, Mayama (31), Adolfhafen; trip to Morobe River, to Waria mouth and on foot to Uno, Jaduna, Siu, and back; *via* Adolfshafen to Peihowa (= Peiho, Pekho); 2nd visit to *Ton Isl.* (Braunschweighafen), to Nassau Bay, returning (Apr. 10) at Malalo; to Finschhafen (20); visit to Sattelberg (mid-May), and subsequently to Jabim (N. coast Huon Gulf), by land to Logaueng, returning by proa; leaving New Guinea (May 30) *via* Friedrich Wilhelmshafen, Eitape, mouth Tami River, (June 3); *via Singapore*, Ceylon, *etc.* returning to Berlin (end of July).

COLLECTIONS. *Herb. Berl.:* 49 *nos.*

LITERATURE. (1) *cf.* Zeitschr. Ges. Erdk. Berl. 1909, p. 689–690.

R. NEUHAUSS: 'Über seine Reisen in Deutsch Neu Guinea 1908/10' (Verh. Deutsch. Kol. Kongr. 1910 Berlin, 1911, p. 106–109); 'Deutsch-Neu-Guinea' (Berlin 1911, 3 vols; for itinerary *cf.* vol. 1, p. 28–85).

BIOGRAPHICAL DATA. Zeitschr. Ethnol. 47, 1915, p. 92–93; POGGENDORF, Biogr.-liter. Handwörterbuch 6^3, 1938.

Neve, Th. A. de

(1881, Kota Baroe, Sumatra; x), founder (1906) and till 1925 Manager of the rubber estate Nangah Djetah near Pontianak (W. Borneo); subsequently founder, owner and Manager of Pemarang Toedjoeh Estate near Pontianak.

Phalaenopsis denevei J.J.S. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. *Herb. Bog.:* 1 specimen of *Rafflesia* and some orchids (pres. 1916 and 1925) from *W. Borneo.*

Newbold, Thomas John

(1807, Macclesfield, England; 1850, Mahabuleshwar, Brit. India), of the Madras Army, author of some publications on the Malay Peninsula,[1] where he was stationed as staff officer about 1833. He had entered the army in 1827 and was promoted captain in 1842; he was geologically interested. In about 1838 he prepared a Zoological and Botanical Catalogue for the Straits; it was printed and circulated for correction and enlargement, but was considered to be too incomplete for publication.

ITINERARY. *1833. Malay Peninsula:* from Malacca to As(s)ahan (Apr. 20), en route to Mt Ophir; Gummi, G. Tando, G. Ledang.[2]

COLLECTIONS. He transmitted plants from Mt Ophir to WALLICH at *Calcutta.*[3]

LITERATURE. (1) T. J. NEWBOLD: 'Some account of the territory of Naning, in the Malay Peninsula'; some small papers in J. H. MOOR: 'Notices of the Indian Archipelago, and adjacent countries, *etc.*' (Singapore 1837); 'A political and statistical account of the British Settlements in the Straits of Malacca, *viz* Penang, Malacca, and Singapore; with a history of the Malay States on the Peninsula of Malacca' (London 1839, 2 vols).

(2) J. T. NEWBOLD (the initials probably erroneously interchanged): 'A visit to the Gold Mine at Battang Moring, and summit of Mt. Ophir, or "Gunong Ledang", in the Malay Peninsula' (Journ. As. Soc. Beng. 2, 1833, p. 497–502).

(3) *cf.* NEWBOLD's Brit. Settl. in Malacca *l.c.* 2, p. 165–174 and Journ. Asiat. Soc. 1834, p. 48.

BIOGRAPHICAL DATA. Journ. Str. Br. Roy. As. Soc. *no* 19, 1887, p. 143–148; Dict. Nat. Biogr. vol. 40, p. 314–315; BUCKLAND, Dict. Ind. Biogr., 1906; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

New Guinea Forces

In July and August, *1944*, C. T. WHITE from Brisbane Herbarium, and Dr H. E. DADSWELL went to New Guinea to conduct a school for the forestry units, headquarters at Lae, Mandated Territory, *NE. New Guinea*, giving them notes on the timber trees of New Guinea. The school lasted a fortnight. The afternoons and some full days were given over entirely to practical work in the field. They initiated there a fairly extensive collecting program and a large number of specimens were collected. These have been given N.G.F. (= New Guinea Forces) numbers; they may or may not be accompanied by the collector's name. The material is fairly bulky and much of it being collected by non-professional botanists and under difficult field conditions is not very good; in *Herb. Brisbane.* Dupl. will be distributed to *Kew, Arn. Arbor.* and *Leyden.*

Some of the material has been dealt with, some of the specimens being described in the Journ. Arn. Arbor., and in the Proc. Roy. Soc. Queensl.

Wood samples deposited in the Forests Products Lab., C.S.I.R., Melbourne.

Newton, Francis(co)

COLLECTING LOCALITIES. *Portuguese Timor:* at Fatumasse (May *1896*), near Atsabe (July 17, *1897*), *etc.*

COLLECTIONS. *Herb. Kew:* plants from tropical Africa, Fernando Po and *Timor*, 89 *nos* (1885–97); the *Timor* plants include 14 ferns.

Neijs, J.
is cited as the collector of *Ganua motleyana* PIERRE *ex* DUBARD (*cf.* LAM in Bull. Jard. Bot. Buit. sér. 3, vol. 7, 1925, p. 123), at Bandjermasin in *SE. Borneo;* the cited specimen in *Herb. Bog.*

Neytzel de Wilde, A.
brother-in-law of Prof. Dr J. VALCKENIER SURINGAR, sent specimens of *Myrmecodia* and *Hydnophytum* from *Java* to the latter in 1912 (coll. *1911*); in *Herb. Wageningen.*

N.G.F., *cf. sub* New Guinea Forces.

Ngadiman bin Ha(d)ji Ismail
a plant collector employed in the Botanic Gardens, Singapore, from 1924–38 (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5); in 1938 appointed to take charge of the botanical reserves.
Eugenia ngadimaniana HENDERSON was named after him.
COLLECTING LOCALITIES. *1924–38. Malay Peninsula.* He accompanied senior officers of the Gardens' Department on numerous expeditions; with FOXWORTHY in Kelantan (Jan.–Apr. *1924*); at Lubok Paku in Pahang (end of 1924); Johore, near the new Mersing Road (Oct. *1936*); *Singapore Isl.:* Bukit Timah Reserve.
COLLECTIONS. *Herb. Sing.* He occasionally contributed to the C.F. (see *sub* Conservator of Forests) series, *Kuala Lump.* too.

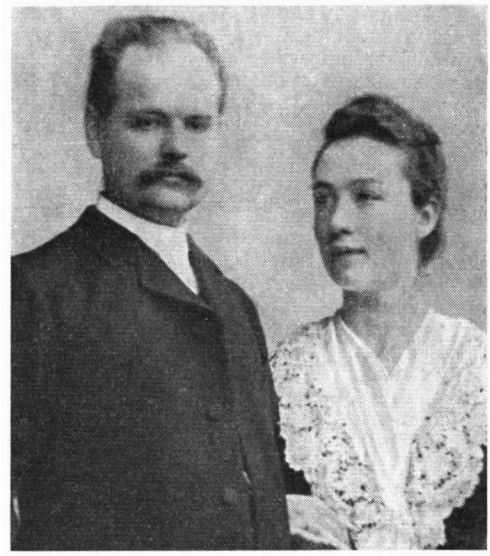
Nichol, B.
of *Penang*, sent living material to *Hort. Sing.* in *1931.*

Niebert, *cf. sub* Forestry Bureau, Manila.

Nielsen, E., *cf. sub* E. STEEMANN NIELSEN.

Nieuwenboer, *cf. sub* Forest Research Institute, Buitenzorg.

Nieuwenhuis, Anton Willem
(1864, Papendrecht, Z.H., Holland; x), was educated at Leyden and Freiburg i.B. universities; since 1889 surgeon in the D.E. Indian Army; he made several Borneo expeditions (see below),[1] in 1896–97 and 1898–1900 as leader; from 1904–34 Professor of Ethnology of the D.E.I. at Leyden University.
Several plants were named after him and his wife, Mrs M. J. T. NIEUWENHUIS-UEXKÜLL GÜLDENBAND.
ITINERARY.[1] *W. & Centr. Borneo Expedition, 1893–94.* In company with HALLIER and MOLENGRAAFF (see those). At first for 3 months on the Mandai River; back to Poetoes Sibau; the trip to the Mahakam was planned for June 1894, when arriving in the latter's basin (July), the leader (the District Officer of the Upper Kapoeas) refused to proceed and accordingly the expedition returned at Poetoes Sibau (22); explorations near the Mendalam River, making headquarters at Tandjong Karang till the end of September.—*Across Borneo, 1896–97.* Embarking (end of Febr. *1896*) for Pontianak, from where by boat (March 7) to Sintang;



MRS AND DR NIEUWENHUIS

proceeding (27) *via* Boenoet to Poetoes Sibau and (Apr. 7) to the Mendalam River, settling for some months at Tandjong Karang again; arrival of the other members of the expedition and the plant collector JAHERI (see there) at Poetoes Sibau (May); proceeding from there (July 3) to Sioet, Long Hakat, Long Mensikai, Nanga Lapong, Goeroeng Delapan, the Bongan, Goeroeng Bakan; going up the Boelit (20) and by land to the Mahakam, passing the watershed, Bt Antara and Pĕnanei (stay some time); proceeding by boat to the Mahakam, following the Kaso; Bĕlarè, mouth of the Bloe-oe; sojourn on the Bloe-oe (since Aug. 30); setting out (Sept. 27) to the Upper Bloe-oe, from where (Oct. 6) going up to Lilit Boelan; ascending the Tĕpoesè, Sĕpan Dingei (saline spring near the Dingei), G. Moang, downstream the Bloe-oe, Bt Kasian (22); Nov. 11 back to the Mahakam, Bt Liang Karing, the Tjĕhan, the Pakatè and back near the Bloe-oe; trip to Long Tĕpai (without JAHERI), visiting the Mĕrasè, Batoe Sala, Sĕpan Daja and Long Boeleng; bivouac on the Bloe-oe (Dec. 3); descending the Bloe-oe (Febr. 5, *1897*) and going up the Mahakam past Long Boeleng (this time with JAHERI who was to collect in the surrounding limestone hills), and back to Bloe-oe; final departure (Apr. 9), to go downstream the Mahakam, stopping at Batoe Sala (Apr. 14–18), Long Tĕpai, Long Dĕhŏ, Bt Batoe Ajo (Apr. 30–May 1; much *Nepenthes*); from Long Dĕhŏ (May 7) *via* the Kiham Oedang

and the Kiham Halŏ to Long Boenoet (8) and passing Long Bagoeng, Long Howong, Tĕpoe, Mĕlak, Tĕngaron, to Samarinda (end of May); sailing (June 5) for Bandjermasin and from there to Soerabaja.—*Across Borneo, 1898–1900. cf.* also *sub* AMDJAH and SAKARAN or SEKARANG. Pontianak (May *1898*); navigating the Kapoeas (from May 24), passing Sintang (26), Semitau, Boenoet (28), to Poetoes Sibau (staying May 29–Aug. 18; AMDJAH beginning his botanical explorations); by boat (Aug. 19) to Sioet and going up the Upper Kapoeas *via* Goeroeng Delapan and Goeroeng Bakang; mouth of the Boelit, ascending it; bivouac at Pangkalan Howong (NIEUWENHUIS and some others climbing the Liang Tibab on Sept. 14); by land (Sept. 16) to the Mahakam, crossing the Boengan, watershed, mouth of the Bloe-oe; several minor trips, *viz* to Batoe Mili (Oct. 22 and in Nov. again), near the Mĕrasè (= probably identical with the S. Marace of AMDJAH), Batoe Marong, near the Tasan; Batoe Sala, Napo Lioe, Loeloe Sirāng; ascent of Batoe Sitoen, Loeloe Sirang; the Tjĕhan, climbing Liang Karing; ascent of Batoe Lesong (setting out on Jan. 16, *1899*, staying for some days); final departure from Long Bloe-oe (Apr. 13) to the coast, *via* Batoe Sala, Long Tĕpai, Long Dĕhŏ, Long Glat, Oema Mĕhak, Oedjoe Halang, Ana and Tĕngaron to Samarinda (arriving June 9). The native collectors returned to Buitenzorg and NIEUWENHUIS prepared for an expedition to the Apoe Kajan; departing from Samarinda (June 17) going up the Mahakam again, to Oedjoe Tĕpoe, Ana, Long Howong, Oema Mĕhak, Long Dĕhŏ, climbing Batoe Ajo, Long Tĕpai, Long Bloe-oe; from there making a 1-month trip to the sources of the Mahakam: setting out (Oct. 1) to the Sĕlirong River; proceeding afoot (11) *via* the Lasang Towong to the Lasang Toejang, from where going back on the 14th; ascent of the Batoe Balo Baung (22–24) and back to Long Bloe-oe; from there (March 9, *1900*) to Long Dĕho; proceeding (May 17) to the Boh, making a 3-month bivouac; breaking camp (Aug. 6), navigating the Boh, the Oga, Tĕmha and the Mĕsĕai; by land (Aug. 23) to the watershed; in Tanah Poetih near the Apoe Kajan (Sept. 5); visiting several neighbouring villages; Long Nawang and back to Tanah Poetih; setting out (Nov. 4) to bivouac on the Kajan, Long Laja, descent to the Mĕsĕai, on the Mahakam again, Long Iram and back at Samarinda (Dec.).

COLLECTIONS. *Herb. Bog.;* dupl. in *Herb. Leyden.* During the expeditions plants were collected by HALLIER, MOLENGRAAFF, JAHERI, AMDJAH and SAKARAN or SEKARANG (see those), but besides by NIEUWENHUIS himself. The plants were separately numbered; he collected ferns too,[2] the latter partly in *Herb.* CHRIST (now at *Paris*). *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam:* material of *Strychnos sp. div., etc.* (pres. 1902).

Living plants in *Hort. Bog.* (pres. 1897),[3] also in subsequent years, for the greater part collected by the Indonesian assistants.

LITERATURE. (1) A. W. NIEUWENHUIS: 'La récente expédition scientifique dans l'île de Borneo' (Tijdschr. N.I.Taal-, Land- en Volkenk. 40, 1898, p. 508–541); several communications *etc.* in Tijdschr. K.N.A.G. 1896, 1898, 1899, 1900–03; 'Dwars door Borneo' (Bull. Mij Bevord. Nat. Onderz. Ned. Kol. *nos* 18–23, 37); 'In Centraal Borneo. Reis van Pontianak naar Samarinda' (Leiden 1900); 'Anthropometrische Untersuchungen b.d. Dajak' (Haarlem 1903); 'Over Borneo' (Hand. Ned. Nat. en Geneesk. Congr. 9, 1903, p. 443); 'Quer durch Borneo. Ergebnisse seiner Reisen in den Jahren 1894, 1896–97 u. 1898–1900' (Leiden 1904–07, 2 vols); 'De toeneming onzer kennis van Borneo sedert vijftig jaren' (Ind. Gids. 51, 1929, p. 229); several small papers in Trop. Nederland *etc.*

(2) *cf.* H. CHRIST in Ann. Jard. Bot. Buit. 20, 1907, p. 92–140.

(3) *cf.* Versl. Pl. Tuin Buitenzorg for 1897, p. 61–63.

BIOGRAPHICAL DATA. Oost en West 1934, p. 124; Wie is dat? 1935, p. 266; BACKER, Verkl. Woordenb., 1936.

Nij..., *cf.* NY...

Nikola, Dr

COLLECTIONS. *Herb. Bog.:* material of *Firmiana colorata* R.BR., a remnant of the former forest near the hospital at Kwala Simpang, Atjeh, *N. Sumatra* (coll. July *1932*).

N(h)ing(g)hul(l)

a native collector employed by GRIFFITH (see there) after his return in 1845 in the short month left to him (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTING LOCALITIES. *Malay Peninsula.* Early in *1845* in Malacca, about Alor Gajah and forwards to Tebong.

COLLECTIONS. Likely with GRIFFITH's herbarium at *Kew;* for duplicates see *sub* GRIFFITH.

The editor of GRIFFITH's 'Posthumous Papers' spelled the name in various ways and took it to be a place name.

Nja'tjech, *cf. sub* Forest Research Institute, Buitenzorg.

Nobuhira, *cf. sub* HANADA.

Noeh, Mohammed, ***cf. sub*** Forest Research Institute, Buitenzorg.

Noer, Mohammed, ***cf. sub ditto.***

Noerhadi, O., ***cf. sub ditto.***

Noerkamal, *cf. sub ditto.*

Noerkas

(born 1873), 'mantri' of the Botanic Gardens, Buitenzorg, who attended L. VAN VUUREN (see there) in the first year of the latter's Celebes explorations. In 1920 he was awarded the Silver Star for loyalty and merit, at that time being in the employ of the Gardens for 32 years; retired in 1931.

COLLECTING LOCALITIES. *1910. W. Java:* Tjibodas.—*1912. SW. Celebes:* vicinity of Makas-

sar (Febr. 24–March 12); Pampanoea and vicinity (March 21–Apr. 2); Wattan Sopeng to Walamping (Apr. 3); hot spring (6); Sengkang (Lake Tempé) (Apr. 7); Paria (13); Gilirang (13); to Doping (15); Kampiri (24), G. Mampoe and G. Sailon (25), kp. Palisoe (26), Singkang (May 2), G. Mampoe (3),



NOERKAS

Lantjah (4), Badja (6), Watampone (9), Mara (13), Bontorihoe (15), Tjani (19), Lapankanrae (20), Sanrego (21), Pa timping (22), Palima (28), Alakang (June 6), Sapa Galoeng near Pare Pare (8), Djompi Pare Pare (10), Lakasi (10), Pare Pare (14), Penrang (14), Rappang (17), Rappang to Enrekang (19), Enrekang (20), Biladjing (23), Lake Tempé (July 1–6), Pangali (29), Roesoeng (29), Salabosi (29); *W. Centr. Celebes*: Madjene and vicinity (28–29), Tapalang and Mamoedjoe (Aug. 4); *SW. Celebes:* Masawa (Polewali) (15).—In the same year he collected on G. Salak in *W. Java*.

COLLECTIONS. *Herb. Bog.:* 510 *nos* of *Celebes* plants VAN VUUREN Exp.; some plants from G. Salak; *Celebes* dupl. in *Herb. Leyden*.

Hort. Bog.: living plants and seeds from *Celebes*,[1] also from Tjibodas (*W. Java*).

LITERATURE. (1) *cf.* List in Versl. Pl. Tuin Buitenzorg for 1912, p. 19–21.

Noltée, Ary Cornelis

(1892, Rotterdam, Holland; x), since 1915 Forest Officer in the D.E. Indian Forest Service, for several years on the staff of the Forest Research Institute at Buitenzorg; in 1925 put in charge of the division 'Wildhoutproductiebedrijf' at Buitenzorg and towards the end of the year transferred to the teak districts of Java; since 1931 attached to the Teak Forest Administration, in 1935 stationed in the Head Office, in 1936 appointed Inspector; retired in 1937.

COLLECTING LOCALITIES. *Java:* teak forests (*1918*); *Centr. Java:* Tegal, Margasari and Ngarengan forestries (Oct. *1919*); forest-section of Manggar; forest-section of Tempoeran (S. Semarang); teak forest, Djombang (*1928*).

COLLECTIONS. *Herb. Bog.:* few plants, some (from Ngarengan and Margasari) numbered in BEUMÉE's series (see there). *Herb. For. Res. Inst. Buitenzorg:* some from *Java* (*1918* coll.).

Nolthenius, Lt

was temporarily stationed (Sept.–Oct. 1896, Dec. 1896–Jan. 1897) on *Lang Island* in Sunda Strait;[1] he met BOERLAGE (see there), when the latter visited the island in Sept. 1896.

COLLECTIONS. *Herb. Bog.:* small collection made in the 2nd half of *1896*.

LITERATURE. (1) *cf.* Tijdschr. K.N.A.G. 14, 1897, p. 119.

Nong Chik bin Panglima Tapah

joined the Forest Department *Malay Peninsula* in 1908; now retired. He collected mainly in E. Pahang; *cf. sub* Conservator of Forest series, Kepong.

Nongchi

employed as a gardener by His Highness the Sultan of Johore (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Hort. Sing.:* a small series of orchid specimens from near Batu Pahat, *Malay Peninsula* (pres. *1892*).

Nongnong

a native collector employed by W. M. DOCTERS VAN LEEUWEN (see there); possibly identical with NENGNENG (see there).

COLLECTIONS. *Herb. Bog.:* plants from *W. Java*, from G. Tjisalak (Febr. *1922*), and near Buitenzorg.

Hort. Bog.: living plants from the environs of Buitenzorg.

Noni (or **Nony**), B., *cf. sub* Forest Research Institute, Buitenzorg.

Noordin, *cf. sub* Conservator of Forests series, Kepong.

Norman, *cf. sub* Forest Research Institute, Buitenzorg.

Noroña, Francisco

(mostly wrongly cited as FERNANDO DE NORONHA) († 1787 or 1788, Mauritius), Spanish physician and botanist who resided for some time at Manila, Luzon (P.I.), where he took much trouble to bring into order and to stock with valuable plants the Royal Botanic Garden. In 1786 he came to Java for a botanical exploration, and was granted permission by the Governor General ALTING

to travel in Priangan. Four Indonesian 'Medicos-Herboristas' and a Dutch draughtsman would accompany him. At Bandoeng NOROÑA was at odds with the latter who evidently wrote a furious letter to HOOIJMAN (see below); as a result the journey was broken off. When back at Batavia he sent a bill, amounting to 14200 ducats, to the Batavian Society for Arts and Sciences, for travelling expenses, copies of his work, *etc.* As this was thought exorbitant, NOROÑA decided to leave as soon as possible and to take his manuscripts with him. He left behind an alphabetical list of plants.[2] He sailed for Mauritius in Febr. 1787.[1]

From his MSS[4] it is evident that he must have worked like one possessed, and it is very probable that the draughtsman could not keep step with him. Besides, NOROÑA was ill with malaria and dysentery, which will not have improved his temper. Does he speak at first of his friend and benefactor HOOIJMAN, this later changes into 'feigning protector', the Dutch were good for nothing, and when homeward bound on the French ship he soon had high words with the captain.

He is commemorated in the genus *Noronhia* STADM. and in several plant species by BLUME and REINWARDT. On the ground belonging to the Manila garden a monument to his memory was later erected (no traces of it have been found in recent times).

ITINERARY.[4] The *Philippines:* stay at Manila (till March *1786*); sailing (March 18) for *W. Java:* Batavia (Apr. 15); stay at Batavia, making the acquaintance of JAN HOOIJMAN, J. C. M. RADERMACHER (see there), Dr Med. STÜTZER, *etc.;* for some time the guest of HOOIJMAN at the latter's country-house near Batavia, from where setting out on his journey on Sept. 5 to Chiluar (= Tjiloear); Boghòr (sometimes written Bèrgen-soòr or Beutensoòrg = Buitenzorg) (8–28); *via* Batu-tulis to Pondoc-ghedè (staying 18 days), and proceeding to Ciceroà (= Tjisaroea) and Chapannas (= Tjipanas), making trips in the vicinity, staying at least 15 days (mention is made of G. Cazur= Kasoer, which was not climbed, however); Tjian(d)jo(e)r and environs, making trips to Chilagon (= Tjilakoe), Chaligàn and Gagac; proceeding to Chibulagon, Beaban, Chitarum (= Tjitaroem) River, to Rachamandàla (= Radjamandala) ((Nov. ? 5); to Churucagòn and Bandom (= Bandoeng) *via* Chimay (= Tjimahi); at odds with his draughtsman and after correspondence with HOOIJMAN (evidently in unfriendly terms) returning *via* Bracamuntiang, Samodang (= Soemedang) and Cheribon to Batavia (in 8 days, ? Dec.); stay at Batavia; embarking on a French vessel (Febr. 18, *1787*).

COLLECTIONS. His herbarium came to LA BILLARDIÈRE through the intermediary of COSSIGNY.[3] It is not known with certainty that Java or Manila specimens were included. In *Herb.* DELESS. (*Geneva*): Madagascar plants; *Herb. Paris:* few specimens from Madagascar.

Part of his collection was sent to M. le Comte D'ANGIVILLER, who presented it to the 'Jardin du Roi' on Nov. 5, 1788.[9] A list of 119 *nos* from Manila (*Luzon*) and *Java*, but from Île de France (= Mauritius) and Madagascar too, accompanied the case in which it was packed. The contents consisted of seeds, flowers and fruits, all mixed up, as many of the packets were torn; it included flowers of 'rasamala' (*Altingia*), fruits of *Casuarina*, guttapercha, *etc.*

At NOROÑA's death M. COSSIGNY became heir to all his drawings and manuscripts, which he originally committed to the charge of LA BILLARDIÈRE with the intention to have them published.[4] Later they were presented to the then Acad. of Sci. at Paris and finally they came to the Libr. of the Nat. Hist. Mus. there. From a letter to BILLARDIÈRE (see Lit. 4, MSS *no* 43) it is evident that COSSIGNY received the plates at least in two consignments (the 2nd time 66!).

Three sets of his water-colour drawings of Javan plants are extant; they are not completely identical.[10] In an introductory essay to an unfinished flora of Java L. A. DESCHAMPS wrote (in MS., Bot. Dept Brit. Mus.) that NOROÑA when he left Java, left some drawings with the clergyman J. HOOIJMAN (deciphered by BRITTEN in Journ. Bot. 41, 1903, p. 283 *seq.* as: Jan Predicat Diman (?)) his maecenas and friend. The rights of the matter is that NOROÑA was very mysterious about his collections *etc.*, but HOOIJMAN had the drawings copied without his knowledge, and planned to add descriptions himself.[8] NOROÑA mentions in his diary (see Lit. 4, MS. *no* 42) to have deposited a set of drawings at HOOIJMAN's.

In the report of 'Het Marineschool' at Semarang for 1792, a communication is made, that the pupils of the said school made drawings of some 100 Javan plants on behalf of the 'Bataviaasch Genootschap'.[7] In April 1796 Governor VAN OVERSTRATEN sent a set of NOROÑA's drawings to L. A. DESCHAMPS (see there) with the request to return them, as he intended to have 'the unique set' copied. In June of the latter year the copies, made in 'Het Marineschool' again, were ready, as appears from some letters from the said Governor to DESCHAMPS, which are included in the latter's manuscripts in the British Museum.

One set of 108 numbered drawings (incl. 2 animals) accompanied by a list 'Plantae indicae a Norogna collectae, descriptae et pictae' (115!) in *Libr. Nat. Hist. Mus. Paris.* We assume that this was NOROÑA's private set, brought by him to Mauritius. Another one in *Libr. Herb. Berlin:* 'Icones ineditae 110 plantarum javanicarum servantur Samarangae in schola navali'.[5] It is unknown to the present author how this set found its way to Germany, while no set is known to be extant in either Java or Holland. The 3rd set, identical with the 2nd, of 111 water-colour drawings (1 species represented by 2 drawings) of Javan plants were included among the MSS and drawings of L. A. DESCHAMPS (see there), they were sent to him by Governor VAN OVERSTRATEN in 1796; presented to the *Libr. Brit. Mus.* in 1861.[6]

LITERATURE. (1) *cf.* Verh. Bat. Gen. K. & W. 5, 1790, p. (23)–(26).

(2) In Verh. Bat. Gen. K. & W. 5, 1790 (this volume contains also elaborate descriptions of *Altin-*

gia excelsa and *Ranghas javanica!*) under the title 'Relatio plantarum Javanensium iter factione usque in Bandong recognitarum a Dne. F. NORON(H)A' (comprising *c.* 700 spec.); 2nd edition in *l.c.* 1827, p. (64)–(86); the list was revised and illustrated by J. K. HASSKARL in Tijdschr. Nat. Gesch. & Physiol. 11, 1844, p. 209–228. Transl. of the *Altingia* paper in Ann. Bot. 2, 1805, p. 325–330.

(3) *cf.* Deutsche Naturzeitung N.F. 1, 1855, p. 69.

(4) *cf.* KONIG & SIMS Ann. Bot. 2, 1806, p. 380–381; DELEUZE, Hist. et descript. Mus. Roy. Hist. Nat. 2, 1823, p. 696–697; LASÈGUE, Mus. Bot. DELESS., 1845, p. 189–190.

The MSS in the Nat. Hist. Mus. Paris consist of:

No 42. Note-books 1–3: Diary of his voyage to Java 'Quaderno 1°–3° de mi viage à la Isla de Java (desde el mes de Marzo de 1786)'. Note-books 4–12: 'Descriptiones plantarum ex Java'.

No 43. Letter from COSSIGNY TO LA BILLARDIÈRE, dated May 9th, 1791. Acknowledgement of receipt of drawings of plants from the inheritance of M. NOROÑA.—'Plantae indicae a Norogna collectae, descriptae et pictae' (List referring to 115 plates. Other folio list referring to the note-books with descriptions, NOROÑA's handwriting ?).—'Classificatio-plantarum a me scriptarum in Java, secundum ordinem familiarum naturalium'.—'Nomenclator Javanensium a domino NOROÑA descriptarum, iterfactione ei permissa insule Java, ab illustrissimo domino prefecto generali ordine alphabetico dispositus'.—'Prodromus plantarum Javanensium a me descriptarum (Nova genera).'—NOROÑA. Botany of the island of Java (108 coloured plates).—Other MSS concerning the flora of Madagascar, his stay in Mauritius; a Spanish-Javanese dictionary, and coloured drawings of Javan animals.

No 1340. 'Notes sur les espèces de plantes décrites par NOROÑA' by LA BILLARDIÈRE.

No 1341. 'Description des plantes de Java' by ? LA BILLARDIÈRE.

(5) *cf.* PRITZEL, Thes. Lit. Bot., 1872, p. 234.

(6) Accompanied by a list of vernacular names in Dutch: 'Notitie der Planten door den heer NORONHA gevonden in de Jacatrasche Bovenlanden zoo als dezelve bij den Inlander genaamd worden' (*cf.* Journ. Bot. 41, 1903, p. 283).

(7) Statement of the lieutenant in the navy M. M. MERENS (letter dated Oct. 12, 1941).

(8) *cf.* F. DE HAAN, Priangan 4, 1912, p. 560.

(9) In the 'Archives Nationales', Paris:

Papers originating from ANDRÉ THOUIN, including:

'État des objets contenus dans une caisse qui fesoit partie de la collection de M. NOROÑA, envoyée à M. le Comte D'ANGIVILLER, qui l'a donnée au Jardin du Roi, le 5 Novembre 1788' (AJ^{15} 511, *no* 482).

Documents with relation to the history of the "Jardin du Roi", of the Museum and its library. MSS of NOROÑA (in April 1949 these could not be found).

(10) Drs VAN STEENIS & BACKER will publish a study on NOROÑA's plates and MSS.

BIOGRAPHICAL DATA. KONIG & SIMS Ann. Bot. 2, 1806, p. 325–326 (footnote), 380–381; Nat. Tijdschr. N.I. 31, 1870, p. 193–195; Journ. Bot. 41, 1903, p. 283–285; BACKER, Verkl. Woordenb., 1936; MSS in London and at Paris.

Norris, Sir William

(1793, ? , London, England; 1859, Sunningdale, Berkshire, England), a jurist who went to British India in 1829; from 1836–47 in the Malay Peninsula (Recorder of Penang *etc.*), later Chief Justice in Ceylon. He was a friend of GRIFFITH's.

He is commemorated in the genus *Norrisia* GARDN. and in some other plant species.

COLLECTING LOCALITIES. *1836–47. Malay Peninsula: Penang;* Mt Ophir (Johore), Malacca.

COLLECTIONS. He sent plants to GRIFFITH, Sir W. J. HOOKER, Lady DALHOUSIE (see those), and GARDNER in Ceylon.[1] The herbaria of GRIFFITH, HOOKER and Lady DALHOUSIE came to *Kew* and so did NORRIS's own fern collection. *Herb. Berl.:* Malacca plants (pres. *c.* 1849); also dupl. in *Herb. Florence*, and *Herb. Leyden* (pres. 1849).

LITERATURE. (1) *cf.* CURTIS, Catal. Plants Penang, 1892, p. 100; RIDLEY in Journ. Str. Br. Roy. As. Soc. *no* 25, 1894, p. 166; BACKER, Verkl. Woordenb., 1936, *sub Norrisia.*

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 28, 1890, p. 89; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; BACKER, Verkl. Woordenb., 1936.

Nouhuys, C. van

Civil Administrator in SE. Borneo.

COLLECTING LOCALITIES. *SE. Borneo:* near Koeala Kapoeas, Kotawaringin (*1912*); ? near Poeroek Tja(h)oe (Upper Barito) (*1919*).

COLLECTIONS. *Herb. Bog.:* some orchids; living material in *Hort. Bog.*

Nouhuys, Jan Willem van

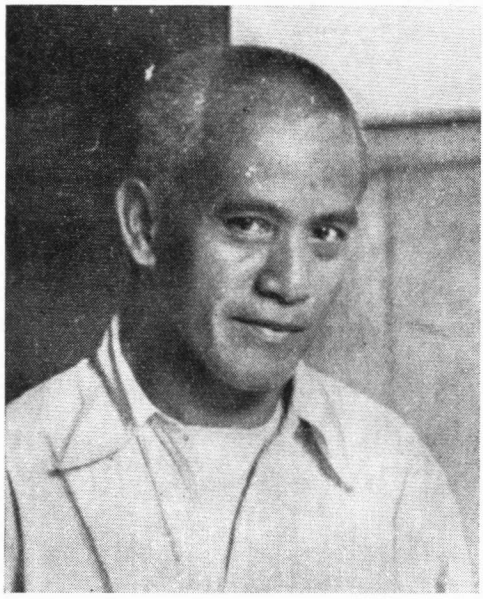
(1869, Leyden, Z.H., Holland; x), was educated at the Naval School at Amsterdam and went to the D.E.I. in 1888 in the employ of the Royal Dutch Navy; in 1902 promoted captain; pensioned off in 1915. After his return in Holland he was appointed Director of the division of Geography and Ethnography of the Maritime Museum 'Prins Hendrik', Rotterdam; he resigned in 1934.

He was a member of the WICHMANN and of both LORENTZ expeditions to New Guinea (*cf.* respectively *sub* G. M. VERSTEEG and L. S. A. M. VON RÖMER).[1]

The genus *Nouhuysia* LAUT. and some plant species were named in his honour.

ITINERARY. *2nd* LORENTZ *Expedition to Dutch S. New Guinea, 1909–10.* L. S. A. M. VON RÖMER (itiner., liter., *etc.* see there) who undertook the botany department of the expedition, was not allowed to participate in the last stretch to the snow mountains, with a view to the necessity to minimize baggage. Proceeding from Top bivouac in the Hellwig Mts (Oct. 27, *1909*); Treub bivouac in the Treub Mts (2360 m alt.) (27); Tigang bivouac (2000 m) (28); Papoea bivouac (*c.* 1670 m) (29); Nood bivouac (2523 m) in the Wichmann Mts

(30); Wichmann bivouac (3081 m) (31); Hubrecht Valley (Nov. 3); Waterval bivouac (4); Oranje bivouac (3740 m) (5); Vallei bivouac (3570 m) (6); Wilhelmina bivouac (*c.* 4000 m) (7); Wilhelmina summit (170 m below the highest point) (8) and Ramp bivouac; Matigheids bivouac (3850 m) (11–



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20); several intermediate bivouacs (LORENTZ still being a poor walker after his previous fall) on the way to Waterval bivouac (27); Hubrecht bivouac (29); Hubrecht Valley; Papoea bivouac (Dec. 5); Top bivouac (9–10); passing Erica summit to Perameles bivouac (12); Alkmaar bivouac (15), from where VAN NOUHUYS made a trip to the Noordwest River (Jan. 3–13, *1910*) and explored the Schultz River (27–28).

COLLECTIONS. *Herb. Utrecht:* 24 mountain plants (coll. Nov.–Dec. *1909*).[2]

Some results were published in Nova Guinea vol. 8.

LITERATURE. (1) Author of 'Voordracht over den ontdekkingstocht in Nieuw Guinea, waarbij het Sneeuwgebergte werd bereikt' (Ver. Moederland en Koloniën 11, 1911, *no* 1); 'Een en ander over onzen tocht naar het Sneeuwgebergte van Ned. Indië' (Tijdschr. K.N.A.G. 1910, p. 799–809, 3 figs); 'De vaststelling eener tropische sneeuwgrens op Nieuw Guinea' (Versl. der voordrachten v.h. Bat. Gen. der Proefondervindelijke Wijsbegeerte 1, 1917–18, p. 205–215); 'Over de herkomst en het gebruik van tabak op Nieuw Guinea' (Mensch en Maatschappij 8, 1932, p. 75–79).

(2) *cf.* Bull. Mij Bevord. Natuurk. Onderz. Ned. Kol. *no* 63, p. 23.

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 270 and *l.c.* 1938; BACKER, Verkl. Woordenb., 1936.

Nur bin Mohamed Ghose, Mohamed

a native, employed in the Botanic Gardens, Singapore, from 1913 (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTING LOCALITIES. *Malay Peninsula*, collecting in many parts from *1913 onwards: Singapore;* Taiping Hills with HANIFF (Febr. 1917); Salak and Sg. Siput with HANIFF (Dec. *1920*); *Sumatra East Coast* (Aug. *1921*): NE. slopes of Karo Boundary Mts, about Sibolangit and Bandar Bahru (= Baroe); *Malay Peninsula: Langkawi Islands* with HANIFF (Nov. 14–27, 1921); G. Pulai, Johore and environs (*1922*); G. Tahan with HANIFF (June 1922); Kelantan and Lebir Rivers to the roots of G. Tahan, with HANIFF (Jan.–Febr. *1923*); G. Angsi (Nov. 1923); Bt Tangga and Sungei Buloh Forest Reserve (Dec. 1923); expedition with FOXWORTHY (see there) from Kuala Lipis into Kelantan (Febr. 22–March 7, *1924*): Galas River at a series of places down the course of the river, Kuala Sameh, Sungei Renong, Kuala Limau Nipis, *etc.* and climbing G. Stong (March 5–7); about Serdang with HANIFF (Nov. 1924); Cameron Highlands (staying about 4 weeks in Apr. *1937*, collecting *c.* 400 *nos*); in Oct. and Nov. 1937 collecting on behalf of Harvard University, visiting Telok Forest Reserve near Klang, the Sungei Tinggi Reserve near Kuala Selangor, Ginting Simpak and Bt Kanching; another expedition for Harvard was planned for *1938*.

COLLECTIONS. *Herb. Sing.;* some duplicates in *Herb. Bog.*, incl. about 90 *nos* from *Sumatra;*[1] *Herb. Kew:* HANIFF & NUR from Pahang *etc.* (pres. 1919) and *Sumatra* plants (pres. 1922); fern dupl. from the *Mal. Penins.* and *Sumatra* in *Herb.* BONAPARTE (= *Paris*).[2]

In 1937 (and ? 1938) he collected on behalf of *Harvard University*, Cambr. (Mass.), at the request of Dr E. D. MERRILL and at the expense of the University: ± 450 *nos*, in *Herb. Arn. Arbor. etc.;* wood samples for the *For. Dept Mal. Penins.* and spirit-specimens for *Herb. Sing.*[3]

LITERATURE. (1) Sumatra plants in Journ. Mal. Br. Roy. As. Soc. 1, 1923, p. 46–115 (ferns on p. 114–115).

(2) *cf.* BONAPARTE, Notes ptéridol., fasc. 14, 1923, p. 447–475.

(3) *cf.* Ann. Rep. Bot. Gard. Sing. for 1937.

Nijenhuis, Johan Herman Dirk

(1893, Amsterdam, Holland; Dec. 15, 1944, in a Japanese camp), of the Dutch Mission Society, Kopandakan, Bolaäng Mongondow, *N. Celebes*.

COLLECTIONS. *Herb. Bog.:* 18 *nos* from *N. Celebes*, collected in March *1936*.

Nyman, Erik Olof August

(1866, Linköping, Sweden; 1900, Munich, Germany), botanist from Uppsala (Ph. Dr in 1896), who sailed for Java in February 1897, to make botanical investigations in the western part of that island.[1] He extended his researches to New Guinea, fell ill after some months' stay and finally had to return to Java. When he went home in mid-

1900, he did not reach his country, dying on the way thither.

He made ethnological and zoological collections too.

Some plants were named after him.

COLLECTING LOCALITIES. *1897–98. W. Java:*[2] at and near Buitenzorg, making several trips, to G. Salak (July 1897); Zandbaai on the S. coast (July–Aug.; early in Aug. with HJ. MÖLLER, see there); Wijnkoopsbaai (Aug.); G. Salak (Aug. and Sept. 10–11); *P. Onrust* (Oct. 27) and *P. Edam* (Nov.) in the Bay of Batavia; Zandbaai (end of Nov.–Dec. 1897 and Febr. 1898); Tjibodas (*c.* June 14–July 26), climbing G. Pangrango (July 16) and G. Gedeh (17–18); G. Salak (in July and Sept.).—*1898. Moluccas: Banda* and *Ambon* on the way to New Guinea.[3]—*1898–99. NE. New Guinea*, former Kaiser-Wilhelmsland: Stephansort and neighbourhood, and Konstantinhafen (Dec. 22, 1898–March 1899); Sattelberg (June and July 1899); Simbang near Finschhafen (Aug.); *Bismarck Archipelago: Neu Pommern* (= *New Britain*), in the vicinity of Herbertshöhe and the slopes of Mutter Volcano, and *Neu Lauenburg* (= *Duke of York Island*) (Aug.–Sept.); *NE. New Guinea:* Stephansort (Sept.–Oct.); Friedrich Wilhelmshafen, Hansemannberg and Sattelberg (Oct.); in Nov. back to *Java*, from where sailing for Europe in June *1900*, after having considerably enlarged his collections.

COLLECTIONS. *Herb. Uppsala;* dupl. at *Lund* and *Stockholm; Herb. Berl.:* plants from *New Guinea* and *Bismarck Archip.*, 460 *nos;* and *Fungi* from *Java* and *New Guinea;* dupl. in *Herb. Leyden; Herb. Copenhagen* (*New Guinea*).

His total collections amount to more than 1000 *nos*, especially cryptogams;[4] many of the phanerogams were collected in rice fields and mangrove forests.

The *New Guinea* plants were described by SCHUMANN.[5] The material of the S. coast of *Java* is said to be still unidentified in *Herb. Berlin* (now probably destroyed).

A fine series in alcohol of *Myrmecodia* and *Hydnophytum* from *Java* in the *Inst. of Plant Ecology, Uppsala.*

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 23; BOEDIJN in *l.c.* p. 107.

(2) E. NYMAN: 'Botaniske excursioner på Java' (Bot. Not. Lund for 1900, p. 117–122, 181–184).

Several data derived from WARBURG 'Monsunia' 1, 1900.

(3) *cf.* VERDOORN: 'Asiatische Jubileae' (Thesis 1934) p. 83.

(4) *Fungi cf.* in WARBURG 'Monsunia' 1, 1900; and literature by BOEDIJN in Ann. Jard. Bot. Buit. 45, 1935, p. 107 *etc.*

(5) In 'Nachträge z. Flor. d. Deutsch. Schutzgeb. i.d. Südsee' (Leipzig 1905).

BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 1903, p. 65; and *l.c.* 2, 1905, p. 47, 208; SCHUMANN & LAUTERBACH, Nachträge Fl. d. D. Schutzgeb. i.d. Südsee, 1905, p. 24–25 (transl. from Bot. Not. 1900); KROK, Bibl. Bot. Suecana, 1925, p. 562, incl. bibliogr.; BACKER, Verkl. Woordenb., 1936.

Obach, Father Antonio S. J.

? of the Ateneo de Manila, collected *Mangifera verticillata* ROB. near Dapitan, Moro Prov., *Mindanao, P.I.* (*cf.* Philip. Journ. Sci. C. Bot. 6, 1911, p. 338).

Obu, Hantarô

of Nomura Estate, Bandjermasin, *SE. Borneo*, collected a plant near the Martapoera River (June 4, *1936*).

COLLECTIONS. *Pandanus dasystigma* KANEH. in coll. KANEHIRA (see there), *no* 3744 *leg.* H. OBU (*cf.* Journ. Japan. Bot. 14, 1938, p. 435).

Ocampo, *cf. sub* Bureau of Science, Manila.

Ochse, Jacob Jonas

(1891, The Hague, Holland; x), educated at the Horticultural School, Frederiksoord; in the employ of the Government Caoutchouc Industry in the D.E.I., 1914–15; since 1915 appointed in Government service in the interest of fruit culture in Java, successively stationed at Batoe (above Malang) 1915–19, at Malang, 1919–20; since 1920 in the Agricultural Department at Buitenzorg and subsequently at Batavia, finally as leader of the sub-division Horticulture; in 1939 appointed Head of the division Co-operation and Home Commerce. In 1946 he resigned; in the same year he was appointed professor in the University of Miami, Florida.

COLLECTING LOCALITIES. *W. Java:* Pasar Minggoe and Ragoenan near Batavia; Sindanglaja (Nov. 12, *1924*); *N. Sumatra:* Atjeh (*c. 1929*).

COLLECTIONS. *Herb. Bog.:* material of some *Loranthaceae* from fruit trees in *Sumatra*, of a *Dioscorea* from *Java*,[1] *etc.*

LITERATURE. (1) *cf.* PRAIN & BURKILL: 'The genus Dioscorea' (1936) p. 130.

BIOGRAPHICAL DATA. Natuurwet. Tijdschr. N.I. 102, 1946, p. 97–98 + portr. and bibliogr.

Octubre

COLLECTIONS. *Herb. Manila: Philippine* plants (pres. *1915*).

Oding, M., *cf. sub* Forest Research Institute, Buitenzorg.

Oedam

Indonesian, since about 1853 in the employ of the Buitenzorg Botanic Gardens; in 1874 he was awarded the Bronze Star as chief mandor.

COLLECTIONS. *Herb. Bog.:* 1 *no* in the H.B. series, collected near Soerabaja in *E. Java.*

Oedin, *cf. sub* Forest Research Institute, Buitenzorg.

Oekoep, *cf. sub ditto.*

Oelo(e)ng, *cf. sub ditto.*

Oemar, *cf. sub ditto.*

Oemar Basah, *cf. sub ditto.*

Oemar Hasan, *cf. sub ditto.*

Oemar Kamal Oedien
ex-sultan of Sambas, *W. Borneo*, sent plants to *Hort. Bog.* in *1866.*

Oenoes, *cf. sub* Forest Research Institute, Buitenzorg.

Oersipuny, Paulus Simon Petrus
(1900, Koetaradja, Sumatra; x), since 1921 Overseer of Forests in D.E. Indian Government service; in May 1936 placed at the disposal of the Resident of the Moluccas, in charge of the supervision of the winning of cajaput oil in Boeroe, stationed at Namlea; in Aug. 1941 transferred to Bengkalis, E of Sumatra.
COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg:* some hundreds of bb. *nos* from *Boeroe; Herb. Bog.: nos* 11–83 from the vegetation of the cajaput fields (pres. 1937) and some herbaceous plants (pres. 1941), through the intermediary of the For. Res. Inst.

Oesman, *cf. sub* Forest Research Institute, Buitenzorg.

Oesman Nandika, *cf. sub ditto.*

Oetoei, Mohamed, *cf. sub ditto.*

Oever, Hendrik ten
(1878, Zwolle, O., Holland; x), was educated in the Agricultural College at Wageningen and in Germany and took his degree at Munich in 1912;[1] since Dec. 1899 in the employ of the D.E. Indian Forest Service, during his whole term of office stationed in Java; finally in 1930 Inspector in Chief; retired in 1933.
Author of many papers relating to forestry in the periodical 'Tectona'.
COLLECTIONS. *Herb. Bog.:* material of *Calophyllum grandiflorum* J.J.S., collected near Njangkowek in Priangan, *W. Java.*[2]
LITERATURE. (1) H. TEN OEVER: 'Die natürliche Verjüngung des Djati' (1912).
(2) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 1, 1918, p. 398.
BIOGRAPHICAL DATA. Tectona 26, 1933, p. i (277)–iv; Wie is dat? 1935, p. xiv; Persoonlijkheden in Nederland, 1938, + portr.

Oey Djoen Seng, *cf. sub* Forest Research Institute, Buitenzorg.

Oey Liang Hok, *cf. sub ditto.*

Officers of H.M.S. Egeria, *cf.* EGERIA.

Ogata, Dr M.
from Tokyo, spent his time in *Java*, August–November *1931*, chiefly in collecting ferns.[1]
COLLECTIONS. The location of his collections is not known.
LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 52.

O'hara, G. M.
Ranger, later Emergency Asst Conservator of Forests in the Malay Forest Department, 1905–27; collected in the *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5), mainly in Perak and the Dindings.
COLLECTIONS. In *Herb. Kuala Lump.*, numbered in the C.F. (see *sub* Conservator of Forests) series.

O'hara, V.
(† March 13, 1926), in the Forest Department, 1912–26; collected in the *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).
COLLECTIONS. In *Herb. Kuala Lump.*, numbered in the C.F. (see *sub* Conservator of Forests) series.

O'herne, C.
(1895, Semarang, Java; x), was educated at the Technical School, Amsterdam; from 1920 in different positions on the s.f. Tjepiring near Kendal, Centr. Java. He started plant collecting when temporarily on half-pay, in the years 1933–35.[1]
COLLECTING LOCALITIES. *1933–35. Centr. Java:* in the vicinity of Rawah Pening near Ambarawa; Kali Bening and Blabak (near Magelang and Moentilan); in 'tambaks' (fish ponds) on the N. coast near Kendal.
COLLECTIONS. He sent aquatic plants for identification to *Herb. Bog.*, where some plants may have been detained. His *private herbarium* was lost during the Japanese occupation of Java.
LITERATURE. (1) He published some papers in Aqua-terra.

Ohwi, Jisaburo
(1905, Tokyo, Japan; x), botanist, educated at Kyoto University, graduated in 1930; Lecturer at the Botanical Institute of Kyoto University, 1936–43; on the staff of the Buitenzorg Herbarium, 1943–45; since 1946 on the non-official staff of the Tokyo Science Museum.
COLLECTIONS. *Herb. Bog.:* at least 15 *nos* of grasses, collected at *Singapore* and Buitenzorg (*W. Java*).[1]
LITERATURE. (1) *cf.* J. OHWI: 'New or noteworthy grasses from Asia' (Bull. Tokyo Sci. Mus. *no* 18, 1947, p. 1–15).

Okney, I. A. M.,
cited as collector of a plant in *Brit. New Guinea* (*cf.* Nova Guinea 8, p. 616) = ? ORKNEY (see there). Plant in *Herb. Melbourne.*

Oldenborgh, Johannes van
(1848, Delft, Z.H., Holland; ? , ?), joined the D.E.I. Civil Service in 1869, and was stationed in Borneo, Sumatra and the Moluccas. From 1876–81 at the disposal of the Resident of Ternate, in 1894 appointed Resident of Ternate and in 1896 of Ambon; at his own request dismissed in 1900.
He made many tours of inspection to New Guinea, but as far as we know he did not make any collections in that island.

ITINERARY.[1] *1879.* Sailing from Ternate in the 'Havik' (Jan. 15): *P. Gebe* (17–19); *Biantji Isl.* (= *Biansi*) (20–21) near Waigeo(e); *Dutch NW. New Guinea*, Vogelkop: Doré Bay; *Mapia Islands;* Doré, Andai; *P. Japen:* bays of Surui (= Seroei), Ansus and Ambai; *P. Rōn;* Wandamen Bay; Doré Bay (Febr. 4–7); Samaté on *Salawati; Misoöl:* Kasim (the mentioned date the 18th, evidently wrong); Ternate (13).[2]—Sailing from Ternate (Sept. 22); *S. Misoöl,* Lilinta (29); Gulf of MacCluer near Ati-Ati, Rumbati and Patipi (Oct. 1–2); Bay of Kapaúr, *Karas Isl.* (3); N. coast of *P. Adi* (4); Dobo (*Aroe Isls*); *Namatote* (9), *Aiduma* and *Lakahia* (10); Wakara; Prinses Marianne Strait (13); E. coast of *Frederik Hendrik Isl.* (14); Dobo (*Aroe Isls*); *Ambon;* Samaté on *Salawati* (29–30); *Dutch NW. New Guinea:* Bay of Doré (Oct. 31–Nov. 1); Ternate (11).[3]—*1880.* Sailing from Ternate (May 17); *via Misoöl* (Waigama and Lilinta); anchoring in the Gulf of MacCluer between Rumbati and Patipi (22–23); kp. Baru and Bay of Kapaúr (24); *P. Gisser* (= *Geser*); Prinses Marianne Strait; *Prins Frederik Hendrik Isl.* (June 5); *via Gisser* and *Ambon* back to Ternate (21).[4]—Sailing from Ternate (Dec. 3); *Sula Besi; Ambon; Dobo* (*Aroe Isls*); along the *S. coast of New Guinea,* Serire, prob. Wenduréka; *Vleermuis Isl.* (= *P. Habé*(*ke*)); Dobo (*Aroe*) (Jan. 6–9, 1881); Ternate (21).[5]—*1881.* For January see before. Sailing from Ternate (March 14); *Mapia Islands* (19); *N. coast of New Guinea:* Bay of Doré (20); *Supiori:* Korido; Humboldt and Tanah Merah Bay (29); *P. Anus* and village of Jori; *Japen:* Bay of Surui (= Seroei), Ansus; E. side Geelvink Bay; *P. Rōn* (7); Bay of Doré; Samati on *Salawati* (14); *S. coast of New Guinea:* MacCluer Gulf, Ati Ati (15); Rumbati and Sisir (16); *islands of the Sekār Bay* (17); *Ambon;* Ternate (May 8).[6]—*1894.* Tour of inspection in the 'Zeemeeuw' (July–Aug.): *Salawati* and *Waigeo*(*e*); along the *N. coast of New Guinea* to Humboldt Bay; the *W. coast* (Vogelkop); Sekār and MacCluer Gulf, Sěkru; Ternate. In November visiting the *S. coast of New Guinea.*[7]

COLLECTIONS. *Herb. Bog.:* material of *Serianthes grandiflora* BTH. from *Ambon,* collected *before 1900.*

LITERATURE. (1) *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea vol. 2, p. 251, 259–262, 283–285, 287–289, p. 586 and 829.

(2) *cf.* ROBIDÉ VAN DER AA in Bijdr. Taal-, Land- en Volkenk. N.I. 1883, t.g. 6e Internat. Congr. Orient. Leiden, p. 164–172.

(3) *cf. l.c.* p. 173–182.

(4) *cf. l.c.* p. 182–189.

(5) J. VAN OLDENBORGH: 'Verslag eener reis met Z.M. stoomer "Batavia" van Ternate naar de Zuidkust van Nieuw Guinea tot 141°' (Tijdschr. Ind. Taal-, Land- en Volkenk. 27, 1882, p. 363–379). *cf.* ROBIDÉ VAN DER AA in Bijdr. Taal-, Land- en Volkenk. N.I. 1883, *l.c. sub* (2), p. 190–204.

(6) J. VAN OLDENBORGH: 'Verslag eener reis van Ternate naar de Noord- en Noord-Westkust van Nieuw Guinea, Z.M. stoomschip Batavia gedurende Maart en April 1881' (Tijdschr. Ind. Taal-, Land- en Volkenk. 27, 1882, p. 409–437); *cf.* also ROBIDÉ VAN DER AA in Bijdr. Taal-, Land- en Volkenk. N.I. 1883, *l.c. sub* (2), p. 205–222.

(7) *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea 2^2, 1912, p. 586.

Oldham, Richard

(1837, Macclesfield, England; Nov. 13, 1864, Amoy, China), Kew gardener who made botanical collections in Eastern Asia, from 1861–64.

Several plants were named after him.

COLLECTING LOCALITIES. Japan, Korea, China and Formosa. On the way thither also in the island of *Penang,* locality: Waterfall (May *1861*).[1]

COLLECTIONS. *Herb. Kew* (pres. 1861–66), 1688 *etc.,* several thousands of specimens; *Herb. Bot. Gard. St Petersb.* (= *Leningrad*): *c.* 1590 specim.; *Herb. Brit. Mus.:* 1138 plants from Formosa (purch. 1866–70). Other dupl. in *Herb. Berlin:* Japan and Korea (*a.* 1862–63) 679 *nos,* Formosa (*a.* 1864) small collection; from Japan and Korea in *Herb.* BOISS. (*Geneva*), *Leyden* and *Vienna;* from Formosa and Japan in *Herb.* BOISS. (*Geneva*), DECAND. (*Geneva*) (264), DE FRANQUEVILLE (= *Paris*), *Munich;* also plants at *Cambridge, Edinburgh,* and *Antwerp* (*Herb.* v. HEURCK).

His total collections amount to about 14000 plants, including many new species.[2] The *Penang* species (mostly ferns) amount to 10, of which 2 or 3 unnumbered.

LITERATURE. (1) *cf. Gleichenia linearis,* RIDLEY in Mal. Br. Roy. As. Soc. 4, 1926, p. 3, and MS. Kew collectors in Kew Library.

(2) D. OLIVER: 'Notes upon a few of the plants collected, chiefly near Nagasaki, Japan, and in the Islands of the Korean archipelago, in the years 1862–63, by Mr RICHARD OLDHAM, late Botanical Collector attached to the Royal Gardens, Kew' (Journ. Linn. Soc. Bot. 9, 1867, p. 168–170).

BIOGRAPHICAL DATA. Bot. Zeitung 24, 1866, p. 260; SEEMANN Journ. Bot. 4, 1866, p. 239–240; Journ. Kew Guild 1897, p. 29; BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 682–684; Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Oliver

is cited as collector in *N. Celebes* (*cf.* Pflanzenreich Heft 92, p. 31). Probably the statement is wrong; D. OLIVER identified the *Celebes* plants of RIEDEL (see there).

Oliveros, *cf. sub* Forestry Bureau, Manila.

Olivier, J.

COLLECTIONS. *Herb. Bog.:* 7 *nos* collected near Batavia, at Mr Cornelis, Tjilintjing, *etc.* in *W. Java* (*1928–31*).

Olivier, J. F., *cf. sub* Forest Research Institute, Buitenzorg.

Omar bin Mohamed

joined the Forest Department *Malay Peninsula* in 1915, and mainly collected in Negri Sembilan; *cf. sub* Conservator of Forests series, Kepong.

Omar, Jantan bin
(† 1938), collector of the Sarawak Museum, who collected in *NW. Borneo*, Sarawak.
COLLECTIONS. *Herb. Sarawak.*

Oort, van
probably PIETER VAN OORT (1804, Utrecht, Holland; Sept. 2, 1834, Padang, Sumatra), was appointed draughtsman of the 'Natuurkundige Commissie' (Commission for Natural Sciences) for the D.E.I. in 1825 and accordingly came to Java in 1826. He accompanied members of the said commission on their travels in W. Java (itinerary 1833 *cf. sub* S. MÜLLER),[1] Ambon, to the SW. coast of New Guinea, Timor, and finally (1833–34) in the environs of Padang (Sumatra West Coast). He ascended G. Salak in W. Java (July 22, *1831*).
Loranthus oortianus KORTH. was named after PIETER VAN OORT.
COLLECTIONS. *Herb. Levden: Vernonia cymosa* BL. *var. eupatorioides* (BL.) KOST. from Tjimahi, Priangan, *W. Java.*[2] The specimen was collected by VAN OORT and identified by KORTHALS.
LITERATURE. (1) P. VAN OORT & S. MÜLLER: 'Aanteekeningen gehouden op eene reize over een gedeelte van het eiland Java in den aanvang van het jaar 1833' (Verh. Bat. Gen. K. & W. 16, 1836, p. 83–156).
(2) *cf.* KOSTER in Blumea 1, 1935, p. 427.
BIOGRAPHICAL DATA. Alg. Konst- en Letterbode 1835[1], p. 66–67; DIARD in Hand. Ind. Gen. 's-Gravenhage 7, 1860, p. 106–108; BACKER, Verkl. Woordenb., 1936.

Oosten, Johannes van
(1883, Enschede, O., Holland; x), schoolmaster, serving from 1913–32 in the D.E.I., from 1925 onwards as teacher in natural history; he retired in 1932, and is living at The Hague now. Friend of C. A. BACKER; for some years president of the Natural History Society at Malang, E. Java.
COLLECTING LOCALITIES. *Centr. Java:* Magelang (Aug.–Sept. *1919*).—*E. Java. 1923.* G. Boetak.—*1928.* Poesoengadjimah, E of Malang; Kediri, at Popoh (S. coast), *etc.;* Nongkodjadjar and W. slope near Pontjokoesoem, G. Tengger.—*1930.* Valley of kali Kromong; foot of G. Welirang and G. Dorowati (N of Lebaksari) (Oct.); Tjobanrondo, G. Kawi (Nov. 9); Malang; G. Boetak.—*1931.* G. Baoeng near Malang.
COLLECTIONS. *Herb. Bog.:* about 60 plants; in 1930 he started numbering anew; *Herb. Pasoer.:* 62 *nos;* also dupl. in *Herb. Leyden.*

Oostenbroek, J.
COLLECTIONS. *Herb. Bog.:* some orchids from Makassar, *SW. Celebes* (coll. *1918*).

Oosterzee, J. J. van
from time to time sent living ornamental plants to *Hort. Bog.*, in about *1883.* Evidently he was a lover of plants; in the library of the Batavian Society for Arts and Sciences is a catalogue of living cultivated plants, which were offered for sale.[1]
In *1899* he sent dried material of 'Kedji Beling', one of the lithotriptic plants, to *Herb. Leyden.*
LITERATURE. (1) 'Plantenlijst der aan den heer J. J. VAN OOSTERZEE Jr te Pegangsaän, toebehoorende botanische collectie' (Batavia 1881).

Oosterzee, Louis Albert van
(1859, Semarang, Java; 1918, Batavia, Java), was educated in Europe and came out to the D.E.I. in 1881 as officer in the Civil Service; in 1898 appointed District Officer at Manokwari (NW. New Guinea); from 1902–09 and 1910–14 Assistant Resident of North New Guinea; pensioned off in 1915.
He was the discoverer of *Balanophora oosterzeeana* VALET., which was named in his honour.
ITINERARY. *1904.* Making a trip from Sjeri, Geelvink Bay (Apr. 14) to the Anggi Lakes (in Arfak Mts, Vogelkop; 19–28) and back to the coast near Wariab (= Wariap) (30).[1]
COLLECTIONS. In 1904, on his trip to the Anggi Lakes, he sighted the above-mentioned *Balanophora,*[2] but unfortunately postponed the collecting, and on the trip back the plant was not met with. It was later described on material collected by GJELLERUP in the same locality.
LITERATURE. (1) L. A. VAN OOSTERZEE: 'Eene verkenning in het binnenland van Noord Nieuw Guinee' (Tijdschr. K.N.A.G. 21, 1904, p. 998–1021).
cf. also Versl. Milit. Expl. Ned. N.G. 1907–15, Weltevreden 1920, p. 22.
(2) *cf.* Tijdschr. K.N.A.G. 21, 1904, p. 1000.
BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Ophof, A. J.
(1910, Soerabaja, Java; x), was educated at the Agricultural College at Wageningen, Holland; he came out to Java in March 1936, first in the employ of the H.V.A. (Handelsvereeniging Amsterdam) and since February 1939 at the Agricultural Institute at Buitenzorg. After the war, during which he was interned by the Japanese, he went to Holland. In 1947 he was appointed temporary teacher at the Horticultural School at Boskoop, Holland; later Secretary of the Agricultural Section T.N.O. (Appl. Nat. Sci. Organ.).
COLLECTIONS. *Private* herbarium of *Cyperaceae*, collected *1940–41;* now at Boskoop (Holland).

Ophuizen, J. A. W. van
Assistant Resident in Benkoelen, *S. Sumatra*, forwarded marine plants and wood samples to the 'Natuurkundige Vereeniging' at Batavia in *1861* (*cf.* Nat. Tijdschr. N.I. 24, 1862, p. 100).

Ophuysen, Charles Adriaan van
(1854, Solok, Sumatra; 1917, Leyden, Holland), joined the D.E. Indian Government service in 1876 as a clerk at the Governor's office, Sumatra West Coast; later Inspector of Native Education at Fort de Kock (S.W.C.); in 1904 he retired and was appointed Professor at Leyden University.
COLLECTIONS. *Herb. Kol. Mus.* (= *Ind. Inst. Amsterdam*): material of Batak medicinal plants,

accompanied by a list of vernacular names, 157 specimens (pres. *1896*). The Batak Lands are situated in Tapanoeli Residency, *NW. Sumatra.*

Orknie, James

owner of the cutter 'Loelia' in which he made a voyage to the West Pacific.

LOCALITIES. *SE. New Guinea, Papua.* He visited the island on the home voyage in the first half of *1873*, touching at Manu-Manu in Redscar Bay, *etc.*; May 25 back at Somerset. He collected near the Baxter River (= Mai Kusa).

COLLECTIONS. *Herb. Melbourne:* several plants communicated by R. BR. SMITH to F. VON MUELLER.[2]

LITERATURE. (1) *cf.* Chron. Lond. Miss. Soc. 1873, p. 224–225 and in A. W. MURRAY: 'Forty Years' Mission Work' (London 1876) p. 484.

(2) *cf.* F. VON MUELLER, Descr. Not. Pap. Pl. vol. 1, pt 3, p. 45.

Oro, M., *cf. sub* Forestry Bureau, Manila.

Orolfo, P.

Filipino Ranger in the employ of the Forest Dept Br. N. Borneo (see there), operating at Sandakan, *Br. N. Borneo.*

COLLECTIONS. *Herb. Manila;* dupl. in *Herb. Bog.* (pres. 1929), and elsewhere (see *sub* Forest Dept *etc.*).

Osbeck, Pehr

(1723, Oset, Sweden; 1805, Hasslöf near Göteborg, Sweden), clergyman who was educated at Uppsala; he attended the lectures of LINNAEUS. Chaplain on a voyage of the Swedish East India Company (see below). He made collections of plants and animals. Later preacher at Hasslöf.

He is commemorated in the genus *Osbeckia* L. and in several other plant names.

ITINERARY. *Voyage in the 'Prince Charles', 1750–52.*[1] Sailing from Sweden (Nov. 18, 1750) *via* Spain, the Canaries, Cape of Good Hope, islands of St Paul and Amsterdam, to *W. Java:* Anjar (July 15–17, *1751*); China; sailing from there (Jan. 4, *1752*); Sunda Strait, anchoring in Meeuwenbaai (Neuen Bay or New Bay) (Jan. 19, going ashore) and visiting *Meeuwen Isl.* (Nieu or New Isl.) (20) and *Prinsen Isl.* (21); *via* Madagascar, Cape of Good Hope, *etc.*, back to Sweden (arriving June 26).

COLLECTIONS. *Herb. State Mus. Stockholm.* Duplicates with *Herb.* LINNAEUS in *Herb. Linn. Soc. Lond.* (plants marked with 'O' or with the name in full).[2] In total he collected about 600 species from China, *Java, etc.*[3]

LITERATURE. (1) P. OSBECK: 'Dagbok öfwer en Ostindisk resa, *etc.*' (Stockholm 1757). Translated: 'Reise nach Ostindien und China' (Rostock 1765); 'Voyage aux Indes Orientales' (Rostock 1765); 'Journal of a voyage to the East Indies, 1750–52, with observations on the natural history, *etc.*' (London 1771).

(2) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 357.

(3) *cf.* Lists of collected plants and animals in OSBECK's diary (*l.c. sub* 1).

E. D. MERRILL: 'OSBECK's Dagbok öfwer en Ostindisk resa' (Amer. Journ. Bot. 3, 1916, p. 571–588; containing a list of *nomina nuda* and besides a list of species described by OSBECK, which were overlooked by most botanists.

LINNAEUS in his 'Species Plantarum' (1753) based many new species on type specimens of OSBECK; *cf.* also in 'Amoenitates Acad.' 4, 1759, p. 261–332.

Evidently HOUTTUYN also had plants of OSBECK at his disposition, *cf.* introduction of the 'Handleiding tot de plant- en kruidkunde'(new edit. 1773).

BIOGRAPHICAL DATA. WICKSTRÖM, Consp. Lit. Bot. Suec., 1831, p. 208; BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 58–60; KROK, Bibl. Bot. Suecana, 1925, p. 565–566; BACKER, Verkl. Woordenb., 1936.

Osman

collected in *Br. N. Borneo* on behalf of the Bureau of Science at Manila.

COLLECTIONS. *Herb. Manila;* dupl. in *Herb. Bog.* (pres. 1929).

Ostendorf, Friedrich Wilhelm

(1903, Amsterdam, Holland; x), was educated at the College of Agriculture, Wageningen, finishing his studies in 1925, taking his Dr's degree in 1933. In 1925 appointed Agriculturist of the Rubber Experiment Station at Buitenzorg (W. Java), and subsequently on the staff of several experiment stations, *viz* at Buitenzorg from 1926–32, at Semarang (Centr. Java) from 1933–40, and finally at Buitenzorg again (W. Java Experiment Station), mainly working on selection of rubber and cocoa.

COLLECTIONS. *Herb. Bog.:* 2 *Cyperaceae* from Ngoepit Estate near Klaten, *Centr. Java* (coll. *1937*).

Ostwald, F. G., *cf. sub* Forest Research Institute, Buitenzorg.

Otañes

cf. sub Bureau of Science, Manila; he is commemorated in *Zizyphus otanesii* MERR.

Oteyza, *cf. sub* Forestry Bureau, Manila.

Othman bin Ahmad

joined the Forest Department *Malay Peninsula* in 1913, and collected mainly in Negri Sembilan; *cf. sub* Conservator of Forests series, Kepong.

Otken-van Lakerveld, Mrs

of Soerabaja, collected material of *Cuscuta australis* (May *1930*) in *E. Java;* in *Herb. Bog.*

Otten, P. J. H., *cf. sub* Forest Research Institute, Buitenzorg.

Ottens, Arend

(1871, ? ; 1925, Weltevreden, Java), sergeant in the D.E. Indian Army; since 1911 Assistant and later Custodian of the Museum and Inquiry Office for Economic Botany, Buitenzorg.

Zingiber ottensii VALET. was named after him.

COLLECTIONS. *Herb. Bog.: Zingiberaceae* on behalf of VALETON, but also other plants,[1] probably all from *W. Java.*

LITERATURE. (1) *cf.* DANSER in Bull. Jard. Bot. Buit. sér. 3, vol. 8, 1926, p. 190.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Ottolander, Teun

(1854, Boskoop, Z.H., Holland; 1935, Tamansari, E. Java), a renowned planter who started his career in 1879 as Assistant on a Cinchona and coffee plantation in Central Java; he soon became Estate-Manager in East Java. In 1909 he settled at Tamansari (in Banjoewangi), he himself being the owner of the estate. He was president of the Dutch Indian Syndicate of Agriculture and had a large interest in the study of nature and in nature protection.

KOORDERS named some plants in his honour.

COLLECTING LOCALITIES. *1878–82.* There is no evidence that collections were made during his early rambles,[1] of which the following trips are known: in *1878* from Pekalongan (*Centr. Java*) *via* Tegal and Cheribon to *W. Java:* Priangan Res., making trips to Tjinjiroean and other Cinchona estates, Nagrak on the slope of the Tangkoeban Prahoe, Tjibodas on the slope of G. Gedeh, Lembang, and to the waterfall at Tjimahie; in *c. 1879* to 'Pring Ombo' Estate near Pekalongan (*Centr. Java*), between Diëng and Slamat; from June–July *1881* to Priangan Res. (*W. Java*), *viz* by boat from Soerabaja to Batavia (at the time evidently planter on an estate on G. Tengger), by train to Buitenzorg (visiting the Botanic and Economic gardens), the 22th proceeding to Sindanglaja; Nov. 18, *1882* from Tosari (on slope G. Tengger, *E. Java*) to Ngadas, and *via* the Ider Ider, Ranoe Pani, R. Koem(b)olo to G. Smeroe.—*1883–1908. Java.* The plants collected probably for the greater part from *E. Java. After 1900* he collected in *E. Java* at: Bajoelor (*1901*), Pantjoer (1901); Besoeki and G. Raoeng-Idjen (*1902*); Pradjekan, Sitoebondo (*1908*), and probably elsewhere.—*S. Sumatra:* Benkoelen Res., G. Kaba (Dec. *1911*, *1914*, Oct. *1917*).[2]

COLLECTIONS. *Herb. Bog.:* > 400 *nos* from *Java* and material of *Rafflesiaceae* from *Sumatra.* Partly with *Herb.* KOORDERS (with KOORDERS *nos*) in *Herb. Bog.*

In *1883* he sent a specimen of *Dendrobium linearifolium* T. & B. to *Hort. Leyden*, and probably other orchids in the same decade; in *1886* living ferns to *Hort. Bog.*, in *1908* a living plant again.

LITERATURE. (1) T. OTTOLANDER: 'Van Java' and some other papers (Sieboldia 5, 1879, p. 83–85, 96–100, 196–197, 212–214, 227–228, 267–269, 277–278, 281–284, 353–355, 364–366; *l.c.* 6, 1880, p. 17–19, 25–28, 185–187, 204–206, 283–286, 300–302; *l.c.* 7, 1881, p. 124–126, 133–134, 201–204, 220–222, 307–309, 316–317, 321; *l.c.* 8, 1882, p. 203–204, 210–213, 271–273, 287–290, 299–300, 303–305, 362–364, 370–371, 375–376, 391–394, 408–409; *l.c.* 9, 1883, p. 76–77, 89–91, 121–124, 233–236, 297–300, 321–324, 333–335, 340–342, 377–378, 388–389, 393–395, 402–407, 409–412); 'Op de Goenoeng Gedeh' (Sempervirens 13, 1884, p. 281–283).

(2) *cf.* T. OTTOLANDER: 'Rafflesia Natuurmonumenten in Sumatra' (Meded. N.I. Ver. t. Nat. Besch. *no* 2, 1918, 21 pp., pl. 3).

cf. S. H. KOORDERS: 'Botanisch overzicht der Rafflesiaceae van Ned. Indië' (*l.c. no* 4, 1918) p. 32–33, 46 and 103–105.

BIOGRAPHICAL DATA. Alg. Landb. Weekbl. N.I. *no* 30, 1919, p. 1064-1066; 'Jubileum' *no* of N.I. Rubber- en Theetijdschr. 9, 1924, Febr.; Bergcultures 9, 1935, p. 1245–1247; Chron. Bot. 2, 1936, p. 241; BACKER, Verkl. Woordenb., 1936.

Oudemans, Corneille Antoine Jean Abram

(1825, Amsterdam, Holland; 1906, Arnhem, Gld, Holland), physician, educated at Amsterdam, Paris and Vienna; from 1859–96 Professor in the University of Amsterdam. He specialized in pharmacognosy and mycology.

COLLECTIONS. In 1871/72 he presented herbarium material of *Cinchona* species, cultivated in *Java*, to the *Herb. Kol. Mus. Haarlem* (= *Ind. Inst. Amsterdam*). To our knowledge he himself never visited Java, probably he received the collection from VAN GORKOM (see there) or someone else.

BIOGRAPHICAL DATA. Kon. Akad. Wet. A'dam Versl. Afd. Nat. 1906/07, p. 174–177; Ber. D.B.G. 26a, 1908, p. (12)–(33); Jaarb. Kon. Akad. Wet. A'dam 1909, p. 57–105; Ned. Kruidk. Arch. 49, 1939, p. 447; *l.c.* 50, 1940, p. 198; *l.c.* 51, 1941, p. 364.

Oudemans, G. J.

officer of the Civil Service in the D.E.I.

COLLECTING LOCALITIES. *Centr. Java:* G. Sendoro (Oct. 10, *1888*).

COLLECTIONS. In *Herb. Bog.* with *Herb.* KOORDERS *bot. var.* The plants were presented to KOORDERS through the intermediary of BRUINSMA.

Ouwehand, Cornelis Dirk

(1866, Katwijk, Z.H., Holland; x), from 1892–1902 Military Surgeon in the D.E.I. Army, stationed in Sumatra; in 1902 transferred to the Public Health Service and appointed teacher at the Medical College (at that time named S.T.O.V.I.A.) at Batavia; later filling various other offices in the same town, and in 1916 pensioned off with the rank of Inspector in Chief of the Public Health Service.

Colx ouwehandii KDS was named after him.

COLLECTING LOCALITIES. *N. Sumatra* (Nov. *1895*–July *1897*), Tapanoeli: Toba Plateau, at Balige, Dolok Tolong, Toba Highlands, Moeara Toba, Lagoe Boti, Oeloean, Si Torang, Pitoe-Pitoe, Siborongborong, Boetar, Bonan Dolok, Bakara, Lintoeng ni Hoeta, Prangonan (highland), Hoeta Gindjang, *etc.*

COLLECTIONS. *Herb. Bog.: nos* 1–395, and some numbered in the H.B. series. The specimens are provided with ample notes. Dupl. in *Herb. Leyden.*

BIOGRAPHICAL DATA. Portr. in L. S. A. M.

VON RÖMER, Historische schetsen, Batavia 1921, pl. 185; BACKER, Verkl. Woordenb., 1936.

Overbergh, Morice van, *cf.* VANOVERBERGH, MORICE.

Overdijkink, Gerard

(1885, Apeldoorn, Gld, Holland; x), teacher at the School of Agriculture at Buitenzorg, and since 1911 at Soekaboemi; later (1929) at Malang; since 1933 retired and living in Holland, at Bilthoven.

COLLECTING LOCALITIES. *W. Java:* Tjibeber (Dec. *1912*); Pasir Pogor on the slope of G. Salak (Sept. *1913*).

COLLECTIONS. *Herb. Bog.:* few plants.

Overzee, van

of Balikpapan, *SE. Borneo.*

COLLECTIONS. *Hort. Bog.:* orchids (pres. through the intermediary of J. J. SMITH in *1924*).

Oxley, Thomas

(† 1886, Southampton, England), surgeon in the Straits Settlements, in the employ of the English E.I.C.; in 1831 stationed in the isle of *Penang* (= Prince of Wales' Isl.), from 1845–57 in Singapore. He paid a visit to the Banda Islands (Moluccas).[2]

He was especially interested in entomology and in economic plants.[1] He lend a helping hand to THOMAS LOBB on the latter's travels.

Some plants were named after him.

COLLECTING LOCALITIES. There are no data as to collecting localities in the *Malay Peninsula;* he climbed Mt Ophir (NW. Johore) twice (Jan. *1840* and Apr. *1848*).[3]

COLLECTIONS. He sent plants from *Malacca* to VOIGT in Bengal, at the moment when the East India Company had ordered the construction of a new herbarium in the *Calcutta* Botanic Garden, evidently to replace what WALLICH had just dispersed. He was said to possess a herbarium of 1000–1200 specimens in 1845 (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5). In *Herb. Kew* (pres. 1848–52), also with *Herb.* Sir W. J. HOOKER.

He sent living material to *Hort. Calcutta* (*c. 1843*) and to *Hort. Bog.* He introduced the so-called 'flamboyant' (*Poincinia regia* BOJER) in Java (1848).

LITERATURE. (1) Author of 'Botany of Singapore' (LOGAN Journ. Ind. Arch. 4, 1850, p. 436–440); also some other papers, chiefly dealing with economic plants, in the same periodical.

(2) *cf.* T. OXLEY: 'The Banda Nutmeg Plantations' (HOOK. Journ. Bot. & Kew Gard. Misc. 9, 1857, p. 1–6).

(3) On the 1st ascent *cf.* LOGAN Journ. Ind. Arch. 6, 1852, p. 636–642 (reprinted from Singapore Free Press 1840, without mentioning the author).

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Oye, Paul Herman Gustaaf van

(1886, Oostende, Belgium; x), hydrobiologist, educated at Ghent University (Ph. Dr 1911); from 1915–18 Zoological Assistant in the Marine Biological Laboratory at Batavia; from 1918–21 officer for Freshwater Fishery, stationed at Tasikmalaja, W. Java.[1] In 1922 he returned to Belgium, took up the medical study (M.D. 1924), and went twice to the Congo; Professor of Zoology at Ghent since 1926.



OUWEHAND

Author of several microbiological papers on Java.

COLLECTIONS. *Herb. Bog.:* some plants from *Java* (pres. *1919–21*). He collected mosses on G. Patoeha (2000–2500 m alt.) in *W. Java* in *1921;*[2] in *Herb.* DIXON (= *Brit. Mus.*).

LITERATURE. (1) P. VAN OYE: 'Een wandeling naar Tjipanas bij Garoet (met beschrijving van de vischvijvers aldaar)' (Trop. Natuur 10, 1921, p. 58–62, 4 fig.).

(2) *cf.* Kew Bull. 1925, p. 94.

BIOGRAPHICAL DATA. Bot. Jaarb. Dodonaea 25, 1934, p. 21–27 (scientific papers); 13e Biol. Jaarb. Dodonaea, 1946, p. 11–15 (incl. continuation of bibliogr.), and p. 16–23 + portr.

P.N.H. nos, *cf. sub* Philippine National Herbarium.

Pa Idan

(† 1913), Indonesian plant collector in the employ of the Buitenzorg Botanic Gardens; in 1902 he was awarded the Bronze Star.

COLLECTING LOCALITIES. *1888. With* WERTHEIM *Expedition* to the *Kai Islands, cf. sub* JAHERI. —*1897.* Visiting the *Krakatau Group,* Sunda Strait, with PENZIG *etc.* (March 17).—He made collections in *W. Java,* on G. Salak *etc. Possibly* partly

in *1891* when making trips in *W. Java* with the botanist G. HABERLANDT who made no collections himself. The latter visited: Depok, Tjiapoes, G. Salak, *P. Onrust & Edam* (Bay of Batavia), Garoet, and Tjibodas (9 days), and was mostly attended by PA IDAN.[1]

LITERATURE. (1) *cf.* G. HABERLANDT: 'Erinnerungen, Bekenntnisse, und Betrachtungen' (Berlin 1933) p. 136–137.

COLLECTIONS. *Herb. Bog.:* ferns from G. Salak, *etc.*

Paardt, Simon Cornelis Theodorus van der

(1884, Batavia, Java; x), after education in Holland came back to Java in 1907 as a 2nd lieutenant in the D.E. Indian Army, and was successively stationed at Semarang, and Djokja (1909–10); on half-pay, 1910–12; in the employ of Borneo Co. Ltd at Soerabaja, 1911–12; exploration tour for the investigation of coconut culture in the Tambelan Islands (on Midai and Benoa) and the Riouw Archipelago in 1912; in 1913 forest exploration in S. Borneo for commercial aims; for coconut culture and cattle breeding in NW. Bali, 1915–18; in the first half of 1919 exploring in Celebes, and subsequently appointed teacher in mathematics at Soerabaja; in 1927 transferred to Batavia; retired in 1934, and settling at Bandoeng where he was appointed Director of a Technical School in 1938. During 1942–45 interned in several Japanese camps, and evacuated to Holland in 1947, now living at Laren.

He was especially interested in birds.[1]

COLLECTING LOCALITIES. *NW. Bali.* He visited the island in *1911* (and *P. Mendjangan*) and in Febr. *1914; since* June *1915* a resident of the island for more than 3 years, in which period crossing NW. Bali several times; in *1922* and *1924* paying visits to the island; in *1926* collecting plants at: G. Goendoel, Soember Timah, NW. coast, Pemoetran and in *P. Mendjangan.*

COLLECTIONS. *Herb. Bog.:* 80 *nos* from *Bali* and *P. Mendjangan* (coll. *1926*). The collection 1915–18 was lost when shipped from Bali to Java.

LITERATURE. (1) TH. VAN DER PAARDT: 'Manoek Poetih; Leucopsar Rotschildi' (Trop. Nat. 15, 1926, p. 169–173, 3 fig.); 'Onbewoond Noord-West Bali' (Tijdschr. K.N.A.G. 46, 1929, p. 45–77, fig. 1–4, 1 map).

Paath, Fr. J.

(1899, Kamanta, Minahassa, Celebes; x), since 1931 Assistant for Agrarian Affairs in the employ of the autonomic Sambas District, stationed at Singkawang in West Borneo. He collected living orchids which were cultivated in his private garden.

Author of some papers in 'De Orchidee'.

Dendrobium paathii J.J.S. was named after him.

COLLECTING LOCALITIES. *W. Borneo:* in the vicinity of Singkawang, G. Raja (Apr. *1935*), *etc.*

COLLECTIONS. Of species unknown to him, he evidently sent flowers in alcohol and photographs to the editors of 'De Orchidee'. The latter transmitted those to J. J. SMITH, then already a resident of Oegstgeest near Leyden.[1] The material *probably* preserved in *Herb. Leyden.*

LITERATURE. (1) *cf.* J. J. SMITH in De Orchidee, July 1935, p. 183–185 and in Gard. Bull. Str. Settlem. 9, 1935, p. 90–91.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936, *sub Addenda.*

Pacheco, J., *cf. sub* Forestry Bureau, Manila.

Pachmit, *cf. sub* Forest Research Institute, Buitenzorg.

Pacis, J. G., *cf. sub* Forestry Bureau, Manila.

Paduada, *cf. sub ditto.*

Pako, *cf. sub* Forest Research Institute, Buitenzorg.

Palangkey, A., *cf. sub ditto.*

Palit, D., *cf. sub ditto.*

Palla, Dr Eduard

(1864, Kremsier (Mähren), Moravia; 1922, Graz, Czecho-Slovakia), was educated at Vienna; in 1888 appointed Assistant in the Botanical Institute at Graz, in the course of years being promoted to Ordinary Professor of Botany (1913). He made a voyage to Java, occupying himself especially with the study and systematics of some cryptogamic families.

Author of systematic papers on *Cyperaceae.*

ITINERARY. *1900–01. W. Java:* Buitenzorg (staying 3 months, till Febr. 1901), probably making trips in the neighbourhood; *possibly* in *Centr.* and *E. Java* too.

According to the biography (see below) he was in Java in 1901–02, which statement is certainly a mistake.

COLLECTIONS. *Herb. Graz,* where FR. VERDOORN in 1937 found a collection of large bundles of *Java* plants *leg.* PALLA, seemingly common species of the classic hunting-grounds. According to the biography he collected many *Java Cyperaceae* which are still unidentified.

LITERATURE. (1) *cf.* Versl. Pl. Tuin Buitenzorg for 1900 and 1901, and Ann. Jard. Bot. Buit. 45, 1935, p. 25, 68 and 75.

BIOGRAPHICAL DATA. Ber. D.B.G. 40, 192,2 Gen. Vers. Heft p. (86)–(89) incl. bibliogr. (evidently none of his publications relating to Java).

Palm, Björn Torvald

(1887, Norrtälje, Sweden; x), phytopathologist-mycologist who took his Ph. Dr's degree at Stockholm in 1915. In 1912–13 he travelled in Madagascar; from 1916–18 attached to the Institute for Plant Diseases, Buitenzorg; employed in the Technical Division of the Department of Agriculture at Batavia, 1919–20; Director of the Deli Experiment Station (Medan, Sumatra), 1920–26. Subsequently Director of the Guatemala Plantations Ltd, 1926–30; and Professor of Plant Pathology in the Uni-

versity of Illinois, U.S.A., at Urbana; in 1934 appointed Lecturer in Phytopathology at Stockholm University.

Author of botanical and agricultural papers.[1]

COLLECTING LOCALITIES. *1920–26. Sumatra East Coast*, paying numerous visits to different parts of G. Sibajak.—In *1924* he collected in Atjeh, *N. Sumatra*.

He visited Tjibodas in *W. Java* on Apr. 10, *1917* and Apr. 7–13, *1918*; he possibly collected there.

COLLECTIONS. In *Herb. Bog.*, for example material for the study of the genus *Balanophora*. The *Atjeh* collection (1924) was sent to Buitenzorg through the intermediary of the Director of the *Deli Experiment Station* (in 1936), maybe for identification only. *Herb. Pasoer.*: 2 *nos* from *N. Sumatra* (coll. 1924). The *Mitrastemon* material is *not* in Herb. Bog., maybe in Sweden, as plants collected by him are in *Herb. State Mus. Stockholm*.

LITERATURE. (1) B. T. PALM & S. C. J. JOCHEMS: 'Sumatraansche dennenbosschen' (Trop. Nat. 13, 1924, p. 75–80, 6 fig.).

B. T. PALM: 'A Mitrastemon from Sumatra' (Medd. Göteb. Bot. Trädg. 9, 1934, p. 147–152, 1 fig.).

BIOGRAPHICAL DATA. KROK, Bibl. Bot. Suec., 1925, p. 568–569, incl. bibliogr.; I. HÖGBOM: 'Svenskar i Utlandet' (Stockholm 1929).

Palma, *cf. sub* Forestry Bureau, Manila.

Palmer, E.

collected *about 1888* on *Thursday Isl.* in Torres Strait; plants in *Herb.? Brisbane.*[1]

LITERATURE. (1) *cf.* F. M. BAILEY: 'A few words about the flora of the islands of Torres Straits and the mainland about Somerset' (Rep. 7th Meeting Australas. Ass. Adv. Sci. Sydney 1898, p. 423–447).

Palmer, William

(1856, Penge, London, England; 1921, New York City, U.S.A.), son of a taxidermist who left England for the U.S.A. in 1868 and moved to Washington in 1873, where the elder PALMER obtained a position at the National Museum. More or less against his liking the son was obliged to enter the service of the Museum as an assistant in modelling and taxidermy, and later became Chief Taxidermist at that Museum. From 1883 onwards he visited several regions on behalf of the Museum. In 1909 he went with the OWEN BRYANT (see there) Expedition to Java, and for more than a year and a half made large collections (mainly birds) in the western part of that island.

ITINERARY.[1] OWEN BRYANT *Expedition, 1909–10.* Travelling *via* Japan and Hongkong to *W. Java*, where botanical collections were made in the following localities: E. slope Mt Salak (March 8, *1909*), Buitenzorg (10–20), Tjipanas (Apr. 10), Tjibodas on Mt Gede (10), Tjiboeroem (= Tjibeureum) (12), Tjibodas (15), Tjibeureum (23), Tjibodas (24), Tjibeureum (24), Tjipanas (25), Poentjak Pass (25), Buitenzorg (28), Mt Salak and G. Boender (May 5–31), Depok (July 24), Tjibodas (Aug. 9–21), Ka(n)dang Badak and upper slopes of Mt Gede (21–23), Mt Gede (23), Ka(n)dang Badak (24), Mt Pangranggo (24, 26), Kandang Badak (27), summit Mt Gede (28), Kandang Badak (28), Mt Pangranggo (29), Kandang Badak (29–30); Tjibeureum (30), Tjibodas (Sept. 4), Mt Gede (8), Kandang Badak (8), Tjibodas (11), Tjipanas (18), Tjibodas (20), Tjibeureum (27), Kandang Badak (27), summit Mt Gede (27), Tjibodas (27), Tjibadak (Oct. 3), Bantar Gebang (4–5), Pelaboean Ratoe (S. coast) (8–15), Tjibireno (Nov. 1), Sawarna (3–8), Bijouh (9), Tjihana (or ? Tjihara) (11), Kaledjitan (20), Soemoer (27), Pruput (Nov. 30–Dec. 4), Tjiperwageran (Dec. 9), Soekaboemi (Jan. 15, *1910*), Sindanglaja (25), Poentjak Pass (28), Batoetoelis near Buitenzorg (March 8), Buitenzorg (Apr. 30), returning by way of *Singapore* (May 15) and England.

COLLECTIONS. In *Herb. U.S. Nat. Herb. Wash.*: *Java* plants numbered 46–1363, while 603 duplicates were collected. The specimens collected consisted mostly of *Pteridophyta*,[2] while a certain number of cellular cryptogams were included. The duplicates have been distributed to several other institutions, incl. to *Herb. Leyden* (225 *Pterid.*).

LITERATURE. (1) *cf.* Ann. Rep. Smiths. Inst. Wash. for 1909/10, p. 43.

For other data concerning the itinerary, collections and biography, we are indebted to the U.S. Nat. Museum.

(2) E. B. COPELAND: 'Notes on some Javan ferns' (Philip. Journ. Sci. C. Bot. 8, 1913, p. 139–145, pl. 2–4).

BIOGRAPHICAL DATA. Auk 39, 1922, p. 305–321, incl. bibliogr. + portr.; in Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931.

Palmer van den Broek, Charles Louis Joseph

(1862, Soerakarta, Java; 1937, The Hague, Holland), was educated in Holland and came back to the D.E.I. in 1887, in the employ of the Civil Service; finally Resident of Ternate (1912–15); subsequently retired.

Author of a paper on the Batang-Hari Districts in Sumatra.[1]

He is commemorated in the genus *Palmervandenbroekia* GIBBS, as he was of great assistance to the authoress, when she was exploring in New Guinea.

COLLECTING LOCALITIES. *1912. N. Sumatra:* Karobatak Lands.—*1915. Dutch North New Guinea:* Tanah Merah Bay and W. slope Cyclop Mts. —*1916. Moluccas: Batjan.*

COLLECTIONS. *Herb. Bog.*: some duplicates, *viz nos* 12–14 from *Sumatra* and *nos* 15–17 from *Batjan* (pres. by the *Kol. Inst. Amsterdam*).

Hort. Bog.: *New Guinea* plants.

LITERATURE. (1) In Tijdschr. Ind. Taal-, Land- en Volkenk. 49, 1907, p. 206–238.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Pamoentjak, St., *cf. sub* Forest Research Institute, Buitenzorg.

Panangaran, *cf. sub ditto.*

Pande Iroot, H. F., *cf. sub ditto.*

Pandengaran, *cf. sub ditto.*

Pandi, M., *cf. sub ditto.*

Pandito(e)kari, *cf. sub ditto.*

Panggabean, J., *cf. sub ditto.*

Panggabean, R. M., *cf. sub ditto.*

Pangkey, S., *cf. sub* Forest Research Institute, Buitenzorg.

Pantling

apparently the collector of many plants from the Sikkim-Himalaya, is cited as the collector of *Dendrobium geminatum* LINDL., *no* 8011, in Perak, *Malay Peninsula* (*cf.* Bull. Mus. Hist. Nat. Paris 19, 1903, p. 302); the said specimen in *Herb. Paris.*

Paraiso, E., *cf. sub* Forestry Bureau, Manila.

Paravicini, Eugen (M.E.E. or M.M.E.)

(1889, Buenos Aires, the Argentine; 1945, Basel, Switzerland), passed his youth at Basel, studied for a short time at Berne University, but then decided to study agriculture at the Technical College, Zürich (Eidgenössische Techn. Hochschule). During his education he made study tours in Europe, N. Africa, the Caucasus, and Armenia, and in 1919 he accepted a position as temporary Botanist in the Botanical Laboratories (Institute for Plant Diseases) at Buitenzorg, Java. In 1922 he returned to Basel, since 1923 teacher there; in 1929 he was appointed Custodian of the Ethnological Museum, Basel.

Ethnology and malacology had his special interest. In about 1928 he made an ethnological-anthropological expedition to the Solomon Islands.[1]

COLLECTING LOCALITIES. *1922. W. Java:* Lembang (Jan. and Apr. 29); *E. Java:* Tosari (Apr.).

He visited Tjibodas in *W. Java* on March 18–20, *1919* and Aug. 3–5, *1922*, and made tours in *Sumatra* too.

COLLECTIONS. *Herb. Bog.; Herb. Berne: Java Fungi* (pres. 1928).

LITERATURE. (1) E. PARAVICINI: 'Reisen in den britischen Salomonen' (Frauenfeld u. Leipzig 1931).

BIOGRAPHICAL DATA. Verh. Schweiz. Naturf. Ges. 1945, p. 368–372, incl. bibliogr. + portr.

Parceval de Grandmaison

COLLECTIONS. *Herb. Bot. Gard. St Petersb.* (= *Leningrad*): plants from Spain, the Canaries and *Java*, in total 919 species (pres. *1874*). Not collected himself?

Parham

He may be B. E. V. PARHAM, the present Botanist and Mycologist of the Department of Agriculture, Suva, Fiji.

COLLECTIONS. GRAY *Herb.*, Cambr., Mass.: *New Guinea* plants (*cf.* 'Notes on collections *etc.*' in Proc. 6th Pac. Sci. Congr. 1939, vol. 4, 1940, p. 531–540).

Park, Mungo

(1771, Foulshields, near Selkirk, Scotland; 1805 or 1806, Niger, W. Africa), educated at Edinburgh University (Med. Dr), protégé of BANKS. In 1792 he went to India and *Sumatra* as surgeon o/b the 'Worcester', making botanical and zoological observations. He stayed 9 weeks on the coast of Sumatra.[1] Afterwards celebrated as explorer of the basin of the Niger in Africa.

He is commemorated in the genus *Parkia* R.Br.

COLLECTIONS. *Herb. Brit. Mus.:* small collection of African plants. Possibly *Sumatra* plants were collected; 20 drawings of fish from the coast of Sumatra in the Libr. Brit. Mus.

LITERATURE. (1) *cf.* Trans. Linn. Soc. Lond. 3, 1797, p. 33.

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 28, 1890, p. 116, and in 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936; in 'Les explorateurs célèbres' (Genève/Paris 1947), p. 108–109 + portr.

Parker, Luther

is cited by MERRILL as the collector of a plant, *no* 49, in the *Philippines* (in Enum. Philip. Fl. Pl.); he too collected *no* 37, *Premna odorata* BLANCO in *Luzon* (*cf.* Philip. Journ. Sci. vol. 1 Suppl., 1906, p. 232), and other plants in that island, *about 1904.* 79 *Nos* from Prov. of Pampanga were pres. to *Herb. Manila* in *1903/04.*

Parkes, J. D., *cf. sub* PARKS, J. D.

Parkinson, Richard

(1844, Augustenburg, Schleswig-Holstein, Germany; 1909, Herbertshöhe, New Britain, Bismarck Archipelago), was first in Samoa and went to the Bismarck Archipelago in 1882; in December of that year he assisted in founding the first plantation at Ralum, New Britain. From about 1890–91 in the employ of the German New Guinea Company.

Author of some books and ethnographical papers on his stay in the Pacific.[1]

Some plants were named in his honour.[2]

ITINERARY.[1] *Bismarck Archipelago*, N of NE. New Guinea. After a 2 years' voyage to New Zealand, the Viti (= Fiji) and Tonga Islands, arriving in Samoa (Nov. 1877), staying till 1882. Sailing from Sydney (early in Oct. *1882*) and *via Mioko* to *Neu Pommern* (= *New Britain*), settling at Ralum plantation, Blanche Bay. He made many tours by boat along the E. and part of the N. coast of *New Britain;* visiting Kaije Volcano; failing endeavour to climb the Wuna Kokor (= Beautemps-Beaupré Mt., later named Varzinberg) on account of the hostile attitude of the natives (Aug. *1883*); 2nd, then successful, endeavour (*1884*); on another occasion visiting the S. slope of this mountain and the woody valley of the Mana Wiwio, between Kaile and Waikiri; boat tour (Apr. *1885*) along the E.

coast of *New Britain*, discovering Put-Put Harbour; ascent of the Wuna Kokor (Aug. 1885), then re-baptized Varzinberg; probably in *1887* a tour by boat to some of the island-groups situated E and SE of New Ireland, visiting *Mortlock Islands*, *Ontong Java* (*Lord Howe Isl.*), *Stewart*, *Solomon*, and *Carteret Islands*.[3]—*1893*. Tour by boat in company with KÄRNBACH (see there) (July 12–20).—*1894*. Early in the year sailing with Bishop LOUIS COUPPÉ from Kinigunan on the Blanche Bay, along the E. coast of *New Britain*, going up part of the Karawat River.[4]—*1895*. *Ontong Java* and *Tasman Islands*.[5] —*1896*. End of March with ALB. HAHL to the E. coast of Gazelle Peninsula, making a trip in the Baining Mts (Apr. 12); back to Herbertshöhe (13).[6] —*1898*. In the 'Möwe' under Capt. MERTEN to the western boundary of former *Kaiser-Wilhelmsland* (N. New Guinea); at the mouth of the Babué River (Neumayer Fluss) (July 6) and during 5 weeks surveying 30 sea-miles of the coast.[7]—*1905*. Tour to *St Matthias Isl.* (Apr. 23), *Kerué* (21) and *Tench Isl.* (Apr. 18 for the 1st time).[8]

Of part of his tours no dates are mentioned.

COLLECTIONS. *Herb. Melbourne;* some of the plants were described.[9] *Herb. Sydney:* 367 plants *Bismarck Archipelago* (pres. 1901); dupl. in *Herb. Berl.* (pres. 1901). Some ferns in *Herb.* BONAPARTE (= *Paris*); 7 grasses in *U.S. Nat. Herb. Wash.*

His collections contain many new species, unfortunately collected without mentioning precise localities.

LITERATURE. (1) R. PARKINSON: 'Beiträge zur Kenntnis des Deutschen Schutzgebietes in der Südsee' (Mitt. Geogr. Ges. Hamburg 1887, p. 201–283); 'Im Bismarck Archipel' (Leipzig 1887); some ethnographical papers in Internat. Arch. Ethnogr. Leiden, vols 1894, 1897 and 1900; 'Dreissig Jahre in der Südsee' (Stuttgart 1907, with portr.).

(2) *cf.* also *Polypodium parkinsonia* BAKER *n. sp.* in Ann. Bot. 5, 1891, p. 480; BAKER received the specimen in 1887 through the intermediary of F. VON MUELLER.

(3) *cf.* WICHMANN, Entd. Gesch. N.G., in Nova Guinea 2^2, p. 460–461.

(4) *cf.* Ann. de Notre-Dame du Sacré-Cœur 30, 1895, p. 94–99 (*non vidi*).

(5) *cf.* Internat. Arch. f. Ethnogr. Leiden 10, 1897 and *l.c.* 11, 1898.

(6) *cf.* Nachr. Kais. Wilh. Land 12, 1896, p. 46–50.

(7) *cf.* Internat. Arch. Ethnogr. Leiden 13, 1900, p. 18–54, pl. 15–22; and KÜHNE in Deutsch. Kolon. Zeit. N.F. 11, 1898, p. 399–402.

(8) R. PARKINSON: 'St. Matthias und die Inseln Kerué und Tench' (Globus 88, 1905, p. 69–72).

(9) By F. VON MUELLER in Descr. Not. Pap. Pl., and also: 'Two new species of Sterculia discovered by R. PARKINSON in New Britain' (Austr. Journ. Pharmac. Febr. 1887); by KRÄNZLIN in Oesterr. Bot. Zeitschr. 44, 1894, p. 257, 337.

BIOGRAPHICAL DATA. Globus 79, 1901, p. 239–240; *cf.* PARKINSON's books, *l.c. sub* Liter. 1; BACKER, Verkl. Woordenb., 1936.

Parkinson, Sydney

(*c.* 1745, Edinburgh, Scotland; Jan. 26, 1771, Indian Ocean), woollendraper, protégé of BANKS, draughtsman during COOK's 1st voyage (*cf.* also *sub* BANKS, and SOLANDER).

Ficus parkinsoni HIERN was named after him.

ITINERARY. *Voyage in the 'Endeavour', 1768–71*,[1] COOK's *1st voyage*, *cf.* detailed intiner. *etc. sub* BANKS.

COLLECTIONS. Unpublished illustrations of plants made during the voyage in *Libr. Brit. Mus.* There are no data as to he himself having done any collecting, though he is the author of a paper on economic plants.[2]

LITERATURE. (1) S. PARKINSON: 'A journal of a voyage to the South Seas, in his Majesty's ship the Endeavour' (London 1773, 2nd ed. w. appendix 1784).

(2) 'Plants of use for food, medicine, *etc.* in Otaheite' (in *l.c.* p. 37–50).

BIOGRAPHICAL DATA. Portrait in his 'Journal' (Liter. *sub* 1); Biogr. Index BRITTEN & BOULGER in Journ. Bot. 28, 1890, p. 117, and in 2nd ed. by RENDLE, 1931.

Parks, John Damper

(sometimes misspelled PARKES), (*fl.* 1823–38), collected for the Horticultural Society in China and *Java*, 1823.[1] Afterwards gardener of the Earl of Arran, F.H.S. at Bognor, Sussex.

ITINERARY. Left London in the 'Lowther Castle' in *1823*, returning in the same ship in May *1824*. On the outward voyage he landed at Anger Point (= Anjer, *W. Java*) (Aug. 1–3, *1823*), gathering some botanical specimens; on the homebound voyage the anchor was cast at *North Island* in the Straits of Sunda, to take in water (Jan. 24, *1824*).

COLLECTIONS. Sold by the Horticultural Society in 1856, obtained by BENTHAM; in *Herb. Kew.*[2]

A Journal kept by him from August 1823 to 1824 is in the possession of the Roy. Hort. Society.

LITERATURE. (1) *cf.* Transact. Hortic. Soc. 5, 1824, p. 427; MS. Journal in the Roy. Hort. Soc.

(2) *cf.* Journ. Bot. 32, 1894, p. 298–299.

'A Catalogue of all the valuable collections of dried plants which have been formed by the travellers employed by the Hort. Soc. of Lond. *etc.* (1856).

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 28, 1890, p. 117, and in 2nd ed. by RENDLE, 1931; BRETSCHNEIDER, Hist. Bot. Discov. China ,1898, p. 271–274.

Parnell, E.

COLLECTIONS. *Herb. Sarawak:* variety of *Amorphophallus variabilis* (pres. *1909*) and 6 specimens of *Rafflesia tuan-mudae* collected at Lundu, Sarawak (*NW. Borneo*) (pres. *1911*).

Parras, *cf. sub* Forestry Bureau, Manila.

Partasasmita, *cf. sub* Forest Research Institute, Buitenzorg.

Partodimedjo, *cf. sub ditto.*

Partowiparo, *cf. sub ditto.*

Pascasio, J.
was temporarily employed by the Bureau of Science, Manila, P.I., for field work during school vacation in *1919*.
COLLECTIONS. *Herb. Manila*, numbered in the B.S. series (*cf. sub* Bureau of Science, Manila).

Pascua, *cf. sub* Forestry Bureau, Manila.

Pascual, G.
a Forest Ranger, murdered by the Japanese; *cf. sub* Forest Dept Br. N. Borneo.

Pascual, I., *cf. sub* Forestry Bureau, Manila.

Pato, M., *cf. sub ditto.*

Paulus
collected a *no* 5600 (*Gonocaryum*) from *Ceram;* in *Herb. Utrecht.*

Pawanche, *cf. sub* Conservator of Forests series, Kepong.

Payer, M., *cf. sub* Forest Research Institute, Buitenzorg.

Pears, Francis
a planter of Johore, Malay Peninsula.
COLLECTING LOCALITIES. *Malay Peninsula:* in the Muar Valley (*1899*) (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).
COLLECTIONS. Only few plants; in *Herb. ? Sing.*

Pedersen, *cf. sub* Forest Research Institute, Buitenzorg.

Peekel, Gerhard
(1876, Essen/Ruhr, Germany; Febr. 19, 1949, Bismarck Archipelago), was ordained priest at Hiltrup in 1902; Roman Catholic missionary in the Bismarck Archipelago since 1904; from 1908 onwards stationed at Lamekot, P.O. Kaewieng, in New Ireland. During World War II he was a prisoner of the Japanese at Rabaul for some years. After the capitulation he came down to Sydney to recover, but subsequently went back to New Guinea.
He is the author of a manuscript flora of the Bismarck Archipelago.
Several genera, *e.g. Peekelia* and *Peekeliopanax* HARMS, and *Peekeliodendron* SLEUM., and species of plants were named in his honour.
COLLECTING LOCALITIES. *Bismarck Archipelago.* In *Neu Mecklenburg* (= *New Ireland*), principally at Namatanai, in later years in Ugana District. He possibly collected at intervals, the collections presented to the Herb. Berlin were collected in *1908–13, 1922–29* and in *1935–38.*—In *1910* he visited the New Hebrides, the Solomon Islands and *New Britain.*
COLLECTIONS. *Herb. Berl.:* 847 *nos* of siphonogams (*1908–13* coll.), 283 *ditto* (*1922–29* coll.), 109 (*1935–38* coll.), in total exceeding 1200 *nos;* also a collection in the *Show Mus. Berl.; Herb. Leyden:* dupl. *New Ireland* (coll. 1908–13); *Herb. Bog.:* 50 *nos* (pres. 1922, numbered > 1000), the *nos* 51–104 (pres. 1924), and 105–188 from Ugana Distr. (pres. 1938).
His important collections led to the description of many new species.[1]
LITERATURE. (1) C. LAUTERBACH: 'Beiträge zur Flora von Neu-Mecklenburg' (ENGL. Bot. Jahrb. 45, 1911, p. 354–365).
H. HARMS: 'Über eine neue Gattung der Araliaceen aus Papuasien' (Notizbl. Berl. Dahl. vol. 9, 1926, p. 478–484, fig. 10).
L. DIELS: 'Plantae Peekelianae papuanae' (Notizbl. Berl. Dahl. 10, 1930, p. 273–285).
E. ULBRICH: 'Über eine neue Gattung der Malvaceae Papuasiens Cephalohibiscus Peekelii ULBRICH *n. g. n. sp.*' (Notizbl. Berl. Dahl. 12, 1935, p. 494).
cf. also in the series 'Beiträge zur Flora Papuasiens' (ENGL. Bot. Jahrb. 1912–→).
Icacinaceae by H. SLEUMER in Notizbl. Berl. Dahl. 15, 1940, p. 228–257.
BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; ENGL. Bot. Jahrb. 74, 1949, p. 633.

Peitsch, G. J.
Army Surgeon, contemporary of BLUME; in 1827 appointed Head of the D.E.I. Medical Service (Civil and Military); in 1836 he went to Europe.
COLLECTIONS. He is cited by BLUME[1] as a contributor of scientific material from *Java,* and by ENGLER[2] as a collector in *Banda* (*Moluccas*).
From a letter in the 'Rijksarchief'[3] it is evident that PEITSCH sent a collection of useful plants from *Banda* to BLUME, in *about 1832*; the collection was incorporated in *Herb. Leyden.* This is probably identical with the collection listed *sub* ANONYMOUS, *Moluccas.*
LITERATURE. (1) In 'Flora Javae' (Nova series 1, 1858, p. iii), and in 'Rumphia' (1, 1835, p. v).
(2) *cf.* Pflanzenreich Heft 64, 1916, p. 27.
(3) Brief Min. Binn. Zaken, sent by BLUME, 25 Febr. 1834, *No* 108, 5e afd. (dated 24 Febr. 1834); seen by Dr H. C. D. DE WIT.

Pelenkahoe, O. J.
(† in or before 1873), major (native officer of the Civil Service) of Tonsea in the Minahassa (N. Celebes), gave assistance to TEYSMANN and DE VRIESE when they travelled in that part of the island in 1860. Probably afterwards transferred to Ambon. He climbed G. Klabat in 1850.[1]
COLLECTING LOCALITIES. *N. Celebes:* Minahassa; *Moluccas: Ambon.*
COLLECTIONS. *Herb. Bog.* (material from *Ambon* pres. in *1869*), partly numbered in the H.B. series.
He sent living plants to *Hort. Bog.* (*cf.* Nat. Tijdschr. N.I. 32, 1873, p. 163 and 168); in the years *1865–66* from *Celebes.*
LITERATURE. (1) *cf.* Meded. 's Lands Plantentuin *no* 19, 1898, p. 38.

Pello, D. S.
collected under the supervision of the forest officer BRUINIER in *SE. Celebes* in *1916*, at least at

the Staring Bay. Material in *Herb. Bog.; cf.* also *sub* Forest Research Institute, Buitenzorg.

Pelt, S. D.
Assistant of the Civil Service at Kalabahi in *Alor* (*Lesser Sunda Islands*), collected living orchids in the same island, which were shipped to *Hort. Bog.* together with the collection of GROENEVELDT from Timor in *1924*.

Peñas, N., *cf. sub* Forestry Bureau, Manila.

Penloup
is cited as the collector of *Pandanus englerianus* MART., *no* 5, in *Neu Mecklenburg* (= *New Ireland*), *Bismarck Archipelago*, in *1908* (*cf.* ENGL. Bot. Jahrb. 49, 1913, p. 66). The specimen preserved in *Herb.* MARTELLI (= *Florence*).

Penney, Fr. Gordon
in the Malayan Civil Service (1876–1906 or '07), collected some plants in Pahang (*1902*), *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).
COLLECTIONS. *Herb. Sing.*

Penzig, Otto
(1856, Samitz, Silesia, Germany; 1929, Genoa, Italy), mycologist, educated at Breslau; since 1879 on the staff of the Botanic Garden at Padua, working under SACCARDO; in 1882 appointed private teacher in the University of Modena, in 1883 Director of the 'Stazione Agraria' there, and in 1887 Professor of Botany at Genoa. He made a study tour to Ceylon and Java, in the latter island especially studying *Myxomycetes* in the laboratories of the Botanic Gardens at Buitenzorg and Tjibodas.[1]
Author of some papers relating to Java.[2]
He is commemorated in the genus *Penzigia* SACCARDO.
COLLECTING LOCALITIES. *W. Java* (Nov. 23, *1896*–Apr. 1, *1897*): principally at Buitenzorg and Tjibodas (slope of G. Gedeh). He visited the 3 islands of the *Krakatau group* in company with TREUB, RACIBORSKI, BOERLAGE, and CLAUTRIAU (March 17, 1897); the excursion was preceded by a trip to *P. Merak* (off the NW. point of Java).
In the German biography (see below) he is said to have visited *Java* and *Sumatra;* as to the latter island no data are known to the author.
COLLECTIONS. Apparently cryptogams only, *viz Fungi* and *Algae*.[3] Original set at *Genoa*. In *Herb. Bog.*, *Fungi Javanici* (pres. 1903); *Herb. Vienna: Fungi Javanici*, 215 *nos* (purch. 1904).
LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 21; and BOEDIJN in *l.c.* p. 107, 110.
(2) O. PENZIG: 'I Prodotti vegetali del mercato di Buitenzorg (Giava)' (Atti Soc. Ligust. di Sci. Nat. e Geogr. Genova 9, 1898); 'Beitr. z. K. der Gattung Epirrhizanthes BL.' (Ann. Jard. Bot. Buit. 17, 1901, p. 142–170, pl. 20–26); 'Die Fortschritte der Flora von Krakatau' (*l.c.* 18, 1902, p. 92–113, 7 fig.); for systematic papers *cf. sub* 3.
(3) O. PENZIG: 'Die Myxomyceten der Flora von Buitenzorg' (Leiden 1898); 'Ueber Javanische Phalloideen' (Ann. Jard. Bot. Buit. 16, 1899, p. 133–173, *t.* 16–25).
O. PENZIG & P. A. SACCARDO: 'Diagnoses Fungorum novorum in insula Java collectorum' (3



PENZIG

series, Genova 1897–1902); 'Icones Fungorum Javanicorum' (Leiden 1904, 1 vol. text + 1 vol. tab.).
Algae by DE WILDEMAN in 'Prodrome de la Flore Algologique d. Ind. néerl.' Supplement (Batavia 1899).
cf. also Ann. Jard. Bot. Buit. 45, 1935, p. 110.
BIOGRAPHICAL DATA. Malpighia 13, 1899, p. 108 (ref. to portr.); Ber. D.B.G. 47, 1929, Gen. Vers. Heft p. (96)–(102); Nuov. Giorn. Bot. Ital. N.S. 37, 1930, p. 756–788, + portr.; Atti Ist. Bot. Giov. Briosi e lab. R. Univers. di Pavia ser. 4, vol. 4, 1933, p. iii–xii, 1 pl.

Peran, *cf. sub* Forest Research Institute, Buitenzorg.

Pereira, J. d'Almeida
(† about 1935, aged *c.* 70 years), a local Eurasian, collector and dealer in plants and animals, at Singapore. He frequently came to the Botanic Gardens for naming and sale; he visited also Lower Siam, besides the *Tambelan Islands* (W of Borneo) (*before 1895*), *New Guinea*, and the *Tanimbar Islands* (*about 1896*).
COLLECTIONS. *Herb. Sing.:* a small series of plants from *New Guinea* and *Tanimbar* (pres. 1896). He sent living plants to *Hort. Sing.* in the years *1895–1909*.

Perham, Reverend J.

COLLECTIONS. *Herb. Sarawak: Leguminosae* from Kuching and *Myrtaceae* from Mt Rumput, Lundu in *NW. Borneo* (Sarawak) (pres. *1912*).

Perkins, Granville Akers

(1891, Lin Ching, China; x), chemist, educated



PERROTTET

at Cornell University, taking his Ph.D.'s degree in 1917 at Pittsburgh University. From 1919–22 on the staff of the Bur. of Science, Manila; from 1922–27 Chief Chemist, Culion Leper Colony (P.I.). Since 1929 in the employ of the Carbide and Carbon Chem. Corp., now a resident of N.Y. City.

COLLECTING LOCALITIES. *Philippines: Culion* (Apr. *1923*), together with H. W. WADE (see there). Certainly only few numbers.

BIOGRAPHICAL DATA. Amer. Men of Sci., 1938.

Pernod, Maurice

from Couvet near Neuchâtel, a student of the Agricultural section of the Polytechnical College at Zürich, Switzerland, invited Professor C. SCHRÖTER (see there) on a voyage round the world in 1898–99. Collecting was done at Buitenzorg and Tjibodas in *W. Java*, in January *1899*.

COLLECTIONS. *Herb. Zürich.*

Perrottet, George Samuel

(1793, Vully, Canton Waadt, Switzerland; 1870, Pondicherry, India), botanist-horticulturist in the 'Jardin des Plantes', Paris, made a voyage (see below) commissioned by the French government, to introduce useful plants in Cayenne and Bourbon (Réunion). From 1824–29 Director of Cultures in Senegambia; 1834–39 Agricultural Botanist at Pondicherry. In 1839 he returned to Europe for the study of silk-culture and was back again at Pondicherry in 1843, being Government Botanist there till his death.

Author of several papers on useful plants.[1]

He is commemorated in the genus *Perrottetia* H.B.K. and in several species of plants.

ITINERARY. *Voyage in 'Le Rhône' and 'La Durance'* (Capt. PHILIBERT), *1819–21.*[2] Embarking at Rochefort (Jan. 1, *1819*); Cayenne; Cape Verde Islands; Bourbon; *E. Java:* Soerabaja (Sept. 13–Oct. 14), making trips in the vicinity and to *Madura Isl.; Philippines:* anchoring at the entrance of Basselan (= Basilan) Strait (Nov. 18), collecting on one of the islets; Samboangan (= Zamboanga) in *Mindanao* (Nov. 21–Dec. 2); *Luzon:* Bay of Manila, anchoring at Cavite (Dec. 23); at Téralta (2 miles from Cavite), and from there to the mountains; back at Téralta and Cavite; setting out (Jan. 29, *1820*) to Cueva (= cave) de San-Matheo, *via* Sienda and Mariquina; to Bosoboso and back to San-Matheo and environs; Téralta, Manila, and to the mountains once more; sailing from Manila (March 18), *via* Sunda Strait, Bourbon, Madagascar and Cayenne; back at Paris (Aug. 1, 1821).

COLLECTIONS.[3] *Herb. Paris:* > 8000 plants in total, including few Java specimens; *Herb.* DELESS. (*Geneva*); *Herb.* DECAND. (*Geneva*): 1095 *nos* from several countries, incl. 58 from Manila (*Luzon*). From India and Senegal in *Herb.* BOISS. (*Geneva*), *Herb.* DE FRANQUEVILLE (= *Paris*), *Vienna.* In *Herb. Brit. Mus.:* plants from Senegal, Nilgheries, Guadeloupe, also mosses; *Herb. Kew:* from Senegambia (pres. 1835). Also duplicates in *Herb. Berl.* and *Leyden;* 42 in *Herb.* LINDEMANN (*U.S.S.R.*); *Herb. Mus. Cantonal Fribourg;*[4] *Herb. Montpellier.*

He brought home many living plants.[5]

Sets of his plants (probably not from the voyage in the 'Rhône') were offered for sale.[6]

LITERATURE. (1) *cf.* PRITZEL, Thes. Lit. Bot., 1872.

(2) G. S. PERROTTET: 'Souvenirs d'un voyage autour du monde. Java, Samboangan, Manilla' (Rev. Deux mondes 1830[4], p. 21–56; *l.c.* 1831[1], p. 1–15; *l.c.* 1831[2], p. 341–389).

cf. also LASÈGUE, Mus. Bot. DELESS., 1845, p. 89–90.

(3) *cf.* Flora 23[2], 1840, p. 720 and *l.c.* 38, 1855, p. 112.

(4) *cf.* SYDOW, Deutscher Botaniker Kalender für 1899, p. 177.

(5) G. S. PERROTTET: 'Catalogue raisonné des plantes introduites dans les colonies françaises de Mascareigne et de Cayenne, et de celles rapportées vivantes des mers d'Asie et La Guyana, au Jardin des plantes de Paris' (Mém. Soc. Linn. Paris 3, 1824, p. 89–151).

PRITZEL cites the following title: 'Catalogue raisonné des plantes introduites dans les colonies françaises de Bourbon et de Cayenne, et de celles rapportées vivantes des mers d'Asie et de la Guyana, au Jardin du Roi à Paris' (Paris 1824).

(6) *cf.* Bot. Zeitung 13, 1855, p. 183 and *l.c.* 15, 1857, p. 175.

BIOGRAPHICAL DATA. LASÈGUE, Mus. Bot. DELESS., 1845, p. 89–94; PRITZEL, Thes. Lit. Bot., 1872; URBAN, Symb. Antill., 3, 1902–03, p. 99–100; WITTROCK, Icon. Bot. Berg., 2, 1905, p. 172–173; C. B. ROBINSON: 'PERROTTET and the Philippines' (Philip. Journ. Sci. C. Bot. 2, 1908, p. 303–306); BACKER, Verkl. Woordenb., 1936.

Perry, G. E.

collected plants in the *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5), which were sent to *Singapore Gardens* in *1920*.

Pesik, J.

Author of some typed reports on Central Celebes.[1]

COLLECTING LOCALITIES. *Centr. Celebes:* Donggala and Paloe (Nov. *1928*, *1930–31*); Kolonedale (*1933*).

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg:* bb. *nos* from Paloe and Donggala (1930–31), and from Kolonedale (1933). *Herb. Bog.:* 25 *nos* of herbaceous plants (pres. through the intermediary of the F.R.I.) and dupl. of the F.R.I.

LITERATURE. (1) On Tawaéli Distr. (1928), Paloe (1930) and Donggala (1931); in the archives of the F.R.I. at Buitenzorg.

Peters

Moeara Enim, Palembang (*S. Sumatra*), sent a species of *Coffea* (from the forest) to *Hort. Bog.* in *1906*.

Peters, K. (or Christian)

physician who took part in the circumnavigation of the world by HAGEMEISTER from *1828–30*.[1]

COLLECTIONS. LIPSKY[2] mentions his collections together with those of I. STEWART, but it seems evident that they took part in different expeditions. As yet I do not know the route followed by HAGEMEISTER's expedition; it is certain that the Marshall Islands were visited.

LITERATURE. (1) *cf.* Bull. Soc. Nat. Moscou 61, 1885, p. 54; ENGL. Bot. Jahrb. 9, 1888, p. 444 Trav. Mus. Bot. Acad. Sci. St Pétersb. 4, 1908, p. 90.

(2) In 'Gerbarii Imperatorskago S. Petersburgskago Botanicheskago Sada k kontsu ego 75-lietniago sushchestvovaniia (1823–1898)' 2nd ed., 1908, p. 164, 192.

Petroeschevsky, Wladimir Alexandrowitch

(1891, Moscow, Russia; x), emigrated to the D.E.I. in 1920; since 1921 in the employ of the Volcanological Service; at present Leader of the Volcanological Research.

COLLECTIONS. Some plant specimens, collected on volcano island *Anak Krakatau* (June 5, *1949*) in Sunda Strait, were presented to *Herb. Bog.*

Peucker

is cited as the collector of *Aristolochia megalophylla* K. SCHUM. in *Neu Pommern* (= *New Britain*) in the *Bismarck Archipelago*, NE of New Guinea, in *1907* (*cf.* ENGL. Bot. Jahrb. 52, 1914, p. 106).

Peyer

evidently about 1890 owner of a collection of living orchids, many of which native in *Sumatra*. Probably he did not collect himself, but obtained the specimens from some professional orchid hunter, or friend, in Sumatra.

Some orchids were named after him by KRÄNZLIN (*cf.* BACKER, Verkl. Woordenb., 1936). A specimen of *Cirrhopetalum peyerianum* KRÄNZL. was sent to the author of this species by the intermediary of a Mr ORTGIES (? curator of the garden).[1]

LITERATURE. (1) *cf.* ENGL. Bot. Jahrb. 17, 1893, p. 485.

Pfeiffer, Johan Philip

(1888, Delft, Z.H., Holland; 1947, Amsterdam, Holland), chemical engineer, educated at Delft Technical College till 1911, taking his Dr's degree in 1917;[1] expert for scientific wood-technology in the employ of the 'Ned. Ind. Houtaankapmij Semarang' (Java), 1912–18; Technical Adviser of the 'Ver. Ind. Bosch Expl. Mij'en Semarang' (Java), 1918–20; Manager of the oil factory 'Sentono' at Kediri (E. Java), 1920–22; Chief Assistant of Technical Botany and Lecturer at the Technical College, Delft, 1922–26; in the latter period besides expert of the Commission of Advice and Research of Surinam wood species, and from 1926–27 Adviser of the Governor of Surinam for Wood and Lumber Affairs; temporary Professor of Technical Botany at Delft, 1927–29; from 1929 onwards on the staff of the B.P.M. (Batavian Oil Co.) Laboratory at Amsterdam, since 1946 Director.

COLLECTING LOCALITIES. *1913. S. &. SE. Borneo:* Sampit and Martapoera (Nov.–Dec.).—*1914. S. Sumatra:* environs of Palembang (June–July).—*1915. P. Simaloer* (March–Apr.); *NE. Borneo:* the environs of Telok Selimau, N of Tandjoeng Mangkalihat; Menoembar, SE of Tandjoeng Mangkalihat, and the lower and middle course of the Berouw River (Dec.–March *1916*).—*1918*. Telok Selimau, Menoembar (betw. Apr.–Nov.); *S. Sumatra:* Palembang (betw. Apr.–Nov.); *P. Simaloer* (Aug.–Sept.).

COLLECTIONS. *Herb. Bog.*, and partly in *Herb. Leyden.* In *Simaloer* (1915) he numbered in continuation of the collection of J. VAN HERWAARDEN (see there); about 20 *nos*.

LITERATURE. (1) On a thesis 'De waarde van wetenschappelijk onderzoek voor de vaststelling van technische eigenschappen van hout' (Amsterdam, 1917).

BIOGRAPHICAL DATA. Persoonlijkheden in Nederland, 1938, + portr.; Vakbl. Biologen 28, 1948, p. 25–27.

Pfeil (und Klein Ellguth), Joachim Friedrich Graf von

(1857, Neurode, Silesia, Germany; died before 1938), educated at Jena; from 1873–83 farmer in Natal and Orange Free State, S. Africa; exploring the Limpopo region (1882) and Ulanga (1885–86); from

1887–89 Director of the Bismarck Archipelago;[1] study tour to the Dutch East Indies, 1889; visit to German SW. Africa in 1892; visits to Morocco in 1897, 1899 and 1901; to the U.S.A. and Mexico in 1904, and to German and English E. Africa in 1905; teacher at the French gymnasium at Berlin, 1917–20.

ITINERARY. Former *Kaiser-Wilhelmsland, NE. New Guinea.* Arriving at Finschhafen (Dec. 22, *1887*); with C. HUNSTEIN setting out (Dec. 28) to Festungs Cape, H. returning on account of illness; excursion in the valley of the Bu Porum and returning afoot to Finschhafen.[2]—*Bismarck Archipelago.* Stationed in *Kerawara* (*1888–89*), from where making tours to *Neu Mecklenburg* (= *New Ireland*) (May 22–, 1888),[3] *Neu Hannover* (= *New Hanover*); he evidently climbed the Wuna Koker or Varzinberg in *New Britain*[4] and Mutter Volcano.[5]

COLLECTIONS. He is said to be the collector of plants in the *Bismarck Archipelago*, described by F. VON MUELLER.

Africa plants in *Herb. Berl.* (pres. 1892–93).

LITERATURE. (1) Author of 'Land und Volk im Bismarck-Archipel' (Verh. Ges. Erdk. Berl. 17, 1890, p. 144–156); 'Studien und Beobachtungen aus der Südsee' (Braunschweig 1899).

(2) J. Graf PFEIL: 'Bericht über eine Reise in Deutsch Neuguinea' (PETERM. Mitt. 36, 1890, p. 219–227).

(3) *cf.* Nachr. Kais. Wilh. Land 4, 1888, p. 153–154 and PETERM. Mitt. 40, 1894, p. 73–82, pl. 7 (map).

WICHMANN, Entd. Gesch. N.G., in Nova Guinea 2^2, p. 476 gives several data, derived from a map made by PFEIL.

(4) *cf.* 'Bilder aus dem Schutzgebiet i.d. Südsee' (WESTERM. illustr. deutsche Mon. Hefte Braunschweig 72, 1892, p. 539–540).

(5) *cf.* PFEIL, Studien und Beobachtungen *etc.*, *l.c.* p. 170.

BIOGRAPHICAL DATA. *cf.* Nachr. Kais. Wilh. Land 4, 1888, p. 17, 57 and 145; J. C. POGGENDORF, Biogr.-liter. Handwörterbuch 4, 1903, and *l.c.* 6^3, 1938.

Phasis, *cf. sub* Forestry Bureau, Manila.

Philipp, P.

Overseer in the employ of W. F. WINCKEL (see there) at Tjidadap (*W. Java*), collected 56 *nos* in the vicinity there at 1000 m alt. (Febr. 8–Aug. 17, *1922*). Collections in *Herb. Bog.*

Philippine National Herbarium

About 1935 Dr QUISUMBING had the name of the herbarium at Manila changed to 'Philippine National Herbarium', and commenced a new series of collections from various sources made by members of his staff to replace the older 'Bureau of Science' (see there) series. As the records were destroyed during the war, a new series starting with 'Phil. Nat. Herb. 1' was begun in 1947. Though the material at Manila has been destroyed, duplicates of the former P.N.H. series have been distributed, and there will be duplications, but Mr QUISUMBING is sure there will be no duplication of names.

In the series is collected by: P. CONVOCAR, G. EDAÑO*, MARTINEZ, D. MENDOZA, E. QUISUMBING*, and M. D. SULIT*, *etc.*. The collectors provided with an asterisk, have a separate entry.

Philips, *cf. sub* Forest Research Institute, Buitenzorg.

Phillips, Philip

(1873, Br. India; x), was educated in forestry in Br. India, England and Germany; served in Br. India from 1897–1901; in 1901 deputed to Malayan Forest Service, and staying permanently till his retirement in 1926. Pioneer of Forest Conservation in Malaya.

COLLECTING LOCALITIES. In Pahang, *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Kuala Lump.*, numbered in the C.F. (*cf. sub* Conservator of Forests) series.

Phillips, William Edward(s)

(*fl.* 1802–1850), since 1800 in the service of the East India Company in Penang, after 1805 acting Governor, and in 1820 finally appointed Governor until his departure in 1824 (according to BURKILL,[1] Governor from 1819–26!). In 1823 he founded Ayer Hitam Garden, Penang.

COLLECTIONS. He gave his plants to WALLICH (distribution see there) and it is said later to *Kew.* In 1824 he presented a collection to the *Horticultural Society* in London, which was passed on to *Kew.* At the sale of the Herbarium of the latter Society[2] plants of his from *Prince of Wales' Isl.* (= *Penang*) were sold to PLANCHON.

LITERATURE. (1) *cf.* Gard. Bull. Str. Settlem. 4, 1927, p. 130.

(2) *cf.* Catalogue of all the valuable collections of dried plants which have been formed by the Travellers employed by the Hort. Soc. Lond. *etc.*' (1856).

BIOGRAPHICAL DATA. Journ. Mal. Br. Roy. As. Soc. N.S. 1, 1923, p. 8–9; *cf.* also CURTIS in 'Catalogue of plants from Penang' (1892); BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; in Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931.

Phoenix

COLLECTIONS. 32 *Philip.* plants in GRAY *Herb.* (from *Arn. Arbor.*), Cambr., Mass.

Pickering, Charles

(1805, Starucca Creek, N. Pennsylvania, U.S.A.; 1878, Boston, Mass., U.S.A.), studied medicine and took his degree at Harvard Medical School in 1826. In 1827 he settled at Philadelphia, and served on the botanical and zoological committees of the Philadelphia Academy of Natural Sciences, holding the offices of Librarian (1828–33) and Curator (1833–37). He was associated with WILLIAM OAKES in botanical exploration; principal zoologist of the

WILKES U.S. Exploring Expedition (*1838–42*), but also collecting plants with RICH and BRACKENRIDGE.[1] A year after the return of the expedition, he crossed the Atlantic, visited Egypt, Arabia, E. Africa, western and northern India, at his own expense.

Author of several papers.[2]

Maesa pickeringii A. GRAY and other plants were named after him.

For Itinerary, Collections, and concerning literature, *cf. sub* WILKES.

LITERATURE. (1) *cf.* MERRILL in 'A discussion and bibliography of Philip. Fl. Plants' (in Enum. Philip. Fl. Pl. vol. 4, 1926) p. 49.

(2) CH. PICKERING: 'On plants and animals in their wild state' (1854); 'The races of Man, and their geographical distribution' (vol. 9 of WILKES U.S. Expl. Exp., 1848); 'The geographical distribution of animals and plants' (1863–76, 2 vols (the 2nd not completed) + 4 maps form the unofficial issue of vol. 19 of WILKES U.S. Expl. Exp.); 'Chronological history of plants' (Boston 1879).

BIOGRAPHICAL DATA. Proc. Amer. Acad. Arts & Sci. 13, 1878, p. 414; A. GRAY, Scientif. Papers, 2, 1889, p. 406–410; J. W. HARSHBERGER, The botanists of Philadelphia, 1899, p. 190–193.

Pictet, Jules Camille

(1864, Geneva, Switzerland; 1893, Geneva), zoologist, educated at Geneva and Stuttgart, and subsequently completing his study at Nice and Naples. In 1890 he made a voyage to the Malay Archipelago with Prof. M. BÉDOT;[1] Dr of Sci. (Geneva) in 1891.

He is commemorated in *Phacotrema pictetianum* MÜLL. ARG.[2]

ITINERARY.[3] *1890.* Leaving Marseille (Febr. 9); Ceylon (staying a fortnight); *Singapore* (some days in March); *NW. Borneo*, Sarawak: Kuching; trips in the vicinity and to Sadong, Simunjan River, Lake (Padang) Propok; Upper Sarawak, Pakou; leaving Kuching (May 11) for *Singapore; W. Java:* Batavia and Buitenzorg; sailing from Tandjong Priok (30) to Semarang; excursion to Boroboudour, and by train proceeding to Sourabaya; *via* Bali, Lombok, Macassar, Flores, Timor (Koupang and Deli), Banda, to *Ambon* (arriving June 26); especially exploring the reef fauna, Sept. 3 embarking again, and *via* Bourou, Batian, Ternate, N. Celebes (Menado, Amourang, Tontoli (= Toli Toli)), Paré-Paré, *etc.*, to Macassar; *E. Java:* Sourabaya, making a trip to the Tengger Mts, climbing Bromo Volcano; passing some days in Java as tourists, embarking Oct. 12; *Singapore* (14); *Sumatra East Coast*, Deli: Medan, Stabat; *Singapore* (Nov. 10), sailing (12) for Europe.

COLLECTIONS. He contributed to botany by collecting lichens in the *Malay Archipelago* on behalf of J. MÜLLER ARG., including several new species. He might have collected some phanerogams or vascular cryptogams too.

LITERATURE. (1) J. C. PICTET & M. BÉDOT: 'Voyage scientifique dans l'Archipel Malais' (Genève 1893–1909, 2 vols).

(2) In Nuov. Giorn. Bot. Ital. 23, 1891, p. 276.

(3) *cf.* 'Compte Rendu général du voyage' (in BÉDOT & PICTET, Voyage scientifique *etc. l.c.* 1, 1893, p. ix–lxiv).

BIOGRAPHICAL DATA. PICTET & BÉDOT, Voyage scientifique dans l'Archipel Malais, 1, 1893, p. v–viii; Ber. Schweiz. Bot. Ges. 50a, 1940, p. 372.

Piepers, Marius Cornelis

(1835, Amersfoort, U., Holland; 1919, The Hague, Z.H., Holland), a jurist who joined the D.E. Indian Government in 1863, and finally was pensioned off in 1894 when vice-president of the High Court of Justice.

Ceratostylis pieperii J.J.S. was named after him.

COLLECTIONS. *Herb. Bog.:* some plants from Batavia (*W. Java*) and orchids on behalf of J. J. SMITH from the Padang Highlands and Padang Pandjang (*Sumatra West Coast*);[1] also in *Herb. Leyden.*

His entomological collection from Java is in the Museum at Leyden.

LITERATURE. (1) *cf.* J. VALCKENIER SURINGAR in 'Het geslacht Cyperus' (Leeuwarden 1898) p. 93; J. J. SMITH in Bull. Dép. Agr. *no* 22, 1909, p. 36.

BIOGRAPHICAL DATA. Encyclop. N.I. 5, 1927, p. A51; BACKER, Verkl. Woordenb., 1936.

Pierce, W. Dwight

COLLECTIONS. 59 *Philip.* plants (numbered between 18–571) in *U.S. Nat. Herb. Wash.*

Pierot, Jacques

(1812, Leyden, Holland; July or Sept. 1841, probably on the home-voyage from Japan, at Macao, China), surgeon, the original proposer of the foundation of the Royal Society for Encouragement of Horticulture (Kon. Mij t. aanmoediging v. d. tuinbouw), which finally took place in 1842. He worked for a considerable time in the Leyden Herbarium, and was destined for Decima where he would have been in charge of a Botanic Garden. In September *1840* he embarked for Batavia (W. Java) with 6 cases containing living plants from Hort. Leyden. He paid a short visit to the highlands of Java (Priangan?) and forwarded living plants from *Java* to *Hort. Leyden.* In *1841* he sailed for Japan for the same purpose; on the way thither they were forced to land at Macao on account of a hurricane, and according to BLUME he died when botanizing there, which is in contradiction with MIQUEL's statement[1] which is sustained by the presence of Japanese plants of his in Herb. Leyden (see below).

He is commemorated in the genus *Pierotia* BL. and in *Salix pierotii* MIQ.

COLLECTIONS. To our knowledge living material from *Java* to *Hort. Leyden* only. Several plants from Kiu Siu in *Herb. Leyden.*

LITERATURE. (1) These data, mentioned by BLUME (Mus. Bot. 1, p. 180) do not agree with the statement of MIQUEL (Ann. Mus. Bot. Lugd. Bat. 3, p. 27) that P. is the collector of *Salix pierotii* in the island Kiu Schiu (the most southern of the larger islands of Japan).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 53, 1943, p. 249.

Pieters, M. S.

cf. sub Forest Research Institute, Buitenzorg; *Barringtonia pietersii* R. KNUTH was named after him.

Pij . . ., *cf.* PY . .

Pineda, Antonio

(1759, Guatemala, Centr. America; June 21, 1792, Badoc, Illocos Prov., Luzon, P.I.), was an official in the Spanish military service. He was the naturalist in charge of the natural history investigations of the MALASPINA *Expedition, 1789–94* (*cf. sub* HAENKE and NÉE for detailed data). He accompanied HAENKE on some foot-tours in *Luzon*, P.I. After his death a monument, now entirely destroyed, was erected at Manila.[1]

Some authors took him to be a zoologist, others to be a botanist; there is no record that he collected material of either botanical or zoological nature.

LITERATURE. (1) E. D. MERRILL: 'The Pineda Monument and the probable site of the first botanical garden in the Philippines' (Philip. Journ. Sci. C. Bot. 7, 1912, p. 363–369, *t.* 22).

BIOGRAPHICAL DATA. 'Noticias sobre D. ANTONIO PINEDA' (Mem. lit., Madrid 1794) (*non vidi*); COLMEIRO, La botanica y los botanicos *etc.*, 1858, p. 182–183.

Pinwill, W. S. C.

in 1877 a resident in *Malacca*, collected a few plants (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Kew: Malaya*, India, *1877*, 295 *nos.* According to BURKILL *l.c.* he collected Pteridophytes.

Piper, Charles Vancouver

(1867, Victoria, B.C., Columbia; 1926, Washington, D.C., U.S.A.), educated in the universities of Washington and Harvard; from 1883–92 residing at Seattle; Professor of Botany in Washington State College, 1892–1903; Agrostologist of the Bureau of Plant Industry, Washington, 1903–26. He was at the disposal of the Bur. of Agriculture, Manila, P.I., to examine the possibility for improving forage conditions there, in 1911–12. In 1911 he visited the Buitenzorg Botanic Gardens.

The genus *Piperia*, and several plant species (*Polyosma piperi* MERR. *etc.*) were named after him.

COLLECTING LOCALITIES. *1911–12. Philippines.* In *Mindanao, etc.*

COLLECTIONS. *Herb. Manila:* 620 plants from various parts of the *Philippine Archipelago* (pres. 1910/11); *U.S. Nat. Herb. Wash.*

His entomological collection in Nat. Mus. Washington.

BIOGRAPHICAL DATA. Who's who 1913; Science N.S. 63, 1926, p. 248–249; Proc. Biol. Soc. Washingt. 41, 1928, p. 61–66; Proc. Amer. Acad. Arts and Sci. 62, 1928, p. 275–276; Am. Men of Sci. 1906.

Piscicelli, Maurizio

COLLECTING LOCALITIES.[1] *1914. W. Java:* Canak Camogian (= probably Kawah Kamodjan) (Febr. 10); *SE. Borneo:* swamp forest Barito River (Febr. 18–23); *SW. Celebes:* Mar(r)os and Batimorang (= Bantimoeroeng) (March 10); Tciambo (= ? Tjamba) (March 15–22).

COLLECTIONS. *Herb. Rome:* > 52 *nos.*[1]

LITERATURE. (1) E. CHIOVENDA: 'Elenco delle piante raccolte dal maggiore MAURIZIO PISCICELLI nell' Indonesia' (Boll. Soc. Geogr. Ital. 53, 1916, p. 28–32).

cf. also R. SCHLECHTER in FEDDE Repert. 21, 1925, p. 120, 121.

Plasschaert, E. K.

(1876, The Hague, Holland; 1947, Bilthoven, U., Holland), Forest Officer, since 1898 in D.E. Indian Government service, stationed in Central Java; from 1904–09 in Surinam; in 1912 coming back to the E. Indies again, and stationed at Fort de Kock in Sumatra; later placed at the disposal of the Director of the Forest Research Institute at Buitenzorg, in 1925 appointed Inspector there; retired in 1927.

Author of some internal reports on Sumatra and adjacent islands.[1]

COLLECTING LOCALITIES. *1913. Sumatra:* Kota Tolo.—*1914. Centr. Sumatra:* Indragiri (Kampar); *N. & W. Sumatra:* Atjeh and Padang Highlands and *? P. Morsala.—1915. W. Sumatra:* Tapanoeli (Sibolga).—*1916. E. Borneo.*

COLLECTIONS. *Herb. Bog.:* some plants and dupl. F.R.I. bb. *nos* (*cf. sub* Forest Research Inst.); also in *Herb. For. Res. Inst. Buitenzorg.*

LITERATURE. (1) On Tapanoeli (1913); P. Pini and P. Morsala (1914); on Indragiri (Kampar and Koeantan Districts) (1914); on Sumatra West Coast (1914); and on Mentawai (Siberoet and S. Pagaï) (1914). All in the Forest Research Institute, Buitenzorg.

Pleyte, Didit Rudolf

(1913, Weltevreden, Java; x), from 1929–31 employee on the Rubber Estate Pasirdjono, Java; subsequently agriculturist on his own land; from March 1946 onwards Overseer of the Buitenzorg Botanic Gardens. In 1948 he partly accompanied the Swedish expedition of Dr S. BERGMAN, together with M. A. LIEFTINCK (see there) and several Indonesian mantris, to some Papua Islands.[1]

ITINERARY.[1] *1948.* Sailing from Priok (July 3); arrival at *Sorong* (22), collecting there and in the environs (July 24–Aug. 17); at Klamono, oil-field of the N.N.G.P.M. (Aug. 17–25); *Sorong* (Aug. 25–Sept. 7); *N. coast* of, and *Centr. Misoöl* (Sept. 7–Oct. 22); leaving Sorong (Nov. 3); back at Priok (Nov. 15).

COLLECTIONS. *Herb. Bog.:* 860 *nos*, and some lichens. *Hort. Bog.:* 308 orchids, and seeds. The Indonesian mantris of the Herbarium, DJAMHARI and MAIN, made collections too (see there).

LITERATURE. (1) *cf.* Flora Malesiana Bull. *no* 5, July 1949, p. 129.

Ploeg, van der
is cited as the collector of a *Palaquium* at Soengaipagoe, *Sumatra West Coast* (*cf.* LAM in Bull. Jard. Bot. Buit. sér. 3, vol. 7, 1925, p. 31).

Ploem, Ed.
agriculturist at Lembang, *W. Java*, sent plants to *Herb.* or *Hort. Bog.* in *1874*.

Ploem, Joannis (or Joannes) Carolus
(1819, Gulpen, L., Holland; Nov. 24, 1881, Sindanglaja, W. Java), physician; he was appointed in the D.E. Indian Army in 1851 and came out to Java in 1852, stationed successively at Willem I (Ambarawa) and Salatiga, both in Central Java. He resigned in 1853 and settled at Solo, where his practice did not answer expectations, however. He applied himself to oyster-culture, was forced by the government to discontinue his endeavours, and then erected barracks at Sindanglaja when the hospitals at Batavia and Buitenzorg were short of space. He was a lover of nature and since 1857 a member of the 'Natuurkundige Vereeniging' at Batavia.

Scleria ploemii BOECK. was named in his honour.

COLLECTING LOCALITIES. *Centr. Java:* Salatiga (*? 1852–53*).—*E. Java.*[2]—*W. Java:* collecting at Bandoeng, Radja Mandala, Sindanglaja, G. Gedeh (the caldera on Sept. 18, *1866*),[1] G. Pangrango, G. Salak, Tjidamar, Tjikalong, Wijnkoopsbaai (= Palaboehan) (*1870*).—Outside Java he collected in *Singapore* (*1867 or 1870*) and visited *Banka* and *Sumatra* in Dec. *1878*.[3]

COLLECTIONS. *Herb. Bog.*: > 388 *nos*, partly numbered in the H.B. series; many of his plants labelled Sdl (= Sindanglaja). Duplicates in *Herb. Leyden* (partly purch.); *Herb. Berl.:* 204 *nos* from *Java* (pres. 1871) and 26 *nos* from *Singapore* and collection of mosses; *Herb. Brussels* (few); *Herb. Paris* (few); *U.S. Nat. Herb. Wash.:* 17 from *Java*.

Herbarium of PLOEM from *Java* was sent to a certain WESTERMAN, who presented the same to Prof. C. A. J. A. OUDEMANS, Amsterdam (= *Herb. Univ. Amsterdam*). From the spores gathered from PLOEM's fern specimens the Superintendent of the Amsterdam 'Hortus botanicus' succeeded in raising a number of ferns which were further cultivated. OUDEMANS subsequently donated the material to the *Leyden State Herbarium* (information from a letter from OUDEMANS to TREUB!).

His labels apparently often bear incorrect localities.

In *Herb. Leyden* several *Cyperaceae* are provided with an impress 'Sumbawa Ploem'; it seems improbable that they were collected in that island by PLOEM himself, it might be material of COLFS (see there).

LITERATURE. (1) *cf.* VAN VLAANDEREN in Jaarb. Mijnwezen 1873, I, p. 219–221.

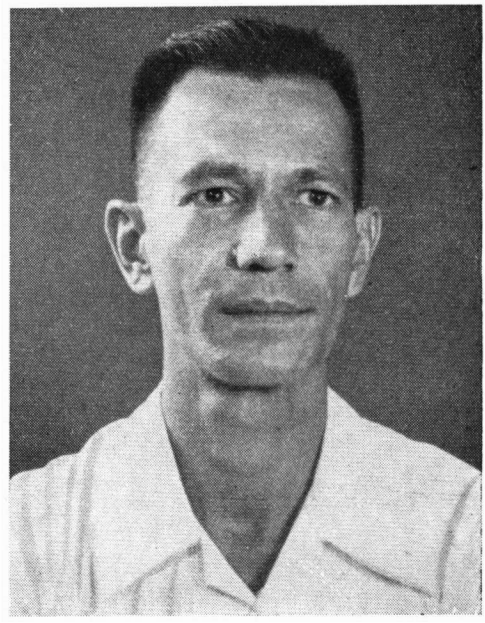
(2) *cf.* UITTIEN in Rec. Trav. Bot. néerl. 33, 1936, p. 287.

(3) J. C. PLOEM: 'Eenige aanteekeningen omtrent de fauna van Banka en Palembang' (Nat. Tijdschr. N.I. 39, 1880, p. 77–84).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; P. C. MOLHUYSEN & FR. K. H. KOSSMANN, Nieuw Ned. Biogr. Woordenb. 10, 1937, p. 736–737.

P.N.H. *nos, cf. sub* Philippine National Herbarium.

Poa, *cf. sub* SULIT.



PLEYTE

Poblacion, G., *cf. sub* Forestry Bureau, Manila.

Poelman, D. H., *cf. sub* Forest Research Institute, Buitenzorg.

Poeloeng Soegondo, *cf. sub ditto*.

Poetih, Abd., *cf. sub ditto*.

Pohan, Adr., *cf. sub ditto*.

Pohan, B., *cf. sub ditto*.

Poivre, Pierre
(1719, Lyons, France; 1786, St Romain near Lyons, France), was educated in theology and went out to China as student missionary in 1739 or 1741, was thrown into prison but released again, staying there and in Cochin-China till 1745, using part of his time for making botanical studies and collecting plants. During the homeward voyage his ship was attacked by the English, and during the fight one of his arms was torn away; the prisoners were kept for some months in Java. He saw this unhappy accident as a token from Heaven that he was not destined for a clerical career, and

decided to devote his further life to the study of geography, natural history, economy, *etc.* On his return (1748, after a stay in Île de France) he presented the results of his former studies to the French East India Company, by whom he was subsequently commissioned in 1749 to travel to Co-



POIVRE

chin-China, the Moluccas, the Philippines, and Madagascar.[1] In the Philippines he succeeded in secretly procuring (buying from a Chinese) an amount of fresh nutmegs which he transmitted to Réunion; besides he made an agreement with the Governor of Portuguese Timor (in 1755), who was to deliver him as many spice plants as desired![2] In 1757 he was back in his native country, devoting the next decade to agriculture. From 1767–73 Intendant of Réunion (Bourbon) and Île de France; subsequently back to France.

He is commemorated in the genus *Poivrea* COMM.

ITINERARY. *1748–57.*[3] Sailing from France (Oct. 23, 1748); in the Malayan region visiting the *Philippines: Luzon*, Manila (May 25, *1751*; sailing from there Febr. 21, *1753* and back again in Sept. *1754*); sailing (Jan. 2, *1755*) for *Mindanao:* Caldeira and Samboangan (= Zamboanga); Febr. 11 *via* Basilan Strait *etc.*, along the coast of Celebes, Buton and Solor to *Timor:* Lifao (Apr. 10–May 1); Île de France; back in France (Apr. 22, 1757).

It is unknown to me whether he visited the *Moluccas;* he evidently visited *Malacca.*[4]

COLLECTIONS. *Herb. Paris* (with *Herb.* JUSSIEU); some of his plants erroneously labelled, *e.g.* a *Rhodocolea* mislabelled *Timor*, instead of Madagascar.[5]

His MSS in the Library of Lyons (France), and the Nat. Hist. Mus. Paris.

LITERATURE. (1) P. POIVRE: 'Voyages d'un Philosophe' (Yverdon 1768; Paris, 3rd ed. 1786).

(2) *cf.* also 'Nottes sur le contenu du pacquet marqué A. servant d'éclaircissement à quelques articles de la mission du Sr LEPOIVRE pour le service de la compagnie des Indes' (in Archives Nationales, Paris, AJ[15] 511, *no* 456).

(3) *cf.* Short itinerary, literature and 'Relation abrégrée des voyages faits par le Sieur (POIVRE) pour le service de la compagnie des Indes, depuis 1748, jusqu'en 1757' by Prof. CORDIER in Revue d. Colon. Français. 1918, p. 5–88; and MS. at Paris.

(4) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 449.

(5) *cf.* PERRIER DE LA BÂTHIE in Ann. Mus. Col. Marseille 46 (5th series vol. 6), 1938, p. 28.

BIOGRAPHICAL DATA. A. BOULLÉE: 'Notice sur POIVRE' (Lyon 1835) (*non vidi*); Bull. Soc. Géogr. Lyon 8, 1889, p. 305–354; portr. in STEYERT, Histoire de Lyon, 1895–99, 3 vols; BRETSCHNEIDER, Hist.Bot.Discov.China, 1898, p. 117–118; Ann. Soc. Bot. Lyon 31, 1906, p. 34; Tijdschr. K.N.A.G. 1919, p. 370; in FOURNIER, Voyages et découvertes scientifiques *etc.*, 1932, p. 88–90 + portr.; in LACROIX, Notice historique sur les membres et correspondents de l'Acad. d. Sci. *etc.*, Paris 1934, p. 33–52; BACKER, Verkl. Woordenb., 1936.

Polak, Betje

(1901, Amsterdam, Holland; x), studied biology in the University of Amsterdam and took her Ph. Dr's degree in 1929 on a thesis dealing with peat formations in Holland. Subsequently she was awarded the Buitenzorg Fund and came to the D.E.I. in 1930;[1] when the Director of the Botanic Gardens, W. M. DOCTERS VAN LEEUWEN, went on furlough, she was temporarily attached to that institution; after his return for some time Assistant at the Medical College, Batavia. Mid-1931 she returned to Holland and was for several years Assistant in the University of Amsterdam. In 1939 she went to Java again at her own expense and was appointed peat specialist at the Soil Science Institute, Buitenzorg.

COLLECTING LOCALITIES. *1930. W. Java:* Telaga Saät and Telaga Warna (Poentjak) (March 3); Tjigombong (March 16); *Centr. Java:* Kali Lerang, S of Djokja, s.f. Sawoegaloer (Apr. 25–26); mangrove near Tjilatjap (28–30); *W. Java:* G. Papandajan (May 31); *Centr. Java:* Diëng Plateau and Rawah Pening (Ambarawa) (Aug.); Tjilatjap; *NW. Sumatra:* Tapanoeli Res.; *Sumatra East Coast*: Bila Estate and Negri Lama Estate, *etc.; P. Padang* near Bengkalis (E of Sumatra); Mandau River; *S. Sumatra:* Palembang Res., Pladjoe; *W. Borneo* (Dec.): Pontianak, Singkawang, Mandor, *etc.*[2]—*1931. W. Java:* G. Salak (G. Boender) (Apr.).—*1939. W. Java:* SE. Priangan Res. at Langen Estate (Sept. 14) and Rawa Tjipanggang (Sept. 17), both part of the Rawa Lakbok;[3] *SE. Borneo:* vicinity of Martapoera and Bandjermasin (Oct. 3–12).—*1940. W. Java:* G. Galoenggoeng, G. Sawal and Lake Pendjaloe. Tour to *Centr. Su-*

matra (Indragiri), *Riouw Archipelago* and *W. Borneo* (Sept.–Oct.).

COLLECTIONS. *Herb. Bog.*: several hundreds of plants, including the *nos* 70–161 from *Sumatra 1930* (154–159 mosses), *nos* 162–315 from *W. Borneo 1930*, *nos* 401–524 from *SE. Borneo 1939*, *nos* 525–635 from *Sumatra & Riouw 1940*, and *nos* 636–733 from *W. Borneo 1940*. 25 *Nos* from G. Lawoe in *E. Java* in *private* herbarium which was moved to *Herb. Bog.* during World War II.

LITERATURE. (1) Her sojourn resulted in the following papers: 'Resultaten en perspectieven van botanisch veenonderzoek' (Trop. Nat. 19, 1930, p. 182–184); 'Ueber Torf und Moor in Niederländisch Indien' (Verh. Kon. Akad. Wet. Amsterdam 30, 1933, p. 1–85, 10 fig.); 'Over het voorkomen van veenafzetting in Nederlandsch Oost-Indië' (Vakbl. Biologen 14, 1933, p. 77–87).

(2) B. POLAK: 'Een tocht in het zandsteengebied bij Mandor (W. Borneo)' (Trop. Nat. 22, 1933, p. 23–28, 8 fig.).

(3) B. POLAK: 'The Rawah Lakbok (South Priangan Java), investigation into the composition of an eutrophic, topogenous bog' (Contrib. *no* 8 of the Chuo Noozi Sikenzyoo, Bogor-Djawa 2603, 44 pp. + map).

Polanen Petel, van

of Tjikembar, *W. Java*, sent plants to *Hort. Bog.* in *1877*.

Polin Pasariboe, *cf. sub* Forest Research Institute, Buitenzorg.

Politon, W., *cf. sub ditto*.

Polman, Harm

(1890, De Wijk, Dr., Holland; x), for more than 12 years attached to the Government Caoutchouc Industry (D.E.I.) and in private horticulture; since 1927 Horticultural Officer in Government employ, stationed successively at Tosari (Tengger Distr.) (1927–30), and at Malang (1930–41), both in E. Java.

COLLECTING LOCALITIES. *1928. E. Java:* G. Tengger, at Tosari *etc.* (Aug.–Sept.).

COLLECTIONS. *Herb. Bog.*: 11 *nos* of *Loranthaceae* on behalf of the monographer B. H. DANSER.

Polo, Marco, *cf. sub* MARCO POLO.

Ponce, S. S.

collector of a new species of *Diospyros* (named *D. poncei* MERR.), *no* 22842, in *Mindanao* (Aug. 28, *1914*).

COLLECTIONS. In the For. Bur. series, *Herb. Manila* (see *sub* Forestry Bureau).

Pond, A.

medical practitioner, is cited as the collector of some ferns at Baguio, Prov. of Benguet, *Luzon* (March *1904*) (*cf.* CHRIST in Philip. Journ. Sci. C. Bot. 2, 1907, p. 208), and of a *Symplocos* in the same month (*cf.* BRAND in *l.c.* 3, 1908, p. 10).

Pool, A. H. Batten, *cf.* BATTEN POOL, A. H.

Popta, Sicco Martinus

(1887, Middelburg, Z., Holland; x), from 1907–17 planter in Deli, Sumatra, and subsequently exploring that island, partly commissioned by some companies. From 1922–25 proprietor of hotels at Prapat and Balige (Toba Lake, Sumatra), and later at Bandoeng. In 1941 he retired on account of complete deafness, settled at Baroetoenggoel on the slope of G. Patoeha, and devoted himself to his hobbies, especially the study and collecting of ferns; after the war settling at Bandoeng.



MISS POLAK

COLLECTING LOCALITIES. *1939. W. Java:* G. Tangkoeban Prahoe (Aug. 29–30); Bandoeng (Sept. 6); Tjigombong (Sept. 20).—*1940. E. Java:* G. Tengger, Ngadiwono (Jan. 17–30); *W. Java:* Kawah Kamodjan (Engelsche vlakte) (May 12), Bt Toenggoel (June 30), Rantjabali (G. Patoeha) (Oct. 6), SE. slope G. Salak (Nov. 10).—*1941.* Boeahbatoe (Jan. 1), Tjisaroea (Priangan) (Febr. 11, 17), Sitoe Lembang (Febr. 23, 25), G. Wajang and G. Soenda (24), G. Gedogan and Boerangrang (Febr.); Tjiwedej (March 3); Wangoenwatti Estate (March 30); Pasir Poentjeling (Tjiwedej) (Apr. 2), Tjikoekoer (Tjiwedej) (18); Baroetoenggoel (Apr. 16, 18; June 9; July 19, 22; Sept. 13); Rantjabali (G. Patoeha) (Aug. 4); Telaga Patengan (G. Patoeha) (Aug. 5.)—*1948*→. In the vicinity of Bandoeng.

COLLECTIONS. His *private herbarium*, made before World War II, got lost, excepted some tens of numbers; dupl. *pr. p.* in *Herb. Bog.*, mostly ferns. His post-war *private herbarium* consisted in Sept. 1949 of about 850 *nos;* dupl. in *Herb. Leyden.*

Porsch, Otto

(1875, Vienna, Austria; x), educated at Vienna, pupil of VON WETTSTEIN, taking his Ph.Dr's degree in 1901; for several years Assistant at Graz and Vienna; since 1912 Professor at Czernowitz (Austria-Hungary). He spent 4 months, from end of Jan.–June *1914*, in *Java*, to study the biology of flowers.[1] In 1938 appointed Professor at the Soil Science College, Vienna.

Author of many important critical papers on flower biology.[2]

COLLECTIONS. Material for demonstration on behalf of instruction.[3]

LITERATURE. (1) 'Wissenschaftliche Ergebnisse seiner botanischen Studienreise nach Java' (Sitz. Anz. Wiener Akad. Wiss. *no* 21, 28. Okt. 1915, 8 pp.).

cf. DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 40.

(2) *cf.* Ann. Jard. Bot. Buit. *l.c.* p. 91.

(3) *cf.* Versl. Pl. Tuin Buitenzorg for 1914, p. 57–58.

BIOGRAPHICAL DATA. Biologia Generalis 11, 1935, p. i–iv, w. portr.

Porte, Marius

(† Jan. 14, 1866, Manila, Luzon, P.I.), French explorer and plant collector who collected in Brazil (1855–*c.* 58) and from *c. 1859–65* near *Singapore* and in the *Philippines*. He is the discoverer of *Phalaenopsis schilleriana* RCHB.

He is commemorated in the genus *Portea* BRONGN. and in several species of plants.

COLLECTIONS. He sent his living plants to Europe; in 1860 from Manila (*Luzon*) to *Paris* (*cf.* list in 'Arch. Nation.' Paris). Also specimen sin *Herb. Leyden*[1] and *Herb.* VILMORIN.[2]

He collected for the horticultural firm of J. LINDEN.

LITERATURE. (1) *cf.* MERRILL in Bull. Bur. Agr. Manila *no* 4, 1903, p. 39.

(2) *cf.* BONAPARTE, Notes ptéridol., fasc. 13, 1921, p. 211.

BIOGRAPHICAL DATA. Flora 49, 1866, p. 350; BACKER, Verkl. Woordenb., 1936, *sub Addenda*.

Porter, George

(*fl.* 1800–34), a member of the gardening staff of the East India Company's Garden at Calcutta, who accompanied WALLICH to Singapore in 1822 and preferred to remain in *Penang*, where he became a schoolmaster and was put in charge of a newly founded Botanic Garden near Ayer Hitam (*1823–c. 1834*), and collected several plants.

Pleomele porteri N.E.BR. was named after him.

COLLECTIONS. He sent his plants to WALLICH; distributed with the E.I.C. Herbarium (see WALLICH), the most complete set in *Herb. Linn. Soc. Lond.*. *Herb. Kew:* from India (pres. 1823).

BIOGRAPHICAL DATA. CURTIS, Catal. Pl. of Penang, 1892, p. 99 and *ditto* in Journ. Str. Br. Roy. As. Soc. *no* 25, 1894, p. 165; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 36, 1898, p. 445–446 and in 2nd ed. by RENDLE, 1931; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; BACKER, Verkl. Woordenb., 1936.

Posewitz, Theodor

(1850, Igló = Neudorf, NE of Budapest, Hungary; 1917, Budapest, Hungary), a medical man, from 1879–84 Military Surgeon in the employ of the D.E. Indian Army and as such stationed in Borneo,[1] Java and ? Banka.[2] He was almost three years in *SE. Borneo*, staying for some time in the swamp region near Bandjermasin, for several months in the dry plain near Barabei, at Tewe(h) in hilly country and finally paying a visit to Pengaron and Tanah-Laut. In 1887 he was appointed Geologist in Chief of the Roy. Imp. Geol. Govt Inst. at Budapest.

He is commemorated in *Selaginella posewitzii* HIERON. (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. According to BACKER he is the discoverer of the above-mentioned *Selaginella*, but the type specimen was collected by C. J. BROOKS (see there) and named in the honour of POSEWITZ.[3]

LITERATURE. (1) TH. POSEWITZ: 'Borneo. Entdeckungsreisen und Untersuchungen gegenwärtiger Stand der geologischen Kenntnisse. Verbreitung der nutzbaren Mineralien' (Berlin 1889); several small papers on Borneo in Nat. Tijdschr. N.I. 1884–85.

(2) TH. POSEWITZ: 'Geologie von Bangka' (Budapest 1885, w. 2 maps); a small paper on Banka in Nat. Tijdschr. N.I. 44, 1885.

(3) *cf.* Hedwigia 51, 1912, p. 241.

Posthumus, Oene

(1898, Delfzijl, Gr., Holland; *c.* Dec. 1945, murdered by extremists at Batavia, Java), botanist, educated at Groningen University, where he took his degree on a morphological thesis, in 1924; when awarded the Buitenzorg Fund he went to the D.E.I. towards the end of 1924[1] and in the next year joined the Djambi Expedition for the collecting of fossil plants.[2] Early in 1926 he returned to Holland, to come back in October of that year as Selectionist in the employ of the Experiment Station for the Java Sugar Industry at Pasoeroean. Since 1939 Director of the General Experiment Station for Agriculture at Buitenzorg; in 1941 also Professor at the Agricultural College, Buitenzorg.

He specialized in ferns and is the author of numerous publications; together with C. A. BACKER he wrote a Fern Flora of Java (in Dutch; 1939).

Sarcanthus posthumii J.J.S. was named after him

COLLECTING LOCALITIES. *1925. W. Java:* especially in the environs of Buitenzorg (Jan.–March), on G. Salak (Jan. 15, 22, 28), E of Buitenzorg (Febr. 10), Depok (Febr. 15, 25), G. Salak (March 2); Tjibodas (March 18), Tjibeureum and Kandangbadak (19), summit G. Pangrango (20), Tjibodas (21–24); in Bantam visiting Kawah and G. Karang (Apr. 6), Pandeglang (7), Pasir Poetih (8), Pandeglang (9); Dago near Bandoeng (Apr. 15); *E. Java:* Lalidjiwo (Apr. 18–19), summit G. Ardjoeno (19) and G. Welirang (20); by way of Litjin (23) to the Idjen Plateau, Kawah Idjen (24); Oemboelan (Apr. 30); Semongkrong (May 1); Tosari and Zandzee (May 3–4). *Djambi Expedi-*

tion,[2] in *Central Sumatra:* near Bangko (July 9–20), collecting near Sg. Merangin, Sg. Mesoemai, at Limboer and Rantau Pandjang, *etc.;* bivouac Selem(b)oekoe (July 24–Aug. 31), near Sg. Karing, Sg. Manau, M. Djangkang, M. Tetoen, M. Karing, M. Titi Meranti; in September collecting was done by mantri SAIMOENDT (see there); in Oct. at Batang Soengai, Sg. Lesing and Paoeh. *W. Java:* Tjibodas (Dec. 11).—*1926. E. Java:* G. Andjasmoro with BACKER (Nov. 14); Poespo with BACKER (Nov. 28); G. Dorowati with COERT (Dec. 5); Pasoeroean (Dec. 27).—*1927. E. Java:* G. Ardjoeno (Jan. 9); N. slope G. Andjasmoro (Febr. 5), G. Bolang (with A. RADERMACHER and BACKER) (6); with BACKER at Blambangan (Febr. 9–11), Kepoeh (March 19), Blambangan and Zuidergebergte S of Toeren (G. Mendjalin) (March 27), Blambangan–Geboek glagah (Apr. 5), Tosari (Zandzee, Bromo Forest, Moenggal Pass) (Apr. 15), Blambangan (Apr. 23), G. Dorowati (May 20), Oemboelan (May 25); and other localities in this part of Java. *S. Sumatra,* Lampong Districts (early in Nov.): Radjabassa, Kalianda.—*1928. E. Java:* Lawang (Jan.); Tiris (March 3), G. Taroeb with BACKER (4–5); Poedjon–Tjobanrondo (Sept. 1), Poetjoengsari (2); Ranoe Daroengan (Sept. 12); Tiris (Sept. 23), SE. slope G. Taroeb (24), Ranoe Belek–Dempit (25), G. Taroeb (26); *P. Bawean,* N of E. Java (2nd half of Oct.); G. Tengger (Nongkodjadjar and Kletak with BACKER) (Nov. 19 or 20); Ranoe Daroengan with BACKER (Dec. 9); also collecting on G. Lawoe, G. Kawi, G. Ardjoeno, at Sitiardjo (S. coast).—*1929.* Bay of Popoh (Jan. 6); Ranoe Daroengan (Jan. 17, Febr. 12); with BACKER visiting: Kepoeh (Febr. 22,) G. Boto (March 10–13), Bondowoso (14) and G. Baoeng (18); Blambangan and environs (Apr. 14–23); G. Baoeng (Aug. 3); G. Smeroe, and kali Bening (Aug. 14), kali Glidik (16); also collecting on G. Kawi, G. Ardjoeno, Kendeng Mts, Zuidergebergte near Djember, *etc.* —*1930.* G. Kawi, Singoeroek, Soerabaja (Patjiran); kali Glidik (Malang), G. Smeroe. *Tour to Borneo and Celebes, E. Borneo:* Balikpapan (Oct. 17), Samarinda (18), Tengarong (19), M. Kaman (20), Melak (22), Melak to Sekolak darat (23), Sg. Darat–Padang Loewai (24),[3] Padang Loewai–Sekolak (25), Melak (26), Djantoer (27); *W. Centr. Celebes:* Pakoeli (Nov. 3), Sidaventa to Kaboelia (3), Koelawi (3), mountain E of Koelawi (4), along Sg. Magili (5), Koelawi to Lindoe (6), environs of Tomado (7), G. Tomado (8), Lindoe to Koelawi (9), Koelawi (10), Donggala (12), Tosale (13), Donggala (14–16) and *SW. Celebes:* Makassar (17–19), making trips to Paleko (18), and to Tjikorok on the SW. slope of G. Bonthain (19).—*1931. E. Java:* Soenggoriti (March 20); G. Kawi above Tjobanrondo (Apr. 19); Poenten (Apr. 26).—*1932. P. Weh,* N of Sumatra: Sabang (March 28); *E. Java:* Poespo (Sept. 10), G. Lawangan (Sept. 25).—*Tour to the Lesser Sunda Islands.* Sailing from Soerabaja (Oct. 29); *Soembawa:* Bima (Nov. 1); *Soemba:* Waike(l)o (2); *Flores:* Geli (or Keli) Moetoe (4), from where to Endeh (6), Wolo-Are(h) (7), Inie Lika (9), Mborong (10), Mborong–Sita (11), Roeteng (12), G. Kasteno SE of Roeteng (13), Rana Mesé (14), SE. slope of G. Mandaswai (15), G. Mandaswai (17), E of Reo (19); and on the way back to Java touching at *SW. Celebes:* Makassar (23), visiting Malino (24–26), and Patapang (25). —*E. Java:* Gradjegan (Dec. 10).—*1933.* G. Sawoer (S. slope G. Smeroe) (Apr. 17); Ranoe Pani to



POSTHUMUS

Sendoeroe (July 16); Lalidjiwo (slope G. Ardjoeno) (July 31); G. Kembar (31) and W. slope G. Welirang (31); Ranoe Kembolo (Aug. 24) and Ajek-Ajek (N. Smeroe) (25); also collecting at Soenggoriti, G. Baoeng, Loemadjang, G. Lamongan. *P. Bawean,* N of E. Java: at Baleboh Goenoeng, G. Menangis, G. Lawangan, Sangkapoera. *Bali:* Sebetan (Nov. 19), Sangeh (20), G. Kelatakan (21), Bedoegoel (22), Poeloehan (22), Lake Bratan (22), Gitgit (24), northern caldera of the Bratan (25), Gitgit (26). *E. Java:* above Litjin (Idjen Plateau) (Dec. 17).—*1934. E. Java:* G. Welirang; G. Kawi (Aug. 5).—*1935.* During a trip to Australia, collecting on *Thursday Isl.,* S of New Guinea (Aug. 17).—*1936. E. Java:* G. Ardjoeno (Febr. 16, March 15); G. Tengger (Apr. 26); G. Dorowati (Apr. 30); G. Andjasmoro (July 19); G. Lamongan (Aug. 9); *E. Java:* road to G. Boetak (Sept. 9), Oro-Oro (9), Tjikadjang (9); road to G. Kawi (Sept. 20); G. Kawi (Oct. 11); also collecting on G. Tjemarakandang (near Malang) and at Ranoe Daroengan (S. slope G. Smeroe).—*1937.* Batoeraden on slope G. Slamat (Febr. 5); G. Andjasmoro; G. Baoeng (June 10); above Ranoe Pani (Aug. 30); G. Kawi-Boetak (Sept. 18); Idjen Plateau: G. Pendil (Nov.

3), Banjoepait (4), Sempol (5); above Sarangan (Nov. 30–Dec. 2), at Tjemara Sewoe (Dec. 1), *etc.* Visit to *Bali:* Bangli (Dec. 26), Sangeh (27), Bedoegoel (27), Bratan caldera (28–29), G. Bratan, above Poeloekan (Jan. 1, *1938*).—*1939. N. Sumatra*, Tapanoeli Res.: Siborongborong (Apr. 16); Hoetagindjang (Toba Lake) (16) and Toba Plateau beyond Balige (16); *Sumatra West Coast:* Pajakoemboeh near Bangkinang (18); *N. Sumatra*, Tapanoeli: Silalahi on the N. side of Toba Lake (22); *Sumatra East Coast:* Sibolangit (23). *SW. Celebes:* Enrekang (Oct. 13), Palopo to Rantepao (14), Maros to Tjambi (15), Malino (?).—*1939–45. W. Java.*

COLLECTIONS. Principally ferns.[4] *Herb. Groningen:* 261 *nos Java* collection 1925; also fern dupl. The Djambi (*Centr. Sumatra*) collection wholly in *Herb. Bog.:* > 600 *nos* (451–1098, partly collected by SAIMOENDT, numbered in the same series). Collections *since 1926* in *private herbarium*, for the greater part dupl. in *Herb. Bog.*, *Herb. Pasoer.* (also some dupl. *Java* 1925), *Herb. Leyden* (365 *nos*, pres. 1933–35), *Herb. Sing.* (5 *nos* from *Flores*, pres. 1935), *Herb. Geneva*, *Brisbane*, *etc.* The total amount of his collections in *Herb. Pasoer.* is *c.* 2000 *nos*, of which more than 1000 collected together with C. A. BACKER (see there).

His collections from the tropics are numbered from 1 onwards; from the *Lesser Sunda Islands* and *Celebes* in 1932, the *nos* 3001–3504.

LITERATURE. (1) *cf.* Ann. Jard. Bot. Buit. 45, 1935, p. 47 and *l.c.* p. 68–69.

(2) O. POSTHUMUS: 'Djambi Expeditie' (Bull. Mij Bev. Nat. Onderz. Ned. Kol. *no* 81); 'Palaeobotanische Djambi-expeditie' (Tijdschr. K.N.A.G. 1926, p. 214–216); 'Eenige opmerkingen betreffende de palaeozoïsche flora van Djambi, Sumatra' (Versl. Gew. Verg. Afd. Nat. Kon. Akad. Wet. Amsterdam 36, 1926, p. 428–434).

(3) O. POSTHUMUS: 'Some remarks on the vegetation on the sandy soil of the Padang Loewai (Borneo)' (Proc. Kon. Akad. Wet. Amsterdam 40, 1937, p. 505–512).

(4) O. POSTHUMUS: 'Betreffende de Pteridophyta van Djambi' (Versl. Gew. Verg. Kon. Akad. Wet. Amsterdam 31, *no* 1, p. 95–112); 'Notes on the Pteridophyta from Djambi' (Proc. Roy. Acad. Sci. Amsterdam 31, *no* 1, p. 95–112); 'Ferns of Bawean' (Proc. Roy. Acad. Sci. Amsterdam 32, 1929, 9 pp.); and numerous other publications on the fern flora of Indonesia (see Ann. Jard. Bot. Buit. 45, 1935, p. 79 and 147).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936, p. 659; Landbouw 20, 1948, p. 178–180; Bull. Bot. Gard. Buit. ser. 3, vol. 18, 1949, p. 171–180, incl. portr. & partial bibliogr.; C. L. RÜMKE: 'Herinneringen aan Dr O. POSTHUMUS' (Nota); Jaarb. Kon. Ned. Akad. Wetensch. 1948–49, 19 pp., reprints w. bibliogr. p. 20–24.

Potts, John

(† 1822, Chiswick, London, England), was sent out to China and the East Indies by the East India Company,[1] on the recommendation of the Royal Horticultural Society, London. He brought home living plants and herbarium from China (1821) and Bengal; in August 1822 he was back in London again, but only to die.

He is said to have made a small collection in *Singapore*, *P. Penang* and *Sumatra*.[2] In his diary, however, no mention is made of a visit to the latter island.

He is commemorated in the genus *Pottsia* HOOK. & ARN. and in *Bauhinia pottsii* G.DON.

ITINERARY.[3] He left England on Jan. 23, *1821*, in the Indiaman 'General Kyd'; on the way visiting and collecting in the hinterland of Calcutta (June 13–Aug. 14); *P. Penang* or *Prince of Wales' Island* (Sept. 8–11); on the 16th part of the cargo had to be thrown overboard as the ship had run aground, and several plants got lost; *Malacca* (Sept. 26–27), collecting 3 species of plants; *Singapore* (29–Oct. 1); typhoon on the 17th, all plants collected since Bengal were thrown overboard!; stay in China; in March *1822* passing Sunda Straits, and returning by way of the Cape and St Helena, to London (Aug. 1822).

In his diary *no mention at all* is made of a visit to *Sumatra*.

COLLECTIONS. Joined to the herbaria of JACK and RAFFLES (see those). DAUBENY (Oxford) secured a collection made by POTTS, at the sale of the collections of the Hort. Society in 1856.[4] *Sumatra* plants of his were sold with *Herb.* LAMBERT[5] together with those of RAFFLES; they were acquired by RICH. A Journal kept by him from Jan. 1821–Jan. 1822 is in the possession of the Roy. Hort. Society, London.

LITERATURE. (1) *cf.* A. MURRAY: 'The book of the Royal Horticultural Society 1862–1863' (London 1863) p. 16.

(2) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 148 and MIQUEL in 'Sumatra' (1860), introduction p. xii.

(3) *cf.* his 'Journal' in Roy. Hort. Soc.

(4) *cf.* 'A catalogue of all the valuable collections of dried plants which have been formed by the Travellers employed by the Hort. Soc. Lond. *etc.*' (1856); Journ. Bot. 32, 1894, p. 298–299.

(5) *cf.* Advertisement of LAMBERT Sale in Athenaeum 1842, p. 44.

BIOGRAPHICAL DATA. BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 269–270; Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Potts, J. W.

ITINERARY. *1885. SE. New Guinea*, *Papua. Thursday Isl.* and *Prince of Wales Isl.* (Sept.), and return to *Thursday Isl.*. Tour by boat in the schooner 'Elsea' leaving Thursday Isl. on Oct. 1; some *islands in Torres Straits;* Port Moresby (Oct. 11–12, trip to Koitapu); a trip to the sources of Laloki River, and subsequently sailing for the Cloudy and Baxter Bay *via* Hula, Kerepuna, Kalo (= Kemp Welch) River, ascending the same for 20 miles;[1] back at Port Moresby; sailing for Bola, *Lilley Isl.*, Delena (Hall Sound), Maiva, Moti-Motu; *Thursday Isl.* (after absence of 6 weeks).

COLLECTIONS. In 1886 he returned to Sydney with a collection of weapons and other ethnolog-

ical objects, 60 species of birds of paradise and numerous orchids. At least partly in the Queensland Museum.

LITERATURE. (1) J. W. POTTS: 'Notes on a trip to New Guinea' (Proc. Roy. Soc. Queensl. 3, Brisb. 1887, p. 2–10); *cf.* also WICHMANN, Entd. Gesch. N.G., in Nova Guinea 2^2, p. 393.

Poulsen, Viggo Albert

(1855, Copenhagen, Denmark; 1919, Copenhagen), botanist, educated at Copenhagen University, where he took his Dr's degree in 1888. From 1876 teacher, since 1893 Lecturer at the Pharmaceutical Institute, Copenhagen, from 1902 with the title of professor. From 1894–95 he was awarded the Carlsberger Fund for a visit to Java, where he stayed at Buitenzorg in the Foreigners' Laboratory from Dec. *1894*–Febr. *1895*.[1] He paid a short visit to Singapore and Ceylon too.

Poulsenia EGGERS was named after him.

COLLECTIONS. Mostly alcohol material for anatomical investigations. Few herbarium material, owing to difficulties in drying it. In *Herb.* and *Mus. Copenhagen:* about 500 specimens.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 20.

V. A. POULSEN: 'Om Mangrovevegetationen (Foredrag)' (Forts-Tid. 9, 1896, p. 7–9); 'En ny Hymenolichen fra Java (Dictyonema expansum)' (Vid. Medd. 1899, p. 273–281).

BIOGRAPHICAL DATA. CHRISTENSEN, Den Danske botaniske litteratur 1880–1911, 1913, p. 70–73 + portr.; Bot. Tidsskr. 37, 1921, p. 107–112; CHRISTENSEN, Den Danske botaniks historie, 1924–26, vol. 1, p. 674–679, vol. 2, p. 480–487; Dansk Biogr. Leksikon 18, 1940, p. 448–450.

Praetorius, Christiaan Frederik Eduard

(1799, Brunswick, Germany; 1846, Soerabaja, Java), since 1821 in Government employ in the D.E.I., appointed warehouse foreman at Tjikao (Krawang, W. Java); from 1828 in the Civil Service, *viz* 1829–34 Resident of Palembang (Sumatra),[1] 1834–37 Resident of Pekalongan (Java) and from 1837–39 Resident of (D)Japara (Java); subsequently Director of Agriculture till 1844 (the years 1842–43 spent in Holland); since the end of 1844 owner of a sugar factory.

Hoya praetorii MIQ. was named after him.

COLLECTING LOCALITIES. *1830–32. S. Sumatra:* Palembang Residency.

COLLECTIONS. *Herb. Leyden;* many of his plants described by BLUME in 'Rumphia' and 'Museum Botanicum'.[2] According to BACKER (*l.c. sub* Biogr. data) he collected in *Java* too.

LITERATURE. (1) He is the author of 'Alphabetische opgave van de voornaamste houtsoorten in de residentie Palembang' (De Indische Bij 1, 1843, p. 449–479).

(2) *cf.* also VAN HALL Bijdr. Natuurk. Wetensch. 7, 1832, p. 115–129 on a specimen of *Calamus draco*, collected by PRAETORIUS.

BIOGRAPHICAL DATA. Hand. Ind. Gen. 2, 1855, p. 51–72; BACKER, Verkl. Woordenb., 1936.

Pratt, Antwerp E.

explorer and professional zoological collector; from 1887–90 in the employ of the English entomologist LEECH, exploring in China, since 1889 collecting plants too.[1] Early in the twentieth century he made some journeys in New Guinea (see below). From about 1912 he made entomological collections on behalf of J. J. JOICEY (owner of the Hill Museum, Witley, Surrey, England); in 1912 with his son FELIX (see below) in Peru and the Amazon region.[6] He made collections in Syria too.

He is commemorated in some plant names.

Since July 1909 a certain ALFRED ERNST PRATT was appointed Staff Surveyor in the Territory of Papua; he accompanied M. ST. C. SMITH (see there) on the Kikori Expedition (see below), and died Dec. 3, 1925 (born 1862). ? Identical.

ITINERARY. *1902–03.*[2] *SE. New Guinea.* Sailing from England with his son Henry (Jan. *1902*) to *Thursday Island;* in the 'Nias' to Merauke (*Dutch S. New Guinea*) (arriving Apr. 11); after a short inspection he thought the locality unsuitable for collecting purposes, departed to Port Moresby and proceeded to *Yule Island:* mouth of the Ethel River, going up the same to the Bioto River, reaching Bioto; Upupu and on foot to Epa, Ekeikei (= Ikeikei) and Madui; crossing the Akuluma River to Dinawa, making bivouac; breaking camp (22) and setting out to the Anga Bunga (= St Joseph River), making bivouac; back to Dinawa; Ekeikei (Sept. 23), Epa (24), Pokama; by cutter to Port Moresby (herbarium lost by shipping seas). Arranging his collections and towards the end of the year making a tour by boat in eastern direction, visiting: Kapa-Kapa, Hula, Kalo, Kerapuna (= Kerepunu) and return to Port Moresby. Leaving Port Moresby o/b the vessel the 'Waup' (Jan. 1, *1903*) to *Yule Island*, proceeding from there to Pokama on the mainland; back by canoe to *Yule Isl.*, staying there for several days; visit to the mainland: Moa, Inawee, Inawa, Inawabia, Aipiana, Rarai, Nara, Bioto and from there to Epa, Ekeikei, building a permanent camp; back at Bioto (*c.* May), voyage to Pokama and *Thursday Isl.;* sailing again (May 23) after having collections dispatched; Ekeikei (June 20); Kebea, Yoyaka and Amana (July 15); Foula (Aug. 13); to Mafulu (Owen Stanley Range), making camp, staying 3 weeks, compelled to go back by lack of food; Foula, Babooni (staying 3 weeks); *via* Waley to Kebea; Ekeikei, Epa, Oo-fa-fa, Pokama; by boat and proceeding by land from Giabada *via* Issu, Manu-Manu, taking a canoe to Port Moresby; by steamer to Cooktown, Sydney, and homewards.— *1907–09.*[3] *Dutch W. New Guinea*, Vogelkop: arriving with 2 sons, FELIX and CHARLES, at Manokwari (*1907*); exploring the Arfak Mts and Angi Lakes; *Dutch N. New Guinea:* several months in the mountainous interior S of Humboldt Bay, Lake Sentani, reaching an altitude of 8000 feet; subsequently leaving behind his sons in *Schouten Isls* (= *Biak*), where they were to collect for 6 months; from June–Oct. *1908* with DON. MACKAY to the Purari River[4] and Kikori (*Papua*); in Dec. 1908 he himself evidently again near Angi Lakes,

in which region he still worked in Nov. *1909.*—*Kikori Expedition, 1910–11.* ALFRED ERNST PRATT (? identical) accompanied this expedition (*cf. sub* M. STAN. C. SMITH).—In *1913* he organized another expedition to Angi Lakes, in *NW. Dutch New Guinea.*

COLLECTIONS. Especially entomological and ornithological collections. Plants from China in *Herb. Kew, Brit. Mus.*, and *Berl.* His botanical *New Guinea* collections are probably but small. Some plants collected near Angi Lakes in *Herb. Kew*, according to Miss GIBBS![5]

LITERATURE. (1) A. E. PRATT: 'To the snows of Thibet through China' (1891).

(2) A. E. PRATT: 'Two years among cannibals. Being some account of the aborigines of Papua' (New Guinea, and a travel and adventure of that Island with Drawings by S. BEGGS) (The Ill. Lond. News 75, 1 Oct. 1904) (*non vidi*); 'Two years among New Guinea cannibals. A naturalist's sojourn among the aborigines of unexplored New Guinea (with appendix on the scientific results of the expedition)' (London 1906). According to the latter book, his New Guinea explorations started in 1901, evidently a printer's error.

(3) *cf.* Tijdschr. K.N.A.G. 1909, p. 846–850 and Ind. Gids 1909[2], p. 1224; PETERM. Mitt. 55, 1909, p. 324.

(4) *cf.* D. MACKAY in Rep. Australas. Assoc. Advanc. Sci. 13, (1911) 1912, p. 385–389; and Geogr. Journ. Lond. 38, 1911, p. 483–487, 1 pl.

(5) A *Vaccinium*, said to have been collected at the Female Lake in 1906 (according to other information he did not collect there before 1907), was described in ENGL. Bot. Jahrb. 72, 1942, p. 255.

(6) *cf.* Entom. Beihefte II–IV, Berl. Dahl. 1935–37, p. 214.

BIOGRAPHICAL DATA. BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 802–805; BACKER, Verkl. Woordenb., 1936.

Pratt Jr, Charles and Felix

sons of A. E. PRATT (see there), who accompanied their father on a collecting tour in *West* and *North Dutch New Guinea* in *1907–08.* The sons stayed in the *Schouten Islands* for 6 months. In 1912 FELIX accompanied his father to Peru and the Amazon region, collecting on behalf of J. J. JOICEY, owner of the Hill Museum (Witley, Surrey, England). Subsequently CHARLES and FELIX made entomological collections in *Dutch New Guinea, Schouten Islands, Roon, Waigeu* (= *Waigeo*), *Ceram* (Manusela Range) and *Buru* (= *Boeroe*), in *1913* and *1920;*[1] possibly in *Sumatra* too. They ceased collecting some time before 1932; they are supposed to have gone into the rubber industry in Sumatra.

COLLECTIONS. Chiefly entomological; occasionally living orchids were collected, as Mr JOICEY grew them; also food-plants of Lepidopterous larvae. In *Herb. Kew:* at least *nos* 3 and 4, both *Urticaceae* from *Ceram* (pres. in 1922 by the Haslemere Mus., Surrey).[2]

LITERATURE. (1) cf. Entomol. Beihefte II–IV, Berl. Dahl., 1935–37, p. 214.

(2) Information *in litt.* by Mr H. K. AIRY SHAW, Kew Herbarium.

Prautch

American, a Manila character, private citizen, often called Deacon. He is cited as the collector of a plant from the *Batan & Babuyan Islands* (in MERRILL, Enum. Philip. Fl. Pl.); in *Herb. Manila.*

Prawirodihardjo, *cf. sub* Forest Research Institute, Buitenzorg.

Pray, F. L.

Forest Officer, *cf. sub* Forestry Bureau, Manila.

Presl

is occasionally cited in MERRILL, Enum. Philip. Fl.Pl., as the collector of *Philippine* plants, preserved in *Herb. Prague.* We may assume that these plants were collected by HAENKE (see there).

Preyer, Dr Axel

from Berlin, stayed about 10 months at Buitenzorg (Java), to get acquainted with tropical crops and their cultivation; besides he made researches concerning useful plants.[1]

ITINERARY. *1900. Malay Peninsula: Penang* (Botanic Garden), *Singapore*, Blakang Mati; *Sumatra East Coast:* Deli; *W. Java:* Buitenzorg, Tjibodas, Priangan Res., Soebang (Krawang); also paying a visit to *Centr. & E. Java.*[2]

COLLECTIONS. *Herb. Berl.:* 159 *nos* of useful plants from *Hort. Bog.;* 393 wood samples in the *Show Mus. Berl.* He evidently collected weeds too, at least *Eryngium foetidum* L. from *Java, s.n.*[3]

LITERATURE. (1) *cf.* Versl. Pl. Tuin Buitenzorg for 1900, p. 30 and Ann. Jard. Bot. Buit. 45, 1935, p. 25.

Author of 'Viehfutterpflanzen aus Java' (Tropenpflanzer 1902, *no* 8).

(2) A. PREYER: 'Indo-Malayische Streifzüge' (Leipzig 1903).

(3) *cf.* BUWALDA in Blumea 2, 1936, p. 166.

Prillwitz, Peter Maximilian Hermann Hubertus

(1900, Garoet, Java; x), educated at the Agricultural College, Wageningen; till 1936 on the staff of the General Tea Experiment Station (later W. Java Exp. Stat.); since 1936 high official in the Department for Economic Affairs at Batavia.

COLLECTIONS. *Herb. Bog.:* material of *Balanophora elongata*, collected on G. Slamat, *Centr. Java*, in Sept. *1928.*

Primo, D., *cf. sub* Forestry Bureau, Manila.

Prince, John

apparently for several years a resident of Sumatra, described by JACK as a freezing mass of ice whom all the wonders of nature were thrown to waste; from 1826–28 Resident-Councillor in Singapore.

Erycibe princei WALL. was named after him.

COLLECTIONS. He sent information and living plants from *Sumatra* to ROXBURGH;[1] the latter was

Director of the Bot. Garden at Calcutta till 1814, so we may assume they were sent before then. In *1819* he sent flowers of the Camphor-tree from Tap(i)anoeli to RAFFLES (see there). To WALLICH (see there) he sent plants from *Sumatra* and *Singapore*. In *Herb.* HOOK. (= *Kew*): *Penang* plants.

Unpublished drawings of Singapore plants at Kew (*cf.* HOOK. Flora Br. India 4, p. 375).

LITERATURE. (1) *cf.* Journ. Str. Br. Roy. As. Soc. *no* 73, 1916, p. 223, note 264.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Pringgo, Raden

collected living plants on G. Djajante near Palaboean Ratoe (S. coast of *W. Java*), on behalf of *Hort. Bog.* (*1905*). = PRINGGO ATMODJO (see there).

Pringgo Atmodjo, Raden Mas

(† May 1912, Buitenzorg, Java), clerk of the Herbarium at Buitenzorg, who attended the expedition of Lieutenant-Colonel (later General) G. C. E. VAN DAALEN (see there) in North Sumatra (Atjeh), and subsequently was bestowed with the Bronze Star for Loyalty and Merit (1903). In 1907–08 he assisted B. BRANDERHORST (see there) in making botanical collections in New Guinea, and returned in August 1908 on account of illness. During his stay in New Guinea he contracted consumption, of which he finally died.

ITINERARY. *1904. N. Sumatra:* Gajo, Alas, and Batak Lands.[1] Departing from Buitenzorg (Jan. 17) to Oleh-leh (arriving the 25th); by steamer (Febr. 8) to Lho(k) Seumawe; on foot *via* Tingkil, Leu-euh, Leunja Boetèr, Gahoe Loeäs (Febr. 14), Aroereulum, Wihdoerni, Boernipaja, Pentanan (16), to Koeng (19); along Laut Tawar (= Lake Takengon or Takingeun); G. Pagarangan (21); Ko(e)tarajang (22); G. Dag (24) and Goea Kambing (25); *via* Djagoeng (28) *etc.* to benteng Paparek; kp. Bentang (March 23); 2-month stay at Kota Lintang (since March 28), making many trips to Boerni Lintang and G. Api (Apr. 15), Doeren, Kota Bělang, Boerni-agoesen (June 5), *etc.;* Lawé agoe River (June 12–14); to the Pak-pak Lands: Bamběl, S of Kotatjane (16–29) and environs, Merdingding (July 2), proceeding in southern direction along the Lae Renoen (13) to Bekara on Toba Lake (15); back *via* Borong borong (= Siborongborong) (17), Pager Pisang and Taroetoeng, to Siboga, where embarking (July 20) for Oleh-leh; sailing (Aug. 18) for Batavia, arriving the 24th.

COLLECTIONS. *Herb. Bog.:* 544 *nos* VAN DAALEN Expedition; dupl. in *Herb. Kol. Mus.* (= *Ind. Inst.*) *Amsterdam* and *Herb. Leyden.*

LITERATURE. (1) *cf.* Versl. Pl. Tuin Buitenzorg for 1904, p. 3 and 15–17; and J. C. J. KEMPEES: 'De tocht van Overste VAN DAALEN door de Gajo-, Alas- en Bataklanden' (Amsterdam, without date).

Proefstation voor Rubber

The Rubber Experiment Station at Buitenzorg (later a division of the West Java Experiment Station) frequently obtained botanical material, sent in by planters. The plants were labelled with the indication P.v.R. *no* . . . and partly with P.v.R. *no* B . . ., and subsequently transmitted to *Herb. Bog.*

Proppe, Dr Gregor Joseph

(1877, Semmritz, Kreis Schwerin, Germany; x), Veterinary Surgeon, came out to the D.E.I. in 1922, where he was appointed in Government service. Successively stationed at Madioen (E. Java) from March–Nov. 1922, at Koepang (Lesser Sunda Isls) from Nov. 1922–Jan. 1925, and at Bondowoso (E. Java) from Jan. 1925–Dec. 1926; subsequently going back to Germany.

COLLECTIONS. *Herb. Bog.:* > 21 *Timor* plants (locality Taimaman), and material of *Aristida adscensionis* L. from *Savoe* (= *Sawoe*) (pres. by Pasoeroean in 1935). *Herb. Pasoer.:* 4 *nos* from *Sawoe* (coll. *1924*). He collected on behalf of C. A. BACKER.

Prout, J. W.

COLLECTIONS. *Herb. Kew:* 33 ferns from *Borneo* (pres. *1866*).

Provost, Simon

joined the expedition of 'L'Étoile du Matin' and the 'Vigilant' (1769), under the command of respectively ETCHÉVERY and TRÉMIGON, organized by P. POIVRE (as chief of the mercantile marine) to obtain spice plants. PROVOST, clerk of the marine, was in charge of the botanical department of the voyage.

ITINERARY. *Voyage in 'L'Étoile du Matin' and the 'Vigilant', 1769–. . .*[1] After numerous adventures they visited Manila (*Luzon*), *Mindanao, Jolo* (= *Sulu*) *Islands*, Taffouri (unknown to me), *Ceram, P. Gebi* (= *Gebe*), and Patani.

COLLECTIONS. They brought home a rich harvest of nutmegs, and clove plants. In the cited paper no mention is made of any dried collections.

LITERATURE. (1) *cf.* A. LACROIX in 'Notice historique sur les membres de l'Académie des scienc. *etc.*' 1934, p. 47.

Pryer, William Burgess

(† 1899), was a partner in the expedition fitted out by ALFRED DENT in 1877 to British North Borneo under the immediate command of Baron OVERBECK, with the purpose of obtaining cessions of territory respectively from the sultans of Brunei and Sulu; at Brunei the treaty of 29th Dec. 1877 was obtained. PRYER stayed at Sandakan acting as Agent and Resident for the British North Borneo Company. June 15, 1878 the greater portion of Sandakan was burnt down by accident and he subsequently removed to the new Elopura site. Later RIDLEY refers to him as Mr PRYER of Byte Estate (Sandakan). He was the owner of an excellent collection of *Lepidoptera* and *Coleoptera*, also of birdskins.

He and his wife wrote some papers on Borneo.[1] *Begonia pryeriana* RIDL. was named after him.

COLLECTING LOCALITIES. *Br. N. Borneo, 1877–99.* He made many trips inland, but only few data are known. In 1881 he made a trip up the Kinabatangan River, departing from Sandakan (Febr. 23), reaching Imbok (March 4).[2] According to POSEWITZ he ascended Alfred River in the same



PULLE

year. He is cited to have collected at Pontianak, *W. Borneo*, too![3]

COLLECTIONS. Principally orchids; some cited and described by RIDLEY.[3] In *1885* a consignment of 25 plants from *N. Borneo*, was received in *Singapore*, according to the Garden's Report, sent by a certain PRYOR (see there); probably misspelled for PRYER!

LITERATURE. (1) W. B. PRYER & F. WITTI: 'Diaries of Messrs PRYER and WITTI' (1881) (*non vidi*).

W. B. PRYER: 'Notes on North Eastern Borneo and the Sulu Islands' (Proc. Roy. Geogr. Soc. Lond. 1883, p. 90–96); 'Manila Hemp in British North Borneo' (*cf.* Tijdschr. K.N.A.G. 1898, p. 728 and Kew Bull. 1898, p. 15).

Mrs W. B. PRYER: 'A decade in Borneo. With introduction by JOSEPH HATTON' (Singapore 1893, 199 pp.).

(2) W. B. PRYER: 'Diary of a trip up the Kinabatangan River' (in Report on the country of the northern portion of Borneo lately ceded to Messrs. DENT and OVERBECK, printed for private circulation).

(3) *cf.* Journ. Linn. Soc. Bot. 32, 1896, p. 282, 285; Journ. Str. Br. Roy. As. Soc. *no* 46, 1906, p. 252.

Pryon

In BURMAN, Flora Indica (1768), he is cited many times as the collector of *Java* plants; in his introduction to this flora, BURMAN classifies him as one of the most excellent botanists. I have no data as to his having been himself in *Java*, so perhaps he obtained the plants from other collectors.

He is commemorated in the genus *Pryonia* MIQ. (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. In *Herb.* BURMAN = DELESS. (*Geneva*).

Pryor

sent 25 plants (all *Dendrobium crumenatum*) from *Br. N. Borneo* to the *Singapore Bot. Gardens*. His name might have been misspelled for PRYER (see there).

Puasa, Mohamed

a Forest Guard who collected in *Br. N. Borneo; cf. sub* Forest Department, Br. N. Borneo.

Pujee, *cf. sub* Conservator of Forests series, Kepong.

Pulle, August Adriaan

(1878, Arnhem, Gld, Holland; x), botanist educated at Utrecht University, taking his Ph.Dr's degree in 1906; teacher in Natural History at Utrecht; member of the Saramacca Expedition (1902–03) in Surinam; in 1906 he was enabled to make a trip to Java by a grant from the Buitenzorg Fund;[1] from 1906–14 University Lecturer in systematic and pharmaceutical botany at Utrecht and besides, from 1906–12, teacher at a secondary school at Amersfoort; a year after his return from the New Guinea expedition (see below), in 1914, he was appointed Professor of Taxonomy and Plant Geography, at the same time Director of the Botanical Museum and Herbarium, in the University of Utrecht; since 1920 besides Director of Cantons Park at Baarn. In 1920 he made another voyage to Surinam.

He is the editor of the Flora of Surinam, issued by the Colonial Institute at Amsterdam. Author of several papers on plant geography and taxonomy.

The genus *Pullea* SCHLTR and other species of plants were named in his honour.

ITINERARY. *1906. Java* (March–July). Staying at Buitenzorg and making several trips, collecting in *W. Java:* Tandjong Priok (Apr. 3); with BACKER and ERNST excursion to *P. Edam* in the Bay of Batavia (Apr. 24), Vlakke Hoek (SW. point of *S. Sumatra*) (25), Java's Eerste Punt (25), *Krakatau* and *Verlaten Isl.* (26);[2] Tjibodas and G. Gedeh; G. Wajang and Windoe (June 19); G. Taloen (June); and in *E. Java:* G. Wilis (May 26).—A. FRANSSEN HERDERSCHEE Expedition *to SW. New Guinea, 1912–13.*[3] Sailing from Soerabaja (Aug. 21, *1912*); touching at Koepang (*Timor*) (27) and Dobo (*Aroe Isls*) (Sept. 3); mouth of the Lorentz River (Sept. 7); Kloof bivouac (2 km N of Alkmaar) (PULLE staying from Oct. 5–Nov. 7); bivouac on Beaufort River (= ? VAN DER SANDE River) (till Nov. 21); Perameles bivouac (22); Mt Dromedaris (Dec.

6–10); Bijenkorf (= Beehive) bivouac (11), ascending Went Mountain (Erica summit); setting out (29) to the ridge of the Hellwig Mts, staying till Jan. 12, *1913;* Bijenkorf bivouac (12–20); Treub bivouac; march to Mt Wichmann (26–31), staying till Febr. 12; back to the Treub Mts, Orò Valley, Lorentz River, Treub bivouac; Kloof bivouac; leaving Lorentz River on Apr. 19. PULLE was not allowed to accompany the party to Wilhelmina summit; for that part of the expedition see *sub* G. M. VERSTEEG.

COLLECTIONS. *Herb. Utrecht:* collection 1906, from *Java etc.*, and dupl. *New Guinea* (1912); *Herb. Bog.* and *Leyden:* principal sets of *New Guinea* plants, 1237 *nos.*

Several of his plants from *Java* are mentioned by KOORDERS in the 'Exkursionsflora von Java'; the botanical results of the *New Guinea* expedition were partly published.[4]

Living plants from G. Wilis (*E. Java*) and *New Guinea* presented to *Hort. Bog.*

LITERATURE. (1) *cf.* Ann. Jard. Bot. Buit. 45, 1935, p. 31 and 69.

(2) *cf.* ERNST in 'Die neue Flora der Vulkaninsel Krakatau' (Zürich 1907) p. 9–39.

cf. Tijdschr. K.N.A.G. 1913, p. 350–355, 789–794, 801–802.

(3) The 3rd expedition fitted out by the Neth. Ind. Committee for scientific researches (Ind. Comité v. Wetensch. Onderz.), *cf.* Bull. Mij Bev. Nat. Ond. Ned. Kol. *nos* 65–68, and 'Versl. Milit. Expl. Ned. N.G. 1907–15' (Weltevreden 1920) p. 29.

A. A. PULLE: 'Naar het sneeuwgebergte van Nieuw Guinea met de derde Nederlandsche expeditie' (Wereld Bibl. Amsterdam 1915); 'Botanische indrukken van Nieuw Guinea' (Natuur en Mensch 1933, p. 184).

(4) *Ericaceae* by J. J. SMITH in Meded. 's Rijks Herb. Leiden *no* 25, 1915, p. 1–14.

In Nova Guinea vol. 8 and 12.

Ferns by ALSTON in Journ. Bot. 78, 1940, p. 225–229.

In 'Beitr. z. Flora Papuas.' (ENGL. Bot. Jahrb. 1912 →).

BIOGRAPHICAL DATA. Portr. in Chron. Bot. 1, 1935, p. 27; Wie is dat? ed. 1–4; BACKER, Verkl. Woordenb., 1936; Persoonlijkheden in Nederland, 1938, + portr.; Meded. Bot. Mus. en Herb. Rijksunivers. Utrecht *no* 55, 1939, 5 pp. + portr.; Bull. Jard. Bot. Buit. sér. 3, vol. 16, 1939, p. 103–105 + portr.

Puy, P. J. du

engineer in the employ of the Kon. Ned. Paketvaart Mij (K.P.M.).

COLLECTIONS. *Hort. Bog.:* living orchids from *Dutch S. New Guinea* and Larat (*Tanimber Isls*) (pres. *1912*); possibly part of the material preserved in *Herb. Bog.*

Pijl, Leendert van der

(1903, Utrecht, U., Holland; x), botanist, educated at Amsterdam University (1922–27), taking his Ph.Dr's degree when on leave in 1934; teacher in Natural History at Arnhem (Holland), 1926–27, and subsequently at the Christian Lyceum at Bandoeng, interrupted by Japanese internment and evacuation to Holland, followed by his replacement in 1947.

He is especially interested in the problems of flower biology; his studies resulted in several pa-



VAN DER PIJL

pers. Besides, he is the author of some guides for the environs of Bandoeng.

COLLECTING LOCALITIES. The following enumeration will certainly be incomplete, as he collected in numerous localities repeatedly, especially in Priangan Residency, from *1927 onwards.—1927. W. Java:* G. Patoeha; Tjibodas (G. Gedeh) (Nov. 20–29).—*1928.* S. Bantam (May);[1] G. Tampomas in Priangan;[2] G. Goentoer.—*1929. E. Java:* G. Idjen and G. Raoeng.—*1930. Lang Eiland, Rakata* (= *Krakatau*) and *Verlaten Eiland* in Sunda Strait (June); *W. Java:* G. Malabar (June);[3] G. Papandajan (Apr. and Dec.; revisiting the mountain numerous times!); Sitoe Bajoemboeng (Nov.). —*1931.* G. Malabar; Bt Toenggoel; G. Manglajang and G. Wajang; *S. Sumatra*, Benkoelen (May 18–27): G. Pakiwang and from Lake Ranau to the coast.—*1932. W. Java:* G. Tjikorai; Soekanegara (June); limestone hills near Padalarang (in Oct. and Dec. of this year, and probably numerous other times).[4]—*1934.* G. Boerangrang.— *? 193* . . G. Gedeh, Tjibodas.—*1936.* 'Tegals' of G. Galoenggoeng *etc.* (July).—*1937.* G. Patoeha (March 29); G. Goentoer (Sept. 19); Krawang (Oct.).—*1938.* Soekanegara (July 3).—*1939.* Slope G. Gedeh above Tjibodas, 1900 m alt. (March 29); in July collecting in *Ambon* (4–6, 11), *Saparoea* (8–9), *SE. Celebes:* Kendari (14), *Boeton* (17), *SW. Celebes:*

G. Bonthain (Bawahkraèng) and Reapia Ridge (19); Bone Res. at Nengo (23–24); and on the home voyage 1 plant in *Bali* (28).—*1940. W. Java:* G. Galoenggoeng (May 10);[5] G. Pantjar (June 6); Soekanegara (July).—*1941. Lesser Sunda Islands: Timor* (June 13–18); *Roti*, Baä (19); *Flores*, Endeh



QUISUMBING

(21–22), Roeteng (25–26); *Komodo* (28); *Soembawa*, Bima (28).—*1949. Anak Krakatau.*

COLLECTIONS. *Herb. Bog.:* > 911 *nos*, part of the numbers were given twice; also plants *s.n.* He collected a new *Gentiana* on Mt Idjen in *1929*,[6] dupl. of the material at *Kew*.

LITERATURE. (1) L. VAN DER PIJL: 'Naar het goud van Bantam' (Trop. Nat. 18, 1929, p. 10–17, 3 fig.).

(2) L. VAN DER PIJL: 'Tampomas' (*l.c.* 18, 1929, p. 87–92, 4 fig.).

(3) L. VAN DER PIJL: 'Twee Malabar-tochten' (Meded. N.I. Ver. v. Bergsport Maart 1931, p. 33–35).

(4) L. VAN DER PIJL: 'De kalkflora van Padalarang' (Trop. Nat. 22, 1933, p. 86–95, 10 fig.).

(5) L. VAN DER PIJL: 'De herbegroeiing van de lavaprop op den G. Galoenggoeng (Preanger)' (*l.c.* 29, 1940, p. 139–140, 1 fig.).

(6) *cf.* H. N. RIDLEY in Kew Bull. 1939, p. 30.

Quadras, José Florencio

Spaniard, friend and associate of VIDAL, early in the twentieth century forester in the Philippine Islands; he made an extensive collection of molluscs.

Selaginella quadrasii HIER. was named after him and the genus *Quadrasia* ELM.

COLLECTING LOCALITIES. *Philippines: Luzon* (Manila), in *Mindanao* (Zamboanga) (March–June *1901*), and in *Dinagat Island.*

COLLECTIONS. In *Mindanao* the *nos* 371, 545, *etc.* He collected for AHERN (see there). Earlier collections in *Herb.* VIDAL (see there).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936, *sub Addenda.*

Quarles de Quarles, Baron W. A. F. C.

a resident of Toeloengagoeng in Kediri Residency (*E. Java*), collected orchids at Trenggalek in the same residency and sent them to J. J. SMITH, *Herb. Bog.* (pres. *before 1910*).

Quezon, G. C., *cf. sub* Forestry Bureau, Manila.

Quick, B. E.

from Michigan University; probable rightly BERT EDWIN QUICH (in the 'International Address book of botanists' (1931), recorded as Professor of Biology (ecology), Westminster College, New Wilmington, Pennsylvania); in February *1914* he investigated the physiological and ecological significance of the leaves and the sporophylls of *Drymoglossum heterophyllum* in the Foreigners' Laboratory at Buitenzorg, *W. Java.*[1]

COLLECTIONS. Material concerning ecology.

LITERATURE. *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 40.

Quimpo, T., *cf. sub* Forestry Bureau, Manila.

Quisumbing, Eduardo

(1895, Santa Cruz, Laguna, Luzon, P.I.; x), was educated at the College of Agriculture, Univ. of the Philippines, and at Chicago University, graduating at the latter institution. From 1920–26 attached to the College of Agriculture (U.P.), and from 1926–28 to the University of California; in 1928 appointed Systematic Botanist and since February 1934 Acting Chief of the Natural Museum Division of the Bureau of Science, Manila, now Director of the National Museum.

Author of taxonomic and morphological papers, many of which dealing with orchids.

COLLECTING LOCALITIES. *Philippines, Luzon. 1929.* Short trips to Mt Labo, Camarines Sur, Baguio, Mt Santo Tomas, Mountain Prov.; Mt Macalod and Mt Malarayas in Batangas Prov.; Mt Maquiling in Laguna Prov.—*1931.* Mountain Prov. (in summer).—*1932.* Mountain Prov.—*1934.* At Manila and neighbourhood with E. GUTIERREZ (see there).—*1947–48.* Manila and vicinity, Mt Maquiling; *Samar:* Guiuan, Salcedo, *Manikani Isl.; Luzon:* Mt Castillo, Mt Kamatis, Baler, *etc.;* Baguio and Mt Sto Tomas.

COLLECTIONS. *Herb. Manila;* from as early as *1917*, small collections, at least partly numbered in the B.S. (*cf.* Bureau of Science), and later in the P.N.H. (*cf.* Philip. National Herb.) series.

BIOGRAPHICAL DATA. Nat. Res. Counc. P.I. Bull. *no* 7, 1935, p. 713–714, incl. bibliogr.

Quoi, Jean René Constant

(1790, Maillé, Vendée, France; 1869, Rochefort,

France), surgeon in the French Navy; naturalist to some French expeditions (see below), during which he undertook the zoological department together with GAIMARD.

Acrostichum quoyanum GAUD. (= *Campium*-COPEL.) was named after him.

ITINERARY. *Voyage in the 'Uranie', 1817–20;*[1] *cf.* detailed data *sub* GAUDICHAUD. QUOI and DUPERREY visited *P. Kera* in the Bay of Koepang together, and in company with others Bakoelnasi, S of Koepang (*Timor*).—*Voyage in the 'Astrolabe', 1826–29;*[2] *cf. sub* P. A. LESSON.

COLLECTIONS. *Herb. Paris:* at least plants from the Bay of Doré (*NW. New Guinea*) and from the Minahassa (*N. Celebes*), together with GAIMARD.[3] MSS in Libr. Nat. Hist. Mus. Paris.[4]

LITERATURE. (1) *cf.* Liter. *sub* GAUDICHAUD.

QUOI & GAIMARD published the zoological results of the expedition in the 'Uranie' (Paris 1824, 1 vol.).

(2) *cf.* Liter. *sub* P. A. LESSON.

QUOI and GAIMARD published the zoological results of the 'Astrolabe' (Paris, 1830–34, 4 vols).

(3) The botanical results were published by A. RICHARD in 'Sertum Astrolabianum' (Paris 1834).

(4) *cf.* Bull. Mus. Hist. Nat. Paris 1, 1895, p. 27.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

R.R.I., stands for Rubber Research Institute, Kuala Lumpur, *Malay Peninsula;* material in *Herb. Sing.*

Ri. *nos, cf. sub* Forest Research Institute, Buitenzorg.

Raad, A. de, *cf. sub* Forest Research Institute, Buitenzorg.

Raadt, Eugène Alphonse Pieter de

(1911, Malang, Java; x), finished his education in 1934 at Leyden University and subsequently joined the D.E. Indian Civil Service. In 1947 District Officer at Palembang, S. Sumatra.

COLLECTING LOCALITIES. *1947. S. Sumatra:* Palembang and vicinity, and near Talang Betoetoe (Aug.).—*1948.* Poelau Panggoeng (Oct. 15), Palembang (Nov. 3).

COLLECTIONS. *Herb. Leyden:* 88 *nos.*

Raap, Hugo

gardener of the Botanic Garden at Genoa, who worked for some time under the direction of PENZIG in preparation for his voyage to the D.E.I. He evidently was a peculiar man; FAIRCHILD gives some particulars[1] on Mr RAPPS, as he erroneously names him; the statement that he disappeared during the Nias expedition does not hold true.

Homalomena raapii ENGL. and other plants were named after him.

ITINERARY.[2] *1896.* He arrived in *Java* towards the end of May, and collected in the following localities in *W. Java:* environs of Buitenzorg (May–July), G. Salak (June 2 and 7), G. Tjibodas near Tjampea (June 11), Tandjong Priok and Batavia and environs (June 14–15), G. Salak (June 22); Tjibodas on the slope of G. Gedeh (July 2–24), G. Gedeh (16), Tjisaroea (20), G. Pangrango (26). —*1896–97. Batoe Islands,* W of Sumatra: *P. Masa* (Sept. 1, *1896*), *P. Tello* (= *Poelautelo*) (Sept. 3–5); *P. Batoe Makele* (7–8), *P. Sigata* (9), *P. Tello* (10), *P. Tanah Masa* (15–25; the 15th visiting *P. Sago* too), *P. Tello* (Sept. 30–Oct. 1), *P. Tanah Masa* (Oct. 1), *P. Tello* (Oct. 3–17), *P. Pini* (Oct. 28–Nov. 14), *P. Sago* (Nov. 20), *P. Sibraro* (27); in December to Padang, *Sumatra West Coast,* for medical treatment; *P. Pini* (Jan. 4–14, *1897*), *P. Tanah Masa* (18), *P. Tello* (23), *P. Tanah Bala* (Febr. 1, 5–8), *P. Tanah Masa* (Febr. 15–20); returning to Batavia *via* Padang.—*1897. W. Java:* Tjibodas (May). *P. Nias,* W of Sumatra:[3] from Goenoeng Sitoli (harbour) (July 27), to the Hili Madjajan, ascending the latter; Goenoeng Sitoli (staying a fortnight); departing (Sept. 18) to the southern part of the island, at Teluk Dalam (= Teloekdalem) *etc.;* to Lagundi (Oct. 30), the Hili Mataluo; *Naku Islands* (= *Hinako Islands*) (Nov. 17); visiting by boat some places in the northern part of Nias; Goenoeng Sitoli (Dec. 13); falling ill again, and sailing for Padang.

COLLECTIONS. *Herb. Bot. Mus. Genoa.* The large collection from *W. Java* (in *Herb. Genoa*) was partly identified by H. HALLIER *f.* In *Herb. Bog.:* 570 *nos* dupl. *Batoe Islands; Herb. Berl.:* 8 portfolios with herbarium from *Java* and *Sumatra* (pres. by Prof. KNUTH in 1932/33); also dupl. in *Herb. Leyden.*

Living orchids from *P. Tello* in *Hort. Bog.*

In literature more than once the year 1894 is mentioned as the year of collecting. This must be based on an error, possibly part of the collection (duplicates ?) was mislabelled. It is not sure whether any plants were collected in *Nias;* the ethnological objects depicted in his paper on that island, are in the Municipal Museum at Braunschweig.

LITERATURE. (1) In 'The world was my garden' (London & New York 1938) p. 61, 75–76.

(2) Data derived from a list of the collection in the Herbarium at Buitenzorg.

(3) H. RAAP: 'Reisen auf der Insel Nias bei Sumatra' (Globus 83, 1903, p. 147–154, 171–178, w. fig.).

(4) *cf.* Meded. 's Rijks Herb. Leiden *no* 37, 1918, p. 1–92.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Raat, de

is cited by WASSCHER (Blumea, 4, 1941, p. 396) as the collector of *Podocarpus imbricata* BL. The name was misread, and rightly is Dr A. RANT (see there).

Rabaya, C., *cf. sub* Forestry Bureau, Manila.

Raboe, P., *cf. sub* Forest Research Institute, Buitenzorg.

Racelis, Antonio P.

(1887, Lucba, Tayabas, P.I.; x), from 1912–15

Ranger in the Philippine Forest Department and subsequently studying forestry in the University of the Philippines and of Michigan; since 1918 Forest Officer in the P.I. and in 1934 appointed Head of the Department of Forest Management, U.P.



RACHMAT

Author of several papers, in the Makiling Echo *etc.*

COLLECTIONS. Probably identical with the collector in the Forestry Bureau (see there) series; *Herb. Manila.*

BIOGRAPHICAL DATA. Nat. Res. Counc. P.I. Bull. *no* 7, 1935, p. 878–879, incl. bibliogr.

Rachman, A., *cf. sub* Forest Research Institute, Buitenzorg.

Rachmat (sometimes **Rachmad**)

(1881, Java; x), Indonesian, since 1896 in the employ of the Buitenzorg Botanic Gardens, finally 'mantri'. He was attached to several expeditions (see below) and was awarded the Bronze Star for Loyalty and Merit in 1910. In 1944, under Japanese administration, he was temporarily dismissed.

Dendrobium rachmatii J.J.S. was named after him.

ITINERARY. *1909–10.* With the 2nd LORENTZ Expedition to *S. New Guinea;* for detailed data *cf. sub* L. S. A. M. VON RÖMER. When the trip to the Hellwig Mts was over, they returned to Alkmaar bivouac (Dec. 15, *1909*); towards the end of the year RACHMAT was homeward bound. He collected a few plants either on the voyage to, or from, New Guinea, at Dobo (*Aroe Islands*) and at Koepang (*Timor*).—*1913–14.* With 2nd VAN VUUREN Expedition (see there) in *SW.* and *Central Celebes.* Collecting in the following, chronologically arranged, localities: *SW. Celebes:* Bonto Parang (June 24), Bonto Djai (25), Menoedjoe, Tasese (27), Bili Bili (28–30), Paleko (July 1); *Centr. Celebes:* Madjene (16), Mamoedjoe (17), Tjempaga (18), Pasang Kajoe (19), Mamoedjoe (21), Balampah (25), Tjampalagia (26), Papang (27), Marigii (27), Lagih Lagih (27), Padjaloengan (27), Banoewaroe–Lampako–Kepogading–Patjera (28), Pasaeran–Parampe–Pakamisang–Panggalo–G. Saripih (29), Sawang, Mapili, P. Wali (Aug.), G. Soliwatang, G. Papandangan, G. Batoe, G. Masawa (Aug.), G. Sikoekoe, G. Saloe Maliri, G. Tabarane, G. Babalombong, G. Soemililoh, G. Tondo Tondo, G. Malabo, Balapioe, Galoeng galoeng, G. Keppe, G. Nanakan, G. Ambalah, G. Timbaäng, G. Bebisang, G. Sisoh, G. Boesoe, G. Taloang, Kandare (Sept.), kp. Tepoeloe, Lahondape, Kandare, G. Kolonodale, G. Lambolo, G. Paka Paka, G. Gimpa, G. Wattang bajoli, G. Sojo, kp. Kadolo, kp. Kasawo (Oct.), G. Konkeonkea, kp. Lapoli, Labahawa, kp. Pasar wadjo, Sg. Wintoe, kp. Waoleh, kp. Lowo Lowo, G. Soengkoewatawo, kp. Walowa, kp. Takimpoe, G. Boting (Nov.), G. Padang Kadjang, kp. Songka, kp. Balandae, kp. Tambalabak, G. Latoepa, G. Rantepao, G. Botang, G. Riäh, G. Tando Tando, G. Pelali, G. Sinadji, G. Batoetoding, G. Pangararan, G. Sinadji, Makale, G. Limboeng (Dec.), G. Lompoh, G. Pa Ngala, Sassak, G. Tambolang, G. Pasangmalambe, G. Toemongah, G. Lamban, kp. Boewa njonja, kp. Rimbon, G. Tea (Jan. *1914*), G. Tolongan, G. Boekoh, G. Katongkoän, G. Ampoloh, G. Saloe Bebeh, G. Beäng.—*1920. W. Java:* Bantam, (Oe)Djoengkoelon.—*1923. Riouw Archipelago: P. Doerian* (June 12–16).—*1924–25.* With the expedition of HANS WINKLER (see there) to *West* and *Centr. Borneo; cf.* also *sub* P. W. M. DAKKUS.—In the course of years till *1941,* from time to time collecting living plants in *Java.*

COLLECTIONS. *Herb. Bog.:* > 1000 *nos* VAN VUUREN Exp. *Celebes;* dupl. in *Herb. Leyden.* From the other trips he brought especially living material on behalf of *Hort. Bog.*[1]

LITERATURE. (1) *cf.* Lists of plants from the LORENTZ Exp. in Versl. Pl. Tuin Buitenzorg for 1910, p. 23–24 and for 1911, p. 21–23.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Raciborski, Marian

(1863, Brzostawa near Opotów, ? Galicia; 1917, Zakopane, S of Krakau, Galicia), from December 1896 to May 1897 attached to the Buitenzorg Botanic Gardens, applying himself to the study of ferns;[1] then in the employ of the Sugar Experiment Station at Kagok near Tegal till October 1898,[2] and subsequently on the staff of the Experiment Station for 'Vorstenlanden' Tobacco at Klaten (Central Java too). In August 1900 he went to Galicia, finally being appointed Professor and Director of the Botanic Gardens, Lemberg; since 1912 Professor and organizer of a new botanical institution at Krakau.

Author of several papers, mainly dealing with cryptogams and orchids.[3]

Several plants, especially ferns, were named after him.

COLLECTING LOCALITIES. Dec. *1896*–May *1897. W. Java:* environs of Buitenzorg, Depok, Tjigombong, Kota Batoe (Jan. 4, 1897), Tjidahoe (Jan. 20), Telagawarna (Poentjak Pass), Tjibodas and G. Gedeh, Tjiapoes, G. Salak, G. Pantjar, G. Malang (Febr. 20), Geger Bintang (March 15), *Krakatau group* (March 17, with PENZIG) and *P. Merak*, Telagabodas, Ngalindoeng (S of Reunghas), G. Goentoer (Apr. 16).—*1897–1900. Centr. Java:* Tegal, G. Slamat (*1898*), Djokja, *Noesa Kambangan* (S of Java), *etc.*—In *1899* he visited *W. Java* again, climbing G. Salak with J. J. SMITH (Nov. 28).—On his way to Europe he collected in *Singapore*, *P. Penang* and Ceylon in *1900.*[4]

COLLECTIONS. Principally ferns, but also orchids, *Burmanniaceae*, lichens, *Fungi*, and *Algae.*[5] Partly in *Herb. Bog.*, *e.g.* 100 *Crypt. paras. in ins. Java lectae et exsiccatae:* in *Herb. Berl.: ditto* (pres. 1899) and 191 *nos* of vascular cryptogams *Arch. Ind.* (1899 pres.); *Herb. Kew:* plants from *Malaya* (pres. 1899); *Herb. Sydney: Java* ferns (pres. by Kew and Buitenzorg); *Herb. Vienna: Crypt. parasit. ins. Java* 103 *nos* (by exch. 1900); *U.S. Nat. Herb. Wash.:* 118 *Java nos.* In *Herb. Bot. Gard. Krakau:* small collection of lichens[6] and probably his private collections, as the *Herb. Leyden* received 241 duplicates of *Java* ferns from that institute in 1936/37.

Hort. Bog.: ferns, orchids, *etc.* from G. Goentoer and other localities (pres. 1897–98).

LITERATURE. (1) M. RACIBORSKI: 'Die Pteridophyten der Flora von Buitenzorg' (1898).

(2) M. RACIBORSKI: 'Biologische Mittheilungen aus Java' (Flora 85, 1898, p. 325–367, 14 fig.); 'Die Farne von Tegal' (Nat. Tijdschr. N.I. 59, 1900, p. 234–253).

(3) *cf.* also references in Ann. Jard. Bot. Buit. 45, 1935, p. 79, 87, 92.

(4) According to BURKILL (Gard. Bull. Str. Settlem. 4, 1927, p. 130) in 1899, which must be a mistake.

(5) R. GUTWINSKY: 'Additamenta ad floram algarum Indiae Batavorum cognoscendam. Algae a cl Dre. M. RACIBORSKI in montibus Vulcaniis: Krakatau et Slamat anno 1897 collectae' (Diss. math. Phys. Acad. Litter. Cracov. vol. 39, p. 287–307); 'De Algis a Dre. RACIBORSKI in Insula Java collectis' (Bull. Acad. Sci. Cracovice 1902, p. 575–617, pl. 36–40).

For literature on *Fungi cf.* Ann. Jard. Bot. Buit. 45, 1935, p. 107, 110.

(6) *cf.* Acta Soc. Bot. Pol. 12, 1935, p. 111, nota 1.

BIOGRAPHICAL DATA. Ber. D.B.G. 35, 1917, p. (97)–(107), incl. bibliogr.; Kosmos 42, Lemberg 1917, p. 66–95, w. portr.; Spr. Kom. Fiz. 51, 1917, p. xxxvii-xl; BACKER, Verkl. Woordenb., 1936.

Radde, Gustav Ferdinand Richard I.

(1831, Tiegenhof, Danzig, Germany; 1903, Tiflis, Russia), got his education in Germany. He made his first voyage to the Crimea in the winter of 1852. He made extensive explorations in Asia. In 1863 Asst Director of the Tiflis Meteorological Observatory, since 1867 Director of the Caucasian Museum at Tiflis. He accompanied two Russian Grand-dukes, ALEXANDER and SERGEI MICHAILOWITSCH, on a voyage to the East (see below). He



RACIBORSKI

was awarded a honorary Dr's degree at Breslau University.

ITINERARY. *Voyage in the 'Tamara', 1890–91.*[1] Sailing from Petersburg (end of Aug. *1890*), Sebastopol (2/14 Oct.), Caïro, Aden, Suez, Ceylon; in *Java* visiting: Batavia (Nov. 23/Dec. 5), Buitenzorg (Bot. Garden), Bandoeng, Sinagar Estate (Priangan Res.), Semarang, Solo, Djokja and Borobudur; sailing from Semarang; visiting *Buton* (= *Boetoeng*) (Dec. 20– . .) and the Bay of Kendari (*SE. Celebes*);[2] sailing (27) for *Ambon,*[3] from where (31) to Ma(ng)kassar (*SW. Celebes*) (staying Jan. 2–11, *1891*), making trips to Tello River (3), Goa (5), N of Makassar (9); weighing anchor (11) and on the way to *Singapore;* on the home voyage visiting Ceylon, Br. India: Himalaya, Darjeeling; and *via* Brindisi returning to Petersburg (Apr. 25/May 7).

COLLECTIONS. *Herb. Tiflis:*[4] 742 species coll. 1890–91. The collection of *Little Nangk* and *Luzipara* (= *Lucipara*) (? near Palembang, E of S. Sumatra) badly preserved!

LITERATURE. (1) G. F. R. RADDE: '23000 Miles in the Tamara' (Petersburg 1892 and 1893, 2 vols, w. maps, Russian) (*non vidi*); letters in Ausland 1891, p. 741–748 (Mal. Archip.) and p. 761 (Ceylon); and in 'Die Samml. Kaukas. Mus.' 6, 1912.

(2) *cf.* G. RADDE: 'Besuch auf Buton und Süd-Celebes' (Globus 69, 1896, p. 151–155).

(3) G. RADDE: 'Besuch an Amboina' (Globus 69, 1896, p. 318–322; botanical excursion in Hitoe!).

(4) *cf.* RADDE, Die Sammlungen des kaukasischen Museum, 1901, p. 5.

BIOGRAPHICAL DATA. ENGL. Bot. Jahrb. 9, 1888, p. 446; Schrift. Naturf. Ges. Danzig N.F. 11, 1904, p. xliii–xlv; WITTROCK, Icon. Bot. Berg., 2, 1905, p. 189; Die Samml. d. Kaukas. Mus. 6, 1912, 2 prts w. ill. & portr. (in Russian and German).

Radermacher, Arnold

(1886, Aix-la-Chapelle, Germany; x), botanist, passed the government examination at Munich and was for some years a teacher in Germany. He continued his botanical studies in Holland and took his Ph.Dr's degree in 1925 at Utrecht University; in the same year appointed Group-Adviser in the employ of the Experiment Station for the Java Sugar Industry at Pasoeroean and successively stationed at Modjokerto (1926–32) and Pasoeroean (1932–36). In 1937 Director of the boarding-school Simpang College at Lawang; subsequently living at Vienna and in Yugo-Slavia, in the latter country attached to the Botanical Museum at Split; in 1942 he was at the 'Hygienski Zavod', Spalato, Dalmatia.

COLLECTING LOCALITIES. *E. Java.* In *1927*: G. Ardjoeno; in Soerabaja Res., NE of G. Bolang, at Modjokerto and near sugar factories; *W. Java:* G. Patoeha (*1927*); *E. Java:* Soemberdjati (*1928*); G. Ardjoeno (*1929*); G. Andjasmoro (*1930*): Kawah Idjen and G. Raoeng (*1933*); Batoe Oeloe in Besoeki (*1934*).

COLLECTIONS. *Herb. Pasoer.:* type specimen of *Blumea pachycephala* J. TH. KOST. in *Herb. Leyden* (*cf.* Blumea 4, 1941, p. 488).

Radermacher, Jacobus Cornelis Mattheus

(1741, The Hague, Holland; 1783, o/b from Batavia to Holland, murdered by a sailor), came out to the D.E.I. in the service of the E.I.C. in 1758; in 1762 Chief Merchant. The next year he departed to Holland to continue his studies, and graduated in Law at Harderwijk. In 1767 he returned to Java, successively filling many offices, finally elected member of the 'Raad van Indië'. In his capacity as commissary of the Batavian Highlands, he made some tours of inspection in Java.

In 1778 he founded the Batavian Society of Arts and Sciences in the proceedings of which society he published many descriptions of the Malay Archipelago, evidently compiled from literature. He is the author of a nomenclator on the flora of Java.[1]

He is commemorated in the genera *Radermachia* STEUD., *Radermachera* Z. & M. and *Radermachia* THUNB.

ITINERARY.[2] *W. Java. 1776.* From Batavia (Aug. 1) *via* Tjibinoeng to Krawang, Klappa Noengal (bird cave, Aug. 24), Buitenzorg, Pondok Gedeh, Tjipanas, Pondok Gedeh and back at Batavia (31).—*1777.* From Batavia (Nov. 5) to Buitenzorg, Pondok Gedeh, Tjisaroea, Megamendoeng (9), Poentjak (Telaga Warna), Tjipanas, Tjiandjoer (10), Soekaraja, Buitenzorg, Dramaga, Tangerang, Batavia.—*1779. W. Java* (? May).[3]

COLLECTIONS. It is probable that he brought together a collection of *Java* plants.[4] He forwarded dried material of the 'Benzoë' tree to HOUTTUYN,[5] and presented an important collection of natural history objects and documents to the above-mentioned Batavian Society.

LITERATURE. (1) J. C. M. RADERMACHER: 'Naamlijst der planten, die gevonden worden op het eiland Java met beschrijving van eenige nieuwe geslagten en soorten' (Batavia 1780–82, 3 pts).

(2) *cf.* Tijdschr. Ned. Ind. 1856[2], p. 161–180.

(3) *cf.* Gedenkboek Bataviaasch Genootschap 1778–1878, p. 40 and 246.

(4) *cf.* NORONHA in Verh. Bat. Gen. K. & W. 5, 1790, (2nd ed.) 1827 in 'Descriptio arboris rangas' and in MSS; HAGEMAN in Nat. Tijdschr. N.I. 31, 1870, p. 193.

(5) *cf.* BLUME in Verh. Bat. Gen. K. & W. 9, 1823, p. 161.

BIOGRAPHICAL DATA. Hand. Ind. Gen. 2, 1855, p. 337–363; Tijdschr. Ned. Ind. 1899, p. 474–511; Gedenkb. Bat. Gen. K. & W. 1778–1878, Appendix X, p. lxxiii–lxxvii; SIRKS, Ind. Nat. Ond., Amsterdam 1915, p. 79; Encyclop. N.I. 3, 1919; BACKER, Verkl. Woordenb., 1936.

Radersma, A.

of Singaparna, Tasimalaja (*W. Java*), sent living plants, among which *Nepenthes*, to *Hort. Bog.* in *1905*.

Radjab, Amir, *cf. sub* Forest Research Institute, Buitenzorg.

Radjamin, *cf. sub ditto.*

Radjo Amat van Hentri, *cf. sub ditto.*

Radjo Melano, H., *cf. sub ditto.*

Raë, B., *cf. sub ditto.*

Raedt van Oldenbarnevelt, Hendrik Jan Antoni

(1860, Riouw, D.E.I.; 1936, Bennekom, Gld, Holland), joined the D.E. Indian Civil Service in 1881; when Assistant District Officer he made some trips in the basin of the Lower Ketaun, Benkoelen Res. (*S. Sumatra*), *viz* from Moeara Santan (Aug. 13–22, *1885*) and in July *1886* visited Sekandau again.[1] In 1910 he was promoted Resident of the Padang Highlands, Sumatra West Coast; retired in 1915.

COLLECTIONS. *Herb. Bog.:* material of a new gutta-percha tree from Benkoelen, *Sumatra* (pres. *1887*).

LITERATURE. (1) H. J. A. RAEDT VAN OLDENBARNEVELT: 'Tochten in het stroomgebied der Beneden-Ketaun en een vierdaagsch uitstapje in de Lebong' (Tijdschr. K.N.A.G. 5, 1888, p. 178–211 (p. 181–187 dealing with plants), and 417–442).

Rafael, *cf. sub* Forestry Bureau, Manila.

Raffles, Sir Thomas Stamford Bingley

(1781, at sea off Jamaica; 1826, Highwood Hill,

Middlesex, England), entered the service of the English East India Company, first as a clerk in the office; in 1805 he was appointed Assistant-Secretary to the Government of Prince of Wales' Island, in 1807 promoted Secretary, in 1810 Agent-General at Malacca; from 1811–16 Lieutenant Governor of Java and its dependencies, and from 1817–24 *ditto* of Bencoolen. He was anxious to extend the English influence in the Archipelago, but did not succeed to get the support of his own government; in 1819 he established English authority at Singapore, he being the first to recognize the importance of this gate to the East. He was a very able man with a keen interest in natural sciences and archeology; DIARD (see there) made a zoological collection in Sumatra under his direction.[1]

Author of a book on Java.[2]

He is commemorated in the plant family *Rafflesiaceae* and in several plant species.

ITINERARY. *Prince of Wales' Island* (= *P. Penang*) (*1805*–June *1810*); *Malacca* (Dec. *1810*–June *1811*); *Java* (Aug. *1811*–March *1816*).—After leave in Europe in Oct. 1817 taking ship for the East again, in *1818* reaching Fort Marlborough, Bencoolen, *S. Sumatra*. During his stay in Sumatra until 1824 he made many trips in the interior, *e.g.* with J. ARNOLD (see there) to P. Lebar on Manna River (May 1818), the latter discovering *Rafflesia* in that locality; *Minangkabou trip:* leaving for Padang (early in July 1818), starting the march (Sept. 16) into the interior with TH. HORSFIELD (see there),[3] and with W. JACK (see there). In Oct. 1818 he made a voyage to Bengal and returned *via Penang* (Dec. 31, 1818–Jan. 18, *1819*), sailing on the 19th to *Singapore* (founding the settlement on Febr. 6), and proceeding by way of *Penang* (staying Febr. 15–*c.* March 6) on a mission to Atcheen (= Atjeh, *N. Sumatra*, collecting a little on shore), from where he returned at the end of April. He and his family and W. JACK sailed for *Singapore* on May 22 (arriving 31), leaving for *Sumatra* by way of *Rhio* (= *Riouw*) on June 28. In Febr. *1824* he embarked at Bencoolen, homeward bound.

COLLECTIONS. *Herb. Kew: Java* (pres. 1826). He sent plants from *P. Penang*, *Atjeh* (by intermediary of JACK, *Singapore* (*Nepenthes rafflesiana* JACK *etc.*)[4] and Benkoelen (*S. Sumatra*) to WALLICH in Calcutta, which were distributed with the E.I.C. Herbarium (see *sub* WALLICH); duplicates in *Herb.* DELESS. (*Geneva*).[5]

Part of the collections, brought together by him and JACK during their stay in *Sumatra*, were destroyed by fire on board the vessel 'Fame' on which he embarked for Europe in 1824.[6] *Sumatra* plants of his were sold with *Herb.* LAMBERT,[7] and acquired by RICH. The latter Herbarium contained *Singapore* plants too.[8]

LITERATURE. (1) T. S. RAFFLES: 'Descriptive catalogue of a zoological collection, made on account of the Hon. E.I.C. in the island of Sumatra and its vicinity' (Trans. Linn. Soc. Lond. 13, 1822, p. 239 *seq.*).

(2) T. S. RAFFLES: 'The history of Java' (London 1817, 2 vols; 2nd ed. 1830); transl. into Dutch. An extract of the botanical part in Flora 4[1], 1821, p. 309–319.

(3) *cf.* Journ. Str. Br. Roy. As. Soc. *no* 73, 1916, p. 185 and note 135.

(4) *cf.* Journ. Str. Br. Roy. As. Soc. *no* 73, 1916, p. 163.

(5) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 128 and 144.

(6) *cf.* Alg. Konst- en Letterbode 1824[2], p. 100.

(7) *cf.* HOOK. Lond. Journ. Bot. 1, 1842, p. 394–396; advertisement of LAMBERT Sale in Athenaeum 1842, p. 44.

(8) *cf.* DON in LAMBERT, Description of the genus Pinus, 2, 1837, Appendix p. 13–24.

BIOGRAPHICAL DATA. Lady RAFFLES: 'Memoir of the life and public services of TH. S. RAFFLES, particularly in the government of Java, 1811–16, and of Bencoolen and its dependencies, 1817–24; with details of the commerce and resources of the Eastern Archipelago, and selections from his correspondence. By his widow' (London 1830); Life by D. C. BOULGER, 1898 (portrs); Biogr. Index BRITTEN & BOULGER in Journ. Bot. 36, 1898, p. 446, and in 2nd ed. by RENDLE, 1931; Encyclop. N.I. 3, 1919; R. COUPLAND: 'RAFFLES' (Oxf. Univ. Press 1926); BACKER, Verkl. Woordenb., 1936.

Rahm, Th., *cf. sub* Forest Research Institute, Buitenzorg.

Rahman, A., *cf. sub ditto.*

Rahman, Abd., *cf. sub* Conservator of Forests series, Kepong.

Rahman Galar, Datoe Abd.

Indonesian official of the Civil Service at Fort de Kock, *Sumatra West Coast*, forwarded 3 cases containing *Teysmannia albifrons* to *Hort. Bog.* in *1867.*

Rahmat si Boeea (*not* si Toroes)

a native collector in the employ of H. H. BARTLETT (see there), who worked under the supervision of the Reverend HAMEL (see there) of the American Methodist Mission. He was trained by BARTLETT in 1927.

Bauhinia rahmatii MERR. and other plants were named after him.

COLLECTING LOCALITIES. *1928–36. N. Sumatra:* Batak Lands (Tapanoeli); *Sumatra East Coast.*

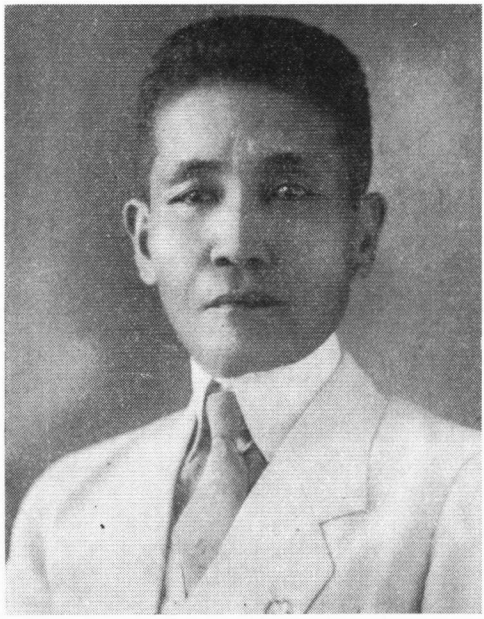
COLLECTIONS. *Herb. Univ. of Michigan:* first set, > 10.000 *nos.* BARTLETT distributed the collections from there, the best dupl. are in *U.S. Nat. Herb. Wash.* (2645); *Herb. N.Y. Bot. Gard.* (with BRITTON *Herb. etc.*); *Arn. Arbor.:* about 2500 specimens (pres. 1934–37); GRAY *Herb.* (pres. by Arn. Arbor.): 60 specimens; orchids in O. AMES *Herb.*, Cambr. (Mass.); *Herb. Berkeley* (Cal.);[1] some in *Herb. State Mus. Stockholm* and *Leningrad.*

The material was partly identified together with the collections of YATES and H. H. BARTLETT.[2] The plants are often cited as collected by HAMEL & RAHMAT SI TOROES, and sometimes by RAHMAT SI

TOROES only. This is wrong, according to BARTLETT the right name is RAHMAT SI BOEEA.

LITERATURE. (1) *cf.* BARTLETT in Nat. & Appl. Sci. Bull. Univ. of the Philip. 4, 1935, p. 227–228, and MERRILL in *l.c. sub* 2.

(2) E. D. MERRILL: 'New Sumatran plants' I–IV



RAMOS

(Pap. Michig. Acad. Sci. Arts & Lett. 19, 1934, p. 149–203, *t.* 16–35; *l.c.* 20, 1935, p. 95–112; *l.c.* 23, 1937, p. 177–202; *l.c.* 24, 1938, p. 63–92).

Ferns by E. B. COPELAND in Univ. Calif. Publ. Bot. 14, 1929, p. 371–378, pl. 55–61.

cf. also H. N. DIXON in Ann. Bryol. 5, 1932, p. 17–50 and A. W. EVANS in Pap. Mich. Acad. Sci. 17, 1933, p. 69–118, pl. 13–18.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Rainer-Kesslitz, *cf.* KESSLITZ, R.

Ramaley, Francis

(1870, St Paul, Minnesota, U.S.A.; 1942, Colorado, U.S.A.), botanist, graduating at Minnesota in 1899; from 1899 until his retirement in 1939 Professor of Biology at Colorado University, Boulder (U.S.A.). He stayed in *Java* from February until April *1904*, working in the Foreigners' Laboratory at Buitenzorg;[1] he paid a visit to Tjibodas on the slopes of Mt Gedeh, climbing the latter and Mt Pangrango; he returned *via* Singapore. He travelled in Japan and Ceylon too.

COLLECTIONS. He brought together a collection of different tropical plants interesting from a morphological and biological point of view.[1] In *Herb. Univ. Colorado;* 66 *Java* ferns in GRAY *Herb.;* 13 dupl. in *U.S. Nat. Herb. Wash.* (numbered between 302–581).

LITERATURE. (1)*cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 29.

Author of 'A botanist's trip to Java' (Plant-world 8, New York 1905, p. 139–150, w. textfig.); 'The botanical garden at Buitenzorg, Java' (Pop. Sci. Monthly 67, 1905, p. 579–589, w. ill.).

BIOGRAPHICAL DATA. Who's who 1913; Ecology 23, 1942, p. 385–386 + portr.

Ramali, A.

physician of the Service of Public Health *etc.* in the D.E.I., stationed at Tandjong Redep (*NE. Borneo*), sent medicinal plants from there for identification to *Herb. Bog.* in *1941*. The material was in a poor state.

Ram(a)li(e), *cf. sub* Forest Research Institute, Buitenzorg.

Ramat alias Bidin Sirait Holboeng, *cf. sub* H. H. BARTLETT.

Ramirez, I., *cf. sub* Forestry Bureau, Manila.

Ramos, Maximo

(† May 11, 1932, Buayan, Cotabato, Mindanao, P.I.), a Philippine collector in the employ of the Bureau of Science at Manila.

Dryopteris ramosii CHRIST and other Philippine plants were named after him.

COLLECTING LOCALITIES. *1904–32. Philippines*, principally in *Luzon, viz:* Rizal Prov. (*c. 1903/04*), Lamao Forest Reserve (July–Aug. *1904*) as AHERN's collector;[1] Mt Pulog with CURRAN, MERRITT (see there) and ZSCHOKKE (Jan. 2–8, *1909*); Sorsogon Prov. (July 22–Sept. 14, *1915*): on Bulusan Volcano, Mt Kililibong, Mt Pocdal, Mt Bogacaua, Mt Lalao, Lake Polog, *etc.;* in *N. Samar* with EDAÑO and FENIX (see those) (Febr.–March *1916*); with EDAÑO and FENIX at Bukidnon (*Mindanao*), and *Luzon* (*1916*); *Mindanao* (*1920*). For a collecting trip in *Br. N. Borneo:* Sandakan (Sept. 20–Dec. 27, 1920). In the *Philippines* again: with EDAÑO on Mt Calavite in *Mindoro* and in Lepanto Subprov. *Luzon* (*1921*); *Sulu Archipelago* (Aug. *1924*); *Luzon:* Mt Pulog (Febr. *1925*); with EDAÑO: *Balabac, Palawan* (Nov. *1927*); with EDAÑO in *Catanduanes* (*c. 1928*); *Luzon:* Cagayan Prov. (*1929*) on Mt Dos Cuernos, Mt Cresta, Mt Tubuan; Rizal Prov. (1929): Mt Susongdalaga; Bataan Prov. (1929): Mt Mariveles; *Batan Islands* (*1930*); *Mindanao* (*1931*): in the mountains of Cotabato, particularly on Mt Matutum with EDAÑO.

COLLECTIONS. *Herb. Manila*, partly for the Forestry Bureau (see there) as AHERN's collector and with PASCASIO in the F.B. series, later numbering in the B.S. series (*cf.* Bureau of Science). *Herb. Arn. Arbor.:* 1142 *nos* of dupl. *Br. N. Borneo; Herb. Kew:* dupl. *Philip.* plants (pres. 1925); *Herb. Bog.*: *Borneo* dupl. and several of the *Philippines; Herb. Sandakan:* 2nd set *Borneo* collection (the 1st being in Manila); *Herb. Berkeley* (Cal.): small collection of ferns, by RAMOS & EDAÑO; *Herb. Utrecht:*

Philip. plants coll. by RAMOS and by RAMOS & EDAÑO; *Herb.* DELESS. & DECAND. (*Geneva*): resp. 296 *Borneo* pl. and 68 *Philip.* plants with EDAÑO; *U.S. Nat. Herb. Wash.*: ± 1680 *Philip.* dupl. and 73 *Philip.* orchids coll. with EDAÑO; *Herb. Leyden: Br. N. Borneo* dupl., and *Philip. Charoph.*

Part of his collections was identified,[2] that from Sorgoson Prov. amounted to about 400 *nos.* The *Borneo* collection comprised 827 *nos*, including many new species.[3] He collected the bulk of the 'Species Blancoanae' (*cf. sub* BLANCO).

LITERATURE. (1) *cf.* MERRILL in Philip. Journ. Sci. 1, 1906, Suppl. p. 3.

(2) E. D. MERRILL: 'New plants from Sorsogon Prov. Luzon' (Philip. Journ. Sci. C. Bot. 11, 1916, p. 1–35); 'New plants from Samar' (*l.c.* p. 175–206).

(3) E. D. MERRILL: 'New or noteworthy Bornean plants' I–III (Journ. Str. Br. Roy. As Soc. *no* 85, 1922, p. 151–201; 86, 1922, p. 312–342; Journ. Mal. Br. Roy. As. Soc. 1, 1923, p. 22–45).

Ramundo

is cited as the collector of *no* 2070, *Dioscorea polyphylla*, at Los Baños, *Luzon* (*cf.* BURKILL & PRAIN, The Genus Dioscorea, 1936).

Rani, Abd., *cf. sub* Conservator of Forests series, Kepong.

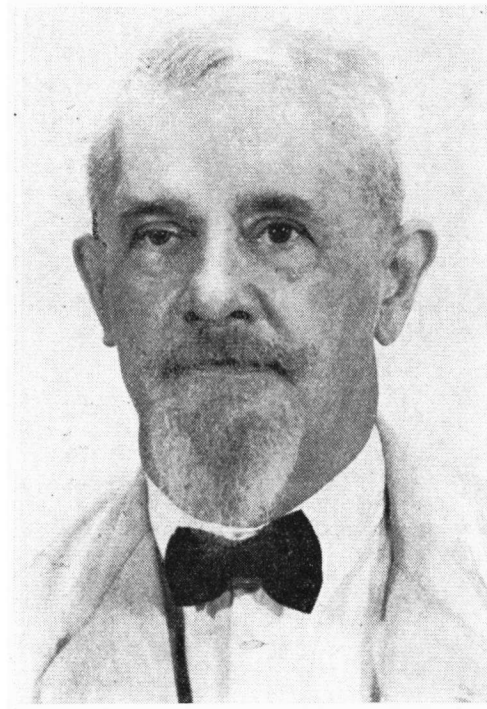
Rant, Anton

(1875, Batavia, Java; April 1942, Buitenzorg, Java), botanist who got his education in Holland, taking his Ph.Dr's degree at Amsterdam in 1906; he came back to Java in 1907 to be appointed Phytopathologist in the employ of the Government Cinchona plantation at Tjinjiroean; since 1918 teacher at the School of Agriculture at Buitenzorg and since 1921 at the N.I.A.S. (Medical College) at Soerabaja. When pensioned off in 1933, he settled at Buitenzorg and was for several years a guest in the Foreigners' Laboratory.[1]

Author of some papers on the flora of Java,[2] *etc.*

J. J. SMITH named some orchids after him.

COLLECTING LOCALITIES. *Probably* from *1907 onwards.* In *W. Java:* Tjinjiroean with J. J. SMITH (Apr. 3, *1911*); G. Wajang near Tirtasari, Tjibeureum, with SMITH (Sept. 19, 1911); Depok with SMITH (Oct. 15, 1911); G. Tangkoeban Prahoe; *E. Java:* Soerabaja; G. Lawoe (*1922*); G. Ardjoeno, Lalidjiwo (Oct. *1923*); *Madoera* (Dec. *1924*): Sampang, Rapa, Tordjoen, Karang Penang, Kwanjar; *E. Java:* G. Tengger and Tosari (Apr. *1927*); G. Idjen (June 1927); G. Diëng (June 27, *1928*) and Magelang; *W. Java:* Lembang (Nov. 12–14, 1928); G. Tangkoeban Prahoe (Nov. 16, 1928); *E. Java:* G. Wilis (Jan. *1929*).—*1st Trip to the Moluccas, 1929.*[3-4] *SW. Celebes:* Makassar and Bantimoeroeng (May 20); *Ambon* (May 24–June 4), collecting at Batoe Merah, Klein Hative, Fort Victoria, Batoe Gadjah, *etc.*; *Seran* (= *Ceram*) (June 6–8), at Piroe and Loki and environs; *Ambon* (June 9–30), at Hitoe, Roemah Tiga, Karang Pandjang, *etc.*; *SW. Celebes:* Bantimoeroeng (July 5).—*Madoera* with COERT (Sept. 1929); *W. Java:* Pengalengan (KARTAMAH) (Nov.) and at Tjiboerial near Buitenzorg (Nov.); *E. Java:* Soetji near Grissee (Apr. 18, *1930*).—*2nd Trip to the Moluccas, 1931.*[4] *SW. Celebes:* Malino (Oct. 18–19); *Boeroe:* Leksoela (Oct. 22); *Ambon* (arriving Oct. 23), visiting Benteng, Klein Hative, Karangpandjang, Waai,



RANT

G. Salahoetoe (Nov. 2–4), G. Nona (7), G. Malintang (8), Galala, Hitoe Mesing, Soja di Atas (17), Paso (18); *SW. Celebes:* Bantimoeroeng Fall (Nov. 27).—*E. Java:* Bromo, G. Tengger (May 20, *1932*); Glenmore in Besoeki (June 14 and 22, 1932); Banjoewangi (Watoe Dodol) (June 20); Radjegwesi Bay (S. coast) (probably in the same month as foregoing localities); Glenmore (May–June *1933*); *W. Java:* Buitenzorg and environs (*1933–37*).

COLLECTIONS. *Herb. Bog.*, partly acquired by sale; dupl. in *Herb. Leyden*, some at *Utrecht.* Lists of part of his collections are in the Herbarium at Buitenzorg.

In *Ambon* he collected the *nos* 54–154, 198–402 (May and June *1929*) and *nos* 514–886 (Oct.–Nov. *1931*); in *Ceram* the *nos* 155–197.[5]

He was assisted by the Indonesian collector KARTAMAH. He presented several living plants to *Hort. Bog.*

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 44, 54; and *cf. l.c.* p. 91, 103, 107, 110.

(2) A. RANT: 'Hollandsche bekenden in de ber-

gen van Java' (Trop. Nat. 3, 1914, p. 152–155, 3 fig.; *l.c.* 4, 1915, p. 60–62); 'De Javaansche gebergteflora als bewijs van een vroegere verbinding van Java met het vasteland van Azië' (Nat. Tijdschr. N.I. 89, 1929, p. 441–468).

(3) A. RANT: 'De mierenboom Endospermum moluccanum BECC. van Ambon naar 's Lands Plantentuin overgebracht' (Trop. Nat. 18, 1929, p. 186–189, 4 fig.); 'Eine Knospenvariation bei Psidium in Ambon' (Ann. Jard. Bot. Buit. 41, 1930, p. 27–32, *t.* 8–12).

(4) A. RANT: 'Twee botanische tochten naar Ambon' (Nat. Tijdschr. N.I. 94, 1934, p. 100–133).

(5) *cf. l.c.* p. 102.

BIOGRAPHICAL DATA. Weekbl. Kon. Ned. Mij Tuinb. & Plantk. 10, 1936, p. 9–12; BACKER, Verkl. Woordenb., 1936; Bull. Bot. Gard. Buit. ser. 3, vol. 17, 1947, p. 273–278, w. portr. & bibliogr..

Rantegaoe, W., *cf. sub* Forest Research Institute, Buitenzorg.

Raoef, Abd., *cf. sub ditto.*

Rapii, *cf. sub ditto.*

Rappard, Frederik Willem

(1907, The Hague, Holland; x), was educated at the Agricultural College, Wageningen; since 1934 Forest Officer in the employ of the D.E. Indian Forest Service, at first stationed at Lahat, Benkoelen (S. Sumatra) and since the end of 1937 at Tjepoe (teak distr., Centr. Java). After World War II (P.O.W. in Siam) he was evacuated to Holland, and returned to Java in 1947, where he was stationed at Banjoewangi and elsewhere in E. Java.

Author of some papers dealing with the vegetation of Benkoelen;[1] excellent amateur photographer.

Dendrobium rappardii J.J.S. was named after him.

COLLECTING LOCALITIES. *S. Sumatra, Benkoelen. 1935. P. Enggano* (June 16–21), making trip along the N. coast, crossing the island from N to S (Abeha). Slopes of G. Pesagi and kp. Oedjoeng (July 20–21); trip along and crossing the southern part of the Game Reserve 'Zuid Sumatra I', visiting Semangka Valley and Soeoh Plain (Sept.); G. Seminoeng (Dec. 19–20).—*1936.* Belirang-Sekintjau Mts (Aug. 12); Kroë, Soekaradja, Way Tenong, Oeloe Danau (Kaoer), *etc.;* Doesoen Besar (Sept.). —*1937.* Ketahoen River; Upper Seblat region in Lebong.—*E. Java:* G. Kawi-Boetak (Oct. 1–2, *1941*).—*E. Java* (*1947* →).

COLLECTIONS. *Herb. Bog.;* the numbers of the older collections with accessory letters, *e.g.* S for plants from G. Seminoeng, K for Kaba (Kelam), P. for G. Pesagi, DB for Doesoen Besar; since 1937 with numbers only, *viz nos* 138–217 (coll. till 1942). He collected 40 *nos* on G. Kawi. *Herb. For. Res. Inst. Buitenzorg:* Benkoelen (*Sumatra*) plants (coll. 1935–36), numbered in the bb. series (*cf. sub* Forest Research Inst.), and from *P. Enggano.*

LITERATURE. (1) F. W. RAPPARD: 'Naar de nieuwe meren van Soeoh' (Trop. Nat. 25, 1936, p. 90–95, 108–113, 17 fig.); 'Over de vegetatie van steen- en aardstortingen in Kroë, Z. Sumatra (G. Pesagi, G. Seminoeng)' (Tectona 30, 1937, p. 281–299); 'De damar van Benkoelen' (Tectona 30, 1937, p. 897–916); a typed report on P. Enggano in the Forest Research Inst. Buitenzorg.

Rasad, *cf. sub* Forest Research Institute, Buitenzorg.

Rasdi, M., *cf. sub ditto.*

Rashid, *cf. sub ditto.*

Ras(j)id, *cf. sub ditto.*

Rasjid, Mohamed, *cf. sub ditto.*

Raynaud

is cited by KOSTER (in Blumea 1, 1935, p. 432) as the collector of *Vernonia patula* (DRYAND.) MERR. *var. typica, s.n.*, in *W. Java;* the cited specimen in *Herb. Leyden.*

A certain FRANÇOIS RAYNAUD figures on the list of the crew in the History of the Voyage of the 'Astrolabe' (*cf. sub* P. A. LESSON) as 'maître canonnier', but it is more likely that the actual collector is A. A. M. REYNAUD (see there).

Razon, *cf. sub* Forestry Bureau, Manila.

Rechinger, Karl

(1867, Vienna, Austria; x), botanist, from 1893–1902 Assistant in the University of Vienna, from 1902 until his retirement in 1922 Assistant Custodian of the 'Hofmuseum' there. In 1905 he made a voyage in the Pacific, accompanied by his wife LILY RECHINGER-FAVARGAR (1880, Aussee in Stiermarken, Austria; x).[1]

Several plants were named after him and his wife.

ITINERARY.[1] *1905.* Departing from Vienna (mid-March); *via* America to the Sandwich and Samoa Islands (May–Aug.); *via* New Zealand and Australia to the *Bismarck Archipelago*, N of E. New Guinea: *Neu Pommern* (= *New Britain*), arriving at Herbertshöhe (Sept. 10), visiting Massawa Bay (12), Baining Mts, Kaia Volcano (15); sailing (17) for the Solomon Islands: Bougainville and Buka (Sept. 18–. .); *Neu Pommern* (Oct. 1–8): Herbertshöhe, visiting Vunakoker Volcano (Varzin) (4); former *Kaiser-Wilhelmsland* (= *NE. New Guinea*): Friedrichshafen (Oct. 10–11), probably before or after collecting on *Siar Isl.* in the Astrolabe Bay; *via* Hongkong, Singapore and Ceylon, back to Europe (Dec.).

COLLECTIONS. *Herb. Vienna.*[2] 16 *Piperaceae* dupl. from *New Guinea* and Samoa in *Herb.* DECAND. (*Geneva*).

LITERATURE. (1) *cf.* Ann. k.k. naturhist. Hofmus. Wien 21, 1936, Notizen p. 95–97.

K. RECHINGER: 'Deutsch Neu-Guinea. Streifzüge in Deutsch Neu-Guinea und auf den Salomons-Inseln. Eine botanische Forschungsreise' (with L. RECHINGER-FAVARGER, Berlin 1908);

'Vegetationsbilder Neu-Guinea' (KARSTEN u. SCHENCK, Vegetationsbilder VI. Reihe, Heft 2).

(2) K. RECHINGER *c.s.*: 'Botanische und zoologische Ergebnisse einer wissenschaftlichen Forschungsreise nach den Samoa-Inseln, dem Neuguinea-Archipel und den Salomons-Inseln' (6 prts in Denkschr. Wiener Akad. 1908–15); 'Plantae novae papuanae' (FEDDE Repert. 11, 1912, p. 179–187).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Reeder, John Raymond

(1914, Grand Ledge, Michigan, U.S.A.; x), studied botany at Michigan State College and at the Northwestern University, Evanston, Ill. (M.S. in 1940). He entered the army during World War II, and was sent to New Guinea. After his return he worked on New Guinea grasses in the U.S. Nat. Herbarium, Washington; in 1947 appointed Instructor in Botany and Curator of the Herbarium, Osborn Botanical Laboratory, New Haven, Connecticut.

COLLECTING LOCALITIES. *NE. New Guinea:* 9 miles NW of Oro Bay near Buna (Dec. 24, *1943*); Keta Creek, NW of Oro Bay (26); low area NW of Oro Bay (29); N of E. Embi Lake (30); *ditto* (Jan. 2, *1944*); edge of jungle near Dobodura (near Buna) (5); Dobodura (10); Keta Creek (13); near Finschhafen, old trail to Butaueng Mission (Febr. 20); Finschhafen area (26); *ditto* (March 9, 13, 19).

COLLECTIONS. *Herb. Arn. Arbor.: nos* 834–895; grasses separate to *U.S. Nat. Herb. Wash.*

Reedy, J.

gardener of Sir W. MACARTHUR (see there), who sent him with the expedition of Sir W. MACLEAY (see there) as an horticultural emissary.

Elaeocarpus reedyi was named after him.[1]

ITINERARY. *SE. New Guinea, Papua. 'Chevert' Expedition, 1875; cf. sub* Sir WILLIAM MACLEAY. F. VON MUELLER mentions the following localities: *Sue Island, Yule Isl., Straits Isl., Cocoanut Isl.*, mainland opposite Darnley and Yule Isl., Katau River and Baxter River. He is cited to have visited Merauke in *Dutch S. New Guinea*,[2] but this seems doubtful.

COLLECTIONS. *Herb. Melbourne.*[3]

LITERATURE. (1) *cf.* F. VON MUELLER in Transact. Roy. Soc. Victoria 1887, p. 6–7.

(2) *cf.* Pflanzenreich 46, p. 246.

(3) *cf.* F. VON MUELLER in Descr. Not. Pap. Pl., especially in pt 1, 1875.

Rees, van

of Solo, *Centr. Java*, sent material of *Euchresta horsfieldii* BENN. to *Herb. Bog.* in *1884.*

Reiche

He might be identical with CARL FRIEDRICH REICHE (1860, Dresden, Germany; 1929, Chile, S. America), Ph. Dr Leipsic 1885, of whom S. American plants are in Herb. Berl. (*a.* 1895–1903, 1912), but it seems more probable that he was an official in the service of the German New Guinea Company.

COLLECTIONS. Some *New Guinea* plants collected by him, were at the disposal of SCHUMANN, when he was preparing 'Die Flora von Kaiser Wilhelmsland' (Berlin 1889); material probably in *Herb. Berlin.*

Reichenbach

is cited by MERRILL (Bull. Bur. of Agr. Manila, *no* 4, 1903, p. 30) as the collector of botanical material in the *Philippines*. Probably this is a mistake, the orchid specialist H. G. REICHENBACH (*cf.* BACKER, Verkl. Woordenb., 1936) never visited the Malaysian region, but was the owner of an extensive herbarium. No other REICHENBACH is known to me.

Reichwein

of Tandjong Karang, Lampong Districts (*S. Sumatra*), sent some orchids to *Hort. Bog.* in *1933.*

Reilingh, Albertus

(1878, Wageningen, Gld, Holland; x), since 1901 Forest Officer in the D.E.I.; during his whole term of office stationed in Java, in teak districts and elsewhere, for a long time in Besoeki (July 1914–Sept. 1923). He retired in 1931.[1]

COLLECTIONS. *Herb. Bog.:* some plants from *E. Java*, Besoeki (coll. Sept. *1923*).

LITERATURE. (1) Author of 'De bosschen en het boschbedrijf in den Kangean-Archipel' (Tectona 12, 1919, p. 425–444); 'De bamboebosschen en de exploitatie daarvan in het boschdistrict Besoeki' (*l.c.* 14, 1921, p. 597–639).

Reillo, Juan

cf. sub Bureau of Science, and Forestry Bureau, Manila; he is commemorated in *Oberonia reilloi* AMES.

Reinwardt, Caspar Georg Carl

(1773, Lüttringhausen near Remscheid, Rhine Prov., Germany; 1854, Leyden, Z.H., Holland), was educated in Holland, and was appointed Professor of Natural History at Harderwijk in 1800; in 1808 Director of the Menagerie of Louis Napoléon and in 1810 Professor of Chemistry, Pharmacy and Natural History at Amsterdam. In 1815 he went to the D.E.I. in charge of the organization of Education, Medical Service, Agriculture, Industry, and Scientific investigation. He was the founder (May 18, 1817) and first Director of the Botanic Gardens at Buitenzorg. In 1822 he returned to Europe and was appointed professor in the University of Leyden.[1]

His scientific inheritance was edited by DE VRIESE; during his lifetime he published a few papers on Java.[2]

He is commemorated in the genus *Reinwardtia* and in several other plant species.

ITINERARY. *1816. W. Java:* Arrival at Batavia (Apr. 27). Till May 1817 staying at Batavia and Buitenzorg, making few small trips.—*1817.* On G. Salak (May 5); from June–Nov. making a journey through *Java* and *Madoera*,[3] visiting Megamendoeng in *W. Java* (July), returning to Buitenzorg

in Nov.—*1818. W. Java:* G. Goentoer (Oct. 29).[4] —*1819. Tour in the Priangan Regencies,*[5] *W. Java:* W. foot of G. Salak, S. slope G. Gedeh and ascent from that side (Apr. 18), Tjihea Distr., Rongo and Koppo to Parangsirop, G. Patoeha (Randja Gedeh *etc.*), Tombak-Poeijong, G. Tiloe,



REINWARDT

G. Malabar, Sumbong, Gadja, G. Goentoer, the Talaja (= Telaga)-Bodas. The trip was originally planned as follows: Tjampie and Sading, G. Salak, G. Gedeh, mountains SE to Limbangan, *Noesa Kambangan* and back to Buitenzorg *via* G. Tangkoeban Prahoe, Boerangrang, *etc.*;[6] it is not known whether this plan was carried out. According to JUNGHUHN[7] he visited G. Papandajan.—In the years *till 1820* he probably made still other trips, data on these are lacking, however. He is said to have been in *P. Saleier about 1820* (*cf.* MEYER & WIGLESWORTH in Birds of Celebes, 1898).—*Voyage to the eastern part of the D.E.I. Archipelago in the 'Experiment', 1821–22.*[8] Sailing from Batavia (Febr. 27, *1821*); *Soembawa:* Bima (March 20–23); *P. Sabrao* (= *Adonara*) (27); *P. Solor* (29); *Timor* (Apr. 3–18): environs of Koepang, *P. Semauw* (= *Semaoe*) (10); from P(a)riti (12) penetrating into the interior, Pasi (14), Goudrivier (15), Babou (= Babaoe) (16) and back to Koepang (17), where taking ship again (19); *P. Ombai* (= *Alor*) (29); *P. Kisser* (= *Kisar*) (May 9–11); *Banda Archipelago* (May 18–June 25); Banda-neira, Groot Banda, *P. Ai* (May 26–27), Papenberg on Neira (June 9), ascent of G. Api (14), Groot-Banda (20–21, G. Bandeira *etc.*) and sailing (26) for *Amboina* (staying June 26–July 19): Batoe-gadjah, Batoe-lobang, Soja-di-atas, Hitoelama and Hila (July 12), Ceit and G. Ateti (or Wawani); visiting *Haroekoe* (July 20–21), *Saparoea* (22–26), *Noesa-laut* (27–29), *Saparoea* (July 30–Aug. 3); back in *Amboina* again (Aug. 5–12); *Ternate* (15–27), climbing the Peak (22–24); *Tidore* (Aug. 28–31), climbing the mountain; for some hours in *Halmaheira,* opposite Tidore (Sept. 1); *Ternate* (Sept. [illegible] *N. Celebes:* Gorontalo (17–19), Lake Limboto (20); from Gorontalo making a trip to the gold-diggings, Pagowat (26), Taloedoejoeng (28), Batoedoelang (29), Pagowat (Oct. 2–3), back to Gorontalo (6) and proceeding to Kotaboena (8); Kema (10); on foot to Menado (Manado) (11–13) and subsequently making a tour through the Minahassa: Lota (14), *via* G. Empong to Kakaskasan (15), G. Lokon (16), Tomohon (17), G. Roeměngan (Roemagang or Mahaboe) (18), Tomohon (19); Tondano (20–23), fall near Tonséa-lama, and Papakelang (22); crossing Lake Tondano to Kakas (24); Langow(w)an(g)–Kamanga–Tompaso (25); G. Sapoetan (= Sopoetan), R. being the first European to climb the mountain (26–27); Tompaso (28), via Kawangkoan–Sonder–Lahendong, back to Tomahon (29), Menado (30); G. Klabat (Nov. 6–8), *via* Aer Měndidi (= Airmadidi); Menado (9–11); Tan(h)wangko (12); Amoerang (13); *E. Java:* Besoeki (Dec. 16–19); Kali-tikoes (20); Badjoel-mati and Banjoewangi (21); Banjoewangi–Litjin (23); Ongop-Ongop (24); Kawah Idjen (25); back to Litjin (26); *via* Matjan-poetih back to Banjoewangi (27); Soemberwaroe (29); Besoeki (Dec. 30–Jan. 2, *1822*); G. Tengger (Jan. 3); Pasoeroean (5–6); Malang (7–12); Pasoeroean (13); Soerabaja (Jan. 14–March 2), REINWARDT himself seriously ill, the other participants making a few-day trip to *Madoera* (Febr. 18–. .); Soerabaja–Grěsik (March 3); *via* the *N. coast of Java*: Toeban (4), Rembang (5–6) and Semarang (7–10), back to *W. Java:* Tjiandjoer (16–17) and Buitenzorg (18). After his return no trips were made till his departure from Batavia (June 15) to Bantam: Serang (15), Pandeglang (16), visiting a hot spring (17), back at Serang, Bantam (18), Anjer (19–26), in the latter place embarking for Holland.

A plant of his is cited from *Purmerend* (island in the bay of Batavia) (*cf.* DE VRIESE *l.c. sub* 8, p. 108).

COLLECTIONS.[9] *Herb. Leyden* (bequeathed in 1854). On the voyage out to the East Indies he collected 52 *nos* of plants ont he Island of St Jago. No collections of the year 1816 are known to compiler; several consignments of herbarium material in the years 1817–19 were lost by shipwreck.[10] From *Ambon* he brought the new genus and species *Bikkia grandiflora.*

In *Herb.* MARTIUS (= *Brussels*): 300 plants;[11] in *Herb.* REICHENBACH (= *Vienna*): orchids from *Java;* dupl. from Leyden in *Herb. Utrecht;* in *Herb. Munich* (with *Herb.* ZUCCARINI *etc.*); *Herb. Breslau; Herb. Bot. Gard. St Petersb.* (= *Leningrad*): *Java* ferns (with *Herb.* SCHRADER); *Herb. Copenhagen; Herb. State Mus. Stockholm.*

LITERATURE. (1) His inaugural address was:

'Over de aanwinsten welke de natuurlijke geschiedenis had verkregen door het onderzoek van Indië' (De augmentis quae historiae naturali ex Indiae investigatione accesserunt) (*cf.* abstr. in Alg. Konst- en Letterb. *no* 29, 1823).

(2) C. G. C. REINWARDT: 'Over de hoogte en verdere natuurlijke gesteldheid van eenige bergen, in de Preanger Regentschappen' (Verh. Bat. Gen. K. & W. 9^2, 1823, p. 1–37; incl. the 1st description of G. Patoeha, *cf.* also fragment in DE VRIESE *l.c. sub* 8, p. 205–220); 'Over de natuurlijke vruchtbaarheid van den grond der Oost-Indische eilanden, vooral van het eiland Java en over de waarschijnlijke oorzaken daarvan' (Versl. 6e Openb. Verg. d. 1ste Kl. *etc.* Nieuwe Verh. v. h. Kolon. Inst. 1, 1827; *cf.* also DE VRIESE *l.c. sub* 8, p. 99–118); 'Over den aard en den oorsprong der eetbare vogelnestjes op Java' (Ber. d. Werkzaamh. *etc.*, van de Nieuwe Verh. Kolon. Inst. 7, 1838, p. xxx).

(3) *cf.* VAN HOËVELL in Tijdschr. Neêrl. Ind. 2^2, 1839, p. 78; and DE VRIESE *l.c. sub* 8, p. 53–55.

(4) *cf.* DE VRIESE *l.c. sub* 8, p. 77–83.

(5) *cf.* Alg. Konst- en Letterbode 1819^2, p. 401; *l.c.* 1820^1, p. 113–120; on the Goentoer *cf. l.c.* 1820^1, p. 215–218.

(6) *cf.* DE VRIESE *l.c. sub* 8, p. 84; and VAN DER BOON-MESCH: 'Disp. Geol. de incendiis montium igni ardentium Ins. Javae eorumque lapidibus' (Lugd. Bat. 1826).

(7) *cf.* 'Java' 2, 1854, p. 133.

(8) W. H. DE VRIESE: 'Reis naar het Oostelijk gedeelte van den Indischen Archipel in 1821; door C. G. C. REINWARDT' (Amsterdam 1858).

cf. also J. TH. BIK in Tijdschr. Ind. Taal-, Land- en Volkenk. 14, 1864, p. 125–183.

The dates of the two cited papers sometimes differ slightly; for the itinerary those of REINWARDT were followed.

(9) Partly in W. H. DE VRIESE: 'Plantae indiae batavae orientalis quas, in itinere per insulis archipelagi indici Javam, Amboinam, Celebem, Ternatam, aliasque annis 1815–21, exploravit CASP. GEORG. CAROL. REINWARDT' (Lugd. Bat. 1856–57, p. 1–160, *t.* 1–8); *cf.* also in DE VRIESE, Tuinbouwflora, 3, 1856, p. 351–352.

cf. also C. L. BLUME: 'Enumeratio plantarum Javae et Insularum adjacentium ex herbariis REINWARDTII, HASSELTII, KUHLII, BLUMEI, *etc.*' (Lugd. Bat. 1827–28, 2 vols).

MSS notes of REINWARDT on Indonesian plants in Herb. Leyden.

(10) *cf.* DE VRIESE *l.c. sub* 8, p. 223–246; Alg. Konst- en Letterbode 1819 and 1820.

(11) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 377; and EICHLER, Das Herbarium Martii, 1869, p. 10.

BIOGRAPHICAL DATA. 'Ueber REINWARDT's und BLUME's Entdeckungen auf Java' (Bot. Zeit. 1823^2, p. 713); Flora 1823, p. 125–126 and *l.c.* 37 (N.R. 12), 1854, p. 175–176; Bot. Zeitung 12, 1854, p. 783; Maatsch. d. Ned. Letteren Leiden 1854; HOOK. Journ. Bot. & Kew Gard. Misc. 7, 1855, p. 21–23; Album der Natuur 1858, p. 312–314; in DE VRIESE, Reis naar het Oostelijk gedeelte van den Ind. Arch. *etc.*, 1858, p. 4–98 en Bijlagen p. 249–303; P. J. VETH, Ontdekkers en onderzoekers, Leiden 1884, p. 95–149; SIRKS, Ind. Nat. Onderzoek, Amsterdam 1915, p. 87–97, w. portr.; Encyclop. N.I. 3, 1919; BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 50, 1940, p. 199; *l.c.* 51, 1941, p. 365–366; *l.c.* 52, 1942, p. 403.

Renesse van Duivenbode, van

sent living material of *Nepenthes* from *Halmaheira* (*Moluccas*) to *Hort. Bog.*, in *1908*. He was probably a descendant of M. D. VAN RENESSE VAN DUIVENBODE whom A. R. WALLACE (in Malay Arch. 2, p. 2) called the King of Ternate.

Rengers, A.

COLLECTIONS. *Herb. Leyden: Java* plants.

Rensch-Maier, Ilse

(1902, Remscheid, Germany; x), wife of BERNARD RENSCH (1900, Thale am Harz, Germany; x), the latter zoologist and since 1925 Head of the division Molluscs of the Zoological Museum of Berlin University. She accompanied her husband and some other scientists on an expedition to the Lesser Sunda Islands (see below) and took care of the botanical collecting.

Adenostemma renschii KOSTER was named after her husband, *Lamiacanthus renschiae* BREM. and *Rhododendron renschianum* SLEUMER after Mrs RENSCH herself.

ITINERARY. *1927. W. Java:* Tjibodas; *Centr. Java:* Diëng Plateau (March 5–6).—*Expedition to the Lesser Sunda Islands.*[1] *Lombok* (March–Apr.): Ampenan, Narmada; *via* Laboeanhadji to S(e)wela (March 22); Sembaloen; G. Rindjani (Apr. 1–7) with Segara Anak and Sembaloen Plateau; Sembaloenboemboeng; Selong; Tandjoengloear and by proa to the southern part of the island: crossing the island to Ekas (staying some days); *W. Soembawa:* Soembawa besar (Apr. 25); Batoe-lanteh Mts (May 4–14), making headquarters at Batoe Doelang; *E. Soembawa:* Dompoe (May 24–June 1); Wawo (June 2–3); *Flores:* Ende(h) (June 9– . .), visiting *P. Ende(h)*; Badjawa; Manggarai, visiting Rana Mesé (June 19–28); Sita; Mborong; Ende(h); Koanara; the Gelimoetoe (July 16–20); *Soemba:* Waingapoe (July 26), Cambera River (Cambaniro); *Bali:* Boeleleng; Gitgit (July 31); Danau Bratan, Batoeriti (Aug. 4– . .); by car to Denpasar (S. Bali) and Kloenkoeng; Kintamani and Danau Batoer; Boeleleng.—A half-day trip was made in *P. Weh* (Sabang), N of Sumatra, either on the voyage out or home.[2]

COLLECTIONS. *Herb. Berl.:* 1662 *nos*, incl. *c.* 10 *nos* from Diëng Plateau, and many cryptogams.[3] About 1000 duplicates in *Herb. Bog.;* also dupl. at *Kew*, and *Leyden.*

Somebody of the D.E. Indian Forest Service collected in June *1928* in the mountains N of Endeh (*Flores*), at the instigation and on behalf of Mrs RENSCH (*cf. sub* FÖRSTER). This collection is cited by VON MALM as *nos . . . comm.* RENSCH; and by Mrs RENSCH as RENSCH *nos . . .*, but evidently numbered separately. The collection at Berlin is probably lost, but the ferns are safe.

LITERATURE. (1) B. RENSCH: 'Eine biologische Reise nach den Kleinen Sunda Inseln' (Borntraeger, Berlin 1930); 'Die Vogelwelt von Lombok, Sumbawa und Flores' (Mitt. Zool. Mus. Berlin 17, 1931, p. 451–637).

(2) B. RENSCH: 'Die Molluskenfauna von Pulu



MRS RENSCH

Weh und ihre geographischen Beziehungen' (Zool. Anzeiger 102, 1933, p. 195–208).

(3) J. VON MALM: 'Die Phanerogamenflora der Kleinen Sunda-Inseln und ihre Beziehungen. Ein Beitrag zur RENSCHEN Sunda-Expedition' (Dr's thesis, Berlin 1934; repr. from FEDDE Repert. 34, 1934, p. 253–307).

ILSE RENSCH: 'Farne und Bärlappe der Sunda-Expedition RENSCH' (Hedwigia 74, 1934, p. 224–256, pl. 7).

H. SLEUMER, *Ericaceae* from *Flores* in ENGL. Bot. Jahrb. 71, 1941, p. 138–168.

Freycinetia by F. MARKGRAF in Notizbl. Berl. Dahl. 10, 1929, p. 769–776.

Loranthaceae by B. H. DANSER in Bull. Jard. Bot. Buit. sér. 3, vol. 11, 1931.

Compositae by J. TH. KOSTER in Blumea 1, 1935, p. 351–536.

Selaginellae by A. H. G. ALSTON in Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1935, p. 432–442.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Renwarin, L., *cf. sub* Forest Research Institute, Buitenzorg.

Reppie, H. N., *cf. sub ditto.*

Resasco, A.

COLLECTIONS. In *1912* he sent an unknown fruit from *Papua* to *Hort. Sing.*; according to Mr HOLTTUM no record was kept.

Resvoll, Thekla Ragnhild

(1871, Vaage, Gudbrandsdalen, Norway; x), botanist, educated at Oslo University, where she took her Ph. Dr's degree in 1918; from 1903–36 Lecturer at Oslo University. She made a trip to Java; the main object of her sojourn was to obtain a general idea of the tropical flora; she devoted herself especially to the flora of the volcanoes.[1]

ITINERARY. *Java* (Nov. *1923*–Jan. *1924*). Probably visiting Tjibodas and G. Tangkoeban Prahoe in *W. Java, etc.*;[2] according to her own information she botanized in the neighbourhood of Bandoeng and Lembang.

COLLECTIONS. A little dried material in *Herb. Oslo.* She sent fruits, seeds, and living plants to the botanical laboratory of Oslo University.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 46.

(2) TH. R. RESVOLL: 'Skoger på Java' I–III (Tidskr. f. Skogbruk *nos* 10–11, 1925, p. 1–14, 10 fig.; *no* 3, 1926, p. 1–4, 3 fig.; and *l.c.* p. 1–16, 13 fig.); 'Kratervegetasjion på Java' (Naturen 1929, p. 321 *seq.*); 'Beschuppte Laubknospen in den immerfeuchten Tropenwäldern Javas' (Flora N.F. 18–19 (GOEBEL Festschrift), 1925, p. 409–420, 6 fig.); 'Fra tropiske Urskoger' (Oslo 1931).

BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 2, 1905, p. 184–185, *t.* 116; portr. in album CHRIST at Basel.

Reyes, C.

cf. sub Forestry Bureau, Manila. He is commemorated in *Calamus reyesianus* BECC.

Reynaud, A. A. M.

(1804, Toulon, France; ? , ?), surgeon in the French Navy, who accompanied the voyage of the corvette 'La Chevrette' (see below) and made botanical collections at his own expense. In 1830 he was appointed teacher at the Medical School at Brest, in 1858 Chief Inspector of the Medical Service; pensioned off in 1872.

He is commemorated in the genus *Reynaudia* KTH and in a species of *Arundo.*

ITINERARY. *Voyage in 'La Chevrette', 1827–28.*[1] Sailing from Toulon (May 29, 1827); Bourbon; Pondicherry; Madras, Calcutta, Rangoon, Peg(o)u; back at Pondicherry (Jan. 17, *1828*); sailing (22) for Ceylon; staying for 18 days at Trinquemaly, and back to Pondicherry; sailing (Apr. 2) for *W. Java:* Batavia (20 days' stay); *via* Sunda Strait (Anjer) to Pondicherry; a month later returning to France *via* False-bay; Hâvre (Dec. 11).

COLLECTIONS. *Herb. Paris:* 900 *nos* of the voyage of the 'Chevrette'; dupl. in *Herb. Leyden. Herb. Kew:* plants from REYNAUD, India (pres. 1886) (? identical).

He was assisted in collecting by DE BLOSSEVILLE

and GABERT. He brought home several drawings of plants and animals.

LITERATURE. (1) *cf.* Reports of Capt. M. FABRÉ *etc.* in Ann. Marit. et Colon. 1829, 2e partie tome 1, p. 600–618.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Reyne, Adriaan

(1890, Uitgeest, N.H., Holland; x), entomologist; on the staff of the Agricultural Experiment Station in Surinam till 1925; then teacher at a secondary school at Haarlem and taking his Ph. Dr's degree at Utrecht in 1926; in 1927 appointed in the employ of the Institute for Plant Diseases at Buitenzorg, and from 1929–33 Head of the Coconut Experiment Station at Manado (N. Celebes). After expiry of his European leave he was put on half-pay and stayed in Holland, where he was pensioned off in 1938.

He is the author of some papers on, and in relation with, the coconutpalm.

COLLECTING LOCALITIES. *1932. N. Celebes:* Lolak Estate (March 8).

COLLECTIONS. *Herb. Bog.:* a few plants.

Reynvaan, Catharina Carolina

(1891, Amsterdam, Holland; x), from 1915–26 private Assistant of her brother-in-law W. DOCTERS VAN LEEUWEN (see there) and subsequently till 1932 adjunct Assistant for Botany at the Medical College, Batavia. After return in Holland she was attached to the Cancer Institute, Amsterdam. Later she married Mr OLY.

Authoress of some small papers in 'De Tropische Natuur'.

Taeniophyllum reynvaanii J.J.S. was named after her.

COLLECTIONS. She collected the above-mentioned orchid at Bandoeng, *W. Java*, in Sept. *1918;* in *Herb. Bog.;* dupl. in *Herb. Groningen.* Also plants together with her brother-in-law W. M. DOCTERS VAN LEEUWEN.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Rhodes, Lt

Singapore, presented plants and seeds to *Hort. Sing.* in *1881.*

Rhyne, Willem (or Wilhem) ten

(1647, Deventer, O., Holland; June 1, 1700, Batavia, Java), went to the Cape of Good Hope in 1673, after having finished his medical studies at Franeker and Leyden in 1668. In S. Africa he stayed from Oct.–Nov., collecting plants for JACOB BREYNE of Danzig. Later he sent notes on camphor and tea from Japan, which BREYN published in 1678 in an appendix to his work.[1] For some years he was stationed in Decima (Japan); when back at Batavia he was charged with several jobs in addition to his medical work, such as interpreter, and member of the Superior Court of Law; from 1681 till his death he was Inspector of Lepers. He was a contemporary of CLEYER (see there), but of far higher standing, medically as well as morally. He paid two visits to West Sumatra, resp. in Sept.–Dec. 1679, and in company with the Danish surgeon H. N. GRIMM in 1680.

TEN RHYNE had a large share in the composition of the 'Hortus Malabaricus', helping RHEEDE with



TEN RHYNE

the Latin descriptions. He was a friend of KAEMPFER's, and correspondent of RUMPHIUS,[2] KAMEL, *etc.*, as he had a large interest in botany. At the request of Governor General CAMPHUYS he supervised the checking of the copy of RUMPHIUS's 'Herbarium Amboinense'.

In addition to papers on medical subjects he was the author of an account of the Cape of Good Hope and some other papers.[3]

COLLECTIONS. Besides from the Cape and Japan, he forwarded plants from the *Dutch E. Indies* to BREYN too. In the *Brit. Mus.* are some of his specimens (a *Durio* with *Herb.* SLOANE 'Botanicum Hortense & medicinale indicum') which were forwarded to PETIVER by BREYNE, and mostly referred to by RAY. A specimen from *Ambon* was cited by BREYN.[4] Specimens of BREYNE's *Herbarium* are in the *Brit. Mus.*, at *Oxford*, and with *Herb.* BURMAN in *Herb.* DELESS. (*Geneva*) and maybe at *Leyden.* So these herbaria might contain specimens of W. TEN RHYNE.

Letters of his in MS. SLOANE, Brit. Mus.; letters with RUMPHIUS were published by VALENTIJN.

LITERATURE. (1) *E.g.* W. TEN RHYNE: 'Appendix ad centuriam primam exoticarum plantarum Jacobi Breynii, in quae agitur de frutice Thee'.

(2) *cf.* 'India Literata' p. 422–424, 428–429 (Appendix to M. B. VALENTINI, Historia simplicium reformata, Francofurti a/M. 1716).

(3) *E.g.* W. TEN RHYNE: 'Oost-Indianische Send-Schreiben von allerhand raren Gewächsen, Bäumen, *etc.* . . . durch TEN RHYNE *etc.*' (see VALENTIJN, Mus. Museorum *etc.*, fol. 1704).



RICHARDS

(4) *E.g.* in 'Prodromi fasciculi rariorum plantarum' 1739, p. 66.

BIOGRAPHICAL DATA. Ind. Gids 32[2], 1910, p. 1284–1292: Geneesk. Tijdschr. N.I. 51, 1911, p. 134–228 + portr.; Ned. Kruidk. Arch. 52, 1942, p. 403; *l.c.* 53, 1943, p. 250.

Ri. *nos, cf. sub* Forest Research Institute, Buitenzorg.

Rich, William

member (botanist) of the WILKES U.S. Exploring Expedition (*1838–42*); itinerary, collections, *etc. cf. sub* WILKES.

Acacia richii A. GRAY was named after him.

Richard, A.

is cited by SCHUMANN (in ENGL. Bot. Jahrb. 9, 1888, p. 189 *seq.*) as the collector of plants near Doré in *NW. New Guinea*, in consequence of some remarks made by F. VON MUELLER (in Descr. Not. Pap. Pl. p. 23, 46, *etc.*). Evidently he misinterpreted the latter who intended to refer the reader to the book of RICHARD on the collection of the expedition in 'L'Astrolabe' (*cf. sub* P. A. LESSON).

Richard, J. J.

COLLECTING LOCALITIES. *1930. E. Java:* G. Raoeng (Oct.); G. Idjen.

COLLECTIONS. *Herb. Bog.:* some grasses.

Richards, Paul Westmacott

(1908, Walton-on-the-Hill, Surrey, England; x), fellow of Trinity College, Cambridge, England, 1933–37; University Demonstrator in Botany in the University of Cambridge, 1937–45, University Lecturer in Botany since 1945; in 1949 appointed Professor of Botany at the Univ. College N.Wales, Bangor. Member of the Oxford University Expedition to British Guiana, 1929. Visited Sarawak and parts of the Malay Peninsula as Botanist of the Oxford University Expedition to Sarawak, June 1932–Jan. 1933 (see below). Organized and led the Cambridge Botanical Expedition to Nigeria, 1935. In 1947/48 he was once more in Africa.

Author of publications dealing chiefly with the ecology of the tropical rainforest and with the taxonomy and ecology of British and foreign bryophytes.

Palaquium richardsii K. GRIFFIOEN & H. J. LAM, *Taxitheliella richardsii* DIXON, *etc.*, were named after him.

ITINERARY. *Oxford Expedition to NW. Borneo, Sarawak, 1932.*[1] Leaving Liverpool (June 18); *Singapore* (July 16), leaving the same day for Kuching in *Sarawak;* Miri, up the Baram River to Claudetown (Marudi; 'heath forest' of *Agathis*! padang!); leaving Marudi (July 27); reaching base camp at the foot of Dulit Range near the Lejok (29); preparing mountain camp at 1500 m alt. (Aug.); another 'heath forest' was visited in the Koyan Valley, but it was too inaccessible for exploration; in Nov. RICHARDS was staying at the base camp and made a short expedition up the Balapau River to G. Laiun; collecting was done too at Bidi, Bau, and Santubong; in Jan. *1933* back at *Singapore; Malay Peninsula:* Kuala Lumpur.

COLLECTIONS. *Herb. Kew:* 1st set, about 2765 *nos*, including *c.* 900 cryptogams.[2] Duplicate set of trees to the *Imp. Forestr. Inst. Oxford*, remaining sets to *Brit. Mus., Sing., Sarawak Mus., etc.. Hepaticae* in *Herb.* P. W. RICHARDS.

They were assisted by a native collector; *cf.* also *sub* SYNGE. Several papers were based on the collections.[3]

LITERATURE. (1) T. H. HARRISSON: 'The Oxford Expedition to Sarawak, 1932' (Geogr. Journ. Lond. 1933, p. 385–410); 'Borneo Jungle' (an account of the Oxf. Exp. to Sarawak by several authors) (London 1938).

P. W. RICHARDS: 'Ecological observations on the rainforest of Mount Dulit, Sarawak' 1–2 (Journ. Ecol. 24, 1936, p. 1–37, 340–360); 'Lowland tropical podsols and their vegetation' (Nature 148, 1941, p. 129–131); 'The biogeographic division of the Indo-Australian Archipelago: 6. The ecological segregation of the Indo-Malayan and Australian elements in the vegetation of Borneo' (Proc. Linn. Soc. Lond. Sess. 154, 1941/42, 1943, p. 154–156).

(2) *cf.* Mosses by H. N. DIXON in Journ. Linn. Soc. Bot. 56, 1935, p. 57–140, pl. 1–4.

cf. Botany in Geogr. Journ. Lond. 1933, p. 404–405.

(3) *Loranthaceae* by B. H. DANSER in Rec. Trav. Bot. néerl. 31, 1934, p. 237.

Dipterocarpaceae by C. F. SYMINGTON in Gard. Bull. Str. Settlem. 8, 1934, p. 1–7.

Orchids by C. E. CARR in Gard. Bull. Str. Settlem. 8, 1935, p. 69–129.

Cyperaceae by H. UITTIEN in Rec. Trav. Bot. néerl. 32, 1935, p. 193–202, 3 fig.

Ericaceae by H. SLEUMER in ENGL. Bot. Jahrb. 71, 1941, p. 138–168.

In 'Contributions to the Flora of Borneo and other Malay Islands *etc.*' (in Kew Bull. 1936–).

cf. also *sub* 2.

Riche, Claude Antoine Gaspard

(1762, Chamelet en Beaujolais, France; 1797, Mont d'Or, France), naturalist on board of the 'Espérance' (1791–94) (itiner. *etc.* see *sub* BILLARDIÈRE). RICHE made the entomological collection and assisted with the botanical one. His name might figure on the labels of the collected plants. He was allowed to return to France in about July 1794, after having been interned (since May) at Angké.

He is commemorated in the genus *Richea* R.BR. and in several plant species.

His MSS are in Libr. Nat. Hist. Mus. Paris.

BIOGRAPHICAL DATA. PRITZEL, Thes. Lit. Bot., 1872; Journ. & Proc. Roy. Soc. N.S.W. 43, 1910, p. 130–131.

Richter

is cited as the collector of *Vitex bicolor* WILLD. in *Java* in *1773* (*cf.* HALLIER in Meded. 's Rijks Herb. *no* 37, 1918, p. 42).

Richthofen, Freiherr Ferdinand von

(1833, Karlsruhe, Silesia, Germany; 1905, ?), geologist and geographer of a Prussian expedition (see below), of which E. VON MARTENS, O. SCHOTTMÜLLER and M. E. WICHURA were members too. He was educated in the universities of Breslau and Berlin, took his Ph. Dr's degree in 1856 at Berlin. He extended his travels for 12 years; after his return in 1872 appointed professor, successively at Berlin, Bonn, Leipsic, and Berlin again.

ITINERARY. *Preussische Expedition nach Ost-Asien*', *1860–62; cf. sub* M. E. WICHURA, also for literature. VON RICHTHOFEN sailed in the 'Arkona' since Singapore (Aug. 13, *1860*); from March *1861* in the 'Thetis' again. He made a trip with JUNGHUHN and DE VRIJ in Oct. *1861*, returning to Buitenzorg on the 25th, leaving the next day for Batavia, joining the expedition early in Nov. at *Singapore*. When the Prussian squadron had set out on the homeward voyage, R. embarked at Hongkong for San Francisco.

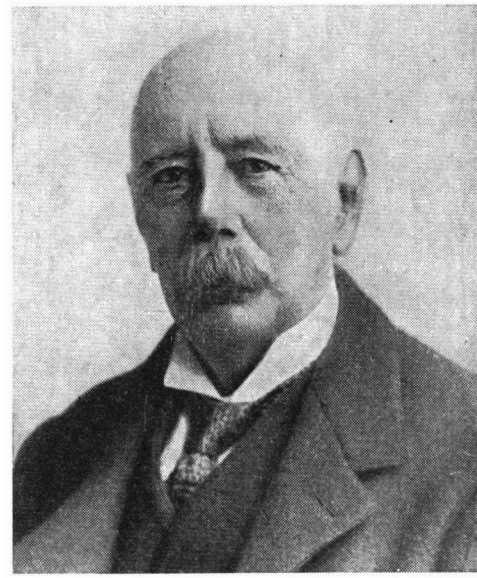
COLLECTIONS. Apparently he collected some *Algae;*[1] he might have collected some phanerogams too.

LITERATURE. (1) *cf.* G. VON MARTENS: 'Die Tange' (in the botanical vol. of the Preuss. Exp. *etc.* 1866), p. 3.

BIOGRAPHICAL DATA. BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 943–947; Zeitschr. Ges. Erdk. Berl. 1905, p. 673–698; Tijdschr. K.N.A.G. 1906, p. 542–559.

Rickets, O. F.

(*c.* 1867, England; ?), civil servant in Sarawak, *NW. Borneo;* for many years Resident at Kuching, in 1938 still living there. He was very



RIDLEY

interested in plants, and collected many species for his garden in Borneo.[1] As early as 1882 he climbed Mt Penrissen!

COLLECTIONS. *Hort. Sing.:* living plants from Sarawak (pres. *1918*, *1938*). According to Mr HOLTTUM his name appears on a few specimens in *Herb. Sing.* taken from living plants; he made no dried collections himself.

LITERATURE. (1) Author of 'Orchids of Sarawak' (Orch. Review 1936, p. 77–83).

Ridley, Henry Nicholas

(1855, West-Harling, Norfolk, England; x), from 1880–87 Assistant in the Botany Department, British Museum, London; 1888–1900 Director of Gardens and Forests, Straits Settlements; 1901–12 Director of Gardens, Singapore. He was one of the chief promoters of the introduction of the para rubber tree, *Hevea*, in the Malay Peninsula and introduced a tapping method. He was a man of great ability, whose achievements in the pioneer days of tropical agricultural reconnaissance are remarkable. After his retirement in 1912 he occasionally revisited the tropics. In 1928 he was awarded the FRANK E. MEYER Medal; vol. 132 of CURTIS's Botanical Magazine was dedicated to his works; the first number of vol. 9 of the Gard. Bull. Str. Settlements was dedicated to him on the occasion

of his 80th birthday, with full appreciation of his work done in the Malay Peninsula.

He is the author of large reports on the collections of others (*cf. e.g. sub* C. B. KLOSS), many papers on new plants from Borneo and the Malay Peninsula, and of several handbooks.[1]

The genus *Ridleyella* SCHLTR and several plant species were named in his honour.[2]

COLLECTING LOCALITIES.[3] *1887.* Trip to the Atlantic islet Fernando de Noronha.[4]—*1889. Malay Peninsula.* In July visiting Selangor, Kuala Lumpur, Malacca, and *Penang;* in Aug. to the E. coast with TASSIM DAUD: *P. Tioman* (18), Pekan, Cherating River, Rumpin, Trengganu, Kelantan and *P. Ketam.*[5]—*1890.* A fortnight's expedition to Pahang, districts round Pekan and Kwala Pahang (May; coll. 600 spec.);[6] *P. Tekong;* Malacca. *W. Java:* sailing from Singapore (Aug.), visiting Buitenzorg and Angier point (= Anjer) on his way to or from Cocos Islands and *Christmas Island.*[7]—*1891. Malay Peninsula*: Taiping (March); *failing attempt to reach G. Tahan,*[6] with KELSALL (June 23–Aug. 19 back in Pulau Tawar), Pahang River (July 7–9); also collecting in *Singapore*, Johore, Malacca, and Port Dickson.—*1892.* In Febr.–March visiting the Dindings, *Sembilan Islands*, Larut Hills, Kuala Kangsar Distr.; later Mt Ophir Range and G. Mering with D. F. A. HERVEY (see there); in Dec. ridge of G. Panti, Kota Tinggi.—*1893. Expedition to Kedah Peak:*[8] leaving *Penang* (June 4); *P. Song-Song*, Yan, Kedah Peak (6 days); Perak Hills (June). *NW. Borneo*, Sarawak: Bau (July); Matang and Lundu (Aug.).—*1894. Malay Peninsula:* Isl. of *Singapore*, outlying parts; Kamuning Estate near Sg. Siput (Febr.). *? NW. Borneo*, Sarawak: Lundu (Sept.).—*1895. Malay Peninsula:* Prov. Wellesley and *Penang* (Dec.; small collection).—*1896. Riau* (= *Riouw*) *Archipelago* (Febr.): *P. Karimoen, P. Boeroe*, S of Singapore, *Rhio* (partly by a native collector).[9] *Mal. Penins.:* Selangor (May 9–June 11):[10] about Rawang, Dusum Tua, Bt Etam, Bt Kutu, Ginting Peras, Ginting Bidai, thus reaching the watershed; between Kajang and Sepang, chiefly the Reko Woods.—*1897. Langkawi Islands;* Selangor near the Batu Caves and along the Pahang track (July). *Sumatra East Coast:* Siak, Mandau River (Nov.). *Labuan; Br. N. Borneo:* Kudat, Sandakan and Labuk Bay; *NW. Borneo:* Sarawak.—*1898. Mal. Penins.:* Batu Caves (? Aug.); Kinta Valley in Perak (Oct.): G. Bujong Malacca, G. Keladang, Ipoh, Telok Pinang; Negri Sembilan, visiting Seremban and Perhantian Tinggi (Dec.); Mt Ophir (Dec.).[11] In this year he also made his annual visit to *Penang*, Prov. Wellesley, the Dindings, *Singapore* and Johore.—*1899.* Annual visit to *Penang*, Dindings and Selangor (Batu Caves *etc.*).—*1900.* In the spring visiting Malacca and Prov. Wellesley; Johore Lama (Oct.); *Expedition to Batu Pahat* in W. Johore (Nov.),[12] collecting on G. Banang, G. Penggaran and ascending Sg. Simpan Kanan; Panchur on the Johore River (Nov.).—*1902.* Perak Hills, *Penang* (3 days collecting in Dec.).—*1903. NW. Borneo:* Sarawak, with plant collector (July).—*1904. Mal. Penins.:* Perak and elsewhere (Febr.); Semangko Pass and at Rantau Panjang (Aug.); *Christmas Island* (Indian Ocean) with plant collector KASSAN (Sept. 25–end of Oct.),[13] this time not touching at Anjer Point. *Mal. Penins.:* G. Pulai in Johore (end of Dec., for a week).—*1905. NW. Borneo:* Matang (Aug.) and Lundu in Sarawak (Sept.).—*1906. Mal. Penins.:* Malacca; Prov. Wellesley.—*1907.* Johore (during Easter Holidays).—*1908.* Johore, at Cucob (or Kukob) and Tempayan River (Apr.); visit to Tebrau, a day at Sed(e)nak (Aug.); Batu Caves, Klang Gates; *Expedition to the main chain of the Peninsula at Telom,*[14] with H. C. ROBINSON and C. B. KLOSS (Nov.): in the neighbourhood of Tapah, then a start from Telom through the Batang Padang Valley (staying 3 weeks).—*1909.* During early part of the year in *Penang; Expedition to Temengoh* (= *Temengor*) *in Upper Perak,*[15] with ROBINSON and KLOSS (July); Perak (Aug.); Kota Tinggi and Kukob in Johore.—*1910.* Expedition to Kedah, Alor Star, Perlis and Setul (Siamese States) (March);[16] Kuala Lumpur (Dec., few days); G. Panti in Johore.—*1911.* Semangkoh Pass, Selangor (in the spring); to the *Pulau Adang group of islands*, off Langkawi,[17] with H. C. ROBINSON and DR HANITSCH, visiting: *P. Rawi* (Febr. 20–21), *P. Adang* (21–23; *P. Nipis* on the 22th), *P. Tengah* (23), leaving for Kuala Malacca in the *Langkawi Islands*, trip to Telayah Tujoh (24) and back to *Singapore via Penang* and Kuala Lumpur; *Expedition to G. Tahan*[18] in Pahang, with KLOSS and ROBINSON (June 27–Aug.). After retirement visiting Annam, Cambodja, Burma, Siam, Ceylon and in *1912* India.—*1915. NW. Borneo*, Sarawak: Mt Matang (Jan.), *Labuan. Java* (Jan.–Febr.): *E. Java:* Tosari (Febr. 1) and *W. Java:* G. Salak, Garoet (Febr. 9), Telaga Bodas (10). *Malay Penins.:* Kuala Lumpur, Ulu Gombak and Klang Gates (March); Genuang in Johore (March).—*1917.* Kota Bahru, Channing Estate, Lebar River (Febr.), Jeram Panjang; G. Tampin (Negri Sembilan), nearly to the summit; Johol and Sg. Jelei; Malacca, Ginting Sempah (Sept.).—*1920.* Bt Tangga from Seremban (Dec.).—*1921.* Klang Gates (Jan.),[19] Ipoh (Jan.). *Sumatra East Coast* (Febr. 5–17):[20] from Belawan proceeding to B(e)rastagi, exploring hill forests in the neighbourhood; ascent of G. Sibajak; the 16th returning to Medan.

COLLECTIONS. They amount to about 50.000 numbers, of which the main set is in *Herb. Kew.* His drawings of orchids *etc.* (> 1000, many coloured) are at Kew.[21] In *Herb. Brit. Mus.:* 8618 plants and 428 woods from *Malaysia* (pres. 1889–1904), 170 phaner. and 80 cryptog. (pres. 1905) and 943 Selangor plants (pres. 1915); *Herb. Sing.*, also from *Sumatra* (Siak) and *NW. Borneo* (Sarawak); *Herb. Calcutta* 7363 specimens (pres. 1890–97; possibly Singapore Herb. dupl., containing plants of other collectors too!). Also dupl. in *Herb. Bog., Leyden, Berl.* (*incl.* orchids from *Java*, pres. with *Herb.* SCHLECHTER), *Edinburgh, U.S. Nat. Herb. Wash.* (some *Sumatra* ferns and 27 dupl. *Mal. Penins.*).

The majority of his collections is from the *Malay Peninsula;* he did not number in the field, but upon study. He was often assisted by native

collectors, for example in the *Riouw Archipelago;* the latter collection mainly consists of orchids.

For the botanical results of his expeditions, see *sub* Literature.

LITERATURE. (1) *cf.* Bibliography in Gard. Bull. Str. Settlem. 9, 1935, p. 2–28.

Of his books the most important are: 'Materials for a flora of the Malay Peninsula, Monocotyledons' (1907–08); 'Spices' (1912); 'Flora of the Malay Peninsula' (1922–25); 'Dispersal of plants throughout the world' (1930).

(2) *cf.* List in Gard. Bull. Str. Settlem. 9, 1935, p. 29–30.

(3) Many of the below-mentioned data derived from the Annual Reports of the Botanic Gardens Singapore for the years concerned, and from BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(4) H. N. RIDLEY: 'Notes on the botany of Fernando Noronha' (Journ. Linn. Soc. Bot. 27, 1891, p. 1–86).

(5) *cf.* Journ. Str. Br. Roy. As. Soc. *no* 20, 1889, p. 86.

(6) H. J. KELSALL: 'Account of a trip up the Pahang, Tembeling and Tahan Rivers, and an attempt to reach G. Tahan' (*l.c. no* 25, 1891, p. 33–56, of which p. 49–56 on the vegetation by H. N. RIDLEY).

cf. also Journ. Bot. 30, 1892, p. 31–32.

H. N. RIDLEY: 'On the flora of the eastern coast of the Malay Peninsula' (Transact. Linn. Soc. Bot. 3, 1893, p. 267–408, pl. 61–66; dealing with the collections of this tour and with those made in 1890 in Pahang).

(7) H. N. RIDLEY: 'A day at Christmas Island' (Journ. Str. Br. Roy. As. Soc. *no* 23, 1891, p. 123–139).

(8) H. N. RIDLEY: 'A botanical excursion to Gunong Jerai (Kedah Peak)' (Journ. Str. Br. Roy. As. Soc. *no* 34, 1900, p. 23–30).

(9) *cf.* Journ. Linn. Soc. Bot. 32, 1896, p. 251, 394.

(10) *cf.* Selangor Journ. of Sept. 4th, 1896.

(11) H. N. RIDLEY: 'The flora of Mt Ophir' (Journ. Str. Br. Roy. As. Soc. *no* 35, 1901, p. 1–28).

(12) *cf.* Ann. Rep. Bot. Gard. Sing. for 1900, p. 5.

(13) A. & E. S. GEPP: 'Some cryptogams from Christmas Island' (Journ. Bot. 43, 1905, p. 337–344).

H. N. RIDLEY: 'An expedition to Christmas Island' (Journ. Str. Br. Roy. As. Soc. *no* 45, 1906, p. 137–155); 'The botany of Christmas Island' (*l.c.* p. 156–271); 'Christmas Island flora. Additional notes' (*l.c. no* 48, 1907, p. 107–108).

(14) H. N. RIDLEY: 'The flora of the Telom and Batang Padang valleys' (Journ. Fed. Mal. Stat. Mus. 4, 1909, p. 1–98, *cf.* also extracts from a letter to J. D. HOOKER in Kew Bull. 1909, p. 159.

(15) H. N. RIDLEY: 'A scientific expedition to Temengoh, Upper Perak' (Journ. Str. Br. Roy. As. Soc. *no* 57, 1910, p. 5–122).

(16) *cf.* Letter to Sir J. D. HOOKER on the flora in Kew Bull. 1910, p. 202–204.

H. N. RIDLEY: 'The flora of Lower Siam' (Journ. Str. Br. Roy. As. Soc. *no* 59, 1911, p. 15–234, w. map).

(17) H. N. RIDLEY: 'A botanical excursion to Pulau Adang' (*l.c. no* 61, 1912, p. 45–65).

(18) H. N. RIDLEY: 'The botany of G. Tahan, Pahang' (Journ. Fed. Mal. Stat. Mus. 6, 1915, p. 127–202; herein 1912 is injustly recorded as the year in which the trip took place!).

(19) H. N. RIDLEY: 'The flora of Klang Gates, Selangor' (*l.c.* 10, 1922, p. 247–251).

(20) H. N. RIDLEY: 'A botanical excursion to Northern Sumatra' (Journ. Mal. Br. Roy. Asiat. Soc. 1, 1923, p. 46–113).

(21) *cf.* Kew Bull. 1936, p. 566, 574.

BIOGRAPHICAL DATA. Journ. Bot. 66, 1928, p. 128; CURTIS' Bot. Magaz. Dedic. 1827–1927, p. 314–316, w. portr.; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; Gard. Chron. 12 May 1928, p. 330, w. portr.; Gard. Bull. Str. Settlem. 9, 1935 p. 1–48, incl. bibliogr. (p. 2–28) and 2 portr.; BACKER, Verkl. Woordenb., 1936.

Riebeeck, Abraham van

(1653, Cape of Good Hope, S. Africa; 1713, Java), son of JAN VAN RIEBEECK the founder of the Cape colony, studied law in the University of Leyden and came to the D.E.I. as second merchant, arriving in May 1677. He finally was appointed Governor General (1708).

ITINERARY. *1703–13.*[1] *W. Java.* To Campon Baroe, Pakowang, and Margamoektij (Aug. *1703*); to Campon Baroe and Pakowang (May *1704*); *via* Tangeran(g) *etc.* to Margamoektij *etc.* (Sept. *1706*); to Tjileungsir and Goeha Gadja (July *1708*); *via* Bodjong Gedeh and Talaga Warna to Tsjianjoer (= Tjiandjoer) and the T(s)ji Balagon, G. Goeroe, Jokjogan, Pondok Opoh (near the S. coast), returning to Batavia *via* Bodjong Gedeh (Sept. *1709*) to Tangerang (Aug. *1710*); to Bekas(s)i (Aug.); to Bajabangan and Tandjoengpoera (Sept.); to Tangerang (July *1711*); to the S. coast (Aug.–Sept.); to G. Salak (Aug. *1712*); to Krawang (Sept.); to Angké (Aug. *1713*), to Bandoeng (Aug.–Sept.). He visited sulphur mountains, probably G. Patoeha.

COLLECTIONS. He is said to have collected on the above-mentioned tours.

LITERATURE. (1) *cf.* HAGEMAN in Nat. Tijdschr. N.I. 31, 1870, p. 202; DE HAAN, Priangan, 2, 1910, p. 277–415.

BIOGRAPHICAL DATA. Encyclop. N.I. 3, 1919.

Riedel, Johann Gerard Friedrich

(1832, Tondano, Minahassa, N. Celebes; 1911, Batavia, Java), son of a missionary in the Minahassa; after finishing his education in Europe, he started his career as officer in the D.E. Indian Civil Service in 1853; at first District Officer in the Minahassa and since 1864 Assistant Resident of Gorontalo, both in N. Celebes; for some time stationed in Billiton (1875–78) and subsequently promoted Resident of Timor and Dependencies (1878–80); in 1880 appointed Resident of Ambon and pensioned off in 1883.

Though he is reputed to have done valuable work as a civil servant, the judgment of scientists is far less favourable. WICHMANN considered him a

congenial of A. B. MEYER (see there) whom he held in contempt.[1] FORBES recorded that RIEDEL, when a Resident of Ambon, was little inclined to be helpful, reason why F. cancelled his voyage to the Moluccas.

He is the author of many ethnological papers, mainly dealing with Celebes; one of them lead to him being awarded the honorary Dr's degree at Leipsic.[2]

He is commemorated in the genus *Riedelia* OLIV. and in several plant species.

ITINERARY. Between *1853–75. N. Celebes*, Minahassa: Tondano (May *1871*), G. Sapoetan (4000 ft) (June 1871);[3] Gorontalo (June *1875*); Manado.—*1876. Billiton* and *? Banka.—187.–79. Timor.* Apparently he made a trip into the interior to near the boundary of Portuguese Timor.—*1880–84. Moluccas & Lesser Sunda Islands.* In Nov. 1880 trip to the *Watoebela*, *Kei* (= *Kai*), *Aroe* and *Tanimbar* (or *Timor-laoet*) *Islands*, also visiting *Babar Sermata*, *Loe(w)ang*, *Leti*, *Kiser* (= *Kisar*), *Wetter* (= *Wetar*), *Roma(ng)*, *Damar*, *etc.*[4] Besides, he visited *Boeroe; Leti Islands* (Aug. *1883; P. Leti*, *P. Moa* and *P. Lakor*); *P. Damar*, *Babar* and *Wetar; Tanimbar Islands* (= *Timor-laoet*) (June *1884*): *P. Larat* and *P. Maroe*.

According to BACKER he collected in *Borneo* too, but this seems doubtful.

COLLECTIONS. The main set probably at *Dresden*, at least many duplicates were distributed from there by Dr A. B. MEYER. The collection amounts to more than 5900 *nos*, for a large part brought together by native collectors; also several without number. Duplicates in *Herb. Kew:* 3 to 400 species from *Celebes*,[5] a small number from *Timor & Dependencies* (pres. 1879),[6] from *Timor-laoet* (= *Tanimbar*),[7] 40 from *Boeroe*,[8] *etc.; Herb. Berl.:* 80 *nos* from *Celebes* (pres. 1876)[9] and mosses from the same island (pres. 1864); *Herb. Vienna:* 308 *nos* from *Celebes; Herb. Leyden; Herb. Utrecht; Herb. Bog.*, some numbered in the H.B. series (1872–74); *Herb. Munich; Herb. Monaco.* He forwarded *Billiton* plants to BECCARI[10] (= *Florence*).

In 1872 he presented 13 plants from Gorontalo (*N. Celebes*) to *Hort. Bog.*

LITERATURE. (1) *cf.* A. WICHMANN:' De Heer RIEDEL en de meren van Noord- en Centraal-Celebes' (Ind. Gids 18[2], 1896, p. 1410–1427).

(2) J. G. F. RIEDEL: 'De sluik- en kroesharige rassen tusschen Selebes en Papua' ('s-Gravenhage 1886).

Many of his papers were published in Tijdschr. Ind. Taal-, Land- en Volkenk., Tijdschr. Ned. Ind., and Tijdschr. K.N.A.G.

(3) *cf.* KUHN in Verh. k.k. Zool. Bot. Ges. Wien 1875, p. 593–602.

(4) *cf.* Tijdschr. K.N.A.G. 5 (Mededeelingen *etc.*), 1881, p. 71–72.

(5) D. OLIVER: 'Note on a collection of North-Celebes plants made by Mr. Riedel of Gorontalo' (Journ. Linn. Soc. Bot. 15, 1877, p. 97–100).

(6) *cf.* FORBES, Wanderings *etc.*, 1885, p. 498.

(7) *cf.* List in FORBES, Wanderings *etc.*, 1885, p. 354–355.

(8) Some plants from there were published in HOOK. Icon. Plant., *e.g.* the new genera *Riedelia* and *Petraeovitex* (1883).

HEMSLEY included his plants from the southern Moluccas in his 'Report of the Challenger' (*cf. sub* MOSELEY).

(9) Published by WARBURG in Monsunia (1900).

(10) *cf.* Rec. Bot. Surv. Ind. 2, 1903, p. 203.

BIOGRAPHICAL DATA. Weekbl. v. Ind. 1911–12, p. 963; Ind. Gids 1912[1], p. 396; Encyclop. N.I. 3, 1919; BACKER, Verkl. Woordenb., 1936.

Riedel, Ludwig

(1790, Berlin, Germany; 1861, São Christavão, Brazil, S. America), horticulturist, emissary of the Petersburg Academy, who accompanied the expedition VON LANGSDORF to Brazil in 1811. Till 1836 he brought together large collections of plants in that part of the world, and subsequently was appointed Director of the Municipal Park at Rio de Janeiro, resigning in 1858.

He is commemorated in the genus *Riedelia* CHAM. (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. *Herb. Kew:* 1859–99, Brazil, *Malaya, etc.* 1840 *nos*. Probably this statement is wrong, as it is hardly possible that he collected in Malaya; apparently the record is mixed up with that of J. G. F. RIEDEL (see there).

Riedlé, Anselme

(1775, Yrsee near Ausburg, ? ; Sept. 23 or Oct. 21, 1801, Koepang, Timor), gardener of the 'Jardin des plantes', Paris, who joined some French expeditions under command of Captain BAUDIN (see there), of which that of 1796–98 did not operate in Malaysian waters.

He is commemorated in the genera *Riedleia* A.P.DC. and *Riedléja* HASSK.

ITINERARY. *Voyage in 'Le Naturaliste' and 'Le Géographe', 1800–04; cf.* detailed itiner., literat. *etc. sub* LESCHENAULT; other members of the expedition were GUICHENOT and SAUTIER (see those). The expedition reached *Timor* on Aug. 21, *1801;* RIEDLÉ collected till his death in the environs of Koepang and made a trip into the interior with PÉRON (Aug. 29).

COLLECTIONS. *Herb. Paris;*[1] duplicates in *Herb.* DELESS. (*Geneva*), *Brit. Mus.*, *Kew;* in *Herb. Berl.: ex Herb.* KNUTH, possibly no Timor plants. Wood samples were collected by RIEDLÉ & GUICHENOT; at Paris.

A MS. journal of part of the voyage in Libr. Nat. Hist. Mus. Paris.

LITERATURE. (1) Some Timor plants described by J. DECAISNE in 'Herbarii timorensis descriptio' (Nouv. Ann. Mus. Hist. Nat. Paris 3, 1834, p. 333–501, pl. 16–21; reprinted Paris 1835).

cf. also BAILLON in Adansonia 11, p. 266.

PH. VAN TIEGHEM: 'Sur une Ochne nouvelle, originaire de Timor' (Bull. Mus. Hist. Nat. Paris 18, 1902, p. 47–49).

BIOGRAPHICAL DATA. URBAN, Symb. Antill., 3, 1902–03, p. 113; BACKER, Verkl. Woordenb., 1936; in 'Archives Nationales', Paris (death recorded on Sept. 23).

Riemsdijk, Dr Jan van

Inspector of Native Education at Fort de Kock, *Sumatra West Coast* Residency, sent orchids to *Hort. Bog.* (*cf.* letter to WIGMAN, dated July 20, 1884, in the Archives of Leyden Herbarium).

Rietz, Gustaf Einar du

(1895, Bromma, Sweden; x), plant geographer and sociologist, in 1921 appointed University Lecturer at Uppsala, taking his Ph.Dr's degree in 1922; from 1924–26 Custodian of the Botanical Museum and since 1931 Professor of Botany in the same place. Outside Europe he travelled in the U.S.A., Java, Australia, New Zealand and the subantarctic islands of that region.

Author of many important papers,[1] also dealing with lichens.

ITINERARY. *1927. E. Java.* Arrival from W. Australia at Soerabaja (Sept. 27); staying at Pasoeroean (until Oct. 11), making some trips: with C. A. BACKER through the mangrove at Pasoeroean (Sept. 27); with BACKER & G. BOOBERG to Lawang, Singosari, Malang, Blambangan, Batoe and Songoriti (29); with BACKER & H. VAN LEER to G. Ardjoeno-Welirang (Oct. 2–5, climbing the summit of Welirang on the 4th);[2] with BACKER and O. ARRHENIUS to Assembagoes; leaving by train for Djokja, Bandoeng and Buitenzorg (*W. Java*) (Oct. 11); staying a few days at Buitenzorg before leaving Java for *Singapore* and Europe.

COLLECTIONS. Plants from *E. Java* at present in *Inst. of Plant Ecology of Uppsala Univers.;* later the 1st set will be sent to *State Mus. Stockholm*, and other sets to *Bot. Gard. Göteborg*, and *Bot. Mus. Uppsala.* In Herb. *Pasoeroean:* 5 *nos* collected together with C. A. BACKER.

The collection contains many lichens and bryophytes, but phanerogams too. The latter were identified by C. A. BACKER.

LITERATURE. (1) *E.g.* of 'The fundamental units of biological taxonomy' (Svensk Bot. Tidskr. 24, 1930, p. 333–428).

(2) G. E. DU RIETZ: 'Vulkanvegetation på östra Java' (Naturens Liv 1931, p. 719–730, 15 fig.).

BIOGRAPHICAL DATA. Vem är det? Svensk biografisk handbok' (Stockholm 1932); Chron. Bot. 1, 1935, p. 257–258 + portr.

Rij . . ., *cf.* RY . . .

Rikken, L. H., *cf. sub* Forest Research Institute, Buitenzorg.

Rimann

an Austrian plant collector in the employ of the firm of SANDER & Sons, St Albans near Londen, who discovered *Dendrobium rimanni* RCHB. *f.n.sp.* in the *Malay Archipelago.*[1] According to J. J. SMITH[2] the species was collected at Makassar (*SW. Celebes*), and in *Timor* according to notes in *Herb.* REICHENBACH.

LITERATURE. (1) *cf.* Gard. Chron. 1882[2], p. 680.

(2) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 8, 1927, p. 361.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Rimestadt, V.

inhabitant of Malang, who imported orchids from the Malay region in Europe *about 1900;* he sent many plants to the firm of SANDER & Sons at St Albans near London.

Phalaenopsis rimestadtiana HORT. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. Besides to the above-mentioned firm, he sent living orchids to *Hort. Bog.* (pres. *1903, 1905*), collected in *Sumatra, Java* (G. Ardjoeno and G. Smeroe in E. Java), *Borneo, Ambon* and *New Guinea* (*e.g.* Merauke, *Dutch S. New Guinea*).

He probably employed native collectors.

Rink, Hinrik (or Hinrich) Johannes

(1819–1893), Ph. Dr Kiel 1844, geologist of the 'Galathea Expedition' (*cf.* itiner. *etc. sub* DIDRICHSEN);[1] from 1848–51 he travelled in Greenland; subsequently in the Greenland Civil Service and Inspector for S. Greenland; Director of the Trade to Greenland, 1871–82.

COLLECTIONS. In *Herb. Copenhagen:* plants from the Nicobars,[1] and from *P. Penang* (coll. *1846*).

LITERATURE. (1) Author of 'Die Nikobarischen Inseln. Eine geographische Skizze, mit spezieller Berücksichtigung der Geognosie' (Kopenhagen) (Skildring af Vegetationen p. 127–139).

BIOGRAPHICAL DATA. CHRISTENSEN, Den Danske botaniks historie, 2, 1926, p. 298–299.

Rio, *cf. sub* Forestry Bureau, Manila.

Ripin, *cf. sub* Forest Research Institute, Buitenzorg.

Ripley, Sidney Dillon

(1913, New York City, U.S.A.; x), ornithologist, educated at Yale (B.A. in 1936) and Harvard University (Ph.D. 1943). He made some expeditions in the Malaysian region, was from 1943–45 in Ceylon (in connexion with war activities), and subsequently (1946–47) visited India and Nepal. At present Associate Curator of Zoology, Peabody Museum of Nat. Hist., Yale University, New Haven, Conn.

Rhododendron ripleyi MERR. was named after him.

ITINERARY. *1936.*[2] *N. Sumatra:* Laut Tawar (= Lake Takengon) (Febr.–March).—*1937–38.* With the CROCKET (see there) Expedition to the S. Pacific, *Dutch New Guinea, Biak* and *Misoöl.*[1]—*1939.* With the GEORGE VANDERBILT Expedition to *N. Sumatra:* Laboean River (March 17) between Medan and Belawan; from Medan (20) to Koetatjane and valley of the Alas River; Meloewak (4 days); Koengke; Blangkedjeren; Blangnanga (March 28–Apr. 5); base camp at Blangbeké (9); G. Löser (= Losir) (climbing the 2 peaks, the first on May 6); Blangkedjeren (May 11–. .); Medan (18); *P. Nias* (June, staying 12 days).

COLLECTIONS. *Herb. Philadelphia:* ± 80 *nos*

from Mt Löser, including type specimens. He collected with FREDERICK A. ULMER Jr (see there); some plants, including a *Parnassia* and *Lobelia*, were described by MERRILL.[3]

Some living orchids from *New Guinea* in private collection at Philadelphia.

LITERATURE. (1) S. D. RIPLEY: 'Trail of the money bird. 30.000 miles of adventure with a naturalist' (New York & London 1940 *etc.*).

(2) Zoological results (birds from Atjeh) in Proc. Acad. Nat. Sci. Philad. 1939 and 1940; and in Bull. Mus. Comp. Zool. Harvard 1944.

(3) E. D. MERRILL: 'Botanical results of the GEORGE VANDERBILT Sumatran expedition, 1939. Plants from Mt Löser' (Notulae naturae of Acad. Nat. Sci. Philad. *no* 47, 1940, p. 1–9.)

BIOGRAPHICAL DATA. Who's who (America Suppl. 1943); Who's who in America (East) 1946.

Risch-Loder, Mrs A.

sent *Ceratostylis subulata* BL. from Bolang, *W. Java*, to J. J. SMITH (*Herb. Bog.*) in *1916* (*cf.* Bull. Jard. Bot. Buit. sér. 2, 26, 1916, p. 36).

Ritchie, Capt. A. T. A.

COLLECTIONS. *Hort. Sing.*: collection of living orchids, collected by himself in *Malaya* (pres. *1938*).

Ritchie, John W.

(1871, Sparta, Illinois, U.S.A.; x), from 1902–07 a schoolteacher in the *Philippines;* in 1933 a resident of Yonkers (New York), attached to the World Book Company.

Bruguiera ritchiei MERR. was named after him.

COLLECTIONS. He brought together important botanical collections, chiefly in Tayabas Prov., *Luzon;* at least partly numbered in the F.B. series (*cf. sub* Forestry Bureau, Manila). In *1903–04*, 24 *nos* from *Guimaras Isl.* were presented to *Herb. Manila.*

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Ritter, Aug.

Zürich, presented coffee seeds from Deli (*Sumatra East Coast*) to the *Bot. Mus. Zürich* in *1912.*

Riupassa, J. M., *cf. sub* Forest Research Institute, Buitenzorg.

Rivera, F., *cf. sub* Bureau of Science, Manila.

Rivière, Henriëtte Christine Charlotte la

(1888, Leyden, Holland; x), studied natural history at Leyden (K IV); Assistant, later Chief Assistant of Botany at Leyden University; in Oct. 1919 she went to Java for the Dutch Buitenzorg Fund, to collect material and make a provisional survey for future more detailed study on the anatomy of lianas.[1] In Sept. 1920 she married C. A. M. A. BECKER (*cf.* also *sub* BECKER-LA RIVIÈRE, H.), and lived for many years in Noesa Kambangan, S of Java.

ITINERARY. During her stay in *Java* (Dec. *1919*–Sept. *1920*), she made various trips in *W. Java:* Tjibodas and G. Gedeh, near Batavia, Garoet; in *Centr. Java:* Tjilatjap, Schildpad Bay; and in *E. Java:* G. Tengger, Zandzee and Bromo.

COLLECTIONS. *Java* plants in *Herb. Leyden.* After her marriage she collected *Algae* in *Noesa Kambangan* for Mrs WEBER-VAN BOSSE (see there).

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 43.

She is the author of some papers on this subject in Ann. Jard. Bot. Buit. sér. 2, vol. 15, 1916, and in *l.c.* 31, 1919 and 33, 1922.

Roberts, Mrs D. Carson

COLLECTIONS. Herb. *Kew:* plants from the *Malay Islands* (pres. *1930*).

Roberts, S. G.

collected *Selaginella palu-palu* BAIL.[1] in *E. New Guinea;* LAUTERBACH also cited plants of his.[2] Apparently F. M. BAILEY had the disposition of his collection, so *possibly* preserved in *Herb. Brisbane.*

LITERATURE. (1) *cf.* Queensl. Agric. Journ. 9, 1901, p. 215, pl. 2.

(2) *cf.* ENGL. Bot. Jahrb. 45, 1911, Beibl. 103, p. 25.

Robertson-Glasgow, Charles Ponsonby

(† about 1900), visited Singapore and Perak in 1898.

COLLECTING LOCALITIES. *1898. Malay Peninsula: Singapore* and Perak (Gapis Pass).

COLLECTIONS. *Herb. Kew:* chiefly *Fungi;* the greater part of his collection seems to have been lost upon his death (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

Robinson, Charles Budd

(1871, Pictou, Nova Scotia; Dec. 5, 1913, Ambon, Moluccas), botanist, educated at Columbia University, where he took his Ph.D.'s degree in 1906; subsequently appointed Assistant Curator of the Herbarium of the N.Y. Botanical Garden. From 1908–11 Botanist in the employ of the Bureau of Science, Manila, P.I.; from Aug. 1911–Dec. 1912 on the staff of the Botanical Garden at New York again and subsequently returning to the Philippines, to enter the employ of the Bureau of Science for a second time. In the first part of 1913 he made the preparations for a planned stay in Ambon, where he was to collect on behalf of MERRILL who intended to give a revision of the Rumphian plants. He was murdered on one of his tours, falling a victim to the superstition of the Ambonese natives.

Author of 'Alabastra Philippinensia' and many other papers.

Several plants were named in his honour.

ITINERARY. March *1908*–Aug. *1911. Philippines*, visiting the island of *Polillo* (Aug. 1–24, 1909),[1] collecting near Manila *etc.* in *Luzon* (*1909 or 1910*).—*1913.* After his return from New York, on Mt Maquiling in *Luzon.* Leaving Manila (June 17) for *Singapore; Java:* Buitenzorg (end of June–early in July); *Bali* (July); *SW. Celebes:* Makassar, and *P. Boeton* (= *Boetoeng*) (July); *Amboina* (=

Ambon) (July 15–Dec. 5),[2] visiting Mt Salahoetoe *etc.*

COLLECTIONS. *Herb. Manila: Philippine* plants numbered in the B.S. (*cf. sub* Bureau of Science) series, and the *Ambon* collection of *c.* 1750 *nos.* Duplicates of the latter collection were distributed by MERRILL to various herbaria; *Herb. Bog.;* in *Herb. Leyden* 34 dupl.; in *Herb. N.Y. Bot. Gard.:* 524 species of flowering plants and ferns from *Ambon* (pres. 1918), probably ROBINSON's collection; *Herb. Kew:* duplicates *Philippine* plants (pres. 1918); *U.S. Nat. Herb. Wash.:* 316 dupl. *Philip.* plants, 651 from *Ambon* and dupl. from the *East Indies; Herb. Sydney: Philip.* plants (pres. 1909) and dupl. *Ambon* ferns; *Herb. Paris:* 10 specim. *P.I.*

In Ambon he was assisted by an Indonesian collector of the Buitenzorg Herbarium, *viz* MARDJOEKI. The collections of *Ambon* were approximately arranged in 2 groups: 1st those that could definitely be referred to species described by RUMPHIUS, numbering about 600 species, which were to be distributed with special labels giving both the modern binominal and the Rumphian name and reference for each species;[3] 2nd those species that were *not* described by RUMPHIUS, 1142 species.[4] Some groups of plants were dealt with separately.[5]

LITERATURE. (1) CH. B. ROBINSON: 'Botanical notes upon the island of Polillo' (Philip. Journ. Sci. C. Bot. 6, 1911, p. 185–228).

(2) E. D. MERRILL: 'The botanical exploration of Amboina by the Bureau of Science, Manila' (Science N.S. 38, 1913, p. 499–502).

(3) E. D. MERRILL: 'An interpretation of RUMPHIUS' Herbarium Amboinense' (Bur. Sci. Publ. 9, 1917, p. 1–595, w. map).

(4) E. D. MERRILL: 'Reliquiae Robinsonianae' (Philip. Journ. Sci. C. Bot. 11, 1916, p. 243–249).

(5) C. R. W. K. VAN ALDERWERELT VAN ROSENBURGH: 'The Amboina Pteridophyta collected by C. B. ROBINSON' (Philip. Journ. Sci. C. Bot. 11, 1916, p. 101–123, pl. 5–6).

Orchids by J. J. SMITH in *l.c.* 12, 1917, p. 249–262.

BIOGRAPHICAL DATA. Journ. N.Y. Bot. Gard. 15, 1914, p. 106; Philip. Journ. Sci. C. Bot. 9, 1914, p. 191–197, incl. bibliogr.; Encyclop. N.I. 3, 1919; Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Robinson, Herbert Christopher

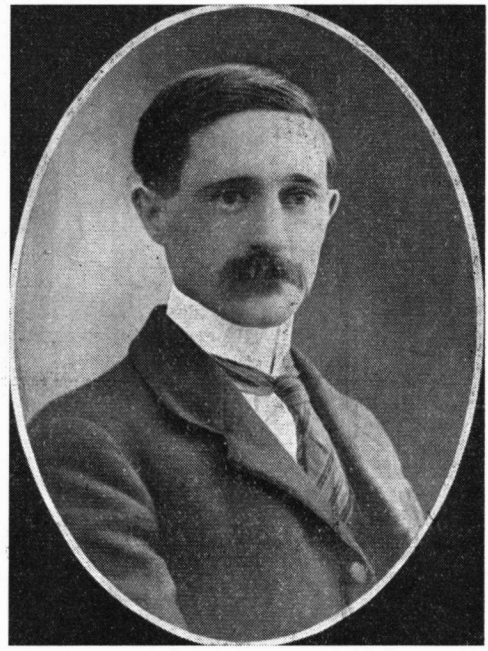
(1874, Liverpool, England; 1929, Oxford, England), zoologist who in 1896 made a journey to Queensland, and carried out an anthropological and zoological expedition to the Malay Peninsula with Dr N. ANNANDALE (see there)[1] in 1901–02. In 1903 he was appointed Curator of the Selangor Museum, in 1906 in addition Inspector of Fisheries; since 1908 Director of the Fed. Mal. States Museum, retiring in February 1926.

On part of his zoological tours he collected plants too, sometimes assisted by native collectors.

Author of many zoological papers (*cf. sub* Biogr. data).

Several species of plants were named after him.

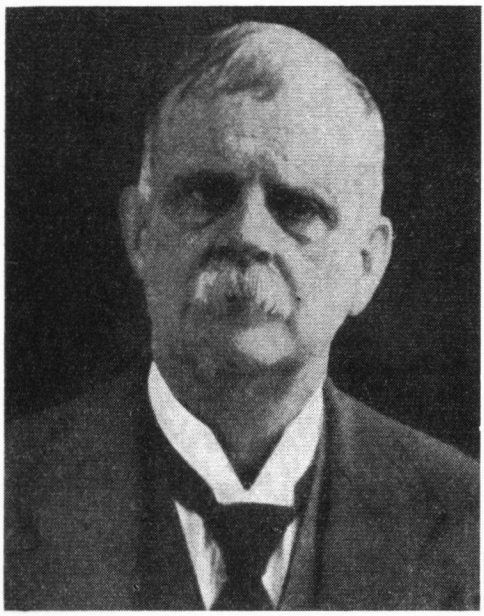
COLLECTING LOCALITIES.[2] *Malay Peninsula: P. Jarak* (Dec. 20, *1904*; no bot. coll. ?); G. Tahan (May–Sept. *1905*), partly with L. WRAY (see there):[3] leaving Kuala Lumpur (May 11), meeting WRAY at Kuala Kubu (11); after the departure of WRAY exploring the Tahan Valley (June 29–July 14);



C. B. ROBINSON

summit of G. Tahan (July 16 and 18); sources of the Teku River (19); Kuala Teku (July 25–Aug. 6); Kuala Tenok (Aug. 7); Kuala Tahan, Tembeling (8); up the Jelai River (9); Kuala Lipis (10, few days' stay); Kuala Temeling (fortnight's stay); Kuala Lumpur (Sept. 6); *Aroa Islands* (Aug. and Nov. *1906;* no bot. coll. ?);[4] in *1908* zoological tour to the *Rhio* (= *Riouw*)-*Lingga Archipelago* with C. B. KLOSS and E. SEIMUND (prob. no bot. coll.); with RIDLEY (see there) and C. B. KLOSS to Telom and Batang Padang Valleys (Nov. 1908);[5] expedition to Temengoh in Upper Perak with KLOSS and RIDLEY (see there) (July *1909*);[6] *P. Adang group of islands* off Langkawi with RIDLEY (see there) (Febr. *1911*);[7] by Dyak collectors on trip to the head of the Langat Valley to G. Menuang Gasing or Bt Nyor or Nuang (end of May–June 1911);[8] G. Tahan with KLOSS and RIDLEY (see there) (July–Aug. 1911);[9] by Dyak collectors at G. Mengkuang Lebar (Jan.–Febr. *1913*);[10] Dyak collectors stationed upon G. Kerbau (end of Febr.–March 1913);[12] Dyak collectors on G. Tampin (Sept. 1913; no bot. coll. ?).[11]—*Expedition in W. Sumatra,* Korinchi (= Kerintji) Peak (Febr.–June *1914*) with C. B. KLOSS (for detailed data see there).[13]—*Malay Peninsula: P. Sanggul,*

S of P. Tinggi (June 16–19, *1915*); expedition to Kedah Peak with KLOSS (Nov.–Dec. 1915);[14] visit to *Java* (Febr.–March *1916*) and zool. coll. at Tjibodas and Mt Idjen; *Langkawi Islands*, mainly on *P. Dayang Bunting* (Nov. and Dec. 1916, Jan. *1917*) with E. SEIMUND (see there); *P. Jarak* (Nov. *1919;*



H. C. ROBINSON

no bot. coll. ?);[15] Cameron's Plateau with HENDERSON (June *1923*); by Chinese collector near the summit of G. Benom (July–Aug. *1925*).[16]

COLLECTIONS. Chiefly in *Herb. Kew* (pres. 1913–16; and dupl. from the Brit. Mus. pres. 1925); *Herb. Brit. Mus.:* 1st set of collection G. Tahan 1905, 233 phanerogams (purch. 1906); 170 phanerogams and 10 ferns from Selangor, G. Mengkuang and G. Kerbau (pres. 1914); *Herb. Sing.:* 132 specimens collected on the mountains of Selangor (pres. by RIDLEY in 1914) and dupl. from G. Kerbau (pres. 1916); *U.S. Nat. Herb. Wash.:* 95 *Sumatra* dupl. (with KLOSS), and 23 *Mal. Pen.* The collection of KLOSS & ROBINSON from Kedah Peak numbers about 200 species.

For papers based on his collections see *sub* the literature referred to above.

LITERATURE. (1) H. C. ROBINSON: 'Itinerary in Perak, Selangor and the Siamese Malay States' (Fasc. Malayenses Suppl. 1903, p. i–xliv, 4 *t.* and map; in collaboration with N. ANNANDALE).

(2) Incomplete with a view to the zoological collections; in part of the localities mentioned here, he might have made zoological collections only.

(3) *cf.* ROBINSON in Journ. Fed. Mal. Stat. Mus. 3, 1908, p. p. iii–xxv, pl. A–D.

H. N. RIDLEY: 'On a collection of plants made by H. C. ROBINSON and L. WRAY from Gunong Tahan, Pahang' (Journ. Linn. Soc. Bot. 38, 1908, p. 301–336; *cf.* also in Journ. Fed. Mal. Stat. Mus. 2, 1907, p. 107–142).

(4) *cf.* Journ. Fed. Mal. Stat. Mus. 2, 1906, p. 8 *seq.*

(5) H. N. RIDLEY: 'The botany of the Telom and Batang Padang Valleys' (Journ. Fed. Mal. Stat. Mus. 4, 1909, p. 1–98).

(6) *cf.* Journ. Str. Br. Roy. As. Soc. *no* 57, 1910, p. 5–122.

(7) *cf. l.c. no* 61, 1912, p. 45–65.

(8) *cf.* Journ. Fed. Mal. Stat. Mus. 4, 1911, p. 235 and BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 170.

(9) *cf.* Journ. Fed. Mal. Stat. Mus. 6, 1915, p. 127–202.

(10) H. N. RIDLEY: 'On a collection of plants from Gunong Mengkuah Lebah, Selangor' (Journ. Fed. Mal. Stat. Mus. 5, 1913, p. 28–50).

(11) *cf.* Journ. Fed. Mal. Stat. Mus. 5, 1914, p. 51 *seq.*

(12) H. N. RIDLEY: 'Plants from G. Kerbau, Perak' (Journ. Fed. Mal. Stat. Mus. 6, 1915, p. 43–62).

(13) For the botanical results *cf.* RIDLEY in Journ. Fed. Mal. Stat. Mus. vol. 8, pt 4, 1917, p. 9 *seq.;* prefatory note by H. C. ROBINSON in *l.c.* p. 1–8.

(14) H. C. ROBINSON & C. B. KLOSS: 'The natural history of Kedah Peak' (Journ. Fed. Mal. Stat. Mus. 6, 1916, p. 219–244).

H. N. RIDLEY: 'The natural history of Kedah Peak'. Botany (*l.c.* 7, 1916, p. 37–58).

(15) *cf.* Journ. Fed. Mal. Stat. Mus. 10, 1922, p. 259 *seq.*

(16) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 167.

BIOGRAPHICAL DATA. Journ. Fed. Mal. Stat. Mus. 16, 1930, p. 1–12, incl. bibliogr.; Journ. Mal. Br. Roy. As. Soc. 8, 1930, p. 361–363; BACKER, Verkl. Woordenb., 1936.

Robinson, William Wellesley

COLLECTIONS. *Herb. Kew: Malaya, 1877.*

Rochussen, Jan Jacob

(1797, Etten near Breda, N.Br., Holland; 1871, The Hague, Holland), at first working for the benefit of commerce, from 1840–43 Minister of Finance, from 1843–45 extra-ordinary ambassador at Brussels, from 1845–51 Governor General of the D.E.I. and in 1858 appointed Minister of the Colonies.

He was largely interested in the development of natural science in the D.E.I., and when staying there, caused to be made drawings of plants and flowers, mainly of orchids from the Botanic Garden at Buitenzorg, which he presented to the then Minister of the Colonies. TEYSMANN was instructed to try to increase the value of these plates by means of adding analyses and short diagnoses of each species. In the course of the year 1853, 18 analyses and 6 diagnoses of new species were sent to Holland; in 1854 orchid flowers in alcohol with notes and explanations on behalf of the collection of drawings of ROCHUSSEN were sent.[1]

Some plants were named in his honour.

No botanical collections of his are known.

LITERATURE. (1) *cf.* Koloniaal Verslag for 1853 and 1854.

BIOGRAPHICAL DATA. Encyclop. N.I. 3,1919; BACKER, Verkl. Woordenb., 1936.

Rock, Joseph Francis Charles

(1884, Vienna, Austria; x), was trained for mission work; reached the Hawaiian Islands about 1907; Professor of Systematic Botany and Chinese, College of Hawaii.[1] He was commissioned by the director of the Hawaiian Sugar Planters' Experiment Station to proceed to Java and Burma for the purpose of collecting seeds, in quantity, of the most promising forest trees occurring on Mt Gedeh in West Java, and in Burma of *Taraktogenos kurzii* KING. It was his second visit to Java, as in 1916 he worked for some time at the Buitenzorg Herbarium.[2] In 1920 collaborator Bureau of Plant Industry and subsequently of the National Geographic Society, Washington; in 1924 Botanical explorer, Arnold Arboretum (Harvard Univers.), and Collaborator of Plant Industry, U.S. Dept of Agr., Jamaica Plain, Mass. (U.S.A.); in 1928 under the auspices of the Nat. Geogr. Soc. Washington once more.

Asplenium rocki C.CHR. was named after him.

COLLECTING LOCALITIES. *1919. W. Java:* Botanic Gardens at Buitenzorg; Tjibodas and Mt Gedeh (Aug. 15–21).[3]—From 1920 onwards he collected in N. Siam, Burma, Yunnan, China, Tibet, *etc.*

COLLECTIONS. He collected *seeds* of trees, shrubs and herbaceous plants which together make up the plant communities of Mt Gedeh. Including the seeds collected in the Gardens at Buitenzorg, he had over 350 species represented in his collection, of which 287 reached *Hawaii* in good condition. A collection from *Malacca* (wrong statement ?) is reported to be in *U.S. Nat. Herb. Wash.* His Hawaiian plants in *Herb. Hawaii*, dupl. in GRAY *Herb.* The ferns collected in the years 1920–24 in *U.S. Nat. Herb. Wash.* (1 *Java* plant!), incl. cotypes; the type specimens + dupl. set in *Herb. Copenhagen.*[4] His *China* collections 1924 and following years at *Washington* too and in *Herb. Arn. Arbor.*

LITERATURE. (1) Author of 'The ornamental trees of Hawaii' (1917).

(2) *cf.* Versl. Pl. Tuin Buitenzorg for 1916, p. 4.

(3) J. F. ROCK: 'The forest of Mt. Gedeh, West Java, a report on a collecting trip' (Hawaiian Planter's Record 22, 1920, p. 67–104, ill.).

(4) C. CHRISTENSEN: 'Asiatic pteridophyta collected by J. F. ROCK 1920–24' (Contrib. U.S. Nat. Herb. Wash. 26, 1931, p. 265–337, 29 pl.).

BIOGRAPHICAL DATA. Journ. Arn. Arbor. 6, 1915, p. 213–214, note; Amer. Men of Sci.; Who's who in America; Cox, Plant-hunting in China, 1945, p. 195–202 (mostly on China trips; initials wrong!).

Rodatz, Hans

entered the employ of the German New Guinea Company in 1897, as estate assistant.[1] He joined two Ramu expeditions (see below), on which he made botanical collections. In 1907 he was still employed in NE. New Guinea.[2]

Sauraula rodatzii LAUT. & K. SCHUM. was named after him.

ITINERARY. Former *Kaiser-Wilhelmsland, NE. New Guinea. 1898. 2nd Ramu Expedition* (Apr. 3–Sept. 3) under the command of E. TAPPENBECK (detailed itiner., liter., *etc.*, see there); H. KLINK (see there) and RODATZ were left behind on April 18th, the latter as leader of the Station.—*1899.* Bismarck Mts (June) with KLINK. *3rd Ramu Expedition* (Sept. 1899–Jan. or Febr. *1900*) under command of C. LAUTERBACH (itiner., liter., *etc.*, see there); KLINK too being a member again.

COLLECTIONS. *Herb. Berl.: c.* 250 *nos.*[3]

LITERATURE. (1) *cf.* Nachr. Kais. Wilh. Land 13, 1897, p. 15.

(2) *cf.* Deutsche Kolon. Blatt 19, 1908, p. 15–20.

(3) *cf.* K. SCHUMANN & LAUTERBACH in 'Nachträge zur Flora d. deutschen Schutzgebiete i.d. Südsee' (Leipzig 1905).

Rodbertus

? professional collector.

COLLECTIONS. *Herb. Berl.:* 741 *nos* from Manila, *Luzon, P.I.* (pres. 1851–52); also plants from Egypt.

Roderkerk, Evert Carel Mattheus

(1911, Beverwijk, N.H., Holland; x), Forest Officer, educated at the Agricultural College, Wageningen, arrived in the D.E.I. in 1936, and was successively stationed at Serang in Bantam (W. Java) 1937, in Benkoelen (S. Sumatra) 1938–39, and in Asahan (Sumatra East Coast) 1940–41; after World War II, since April 1947, stationed at Raha, P. Moena (S of SE. Celebes).

COLLECTING LOCALITIES. *1940. S. Sumatra:* Benkoelen Res., on Bt Doepi near Kepahiang, *etc.; Sumatra East Coast:* on Aug. 22, collecting at Asahan, Kota Pinang, Langga Pagoeng (Padang Bolak); also collecting in *1941.*

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg* (see there), numbered in the bb. series. In *Herb. Bog.:* 22 specimens without numbers (pres. by F.R.I.), and material of *Balanophora* from Benkoelen.

Rodway, Frederick Arthur

(1880, Hobart, Tasmania; x), physician, educated at Melbourne (Victoria) University; medical practitioner, mostly in New South Wales. At present at 'The Corner', Nowra, N.S.W., Australia. He is largely interested in the flora, and is the owner of an extensive private herbarium. He and his wife made a trip to Java (see below).

ITINERARY. *1938.* In the s.s. 'New Zealand' sailing from Sydney; *Bali* (Oct. 3–6): Kintamani, Sangeh, Denpassar, seashore at Kloenkoeng, Bangkasa, Besakih, Tabanan, Karangasem; *Centr. Java:* Djokjakarta (3 days); Semarang; *W. Java:* Batavia and visit to the Botanic Gardens at Buitenzorg, and Poentjak Pass. His stay in *Java* covered Oct. 7–22.

COLLECTIONS. *Herb. Kew:* dupl. *Java* and *Bali* plants (pres. 1939).[1] In *private herbarium:* 13000 specimens, chiefly Australian and Tasmanian species, 20 from *Bali* and 23 from *Java*. Only part of the *Java* and *Bali* plants were sent to *Kew* for identification. The collection of these islands comprise especially grasses and weeds.

LITERATURE. (1) *cf.* Kew Bull. 1940, p. 703.

Roebelen, Carl

(1855, Geisslingen, Würtemberg, Germany; Jan. 6, 1927, on the way from Wien Chan in the direction of Chieng Kwang, N. Siam), served his horticultural apprenticeship in the Royal Garden of the King of Würtemberg at Friedrichshafen, later working in several gardens in foreign countries. Spring 1880 he entered the employ of Messrs SANDER & Sons, St Albans, which firm sent him to the Philippines;[1] about 1882 he left SANDER's and worked for the remainder of his life (except for a brief period in 1884) for his own account. About 1886 he made Bangkok his headquarters, but continued to travel in Siam and neighbouring countries. During the war 1914–18, he was interned in India; at the end he went to Switzerland and remained there till he was allowed to return to Siam in 1924.

Some orchids were named after him.

COLLECTING LOCALITIES. *c. 1880–82. Philippines,* in SANDER's employ; possibly spending the next years too in that Archipelago.—*After 1884* he visited *Borneo, Sumatra,* and *Java,* many small islands, Burma and Cochin-China.

COLLECTIONS. According to KERR[2] probably no dried collections made. He collected many orchids, all of which were sent to London to be sold by auction; no exact localities of his finds are known; diaries, manuscripts, *etc.* are lost. Herbarium specimens probably made from living plants.

LITERATURE. (1) C. ROEBELEN: 'Phalaenopsis in the Philippine islands' (Gard. Chron. 3rd ser., vol. 7[1], 1890, p. 459).

(2) In 'Early botanists in Thailand' (Journ. Thail. Res. Soc. Nat. Hist. Suppl. 12, 1939, p. 20).

BIOGRAPHICAL DATA. Florists Exch. 65, p. 371 + portr.; Journ. Siam Soc. Nat. Hist. 7, 1927, p. 132–134; MÖLLER's Deutsche Gärt. Zeit. 42, 1927, p. 175–176; BACKER, Verkl. Woordenb., 1936; Journ. Thail. Res. Soc. Nat. Hist. Suppl. 12, 1939, p. 20.

Roelofs, J. W., *cf.* Forest Research Institute, Buitenzorg.

Roelofsen, Jan Hendrik

(1878, Tjilatjap, Java; x), since 1902 Forest Officer in D.E. Indian Government service, stationed in Java, successively at Todanan (Kediri), W. Priangan (1906), since 1907 in the teak districts; in 1914 for some time on the staff of the Forest Research Institute at Buitenzorg, to be restationed in the teak districts in 1915; in 1920 transferred to Priangan Residency (for some time besides in charge of the forest administration of Krawang), and in 1925 to Salatiga in Central Java. Since 1926 Inspector, stationed in the Head-office at Buitenzorg; he retired in 1929.

COLLECTING LOCALITIES. *19 .. Centr. Java:* Banteren near Banjoemas.—*1923. W. Java:* G. Rakoetak, Bandoeng and G. Malabar.

COLLECTIONS. *Herb. Bog.:* plants from Banjoemas; Priangan plants numbered in BEUMÉE's series (see there).

Roemer, von

COLLECTIONS. His *Java* collection was in the possession of the 'Naturhistorische Verein für die Preussische Rheinlande und Westfalen', inserted in the 'Ausserrheinische Herbarium'. In 1936 it was transferred with the said herbarium to *Herb. Berl.*. WIRTGEN in Verh. Nat. Hist. Ver. Preuss. Rheinl. u. Westfalen 64, 1907, Sitz. Ber. E. p. 47–51, does not mention it.

Not collected himself?

Römer, Lucien Sophie Albert Marie von

(1873, Kampen, O., Holland; x), from 1903–06 psychiatrist at Amsterdam, from 1906–13 Medical Officer in the Royal Dutch Navy; since 1913 Inspector of the Civil Medical Service in the D.E.I.; from 1930 till his retirement in 1932 chief Government Physician in the Service of Public Health at Bondowoso (E. Java); subsequently medical practitioner at Malang (E. Java); in 1948 still living in Java. He joined a New Guinea expedition (see below) and visited some islands W of Sumatra; during both tours he made botanical collections.

Several plants were named after him.

ITINERARY. *2nd* LORENTZ *Expedition, 1909–10.*[1] *cf.* also *sub* NOUHUYS, LORENTZ and HABBEMA. Sailing from Soerabaja (Aug. 15, *1909*); *Timor:* Koepang (21); *Aroe Islands:* Dobo (29); *Dutch S. New Guinea:* running into Lorentz River (= Noord River) (Sept. 2); reconnaissance of Van der Sande River (= Bibis River) (Sept. 6–12; this trip without VON RÖMER); ascending Lorentz River; Alkmaar bivouac (Oct. 4); ridge of the Hellwig Mts (Oct. 16); proceeding (27) to the everlasting snow (*cf. sub* NOUHUYS, LORENTZ and HABBEMA); VON RÖMER in the meantime returned to Alkmaar bivouac and set out (Nov. 13) on a second tour to Hellwig Mts in company with RACHMAT (see there), ascending the summit (Nov. 29); Alkmaar bivouac; part of the way downstream Lorentz River (Jan. 10, *1910*); leaving the river (March 17) and returning by way of *Ambon* and Makassar (*SW. Celebes*) to Soerabaja (arriving March 31).—Dec. *1910*–Jan. *1911.* Islands W of Sumatra: *Nias* (since Oct. 19); (*Ne*) *Nako* (= *Hinako*) *Islands* (Jan.).

COLLECTIONS. *Herb. Bog.:* 1335 *nos* from *New Guinea,* including 7 plants from the top region collected by LORENTZ and HABBEMA;[2] duplicates in *Herb. Leyden, Utrecht, Kew* and *Berl.*[3] In *Herb. Bog.:* some plants from *Nias, nos* 1–48 and I–XXV; and the *nos* 1–26 from the *Hinako Islands.*

For living plants from *New Guinea,* see *sub* RACHMAT.

LITERATURE. (1) *cf.* Bull. Mij Bev. Nat. Ond. Ned. Kol. *nos* 59–64; Tijdschr. K.N.A.G. 1910,

p. 144, 357, 573, 1030, 1244 and 1301; Geogr. Journ. Lond. 37, 1911, p. 477–500; Versl. Milit. Expl. Ned. N.G. 1907–15, Weltevreden 1920, p. 28–29.

H. A. LORENTZ: 'Zwarte menschen—Witte bergen' (Leiden 1913).

(2) *cf.* v. R.: 'Kurze allgemeine Mitteilungen über Ort und Zeit des Einsammelns des Herbarium Materials der Süd-Neu-Guinea Expedition im Jahre 1909–10 unter Leitung des Herrn Dr Jur. H. A. LORENTZ' (Buitenzorg, Apr. 27, 1910).

(3) The results were published in Nova Guinea vol. 8, 1909–14.

cf. also J. J. SMITH: 'Vorläufige Beschreibungen neuer papuanischer Orchideen' II (Bull. Dép. Agr. Ind. néerl. *no* 39, 1910, p 1–22).

cf. also 'Beitr. z. Flora Papuas.' (ENGL. Bot. Jahrb. 1912–).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; Persoonlijkheden in Nederland, 1938, + portr.

Roepke, Walter Karl Johann

(1882, Hohensalza (Inowraclaw), Posen; x), entomologist, educated in the Universities of Berlin and Zürich, taking his Ph.Dr's degree in 1907 in the latter university; from 1908–11 on the staff of the Experiment Station at Salatiga (Centr. Java), from 1911–12 Acting Director, and from 1912–18 Director of the same institution; 1918–19 Entomologist at the Institute for Plant Diseases, Buitenzorg; since 1919 Professor at the Agricultural College, Wageningen (Holland), successively of Tropical Agriculture and of Plant Diseases. He visited the Moluccas in 1929, when he was in the D.E.I. on the occasion of the 4th Pacific Science Congress.

Author of entomological papers on the butterflies of Java, *etc.*

COLLECTING LOCALITIES. *Centr. Java:* Salatiga (Jan. *1918*).—*Moluccas, P. Batjan:* G. Sibela (Aug. 11, *1929*).[1]

COLLECTIONS. *Herb. Bog.:* 18 *nos* from *Batjan,* some from *Java.* In 1909 he discovered *Mimosa invisa* on G. Lawoe, the first record from Java.[2]

LITERATURE. (1) W. J. K. ROEPKE: 'Herinneringen van een entomoloog aan het eiland Batjan' (Trop. Nat. 24, 1935, p. 73–83, 96–105, 12 fig.).

(2) *cf.* BACKER & VAN SLOOTEN, Handb. theeonkruiden, 1924, p. 122.

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 312.

Roesil

Indonesian collector from Buitenzorg, who was in the employ of the Deli Experiment Station, Medan (Sumatra), in 1915. He was to make a collection of the vegetation on fallow tobacco lands.

COLLECTING LOCALITIES. *1915. Sumatra East Coast:* at Kabandjahé (June 22), near Medan (Aug. 2), *etc.*

COLLECTIONS. *Herb. Deli Exp. Stat.,* > 529 *nos.* The plants were identified at Buitenzorg.

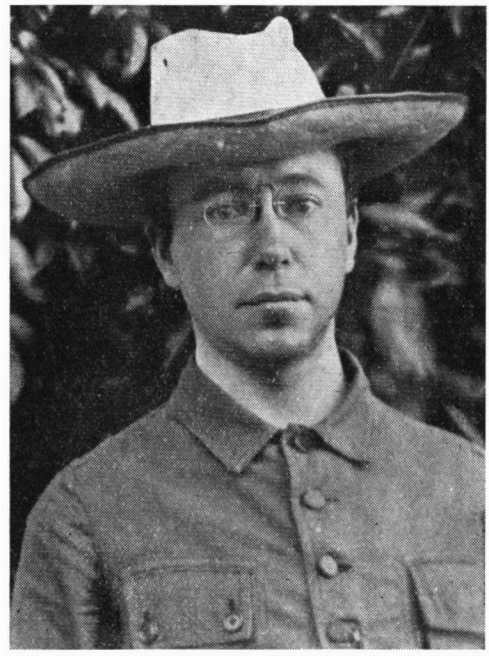
Roeslan, *cf. sub* Forest Research Institute, Buitenzorg.

Roestel

(living in the 18th century), pharmaceutical chemist at Landsberg, Germany.

Roestelia REBENTISCH was named in his honour.

COLLECTIONS. *Herb. Berl.:* 160 species, especially from *Malacca* (with *Herb.* WILLDENOW, purch.



VON RÖMER

in 1818). As WILLDENOW died in 1812, we may assume that the plants were collected previously. By himself?

Rogers, Hollis Jetton

(1911, Murray, Kent., U.S.A.; x), botanist, educated at Murray State Teachers College and the University of Kentucky; from 1941–42 teacher in the latter university; from 1943–45 serving in the U.S. Army; subsequently Graduate Student at Duke University, Durham, N. Carolina. He was in New Guinea with Airborne Engineers from July 1943–Jan. 1945.

COLLECTING LOCALITIES. *1944. NE. New Guinea,* Mandated Territory: Ramu Valley, just above where the Gusap meets the Ramu, near the Mariwassa village, and on the headwaters of the Markham Valley (*nos* 3001–3024, coll. Febr.–Apr.); vicinity of Aitape (= Eitape) and between the Aitape and Drennimore rivers, on the coral islets *Tumeo* and *Angel* just off the shore there (*nos* 3025–3080, coll. June–Dec.).

COLLECTIONS. *Herb. Arn. Arbor.: nos* 3001–3080 (acq. 1944); dupl. will be sent to *Herb. Duke University* and *Herb. Univ. Kentucky; Herb. Nat. Hist. Mus. Chicago:* 34 *N.G. Algae.*

Rogerson, Clarke T.
during World War II sergeant in army hospitals; zoologist by profession.
COLLECTIONS. *U.S. Nat. Herb. Wash.:* about 250 specim. of seed plants from *Luzon (Philippines)*, mostly collected near Manila; *Herb. Univ. Michigan: Fungi* from *Luzon*.

Rojas, J., *cf. sub* Forestry Bureau, Manila.

Rola, C. & F. L., *cf. sub ditto*.

Roldanus, J., *cf. sub* Forest Research Institute, Buitenzorg.

Romburgh, P. van
(1855, Leyden, Z.H., Holland; 1945, Baarn, U., Holland), chemist, educated at Leyden University, taking his Ph.Dr's degree in 1881; from 1878 onwards Assistant at the University; from 1890–1903 Head of the Economic Garden and the Agricultural-Chemical Laboratory of the Botanic Gardens at Buitenzorg; he made some official tours in search of rubber-yielding plants. From 1903–26 Professor of Chemistry at Utrecht; in 1916 settling at Baarn.
Author of phytochemical papers.
Some plants were named after him.
ITINERARY.[1] *1893.* Tour to *Centr.* and *E. Java.* —*1898. S. Sumatra*, Lampong Districts: Tandjong Pinang Estate in Toelang Bawang Division; *via* Meraksa by boat to Menggala; Tandjoeng Agoeng, and on the way to Benkoelen Residency *via* Negeri Besar–Negara Batin (Aug. 31)–Boemi Agoeng–Segara Midëi–Balambangan–Negri Batin (Sept. 2)–banks of the Wai Oempoe–Tandjoeng Koeroeng–Kasoy–Djoekoe Batoe–Way Tenong–Baroe–Liwa–Kroë; by boat to Benkoelen, making trips to Taba Penandjoeng, Tandjoeng Heran, Kramat Mentiring, desa Soerbaja, desa Taba Padjau; by sea to *W. Sumatra:* Padang, Datar, Alahan Pandjang; Moeara Laboe, from where making trips to the forest of the Soengai Tjoepa, Sg. Lambai, Bt Pintoe Kajoe (near Loeboeq Sampir), Loeboeq Gedang, Bt Soengai Djando and Bt Soengai Pinang; from Loeboeq Gedang *via* Moeara Laboe to Alahan Pandjang, Solok, and Sawah Loento; excursion to the forests of Sidjoendjoeng; environs of Fort de Kock and Pajakombo; *via* Manindjau to Loeboeq Basoen; Loeboeq Sikaping (Oct. 22–24); *via* Pantie Forest to Taloe, Ajer Bangis, and back to Padang; returning to Buitenzorg (arriving early in Nov.).—*1899. SE. Borneo* (March–Apr.): Bandjermasin; by boat to Boentok (middle course Barito), from where making trips to Pemangka, Danau Medara, Kelahian, Ajoe River (as far as Moeroeng Paken), Sg. Boeroeng and Sg. Mendioet; Moeara Teweh, Sg. Lahai (ascending past Tjoedjoe); downstream again to Moeara Teweh, Marabahan, Negara, Kendangan (trip to Harian), and Bandjermasin.—*W. Java*, Bantam: Tjitoedjah (Aug. 1).—*W. Borneo* (Sept.–Oct.): Pontianak; by boat to Sambas, and trip to Paloh *via* Pimpiran and Kalimantang; trips to Sg. Stingga, Sg. Lokan Mendjawa (or Doengo), ascent of the Asoe Asang (600 m); Pontianak, making trips to Biang above Sanggau (on the Kapoeas), forests near Sg. Boejanan; from Tajan by water to Kemaring; back to Pontianak; *Singapore; Batam (Riouw)*, making a trip in the forests; *Boeroe* and *P. Loban* opposite of it; *via Singapore* to *Sumatra East Coast*, Deli: Bindjei, forest near Bandar Baroe (above Petani), ascent of the Sempoelana Angin (1400 m); back to Buitenzorg.
He made collections in *Java* too. In *W. Java*, Bantam at: Poleng, Bodjong Manik and Moentjang, besides in Priangan Residency, and probably in other localities, between *1890–1903*.
COLLECTIONS. *Herb. Bog.*, mainly rubber and gutta-yielding plants,[2] but orchids[3] and *Pipers*[4] too.
Several plants for *Hort. Bog.*, from *Sumatra, Borneo, etc.*
LITERATURE. (1) *cf.* P. VAN ROMBURGH: 'Caoutchouc en Getah-pertja in Nederlandsch-Indië' (Meded. 's Lands Plantentuin *no* 39, 1900).
(2) J. G. BOERLAGE: 'Enumération des végétaux producteurs de caoutchouc et de Getah-pertja récoltés par le Dr. P. VAN ROMBURGH dans les îles de Sumatra, Borneo et Java' (Bull. Inst. Bot. Buit. *no* 5, 1900, p. 1–29; in the preface his last trips to Borneo, Riouw and Sumatra are wrongly stated to have taken place in 1898).
(3) *cf.* Bull. Dép. Agric. Ind. néerl. *no* 5, 1907, p. 17 and Icon. Bogor. 3, 1909, p. 20.
(4) Several cited by S. H. KOORDERS in 'Monographie der Piperaceae van Java' (Kon. Akad. Wet. Amsterdam 2e sect. 14, *no* 4, 1908, p. 1–75).
BIOGRAPHICAL DATA. Chem. Weekbl. 23, 1926, p. 22–39 + portr.; bibliogr. in *l.c.* p. 39–57; BACKER, Verkl. Woordenb., 1936; Jaarb. Kon. Akad. Wet. Amsterdam 1944–45, 1946, p. 141–144, + portr.

Rookmaker
sent a living orchid from Boné near Pampano-(e)a (*SW. Celebes*) to *Hort. Bog.* The plant is cited in a publication of J. J. SMITH.

Roos, R.
(† Jan. 3, 1919, near kp. Semboeang, Atjeh, Sumatra), Civil Administrator at Serbodjadi, Atjeh (*N. Sumatra*), successor of BAPTIST (see there), sent material of *Rafflesia sp.* in spirit to KOORDERS;[1] in *Herb.* KOORDERS = *Herb. Bog.*
LITERATURE. (1) *cf.* S. H. KOORDERS: 'Botanisch overzicht der Rafflesiaceae van Ned. Indië' (Meded. N.I. Ver. t. Nat. Besch. *no* 4, 1918, p. 110–111).

Roosendaal, J. van
cf. sub Forest Research Institute, Buitenzorg; when a Forest Officer at Ngawi (*E. Java*), he sent 2 living wild *Kaempferias* to *Hort. Bog.*

Ropi, *cf. sub* Forest Research Institute, Buitenzorg.

Roque, T. N., *cf. sub* Forestry Bureau, Manila.

Roringpandey, F., *cf. sub* Forest Research Institute, Buitenzorg.

Rosaria, *cf. sub* Forestry Bureau, Manila.

Rosenberg, Carl Benjamin Hermann Baron von (1817, Darmstadt, Germany; 1888, The Hague, Holland), already developed an interest in natural sciences and travelling, when still a child; he came to the D.E.I. as a private soldier, and acted surveyor in Sumatra for 16 years, from 1840–42 as assistant of JUNGHUHN. From 1856–59 he was in the employ of the Topographical Service at Batavia, joining a New Guinea Expedition in 1858 (see below) as draughtsman. The next year he was transferred to the Civil Service and was placed at the disposal of the Governor of the Moluccas; acting Civil Administrator in S. Ceram, instructed to make a map of Ceram; since 1860 in charge of surveying only. In 1862 he went on sick-leave to Java and in June of that year appointed offical in charge of natural science investigations and collector for the Museum at Leyden, stationed in Ambon. In 1866 he went on European furlough and was reappointed in 1868, arriving in Ternate early in September. He made extensive travels in the eastern part of the Archipelago, and retired towards the end of 1871.

In proportion to the extent of his travels, the results are pretty poor; he is charactarized by WICHMANN as a 'Müssiggänger' (= idler) who did not even take the trouble to visit the interior.

Author of ethnological and ornithological papers, and of a book on his stay in the Malay Archipelago.[1]

Uvaria rosenbergiana SCHEFF. was named after him.

ITINERARY.[1] *N. Sumatra*, Batak Lands (Oct. 2, *1840*–Jan. 4, *1845*), partly in company with JUNGHUHN, visiting Padang Lawas *etc.;* the first years headquarters at Pertibie, since April 1843 at Tobing; in Oct. 1844 transferred to Siboga; he made a voyage on a warbrig to Baros-Singkel and Trumon, and was transferred to Padang in Jan. 1845.—*W. Sumatra*, Padang Highlands (Jan. 11, *1845–1856*), making trips to IX Kota (Apr. 29–July 2, *1845*), to Agam and IV Kota (June 24–Oct. 28, *1849*), to the eastern districts of the Highlands (May 29–Aug. 8, *1852*), an ascent of G. Talang (May 27–June 8, *1854*), stay at Brakian (Febr. 28–March 25, *1856*); his stay in W. Sumatra was interrupted by some visits to the islands west of it: to the *Mentawai Islands* (March 24–May 9, *1847;* March 24–June 9, *1849;* Aug. 27–Sept. 8, *1852*)[2], to *P. Enggano* (Sept. 10–24, 1852), to the *Banjak Islands* (July 12–Aug. 25, *1853*), to *Nias* (Sept. 6, *1854*–Sept. 11, *1855*),[3] and to *Hog-Island* or *Simaloer* (Sept. 13–26, 1855).—*1858. Voyage in the 'Etna'* (*cf.* also J. H. CROOCKEWIT) to the *SW.* and *N. coast of Dutch New Guinea* (VON ROSENBERG following in the bark 'Atie Atul Barie').[4] Sailing from Ambon (March 15); *P. Adi* (20); Karoefa River (25–28); Bight of Kaimana (30); Speelmans Bay (Apr. 2); Arigoena (= Argoeni) Bay (5); Triton Bay (12), *Lakahia* Isl.; Timbona (= Etna) Bay; departure (Apr. 24) for the N. coast: Doreh (May 14); sailing (June 17) for Humboldt Bay (staying June 23–July 2, making some tours by land to Cape Bonpland *etc.*); back in Ambon (21).—From April 26, *1859*–Dec. 17, *1861*, stationed in *Ceram*,[5] making a tour to the *Papua Islands* in *1860:*[6] leaving Wahai (July 2); *Misoöl* (4–9); *Batanta* (11); *Waigeo(e)* (12–17); *Batanta* (23); *Salawati(e)* (Samate on the 24th, and western part); *via Misoöl* (Aug. 7) back to Wahai (30).—*1863–64.* Tour to *N. Celebes:*[7] Gorontalo (Apr. 2–May 7, *1863*); trip to Medelido (May 8–21); starting (June 7) a tour along the S. coast of the Gulf of Tomini going as far as Pos(s)o (*Centr. Celebes*) and back (the trip covering 34 days), visiting: the mouth of the Bongka River (*E. Peninsula*) (June 26–30), *P. Japara* (July 4) and the opposite coast (5), *etc.;* back at Gorontalo (10); to Lake Limbot(t)o (Aug. 10), staying at Ajer Panas (10–27), at Limboto (Aug. 28–Sept. 5) and Panybi (Sept. 7–15); Gorontalo (Sept. 16–Oct. 20); crossing the peninsula to the north (Oct. 21–27) to Kwandang (= Koeandang), making a trip to the gold-diggings at Soemala(t)ta (Oct. 28–Nov. 3); Kwandang (Nov. 4–6); Gorontalo (7–15); Bone, E of Gorontalo (16–26); Gorontalo (Nov. 27–Apr. 12, *1864*); Bone (Apr. 13); Toelabollo (Apr. 14–May 20); Gorontalo (May 21–June 12); *Togean* (= *Schildpad*) *Islands* in the Gulf of Tomini (June 21–23); back at Gorontalo (June 24–Aug. 16); on account of a severe attack of rheumatism to Kema and Manado (staying Aug. 19–Sept. 6); to Tondano (7–12), taking hot baths at Passo (Sept. 12–Oct. 2), *via* Empong and Manado back to Kema, on the way making a trip to Lake Linoe; Kema (Oct. 14–Nov. 27); embarking for Ambon (28). In Dec. 1864 back in *Ambon* again.[8]—*1865.* Tour to the *SE. Moluccas.*[9] Sailing from Ambon (Jan. 6) to the *Aroe Islands:* Dobo (arriving the 22nd, 1½ months' stay, exploring *P. Wamar* and part of the S. coast of *P. Wokam;* headquarters at kp. Wokam on *P. Wokam* (since March 8); back to Dobo (Apr. 16); sailing (May 2) for *P. Kobroör*, Wonoembai (= Manoembai) Distr. (May 5–June 7); *Maikoor* (June 12–July 27), at Wangal *etc.;* when in the latter island, ROSENBERG himself was ill part of the time and sent his collectors to *P. Trangan* (July 6–12) and Wangal-East (16–22); embarking (27) for the *Kei* (= *Kai*) *Islands: Groot Kei* (= *Noehoetjoet*), at Larrat (July 30–Aug. 6); Doellah, chief kampong of *Klein Kei*, said to be situated on Isl. *Doellah* (= probably Toeal) (Aug. 10–30), visiting the adjacent islands *Tiando* (= prob. *Tajandoe*), *Tjonfolokker, etc.; P. Koor* (= *Koer*) (Sept. 2–3); *P. Tijoor* (= Tioör) (Sept. 5); *Watoebe(l)la Islands: P. Kassoewoei* (= *Kasioei*) and *P. Watoebela* (5–8); *Goram* (= *Gorong*) *Islands: P. Manawoka* (10–16), *P. Goram* (= *Gorong*) (17–30); back in *Ambon* (Oct. 5).—*1868.* From September staying in *Ternate*, making some minor tours: to Oba and Dodinga in *Halmaheira* (Sept. 30–Oct. 1), to *Tidore* (Oct. 2), *etc.* At the end of the year sailing for *NW. New Guinea*, Vogelkop: Sor(r)ong (Dec. 24–28).—*1869.* Proceeding to Geelvink Bay (staying Jan.–July): Dorei (Jan. 1–18), Mefoor (= *P. Noemfoor*) (Jan. 21–Febr. 3), *Kor(r)ido* (March 12–Apr. 3), *P. Japen* (Ansoes) (Apr. 5–May 6), *Meos* (= *Mios*) *Noem* (May 7–28), Andai (June 2), Dorei (3–7) and Samate on *Salawati* (June 17–July 4), his hunters

on *Batanta* too; back in *Ternate* (July 9).—*1870.* Sailing from Ternate (Jan. 11); *P. Batjan:* Labuha (= Laboeha) (14–16); *Halmaheira:* Gane (16–18); *Salawati:* Samate (Jan. 28–Febr. 12); *NW. New Guinea:* Bay of Dorei (Febr. 18), VON ROSENBERG setting out for Andai (staying till May 19; in April his hunters at Hattam); Bay of Dorei (19–20); *Salawati:* Samate (May 28–June 1); back in *Ternate* (June 20).[10]

According to the cited obituary he touched at *Timor*, the *Banda Group*, and *Boeroe*, during one of his tours. No further details known to me.

COLLECTIONS. Mainly zoological and especially ornithological collections in the Leyden Museum; he employed native collectors.[11] Many New Guinea birds (1858) went to Darmstadt (Germany).

Exceptionally he collected botanical material; 20 *nos* of seeds and orchids from *New Guinea* were presented to TEYSMANN in *1858;*[12] sometimes plants of his are cited in literature,[13] evidently originally sent to *Hort. Bog.* and partially preserved in *Herb. Bog.* In *Herb. Leyden: Celebes* cryptogams (pres. 1864 through the intermediary of the Museum!), and some material from *New Guinea* (Doré), Mefoor (= *P. Noemfoor*) and *Salawat(t)i* (pres. 1870 *ditto*).

LITERATURE. (1) C. B. H. VON ROSENBERG: 'Der Malayische Archipel' (Leipzig 1878).

(2) C. B. H. VON ROSENBERG: 'De Mentawei-eilanden en hunne bewoners' (Tijdschr. Ind. Taal-, Land- en Volkenk. 1, 1853, p. 399–440); 'Geographische en ethnographische beschrijving van het district Singkel, de landen liggende langs de Simpang kanan en de Banjak eilanden, benevens eene korte aanteekening nopens de Simpang kiri' (*l.c.* 3, 1854, p. 397–476); 'Een en ander over de bewoners der Mentawei-eilanden' (Intern. Arch. Ethnogr. 1, 1888, p. 218–219, pl. 18).

(3) J. F. NIEUWENHUIS & C. B. H. VON ROSENBERG: 'Verslag omtrent het eiland Nias en zijne bewoners' (Verh. Bat. Gen. K. & W. 30, 1863, p. 1–153).

(4) C. B. H. VON ROSENBERG: 'Beschrijving eener reis naar de Zuidwest- en Noord-Oostkust van Nieuw Guinea' (Batavia 1859–62, 3 pts in Nat. Tijdschr. N.I. 19, 1859, p. 399–422; *l.c.* 22, 1860, p. 306–353; *l.c.* 24, 1862, p. 333–352).

H. D. A. VAN DER GOES: 'Nieuw Guinea, ethnographisch en natuurkundig onderzocht in 1858' (Bijdr. Taal-, Land- en Volkenk. 5^2, 1862, p. 1–106).

The data of the above-cited papers do not fully agree; the ones cited in the itinerary are those of ROSENBERG.

(5) C. B. H. VON ROSENBERG: 'Beschrijving van eenige gedeelten van Ceram' (Tijdschr. Ind. Taal-, Land- en Volkenk. 16, 1867, p. 97–182, 1 map); 'Korte beschrijving der Teloeti-baai (Ceram)' (Tijdschr. K.N.A.G. 2, 1877, p. 147).

(6) C. B. H. VON ROSENBERG: 'Verhaal eener reis naar de Papoeasche eilanden Misool, Salawatie, Batanta en Waigeoe' (Nat. Tijdschr. N.I. 24, 1862, p. 363–402).

(7) C. B. H. VON ROSENBERG: 'Reistogten in de afdeeling Gorontalo' (Amsterdam 1865, uitg. Kon. Inst. Taal-, Land- en Volkenk. N.I., 162 pp., 6 pl. and 4 maps).

(8) *cf.* Koloniaal Verslag for 1864.

(9) C. B. H. VON ROSENBERG: 'Reis naar de Zuidoostereilanden gedaan in 1865 op last der Regeering van Nederlandsch-Indië' ('s-Gravenhage 1867, 125 pp.).

(10) C. B. H. VON ROSENBERG: 'Reis naar de Geelvinkbaai op Nieuw Guinea in de jaren 1869 en 1870' (Kon. Inst. Taal-, Land- en Volkenk. N.I. 1875, p. 1–153, 21 pl. incl. portr. and maps).

(11) *cf.* VETH: 'Overzicht van hetgeen ... gedaan is voor de kennis der Fauna van Ned.-Indië' (Dr's thesis, Leiden 1879), p. 138–139, 145–150, 158–161.

(12) *cf.* Nat. Tijdschr. N.I. 16, 1858/59, p. 365.

(13) *cf.* TEYSMANN & BINNENDIJK: 'Plantae novae in Hort. Bog. cultae' (Nat. Tijdschr. N.I. vol. 27; some plants from *Ceram* and *New Guinea*); *cf.* also *l.c.* 29, 1867, p. 249.

BIOGRAPHICAL DATA. Portrait, see *sub* Liter. 1 and 7; Bijdr. Taal-, Land- en Volkenk. N.I. 38, 1889, p. 130–143, w. bibliogr.; Tijdschr. K.N.A.G. 1889, p. 318; Ind. Gids 11^1, 1889, p. 431; Encyclop. N.I. 3, 1919; BACKER, Verkl. Woordenb., 1936.

Rosenbluth, R.

Forest Officer of the Bureau of Forestry, Manila, P.I.

Diospyros rosenbluthii ELMER was named after him.

COLLECTIONS. *Herb. Manila*, numbered in the F.B. (see *sub* Forestry Bureau) series, incl. plants from *Mindoro* (May *1908*) and *Masbate* (Apr. *1909*). Also collected together with TAMESIS. Small collections. 65 Dupl. in *U.S. Nat. Herb. Wash.*

Rosenburgh, V.

is cited by MERRILL in Enum. Born. Pl., 1921, as the collector of *Ficus consociata* BL. *var. murtoni* KING in *Dutch Borneo* (*cf. l.c.* p. 222). Rightly: VAN ROMBURGH (see there).

Rosenstingl, Walther

physician at Gmunden (Austria), lived for some years in *Sumatra West Coast.* He collected at Soeliki, Padang Highlands,[1] at L Kota, Mangani (Dec. 22, *1922*), *etc.*

In 1928 he sent 2 Sumatra plants for identification to Leyden Herbarium. He then lived at Enns, Austria.

LITERATURE. (1) *cf.* Oesterr. Bot. Zeitschr. 79, 1930, p. 352–354.

Rosier, Johannus Petrus

(1894, Amsterdam, Holland; Sept. 18, 1944, drowned o/b s.s. Zyniyo Maru as a Japanese P.O. W.), schoolteacher in Holland, 1914–18; since 1919 in the D.E.I. in the same function. Since August 1932 acting Head of the High School (M.U.L.O.) at Buitenzorg.

COLLECTING LOCALITIES. *1940–41. S. Sumatra:* Lampong Districts, 'De Giesting' (1940, July 1941).—*W. Java:* Bodjong Lopang (Djampang Tengah) (1940–41); Doengoes Iwoel (1940–41).

COLLECTIONS. Foster-plants of catterpillars, sent for identification to *Herb. Bog.* For the greater part insufficient material of small importance; some specimens preserved in *Herb. Bog.*

In 1940 he presented a living plant from *Sumatra* to *Hort. Bog.*

Ross, Capt. J. D.

COLLECTIONS. In *1879* and *1881* he presented ferns, rare orchids, palms, seeds, *etc.* to *Hort. Sing.* The origin of the specimens is not recorded, nor whether dried material was made of the living plants.

Rossum, Hendrik Izaäk Philips van

(1875, Soerakarta, Java; 1926, Mr Cornelis, Java), since 1905 Head Overseer in the D.E. Indian Forest Service, successively stationed in Banjoemas (Centr. Java), W. Priangan (W. Java), and from May 1910–Febr. 1913 in Billiton; after expiry of his furlough in Rembang (Centr. Java), and since 1918 at Batavia; he retired in 1922.

COLLECTIONS. When stationed at Tandjong Pandan in *Billiton* in *1911*, he collected *c.* 68 *nos* herbarium from trees, which were sent to *Herb. Bog.* through the intermediary of K. HEYNE (see there).

Rostados, E.

miner and planter who collected plants from the mining centre of Bundi on the Upper Kemaman in South Trengganu, *Malay Peninsula*, in *1904* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5). About 1918 he went bankrupt through adventures in tin-mining in Lower Siam.

COLLECTIONS. *Herb. Sing.*

Rothdauscher, Heinrich

took his Ph.Dr's degree at Munich in 1897. He is cited by MERRILL[1] as the collector of botanical material in the *Philippines*. Elsewhere we came across the statement that he is the collector of *Sciaphila nutans* GIESSEN in *Luzon, P.I.* (*1879*), the type specimen of which in Herb. *Munich*,[2] and of *Averrhoa carambola*, Manila (*Luzon*) (1879); another plant was collected at Manila in *1883* and is preserved in *Herb. Monaco*.[3]

LITERATURE. (1) In Bull. Bur. of Agric. Manila *no* 4; cited as ROTHDAUCHER!

(2) *cf.* Pflanzenreich 104, 1938, p. 48.

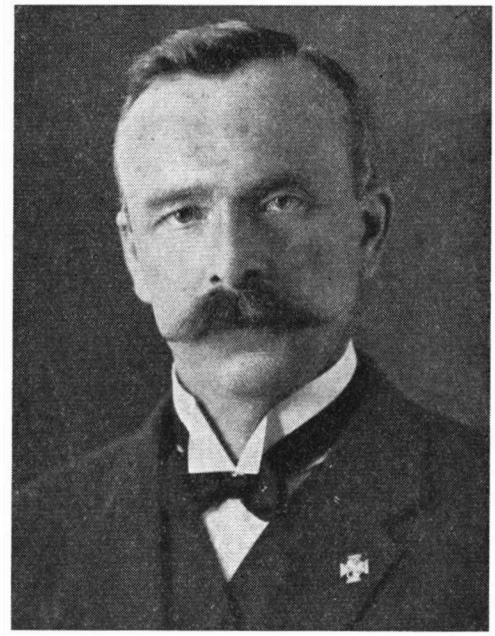
(3) *cf. l.c.* 98 a, 1932, p. 602.

Rothert, Karol Wladyslaw

(1863, ? ; 1916, St Petersburg, Russia), professor at Riga and Odessa, made a study tour in the D.E.I. from January till November 1909. He made some trips, and was working on systematic anatomy in the Treub Laboratory at Buitenzorg.[1]

Some ferns were named after him.

COLLECTING LOCALITIES.[2] *1909. W. Java:* Tjibodas, G. Gedeh (March; possibly later for a 2nd time, at least DAMMERMAN states that he visited this place twice); with Dr W. ARNOLDI (see there) to the *Duizend Islands*, Bay of Batavia; *N. Celebes:* Manado Res., subdivision of Bwool (May 4); *Moluccas:* Gisser (= Geser) on *P. Ceram Laoet* (May 11); *Aru Islands* (with Dr W. ARNOLDI): *P. Trangan; Noesa Kambangan*, S of Java, studying the mangrove; *E. Java:* G. Idjen (June); *W. Sumatra:* G. Taloek (Nov.); probably sailing from Padang back to Europe.



ROUPPERT

COLLECTIONS. He collected much material, incl. a fine collection of *Hymenophyllaceae*, for different scientific institutions. Duplicates in *Herb. Bog.*

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 34.

W. ROTHERT: 'Über die anatomischen Differenzen der Gattungen Dracaena und Cordyline' (Bull. Dép. Agr. Ind. néerl. 24, 1909, p. 1–15); 'Beobachtungen an Lianen' (Bull. Ac. Scienc. Cracovie 1913, p. 750–807, pl. 65–67).

(2) Only few data about his trips are known to me, the above-cited ones are mainly derived from herbarium material and will be incomplete.

BIOGRAPHICAL DATA. Spr. Kom. Fiz. 51, 1917, p. xviii–xx (*non vidi*); BACKER, Verkl. Woordenb., 1936.

Rouppert, Kazimierz Stefan

(1885, ? ; ?), Professor of Botany, University of Krakau, was staying in the Treub Laboratory at Buitenzorg, from April till October 1926, with the support of the International Educational Board of ROCKEFELLER Jr, studying many biological problems.[1]

At the outbreak of war, in September 1939, he left Krakau for Budapest, working in the Plant

Physiological Laboratory of the University there. A letter which was sent to him in 1947, was returned with the remark 'inconnu' (unknown).

COLLECTING LOCALITIES. *1926. W. Java:* G. Salak (Aug.); *E. Java:* G. Tengger, between Ranoe Koembolo and the foot of the summit of G. Smeroe (Oct. 8).

COLLECTIONS. He is cited by DANSER[2] as the collector of a *Nepenthes* from G. Salak and a *Polygonum* from G. Tengger-Smeroe. Possibly these plants were especially collected on behalf of DANSER, who at that time was preparing monographs of the families of plants in question.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 47.

K. ROUPPERT: 'Wraženia Ogrodnicza z Jaway' (Krakow 1927, p. 1–30, 25 fig.) (*non vidi*).

(2) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 8, 1927, p. 208.

Roux, Charles Constant François Marie le

(1885, Assen, Dr., Holland; 1947, Amsterdam, Holland), ex-officer of the D.E. Indian Army; successively Custodian of the Museum of the Batavian Society of Arts and Sciences, of the Colonial Institute at Amsterdam, and of the Ethnological State Museum at Leyden. He was topographer-ethnographer of the STIRLING Expedition to *New Guinea* in 1926 (*cf. sub* DOCTERS VAN LEEUWEN),[1] and leader of the *New Guinea* expedition 1939 of the Royal Dutch Geographical Society (*cf. sub* EYMA).[2]

COLLECTIONS. He collected material of 2 *Dendrobiums* on the central range in the basin of the Upper Rouffaer River in *Dutch New Guinea* in *1926*, which DOCTERS VAN LEEUWEN presented to *Herb. Bog.* in 1928.

LITERATURE. (1) CH. C. F. M. LE ROUX: 'Expeditie naar het Nassau-gebergte in Centraal Noord Nieuw Guinee' (Tijdschr. Ind. Taal-, Land- en Volkenk. 66, 1926, p. 447–513, w. maps and plts).

(2) CH. C. F. M. LE ROUX: 'De bergpapoea's van Nieuw Guinea en hun woongebied' (Leiden 1938, 3 vols of which 2 vols of plates).

Roux, Jean

(1876, Geneva, Switzerland; 1939, Basel, Switzerland), zoologist, educated at Geneva; since 1902 Custodian of the Natural History Museum, Basel. He accompanied H. MERTON (see there for itiner., liter., *etc.*) on a voyage to the *Aroe* and *Kai Islands* from Oct. *1907*–Aug. *1908*.[1] In 1911/12 he accompanied FRITZ SARASIN to New Caledonia and the Loyalty Islands. He retired in 1937.

COLLECTIONS. Evidently he made a botanical collection too.[2]

The ethnological objects preserved at Frankfurt and Basel.

LITERATURE. (1) J. ROUX: 'Deux archipels voisins de la Nouvelle-Guinée, Îles Arou et Kei. Récit d'une exploration scientifique' (Globe 49, 1910, Mém. p. 1–37).

(2) *cf. l.c.* p. 10.

BIOGRAPHICAL DATA. Verh. Schweiz. Naturf. Ges. 1940, p. 487–493, incl. bibliogr.; Verh. Naturf. Ges. Basel 51, 1939/40 (1940), p. 264–271, incl. bibliogr. + portr.

Rouyer, Henri

made a voyage to the D.E.I. in 1901–02, leaving Marseilles in December 1900. He planned to study the geography, natural history, and ethnography of the more important islands of the Malay Archipelago. Of his itinerary only some data are known; he evidently visited Buitenzorg,[1] and touched at Fak Fak in W. New Guinea as single passenger on board a mail-boat. In his imagination the latter visit took fantastic proportions, and the world was surprised by a French newspaper relating the story that ROUYER and his expedition (*sic!*) had been the victims of a fiendish attack of the natives when they landed on the south coast of New Guinea![2] In February 1902 he was back at Marseilles again. Some years later he settled as collector in the Padang Highlands, *West Sumatra*, offering entomological collections for sale. In that period he must have collected *Cibotium sumatranum* H. CHRIST on Linggalang (= rightly Singgalang) Volcano (*1905*), material of which is preserved in *Herb. Zürich*.[3] According to HORN & KAHLE he was settled as insect dealer at Malang till 1906.[4]

LITERATURE. (1) *cf.* Tijdschr. K.N.A.G. 1903, p. 131.

(2) *cf.* WICHMANN, Entd. Gesch. N.G. in Nova Guinea 2[2], p. 790.

(3) *cf.* CHRIST in Philip. Journ. Sci. C. Bot. 2, 1907, p. 118.

(4) *cf.* Entomol. Beih. II–IV, Berl. Dahl. 1935–37, p. 232.

Rowell, Dr Irvine

(† 1892, ? London, England), from about 1878–90 Head of the Medical Service in the Straits Settlements; a friend of G. KING.

In 1888 he sent in a collection of wood samples to an exhibition in England. He might have collected some plants.

Ficus rowelliana KING was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

Roxburgh Jr, William

(†, ? Calcutta, Br. India, *c.* 1806), son of WILLIAM ROXBURGH, the first Superintendent of the East India Company's Garden at Calcutta; in 1799 Assistant of his father, in 1801 working at Chittagong.

He collected living and dried plants for his father in *Penang* in May–Aug. *1802*.[1]

In *1803* a son of Dr ROXBURGH arrived from *Ambon* with 22000 nutmegplants and upwards of 6000 cloves in Bencoolen, fort Marlborough, *S. Sumatra*. Since the death of CHARLES CAMPBELL (see there), ROXBURGH Jr had been appointed to the superintendence.[2] It seems possible that ROXBURGH Jr collected during his stay in the *Moluccas*, as in the herbarium of his father plants from *Banda* and other Malayan islands are extant (dupl. in *Herb.* LAMBERT),[3] but these might have been collected by CHRISTOPHER SMITH (see there). Possibly

ROXBURGH Jr collected in *Sumatra*. In 1805 he was once more with his father at Calcutta.

COLLECTIONS. The authentic herbarium of W. ROXBURGH Sr, including the plants collected by his son, in *Herb. Linn. Soc. Lond.* (since 1913 for the greater part at *Kew* with *Herb.* WALLICH), in *Herb. Kew* (*ex Herb.* FORSYTH), *Herb. Brit. Mus.*, *Herb.* DECAND. (*Geneva*) (300 *nos*), *Herb.* DELESS. (*Geneva*), *Herb. Univ. Edinburgh*,[4] *Herb.* MARTIUS (= *Brussels*).

His *Penang* plants were described in the 'Flora Indica' (1820); some of them have not since been met with in Penang, probably they were cultivated in Penang or wrongly labelled in the Calcutta Gardens.[5]

An extensive collection of original drawings in the Bot. Gard. Calcutta; a series of copies at Kew and Liverpool; 1825 drawings got into the possession of the Count of Flanders, Brussels.[6] 14 Watercolour drawings of *Malayan* plants, with one of a *Cycas* from the *Moluccas* in the Libr. Brit. Mus.

LITERATURE. (1) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(2) *cf.* MARSDEN: 'History of Sumatra' (1811) p. 148.

(3) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 144–145. The assumption that ROXBURGH Sr himself made collections in the Malay Archipelago is wrong!

(4) *cf.* HOOK. Journ. Bot. & Kew Gard. Misc. 9, 1857, p. 12.

(5) *cf.* Journ. Str. Br. Roy. As. Soc. *no* 25, 1894, p. 163.

(6) *cf.* A. DECANDOLLE, Phytographie, 1880, p. 444–445.

BIOGRAPHICAL DATA. D. PRAIN: 'JOHN ROXBURGH' (Journ. Bot. 57, 1919, p. 28–34); Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931.

Roy van Zuydewyn, E. de

living at Poeger, *SE. Java;* in *1930* he collected material of *Andropogon contortus* near Poeger, S of Menampoe (S. coast), at the instigation of TH. ETTY (see there). Mr ETTY forwarded the material to *Herb. Bog.*

Royen, Adr. van

(1704, Leyden, Holland; 1779, Leyden, Holland), from 1732–55 Professor of Botany and Medicine at Leyden University, from 1755–75 exclusively of Medicine.

Author of some botanical papers.[1]

Melastoma royeni BL. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. *Herb. Leyden;* in *Herb. Brit. Mus.:* plants from the *East Indies* (*ex Herb.* BANKS); also plants in *Herb.* BURMAN (= *Herb.* DELESS. (*Geneva*) & *Leyden*); he forwarded plants to LINNAEUS too.[2] His herbarium was used by BLUME, when the latter worked out the *Melastomaceae*.[3]

He never visited the Indies; probably plants from there were sent to him, and inserted into his own herbarium without mentioning the actual collector.

LITERATURE. (1) *cf.* PRITZEL, Thes. Lit. Bot., 1872.

(2) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 66 and p. 358; A. DECANDOLLE, Phytographie, 1880, p. 445.

(3) *cf.* Flora 15, 1831, p. 473.

Rubber Research Institute, *cf. sub* R.R.I.

Rudolph, Karl

German Government Gardener, from 1907–10 stationed in *Neu Pommern* (= *New Britain*).

COLLECTIONS. *Herb. Berl.:* 40 *nos* from the Gazelle Peninsula near Simpsonhafen (= Rabaul), *New Britain;* dried fruits and wood samples in the *Show Mus. Berl.*

Plants were published in 'Beiträge zur Flora Papuasiens' (ENGL. Bot. Jahrb. 1912→).

Rue, C. de la, *cf.* LARUE.

Ruecker

possibly identical with the Assistant Hunter of that name, who quitted the employ of the German New Guinea Company in 1889.[1]

Piper (*Rhyncholepis*) *rückeri* K.SCH. was named after him.

COLLECTIONS. Over 44 *nos*, collected in former *Kaiser-Wilhelmsland* (= *NE. New Guinea*) in the vicinity of Constantinhafen. *Probably* with the herbarium of the New Guinea Company in *Herb. Berl.* The plants were at the disposal of K. SCHUMANN.[2]

LITERATURE. (1) *cf.* Nachr. Kais. Wilh. Land 1889, p. 33.

(2) Results published in 'Die Flora von Kaiser Wilhelmsland' (Beih. Nachr. Kais. Wilh. Land 1889, p. 1–137; together with the collection HOLLRUNG).

Rümke, Christian Ludwig

(1898, Leyden, Holland; x), botanist, educated at Utrecht University, taking his Dr's degree when on furlough in 1934. In 1927 he went to Java in the employ of the Experiment Station for the Java Sugar Industry (Pasoeroean); since 1938 appointed Selectionist.

Founder, and since 1940 honorary member, of the Dutch Genetical Society. Author of some plant-genetical papers.

COLLECTING LOCALITIES. *W. Java:* G. Gedeh with F. W. WENT (*1928*); *E. Java:* Idjen Plateau (*1929*); G. Kawi (Nov. *1930*).

COLLECTIONS. *Herb. Pasoer.:* 24 *nos*, incl. 16 from Idjen Plateau. *Herb. Bog.:* dupl. of *Dendrobium hasseltii* BL.

Ruinen, Werner

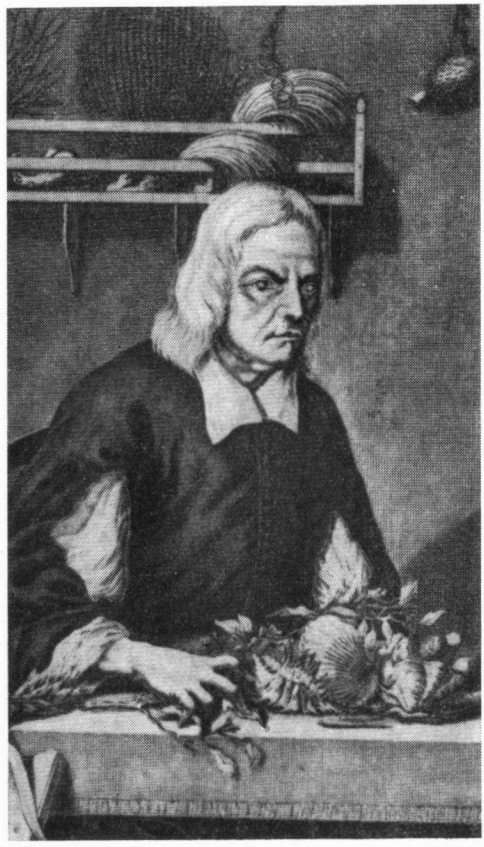
in 1919 presented living orchids from *Ceram etc.* to *Hort. Bog.*

Identical with the author of 'Overzicht van de literatuur betr. de Molukken (excl. Nieuw-Guinea), 1550–1933' (Amsterdam 1928–35, 2 vols; with A. B. TUTEIN NOLTHENIUS).

Ruiz, Q., *cf. sub* Forestry Bureau, Manila.

Ruloffs, J. P. C.

Civil Administrator of Djeboes Div., collected some plants near Djeboes in *Banka* (*cf.* TEYSMANN in Nat. Tijdschr. N.I. 27, 1864, p. 157–258, and SCHEFFER in Ann. Jard. Bot. Buit. 2, 1885, p. 9). *Probably* in *Herb. Bog.*



RUMPHIUS

Rumpf, Georg Ever(h)ard (or Eberhard)

called RUMPHIUS (probably in 1628, Münzenberg or Wetterau, Germany; 1702, Ambon, Moluccas), attended the gymnasium at Hanau and subsequently enlisted in a German legion which was said to be destined for service in the Ionian Sea. This proved to be make-believe only, as its real destination was Brazil, *viz* in Dutch service. When on the way from Texel (a Dutch Wadden island) to Portugal, the ship fell into the hands of the Portuguese and for RUMPHIUS this adventure ended in a stay of 3 years in that country, where his first interest in The East was raised. Subsequently he returned to Hanau, staying from 1649–52, his occupation in this period being unknown. In 1652 he once more enlisted in Dutch service, as a soldier of the E.I.C. Mid-1653 he arrived in Java and in the same year was transferred to Ambon; in 1657 he was appointed Second Merchant (from then onwards in the Civil Service) and in 1662 Merchant. About that time he began to apply himself to the study of the flora and fauna of Ambon and circumjacent islands, continuing his studies till he went incurably blind in 1670. His investigations resulted in some famous works.[1] The manuscript of his 'Herbarium Amboinense' fell a prey to the sea, but fortunately Governor General CAMPHUIS had a copy made beforehand.

He is commemorated in the genus *Rumphia* L and in many other plant species.

COLLECTIONS. His books, collections and manuscripts were destroyed for the greater part by a heavy fire on January 11, 1687. Probably but a small part of his herbarium is preserved, evidently some of it in *Herb. Florence*,[2] and partly transferred from there to *Vienna*. MARTELLI mentions[2] that the Rumphian species were bought in 1682 by Grand-duke COSIMO III DE'MEDICI. Later all the Grand-ducal collections were transferred to the Museum di Fisica e Storia Naturale di Firenze (Florence) founded in 1778. The specimens were mishandled because the later custodians did not know of the origin nor of the importance of the collections; hence they were so mixed that it became impossible to find out which are Rumphian and which are not. The original labels were destroyed and the new labels did not indicate the collector, the date, and the place of the collection.

The only label of any importance that MARTELLI saw in his student days was that the collections were ancient, 'Antica Collezione del Museo'. However among the fruiting specimens BECCARI detected two species of *Calamus* which were certainly of the Rumphian collection. When MARTELLI intended to make a closer examination of these collections he experienced such obstruction that he had to give up the attempt.

For the location of his MSS *etc.*, see 'RUMPHIUS Gedenkboek 1702–1902' (Kolon. Mus. Haarlem, 1902) which contains a chapter on that subject. Some drawings of Ambon plants, made through the intermediary of CHASTELEIN (see there), are in the Bot. Dept of the British Museum; they were probably bought with W. TEN RHYNE's effects (see there). These, mostly coloured, drawings were probably made for RUMPHIUS. Also drawings at the University of Amsterdam. Some of his letters were published.[3]

LITERATURE. (1) *E.g.* 'Het Amboinsch Kruidboek' I–VII incl. the 'Auctuarium', revised and edited by J. BURMAN (1741–55); 'Amboinsche Rariteitkamer' (Amsterdam 1705; reprint. in 1741); several MSS (for detailed data *cf.* RUMPHIUS Gedenkboek *l.c. sub* Biogr. Data).

'Het Amboinsch Kruidboek' (= Herbarium Amboinense) led to the following papers:

O. STICKMAN: 'Herbarium Amboinense' (LINNAEUS, Amoenit. Acad. 4, 2nd ed. 1788, p. 112–143).

J. BURMAN: 'Index alter in omnes tomes Herbarii Amboinensis G. E. RUMPHII, quem de novo recensuit, auxit, et emendavit' (Lugd. Bat. *etc.* 1769).

FR. (BUCHANAN) HAMILTON: 'Commentary on the Herbarium Amboinense' (Mem. Wern. Nat. Hist. Soc. Edinburgh 5^2, 1824, p. 307–383).

A. W. E. TH. HENSCHEL: 'Clavis botanica et zoologica. Accedunt Vita G. E. RUMPHII, Plinii indici, specimenque materiae medicae amboinensis' (Vratislaviae 1833).

An incomplete manuscript 'Clavis Herbarii Amboinensis' of H. ZOLLINGER in the Buitenzorg Libr.

J. K. HASSKARL: 'Neuer Schlüssel *etc.*' (Abh. Nat. Ges. Halle 9, 1866, p. 145–389).

E. D. MERRILL: 'An interpretation of RUMPHIUS'S Herbarium Amboinense' (Bur. Sci. Publ. 9, 1917, p. 1–595, map).

J. J. SMITH: 'The Amboina Orchidaceae collected by C. B. ROBINSON' (Philip. Journ. Sci. C. Bot. 12, 1917, p. 249–262).

(2) U. MARTELLI: 'Notizie sopra l'Erbario Rumphio' (Boll. Soc. Bot. Ital. 1902, p. 90); 'Le collezione di G. E. RUMPH acquistate dal Granduca COSIMO III DE' MEDICI, una volta esistenti nel Museo di Fisica e Storia Naturale di Firenze. Estratto da un catalogo manoscritto dal G. TARGIONO TOZZETTI per cura di U. MARTELLI' (Firenze 1903; containing extracts from a manuscript catalogue prepared by Prof. G. TARGIONI-TOZZETTI in 1763; Dr C. X. FURTADO was so kind as to translate the story of the collection).

A palm, coll. RUMPHIUS, is cited in Annals Bot. Gard. Calcutta XII, 1, Palms part II, p. 166.

(3) In 'India Literata' (Appendix to M. B. VALENTINIUS, Historia simplicium reformata, Francofurti a/M 1716).

BIOGRAPHICAL DATA. HALLER, Bibl. Bot. 1, 1771, p. 615–617; Autobiographic 'Peregrinatio' in RUMPHIUS, Herb. Amboin., preceding part 6; HENSCHEL in 'Clavis Rumphiana *etc.*' *l.c. sub* 1; BLUME, Rumphia 1, p. 7–9, and *l.c.* 2, p. 9–13; P. A. LEUPE: 'GEORGIUS EVERARDUS RUMPHIUS, Ambonsch natuurkundige der 17e eeuw' (1871, Kon. Akad. v. Wetensch. Amsterdam); Album der Natuur 1885, p. 1 *seq.*; 'RUMPHIUS Gedenkboek 1702–1902' (Kolon. Mus. Haarlem 1902, 221 pp.); WITTROCK, Icon. Bot. Berg., 1903, p. 155 and *l.c.* 2, 1905, p. 168, 173; J. D. MILNER, Catalogue portraits at Kew, 1906, p. 93; SIRKS, Ind. Nat. Onderzoek, Amsterdam 1915, p. 25–61 (an article in English based on this chapter of SIRKS's book was published by L. M. PERRY in HONIG & VERDOORN, Science and Scientists in the Netherlands Indies, 1945, p. 295–308); Encyclop. N.I. 3, 1919, p. 640–645; Trop. Nederland 5, 1932/33, p. 307, 333; BACKER, Verkl. Woordenb., 1936; H. ENGEL, Alphabetical list of Dutch zoological cabinets *etc.* (Bijdr. t. d. Dierk. 27, 1939), p. 310–311; Ned. Kruidk. Arch. 50, 1940, p. 199–200; *l.c.* 51, 1941, p. 367; *l.c.* 52, 1942, p. 404; G. Ballintijn: 'De blinde ziener van Ambon' (DE HAAN, 1944); Flora Malesiana Bull. *no* 5, July 1949, p. 129 (monument).

Russell Jr, De Kalb

(1918, Washington, D.C., U.S.A.; x), B.A.'s degree from University of Virginia in 1941; spent 4 years with the U.S. Army doing active service in the Southwest Pacific; at present studying dentistry at the GEORGE WASHINGTON University.

COLLECTING LOCALITIES. *1943.* In *Papua:* Port Moresby (Febr.); and in the Mandated Territory (*NE. New Guinea*): from Oro Bay (March, Apr., May); Soputa (June); Morobe (July–Sept.); Dobodura and Ulatta, vicinity of Oro Bay (last part of Sept.).

COLLECTIONS. *U.S. Nat. Herb. Wash.:* 455 specim. incl. ferns from *New Guinea* (*c.* 200) and Australia (Queensland); dupl. of the ferns (especially collected at Morobe) in *Herb. Brisbane.*

Rutgers, Abraham Arnold Lodewijk

(1884, Amsterdam, Holland; x), botanist, educated in the University of Amsterdam, taking his Ph.Dr's degree in 1910 at Utrecht; in November of that year he was appointed Botanical Assistant in the division of Botanical Laboratories (since 1912 division for Plant Diseases) of the Botanic Garden at Buitenzorg, Java; from 1916–23 Director of the General Experiment Station of the A.V. R.O.S. (Medan, Sumatra); from 1923–28 Director of the Department of Agriculture at Buitenzorg; 1928–33 Governor of Surinam and subsequently a member of the Second Chamber in Holland.

COLLECTING LOCALITIES. *N. Sumatra:* Atjeh with L. P. DE BUSSY (May 4–8, *1917*), visiting Bireuën, Takengon, *etc.*, possibly not collecting;[1] Tapanoeli Res., SE of Balige, with F. C. VAN HEURN (Dec. 11, *1918*); *Sumatra East Coast:* Asahan (March *1919*, numbered in the series of LÖRZING).

COLLECTIONS. In *Herb. Bog.*, probably but few plants; DANSER cites some *Nepenthaceae* in his monograph of that family.

LITERATURE. (1) A. A. L. RUTGERS: 'Aanteekeningen over den Gajo-weg' (Meded. Alg. Proefstat. A.V.R.O.S. Alg. ser. *no* 4, 1918).

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 320.

Ruthven le Hunte, G., *cf.* HUNTE, G. RUTHVEN LE

Rutten, Louis Martin Robert

(1884, Maastricht, L., Holland; 1946, Utrecht, Holland), was educated at Utrecht and Munich, taking his Ph.Dr's degree in 1909; from 1909–21 geologist in the employ of the 'Ned. Mij tot het verrichten van mijnbouwkundige werken'; since 1922 Professor of Geology, Mineralogy, Palaeontology *etc.* in the University of Utrecht.

During his tours in the D.E.I. he was accompanied by his wife Mrs C. J. RUTTEN-PEKELHARING, who assisted him with plant collecting.

Author of many geological publications.[1] Several plants were named after him.

ITINERARY. *1910–14. E. & NE. Borneo.* In the following localities: Balikpapan and environs (Apr.–Aug. *1910*);[2] Samarinda (the collection was received at Buitenzorg in *1911*); Sg. Kajan (= Boelo(e)ngan) (*1912*);[3] W of Sangkoelirang Bay and N of the Rapah River (March–May *1913*);[4] Boelongan (*1914*).—RUTTEN *Expedition to the Moluccas, 1917–19.*[5] *Ambon* (Aug. 12–16, *1917*); *Ceram:* Wa-

hai (18); collecting was done from Aug. 20 (*cf. sub* KORNASI) near Wahai and environs; to the basins of the Koea and Toloearang rivers (Aug. 24–Sept. 1); basin of the Wai Solok (Sept. 8–9); excursion to the Moeal and Isal rivers (17–24); environs of Wahai; on the way to *E. Ceram:* sailing by proa (Oct.



MRS AND DR RUTTEN

5) to Pasahari; afoot along the beach to Seliha; following the Wai Samal to Kabailoe; through the Wai Eha to Maneo (Oct.); *via* Meseleinan Pass to Laimoe (S. coast); crossing from Ilasa Oelalahan to Kobi; by proa to Bengoi; Matakabo River; *via* Ake Ternate and Wahakajam to Seti; Kohonoesi, along the Moesi (tributary Wai Samal) to the north coast and back to Wahai (Nov. 11); tour in *Centr. Ceram* (Nov. 19–Dec. 20): *via* Wae Koea, Roho and Kaniki to Manoesela; *via* the border-mountains to Hatoemete (S. coast); along the coast in western direction to Saunoeloe and occasionally penetrating into the interior; back to Laimoe, along the coast to Woloe, and to Manoesela by way of Oesahan Pass; *via* Ratoe Kabau to Kabohari and along the Saripoetih River back to the N. coast; Wahai (Dec. 20–Jan. 9, *1918*); *SE. Ceram:* Atiahoe on the mouth of the Bobot (Jan. 10), in eastern and subsequently in northern direction along the coast, surveying many rivulets; back from Waroe along Masiwang and the basin of the Bobot; environs of Atiahoe; crossing to Wahakajam and Botti on the N. coast; returning by proa to Wahai (March 5); sailing for *Ambon* (24), staying some weeks, though the planned investigations did not come to much on account of illness; *W. Ceram:* Piroe (Apr. 28), making some trips through the northern part of Hoeamoal; by proa to Lokki (May 1), afoot to Loehoe and proceeding to Wai Salah; surveying the coast as far as Lobang Haja; *P. Tikoes;* excursion along Wai Boeloe Tikoes, to G. Kobar; *P. Boentah* (or *Boental*) (9–11); *P. Boano* (11–16); *P. Kel(l)ang* (16– ? 23); by boat *via* Takaloepoe, Sole, and Seri Kambello to *Ambon* (staying May 24–June 8); *Ceram:* Wahai (June 11); to Besi on the Bay of Seleman (13–17), visiting G. Sapolewa (165 m alt.), Sapolewa Delta, Wai Salawai; Wahai; *Centr. Ceram:* passing Toloearang and Isal Mts to Kaniki and Manoesela; trips in the neighbourhood in the direction of Woloe (S. coast), G. Moerkele ketjil (2500 m alt.) (June 30–July 1); from Manoesela *via* Hatoeolo(n) to Kaloa on the Isal, and back to Wahai *via* Moeal and Toloearang (July 11 at Wahai); *Ambon* (KORNASI going back to Buitenzorg); *W. Ceram:* Piroe (Aug.): 2-day trip N and NW of Piroe, *via* Moerikaoe to Loemoli and Lohia Tala (14–15); exploring the rivers of SW. Ceram (end of Aug.–first half of Sept.): along the Nala to the Selaoe, Wai Kwa and Wai Rioeapa, along the Wai Kasoe and the mountains of Honitetoe, along Wai Rioeapa back to the coast near Kairatoe, along the coast to Wai Samoe, inland to Melilia, proceeding in N. direction to the upper course of the Eti, then in S. direction to the coast (Kawal), and NW to Eti and Piroe; mapping the environs of Kaibobo (E. coast Piroe Bay) (Sept. 14–20); between Piroe and Cecilia Mts (Sept. 27–Oct. 26); RUTTEN staying in NW. Ceram (Nov. 5–16), while HOTZ visited the islands Manipa and Kel(l)ang, W of Ceram; due to an attack of Spanish flu no trips were made till the beginning of the new year; basin of the Kawa and Eti rivers (Jan. 3–9, *1919*); neighbourhood of Piroe (15–17); to Amahai (Elpapoetih Bay) (21); crossing the island from Sepa to Sawai, from Pasanea to Makariki and from Waraka to Lisabata, visiting G. Loemoete (Febr. 6) *etc.;* Piroe (Febr. 23–March 31); *NE. Ceram:* Boela and environs (Apr. 4–14); *W. Ceram:* W of Makina (May; from Oewin to the border-mountains; much material from 1000–1100 m alt.): starting from Piroe (May 3); Riring (5–7); Manoesa Manoewe; along the Upper Sapolewa and across the mountains to Walokone (9); ascent of the Hatoe Sosokoetai; proceeding to the N. coast; back by way of Oewin (22) to Piroe (26).

COLLECTIONS. *Herb. Utrecht: Borneo,* > 782 *nos; Herb. Bog.:* collection Samarinda, *E. Borneo* (pres. 1911), and from the *Moluccas; Herb. Leyden:* dupl. *E. Borneo* and *Moluccas.* The total collections from the *Moluccas* amount (incl. that of KORNASI) to 2280 *nos,* principally from *Ceram,*[6] the *nos* 1069–1184 from *Ambon.* The collections contain a large amount of ferns.

After the departure of KORNASI, RUTTEN was assisted by a young Alfurese chief.

LITERATURE. (1) And of the book: 'Voordrachten over de Geologie van Ned. Oost-Indië' (1927).

(2) L. M. R. RUTTEN & C. J. RUTTEN-PEKELHARING: 'De omgeving der Balikpapanbaai' (Tijdschr. K.N.A.G. 1911, p. 579–601, map *no* X).

(3) L. M. R. RUTTEN: 'Reisherinneringen uit Zuid-Oost Boelongan (O. Borneo)' (Tijdschr. K. N.A.G. 1916, p. 236–253).

(4) L. M. R. RUTTEN: 'Reisherinneringen uit N. Koetei, bewesten de Sangkoelirangbaai' (*l.c.* 1917, p. 711–738, 2 maps in the text).

(5) L. M. R. RUTTEN: 'Ceram Expeditie' (Mij Bev. Nat. Onderz. Ned. Kol. Bull. *nos* 69–77); 'Verslagen van de Geologische Expeditie naar Ceram' (partly with W. HOTZ, in Tijdschr. K.N. A.G. 1918, p. 112–121, 228–234, 368–378, 547–555; *l.c.* 1919, p. 36–48, 199–207, 460–466, 559–579, 580–581; *l.c.* 1920, p. 17–40; several maps); 'Ontwikkelingsmogelijkheden van het eiland Ceram' (*l.c.* 1920, p. 43 *seq.*).

(6) J. J. SMITH: 'Orchidaceae seranenses' (Bull. Jard. Bot. Buit. sér. 3, vol. 10, 1928, p. 85–172); and *Ericaceae* in FEDDE Repert. 30, 1932, p. 162–178.

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 322; BACKER, Verkl. Woordenb., 1936.

Rutten-Kooistra, Titia Wietske

(1913, Utrecht, Holland; x), passed her final examination of biology in 1936 at Utrecht. She married Dr M. G. RUTTEN (eldest son of L. M. R. RUTTEN), who was appointed geologist in the employ of the B.P.M. (Batavian Oil Company) and was stationed at Tjepoe (Centr. Java, 1936–37), and subsequently transferred to S. Sumatra. In June 1939 they went on furlough to Holland; in 1940 he was in nomination for a job in the employ of the Geological Service at Bandoeng, but the appointment did not come off on account of the German occupation of Holland, which prevented RUTTEN to go thither. At present her husband is Professor of Geology at Amsterdam University.

COLLECTING LOCALITIES. *S. & Centr. Sumatra. 1938.* Djambi Res. between Moeara Tembesi and Moeara Tebo (Sept.);[1] Sipin Lake in Djambi Res. (Oct.); Palembang and Pladjoe in Palembang Res. (Nov.–Dec.); W. Palembang, Pagar Alam (Dec. 25–26).—*1939.* Environs of Pladjoe near Palembang (Jan.).

COLLECTIONS. *Herb. Utrecht:* 80 *nos* from *Dipterocarpaceae* forest in Djambi (coll. 1938), of which *no* duplicates in *Herb. Bog.* In *Herb. Bog.: nos* 1–121 from Palembang Residency (no forest plants) and 21 S *nos* of swamp plants from Sipin Lake.

LITERATURE. (1) T. W. RUTTEN-KOOISTRA: 'Over de onkruidflora van rubbertuinen in de omgeving van Djambi' (Nat. Tijdschr. N.I. 49, 1939, p. 141–147); 'Wandeling door een Dipterocarpaceeën-bosch in Djambi' (Trop. Nat. 29, 1940, p. 109–113, 5 fig.).

Ruttner, Franz

(1882, Kalk-Podol, Bohemia, Austria; x), hydrobiologist who took his Ph.Dr's degree in the German University of Prague in 1906. In the same year he was appointed Assistant of the Biological Station at Lunz a.S. (Lower Austria); since 1908 leader of that institute. In 1925 in addition University Lecturer at Vienna, and since 1927 Extraordinary Professor. He visited the D.E.I. as a member of the 'Deutsche Limnologische Sunda Expedition' (with THIENEMANN and FEUERBORN).[1]

He was the discoverer of a new *Sonerila* which was named in his honour (*cf.* BACKER, Verkl. Woordenb., 1936).

ITINERARY. *Deutsche Limnologische Sunda Expedition, 1928–29.*[1] Leaving Hamburg (July 18, *1928*), *via* Kossier (Red Sea), Ceylon; *Sumatra East Coast:* Belawan-Deli (Sept. 4); *W. Java:* Batavia (Sept. 7); Buitenzorg and environs (Sept. 8–Oct. 4; visiting the lakes of Tjigombong, Sindanglaja and Telaga Warna); leaving (Oct. 5) for E. Java, visiting in Priangan Res. the lakes of Leles, Sindangsinar, Bagendit, Pendjalu, Trogong-Tjipanas, vicinity of Tasikmalaja; *E. Java:* Surabaja (fish ponds); Klakah (Oct. 8–Dec. 1, exploring Ranu Lamongan, R. Pakis, R. Bedali, and R. Klidungan; visiting Punten or Poenten above Malang, and mountain streams on G. Kawi); Sarangan (Dec. 2–23; Telaga Pasir, Telaga Ngebel, summit G. Lawu); *Centr. Java:* Solo, Djokja; *W. Java:* Buitenzorg (Dec. 27–Jan. 16, *1929*); sailing (Jan. 17) from Merak in Bantam to *S. Sumatra:* by train and car to Benkulen Res., Ranau Lake (Jan. 19–Febr. 11); Kepahiang (12); from Benkulen to *Sumatra West Coast:* Padang (18) and proceeding to Singkarak Lake (Febr. 20–March 22, visiting Manindjau Lake and Danau di Atas); travelling (23–28) *via* Fort de Kock and Sibolga to Toba Lake (Batak Lands); Balige on Toba Lake (March 28–Apr. 26); returning (Apr. 27–May 4) *via* Sibolga, Fort de Kock, and Padang, to *S. Sumatra:* Benkulen Res., Tjurup (May 5–8); Muara Klingi on the Musi (9); by boat (11–12) to Palembang; from Palembang (14) back to *W. Java:* Buitenzorg (15–26); *Centr. Java:* Diëng Plateau (June 1–6); *via* Djokja and Solo to *Bali* (staying June 11–23, visiting Baturiti, Danau Bratan, Den Pasar, Kintamani and Danau Batur); *E. Java:* Ngadisari on G. Tengger (24–26); Surabaja, RUTTNER visiting Ranu Klidungan once more; *W. Java:* Buitenzorg (June 30–July 7, visiting Tjigombong, Sindanglaja); Tjibodas and G. Gedeh-Pangrango (July 8–16), Buitenzorg (17–31, visiting *coral islands in the Bay of Batavia,* and Kuripan); sailing from Batavia (Aug. 1), homeward bound.

COLLECTIONS. *Herb. Bog.:* 375 *nos;* dupl. in *Herb. Leyden, Herb. Lunz* (Lower Austria). Principally water and marsh flora.[2] From *Sumatra: nos* 1–273, 317–320, 379, 390–397; from *Java: nos* 274–302, 321–389; from *Bali: nos* 303–316.

LITERATURE. (1) A. THIENEMANN: 'Die Deutsche Limnologische Sunda-Expedition' (Deutsche Forschung Heft 13, 1930, p. 120–136); 'Forschungsreisen auf Java, Sumatra und Bali' (Die Medizinische Welt 1931, *nos* 10 and 12, 14 pp.); 'Tjibodas, der javanische Berggarten' (Natur und Museum 1931, p. 40–48, 7 fig.).

FR. RUTTNER: 'Seenstudien in Niederländisch-Indien' (Mitt. Geogr. Ges. Wien 75, 1932, p. 114–146); 'Merenonderzoek in Ned. Indië' (Trop. Nat. 21, 1932, p. 151–157, 178–184, 12 fig.).

The scientific results of the expedition were published as supplementary volumes of the 'Archiv für Hydrobiologie', under the title 'Tropische Binnengewässer'; till 1939, 8 volumes came out, including many papers by RUTTNER. Itinerary in vol. 1, 1930, p. 5–17.

FR. RUTTNER: 'Die Wasservegetation einiger Seen Niederländisch-Indiens' (in KARSTEN, Vegetationsbilder, Reihe 25, Heft 7, pl. 37–42, 1940).

In the itinerary the German 'u' stands for the Dutch 'oe'.

(2) C. G. G. J. VAN STEENIS: 'Die Pteridophyten und Phanerogamen der Deutschen Limnologischen Sunda-Expedition. Mit Vegetationsskizzen nach Tagebuchaufzeichnungen von FR. RUTTNER'

(Arch. f. Hydrobiol. Suppl. vol. 11 (= Trop. Binnengewässer vol. 3), 1932, p. 231–387, 8 fig., tables, and pl. 27–63).

Lichens by ZAHLBRUCKNER in *l.c.* 12, 1934, p. 730–738, 3 fig.

Rijck van der Gracht, F. M. P.

president of the district joint court at Klaten (*Centr. Java*), collected some plants at Kedjene, Waroenpring, in Pekalongan Residency.

COLLECTIONS. *Herb. Bog.*, including *Taeniophyllum biocellatum* J.J.S. *n.sp.* He presented wild vanilla to *Hort. Bog.* in *1912.*

Rijckevorsel, L. M. van

(1884, Vught, N.Br., Holland; 194 . , in Japanese prisoner camp, Java), Father of the Society of Jesus, stationed in Central Java, *viz* at Moentilan from 1909–14 and 1919–27 (during World War I in Holland), at Ambarawa 1927–36, at Moentilan again 1936–38, and at Mertojoedan 1938–39.

COLLECTING LOCALITIES. *1913. Centr. Java:* Kedoe Residency, also on G. Andong near Djokja. —*1922. W. Java* (Apr.): G. Papandajan, lava streams G. Goentoer, G. Kendang and Kawah Manoek.—*1930. Centr. Java* (Jan.): neighbourhood of Ambarawa (collecting *Cuscuta australis*).

COLLECTIONS. *Herb. Bog.:* > 153 *nos.*

Rycroft, Sir William

Major-General, Governor of British North Borneo, made collections of plants at Sandakan, *Br. N. Borneo*, on *B(a)lambangan Isl.*,[1] *etc., about 1923.*

COLLECTIONS. *Herb. Brit. Mus.* His plants have printed labels.

LITERATURE. (1) *cf.* JONKER, Monograph of the Burmanniaceae, 1938, p. 125.

Rijk, T. de

of Soerabaja, E. Java, forwarded an album containing wild and cultivated plants of the D.E.I., under the title 'Album botanique et horticole' (French text in manuscript), to the International Exhibition at Amsterdam in 1883 (*cf.* Catalogue of that Exhibition, p. 128).

Rijkebüsch, Elisabeth Johanna

(1902, Fort de Kock, Sumatra; x), passed her final examination in natural history in 1928 at Leyden University; from 1934–40 Assistant at the Medical College, Batavia; subsequently on furlough to Holland and till 1945 unable to come back to Java on account of the war. In 1945 she returned to Java, and was appointed on the staff of the Military Hygienical Institute, Batavia. In the thirties she did research work on skin *Fungi.*

COLLECTING LOCALITIES. *SW. Celebes* (July *1935*), on a tour by car from Makassar to Rante Pao and Palopo, collecting near Todjamboe, Enrekang, Lemo-Lemo, Pasoei, Kalosi, *etc.; W. Java:* Depok (Apr. *1936*); *Centr. Java:* Diëng Plateau (mid-*1937*);[1] *W. Java:* Oedjoeng Genteng, Djampangs (S. coast) (June 6, *1938*).

COLLECTIONS. *Herb. Bog.:* > 50 *nos*, including 21 from *Celebes.*

LITERATURE. (1) E. J. RIJKEBÜSCH: 'Uitstapjes in het Diëng Gebergte' (Oriënt 33, Aug. 14, 1937, p. 13–20 and continuation).

Rijn, A. F. Ch. van

presented wild living plants from Depok, Kretek and Tjibalok (*Java*) to *Hort. Bog.* in the years *1919–20.*

Rijn, L. A. van

of Poeroek Tjahoe, on the Upper Barito River, *SE. Borneo*, sent living orchids to *Hort. Bog.* in *1904.*

Rijn van Alkemade, Ingebrecht Abraham van

(1858, Rotterdam, Holland; 1932, The Hague, Holland), joined the D.E. Indian Civil Service in 1878; in 1900 promoted Resident of Palembang, S. Sumatra.

He is commemorated in *Pandanus alkemadei* MARTELLI.

COLLECTIONS. He sent material of abovementioned plant from Ogan–Oeloe Division, Palembang Res., *S. Sumatra*, to MARTELLI (*cf.* Webbia 4, 1913, p. 430–431). Material in *Herb.* MARTELLI (= *Florence*).

S.F. *nos, cf. sub* Singapore Botanic Gardens.

S.W.K. *nos, cf. sub* Forest Research Institute, Buitenzorg.

Saäman, *cf. sub ditto.*

Saänam (or **Saänan**)

student 'mantri' in the Botanic Gardens at Buitenzorg, Java, who attended the VAN HULSTIJN (see there and below) Expedition to the Moluccas.

ITINERARY. VAN HULSTIJN *Exp., 1913–14.* For the first part of this expedition *cf. sub* ATJE(H). From May *1914* in the *Obi Islands;* the operations were discontinued in connexion with the European war. The plants from *Ambon* were probably collected during the voyage home. SAÄNAM was back at Buitenzorg towards the end of the year.

COLLECTIONS. *Herb. Bog.:* plants from VAN HULSTIJN Exp., *viz* 141 *nos* from *Obi, P. Bisa* and *Ambon.*

Sabado, S., *cf. sub* Forestry Bureau, Manila.

Sablaya, M.

COLLECTIONS. *Herb. Manila: Philippine* plants (pres. *1916*); 43 dupl. in *U.S. Nat. Herb. Wash.*

Sachs, E. F.

of *Sumatra*, sent a tuber of *Amorphophallus titanum* to *Hort. Sing.* in *1879.*

Sachse, Frans Jonathan Pieter

(1870, Gombong, Java; x), Officer of the Infantry, who joined the D.E. Indian Army in 1893; in former years Military Commander of Ceram,[1]

later captain of the General Staff, was stationed for a second time in Ceram in the years 1915–20, in charge of the surveying and mapping of the island with the assistance of some Indonesian scouts of the Topographical Service.[2] He was pensioned off with the rank of major-general in 1927.

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg:* 3 *nos* from *Ceram*, numbered in the F.R.I. bb. series (see *sub* Forest Research Institute), coll. about *1919;* dupl. in *Herb. Bog.*[3]

LITERATURE. (1) Author of 'Het eiland Seran en zijne bewoners' (Leiden 1907, w. pl. & maps); *cf.* also Tijdschr. K.N.A.G. 1906, p. 439 (with maps VII and VIII, *etc.*), and 833.

(2) *cf.* Jaarversl. Topogr. Dienst for 1917, p. 105–107, pl. XX–XXI.

(3) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 16, 1938, p. 96.

BIOGRAPHICAL DATA. Persoonlijkheden in Nederland, 1938, + portr.

Saharoedin, *cf. sub* Forest Research Institute, Buitenzorg.

Sahat bin Maleh

joined the Forest Dept *Malay Peninsula* in 1907, and collected in Negri Sembilan. Retired now. Collections *cf. sub* Conservator of Forests series, Kepong.

Saheb, B. K.

(1885, Singapore; x), Foreman Gardener in the Singapore Botanic Gardens, 1899–1913; later nurseryman and dealer in plants. For many years he occasionally brought plants to the Singapore Gardens for naming and for sale. He collected in Sarawak, *NW. Borneo*, as early as *1911*, evidently in *Rhio* (= *Riouw*) too.[1]

Plethiandra sahebii BURK. was named after him (*cf.* Journ. Str. Br. Roy. As. Soc. *no* 77, 1917, p. 265–269, 4 fig.).

COLLECTIONS. His name appears on a few labels in *Herb. Sing.*, though he made no dried collections himself. Living material to *Hort. Sing.*

LITERATURE. (1) *cf.* Journ. Str. Br. Roy. As. Soc *no* 79, 1918, p. 45–46.

Sahiboe, *cf. sub* Forest Research Institute, Buitenzorg.

Saïd, Abdoel

sent *Leguminosae* from Benkoelen, *S. Sumatra*, to *Hort. Bog.* in *1919*.

Saïd, A. S., *cf. sub* Forest Research Institute, Buitenzorg.

Saidi Naämin, *cf. sub ditto.*

Saimoendt

Indonesian plant collector who attended an expedition in Sumatra (see below).

COLLECTING LOCALITIES. *1925. Djambi Expedition* in *Centr. Sumatra* (July–Oct.). Detailed itiner. *etc.* see *sub* O. POSTHUMUS; in the month of September SAIMOENDT collected in Ds. Baroe, at Sg. Karing, Sg. Merangin, *etc.—W. Java:* G. Moenara(h) and G. Noentjoeng on Roempin Estate, NW of Buitenzorg (2nd half of Dec.).[1]

COLLECTIONS. *Herb. Bog.: Sumatra* plants Djambi Expedition, partly collected by SAIMOENDT and numbered in the series of POSTHUMUS (labels also bearing private numbers); *nos* 1–63 from Roempin Estate.

LITERATURE. (1) *cf.* Versl. Pl. Tuin Buitenzorg for 1925, p. 7.

Saint John, Sp., *cf. sub* JOHN, SP. ST.

Sainz de Baranda, Dr José, *cf. sub* BARANDA, Dr J. S. DE

Saito, S.

made a herbarium collection of cultivated plants and weeds in the Economic Garden of the General Experiment Station for Agriculture at Buitenzorg. > 127 *nos*, partly for identification to *Herb. Bog.* (in July *? 1939*).

Sajor, Valentin

(1893, Cabugao, Ilocos Sur, Luzon, P.I.; x), from 1917–18 Ranger-Scaler of the Bureau of Forestry of the Philippines; since 1924 Officer in charge Bureau of Forestry; B.S.F. University Idaho in 1926, and M.F. Yale University in 1927; from 1928–30 District Forester; from 1930–33 Assistant Chief Div. of Licenses and 1933–34 of the Div. of Forestry & Range; since 1934 Forester in the Bureau of Forestry and Assistant Professor of Range Management, Manila.

Author of some sylvicultural papers.[1]

COLLECTIONS. *Herb. Manila*, numbered in the F.B. (= Forestry Bureau, see there) series.

LITERATURE. (1) V. SAJOR: 'Forests and forestry in the Philippines' (Makiling Echo 6, 1927, p. 2–17), and some others in the same periodical.

BIOGRAPHICAL DATA. Nat. Res. Counc. P.I. Bull. 7, 1935, p. 888, incl. bibliogr.

Sakai, R.

and F. SENBON, two Japanese botanists, stayed at Buitenzorg (*W. Java*) in Dec. *1911*, and made a collection of economic plants for the *Bur. of Forestry Tokyo* (*cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 37).

Sakaran (Sakeran or Sekarang)

student 'mantri' of the Botanic Gardens at Buitenzorg, who attended NIEUWENHUIS's expedition to *Borneo* in the years *1898–99* (see *sub* NIEUWENHUIS). Since 1904 appointed 'mantri'; retired in 1926.

COLLECTIONS. *Hort. Bog.:* living plants from *Borneo*,[1] and Tjibodas (G. Gedeh, *W. Java;* pres. *1910*).

LITERATURE. (1) *cf.* Versl. Pl. Tuin Buitenzorg for 1899, p. 66–67.

Salazar, A., *cf. sub* Forestry Bureau, Manila.

Saleh, M., *cf. sub* Forest Research Institute, Buitenzorg.

Sales, J. G.
in 1925 appointed Junior Ranger in the employ of the Bureau of Science at Manila, Luzon, P.I.; he collected in Sandakan, *Br. N. Borneo, from 1925.*
COLLECTIONS. *Herb. Manila* (pres. Apr. 1929); dupl. in *Herb. Bog.*

Salih, *cf. sub* Forest Research Institute, Buitenzorg.

Salih, Hadji Mohamed
of Singapore, presented some *Vandas* to *Hort. Sing.* in *1923.*

Salim, Abd. & Oedin, *cf. sub* Forest Research Institute, Buitenzorg.

Salim, Mohammed, *cf. sub ditto.*

Salim bin Abdulla Moetahar Said
of Pontianak, *W. Borneo*, sent plants to *Buitenzorg* in *1874.*

Salleh bin Jagot
joined the Forest Dept *Malay Peninsula* in 1907, and collected in Selangor; at present retired; *cf. sub* Conservator of Forests series, Kepong.

Saluz, J.
of Samarinda, *E. Borneo*, presented seeds, fruits, and 2 herbarium specimens from there to *Herb. Univ. Zürich* (*1904–05*).

Salverda
is cited as the collector of a plant in *P. Kangean*, on April 13, *1911* (*cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 15[2], 1937, p. 61).
He might be identical with the forester of that name, ANTONI THOMAS LUBERTUS SALVERDA (1868, Groningen, Holland; x), who was in the employ of the D.E. Indian Forest Service since December 1891, stationed in the forest district Soerabaja–Madoera–Pasoeroean, since 1893 in teak districts in Central Java, and since March 1904 in E. Priangan–Krawang. In 1909 he was appointed Inspector and in 1910 promoted Inspector in Chief; retired in 1916.

Salverda, Zeno
(1903, Hengelo, O., Holland; x), was educated at the College of Agriculture, Wageningen; came to Java in 1930 and was appointed estate assistant on the Government coffee plantation Bagelen in E. Java; in 1932 in the employ of the Plantation Company Siloewak Sawangan at Weliri (Centr. Java). Since 1933 in the D.E. Indian Forest Service, stationed at Hoalmoal (W. Ceram); in 1936 sent to West New Guinea for a preliminary exploration (see itinerary below); from 1938 in the teak districts of Java; in 1940 in Ceram and Celebes, in 1941 in Ambon, where he was replaced in 1946 after the Japanese capitulation.

COLLECTING LOCALITIES & ITINERARY. *1935. W. Ceram.*[1]*—1936–37. W. New Guinea*, Vogelkop:[2] *P. Babo* (Nov. 25, *1936*); by proa along the mangrove to the Aroba River (28) and S of Babo (Dec. 2); by ship from Babo to the *Kamoendan River*, sailing 50 km upstream (Dec. 5–7); by motor-proa proceeding to the Kariri District (8–9), making bivouac; some trips in the neighbourhood (10–12); making the 2nd bivouac part of the way downstream in the sago swamps, and making exploration tours (14–18); 3rd bivouac at the mouth of the Kamoendan; tour in *P. Babo* (Jan. 10, *1937*); Fak-Fak (16–17), exploring the Otakwa, Bloemen, Noordwest and Lorentz rivers in the 'Albatros' (18–27); from Inanwattan (S. coast) by motor-boat to Teminaboean on the upper course of the Kaiboes (29); on foot to *Lake Amaroe* (30–31); reconnaissance W and NW of the said lake (Febr. 1–2), karst landscape; returning *via* Wehali, and trip to Hesia (3), Siak Moselek and environs (4), Wersar and by motor-boat to Kondal (6–7); Inanwattan (8–10); back at Babo; *Kokas and the mountainous country of Onin Peninsula* (13–22): Kokas; ascending the Kajoeni River by proa to Pasar Pendek, making tours in the mountains, visiting Pikpik, Komkomoer, Boenga-boenga-poer, Bagbadan, and the Hamamandi (= Hamamedi) Ridge; back at Kokas and by proa to the opposite *P. Ogar; tour to Idore* (March 1–4), the 'mantri'-surveyor collecting on *P. Modan; savannah region North Bomberai:* by proa from Babo to Senendara River (6); ascending the same, visit to the Makasuara, Tovoei and hence to the Agonda Savannah (padang!); returning (11) by proa; *Central Bomberai:* from Babo by proa along the Kaitero to Taniba and exploring the neighbourhood (23–25); on foot to the ladang grounds W of Argoeni Bay, *via* Waroroma, Poerwarta, Mariëdi, Wermenoe to Mendiwa (26–29); to the sources of the Gobo and Gesawe rivers *via* Mangera, Waragegere and Raoena (March 30–Apr. 7); from Mendiwa by proa to Serarang (Apr. 8); *G. Genofa* (9–10), visiting a stalactite cave; from Mendiwa by proa to Tiwara on the northern part of the Argoeni Bay (12); minor tour in the environs and *crossing to Soegawata* (13); along Kawafa River (14); back to Babo (15).—*1940. Ambon, W. Ceram* and *SW. Celebes.*

COLLECTIONS. In *Herb. For. Res. Inst. Buitenzorg* (see there), including 574 *nos* from *New Guinea*, numbered in the bb. series; also specimens of woods and resins. In *Herb. Bog.:* mainly duplicates of the F.R.I. bb. *nos.*

LITERATURE. (1) Typed reports on W. Ceram (1935) in the Forest Research Institute, Buitenzorg.

(2) Z. SALVERDA: 'Rapport van een oriënteerende exploitatie in ZW. N. Guinea Nov. 1936–Mei 1937' (mimeographed report of the D.E.I. Forest Service, accompanied with many photographs and maps); see also extract from a letter, dated May 1937, in Tijdschr. Nieuw Guinea 2, 1937, p. 101, and R. WIND in *l.c.* 3, 1939, p. 507–530, 571–591; 'Ervaringen van een landhuishoudkundige exploratie op N.-Guinea' (Bergcultures 13, 1939, p. 1265–1275, w. fig.).

Salvoza, F. M.
collector in the F.B. series (see *sub* Forestry Bureau, Manila); *Herb. Manila.* In *1947/48* he collected plants on Mt Makiling in *Luzon*, and in *Polillo* and *Palasan Island.*
He is probably identical with FELIPE SALVOZA (1892, Polillo, Tayabas, P.I.; x), from 1915–16 Principal Teacher at Infanta Int. School, Tayabas; 1918–26 Ranger, and after study at the State College at New York, Forest Officer since 1930. In 1924 he started a collection of lianas.
Author of several sylvicultural papers.[1]
LITERATURE. (1) F. SALVOZA: 'Leaflet of Philippine Dipterocarps' (Makiling Echo 11, 1932, p. 73–116); 'The Dipterocarps in Pangil, Laguna' (Nat. & Appl. Sci. Bull. Univ. Philip. 5, 1936, p. 419–448); *etc.*
BIOGRAPHICAL DATA. For F. SALVOZA *cf.* Nat. Res. Counc. P.I. Bull. 7, 1935, p. 888, incl. bibliogr.

Samba, *cf. sub* Forest Research Institute, Buitenzorg.

Samel, E., *cf. sub ditto.*

Samethini, *cf. sub ditto.*

Samian, *cf. sub ditto.*

Samioedin, A. B., *cf. sub ditto.*

Samuels, *cf. sub ditto.*

Sanchez, Father F.
of the 'Ateneo de Manila'; a very amateurish collector.
Canarium sanchezii MERR. was named after him.
COLLECTIONS. *Herb. Manila:* 19 *Philippine* plants (pres. *1911/12*) and 24 Benguet plants (*Luzon*) for identification (*1912/13*). At all events he collected in *Mindanao*[1] and *Cebu*[2] too.
LITERATURE. (1) *cf.* Philip. Journ. Sci. C. Bot. 11, 1916, p. 183.
(2) Plants from there cited in MERRILL, Enum. Philip. Fl.Pl.

Sanderson, A. R.
Mycologist in the Laboratory of the Rubber Growers Association at Petaling, Selangor. He left Malaya when the laboratory was closed in 1926. His special interest is *Mycetozoa.*
COLLECTIONS. *Herb. Sing.:* a few phanerogams of his various travels in the *Malay Peninsula, e.g.* 26 *nos* in *1926.* According to Mr HOLTTUM he might have taken some to England.

Sandique, *cf. sub* Forestry Bureau, Manila.

Sandkuhl, H.
COLLECTIONS. *Herb. Manila: Philippine* plants (pres. *1915–16*); partly with private numbers, but also in the B.S. (*cf.* Bureau of Science) and F.B. (*cf.* Forestry Bureau) series. Many of his plants are cited in MERRILL, Enum. Philip. Fl.Pl.; evidently the numbers exceed 300. According to MERRILL he sold part of his duplicates.

Sands, William Norman
in the Agricultural Department Straits Settlements (1920– . .).[1]
COLLECTIONS. *Herb. Sing.:* plants from the *Malay Peninsula* (pres. *1924*) (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).
LITERATURE. (1) Author of 'Vegetation of the ricefields in North Kedah' (Malayan Agric. Journ. 21, 1933, p. 379–386).

Sanger-Davies, Arthur Elphinstone
(1885, Tunbridge-Wells, Sussex, England; March 22, 1945, in Japanese camp at Si Rengo-Rengo near Rantau Prapat, Sumatra), completed his training at Oxford after starting at Cooper's Hill; he joined the Forest Department Malay Peninsula in Aug. 1907, during his term of office holding charge of most states of the Federation; finally State Forest Officer, Negri Sembilan and Malacca; retired in June 1937, and settled at Brastagi, Sumatra. He started the regeneration-improvement-felling schemes in Malayan Forests.
COLLECTIONS. *Herb. Kuala Lump.*, numbered in the C.F. series (see *sub* Conservator of Forests), collected throughout the *Federated Malay States.*
BIOGRAPHICAL DATA. In Malayan Forester July 1937 (*non vidi*); *l.c.* 11, 1948, p. 58.

Sant, Lieutenant
collected living plants in *Flores* (*1924*), *Lesser Sunda Islands*, which were sent with those of GROENEVELDT (see there) from Timor to *Hort. Bog.*

Santos
He is commemorated in *Antidesma santosii* MERR. Probably J. K. SANTOS, see there.
COLLECTIONS. *Herb. Manila: Philippine* plants (pres. *1917*); part of his plants numbered in the B.S. (see Bureau of Science) series, also in F.B. (see Forestry Bureau) series by P. Santos.

Santos, J. K.
COLLECTIONS. Dupl. *Philippine* plants in *Herb. Univ. Michigan; cf.* also *sub* SANTOS.

Santos, José Vera
A *no* 397, *Plumbago zeylanica*, was collected by him in Batangas Prov., *Luzon, P.I.;* material in *Herb. Univ. Philip.;* dupl. in GRAY *Herb.*, Cambr. (Mass.).
Author of 'New grasses from the Philippines and S. India' (Journ. Wash. Acad. Sci. 33, 1933, p. 135–140).

Santos, P., *cf. sub* Forestry Bureau, Manila.

Sapiïn
Indonesian collector who collected in *W. Java*, especially on Poentjak Pass and at Tjibodas (slope G. Gedeh), as early as *1896.* Most of his collecting was done in the years *1914–24* on the N. slope of G. Gedeh.

COLLECTIONS. *Herb. Bog.*, partly numbered in BEUMÉE's series (see there); dupl. in *Herb. Leyden.*

Sappan bin Hassan

Junior Foreman (1922– . .), and in 1938 Foreman Gardener of the Gardens Department Straits Settlements.



J. K. SANTOS

COLLECTIONS. He never made dried collections, but his name appears on some specimens in the *Singapore Herbarium of cultivated plants.*

Sapper, Karl Theodor

(1866, Wittislingen, Bavaria, Germany; x), was educated at Munich (Ph.Dr 1888); in 1888 at the Zoological Station, Naples, Italy; from 1890–91 on coffee plantations, from 1893–96 geologist in Mexico; since 1902 Extraordinary Professor of Geography at Tübingen, Germany (from 1907–10 Ordinary), from 1910–19 Professor at Strassburg, and from 1919 onwards at Würzburg.

He travelled in Central America and Mexico (1880–1900), Central America and the Lesser Antilles (1902–03), and made a geographical-geological expedition to the Bismarck Archipelago with FRIEDERICI (see itinerary below).

Author of a comprehensive paper on New Ireland.[1]

ITINERARY. *Bismarck Archipelago, 1908.*[2] The expedition left Germany in March; investigation of *Neu Hannover* (= *New Hanover*) (May–June), crossing the island twice; *Neu Mecklenburg* (= *New Ireland*) (mid-June–mid-July), crossing the island several times; after a visit to Bougainville, SAPPER returned to *New Ireland*, and visited the *Anir Islands;* exploration of the SE. coast of *New Ireland*, and crossing the island from Suralil to Hiratan, and from E to W through the narrowest part. End of August the expedition was dissolved; return voyage in September.

COLLECTIONS. *Herb. Berl.:* 3 *nos* from *Neu Mecklenburg* (= *New Ireland*) (pres. 1910). He made zoological collections too.

LITERATURE. (1) K. SAPPER: 'Beiträge zur Landeskunde von Neu-Mecklenburg und seinen Nachbarinseln' (Mitt. Deutsch. Schutzgeb. Erg. Heft 3, 1910, p. 1–130, 1 pl., 8 maps; map 7: vegetation map!; it includes an essay by C. LAUTERBACH: 'Die Vegetationsformen', *l.c.* p. 71–74).

(2) *cf.* Deutsch. Kolon. Blatt 1908, p. 743, 1009–1010, 1057, 1060 + map, 1237.

BIOGRAPHICAL DATA. In J. C. POGGENDORF, Biogr.-liter. Handwörterbuch 4, 1903.

Sappi bin Hassan

Foreman Gardener, Botanic Gardens, Singapore (1922–38). Probably SAPPAN BIN HASSAN.

COLLECTIONS. He may have brought in odd specimens from *Singapore Island*, but never made dried collections. His name may appear on specimens in the *Sing. Herbarium of cultivated plants.*

Sarasin, Karl Friedrich (mostly Fritz) & Paul Benedikt

(1859, Basel, Switzerland; 1942, Lugano, Switzerland) & his cousin (1856, Basel, Switzerland; 1929, Basel), famous wealthy zoologists and explorers who besides in Celebes (see below), travelled in Ceylon (1883–86, 1890, 1902, 1907, 1925), Egypt and Sinai (1889), New Caledonia and the Loyalty Islands (FRITZ with J. ROUX, 1910–12),[1] and Tunis (1923). After his cousin's death FRITZ made a voyage to Siam in 1931. In 1886 they settled at Berlin to work out their collections; since 1896 they made Basel their residence in the intervals between their travels; after 1907 each went his own way. Their main object was the collecting of zoological material, besides they had a large interest in ethnography, botany, *etc.;* in 1919 FRITZ was made a honorary Dr of geography at Geneva.

Several plants were named in their honour.

ITINERARY. *1st Celebes Expedition, 1893–96.*[2] *N. Celebes:* Menado (= Manado) (June 26–27, *1893*); *stay at Kema* (June 28–Nov. 17), making trips to Tondano–Tomohon (Sept. 1–10), G. Klabat (20–27), G. Sudara (Oct. 14–19); *by land from Menado to Gorontalo:* from Menado (Nov. 20); Amurang; Karoa (25); Lake Mokobang (29); Popo (30); Pontodong, Kottabangon (= Kotamobagoe) (Dec. 1); Salimandungan (4); Lolak (9); Dumoga Besar (12); Dumoga Ketjil and Duluduo (16); Malibagu (= Molibagu) (18); by proa to Taludaä (arriving the 23rd); Tombolilati River (24); Gorontalo (26); *exploration of the Bone River:* from Gorontalo (Jan. 6, *1894*); Pinogo (9); following the course of the river; G. Bulawa (16); Bone mountains; in SSE. direction to the coast, reaching Negeri Lama (21); by proa to Malibagu (23) and proceeding to Kema (arriving the 30th); *stay at Kema* (Jan. 30–March 15); *stay at Tomohon* (March

16–Aug. 9), and climbing (it is not clear whether during this or a following stay!) G. Lokon (several times), G. Masarang, G. Rumengan and G. Empung (May), and many tours in the environs; *crossing from Buol (= Boeol) to the Gulf of Tomini:* Buol (Aug. 15); by proa to Matinan(g) (24); by land in southern direction; G. Matinan(g) (28); Oleïdu kiki (31); G. Bontula (Sept. 1); along the Mangkahula (= S. Randangan) and Butaiodaa River (= lower course of the Mangkahula after the junction with S. Pagoeat) to the S. coast; Maris(s)a (6); by proa (7) to Gorontalo (arriving the 10th); returning by boat (15) to the Minahassa; *stay at Tomohon* (Sept. 18–Nov. 30), making tours to G. Lokon, G. Empung, Langowan, *etc.;* sailing from Menado (Dec. 2) to Makassar (*SW. Celebes*) and after a short delay, by mail-boat circumnavigating the 2 southern peninsulas (Dec. 17–31), touching at several places on the Gulf of Bone, the island of *Buton* (= *Boetoeng*) and some places of the *SE. peninsula;* stay at Makassar (Jan. 1–14, *1895*); *crossing Central Celebes from the Gulf of Bone to the Gulf of Tomini:* Palop(p)o (Jan. 19); by proa to Borau (27); Djaladja (30); Tanaoki (Febr. 1); Lambongpangi (5); Takalekadjo (= Takolekadjoe) Mts; *via* Tamakolowe (10) to Lake Posso (11); by proa to the northern border of the lake (15); proceeding (21) to the coast of the Gulf of Tomini, *via* Bunkudina, Tamunku, Jajaki (23); Mapane (24) and from there back to *N. Celebes* by sailing-proa (March 4–12); Gorontalo (13–20), making explorations near Lake Limboto and along the coast; by steamer (21) to Menado; *stay at Tomohon* (March 23–May 7), climbing G. Soputan (Apr. 18–22) *via* Lango(w)an; voyage to *SW. Celebes* (May 8–24): *headquarters at Makassar* (May 25–June 26); making a tour (June 27–July 8) to the Peak of Maros, Leangleang, the Bulu Selimbo and Bantimurung; back at Makassar again (9–27); *failing attempt to cross the SW. peninsula* from the Gulf of Mandar to the Gulf of Bone: by steamer (28) from Makassar to Pare-Pare; by proa to Maroneng (Aug. 2); on foot to Bungi; to Enrekang (5) *via* the Loko Mts; along the Bambapuang (9); Lake Lura; Sosso (10); Kalos(s)i (12), where forced to return to Enrekang and Maroneng (arrival on the 16th) on account of the hostile attitude of the natives; by proa *via* Pare-Pare (19–24) to Makassar; *stay at Makassar* (Aug. 25–Sept. 28); *tour to the Peak of Bantaëng (= Peak of Bonthain)*:[3] setting out from Makassar (Sept. 29); Bantaëng; Lokka, starting the ascent on Oct. 13; crater rim (15); descending to Errelompoa (16); Lok(k)a (17–24); the next day setting out for a 2nd ascent, this time in NE. direction *via* Djambi (25), Labo and Borongrapoa (26), Kawaija and Kalimbu (27), Tasosso (28), to the Wawokaraëng (29); descent *via* Tasosso in N. direction to Lembagna (30); crossing Buntulang and Maminko rivers and proceeding in W. direction; Erreúlo (or Raulo) (Nov. 2); Errelompoa (3), from where once more setting out (4) to the summit along the first track; the Lompobat(t)ang (5); Errelompoa (6); Lok(k)a (7–14); returning by coastal steamer (15) to Makassar; *stay at Makassar* (Nov. 19, 1895–Febr. 4, *1896*); *crossing the northern part of the SE. peninsula:*[4] Paloppo (Febr. 9–16); by steamer to the Bay of Ussu (= Oesoe) (17); Ussu (18–22); proceeding afoot (23); Matan(n)a on Lake Matana (26–27); by boat to Sarawáko (= Saroako) (28), and to the southernmost extremity of the lake; on foot to Lake Towuti (29), Pekalowa; staying at the lake and visiting P.



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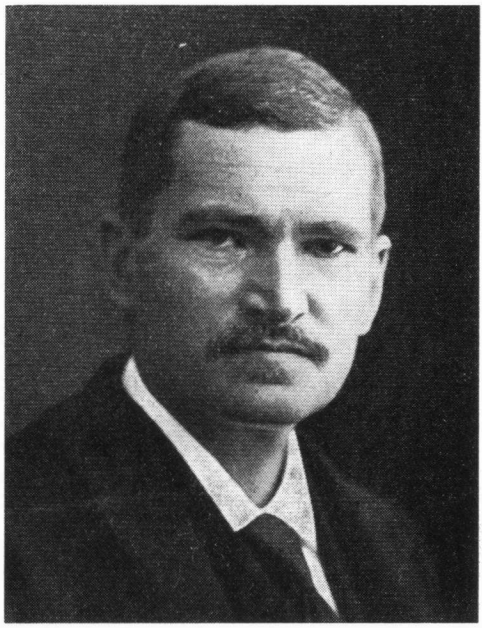
Loëha (March 2), returning the same road to Lake Matani (= Matana); Sarawako (3–4); crossing Lake Matani to Sokoija (5–6); Sokita and Togo (8); Tampira (9); downstream Tampira River (= S. La) to the coast of Tomori Bay (9); *P. Timbe* (9–13); voyage (15–22) back to Makassar; *stay at Makassar* (March 23–Apr. 5); return to Europe.—*2nd Celebes Expedition, 1902–03.*[5] *SW. Celebes:* stay at Makassar (March 1–Apr. 11, *1902*); *1st Toála tour:* from Makassar to Maros (Apr. 12); limestone hills of Bantimurung (13–14); Batunuangássue (15); Kappang and the hill Lumpilumpi; Tjamba (17); Lita, Djawidjawi and Tjani (19); Bontorio (22); G. Bowonglangi (24); Bontorio (26–27); Biruë (28); Ponre (29); Bakunge (Apr. 30–May 2) in Lamontjong District; Lappakanru (4); Tjamba (6); Makassar (8); *stay at Makassar* (May 9–July 4), from where making trips to Dulang *via* Maros (May 26), to the *Kuri Islands* (27), to Leangleang (29), *etc.; 2nd tour through Central Celebes* from Palu to Paloppo: sailing from Makassar (July 5); short visit to Donggala (7); Palu (8–10); in S. direction through the Palu Valley, *via* Kalukubúla, Ololodjo (11–12); Sidondo–Sidojo–Sibalaja (13); Pakuli (14); across a plateau to Tuwa (15);

via a spur of the Momi to Sadaonta (16); Kulawi District (17–19); Sibaronga Ridge to Langko (20); Lake Lindu (21–23); back to Kulawi (24–26), not proceeding on account of unwillingness of the natives; Sadaonta (27); Tuwa (28); temporary stay at Sakedi (July 29–Aug. 10); Pulu–Pesaku–Kalek-



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ke (11); Beka and Palu (12); stay at Palu (12–27); setting out on the *2nd attempt to cross the Central part of the island: via* Dolo (28), Pesaku (29); Sakedi (30–31), making a trip to Pandéra (31); Tuwa (Sept. 1); Sadaonta (2); Kulawi (3); Gimpu (5–6); proceeding in S. direction to Toware (11); Landjéka, Gintu (12); Bada District; Bangkekau (13–15), visiting Badagajang (15); Topapu Mts (reaching the summit of *c.* 1900 m alt. on the 17th); descending to Lebóni Plain, Simpúsu (18); Leboni (19–20); Poanáa Mts (22, making camp at 1760 m alt.); watershed Takal(l)a Mts, 2000 m alt. (23); descending to Luwu Plain along S. Baliase; Masapi (26); Salubalombo, Palilli (27); Tanrung, Masamba (28–29); Waibunta (30); Taruwe, Penéki (Oct. 1); crossing Lumasi River, Buntubuku (2); Paloppo (3– .), visiting the near *P. Libukang; SW. Celebes: stay at Makassar* (Oct. 21–Dec. 5); *2nd Toála tour:* Makassar–Maros–Batunuangassue (Dec. 6–8); Bangaja Plateau (7); Kappang (8); ascent of the Lumpilumpi and proceeding to Tjamba (9–10); Lappakanru Plain (11); Lamontjong region, bivouac near Bakunge (12–28), visiting many caves in the Toala District, *e.g.* the Leong Tjakondo, Leong Suru, and Tinodoë; Walannaë Valley (29); climbing Bulu Tana (30); Balangnipa, Sandjai (= Sindjai) (Dec. 30–Jan. 1, *1903*); Kadjang (2); Tiro (3–6; exploring the coast); Makassar (8); *stay at Makassar* (Jan. 9–Febr. 10), *via* Maros to Pangkadjene and Kantissang (Jan. 29), *etc.; crossing the southern part of the SE. peninsula:* embarking at Makassar (Febr. 11); Kolaka on Mingkoka Bay (= Mekongga Bay) (12–19); Lambo (21); Mowewe (22–23); *via* the Tinondo Ridge and the Simbune Valley (25); Konawe District (26); by way of a depression of the Tomosi Mts to Meraka (27); Lambuja (Febr. 28–March 2); *via* Lereti–Molitu–Opa Swamp (3); making camp at Puriala near the swamp (3–4); returning the same road as far as Molitu (5) and then proceeding in eastern direction, Lalunggátu (6); Pundidaha Distr. (7–8); crossing the Lahambuti River (= Lahoemboeti River), Laloumera (9–10); Kapuhara on Konaweha River and downstream the river to Usambálu (11); country road to Kendari (12); by boat (14–19) *via* Kolaka to Makassar; *stay at Makassar* (March 20–Apr. 8).

According to BACKER, Verkl. Woordenb., 1936, they made another *Celebes* expedition in *1906*; we do not know whether this statement holds true, as yet we have no data.

COLLECTIONS. *Herb. Berl.:* '*Iter celebicum Sarasinorum*' (*a. 1893–96*), 873 *nos* of siphonogams, and '*Iter celebicum Sarasinorum*' II (*a. 1902–03*), *c.* 750 *nos*;[6] WARBURG made the preliminary identifications. The ferns are preserved in *Herb. Basel;* they were worked out by CHRIST;[7] fragments of the *nos* 1–500 (coll. 1893 in the Minahassa), evidently belonging to a diary, in *Herb. Basel* too. In *Herb. Kew:* duplicates *Celebes* exp. *1893–96* (pres. after 1930).

Unfortunately most of the material will be lost now.

LITERATURE. (1) FR. SARASIN: 'Aus den Tropen. Reiseerinnerungen aus Ceylon, Celebes und Neu-Caledonien' (Basel 1931); several other books and papers on New Caledonia and the Loyalty Islands, Ceylon, *etc.*

(2) P. & FR. SARASIN: 'Reiseberichte aus Celebes' (Zeitschr. Erdk. Berl. 26, 1894, p. 351–401; *l.c.* 30, 1895, p. 226–234, 311–352; *l.c.* 31, 1896, p. 21–49); 'Durchquerung von Südost-Celebes' (Verh. Ges. Erdk. Berl. 23, 1896, p. 339–356); *cf.* also *sub* 5.

(3) *cf.* FR. SARASIN, Aus den Tropen, *l.c.* p. 80–102.

(4) *cf. ditto l.c.* p. 103–121.

(5) P. & FR. SARASIN: 'Reisen in Celebes' (Wiesbaden 1905, 2 vols); 'Materialien zur Naturgeschichte der Insel Celebes' (Wiesbaden 1898–1906, 4 vols; non-botanical).

(6) Partly worked out in WARBURG, Monsunia, 1900; by IRMSCHER in 'Begoniaceae Papuasiens' (ENGL. Bot. Jahrb. 50, 1913, p. 335–383); *Ericaceae* by H. SLEUMER in ENGL. Bot. Jahrb. 71, 1941, p. 138–168.

(7) H. CHRIST: 'Filices Sarasinianae' I–IV (Verh. Naturf. Ges. Basel 11, 1894–97, p. 1–35, 198–219 (1 pl.), 221–258 (1 pl.), 421–447); 'Die Farnflora von Celebes' I (Ann. Jard. Bot. Buit. 15, 1898, p. 73–186, pl. 13–16; *pr.p.* coll. SARASIN 1893–96); 'Die Farnflora von Celebes II. Filices Sarasinianae itineris secundi' (Ann. Jard. Bot. Buit. sér. 2, vol. 4, 1904, p. 33–44).

BIOGRAPHICAL DATA. F. SARASIN: 'Zur Erinnerung an P. B. SARASIN' (Verh. Naturf. Ges. Basel 40, 1928/29, p. 1–28, w. portr. and bibliogr.); Vierteljahrschrift Naturf. Ges. Zürich 74, 1929, p. 327 (PAUL SARASIN); Tijdschr. K.N.A.G. 1929, p. 434 (P. B. SARASIN); BACKER, Verkl. Woordenb., 1936; F. SARASIN: 'Aus einem glücklichen Leben' (Autobiographie, 1941); Verh. Schweiz. Naturf. Ges. 1942, p. 303–310 + portr. (K. F. SARASIN); Vierteljahrschrift Naturf. Ges. Zürich 87, 1942, p. 520 (FRITZ SARASIN); Verh. Naturf. Ges. Basel 54, 1942/43 (1943), p. 222–264, incl. bibliogr. + portr. (K. F. SARASIN).

Sarawak Museum Collector

Under MOULTON's (see there) directorship of the Sarawak Museum, a native collector, cited by MERRILL as 'Sarawak Museum Collector' (the native collectors who operated on behalf of Manila are cited: Nat. Collector Bur. Sci. in Sarawak), collected more than 2300 *nos* of plants.

Saraya, *cf. sub* Forestry Bureau, Manila.

Sardjo Martosoediro, *cf. sub* Forest Research Institute, Buitenzorg.

Sareän (= Sarian)

Indonesian in the employ of the Botanic Gardens at Buitenzorg, who assisted RACHMAT (see there) on the *2nd* LORENTZ *Expedition* to New Guinea in *1909*. Like the latter he was awarded the Bronze Star for Loyalty and Merit in 1910.

COLLECTIONS. He made no dried collections, but brought living plants from *New Guinea* (*1909*) and *W. Java* (G. Salak in *1911;* Tandjong Priok and Tjiseëng with IRSAN in *1927;* G. Leutik in 1927 and *1931*) to *Hort. Bog.* His name may appear on some of the labels in *Herb. Bog.*

Sareno, *cf. sub* Forestry Bureau, Manila.

Sargent, Charles Sprague

(1841, Boston, Mass., U.S.A.; 1927, Brooklyn, Mass., U.S.A.), studied botany and horticulture; in 1872 appointed first Director of Harvard Botanic Garden and Professor of Horticulture besides (1872–73); Nov. 1872 Director of the Arnold Arboretum (1879 resigning the Harvard Garden). In 1892 he made a voyage to Japan, in 1903 a tour around the world, and in 1905–06 he visited S. America. He made the first attempt to reafforest the prairies.[1]

Some plants were named after him.

ITINERARY.[2] *1903.* During his tour around the world he paid a visit to *W. Java* (Buitenzorg, and Tjibodas on the slope of Mt Gedeh) (Oct. 15–16), and *Singapore* (28).

COLLECTIONS. *Herb. Arn. Arbor.:* large botanical collections of the above-mentioned tour; *no* duplicates, nor diaries or notes.

SARGENT is cited to have collected a *Rhizophora* on the shore of Johore Strait, *Malay Peninsula*, on Oct. 27, *1913*. Probably the cited year should be 1903.

LITERATURE. (1) Author of 'The Silva of North America' (1891–1902, 14 vols); 'Manual of the trees of North America' (Boston, 1st ed. 1905); *cf.* also Bibliography in Journ. Arn. Arbor. 8, 1927, *l.c.* below.

(2) *cf.* Versl. Pl. Tuin Buitenzorg for 1903, p. 24.

BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 2, 1905, p. 201; Journ. Arn. Arbor. 8, 1927, p. 69–86, w. portr. & bibliogr.; Kew Bull. 1927, p. 221–223; CURTIS' Bot. Magaz. Dedic. 1827–1927, p. 335–336, + portr.; Journ. Bot. 65, 1927, p. 151–152; BACKER, Verkl. Woordenb., 1936.

Sari, *cf. sub* Forest Research Institute, Buitenzorg.

Sarip, *cf. sub ditto.*

Sarip

Assistant 'Mantri' of the Herbarium at Buitenzorg, who attended R. E. PH. MAIER (see there) on a trip in Bali (see below).

COLLECTING LOCALITIES. *1918. Bali; cf.* R. E. PH. MAIER, also for literature. SARIP collected at Tjandie kesumah (Aug. 13), *etc.*

COLLECTIONS. *Herb. Bog.:* plants from the MAIER Exp. (see there); some labels bear SARIP's name.

Living plants in *Hort. Bog.*

Sastraätmadja, *cf. sub* Forest Research Institute, Buitenzorg.

Sastro Soewondo, *cf. sub ditto.*

Sastroatmodjo, *cf. sub ditto.*

Sastrodihardjo, *cf. sub ditto.*

Sastrodirdjo

'Mantri' of the D.E. Indian Forest Service, stationed at Poedjon (E. Java), collected 19 *nos* of plants near Tawangredjo in *E. Java* (June 30, *1926*); in *Herb. Bog.*

Sati, St., *cf. sub* Forest Research Institute, Buitenzorg.

Saubert, Gaston Gabriël Paul

(1908, Djokjakarta, Java; June 26, 1944, during a Japanese transport of P.O.W.'s o/b the 'van Waerwijck' in Malacca Straits), was educated at Wageningen Agricultural College, taking his Dr's degree in 1937 (working for his thesis at Leyden); since Febr. 1938 Agriculturist on the staff of the A.V.R.O.S. Experiment Station, Medan, Sumatra.

COLLECTIONS. *Herb. Bog.:* few plants collected at Aek na Oeli (Toba, *N. Sumatra*) in May *1941.*

Saulière

is cited by BUWALDA (in Blumea 2, 1936, p. 128) as the collector of *Hydrocotyle javanica* THUNB., *no* 135, in *Madoera*. This is *not* the island near Java, but Madura in distr. of Madras (India) in which locality a Reverend A. SAULIÈRE made a

botanical collection. Material was presented to *Kew* in 1913–14.

Sautier, Antoine

(† Nov. 15, 1801, at sea on the way from Timor to New Holland), student gardener attached to a French expedition under Capt. BAUDIN († 1803) (see itinerary below).

He is commemorated in the genus *Sautiera* DECNE (*cf.* BACKER, Verkl. Woordenb., 1936).

ITINERARY. *Voyage in 'La Naturaliste' and 'Le Géographe', 1800–04.*[1] Detailed data *cf. sub* LESCHENAULT and the other members, RIEDLÉ and GUICHENOT. *Timor* was visited from Aug. 21–Nov. 12, *1801.*

COLLECTIONS. *Herb.* DELESS. (*Geneva*), *Paris, Brit. Mus.* and *Kew.*[2]

The collection was studied together with those of the other members of the expedition.[3]

LITERATURE. (1) F. PÉRON: 'Voyage de découvertes aux terres Australes exécuté *etc.* sur les corvettes Le Géographe, Le Naturaliste et la goulette La Casuarina, pendant les années 1800–04' (Paris 1807–16, 2 vols + atlas).

A MS. journal of SAUTIER in Libr. Nat. Hist. Mus. Paris.

(2) *cf.* FORBES, A naturalist's wanderings *etc.*, 1885, p. 497.

(3) J. DECAISNE: 'Herbarii timorensis descriptio' (Nouv. Ann. Mus. Hist. Nat. Paris 3, 1834, p. 333–501, pl. 16–21; reprinted Paris 1835).

Sauveur, Emile Gaston

(1915, Groningen, Holland; x), forester, educated at the Agricultural College, Wageningen (1932–39). After having been in France and Africa, he went to Java at his own expense about 1940; he first enlisted in the D.E. Indian Army at Buitenzorg, and subsequently was appointed in the employ of the *Pinus* Exploitation (turpentine winning) near Takengon in N. Sumatra. After World War II in the employ of the Forest Service in Indonesia.

COLLECTING LOCALITIES. *1940. W. Java:* environs of Buitenzorg.

COLLECTIONS. *Private* collection; probably lost now.

Savinierre, Erd de la

French botanist, pupil of Prof. E. BUREAU at Paris. In the years 1876–79 he made a voyage of exploration to Celebes and Java,[1] charged by the French Government. The original idea was to collect material for a flora of Celebes. In his letters to France he complained of non-cooperation of the D.E. Indian Government and the Alfurs (natives of Celebes).

Polypodium sauvinieri BAKER was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTING LOCALITIES. *N. Celebes*, Minahassa (*c.* June 11, *1876*–May *1877*): Manado, Likupang, Sukur and Sawaän; *W. Java:* Batavia (Aug. 28, *1877*–May *1879*), at Rangkasbetoeng, Tanahabang, Bangléo (Tjilingsi Distr., mangrove), Pegangsaän, *etc.*

COLLECTIONS. It was evidently the intention to sell sets of his collections; before his departure several botanists and institutions subscribed, *i.e.:* COSSON, BOISSIER, Kew, DECANDOLLE, Brussels, Petersburg, Leyden, GRISEBACH (Göttingen), MAXIMOWICZ, Dr BREHMER (Lübeck). Of these Leyden did not pay in advance, and to our knowledge no set is preserved there. His labels have the printed heading: 'Erd DE LA SAVINIERRE, Plantes des Moluques'.

Herb. Paris: 755 *nos* from *Celebes,*[2] and *Java* plants, in total *c.* 1600 *nos; Herb. Kew: Java, Celebes*, 237 *nos* (acq. 1886); *Herb. Bot. Gard. St Petersb.* (= *Leningrad*): *Celebes, Java*, 242 *nos* (sometimes recorded *sub* SAVINIER or SAVATIER!); *Herb. Brussels; Herb.* DECAND. (*Geneva*): 236 *Malaysian* plants; *Herb.* DELESS. (*Geneva*); *Herb. Univ. Zürich.*[3]

LITERATURE. (1) *cf.* Tijdschr. K.N.A.G. 2, 1877, p. 56 (intended botanical voyage).

He is mentioned by A. G. VORDERMAN as a compatriot of F. A. C. COLFS (see there), in 'Het journaal van ALBERT COLFS *etc.*' (Batavia 1888) p. 1; from letters and other papers in the Arch. Herb. (Phanérog.) Paris it, however, seems evident that he was French, and not Belgian.

(2) *cf.* A. DECANDOLLE, Phytographie, 1880, p. 446 (*sub* DE LA SAVINIÈRE). No *Java* plants are mentioned in this book, but it is supposed that these reached Paris after the manuscript was closed. The 755 *nos* recorded from Celebes, probably included Java plants too, as to my knowledge no more than 600 odd numbers were collected in Celebes.

(3) *cf.* ENGL. Bot. Jahrb. 55, 1918, p. 68.

Savornin Lohman, C. de

sent a living specimen of *Phreatia moluccana* J.J.S. from *N. Halmahera* to *Hort. Bog.*

Sawyer, Frank Elliot

(1914, San Francisco, Cal., U.S.A.; x), educated in Forestry at the University of California, B.S. in 1938; was in the Pacific during World War II as a U.S.A. service man.

COLLECTIONS. At least 194 *nos* collected 4 miles S of Langemak Bay, vicinity of Finschhafen, *NE. New Guinea* (March–Apr. *1945*).

In *Herb. Berkeley* (Cal.): 284 *nos;* dupl. in *Herb. Arn. Arbor.*

Sayer, W. A.

a well-known collector and naturalist who was attached to the expedition of the Victorian Branch of the Roy. Geogr. Soc. Australasia to the Owen Stanley Range in New Guinea, under the guidance of W. R. CUTHBERTSON.

Saccolabium sayerianum F.v.M. & KRÄNZL. (*cf.* BACKER, Verkl. Woordenb., 1936), *Dasycoleum sayeri* C.DC. and other plants were named after him.

ITINERARY. *1887. SE. New Guinea.*[1] Port Moresby (July 8–19); departing for Kapa-Kapa (20); bivouac near Kopegoro, 4 miles ENE; march in E. direction (Aug. 2); crossing Nutmeg, Hunter and Musgrave rivers (4); Sayer River (Meneme); Kemp Welch River; bivouac at the foot of Mt Douglas,

ascending the said mountain and making some trips in the neighbourhood; Margaret River, Alice Gordon River, ascent of Mt Gillies; march in E. direction (25); ascent of Mt Panton; Margaret River, Mt Obree (Aug. 30 summit); back at Kopegoro (Sept. 5); Kapa-Kapa to Port Moresby (9).

COLLECTIONS. He collected for F. VON MUELLER; Mr C. T. WHITE thinks that a number of his plants probably lie undetermined in the *Nat. Herb. Melbourne.* Several of his plants were described by VON MUELLER and others.[2] Duplicates in *Herb.* DECAND. *(Geneva)*;[3] *U.S. Nat. Herb. Wash.* (5 grasses).

LITERATURE. (1) W. R. CUTHBERTSON: 'Explorations of the Highlands of South-Eastern British New Guinea (July to Oct. 1887)' (Transact. & Proc. Roy. Geogr. Soc. Australasia Vict. Br. 5, 1888, p. 2, 7–12); 'Journal of the Royal Geographic Society's exploration to the highlands of British New Guinea' (*l.c.* p. 13–43).

(2) F. VON MUELLER, Descr. Not. Pap. Pl., 9, 1890; in odd numbers of the Vict. Naturalist, *e.g.* 4, 1887, p. 110–112; in Transact. & Proc. Roy. Soc. Victoria 24, 1887, p. 174–175.

F. VON MUELLER & J. G. BAKER: 'On a new Selaginella from New Guinea' (Journ. Bot. 26, 1888, p. 26).

F. KRAENZLIN in 'Orchid. Papuas.' (in Oesterr. Bot. Zeitschr. 44, 1894; and *l.c.* 45, 1895).

(3) *cf.* Bull. Herb. BOISS. sér. 2, vol. 3, 1903, p. 170.

Schaap

of Kandangan, sent a *Drosera* from G. Wilis in *E. Java* to *Hort. Bog.* in *1897.*

Schaap, D. F.

Resident of the Civil Service in *Banka* (Muntok), sent material of gutta-percha trees to the 'Natuurkundige Vereeniging' at Batavia, Java, in *1852.*

Schadenberg, Dr Alexander V.

(1851, Breslau, Germany; 1896, Capiz, Panay, P.I.), ethnologist who made several explorations in the Philippines, the first one as early as 1876–79;[1] in autumn 1881 he set out with O. KOCH (see there) for a 2nd voyage. In November 1885 he set out once more to the Philippine Archipelago, that time planning to devote more time to botanical collecting.[2]

Rafflesia schadenbergiana GOEPP., and *Rhododendron schadenbergii* WARB. were named after him.

COLLECTING LOCALITIES. *1881–82. Philippines. Luzon:* Manila (few days); sailing for W. Luzon, the country of the Negritos (staying some weeks); back to Manila; visit to *Panay, Guimaras, Negros* and *Sulu Archipelago.* From the end of Dec. *1881*–June *1882* he stayed in *S. Mindanao,* Davao, collecting on Mt Apo (Febr.) and on the near Mt Párag (Apr.),[3] being back at Breslau (Germany) towards the end of August.

COLLECTIONS. His entomological collection at Dresden and Vienna. Botanical collection *probably* at *Dresden or Breslau.* He collected in 1882 with O. KOCH (see there), including a new species of *Rafflesia etc.*[4] The latter material in *Herb. Breslau;* in 1880 he brought home an *Amorphophallus* tuber to *Breslau.* Up till the present no later *Philippine* collections are known to me.

LITERATURE. (1) B. STEIN: 'Dr SCHADENBERG's Forschungen auf Mindanao' (Breslauer Zeitung, Nov. 26, 1882) *(non vidi).*

Letter from A. SCHADENBERG to Dr GOEPPERT (Jahresber. Schles. Ges. Vaterl. Cult. 1882, p. 204–205); 'Ueber die Forschungen auf Mindanao' (NEUBERT's Deutsch. Gart. Mag. 2nd ser. vol. 3, 1884, p. 163–169).

A. B. MEYER & A. SCHADENBERG: 'Die Philippinen. I. Nord Luzon' (Dresden 1890); 'Album von Philippinen-typen' (Dresden 1891).

(2) *cf.* Gartenflora 35, 1886, p. 36.

(3) *cf.* Philip. Journ. Sci. sect. A., 1907, p. 179.

(4) *cf.* Jahresber. Schles. Ges. Vaterl. Cult. bot. sect. *no* 61, p. 238.

G. HIERONYMOUS: 'Ueber eine neue von Dr A. SCHADENBERG und O. KOCH auf Süd-Mindanao entdeckte Art der Gattung Rafflesia' (Gartenflora 34, 1885, p. 3–7, pl. 1177); 'Ueber Rafflesia Schadenbergiana GOEPP. Ein Beitrag zur Kenntnis der Cytinaceen' (Breslau 1885, 2 pl.); 'Rafflesia Schadenbergiana GOEPP. n.sp.' (Bull. internat. de Bot. et Horticult. St Pétersbourg, (1884) 1885, p. 35–36, 1 pl.).

B. STEIN in Gartenflora 34, 1885, p. 66–68, pl. 1184; *l.c.* p. 193–194, pl. 1195; *l.c.* p. 194–195, pl. 1196.

BIOGRAPHICAL DATA. Biogr. Jahrb. 1, p. 428–430.

Schäfer, Hans

(1884, Görlitz, Silesia, Germany; x), was educated at several German universities (M.D. Breslau 1909); from 1909–14 in the Cameroons (Africa); in 1921 to the D.E.I., till 1924 Government Physician at Sibolga and Padang (West Sumatra); in 1926 regional and missionary doctor at Sambas (W. Borneo); later plantation doctor in Deli (Sumatra East Coast) and subsequently of the gold-mine Lebong Tandai in Benkoelen (S. Sumatra). At the invasion of Holland by the Germans he was interned and later shipped to British India, where he was in a camp at Dehra Dun; after World War II attached to a health-resort at Dannenfels, Pfaltz (S. Germany).

He is commemorated in *Calamus schaeferianus* BURRET.

COLLECTING LOCALITIES. *Sumatra* and *W. Java* (G. Papandajan).

COLLECTIONS. *Herb. Bog.:* material of *Amorphophallus* and *Rafflesia* species from *S. Sumatra* (pres. *1934–38*); *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam:* flower of *Rafflesia arnoldi* + herbarium material of *Cissus sp.* (pres. *1935*); also material in *Herb. Berlin.* Material of *Rafflesia* in formalin *etc.* was sent to *Hamburg* and *Königsberg* too. Tubers of *Amorphophallus* were presented to Buitenzorg, Kew, Amsterdam, Hamburg and Berlin.

Schaepman, A. E.

(1900, Zwolle, O., Holland; Jan. 5, 1931, Cele-

bes), was educated at the Agricultural College, Wageningen; after some years of practice in Holland, he went to the D.E.I. in 1926, appointed in a private situation at Merbau (Sumatra East Coast); since the end of 1927 Consulting Agriculturist in Government employ, successively stationed at Buitenzorg, Padang (Sum. W. Coast 1928), Kotaradja in N. Sumatra (1928–29), and Makassar in SW. Celebes.



SCHEFFER

COLLECTIONS. *Herb. Bog.:* 7 *nos* of *Loranthaceae* and other plants from the Peak of Bantaëng (= Bonthain), *SW. Celebes* (coll. Apr. *1930*).

Schebesta, Reverend Father Paul
missionary and linguist.[1]

From his books it is apparent that he travelled extensively in the *Malay Peninsula* for the study of the Sakai people, visiting the states of Perak, Kelantan, Negri Sembilan, the mountains of Pahang, Malacca, *etc.* Subsequently he visited the Kubu region in Sumatra, situated north of Palembang.

COLLECTIONS. *Herb. Sing.:* some useful plants collected near the Kedah-Perak boundary (at Baling *etc.*) in the *Malay Peninsula* (*1924*) (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; by mistake *sub* ICHEBESTA).

LITERATURE. (1) Author of 'Among the forest dwarfs of Malaya' (London 1929), transl. from German: 'Bei den Urwaldzwergen von Malaya' (Leipzig 1927); '"Orang-Utan". Bei den Urwaldmenschen Malayas und Sumatras' (Leipzig 1928); and of several ethnological papers.

Scheepens, Willem Jan
(1907, Nijmegen, Gld, Holland; Jan. 3, 1949, killed in battle, Pati, Java), went to Java as a 2nd lieutenant in the D.E.I. Army about 1930; in 1934 transferred to Atjeh, N. Sumatra, first at Blangkedjeren, and towards the end of 1936 at Bakongan. After the capitulation of the D.E.I. in 1942, he escaped to Colombo, returning to Java after the end of World War II. In 1946 he got wounded near Buitenzorg and was evacuated to Holland; Oct. 1947 he returned to Java once more.

He found a track to G. Löser during a patrol from Oct. 28–Nov. 5, 1936; it was used by VAN STEENIS in 1937. Later he made several other patrols on this mountain massive.[1]

COLLECTIONS. *Herb. Bog.:* 12 *nos* of fragmentary specimens from G. Löser (= Losir) in Atjeh, *N. Sumatra* (coll. Nov. *1936*).

LITERATURE. (1) *cf.* A. DOUP: 'Een energiek doorgezette patrouille naar het Löser complex' (Ind. Milit. Tijdschr. 1939, p. 42–54, w. map).

Scheepmaker
of Soerabaja, sent living plants to *Hort. Bog.* in the years *1883*, and *1893–94*, from G. Tengger (*E. Java*), *etc.*

Scheepmaker, Georg Johann
(1897, The Hague, Holland; x), schoolmaster in Holland from 1917–23; from 1924–25 in the same function in Dutch East Indian Government service, and subsequently attached to private schools. At present living at Batavia.

He is an amateur entomologist; with F. DUPONT he wrote a book on the life-history of Javan butterflies.[1]

COLLECTIONS. *Herb. Bog.:* 8 specimens of plants (numbers between 1 and 162).

LITERATURE. (1) 'Uit Java's Vlinderleven' (Batavia 1936).

Scheffer, Rudolph Herman Christiaan Carel
(1844, Spaarndam, N.H., Holland; 1880, Sindanglaja, W. Java), botanist educated at Utrecht University, pupil of MIQUEL; after graduating (Ph. Dr) in 1867, he sailed for Java in November of that year, from 1868 till his death filling the office of Director of the Botanic Gardens at Buitenzorg. In 1876 he founded the Economic Garden and the Agricultural School, and laid out the mountain-garden at Tjibodas; he is the founder of the 'Annales du Jardin Botanique de Buitenzorg'.

He made some tours in Java attended by Mas ARSIN (see there), and is the author of several papers on the Malaysian flora.[1]

He is commemorated in the genus *Schefferella* PIERRE and in many plant species.

COLLECTING LOCALITIES. Between *1868–80. W. Java:* G. Hambalang and Kalapa Noenggal (*1868 or* early in *1869*, with TEYSMANN); some trips in the environs of Buitenzorg (autumn *1870*):[2] G. Pantjar (Sept. 2), *via* G. Tjimanala and Pasir Ipis (3) to G. Loehoer (3), G. Bongkok (4) and back to Buitenzorg (5); leaving Buitenzorg (Oct. 1), visiting Seuseupan (3), Rawa Tjankoang (= Tangkoean)

(5), coffee plantation Pasir Ipis (6); many times on G. Salak, Tjibodas and G. Gedeh-Pangrango (Nov. 1870 *etc.*); in *1871* collecting in Priangan Res.: G. Wajang (May 28), G. Tiloe (29), Kendeng (between G. Patoeha and Tiloe) (June 1), and G. Tangkoeban Prahoe; near Tandjong Priok and Batavia (Tjilintjing, Moeara Baroe, *etc.*) (Aug. 7–8); in Priangan Res. once more: Pasir Kiamis (Garoet) (Sept. 2), Kawah Manoek (21), G. Papandajan (22–23), G. Tjikorai (25–26); Bandjir, Kali Poetjang and Tjikemboelan(g) (Oct. 3 and 6), and *Noesa Kambangan*, S of Centr. Java (Oct. 5).

He collected in many other localities in *W. Java* of which the exact dates are not known, *e.g.* at Tjiseroea, Koeripan, and G. Tjibodas near Tjampea; at Tjidadap, Tjidjoelan and on G. Malabar in Priangan; with TEYSMANN in Kawah Tjiwedej and at Telaga Patengan on G. Patoeha; and certainly in many other places not mentioned here.

A *Cyperus* collected by SCHEFFER was wrongly supposed to have been collected in *Borneo*,[3] it originated from the environs of Batavia; SCHEFFER did not make collections outside Java.

COLLECTIONS. *Herb. Bog.*, numbered in the H.B. series; dupl. (1871) in *Herb. Leyden; Copenhagen.* He started the H.B. (see HERBARIUM BOGORIENSE) series in 1868. *Herb. Brit. Mus.:* 276 woods from *Java* (pres. 1872) and 67 plants from *Banka* (as SCHEFFER did not collect in Banka, it may be assumed that the presented plants were duplicates of *Herb. Bog.*, but *not* of SCHEFFER's collections); *Herb. Kew:* plants from the Indian Archipelago (pres. 1870–78), certainly too only partly consisting of plants collected by SCHEFFER himself.

He brought some living plants for *Hort. Bog.* (pres. 1871).

LITERATURE. (1) *E.g.:* 'Observationes phytographicae' I–III (Nat. Tijdschr. N.I. 31, 1870, p. 1–23, 338–390; *l.c.* 32, 1873, p. 387–426); 'Bijdragen uit het buitenland tot de kennis der Flora van den Indischen Archipel' (*l.c.* 34, 1874, p. 33–111); 'Sur quelques plantes nouvelles ou peu connues de l'Archipel Indien' (Ann. Jard. Bot. Buit. 2, 1885, p. 1–31); *etc.*

(2) R. H. C. C. SCHEFFER: 'Verhaal van een paar dienstreizen in de assistent-residentie Buitenzorg gedaan in het najaar van 1870' (Nat. Tijdschr. N.I. 32, 1873, p. 207–233).

(3) *cf.* J. VALCKENIER SURINGAR: 'Het geslacht Cyperus in den Maleischen Archipel' (Thesis, Leeuwarden 1898) p. 149 and 166.

BIOGRAPHICAL DATA. Tijdschr. Nijverh. & Landb. N.I. 25, 1880, p. 394 and *l.c.* 28, 1883, p. 104; Ind. Gids 2^2, 1880, p. 597–600; Jaarb. Kon. Akad. Wetensch. 1880, p. (1)–(21); Eigen Haard 1880, p. 428–431; SIRKS, Ind. Nat. Onderzoek, Amsterdam 1915, p. 189–195 + portr.; Encyclop. N.I. 3, 1919; BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 50, 1940, p. 200; *l.c.* 51, 1941, p. 368.

Schelfhorst, F.

Protestant missionary in the *Kangean Islands*, sent 6 epiphytic orchids from there to *Hort. Bog.* in *1914*.

Scherer, G. A.

at that time Resident of the D.E.I. Civil Service in *Sumatra East Coast.*

COLLECTIONS. *Herb. Bog.:* material in spirit of *Marsdenia* (pres. *1887*).

Schierbrand

is cited as the collector of a plant in *Java* (*cf.* MEZ in Pflanzenreich 9, 1901, p. 32). He might be identical with the author of a travel account on this island.[1]

LITERATURE. (1) W. C. VON SCHIERBRANDT: 'Reisebericht aus Java in den Jahren 1825–1826 (für die Familie und Freunde als Manuskript herausgeg. von A. SCHÖNE)' (Königsberg 1888) (*non vidi*).

Schiesland

is cited as collector in *Java* (*cf.* Pflanzenreich Heft 93, p. 285). No further data known. Identical with the former?

Schiffmann, Max

collected a *Polypodium* in *Penang* in March *1888* (*cf.* CHRIST in Ann. Jard. Bot. Buit. 15, 1898, p. 145); the cited specimen in *Herb. Monaco.*

Schiffner, Victor Felix

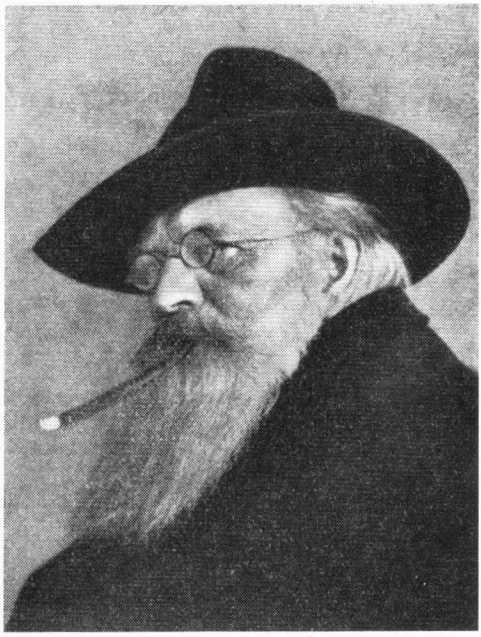
(1862, Bömisch Leipa, N of Prague, Austria (later Czecho-Slovakia); x), Assistant in the Botanic Garden and University Lecturer at Prague; from December 1893 till July 1894 attached to the Herbarium at Buitenzorg to collect and describe the hepatics of West Java.[1] In 1895 appointed Extraordinary Professor at Prague, from 1902 till his retirement in 1932 Professor in the University of Vienna. In 1901 he travelled in S. Brazil.

Author of many papers dealing with hepatics. *Solanum schiffnerianus* WITASEK was named after him.

ITINERARY.[2] With his wife sailing from Trieste (Sept. 21, *1893*), *via* Bombay, Ceylon, *P. Penang* (short stay, coll. cryptog.), *Singapore* (5 days in Nov., coll. cryptog. in the vicinity of the town), to *W. Java:* Batavia (Nov. 10) and proceeding to Buitenzorg, making his headquarters there; small trips in the environs, collecting (phaner. too) in Hort. Bog., on G. Salak (Dec. 5), G. Bunder (19), G. Burung (= ? Vogelberg, Tjampea), G. Pantjar (27–28), N. slope G. Salak (end of Dec.), G. Megamendong (Jan. 5, *1894*), Puntjak, Telaga Warna (lake); G. Salak, basin of the Tjiapus (twice in Jan., the last time from 27–28), Kotta Batu (Jan., Febr. 7); in the first half of Febr. to E. Priangan: from Garut to Situ-Bagendit, Tjipanas (foot of G. Guntur) (11), to Daradjat between G. Guntur and G. Papandajan, Kawah Manuk, from Tjisarupan to the crater of G. Papandajan, kp. Nangrang (20), Telaga Bodas; back to Buitenzorg, arranging his collections (10 days); trips in the environs, to Depok (coll. phaner., March 16), Pasir Angin (Gadok) (24), *etc.;* G. Gedeh-Pangrango (Apr.–May), Tjiliwoeng, Soekamantri, Soekaboemi, Mengamendung, Buitenzorg (July 2), G. Gedeh (July 10); *Sumatra West Coast* (July 1894): Padang Pandjang,

Aneikloof (21), G. Singgalang (25–26) (summit, coll. *Primula!*), G. Merapi (= Marapi) (30); *Sumatra East Coast* (July): G. Sinaboen(g) and G. Sibajak.

COLLECTIONS. *Herb. Germ. Univ. Prague: Java* and *Sumatra* (his private collection); *Herb. Vienna:* mainly mosses and hepatics, but phanerogams too,



SCHIFFNER

the latter for the greater part unidentified.[3] He offered *exsiccata* of hepatics in sets for sale;[4] *Herb. Leyden:* bot. sp. '*Iter indicum*' (*Java* and *Sumatra*) 3850 *nos* (purch. 1936/37); *Herb. Brit. Mus.:* 113 hepatics from the *Mal. Archip.* (purch. 1898); *Herb. Berl.:* '*Musci iter indicum*' 89 *nos; Herb. Kiel:* '*Iter indicum*'; *Herb. Geneva:* '*Musci Iter indicum*' 230 (purch. 1898/99); *Herb. Manila:* Ind. Mal. hepatics 49 *nos* (purch. 1931); *Herb. Hamburg:* tropical useful plants; *Herb. Univ. Zürich:* 238 hepatics from *Java* (acq. 1898/99). He made a large collection of lichens too;[5] dupl. in *Herb. Conserv. Bot. Geneva.* He collected several specimens of *Nepenthes* from different localities in *Java* and *Sumatra*, which are consecutively numbered, so we may assume that he numbered after study. Few duplicates in *Herb. Bog.*

LITERATURE. (1) *cf.* Versl. Pl. Tuin Buitenzorg for 1893, p. 7 and 25; *l.c.* for 1894, p. 1.

He is the author of the 1st vol. of the 'Flore de Buitenzorg', *viz* 'Die Hepaticae der Flora von Buitenzorg' (Leiden 1900).

(2) V. F. SCHIFFNER: 'Verlauf seiner Forschungsreise nach Java' (Mitt. Ges. Förderung deutsch. Wiss. *etc.* in Böhmen *no* 2, Prag 1894, 11 pp.).

(3) *Solanaceae* by J. WITASEK in Oesterr. Bot. Zeitschr. 80, 1931, p. 162–167.

(4) V. F. SCHIFFNER: 'Expositio plantarum in itinere suo indico annis 1893/94 suscepto collectarum speciminibusque exsiccatis distributarum, adjectis descriptionibus novarum. Series prima Hepaticarum partem continens' (Denkschr. math. naturw. Cl. Kais. Akad. Wiss. Wien 67, 1898, 51 pp.); and subsequent Series (in *l.c.* 1900, p. 52–116; and Ann. Bryol. 2, 1929, p. 117–154).

cf. also TH. HERZOG in Svensk Bot. Tidskr. 42, 1948, p. 230–241.

(5) *cf.* ZAHLBRUCKNER in Ann. Crypt. Exot. 1, 1928, p. 109–212; and in Ann. Mycol. 29, 1931, p. 76.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Schild, J.

(1865, St Pölten, W of Vienna, Austria; ?), for many years German consul at Padang, Sumatra West Coast. He rendered SCHLECHTER good service when the latter was investigating Padang and environs in 1907.

Selaginella schildei HIERON. (reduced to *S. tylophora* v.A.v.R.) was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. *Herb. Vienna:* 1 herbarium specimen (pres. *1904*); *Herb. Bog.:* a few plants collected near Padang in *1912.*

He sent tubers of *Amorphophallus titanum* to the *Bot. Gard. Hamburg* in *1927* (*cf.* Ber. D.B.G. 49, 1931, p. 92).

Schilling, *cf. sub* Forest Research Institute, Buitenzorg.

Schilling, J. A.

Governor of Ambon, who sent a hundred of living plants from there to the *Hortus Medicus* on Molenvliet at Batavia, which garden was founded in about 1790 by FREDERIK SCHOUWMAN, Merchant and 1st Administrator of the Medicinal Shop (*cf.* Verh. Bat. Gen. K. & W. 5, 1790, p. (20) and *l.c.* 6, 1792, p. (19)).

Schimper, Andreas Franz Wilhelm

(1856, Strassburg, Germany; 1901, Basel, Switzerland), botanist who after taking his Ph.Dr's degree (1878 at Strassburg) worked for some time at Lyons (France) and Baltimore (U.S.A.) (1881); in 1882 he settled at Bonn, in 1886 being appointed Extraordinary Professor there; since 1898 Professor at Basel, entering upon his duties after return from the 'Valdivia' Expedition (see below). Beside as a member of this deep-sea expedition, he travelled in the West Indies (1883), Brazil (1886–87), Ceylon and Java (1889–90).

His special interest was the beach and crater vegetation and the life-history of epiphytes.[1]

Vaccinium schimperi KDS was named after him.

COLLECTING LOCALITIES. *Java* (Oct. 1, *1889*–March 13, *1890*).[2] In *W. Java:* Buitenzorg, Priok, Tjilintjing, *P. Leiden* and the *Duizend Eilanden* (in the Bay of Batavia) for the study of the beach vegetation; visiting G. Salak, G. Gedeh-Pangrango, G. Tangkuban Prahu, G. Guntur (lava fields),

G. Papandajan, G. Tjikorai, Telaga Bodas and Kawah Manuk for the study of the alpine and the crater flora; in *Centr. Java:* coastal forests of *Nusa Kambangan* (S of Java) and the rhizophore regions along the Kinderzee (Febr. *1890*); the dunes of Wodjo (Febr. 1890); *E. Java:* rhizophore regions of Pasuruan and Probolinggo; on G. Ardjuno and G. Tengger (Febr.).

ITINERARY. *Deep-sea expedition in the 'Valdivia', 1898–99.*[3] Sailing from Hamburg (July 1898) *via* the Canaries, Cameroon, the Cape of Good Hope, Kerguelen, New Amsterdam and the Cocos Islands; *W. Sumatra* (Jan. 22–29, *1899*): Emmahaven, Padang, Padang Pandjang, Fort de Kock, Pajakombo, Kloof van Harau; *Mentawai Islands:* Siberoet (Jan. 30, not going ashore); *S. Nias* (Febr. 1, part of the expedition going ashore); *P. Weh:* Sabang (Febr. 6); *via* the Nicobars, Maladives, Ceylon, Seychelles, and the Red Sea, to Europe; Hamburg (Apr. 29, 1899).

COLLECTIONS. According to URBAN[4] he (in 1898–99) mainly collected material in spirit, preserved in *Herb. Bonn* and *Basel.* In the *Show Mus. Berl.:* 30 *nos* of rhizophores of the *Malay Archipelago.* A few plants, including the type specimen of *Vaccinium schimperi* KDS, in *Herb. Leyden.*

LITERATURE. (1) Author of 'Die Indo-Malayische Strandflora' (Jena 1891); 'Die Gebirgswälder Javas' (Forstl. Naturw. Zeitschr. 2, 1893, p. 329–345; transl. in Ind. Forester 20, 1894, p. 55–57, 87–91); his life-work 'Pflanzengeographie auf physiologischer Grundlage' (Jena 1898; revised and enlarged edition by F. C. VON FABER in 1935); and numerous physiological papers on the evaporation of leaves, the life of epiphytes, *etc.*

(2) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 15.

(3) *cf.* PETERM. Mitt. 45, 1899, p. 24, 48, 72, 128.

CARL CHUN: 'Aus den Tiefen des Weltmeeres' (Jena 1900); also transl. into Dutch.

'Valdivia'. Wissenschaftliche Ergebnisse der deutschen Tiefsee Expedition auf dem Dampfer Valdivia 1898–1899 . . . herausgegeben von CARL CHUN (Jena 1902– . .; SCHIMPER's notes were elaborated by H. SCHENCK).

(4) *cf.* URBAN, Symb. Antill. 3, 1902–03, p. 120.

BIOGRAPHICAL DATA. Ber. D.B.G. 19, 1901, Gen. Vers. Heft p. (54)–(70), incl. bibliogr. & portr.; WITTROCK, Icon. Bot. Berg., 1903, p. 141–142; *l.c.* 2, 1905, p. 151; BACKER, Verkl. Woordenb., 1936.

Schlaginhaufen, Otto

(1879, St Gallen, Switzerland; x), was educated in the University of Zürich (Ph.Dr 1905); in the same year appointed Assistant at the Royal Ethnological Museum, Berlin, and from 1906–11 at the Royal Anthropological Museum, Dresden; since 1911 Extraordinary (1917 Ordinary) Professor of Anthropology and Director of the Anthropological Institute, University of Zürich.

He joined a German naval expedition from 1907–09 (leader E. STEPHAN, later A. F. KRAEMER, see there), and subsequently returned to Matupi commissioned by the direction of the Dresden Museum to make investigations in former Kaiser-Wilhelmsland.

ITINERARY. *German Naval Expedition, 1907–09.*[1] *Bismarck Archipelago. New Britain:* Simpsonhafen (Nov. 3, *1907*); stay at Matupi (SCHL. to Solomon Isls); sailing *in the 'Planet'* (Nov. 28)



SCHIMPER

from Matupi to *Neu Mecklenburg* (= *New Ireland*): Käwieng, Namatanai (29); Dec. 1, putting into a more southern port, Muliama; from Muliama exploring the island: visit to the *Tanga Islands* (March 26–31, *1908*); *New Ireland:* in May exploration of the E. coast S of Muliama as far as Blosseville (or Toau) Isl. and back (7–15), and of the E. coast N of Muliama as far as Namatanai (21–..); STEPHAN falling ill on the way thither; stay at Matupi; boat tour to the *Greenwich Isls,* on the way crossing New Ireland from Karu to the W. coast; back to Muliama, where SCHL. decided to continue the exploration on his own hand, notwithstanding STEPHAN's death; *Fêni Isls* (*Anir*), off the E. coast of New Ireland (Sept.); to Namatanai on account of ill health (mid-Sept.); back to Muliama (end of Oct.), where Dr A. KRAEMER (see there) and wife joined the expedition; transfer of base to central New Ireland: Lamussong (or Lamasong) (Dec. 18); in the meanwhile SCHL. paid a visit to isl. *Lir* (or *Lihur*), opposite Lamus(s)ong (Dec. 12–Jan. 20, *1909*), returning to the latter place (Jan. 21); SCHL. exploring the N. part of New Ireland (Febr.–March); back to Muliama (early April), and paying another visit to the southern Siar region as far as Blosseville Isl., and subsequently to Namatanai and back; exploration of the region S and N of Namatanai; leaving the Bis-

marck Archipelago in July, and setting out to *NE. New Guinea.—1909.* Former *Kaiser-Wilhelmsland, NE. New Guinea.*[2] Sailing from the *Bismarck Arch.* (July 10); Friedrich Wilhelmshafen (12), from where making trips into the interior, *viz* to the Hansemannberg, by boat to the Kaiserin Augusta River (= Sepik) and to the N. coast; tour to the Torricelli Mts with SCHLECHTER and others (Aug. 28–Sept. 28); in E. and W. direction along the coast; sailing (Dec. 1) for Matupi, from where (25) on the home voyage to Europe.

COLLECTIONS. *Herb. Berl.:* small collection from *Neu Mecklenburg* (= *New Ireland*) (1908). He might have collected plants in Kaiser-Wilhelmsland too.

LITERATURE. (1) O. SCHLAGINHAUFEN: 'Orientierungsmärsche an der Ostküste von Neu Mecklenburg' (Mitt. Deutsch. Schutzgeb. 21, 1908, p. 213–220, pl. 6, map 12); 'Ein Besuch auf den Tanga-Inseln' (Globus 94, 1908, p. 165–169, w. ill.); 'Reisebericht aus Süd-Neu Mecklenburg' (Zeitschr. Ethnol. Berl. 40, 1908, p. 566–567); *cf.* also Globus 95, 1909, p. 82, 193 and 235.

'Die deutsche Marine-Expedition 1907/09' (Deutsch. Kolon. Blatt 19, 1908, p. 183–184, 291–292, 478–479, 581–582, 685–686, 803–805, 1011–1012, 1237–1239; *l.c.* 20, 1909, p. 174–176, 278–280, 494–495, 695–696, 1053–1056).

(2) O. SCHLAGINHAUFEN: 'Reisen in Kaiser Wilhelmsland (Neu Guinea)' (Abh. u. Ber. Kön. Zool. Anthrop. Ethnogr. Mus. Dresden 13, 1910, p. 3–19, 3 pl., 21 fig.).

BIOGRAPHICAL DATA. Who's who 1913; Neujahrsbl. Naturf. Ges. Zürich for 1947, 149, 1946, p. 99 + portr.

Schlechter, Friedrich Richard Rudolph

(1872, Berlin, Germany; 1925, Berlin, Germany), botanist who made several expeditions to Africa and the Malay Archipelago for economic-botanical purposes. The two New Guinea expeditions (see below), in search for gutta-percha and caoutchouc-yielding plants, were financed by the 'Kolonial-Wirtschaftliche Komitee', Berlin.[1]

He is author of numerous taxonomic papers dealing with orchids, and some with other families of plants, and beside of some plant-geographical publications.[2]

Polyalthia rudolphi DIELS, *Gmelina schlechteri* H. J. LAM, and many other species were named in his honour.

ITINERARY.[1, 3] *1901–02.*[4] Sailing from Naples (Dec. 13, 1900); *Malay Peninsula: Singapore* and environs (Jan. 5–17, *1901*); Malacca and Mt Ophir (Jan. 18–Febr. 7); *Singapore–Penang*–Taiping and G. Hijan (Febr. 8–19); *Penang–Sumatra East Coast* (Belawan, Deli, Medan, Lan(g)kat, Laut Tador (= ? Tawar)–*Penang* (Febr. 20–March 13); *Penang–Malay Peninsula* (Perak and G. Hijan)–*Singapore* (March 14–28); *Singapore–Br. N. Borneo* (*Labuan* (Apr. 2–3), Kudat (4–7), Sandakan (8–9), *Labuan* (11–16))–*NW. Borneo* (Sarawak, Brunei)–*Singapore* (March 29–Apr. 23); *Singapore–Riouw–Centr. Sumatra* (Indragiri, Rengat)–*Singapore* (Apr. 24–May 14); *Singapore* (May 15–June 6); *Singapore–Java* (Batavia (9), Buitenzorg, Bandoeng, Soerabaja) (June 7–27); from Soerabaja to *SE. Borneo:* Bandjermasin, Balikpapan, Samarinda, the Mahakam (= Koetai River), Tengaroeng (= Tenggarong), Ma Kaman, Ma Klindjau (June 28–July 24); Koetai region, middle course of the Mahakam (July 25–Aug. 19); to Samarinda–Bandjermasin–*P. Bawean* (N of Java)–*Java* (Soerabaja) (Aug. 20–Sept. 2); Soerabaja–Semarang–Batavia (Sept. 5)–Buitenzorg–Tjibodas and G.Gedeh–Batavia–*Billiton–Riouw–Singapore* (Sept. 3–18); *Singapore–Riouw* (Tandjoeng Penang) (Sept. 19); stay at Pasir Tandjang (22–25); *Singapore* (26–27); sailing (28) for Makassar (*SW. Celebes*); *Ambon* (Oct. 7); *Banda* (collected on G. Api, Oct. 8); former *Kaiser-Wilhelmsland, NE. New Guinea:* Berlinhafen (15); Friedrich Wilhelmshafen (17); Erima Hafen; Finschhafen–*Bismarck Archipelago* (Herbertshöhe, *Neu Pommern* = *New Britain*) (21); staying at Herbertshöhe (21–27); Gazelle Peninsula, Massawa (29), Weberhafen; back to Herbertshöhe (Nov. 7); sailing (18) for *Neu Mecklenburg* (= *New Ireland*), visiting Rossel Mts, *etc.;* from Herbertshöhe (Dec. 14) to the mainland of *NE. New Guinea:* Friedrich Wilhelmshafen; Stephansort (19); from Erima Hafen to the Ramu River (26); Ramu Station (Jan. 3–10, *1902*); *Bismarck Mts* (up to 1800 m alt.); Ramu Station (24–26); Erima (Febr. 7); sojourn at Stephansort; setting out (26) to Finisterre Mts, forced to return at 600 m alt.; Konstantinhafen (March 8); Stephansort (March 15–Apr. 6); Seleo (Apr. 8), Berlinhafen; tour to the *Torricelli Mts* (13–24); Seleo (May 4–8); *Neu Pommern:* Herbertshöhe (May 20–29); *Nusa* (May 30); *Neu Mecklenburg* (= *New Ireland*): Kavieng (–June 15), making a trip starting at the NW. point and following the N. coast till halfway the island and then crossing it *via* the mountains of Punam; Bo (June 28); Rossel Mts (6 days); sailing *via Neu Lauenburg* (= *Duke of York Island*) to Mioko (July 15); *Neu Pommern:* Herbertshöhe, from where (Aug. 14 or 15) departing for Sydney and New Caledonia.[4]—*1906–10.*[1] Sailing from Genoa (Oct. 23, *1906*); *Penang; Singapore* (Nov. 14–22), visiting Bt Timah; *Singapore* (23)–*W. Java* (Batavia (26), Buitenzorg (27–Dec. 2), Tjampea, Tjipetir (3–5), Batavia)–*Singapore* (–Dec. 25);[5] *NW. Borneo,* Sarawak: Kuching (Dec. 28, 1906–Jan. 1, *1907*); Sarawak (2)–*Singapore* (2–4); *Singapore* (4)–Tandjong Priok (*Java*)–Sunda Strait–*S. Sumatra* (Telok Betong, Benkoelen)–*Sumatra West Coast* (Indrapoera, Emmahaven, Padang (Jan. 11–early Febr.) and environs, Padang Pandjang, Agam, Fort de Kock, G. Merapi and back to Padang) (till Febr. 10); Padang (11)–Indrapoera–Benkoelen–Batavia–*Singapore* (–23); Singapore (leaving 24)–Hongkong–*Philippines* (*Luzon,* Manila) (March 4–5)–*NE. New Guinea* (Friedrich Wilhelmshafen) (13)–*Bismarck Archipelago* (*French Island,* Herbertshöhe (16–21) in *Neu Pommern*); Herbertshöhe (23)–Simpson Hafen–*French Island–NE. New Guinea:* Friedrich Wilhelmshafen (26–27), Stephansort (28), Konstantinhafen, Bulu (29); headquarters at Bulu (March 29, 1907–Febr. 28, *1908*), from there making many trips into the

interior, in the environs of Bulu, Konstantinberg, Kalika, Damum, the Minjem and the Mudjene, Wangi and Albu, Bongu and Melamu (Konstantinhafen), Stephansort, the Djamu, Gatiberg, Kaniberg, Ibo Mts (detailed data *cf.* Literature *sub* 3), visiting most places several times; leaving Bulu (March 1, 1908), Finschhafen, Adolfhafen (4); penetrating into the interior along the Uaria (= *Waria* or *Herkules River*)[6] (ascending it till the 12th, the 15th back at the mouth), climbing Gomadjidji-Berg; Bulu (18); from Bulu making trips in the neighbourhood of the Minjem and the Mudjene, *etc.*; *tour to the Finisterre Mts* up to 1000 m alt. (July 6–31); trip to Kenija (= Ramu) (Aug. 12–26); *2nd tour to the Finisterre Mts* up to 1200 m (Aug. 27–Sept. 17); *via* the Ramu to the *Bismarck Mts* up to 1600 m (Sept. 18–Nov. 1); part of the way back and once more in the *Bismarck Mts* up to 2000 m (Nov. 2–Dec. 4); *via* the Ramu back to Bulu (Dec. 5–31); from Bulu to the *Finisterre Mts* up to 1300 m (Jan. 1–21, *1909*); return march (Jan. 22–Febr. 8) to Bulu; from Bulu to Friedrich Wilhelmshafen (Hansemannberg), Biliao and Hilo and back to Friedrich Wilhelmshafen (Febr. 9–Apr. 3); *2nd trip to the Waria* (= *Herkules River*) (Apr. 4–June 6), visiting Stephansort, Finschhafen (5), Bukaua (5), Adolfhafen, ascending the river, Gomadjidji-Berg, Dischore summit (above 1300 m) (May 31–June 6); return (June 7–July 6) to the mouth of the Waria; from July 7–27 visiting Adolfhafen, Margot River, Bukaua, Finschhafen (Sattelberg) (14–16), Friedrich Wilhelmshafen (17); by boat to the mouth of the Ramu; going up the Kaiserin Augusta (= Sepik) River for about 185 sea-miles, and return to Dallmanhafen (July 28–Aug. 6); trip to Muschu (7), Eitape (8), St Anna (18–22), Tadji, Wokau, Pro, back to Eitape (25), and Paub (Aug. 29–Sept. 1); *Torricelli Mts*, setting out from Paub *via* Jemur River to Akur (Sept. 2–9); Apur (10), returning (10–27) to Paub *via* Rin-Tejao and Rin-Jemur bivouacs; Pro (28), Eitape (28–Oct. 10), Friedrich Wilhelmshafen (Oct. 11–21), sailing from Friedrich Wilhelmshafen (Oct. 21), along the coast of Dutch New Guinea, *via Banda*, *Ambon* and *Boeroe*, to *Celebes*[7] (22–30); *SW. Celebes:* stay at Makassar (Oct. 31–Nov. 3); by boat along the W. coast (4–10) to *N. Celebes:* Manado (11–14); Tomohon (Nov. 15–Dec. 5), visiting G. Masarang, G. Mahawo, G. Lokon and Tampuso (= Tompaso); Tondano (6), from where to Ayermadidi (= Airmadidi) (7); to the summit of G. Klabat and back (–19); *via* Tondano to Kakas, G. Kawang (Kombi); Lango(w)an–Ratahan (24); back to Lango(w)an–Kawangkoan–Lansot (26); G. Sopoetan (27–30); Kawangkoan–Sonder–Tomohon (31); from Tomohon (Jan. 3, *1910*) to Manado; sailing (10) to Toli-Toli (12); by proa going up the Kuala Besar (17); ascending the Lampasioe River (20); by canoe to the isl. of *Kabetau* (= *Kabetan*) (? 24); ill at Toli-Toli (Jan. 25–Febr. 5), and the next day by boat to *SW. Celebes:* Makassar (staying till Febr. 20); Makassar (21)–*Bawean–Karimon Djawa –W. Java* (Batavia); Buitenzorg (–March 10); sailing from Batavia (11), *via Banka*, *Singapore*, *Penang*, to *Sumatra East Coast:* Medan, Rindjai (= ? Bindjei) Estate and Lau Boentoe, Bandar Baroe (Pentani Fall) and back to Medan and Rindjai Estate; embarking at Belawan (Apr. 11) and *via Penang*, Colombo, *etc.* to Europe, arriving at Naples on May 1st.



SCHLECHTER

COLLECTIONS. *Herb. Berlin* from exp. *1901–02* and *1907–10* (numbers see below). Separate collections of *Orchidaceae*, *Primulaceae*, *Asclepiadaceae*, *Burmanniaceae*, and *Triuridaceae* to *Herb. Berl.* (acq. 1913); these collections include many specimens from other collectors, *viz* RIDLEY, FLEISCHER, J. J. SMITH, KAEMPF, LORIA, GIULIANETTI, W. MACGREGOR, WERNER, *etc.* and were inserted in the general herbarium, except the orchids which remained under the supervision of SCHLECHTER. In the *Herb. Berl.* besides, a small collection of *New Guinea* mosses; some material in the *Show Mus. Berlin.* Dupl. in *Herb. Paris:* 200 *New Guinea* plants and 86 *Sumatra* orchids (pres. 1910); ferns in *Herb.* BONAPARTE (= *Paris*); *Herb. Kew: Orchid.* and *Asclep.* (pres. 1905), *Sumatra* and *New Guinea* plants (purch. 1910), *Celebes* plants (pres. 1912), ferns (pres. by BONAPARTE in 1923), *New Guinea* orchids (purch. 1924), a collection (purch. 1927), 300 *New Guinea* plants (pres. 1934); in *Herb. Brit. Mus.:* 123 specimens (mainly orchids, by exch. 1905), 61 *Sumatra* orchids (exch. 1911), 175 phanerogams + 76 cryptog. *New Guinea* (purch. 1911); *Herb. Bog.:* 420 *New Guinea* plants (purch. 1909), 90 *nos Orch. Mal.* (1910), some hundreds of orchid dupl. (pres. 1927–29); *Herb. Leyden:* orchids from *Papua* and the *Malay Archipelago* and plants from *New Guinea* (purch. 1933/

34) and several dupl. from *Borneo, Sumatra, Celebes, etc.; Herb.* DELESS. (*Geneva*): 516 *nos* (acq. 1919–21) + 353 *New Guinea* plants (acq. 1934); *Herb. Stockholm:* 200 dupl. *Orch. Celebes*, 500 *Orch. New Guinea; Herb. Copenhagen: New Guinea* plants; *Herb. Manila:* dupl. *Sumatra* orchids (exch. 1910/11), *Malayan* orchids and *Asclep.* 122 (1911/12); *Herb. Sydney:* 48 orchids former *German New Guinea* and New Caledonia (acq. 1906); *Herb. Calcutta:* 170 *New Guinea* dupl. (acq. 1910/11); *Herb. Field* (= *Nat. Hist.*) *Mus. Chicago:* 197 *New Guinea* plants (purch. 1927); *Herb. N.Y. Bot. Gard.:* 407 *New Guinea* plants (purch. 1934); in *Herb. Hamburg:* dupl. voyage (not mentioned which) (acq. 1912); *U.S. Nat. Herb. Wash.:* 89 *New Guinea* plants; *Herb. Univ. Zürich* (*Papua*); a few in *Herb. Univ. Amsterdam; Herb. Lyons* (with *Herb.* BONAPARTE): phanerogams (Mr ALSTON suspects it to be SCHLECHTER's private herbarium); *Herb. Bot. Gard. Edinburgh:* 320 *New Guinea* phanerogams (from Frau SCHLECHTER). Orchids in private *Herb.* R. GROSS (Berlin).

New Guinea plants were offered for sale by TH. OSWALD WEIGEL in 1922 (mainly pteridophytes). SCHLECHTER presented living material from *New Guinea* to *Hort. Sing.* (in 1902), and *Celebes* orchids to *Hort. Bog.* (in 1910).

From the Expedition *1901–02* the following numbers: *Borneo* 13101–13140, *Malacca* (= *Malay Peninsula*) 13141–13241, *Sumatra* 13242–13329, *Borneo* 13330–13569, *Java* 13570–13633, *Riouw Arch.* 13634–13658, *Moluccas* 13659–13668, *New Guinea & Bismarck Arch.* 13669–14712.

SCHLECHTER had to spend most of his time in search of gutta-percha and caoutchouc-yielding plants,[8] but in his spare time he brought together a collection of pteridophytes and phanerogams, including 300 *nos* of orchids which were analysed and drawn *in situ*.[9]

From the Expedition *1907–10* the following numbers: *Borneo* 15820–15844, *Sumatra* (1907) 15845–16035, *New Guinea* 16036–20399, *Celebes* 20400–20725, *Sumatra* (1910) 20726–20784. During this expedition he was assisted by the native plant collectors SIKIN and TAKADU (see those).

The collections were partly studied,[10] and the remaining part preliminary identified.

LITERATURE. (1) R. SCHLECHTER: 'Reisebericht der Guttapercha- und Kautschuk-Expedition nach den Südsee-Kolonien' (Tropenpflanzer 5, 1901, p. 211–220, 318–329, 372–382, 457–471, 539–543, 602, + fig.; *l.c.* 6, 1902, p. 22–30, 213–234, 394–402; *l.c.* 7, 1903, p. 308–320; 'Die Guttapercha- und Kautschuk-Expedition nach Kaiser Wilhelmsland, 1907–09' (Berlin Kol. Wirtsch. Kom. 1911, 171 pp., 6 pl., 3 maps).

(2) R. SCHLECHTER: 'Allgemeine Bemerkungen über das Vorkommen der Pteridophyten in Neu-Guinea' (ENGL. Bot. Jahrb. 49, 1912, p. 1–6); 'Allgemeine pflanzengeographische und systematische Bemerkungen' (in 'Orchidaceae von Deutsch Neu Guinea' 1914, 65 pp.); *cf.* also *sub* 10.

(3) *cf.* also itinerary in 'Nachruf' in Notizbl. Berl. Dahl. (*l.c. sub* Biogr. data) p. 924–938.

(4) R. SCHLECHTER: 'Reise nach Hinterindien, Malaisien und Neu-Kaledonien' (ENGL. Bot. Jahrb. 32, 1903, Beibl. 72, p. 7–10); *cf.* also in Tropenpflanzer *l.c. sub* 1, and Deutsch. Kolon. Blatt and Deutsche Kolonialzeit. 1901 and 1902.

(5) R. SCHLECHTER: 'Reisebericht aus Singapore' (Tropenpflanzer 11, 1907, p. 79–80).

(6) R. SCHLECHTER: 'Bericht über eine Erkundigungstour nach dem Uaria (Herkules Fluss) in Neu Guinea' (Tropenpflanzer 12, 1908, p. 569–573).

(7) Itinerary Celebes *cf.* in FEDDE Repert. 21, 1925, p. 113–116.

(8) R. SCHLECHTER: 'Über die neue Guttapercha von Neuguinea' (Tropenpflanzer 7, 1903, p. 467–471).

(9) For further data *cf.* SCHUMANN, Nachtr. z. Flora d. deutsch. Schutzgeb. i.d. Südsee, 1905, p. 16–17.

(10) R. SCHLECHTER: 'Zur Kenntnis der Orchidaceen von Celebes' (FEDDE Repert. 10, 1911, p. 1–40, 66–96, 177–213); 'Die Orchidaceae von Deutsch Neu-Guinea' (1911–14, in FEDDE Repert. Beih. 1, lxvi + 1079 pp.); 'Die Orchidaceen der Insel Celebes' (FEDDE Repert. 21, 1925, p. 113–212; incl. itinerary p. 113–116); 'Beiträge zur Kenntnis der Orchideen-Flora von Sumatra' (ENGL. Bot. Jahrb. 45, 1911, Beibl. *no* 104, p. 1–61; coll. Jan.–Febr. 1910); many families in the 'Beiträge zur Flora Papuasiens' (ENGL. Bot. Jahrb. vol. 49–→).

Philippine Asclepiadaceae in Philip. Journ. Sci. C. Bot. 1, 1906, Suppl. p. 295–303, 453–472 and in FEDDE Repert. 13, 1915, p. 537–544, 554–566; 'Beiträge z. K. der Asclepiadaceae des Monsungebietes' (ENGL. Bot. Jahrb. 40, 1908, Beibl. 92, p. 1–19); 'Neue Asclepiadaceae von Sumatra und Celebes' (Beihefte Bot. Centr. Bl. 34^2, 1917, p. 1–18).

BIOGRAPHICAL DATA. Notizbl. Berl. Dahl. 9, 1926, p. 912–958, incl. bibliogr. and detailed itinerary; Journ. Bot. 64, 1926, p. 24–25; Amer. Orch. Soc. Bull. 2, 1933, p. 20–21; BACKER, Verkl. Woordenb., 1936; portr. in OAKES AMES Lab., at Cambridge (Mass.).

Schlencker, Mary Elizabeth Sarah Cribb

(1870, 'Fairholme', Milton, Brisbane, Australia; x), wife of Reverend H. P. SCHLENCKER, officer of the London Missionary Society, came to New Guinea in February 1905; they were successively stationed at Kalaigolo (1905), Boku (1910), and Orokolo (March 1912); in July 1926 Mr SCHLENCKER's health forced them to leave for Australia.

Castanopsis schlenckerae BAIL. was named after her.

COLLECTING LOCALITIES. *SE. New Guinea, Papua*, between *1905–26*, at: Kalikodobu, Boku, Henty Range, and Orokolo.

COLLECTIONS. *Herb. Brisbane*, identified and described by F. M. BAILEY, and C. T. WHITE.[1]

LITERATURE. (1) The results published in his 'Contributions to the flora of British New Guinea' series in Queensl. Agric. Journ. 22, 1909, p. 147–150; *l.c.* 23, 1909, p. 158–159, 218–220, 261–263; *l.c.* 24, 1910, p. 20–23; *cf.* also WHITE in Proc. Roy. Soc. Queensl. 34, 1922, p. 5–65.

Schmidt

According to KOORDERS (*cf.* Kon. Akad. Wet. Amsterdam 2e sect. 14, *no* 4, 1908, p. 31 and 55), C. DECANDOLLE saw specimens of *Piperaceae* collected by SCHMIDT in *Java* and preserved in *Herb. Berl.*

É. DE WILDEMAN (in 'Prodrome de la flore algologique des Indes Néerl.' 1897) cites a certain SCHMIDT as collector of *Algae* in *Java* and *Sumbawa.*

Schmidt-Müller

is cited by BLUME in his 'Flora Javae' (*Nova series* 1, 1858, p. iii), as one of his contributors of scientific material from *Java.* It remains a point in question whether his name ever appeared on any label.

Schmiele, Georg

(1855, ? ; March 3, 1895, in the roads of Batavia o/b s.s. Lübeck), jurist who entered the employ of the German New Guinea Company in 1886, and that of the German Government in 1889, serving in the Bismarck Archipelago. In 1890 he was appointed Chancellor of the Imperial commissaryship of New Guinea, and went on European leave in 1891. Several times he acted as leader of punitive expeditions in the Bismarck Archipelago, and from 1892–Febr. 1895 as Military Commander of Kaiser-Wilhelmsland. He died on the voyage home.[1]

Psychotria schmielei WARB. was named after him.

ITINERARY. Former *Kaiser-Wilhelmsland, NE. New Guinea.* Arrival at Finschhafen (Sept. 20, *1886*).—*Bismarck Archipelago.* Since Nov. 1886 stationed at Matupi in *Neu Pommern* (= *New Britain*).—*1888.* Setting out (June 3) for a trip from Blanche Bay crossing the Gazelle Peninsula to Ataliklikun Bay; after some trouble with the natives they reached the settlement Unter-Kambair.[2] —*1892.* From Simbang to the *Siassi Islands* (Oct.).[3] —*1893.* Trip to Buramana Village (March 2), descending the bed of the Tolumbi. Sailing from Herbertshöhe (May 3) in the 'Ysabel' to the *Upuos Islands; via Nusa* to Kapsu on the N. coast of *Neu Mecklenburg* (= *New Ireland*), and back to the *Upuos Islands;* back to Herbertshöhe (17).[4] In Oct. to Herbertshöhe once more.[5]—*1894.* Accompanying a recruiting-tour to the western part of *Kaiser-Wilhelmsland:* Isl. of *Gressien,* Berlin-Hafen (*Angal Isl., Seleo*), Angriffs-Hafen.[6] In the last quarter of the year to Finschhafen and for reasons of ill health to the Sattelberg, returning at Friedrichshafen (Dec.) after an 8 weeks' stay without having recovered.

COLLECTIONS. *Hort. Bog.:* a lot of plants (pres. *1893*). Material of his probably in Germany also.

LITERATURE. (1) Author of 'Die Bewohner der Insel Mioko' (in Deutsche Kolon. Zeit. 1888).

(2) *cf.* Nachr. Kais. Wilh. Land 4, 1888, p. 154–158.

(3) *cf.* Kolon. Jahrb. 6, 1893, Berlin 1894, p. 105.

(4) *cf.* Nachr. Kais. Wilh. Land 9, 1893, p. 29–30, 36.

(5) *cf. l.c.* 9, 1893, p. 67–68; and *l.c.* 10, 1894, p. 17–19; Deutsch. Kolon. Blatt 5, 1894, p. 75.

(6) *cf.* Nachr. Kais. Wilh. Land 1894, p. 45–47.

BIOGRAPHICAL DATA. Several data in Nachr. Kais. Wilh. Land 2, 1886, p. 77, 79; *l.c.* 3, 1887, p. 3, 5, 57, 73; *l.c.* 7, 1891, p. 3; *l.c.* 11, 1895, p. 12; Deutsch. Kolon. Blatt 6, 1895, p. 167, 213; Deutsche Kolon. Zeit. N.F. 8, 1895, p. 85; BACKER, Verkl. Woordenb., 1936.

Schmuziger, André Werner

(1899, Aarau, Switzerland; x), agriculturist, educated at Zürich University, where he took his Ph. Dr's degree in 1935. After attending the course of the Sugar School at Amsterdam, he came to Java as Group-Adviser in the employ of the Experiment Station for the Java Sugar Industry, and was successively stationed at Banjoemas (1925–28), and Djombang (1928–32). Since 1937 in the employ of the Potassium Syndicate in Europe.

COLLECTIONS. *Herb. Pasoer.:* 5 *nos* of plants from the neighbourhood of Djombang and from the s.f. Tjoeker near Soerabaja, *E. Java* (coll. in *1931*).

Schneider, Capt.

probably O. SCHNEIDER, about 1890 captain of the 'Ysabel', and in 1891 quitting the German New Guinea Company. He made many tours by boat along the coast of former Kaiser-Wilhelmsland.

COLLECTIONS. Marine *Algae,* from Hatzfeldhafen, *NE. New Guinea.*[1] The collection was apparently made *about 1890/91;* its location is not known. He evidently collected in Samoa in 1892. No phanerogam collections known to us.

LITERATURE. (1) *cf.* F. HEYDRICH in Ber. D. B.G. 10, 1892, p. 458–485; and O. C. SCHMIDT in Hedwigia 68, 1928, p. 19–86.

Schneider, C. F. A.

a medical officer who accompanied the voyage of the 'Circe' to New Guinea.[1]

ITINERARY. *Voyage in the 'Circe', 1849–50.*[1] *Ambon* (Dec. 3–15, *1849*); *Ceram:* Wahai (Dec. 28, 1849–Febr. 13, *1850*); *Ternate* (Febr. 25–March 16); *Gebi* (= *P. Gebe*) (March 19–25); through Dampier Strait to *NW. New Guinea:* Dorei (Apr. 1–24); Run (= *? P. Roön*) (May 27–31); *P. Japen:* Ansoes (June 6–8); *P. Koeroedoe,* and failing attempt to reach Bougainville Bay; return (June 12–21) *via* the *Schouten Islands* and Dorei; *Ambon* (July 15); back at Soerabaja in *E. Java* (25).

COLLECTIONS. DE BRUYN KOPS in his cited paper,[1] mentions SCHNEIDER in search of flowers on one of the islands. In the same publication he says that he has SCHNEIDER to thank for the zoological, mineralogical, and botanical data. We do not know whether any herbarium specimens exist.

LITERATURE. (1) *cf.* G. F. DE BRUYN KOPS in Nat. Tijdschr. N.I. 1, 1850, p. 163–235.

Schneider, Dr Fritz

son of O. SCHNEIDER-ORELLI, Professor of Ento-

mology at the Technical College, Zürich. At the request of Professor WALO KOCH he collected about 10 water plants in *Sumatra*, including the rare *Echinodorus ridleyi* at Aik Kwasan, Negaga, Asahan (*East Coast*) on Sept. 27, *1936*. In *Herb. Techn. Coll. Zürich.*

Schneider, Gustav

(1867, Basel, Switzerland; x), zoologist and Custodian of the Zoological Institute, Basel, who travelled in *Sumatra etc.* (1897–99) to make zoological collections.[1]

Polypodium schneideri CHRIST was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

ITINERARY. *1897–98.*[1] *Sumatra East Coast*, Deli: headquarters at Terbanjawan (June *1897*); Upper Langkat, Sukaranda (July-Aug.); hinterland of Langkat, headquarters at Berkantjang (Sept.–mid-Oct.), exploring the vicinity, making a trip *via* Mt Simelir to Durian Kenajan, foot of the Sinabung, *etc.;* back to Lau Buntu, collecting in the neighbourhood of Sungei Ruan and Sg. Gerpa: Sukaranda (Oct.–Nov.), in the latter month descending the Langkat River (= evidently Sg. Wampoe) to Stabat; collecting in Lower Langkat for 5 months, principally at Tandjung Bringin, Stabat, Tg Butus, Bt Tinggi (Glen Berwi), Pankalan Brandan, Pulu Telang; leaving for *P. Penang* on account of ill health; back to *Sumatra East Coast* (end of April *1898*), Deli: Tebing Tinggi; in May setting out to Bahsumbu, Tongah, Surbo Dolok, making bivouac in the neighbourhood of Si Tobang (2 days); climbing the pass of Dolok Simarsubit (May 23); Pomatang raja (–June 2), making several trips in the environs, climbing the Simbolon (Raja Mts, *c.* 1500 m); to Mara raja, Purba, and Bandar Saribu on Toba Lake; Serba Djandi, trip to Tongging (on the N. side of the lake); *via* Saributjandi, Simula, back to Tebingtinggi (June 20 arrival); trip to Laut Tador (hundreds of *Vanda hookeriana*!) and Tandjung Laut; another trip to the Raja Mts (to Pomatang Bandar); leaving (mid-Sept.) for Belawan and *Singapore;* leaving Singapore again (Oct. 30), this time bound for *Centr. Sumatra*, Indragiri: headquarters at Djapura on the Indragiri (or Kuantan) River, making trips in the environs, to the neighbouring lakes Danau Kota, D. Baru, D. Si Along Lotong and D. Gading, *etc.*; P(e)ranap (higher up the river); Batu ridial on the Sg. Kwantan; expedition to the 'Orang Mamma' (between the Tjenako, Peranap and Gangsal rivers).

He made mainly marine-zoological collections in *Singapore, Riouw Archipelago*, Kedah (*Malay Peninsula*), *P. Penang, P. Tikus* (? off Benkoelen), *Java*, and *Nusa Kambangan.*

COLLECTIONS. *Herb. Basel:* plants from *Sumatra* on behalf of CHRIST, > 40; ferns probably with *Herb.* CHRIST at *Paris.*

See also *sub* ANONYMOUS, *Sumatra* ferns presented by G. MEYER-DARCIS TO *Herb. Univ. Zürich* in 1905; collected by him?

CHRIST described some new species.[2]

LITERATURE. (1) 'Orang Mamma (Mamak), ein bisher unbekannter Volksstamm im innern Sumatras' (Leipziger Ill. Zeit. *no* 961, 29. Mai 1900); 'Ergebnisse zoologischer Forschungsreisen in Sumatra. I. Säugetiere (Mammalia)' (Zool. Jahrb. vol. 23 Systematik, 1906, p. 1–172, 3 pl. and 2 maps; introduction and itinerary *cf.* p. 1–31).

(2) H. CHRIST: 'Filices novae' (Bull. Herb. BOISS. 6, 1898, p. 835–837).

Schnepper, Willem Casparus Rudolf

(1893, Zwolle, O., Holland; x), Forest Officer who was in the employ of the D.E. Indian Forest Service since 1919. For many years stationed in Sumatra, first at Medan, since June 1921 at Fort de Kock; from October 1925 in Benkoelen, placed at the disposal of the Head of the Mining Department; from April 1927 in Java; after World War II on half-pay; in 1947 Inspector in W. Java, stationed at Bandoeng; in 1948 on European sick-leave.

Author of some papers in the periodical Tectona,[1] and of some typed reports on trips to Bantam and Trouwerseiland.

COLLECTING LOCALITIES. Between *1919–22. Sumatra East Coast* and *W. Sumatra* (Tapanoeli). Evidently assisted by GALOENGI, a native collector, in the Karo Lands. On the Karo Plateau he collected as late as Dec. 14, *1922.—1925 or 1926. S. Sumatra:* Benkoelen.—Between *1931–35. W. Java:* at Lebak and Buitenzorg (*1931*), *etc.*

COLLECTIONS. In *Herb. For. Res. Inst. Buitenzorg* (see there): 159 *nos* from *northern part of Sumatra* (actually collected by GALOENGI ?, see there), 34 from *S. Sumatra* (Benkoelen), and some from *Java;* plants numbered in the bb. and Ja. series.

LITERATURE. (1) *Viz:* Rapport over de Afd. Kerintji, Sumatra Westkust Oct. 1923 (typed report); 'Benzoëcultuur en volkswelvaart in Tapanoeli (Sumatra)' (Tectona 16, 1923, p. 264–275, 1 map); 'Pinus Merkusii JUNGH. & DE VRIESE' (*l.c.* 17, 1924, p. 352–356, 1 fig.); 'Boschbouwkundige wetenswaardigheden van Sumatra's Westkust' (*l.c.* 18, 1925, p. 643–652); and 'Uit een verslag naar Trouwerseiland aan de Zuidkust van Bantam' (*l.c.* 27, 1934, p. 190–210, 4 fig.).

Schoede, Hermann

COLLECTIONS. *Herb. Berl.:* 3 pots containing marine *Algae*,[1] collected in the *Bismarck Archipelago* (*1910*).

LITERATURE. (1) Worked out by O. C. SCHMIDT in Hedwigia 68, 1928, p. 19–86.

Schoggers, J. C. F.

(1843, Padang, Sumatra; 1908, Soekaboemi, Java), appointed 2nd lieutenant in the Infantry of the D.E. Indian Army in 1864; in 1899 promoted lieutenant-colonel, in which rank pensioned off in 1891. A lover of flowers.

Asplenium schoggersii v.A.v.R. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. He bought the above-mentioned fern from a native plant collector and presented it to his son-in-law, the fern specialist ALDERWERELT VAN ROSENBURGH. The specimen is preserved in *Herb. Bog.*

Schol-Schwarz, Marie Beatrice

(1898, Weltevreden, Java; x), phytopathologist, educated in the University of Utrecht, taking her Ph.Dr's degree in 1922. From 1922–26 in the employ of the Institute for Plant Diseases at Buitenzorg, Java; subsequently she married Mr SCHOL.

COLLECTIONS. *Herb. Bog.: Macrosolen tetragonus* (BL.)MIQ. from Pekalongan (*Centr. Java*) (coll. *1929*).

Scholte, Johannes

(1874, Koevorden, Dr., Holland; 1942, Ermelo, Gld, Holland), schoolmaster, from 1905–32 in D. E. Indian Government service; subsequently retired.

COLLECTIONS. He collected some plants at Tjibeureum near Bandoeng (*W. Java*) (March 2, *1912*), which were numbered in the series of C. A. BACKER and preserved in *Herb. Bog.* (probably the *nos* 2341–2363).

Scholten, F. K., *cf. sub* Forest Research Institute, Buitenzorg.

Schomburgk, Sir Robert Hermann

(1804, Freiburg, Silesia, Germany; 1865, Schöneberg near Berlin, Germany), naturalist and explorer who settled in North America about 1828; he set out to the West Indies in 1829, exploring British Guiana and the lower course of the Orinoco from 1835–39;[1] from 1840–44 a member of the Committee for border-delimitation between Venezuela and Guiana; knighted in 1844; from 1848–57 British Consul in San Domingo, and from 1857–64 *ditto* at Bangkok, Siam; subsequently returned to Europe.

He is commemorated in the genus *Schomburgkia* LINDL. and in many plant species.

COLLECTING LOCALITIES.[2] *1857.* Early in the year, on the way to Bangkok, collecting in *Penang* and *Singapore.*

COLLECTIONS. *Herb. Kew*, including *Malayan* plants; *Herb. Berl.:* 226 *nos* from Siam and *Singapore.* Duplicates in *Herb. Paris;* plants from Brit. Guiana in *Herb. Brit. Mus.* too.

LITERATURE. (1) R. H. SCHOMBURGK: 'A description of British Guiana, geographical and statistical, *etc.*' (London 1840); 'Reisen in Guiana und am Orinoko während der Jahre 1835–39, *etc.*' (Leipzig 1841).

Also data on his trips in Brit. Guiana in LASÈGUE, Mus. Bot. DELESS., 1845, p. 216–219, and in URBAN, Symbol. Antill. 3, 1902/03, p. 121–123.

(2) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

BIOGRAPHICAL DATA. Bot. Zeitung 23, 1865, p. 131–132; Dict. Nat. Biogr. 50, p. 437; URBAN, Symb. Antill. 3, 1902–03, p. 121–123; WITTROCK, Icon. Bot. Berg., 1903, p. 97; J. D. MILNER, Catalogue portraits at Kew, 1906, p. 96; 3rd Suppl. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 46, 1908, p. 13 and in 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936; KERR in Journ. Thail. Res. Soc. Nat. Hist. Suppl. 12, 1939, p. 11–13.

Schottmüller, Otto

(† 1864, Berlin, Germany), gardener, 2nd botanist of the 'Preussische Expedition *etc.*' (see below).

ITINERARY. '*Preussische Expedition nach Ostasien*', *1860–62.*[1] Detailed data *cf. sub* WICHURA (also *sub* E. VON MARTENS). SCHOTTMÜLLER collected at least in Madeira, *Singapore*, Japan, China, the *Philippines*, and *Java.* He is cited to have collected in *Borneo* too (*1862*),[2] but no data about the ship touching at that island are known. He evidently part of the time sailed in the 'Arkona', like VON RICHTHOFEN (see there).

COLLECTIONS. *Herb. Berl.:* 662 phanerogams from the expedition, together with an amount of seaweeds.[3]

LITERATURE. (1) 'Die Preussische Expedition nach Ost-Asien' (Berlin 1864–73, 7 vols + atlas).

(2) *cf. Quercus cornea* LOUR. in Jahrb. Bot. Gart. Berl. 4, 1886, p. 224.

(3) *cf.* Pflanzenreich Heft 92, p. 24.

Partly published by WARBURG in Monsunia 1, 1900.

Algae by G. VON MARTENS in the botanical volume of 'Die Preussische Expedition *etc.*' *l.c.:* 'Die Tange' (1866, p. 1–152, pl. 1–8).

Schoute, Johannes Cornelis

(1877, The Hague, Holland; 1942, Groningen, Holland), botanist who was educated at Groningen University, and took his Ph.Dr's degree in 1902. From February until June *1903* he stayed at Buitenzorg (*W. Java*), occupying himself chiefly with a study of the secondary growth of palms, making a corresponding research of the tree ferns.[1] After his return in Holland, on the staff of the Government Experiment Station for seed-control at Wageningen, and subsequently teacher of natural history at Gouda and Bussum. In 1917 he was appointed Professor of Botany at Groningen, resigning in 1931 to be able to devote himself to scientific work again; he remained Honorary Professor of Plant Morphology.

Author of many morphological papers.[2]

COLLECTIONS. *Herb. Groningen:* 334 *nos* of *Palmae* collected in *Hort. Bog.*, and a 100 of medicinal and other plants, mostly from Buitenzorg.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 28.

(2) *E.g.* of 'Über das Dickenwachstum der Palmen' (Ann. Jard. Bot. Buit. sér. 2, vol. 11, 1912, p. 1–209, pl. 1–15).

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 336; Chron. Bot. 7, 1942, p. 278–279 + portr.; Vakbl. Biologen 23, 1942, p. 1–2; in Jaarb. Rijksuniv. Groningen 1945; Jaarb. Ned. Akad. Wet. Amsterdam, 1941/42, p. 192–210 + portr. and bibliogr. (not printed for lack of space); portr. in Ned. Kruidk. Arch. 55, (1945) 1947, facing p. 110.

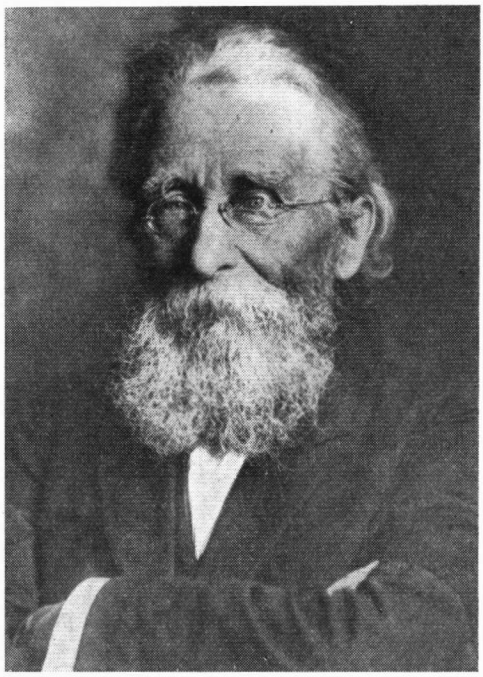
Schouten, A. R.

(1877, Pekalongan, Java; 1932, Weltevreden, Java), biologist who went to Java in 1908 as Assistant of the Experiment Station for Coffee and

Rubber at Malang; since 1909 teacher of natural history at secondary schools at Batavia.

He is the discoverer of *Polypodium schouteni* v.A.v.R. (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. The above-cited fern from *Java* was collected *in or before 1912* and is preserved in *Herb. Bog.* Probably he is the collector of 2 *Selaginellas* at Tjinjiroean (*W. Java*), material of which in *Herb. Bog.* and *Leyden.*[1]



SCHRÖTER

LITERATURE. (1) *cf.* A. H. G. ALSTON in Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1935, p. 438 and 441.

Schouten, W. C.

(? , Hoorn, N.H., Holland; 1625, Bay of Antongil on the E. coast of Madagascar), sea-farer who circumnavigated Cape Horn in his ship the 'Eendracht' in 1615; he discovered the Schouten Islands in 1616, reached Java by way of the Moluccas, and subsequently returned to Holland.

He is commemorated in the genus *Schoutenia* KORTH. (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. No collections of his are known to us.

Schouwman, Frederik, *cf. sub* J. A. Schilling.

Schrader, Carl

(1852, Brunswick, Germany; 1930, Berlin, Germany), from 1878–89 observer of the Observatory at Hamburg, in which function he was stationed in S. Georgia in 1882/83. He was the leader of an expedition to New Guinea (see below), in which island he founded a meteorological station at Finschhafen[1] in June 1886. From 1890–1923 Government Inspector for examinations of steersmen for foreign trade; in 1914 he travelled in the Crimea.

Cyrtandra schraderi K. SCHUM. and *Aglaia schraderiana* HARMS were named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

ITINERARY. Former *Kaiser-Wilhelmsland, NE. New Guinea, 1886–87.* Detailed data *cf. sub* HOLLRUNG. *1886.*[2] At first combined excursions with HOLLRUNG in the vicinity of Langemak; by boat to the coast region N of Finschhafen (July 3), ascending the Busim River, and back at Finschhafen (21); trip to the Kaiserin Augusta River (= Sepik) (July–Aug.).—*1887.*[3] Bagili Distr. (Apr.); Kaiserin Augusta River (June).

COLLECTIONS. He collected at least some *Musci;*[4] in *? Herb. Berl.*

LITERATURE. (1) *cf.* Nachr. Kais. Wilh. Land 2, 1886, p. 133.

C. SCHRADER: 'Umgegend von Finschhafen' (in *l.c.* 5, 1889); 'Astronomisch-geographische Ortsbestimmungen und magnetische Beobachtungen in Kaiser Wilhelmsland und dem Bismarck Archipel' (in Zeitschr. Ges. Erdk. Berlin 1889).

(2) *cf.* Nachr. Kais. Wilh. Land 2, 1886, p. 5, 84, 88, 119, 123, 126.

(3) *cf. l.c.* 3, 1887, p. 148, 190.

(4) Published by A. GEHEEB in SCHUMANN: 'Die Flora von Kaiser Wilhelmsland' (Beih. z.d. Nachr. Kais. Wilh. Land 1889, and in ENGL. Bot. Jahrb. 9, 1888).

Schrader, F. A., *cf. sub* Forest Research Institute, Buitenzorg.

Schreuder, E. J., *cf. sub ditto.*

Schröter, Carl Joseph

(1855, Esslingen, Würtemberg, Germany; 1939, Zürich, Switzerland), whose family moved to Switzerland as early as 1865, and since lived at Zürich. In 1879 he was appointed University Lecturer in Botany at the Technical College (Eidgenössische Technische Hochschule), and from 1884–1925 Professor of the said College at Zürich. He twice visited the D.E.I. (see below). The voyage 1898/99 was made at the expense of Mr PERNOD (see there).

Author of many plant-geographical and other papers, several of which concerning the alpine flora.[1]

Polygonum schroeterianum DANSER was named after him.

ITINERARY. *Voyage round the world, 1898–99.*[2] Departing in Aug. 1898, going through the U.S.A., and *via* Honolulu to E. Asia, especially visiting Japan, and travelling *via* China, Saigon, and *Singapore* to *Java;* in March 1899 he was back in Switzerland again. He and Mr PERNOD stayed in *W. Java*[3] from end Dec. *1898*–Jan. *1899;* they collected in mangrove forest, and at Buitenzorg, Tjibodas (Dec. 29, 1898) and on G. Pangrango; Jan. 2nd they set out to Gamboeng Estate on the slope of G. Tiloe, being for a week the guest of Mr KERK-

HOVEN; subsequently the Cinchona plantations of G. Tangkoeban Prahoe were visited.[4]—*Journey through Java* (March–Sept. *1927*),[5] collecting in the following localities: *W. Java:* G. Malabar (May); *Centr. Java:* Diëng Plateau (mid-May); Banjoemas; *E. Java:* G. Lawoe, Sarangan (May 30); G. Tengger with C. A. BACKER (June 3–6); along the N. coast (G. Bentar, G. Loros, G. Kendang) (9–10); Idjen Plateau with BACKER (10–12); G. Ardjoeno-Welirang (17–20); Rawah Bening with COERT (26); G. Keloed, Sarangan and G. Andjasmoro with COERT. He collected some numbers in *Sumatra*, probably on the voyage to or from Java, *viz* at Benkoelen, Kroja, on G. Sibajak and G. Pintoe (*East Coast*).

COLLECTIONS.[6] *Herb. Techn. Coll. Zürich*, from both voyages, including a 100 *nos* from G. Ardjoeno-Welirang (1927); dupl. in *Herb. Basel.* In *Herb. Pasoer.:* 39 *nos* with J. H. COERT (coll. 1927); *Herb. Bog.:* 14 dupl. (pres. 1927); in *Mus. Univ. Zürich:* natural history objects from *Java* (pres. 1901/02); *Herb. Berne: Java Fungi* (pres. 1927–28).

LITERATURE. (1) *E.g.* of 'Das Pflanzenleben der Alpen' (Zürich 1926).

(2) C. SCHRÖTER: 'Esquisses botaniques d'un voyage autour du monde' (Arch. d. Sci. Phys. et Nat., Oct. et Nov. 1899, Compt. Rend. d. Trav. prés. à la 82me Sess. d. 1. Soc. Helv. d. Sci. Nat. Réun. Neuchâtel d. 30 juillet au 2 août 1899, Genève 1899, p. 48; Arch. d. Sci. Phys. et Nat., Bibl. univers. 104me année, 4me pér., vol. 8, Genève 1899, p. 394; Act. Soc. Helv. d. Sci. Nat., 82me Sess., 31 juillet au 2 août 1899 à Neuchâtel, Neuchâtel 1900, p. 52–53).

(3) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 23.

(4) C. SCHRÖTER: 'Ein Besuch bei einem Cinchonenpflanzer Javas' (Schweiz. Wochenschr. f. Chemie u. Pharmacie *no* 36, 1900).

(5) C. SCHRÖTER: 'Exkursionen in Ost-Java (Idjen plateau und Weliran)' (Vierteljahrschr. Naturf. Ges. Zürich 73, 1928, Beibl. 15, p. 554–600, 7 fig., pl. 17–19); 'Eine Exkursion ins Tenggergebirge' (Verh. Naturf. Ges. Basel 40, 1928/29, p. 511–535); 'Javanisches Edelweiss und Heidelbeerbäume' (Volkshochschule 1934, p. 101–102); 'Ausflüge auf Java' (*l.c.* 1935, p. 307–313).

(6) For *Fungi cf.* Vierteljahrschr. Naturf. Ges. Zürich 46, 1901, p. 122–127.

BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 2, 1905, p. 164–165, *t.* 133; DÖRFLER, Botaniker Porträts, 1906/07, *no* 7; Festschrift in Veröff. Geobot. Inst. RÜBEL, Zürich 1925;, Volkshochschule 1935, p. 302–307; BACKER, Verkl. Woordenb., 1936; Vierteljahrschrift Naturf. Ges. Zürich 84, 1939, p. 355; Nat. Tijdschr. N.I. 99, 1939, p. 71–74; Chron. Bot. 5, 1939, p. 285–286, w. portr. on p. 289; Neujahrsbl. Naturf. Ges. Zürich for 1947, 149, 1946, p. 89–90 + portr.

Schroo, Hendrik

(1913, Klaten, Centr. Java; x), educated at Wageningen Agricultural College; from 1940–41 Pedologist of the Soil Science Institute, Buitenzorg (Java); after the Japanese occupation, during which he was a P.O.W., he joined the Forest Service and was stationed in Borneo; in 1948 on sick-leave to Europe.

COLLECTING LOCALITIES. *1941.* When still on the staff of the Soil Science Institute he made an exploration in the coastal region of Ketapang, Matan Distr., *SW. Borneo*, where he collected on a sandy strip near the Soengei Pesagoean, between July 1–Aug. 7.

COLLECTIONS. *Herb. Bog.:* some padang plants from Ketapang, *SW. Borneo* (coll. 1941).

Schüller

of Kroë, *S. Sumatra*, is reported to have sent living orchids to *Hort. Bog.* in April *1899*. His name is rightly: J. G. H. F. SCHULLER TOT PEURSUM (see there).

Schuitemaker, Jan Pieter

(1894, Probolinggo, Java; x), since 1921 Forest Officer in the employ of the D.E. Indian Forest Service, successively stationed in Java, Bali (Singaradja, 1928), and W. Borneo (Pontianak, from 1929);[1] since 1932 at Buitenzorg, from 1937–39 teacher at the School of Agriculture there; in 1939 transferred to Madioen (E. Java), and in 1941 appointed Director of the School of Forestry there; after World War II reappointed in Dec. 1947, stationed at Batavia; at present Director of the School of Forestry at Buitenzorg.

COLLECTING LOCALITIES. *1929–32. W. Borneo.* In March–Apr. *1931* the 'mantri' of the Herbarium, MONDI (see there), collected under his supervision in *Borneo* and the *Karimata Islands*, W of Borneo; near Pontianak (Sept. 1931, and in *1932*).—*1937. W. Java:* Buitenzorg.

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg* (see there): bb. *nos* from *Borneo* and 3 Ja. *nos* from Buitenzorg. *Herb. Bog.:* duplicates from the F.R.I., and herbaceous plants with private numbers (*Nepenthaceae* and *Loranthaceae* collected in Febr. 1932); *Herb. Leyden: Borneo* dupl. (1931).

LITERATURE. (1) J. P. SCHUITEMAKER: 'Damaronderzoek in West-Borneo' (Tectona 26, 1933, p. 230–266); 'Het garoehout van West-Borneo' (*l. c.* 26, 1933, p. 851-892); 'Onderzoek naar de bekerfauna van eenige Nepenthaceae bij Mandor. I. Botanisch gedeelte' (Trop. Nat. 23, 1934, p. 146–151); 'Aanteekeningen betreffende het Natuurmonument Mandor (W. Borneo)' (Versl. N.I. Ver. Natuurbesch. 1935, 1936, p. 124–129); *cf.* also a typed report on Kendawangan in W. Borneo (trip from Aug. 18–29, 1930), in Forest Research Institute.

Schuller tot Peursum, J. G. H. F.

(1861, Batavia, Java; 1919, Batavia, Java), originally in the Civil Service, *e.g.* in Sumatra; since 1910 estate-manager of the land Menteng near Batavia.

Dendrobium schulleri J.J.S. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. Apparently he was an orchid amateur who bought orchids from *Sumatra* (*cf.*

also *sub* SCHÜLLER), *New Guinea, etc.*, but did not collect himself. He presented living orchids to *Hort. Bog.* (*e.g.* from *New Guinea* in *1918*), and dried material to *Herb. Bog.* (*1913–16*).

Schulte, Mrs E.
of Weltevreden, sent plants collected in and near Batavia (*W. Java*) to *Herb. Bog.* in *1913*.

Schultze, Wilhelm (later Willy)
entomologist, is cited in MERRILL, Enum. Philip. Fl.Pl., as the collector of plants in the *Philippines*. Few plants in *Herb. Manila*, partly numbered in the B.S. (*cf. sub* Bureau of Science) series.

Schultze, W. O. H.
accompanied M. BURRET (see there) on a collecting trip above Kaba Wetan Estate, Benkoelen, *S. Sumatra*, in May *1939*. Some *nos* of plants were collected together.

Schultze Jena, Dr Leonhard
(1872, Jena, Germany; x), zoologist-geographer who joined a German-Dutch border expedition (see below, and also *sub* GJELLERUP) at the expense of the 'Reichskolonialamt' (Dept of Colonies). About 1913 Professor of Geology in the University of Kiel, and later in the University of Marburg. He travelled in SE. Africa (1903–05), Macedonia, and S. Mexico too.
Several plants were named after him.
ITINERARY. *1910. North New Guinea.*[1] Camp of the vanguard expedition at the mouth of the Tami (Febr.–March); negotiations of SCHULTZE at Batavia and Buitenzorg (March–Apr.); since May 4 preparatory trips, reconnoitring of the Tami and Mossu rivers; march *via* the Bewani Mts to Omkeer (= Keerom) River and back (June 12–July 31); Oenake Promontory (Aug.); breaking up Tami bivouac, and arriving near the mouth of the Sepik (Sept. 8–10); ascending the Sepik (= Kaiserin Augusta) River (till Oct. 30); excursion to the mountains (Peripatus summit, 1492 m) (Nov. 2–13); breaking camp, and downstream the river (17–26); to Alexishafen and Friedrich-Wilhelmshafen (27–30); *Bismarck Archipelago:* Rabaul (Dec. 3).
COLLECTIONS. *Herb. Berl.:* 432 *nos* of phanerogams and ferns, 17 *nos* of *Fungi*, 4 *nos* of lichens, 22 *Musci;* in the *Show Mus. Berl.:* 52 *nos.*
The collections were worked out in the 'Beiträge zur Flora Papuasiens' (ENGL. Bot. Jahrb. 1912–).
LITERATURE. (1) *cf.* PETERM. Mitt. 1909, p. 324; Zeitschr. Ges. Erdk. Berl. 1909, p. 623–624; *l.c.* 1910, p. 668–669; and *l.c.* 1911, p. 128, 361–365.
L. SCHULTZE JENA: 'Forschungen im Innern der Insel Neu-Guinea (Bericht des Führers über die wiss. Ergebn. d. Deutsch. Grenzexpedition in das westliche Kaiser Wilhelmsland 1910)' (Mitt. d. Deutsch. Schutzgeb., Ergänz. Heft *no* 11, 1914, iv + 100 pp., maps, fotos, *etc.;* itinerary in *l.c.* p. 79–80).
BIOGRAPHICAL DATA. Who's who 1913; BACKER, Verkl. Woordenb., 1936.

Schumm, *cf. sub* Forest Research Institute, Buitenzorg.

Schuster, Walter Hugo
(1907, Vienna, Austria; x), naturalized as a Dutchman; since 1928 official in the employ of the Freshwater Fishery Service in the Dutch East Indies.
COLLECTIONS. *Herb. Bog.:* 26 *nos* (1–11 and 1–15) from the mangrove forests near Kalianak, Soerabaja, *E. Java* (*1940*).

Schuurman, J. A.
sent living plants from *Banka* to *Hort. Bog.* in the years *1897–98*. He was the discoverer of *Sarcanthus proboscideus* J.J.S. in that island (*cf.* Bull. Dép. Agr. Ind. Néerl. *no* 5, 1907, p. 26), material of which preserved in *Herb. Bog.*

Schuurman, J. J.
(1909, Tolbert, Gr., Holland; x), biologist, educated at Groningen University, who took his Ph. Dr's degree in 1936; in 1938 appointed Advising Fishery Expert in the D.E.I., at first stationed at Buitenzorg, and since 1940 in Central Java.
COLLECTIONS. *Herb. Bog.:* 15 water plants from Rawa Pening near Ambarawa, *Centr. Java* (coll. Sept. 6, *1939*).

Schuylenburch, van
sent a *Dendrobium* from Porrong near Lawang, *E. Java*, to *Hort. Bog.* in May *1933*.

Schwaner, Dr Carl Anton Ludwig Maria
(1817 or 1818, Mannheim, Germany; March 30, 1851, Buitenzorg, Java), geologist, educated in Germany; early in 1842 appointed member of the 'Natuurkundige Commissie' (Commission for Natural Sciences) in the D.E.I. In August 1842 he arrived at Batavia, where he stayed 14 months; subsequently charged with the investigation of the coal-layers in Borneo. In 1848 he returned to Java to work out his scientific notes.[1] In 1850 he was instructed to go to Borneo once more, but died before leaving. When in Java, he made some trips in the environs of Buitenzorg.[2]
The Schwaner Mountains were named after him.
ITINERARY. *1843–48. Borneo.* Especially exploring the *SE. part*, in Tanah-Laut and Tanah-Boemboe: ascending the Barito to Sg. Tewe, and the latter to the watershed, following Sg. Lawa and Kendang Pahoe to Moeara Pahoe on the Mahakam; ascending the Mahakam to Long-merah, back to Sg. Ratah and ascending it, downstream the Sg. Maroewai and the Laoeng to the Barito, and back to Bandjermasin.[3]—*1846.* From Bandjermasin (Dec. 9) by proa to Martapoera (9), Sg. Raja (10), Batoe Belian (11), and back to Sg. Raja and Bandjermasin (12).—*1847–48.* From Bandjermasin (Oct. 25, 1847) to the Kahajan River; from the confluence with the Troesan to kp. Toesoet on the Mantohei (Nov. 2–Dec. 26); kp. Toesoet–Indang–Oreng on the Senamang (Dec. 27, 1847–Jan. 13, *1848*); *via* the watershed between the Katingan and the Malahoei (= Melawi), and following it to

Sintang (Jan. 14–28); proceeding to Pontianak (Jan. 29–Febr. 2).[4]

COLLECTIONS. His entomological collection went to Leyden about 1851.

According to VETH (in *l.c. sub* Biogr. data), SCHWANER went to Borneo accompanied by a staff including a native plant collector; elsewhere[5] it is recorded that the 'Vereeniging voor de Flora van Nederland en zijn Overzeesche Bezittingen' offered the Dutch Government to work out the herbarium which might have been left behind by SCHWANER. It is still doubtful whether he actually collected plants.

108 Drawings from the Borneo voyage were presented to the Kon. Instituut voor Taal-, Land- en Volkenkunde at Delft (later at The Hague).

LITERATURE. (1) Author of 'Resultaten van een onderzoek naar den Baritostroom ten opzichte zijner bevaarbaarheid voor grootere vaartuigen' (Ind. Arch. 1^2, 1850, p. 394–410); 'Reis naar, en aanteekeningen betreffende de steenkolen van Batoe Belian (Z.O. kust Borneo)' (Nat. Tijdschr. N.I. 3, 1852, p. 673–688); 'Historische, geographische en statistieke aanteekeningen betreffende Tanah Boemboe' (revised by NETSCHER & DEWALL in Tijdschr. Taal-, Land- en Volkenk. 1, 1853, p. 335–371); 'Borneo. Beschrijving van het stroomgebied van de Barito en reizen langs eenige voorname rivieren van het Zuid-Oost. gedeelte van dat eiland, in 1843–47' (Amsterdam 1853/54, 2 vols).

(2) C. A. L. M. SCHWANER: 'Geologische uitstapjes in de omstreken van Buitenzorg, vnl. op den Salak' (Nat. Tijdschr. N.I. 5, 1853, p. 369–426).

(3) *cf.* POSEWITZ, Borneo, 1889, p. 19–20.

(4) *cf.* SCHWANER, Borneo, *etc.*, *l.c.* vol. 2; Tijdschr. Ned. Ind. 10^1, 1848, p. 164–166; *l.c.* 11^1, 1849, p. 144–145; *l.c.* 13^1, 1851, p. 417–418 (new instruction); Nat. Tijdschr. N.I. 11, 1856, p. 286.

(5) *cf.* Alg. Konst- en Letterbode 1851^2, p. 130.

BIOGRAPHICAL DATA. Nat. Tijdschr. N.I. 2, 1851, p. 189–191; H. J. VETH, Overzicht van hetgeen . . . gedaan is voor de kennis der Fauna van Ned. Indië, Leiden 1879, p. 99, 106, 108, 113; SIRKS, Ind. Nat. Onderzoek, Amsterdam 1915, p. 120, *etc.*: Encyclop. N.I. 3, 1919; in the Government Register the year of birth mentioned is 1818.

Schwartz, A.

from *1912 or 1913–21* Assistant Curator of the Mountain Garden at Tjibodas, *W. Java*. He collected ferns on the slopes of G. Gedeh. In *1939* he conducted an expedition of the Dutch New Guinea Company, during which botanical collections were made by ANANG (see there).

COLLECTIONS. *Herb. Bog.*: ferns, numbers above 2600, identified by VAN ALDERWERELT VAN ROSENBURGH, who erroneously wrote the name 'SWARTZ' on the labels; dupl. in *Herb. Leyden*.

Schwarz, Eduard

(† 1862, Vienna, Austria), Naval Surgeon who was to undertake the botany department of the expedition in the 'Novara' (1857–59) with JELINEK (see there and *sub* HOCHSTETTER). According to WAWRA VON FERNSEE[1] he embarked as a botanist, but it was soon evident that he was none! Notwithstanding he did good work as a medical observer, and reporter on the voyage.

LITERATURE. (1) *cf.* Notizbl. hist. stat. Sect. d.k.k. Mähr.-Schles. Ges. z. Beförd. d. Ackerbaues, d. Natur- und Landeskunde *no* 10, 1878, p. 15.

Schwarzenbach, E.

engineer at Moeara-Aman in Benkoelen (*S. Sumatra*).

COLLECTIONS. *Herb. Univ. Zürich* (pres. *1931/32*).

Schweizer, Jean

(1896, Diessenhoven, Switzerland; x), botanist who took his Ph.Dr's degree at Berne University in 1919; on the staff of the Besuki Experiment Station (Djember, E. Java), 1920–29; in the employ of the R.C.M.A. Deli at Medan (Sumatra), 1929–30; since 1930 Director of the Besuki Experiment Station.

Author of many papers, especially dealing with physiological, phytopathological, and genetical problems concerning rubber, coffee, and tobacco culture.

COLLECTIONS. *Herb. Bog.* and *Pasoer.*: few *nos* from the environs of Djember, *E. Java, e.g.* from Rawasarie at the foot of G. Raoeng. Also plants in *Herb. Berne* (from ? Europe).

Schwenk, Heinrich

(1809, Lick near Darmstadt, Germany; Jan. 7, 1856, o/b the brigantine 'Banda', in Sagoendi Bay, Nias Island), entered the D.E.I. Army in 1830 as a soldier. In 1836 he was appointed 2nd lieutenant, and in 1853 major. As a volontary participant in a military demonstration he became deadly wounded on Jan. 5, 1856.

Collector of some plants on *P. Morsala* (= *Moesala*), opposite the Bay of Tapanoeli. He was the discoverer of *Anauxanopetalum schwenkii* T. & B. on that island.

COLLECTIONS. *Herb. Bog.*: the above-mentioned plant *etc.* (coll. *1855*); besides he sent seedlings of *Dipterocarpaceae* to *Hort. Bog.* (*cf.* TEYSMANN in Journ. Bot. néerl. 1, 1861, p. 369).

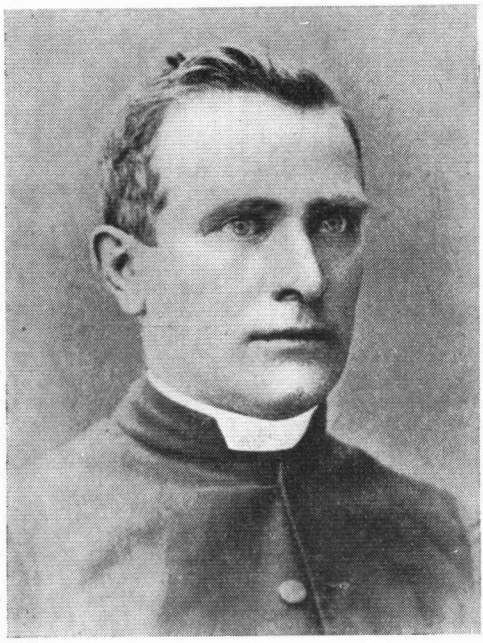
Scortechini, Reverend Father Benedetto

(1845, Cupramontana near Ancona, Italy; Nov. 4, 1886, distr. of Calcutta, Brit. India), a Roman Catholic missionary who was operating in Queensland from 1871– 84, and who devoted part of his time to the study of botany, helped on by F. M. BAILEY and Baron F. VON MUELLER. Early in 1884 he went to Taiping, Malay Peninsula, and was appointed by Sir HUGH LOW as the Government Botanist, Perak, which post he held till his death in 1886.[1] In October of the latter year he was deputed to proceed to Calcutta to arrange and name his collections of Perak plants, but died shortly after his arrival.

He is commemorated in the genus *Scortechinia* HOOK. *f.* and in several other plant species, some-

times erroneously named after his supposed Christian name BERTOLD.

COLLECTING LOCALITIES. *Thursday Isl.* in Torres Strait.[2]—*Malay Peninsula. 1884.* Probably early in the year leaving Australia; according to his early collections in *Perak*, he was in Taiping



SCORTECHINI

only in about March. From the time of his arrival (March) exploring the *Larut District, i.e.* the plains around Taiping and the hills in the neighbourhood as Maxwell's, Caulfield's hills and G. Hijou (on the labels mentioned as G. Idjou); G. Bubu with TENISON-WOODS (see there) (May),[3] ascending by the Hermitage and G. Haram Parah (= G. Arang Para); about Arang Para (June); Pangkor in the Dindings (July); Ijuk (= Ijok) (Aug.); travelling in southern direction to the Bruas River, crossing over to Pangkor (Nov.); Batu Kurau NW of Taiping (Dec.).—*1885. Eastern district of Kinta* (Febr.), collecting extensively on G. Bujong Malaka, at Kuala Dipang, Gopeng, and Blanja (betw. March and May); V. NARAYANASWAMI[4] assumes that little collecting was done after June 1885 and that S. was busy arranging his collections, whereas BURKILL[5] says that S. returned to Gopeng (Kinta Distr.) from Taiping in July 1885 and ascended the neighbouring parts of the main range, in *1886* still visiting *Singapore Isl.* and Telok Anson (Aug.).

COLLECTIONS. He bequeathed his botanical collections to *Herb. Calcutta.* In *Herb. Brit. Mus.:* 186 ferns and 49 *nos* of *Loranthus* and *Ficus* species from Perak (pres. 1884–86), and with *Herb.* BEDDOME; *Herb. Kew:* Malaya, 269 *nos* (pres. 1886–87); *Herb. Edinburgh* (Perak plants); *Herb. Perak Mus.* (= *Sing.* now); *Herb. Bot. Gard. St Petersb.* (=*Leningrad*): 169 *nos* and 28 collected with WRAY; also dupl. in *Herb. Sing., Leyden* (Perak), *Utrecht* (Perak), *Berlin* (Perak *a.* 1884), *Herb.* DECAND. (*Geneva*), and *Florence.*

He left many misspellings of Malayan names upon his labels and a great many sheets were unnumbered and unlocalized.

His Malayan collections were partly worked out.[6]

LITERATURE. (1) Author of 'Note on Botany and Malay (names of plants)' (Journ. Str. Br. Roy. As. Soc. *no* 16, 1885, p. 413–415).

(2) *cf.* F. v. MUELLER in WING'S South. Sci. Rec. N.S. 2, Apr. 1886.

(3) *cf.* Account of the ascent in Journ. Str. Br. Roy. As. Soc. *no* 14, 1885, p. 275 *seq.*

(4) In 'Provenance of early Malayan plant collections' (Journ. & Proc. As. Soc. Bengal N.S. 27, 1931, p. 327–477), see p. 329–331.

(5) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5 (some wrong data were rectified in part of his reprints).

(6) B. SCORTECHINI: 'Descrizione di nuove Scitaminae trovate delle penisola Malesa' (Nuov. Giorn. Bot. Ital. 18, 1886, p. 308–311, 3 pl.).

R. H. BEDDOME: 'Ferns collected in Perak by Father SCORTECHINI' (Journ. Bot. 25, 1887, p. 321–325; on material in the *Brit. Mus.*); 'SCORTECHINI's Malayan ferns' (*l.c.* 31, 1893, p. 225–226; on material preserved at *Kew*, and similar set in *Herb.* BEDDOME = *Brit. Mus.*).

BIOGRAPHICAL DATA. Rev. Mycol. 9, 1887, p. 123; Proc. Roy. Soc. Queensl. 4, 1887, p. 2–8; Malpighia 13, 1899, p. 110 (ref. to portr.); MAIDEN in Journ. Austr. Ass. Adv. Sci. Brisbane meeting 1909, p. 381; Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Scott, John

(? 1838–80), Curator of the Royal Botanic Gardens, Calcutta, is credited in books with collecting in *Penang;* but probably what he did was to cultivate plants brought to Calcutta from Penang by others (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

Scribner, Frank (or Franklin Pierce) Lamson

(1851, Cambridgeport, Mass., U.S.A.; 1938, Washington, D.C., U.S.A.), B.S., Maine State College of Agriculture, 1873; on the staff of the U.S. Dept of Agriculture, 1885–88; Professor of Botany and Horticulture in Tennessee, 1888–94; Chief Div. Agrost. U.S. Dept Agr., 1894–1901; Chief Bureau of Agriculture, Manila, P.I., 1901–1904; Special Agent and Agrostologist, U.S. Dept Agr., 1904–22.

Well-known author on grasses, *etc.*[1]

He is commemorated in *Gigantochloa scribneriana* MERR.

COLLECTIONS. Some (*c.* 14) grasses, collected in *Luzon* (June *1902*), and *Cuyo* (Dec. *1902*), including the above-mentioned new species.

LITERATURE. (1) *E.g.* 'List of Philippine agri-

cultural products and fiber plants' (Bull. Bur. Agr. Philip. Isl. *no* 5, 1904, 47 pp.).

BIOGRAPHICAL DATA. Who's who in America 1930/31; Chron. Bot. 4, 1938, p. 84, 261.

Seba, Albert

(1665, Etzel, East Friesland, Germany; 1736, Amsterdam, Holland), is sometimes said to have accompanied the voyages of several merchantships to India, and to have brought home important collections of natural history objects; later investigations do not make this probable. When settled at Amsterdam as a dispenser, he sold his cabinet to Czar Peter the Great. Afterwards he made a still larger collection which was sold in parts after his death (several plants in *Herb. Brit. Mus.*).

He edited a work in 4 volumes entitled 'Locupletissimi rerum naturalium thesauri accurata descriptio', illustrated with many coloured plates (Amsterdam, 1734–65).[1]

Though his interest was mainly zoological, there remains the possibility that he collected plants too. BLUME says in his 'Collections des Orchidées les plus remarquables *etc.*' (Amsterdam 1858, p. 36) under *Goodyera pusilla: 'Habit. In Java occidentali in sylvis montis Pangarango mense Junio florens a me lecta. Habemus, ex Herbario, ut videtur, quod collegit* SEBA, *specimen minus completum hujus speciei, cui manu ipse suâ* BURMANN *ascripsit: 'Apocynum reticulatum'. Infra aliâ manu scriptum, sed litura deletum est: 'Petola Rumphij Herb. Amboin. Lib.* 9 SEBA Thes. II, p. 31 *tab.* 30 *num.* 4.' *addito infra in margine 'depicta'.*

LITERATURE. (1) *cf.* H. J. VETH, Overzicht ... voor de kennis der fauna van Ned. Indië, Leiden 1879, p. 8.

BIOGRAPHICAL DATA. HALLER, Bibl. Bot., 2, 1772, p. 232–233; Svensk Linn. Sällsk. Årsskrift 20, 1937, p. 75–100 + portr. and other ill., incl. bibliogr.; H. ENGEL, Alphabetical list of Dutch zoological cabinets *etc.* (in Bijdr. t.d. Dierk. 27, 1939), p. 315; Ned. Kruidk. Arch. 50, 1940, p. 200.

Seemann, Bert(h)old Carl

(1825, Hanover, Germany; 1871, Javali, Nicaragua, Centr. America), came to Kew in 1844, full of desire to travel in foreign countries, with the object of fitting himself for the work of botanical collector. He was appointed successor of THOMAS EDMONSTON who died during the expedition of the 'Herald' (see below), and joined that expedition in America.[1] In 1853 Ph.Dr at Göttingen University. In 1860 he joined an expedition to the Fiji Islands;[2] later he made some voyages to America with a commercial purpose, which resulted in his being appointed Managing Director of a gold-mine at Javali, Nicaragua.

He was founder, and for many years editor, of the serials Bonplandia (1853–) and SEEMANN Journal of Botany (1863–).

Seemannia REGEL and *Adianthum seemanni* W. J. HOOK. were named after him.

ITINERARY. *Voyage in the 'Herald', 1845–51.*[1] The ship sailed from Plymouth on June 26, 1845; SEEMANN left England in Aug. 1846, reached Panama on Sept. 22, and joined the expedition on Jan. 17, 1847. He explored the whole W. coast of America and a great part of S. America; homewards from Honolulu (Oct. 30, *1850*) *via* Hongkong (Dec. 1–22), *P. Aor* (29), and *Singapore* (Dec. 30, 1850–Jan. 8, *1851*); passing the Straits of Sunda, a party effecting a landing in *S. Sumatra* (Jan. 15); Keeling Islands; *via* the Cape and St Helena, reaching England, Spithead (June 6, 1851).

COLLECTIONS.[3] *Herb. Brit. Mus.:* 2000 plants forming the type collection of the 'Herald' (purch. 1862) and 450 plants from the South Sea Islands *etc.* coll. during the Voyage of the 'Herald' (pres. 1852); *Herb. Kew:* 152 *nos* of the 'Herald' (acq. 1867), possibly identical with the *Malayan* and Chinese plants collected by SEEMANN and acquired with *Herb.* HOOK.. Also duplicates in *Herb. Berlin, Vienna,* and *Herb.* DECAND. (*Geneva*), possibly not from the 'Herald' expedition.

The collection of the 'Herald' was studied, eliminating the plants from *Singapore* and *Sumatra.*[4]

LITERATURE. (1) B. C. SEEMANN: 'Narrative of the voyage of H.M.S. Herald during the years 1845–1851, under the command of Capt. HENRY KELLETT; being a circumnavigation of the Globe, and three cruises to the arctic regions in search of Sir JOHN FRANKLIN' (London 1853, 2 vols); transl. into German: 'Reise um die Welt in 1845–1851' (Hannover 1853, 2 vols).

For the period covering May 1848–Febr. 1850 *cf.* Journ. Bot. & Kew Gard. Misc. 1, 1849, p. 144–149, 185–188; and *l.c.* 2, 1850, p. 151–158, 179–182, 361–369. For the period Oct. 1850–June 1851 *cf.* in *l.c.* 4, 1852, p. 18–26.

(2) Resulting in his 'Flora Vitiensis' (1865–73).

(3) J. BRITTEN: 'Dr. SEEMANN's study set' (Journ. Bot. 27, 1889, p. 102–105).

(4) B. C. SEEMANN: 'The botany of the voyage of H.M.S. Herald during the years 1845–51' (London 1852–57, 10 pts preceded by a short summary of the voyage, 100 pl.; on the dates of issue *cf.* Journ. Bot. 59, 1921, p. 22–23, and the list of collaborators in *l.c.* p. 23–24).

BIOGRAPHICAL DATA. Gard. Chron. 1871, p. 1678, w. portr.; Proc. Linn. Soc. 1871–72, p. i–xxiv; TRIMEN Journ. Bot. N.S. 1, 1872, p. 1–7, w. portr.; in SEEMANN, Flora Vitiensis, London 1865–73, p. xxxi–xxxiii + portr.; Bot. Zeit. 30, 1872, p. 503–509; PRITZEL, Thes. Lit. Bot., 1872; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 28, 1890, p. 280, and 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Seifriz, William

(1888, Washington, D.C., U.S.A.; x), botanist who was educated and took his Ph.D.'s degree at JOHNS HOPKINS University, Baltimore (U.S.A.) (1920); subsequently working at Geneva, in London and Germany; from 1923–24 Botanical Instructor at Michigan; in 1925 appointed Professor of Botany at Philadelphia, University of Pennsylvania.

He worked in the Treub Laboratory at Buitenzorg from September until November 1920, stud-

ying the phenomena of periodicity in tropical plants.[1]

COLLECTING LOCALITIES. *1920. W. Java* (between Sept.–Nov.): Buitenzorg, Tjibodas, and Mt Gedeh-Pangrango (also on Mt Sela, one of the summits);[2] *E. Java:* G. Tengger, Sandsea area.

COLLECTIONS. The phanerogams of his collection were identified by C. A. BACKER at Buitenzorg, the lichens by PLITT at Maryland,[3] the mosses by R. S. WILLIAMS at New York, and the hepatics by A. W. EVANS at Yale. 2 Java dupl. in *U.S. Nat. Herb. Wash.* The collection comprised about 500 *nos* and all were later given away to botanical friends in *London*, at *Geneva*, *Berlin*, and *Baltimore*.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 43.

(2) W. SEIFRIZ: 'The altitudinal distribution of plants of Mt. Gedeh, Java' (Bull. Torr. Bot. Club 50, 1923, p. 283–306); 'The altitudinal distribution of lichens and mosses on Mt. Gedeh, Java' (Journ. Ecology 12, 1924, p. 307–313).

(3) *cf.* also ZAHLBRUCKNER in Ann. Crypt. Exot. 1, 1928, p. 109–212.

BIOGRAPHICAL DATA. Amer. Men of Sci. 1938.

Seimund, E.
in the Museums Department, Fed. Malay States, *c.* 1916–25.

COLLECTING LOCALITIES. Between *1916–25. Malay Peninsula.* In the *Langkawi Islands* with H. C. ROBINSON, mainly on *P. Dayang Bunting* (Nov.–Dec. *1916*, Jan. *1917*); *P. Rembia* of the *Sembilan Islands* (Nov. *1918*); Kuala Tahan (Nov. *1920*); Kuala Lumpur; Pahang, G. Tahan (Febr.–March *1921*); *P. Lal(l)ang* of the *Sembilan Islands* (Nov. and Dec. *1925*).

COLLECTIONS. He collected plants for H. C. ROBINSON (see there). The latter sent most of his collections to *Kew*, so possibly those of SEIMUND also. In *Herb. Kew:* plants from Tahan and Kuala Lumpur (pres. 1921), and ? with coll. ROBINSON; *Herb. Sing.;* some dupl. in *Herb. Bog.*

Sekarang
= SAKARAN (see there), 'mantri' of the Buitenzorg Botanic Gardens, who brought home living plants from the NIEUWENHUIS Expedition to *Borneo* (*1898–1900*) (*cf. sub* NIEUWENHUIS and AMDJAH), for *Hort. Bog.*

Seki, S. or Y.
collected with Y. YAMAMOTO (see there) near Peurula (= Peureulak), *Sumatra East Coast* (Aug. 2, *1939*).

Seligmann, Charles Gabriel
(1873–1940), educated at St Thomas's Hospital, medical doctor; anthropologist-ethnologist, for a long time Professor of Ethnology at London University. He visited New Guinea twice (see below). In 1908 he made ethnological explorations in Ceylon, and he explored in Africa too.

ITINERARY. In *1898–99* with the *Cambridge Anthropological Expedition* to Torres Straits, *S of New Guinea.*[1]—In *1904* with the DANIELS *Ethnographical Expedition* to *New Guinea,*[2] visiting: the western extremity of *Papua*, W of Bugi and making a partial ascent of the Bensbach River; the coastal region of the Central Division of Papua (Koita); Roro (= Rarai ?) and Mekeo Districts, valley of St Joseph River; the southern Massim District (Wagawaga, Bartle Bay, Tubetube), and the northern Massim Distr. (*Trobriand* and *Marshall Islands, etc.*).

COLLECTIONS. *Herb. Kew: New Guinea* plants (pres. 1905).

LITERATURE. (1) *cf.* detailed data, liter. *etc.* in WICHMANN, Entd. Gesch. N.G., in Nova Guinea 2[2].

(2) C. G. SELIGMANN & W. MERSH STRONG: 'Anthropogeographical investigations in British New Guinea' (Geogr. Journ. Lond. 27, 1906, p. 225–242, 347–365, w. maps).

C. G. SELIGMANN: 'The Melanesians of British New Guinea' (Cambridge Univ. Press 1910); and many small ethnographical papers.

BIOGRAPHICAL DATA. Who's who 1929–40; N.I. Geogr. Meded. 1, 1941, p. 145.

Selorio, *cf. sub* Forestry Bureau, Manila.

Seliman Hout- en Land Exploitatie Mij
in *Borneo*, sent 14 *nos* of herbarium material from there to *Herb. Bog.* in *1916*. Also bb. *nos* in *Herb. For. Res. Inst. Buitenzorg.*

Sem, *cf. sub* Forest Research Institute, Buitenzorg.

Semeroe, *cf. sub ditto.*

Semmelink, J.
(1837–1912), Medical Officer in the D.E.I., 1859–82; stationed at Larantoeka, *Flores* (*Lesser Sunda Isls*), 1862–63; then at Besoeki (E. Java) in the employ of the Civil Medical Service, 1864–65.

COLLECTIONS. *Herb. Leyden:* some cryptogams from *Flores* (acq. *1864*). In 1863 he sent a collection of animals to the Leyden Museum.

BIOGRAPHICAL DATA. H. ENGEL, Alphabetical list of Dutch zoological cabinets *etc.* (Bijdr. t.d. Dierk. 27, 1939), p. 316.

Semper, Carl Gottfried
(1832, Altona near Hamburg, Germany; 1893, Würzburg, Germany), traveller-zoologist, at first destined for the Navy, but afterwards educated at the University of Würzburg, where he took his Ph.Dr's degree in 1856. He continued his studies at Würzburg and Kiel, making some travels in Europe. He decided to make a voyage to the Philippines (see below), paying the expenses from the large fortune inherited from his father. He returned to Germany in 1865; in 1866 University Lecturer at Würzburg, in 1869 Extraordinary Professor, and in the same year Ordinary Professor and Director of the Zoological Cabinet. In 1892 he resigned on account of his declining health.

ITINERARY. *Voyage to the Philippines etc., 1858–65.*[1] Leaving Hamburg (June 20, *1858*), *via Christmas Isl.* and *Singapore*, arriving in *Luzon:*

Manila (Dec.); for the first half year exploring the environs of Manila; Aug. *1859* to the southern part of the Philippines, staying 7 months in the environs of Zamboanga (*Mindanao*) and in *Basilan;* March *1860* return to *Luzon*, Manila; in May setting out on a tour through the provinces of Bulacan and Nueva Ecija to Pantabagan, *via* mountain ridge to Baler, and along the coast to Palanan (Prov. of Nueva Isabela); *via* the mountains into the interior, N. Luzon, Nueva Isabela and Cagayan Prov., near Mababuk, and the Catalangan River; Harau River; from Satpat to Ilagan; at Aparri, Cagayan (Aug. 27); April *1861* setting out to *N. Luzon*, the basin of the Rio Aguo, a trip interrupted in Nov on account of illness; Dec. 31, 1861 sailing for the Palau Islands (staying March 25–Jan. 26, *1862*); *Bohol*, and in the same year minor tours to *Cebu*, *Leyte*, and *Mindanao;* back to *Luzon*, Manila; May–Dec. *1864* eastern part and the interior of *Mindanao;* May *1865* sailing from Manila, homeward bound *via* Hongkong, Saigon, Ceylon, and Egypt, reaching Altona in Germany in July.

COLLECTIONS. He is cited as the collector of *Hepaticae* in *Luzon* (*Philippines*).[2] Possibly he collected phanerogams too.

LITERATURE. (1) C. SEMPER: 'Reisen im Archipel der Philippinen' (2nd div., Scientif. results, 1868–1900, 8 vols; evidently the 1st div. was never published) (*cf.* Itinerary in his biography (*l.c.* vol. 1, Ergänz. Heft 1895, p. vii–xviii)); *cf.* also 'Reisebericht' I–IV (in Zeitschr. f. wiss. Zool. 10, 1859, p. 179–182; *l.c.* 11, 1860, p. 100–108; 13, 1863, p. 559–570; 14, 1864, p. 417–426); 'Reise durch die nordöstlichen Provinzen der Insel Luzon' (Zeitschr. Allg. Erdk. N.F. vol. 10, 1861, p. 249–266), and 'Reise durch die nördlichen Provinzen der Insel Luzon' (*l.c.* 13, 1862, p. 81–96); 'Palau Inseln im Stillen Ozean' (1873).

(2) *cf.* Bull. Herb. BOISS., sér. 2, vol. 3, 1903, p. 526.

BIOGRAPHICAL DATA. In C. SEMPER: 'Reisen im Archipel der Philippinen' vol. 2, Ergänz. Heft 1895, p. vii–xxi, incl. portr. and bibliogr.

Senbon, F.

and R. SAKAI, two Japanese botanists, stayed at Buitenzorg (*W. Java*) in December *1911*, and made a collection of economic plants for the *Bureau of Forestry at Tokyo* (*cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 37).

Senff, J. CH. B., *cf. sub* Forest Research Institute, Buitenzorg.

Sengoet, *cf. sub ditto.*

Senin, Mohamed, *cf. sub ditto.*

Senn, Gustav

(1875, Basel, Switzerland; 1945, Basel), botanist, educated at Neuchâtel and Basel, especially studying anatomy and physiology; Ph. Dr in 1899. He made an excursion to Corsica, and subsequently worked in Germany, respectively at Halle, Kiel and Leipsic. In 1910/11 he was given the opportunity to make a voyage to the tropics (for the 'Eidgenössische naturwissenschaftliche Reisestipendium'), and visited Ceylon, *Java*, and the *Malay Peninsula*. He was a visitor of the Buitenzorg Botanic Gardens from Oct. *1910*–Febr. *1911*. This voyage resulted in many papers,[1] and a rich collection of material which he afterwards mostly used for his lectures. In 1912 he was appointed Professor of Botany at Basel.

COLLECTIONS. *Herb. Basel;* some in *Herb. Leyden.*

LITERATURE. (1) *E.g.* 'Tropisch-asiatische Bäume' in KARSTEN u. SCHENCK, Veget. Bilder, Reihe 10, Heft 4, pl. 19–24.

BIOGRAPHICAL DATA. Verh. Schweiz. Naturf. Ges. 1945, p. 376–380 + portr.; Verh. Naturf. Ges. Basel 56, 1945, p. vi–xv, incl. bibliogr. + portr.

Serevo, *cf. sub* Forestry Bureau, Manila.

Serrurier, Miss M. C.

collected 40 plants (many cultivated) in the Mountain Garden at Tjibodas (slope of G. Gedeh, *W. Java*) in Oct. *1897*, and presented them to the *Herb. Kol. Mus.* (= *Ind. Inst. Amsterdam*) in 1904.

She might be the daughter of L. SERRURIER, the founder of the 'Mij t. bevordering van het Natuurkundig Onderzoek d. Ned. Koloniën', who resigned in 1896 as Director of the Ethnological Museum at Leyden, and went to Java as teacher at the Gymnasium Willem III at Batavia. When she presented the collection in 1904, she was living at Lausanne, Switzerland.

Servatius, P. A.

of Buitenzorg, *W. Java*, presented plants (probably living ones) to the *Buitenzorg Botanic Gardens* in *1873.*

Servinas, *cf. sub* Bureau of Science, Manila.

Seubert, Ad.

a Forest Officer who collected mosses, especially on Diëng Plateau in *Centr. Java.* He is probably identical with the later Inspector of Forests of that name.[1]

The mosses *Entodon seubertianus* FLEISCH. and *Ectropothecium seuberti* FLEISCH. were named after him; the latter species was collected near Wonosobo (= Diëng Plateau), probably the former too.[2]

COLLECTIONS. *Herb. Berl.: Java* mosses (coll. in *1879*). Up till the present we have no data that he collected also phanerogams.

LITERATURE. (1) The Inspector SEUBERT is the author of: 'Natuurlijke reboisatie op het Moeriagebergte in de residentie Japara' (Tijdschr. Binnenl. Bestuur 19, 1900, p. 498–529).

(2) *cf.* M. FLEISCHER, Die Musci der Flora von Buitenzorg, vol. 4, p. 1153 and 1397.

Sevrens, O. F.

school-teacher.

COLLECTIONS. In *1912/13* he sent 81 Benguet plants (from *Luzon*) for identification to *Herb. Manila.*

Sewandono, M., *cf. sub* Forest Research Institute, Buitenzorg.

S.F. *nos, cf. sub* Singapore Botanic Gardens.

Shariff, Mrs
of *Penang*, sent living material to *Hort. Sing.* in *1924*.

Shaw, Percy Charles
English missionary, from 1906–07 in St John's College at Melbourne, Australia; in 1907 stationed at Ambasi, and in *c.* 1918 at Dogura (*E. New Guinea*), in the employ of the Anglican Mission.
In *1914* he discovered *Polypodium shawii* COPEL. near Taupota (*E. New Guinea*).
COLLECTIONS. *Herb. Sydney:* plants from *E. New Guinea* (pres. *1907*).

Shaw, Walter Robert
(1871, Galena, Ill., U.S.A.; before 1933, San Francisco, U.S.A.), botanist, taking his Ph.D. at Stanford in 1897; from 1906–22 successively teacher and Professor of Botany in the University of Manila, P.I.
Author of many papers on Philippine *Fungi*. He collected plants mainly round Manila, *Luzon*.
COLLECTIONS. *Herb. Manila;* probably hardly any duplicates.
BIOGRAPHICAL DATA. Amer. Men of Sci. 1927.

Sheffield, J. N.
COLLECTIONS. *Herb. Brit. Mus.:* 10 ferns, 24 mosses, 24 hepatics, and 10 lichens from Perak, *Malay Peninsula* (pres. *1914*) (*cf.* Journ. Bot. 52, 1914, p. 307).

Sheilds
COLLECTIONS. *Herb. Bog.: Plectronia glabra* BTH. & HOOK. *f.* from Bantam, *W. Java* (coll. May 1, *1933*).

Shelford, Robert Walter Campbell
(1872, Singapore; 1912, Oxford, England), zoologist-anthropologist who studied natural history at Cambridge. In 1897 he went to Borneo as Curator of the Sarawak Museum; in 1905 appointed Assistant Curator at Oxford Museum. After leaving Kuching he spent several weeks travelling in the *Malay Archipelago* (no further data known to me), returning home by way of Japan, Vancouver, and the U.S.A. He suffered from hip-tuberculosis.
Dischidia shelfordii PEARS. and some other plants were named after him.
COLLECTING LOCALITIES. *1897–1905. NW. Borneo*, Sarawak. A trip to Mt Penrissen (May *1899*),[1] leaving Kuching on May 5, and back again on June 4; visiting Mt Matang many times; Mt Santubong; Trusan River, northern end of Sarawak (Nov. *1902*); Sadong–Tabekang (Aug. *1903*), upper waters of the Sadong River (24–25), Lanchang (26–27), upper waters Sadong River (28–31).[2]
COLLECTIONS. *Herb. Sing.: Sarawak* plants (pres. 1902–03). *Probably* in *Herb. Sarawak* too. The above-mentioned *Dischidia* in *Herb. Kew*.
LITERATURE. (1) R. W. C. SHELFORD: 'A trip to Mount Penrissen' (Journ. Str. Br. Roy. As. Soc. *no* 33, 1900, p. 1–26; incl. list of animals and plants, the latter by H. N. RIDLEY and Bishop HOSE).
(2) R. W. C. SHELFORD (edited by E. B. POULTON): 'A naturalist in Borneo' (London 1916).
BIOGRAPHICAL DATA. In 'A naturalist *etc.*' *l.c.*, w. portr.

Sherfesee, William Forsythe
Forester of the Bureau of Forestry at Manila (P.I.), about 1914–15 Director of Forestry. He later went to China, married a wealthy widow, and did no work after that.
Parkia sherfeseei MERR. is named after him.
COLLECTIONS. *Herb. Manila*, numbered in the F.B. (see *sub* Forestry Bureau, Manila) series.
BIOGRAPHICAL DATA. Portr. in Philip. Journ. Forestry 2, 1939, pl. 1.

Sherman, Penoyer L.
chemist, special agent and Inspector of the Forestry Bureau, Manila, in 1901/02. In about June 1901 he was sent to Singapore, Java, and Sumatra, to investigate methods of obtaining gutta-percha.
COLLECTIONS. He collected incidentally only, in *Mindanao* and possibly elsewhere in the *P.I.;* material in *Herb. Manila;* 3 dupl. in *U.S. Nat. Herb. Wash.*

Sherring
collected seeds or fruits of *Macrozanonia* in *New Guinea;* material in *Herb. Kew* (*cf.* Ann. Bot. N.S. 6, 1942, p. 96).

Shibata, Keita
(1877, Tokyo, Japan; x), botanist who took his Ph.Dr's degree at Tokyo in 1899; Professor of Plant Physiology at Sapporo, 1907–09; he worked in Germany from 1910–11, and in the next year was appointed Extraordinary Professor at Tokyo University (in 1918 Professor). During some weeks, Jan.–Febr. *1917*, he made investigations in the Foreigners' Laboratory at Buitenzorg (W. Java), on the occurrence of flavones in tropical plants. During various trips through *Java* he collected samples of cultivated and pharmaceutical plants.[1]
LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 42.
BIOGRAPHICAL DATA. Bot. Mag. Tokyo 51, 1937, p. 388–392, w. bibliogr. & portr.

Siahaan, J., *cf. sub* Forest Research Institute, Buitenzorg.

Siberg
collected material of *Styrax benzoin* in *Sumatra West Coast* Residency in *1778*, and sent it to J. C. RADERMACHER (see there) (*cf.* Verh. Bat. Gen. K. & W. 3, 1781, p. 45, footnote 6).

Siegel

Overseer of the D.E.I. Forest Service, collected *Podocarpus imbricata* BL. on G. Tengger in *E. Java* (March 3, *1899*). The material was inserted in *Herb.* KOBUS, and is with the latter in *Herb. Bog.*

Siegers, W., *cf. sub* Forest Research Institute, Buitenzorg.

Sigafoos, Corporal Robert S. (or ? A.)

botanist, graduate from Ohio State University, collected during World War II, W of Hollandia, N of Simboro Strait of Sentani Lake, *Dutch N. New Guinea*, in Febr. *1945*. Subsequently he collected in the *Philippines*. Now at Harvard University, Cambr., Mass.

COLLECTIONS. *Herb. Arn. Arbor.: c.* 100 specimens from *New Guinea*.

Sihaja

educated at the Agricultural School, Buitenzorg; Manager of the Tea Estate Tjimanggoe near Tjibeber. He collected for C. A. BACKER (see there), mostly weeds from tea-plantations at Leuwimanggoe near Tjibeber (*W. Java*), *about 1915–20*.

COLLECTIONS. *Herb. Bog.*, plants *s.n.*

Sihombing, Moelia Toerman

(1907, Siborongborong, Sumatra; x), was educated at the Veterinary School, Buitenzorg; appointed veterinary surgeon in D.E.I. Government service since 1931. He was successively stationed at Waingapoe (Soemba, 1931–34), Soerakarta (Centr. Java, 1934–37), Roeteng (Flores, 1937–40), and since October 1940 at Koepang(Timor).

COLLECTIONS. *Herb. Bog.:* 88 *nos* of pasture-plants, collected at Manggarai and Bedjawa in *Flores* (Jan. *1940*).

Sij . . ., *cf.* SY . . .

Sikin

a native of New Ireland (Bismarck Archipelago), who together with TAKADU (see there) collected many plants on behalf of SCHLECHTER, when the latter was in *New Guinea* from *1907–09*.

Dendrobium sikini SCHLTR was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. *Herb.* SCHLECHTER = in *Herb. Berl., etc.* (see *sub* SCHLECHTER).

Silo, A., *cf. sub* Forest Research Institute, Buitenzorg.

Silva, José Gomes da

physician, pupil of JULIO HENRIQUES; Head of the Health Department, respectively in Timor (at Dilly) and at Macao (China). He studied the *flora medica*.

Author of an enumeration of Timor plants.[1]

COLLECTIONS. *Herb. Bot. Inst. Univ. Coimbra: c.* 260 specim. from *Port. Timor* (coll. *1884*) (identified by himself and not seen by any other botanist after that), and plants from Macau.[2] Evidently some dupl. in *Herb. Berlin.*[3]

LITERATURE. (1) 'Catálogo de plantas de Macau e Timor' (Bol. da Prov. de Macau e Timor, *nos* 21–26,1887; republished in Bol. Sanit. da Prov. de Timor, 1924, p. 62–88).

(2) Plants from Macau published by J. HENRIQUES in Bol. da Socied. Broter. ser. 1, vol. 2, 1883 (1884), p. 164–168 and *l.c.* vol. 3, 1884 (1885), p. 141–154.

(3) *cf.* ENGL. Bot. Jahrb. 50, Suppl. 1914, p. 180.

BIOGRAPHICAL DATA. Bol. da Socied. Broter. ser. 1, vol. 3, 1884 (1885), p. 233; Broteria 3, 1904, p. 310; information *in litt.* by Prof. Dr A. FERNANDES at Coimbra.

Simajon, R., *cf. sub* Forestry Bureau, Manila.

Simandjoentak, *cf. sub* Forest Research Institute, Buitenzorg.

Simatoepang, K., *cf. sub ditto.*

Simon Thomas, J. H.

in *1884* District Officer at Tjamba, *SW. Celebes*, collected hepatics near that place between 800–1150 m alt.

COLLECTIONS. *Herb. Leyden: Hepaticae* and *Musci.* Probably no phanerogams.

Sinaij, P., *cf. sub* Forest Research Institute, Buitenzorg.

Sinclair, Andrew

(? , Paisley, England; March 25, 1861, drowned in Rangitata River, Middle Island, New Zealand), physician who entered the service of the Royal Navy about 1824; Assistant-Surgeon on the voyage of the 'Sulphur' (see below) under Capt. Sir EDW. BELCHER. From 1842 onwards he made several voyages to Australia and New Zealand, collecting diligently.

He was commemorated in the genus *Sinclairia* HOOK. (= *Liabum*).

ITINERARY. *Voyage in the 'Sulphur', 1836–42.*[1] Detailed data *cf. sub* R. B. HINDS and BARCLAY.

COLLECTIONS. *Herb. Kew:* South America, New Zealand (pres. 1836–61); *Herb. Brit. Mus.:* 600 New Zealand plants (purch. 1858).

He collected during the voyage of the 'Sulphur', but perhaps not in the Malaysian region.The botanical results of the expedition were edited by BENTHAM.[2]

LITERATURE. (1) Sir EDW. BELCHER: 'Narrative of a voyage round the world performed in H. M. S. Sulphur during the years 1836–42' (London 1843, 2 vols).

(2) 'The botany of H.M.S. Sulphur under the command of EDW. BELCHER during the years 1836–42' (London 1844–46, *nos* I–VI, w. 60 plates).

BIOGRAPHICAL DATA. The Phytologist 1860, p. 284; Gard. Chron. 1861, p. 773; Proc. Linn. Soc. Lond. 1862 (meeting May 24th) p. xcv–xcvi; Bot. Zeitung 1861, p. 336; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 28, 1890, p. 308, and in 2nd ed. by RENDLE, 1931.

Singapore Botanic Gardens
Mr I. H. BURKILL, from 1912–25 Director of Gardens, Straits Settlements, started the S.F., standing for Singapore Field number series, to which the whole Department and others contributed.

Sipman, Johan Philip
(1666, Darmstadt, Germany; 1725, Batavia, Java), physician, from 1692–96 assistant of RUMPHIUS in Ambon, who personally brought the 3 last MS. volumes of the 'Herbarium Amboinense' to Holland; he brought home a beautiful cabinet besides.[1] Later he returned to the Dutch E. Indies; from 1700–12 in Ambon once more (in several ranks of 'Koopman', official of the E.I.C.); in 1713 Governor of Makassar, ending his career and life as Member of Council (Raad van Indië).
COLLECTIONS. '*Plantae Amboinenses a* JOHANNE PHILIPPO SIPMANNO *collectae*' in KIGGELAER'S collection in *Herb.* SLOANE (H.S. 220) in *Herb. Brit. Mus.* This volume contains 28 pages with several *Ambon* plants, collected as early as *1698;* the remaining part of the volume consists of non-Malaysian collections.
LITERATURE. (1) Author of 'Eene beschrijving der Ambonsche hoornen en schulpen door den doctor in de Medicijnen SIPMAN' (Appendix to RUMPHIUS: 'Amboinsche Rariteitkamer' ed. 1741 by JAN ROMAN DE JONGE).
BIOGRAPHICAL DATA. VALENTIJN, Oud en Nieuw Oost-Indië, 3, 1726, p. 224–225, 560; H. J. VETH, Overzicht van hetgeen... gedaan is voor de kennis der Fauna van Ned. Indië, Leiden 1879, p. 7; RUMPHIUS Gedenkboek 1902, p. 54; H. ENGEL, Alphabetical list of Dutch cabinets *etc.* (Bijdr. Dierk. 27, 1939), p. 316; Ned. Kruidk. Arch. 53, 1943, p. 252.

Siregar, A. H., *cf. sub* Forest Research Institute, Buitenzorg.

Siregar, Andr., *cf. sub ditto.*

Siregar, N., *cf. sub ditto.*

Siregar, P. F., *cf. sub ditto.*

Siriban, F., *cf. sub* Forestry Bureau, Manila.

Siso, Jacob Hendrik de
Captain Commander at Koepang, *Timor* (*Lesser Sunda Islands*), sent plants to *Hort. Bog.* in the years *1874* and *1875;* probably at the instigation of TEYSMANN, who visited the island in 1873.

Sitam
collector, employed by HAVILAND (see there); much later still collecting in *NW. Borneo*, Sarawak (Aug. *1925*).

Sitanala, Jacob Bernardus
(1889, Tifoe, S. Boeroe, Moluccas; x), Indonesian government physician who joined the FRANSSEN HERDERSCHEE Expedition to *New Guinea* (1912–13) (detailed itiner. *etc. cf. sub* PULLE). When in that island he discovered *Dendrobium sitanalae* J.J.S. near Kloof bivouac (Lorentz River) (Jan. *1913*).[1] In later years he was attached to the leper hospital at Pelantoengan (Centr. Java); and subsequently Head of the Service for Lepercontest in the D.E.I.
COLLECTIONS. He discovered the above-mentioned *Dendrobium, no* 11218. We do not know whether he collected still other plants, if so, probably but few. For the Herbaria *cf. sub* PULLE.
LITERATURE. (1) *cf.* Nova Guinea 12, 1916, p. 292–293.

Sitorang, E., *cf. sub* Forest Research Institute, Buitenzorg.

Sjafei, *cf. sub ditto.*

Sjahboedin, *cf. sub ditto.*

Sjamsoeddin, *cf. sub ditto.*

Sjaradjoe(d)din, A., *cf. sub ditto.*

Sjarif, *cf. sub ditto.*

Sjoers, A.
collected living orchids in *W. New Guinea* (near Manokwari) and in *N. New Guinea* (at Hollandia), at the end of *1938* and early in *1939*. According to his communication the specimens were sent to the *Buitenzorg Botanic Gardens*, though they are not mentioned in the records of the latter.

Skeat, Walter W.
of the Malayan Civil Service; he organized a scientific expedition under the auspices of the University of Cambridge, which collected in the north of the *Malay Peninsula.*[1] For detailed data *cf. sub* YAPP (also *sub* ANNANDALE and GWYNNE VAUGHAN); they explored G. Tahan (Aug.), however, not reaching the top.[2]
COLLECTIONS. *Herb. Kew* and *Cambridge.*
LITERATURE. (1) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.
(2) W. W. SKEAT: 'A personal reconnaissance of Gunong Tahan' (Malay Mail; reprint in Journ. Fed. Mal. Stat. Mus. 3, 1908, p. 77–90); 'Malay magic. Being an introduction to the Folklore and popular religion of the Malay Peninsula' (1900) (*non vidi*).

Skottsberg, Carl Johan Fredrik
(1880, Karlshamn, Sweden; x), botanist who took his Ph.Dr's degree at Uppsala in 1907; since 1907 University Lecturer, and from 1909 Curator of the Botanical Museum, Uppsala; in 1919 appointed Professor of Taxonomy and Plant Geography, besides Director of the Botanic Gardens, Göteborg. He joined several expeditions, including the Swedish Antarctic Expedition, 1901–03; leader of the Swedish Magellan Expedition to the Falkland Islands, S. Georgia, Patagonia, Terra del Fuego, and Juan Fernandez, 1907–09; leader of

the Swedish Pacific Expedition to Juan Fernandez, and Easter Island, 1916–17. Besides he made study tours in Europe, the U.S.A., Hawaii, Tunis, Japan, Java, Australia, and New Zealand.

Editor of the Medd. fran Göteb. Botaniska Trädgard., and author of many important papers among which several on Hawaii and the Juan Fernandez Islands.[1]

He is commemorated in *Duranta skottsbergiana* MOLD.

COLLECTING LOCALITIES. He visited *Java* when a member of the 4th Pan-Pac. Sci. Congress in *1929*, joined some of the excursions, collecting on *Krakatau* (Sunda Straits), G. Tangkoeban Prahoe (*W. Java*), and G. Ardjoeno-Welirang-Kembar (with C. A. BACKER) (*E. Java*).—In *1938* he paid a 2nd visit to *E. Java* (Nov.–Dec.), at Soerabaja and Pasoeroean, when on the voyage home from Hawaii, Australia, and New Zealand.

COLLECTIONS. *Herb. Göteborg.* Some numbers of BACKER & SKOTTSBERG in *Herb. Pasoer.*; dupl. in *Herb. Bog.*

LITERATURE. (1) *E.g.*: 'The natural history of Juan Fernandez and Easter Island', vol. 2, Botany (Upsala 1920–28, with various authors); 'The Swedish Pacific Expedition of 1916–17' (Geografiska Annaler 1924, p. 209–212); 'Juan Fernandez and Hawaii. A phytogeographical discussion' (Bern. P. Bish. Mus. Bull. 16, 1925, 47 pp.); 'Vascular plants from the Hawaiian Islands' I–II (Medd. fr. Göteb. bot. Trädg. 2, 1925/26, p. 185–284, 9 fig., and *l.c.* 10, 1936, p. 97–193).

BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 1903, p. 71; and *l.c.* 2, 1905, p. 52, *t.* 111; Vem är det? Svensk biografisk handbok (Stockholm 1932); Festschrift, Medd. Göteb. Bot. Trädg. 14, 1940, w. portr. & bibliogr.

Slingerlandt, Jacobus Hendrik van

(1825, Batavia, Java; 1908, Grissee, Java), was appointed clerk in the General Secretary's office at Buitenzorg; in 1851 student at the Banka tin-mining, from 1853–56 Manager of the same; from 1858–60 Warehouse-Keeper of the salt-depot at Grissee, and from 1867–74 once more Manager of the Banka tin-mining. He was pensioned off in 1877. He lend TEYSMANN a helping hand, when the latter visited Banka in 1869/70.

Goniothalamus slingerlandtianus SCHEFF. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. He sent plants from *Banka* to *Buitenzorg* in *1870*.

Slooten, Dirk Fok van

(1891, Amersfoort, U., Holland; x), botanist, educated at Utrecht University where he took his Ph.Dr's degree in 1919. In the same year he was appointed Assistant of the Buitenzorg Herbarium, of which institution he became Acting Chief in 1929 and Chief in 1931; in 1947 still in the same position; since end 1948 Acting Director of the Buitenzorg Botanic Gardens.

He is the monographer of some Malayan plant families, and together with C. A. BACKER the author of a handbook on weeds occurring in tea-plantations in Java.[1]

Symplocos slooteni VAN STEENIS MS. was named after him.

COLLECTING LOCALITIES. *1919–41.* Between these years many *nos* from the environs of Buiten-



VAN SLOOTEN

zorg.—*1919. W. Java:* Tjibodas, and G. Gedeh-Pangrango (Oct. 12–19); Wijnkoops Bay (Nov. 22); Tjampea, G. Tjibodas (Dec. 21); Tjinjiroean and environs (25); G. Malabar (26–27); G. Wajang (27); Tjimahi (Dec. 29–early in 1920).—*1920.* Tjimahi (–Jan. 3); *Centr. Java:* Diëng Plateau with Telaga Balekambang and G. Pangonan (Apr. 5–9); *W. Java:* Sitoe Tjilameh and Tjikaret, N of Buitenzorg (June 13); G. Boerangrang, Poerwakarta, Wanajasa, *etc.* (July 21–29); Kalappa Noenggal and G. Karang (Dec. 23–27).—*1921.* G. Tangkoeban Prahoe (Jan. 2); Weltevreden (Jan. 9); Pengalengan (Apr. 15); Buitenzorg, Tjiseëng (Apr. 24); Tjinjiroean (June 6); *P. Noordwachter* (Bay of Batavia) with BACKER (Sept. 8); G. Salak (Oct.); Tjiboengoer (Dec.); Tjinjiroean (Dec. 31).—*1922.* Telaga Warna (June 8); G. Salak (July 1); Tjiboerial (July 29).— *1923.* Cinchona plantation G.K.O. division Tjikapaka (Jan. 3); Tjinjiroean (Dec. 24–29).—*1924.* Tjiomas (Febr. 17); Tjilintjing near Batavia (Sept. 9); Koeripan (Sept. 28).—*1925.* G. Pangrango (June 7); *Centr. Java:* Djokjakarta and environs (Oct. 5).—*1926. W. Java:* Bandoeng (March 19–21); Java's Eerste Punt (Sept. 27).—*1927.* Batavia (Apr. 11).—*1928. P. Weh*, N of Sumatra: Sabang (May 15); *W. Java:* Megamendoeng (Sept. 23); *Centr. Java:* Djokja and en-

virons (Sept. 27); *E. Java:* Morokrembangan (Sept. 28), Grissee (29), Soerabaja (Sept. 30–Oct. 1); *SE. Borneo* with ENDERT (see there): Tanahboemboe, N of Batoelitjin, vicinity of the Sg. Srigadoeng (Oct. 26–Nov. 1), and *P. Laoet:* NE of Stagen and vicinity of Sg. Paring (Nov. 5–9); *E. Java:* environs of Pasoeroean and Tretes (Nov. 13); *Madoera* (Nov. 23).—*1929. W. Java:* Wijnkoops Bay (July 28); Garoet, G. Goentoer, and Telaga Bodas (Aug. 2–4); Pasir Maoeng (Dec.).—*1931. E. Java* (end of March–Apr.): near Watoedodol and foot G. Baloeran (with CLASON) (March 31), Tosari–G. Tengger, Loemadjang–Pasirian, S. slope G. Smeroe, Ranoe Bedali, Ranoe Klakah, G. Semongkrong, Bay of Popoh, Idjen Plateau, Pradjekan–Pantjoer; *Centr. Java:* Oengaran (July 18); *E. Java:* Idjen Plateau (July 20–23).—*1932. W. Java:* Wijnkoops Bay (March 27); *P. Kuiper* in the Bay of Batavia (June 5).—*1933.* Toegoe (May 28); Tjitjadas (July 2); *E. Java:* G. Lawoe (Nov. 12–15).—*1934. Centr. Java:* Ketanggoengan West (SE of Losari) (Oct. 12–14).—*1936. W. Java:* sojourn at Pengalengan (July); excursion to Tegal Harendong (July 10); 'tegals' of G. Papandajan (July 27).—*1937. Centr. Java:* Parangtritis near Djokja (May 14); *W. Java:* G. Papandajan (July 9).—*1938. Singapore:* (Apr. 26; collecting 1 *no* only); *W. Java:* G. Boerangrang (June 26, July 3); Bantam (Oct. 16, Dec. 24–26).—*1940.* Bantam (March 22–24).—*1941. E. Java:* Tawangmangoe (slope G. Lawoe) (May 30–31).

COLLECTIONS. *Herb. Bog.: nos* 2–828, 2000–2704; the plants were numbered after study, mainly chronologically, but not always. Of the more important collections the numbers run as follows: Tjibodas & G. Gedeh-Pangrango coll. *1919 nos* 2–224, Diëng Plateau *nos* 328–429, G. Boerangrang *etc. nos* 433–522, G. Karang *etc. nos* 578–606, *Borneo* and *P. Laoet nos* 2101–2315, *E. Java* in Apr. *1931 nos* 2335–2489 (*no* 2460 from Oengaran, *Centr. Java*). *Herb. Leyden: Java* dupl. (1920), and from *E. Borneo* (1928).

Living plants from *P. Laoet* in *Hort. Bog.* (1928).

LITERATURE. (1) 'Geïllustreerd Handboek der Javaansche Theeonkruiden en hunne beteekenis voor de cultuur' (Batavia 1924).

BIOGRAPHICAL DATA. Wie is dat? ed. 1–4; BACKER, Verkl. Woordenb., 1936.

Slot, B. E. M.

and T. OTTOLANDER (see there) collected a specimen of *Rafflesia arnoldi* R. BROWN on the NW. slope of G. Kaba, Benkoelen, *S. Sumatra* (Oct. *1917*). In *Herb.* KOORDERS = *Herb. Bog.*

Sluiter, Catharina Petronella

(1883, Weltevreden, Java; x), botanist, educated at Amsterdam and Zürich universities; collaborator of Mrs A. WEBER-VAN BOSSE, and in 1913 appointed Assistant at the Central Bureau for Fungi Cultures, Amsterdam. In 1915 she was enabled by a grant from the Buitenzorg Fund to make a tour to Java. Her main interest was soil Fungi, but besides she intended to get acquainted with the tropical flora.[1] In May 1916 she was appointed Assistant at the Research Station of the Government Cinchona Plantation at Tjinjiroean; in 1917 she continued research work at Medan in the Tobacco Experiment Station; since June at the Institute for Plant Diseases, Buitenzorg. Later she married Mr FEENSTRA, and lived at Amsterdam.

ITINERARY. *1915–16. Sumatra East Coast:* Medan (July 21, *1915*), making several excursions to different plantations, Sibolangit (Bot. Garden), and the Batak Lands; Aug. 18 leaving for *W. Java*, staying at Buitenzorg, making excursions to plantations; *Centr. Java:* Diëng Plateau (Nov. 19–22); Tjilatjap, Kinderzee and *Noesa Kambangan* (Dec. 18); *W. Java:* Tjibodas and G. Gedeh (Dec. 21–Jan. 2, *1916*); G. Tangkoeban Prahoe (Jan. 23); Kawah Kamodjan (27), G. Papandajan (29); *E. Java:* Pasoeroean, mangrove forest (Loeroes); Banjoewangi, crossing Idjen Plateau to Pantjoer, Djember; from Probolinggo to G. Tengger: Soekapoera, Zandzee and G. Bromo, Tosari.—*1917. Sumatra East Coast:* excursion to G. Sibajak and G. Sinaboeng (May); from Harengaul (May 16) to Toba Lake, Samosir, Balige, and *via* Siborong-borong to Sibolga (Tapanoeli), Fort de Kock, and Padang (*Sumatra West Coast*); back in *Java*, Batavia (June 6).

COLLECTIONS. *Herb. Bog.:* small collection from G. Papandajan (*W. Java*). She occasionally brought plants for identification to the experiment stations visited. Some might have been preserved.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 41.

Slyunin

COLLECTIONS. *Javanese* and other plants (Ceylon, Japan, Kamschatka, *etc.*) in *Herb. Bot. Gard. St Petersb.* (= *Leningrad*) (*cf.* W. H. LIPSKY, Gerbariĭ Imperatorskago S. Petersburgskago *etc.* (1823–1898), 2nd. ed. 1908, p. 192).

Smiles

collected *Averrhoa carambola* in Sarawak, *NW. Borneo* (*1890*); material in *Herb. Berl.*

Smith, Christian

is cited by COWAN (in Not. Bot. Gard. Edinb. 16, 1932, p. 277) as the collector of a *Wendlandia, no* 13 of his collection, in *Java* (Jan. 25, *1819*). The only collector of that name known to me, is the professor of the University of Christiania, who was botanist with Capt. TUCKEY's expedition to the Congo in 1816, and died in the same year in Africa.[1] He cannot possibly be the collector of the cited Java plant.

LITERATURE. (1) *cf.* Biogr. Index BRITTEN & BOULGER in Journ. Bot. 37, 1899, p. 79.

Smith, Christopher

(† 1806, Penang), employed in Kew Gardens, took the place of NELSON (see there) on the 2nd successful expedition of BLIGH (see there, and below). From 1794–1806 he was employed by the East India Company at Calcutta; he was sent to the Moluccas (1796–1802) for raising nutmegs, cloves, *etc.*, and introducing valuable plants into Penang;[1]

appointed Superintendent Botanic Gardens Moluccas; from 1805–06 Superintendent of the Gardens in Penang, where he died.

Myristica smithii WARB. was named after him.

ITINERARY & COLLECTING LOCALITIES. *2nd Voyage with* Capt. W. BLIGH (see there) *in the 'Providence' etc., 1791–93;*[2] *cf.* also *sub* J. WILES. Sailing (July 12, 1791), passing through the Downs to Spithead; Teneriffe, Cape of Good Hope, Tasmania; Tahiti (staying over 3 months in Matavai Bay); touching at Aitutaki, Tonga Islands; Fiji, New Hebrides (Banks group), through the Louisiades into Torres Strait; *Timor:* Coupang (= Koepang) (Oct. 3–10, *1792*); by way of Cape of Good Hope to St Vincent, Jamaica; return at the Downs (Aug. 2, 1793), anchoring at Deptford on the 7th.—*1796.*[3] *Malac(c)a* (June); *Barn Isl.* (June); *Rhio* (= *Riouw*) *Isls* (E of Sumatra) (July); *Moluccas: Ternate* (Oct.).—*1797. Saparoea* (Apr.), *Ambon* (May); *Ceram*, Honimoa (July); *Banda.*—*1801. Gillolo* (= *Halmaheira*) (Nov.).—*Between 1796* and *1805* collecting in *the Moluccas, e.g.* on *Noesa Laoet* (S of Ceram).—1805–06. *P. Penang.*

COLLECTIONS. Plants collected on the voyage in the 'Providence', and plants and drawings from the *Moluccas*, with *Herb.* BANKS in *Herb. Brit. Mus.;* 183 original water-colour drawings of plants from the Straits Settlements were acquired in 1885.[4] Also plants in *Herb. Kew* (*e.g.* with *Herb.* ROXBURGH), and other duplicates in *Herb.* DELESS. (= *Geneva*), and *Herb.* WEBB (= *Florence*).

In the *Moluccas* he made a large collection of herbarium specimens which were sent to BANKS (coll. 1802) and to J. E. SMITH (coll. 1796–97), the latter acknowledging his indebtedness to CHR. SMITH in REES' Cyclopaedia (*s.v. Dicksonia*).[5] The *Herb.* J. E. SMITH in due time became a part of the *Herb. Linn. Soc. Lond.*

The collection of living plants made by SMITH and WILES in 1791–93, was recorded in the 'Hortus Kewensis' (2nd ed. 1813) as introduced by Capt. BLIGH.

In 1796 PETER GOOD (see there) was sent to Calcutta to bring home the collection prepared by CHRISTOPHER SMITH.[6]

He introduced valuable plants from the Moluccas into Penang, and from Penang he sent plants to the Garden at Calcutta.[7]

LITERATURE. (1) On the results, *cf.* Ann. Bot. 1, 1805, p. 569–573.

(2) I. LEE: 'Captain BLIGH's second voyage to the South Sea' (1920).

(3) Partly information by Mr A. H. G. ALSTON.

(4) *cf.* Gard. Chron. 1881[2], p. 267; Hist. Coll. Brit. Mus. 1, 1904, p. 49 and 183.

(5) *cf.* Journ. Bot. 60, 1922, p. 23–25.

(6) *cf.* Kew Bull. 1891, p. 301; Singapore Naturalist 1923, p. 37–38.

(7) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931.

Smith, Cuthbert

(1890, Stainforth, Yorkshire, England; x), joined the Forest Dept Malay Peninsula in 1914; since 1934 Conservator of Forests, finally State Forest Officer Perak; after internment by the Japanese he retired and settled in England.

He is cited by J. MONACHINO as the collector of *Alstonia angustifolia* WALL. *ex* A.DC. in Selangor, *Malay Peninsula* (*cf.* Pacif. Sci. 3, 1949, p. 160). The specimen is numbered 18151, evidently in the C.F. (see *sub* Conservator of Forests) series; the cited specimen in *Herb. Sing.*, but probably in *Kuala Lump.* too.

Smith, Eryl Glynne

(about 1890, ? ; 1930, by motor-car accident near Bangkok, Siam), doctoress, wife of Dr MALCOLM SMITH in the service of the Government of Siam, botanist educated in London. She travelled in Siam, Kambodja, Hainan, the Malay Peninsula, and the Malay Archipelago, to make botanical collections.

From 1928–30 she worked at Kew on ferns of the Malay Peninsula; she is the authoress of some pteridological papers.

Lobelia eryliae FISCHER was named after her.

COLLECTING LOCALITIES. *1922. Malay Peninsula:*[1] Fraser Hill, upon the Main Range.—*19 . . . Malay Archipelago.* She spent 6 months, chiefly in *Celebes* (visit to G. Bonthain, in the SW. peninsula),[2] and *Timor* (*Lesser Sunda Islands*).

COLLECTIONS. Chiefly ferns; many of her collections in *Herb. Kew* (pres. 1930); 36 dupl. from *Malaysia* in *U.S. Nat. Herb. Wash.*

LITERATURE. (1) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(2) *cf.* Kew Bull. 1928, p. 141.

BIOGRAPHICAL DATA. Kew Bull. 1930, p. 175, 398; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; BACKER, Verkl. Woordenb., 1936.

Smith, Joannes Jacobus

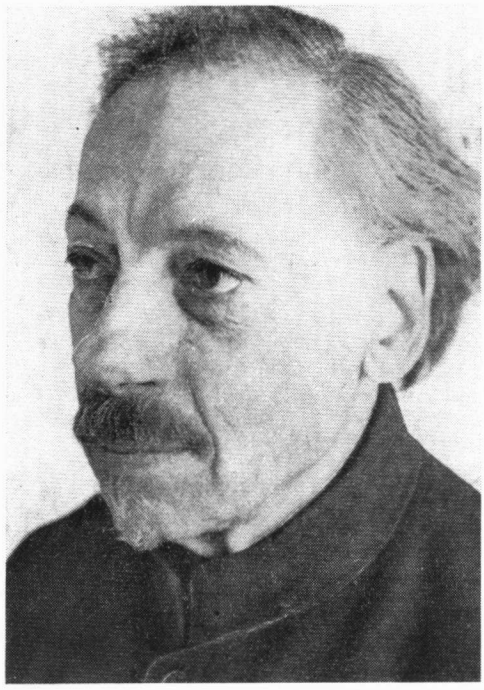
(1867, Antwerp, Belgium; 1947, Oegstgeest, Holland), went to Java in 1891, and was shortly after appointed Assistant Curator of the Botanic Gardens, Buitenzorg; in 1905 promoted Assistant of the Buitenzorg Herbarium, and from 1913 till his retirement in 1924, Head of the said institute. On his return in Holland he settled at Utrecht, and later at Oegstgeest near Leyden.

Author of many taxonomic papers, especially dealing with orchids,[1] but besides with *Ericaceae, Euphorbiaceae, etc.* With a view to his important work he was awarded the Honorary Ph.Dr's degree at Utrecht University in 1910.

SCHLECHTER named many orchids after him.

COLLECTING LOCALITIES. *Between 1891–1924. W. Java:* many times on G. Salak, at Tjampea, Tjigombong, Poentjak, Megamendoeng, Tjiapoes (Salak), and in other places in the neighbourhood of Buitenzorg; Garoet, Kawah Manoek (Oct. *1894*);[2] *E. Java:* Blitar (Kediri) (*1896*); *W. Java:* Garoet (Tjampaka Warna); *Islands in the Bay of Batavia* (end of Febr. *1899*):[3] *P. Edam, Agnieten Island, Groot Kombuis,* and *P. Amsterdam; Centr. Java:* G. Groeda (?), and Djolotigo in Pekalongan

(1899); *W. Java:* Tjibodas–Kandangbadak (July 1899); G. Salak with RACIBORSKI (Nov. 28, 1899).— *Voyage to the Moluccas* (June 23–Sept. 12, *1900*),[4] with Dr J. G. BOERLAGE (itinerary see there); due to BOERLAGE's illness the collection from August 14 onwards was made exclusively by J. J. SMITH;



J. J. SMITH

after that date he visited *N. Celebes:* Gorontalo and Bone (Aug. 16); after shipwreck put ashore at Roembia (18–21); *Ternate* (24–31), climbing the Peak towards the end of the month; on the voyage home they touched at *Batjan*, Kajeli (*Boeroe*), *Ambon*, *Banda*, *Ambon*, and Makassar (*SW. Celebes*), making some trips in *Batjan* and *Banda*.—*W. Java:* Djampang tengah (Dec. 1900, living plants); Sitoe Goenoeng (Apr. *1901*); *Krakatau* (Sunda Strait) (Apr. *1906*); Tjibodas, G. Gedeh and Geger Bintang (a fortnight in June 1906, during which he discovered *Corysanthes carinata* J.J.S. *n.sp.* with WOUTERS, the curator of the Mountain Garden, Tjibodas); *Noesa Kambangan*, S of Centr. Java with Forest Officer KUNST (1906); *Duizend Islands*, N of the Bay of Batavia (Dec. 27–30, 1906):[5] *Zuidwachter* (or *P. Paniki*). *Noordoosteiland* (or *P. Pendjaliran*), *P. Doea* (Bay of Bantam), *? P. Onrust;* Poentjak (July 16, *1908*); Tjisoeroepan (Dec. 9, 1908); G. Boender near G. Salak (Aug. *1909*); Tjinjiroean with RANT (Apr. *1911*); G. Kendeng near Bandoeng (Apr. 7, 1911); Depok with RANT (Oct. 15, 1911); Tjibeureum near Bandoeng, and G. Wajang with RANT (Sept. 19, 1911); G. Salak (*1913*); G. Boerangrang and G. Parang (July *1920*); Tjibeber–Tjampaka (G. Beser, G. Karang) (June 10–23, *1923*).

COLLECTIONS. *Herb. Bog.*, incl. 702 *nos* from the voyage to the *Moluccas* 1900 (BOERLAGE and SMITH),[6] 50 *nos* from *Zuidwachter* 1906, 550 *nos* from Tjinjiroean (*Java*, 1911), and 750 *nos* from G. Boerangrang and Parang (*Java*, 1920). *Herb. Leyden: Java* dupl. (1899). Also orchids in *Herb.* SCHLECHT. (= *Herb. Berl.*).

He brought home many living plants for *Hort. Bog.*, also from the *Moluccan* expedition, *i.e.* from *Ambon*, *Batjan*, *Boeroe*, *Ternate*, Gorontalo (*N. Celebes*), *Banda*, and Makassar (*SW. Celebes*).[7]

LITERATURE. (1) *E.g.* 'Die Orchideen von Java' (1905). For other publications *cf.* bibliography in Bull. Jard. Bot. Buit. sér. 3, vol. 14, 1937, p. 102–114.

(2) J. J. SMITH: 'Een tochtje in Garoet's omstreken' (Teysmannia 6, 1895, p. 151–162).

(3) J. J. SMITH: 'Een tochtje naar de koraaleilanden ten Noorden van Tandjong Priok' (*l.c.* 10, 1899, p. 85–95).

(4) *cf.* Report on the voyage in Versl. Pl. Tuin Buitenzorg for 1900, p. 101–107.

J. J. SMITH: 'Ambon' (Teysmannia 12, 1901, p. 81–94, 157–170, 322–332).

(5) J. J. SMITH: 'Een botanische reis naar de Duizend Eilanden' (*l.c.* 18, 1907, p. 450–456).

(6) J. J. SMITH: 'Orchidaceae van Ambon' (Batavia 1905).

(7) *cf.* Versl. Pl. Tuin Buitenzorg for 1900, p. 84–85.

BIOGRAPHICAL DATA. Vakbl. Biologen 5, 1923/24, p. 145; Orch. Review Sept. 1934 (copied in De Orchidee 3, 1934, p. 276–278); BACKER, Verkl. Woordenb., 1936; Blumea, Suppl. 1, SMITH vol., 1937, with dedications, photographs, *etc.;* Bull. Jard. Bot. Buit. sér. 3, vol. 14, 1937, p. 99–114, incl. bibliogr. & portr.; De Orchidee 6, 1937, p. 137–143; and *l.c.* 7, 1938, p. 359–370 (error in the pagination); Wie is dat? ed. 3–4; Orchideeën, June 1942, 6 pp.; Vakbl. Biologen 27, 1947, p. 17–19; Biologia 1, 1947, p. 11; Orchideeën, March 1949, p. 23–31 + portr.

Smith, J. S.

collected on Sg. Batu Apoi, Brunei, *NW. Borneo* (Apr. 22, *1935*) (*cf.* Gard. Bull. Str. Settlem. 10, 1939, p. 377). In *Herb. Kuala Lumpur.*

Smith, Lindsay Stuart

(1917, Bundaberg, Queensland, Australia; x), appointed to the staff of the Government Botanist, Brisbane, 1936; B.Sc. University of Queensland, 1940; in army service from March 1942 to Jan. 1946. In 1944 he was sent to Sogeri, NE. New Guinea, with a mobile chemical warfare laboratory; later in the year transferred as botanist to CRE New Guinea Forests with headquarters at Lae; returned to Brisbane at end of May, 1945.

Author of some small papers on the Queensland flora *etc.*;[1] some papers on the New Guinea flora are in process of preparation.

COLLECTING LOCALITIES. *NE. New Guinea*, Mandated Territory: Sogeri (Apr.–May *1944*); Lae

area (July–Sept.); Aiyura and Garoka (Oct.); Lae area (Nov.–Jan. *1945*); Aitape (Jan.); Lae area (Febr.); Buna hinterland (March); Milne Bay (March).

COLLECTIONS. *Herb. Brisbane;* dupl. specimens to be sent to *Arn. Arbor.*, *Kew*, and *Leyden.*

The Sogeri specimens were chiefly ferns with few duplicates; the later collections with N.G.F. (New Guinea Forces, see there) numbers.

LITERATURE. (1) *E.g.* 'The ligneous genus Endospermum BENTH. in New Guinea' (Proc. Roy. Soc. Queensl. 58, 1947, p. 51–60).

Smith, Miles Staniforth Cater

(1869, Kingston, Vict., Australia; x), was educated at the University of Melbourne (engineering); in 1896 to the W. Australian gold-fields, from 1900–01 Mayor of Kalgoorlie, and from 1901–06 on the federal senate of W. Australia. In 1907 appointed Commissioner for Lands and Director of Public Works, Papua; in 1908 Administrator, Commissioner for Lands, Director of Mines and Agriculture. Before proceeding to Papua, he spent some time in Ceylon and Singapore, studying agriculture and economic botany. In 1916 he enlisted in the Austr. Imp. Force; from 1919–21 Administrator of the Northern Territory.

Author of a 'Handbook of the territory of Papua' (Melbourne, 2nd ed. 1909).

ITINERARY. *SE. New Guinea, Papua. Kikori Expedition, 1910–11.*[1] Starting inland from Goaribari (Nov. 20, *1910*), up the Kikori River; *SE.* spur of Mt Murray; climbing Mt Murray (within 14 days); Sambregi Creek (Dec. 10 starting downstream); all bagage lost on the Kikori River (Jan. 26, *1911*); *Goaribari Isl.* (March 16). He was accompanied by A. E. PRATT (see there) and others; several other expeditions were equipped in search of them.

COLLECTIONS. On Mt Murray a rough collection of ferns and mosses was made; it is not mentioned by whom, so possibly by A. E. PRATT. The whole of the collection was lost during the accidents on the Kikori River.

SMITH sent *Hopea glabrifolia sp. nov.* from *Misima Island* (*Papua*) to *Sydney.*[2]

LITERATURE. (1) *cf.* Ann. Rep. Papua 1910–11, 1911, p. 165–171, incl. notes on geology, climate, flora, fauna, *etc.*, w. map.

ST. SMITH: 'In unknown Papua' (Gard. Bull. Str. Settlem. 1, 1912, p. 57–66); 'Exploration in Papua' (Geogr. Journ. Lond. 39, 1912, p. 313–331).

(2) *cf.* C. T. WHITE in Proc. Roy. Soc. Queensl. 43, 1931, p. 49.

BIOGRAPHICAL DATA. Austr. Encyclop. 2, 1926.

Smith, W. H.

of the COOPER Technical Bureau, made a small collection of plants used as fish poisons in Sarawak, *NW. Borneo*, in *1924.*

COLLECTIONS. *Herb. Kew* and *Brit. Mus.*

RIDLEY described a new *Diospyros* collected by him.[1]

LITERATURE. (1) In Journ. Bot. 63, 1925, p. 51.

Smyth, A. V.

American forester, sergeant during World War II.

COLLECTIONS. *U.S. Nat. Herb. Wash.:* 26 specim. from *New Guinea.*

Snell, L.

collected living orchids on behalf of J. J. SMITH, *Hort. Bog.*, near the Isaq River in Atjeh, *N. Sumatra.*

Snepvangers, Franciscus Wilhelmus

(1873, Vlissingen, Z., Holland; 1945, The Hague, Holland), Forest Officer, since 1896 in D.E. Indian Government service; retired in 1926.

COLLECTIONS. *Hort. Bog.:* a number of orchids (pres. *1905*), when stationed at Kedoengdjati (Semarang) in *Centr. Java.*

Snethlage, Dr

COLLECTIONS. *Herb. Bog.: Nepenthes tobaica* DANS. (acq. May *1932*) from *Sumatra.*

Soedarmo, *cf. sub* Forest Research Institute, Buitenzorg.

Soedarsono, M., *cf. sub ditto.*

Soedjono, R., *cf. sub ditto.*

Soedjonosastro

Forest Ranger in E. Brantas District, *E. Java*, collected near Djoenggo (May 20, *1926*), and at Djoeroengkwali (May 28).

COLLECTIONS. *Herb. Bog.:* 22 *nos* of herbaceous plants.

Soegandi(redjo)

Indonesian in the employ of the Buitenzorg Herbarium till 1910, finally in the rank of Assistant Mantri; later clerk of the market, and landing in jail on account of theft.

In 1900 he collected on behalf of KOORDERS, and in the same year he attended BOERLAGE and SMITH on their voyage to the Moluccas.

COLLECTING LOCALITIES. *W. Java. 1900.* Near Tjibeureum (March 12), Kota Batoe (Apr. 9), Depok (May 28), G. Salak, *etc.—1909.* Priangan Res. (staying 3 weeks on Taloen Estate near Bandoeng): G. Kentjana near Taloen (Apr. 22), G. Windoe (24), Taloen (25), G. Kembang (27), G. Malabar (29).

COLLECTIONS. *Herb. Bog.:* > 156 *nos* from G. Malabar, > 115 *nos* from Taloen, *etc.* Some labels of his have no indication as to the name of the collector, but are provided with the initials 'G.W.', standing for the collecting locality G. Windoe!

Soehanda

Indonesian, then in the employ of the Buitenzorg Herbarium, who attended the expedition of J. K. DE JONG (see there) to the Lesser Sunda Islands.

COLLECTING LOCALITIES. *1937.* With J. K. DE JONG *Expedition. Flores* (June 6–30): Laboe-(h)an Badjo (arriving the 6th), Emborak (= Em-

boera or Mboera) (9–11), Nanganai (11–12), Kenari (14), Emborak and Nanganai (16), Gorontalo (17), Paroegaboleng (17–19), Sibinongko (20), kp. Aer Kemiring (21), *P. Badjo* (22), Boibaroe (23), Gololangkas (24), Tjopi (25), Laboe(h)an Badjo (25), *P. Papagaran Besar* (July 1); *P. Komodo* (3–6);



SOLANDER

Flores: Laboe(h)an Badjo–Reo (8–11, no collecting done).

COLLECTIONS. *Herb. Bog.:* 363 *nos*, mainly from *Flores;* the *nos* 275–285 from *P. Papagaran Besar*, and *nos* 286–363 from *P. Komodo.*

Soejatno
in 1940 Agricultural Overseer in *Timor* and Dependencies (*Lesser Sunda Islands*).

COLLECTIONS. *Herb. Bog.:* material of cultivated *Phoenix* (*1940*).

Soekandar, M., *cf. sub* Forest Research Institute, Buitenzorg.

Soekarman, M., *cf. sub ditto.*

Soekawiono, *cf. sub ditto.*

Soekoen, *cf. sub ditto.*

Soekowiono, *cf. sub ditto.*

Soela, *cf. sub ditto.*

Soelaiman, G., *cf. sub ditto.*

Soemadi, *cf. sub ditto.*

Soemadji, *cf. sub ditto.*

Soemardi, *cf. sub ditto.*

Soemardjo, *cf. sub ditto.*

Soermarmo, *cf. sub ditto.*

Soemawiria, *cf. sub ditto.*

Soemintadiredja, *cf. sub ditto.*

Soemodimoto, *cf. sub ditto.*

Soemomihardjo, M., *cf. sub ditto.*

Soeparman, *cf. sub ditto.*

Soepomo, *cf. sub ditto.*

Soerachmat, R. M., *cf. sub ditto.*

Soeradinata, *cf. sub ditto.*

Soeradiredja, A., *cf. sub ditto.*

Soeradji, Mas Njabei
Indonesian cashier of F. W. WINCKEL (see there).

COLLECTIONS. *Herb. Bog.:* > 39 *nos* collected near Ngawi in *Centr. Java* (May *1918*), presented through the intermediary of F. W. WINCKEL.

Soeratman, *cf. sub* Forest Research Institute, Buitenzorg.

Soeria, *cf. sub ditto.*

Soeriakoesoema, R., *cf. sub ditto.*

Soeriawisastra, *cf. sub ditto.*

Soeri(o)dikarto, *cf. sub ditto.*

Soetan Besar, *cf. sub ditto.*

Soetan Palembang, *cf. sub ditto.*

Soetardjo, *cf. sub ditto.*

Soetarmo, *cf. sub ditto.*

Soetisnawinata, E., *cf. sub ditto.*

Soetomo, M., *cf. sub ditto.*

Soewondo, *cf. sub ditto.*

Sohns, Johannes Christiaan Frederik
(1877, Djokjakarta, Java; Febr. 14, 1923, Madioen, Java), veterinary surgeon, since 1901 in the employ of the D.E. Indian Government, subsequently stationed at Kediri (E. Java), Taroetoeng (Tapanoeli, W. Sumatra, 1908), and from 1911 at Buitenzorg in the Veterinary Laboratory; in 1915 Acting Director, and in 1917 Director of the latter institution. At his request he was reappointed Veterinary Surgeon and stationed at Kabandjahe (Sumatra East Coast) in May 1919; in April 1920 he was transferred to Madioen (E. Java).

COLLECTING LOCALITIES. *1919. Sumatra East Coast:* Simeloengan-Karo.—*1920. Sumatra West Coast* (March); *Sumatra East Coast:* Kaba(n)-djahe (March); Deli Plain, Karo Lands, Toba Lake, and above Medan.—*1921. E. Java:* Patjitan (S. coast Madioen Res.) (Jan. 18).

COLLECTIONS. *Herb. Bog.*, incl. *c.* 42 *nos* from Kaba(n)djahe (*Sumatra*), and *c.* 39 from *Java; Herb. Pasoer.:* 7 *nos.*

BIOGRAPHICAL DATA. Ned. Ind. bladen Diergeneesk. en Dierenteelt 34, fasc. 2, p. i–iii (following p. 127).

Solander, Daniël Carl

(1736, Pitea, Norrland, Sweden; 1782, London, England), favourite pupil of LINNAEUS. In July 1760 he settled in England, and was appointed Assistant Librarian of the British Museum in 1763. He accompanied BANKS (see there) on COOK's first voyage round the world, and subsequently became librarian of BANKS whom he accompanied on a voyage to Iceland. Since 1773 in the employ of the British Museum again, this time as Curator of the Natural History division.

He is commemorated in the genus *Solandra* (*auct. div.*) and in some plant species.

ITINERARY. COOK's *1st Voyage in the 'Endeavour', 1768–71.* Detailed data *cf. sub* Sir J. BANKS and J. COOK.

COLLECTIONS. *Herb. Brit. Mus.;* some dupl. in *Herb. Linn. Soc. Lond.* He collected during the sojourn in *W. Java* (Oct. 2–Dec. 24, *1770*),[1] and apparently in other localities too.

Herb. Sydney: some Australian plants.[2] The collections of his in *Herb.* LINNAEUS, *Nat. Hist. Mus. Stockholm,* date from the Swedish period, but specimens of his from the above-mentioned voyage are present in *Herb. Stockholm* with other herbaria.[3] Possibly plants of his in *Herb. Copenhagen.*[4] Also plants in *Herb.* MARTYN (= *Cambridge*).

Plants of BANKS and SOLANDER were at the disposal of GAERTNER when the latter prepared his famous book.[5]

A complete set of autographic notes of SOLANDER made during the voyage *etc.* is in the *Libr. Brit. Museum;* unpublished drawings of the voyage in the Bot. Dept Brit. Mus. also.

LITERATURE. (1) D. C. SOLANDER: 'Plantae javanenses. Plants collected during a short stay at Batavia during COOK's Voyage with J. BANKS, anno 1770' (MS. in Libr. Bot. Dept Brit. Mus., enumerating 338 species).

(2) *cf.* Journ. Bot. 43, 1905, p. 279, and *l.c.* 44, 1906, p. 70–71.

(3) *cf.* Ark. f. Bot. 7, 1907, *no* 3, p. 8, 11, 14–17.

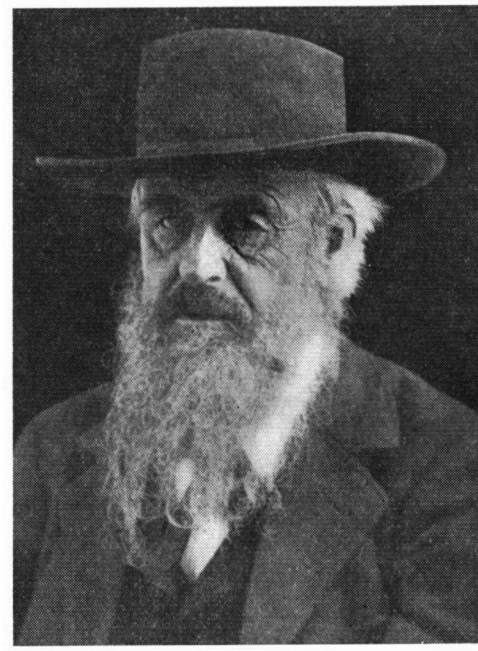
(4) *cf.* Flora 6^2, 1823, p. 493.

(5) 'De Fructibus et Seminibus Plantarum' (Stuttgart-Tübingen 1788).

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 28, 1890, p. 311–312, and 2nd ed. by RENDLE, 1931; WITTROCK, Icon. Bot. Berg., 1903, p. 98; Journ. & Proc. Roy. Soc. N.S.W. 55, 1921, p. 166–167; KROK, Bibl. Bot. Suecana, 1925, p. 655–660, incl. bibliogr.; BACKER, Verkl. Woordenb., 1936; specimen of handwriting in SP. SAVAGE, A catalogue of the Linnean Herbarium, London 1945, fig. 40.

Solms-Laubach, Hermann Graf zu

(1842, Laubach, Upper Hesse, Germany; 1915,



SOLMS-LAUBACH

Strassburg, Germany), private University teacher at Halle a/Saale, in 1872 appointed Professor of Botany at Strassburg, and in 1879 Director of the Botanic Garden at Göttingen and besides Professor of the university there; from 1888 till his superannuation in 1907, Professor at Strassburg again.

He paid a visit to Java (see below), making several provisional researches and collecting a considerable amount of material for later studies.[1]

Author of several taxonomic papers, especially dealing with *Rafflesiaceae.*

He is commemorated in the genus *Absolmsia* O.K.

ITINERARY. *Java* (Oct. *1883*–March *1884*). Staying 3 months at Buitenzorg,[2] collecting in the following localities in *W. Java:* G. Pantjar (Dec. 1, 1883), Tjibodas (Jan. 30, 1884).

COLLECTIONS. *Herb. Berl.: Musci, Fungi* and *Hepaticae* from *Java* (coll. 1883–84), 27 *nos* of siphonogams (pres. 1884–85), and material of *Rafflesia* (pres. 1892); numerous *nos* for the *Show Mus. Berl.* In *Herb. Brit. Mus.:* cryptogams (pres. 1894) (from *? Java*); *Herb.* LINDEMANN (U.S.S.R.): 10 dupl. (no provenance mentioned); *Herb. Leyden: Musci* from *Java.*

LITERATURE. (1) *cf.* Ann. Jard. Bot. Buit. 45, 1935, p. 11, 70, 76, 91, 107.

(2) H. ZU SOLMS-LAUBACH: 'Der botanische Garten zu Buitenzorg' (Bot. Zeitung 42, 1884, p. 753–761, 769–780, 785–791).

BIOGRAPHICAL DATA. Ber. D.B.G. 33, 1915, p. (95)–(112); Nachr. k. Ges. Wiss. Göttingen 1916, p. 57–70; Bibliogr. in Proc. Linn. Soc. Lond. 1916/17, p. 67–71; BACKER, Verkl. Woordenb., 1936.



SONNERAT

Somonte, *cf. sub* Forestry Bureau, Manila.

Sonnerat, Pierre

(betw. 1745–49, Lyons, France; 1814, Paris, France), a zealous naturalist, endowed with great skill as a draughtsman. He entered the Navy and obtained a situation in Isle de France (as protégé of his relative P. POIVRE), and left Paris for the southern hemisphere in 1768. He attached himself to COMMERSON (see there) and worked with him for 3 years in Mauritius, Bourbon and Madagascar. He made several expeditions (see below); in 1774 he was appointed Naval Commissary. Subsequent to 1781 he still made several voyages to India, being at Pondicherry as late as 1801. In 1805 he returned to France. He was mainly zoologically interested, but collected many plants too.

He is commemorated in the genus *Sonneratia* L. *f.* and in many plant species.

ITINERARY. *With the 2nd Moluccan Expedition, 1771–72,*[1] equipped by POIVRE, under the command of PROVOST (for the 1st exp. see there); SONNERAT joined as a volunteer. Sailing from Port Louis, Isle de France (June 29, *1771*); *via* the Seychelles, P. Para, P. Pisang (ashore), P. Timon (= *? P. Tioman* near the Malay Peninsula) (Aug. 22), P. Condor; *Luzon:* Port Cavite (Sept. 3); Manil(l)a (Oct. 25 penetrating into the interior); Calamba (Nov. 20); Los Bagnos; leaving Port Cavite (Dec. 29); *Panay:* Antigue (Jan. 7–13, *1772*); *Mindanao:* Caldera (18), Sambouanga (= Zamboanga) (19–22); *Jolo Isl.; Mindanao:* Sambouanga (Febr. 6–8); *Sulu; Moluccas* and *islands near New Guinea: P. Gebe(h)* (20–March 1); *P. Moar* (= *? P. Moeor*) (March 4–8); *P. Gebe(h)* (March 9–Apr. 6); E.coast of *Halmahera* (1 day in Apr.); *via* Timor Strait (Apr. 28) back to Mauritius (arriving June 4 and 5).–*1774–81.*[2] Several travels to Ceylon, Malabar, Gates Mts, Coromandel, *Malacca,* China; passing two years in the provinces of Carnate, Tanjaour and Maduré; sojourns at Pondicherry, Isle de France, Madagascar, Cape of Good Hope.

COLLECTIONS. The majority in *Herb. Paris;* dupl. in *Herb. Linn. Soc. Lond.; Herb.* DELESS. (*Geneva*), *St Petersb.* (= *Leningrad*), *Copenhagen,* and with *Herb.* BERGIUS in *Herb. Roy. Acad. Stockholm.*

According to WARBURG the amount of plants recorded from the *Moluccas* is only small, and he supposes that many plants recorded from *Java* were erroneously labelled and in reality originated from the *Moluccas* and the *Philippines.*[3]

Many of his collections later formed a part of COMMERSON's herbarium and have occasionally been credited to the latter.[4] Manuscript descriptions of *Luzon* plants with the MSS of COMMERSON in Libr. Nat. Hist. Mus. Paris.[5] *Java* plants credited to SONNERAT, may have been collected by COMMERSON.

Also MSS in the Library at Lyons (France) (*non vidi*).

LITERATURE. (1) P. SONNERAT: 'Voyage à la Nouvelle Guinée' (Paris 1776, w. 120 pl.); transl. into English: 'An account of a voyage to the Spice-Islands and New Guinea' (London 1781); *ditto* into German (Leipzig 1777), and into Swedish (Upsala 1786). The title of the book is misleading, as the expedition did *not* visit New Guinea.

cf. also *l.c. sub* 2, vol. 3, 1782, p. 60–93 (Journal d'un voyage aux Moluques).

(2) P. SONNERAT: 'Voyage aux Indes orientales et à la Chine, fait par ordre du Roi depuis 1774 jusqu'en 1781' (Paris 1782, 3 vols; 2nd ed. 1806, 4 vols + atlas: 'Collection des planches pour servir au voyage aux Indes Orientales et à la Chine', 140 pl.); transl. into Dutch.

(3) *cf.* 'RUMPHIUS Gedenkboek' (Haarlem 1902) p. 65.

(4) *cf.* C. B. ROBINSON in Philip. Journ. Sci. C. Bot. 4, 1909, p. 683.

(5) Labor botanicus in Gallicanum Insulam denuo suspectus, anno 1772. 'Appendicis loco hic adjiciuntur adumbrationes quaedam plantarum Luzonicarum, quas ad nos detulit D. SONNERAT anno 1772 et cursim descripserat.'

BIOGRAPHICAL DATA. Gard. Chron. 3rd ser. 12, 1892, p. 338 and 378; BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 120–121; Ann. Soc. Bot. Lyon 31, 1906, p. 34–35; in LACROIX, Notices Historiques sur les Membres et Correspondants de l'Académie d. Sci. *etc.*, 1934, p. 70–75; BACKER, Verkl. Woordenb., 1936.

Soper, John R. P.

(1904, England; x), Agricultural Officer in the Dept of Agriculture S.S. & F.M.S., 1936–...

COLLECTIONS. *Herb. Sing.:* specimens of grasses collected in Perak, *Malay Peninsula.*

Sorgdrager, Pieter

(1906, Salatiga, Java; x), pharmacist, educated at Leyden University; from 1930–34 Military Dispenser, successively at Batavia, Bandoeng and Padang; from 1934–41 in the employ of the K.P.M. (Royal Packet Company) at Batavia, in 1941 besides Lecturer in Pharmacy at the Medical College there. He took his Dr's degree at Utrecht in 1947.

He is especially interested in Javanese medicinal herbs and examined mixtures of those.[1] On behalf of his research he collected weeds in the environs of Batavia, and at Lembang (above Bandoeng, early in Sept. *1939*) in *W. Java*, mostly in cultivated area, from *1937 onwards.*

COLLECTIONS. *Herb. Bog.:* some tens of numbers.

LITERATURE. (1) P. SORGDRAGER: 'Indische kruidenmengsels' (Pharm. Tijdschr. *nos* 6, 7, and 11, June, July, and Nov. 1939, in total 20 pp.) and many other papers in several periodicals, on the same and other pharmacological subjects; 'Enkele Indische Geneeskruiden' (1947, Thesis, Utrecht).

Soriano, *cf. sub* Forestry Bureau, Manila.

South, F. W.

sent plants to the Singapore Gardens in *1920* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. *Herb. Sing.*

Sow

Sakai Forest Guard, joined in 1929 as tree climber and Herbarium collector at the Forest Research Institute, Kepong. Collections *cf. sub* Conservator of Forests series, Kepong.

Spaan, Willem Jan

(1874, Velp, Gld, Holland; x), since 1896 Forest Officer in the employ of the D.E.I. Government, successively stationed at Japara, Djokja-Kedoe, Bondowoso (1899–1907), and at several other stations in the teak districts of Java; in 1915 at Buitenzorg, and in 1919 at Malang. Early in 1925 he was promoted Inspector, and retired towards the end of the year.

COLLECTING LOCALITIES. *E. Java:* Kendang Mts in Besoeki (*1906*).

COLLECTIONS. *Herb. Bog.:* a specimen of *Santalum album* L.[1]

LITERATURE. (1) W. J. SPAAN: 'Mededeelingen over den Sandelboom' (Tectona 3, 1910/11, p. 129–155).

Spangler

R. BROWN in BENNETT & BROWN, Plant. Jav. rarior., cites plants collected by SPANGLER in *Java.* MIQUEL already supposed the collector to be SPANOGHE;[1] this was later confirmed by SCHUMANN.[2] Thus the name *Sterculia spangleri* R.BR. was erroneously given (*cf.* BACKER, Verkl. Woordenb., 1936).

LITERATURE. (1) *cf.* Flora Ind. Bat. 1[2], p. 174. (2) *cf.* ENGL. Bot. Jahrb. 24, Beibl. 58, p. 17.

Spanoghe, Johan Baptist

(1796, Madras, Br. India; Apr. 22, 1838, Pekalongan, Java; buried at Pasirangin, S of Lebak, W. Java),[1] of Belgian origin; he entered the D.E. Indian Government service in 1816 and was appointed Assistant Resident of the southern divisions of Bantam Residency in W. Java in 1821. About 1827/28 he was placed on half-pay on account of ill health; in 1831 he set out for Timor, in which island he was acting Resident from 1833–34; subsequently on half-pay once more. In 1836 he returned to Java, and was honourably discharged in the next year. After his retirement he settled at Pekalongan.

He is commemorated in the genus *Spanoghea* BL. and in several plant species (*cf.* also *sub* SPANGLER).

COLLECTING LOCALITIES. *182.–31. W. Java,* Bantam Residency. He accompanied BLUME (see there) to the Badoeis in *1822*;[1] he also collected together with MILLET (see there).—*1831–36. Lesser Sunda Islands.* Sailing from Batavia (Aug. 23, *1831*); ashore in Bima (eastern part of *Soembawa*);[2] *Timor:* Koepang (arriving Oct. 11).[3] In *Timor* he collected in the following localities: Oyba, Pariti, Oyniesoe, Koesambi, Amabie, Bakoelnasi; besides in the neighbouring islands: *P. Kambang, P. Semaoe, P. Rot(t)i,* and *P. Lamaan.* He collected a few specimens in *Bali.—1836. Java.—1837–38. Centr. Java:* Pekalongan.

In a list at Leyden Herbarium *Java* plants are mentioned from G. Salak, G. Gedeh (crater and summit), Simbang, Batavia, Hort. Bog., and G. Diëng; *probably* collected in *1836–38.*

COLLECTIONS. *Herb. Leyden:*[3] 423 species from *Timor*, few from *Bali*, and several from *Java;* dupl. in *Herb. Utrecht;* in *Herb. Kew* (with *Herb.* Sir W. J. HOOKER), also *Java* mosses (pres. 1834–36); *Herb. Paris;* in *Herb. Bot. Gard. St Petersb.* (= *Leningrad*); SPACH *Plantae timorensis*[5] (probably a mistake for SPANOGHE).

According to BACKER the *Leyden Herbarium* has a specimen of *Smithia sensitiva*, collected in *Bali* by SPANOGHE!

He published some papers on his *Timor* collections.[4] His *Timor* plants were *not* included by DECAISNE in his 'Herbarii Timoriensis descriptio', the latter planned to deal later with the collections of SPANOGHE and ZIPELIUS (see introduction in *l.c.*).

The manuscript of the 'Prodromus', which was completed in 1836, was sold after his death (during life he refused to forward it to BLUME, maybe in consequence of DECAISNE's intention) to D. F. L. VON SCHLECHTENDAL, the editor of 'Linnaea'. A series of more than 70 coloured plates was intended to illustrate the work; as the reproduction would have been too expensive, they remained unedited. It is not clear whether the plates were included in the sale; their present location is evidently in *Herb.*

Leyden.[6] According to MIQUEL (Flor. Ind. Bat. 3, p. vii), SPANOGHE's herbarium was sold to VON SCHLECHTENDAL too. The latter gave it to MIQUEL!

LITERATURE. (1) *cf.* Ind. Magazijn, 2e twaalftal, *nos* 3 and 4.

(2) *cf.* HASSKARL in Tijdschr. Neêrl. Ind. 4^2, 1842, p. 230.

(3) *cf.* Letter in Alg. Konst- en Letterbode 1832^1, p. 356–361 (voyage Batavia–Timor + plant list of Bima). When writing the letter he intended to send some unknown plants from Bima and the collection from Timor to BLUME at Leyden.

(4) 'Extract of a letter from M. SPANOGHE, the Dutch Resident at Coupang, relating to the natural history of the island of Timor; with some account of the Upas tree, discovered there by that gentleman' (HOOK. Comp. Bot. Mag. 1, 1835, p. 308–317).

J. B. SPANOGHE: 'Catalogue of the plants found on Timor and the neighbouring islands' (*l.c.* 1, 1835, p. 344–351); 'Prodromus florae timorensis' (Linnaea 15, 1841, p. 161–208, 314–350, 476–480).

(5) *cf.* HERDER in Bot. Centr. Bl. 55, 1893, p. 269; and LIPSKY, Gerbarii Imperatorskago S. Petersburgskago etc., 2nd ed. 1908, p. 192.

(6) *cf.* Blumea 3, 1940, p. 524 footnote, and *l.c.* p. 580 *ditto.*

BIOGRAPHICAL DATA. Hand. Ind. Gen. 2, 1855, p. 393–400; BACKER, Verkl. Woordenb., 1936; Chron. Naturae (contin. of Natuurwet. Tijdschr. N.I.) 104, 1948, p. 206–209.

Spare, Gordon H.

(born in England; ? died as a P.O.W. in Siam), Student Gardener at Kew, who worked in the Herbarium also; from 1929–32 rubber planter in Johore, Malay Peninsula, and then in Perak and Kedah.

He is commemorated in *Fagraea sparei* HENDERSON.

COLLECTING LOCALITIES. *1929–41.* In various parts of the *Malay Peninsula:* in Johore (on Sungei Tukong Estate, *etc.*); in Perak, on the tidal banks of the Krian River at Bagan Serai (Jan. *1932*); neighbourhood of Sg. Krian in Perak (*1939*); Kedah (*1940*).

COLLECTIONS. *Private herbarium* (probably lost); *Herb. Sing.:* his private coll. of mosses (pres. 1939), and dupl. of the other collections. Also dupl. in *Herb. Kew;*[1] dupl. of mosses to H. N. DIXON. Part of his collections were numbered in the S.F. (= Singapore Field) Number series.

LITERATURE. (1) JONKER cites a *no* F. 707, *Burmannia coelestis* DON, material of which at *Kew*, in a 'Monograph of the Burmanniaceae' (Dr's Thesis, Utrecht 1938) p. 123.

Sparrman, Andreas (or Anders)

(1748, Lena in Uppland, N of Stockholm, Sweden; 1820, Stockholm, Sweden), Med. Dr and natural history investigator, pupil of LINNÉ; he made a voyage to China (see below), to the Cape in 1772 (making excursions partly in company with THUNBERG),[1] subsequently joined COOK's 2nd Voyage (see *sub* COOK) in 1772–75, and returned to the Cape Colony, collecting till 1776.[2] When back in Sweden, in 1780, he was appointed Custodian of the Swedish Academy of Science, in 1781 Professor of Natural History at Uppsala, and in 1790 *ditto* at Stockholm.

He is commemorated in the genus *Sparmannia* L. *f.*

ITINERARY. *Voyage to China, 1765–67*, with Capt. C. G. EKEBERG.[3] Sailing from Göteborg (Dec. 28, 1765); *via* Port St Mariae and Teneriffe to *W. Java:* anchoring near *Ins. Nieuw Bay* (= *Meeuweneiland*) (July 16, *1766*); *Prints Eyland* (= *Prinsen-eiland*) (July 22); *via* P. Condor, Macao, proceeding to China; on the voyage home (Jan. 21, *1767* from China) anchoring near *Nord Eyland* (= prob. *Noord-eiland* or *P. Moendoe*, E of the southern extremity of Sumatra) (Febr. 9, 1767); *via* the Cape and the Azores back to Sweden.

COLLECTIONS. Plants from the Cape, New Zealand, *etc.*, in *Herb. State Mus. Stockholm.* The collection from the China voyage probably in Sweden too. Dupl. in *Herb. Acad. Sci. St Petersburg* (= *Leningrad*) (with coll. THUNBERG, pres. 1811); *Herb. Linn. Soc. Lond.* (numerous specimens marked 'Sp.').

LITERATURE. (1) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 445.

(2) A. SPARRMAN: 'A voyage to the Cape of Good Hope, towards the antarctic polar world and round the world; but chiefly into the country of the Hottentots and Caffres from the year 1772 to 1776' (London 1785, 2 vols, transl. from Swedish; also French transl., Paris 1787, 3 vols).

(3) A. SPARRMAN: 'Iter in Chinam' (*Diss. Acad.* in LINNAEUS, Amoen. Acad. 7, 2nd ed. 1789, p. 497–506; a list of 10 plants from *Meeuwen Island* on p. 499, of 7 plants from *Noord Island* on p. 504).

BIOGRAPHICAL DATA. WIKSTRÖM, Conspect. Litt. Bot. Suec., 1831, p. 239–240 (bibliogr.); WITTROCK, Icon. Bot. Berg., 2, 1905, p. 53; KROK, Bibl. Bot. Suecana, 1925, p. 662; BACKER, Verkl. Woordenb., 1936; specimen of handwriting in SP. SAVAGE, A catalogue of the Linnean Herbarium, London 1945, fig. 11.

Speldewinde, C. A.

joined the Forest Department *Malay Peninsula* in Dec. 1907 as a Forest Ranger; retired in 1948 as S.A. Conservator of Forests; collected mainly in Perak and Pahang. In *Herb. Kuala Lump., cf. sub* Conservator of Forests series, Kepong.

Spennemann, August W.

(*c.* 1878, Bielefeld, Germany; 194., in allied prisoner camp, Br. India), came to Java about 1915; plantation assistant in East and West Java. About 1928 he lived for some years at Bandoeng, and from 1930 on a plantation at Parakan Salam near Poerwakarta (W. Java). In May 1940 he was interned by the Dutch.

His special interest was bird life and its relation to botany.

COLLECTIONS. He incidentally collected plants on which birds were seen, between *1930–32.*

Herb. Bog.: 3 *nos* from Poerwakarta (*W. Java*)

leg. SPENNEMANN, numbered in the series of VAN DER PIJL (see there). In total he collected 6 *nos*, *viz* 285–290, of which only 3 in the Buitenzorg Herbarium.

BIOGRAPHICAL DATA. Chron. Naturae 104, 1948, p. 3.

Sperna Weiland, Theodoor Paul Albert

(1886, Dongen, N.Br., Holland; x), since 1910 veterinary surgeon in D.E. Indian Government service, stationed in Sumatra successively at Seriboe Dolok (Sum. East Coast, 1910–11), Balige (Tapanoeli, 1911–1916), Taroetoeng (Tapanoeli, 1916–17), and at Balige once more (1917–19). In July 1919 he went on furlough, and resigned after expiry of the same. Later veterinary surgeon for examination and Assistant Director of the Leyden abattoir. In 1925 he took his Dr's degree at Utrecht.

COLLECTIONS. *Herb. Bog.:* 71 *nos* collected near Toba Lake in *N. Sumatra about 1915*.

Speyer, Dr E.

COLLECTIONS. *Mus. Senckenb. Ges.* (= *Univ.*) *Frankfurt:* medicinal herbs, tubers, and fruits from *Penang* (pres. *1906/07* without names).

Spire, Dr O.

made a study of rubber-producing plants charged by the French Ministry of the Colonies; he stayed in Java from Oct. *1901* till March *1902*.[1] He mentioned the dispatch of flowers and fruits of *Loranthaceae* and of some animals to *Paris*, collected in the vicinity of the Botanical Institute at Buitenzorg (*W. Java*). Nearly finished with his investigations he planned to cross Java and even Sumatra and Borneo. He intended to make zoological collections in *Java*.[2] In 1902–03 he was sent on a mission to Indo-China as 'Médecin major des Troupes Coloniales.' He took his Dr's degree in 1905 at Paris.

COLLECTIONS. In *Herb. Paris: c.* 1500 specim. from Indo-China; also *Java* plants (probably few).

BIOGRAPHICAL DATA. In 'Flore gén. d. l'Indo-Chine' tome prélim. 1944, p. 47.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 26.

Author of: 'Les espèces d'arbres à caoutchouc cultivées aux Indes néerlandaises' (in ? , p. 39 *seq.*; seen reprint only).

(2) *cf.* Bull. Mus. Hist. Nat. Paris 17, 1901, p. 202.

Spoel, Johannes

(1896 Magelang, Java; x), chemical engineer, educated at the Technical College, Delft; in the employ of the B.P.M. (Batavian Oil Company).

COLLECTIONS. In *1927* he presented 54 plants (mainly orchids) from Balikpapan (*E. Borneo*), and in *1936* plants from Pangkalan Brandan (*NE. Sumatra*) to *Hort. Bog.*. *Possibly* some of them preserved in *Herb. Bog.*

Sporleder

of Wernigerode, Germany, is cited by MIQUEL (in Ann. Mus. Bot. Lugd. Bat. 1, 1863, p. 47) as the collector of *Gleichenia vulcanica* BL. in *Java*.

Sprée, Dr Thijs

(† 1876), practitioner at Veenwoude, Fr., Holland (in 1863 living at Rhenen, U.), is cited as the collector of *Ageratum conyzoides* at Batavia, *W. Java;* material of the specimen in *Herb. Leyden* (*cf.* KOSTER in Blumea 1, 1935, p. 487); he is supposed to have collected a *Najas* '*in fossis pr. Patjenan*' *Java* in *1847*, a *Ceratophyllum* in ditches near Soerabaja (*E. Java*) in *1847*, a plant behind Molenvliet, Batavia (July 29, *1847*), and *Musci* in the same island, of which material in *Herb. Leyden* (*ex Herb.* BUESE) too. It is not known with certainty that SPRÉE visited the island himself, though Prof. SURINGAR wrote on the label of the above-mentioned *Ceratophyllum:* 'Dr TH. SPRÉE *qui plant. leg. Java* A° 1847'.

Spruit P.Pzn, Cornelis

(1891, Den Briel, Z.H., Holland; x), botanist, educated at Wageningen Agricultural College and Utrecht University, took his Ph.Dr's degree at Utrecht in 1919. From 1916–19 Assistant for Technical Botany at Delft, from 1919–41 on the staff of the Cinchona Experiment Station at Tjinjiroean, W. Java.

COLLECTIONS. *Herb. Bog.:* some plants from the environs of Tjinjiroean, *W. Java*, collected occasionally *since 1928*.

Spurway, B. J. C.

Forest Officer in Sarawak.

COLLECTIONS. *Herb. Bog.:* 3 *Dipterocarpaceae*, collected in Sarawak, *NW. Borneo* (pres. *1932*).

Stadtmiller, L. R.

Forest Officer, later Professor at Michigan, worked for some time in the Buitenzorg Herbarium in 1921.

COLLECTING LOCALITIES. *1921. Sumatra East Coast:* at Bandar Poelau (July 6), Tabat Pandjang (Sept. 27), Kota Malintang (Sept. 29), Moeara Bahar (Oct. 15), Senawar.—Together with FERRARIS he collected in *Mindanao*, possibly in 1921 too.

COLLECTIONS. Few collections. LAM (in Bull. Jard. Bot. Buit. sér. 3, vol. 7, 1925) mentions several *Palaquiums* collected by him in *Sumatra East Coast*, some of the plants numbered above 100. The *Palaquium* collected by him in *Mindanao* is numbered in the F.B. (= Forestry Bureau, Manila) series, *Herb. Manila*.

Stahl, Christian Ernst

(1848, Schiltigheim, Alsace, Germany; 1919, Jena, Germany), from his boyhood a friend of A. F. W. SCHIMPER, studied natural history at Strassburg, Halle and at Strassburg once more. He took his Dr's degree in 1873. Since 1877 University Lecturer at Würzburg; in 1880 appointed Extraordinary Professor at Strassburg, and in 1881 Professor at Jena.

He made two voyages to the tropics, *viz* to *Java* in *1889–90* (staying from Nov. 1889–March 1890 in the Foreigners' Laboratory at Buitenzorg),[1] and to Mexico in 1894.

COLLECTIONS. He is cited to have collected some *Hepaticae* (*cf.* Bull. Herb. Boiss. sér. 2, vol. 3, 1903, p. 599, 882). He might have collected phanerogams too.

He brought living plants to Europe, which were cultivated in the hothouse at Jena.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 15.

BIOGRAPHICAL DATA. Ber. D.B.G. 37, 1919, p. 471, (85)–(104), incl. bibliogr. + portr.

Star, G. H. van der, *cf. sub* Forest Research Institute, Buitenzorg.

Stathouder

LECOMTE in his annual report (Rapp. ann. sur le fonctionnement du Serv. Bot. Mus. Hist. Nat. Paris 1909, 1910, p. iv) mentions a Herbarium STATHOUDER from *Java*, which is kept separately in the *Herb. Paris.*

During my recent visit, both the herbarium and concerning list, letters and other documents were consulted.[1] A list of the Herb. STATHOUDER was prepared by A. L. DE JUSSIEU, with the heading: 'Catalogue des plantes d'un herbier de l'isle de Ceylan, inscrit avec les noms des pays, faisant partie de la collection Stathoudérienne, envoyée de la Hollande au Muséum d'Histoire Naturelle'. From this list and the given vernacular names, it is evident that these plants were *not* collected in Java, and that LECOMTE's statement (see above) was incorrect.

This herbarium[2] formed part of the 'Collection Stathoudérienne', the private natural history cabinet of the Dutch 'Stadhouder' (stadtholder), which was, during the French occupation of Holland in 1795, sent as official war-booty to Paris. The extremely valuable zoological collections were brought back in 1815,[3] but the botanical part, which was of little importance, evidently was not claimed.

Though the *Herb.* STATHOUDER does not seem to include any Malaysian specimens, a list in the 'Archives Nationales' at Paris, includes 'seeds from Batavia (*Java*)', and medicinal plants, resins, wood samples, *etc.* of which no country of origin is mentioned. Some of these might still be at *Paris.*

LITERATURE. (1) MS. list of A. L. DE JUSSIEU in Libr. Nat. Hist. Mus. Paris, and Herb. (Phanér.) Paris. Other lists, letters and documents concerning this collection in Arch. Nationales, Paris (AJ^{15} 836).

(2) Further particulars in Bull. Bot. Gard. Buitenzorg 18, 1950, p. 468–470.

(3) For particulars on the zoological part *cf.* A. GIJZEN, 's Rijks Museum v. Nat. Hist. 1820–1915, Rotterdam 1938, p. 23–28; and H. ENGEL, Alphabetical list of Dutch zoological cabinets *etc.* (Bijdr. t. d. Dierk. 27, 1939) p. 300–302.

Staunton, Sir George Leonard, Baronet

(1737, Cargin, Galway, Ireland; 1801, Portland Place, London, England), physician who practised in the West Indies since 1762, but soon changed the medical profession for that of law; visited Brazil; he accompanied MACARTNEY to Madras in 1781–84, and to China in 1792–94.[1] The latter embassy was accompanied by 2 gardeners, one of them was J. HAXTON (see there), the other's name is not known to me.

STAUNTON is commemorated in several plant species.

ITINERARY. *Embassy to China, 1792–94.*[1] Sailing from Portsmouth in the 'Lion' and the 'Hindustan' (Sept. 26, 1792); *via* Madeira, Teneriffe, the Canaries, Cape Verde Islands, Rio de Janeiro, St Paul and Amsterdam Island; Sunda Strait (Febr. 25, *1793*); *W. Java:* Batavia (March 6–17); Bantam (March 17–Apr. 26), at St Nikolaas Punt *etc.*, and in this period sailing to and fro between Java and *S. Sumatra* in search for a good berth, evidently going ashore in the latter island; passing Banka Strait to Pulo Condor (May 17–18) and proceeding to Cochin-China and China; voyage home *via* St Helena, to Portsmouth (Sept. 6, 1794, arrival).

COLLECTIONS. Large collection of plants to BANKS = *Herb. Brit. Mus.* Duplicates in *Herb. Kew:* China plants (*ex Herb.* BROWN, pres. 1879); *Herb. Vienna:* China and Brazil, 500 *nos; Herb.* WEBB (= *Florence*); *Herb.* DELESS. and DECAND. (*Geneva*); *Herb.* v. HEURCK (*Antwerp*). *Possibly* in *Herb. Oxford* too, presented by Lord MACARTNEY.[2]

Plants of his were sold with the LAMBERT *Herbarium;*[3] at the time acquired by PAMPLIN.

The greater part of his collections is from China, probably only few plants from *Malaysia;* he is cited as the collector of *Sterculia polyphylla* R.BR. in *Sumatra.*[4]

LITERATURE. (1) G. STAUNTON: 'An authentic account of an embassy from the king of Great Britain to the emperor of China; including cursory observations made ... together with a relation of the voyage undertaken on the occasion by H.M.S. Lion and Hindostan ... with notices *etc.* taken chiefly from the papers of H.E. the Earl of MACARTNEY' (London 1797, 2 vols; 2nd ed. 1798, 2 vols + atlas); transl. into Dutch (1798–1801, 7 vols). Herein some natural history observations, and some lists of plants collected in China.

Other reports on the embassy, by A. ANDERSON and J. BARROW.

(2) *cf.* HOOK. Journ. Bot. & Kew Gard. Misc. 6, 1854, p. 251; and DRUCE, An account of the Herbarium of the University of Oxford, 1897, p. 15.

(3) *cf.* Catalogue of the sale (in Libr. Brit. Mus. and Kew).

(4) *cf.* BENNETT & BROWN, Plant. Javan. rar., p. 227.

BIOGRAPHICAL DATA. Alg. Konst- en Letterbode 1801[1], p. 209–210; Gent. Magaz. 71[1], 1801, p. 89–90, 183; Proc. Roy. Soc. Lond. 10, 1860, p. xxvi; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 28, 1890, p. 314 and in 2nd ed. by RENDLE, 1931; BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 156–157; BUCKLAND, Dict. Ind. Biogr., 1906; BACKER, Verkl. Woordenb., 1936; G. STAUNTON: 'Memoirs of the Life and Family of the late Sir G. L. STAUNTON.'

Steele, Captain

of the 'Ivanhoe' brought *Dendrobium viridiflo-*

rum BAIL. from *New Guinea* (*cf.* BAILEY in Queensl. Agric. Journ. 1898, p. 285); specimen *probably* in *Herb. Brisbane.*

According to WICHMANN (in Entd. Gesch. N.G., Nova Guinea 2^2, p. 604), STEELE left Port Moresby for Brisbane in *1895.*

Steemann Nielsen, E.

(1907, Copenhagen, Denmark; x), Professor of Botany at the Pharmaceutical College, Copenhagen; botanist of the 'Dana' Expedition, 1928–30.[1]

ITINERARY. *'Dana' Expedition, 1928–30.*[1] Leaving Copenhagen (June 14, 1928), *via* Plymouth, Morocco, Madeira, Martinique, Panama, Marquesas Isls, Tahiti, Cook Isls, Samoa Isls, Fiji Isls, New Caledonia, New Zealand, New South Wales, Queensland; *Thursday Isl.* (March 18, *1929*); *Moluccas: Ambon* (25); *N. Celebes:* Manado (30–31); Cochin-China, Siam, Annam; *Philippines, Luzon:* Aparri (May 23); Formosa, Shanghai, Formosa; *Luzon:* Manila (June 17–24, visiting Mt Maquiling); *N. Celebes:* Manado (July 3–4); *Dutch NW. New Guinea:* Manokuari (= Manokwari, 15–18); *N. Celebes:* Manado (Aug. 3–5); *E. Java:* Surabaya (20–28, visiting Mt Panderman); *W. Java:* Batavia (Sept. 5); *Sumatra West Coast:* Padang (13, 26–Oct. 4); Cocos Isls; *W. Sumatra:* Padang (30–31); Nicobar Isls; *Sumatra East Coast:* Belawan Deli (Nov. 10–14); Ceylon; Seychelles, Madagascar, E. & S. Africa; St Helena, Sierra Leone, Teneriffe, the Canaries, N. Africa, Italy, and back to Copenhagen (arrival June 30, 1930).

COLLECTIONS. *Herb. Copenhagen:* plants from the 'Dana' Expedition. The expedition collected in the *Malaysian* region in *1929*, about 600 specim., *viz* from: *Thursday Isl.* (N of Australia, March 18) *nos* 556–575, Manado (*N. Celebes*, March 31 and July 4) *nos* 743–781, *P. Biaro* (southernmost of the *Sangihe Isls*, July 6) *nos* 782–824a, Mt Maquiling (*Luzon, P.I.*, June 20) *nos* 825–834, Manokwari (*Dutch NW. New Guinea*, ? June 27) *nos* 835–904, Mt Panderman (*E. Java*, Aug. 25) *nos* 905–997, *South Pagai* (W of Sumatra, Sept. 24) *nos* 1012–1048, Emmahaven (*Sum. West Coast*, Oct. 30) *nos* 1062–1112, Loeboek Salasih (= Soelasih, Padang Highlands, *Sumatra West Coast*, Oct. 30) *nos* 1113–1206, G. Pintoe (near Medan, *Sumatra East Coast*, Nov. 11) *nos* 1207–1320.

LITERATURE. (1) *cf.* List of the ports called at, *etc.* in Dana-report *no* 1 'Introduction to the reports from the Carlsberg foundation's oceanographical expedition round the world 1928–30' (Copenhagen & London 1934) p. 10–11. For members of the expedition *cf. l.c.* p. 14–15.

'Dana's Togt omkring Jorden 1928–1930 af JOHANNES SCHMIDT og Deltagerne i Ekspeditionen' (KØBENHAVN 1932) (*non vidi*).

Steenbergen, H., *cf. sub* Forest Research Institute, Buitenzorg.

Steenhoven, H. van der (or den), *cf. sub ditto.*

Steenis, Cornelis Gijsbert Gerrit Jan van

(1901, Utrecht, Holland; x), botanist, educated at Utrecht University, where he took his Ph.Dr's degree in 1927; towards the end of the latter year he went to Java as Assistant at the Buitenzorg Herbarium; high official for the organization of the 'Flora Malesiana'; since Aug. 1946 stationed in Holland.

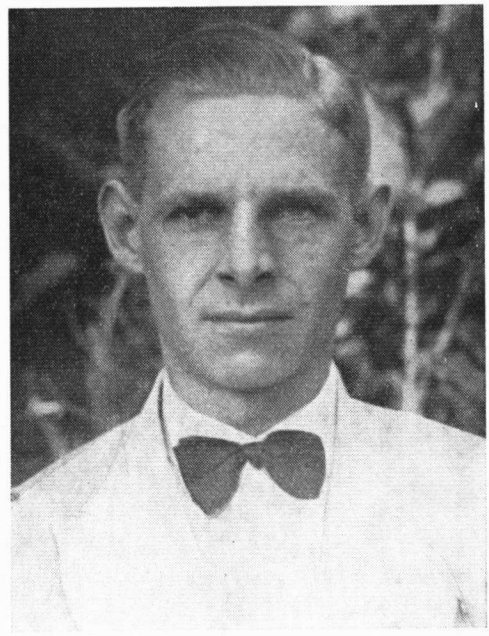
He is the author of many taxonomic, plant-geographical, and other papers, relating to the flora of Malaysia.[1]

J. J. SMITH named some orchids after him, and he is commemorated besides in *Eurya steenisii* DE WIT.

COLLECTING LOCALITIES. *1927. P. Weh*, N of Sumatra: *pr.* Sabang (Dec. 6); *W. Java:* Tjigombong (Dec. 18); slopes G. Salak above Waroengloa (Dec.).—*1928.* From Tjitjoeroeg to G. Perbakti and the crater fields of G. Salak (Jan. 8); many times at Buitenzorg and in the vicinity; Tjilintjing, E of Tandjong Priok (Febr. 26). *Expedition to the Anambas & Natoena Islands* (partly with HENDERSON, see there):[2] *P. Siantan* (March 29–Apr. 6), near Terempa, *etc.*, and visiting *P. Tandjoeng Soeka* (Apr. 3); *P. Sedanau* (Genting) (Apr. 7–8); *Boengoeran* (= *Groot Natoena*), kp. Ranai and G. Ranai (Apr. 9–15; summit on the 15th); *P. Sedanau* (Genting) (17). *W. Java:* Tjiboerial (May 6); Sitoegoenoeng (June 24); Bandoeng, near Lembang, Dago, *etc.* (end of May); Tjiboerial (July 7); Tjipanas–Tjibodas (July 16), *Tjibodas and slopes G. Gedeh* (17–26),[3] summit G. Gedeh (22), G. Pangrango (23), and Geger Bintang (26); Bolang (Aug. 26); from Buitenzorg in the direction of G. Pantjar (Sept. 16); Megamendoeng, Tjièsèk (Sept. 23); G. Pantjar (Oct. 27–31) with W. M. DOCTERS VAN LEEUWEN, collecting at kp. Karangtengah, G. Paniisan and G. Liiang; Tapos (Nov. 4); *Centr. Java:* Djokja station and Walikoekoen (Dec. 23); *E. Java:* Poenten (Dec. 24–Jan. 3), making trips to Djoengo (28), Tjobanrondo near Poedjon (30).—*1929.* Poenten (–Jan. 3), in the vicinity and on G. Dorowati and Koekoesan (Jan. 2); from Pasoeroean in eastern direction, G. Bentar and G. Loeroes (4); *W. Java:* G. Tjibodas (Jan. 13);[4] SW of Leuwiliang, Poerasèda, Nangèla (Febr. 2–5; with BAKHUIZEN VAN DEN BRINK Sr and DOCTERS VAN LEEUWEN);[5] Tjigombong (Febr. 24); Meester Cornelis (March 3); Depok (March 14); Tjitajam; Tjibodas (slope G. Gedeh) (May 5); Wijnkoops Bay, Karang Hawoe (May 9); Tandjong Priok harbour-ground (May 13); Tjibodas–G. Gedeh (aloen-aloen) (June 2–3); dessa Kemang (July 7); Tjiapoes (July 28); G. Salak above Waroengloa (Aug. 2); Tjibinoeng (Aug. 28, Sept. 9);[6] Tjampea (Sept.). *Trip to S. Sumatra*, Benkoelen:[7] Kroei (Oct. 25); Danau (= Lake) Ranau, staying at Banding Agoeng (Oct. 25–Nov. 15), from where making trips to the coffee plantation Aeroebi and djoerang (= ravine) (Oct. 26), E of Soerabaja to Tandjoengsari (28), Talangtotong forest between Sepatoehoe and Simpang (29), foot G. Pakiwang (30, 31), G. Raja (Nov. 2), G. Pesagi (3–5; ascending from Raja, descending to Oedjoeng and Aer Semangka), G. Pakiwang (7), at the back of Sepatoehoe (8), summit G. Pakiwang (9), Aer Telanai cleft near Banding (10), S. slope G. Seminoeng (12); Marta-

poera station (16). *W. Java:* Tjiboerial (Dec. 21); G. Boender and crater G. Salak (Dec. 25–26).—*1930.* Tjisoeroepan (Jan. 19), E. side *G. Papandajan* (20), Tegal Aloen Aloen and Tegal Boengbroeng (21), summit G. Papandajan (22), Tjisoeroepan (23); G. Salak above Waroengloa (March 24); *G. Papandajan* (March 28–31),[8] visiting most of the 'tegals', including Tegal Pandjang, Tegal Marioek and Tegal Kembang; Poentjak Pass with Telagasaät and Telagawarna (Apr. 6);[9] Tjisaroea Zuid (= South) (May 18);[10] Tjiboerial (May 25); *G. Patoeha:*[11] Telaga Patengan (June 7), Patoehawati (8), Kawah Poetih (8), and swamp along the road (9); Tjisaroea Zuid (July 6); *P. Dapoer,* bay of Batavia (July 12–14);[12] Koeripan (July 20); *Centr. Java: Diëng Plateau* (Aug. 5–10),[13] collecting at Telaga Tjebong (5), Telaga Balekambang (5), Telaga Pengilon (6), Telaga Warna (6), Tegal Pangonan (6), Kawah Sileri (7), swamp near kali Dolog (7), Telaga Dringoe (7), near kp. Siglagah, Kali Poetih Valley (8), Telaga Teroes (8), Telaga Loewoe (8), G. Prahoe (9), near kp. Diëng and kp. Siteroes (10); *W. Java:* lake of Tjilodong (Sept. 28); *Tjibodas–G. Gedeh–Pangrango* (Nov. 2–9); Depok (? Nov. 9); G. Tjibodas (Dec. 7); trip by car with BOOBERG from Batavia to Priok, Serang, along the W. coast of Bantam to Tjiboengoer (Dec. 31–Jan. 1, 1931).—*1931.* Proceeding (see *sub* 1930) to Pelaboehan Ratoe (S. coast) and W of the mouth of the Tjikarang near pier Tjiletoeh Estate (Tjitèspong) (Jan. 3); Telagasaät (March 1); Tjikampek (Apr. 11–12); *G. Papandajan* (May 12–18),[14] collecting on the 'tegals' *etc.;* Sitoegoenoeng (June 14); Tjibodas–Tjibeureum (July 7–21), making a trip to *Geger Proet* (between Geger Bintang and Pangrango) (18); Bolang (July 26); *G. Salak* I (Aug. 2–3); G. Pawon near Padalarang (Sept. 25).—*1932.* Tjianten Fall (Jan. 31); Depok (March 6); Salak cleft, Tjiapoes (July 31); Tjitajam (Aug. 28); Tjisaroea (Sept. 1–13), at Tjoeroeg Tjibogo, G. Semboeng, G. Mas, Mandalawangi, *etc.*—*1933.* Tjibodas (slope G. Gedeh) (Apr. 13–20); G. Boender (May 21); Tjitjadas, Sitoe Pelahlar, *etc.* (May 25); G. Kanaga (Krawang) (June 11);[15] swamp forest of Tjitjadas (June 18);[16] G. Aseupan (July 7);[15] G. Bèsèr, N of Tjiandjoer–Patjet (Sept. 3); Sindanglaja–Patjet (Sept. 4–9), collecting on the Ontbijtberg (= G. Kasoer *etc.*); G. Limo (Sept. 15);[17] G. Bèsèr (Sept. 17);[18] Sitoe Goenoeng (Nov. 19).[19] *P. Weh,* N of Sumatra: Anak Laoet *etc.* (Dec. 31).—*1934. Trip in N. Sumatra:*[20] by car from Kotaradja to Bireueun and Takengon (Aug. 27), collecting at Aloer Gloeng, W of the Goudberg and S of Sigli; sojourn at Takengon (Aug. 28–Sept. 7), collecting at Boer ni Gentella (Aug. 29), Lake Takengon (= Laoet Tawar) (30), Boer ni Bias (31), Boer ni Lintang (Sept. 1), Boer ni Telong (2), Boer ni Poepandji and Laoet Poepandji (3), Boer ni Gĕrĕdong (3–5), S. side of the lake near Oneng (7); Takengon–Lho Seumawhe (8); Lho Seumawhe and Lho Soekoen (9). *W. Java:* Tjisaroea (Oct. 21); Koeripan (Nov. 12); Tapos (Dec. 26).[21]—*1935. W. Java: Indramajoe* Regency, S of Plosokerep (March 3–4);[22] Antjol, W of Batavia (March 9); *G. Papandajan* from Tjileuleuj (Apr. 12–14);[23] *P. Haarlem,* Bay of Batavia (Apr. 28).[24] *Trip to E. Java:*[25] *G. Ardjoeno-Welirang* (June 3–7), *e.g.* at Lalidjiwo (3), G. Welirang and Kembar II (4), summit Ardjoeno (5), G. Kembar I (6), descending the S. slope of Ardjoeno to Djoengo (7); Bangil, G. Baoeng (9); *G. Tengger* (June 10), Zandzee, Roedjak, Ider Ider, Moengal Pass; Ranoe Pani (Smeroe) (11), at Telaga Regoelo, G. Dempo, Rawa Dringoe, Ajek Ajek; Ranoe Pani–Gondang Boerno (SE. slope Smeroe) (12); Ranoe Daroengan (S. Smeroe) (13); Besoek Bening (14). *W. Java:* G. Limo (Sept. 29); Tapos (Dec. 15); staying at Tjipadaroeoem (*G. Patoeha*) (Dec. 25–30), collecting at Rantja Tjibodas (25), Tamansaät (26), Sitoe Arsidin (27), Kawah Tjiwedeh (28), Telaga Patengan–Rantja Oepas–Tji Oleh Oleh–Rantja Walini–Rantja Bali (30).—*1936. W. Java: Indramajoe* Regency, Plosokerep (Jan. 4, March 15–16).[26] *Trip to Bali* (collecting some plants on the way thither, March 31, in *E. Java*) (Apr. 1–12):[27] Gilimanoek (W. Bali) and forest near Tjekik (1), Prapatagoeng, NW. peninsula (2), Poeloekan (S. Bali) (3), Tedjakoela (N. coast, 4), Gitgit (5), G. Agoeng from Moentjan (5–7, climbing the summit on the 7th); Kintamani, Lake Batoer, lava fields (8); G. Abang (9); Den Passar, and proceeding to Lake Bratan and Bedoegoel (10–12). *W. Java:* Indramajoe, Plosokerep (May 3, with VAN SLOOTEN); Megamendoeng (May 30); Tjitjadas (June 1); Goeha Gadjah (Kelapa Noenggal) (July 4 and 11);[28] G. Aseupan (Sept. 13); Tjibodas (*G. Gedeh*) (Oct. 10–18); G. Salak VI (Dec. 26).—*1937. Losir Expedition to N. Sumatra:*[29] sailing from Priok (Jan. 16); Singapore (18); Medan (19); by car to Kota Tjané (20) and from there a 3-day march to Blang Kedjeren in the Gajoe Lands; Blang Kedjeren–Penosan–bivouac I *G. Losir* (2350 m) (27); bivouac I–summit Poetjoek Angasan (2700 m)–bivouac II (2120 m) (28); crossing the watershed (2400 m), descent to the Lau Alas, and bivouac III above the Lau Alas (2240 m) (29); following the ridge of the watershed to bivouac IV (2740 m) (30); sharp crest of the last part of the watershed to Aloer bivouac V (2720 m) (31); large plateau under the central summit of the Losir, bivouac VI (3300 m) (Febr. 1–4), collecting on the central top (3500 m) (2), aloer (3), ridge to the western summit and bog-plateau round bivouac (4); *via* the central summit in the direction of the eastern summit to bivouac VII on a small 'blang' (5); from about 3000 m alt. following a burnt ridge descending to 1800 m (6–7), slope to the Lau Alas from bivouac VIII-IX (7); from the Lau Alas (1220 m)–crest Agoesan (2500 m) (8) and back to Blang Kedjeren; Blang Kedjeren–Gadjah (Febr. 15); Gadja–Oreng–Pendeng (16); Pendeng–Aer Poetih (17); ascent of *Go Lemboeh* to 1850 m (18); bivouac at 3025 m (19–22), collecting on the summit (3044 m), in the ravine (aloer), *etc.;* descent to Moss bivouac (1850 m) (23); to Fall bivouac (600 m) (24); Aer Poetih–Pendeng (25); Pendeng–Gadjah (26); *via* the watershed (c. 1700 m)–Blang Kedjeren (27); Blang Kedjeren–Paloh–Kongke (March 4); Kongke–Goempang–bivouac I *G. Kemiri* (= Boer ni Geumpang) (1360 m) (5); bivouac I to II (2800 m) (6); bivouac II to summit G. Ke-

miri (3314 m) (7), collecting near the summit (7–9); descent to bivouac II (10); *ditto* to bivouac I (11); bivouac I–Kongke (12); Kongke–Paloh (13) and back to Blang Kedjeren; Sangir–bivouac I–II (March 19–20); *Kapi solfatara fields*, Paja (21); at 1500 m alt. (22); *Pasir Lebar–Laoet Tiga Sagi* (23); *via* Aer Panas back to the main road (24). *Trip to SW. Celebes:*[30] arrival at Makassar (June 12); during the first part of the trip the collecting was done by EYMA (see there), after the stay on the summit of Latimodjong Mts EYMA descended the other side of the mountain, while VAN STEENIS and STEUP descended the former trail; back to Rante Lemo *via* the Poka Pindjang (19); by car from Rante Lemo–Pasoei–Kalosi (20); Kalosi–Makale–Rante Pao–Todjamboe (21); Todjamboe–Palopo–Singkang (22); Singkang–Makassar (23); Malino (24); Bantimoeroeng (25). *W. Java:* G. Salak, Waroengloa (July 25); Bantam, *Danau Swamp* (Aug. 9–12);[31] Wijnkoops Bay (Nov. 7);[32] Batavia North, W of the ferry across kali Angké (Nov. 21).—*1938.* Angké (Febr. 14);[33] Megamendoeng (Apr. 10); Wanasari above Soekaboemi (12–17), climbing the S. slope of *G. Gedeh* (16). *Trip to E. Java:* Lake Klakah (July 10); G. Lamongan–Taroeb (11–12), descending to Ranoe Gedang, from there to Tiris and by car to Bermi (12); coffee estate Aer Dingin–Taman Hidoep (13); Djentor bivouac (2200 m), *Jang Plateau* (14–17), making trips to Selontjeng (2900 m) (15), G. Welirang and G. Argapoera (3088 m) (16), Toendjoeng (lakes , *c.* 1900 m) (17); descending *via* Sekassor to bivouac of Kali Djeloewang (18), and the E. slope of G. Jang to Soembertengga (19). *W. Java:* Tjikampek (July 25); *P. Edam*, Bay of Batavia (Aug. 28); Tjibodas (*G. Gedeh*) (Oct. 17–24), collecting near Tjibeureum, *etc.;* Doengoes Iwoel,[34] Djasinga Estate in Bantam (Dec. 18).—*1939.* Batavia, Tjilintjing and Angké with Prof. BURRET (Apr. 23); Depok Nature Reserve (May 28); Telagawarna (May 29); *P. Doe(w)a*, Bay of Bantam (June 11); G. Telaga (watershed E of Poentjak) (June 25); *Oedjoeng Genteng* (S. coast) (June 29–July 2),[35] making trips to Tjitèspong, Tipar (1), Tjikepoeh (2), and on the way home on the banks of Kali Tjikarang (3); Tjibodas (Gedeh) (July 17–27); Salak N, (H)Ima Leutik (Aug. 20); Poentjak Pass, Telagawarna (Sept. 3); Salak crater (Sept. 17); Doengoes Iwoel, Bantam Res. (Sept. 30); Poentjak–Tjibodas (Oct. 1); *Centr. Java:* Pemalang (Oct. 15); G. Gadjah, S of Pemalang (16); Tjoeroeg Pengkawa, dessa Sikasor, Kali Pakoe near Randoedongkal (18); pass of Banjoemas–Pekalongan, above Belik (19); *G. Slamat* (N. slope and summit) (20–22); *W. Java:* Rawa Tjibitoeng, Rantja Gede near Kertasari, Priangan Res. (Oct. 24); G. Papandajan (25– . .); Poentjak–Rarahan–Geger Bintang–Tjibeureum–Tjibodas (Nov. 14); G. Telaga (Poentjak) and Telagawarna (Nov. 19); G. Telaga (Nov. 26); Tjibodas–Rarahan–Tjibeureum (Dec. 3).—*1940.* Batavia, Moeara Angké (Jan. 14); *E. Java:* Tampoewono above Lawang (Febr. 14–15); *W. Java:* above Poerasèda, S of Leuwiliang (March 3); G. Bèsèr near Patjet (March 10); Djasinga–Maribaja Forest Reserve (March 26). *Trip to E. Java:* Trètès, Popokanredjo (Apr. 16); *G. Ardjoeno*, Lalidjiwo (18), G. Kembar (19); *G. Tengger*, Tosari (20–23), Zandzee, Widodaren, and Klètak Pass; Penandjaän (24), Bermi; Taman Hidoep (*Jang Plateau*, 25); Bermi (26); *Idjen Plateau*, Sempol (Apr. 27–May 4),[36] collecting at the 'Redjengans' (28), Banjoepait (Djeding) (29), G.



VAN STEENIS

Tambak and Anjer (30), Kawah Idjen (May 1), G. Merapi (2), G. Pendil (3), G. Soeket (4); Kalisat, Bondowoso (5). *W. Java:* Megamendoeng, above the Tjièsek Fall (May 30–31); G. Papandajan (June 30); foot Geger Bintang above Rarahan (Aug. 18); Tjitalahab near Bodjong Lopang, Djampang Tengah (Oct. 13); Telagawarna (Oct. 20); islands of *Alkmaar* and *Purmerend* (Oct. 27);[37] Tjibodas (*G. Gedeh*) (Nov.), trips to Geger Bintang, Tjibeureum, Rawa Denok, Rawa Gajonggong;[38] Kromong Hills, *G. Tjeremai* (= Tjareme, summit too) (Dec.); *Centr. Java:* environs of Blora, Rembang Res., on G. Lasem (Dec. 31), *etc.*—*1941.* Rembang Residency (early in Jan.); *W. Java:* G. Gedeh–Geger Bintang (Febr. 16); Linggadjati above Cheribon, collecting at Noenoek–Tjihaoer (S of Madja, 'Het Stervende Land') (Apr. 10–12); G. Ngoentjoeng between Tjampea and Koeripan (July 13); from Ima Leutik to G. Salak I (July 15–16); G. Toetoel near Buitenzorg (July 20); *G. Gedeh*, from Malèbèr Estate (Aug. 2–3); from Tjirarak–Tjisaroea to G. Halimoen (1930 m) (Sept. 4–5); tertiary limestone hill near Tjibadak, and near Tjitalahab,[39] Djampang Tengah (Sept. 16); Tjisaroea Zuid (Sept. 20); Rawa Tembagah near Krandji (Bekasi) (Sept. 28); Depok Nature Reserve (Oct. 5); N and S of Tangerang and Solear near

Tjisoka (Oct. 10); Poentjak, Telagawarna (Oct. 12); G. Mas Estate, Poentjak (Nov. 16); G. Njoentjoeng (643 m) and G. Tendjoleat (471 m), Tjipatat Estate, Bolang (Nov. 18); Tjitalahab, Djampang Tengah (Dec. 6).—*1942.* Tjimahi, Treinkampement (July); Depok Nature Reserve (Oct. 4).—*1946.* Buitenzorg Botanic Gardens; Batavia.

COLLECTIONS. *Herb. Bog.:* > 12000 *nos*, including a small amount collected by others and numbered in his series, *viz nos* 3052–3065 *leg.* BOEDIJN, *nos* 2950–2951 *leg.* VAN DER VECHT, *no* 4438 *leg.* ECOMA VERSTEGE, *nos* 5653–5679 *leg.* KIMAH (see *sub* those collectors). *Herb. Leyden:* dupl. from *Java, Anambas,* and *Sumatra; Herb. Utrecht (Java).*

Of his more important collections the numbers run as follows: *Anambas & Natoena Islands nos* 677–1484; *W. Java,* Tjibodas–G. Gedeh–Pangrango (coll. *1928*) *nos* 1806–2156; G. Pantjar *nos* 2283–2445; *S. Sumatra nos* 3107–3990 and 4440–4445; *W. Java,* G. Papandajan (coll. *1930–35*) *nos* 4047–4159, 4161–4398, 4766–4964, 6771–6804 and others in subsequent years; *N. Sumatra* (coll. *1934*), *nos* 5764–6599; *W. Java,* Indramajoe (coll. *1935–36*) *nos* 6617–6764, 7469–7542, 8162–8219; G. Patoeha (coll. *1935*) *nos* 6861–6999, 7412–7468; *E. Java* (coll. *1935*) *nos* 7000–7411; *Bali nos* 7552–8161; *N. Sumatra* Losir Exp. *1937 nos* 8266–10101 and 10293–94 phanerogams, and *nos* 10102–10292 cryptogams; *SW. Celebes nos* 10302–10447; *E. Java* (coll. *1938*) *nos* 10631–11134; *E. Java* (coll. *1940*) *nos* 11820–12194. The *nos* 5677–79 by mistake were used twice, *viz* for plants from Sitoegoenoeng, and for some *leg.* KIMAH. The plants collected in 1941 were not chronologically numbered.

He brought living plants for *Hort. Bog.* from the *Anambas & Natoena Islands,* from *N. Sumatra* (1934), and from several minor trips in *Java etc.*

LITERATURE. (1) *E.g.:* 'On the origin of the Malaysian mountain flora' I–III (Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1934, p. 135–262, 2 fig.; *l.c.* 13, 1935, p. 289–417; *l.c.* 14, 1936, p. 56–72); 'Maleische vegetatieschetsen' (Tijdschr. K.N.A.G. 52, 1935, p. 25–67, 2 fig., 1 coloured map, 4 fotos; *l.c.* p. 171–203, 363–398, 2 fig., 6 fotos); 'Cycles of drought and reafforestation in the U.S.A. seen in the light of a new botanical hypothesis on the origin of deserts in general' (Bull. Jard. Bot. Buit. sér. 3, vol. 14, 1936, p. 50–55).

(2) C. G. G. J. VAN STEENIS: 'Botanical results of a trip to the Anambas and Natoena Islands' (Bull. Jard. Bot. Buit. sér. 3, vol. 12, 1932, p. 151–211, 11 fig.; with 'Notes on the vegetation of Djemadja' by M. R. HENDERSON); *cf.* also Trop. Nat. 22, 1933, p. 113; and 'Beklimming van den G. Ranai (op het eiland Boengoeran)' (Meded. N.I. Ver. Bergsport *no* 13, 1936, p. 24).

cf. also *sub* Lit. 40.

(3) C. G. G. J. VAN STEENIS: 'Floristische indrukken van Tjibodas' (Trop. Nat. 17, 1928, p. 199–207, fig. 1–7).

(4) C. G. G. J. VAN STEENIS: 'Schets van de flora van den G. Tjibodas bij Tjampea' (Trop. Nat. 20, 1931, p. 79–82, 3 fig.).

(5) C. G. G. J. VAN STEENIS: 'Het geslacht Tristania op Java' (Tectona 22, 1929, p. 1333–1341, 4 fig.).

(6) *cf.* report in Trop. Nat. 18, 1929, p. 211.

(7) C. G. G. J. VAN STEENIS: 'Treubia insignis GOEB. in Sumatra gevonden' (Trop. Nat. 19, 1930, p. 213–215, 3 fig.); 'Report of a botanical trip to the Ranau region, South Sumatra' (Bull. Jard. Bot. Buit. sér. 3, vol. 13, 1933, p. 1–56, 11 fig., tab. 1).

(8) C. G. G. J. VAN STEENIS: 'Eenige belangrijke plantengeographische vondsten op den Papandajan' I (Trop. Nat. 19, 1930, p. 73–91, 14 fig.); *cf.* also *l.c.* p. 51.

(9) C. G. G. J. VAN STEENIS in *l.c.* 19, 1930, p. 106.

(10) *cf.* report in Trop. Nat. 19, 1930, p. 128, 2 fig.

(11) *cf. ditto* in *l.c.* p. 219–220.

(12) C. G. G. J. VAN STEENIS: 'Schets van de flora van het eiland Dapoer (Duizend Eilanden)' (Trop. Nat. 24, 1935, p. 31–34, 6 fig.).

(13) C. G. G. J. VAN STEENIS: 'Opmerkingen over het voorkomen van Polygonum plebejum op het Diëng Plateau' (*l.c.* 21, 1932, p. 162–164, 4 fig.).

(14) C. G. G. J. VAN STEENIS: 'Polygonum vegetaties in de tropen' (*l.c.* 20, 1931, p. 163, 1 fig.); 'Enkele gegevens over het Natuurmonument Papandajan' (N.I. Ver. t. Nat. Besch. Versl. for 1929/31, 1932, p. 77); 'Eenige belangrijke plantengeographische vondsten op den Papandajan" II (Trop. Nat. 21, 1932, p. 101–158, 8 fig.); 'Fossiele bladafdrukken van den G. Papandajan' (*l.c.* 21, 1932, p. 188–191, 4 fig.).

(15) C. G. G. J. VAN STEENIS: 'Enkele opmerkingen over het bergland aan de NW. zijde van den Sangaboewana (W. Java)' (Trop. Nat. 23, 1934, p. 163–167, 4 fig.).

(16) C. G. G. J. VAN STEENIS: 'Het moerasboschje bij Tjitjadas, Res. Batavia' (*l.c.* 23, 1934, p. 105–109, 5 fig.).

(17) *cf.* report in *l.c.* 22, 1933, p. 231–232, 1 fig.

(18) *cf. ditto* in *l.c.* 23, 1934, p. 19–20, 2 fig.

(19) *cf. ditto* in *l.c.* 23, 1934, p. 39–40, 2 fig.

(20) C. G. G. J. VAN STEENIS: 'Bergen en bergtochten in de Gajoe- en Alaslanden' (Meded. N.I. Ver. Bergsport *no* 17, 1940, p. 2–14, 2 maps, 17 fotos).

(21) *cf.* report in Trop. Nat. 24, 1935, p. 72, 1 fig.

(22) C. G. G. J. VAN STEENIS: 'Iets over het landschap in Indramajoe, West Java' (Gedenkb. Dr J. P. THIJSSE, special number of the Levende Natuur July 25, 1935, p. 62–63, 2 fig.).

(23) C. G. G. J. VAN STEENIS: 'Eenige biologische waarnemingen op den Papandajan' (Trop. Nat. 24, 1935, p. 141–147, 9 fig.).

(24) *cf.* report in Trop. Nat. 24, 1935, p. 121, 2 fig.

(25) C. G. G. J. VAN STEENIS: 'Aanteekeningen over een tocht naar Oost Java' (Trop. Nat. 24, 1935, p. 122–123, 3 fig.); 'Open air hothouses in the tropics at 3100 metres altitude' (Gard. Bull. Str. Settlem. 9, 1935, p. 64–69, pl. 1); 'Openluchtbroeikassen in de tropen op 3100 m boven zee' (Trop. Nat. 25, 1936, p. 37–44, 7 fig.).

(26) C. G. G. J. VAN STEENIS: 'Voorstel voor een

natuurmonument in Indramajoe' (Versl. N.I. Ver. t. Nat. Besch. for 1935, 1936, p. 156–159, 2 fig.); 'Landschap en flora van Indramajoe' (Jubil. number Trop. Nat. Dec. 1936, p. 111–123, 21 fig.).

(27) C. G. G. J. VAN STEENIS: 'Nog iets over fumarolenplanten' (Trop. Nat. 25, 1936, p. 158–159, 4 fig.); 'Een beklimming van den Piek van Bali' (Meded. N.I. Ver. Bergsport *no* 13, 1936, p. 20, 1 fig.); 'Losse aantekeningen over de Balische flora' (Trop. Nat. 26, 1937, p. 69–78, 14 fig.).

(28) *cf.* report in Trop. Nat. 25, 1936, p. 143; and in Buitenzorg Post from July 7, 1936, p. 1.

(29) C. G. G. J. VAN STEENIS: 'On the 1937 Losir expedition to the Gajolands (Atjeh, N. Sumatra)' (Chron. Bot. 4, 1938, p. 248–249); 'Exploraties in de Gajo-Landen. Algemeene resultaten der Losir-Expeditie 1937' (Tijdschr. K.N.A.G. 55, 1938, p. 728–801, 32 fotos, 2 maps; and Bull. Mij Nat. Onderz. Ned. Kol. *no* 97), and postscript to this paper in *l.c.* 55, 1938, p. 932–933; 'Naar den hoogsten top van Atjeh' (Actueel Wereldnieuws 14, May 1, 1937, 7 pp., 10 fotos); 'De aarden buizen van de Gajolanden' (Trop. Nat. 26, 1936, p. 190–191, 2 fig.); 'Exploring the mountain flora of North Sumatra' (Chron. Bot. 4, 1938, p. 169); report of a lecture on the expedition in Nat. Tijdschr. N.I. 98, 1938, p. 213–214; 'Ecological observations on the genus Pleiocraterium' (Rec. Trav. Bot. néerl. 36, 1939, p. 446–448); 'Bergen en bergtochten in de Gajoe- en Alaslanden' (Meded. N.I. Ver. Bergsport *no* 17, 1940, p. 2–14, 2 maps, 17 fotos).

cf. also *sub* 40.

F. A. VAN BAREN: 'Petrografisch en mineralogisch onderzoek van enkele gesteenten en zanden van den Gajo Loeeus (Atjeh)' (Proc. Kon. Akad. Wet. Amsterdam 42, 1939, p. 79–82, w. map).

(30) C. G. G. J. VAN STEENIS: 'Naar den hoogsten top van Celebes' (Actueel Wereldnieuws Sept. 4, 1937, 5 pp., 6 fig.); 'Een beklimming van den Latimodjong (Zuid Celebes)' (Meded. N.I. Ver. Bergsport *no* 15, 1937, p. 1–4, 4 fotos); 'Verdrinkend bosch' (Trop. Nat. 26, 1937, p. 191–192, 2 fig.).

cf. also F. K. M. STEUP in Trop. Nat. 27, 1938, p. 140–146, 10 fig.

(31) C. G. G. J. VAN STEENIS: 'Het Danoe-meer' (11e Versl. N.I. Ver. t. Nat. Besch. 1939, p. 214–222, fig. 53–58).

(32) *cf.* report in Buitenzorg Post from Nov. 9, 1937; and in Trop. Nat. 27, 1938, p. 75–76, 3 fig.).

(33) C. G. G. J. VAN STEENIS: 'Het gelam bosch bij Angké-Kapoek (Batavia)' (Tectona 31, 1938, p. 889–901, 6 fig.).

(34) *cf.* 11e Versl. N.I. Ver. t. Nat. Besch. 1939, p. 313–314.

(35) C. G. G. J. VAN STEENIS: 'Kieming van zaden van Mimosa invisa na brand' (Trop. Nat. 28, 1939, p. 191, 1 fig.); 'Eikels in de drift op het strand bij Oedjoeng Genteng' (*l.c.* 29, 1940, p. 74).

(36) C. G. G. J. VAN STEENIS: 'Vegetatieschetsen van den Idjen' I–II (Trop. Nat. 29, 1940, p. 157–161, 180–184, 11 fig.).

(37) C. G. G. J. VAN STEENIS: 'Eikels in drift op het eiland Purmerend' (Trop. Nat. 29, 1940, p. 198–199).

(38) C. G. G. J. VAN STEENIS: 'Het veentje van Rawa Gajonggong bij Tjibeureum boven Tjibodas (N. Gedeh)' (Trop. Nat. 30, 1941, p. 170–172, 4 fig.).

(39) *cf.* Trop. Nat. 30, 1941, p. 179–181.

(40) J. J. SMITH: 'Die Orchideen der Anambas- und Natuna-Inseln' (FEDDE Repert. 30, 1932, p. 327–336); orchids from Sumatra 1929 in FEDDE Repert. 32, 1933.

C. E. B. BREMEKAMP: 'Pleiocraterium genus novum Rubiacearum Hedyotidearum' (Rec. Trav. Bot. néerl. 36, 1939, p. 438–445).

H. N. DIXON: 'High alpine mosses from Sumatra' (Ann. Bryol. 12, 1939, p. 48–56), with postscript by VAN STEENIS (*l.c.* p. 56).

G. KÜKENTHAL: 'Neue Cyperaceen aus dem Malayischen und Papuanischen Gebiet' I (Bull. Jard. Bot. Buit. sér. 3, vol. 16, 1940, p. 300–323).

O. POSTHUMUS made a MS. list of Atjeh ferns, 1937.

J. J. SMITH: 'List of Orchidaceae collected in 1937 by Dr C. G. G. J. VAN STEENIS in Atjeh (North Sumatra)' I–II (Blumea 5, 1943, p. 316–323; *l.c.* 5, 1945, p. 700–708).

BIOGRAPHICAL DATA. Wie is dat? ed. 3–4; BACKER, Verkl. Woordenb., 1936.

Steenstra Toussaint, A. J. D.

physician who founded a health ressort at Gadok, S of Buitenzorg, (*W. Java*) in *1853*.

COLLECTIONS. *Java* plants in *Herb. Leyden* (in the list of contributors to that Herbarium, erroneously listed under STEINSTRA TOUSSAINT).

Steere, Joseph Beal

(1842, Rollin, Michigan, U.S.A.; 1940, Ann Arbor, Mich., U.S.A.), B.A from Michigan in 1868, B. of Laws degree in 1870, and the honorary degree Ph.Dr Michigan in 1875; ornithologist who travelled in S. America, in China and Formosa from 1870–73, and in the Philippines and the Moluccas from 1874–75; from 1876–93 Instructor and later Asst Professor and Professor of Zoology in the University of Michigan. He led a scientific expedition to Brazil in 1879 and visited the Philippines once more in 1887/88.

Author of 'Fifty new species of Philippine Birds', *etc.*

Some ferns were named after him.

ITINERARY. *Philippines, 1874–75.*[1] Leaving Hongkong (May 1874) for Manila, *Luzon;* crossing the island by way of Mauban and Lucban to the Pacific (Mt Ma-hay-hay near Laguna Bay); *Palawan* eastside, Puerto Princesa (by steamer in July, staying a month); crossing *Balabac* (Aug.–Sept.), remaining a month; SE. corner of *Mindanao*, staying for one month and a half at Zamboanga and Dumalon; *Basilan* (2 weeks); *Mindanao:* Zamboanga, Dumalon, and trip to the island of *Santa Cruz* (in Davao Gulf); *Luzon:* Manila (few days in Dec.); *Panay*, visiting Ilo Ilo and mountains in the interior (Dec.); *Guimaras; Negros; Zebu* (= *Cebu*); *Negros; Bohol; Cebu; Luzon:* Manila, leaving in April *1875* for *Singapore; Moluccas: Amboina* (= *Ambon*),[3] staying about 20 days, making some

trips in the hills; *Ternate* (July).—*Philippines, 1887–88.*[2] *Paragua* or *Palawan* (Aug.–Sept. *1887*), *Mindanao*, Zamboanga (Oct.), *Basilan* (Nov.), *Mindanao* (Dec.), *Guimaras* (Dec.), *Panay* (Jan. *1888*), *Negros* (in the mountains) and *Siquijor* (Febr.), *Cebu* and *Bohol* (March), *Samar* and *Leyte* (Apr.), *Masbate* and *Marinduque* (May), *Mindoro* (June), *Luzon* (July).

COLLECTIONS. *Herb. Univers. Michigan*, ferns only;[4] dupl. in *Herb. Kew:* Peru, *Philippines*, 170 ferns (acq. 1876). His collections include ferns from the *Moluccas.*[3]

LITERATURE. (1) J. B. STEERE: 'Expedition to the Philippines' (Nature 14, 1876, p. 297–298); 'An American naturalist in the Far East. Excerpts from letters written from Formosa, the Philippines, and the East Indies during the years 1874 and 1875' (Michig. Alumn. Quarterly Rev. 45, *no* 9, 1938, p. 47–61 + portr.).

(2) J. B. STEERE: 'The Philippine Islands' (Nature 39, 1888, p. 37–38); 'A month in Palawan' (Amer. Naturalist 22, 1888, p. 142–145); 'Six weeks in southern Mindanao' (*l.c.* p. 289–294); 'Observations made in the central Philippines' (*l.c.* p. 622–626, 779–784); 'The Philippine Islands' (Science 12, 1888, p. 84); 'A month in the eastern Philippines' (Amer. Naturalist 23, 1889, p. 102–107); 'Notes from the Philippine Islands' (Bull. Torrey Bot. Club 16, 1889, p. 217–218); 'A list of the Birds and Mammals collected by the STEERE expedition to the Philippines, with localities, and with brief preliminary descriptions of supposed new species' (Ann Arbor 1890, 30 pp.); 'A visit to the Philippine Islands of Masbate and Marinduque' (Amer. Naturalist 25, 1891, p. 731–734); 'The island of Mindoro' (*l.c.* 25, 1891, p. 1041–1054). Ornithological results in Ibis 3, 1891, p. 301–316.

(3) Collected *Drymoglossum fallax* v.A.v.R., *cf.* C. CHRISTENSEN in Dansk Bot. Ark. 6, 1929, p. 86; *cf.* also *sub* 4, HARRINGTON *l.c.*

(4) M. W. HARRINGTON: 'The tropical ferns collected by J. B. STEERE in the years 1870–75' (Journ. Linn. Soc. Bot. 16, 1878, p. 25–37).

HOOK. Icon. Plant. 37, 1886/87, *t.* 1623, and 1664.

E. B. COPELAND: 'Notes on the STEERE collection of Philippine ferns' (Philip. Journ. Sci. C. Bot. 2, 1907, p. 405–407); 'The Philippine ferns collected by J. B. STEERE' (*l.c.* 60, 1936, p. 19–25).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; portr. in Michig. Alumn. Quarterly Rev. 45, *no* 9, 1938, p. 49); Ann. Rep. Nat. Res. Counc. P.I. 1940–41, p. 124.

Steffens, H. F. (or ? F. C.)

German consul at Manado (*N. Celebes*), who lent SCHLECHTER a helping hand during the latter's botanical investigation of the Minahassa. He had orchids collected in the vicinity of Manado, in the years *1910–11.*[1]

Several orchids were named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. *Herb. Berl.* (with *Herb.* SCHLECHTER).

LITERATURE. (1) *cf.* SCHLECHTER in FEDDE Repert. 21, 1925.

Stehn, Charles Edgar

(1884, Altona, Germany; † between 1940–45), studied geology at Karlsruhe and Bonn, taking his Ph.Dr's degree in the latter university in 1914. After having been employed as war-geologist from 1914–18, and subsequently in various geological institutions at Bonn, he went to Java towards the end of 1921 in the employ of the Mining Department of the D.E.I. Before long he was placed at the disposal of the leader of the Volcanological Service, of which he was in charge himself since 1925. In May 1940 he was interned on account of his German nationality and Nazi sympathies, and was later transported to Br. India.

COLLECTIONS. *Herb. Bog.:* some plants from G. Papandajan (*W. Java*) (Dec. *1929* and Jan. *1930*), and occasionally some numbers.

Stein, Miss E.

and Miss A. L. VON GRAEVENITZ (see there) stayed in *Java* for a few months in *1907* to study the tropical flora and to collect material (*cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 32).

Stein, Georg Hermann Wilhelm

(1897, Ziltendorf, Güben, Germany; x), teacher at secondary schools, self-educated in natural sciences, specially interested in zoology and geology. He travelled in the eastern part of the Malay Archipelago;[1] unfortunately his diaries were lost during war years and his narrative will never be completed.

He made botanical collections too; some plants were named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

ITINERARY. *1931. W. New Guinea.*[1] In the beginning of the year *via Waigeo(u)* to Manokwari; *via Miosnom* (= *Mios Noem*) (Febr. 17) to the island of *Japen* (or Jobi), Seroei (18), staying 7 weeks on the island, the highest bivouac being at 1000 m alt.; *Numfor* (= *P. Noemfoor*) (short stay); Manokwari; *Waigeo(u)* (May 6–June 16): sailing into Majalibit Bay, Lupintol, and crossing the lake to kp. Warmek (staying from May 9–18); mountainous hinterland of Warmek (20–28); Lam-Lam Mts in the N. part of the island (May 31–June 5), and visiting kp. Liunsok and Lupintol; back at Manokwari, from where *via Numfor* and *Japen* (Seroei) (July 6–17) to the S. point of Geelvink Bay, Wainami (= Nabire); by proa along the coast to the mouth of the Wanggar, ascending it for 6 days; march through the central mountains (setting out July 28), crossing the Waissai and the Menoo, making camp on the latter river; along the spur of the Weyland Mts, the G. Kunupi; while his wife stayed in bivouac, he went for some time to G. Sumuri; back in Kunupi bivouac (1500 m); about the end of Oct. returning to the coast, Wanggar (staying 16 days); by proa to Wainami; Manokwari; *Ternate*, from where sailing for the *Lesser Sunda Islands.—1932. Timor:* Tjamplong (Jan. 26), G. Moetis (Febr. 18–March 6); Niki-Niki, Soepoel (March); *Port. Timor:* Mt Ramelau (= Fatamailau) (Apr. 30–May 4). Making zoological collections in *Sumba.*

COLLECTIONS. *Herb. Berl.:* 623 *nos* from *W. New Guinea and neighbouring islands*, 607 *nos* from *Timor* (purch. 1931/33); the latter evidently numbered in continuation of the New Guinea collection.

The collection was partly elaborated.[2]

LITERATURE. (1) G. STEIN: 'Eine Forschungsreise nach Niederländisch-Ostindien. 1. Teil Neu Guinea' (Journ. f. Ornith. Berl. 81, 1933, p. 253–310).

For data on Waigeo *cf.* also Novit. Zool. 38, 1932, p. 129–130.

(2) L. DIELS: 'Matoniacea nova papuasica' (Notizbl. Berl. Dahl. 11, 1932, p. 311).

Palmae by BURRET in Notizbl. Berl. Dahl. 11, 1933, p. 704–713.

Orchidaceae by J. J. SMITH in 'Beitr. Flor. Papuas.' 20 (= ENGL. Bot. Jahrb. 66, 1934, p. 161–215).

I. RENSCH: 'Farne und Barläppe der Sunda-Expedition RENSCH (Unter Beziehung einer Aufsammlung G. STEIN's von Timor)' (Hedwigia 74, 1934, p. 224–256, pl. 7).

J. VON MALM: 'Einige bemerkenswerte Arten aus den Steinschen Sammlung aus Timor' (FEDDE Repert. 41, 1937, p. 295–296).

In 'Beitr. Flora Papuasiens' (ENGL. Bot. Jahrb. 1934→).

Steinmetz, J.

Major of Engineers at Padang, *Sumatra West Coast.*

COLLECTIONS. He sent living and dried material of gutta-percha trees to the 'Natuurkundige Vereeniging' at Batavia in *1852*. The said material was probably forwarded to *Herb. Bog.;* LAM cites a *Palaquium gutta* BURCK collected by STEINMETZ at Pariaman, *Sumatra West Coast* (*cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 7, 1925, p. 31).

Steinstra Toussaint, *cf.* STEENSTRA TOUSSAINT.

Stephan, Dr Emil

(1872, Glatz, Silesia, Germany; May 25, 1908, Namatanai, New Ireland, Bismarck Archipelago), studied medicine at several universities, and was appointed fleet-surgeon in 1900. In this function he joined several German expeditions, *viz* to China (1900–01), the Bismarck Archipelago in the 'Möwe' (1903–04),[1] and to the Pacific (incl. Bismarck Arch.) (1907–08). He was leader of the latter expedition, which made use of the 'Planet'. He made important ethnological collections.

Stephansort was *not* named after him.

COLLECTING LOCALITIES. *1907–08.*[2] During the *marine expedition to the Pacific*, he collected in the *Bismarck Archipelago*, in *Neu Mecklenburg* (= *New Ireland*). In Oct. 1907 he arrived at Simpsonhafen; one of the other members was SCHLAGINHAUFEN (see there for itinerary *etc.;* see also *sub* A. FR. KRAEMER). In May 1908 he fell ill during a trip from Muliama to Namatanai, and was transported by boat from Kudukudu (May 24) to the latter place, where he died shortly after.

COLLECTIONS. *Herb. Berl.:* 15 *nos* of siphonogams from *New Ireland* (coll. 1907–08).

In 1904 evidently no plants were collected.

LITERATURE. (1) E. STEPHAN & FR. GRAEBNER: 'Neu Mecklenburg (Bismarck Archipel)' (Berlin 1907).

(2) *cf.* PETERM. Mitt. 53, 1907, p. 292.

BIOGRAPHICAL DATA. Globus 94, 1908, p. 114 and *l.c.* 95, 1909, p. 81; Mitt. a. d. Deutsch. Schutzgeb. 21, 1908, p. 219; Deutsch. Kolon. Blatt 19, 1908, p. 1011–1012.

Stephens, Arthur Bligh

(1855, England; 1909, Perak, Malay Peninsula), planter and then (1895) Forest Officer in Perak, *Malay Peninsula;* later Deputy Conservator of Forests (1897–1909);[1] he collected forest trees in Perak.

Cymbidium stephensii RIDL. was named after him.

COLLECTIONS. *Herb. Kuala Lump.*

LITERATURE. (1) Author of 'Precocious coconuts, with note by H. N. RIDLEY' (Journ. Str. Br. Roy. As. Soc. *no* 31, 1898, p. 103–104).

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; BACKER, Verkl. Woordenb., 1936.

Stephenson

is cited as the collector of a *Piperacea* at Sungei Ugong in *P. Penang* by C. DECANDOLLE (in Rec. Bot. Surv. Ind. 6, 1912, p. 27).

Steup, Ferdinand Karel Marie

(1898, Indian Ocean, 8° 26 N. 72° E.; x), was educated at the Agricultural College at Wageningen, Holland; since 1921 Forest Officer in D.E. Indian Government service, successively stationed in Java, S. Sumatra (Palembang and Tandjong Karang) from 1922, and since April 1928 in Celebes (first at Manado, since 1935 at Makassar). In August 1938 he was transferred to the Riouw Archipelago (Tandjong Pinang); at present Inspector of the Forest Service, Batavia.

Author of several papers, including some on the vegetation types of Celebes.[1]

Podocarpus steupii WASSCH. was named after him.

COLLECTING LOCALITIES. *1921. Java* (lichens).—*1927. Centr. Sumatra:* Djambi.—He also collected lichens in Sumatra.—*1929–34.*[2] *N. Celebes:* Bolaäng Mongondow Subdivision; *P. Lembeh* (Tondano) (Aug. 16, *1932*); environs of Manado; Boalemo subdivision (Minahassa);[3] G. Klabat; Gorontalo; *Centr. Celebes:* Paloe Valley (*1929*);[4] subdivisions of Poso and Kolonedale.—*1936–37.*[5] *SW. Celebes:* Lompobatang (*1937*); *Centr. Celebes:* Rongkong region, near Limboeng, and Porio (Masamba) (1937).—*1938–42. Riouw Archipelago.*

COLLECTIONS. *Herb. Bog.*, dupl. partly numbered in the F.R.I. (*cf. sub* Forest Research Institute, Buitenzorg) series. Many *Celebes* plants, the *nos* 151–181 from G. Klabat, the *nos* 204–228 from Rongkong region. In *Herb. For. Res. Inst. Buitenzorg:* 14 *nos* from Djambi (*Centr. Sumatra*, 1927), and *Celebes* plants; *Herb. Pasoer.:* 20 *nos* of ferns from *N. Celebes* (pres. 1931). *Java* lichens were presented to DU RIETZ (see there).

LITERATURE. (1) F. K. M. STEUP: 'Over vegetatietypen op Celebes' (Nat. Tijdschr. N.I. 98, 1938, p. 283–294); 'Over Vegetatietypen op Celebes' (Hand. 8e N.I. Natuurwet. Congr. 1939, p. 421–423).

(2) F. K. M. STEUP: 'Bijdragen tot de kennis der



STEUP

bosschen van Noord- en Midden Celebes' (several papers in Tectona vols 23–26, 1930–33); 'Botanische aanteekeningen over Noord Celebes' I–IV (Trop. Nat. 22, 1933, p. 109–111; *l.c.* 23, 1934, p. 61–63; *l.c.* 24, 1935, p. 186–189; *l.c.* 25, 1936, p. 29–31); 'Het ebbenhout in de Res. Menado' (Tectona 28, 1935, p. 95–107).

Author of numerous typed reports on N. Celebes trips (1928–34), in the Forest Research Institute, Buitenzorg.

(3) F. K. M. STEUP: 'De lasibosschen van de onderafd. Boalemo (Minahassa)' (Tectona 28, 1935, p. 95–107).

(4) F. K. M. STEUP: 'Plantengeographische schets van het Paloe-dal' (Tectona 22, 1929, p. 576–596).

(5) Some typed reports (1936–37) in Forest Research Institute, Buitenzorg.

F. K. M. STEUP: 'Vegetatieschetsen uit Celebes' (Jubil. number Trop. Nat. 25, 1936, p. 42–45, 6 fig.); 'Vegetatieschetsen uit Zuid Celebes' (Trop. Nat. 27, 1938, p. 140–146, 10 fig.).

Stevens

is cited as the collector of *Burmannia disticha* L. in Mowless Distr., Mt Misim (*E. New Guinea*) (*cf.* JONKER, Monograph of the Burmanniaceae, Thesis, Utrecht 1938, p. 120). The said specimen in GRAY *Herb.*, Cambr. (Mass.).

Stevens, Frank Lincoln

(1871, Syracuse, N.Y., U.S.A.; 1934, ? Urbana, Ill., U.S.A.), plant pathologist, took his Ph.D. in 1900 at Chicago; subsequently granted a travelling fellowship, spending a year in Europe; upon return appointed Instructor in Biology at North Carolina State College, in the following year Professor of Botany and Vegetable Pathology; in 1912 Dean Coll. Agric. University of Porto Rico; from 1914 onwards Professor at Illinois; from *1930–31* Visiting Professor of Agriculture at Los Baños, College of Agriculture, *Luzon*, *Philippines*, arriving at Manila on June 23, 1930.

He made several collecting trips to various tropical countries.

COLLECTIONS. From Hawaii and the *Philippines* in *Herb. Univ. Michigan* (pres. *c.* 1938) (*cf.* Chron. Bot. 5, 1939, p. 307). He collected mostly *Fungi*.

BIOGRAPHICAL DATA. Philip. Agric. 19, 1930, p. 199–202 + portr.; Amer. Men of Sci. 1933; Science 1934, p. 263, 419–420; Science 80, 1934, p. 263, 419–420; Chron. Bot. 1, 1935, p. 318 + portr.

Stevens, Hrolf Vaughan

(† 62 years old on Apr. 29, 1897, Kuching, Sarawak), anthropologist-ethnologist who made a voyage to the Malay Peninsula under the auspices of the RUDOLF VIRCHOW Institute and of the Kön. Mus. f. Völkerkunde.[1]

COLLECTING LOCALITIES. *Malay Peninsula. About 1892* he visited all parts of the Peninsula, collecting in S. Trengganu near the Kemaman River (*1890*).—He made trips in Sarawak, *NW. Borneo* too, evidently also in *1897*.

COLLECTIONS. *Herb. Sing.*: useful plants of the wild Sakai tribes (pres. 1894). No botanical material from *Borneo* known to the present author.

His ethnological collections are preserved at Berlin and Leningrad.

LITERATURE. (1) *cf.* Verh. Berl. Anthropol. Ges. 1892, p. 829–836 (exclusively dealing with ethnology, no dates and localities mentioned).

cf. also 'Anthropologische Bemerkungen' (Zeitschr. f. Ethnol. 29, 1897, p. 173); with R. J. WILKINSON: 'Papers on Malay Subjects' Suppl., 1910, 'The aboriginal tribes', p. 3–5.

Important data on plant poisons in 'Materialien zur Kenntnis der wilden Stämme auf der Halbinsel Malâka' (Veröff. Mus. Völkerk. Berl. vol. 2, Heft 3/4, 1892; and in *l.c.* 3, Heft 3/4, 1894).

BIOGRAPHICAL DATA. Journ. Str. Br. Roy. As. Soc. *no* 30, 1897, p. xxi; BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

Stewart, C.

is cited by F. VON MUELLER as the collector of *Gmelina macrophylla* BTH. on *P. Saibai*, S of New Guinea.[1]

A certain STEWART, naturalist, joined the expe-

dition of the 'Melbourne Age' (see below) under command of JOHN STRACHAN.[2]

H. GREFFRATH cites a C. STEWART who left Thursday Island in April 1886 in company with 4 others, to explore the region W of the Fly River;[3] no further details known to me. Probably the 3 cited STEWARTS are identical.

ITINERARY. *Expedition of the 'Melbourne Age', 1884.*[2] Leaving Melbourne for *Thursday Isl.* and from there proceeding (Apr. 22) to *Travers Isl., Banks Isl., Jervis Isl.* (24); trip to the opposite mainland of *SE. New Guinea:* mouth of the Mai Kusa (= Baxter River) (May 7); ascending the Mai Kusa part of the way; when going downstream there was a skirmish with the natives and as a result they had to abandon their boat; crossing Gregory River; reaching the coast opposite P. Saibai (29); on June 3 a boat of the Mission called for them; *Thursday Isl.* (9).—*1886.* Leaving Thursday Island (Apr.) to explore the region W of Fly River in *S. New Guinea.*[3]

LITERATURE. (1) *cf.* Descr. Not. Pap. Pl. pt 8, 1886, p. 46.

(2) J. STRACHAN: 'Explorations and adventures in New Guinea' (Proc. Geogr. Soc. Australasia Queensl. Br. 1885–86; London 1888).

(3) *cf.* Deutsche Rundschau f. Geogr. u. Stat. Wien 9, 1887, p. 443 (*non vidi*); Globus 50, 1886, p. 80.

Stewar(d)t, Ivan

gardener who accompanied the Russian voyage of the ship 'Krotky' round the world, under Capt. Baron F. P. WRANGEL, *1825–27.*[1]

COLLECTIONS. He made botanical collections in Australia, Hawaii, Brazil, Rio de Janeiro, St Helena, Chili, Valparaiso, Cape of Good Hope, Tahiti, Cape Verde Islands, *Sumatra, Philippines* (Manila, *Luzon*), Pacific Islands (Sandwich *etc.*), and N. America; *cf.* also *sub* CHR. PETERS. Collecting was done under the supervision of the physician of the expedition, Dr A. F. KYBER.

The Manila (*Luzon*) collection amounts to 350 plants, in *Herb. Bot. Gard. St Petersb.* (= *Leningrad*).[2]

Living plants and seeds were brought home too.

LITERATURE. (1) *cf.* Gartenflora 22, 1873, p. 140; Acta Hort. Petrop. 2, 1873, p. 182, 238; ENGL. Bot. Jahrb. 9, 1888, p. 453.

(2) *cf.* LIPSKY, Gerbariĭ Imperatorskago S. Petersburgskago Botanicheskago *etc.*, 2nd ed., 1908, p. 164 and 192.

Steyn Parvé

a resident of Djokja in *Centr. Java*, sent plants to Buitenzorg in *1874.*

Stier, David Andreas

(1683, Helmstadt, Bavaria, Germany; May 8, 1731, Java), a resident of Batavia, as early as 1714; in 1718 City-Administrator, in 1720 sergeant of the Civic Guard, from 1724–26 Sheriff; from 1729 till his death delegate over the natives, besides for help and assistance in mining on Mt Parran. He had some knowledge of plants and Greek, and might have been a student for some years. His appointment in 1729 was certainly due to his friendship with the then Governor General DURVEN, a man of dubious character. STIER finally lived on Pondokpoetjoeng estate. In 1729 and 1730 (August) he paid a visit to the mining on Mt Parran (?), the latter time proceeding to the S. coast, at Wijnkoops Bay.

COLLECTIONS. SEBA mentions that ANDREAS or ANDRE STIER, a friend of his, sent plants from the *D.E.I.* to him (*cf.* Thesaurus 1, 1734, p. 39).

BIOGRAPHICAL DATA. DE HAAN, Priangan, 1, 1910, Personalia p. 37–40.

Stigter-de Vos tot Nederveen Kappel, Anna Elisabeth Marie

(1877, Wemeldinge, Z., Holland; x), wife of the then Director of the Lunatic Asylum at Buitenzorg, collected *Pterisanthes cissoides* BL. in the vicinity of Buitenzorg (Jan. *1929*), *W. Java;* specimen in *Herb. Bog.*

Stij . . ., *cf.* STY . . .

Stockhardt

of Madioen, *E. Java*, sent plants to *Buitenzorg* in *1873.*

Stocks

is cited as the collector of *Neuropeltis maingayi* PETER (*cf.* Blumea 3, 1938, p. 84) in *Malacca*, material of which in *Herb. Kew.*

A certain Dr STOCKS was the collector of valuable collections from Sind and Beluchistan (*cf.* HOOKER & THOMSON, Flora Indica 1, 1855, p. 70). He might have collected in the *Malay Peninsula* too, or otherwise he must have got the specimen from somebody else, as the cited species is endemic in the Malay Peninsula.

Stok, Johan Ewald van der

(1880, Buitenzorg, Java; x), was educated at Wageningen; since 1903 Assistant of the Java Sugar Experiment Station at Pasoeroean; from 1909–10 Assistant Chief of the Experiment Station for Rice *etc.* at Buitenzorg; in 1910 appointed Director of the said Experiment Station at Pasoeroean; in 1917 Inspector of Agriculture at Buitenzorg; in 1920 Chief of the Agricultural Division of the Department of Agriculture *etc.;* since 1925 professor at Wageningen Agricultural College.

COLLECTIONS. In *1915* he sent a grass from *E. Java* to *Herb. Bog.*

Stokey, Alma Gracey

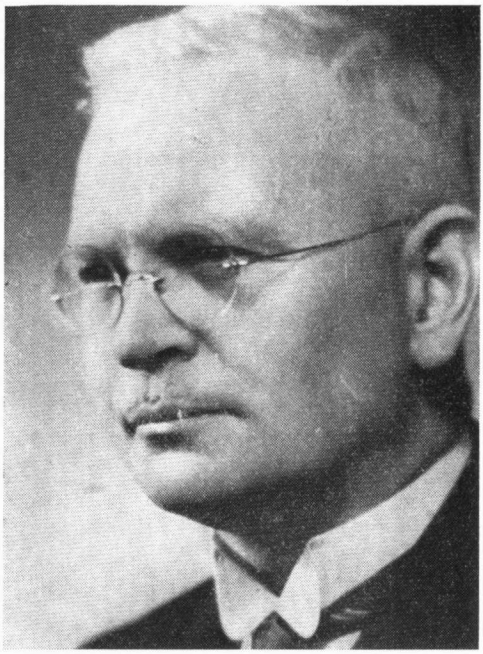
(1877, Canton, Ohio, U.S.A.; x), took her Ph. D. at Chicago in 1908; since 1916 Professor of Botany, Mount Holyoke College, South Hadley, Mass. (U.S.A.), worked in the Foreigners' Laboratory at Buitenzorg, *W. Java*, from May–July *1931*, and once more in *1937.*[1] She studied the germination of fern spores and the development of the prothallia, especially those of representatives of more primitive families.[2]

COLLECTIONS. She collected ferns at Tjibodas,

W. Java (July *1937*). The collection was dried at the Buitenzorg Herbarium, identified by O. POSTHUMUS, and subsequently sent to her.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 51.

(2) A. G. STOKEY: 'Spore germination and vege-



STOMPS

tative stages of gametophytes of Hymenophyllum and Trichomanes' (Bot. Gazette 101, 1940, p. 759–790); 'The gametophyte of Dipteris conjugata' (*l.c.* 106, 1945, p. 402–411, 53 fig.).

BIOGRAPHICAL DATA. Amer. Men of Sci. 1938.

Stoliczka, Ferdinand

(1838, Hochwald, Moravia, Austria; June 19, 1874, Shayok, Ladak, Br. India), was educated at Prague, and at the University of Vienna, where he graduated Ph.Dr. In 1861 he joined the Austrian Geological Survey, and in the next year was appointed palaeontologist of the Geological Survey of India. He made several Himalayan and other expeditions. During a 3-month leave he visited and explored portions of Burma, the Malay Peninsula, the Andamans and Nicobar Islands. In 1873 he was selected as naturalist and geologist to accompany a mission dispatched by the Indian Government to Yarkand *etc.;* he died on the home voyage.

COLLECTING LOCALITIES.[1] He left Calcutta on July 31, *1869*, travelled *via* Akyab and Rangoon, spent 16 days each at Moulmein and in *Penang*, *i.e.* in August he visited and collected in *Penang* (16 days), *Malacca* (1 day), and *Singapore* (8 days). He then proceeded *via P. Penang* to the Nicobars and the Andamans, reaching Calcutta by the 14th of October.

COLLECTIONS. *Herb. Vienna:* '*Plantae Indiae orientalis*' (445). KURZ sent material of *Sapindaceae* collected by STOLICZKA to RADLKOFER for identification;[2] *probably* preserved in *Herb. Calcutta.*

A Czech paper[3] could not be consulted, but it probably has nothing to do with his botanical collections.

LITERATURE. (1) *cf.* in 'Memoir' (cited below *sub* Biogr. Data) and in a letter published in Verh. Geol. Reichsanstalt Wien 39, 1870, p. 23–28.

(2) *cf.* Act. Congr. internat. bot. *etc.* à Amsterdam en 1877, 1878, p. 39 of the reprint.

(3) J. PALACKY: 'Reliquiae Stoliczkianae' (in Nàkladem král-ceskí společnosti nank, due 29, 1881) (*non vidi*).

BIOGRAPHICAL DATA. Nature 10, 1874, p. 185–186; Memoir of the Life and Work of... by V. BALL in Scient. Res. Second Yarkand Mission, London, 1886, 36 pp., incl. bibliogr.; BUCKLAND, Dict. Ind. Biogr., 1906.

Stomps, Theodoor Jan

(1885, Amsterdam, Holland; x), studied biology in the University of Amsterdam, taking his Ph. Dr's degree in 1910; he was appointed Extraordinary Professor of Cytology at Amsterdam in 1910, Professor of Botany in 1919, and Director of the Botanic Garden there in 1924. After World War II he was deprived of his office.

He paid a visit to Ceylon and the Dutch East Indies in 1923, occupying himself chiefly with the fixation of material for embryological and cytological investigations in the Foreigners' Laboratory at Buitenzorg.[1]

Most of his papers deal with heredity. One publication published on his voyage to the tropics deals with Ceylon,[2] another with the tree limit in the tropics.[3]

VISITED LOCALITIES. June–Oct. *1923. W. Java:* spending a great deal of his time at Buitenzorg in the Botanic Garden; the Mountain Garden at Tjibodas; Bandoeng and environs; Garoet, G. Papandajan; the south coast; the coral reefs in the Bay of Batavia; *Centr. Java; E. Java:* Pasoeroean, Idjen Plateau, Tengger Mts. He also made a trip through *Sumatra,* collecting in *West Coast:* at Poentjak Boekit near Lake Manindjau (Sept. 28); Karbouwengat, Fort de Kock (29); Pajakoemboeh near Kloof van Harau and Aer Poetih (30); and in *Sumatra East Coast:* Medan, Deli, Padang Boelan, fallow tobacco fields (Oct. 11); Medan, Deli, Tjinta radja (11–12); Medan, Deli, Loeboek Dalem (12); going from Brastagi *via* Kabandjahe to Kota Tjane along the Alas Road, on G. Sibajak (up to the summit), and in the Sibolangit Garden (no dates mentioned).

COLLECTIONS. *Herb. Amsterdam: c.* 270 *nos* from *Sumatra* (59 from the *West Coast*, 212 from the *East Coast*); probably from *Java* too. The *Sumatra* collection is not yet inserted in the General

Herbarium, and was recently preliminary identified by Dr C. G. G. J. VAN STEENIS.

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 45–46; and BOEDIJN in *l.c.* p. 107, 110.

(2) TH. J. STOMPS: 'Patana's, alpine Grassfluren auf Ceylon' (Veröff. Geobot. Inst. Rübel, Zürich 1925, p. 252–264).

(3) TH. J. STOMPS: 'Baumgrenze und Klima-Charakter in den Tropen' (Verh. Klimatol. Tagung, Davos 1925).

BIOGRAPHICAL DATA. Levende Natuur 41, 1936, p. 1 + portr.; Wie is dat? ed. 1–4; portr. in Chron. Bot. 1, 1935, p. 27; Ned. Kruidk. Arch. 49, 1939, p. 449; *l.c.* 50, 1940, p. 201; *l.c.* 51, 1941, p. 370.

Storm van 's Gravesande, Frans Lodewijk Karel (1856, Palembang, Sumatra; 1933, The Hague, Holland), was educated in Holland, and in 1878 appointed civil officer in the Dutch East Indies. Since 1901 Assistant Resident at Padang Pandjang (Sum. West Coast), since 1906 till his retirement in 1909 Resident of Palembang (S. Sumatra). Orchid amateur.

Bulbophyllum stormii J.J.S. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. He sent living orchids from the Padang Highlands in *Sumatra West Coast* Res. (Fort de Kock, Padang Pandjang, *etc.*) to *Hort. Bog.* in the years *1897*, and *1904–05*. In several instances dried material is preserved in *Herb. Bog.*[1]

LITERATURE. (1) *cf.* Icon. Bogor. 3, *t.* 220 and 224.

Stortenbeker
planter on Pondok Gedeh Estate near Buitenzorg, *W. Java*, sent material of a *Rafflesia* (coll. June 23, *1933*) to *Herb. Bog.*

Stoutjesdijk, Johan Anthon Jan Hendrik (1896, Haarlem, Holland; Sept. 18, 1944, o/b s.s. Junyo Maru near Sumatra), since 1921 Forest Officer in the Dutch East Indies, at first stationed in the Java teak districts; since 1928 in Sumatra, respectively at Sibolga in Tapanoeli (1928–30), and at Fort de Kock in the Padang Highlands (Sum. West Coast). In 1936 he was replaced in Java.

COLLECTING LOCALITIES. *1921. E. Java:* Ngawi (June), G. Lawoe (June 15), teak districts (Aug.).—*1931. Sumatra West Coast.*—*1934. Sumatra West Coast:* G. Kerintji (Febr.).

COLLECTIONS. *Herb. Bog.:* private numbers from *Java* (exceeding 153), and partly in the series of BEUMÉE (see there), 6 *nos* from G. Kerintji (*W. Sumatra*); *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam:* complete material of several benzoin species (pres. 1930); *Herb. For. Res. Inst. Buitenzorg:* bb. *nos* from *Sumatra West Coast* (coll. 1931).

Strachan, Capt. John
leader of the expedition of the 'Melbourne Age' (*cf. sub* C. STEWART) in 1884, paid several other visits to New Guinea of which he relates in his book.[1]

ITINERARY.[1] *1884. Expedition of the 'Melbourne Age'* to *SE. New Guinea* (*cf. sub* C. STEWART).—*1885.*[2] Sailing from Port Jackson (Sept. 17) in the 'Herald'; *Dauan Isl., Saibai Isl., Boigu Isl.; SE. New Guinea:* west mouth of the Mai Kusa (= Baxter River) and the western tributary and *Mata Kaua Isl.*; ascending the Wassi Kusa as far as the Mai Kusa; *Strachan Isl.;* Beru District, *Boigu Isl.* (Nov. 19), *Saibai* (22) and the opposite mainland of *New Guinea;* Mawata on the Binaturi; failing attempt to reach the mouth of the Fly; back to Mawata and visit to Masagari and Turi-Turi; homeward bound (Dec. 15); Port Jackson (Jan. 20, 1886).—*1886–87. Moluccas:* through Samau Strait ranging along the N. coast of Timor, Ombai Passage, Banda Sea, Banda Islands, Keffing & Gisser (= Geser) (Ceram-laut Islands); *SW. New Guinea:* Gulf of MacCluer; anchoring near Ati-Ati and Rumbati; Sekar Bay, Tambani, Bombarai, Bintuni, *Arguni Isl.; Moluccas:* Gisser (= Geser, 1 week's stay); *SW. New Guinea:* Gulf of MacCluer; *Goram Isl.* (for 8 days); *Karas* and *Tuburuasa islands; Samai* and ascent of the mountain near the bay; *Tuburuasa* (Jan. 17, *1887*); Arguni Bay; Dobo (*Aru Islands*); *Kei Islands; S. New Guinea:* Mawata near the mouth of the Binaturi, *Saibai, Boigu* and *Strachan islands;* Cape York (March 2); back in England (Jan. 1888).—*1889.* In the 2nd half of the year once more visiting the coast of *New Guinea*, from where in March *1890* to Somerset.

COLLECTIONS. He brought a collection of wood samples from his voyage in the 'Herald' (1885).[2]

LITERATURE. (1) J. STRACHAN: 'Explorations and adventures in New Guinea' (Proc. Geogr. Soc. Australasia Queensl. Br. 1885–86; London 1888).

(2) *cf.* Ausland 59, 1886, p. 359.

Straelen, Philippus Bernardus Maria van (1894, Utrecht, Holland; reported missing Febr. 27, 1942, Java Sea), naval cadet in 1911; officer in the Roy. Dutch Navy, in 1918 serving o/b the ironclad 'Zeven Provinciën'; in 1942 Captain Commander of the cruiser 'Java' which went down in battle with the Japanese; he was posthumously decorated.

COLLECTIONS. *Herb. Bog.:* > 44 *nos* from *Noesa Kambangan*, S of Centr. Java, collected Apr. –May *1918*.

Straelen, Victor Emile van (1899, Antwerp, Belgium; x), took his Dr's degree in 1915 at Brussels; Professor of Paleontology and Geology in the University of Ghent and Director of the Royal Museum of Natural History of Belgium.

He accompanied the then crownprince LEOPOLD of Belgium and his wife ASTRID on their voyage to the Dutch East Indies in 1928–29. He is the editor of the results of that voyage.[1]

In 1932 he accompanied King ALBERT to the Belgian Congo, where he made exploration tours in 1938–39 and in 1946–47.

ITINERARY. From Dec. *1928*–May *1929* in the *Dutch East Indies*, visiting *Java:* Tandjong Priok,

Buitenzorg, Wijnkoops Bay, Tjibodas (Tjibeureum), Lake Pendjaloe, environs of Cheribon and Semarang, Wonosobo, S of Djokja, Solo, Malang, Besoeki; *Lesser Sunda Islands: Bali* (Boeleleng Tamblingan Lake, dipterocarp forest at Sangeh, Den Passar, Kloengkoeng, *etc.*), *Lombok* (Ampenan, Mataram, Laboehanhadji), *Soembawa* (the river Brang Re); *E. Borneo:* Samarinda, mouth of the Mahakam, Balikpapan; *SE. & Centr. Borneo:* Bandjermasin, Barito River, Makandjang (on the Upper Barito), the Upper Maroewai, bivouac N of Poeroektjaoe; *SW. Celebes:* Makassar, Maros, Bantimoeroeng, Peak of Bonthain; *Centr. Celebes:* Donggala, Paloe Bay, Lemo; *N. Celebes,* Minahassa: Tondano, Kema and Manado; *Moluccas: Ternate, Halmaheira* (isthmus near Dodinga, and Passir Poeti on the E. coast), *Ambon, Banda group* (Bandaneira and G. Api summit); *Papua Islands: Misoöl* (S. coast, Lilinta) and *P. We(e)im; Dutch West New Guinea:* Manokwari, Moemi, Waïdera River, Moemi River, Arfak Mts, Anggi Lakes (Anggi Gita); *P. Japen;* Sorong (*P. Doom*); *Pisang Islands: P. Saboeda; SW. New Guinea:* Triton Bay, mouth of the Tombone River, and Lake Kamakawallar; *Aroe Islands* (*P. Enoe, P. Kobroör, P. Wokam*); *S. Sumatra:* Palembang, Sg. Sekana, direction G. Serillo; *W. Sumatra:* Padang Highlands (Apenberg, Solok, Pajacombo), Tapanoeli (Toba Lake, Sibolga, Taroetoeng, Padang Sidempoeang); *E. Sumatra:* Medan, Kuala Krapau; *N. Sumatra:* Bireuën-Takengon, Lake Takengon, Balik Ravine, Redelong, N. coast Atjeh (near Lohkn(a)ga); *P. Weh.*

COLLECTIONS. In *Herb. Brussels: Algae,*[2] lichens (numerous), and mosses.[3] The collection is not numbered.

The large zoological collections were elaborated in several volumes of the 'Résultats scientifiques *etc.*'.

LITERATURE. (1) V. VAN STRAELEN: 'Résultats scientifiques du Voyage aux Indes Orientales Néerlandaises *etc.*' (vol. I Introduction, 1933; beautifully illustrated).

'De reis door den Indischen Archipel van Prins Leopold van België'. 'Le voyage à travers l'Archipel Indien du Prince Léopold de Belgique' (Amsterdam, DE BUSSY; photographs with short explanations in several languages!).

É. DE WILDEMAN: 'A propos des résultats scientifiques du Voyage aux Indes néerlandaises de LL. AA.RR. le Prince et la Princesse Léopold de Belgique' (Bull. d. Séances Inst. Roy. Colon. Belge 5, 1934, p. 471–484).

(2) *cf.* A. WEBER-VAN BOSSE in 'Résultats scientifiques *etc.*' (Mém. Mus. Roy. Hist. Nat. Belg. hors série vol. 6, fasc. 1, 1932).

(3) *cf.* H. N. DIXON: 'Mosses of Celebes' (Ann. Bryol. 7, 1934, p. 19–36).

BIOGRAPHICAL DATA. Internat. Who's who; Europ. Who's who; *etc.*

Straten, J. A. van

COLLECTING LOCALITIES. *Centr. Java:* Waloebelah, Kendal (*1916*); Blora (*1918*).

COLLECTIONS. *Herb. Bog.:* few numbers.

Straub, Johannes

(1891, Sidoardjo, Java; x), studied tropical agriculture at Wageningen College. From 1918–22 he was employed in sugar-factories; since 1922 in D.E. Indian Government service, at first as teacher, later as Consulting Agriculturist. He was stationed at Kediri (E. Java, July 1922–28), Singaradja (Bali and Lombok Residencies, 1929–34), and subsequently at Pekalongan and Cheribon in Central Java.

COLLECTING LOCALITIES. July *1930. Timor:* Baoen(g), SE of Koepang; Bebaoe (= Babaoe), NE of Koepang; Bekasèh, N of Babaoe.

COLLECTIONS. *Herb. Bog.:* 6 *nos* of weeds.

Strelin, S. L., *cf. sub* ARNOLDI, Prof. W.

Stresemann, Erwin

(1889, Dresden, Germany; x), ornithologist, graduated at Munich in 1920; since 1924 Keeper of the Berlin Zoological Museum, since 1930 with the title of professor; in 1946 Professor at Berlin University. Zoologist of the second 'Freiburger Molukken Expedition' under command of K. DENINGER in 1910/12.

His collections and papers are mainly zoological.[1]

J. J. SMITH named some plants in his honour (*cf.* BACKER, Verkl. Woordenb., 1936).

ITINERARY. *Zweite Freiburger Molukken Expedition, 1910–12.*[2] Leaving Germany (summer 1910); *Malay Peninsula* (Sept. *1910*):[3] Perak, visiting the main range from Tapah, Batu Puteh Valley (bivouac at 1400 m alt., excursions up to 2000 m) *etc.;* after an adventurous voyage in a motor launch of the expedition stranded on the N. coast of *Bali* (*Lesser Sunda Isls*), in which island an involuntary stay of 3 months (Jan. 11–Apr. 16, *1911*),[4] making zoological collections in the environs of Buleleng, at Tjelukan Bawang, Gitgit, G. Bratan (Jan. 26, 28), Danau Bratan, Kintamani (twice from Buleleng); in March *via* the mountains in E. Bali to S. Bali (Rendang, Klungkung, Gjanjar, Den Pasar, Marga) and *via* Danau Bratan back to Buleleng; *Seran* (= *Ceram*);[5] landed at Amahei on the S. coast (end of Apr.); Ora Mts (early May); crossing the island in northern direction to Sawai (May), and proceeding to Wahai on the N. coast; from Pasahari following the Isal River to Manusela, making base camp (May–Aug.); STR. forced to stay at home for some weeks (as a consequence of foot wound), but subsequently investigating the mountains, collecting at Hoale Pass, G. Hoale, G. Sofia, Kaloa, Wai Isal, N of the Isal Mts, Huaolu, Bessi; setting out with DENINGER to G. Pinaia from Kaniki (E. summit on the 15th, W. summit (3050 m) on the 17th); plain in Centr. Ceram, N of the Isal Mts (end of Aug.), Kanike, Roho, Huaolu; central mountains of W. Ceram (Sept.–Dec.), specially making ethnological and linguistic studies, but collecting also on Hatu Saka (1450 m), G. Touwela (1100 m), and at Waraoini (800 m); early in Jan. *1912* to *Buru* (= *Boeroe*), landed at Tifu; crossing the island *via* Wakolosee (Lake Wakolo, staying some days at Nalbesi) to the N. coast near Wae

Langa; Bara; following the Wai Sesifu; from Pulu Tenggah (Febr. 21) climbing the Fogha (Kapala Madang, or G. Tomahoe = ? Kaoe Palatmada), reaching the summit (2040 m) on the 26th; failing endeavour to reach the Upper Wai Apu from Oki; from Oki to Fakal and *via* the Taglamite (mountain) to the S. coast near Leksula; leaving the Moluccas on Apr. 1, *1912*.

COLLECTIONS. *Herb. Leyden:* 470 *nos* of *Musci, Hepaticae, Filices* and phanerogams (156), *nos* upwards of 370 from *Boeroe*. They were partly elaborated, though not by H. HALLIER as was the original intention.[6] HALLIER sent the ferns for identification to ROSENSTOCK at Gotha. It is possible that he collected only mosses in the *Malay Peninsula*.[3]

LITERATURE. (1) *cf.* Novit. Zool. 20, 1913, p. 325 *seq.*; *l.c.* 21, 1914, p. 25 *seq.*, 358 *seq.*; *etc.*

(2) E. STRESEMANN: 'Reisen in den Süd-Molukken'. Bericht über die 'II. Freiburger Molukken-Expedition' *etc.* (Sitz. Ber. Ges. naturf. Freunde z. Berl. 1925, *nos* 1–10, p. 9–13).

(3) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(4) *cf.* Novit. Zool. 20, 1913, p. 325 *seq.*

(5) *cf.* PETERM. Mitt. 60^2, 1914, p. 77; and Palaeontographica suppl. 4, 3. Abt.^{2}, 1918, p. 48.

(6) Some *Orchidaceae* by J. J. SMITH in 'Orchidaceae seranenses' (Bull. Jard. Bot. Buit. sér. 3, vol. 10, 1928, p. 85–172), and in 'Orchidaceae buruenses' (*l.c.* 9, 1928, p. 439–481); *Ericaceae* by J. J. SMITH in FEDDE Repert. 30, 1932, p. 162–178; *Musci* by TH. HERZOG in Hedwigia 57, 1916, p. 233–241.

Strettell, Mrs

plants of her from the *Malaysian* region in *Herb. Univ. Manchester* (*cf.* 'A brief account of the Gen. Herb. of J. C. MELVILL' 1904, p. 13).

Strikwerda, Yme

(1837, Bolsward, Fr., Holland; 1909, Haarlem, Holland), a steersman, joined the D.E.I. Civil Service in 1859; till 1871 stationed in W. Borneo; on European leave, 1871–73; Assistant Resident at Koeningan (Cheribon Res., W. Java) from 1873 onwards; retired in 1879. A member of the 'Natuurkundige Vereeniging' at Batavia.

COLLECTIONS. In *1867* he sent material of *Calophyllum inophyllum* from *W. Borneo* to the 'Natuurkundige Vereeniging', from where it was forwarded to TEYSMANN (Buitenzorg) for identification. In *1875* he once more sent material to Batavia.[1]

Hort. Bog.: several Borneo rattans (pres. *1867*).

LITERATURE. (1) *cf.* Nat. Tijdschr. N.I. 30, 1868, p. 432 and 449; *l.c.* 31, 1870, p. 183; *l.c.* 35, 1875, p. 259.

Strong, T. A.

joined the Forest Department *Malay Peninsula* in 1921, and was transferred to Ceylon in 1938; in 1945 appointed Director of Forests Malayan Union.

COLLECTIONS. Mainly in S. Perak and Johore; *cf. sub* Conservator of Forests series, Kepong.

Strouts, E. A.

joined the Forest Dept *Malay Peninsula* in 1923; retired in 1933; collected mainly in Pahang and Negri Sembilan. In *Herb. Kuala Lump., cf. sub* Conservator of Forests series, Kepong.

Strubell, Adolf

(1861, Frankfurt a/M, Germany; 1927, Bonn, Germany), zoologist who graduated in 1888 at Leipsic; probably subsequently employed at Frankfurt a/M. Since 1906 professor at Bonn University. In 1889/90 he made a voyage to the Dutch East Indies, for several months working in the Foreigners' Laboratory at Buitenzorg.[1]

VISITED LOCALITIES.[2] *1889. Singapore* (Apr.). —*1889–90. W. Java:* Batavia, Buitenzorg, G. Gedeh (summit and Tjibodas), G. Salak, Bekasi, Tandjong Priok, Arga Sarie Estate on G. Malabar, G. Tangkoeban Prahoe, environs of Garoet, *Duizend Eilanden* (Bay of Batavia); *Krakatau* (Sunda Strait); *Centr. Java; Moluccas: Ambon* (Hitoe and Leitimor), S. coast *Ceram*, islands of *Haroekoe* and *Saparoea*, touching at *Batjan* and *N. Celebes;* in Febr. 1890 leaving Java.

COLLECTIONS. *Herb. Senckenb. Ges.* (now *Univ.*) *Frankfurt:* palm fruits from the Buitenzorg Botanic Garden, and some specimens of ant plants from *Java* (pres. 1890–93).

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 13–14.

(2) *cf.* Ber. Senckenb. Ges. Frankf. a.M. 1889/90, p. 137; *l.c.* 1890/91, p. 3–20 and 241.

Strugnell, Edmund Jardine

(1903, London, England; x), B.Sci. in Forestry in Edinburgh University; joined the Forest Department Malay Peninsula in 1924. In 1934 temporarily in charge of the Forest Research Institute, Kepong; now Asst Director of the Department of Forestry in the Mal. Peninsula.

COLLECTING LOCALITIES. *Malay Peninsula:* ascent of G. Benom from Raub (May *1930*, a first attempt was made in Sept. *1929!*);[1] Cameron Highlands and down to the Tenom Valley, accompanied by a plant collector of Singapore (Aug.); Dindings (*1931*); Rantau Panjang in Selangor (*19 . .*). He collected throughout the Federated Malay States.

In later years he evidently made trips to G. Tahan, G. Chahang, and G. Bubu.[4]

In *Sumatra* he visited Bengkalis (Nov. *1929*), Deli and Atjeh (Jan. *1930*),[2] and possibly the swamps of the East Coast in *1934 or 1935* again.[3]

COLLECTIONS. He numbered in the Conservator of Forests (C.F.) (see there) series of the For. Res. Inst. at Kepong. Material probably both in *Herb. Kuala Lump.* and *Singapore;* dupl. in *Herb. Edinburgh.*

LITERATURE. (1) E. J. STRUGNELL & W. S. WILBOURN: 'An ascent of Gunong Benom from Raub' (Journ. Mal. Br. Roy. As. Soc. 9, 1931, p. 15–27; incl. list of herb. specimens).

(2) E. J. STRUGNELL: 'A report on the swamp forests of the East Coast of Sumatra' (typescript in For. Res. Inst. Buitenzorg).

(3) E. J. STRUGNELL: 'Across Sumatra by car' (Malayan Forester 4, 1935, p. 172–176).

(4) *cf.* Malayan Forester vol. 6, p. 131; *l.c.* 11, p. 28 and 85.

Stüber, W.

professional collector, settled near Hollandia in Dutch North New Guinea. In the years 1930–34 he collected numerous insects, especially *Odonata*, on behalf of LIEFTINCK, Buitenzorg Museum. Dealer in living New Guinea orchids.

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg:* 1 *no* from Hollandia, *North New Guinea* (pres. *1927*).

Stuffkes

of Sitiardja Estate, Tjitjalengka (*W. Java*), sent a wild *Dendrobium* to *Hort. Bog.* in Sept. *1895*.

Stuhlmann, Franz Ludwig

(1863, Hamburg, Germany; 1928, Hamburg), zoologist who stayed a long time in Africa as officer in the German army and in various other employments. In 1900/01 he made a voyage to the British and Dutch Indies;[1] in 1903 he was appointed Director of the Biological-Agricultural Institute at Hamburg, in 1908 secretary of the Colonial Institute, and in 1921 Director of the 'Weltwirtschaftinstitut' in the same place.

Eriocaulon stuhlmanni N.E.BR. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

ITINERARY.[1] Sailing from Africa (Dec. 25, 1900) to Brit. India and Ceylon; *Singapore* (Apr. 29, *1901*); *W. Java:* Tandjong Priok (May 2), Buitenzorg (May 3–11), Tjibodas (slope of G. Gedeh, 12), Bandoeng (*Cinchona* plantations); *Centr. Java:* Klaten (tobacco, indigo, sugar) (leaving again on May 22), Solo, Semarang (teak) (leaving the 28th); *W. Java:* Buitenzorg (tea); embarking for Africa (June 7).

COLLECTIONS. *Herb. Berl.:* siphonogams of India, Ceylon, and *Java*, 148 *nos;* 204 *nos* in the *Show Mus. Berl.*

LITERATURE. (1) FR. STUHLMANN: 'Studienreise nach Niederländisch und Britisch Indien, Ceylon, Java' (Tropenpflanzer 5, 1901, p. 243–266, 351–364; *l.c.* 6, 1902, p. 181–197; on Java in *l.c.* 1903, Beiheft 4, p. 1–58); *cf.* also Kolonial-Wirtschaftliches Komitee Ber. I–IV.

Sture, Prof. M.

made a trip into the mountains of Megros (= prob. *Negros*), *Philippines*, near the southern end. Though no botanist, he brought home a number of plants, including an, in his opinion new, pitcher plant.[1] The data, name, *etc.*, raise strong suspicion that he might be identical with Prof. J. B. STEERE (see there).

LITERATURE. (1) M. STURE: 'Notes from the Philippine Islands' (Bull. Torr. Bot. Club 16, 1889, p. 217–218; extract from a letter to Prof. A. A. CROZIER, dated Cohn, Philippines, March 12, 1889).

Sturler, de

Possibly different collectors bearing the same family name sent living plants to *Hort. Bog.* The following plants were presented: living plants in *1877–78* by DE STURLER of Tjiomas Estate near Buitenzorg (*W. Java*), an orchid by a DE STURLER of Tandjong Pinang (*Riouw Arch.*) in *1898*, living orchids from the Lampong Districts (*S. Sumatra*) (possibly from V. DE STURLER, who made a hunting trip in these districts in 1914).

Sturler, Willem Louis de

? a major, ? pensioned off in 1868. About 1851 he was elected a fellow of the Society for Dutch Literature at Groningen.[1]

Exhibitor of a collection of wood samples at Paris.[2] Author of various papers, including agricultural ones.[3]

COLLECTIONS. *Herb. Leyden:* plants and wood samples (pres. *1864–65, 1868*). Possibly they include material of *Palaquium* species from *Ternate.*[4]

LITERATURE. (1) *cf.* Alg. Konst- en Letterbode 1851[2], p. 2.

(2) W. L. DE STURLER: 'Catalogue descriptif des espèces de bois de l'archipel des Indes orientales (coll. DE STURLER) exposées à l'exposition internationale de 1867 à Paris' (Leiden 1867, 86 pp.).

(3) W. L. DE STURLER: 'Proeve eener beschrijving van het gebied van Palembang' (Groningen 1843; naar aanteekeningen van J. E. DE STURLER, ex a.r. van Palembang en resident van Banjoemas); 'Handboek voor den Landbouw in Nederlandsch Oost-Indie' (Leiden 1863); 'Beschrijving der houtsoorten voorkomende in Ned. Oost-Indië' (Tijdschr. Ned. Mij Bev. Nijverh. 29, 1866, p. 1–73; reprinted Haarlem 1866); *etc.*

(4) *cf.* H. J. LAM in Bull. Jard. Bot. Buit. sér. 3, vol. 7, 1925, p. 52 *etc.*

Stijman, Karel Frederik

(1820, Banda, Moluccas; July 22, 1869, o/b on the home voyage to Holland), went to Holland when a child, and returned to the Indies in 1840. In the same year he was appointed officer of the Civil Service; in 1861 promoted Resident of Tapanoeli (NW. Sumatra), in 1862 of the Padang Highlands (W. Sumatra); from 1864 on half-pay and going to Holland for 2 years; in 1867 Resident of Pekalongan (Centr. Java). In 1869 he went on sick-leave to Holland, and died during the voyage.

Trivalvaria stymanni SCHEFF. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. Evidently he sent some plants to *Buitenzorg.*[1] Those from *Centr. Java* were collected on Mt Diëng (pres. *1867*); also from *Sumatra.*

LITERATURE. (1) *cf.* Nat. Tijdschr. N.I. 31, 1870, p. 8.

Suarez, V., *cf. sub* Forestry Bureau, Manila.

Suawah, M., *cf. sub* Forest Research Institute, Buitenzorg.

Subramanian

Foreman Gardener employed by the Singapore Botanic Gardens from *c. 1918–32.*

COLLECTIONS. *Herb. Sing.:* odd collections made in *Singapore Island* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5). According to Mr HOLTTUM his name may also appear as collector of plant specimens in the Gardens.

Suleiman
retired Forest Guard; *cf. sub* Forest Dept Br. N. Borneo.

Sulit, Carlos
from *1915–34* Ranger, Supervisor, Forester, Chief Bureau of Forestry, Manila, *P. I.* He passed through the Yale Forest School (U.S.A.) in 1925.
Author of sylvicultural papers.[1]
COLLECTIONS. In *Herb. Manila*, numbered in the F.B. (see *sub* Forestry Bureau) series.
LITERATURE. (1) C. SULIT: 'Preliminary report on the reconnaissance work conducted in the Makiling national botanic garden' (Makiling Echo 1, 1922, p. 6–8); and others in the cited journal.
BIOGRAPHICAL DATA. Nat. Res. Counc. P.I. Bull. 7, 1935, p. 894–895, incl. list of publications.

Sulit, Mamerto D.
Ranger of the Division of Forest studies and Research, Bureau of Forestry, Philippines;[1] subsequently Asst Professor of Dendrology, School of Forestry, University of the Philippines; at present on the staff of the National Museum, and Chief Botanical Collector.
COLLECTING LOCALITIES. *Philippines, Luzon:* Mountain Prov. (summer *1931*); Laguña Forest Plantation, Maquiling National Park (Apr. *1935*); College Campus, Laguña (May 1935); and on Mt Lobo, Batang (*1937*).—*1947–48.* Mt Makiling, Mt Bulusan, Mt Pauai, Mt Osdung, Mt Singakalsa, Mt Nañgaoto; *Centr. Samar.*
COLLECTIONS. *Herb. Manila*, numbered in the F.B. (see *sub* Forestry Bureau), and in the P.N.H. (*cf.* Philip. Nat. Herb.) series.
LITERATURE. (1) Author of 'The genus Mussaenda in the Makiling Nat. Park' (Philip. Journ. Forestry 2, *no* 1).

Suman, *cf. sub* Conservator of Forests series, Kepong.

Sumeis(e)y, *cf. sub* Forest Research Institute, Buitenzorg.

Sumendap, Chr., *cf. sub ditto.*

Sunier, Armand Louis Jean
(1886, Rotterdam, Holland; x), zoologist, educated at Leyden and Groningen universities, taking his Ph.Dr's degree at Groningen in 1911. From 1911–23 on the staff of the Marine Biological Laboratory at Batavia,[1] since 1914 Head of that institution; in 1923 appointed Custodian of the Natural History Museum at Leyden; since 1927 Director of 'Artis' (zoological garden) at Amsterdam.
COLLECTIONS. Till the present only one record of him having collected plants came to our knowledge (*cf.* DANSER in Bull. Jard. Bot. Buit. sér. 3, vol. 8, 1926/27, p. 223). The cited plant from Sitoegoenoeng (*W. Java*) (coll. June 6, *1916*), is in *Herb. Bog.*
LITERATURE. (1) Author of 'Contribution to the knowledge of the natural history of the marine fishponds of Batavia' (Treubia 2, 1920/21, p. 159 *seq.*).
BIOGRAPHICAL DATA. Wie is dat? 1935, p. 366.



M. D. SULIT

Surbeck, Heinrich
(1876, Hallau, Schaffhausen Canton, Switzerland; Nov. 1945, murdered at Pematang Siantar, Sumatra), chemical engineer, educated at the Technical College, Zürich (1895–1900); subsequently he got lung tuberculosis, took a cure in the Swiss mountains, and in 1904 went to Sumatra (Indragiri) where he recovered completely; in about 1906 he founded the first gambir factory in Asahan; at Pematang Siantar (Sum. East Coast) he had a power-station, an ice and lemonade factory (built in 1916) and a hotel; at Padangsidimpoean (Tapanoeli) he also owned industrial property.
COLLECTING LOCALITIES. *Sumatra East Coast. 1914.* Sg. Taroean and Kasoengai bridge (June 5); Asahan (Aug. 30); Ayer Sakor, Asahan (Nov. 11); Bangkalak, slope Bangkalak, and Soemporoo (16); Ayer Sakor (25), Negaga marsh (Paja) (29), Simpang Toba (30).—*1915.* Oelak Boetar (Jan. 31); Asahan ice factory on Asahan River (Febr. 3, Apr. 28).—*1917.* Sg. Loda Ravine at the junction with Sg. Lodibo (Jan. 29); Kabandjahe (Toba Plateau) (Jan. 30, Febr. 18); Asahan (Apr. 16, May 15); G. Malajoe (Asahan) (May 16, June 18); Djamboedolok, Batoerangin, 1000 m alt. (June 24); summit of Mt Ria Ria, Toba, 1700 m

alt. (28); ridge of Mt Soeroengan, 2000 m alt. (July 1); Aek Korsek, pass to Pagar Batoe, 800–900 m alt. (2).—*1941*. Some days on the plateau of Tele (NW. Tapanoeli, *W. Sumatra*) at an altitude of *c.* 1850 m (beginning of the year), and in the neighbourhood of Sidikalang in the same residency (Apr. 5).

COLLECTIONS. He offered his collections *1914–17*, comprising about 400 *nos* (of which *c.* 200 ferns), to the Technical College at Zürich, but the offer was refused by Prof. SCHRÖTER, as the latter pretended that all species were already represented in the herbarium by his own collections. Subsequently SURBECK had the collection for several years at Schaffhausen (Switzerland), but previous to 1940 offered it to teacher E. OBERHOLZER at Samstagern (Canton Zürich). The latter kept a set of the ferns for himself, and the remaining part came, after all, the *Herb. Techn. Coll. Zürich*, where it will be inserted. Prof. Dr WALO KOCH promised duplicate sets to *Leyden* and *Buitenzorg*.

The material collected in *1941* is probably lost.

Svoboda, Wenzel

surgeon who accompanied the voyage of the Austrian corvette 'Aurora', 1886–88,[1] under command of Capt. FR. MÜLLER.

The 'k.k. naturhistorische Hofmuseum' at Vienna provided funds for the collecting of zoological, ethnological and botanical objects.

ITINERARY. *Voyage in the 'Aurora', 1886–88.*[1] Sailing from Pola (Aug. 1, *1886*); *via* Port Saïd, Suez, Aden, Point de Galle (Ceylon), the Nicobars; *N. Sumatra:* Acheen (= Atjeh), Oleh-leh (Oct. 8–10); *Penang* (16–27); Pancore (= *Pangkor Isl.*) off the Dindings (30–Nov. 2); *Malay Peninsula:* Malacca (Nov. 5–7); *Singapore* (9–Dec. 3); Neu-Johore (= Johore Bahru) (4–5); *Banka:* Muntok (15–17); *W. Java:* Batavia (19–Jan. 3, *1887*); *E. Java:* Soerabaja (Jan. 13–20); *Bali:* Boeleleng (24–26); *Sumbava* (= *Soembawa*): Bima (30–Febr. 1); *SW. Celebes:* Makassar (Febr. 3–8); heading for the *Moluccas; Batjan* (18–19); *Ternate* (21–23); on the way to the *Philippines; Mindanao:* Zamboanga (March 6); *Isabella Isl.* (= *Basilan*) (7–8); *Luzon:* Manila (17–28); Hué, Macao and Hongkong; Swatow, Amoy and Formosa; Japan; back to the China coasts; Hongkong, Canton, Macao, Saigon; *Singapore* (Jan. 26–31, *1888*): home voyage (sailing Febr. 1) *via* Ceylon, Aden, Suez, Port Saïd, and Corfu; Pola (Apr. 28).

COLLECTIONS. *Herb. Vienna:* small collection of plants collected during the voyage of the 'Aurora' (pres. 1888).

LITERATURE. (1) 'Reise der oesterreichischen Corvette 'Aurora'' (Intern. Arch. Ethnogr. 1, 1888, p. 172).

J. FREIHERR VON BENKO: 'Die Schiffs-Station der k. und k. Kriegs-Marine in Ost-Asien. Reisen S.M. Schiffe 'Nautilus' und 'Aurora' 1884–1888' (Wien 1892, 3 maps).

Swaan, P.

Captain Lieutenant of the Dutch Navy, accompanied the voyage of the 'Soerabaja' to New Guinea (1875–76).[1] For itinerary and complete literature see *sub* O. BECCARI.

Author of a hydrographical description of the coasts of New Guinea.[2]

COLLECTIONS. *Mus. Kol.* (= *Ind.*) *Inst. Amsterdam* (formerly Haarlem): wild nutmegs (pres. 1876). They were probably collected in the vicinity of Wairoor (facing the island of Mios Waar), Geelvink Bay, *NW. New Guinea*, on Dec. 4, *1875*.[3]

LITERATURE. (1) A. J. LANGEVELDT VAN HEMERT and P. SWAAN: 'Verslag der reis van het stoomschip Soerabaja naar de Noord- en Westkust van Nieuw-Guinea van November 1875 tot Maart 1876' (in ROBIDÉ VAN DER AA, Reizen naar Ned. Nieuw-Guinea . . . in de jaren 1871, 1872, 1875–76, *etc.*, 's-Gravenhage 1879, p. 211–342).

Report by SWAAN in Jaarb. Kon. Nederl. Zeemacht 1875–76, p. 333–355).

(2) P. SWAAN: Hydrographische beschrijving der kusten van Nieuw-Guinea' (Tijdschr. K.N.A.G. 3, 1879, p. 85–97 + map).

(3) *cf.* in ROBIDÉ VAN DER AA *l.c. sub* 1, p. 249–250.

Swart, Ferdinand

(1894, Amsterdam, Holland; x), since 1919 Forest Officer in D.E. Indian Government service; originally stationed in the teak districts of Java. In 1921 transferred to Tandjong Pinang (Riouw Arch.), and in the same year to Bengkalis (E. Sumatra); after a short stay in Java, stationed in Atjeh in July 1926, respectively at Oeloe Lheue and Koetaradja; from 1933–39 at Trenggalek in Kediri,[1] and since 1940 in the Head Office of the Forest Service at Buitenzorg; he retired in 1946.

LOCALITIES & COLLECTIONS. *Herb. Bog.:* material of *Rafflesia atjehensis* KOORD. from Atjeh (*N. Sumatra*, coll. *1926*), and of *Dendrobium jacobsonii* J.J.S. from G. Wilis (*E. Java*, coll. end *1938*).

Herb. For. Res. Inst. Buitenzorg: 3 bb. *nos* from Atjeh (*N. Sumatra*, *1927*), and Ja. *nos* from Kediri (*E. Java*, *1938*).

LITERATURE. (1) Author of 'Begroeiing en reboisatie in het Wilis gebergte in de afd. Kediri' (Tectona 32, 1939, p. 469–504).

Swartz

The fern specialist ALDERWERELT VAN ROSENBURGH (see there) erroneously wrote the name 'SWARTZ' on labels of the fern collection made by A. SCHWARTZ (see there) at Tjibodas in *W. Java*.

Sweklie, J. M., *cf. sub* Conservator of Forests series, Kepong.

Swettenham, Sir Frank Athelstane

in 1883 British Resident at Selangor, Malay Peninsula, later Governor of the Straits Settlements. He retired in 1904.

COLLECTIONS. *Hort. Sing.:* 10 Selangor (*Malay Peninsula*) plants (pres. *1883*). According to Mr HOLTTUM probably no specimens are preserved.

S.W.K. *nos*, *cf. sub* Forest Research Institute, Buitenzorg.

Swoboda, Dr, *cf.* SVOBODA, W.

Sybrandi, J.

COLLECTIONS. *Herb. Bog.*: some plants collected at Lebak Barang, Pekalongan in *Centr. Java* (Aug. *1917*).

Symington, Colin Fraser

(1905, Edinburgh, Scotland; 1943, Nigeria, Africa), was educated at Edinburgh, where he took his B.Sci. degree in forestry, and subsequently took a postgraduate course at Oxford University. In 1927 he was appointed to the Malayan Forestry Service. Some years before the war he was promoted Forest Botanist at Kepong (Kuala Lumpur), Selangor. Besides in the below-mentioned islands he travelled in the Philippines. After the capitulation of Singapore he escaped to Australia and after a time was posted by the Colonial Office to the Forestry Dept in Nigeria.

Monographer of the *Dipterocarpaceae* of the Malay Peninsula.

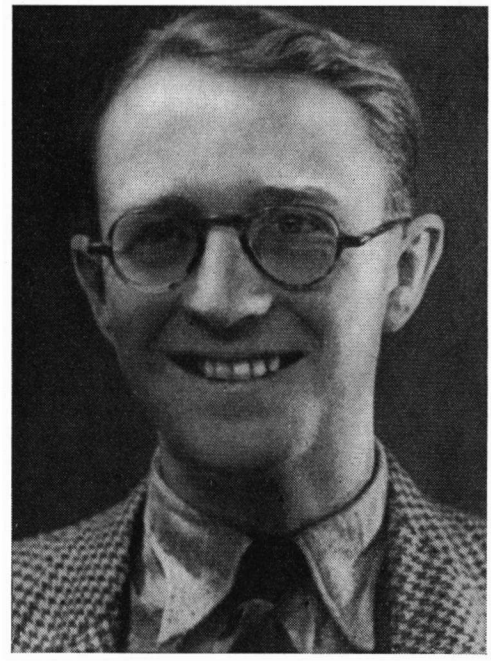
He is commemorated in *Eugenia symingtoniana* HENDERSON.

COLLECTING LOCALITIES. *1930. E. Sumatra:* Brastagi (Dec.).—*1931. Malay Peninsula:* Keledang-Sayong Forest Reserve in Perak South (Apr.); Trengganu (July); with FOXWORTHY in *Penang* (Sept.), collecting on his way at Telok Anson and in the Dindings.—*1934.*[1] *Penang* (Pantei Acheh, Penang Hill); Perak (Pondok Tanjong and Ijok); Pahang (Beserah, Kuantan, Sg. Lembing, Cameron Highlands (Apr.)); G. Tapis (June 10–17)[2] accompanied by KIAH, a collector of the Singapore Botanic Garden; Kelantan (G. Stong, G. Sagi, Chabang Tongkat, Gong Kedah, Bt Yong, Tualang Gelang).—*1935.* Selangor (Bt Lagong, Sg. Buloh, Sg. Lalang, Bt Takun, Klang Gates, Gap); Perak (Parit, Pelus, Jalong, Chikus, Jangka, Trolak); Pahang West (Kemasul, Bt Raka, Lentang, Rotan Tunggal, Bt Kajang); visit to Manila (*Luzon, Philippines*) to study *Dipterocarpaceae* in the Herbarium (Nov.–Dec.).—*1936.* After his return from leave (end of Oct.) paying a visit to Perak (Bubu and Keledang Sayong); Selangor (Ulu Gombak, Sg. Boloh, Weld Hill, Rantau Panjang and Telok); Negri Sembilan (Senawang, Triang and Senaling Inas); Pahang (Baloh, Telok Sisek, Kuantan-Pekan Road).—*1937.* Boh Plantations party to Cameron Highlands (March 31–May 5), spending 2 days at Fraser Hill.—*1938.* Malacca (Merlimau For. Reserve); Johore (Banang For. Reserve); Selangor (Kepong, Telok For. Reserve); Pahang (Kemasul For. Reserve, Baloh For. Reserve, Bt Goh For. Reserve), *Langkawi Islands* (G. Raya, G. Batu Chinchang, *P. Dayang Bunting, etc.*) (middle of the year), making a 6 weeks' collecting trip accompanied by the local forest officers to *Br. N. Borneo* (June 9–24) and *Brunei* (Aug.).[3] In *Br. N. Borneo* he collected in the Kabili-Sepilok Forest Reserve, the logging areas at Betotan and Segaliud, and in Semporna Distr.[4]

COLLECTIONS. *Herb. Kuala Lump.*, numbered in the Conservator of Forests (C.F.) series (see there). On G. Tapis he collected 99 *nos* above 2000 ft. Dupl. in *Herb. Sing.; Edinburgh; Herb. Manila:* 51 dupl. (pres. 1935); in *Herb. Bog.* some dupl. too.

LITERATURE. (1) *cf.* Malayan Forester 5, 1935, p. 65.

(2) C. F. SYMINGTON: 'The flora of Gunong Ta-



SYMINGTON

pis in Pahang' (Mal. Br. Roy. As. Soc. 14, 1936, p. 333–365, pl. 19–23).

(3) *cf.* Chron. Bot. 5, 1939, p. 295.

(4) *cf.* Ann. Rep. For. Dept Br. N. Borneo for 1938, p. 18–19.

BIOGRAPHICAL DATA. Proc. Linn. Soc. 1943/44, pt 3, Aug. 1945, p. 233–235.

Synge, Patrick M.

botanist (Corpus, Cambridge) and horticulturist who joined the Oxford Expedition to Sarawak[1] as a photographer and assistant botanist.

ITINERARY. *Oxford Expedition, 1932. NW. Borneo, Sarawak.* See *sub* P. W. RICHARDS. In October SYNGE fell ill and was transported to hospital. He recovered too late to join the expedition at the base camp and went to see the Niah Caves.

COLLECTIONS. *cf. sub* RICHARDS. SYNGE was especially concerned with orchids and pitcher plants.[2] Living orchids were sent home to Sir JEREMIAH COLEMAN.[3] His collections were separately numbered.

LITERATURE. (1) With many others (T. H. HARRISSON, FORD, *etc.*) author of 'Borneo Jungle' (London 1938).

(2) P. M. SYNGE: 'Collecting Nepenthes in Bor-

neo' (New Flora and Silva 6, p. 221–227) (*non vidi*); 'Plants with personality' (1939).

(3) *cf.* Rep. Sarawak Museum for 1932, p. 12.

Sijpkens, J. P.

(1916, Sneek, Fr., Holland; x), was educated at the Agricultural College, Wageningen, taking his Dr's degree in 1945. He worked for some years at the CILO, Wageningen, and in August 1946 joined the 'Gouvernements Landbouw Bedrijven' (Government Estates) in Indonesia, successively stationed at Martapoera (SE. Borneo), Serpong, Tjikopo and Tjipanas, in W. Java.

COLLECTIONS. *Herb. Wageningen:* > 20 *nos* collected at Martapoera, *SE. Borneo* (acq. *1947*), evidently from cultivated ground.

Sijthoff, P.

of Bandoeng, sent a lot of orchids to *Hort. Bog.* in *1905*.

Szemian, József Márton Károly

(1890, Budapest, Hungary; x), chemical engineer, educated at Budapest; from 1912–24 on the staff of various agricultural experiment stations in Hungary; founder, and from 1924–27, Director of the Agricultural-Chemical Institute at Ankara, Turkey; 1927–32 Pedologist in D.E. Indian Government service, in charge of an agrogeological survey of South Sumatra;[1] in the employ of the D.E. Indian Mining Department from 1932 onwards.

COLLECTING LOCALITIES. *1931. S. Sumatra* (exploring Febr.–Sept.): on the border of Palembang Residency and the Lampong Districts near Wai Poengkan, between Moeara Doea and Blankanganoempoe (March, June).

COLLECTIONS. *Herb. Bog.:* > 84 *nos*, including some *Musci*. He collected in Anatolia too; plants in private Herbarium of the late Dr A. DEGEN (Budapest).

LITERATURE. (1) J. SZEMIAN: 'Aanteekeningen van een agrogeologische verkenningsreis door het gebied der Residentie Palembang' (Bergcultures 1930, p. 79 *seq.*).

T., G.

The initials 'G.T.' (perhaps G.I.), together with the locality *Singapore* and the date December *1845*, occur upon the label of a specimen in the *Herbarium of the Roy. Bot. Gard. Kew*, to which has been added 'G. THOMSON'. Who the collector was is unknown. Certainly it was not Dr GIDEON THOMSON of Madras (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 132).

Taay, *cf. sub* Forestry Bureau, Manila.

Tabat, *cf. sub ditto.*

Tachun bin Baba

Sakai Forest Guard, in the Forest Department *Malay Peninsula, 1929–47*, tree climber and herbarium collector at the Forest Research Institute, Kepong; *cf. sub* Conservator of Forests series, Kepong. Temporarily he worked under the direction of the Forest Department Sarawak (*cf.* also *sub* DAUD), at least in *1938*.

Tadjoedin, A. B., *cf. sub* Forest Research Institute, Buitenzorg.

Tänzer, Christiaan

(1916, Soerabaja, Java; x), was educated at the Buitenzorg Agricultural School; from 1938–46 Assistant of the Soil Science Institute at Buitenzorg, Java.

COLLECTING LOCALITIES. *1940. Centr. Sumatra:* Djambi, Indragiri River, in the vicinity of Tambilahan–Rengat (Sept. 13–30).

COLLECTIONS. *Herb. Bog.:* plants from Rengat in Djambi (*Centr. Sumatra*).

Taha, Mohamed

collected on behalf of E. D. MERRILL at Sandakan in *Br. N. Borneo*. The plants were collected *after 1920* and *before 1929*, probably under supervision of the Dept of Forestry, Br. N. Borneo.

COLLECTIONS. *Herb. Manila;* dupl. in *Herb. Bog.* (pres. 1929).

Taha bin Bador

joined the Forest Department *Malay Peninsula* in 1915; collected mainly in N. Perak; collections *cf. sub* Conservator of Forests series, Kepong.

Tahar, B., *cf. sub* Forest Research Institute, Buitenzorg.

Tahir, Mohamed, *cf. sub* Conservator of Forests series, Kepong. Retired Forest Guard.

Tahir, Mohamed, *cf. sub* For. Dept Br. N. Borneo.

Taib, Mohamed, *cf. sub* Forest Research Institute, Buitenzorg.

Takadu

a native of New Ireland (Bismarck Archipelago), who collected together with SIKIN on behalf of F. R. R. SCHLECHTER, when the latter botanized in *New Guinea* (*1907–09*).

Cadetia takadui SCHLTR was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. With *Herb.* SCHLECHTER in *Herb. Berl.*

Takahashi, C.

a Japanese plant collector who had numerous specimens of a new *Dendrobium* collected and sold them to Singapore;[1] the species had been discovered in 1932 near Martapoera in *SE. Borneo* by FRONIUS, a civil engineer.

It is a pity that the name *takahashii* has been given to this *Dendrobium* by C. E. CARR, as this Japanese nearly succeeded in the extermination of this beautiful species. Fortunately the name proved to be a synonym of *D. ovipostoriferum* J.J.S.

COLLECTION. *Probably* in *Herb. Sing.*

LITERATURE. (1) *cf.* Orchid Review 42, 1934, p. 14.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936 (and new information); Trop. Nat. 26, 1937, p. 23.

Talakua, P. R.
'mantri' in the employ of the D.E. Indian Forest Service.

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg:* bb. *nos* from *Timor* (coll. *1925–29*); *Herb. Bog.:* 7 *nos* of herbaceous plants from Koepang Subdistrict in *Timor*.

Talib bin Jadaris, Abdul
joined the Forest Department *Malay Peninsula* in 1914; now retired. He collected mainly in S. Perak; *cf. sub* Conservator of Forests series, Kepong.

Tama, M., *cf. sub* Forest Research Institute, Buitenzorg.

Tamayo, M. A., *cf. sub* Forestry Bureau, Manila.

Tamboenan, D. B. F., *cf. sub* Forest Research Institute, Buitenzorg.

Tamesis, Florencio
(1888, Unisan, Tayabas, P.I.; x), attented the ranger course, School of Forestry (U.P.), from 1911–12; 1912–19 Ranger at Los Baños and Manila. From 1919–23 he studied forestry in Washington University and was subsequently appointed Forester at large, Bureau of Forestry, Manila. In 1927 he reached the rank of Assistant Director of Forestry, later Director of the Department.

Author of some small sylvicultural papers.

COLLECTIONS. He collected in the *Philippines*, numbered in the F.B. (Forestry Bureau, see there) series.

BIOGRAPHICAL DATA. Nat. Res. Counc. P.I. Bull. 7, 1935, p. 742, incl. bibliogr.; portr. in Philip. Journ. Forestry 2, 1939, pl. 1.

Tammes, Pieter Merkus Lambertus
(1903, Batavia, Java; x), botanist, educated at Groningen University, taking his Ph.Dr's degree in 1930. Subsequently appointed on the staff of the General Agricultural Experiment Station at Buitenzorg (W. Java), being stationed most of the time at the Coconut Experiment Station[1] at Manado in N. Celebes; at present stationed at Makasser (SW. Celebes).

His papers are either physiological, or deal with the biology of the coconut and other palms.

COLLECTIONS. *Herb. Pasoer.:* 5 *nos* of plants from *Sangihe* and *Talaud Islands*, N of Celebes (coll. *1930*), and some small samples in *Herb. Bog.*

LITERATURE. (1) Author of 'De bevolkingscultuur van klapper in het bijzonder in Oost Indonesië' (Meded. Dept Econ. Zaken N.I. *no* 11, 72 pp., fig. 1–5b).

Tan Goan Piaauw
of Buitenzorg, *W. Java*, sent plants to *Hort. Bog.* in *1878*.

Tan Keng Wie, *cf. sub* Forest Research Institute, Buitenzorg.

Tanaka, Tyôzaburô
(1885, Osaka, Japan; x), graduated at Tokyo University, 1910; Dr of Agriculture, 1932; Professor of Horticulture and Applied Botany at Taihoku Imp. University, 1929–44; Emeritus Professor, 1945. Well-known Citrus specialist.[1]

In 1923 he was for a short time a guest of the Buitenzorg Herbarium. Early 1938 he was Guest Professor in the Philippines, making several collecting trips.[2]

COLLECTING LOCALITIES. *1923. W. Java:* in and around Buitenzorg (mostly Cultuurtuin = Economic Garden) (March or April).—*1935. Malay Peninsula:* around *Singapore* and Kuala Lumpur (Nov.).—*1937* (*or ? 1938*).[2] *Philippines* (Jan.–March): *Luzon* (northern half, central route, and western route, *via* Aparri, Laoag, and Baguio), and *Mindanao* (route through Davao, Cotabato, Dansalan and Illigan, including Bukidnon).—*1944. Java* around Batavia, Buitenzorg and Soerabaja (Sept.).

COLLECTIONS. About 300 sheets of *Citrus* only,[1] in TANAKA *Herb.* in the *Univ. of Taiwan* (Hort. Inst.).

LITERATURE. (1) T. TANAKA: 'Notes on the Dutch Indian species of Rutaceae-Aurantieae' (Meded. Rijks Herb. Leiden *no* 69, 1931); 'Philippine Rutaceae-Aurantioideae (Revisio Aurantiacearum VII)' (Trans. Nat. Hist. Soc. Formosa 22, *no* 123, 1932, p. 418–433); 'A report of the investigation of Philippine Citrus' (Studia Citrologica 9, 1939, p. 1–33).

(2) *cf.* Chron. Bot. 4, 1938, p. 275. According to his own information he collected early in 1937!

Tanasalè, P., *cf. sub* Forest Research Institute, Buitenzorg.

Tandom, H.
Forest Guard; *cf. sub* For. Dept Br. N. Borneo.

Tangkilisan, W., *cf. sub* Forest Research Institute, Buitenzorg.

Tanje, H., *cf. sub ditto.*

Tappenbeck, Ernst
agriculturist who in 1891 entered the service of the German New Guinea Company.[1] He made some trips into the interior of New Guinea, and in 1898 was appointed Leader of the 2nd Ramu Expedition during which he was accompanied by an Indonesian collector.

ITINERARY. *NE. New Guinea*, former Kaiser-Wilhelmsland. *1892.* Ascent of the ridge of the Hansemannberg, situated about 4½ km from Friedrich Carl Hafen, in company with the missionary G. BERMANN (Apr.).[2]—*1896.* A member of the *Kaiser-Wilhelmsland Expedition, cf. sub* C.

A. G. LAUTERBACH (also for liter. *etc.*).—*1898. 2nd Ramu Expedition,*[3] with H. RODATZ and H. KLINK (see those). Starting from Friedrich Wilhelms Hafen (Apr. 3): Elisabeth Bucht (–Apr. 7); Prinz Adalbert Hafen (–Apr. 12); Potsdam Hafen; mouth of the Ottilien (= Ranu or Ramu) River (13); ascending the same until reaching the locality to where LAUTERBACH had come downstream on Aug. 14, 1896, thus producing evidence for the identity of the Ramu and Ottilien River; KLINK & RODATZ (see there) stayed behind, the others went downstream and left the river mouth on April 26th. To Prinz Adalbert Hafen (Aug. 9), staying till the 18th; Prinz Eitel Friedrich Hafen; Potsdam Hafen (21–25); mouth of the Ranu; ascending the river (31), reaching the station on Sept. 3rd.

COLLECTIONS. *Herb. Berl.:* coll. 1896 (*cf.* LAUTERBACH) and 188 *nos* of the 2nd Ramu Expedition. Possibly no collections were made in 1892.

LITERATURE. (1) Author of 'Deutsch Neu-Guinea' (Berlin 1901; giving a few remarks on the vegetation).

(2) *cf.* Nachr. Kais. Wilh. Land 8, 1892, p. 25.

(3) *cf. l.c.* 13, 1897, p. 52–55 and 14, 1898, p. 57–59, w. map.

Taris, Dja. Bt., *cf. sub* Forest Research Institute, Buitenzorg.

Tarrosa (or **Tarroso**), *cf. sub* Forestry Bureau, Manila.

Taschner, Christian Friedrich

(1817, Eisenach, Germany; ?), is cited as the collector of a *Hymenophyllacea* in *Java* (*cf.* VAN DEN BOSCH, Hymenophyllaceae, 1861, p. 38). He is the author of 'De Duabis Trichomanum speciebus de earum nec non aliarum hujus generis plantarum structura' (Jena 1843), and possibly was the owner of a private herbarium. No data as to him ever having visited Java are available.

Tassim Daud

employed in the Singapore Gardens (*1886–95*), collected plants under RIDLEY in the *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

COLLECTIONS. In *Herb. Sing.*

Taylor, Edward Harrison

(1889, Maysville, Mo., U.S.A.; x), zoologist (main interest herpetology), educated at Kansas, where he took his Ph.D. in 1926. Went to the P.I. in 1912; from 1916–20 Chief division Fisheries, Bur. of Science, Manila, P.I.; from 1923–24 Head Dept Zoology, Philippines; since 1927 at Kansas University, Professor from 1934 onwards.

Eria and *Malaxis taylori* AMES were named after him.

COLLECTIONS. In *1913* he sent 63 *Philippine* plants for identification to *Herb. Manila.* In his 'Enumeration Philip. Flow. Pl.' MERRILL cites several numbers of his (*e.g.* 1, 9, 10, 28, 202), most of the plants evidently being orchids; in Dec. *1922* he collected on Mt Maquiling, *Luzon;* plants from *Mindanao* too. Orchids in *Herb.* O. AMES (Cambr., Mass.).

Tecson, T.

cf. sub Forestry Bureau, Manila; he is commemorated in *Discocalyx tecsonii* MERR.

Teerink, Carel Gerrit Jan

(1897, Amersfoort, U., Holland; early March 1942, killed during battle, Tjiater Pass above Bandoeng, Java), joined the D.E. Indian Army in 1919 as a 2nd lieutenant; officer in command of the military detachment accompanying the 3rd *Archbold Expedition* (*1938–39*) in *Dutch New Guinea* (*cf. sub* L. J. BRASS). In 1940 he was promoted to the rank of major, and appointed Military Commander of Semarang.

COLLECTIONS. He collected some plants during the above-mentioned expedition, which were evidently inserted in the collection BRASS (see there) and elaborated with the latter.

Tengwall, Tor Åke

(1892, Ornsköldsvik, Sweden; 1946, New York City, U.S.A.), was educated and took his Ph.Dr's degree at Uppsala (1920), studied for some time at Utrecht University, and was subsequently on the staff of the Experiment Station for the Java Sugar Industry at Pasoeroean, E. Java (1921–26), finally in the rank of Inspector. From 1926–31 Sub-Director of the Rubber Experiment Station at Buitenzorg, from 1931–33 Leader of the Agricultural Service of the 'Bergcultures' in Java. In 1933 he was appointed Director of a tropical Agricultural Institute in Turkey; subsequently Director Research Dept Firestone Plantation Co. in Liberia; finally Adviser of the Rubber Division of the Board for the Netherlands Indies, Surinam and Curaçao at New York City.

Author of some plant-geographical papers.

Blechnum tengwallii KJELLB. and *Vernonia tengwallii* KOSTER were named after him.

COLLECTING LOCALITIES. *1925. Lombok:* G. Rindjani (Oct.).—*1927. SW. Celebes:* Saädang Valley.

COLLECTIONS. *Herb. Pasoer.: Lombok* plants. *Herb. Bog.:* 64 dupl. *Lombok* plants (pres. 1929) and material of *Nepenthes* from *Celebes; Herb. Leyden:* dupl. *Lombok.*

BIOGRAPHICAL DATA. KROK, Bibl. Bot. Suecana, 1925, p. 699, incl. bibliogr.; BACKER, Verkl. Woordenb., 1936; Vakbl. Biologen 26, 1946, p. 26.

Tenison-Woods, Reverend Julian Edmund

(1832, Southwark, London, England; 1889, Sydney, Australia), was educated at Oxford, and in 1854 appointed Professor at the Naval Cadet College, Toulon (France). He went to Tasmania in 1855, and was ordained priest in 1857. His special interest was geology, and in 1883 he was invited by the Governor of the Straits Settlements to report on the mineral resources of that region; H.M.S. 'Pegasus' was specially detached for this service. WOODS explored Java, Siam, Borneo, Malacca and the Philippine Islands. He returned to Australia in 1886 or 1887.

Author of numerous papers, mainly published in the Proc. Linn. Soc. N.S.W.[1]

ITINERARY.[2] Leaving Sydney (June *1883*); stop at Brisbane, travelling in SE. Queensland for 2 months; sailing from Brisbane (Aug.); *E. Java:* Banjoewangi; *via* Bajuramatti (= Badjoelmati) to Soembravardoe (= Soemberwaroe), Asoembagus (= Asembagoes), Kapongan, Sitoebondo, Klampokan, Besoeki; *via* Dringu to Proboling(g)o; Passerowan or Passueran (= Pasoeroean); by railroad to Malang, visiting the vicinity; Tusari (= Tosari), Mt Tengger, Sand Sea, Bromo Crater; back to Malang, and by train to Sourabaya; visiting the vicinity; by train to Madioen; *Centr. Java:* Seragen, Solo (temples); Djokjakarta (ruines); Boro Budor, Magelang, Ambarawa, Samarang; by steamer to *W. Java:* Batavia, touching at Pekalongan, Tegal, Cheribon, and Pamaroukan (= Pamanoekan); visiting Buitenzorg, Soekaboemi, Parakan Sala(k) Estate; early in Oct. by steamer from Batavia to *Ban(g)ka* (Muntok); *Riouw Archipelago: P. Bintang; Malay Peninsula: Singapore* (Oct.), leaving the latter place (Oct. 28) for Malacca; *Penang* (leaving Nov. 10); Perak (for a long time Taiping was made the central point of his activities, so probably in this period collecting with SCORTECHINI), visit to Mt Bubu[3] with SCORTECHINI; Jan. *1884* laid up with fever; Febr. starting on a boat expedition *into the interior*,[4] leaving Kuala Kansa, descending the river; by land to Possin, Pappau, Lahat, Goping (tin mines); down Kinta River to the Kampar River, ascending the latter; from Kuala Diepang to Telok Anson (Perak); Krian River; starting from the mountain garden at Arang Para (May 20, 1884), staying on Mt Bubu (23–27), visiting the Kenas River, and returning to Arang Para; some weeks at Pangkor; Selangor; Pahang (mid-1884); Malacca (Oct.); starting (end Oct.) from Penang in H.M.S. 'Pegasus' (Capt. BICKFORD) for a cruise in Bornean and Sulu seas, in *N. Borneo* touching at: *Labuan*, Brunei, Gaya, Kudat, Sandakan (Nov. 12), and in the *Philippines:* the *Sulu Archipelago* (Jolo) and the *Cagayanes Islands*.[5] At Manila (*Luzon*) he left H.M.S. 'Pegasus,' moving to H.M.S. 'Flying Fish' (a government survey vessel). According to Mr C. T. WHITE he visited Taal Volcano early in 1885 (I doubt this); Hongkong and Japan (June–July); again in China and Japan in Oct.—In *1886* he made travels in the *Philippine* Islands, collecting on Taal Volcano (Lake of Bombon) in *Luzon* (end of March 1886);[6] he also visited the *Moluccas*.

COLLECTIONS. His collection was sent to SCORTECHINI (see there), so the bulk probably went to *Herb. Calcutta* with that of the latter. There is very little known about the amount *etc.* of his collections; from Taal Volcano (*Luzon*) he brought back more than 100 plants, augmented through the kindness of friends, who had collected in the same locality, to more than 230 species; in the *Philippines* he collected *Fungi*, lichens, mosses, fishes and molluscs besides.

Mr C. T. WHITE informed me that WOODS's legatee and executrix got in touch with F. VON MUELLER who offered £ 40 for his Herbarium of *Indian*, Japanese, and Australian plants; this was probably accepted and Mr WHITE presumes that the bulk of the specimens are in *Herb. Melbourne.* In *Herb. Brisbane:* a number of plants from Hongkong, Japan, and Australia.

LITERATURE. (1) J. E. TENISON-WOODS: 'History of the discovery and exploration of Australia' (1865, 2 vols), and other books; 'Malaysian essays *no* 4. On the vegetation of Malaysia' (Proc. Linn. Soc. N.S.W. 2nd ser., vol. 4, 1889 (1890), p. 9–106, pl. 1–9), and many non-botanical papers in the same periodical.

(2) J. E. TENISON-WOODS: 'A journey through Java' (20 letters in Sydney Morning Herald 1884); 'An exploration in Perak' (7 letters in *l.c.*) (*non vidi*).

(3) J. E. TENISON-WOODS: 'Journey to the summit of Gunong Bubu' (Journ. Str. Br. Roy. As. Soc. *no* 14, 1884, p. 275–285).

(4) *cf.* extracts from a letter to MACLEAY in Proc. Linn. Soc. N.S.W. 9, 1884, p. 383–386.

(5) J. E. TENISON-WOODS: 'Geographical notes in Malaysia and Asia' (Proc. Linn. Soc. N.S.W. 2nd ser., vol. 3, 1888 (1889), p. 557–650).

(6) J. E. TENISON-WOODS: 'On the volcano of Taal' (*l.c.* 2, 1887 (1888), p. 685–810, pl. 18–19; with catalogue of plants p. 739–804; *cf.* also PETERM. Mitt. 1888, p. 246).

BIOGRAPHICAL DATA. Proc. Linn. Soc. N.S.W. 2nd ser., vol. 4, 1889 (1890), p. 1301–1309, incl. bibliogr.; Ann. Bot. 3, 1889/90, p. 494–495, incl. incomplete bibliogr.; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 29, 1891, p. 375, and in 2nd ed. by RENDLE, 1931; MAIDEN in Journ. Austr. Ass. Adv. Sci. Adelaide Meeting 1907, p. 22–23, and in Journ. & Proc. Roy. Soc. N.S.W. 42, 1908, p. 82; Austral. Encyclop. 1926; Catholic Encyclop. 15, p. 702 (portr.); Rev. G. O'NEILL: 'Life of the Rev. JULIAN EDMUND TENISON-WOODS (1832–1889)' (Sydney, Melbourne, Brisbane 1929, w. several photogr.) (*non vidi*).

Teodoro, N.

COLLECTIONS. *Herb. Manila: Philip.* plants (pres. *1916*).

Terhaar, Captain

collected material of *Rafflesia atjehensis* KDS near Lokop, Serbodjadi Subdivision, Atjeh, *N. Sumatra* (March 15, *1918*).[1]

COLLECTIONS. The above-mentioned plant in *Herb. Bog.*, numbered in *Herb.* KOORDERS.

LITERATURE. (1) *cf.* S. H. KOORDERS: 'Botanisch overzicht der Rafflesiaceae van Ned. Indië' (Meded. *no* 4 N.I. Ver. t. Nat. Besch., 1918, p. 124[14]).

Teruya, Z.

a resident of Singapore, Secretary of the Japanese Planters Association from *c.* 1924–40.

Author of semi-popular works in Japanese on Malayan plants, intended for planters.

COLLECTING LOCALITIES. *1924→.* In the *Malay Peninsula*, specially in Johore. In the Malay Archipelago he visited: *Sumatra West Coast* (Sept. *1929*); *N. Celebes (1931)*: Mongondow (March 28), Mt Aga in the Minahassa (Apr. 4); *SW. Celebes:*

Pangkadjene (May 8). According to Mr HOLTTUM he collected in *Borneo* too, near Japanese rubber estates.

COLLECTIONS. At least partly in *Herb. Sing.* (pres. 1924). Owner of a *private herbarium* of phanerogams and ferns; in 1937 his numbering was up to *c.* 3000. He certainly sent also material to Japan.[1]

In 1935 a collection of his was identified at Buitenzorg at the request of Singapore.

During World War II he deposited his *private herbarium* in *Herb. Sing.* where it is still at this moment (1947), awaiting the decision of the British Government whether it will be given back or not.

LITERATURE. (1) *cf.* R. KANEHIRA: 'A contribution to our knowledge of Pandanus of the Malay Peninsula and Borneo' (Journ. Jap. Bot. 14, 1938, p. 429–438, 10 fig.).

Teschemacher, James Englebert

(1790, Nottingham, England; 1853, Boston, Mass., U.S.A.), merchant, first in London, since 1830 at Havana, and since 1832 at Boston. Evidently an amateur mineralogist, writing numerous papers on that subject. He is cited in HOOKER, Species Filicum, as the collector of some *Sumatra* ferns. According to Dr O. POSTHUMUS most of the cited species were not found back by others, and are partly known of the Sandwich Islands only. The latter fern specialist supposed an interchange of labels, or something of the kind, to have taken place.

T. was evidently one of W. J. HOOKER's correspondents (*cf.* Ann. Bot. 16, 1902, App. C., p. ccxvi) in the years 1842–43, and is mentioned in the introduction to the 'Synopsis Filicum' as having sent material from the *East Indies* (incl. the *Malay Peninsula* and the *Malay Archipelago*) to him.

J. E. TESCHEMACHER is the author of: 'On a new species of Rafflesia, from Manila' (Bost. Journ. Nat. Hist. 4, 1841, p. 63–66, *t.* 6; reprinted in JARDIN Ann. Mag. Nat. Hist. Lond. 9, 1842, p. 381–384, 1 pl.). He received the material from Manila (coll. in *Leyte, P.I.*), and did *not* collect it himself.

BIOGRAPHICAL DATA. POGGENDORFF, Biogr.-Liter. Handwörterbuch 2, 1863, p. 1083.

Tetelepta (or Tetalepta), J., *cf. sub* Forest Research Institute, Buitenzorg.

Teuscher, R.

(1827, Buttstaedt, Saxony, Germany; March 30, 1884, Bandoeng, Java), garden-architect in Holland; in 1851 at Batavia as a soldier in the Dutch army, laying out the garden of the Military Hospital at Weltevreden; subsequently placed under TEYSMANN in the Buitenzorg Botanic Gardens, but soon bought out, and becoming planter; later Overseer of the *Cinchona* division of the Botanic Gardens; in 1863 starting a nursery of his own at Batavia in the same locality where the next year the Zoological Garden was founded, of which he was appointed manager; after some disagreement he was dismissed, and once more started a nursery of his own; then successively on a coffee estate near Buitenzorg, starting a tobacco plantation, and finally a nursery at Bandoeng (about 1869). In 1881 he made a voyage to Europe, and in 1882–83 he made some collecting trips in Borneo (see below), subsidized by the D.E.I. Government.

Begonia teuscheri, and *Dryopteris teuscheri* v.A. v.R. were named after him.

ITINERARY. *1st Borneo trip, 1882.*[1] Starting from Batavia (May 1); *W. Borneo:* Pontianak (3–5); ascending the Kapoeas by boat; Sintang (8–10); ascending the Melawie (11) to Nanga Pinoh (15) and beyond; G. Lobang (18), Mam (20) and Sg. Mam (20–21), Noeah (24), Sg. Noeah, Bt Boelai and Bt Noeah (25); back at Nanga Pinoh (26); G. Taboen (28); from Nanga Pinoh (June 1) ascending the Pinoh River, visiting G. Berinat (2), and back at Nanga Pinoh (3); return to Sintang (5), where making preparations for a Kapoeas trip; start from Sintang (16); Silat (19); Smitau (21–23); Sg. Koempai (26); return to Smitau; downstream (29), Bt Toengoel, Silat; visiting the Penein Mts (June 30–July 1); Ketoengouw (= Ketoengau) River; Sintang (4–15), making a trip on the Melawie River (14); descending the Kapoeas to Tempoena (16); Melawie River (17); Sintang (22–29); Biang (July 31–Aug. 3); Sangau (4); Semangkai (5); leaving Meliau (7); arriving at Pontianak (10).—*2nd Borneo trip, 1883.*[2] *W. Borneo:* Pontianak (Apr. 17–22); Sintang (Apr. 27–May 16); to the Melawie River (17); Nanga Pinoh (21); kp. Noah (29), Kroab (31); Serawej (June 9–13); ascending the Serawej (14); the Nanga Sepan (20), G. Rajah (22); Menoekoeng (27), Kroab (28), climbing the mountain there and proceeding to Noah (29), Bt Boelai (30), Nanga Pinoh (July 3); Sintang (4–27); ascending the Kapoeas to Penein, returning on Aug. 2nd; Sintang (5–12); back at Pontianak (23).

COLLECTIONS. *Herb. Bog.: Borneo* collections, including many ferns.[3]

Hort. Bog.: many living *Borneo* plants (including orchids) and seeds. As early as *1877* he presented living plants (cultivated specimens) to the Buitenzorg Garden. He evidently sent living plants to *Ghent* (Belgium) for the 'Compagnie continentale d'horticulture à Gand'.[4]

LITERATURE. (1) *cf.* Diary in Tijdschr. Landen Tuinbouw en Boschcultuur 2, 1887, p. 200, 228, 314; *l.c.* 3, 1888, p. 270, 307, 347, 403. Reprinted as 'Dagboek van TEUSCHER's eerste reis naar de W. kust van Borneo in 1882' (Alg. Landb. Wbl. N.I. 19, 1934, p. 202–203, 246, 262–263, 309–310, 386–388, 465–467, 508).

cf. also 'TEUSCHER's speurtochten in Borneo (uit een reisjournaal van 1882)' (De Orchidee 4, 1935, p. 109–112).

(2) *cf.* Diary of the 2nd trip in Tijdschr. Landen Tuinbouw en Boschcultuur 4, 1889, p. 146, 187, 228, 266, 326, 367, 405, 442, 477.

(3) Elaborated by W. BURCK: 'Contributions to the fern-flora of Borneo' (Ann. Jard. Bot. Buit. 4, 1884, p. 88–100, pl. 7).

cf. also some in H. CHRIST: 'Filices Borneenses' (*l.c.* 20, 1907, p. 92–140, pl. 3).

(4) *cf.* SCHUMANN in Pflanzenreich Heft 20, 1904, p. 83.

BIOGRAPHICAL DATA. Javabode, April 22nd, 1884 (reprinted in Sempervirens 13, 1884, p. 195–196); BACKER, Verkl. Woordenb., 1936.

Textor, Carl Julius

(1816, Beckenheim near Frankfurt a/M, Germany; ? , ?), was designated to take the place of Dr J. PIEROT (see there), who died in China on his way to or from Japan in 1841. He arrived in Java in 1842, and in 1843 was appointed Assistant at the factory for Dutch trade with Japan. In 1845 on leave and discharged, as the Roy. Soc. for Encouragement of Horticulture (Kon. Mij t. aanmoediging v.d. tuinbouw) did not require his services any more. In 1846 he returned to Java at his own expense and was appointed Overseer of the indigo culture; in 1852 promoted Assistant, in 1853 transferred from Bagelen to the Priangan Regencies; in 1856 official for Japan, placed at the disposal of the Chief Dutch Director there; in 1857 Assistant of the factory for Dutch trade with Japan; discharged in 1859.

ITINERARY. It was settled that he was to accompany HASSKARL's tour to Semarang and Djapara in *Centr. Java*, which took place in Oct. *1842.*[1]

COLLECTIONS. Collections, which *may* include *Java* plants, are in *Herb. Leyden.*

LITERATURE. (1) *cf.* Meded. 's Lands Pl. Tuin *no* 6, 1889, p. 57.

Teysmann, Johannes Elias

(1808, Arnhem, Gld, Holland; 1882, Buitenzorg, Java), came to Java in 1830 as Gardener of Governor General VAN DEN BOSCH. From 1831–69 he was Curator of the Buitenzorg Botanic Gardens which he succeeded in keeping going notwithstanding numerous difficulties. In 1858 he was appointed Honorary Inspector of Cultures, which office he still filled after his retirement as Curator in 1869. During his long term of office he made very important botanical explorations, in later years along with his valuable work in the interest of crop plants. It was stipulated that he was never to stay away on a tour for more than 6 months, as it was well-known that his zeal was without limits.

He is the author of botanically interesting reports on his numerous tours, and published besides many papers on useful plants, for the greater part in Natuurkundig Tijdschr. Ned. Indië.

He is commemorated in the genus *Teysmannia* RCHB. *f.* & ZOLL. and in several plant species. His name was given too to the periodical 'Teysmannia' (1890–1922), since 1925 incorporated in 'De Indische Culturen-Teysmannia'.

COLLECTING LOCALITIES & ITINERARIES. *1842. W. Java:* G. Salak with SCHWANER and ZOLLINGER (betw. Nov. 29–Dec. 26).—*1853. Tour to the Priangan Regencies and Central Java:*[1] from Buitenzorg (May 20) to Tjiandjoer by way of the Poentjak and Tjipanas; Bandoeng (21); Lembang (22); G. Tangkoeban Prahoe (23); Garoet (24); Telega Bodas (25); crater of G. Goentoer (26); from Tjisoeroepan visiting the crater of G. Papandajan (27); Garoet–Manondjaja (29); Manondjaja –Bandjar (31); descending the Tjitandoej to Kalipoetjang (June 1); *Centr. Java:* proceeding downstream the Tjitandoej, and crossing the Segara Anakan to the SW. point of *Noesa Kambangan*, Bantengmati (2); exploring the western part of the latter island (3–4), collecting along the north coast and proceeding by boat to Tjilatjap (5); east side of Noesa Kambangan, at Karangbolang exploring the beach (7); returning to *Centr. Java:* Tjilatjap, *via* Adipala, Djetties, crossing the Aija (= Ajah) Mts to the bird-nest cliffs at Karangbolong in Bagelen (8); visiting the caves and back to Adipala (9); Banjoemas (10–11); Bandjernegara (12); proceeding to the north, Pagentan, Bato(e)r (13), exploring the environs (14); Diëng Plateau (15–17); Wonosobo (18–20); Temang(g)o(e)ng (21–25); Magelang (26); Boroboedho (= Boroboedoer) and Tjandi Mendoet, Moentilan (27); Djokjakarta (June 28–July 1); Zuidergebergte (Goenoeng Kidoel) (2–6); Djokjakarta (7–13), making a trip to Megiri (12); Soerakarta (14–15); Karangpandan, Kamoening (16–17); G. Lawoe (18–19) and back to Kamoening; trip to Soekoe (21); Solo (= Soerakarta) (22–23); *via* Bojolali to Gebiok (24); Selo (saddleback G. Merapi and Merbaboe) (25); Ampel (26); Salatiga (27); Semarang (28–31), making some trips in the environs; Pekalongan (July 31–Aug. 1); Tegal (2–3); *W. Java:* Cheribon (3–4); G. Tjeremeh (= Tjareme), ascent from Koeningan *via* Argalinga (6–7); Madjalengka, Karangsamboong, Soemedang (8); Bandoeng (9); Tjiandjoer (10); Buitenzorg (11).—*1854. Tour to East Java etc.:*[2] Buitenzorg–Semarang (June 11–14); *Centr. Java:* Semarang–Djawana (= Djoewono) (16); Tajoe, visiting the beach, and proceeding to Poentjal (17); Banjoemanis, Keling, Bandjaran (18); (D)Japara (19), from where visiting *P. Kellor* and *P. Tengga* (21); *Karimon-Java* (= *Karimoendjowo Islands*) (22–24), visiting *P. Karimoendjowo, P. Mienjangan* (= *Mendjangan*)*-ketjil* (23) and *P. Mendjangan besar* (24); by boat to Djapara (25–30); Majong, Djoerang (July 2); Tjo(h)lo(h) (3), climbing part of G. Moriah (= Moerjo) (4); Pat(t)i (5); Rembang (6–7); Blora, Ngaring (8); *E. Java:* Ngawi (10–11); Maget(t)an (12); Plansan (= Plaosan) (13); by way of Madioen to Ponorogo (14); Slaong, Nimbang (15); Patjitan on the S. coast (16); Nimbang, Lohrok (= Lorog) (17); Pangool (= Panggoel) (18); Bay of Soembri(e)ng (19); Prigi (20); Treng(g)alek (21–23); *via* Poedak to G. Wilis (24), climbing its highest summit the Dorowati (25); Trengalek (26); Toeloenagoeng (27); Blitar (28–30); Garo(e)m, Semen (31); G. Kawi (Aug. 1–2); Ngantang (3); Batoe, Malang (4); Pakis, Nongkodjadjar (6); Tosari (Tengger Mts) (7); visiting Bromo Volcano and proceeding to Ngadisari (8); Petalan, Probolinggo (9); Probolinggo, Klak(k)a(h) (11); Loemadjang (12); Poeger and Watang Mts (= G. Watangan) (13–14); to Djember (15); Bondowos(s)o (16); Pradjakan–Sitoebondo–Soemberwaroe–Badjoelmati (17); Banjoewangi (18); Rogodjampi (19); Bomo and back to Rogodjampi (20); Kradenan, Gradjakan (= Gradjagan) (21): Rogodjampi (22); to Litji(e)n (23– ? 30); by boat (Aug. 31) to *Bali:* Pabehan (Bali Boleling) (Sept. 1); Singaradja (1–20),

making trips in the environs, to the falls of Banjoemala (6), to Kaliboeboek (8), Sangsit and Boengkoelan (9), the road to Gi(e)tgi(e)t (17), *etc.;* trip to Ban(d)jar and embarking for Tebongkoes (21); *E. Java:* Banjoewangi (23); on horseback to Badjoelmati (24); Soemberwaroe, Kapongan (25); Sitoebondo, Panaroekan, Besoeki, Probolinggo (26); Pasoeroean (27); Soerabaja (Sept. 28–Oct. 3); along the N. coast to Toeban (4); Lassem (collecting *Limonia!*), Rembang (6); returning to Buitenzorg by the same route as followed on the outjourney, arriving home on Oct. 13.—*1855–56. Tour to West Sumatra:*[3] sailing from Batavia (Nov. 1, *1855*); *Sumatra West Coast: P. Pisang* off Padang (11–12); Padang (13–19); Loeboe(k)along (20); Kajoetanam (24); Padangpandjang, Aneikloof (25–27); Fort v. d. Capellen (28); Singkarak (Nov. 29–Dec. 1); Solok (2–3); Bat(t)angbaroes (4); Alahan Pandjang (5); Lolo (6); Loeboesampiet (7); Soengipagoe (= Tandjong-medan) (8); Solok (15); Boekitsiliet (23), G. Talang (24); Soepaijan (25–26); Solok (27); Padangsiboesoek, Sidjoengdjoeng, Tandjongampalo (= Tandjoengampoeloe), Boea, Halaban; Pajako(e)mbo(eh) (Jan. 5, *1856*); Fort de Kock (7–9); *via* Matoewa and Karbouwengat to Manindjoh (= Manindjau) (10); Palemba(i)jan, Bondjol, Loeboesikepping (= Loeboeksikaping), Panti, Rau (= Raoe); *Tapanoeli:* Moearasipongi, Kottanopan (= Hoetanoppan), Penjaboengan, Siaboe, Soeromantingi (= Saroema-tinggi); Padangsidempo(e)an (26); Bat(t)angtaro (= toroe), Loemoet, Djaga-djaga; crossing the bay of Tapanoeli to Sibolga (31); trips by proa in the bay; Baro(e)s (Febr. 7); back at Sibolga (10), from where sailing on the 16th, touching at Natal, *P. Taman* (= *Temang*) (21), Padang (24), and the Poeloe Bay (Benkoelen) on the way to Batavia (arriving March 5). If the data on the concerning herbarium material are correct, he collected in 1856 too on *P. Weh*, N of Sumatra.—*1857. Tour to Banka and the interior of Palembang:*[4] sailing from Batavia (Apr. 8); *Banka:* Muntok (14–22), collecting in the environs (several *Nepenthes* species!); (D)Jeboes (Apr. 23–May 4); Plangas (5); Muntok (6–14); *S. Sumatra:* Palembang (16–28); going into the interior, mainly by proa: Kepahiang (June 4), Batoeradja (5), Moeara-doewa (11), and rowing back (17); Moeara Enim (June 25–July 10), making several trips in the environs; Lahat (12–13); Moeara Enim (14–15); by proa (16) to Palembang; Palembang (Aug. 7–16); *via* Muntok (*Banka*) (17–18), back to Batavia.—*1857–58. Tour to the Lampong Districts:*[5] sailing from Batavia (Nov. 1857) to *S. Sumatra:* Telok Betong; crossing the Lampong Districts: Mangala (= Menggala), ascending the Toelang-bawang River to Kebang, visiting the Talang forests, returning by boat to Mangala and proceeding to Moeara Toelangbawang on the coast; back to Mangala, Tarabangi, and downstream the Bengoeboean River to Siriengkibouw, and back to Tarabangi; in western direction to the mountains, following the course of the Pengoeboean as far as Gedongarta; Soedoesoedoe Mts and back to Tarabangi; Telok Betong; by proa to *Krakatau, Sebisi* (= *P. Sebesi*) and *Seboekoe;* returning to *S. Sumatra*, landing at Tjanti, from where starting a trip to the Ampat marga's following the southern route to Tjampakka; visiting one of the highest ridges of G. Radja Bas(s)a and the eastern beach as far as Ketap(p)ang and Rogok; following the road west of the Radjabasa back to Ketimbong; by cruising-proa to Batavia (Jan. *1858*).—*1859.* In the second half of the year travelling with W. H. DE VRIESE (see there) in *Java* and *Madoera.*[6]—*1859–60. Tour to the Moluccas with* W. H. DE VRIESE:[7] sailing from Soerabaja (Dec. 15, *1859*); *SW. Celebes:* Makassar (a few days); *Timor:* Koepang (1 day) and a visit to Timor-Delhi (= Dilly); *Banda Islands: Groot* and *Klein Banda; Ambon* (early in *1860*), visiting Hitoe, Leitimor, Ema, Bata-lobang, Batoe-Gantong, *etc.; Saparoea*, from Nol(l)ot crossing to *Ceram:* landing at Latoe; Hoealooi and by boat to Elpa-poetih; by boat to Awahia (= ? Waija), Makariki (visiting Roewata River), Amahai (visiting Kowako Plain), and the region west of the Elpa-poetih Bay (landing at Roema-Kaij); partly by land to Tihoelal(i)e, and partly by sea to Kamarian, from where making a trip to Kai(j)ratoe and to a plateau in the interior; Waaij (= ? Wahai, or, ? Waija), from where by land to Toleehoo and Soelie, and following the Bay of Baguala to the pass; *Ambon; Boeroe* (Febr.): Kaje(e)li, from where ascending the Wai-Apo(e) to Wai-Poro and Wai-Geelen; by sea to the SE. coast, touching at Pohon-Rea, Namlea and Lomara; *P. Oki(e)* and environs of Oki(e); *Ambon*, visiting Roema Tiga, Hitoe-Lama, Hila and Said; *Ternate*, from where visiting *Tidore*, and climbing the Peak of Ternate (March); *Halmaheira:* Sidangoli(e), visiting several small islets and ascending the rivulet; by sea to Dj(a)ilolo; by land to Sahoe and Soerahoo; Dj(a)ilolo–Sidangoli(e)–Dodi(e)nga; *Ternate; Batjan* (Apr., staying 5 days), mainly in the vicinity of the principal town (? Laboeha) and making a trip to Mombia; *N. Celebes*, Minahassa (Apr.–June): Kema, from where on horseback to Manado; trips to Paniki(e), Pandoe, Tonk(e)la and Kima; Tomohon, Kakas, Sonder, Kakas, crossing the lake to Tondano; trip to Sawangan and the Fall of Tondano at Tonsea-Lama and Roeroekan; in eastern direction to the coast, Atep, from where returning to Kapetaran; *via* Toleran-Ketjil to Kakas, crossing the lake; Ratahan, Be(e)lang; Ratahan, Tonsawang, Amoerang (Romohon); tour to Koemel(o)emboeai and Pontak; Romohon, Sonder, Tomohon, Tana(h)wangko, Manado; travelling in the northern part to Kassar and Toelap (Girieng River), from where by sea to Kema; E. slope of G. Klabat (up to 900 ft); Kema, Matoengkas, Li(e)koepang, Manado; back at Soerabaja (June 19). *About 1860* he evidently collected on *Krakatau, P. Sebesi*, and *Dwars in den weg* (= *P. Sangian*).[8]—*1862. Tour to Siam:*[9] sailing from Batavia (Febr. 25); *Singapore* (March 1–4, collecting in private gardens); Siam (March 11–Apr. 3); *Riouw-Lingga Archipelago: P. Bintang*, Tandjong Pinang (9–10); Batavia (15).— *1869–70. Tour to Banka:*[10] arrival at *Banka*, Muntok (June 27); exploring the coast in the vicinity; G. Mle noembing (July 13–14); visiting the N. coast (Juy-

21–Sept. 17); Soengei-Liat (= Soengailiat), G. Betong, G. Raja, Maras Mts; Marawang; to Pangkal Pinang (Oct. 25); Mang(k)ol Mts (G. Langier) (29), Koba, Toboali(e); *Lepar Archipelago* (Nov. 26–Dec. 4), visiting *P. K(e)lapan* and other islands; back in *Banka*: following the by-path to Soengeiselan; Permisan Mts (Dec. 21); *via* Pangkal Pinang back to Muntok, from which place making minor tours in the vicinity till his departure on Jan. 27th; back at Buitenzorg (31).—*1870–71. Tour to Banka* (for making experiments in laying out sawahs, but making botanical collections too) (Aug. 7, 1870–Apr. 1, 1871).[11]—*1871. Voyage to New Guinea in the 'Dassoon':*[12] *Ternate* (July 28–Aug. 12), visiting Batoe Angoes, Telaga Soela Takomi (lake) (6), *etc.; P. Gebe* (15–19), *P. Fau* (18); *Salawat(t)i*, Samate (22–23); *SW. New Guinea:* Gulf of MacCluer (or Telo(e)k Beraoe) (25–30), TEYSMANN not permitted to go ashore; *Salwat(t)i*, at Samate (Sept. 1–4), visiting *P. Bam* and *Roembobo* (2), and *P. Sor(r)ong* (3); *NW. New Guinea:* Dorei, Geelvink Bay (Sept. 8); *P. Mansinama* (= *Mansiman*) (9); vicinity of Dorei (10–11); *P. Japen*, Ansoes (13–15); Napan (16–17); *P. Roön* (17–19); Was(s)ior (19); *P. Meoswaar* (= *Mios Waar*) (20); Wandesi (= Wendehsi), Wariap, Dorei (21); Ajambo(e)ri (23), Andai (24–25), Andai River (26–27); Dorei, leaving Oct. 1st for *North New Guinea:* Humboldt Bay (Oct. 8–11, 14–15); Walckenaers or Valkenier Bay (= Tanahmerah Bay) (17); mouth of the Amberno River (= Mamberamo) (19), ascending the same for some hours (20); stay at Dorei (23–28), paying visits to *P. Meosmapi* (24), and *P. Middelburg* (= *P. Doewa*) (31); *Ternate* (arriving on Nov. 6), TEYSMANN leaving the 'Dassoon' and making some trips in *Halmahe(i)ra* (10–19):[13] visiting Dodinga (10), Bebanèh (11), Kauw (12), Tabelo (= Tobelo) (13) and Galela (on the E. coast, 13) by boat; Batoe Angoes (14), Telaga lamo (15–17), Galela (17); G. Kerkan (or Kerkau) (18–19); Tabelo (19–20), visiting some islets off the coast (20); Bebanèh (21) and *via* the pass to Dodinga (22); *Ternate* (Nov. 22–28); *Boeroe*, at Kajeli; *Ambon; Banda* (Dec. 3); *Timor:* Dilly (6), Koepang (7–8); Soerabaja (12); Buitenzorg (25).—*1872. Tour to Banka & Riouw Lingga.*[14] *Banka:* Muntok (May 14); Paja Raja; Bakem; Pangkal Pinang (June 6–9); *via* Marawang to Soengei Liat (10); Belinjoe, N. coast (13); Djeboes (17); Muntok (19); Batoe Balai, sailing (June 25) for the *Riouw Archipelago:* Tandjong Pinang on *P. Bintan(g);* from that island visiting *P. Senggaran* (July 11) (the 16th at Tandjong Gliger), *P. Looz*, *P. Doempah* (= *Dompak*) (27), climbing the mountain of Bi(e)ntang (Aug. 2), *P. Pengoedjan* (= *? P. Oedjan*), *P. Tekoelei* (7) and back at Tandjong Pinang; sailing (Aug. 17) for the *Lingga Archipelago: P. Temiang* (20); *P. Lingga*, Soengei Dai (23), and making trips to Bt Tjengkeh (25), Bt Sipientjan (30), Bt Ajer Atap (Sept. 5), G. Tanda (14); *P. Singkep* (Oct. 14–19); *P. Lingga* (having plants collected on G. Dai, not on the summit, however); sailing (Nov. 12) for the *Riouw Archipelago:* Tandjong Pinang (16–18); proceeding (Nov. 19) to *Banka:* Muntok, where making a tour to Bakim and Paja Raja (24); embarking (Dec. 5) for Batavia; back at Buitenzorg (9). —*1873. Tour to the Lesser Sunda Islands:*[15] sailing from Batavia (June 15); Soerabaja (19–21); *SW. Celebes:* Makassar (26); *Timor* (June 30–Sept. 3): Koepang and environs (June 30–July 11); Taroes, Babauw (= Babaoe) (12), botanizing in the valley near the Bay of Pariti (13); Oesouw, road to the foot of Mt Fatoe Leo (14); Nonbaun (15–21), from where making trips in the environs, to Soengei Noni, *etc.;* Tanini (22–23); Nonbaun (24–25); Seh-ied (26); Kèlali (27); Pariti (28–30); Koepang (July 31–Aug. 17), collecting at Oba, Pohla, *etc.;* Baun (= Baoen) (18–23), visiting several lakes, the neighbouring coast, the Ehtoe Wéoet, *etc.;* the Noëil sani, Oïkabiti (24); Taroes (25); Koepang (Aug. 26–Sept. 3); *Soemba* (Sept. 6–Oct. 3): Kabaniroe on the Kambéra River (= ? Kambaniroe) (Sept. 6–9), visiting Waingapoe (8); Kadoemboe (10–11); Kabaniroe (12–15); crossing the island to the S. coast, Loko-Wienggoe (17), the Loko-behlar (18), Karita (20–21), Taboendoeng (22–24), Tariembang (25–26), the Lokomandas (27), foot of the Omangoetoe-manoe (28); back at Kabaniroe (Sept. 29–Oct. 3), visiting Waingapoe once more (Oct. 2); *Timor:* Koepang (Oct. 10–19); *P. Samauw* (= *Semaoe*) (20–26): Oïassa (20); Haïng-sisi and *P. Kambieng* (21); back to *P. Semaoe*, Bakanoesa (21–23); Pas Lehloh (24–25), to the beach near Poeloe Mera (25); Ajer-boek-noesang (26); *Timor:* Koepang (Oct. 27–Nov. 1); Atapoepoe (Nov. 3–5); *Alor:* Ombai (7–8); *Solor* (Nov. 12); *Flores* (12–19): Larantoeka (12–20), trips in the environs, to Woereh (*P. Adonare*) (16), some collectors to the Ilamandahiri (= Ili Mandiri) (17); *via Solor* (20) returning to *Timor:* Koepang (Nov. 24–Dec. 21); *via* Makassar (*SW. Celebes*) (Dec. 25), back to Soerabaja (arrival on the 30th); Buitenzorg (Jan.7, 1874).—*1874. Tour to West Borneo:*[16] leaving Buitenzorg (July 3); *W. Borneo:* Pontianak (10–12); Mampawa(h) (13–14); Pontianak (14–19) making a trip on the Landak River (18); by boat to Soekalanting and ascending the Kapoeas River (20); Tajan, Sangouw (= Sanggau) (21); Sekadouw (= Sekadau), B(e)litang (22); Sintang (23–24); Silat (25); Salimbouw (= Selimbau), Djongkong, Boenoet (26); downstream to Soehait (= Soehaid), and ascending the Tawang River (= S. Tanang), *P. Madjang* in Lake Seriang (27); staying in that region (July 28–Aug. 5), exploring P. Madjang (July 28–Aug. 1), Lempei, *etc.;* voyage (6–8) back to Pontianak; sailing once more by boat (16) to Sintang and the lakes of Seriang: *P. Madjang* (20), G. Lempei (21–22), Singkadjang (23), *P. Madjang* (24); Lanjak, Danau Loe(w)ar (26); discovering a remarkable *Pandanus* (27); *P. Sepandan* (27–28), *P. Malaijoe* and Moeara Bajan (30); Batang Nali and Batang Blitang, Lake Bekowang (= D. Bekoean) and Batang Poetoes, Lake Kadabang and back in the Kapoeas River (31); rowing up the river as far as Piassa (Sept. 1); Salimbouw (= Salimbau) (2); Soehait, Tawang River (3); ascending the river till half-way Lake Seriang, going ashore, and back to the Kapoeas (4); ashore in the region of Soengei Gandal, Kenepei and Kenepei River (5); visiting the coal-mines and back to Menawa and Kenepei (6); Silat (8);

Penein Mts (10); Sintang (13–21), making trip to the gold-mines (18, 19), the Malawi River (20), *etc.;* further downstream the Kapoeas, forest of Tengkawang (22); B(e)litang, Sepauk (= Sepaoek), Soengei Aja (23); Sekadouw (= Sekadau) (24); Kadoekoel (= Kedoekoel), Biang (25); Biang Mts



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(26); Sangouw (= Sanggau), ascending the Sg. Sekajan to visit a fall, Samarangkai (27); Meliouw (= Meliau) (28); Tajan (29); P. Limboeng (30); descending the Kleine Kapoeas (Kapoeas ketjil) to Pontianak (Oct. 2); Pontianak (2–16); by boat to *P. Temadjoe* off the coast (17), Singkawang (19–21); G. Passi (22–24); Tjoelong–Djintang (24); Sedau(w), Singkawang (25), in the latter place staying some time; Montrado (Nov. 1–9), making a trip to the Opi Mts (5); Soengei Betong, *via* the Pengarang Mts (10); Bengkajang (11–14), visiting the gold-mines; Sebalouw (= Sebalau) (15–19), visiting the neighbouring hills (Moenggoh), Tria River; downstream the Sebalau River, Ledo (20); Sambas (22–24); afoot to Kartiassa (25), by proa to Bantanan (26–28); travelling back (29–30) to Sambas, staying there till Dec. 20 (partly ill), making a trip to Sg. Sebrau(w) (Dec. 11); by boat to Pamangkat (21), Pontianak (25), embarking (Jan. 14, 1875) for Batavia; Buitenzorg (18).—*1875. Tour to Billiton, Karimata Islands, and West Borneo:*[17] *Blitoeng* (= *Billiton*): Tandjo(e)ng Pandan (May 8–31), making a trip up the Tjiroetjoep (= Tjeroetjoek) (11); setting out to Begantong (June 1), G. Tadjem bini (2), Boeding (3), Ajer Kli (4), visiting several padangs, Mangar (on the E. coast) (6–7), Gantoeng (8), Dindang (= Dendang, S. coast) (9); *via* Badau(w) returning to Tandjong Pandan (arriving on the 12th); *P. Mandanauw* (= *Mendanau*) (19), *P. Kalehmambang* (20); back at Tandjong Pandan (21–24); *Karimata Islands: P. Seroetoe* (27), a small islet N of it (28), *P. Karimata* (July 2–12, 8–10 exploring the mountains); *W. Borneo:* Pontianak (15–25), collecting in the hinterland; by sampan (July 26) to Landak, Ngabang (arriving Aug. 2), trips in the environs, visiting the diamond-mines, Marenteh (= Marintoe) (10–11); to Pangkallan Browi (14–16); by proa to Poelouw (17–19); returning (20) *via* the Hampar Djawa Mts; Pangkallan Browi (22); ascending the Sg. Padeh (23), and proceeding by 'tandoe' (sedan-chair) (25) to the border of Landak and Sambas; Pangkal (27–28); Ngabang (Aug. 29–Sept. 18, partly ill); Pontianak (Sept. 21–Oct. 11); Batavia (15).—*1876. Tour to the Moluccas:*[18] leaving Buitenzorg (May 12) for Batavia, and sailing *via* Soerabaja, and *Celebes* (Makassar, Gorontalo and Manado), to the Moluccas: touching at *Ternate* and Kajeli (*Boeroe*) on the way to *Ambon* (staying June 7–July 15), partly at Ema (June 28–July 2; his plant collectors exploring G. Hori or Hoearési), and his collectors regularly at Soja; *Soela Besi* (= *Sanana*) (July 17–30), exploring the Apoedoel Mts (22); *Boeroe* (Aug. 1–14), at Kajeli, his hunters going (6) to Lake Rano; *Ceram*, at Wahai (16–18); *Papua Islands, Misole* (= *Misoöl*): Waigama (19–30), trip to the Fakel River E of Kassiem (27); *Ceram*, Wahai (31); *Ambon* (Sept. 2–Nov. 7), staying for some time at Hoetoe-moeri on the S. coast of Leitimor (Sept. 21–Oct. 1), at Hila (Oct. 12–20; on the 15th sending an expedition to G. Wawani or Toena), going from Hitoelama to Liang and Waai (21), and staying at Waai (21–29; from 25–26 sending an expedition to the G. Salhoetoe or Seloehoetoe; visiting the island *Pombo* on the 27th), and finally in the town of Ambon; *via Boeroe* (Kajeli) (Nov. 8) to *Ternate* (9–11); *Celebes:* Kema (12), Gorontalo (15), Makassar (19–21); back at Soerabaja (23); Batavia (28), and Buitenzorg (29).—*1877. Tour to Celebes and Dependencies.*[19] *SW. Celebes:* Makassar (June 24–July 5); Pangkadjene (between Maros and Segeri) and environs (July 6–Aug. 26); Sehroh (27), Tanehteh (28); Tjamba (Aug. 28–Sept. 5); Boeloe–Boeloe (6), Baleh-Angien (7–17); Maros (18–30), sending his collectors to Bantimoeroeng (20–21), mountains and beach, and himself going to kp. Oedjoeng (27) and to the caves (Lëang, Kalotoro) (28); Makassar (Oct. 1–13); trip to Bantaëng-Bonthain (Oct. 14–Nov. 14) *via* Lo(h)ka (24), summit of the Doodkist (*c.* 4000 ft, on the 28th), Lanjienga, Papepekang, *etc.* (*not* climbing the summit); by boat to Boele-Komba (= Boeloekoemba) and *Saleijer* (= *P. Salajar*) (Nov. 16–Dec. 11): crossing the island to Gantarang on the E. coast (28), sending his collectors to G. Haroe (29); *SW. Celebes:* Makassar (Dec. 13–22); Soerabaja (24), Batavia (28), Buitenzorg (29).

R. BONAPARTE mentions[20] that TEYSMANN was in 1877 in Misoöl (o/b the 'Tagal'). From the literature cited by B. it is evident that the voyage of the

'Tagal' took place in July 1877, TEYSMANN is not mentioned, however, and besides at that time stayed in Celebes! So this statement must be based upon an error.

TEYSMANN specimens are cited besides from *Sumatra East Coast, P. Merak* (Strait Sunda), Wijnkoops Bay, and Kawah Tjiwedeh with Telaga Patengan in *W. Java, P. Pandjang* (Bay of Batavia), *Bawean,* and *Waigeo.* No dates are known to the author.

COLLECTIONS. *Herb. Bog.:* several thousands of numbers in the H.B. series incl. from *Celebes* in *1877,* 1800 *nos.* To his own disappointment his *New Guinea* voyage (*1871*) yielded the smallest amount of plants, *viz* 133 species, due to the fact that the commander of the 'Dassoon' did hardly give him the opportunity to do any exploration work at all. During his last tours, he already nearing the age of seventy and his health being on the decline, most plants were collected by his Indonesian collectors.

TEYSMANN sent several *Sumatra* plants to *Leyden,* which were brought to *Utrecht* by MIQUEL. The latter described several new species on this material in the Supplement of his Flora. The type specimens are *not* in the Buitenzorg Herbarium, though material of the same numbers evidently is present (judging from locality, vernacular name and the like).

Duplicates in: *Herb. Leyden, Utrecht, Kew, Berlin* (*Java, Sumatra, Banka* 232 *nos,* pres. in 1861; and 411 *Java nos* pres. in 1869), *Herb. Bot. Gard. St Petersb.* (= *Leningrad*): 137 *Java* plants, and 264 from the *Sunda Islands; Copenhagen, Florence* (*Java* and probably with *Herb.* BECCARI from *Borneo,* Kapoeas); *Herb.* MARTIUS (= *Brussels*): 143 from *Java* + 50 *Palmae* (Hort. Bog.); *Melbourne* (from *New Guinea*), *Vienna* (*Java* orchids with *Herb.* REICHENBACH); *Calcutta* (from *Sumatra*); *Herb. Kol. Mus.* (= *Ind. Inst.*) *Amsterdam:* material of 'massooi' from *New Guinea.*

He brought home numerous living plants for *Hort. Bog.* In 1858 several were dispatched to *Hort. Leyden.*[21]

The elaboration of his respective collections is referred to in the itineraries of the concerning tours.[22]

LITERATURE. (1) J. E. TEYSMANN: 'Uittreksel uit een dagverhaal eener reis door Midden-Java' (Nat. Tijdschr. N.I. 8, 1855, p. 195–294; in this publication the year in which the tour took place is erroneously stated as 1854).

(2) J. E. TEYSMANN: 'Uittreksel uit het dagverhaal eener reis door Oost-Java, Karimon Java and Bali Boleling' (*l.c.* 11, 1856, p. 111–206).

(3) J. E. TEYSMANN: 'Dagverhaal eener botanische reis over de westkust van Sumatra' (*l.c.* 14, 1857, p. 249–376).

(4) J. E. TEYSMANN: 'Botanische reis over Banka en in de Palembangsche binnenlanden' (*l.c.* 18, 1859, p. 1–96; transl. into German in Bonplandia 7, 1859, p. 118–136, 146–163); 'Aanteekeningen van inlandsche plantennamen van Bangka' (Nat. Tijdschr. N.I. 27, 1864, p. 236–254); 'Opgave der tot nu toe bekend geworden planten van Bangka' (*l.c.* 27, 1864, p. 157–258).

cf. also letter to HASSKARL in Flora N.R. 15, 1857, p. 650–652.

(5) J. E. TEYSMANN: 'Verslag over de katoencultuur in de Lampongsche Districten' (Tijdschr. Nijverh. & Landb. N.I. 5, 1859, p. 161 *seq*).

(6) *cf.* Flora N.R. 18, 1860, p. 159–160.

(7) J. E. TEYSMANN: 'Verslag van den Hon Insp. v. Kultures J. E. TEYSMANN over de door Z. Ed. in 1860 gedane reize in de Molukken' (Nat. Tijdschr. N.I. 23, 1861, p. 290–369; copied and transl., resp. into French and German in Journ. Bot. néerl. 1, 1861, p. 297–344, and in Bonplandia 1862).

cf. also letter to HASSKARL in Flora N.R. 18, 1860, p. 621–623.

MIQUEL described some plants, collected during this tour, in the 'Annales' and in some monographies.

(8) *cf.* MIQUEL, Flora Indiae Batavae, Suppl. Sumatra (1862) (5 plants recorded), and also in Nat. Tijdschr. N.I. 24, 1862, p. 315.

(9) J. E. TEYSMANN: 'Verslag eener reis naar Siam in het gevolg van den Gouvernements Kommissaris Mr. A. LOUDON' (Nat. Tijdschr. N.I. 25, 1863, p. 149–197).

cf. also KERR in Journ. Thail. Res. Soc. Nat. Hist. Suppl. 12, 1939, p. 13–14; and Bot. Zeitung 20, 1862, p. 224.

(10) J. E. TEYSMANN: 'Aanteekeningen uit het dagboek mijner reis over Bangka van Juni 1869 tot en met Jan. 1870' (Nat. Tijdschr. N.I. 32, 1873, p. 31–100).

(11) J. E. TEYSMANN: 'Verslag mijner verrigtingen op het eiland Banka, van Augustus 1870 tot April 1871' (Tijdschr. Nijverh. & Landb. N.I. 16, 1871, p. 248–269).

(12) J. E. TEYSMANN: 'Extrait d'un récit d'un voyage à la Nouvelle Guinée' (Ann. Jard. Bot. Buit. 1, 1876, p. 61–95); 'Verslag eener reis naar Nieuw Guinea' (Nat. Tijdschr. N.I. 40, 1881, p. 193–282).

P. VAN DER CRAB: 'Verslag eener reis naar de Maccluers-, Geelvink- en Humboldt-baaien in Nieuw-Guinea van Aug. tot Nov. 1871' met aanteekeningen uit het journaal van den Inspect. d. cultures J. E. TEYSMANN (in 'Reizen naar Ned. Nieuw-Guinea ondernomen op last der regeering van Ned. Indië in de jaren 1871, 1872, 1875–76, *etc.*' met Geschied- en aardrijkskundige toelichtingen door P. J. B. C. ROBIDÉ VAN DER AA, 's-Gravenhage, 1879, p. 3–134).

R. H. CH. C. SCHEFFER: 'Énumeration des plantes de la Nouvelle Guinée' (Ann. Jard. Bot. Buit. 1, 1876, p. 1–60; and Épilogue in *l.c.* p. 178–181, compiled from literature!).

cf. also plants in Nova Guinea vol. 8, pt 3.

(13) J. E. TEYSMANN: 'Uitstapjes naar het binnenland van Noord-Halmahera' (Bijdr. Taal-, Land- en Volkenk. N.I. 4e reeks, vol. 1, 1877, p. 500–518; information by ROBIDÉ VAN DER AA, *cf. l.c.* p. 495–500).

(14) J. E. TEYSMANN: 'Verslag eener botanische reis naar Banka, Riouw en Lingga van 10 Mei tot en met 9 Dec. 1872' (Nat. Tijdschr. N.I. 34, 1874, p. 225–296).

(15) J. E. TEYSMANN: 'Verslag eener botanische reis over Timor en de daaronder ressorteerende eilanden Samauw, Alor, Solor, Flores en Soemba' (*l.c.* 34, 1874, p. 348–484; vocabularies on p. 485–517).

Ferns elaborated by BAKER in 'Nota sopra alcune felci raccolte dal Sign. J. E. TEYSMANN all' isola di Sumba o Sandal-wood ed in Timor' (in BECCARI, Malesia 3, 1886, p. 56–57).

(16) J. E. TEYSMANN: 'Verslag eener botanische reis naar de Westkust van Borneo' (Nat. Tijdschr. N.I. 35, 1875, p. 273–386).

(17) J. E. TEYSMANN: 'Bekort verslag eener dienstreis naar Billiton, de Karimata-eilanden en Landak ter Westkust van Borneo van 5 Mei t/m 17 Oct. 1875, *etc.*' (*l.c.* 36, 1876, p. 210–293).

Ferns by W. BURCK in Ann. Jard. Bot. Buit. 4, 1884, p. 88–100; and some by H. CHRIST in *l.c.* 20, 1907, p. 92–140.

(18) J. E. TEYSMANN: 'Bekort verslag eener botanische dienstreis naar de Molukken, van 12 Mei t/m 29 November 1876' (Nat. Tijdschr. N.I. 37, 1877, p. 75–148).

(19) J. E. TEYSMANN: 'Bekort verslag eener botanische dienstreis naar het Gouvernement van Celebes en Onderhoorigheden, van 12 Juni t/m 29 December 1877' (*l.c.* 38, 1879, p. 54–125).

S. H. KOORDERS: 'Ueber eine neue Praravinia aus Süd-Celebes und ueber Praravinia densiflora KORTH.' (*l.c.* 63, 1903, p. 73–75).

(20) *cf.* R. BONAPARTE: 'Les derniers voyages des Néerlandais à la Nouvelle Guinée' (Versailles 1885), in which is referred to Koloniaal Verslag 1878, p. 34.

(21) *cf.* Ann. d'Hort. et de Bot. ou Flore des Jardins du Roy. Pays-bas *etc.* 2, 1859, p. 130–142.

(22) *cf.* also SCHEFFER in Ann. Jard. Bot. Buit. 2, 1885, p. 1–31.

Mosses, presented to BECCARI, *cf.* GEHEEB in Bibl. Bot. Heft 44, 1898, pt 2.

BIOGRAPHICAL DATA. Tijdschr. Nijverh. & Landb. N.I. 25, 1880, p. 265 *seq.*; Nat. Tijdschr. N.I. 40, 1881, p. 165–177; Teysmannia 1, 1890, p. 1–12; WITTROCK, Icon. Bot. Berg., 2, 1905, p. 173, *t.* 144; Encyclop. N.I. 4, 1921; Nat. Tijdschr. N.I. 91, 1931, p. 27–49; BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 50, 1940, p. 202; *l.c.* 51, 1941, p. 372; letters in Arch. Herb. Leyden.

Thabranie, Mohamed, *cf. sub* Forest Research Institute, Buitenzorg.

Thenu, J. K. (or J. T.), *cf. sub ditto.*

Therik, H., *cf. sub ditto.*

Theunissen, A. V. (probably Adam Victor)

(*c.* 1870, Limburg Prov., Holland; after 1933, Fort de Kock, Sumatra), came to the D.E.I. as a private soldier; later appointed day-labourer in the employ of the Forest Service,[1] and finally Market Clerk at Fort de Kock.

Author of a paper on *Rafflesia.*[2]

J. J. SMITH named some orchids in his honour (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTING LOCALITIES. *1915. N. Sumatra,* Atjeh: Singkel.—*1916. P. Morsala* (= *Moesala* or *Mansalar*).—*1916–17. W. Sumatra.* Tapanoeli Res.: Tapanoeli, Taroetoeng, Sawah Baroe (Natal), Sipirok; Sum. West Coast Res.: Kaladi (Sidjoengdjoeng), Fort de Kock, E. part of Padang Lawas (May–June 1916), Gadang Beo (Solok), Soengei Dareh.—*1923. Sumatra West Coast:* Fort v. d. Capellen.

COLLECTIONS. He collected many living orchids on behalf of W. GROENEVELDT and E. R. JACOBSON (see those); several of these orchids were presented to *Hort. Bog.* They are partly represented in *Herb. Bog.*, and described by J. J. SMITH.

Herb. For. Res. Inst. Buitenzorg: bb. *nos* from *Sumatra, viz* Atjeh (1915), P. Morsala (1916), Tapanoeli (1916–17), Fort v. d. Capellen (1923); dupl. in *Herb. Bog.*

LITERATURE. (1) Author of service reports on: Singkel (Atjeh) 1915, E. part of Padang Lawas 1916, P. Morsala in report W. VERSLUIS 1916, the locality of Rafflesia 1917, subdiv. of Natal (Tapanoeli) 1917–19.

(2) A. V. THEUNISSEN: 'Een zeer zeldzame Rafflesia-soort' (Trop. Nat. 13, 1924, p. 150–152, 2 fig.).

Thij . . ., *cf.* THY . . .

Thompson

collected *Gmelina villosa no 66 before 1914* in *? Singapore;* material in GRAY *Herb.*, Cambr. (Mass.).

Thomsen, Andreas Christian Thingberg

(1881, Hjörring, N. Jutland, Denmark; x), was appointed Medical Officer in the D.E. Indian Army in 1911; he resigned in 1923. For some years he joined one of the Military Exploration Detachments in Dutch New Guinea.

COLLECTING LOCALITIES. *Dutch North New Guinea* (Nov. *1913*–Jan. *1915*): principally in the Mamberamo region. From the list in the Buitenzorg Herbarium the following data are extracted: in April *1914* near Pionier bivouac, Mamberamo, Otken River; in May of the same year at Pionier bivouac; in August near Pionier bivouac and Mamberamo; in September near the Mamberamo.

COLLECTIONS. *Herb. Bog.: c.* 270 *nos* of plants (dried and in spirit); dupl. in *Herb. Leyden.*

Some of his collections were mixed up with those of FEUILLETAU DE BRUYN (see there) and were numbered without order, others were numbered by mantri AJOEB (see there) only. Judging from the numbers part of the material evidently got lost.[1] The material was elaborated in Nova Guinea vol. 14.

LITERATURE. (1) *cf.* Versl. Milit. Expl. Ned. N.G. 1907–15, Weltevreden 1920, p. 350.

Thomson, Alexander

COLLECTIONS. *Herb. Kew: Java (1847–62).*

No data on this collector could be traced.

Thomson, G.

COLLECTIONS. Plants from *Singapore*, without date and number, in *Herb. Oxford* (W. FIELDING *Herb.*).

Thomson, William

(1901, Tjimahi, Java; Jan. 15, 1944, Bandoeng, Java) who, after having gained chemical practice at a sugar factory, in 1922 entered the employ of the Experiment Station for the Java Sugar Industry at Pasoeroean (E. Java); since 1940 in the rank of Chemist.

COLLECTIONS. *Herb. Pasoer.*: 1 *no* from G. Lamongan (*E. Java*, coll. *1930*).

Thorenaar, Adriaan

(1894, Waarde, Z., Holland; x), Forest Officer who entered the D.E. Indian Forest Service in 1919; at first stationed in the teak districts of Java, and in 1920 put at the disposal of ENDERT (see there) for the forest exploration of Palembang.[1] In June 1925 he was transferred to Buitenzorg; from 1927 stationed in Java; in 1934 appointed teacher of the Agricultural School at Buitenzorg, and since 1937 stationed at Poerworedjo (Centr. Java).

When on European furlough in 1926 he took his Dr's degree at Wageningen.[2] He is the author of other sylvicultural papers, and of a text-book on pedology.

COLLECTING LOCALITIES. *Java* (*c. 1918*); *E. Java:* Tritik (Nov. *1919*), G. Pandan (Jan. 9, *1920*); *S. Sumatra:* Palembang (Aug. *1920–24*); *E. Java:* G. Smeroe (*1927*); *Centr. Java:* Balapoelang, in teak forest (1927); *W. Java:* G. Gedeh (1927); Indramajoe, 'sïïl' plains (Jan. 4, *1935*).

COLLECTIONS. *Herb. Bog.*: *Java* collection of > 400 plants, privately numbered; plants collected in *1919* are numbered in the series of BEUMÉE (see there); dupl. of the For. Res. Inst. Buitenzorg. *Herb. For. Res. Inst. Buitenzorg:* 1317 T. numbers (partly collected with other employees of the Service, mainly with L. J. W. DORST and C. J. VAN DER ZWAAN); in 1918 some Ja. (*Java*) *nos.* Some *Sumatra* dupl. in *Herb. Utrecht.*

LITERATURE. (1) A. THORENAAR: 'Land- en boschbouw in Palembang' (Tectona 17, 1924, p. 761 *seq.*; *cf.* also *l.c.* 1923, p. 533); 'Eigenaardige wortelvormingen in de moerasbosschen van Palembang' (Trop. Nat. 16, 1927, p. 73–82, 11 fig.).

J. VAN ROSENDAEL & A. THORENAAR: 'Hopea Mengarawan MIQ.. De natuurlijke verjonging van Ngegarawan in Z. Sumatra' (Tectona 17, 1924, p. 519–567, fig. 15–18).

(2) A. THORENAAR: 'Onderzoek naar de bruikbare kenmerken ter identificatie van boomen naar hun bast' (Meded. Boschb. Proefstat. *no* 16, 1926).

Thull, Johannes Gerardus van

(1882, Lithoven, N.Br., Holland; 1944, Wageningen, Holland), schoolmaster, first in Holland, and from 1909–31 in the D.E.I.; Director of the Normal School for Indonesian teachers in 1924; later Inspector of Elementary Instruction; he retired in 1931.

COLLECTIONS. When stationed at Blitar (*E. Java*), in *1913*, he sent material of some grasses to *Herb. Bog.*

Thunberg, Carolus Petrus (or Carl Pehr)

(1743, Jönköping, Sweden; 1828, Tunaberg near Uppsala, Sweden) (his year of death sometimes erroneously stated as 1822), physician-botanist, a pupil of LINNAEUS. After a visit to Holland some wealthy Dutch merchants offered him to make an exploration tour to the East Indies and Japan at their expense, in order to bring back living plants and seeds, suited for the climate in Holland, on behalf of the *Hortus Medicus* and the country-seats of its patrons. After a sojourn at the Cape of Good Hope, from where he travelled over a large part of South Africa (1772–75), he sailed for Batavia and there joined the Dutch embassy to the Imperial Court at Tokio (Japan).[1] On the voyage home he passed half a year in Java, and seven months in Ceylon, before returning to Europe. He subsequently declined the offer of a Dutch professorate and went to England to study BANKS's collections. In April 1779 he returned to Stockholm, and became Ordinary Professor at Uppsala in 1784, as successor to LINNAEUS.

He is the author of several botanical papers.[2]

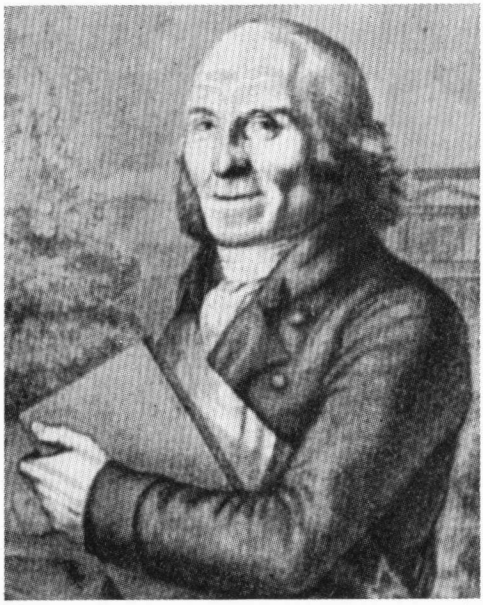
He is commemorated in the genus *Thunbergia* RETZ. and in several plant species.

ITINERARY.[1] March 2, *1775*, sailing from the Cape of Good Hope to *W. Java:* Batavia (staying May 18–June 19); sailing (June 20) for Japan, in which country he stayed from Aug. 1775–Nov. *1776*, making a journey from March 4–June 30; back in *W. Java:* Batavia (Jan. 4, *1777*), collecting in the environs; by boat (March 23) to *Centr. Java:* Semarang (arriving Apr. 9); mountainous country in the hinterland; Ounarang (= Oengaran) (Apr. 23), Salatiga (24), Kopeng (26), Salatiga (27); back at Semarang (May 1–13); by boat to (D)Japara (14); *W. Java:* back at Batavia (June 1); Tandjong (19); Buitenzorg (20), Tjisaroea (22), Tjipanas, Pondok Gedeh (24), Megamendoeng, Buitenzorg (25), bird-cave (Tcheraton) (26); back at Batavia (28); Jacatra; sailing (July 5) for Ceylon, in which island staying till Febr. 1778.

COLLECTIONS. *Herb. Uppsala*, to which he presented his collections, including plants from other collectors, in 1785.[3] Both in *Herb. Leyden* and *Herb. Amsterdam* plants from Japan, *possibly* from *Java* too. M. HOUTTUYN (see there) was presented with a *Java* collection (*cf.* 'Handleiding t.d. plant- en kruidkunde' New ed. 1773, and the catalogue cited *sub* HOUTTUYN), so it seems probably that those are at *Leyden*. Other dupl. in: *Herb. State Mus. Stockholm* (with *Herb.* ALSTRÖMER, MONTIN, *etc.*): > 2000; with *Herb.* BERGIUS in *Herb. Acad. Sci. Stockholm; Herb. Linn. Soc. Lond.* (plants marked 'T' with number referring to some MS. Catalogue; *Herb.* DELESS. (*Geneva*), *Herb. Brit. Mus.* (*ex Herb.* PALLAS and BANKS), *Herb. Berlin* (*ex Herb.* WILLDENOW), *Herb.* LINDEMANN (U.S.S.R.) 15 *nos*, *Herb. Vienna*, *Herb. Bot. Gard. St Petersb.* (= *Leningrad*) (with *Herb.* LEDEBOUR), *Herb. Acad. Sci. Leningrad* (pres. 1811), *Herb. Univ. Kiel* (from *Java*), *Herb. Melbourne* (with *Herb.* LEHMANN, many authentic specimens), *Herb. Univ. Moscow* (from the Cape and New Holland; in the latter country T. certainly not

collected himself!); *Herb. Montpellier* (Cape and Japan).

During his stay in Java he was assisted by a native collector who was put at his disposal by courtesy of J. C. M. RADERMACHER (see there); his *Java* collection gave rise to the publication of a flora of Java.[4]



THUNBERG

A list of papers in which plants of his are described can be found in the publication of JUEL,[3] p. 37–40.

LITERATURE. (1) C. P. THUNBERG: 'Resa uti Europa, Afrika, Asia förättad Aren 1770–1779' (Upsala 1788–93, 4 vols). This diary was translated into English: 'Travels in Europe, Africa and Asia, *etc.*' (London 1794–95, 4 vols); into German: 'Reise durch einen Theil von Europa, *etc.*' (Berlin 1792–94, 2 vols) and abridged as 'Reisen in Afrika und Asien, *etc.*' (Berlin 1792); into French: 'Voyage en Afrique et en Asie *etc.*' (Paris 1794) and 'Voyage au Japon *etc.*' (Paris 1796, 4 vols).

(2) *E.g.* 'Nova genera plantarum' (Upsala 1781–1801); 'Flora Japonica' (Lipsiae 1784, *t.* 1–39); 'Icones plantarum japonicarum' (Upsala 1794–1802, 5 vols).

For the numerous other papers of him and his pupils *cf.* list of literature in the publication of H. O. JUEL (see below) p. 24–36.

(3) H. O. JUEL: 'Plantae Thunbergianae. Ein Verzeichnis der von C. P. THUNBERG in Südafrika, Indien und Japan gesammelten und der in seinen Schriften beschriebenen oder erwähnten Pflanzen, sowie von den Exemplaren derselben, die im Herbarium Thunbergianum in Upsala aufbewahrt sind' (Upsala 1918, p. 1–462).

(4) C. P. THUNBERG (L. WINBERG & FR. OL. WIDMARK): 'Florula javanica' (Thesis, Upsala 1825, pt 1–2, 23 pp.). See also *Addenda.*

BIOGRAPHICAL DATA. Svenska Vet. Acad. Handl. 1828, p. 242–267; Flora 12^2, 1829, Erg. Bl. p. 89–106; WIKSTRÖM, Conspect. Litt. Bot. Suec., 1831, p. 260–269, 332, 340; Nov. Act. Soc. Sci. Upsala 2, 1832, p. 409–422, w. part. bibliogr.; PRITZEL, Thes. Lit. Bot., 1872; Bot. Tidskr. Kjøbenh. 12, 1880/81, p. 81–82, incl. part. bibliogr.; Rev. Hort. Belge 19, 1893, p. 197; TRIMEN, Handb. Flor. Ceylon, pt 5, 1900, p. 373; WITTROCK, Icon. Bot. Berg., 1903, p. 73–74, and *l.c.* 2, 1905, p. 55, *t.* 33; portr. in J. DÖFLER, Botanikerporträts (Wien 1907) *no* 39; Journ. Linn. Soc. Bot. 45, 1920, p. 43–45; J. H. VERDUYN DEN BOER, Botanists at the Cape 1, 1929, p. 34–40 + 2 portr.; BACKER, Verkl. Woordenb., 1936; MIA C. KARSTEN: 'CARL PETER THUNBERG. An early investigator of Cape Botany' I–V (Journ. S. Afric. Bot. 5, 1939, p. 1–27, 87–104, 105–155, w. plts incl. portr. & facsim.; *l.c.* 12, 1946, p. 127–163, 165–190, pl. 4–5); specimen of handwriting in SP. SAVAGE, A catalogue of the Linnean Herbarium, London 1945, fig. 20.

Thung Pan Soey, *cf. sub* Forest Research Institute, Buitenzorg.

Thung, Dr Tjeng Hiang

(1897, Buitenzorg, Java; x), Phytopathologist of the Experiment Station for Tobacco at Klaten (Centr. Java), 1929–39; since Nov. 1939 on the staff of the Institute for Plant Diseases at Buitenzorg (W. Java). After World War II he was evacuated to Holland, and returned to Buitenzorg in 1948 as Professor of Phytopathology at the Agricultural College there; since 1949 at Wageningen.

COLLECTING LOCALITIES. *Centr. Java:* Klaten, near Djokjakarta (*1934*).

COLLECTIONS. In the above-mentioned locality he collected with Miss KERLING (see there) a number of water plants which he forwarded to Dr WALO KOCH of the 'Eidgen. Technische Hochschule' (*Polytechn. Coll.*) at *Zürich.* One of them was described by the latter as *Najas pseudograminea n.sp.. Herb. Bog.:* material of the above-mentioned *Najas* (pres. by Zürich in 1937); in *1938* 2 *nos* of plants for identification.

Thijssen, L. P., *cf. sub* Forest Research Institute, Buitenzorg.

Ticoalu (or Ticoala), H., *cf. sub ditto.*

Tideman, Jan

(1874, Apeldoorn, Gld, Holland; 1944, Haarlem, Holland), joined the D.E. Indian Civil Service in 1898, finally Resident; retired in 1930.

COLLECTIONS. *Hort. Bog.:* a *Tacca,* collected on the road Tawaeli–Toboli (*N. Celebes*) in *1926.*

Tihal, *cf. sub* Forest Research Institute, Buitenzorg.

Timmer, P., *cf. sub ditto.*

Tirtoatmodjo, R.
(† before 1910), Indonesian plant collector who worked for more than twelve years on behalf of KOORDERS.

COLLECTIONS. He collected 20 numbers of plants on a tour with W. BUURMAN VAN VREEDEN (see there) in *1890*, in the Siloengka District, Padang Highlands (*Sumatra West Coast*).[1] Numbered in KOORDERS's series.

LITERATURE. (1) *cf.* A. KOORDERS–SCHUMACHER, Systematisches Verzeichnis, pt 2, 1910, p. 57–59.

Tirtodikromo, *cf. sub* Forest Research Institute, Buitenzorg.

Tirtodimedjo, *cf. sub ditto.*

Tiwel, K., *cf. sub ditto.*

Tjampa, *cf. sub ditto.*

Tjioe Kin Tjing, *cf. sub ditto.*

Tjiptosoesilo, R., *cf. sub ditto.*

Tjokrosandjojo, *cf. sub ditto.*

Tjokrotenojo, *cf. sub ditto.*

Tjokrowedhono, Raden Adipati
Regent of Tjilatjap (*S. Centr. Java*), forwarded 2 *Rafflesia* specimens + *Cissus* to *Hort. Bog.* in *1867.*

Tobias
Resident of *Madoera*, sent living plants to *Hort. Bog.* in *1865.*

Tobing, G. L., *cf. sub* Forest Research Institute, Buitenzorg.

Tobing, O. M. L., *cf. sub ditto.*

Tobing, T. L., *cf. sub ditto.*

Toelan, *cf. sub ditto.*

Toengga, A., *cf. sub ditto.*

Toepan, H., *cf. sub ditto.*

Toesin, *cf. sub ditto.*

Togas, E. P., *cf. sub ditto.*

Tollens, E.
of Blitar (*E. Java*), sent an inflorescence of *Phalaenopsis fimbriata* J.J.S. *n.sp.* to *Herb. Bog.* (*cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 3, 1921, p. 300 *seq.*). The collector may be identical with E. TOLLENS, who from 1903–04 was Acting Assistant Curator of the Buitenzorg Botanic Gardens.

Tolson
is cited as the collector of *Aerides inflexum* at Goa near Makassar (*SW. Celebes*) (*cf.* TEYSMANN & BINNENDIJK in Nat. Tijdschr. N.I. 24, 1862, p. 324). Material in *Herb. Bog.*

The TOLSON at Batavia, who presented a select collection of orchids to *Hort. Bog.* in *1868*, might be the same TOLSON as the above-mentioned. The initials of the Batavia TOLSON are probably R.P.; he was a merchant who was erased from the list of members of the 'Natuurkundige Vereeniging' in 1868.

Tomeldan, *cf. sub* Forestry Bureau, Manila.

Toorop, Christoffel Theodorus
(1825–1887), was appointed Overseer of the Indigo Culture in Java in 1843. Subsequently he filled some administrative offices in the same island, and was appointed Administrator of the Tinmines at Soengei Liat (Banka) in 1863. He accompanied TEYSMANN on some of his tours in the latter island in 1869. In 1878 he was appointed Assistant Resident of Sambas (NW. Borneo); retired in 1886.

Xylopia tooropiana SCHEFF., discovered by TEYSMANN, was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. In *1870–71* he sent (? living or dried) plants from *Banka* to *Buitenzorg. Herb. Bog.:* material of gutta-percha-yielding plants from *Borneo* (pres. *1886*).

Topacio, *cf. sub* Forestry Bureau, Manila.

Topping, David Leroy
(1861, North Harpersfield, N.Y., U.S.A.; 1939, Honolulu, Hawaii), for many years a government official in the Philippines, employee of the Auditor's Office and the Bureau of the Treasury at Manila. He was interested in botanical field work and collected in the U.S.A., Siberia (serving with the American Red Cross following the World War), Hawaiian Islands, and the below-mentioned localities in Malaysia. He lived at Honolulu since his retirement in 1922.

ELMER, COPELAND, and MERRILL named several plants in his honour.

COLLECTING LOCALITIES. *Philippines,* between *c. 1903–22. Luzon:* in the vicinity of Baguio, Benguet Prov. (Jan.–Febr. *1903*), Mt Sto Tomas; Lamao Forest Reserve (May *1904*); environs of Manila.—*Br. N. Borneo:* Mt Kinabalu (Oct.–Nov. *1915*), with Mrs M. S. CLEMENS (see there).

COLLECTIONS. Mostly ferns. 1st set in *Herb. Manila:* 550 *Philip.* ferns (pres. 1908–09), *Philip.* plants (pres. 1914–15), 560 *Borneo* ferns (pres. 1916). Dupl. in: *U.S. Nat. Herb. Wash.:* 1398 *Philip.* plants, 229 from *Br. N. Borneo; Herb.* COPELAND: ferns from Kinabalu; *Herb. Berkeley* (Cal.): *Borneo* plants; from Kinabalu in various other herbaria; *Herb. N.Y. Bot. Gard.:* 100 *Philip.* ferns and besides probably the set presented by O. DEGENER. The latter procured a fine collection of pteridophytes (by purchase and bequest); the plants were distributed widely, the best set went to *N.Y. Bot. Gard.*, but also one to *Herb. Geneva* (218 dupl. *Philip.* and *Borneo* ferns).

The collection from Lamao Forest Reserve amounts to some hundred of numbers.[1] On Mt Kinabalu he mainly collected ferns. He numbered partly in the Bureau of Science (B.S.) series, but partly with private numbers too.

LITERATURE. (1) *cf.* MERRILL in Philip. Journ. Sci. C. Bot. 1, 1906, Suppl. p. 3.

(2) E. B. COPELAND: 'New species and a new genus of Borneo ferns chiefly from the Kinabalu collections of Mrs CLEMENS and Mr TOPPING' (*l.c.* 12, 1917, p. 45–65).

cf. also C. CHRISTENSEN & R. E. HOLTTUM in 'The ferns of Mount Kinabalu' (Gard. Bull. Str. Settlem. 7, 1934, p. 191–324, pl. 51–62); and E. D. MERRILL in Amer. Journ. Bot. 5, 1918, p. 514–515.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; Bern. P. Bish. Mus. spec. publ. 34, 1939, p. 32; Science 90, 1939, p. 203; Chron. Bot. 6, 1940, p. 68.

Torén (or **Toreen**), Olof

(1718, Sätila, Västergötland, Sweden; 1753, Nersingoë or Näsinge, Bohuslän, Sweden), from 1750–52 chaplain on a ship of the Swedish East India Company during a voyage to India and China. From July 1751–Jan. 1752 the ship, the 'Gothic Lion' was anchored at Whampoa (near Kanton), at the same time as that of OSBECK (see there).

He presented LINNAEUS with seven letters and an itinerary, which were appended to the diary of OSBECK.[1] From the cited data it is evident that he touched at Queda (= Kedah, *Malay Peninsula*) in Malacca Strait on May 13, *1751*.

He is commemorated in the genus *Torenia* L.

COLLECTIONS. He presented plants collected during this voyage to LINNAEUS. In *Herb. Linn. Soc. Lond.;* dupl. in *Herb. State Mus. Stockholm.*

LITERATURE. (1) *cf.* German edition OSBECK, Reise nach Ostindien und China, Rostock 1765, p. 433–514.

BIOGRAPHICAL DATA. BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 60; KROK, Bibl. Bot. Suec., 1925, p. 721–722; BACKER, Verkl. Woordenb., 1936.

Toroes, *cf. sub* RAHMAT SI BOEEA.

Torrance

Java plants of his in *Herb. Univ. Manchester* (*cf.* 'A brief account of the Gen. Herb. formed by J. C. MELVILL' 1904, p. 13).

Torrible, *cf. sub* Forestry Bureau, Manila.

Toxopeus, Hendrik Jannes

(1902, Groningen, Gr., Holland; x), geneticist, educated at Groningen University; since 1928 in the employ of the General Experiment Station for Agriculture at Buitenzorg, at first stationed at Poenten in E. Java for the cultivation of *Citrus* varieties, subsequently at Buitenzorg as Head of the Botanical Laboratory; in 1948 he was stationed for 3 years at Wageningen (Instituut voor Veredeling van Landbouwgewassen). His papers deal with genetics and cultivation of *Citrus*, capok, and other useful plants.

COLLECTING LOCALITIES. *E. Java:* G. Dorowati (end of Nov. *1930* and March *1931*); G. Kawi (1931); G. Lawoe (May *1937*); *Moluccas: Ambon* and *Batjan* (*1940*).

COLLECTIONS. *Herb. Bog.*, incl. 30 *nos* from the Dorowati, 11 from the Lawoe, and material of wild cloves from the *Moluccas.*

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 474.

Toxopeus, Lambertus Johannes

(1894, Toeban, E. Java; x), entomologist who got his education at Amsterdam University; he was appointed teacher in Natural History at Amsterdam in 1923, took his Ph.Dr's degree in 1930,[1] and subsequently went to Java, where he was attached to several secondary schools, *viz* at Bandoeng, and Batavia; in 1946 Lecturer of Zoology in the University of Indonesia; in 1948 on leave in Holland; in 1949 Professor at Bandoeng.

In 1921/22 he was leader of the zoological-botanical section of a scientific expedition to Boeroe. The latter was executed under the auspices of the Roy. Dutch Geogr. Society and the Treub Society, supported by the Indian Committee for Scientific Researches. It aimed at performing subsequent researches to RUTTEN's geological investigations in that island, by the geologist HENNY; TOXOPEUS was to make the botanical and zoological collections. They were assisted by Mr and Mrs ESTRIN (Russians) and two mantris of the Buitenzorg Botanic Gardens.[2]

In 1938/39 he joined the 3rd Archbold Expedition to Dutch New Guinea (*cf. sub* BRASS), making exclusively zoological collections.[3]

He is the author of several entomological papers.

J. J. SMITH named some plants after him (*cf.* BACKER, Verkl. Woordenb., 1936).

ITINERARY & COLLECTING LOCALITIES. *Boeroe Expedition, 1921–22.*[2] On the way to the Moluccas collecting at Narmada, *Lombok* (Jan. 30, *1921*); *Moluccas, Boeroe:* Leksoela (on the S. coast) and environs (Febr. 7–March 15, 1921); to Tifoe, Mnges' Waen, Wa'Katin (= Wakatin) and by way of the Ehoe Road back to Leksoela (March 16–27); stay at Leksoela (March 27–Apr. 10); *via* Wa'Katin and Wai Eno to Lake Rana (arriving the 26th); Nal(')besi station (Apr. 26–July 17), from where visiting Koentoeroen (July 7–11); on account of ill health sailing (18) for Ambon; back at Leksoela (Aug. 12) and start of operations at Fakal (only kampong situated above 3400 ft!) and Ehoe; after a short stay returning to the coast; 3-week trip through E. Boeroe (Babiroesa; Sept.–Oct.); an infection caused by *Microthrombidium* made exploration impossible for some weeks; tours in the environs of Mefa (early in Nov.; also visited from Sept. 6–7); departing for Ambon, from where he intended to join a New Guinea expedition; as the latter plan fell through he returned to Boeroe, collecting near the coast till the end of Jan. *1922;* Jan. 28 *via* Tifoe and Wai Eno to Wa'Temum, proceeding to Koentoeroen and visiting Lake Rana a few

times more. A month later he was filming at En'biloro and having twice made the ascent of Fat'koton at Fakal he finally moved down to the coast.—After return to Java (April) visiting in *W. Java:* Tjibodas (May 27–June 8, 1922); *Sumatra East Coast* (1922): Langkat, Kepala Roessa near Bandjai, and Sibolangit.—*S. Sumatra*, Lampong Districts: G. Tanggamoes (July and Sept. *1934*); *SW. Celebes:* near Todjamboe (June–July *1936*).

COLLECTIONS. *Herb. Bog.: nos* 1–650 from *Boeroe* (in the concerning list many numbers are left open), *nos* 1–26 from G. Tanggamoes (*S. Sumatra*), and an amount of not-numbered plants; *Herb. Leyden: Boeroe* dupl.

Hort. Bog.: living plants from *Boeroe*, orchids from *E. Sumatra* (1922), and some from *New Guinea* (seeds, 1939).

The *Boeroe* collection was partly elaborated.[4]

LITERATURE. (1) L. J. TOXOPEUS: 'De soort als functie van plaats en tijd getoetst aan de Lycaenidae van het Australaziatisch gebied' (Thesis, Amsterdam 1930).

(2) *cf.* Bull. Mij Bevord. Nat. Onderz. Ned. Kolon. *nos* 78 and 80.

L. J. TOXOPEUS: 'Verslagen Boeroe-expeditie, Flora' (Tijdschr. K.N.A.G. 1922, p. 55–57); 'A short account of the expedition to Buru (Moluccas)' (*l.c.* 1924, p. 7–18).

(3) L. J. TOXOPEUS: 'Nederlandsch-Indisch Amerikaansche expeditie naar Nieuw-Guinea (3e Archbold expeditie naar Nieuw Guinea 1938–39). Lijst van verzamelstations' (Treubia 17, 1940, p. 271–275, w. map; Engl. summary p. 277–279).

(4) J. J. SMITH: 'Orchidaceae buruenses' (Bull. Jard. Bot. Buit. sér. 3, vol. 9, 1928, p. 439–481); *Ericaceae* in FEDDE Repert. 30, 1932, p. 162–178.

Treacher, W. Hood

Governor of Labuan who, when the Swedish expedition of the 'Vega' (*cf. sub* ALMQUIST) in 1879 paid a short visit to that island, offered hospitality to its leader Baron NORDENSKIÖLD. After the latter's return in Europe, TREACHER sent him a collection of leaves and fruit of the kinds of trees which at the time grew in the island,[1] for comparison with fossil material.

COLLECTIONS. It is not mentioned whether the above-mentioned collection was made by TREACHER himself. 318 Sheets of phanerogams from *Labuan* in *Herb. State Mus. Stockholm;* identified by Dr E. D. MERRILL.

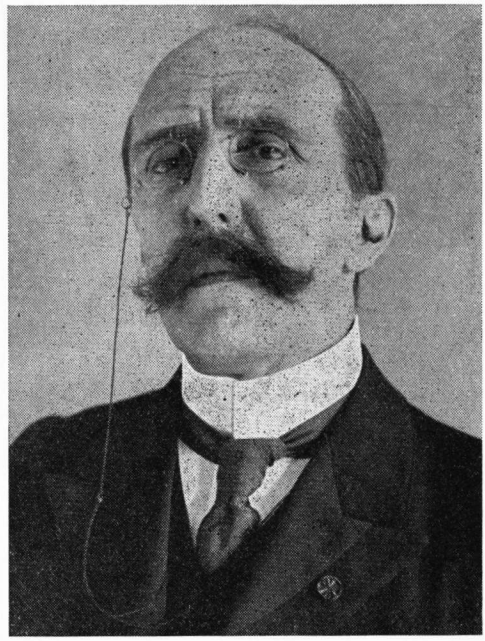
LITERATURE. (1) In Baron A. E. NORDENSKIÖLD: 'The voyage of the "Vega" round Asia and Europe' (Engl. transl., London 1881) vol. 2, p. 408.

Treub, Melchior

(1851, Voorschoten, Z.H., Holland; 1910, Saint Raphaël, SW of Cannes, France), biologist, from 1880–1909 Director of the Buitenzorg Botanic Gardens, since 1905 Director of Agriculture besides. Under his management the Gardens became an institute of world-fame, where numerous foreign scientists worked for some time.

He is the author of several papers, mainly on the morphology of the *Balanophoraceae, Loranthaceae, Lycopodiaceae, etc.*, and on physiology, published in the 'Annales' of the Gardens. The history and development of his institute was at several occasions described by him.

He is commemorated in the well-known moss genus *Treubia*, and in several other plant genera and species.



TREUB

COLLECTING LOCALITIES & ITINERARIES. *1880–1909.* During his term of office at Buitenzorg, he probably occasionally collected in *W.* Java,[1] especially in the vicinity of Buitenzorg and Tjibodas, but hardly any data are known; in *1882* he climbed G. Salak; visited *Krakatau* on June 19 and 24, *1886.*[2]—*Tour to the Moluccas etc., 1893.*[3] Attended by mantri JAHERI (see there), the tour totally taking 2 months, leaving Buitenzorg on Sept. 2. He visited *Ambon:* vicinity of the principal town (Soja di atas, Soja di bawah) and the north coast (Hitoe lama, Hila, Seit, 'Maspait'); *Banda Islands: Groot* and *Klein-Banda, G. Api; Ceram:* Waha(a)i *etc.* on the north coast, and Amahai and vicinity on the south coast; *Ceram laoet Islands: Gisser* (= *Geser*) and *Ceram laoet; SW. New Guinea:* Ati-Ati-Onin, Skroë (Oct. 10); *Kei* (= *Kai*) *Islands: Oeboer* and *Klein Kai; Aroe Islands: P. Wokam, P. Wamar*, Dobo, *etc.; Tanimbar Islands: P. Larat, P. Se(j)ra; Zuidooster & Zuidwester Islands: P. Babber* (= *Babar*), *P. Dammer* (= *Damar*), *P. Let(t)i, P. Kisser* (= *Kisar*), *P. Wetter* (= *Wetar*); *Saparoea;* on the voyage home touching at Makassar (*SW. Celebes*).—*1894. Sumatra East Coast* (Sept. 12–23):[4] Deli, Langkat and Serdang, with the special purpose to visit various tobacco plantations.

—*1897.* Visiting the *Krakatau group* with PENZIG (March 17), subsequent to a visit to *P. Merak* in Sunda Strait. In April of the same year a tour with the Curator of the Gardens to *Singapore* and *P. Penang* for a visit to the Botanic Gardens there.[5]— *1898.* With the Curator of the Gardens to *Sumatra East Coast* (10 days); *via P. Penang* to Ceylon, and returning to Buitenzorg by way of *Singapore.*

COLLECTIONS. *Herb. Bog.*, numbered in the H.B. series; from the plants (541 *nos*) collected on the tour to the *Moluccas* rough lists were published, and some species were described;[6] dupl. in *Herb. Leyden.*

Hort. Bog.: living plants from the *Moluccas*[7] and *Sumatra.*[8]

Herb. Kew: 308 *nos, Java* and Japan (1891–97); probably TREUB is *not* the collector, but presented duplicates of the Herb. Bog. in his function as Director of the Gardens. The same may hold true for the orchids sent to RIDLEY, then Director of the Singapore Botanic Gardens, before 1896.[9] In 1886 he sent 85 species of cultivated plants from Buitenzorg to *Herb. Bot. Gard. St Petersb.* (= *Leningrad*).

His *New Guinea* plants were elaborated *pr.p.* in Nova Guinea vol. 8.

LITERATURE. (1) On the periodicity of the flora of Java he wrote: 'Quelques observations sur la végétation de l'île de Java' (Bull. Soc. Roy. Belg. 26^2, 1887, p. 182–185).

(2) M. TREUB: 'Notice sur la nouvelle flore de Krakatau' (Ann. Jard. Bot. Buit. 7, 1888, p. 213–223); 'Over het nieuwe plantenkleed van Krakatau' (Nat. Tijdschr. N.I. 48, 1889, p. 338–339).

(3) *cf.* Versl. Pl. Tuin Buitenzorg for 1893, p. 25–26.

(4) *cf. l.c.* for 1894, p. 81.

(5) *cf. l.c.* for 1897, p. 66–70.

(6) *cf. l.c.* for 1893, p. 27–31.

H. HALLIER in 'Neue und bemerkenswerte Pflanzen aus dem Malaiisch-Papuanischen Inselmeer' I–III (Ann. Jard. Bot. Buit. 13, 1896, p. 276–327, pl. 21–30; Bull. Herb. BOISS. 6, 1898, p. 212–220, 284–288, 348–360, 604–622, pl. 5–11; *l.c.* sér. 2, vol. 1, 1901, p. 667–676, pl. 9–12).

(7) *cf.* Versl. Pl. Tuin Buitenzorg for 1893, list on p. 66–70.

(8) *cf.* list in *l.c.* for 1894, p. 58.

(9) *cf.* Journ. Linn. Soc. Bot. 32, 1896, p. 219.

BIOGRAPHICAL DATA. Teysmannia 9, 1899, p. 481–499; Eigen Haard 1903, fasc. 16, 17 and 18; WITTROCK, Icon. Bot. Berg., 2, 1905, p. 173, *t.* 98; Portr. in Jaarb. Dept. Landb. N.I. for 1909, 1910; Ber. D.B.G. 28, 1910, Gen. Vers. Heft p. (21); Rev. gén. d. Sci. pures et appl. Paris 1910, p. 882; Kew Bull. 1910, p. 349–350; Gard. Chron. 3rd ser. 48, 1910, p. 336 w. portr.; Nature 84, 1910, p. 539–540; Versl. Kon. Akad. Wet. Amsterdam 1910, p. 484–487; Ind. Mercuur Oct. 1910; Ann. Jard. Bot. Buit. suppl. 3, 1910, préface, and *l.c.* 24, 1911, p. i-xxxii, incl. bibliogr.; Tijdschr. K.N.A.G. 1911, p. 165, 873, 965; Levensber. Mij Ned. Letterk. 1911/12, 25 pp.; Bull. Soc. Bot. Roy. Belg. 48, 1911, p. 285–325 (extr. Ann. Jard. Bot. Buit. 1911 *l.c.*); in Beilage 'Nekrologe' z.d. Verh. d. Schweiz. Naturf. Ges. Solothurn 1911; Rev. gén. d. Sci. Paris 1935, copied in De Kern 6^2, 1936, p. 151–154; BACKER, Verkl. Woordenb., 1936; Encyclop. N.I. 4, 1921; Ned. Kruidk. Arch. 49, 1939, p. 449; *l.c.* 50, 1940, p. 202; *l.c.* 51, 1941, p. 372–373.

Tridolin, *cf. sub* Forest Research Institute, Buitenzorg.

Troll, Wilhelm

(1897, Munich, Germany; x), at first lecturer, subsequently Professor of Botany at Munich; he took his Dr's degree in 1921; in the thirties appointed at Halle a/Saale; after World War II Professor at a new university at Mainz. In 1929/30 he joined the 'Sunda Expedition der Notgemeinschaft der Deutschen Wissenschaft' under leadership of the zoologist Prof. J. W. HARMS. Its special purpose was the study of biological problems; collecting was done as a side-line only. TROLL himself made morphological studies, one of his more important subjects being the respiratory roots of mangrove plants.[1]

The fern *Campylogramma trollii* GOEBEL was named after him.

ITINERARY. *1929.* As no complete itinerary is available, the following data were extracted from his papers. *Sumatra East Coast:* near Belawan (Febr. 5 and possibly at other dates); mangrove coast and swamp forest of Deli: at Perbaungan (= Perbaoengan), Bětingtjámar, *etc.*; *P. Berhala* (March 19); *Sumatra West Coast:* Padang; *Mentawei Islands:* P. Siberut (June 1, staying a few days);[2] *Ambon:* Soja di bawah (July 3), Asiloeloe (July 14), Wai Tonahitoe delta, between Ambon and Roetoeng (Sept. 1), Wai Ila (Sept. 1), Latéri; *Saparoea; Aroe Islands: P. Wamar*, near Dobo (Oct. 22), *P. Enu.*

COLLECTIONS. He collected mainly ferns,[3] some sea-grasses, *Algae*, and mosses; he had to leave behind most of his collections at *Halle*, when he had to leave that town before the entry of the Russian army. Material in alcohol, especially of roots of mangrove trees, is for the greater part in the *Bot. Inst. Halle* (a/Saale), for a small part in *Bot. Mus. Munich.*

LITERATURE. (1) W. TROLL: 'Botanische Mitteilungen aus den Tropen' I–XII (Flora N.F. 25, 1930, p. 155–216, fig. 1–34; 25, 1931, p. 427–456, fig. 1–15; 25, 1931, p. 474–502, fig. 1–18; 26, 1932, p. 371–417, fig. 1–6, 1–8, 1–8; 28, 1933, p. 301–360, fig. 1–13, pl. 9–11, fig. 1–6, 1–6, 1–4, 1–6, pl. 12); 'Ueber die sogenannten Atemwurzeln der Mangroven' (Ber. D.B.G. 48, 1930, Gen. Vers. Heft p. (81)–(99)); 'Ueber die Luftwurzeln von Sonneratia L. *f.* und ihre biologische Bedeutung' (Planta 13, 1931, p. 311–463; with O. DRAGENDORFF); 'Vergleichende Morphologie der höheren Pflanzen' vol. 1, pt 3, p. 2007–2574 (1941–42); and several small papers.

(2) W. TROLL: 'Bilder von der Mentawei-Insel Siberut' (Natur und Mus. Senckenb. Ges. Frankfurt 1932, p. 342–353).

(3) W. TROLL: 'Eine neue Schizaea-Art der digitata-Gruppe' (Flora N.R. 28, 1933, p. 338-343, 6 fig.).

Tromp, Solko Walle

(1848, Leeuwarden, Fr., Holland; Dec. 10, 1897, ?), joined the D.E.I. Civil Service in 1870, and was stationed in Sumatra until his appointment as teacher at the Agricultural School at Buitenzorg in 1881; in 1883 replaced in the Civil Service in Bantam (W. Java), and from 1884–86 Assistant Resident at Koetei (SE. Borneo); after return from European leave in 1888 stationed at Sintang (W. Borneo); from 1889–90 on leave once more, and subsequently Resident of Borneo's Western Division.

He was the instigator of the Borneo Expedition 1893/94 (*cf. sub* HALLIER, MOLENGRAAFF, *etc.*).

COLLECTIONS. *Herb. Bog.*: material of *Sapotaceae* from *E. Borneo* (*1884*).

Hort. Bog.: *W. Borneo* orchids (*1890*, *1892*, *? 1893*); and water plants (*1896*, listed with the Borneo plants of the NIEUWENHUIS Expedition 1896/97).

LITERATURE. (1) S. W. TROMP: 'Een reis in de bovenlanden van Koetei' (Tijdschr. Ind. Taal-, Land- en Volkenk. 32, 1889, p. 273–304).

Tromp de Haas, Dr

probably Dr W. R. TROMP DE HAAS, who in 1896 was appointed Assistant for Soil Investigations at Buitenzorg, W. Java, sent 15 *nos* of grasses to *Herb. Bog.* They were identified by BOERLAGE, so they must have been collected *before 1900*.

Trotha, Lothar von

COLLECTIONS. *Herb. Berl.*: 20 siphonogams from *Java*.

In the same herbarium 320 Africa plants (coll. 1891–97) collected by Herr Oberst VON TROTHA, Commander of the 'Schutztruppe' in German East Africa (*cf.* Notizbl. Berl. Dahl. 1, 1897, p. 287). The collectors may be identical, but up to the present no data concerning his stay in Java came to my knowledge.

Tryon, Henry

(1856, Buckfastleigh, South Devon, England; Nov. 15, 1943, Brisbane, Australia), a medical student who later turned to the study of natural history, developing an allround knowledge in all branches of natural science. He came to New Zealand, managing a grazing property for his father, a life which did not appeal to him. He made lengthy collecting tours. Hearing of the great possibilities of the sugar industry in N. Queensland he came to that country about 1882; in 1883 appointed Assistant at the Queensland Museum, and after some years Asst Curator; in 1894 Government Entomologist in the Dept of Agriculture and in 1901 also Govt Plant Pathologist, holding this dual position until his retirement in 1929.

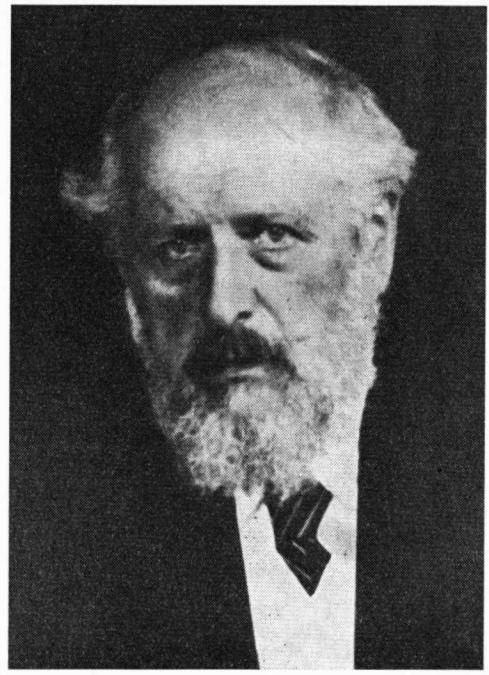
In Aug. *1895* he was appointed to visit British New Guinea (now *Papua*) to collect sugar-cane varieties.

In 1912 he worked for some time at the Buitenzorg Herbarium.

COLLECTIONS. In the 4½ months he spent in New Guinea he collected 66 varieties of sugar-cane including the well-known 'Badila'.

A very comprehensive report by him on his collections was unfortunately never printed (*cf.* WHITE in Proc. Roy. Soc. Queensl. 34, 1922, p. 10–11).

BIOGRAPHICAL DATA. Bibliogr. in Queensl. Agric. Journ. 32, 1929, p. 178–183; Proc. Roy. Soc. Queensl. 56, 1945, p. 77–80.



TSCHIRCH

Tschirch, Wilhelm Oswald Alexander

(1856, Guben, Brandenburg, Germany; 1939, Berne, Switzerland), pharmacist, Ph.Dr at Berlin (1888) on an anatomical subject. In 1884 appointed Lecturer in the University of Berlin and the Agricultural College, from 1890–1932 Extraordinary Professor of Pharmacy at Berne.[1]

In 1888/89 he visited the tropics, *viz* Ceylon and the Dutch East Indies, mainly to study medicinal plants.[2]

COLLECTING LOCALITIES.[2] *Singapore* (end of Oct. *1888*), Botanic Gardens; *Java* (Nov. 1888–Febr. *1889*). He visited at least Buitenzorg and Kota Batoe, Tjibodas (Mountain Garden), and *Cinchona* plantations in *W. Java;* the return voyage was made *via Singapore*, Ceylon, and Genoa.

COLLECTIONS. *Herb. Univ. Berne: Java* plants (pres. 1897). *Show Mus. Berl.*: 110 *nos;* probably mainly spices, officinal herbs, *etc.*

He is cited by WARBURG as the collector of a *Myristicacea* in *Java* (*cf.* Monographie p. 649). He collected some *Bacillariaceae* at Kota Batoe near Buitenzorg.[3]

LITERATURE. (1) Author of 'Handbuch der

Pharmacognosie' (1909–27, 3 vols) and numerous other publications.

(2) A. TSCHIRCH: 'Pharmaceutische Reiseplaudereien' (Pharm. Zeit. 34, 1889, p. 631–632, 638–640, 655–656, 668–669); 'Indische Fragmente I' (Arch. Pharm. 228, 1890, p. 203–217); 'Indische Skizzen' (Naturw. Wochenschr. 5, 1890, p. 11–12, 61–65, 201–205); 'Der javanische Urwald' (Jahresber. Geogr. Ges. Bern 1890, 1891, p. 58–72 + ill.); 'Indische Heil- und Nutzpflanzen und deren Kultur' (Berlin 1892); 'Der javanische Urwald. Eine Reise-Erinnerung' (Apoth. Zeit. Berlin 9, 1894, p. 127–130, 137–142); 'Notiz über Cola' (Flora 88, 1901, p. 242–244).

(3) *cf.* O. MÜLLER in Ber. D.B.G. 8, 1890, p. 318–331; and note in Dutch in Teysmannia 2, 1891, p. 233.

BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 2, 1905, p. 165, *t.* 133; A. TSCHIRCH: 'Erlebtes und Erstrebtes. Lebenserinnerungen' (Bonn 1921, + portr. and other ill.); Festschrift z. 70. Geburtstag redig. von H. THOMS (Leipzig 1926, + portr.); Vierteljahrschr. Naturf. Ges. Zürich 85, 1940, p. 355; Chron. Bot. 6, 1941, p. 357, w. portr.; Ber. D.B.G. 59, 1941, p. (67)–(108), incl. portr. & bibliogr.

Tuil, van, *cf. sub* Forest Research Institute, Buitenzorg.

Tulmek, Dr L.

COLLECTIONS. *Herb. Bog.:* plants from Prapat, Toba Lake in *N. Sumatra* (June *1922* coll.).

Tumbel, W. A. M., *cf. sub* Forest Research Institute, Buitenzorg.

Tungol, P., *cf. sub* Forestry Bureau, Manila.

Tupas, *cf. sub ditto.*

Turner, Rev. Dr

A Rev. Dr TURNER is cited by F. VON MUELLER as a collector near Port Moresby, *SE. New Guinea.*[1]

He is probably identical with the missionary doctor W. Y. TURNER. The latter left Somerset for Port Moresby in company with his wife and S. MACFARLANE, on March 21, *1876.* In the same year he joined GOLDIE and W. G. LAWES on a boat tour to Hula and Kerepunu (June 12–22). In 1877 he quitted the Mission, his wife having died in November of the previous year at Somerset.

COLLECTIONS. *Herb. Melbourne:* some plants, described by VON MUELLER.[1]

LITERATURE. (1) in Descr. Not. Pap. Pl. 1, pts 4 and 5, 1876–77.

Turner, J.

COLLECTIONS. He made a small collection of plants in *New Britain.*[1] The described *Eucalyptus* was collected near Spacious Bay, the material was sent to VON MUELLER at *Melbourne* by the *Sydney Bot. Garden.*

LITERATURE. (1) F. VON MUELLER: 'Description of an hitherto unrecorded species of Eucalyptus from New Britain' (in Australas. Journ. Pharm., July 1886).

Turner, R. Lister

(1875, Apia, Upola, Samoa; x), son of a missionary in Samoa, was brought to England when four years of age; educated at Glasgow University (M.A. 1900), one of his subjects being botany; studied theology at Edinburgh, and subsequently took a course in medicine and surgery in London. In the beginning of 1902 he left England for Papua as a missionary of the London Missionary Society, arriving in March of that year; colleague and successor to Rev. W. G. LAWES (see there) at the Training College at Vatorata, Rigo District, from 1905–24 in sole charge of the said College; in the latter year removed to Fife Bay in the Eastern Distr.; in 1930 transferred to Delena near Hall Sound on account of ill health; retired to England in 1939, leaving Papua in February; settled at Dorking, Surrey, England.

Part author of a Motu Grammar and Vocabulary, and author of an article on witchcraft in Papua.

Jasminum turneri C. T. WHITE and *Habenaria turneri* ROGERS were named after him.

COLLECTING LOCALITIES. *SE. New Guinea, Papua. 1902–09.* Rigo District.—*1910–24.* Rigo District.—*1930.* Near Fife Bay in the Eastern Distr. (Aug.–Oct., 140 plants); *Toulon Isl.* (few plants, end of the year).—*1931–38.* At Delena near Hall Sound.

COLLECTIONS. The first collection (1902–09) was practically worthless as the material was scrappy and badly insect-eaten; it was taken home in 1909. Later collections to *Herb. Brisbane,*[1] and dupl. of Fife Bay and Delena plants to *Herb. Brit. Mus.*

LITERATURE. (1) Elaborated by R. S. ROGERS in Trans. & Proc. Roy. Soc. South Austr. 49, 1925, p. 254–265; and by C. T. WHITE in Proc. Linn. Soc. N.S.W. 51, 1926, p. 296–298, pl. 17.

Turnwald

In the 'Beitr. Flor. Papuas.' (in ENGL. Bot. Jahrb.) he is occasionally mentioned as the collector of plants in *Neu Pommern* (= *New Britain*) and *Neu Mecklenburg* (= *New Ireland*) in the *Bismarck Archipelago*, in the Solomon Islands, and at Bogadji in *NE. New Guinea* (*1909*). *Evodia schullei* WARB. *f. gracillima* LAUT. from the last-mentioned locality was in *Herb.* LAUTERBACH and is now probably in *Herb. Breslau.* The other plants are *probably* either in *Herb. Berl.* or *Breslau* too. Up to the present there is no evidence of him being identical with R. THURNWALD, who made extensive explorations of the Sepik River *etc.* in 1912–14.

Twijsel, J.

sent vanilla plants from Singkawang in *W. Borneo* to *Hort. Bog.* in *1901.*

Udasco, *cf. sub* Forestry Bureau, Manila.

Uhl, F. G.

collected plants at Sagaranten, Djampangs (S.

Priangan, *W. Java*) in Jan. and April *1924;* and on G. Gedé, Tjiparaj. In *Herb. Bog.*, numbered in the series of BEUMÉE (see there).

Ulak

native collector employed by G. D. HAVILAND (see there). Probably identical with ULOK (see there).

Uljee, Joh. A., *cf. sub* Forest Research Institute, Buitenzorg.

Ulmer Jr, Frederick A.

collected with S. DILLON RIPLEY (itiner., collect., *etc.* see *sub* RIPLEY) on the GEORGE VANDERBILT *Sumatra* Expedition, *1939.*

Gentiana ulmeri MERR. was named after him.

Ulok

Dyak collector, for more than 10 years attached to the Museum staff at Kuching, Sarawak (*NW. Borneo*). He resigned in 1902. Probably identical with ULAK (see there).

Ultée, Arnoldus Johannes

(1878, Utrecht, U., Holland; x), chemist, educated and graduated (Ph.Dr 1906) at Utrecht University, and subsequently passing for chemical engineer at Delft in 1907. He came to the Dutch East Indies in 1907, where he was appointed on the staff of the Experiment Station at Salatiga (Centr. Java); since 1912 Director of the Experiment Station at Djember (E. Java); from Dec. 1921–1923 Head of the Phytochemical Laboratory of the Botanic Gardens at Buitenzorg (W. Java); finally from 1923–32 Director of the Experiment Station at Malang (E. Java).

Author of mainly phytochemical papers.[1]

COLLECTING LOCALITIES & ITINERARIES. *1912–21. E. Java:* in Besoeki Res.; on *Noesa Baron* (island S of E. Java) (*c. 1913*);[2] Poeger (*1917*); Djember.—*1922. W. Java:* Buitenzorg.—*1925.* Official tour to *SE. Borneo* (early in Dec.),[3] collecting a little on some estates.—*1927.* Tour to *Sumatra East Coast* (Apr. 14–May 2); *E. Java:* environs of Nongkodjadjar (June, Nov., Dec.); *S. Sumatra* (Sept. 27–Oct. 15).—*1928. E. Java:* Batoe and Poedjon (March), above Poenten (Ardjoeno) (June), Nongkodjadjar (July), G. Wedon Lanong (Oct.), Lawang (Oct.), Djoengo (Oct.), Tjoban Rondo (Nov.), G. Oekis near Batoe (Nov.).—*1929.* Lawang, Djoenggo, Prigen, Ngantang, Trètès, Poedjon (March 23), Batoe, Pasirian; *South* (Benkoelen) and *West Sumatra* (Oct. 4–Nov. 21).—*1930. E. Java:* mostly the same localities as in 1929, but besides at Soember Asin; *Centr. Java:* Salatiga; *S. Sumatra*, Lampong Distr.: Tandjong Karang.—*1931. E. Java:* Malang, Prigen, *etc.*—*1932.* Malang.— *? 1933. Trip in Sumatra*, collecting in *S. Sumatra:* Lampong Districts, Kota Agoeng, Ranau, Moeara Enim, Benkoelen; and in *Sumatra West Coast:* Korintji, Padang, Alahan Pandjang, Moeara Laboeh, Fort de Kock, Harau Kloof, Lake Manindjau, Loeboek Sikaping.

COLLECTIONS. *Herb. Bog.: c.* 260 *Java nos*, and *Sumatra* plants (50 *nos* coll. 1929, 1 *no* coll. 1930; and several pres. in 1933, the highest number of the latter collection being 148). At first he numbered each collection separately; since Sept. 1928 they are numbered consecutively, starting with *no* 1; the last Sumatra collection is probably numbered apart. His *private herbarium* was deposited respectively at *Djember* and *Malang Exp. Stations.*

LITERATURE. (1) *cf.* In Bull. Jard. Bot. Buit. 1922 and 1924; and 'De kaarsjes van Tjibodas' (Hand. 3e Ned. Ind. Nat. Wet. Congr. Buitenzorg 1925, p. 275–276).

(2) *cf.* Trop. Nat. 2, 1913, p. 143.

(3) A. J. ULTÉE: 'Causerie over een reis naar de Z. en O. afd. van Borneo' (read at the General Meeting of the Malangsche Landb. Ver. on Dec. 28th, 1925).

BIOGRAPHICAL DATA. Bergcultures 6, 1932, p. 494–503; Wie is dat? 1925, p. 381.

Ungo, Moro, *cf. sub* Forestry Bureau, Manila.

United States Exploring Expedition, *cf. sub* WILKES, CH.

Uno, Abdul

(1900, Kwandang or Koeandang, N. Celebes; x), employee of the D.E. Indian Forest Service since May 1924; respectively stationed in E. Java, in W. Java (Buitenzorg, Forest Research Institute), and in Central Java; since Sept. 1929 'boscharchitect' (Head Overseer) in Gorontalo Subdivision (Manado Res., North Celebes). In 1947 he was transferred to E. Borneo.

Author of some typed reports on trips in Celebes.[1]

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg: N.* and *Centr. Celebes* (Pos(s)o) plants (coll. *1930–38*), numbered in the F.R.I. bb. series. *Herb. Bog.:* dupl. of the For. Res. Inst. and some herbaceous plants (*nos* 64 and 65, coll. Febr. and Aug. *1933*).

LITERATURE. (1) *Viz* on: Kwandang, Soemalati in Gorontalo (Aug. 22–24, 1931), Gorontalo (Dec. 1931, and 1933), Todjo region (Poso) (Apr. 5–28, 1935).

Unu Ultrai

is erroneously cited as the collector of *Celtis latifolia* (BL.)PLANCH. in *Halmaheira*, and of *Trema orientalis var. rigida* in *Ternate* (*cf.* ENGL. Bot. Jahrb. 50, 1913, p. 311 and 322) of which the material is in *Herb. Leyden.* The cited sheets are duplicates from *Herb. Utrecht.* The labels read: '*ex Herb. Univ. Ultraj.*', of which the last two words were misunderstood for a collector's name.

Uschdraweit

accompanied M. BURRET (see there) on collecting trips in the vicinity of Medan, *Sumatra East Coast*, in June *1939.* Some *nos* were collected together.

He is commemorated in *Daemonorops uschdraweitianus* BURRET.

Uslar, van (or von)
sent living orchids from *Borneo* to *Hort. Sing.* in *1903/04.*

Usop (sometimes **Usope** or **Yusop**), Moh., *cf. sub* Conservator of Forests series, Kepong.



VALETON

Usteri, Alfred
(1869, Bühler, SSE of St Gallen, Switzerland; 1948, Reinach, Switzerland), horticulturist-botanist at Reinach near Basel, pupil of Prof. SCHRÖTER. Evidently for some time Professor at the Technical College at Saõ Paulo, Brazil. He made a voyage to the Philippines in 1902/03; he himself[1] erroneously mentions autumn 1903 as the time he got the invitation (*l.c.* p. v). This is without doubt a mistake, as MERRILL already mentioned his collecting in the Philippines (in 1902–03) in a paper which was published in Sept. 1903 (*cf.* Bull. Philip. Bur. Agric. *no* 4, 1903, p. 42). Besides, his visit to the Buitenzorg Gardens is mentioned in the report of that institution for 1903. He graduated on the results of his voyage. Later living at Reinach once more.

Selaginella usteri HIERON. (*cf.* BACKER, Verkl. Woordenb., 1936), and some other plants were named after him.

ITINERARY.[1] End of *1902–03.* Island of *Labuan* near NW. Borneo (half a day); *Philippines, Luzon:* Manila, and small trips in the environs; *Cebu,* making a trip to a small hill (the Lahu); proceeding by boat to *Panay:* Iloilo and trips to La Paz, Jaro, Pavia, Molo, Manduriao, Are valo and visit to *Guimaras* by boat; *Negros:* St Carlos, Talabe River, to the Val Hermoso (by boat), Castellana at the foot of Calaon Volcano; embarked at Pontevedra, sailing to *Panay:* Iloilo, making another 1-day trip to *Guimaras; Luzon:* Manila; *Singapore,* collecting in the Botanic Gardens and near the Kalang River; *W. Java:* Buitenzorg, Tjiapoes Kloof (G. Salak), Telaga Warna (lake), Sindanglaja, G. Gede-Pangrango, G. Tangkoeban Prahoe; voyage home *via Penang* and Colombo; in Oct. 1903 or previously, back in Switzerland.

COLLECTIONS. In '*Museum Jpirange*', *Saõ Paulo, Brazil;* according to the collector himself duplicates might be present at *Kew; Herb. Manila:* dupl. *Philip.* plants (pres. 1903/04); *Herb. Techn. Coll. Zürich* (poor material). In total 1467 *nos* have been collected, evidently numbered after study. He identified them himself at Kew, assisted by the staff; they include many cryptogams, of which the *Algae* were especially elaborated.[2]

LITERATURE. (1) A. USTERI: 'Beiträge zur Kenntnis der Philippinen und ihrer Vegetation, mit Ausblicken auf Nachbargebieten' (Thesis, Zürich 1905, p. 1–166, 2 pl., 29 fig.); 'Beobachtungen über tropische Märkte' (*non vidi*).

(2) By W. SCHMIDLE in Hedwigia 43, 1904, p. 414–415 and in the cited thesis *l.c.* p. 136–139.

Vaas, Karel Frederik
(1911, Arnhem, Gld, Holland; x), botanist educated at Leyden University, where he took his Dr's degree in 1938. In the next year he was appointed Inspector at the Laboratory for Freshwater Fishery at Buitenzorg (Java). In July 1940 he made a tour to *SW. Celebes* for the investigation of Lake Tempe.

COLLECTIONS. *Herb. Bog.:* 9 *nos* from Lake Tempe, near Wadjo, *SW. Celebes* (*1940*).

Vachell, J.
a missionary who collected plants in Java and the environs of Macao (S. China).[1]

He might be identical with GEORGE HARVEY VACHELL (*fl.* 1800–36), chaplain of the E.I.C. Factory at Macao, 1825–36, who is commemorated in the genus *Vachellia* W. & A.[2]

COLLECTIONS. In *Herb.* FIELDING[1] = *Herb. Oxford;* also at *Kew,* and *Cambridge.*

LITERATURE. (1) *cf.* LASÈGUE, Mus. Bot. DELESS., 1845, p. 331.

(2) *cf.* BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 294–298; Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931, p. 309.

Valderrama, *cf. sub* CASTILLO.

Valdez, Juan Gonzalez
first Forest Inspector in the *Philippines;* he collected material of forest trees.[1] The 'Inspeccion General de Montes' was erected during Spanish régime in 1865.[2]

COLLECTIONS. *Herb. de la escuela especial de montes, Escorial;* according to VIDAL much material without flowers or fruits.[1]

LITERATURE. (1) *cf.* MERRILL in Bull. Philip. Bur. Agric. Manila *no* 4, 1903, p. 38.

(2) *cf.* Nat. Res. Counc. P.I. Bull. 6, 1935, p. 547.

Valencia, N., *cf. sub* Forestry Bureau, Manila.

Valentin, P., *cf. sub ditto.*

Valera, *cf. sub ditto.*

Valeton, Theodoric

(1855, Groningen, Holland; 1929, The Hague, Holland), botanist who was educated and took his Dr's degree (1886) at Groningen University. In 1889 he came to Java as Bacteriologist of the Sugar Experiment Station at Pasoeroean; since 1892 on the staff of the Buitenzorg Botanic Gardens, from 1903 until his retirement in 1913 Head of the Herbarium. From 1915–19 he stayed once more at Buitenzorg for the study of the *Zingiberaceae.*

Author of the botanical text of the 'Bijdragen tot de kennis der Boomsoorten op Java', for which KOORDERS had the material collected and undertook the economical part. He wrote numerous taxonomical papers, and several descriptions of new species in the 'Icones Bogorienses'.

He is commemorated in several plant names, including the Brazilian genus *Valetonia* DURAND.

COLLECTING LOCALITIES. *E. Java:* Probolinggo (Oct. 16, *1899*); Lalidjiwo, slope G. Ardjoeno (June 12–14, *1901*); *W. Java:* Tjampea (Nov. *1902*); G. Gedeh (Dec. 31, *1903*); Priangan mountains; Geger Bintang; Tandjoeng Priok (Nov. *1904*); *Krakatau* (March 1, *1905*), and *P. Mas besar & P. Mas ketjil* (March 2), both in company of ARSIN and GOLENKIN; *Islands in the Bay of Batavia; Centr. Java: Noesa Kambangan* (Nov. *1907*); *W. Java:* Poentjak (March 31, *1908*; July 15); G. Pangrango (*1908*); Tjibodas (July *1911*); Tjinjiroean (twice in 1911); *E. Java:* Pasoeroean (Dec. 6, *1917*). Probably he collected in many other localities in *W. Java.*

COLLECTIONS. *Herb. Bog.: c.* 800 *nos*, of which 550 were collected during his first stay of a fortnight at Tjinjiroean (*W. Java*) in 1911. Dupl. in *Herb. Utrecht.*

Hort. Bog.: living plants from *Noesa Kambangan* (1907), and from Jang Plateau (*E. Java*, 1916).

BIOGRAPHICAL DATA. Bull. Jard. Bot. Buit. sér. 3, vol. 11, 1930, p. 1–11, w. portr. and bibliogr.; BACKER, Verkl. Woordenb., 1936.

Valeton Jr, Théodore

(1881, Amsterdam, Holland; x), went to Java in 1908, from 1924–34 Director of the School of Agriculture at Buitenzorg, and subsequently retired.

COLLECTIONS. In *Herb. Bog.:* some 23 *nos* from Tjadasmalang, *W. Java* (Sept. 11, *1917*), *etc.*

Valk, M. C.

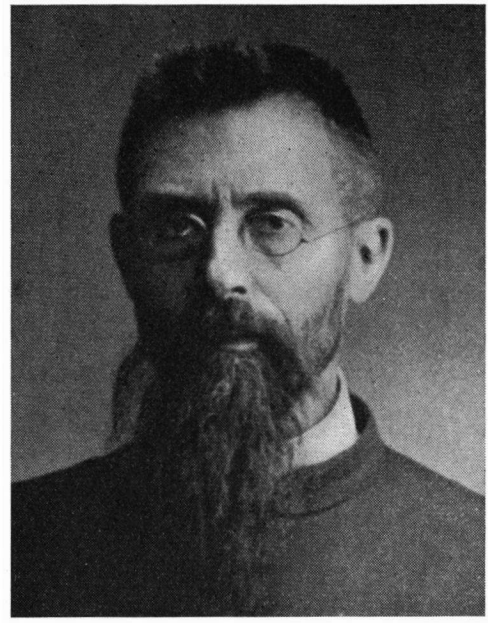
of Soerabaja, sent a living specimen of *Phalaenopsis fimbriata* J.J.S. to *Hort. Bog.* (*cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 3, 1921, p. 301).

Valkenburg, Ir M.

collected with J. H. COERT (see there, *Addenda*) on G. Keloed in *E. Java* (June 16–17, *1919*).

Vanoverbergh, Maurice (or Morice)

(1885, Oyghem, Belgium; x), missionary, educated at Scheut (Brussels), ordained priest in 1909 and subsequently leaving for the Philippines in September; from 1909–11 stationed at Bauco and Pugo (Luzon), from 1911–15 at Tubao and Bauco,



VANOVERBERGH

from 1916–21 at Bangan, from 1921–24 at Tagudin; founded Kabugao Station in 1925; in 1932 at Tagudin; 1933 to Belgium; 1934 back in Luzon, stationed at Apayao, and since 1936 at Sabangan; in 1945 secretary of the bishop, in 1946 replaced at Bauco.

In 1924 he made an expedition to the Negritos, and visited the U.S.A.

The genus *Vanoverberghia* MERR. and several plant species were named in his honour.

COLLECTING LOCALITIES. *Philippines. Luzon:* Bontoc Subprov., Bauco and vicinity (Jan. *1910*–Aug. *1911*). In *1912* and following years he continued his explorations in Mountain Prov., at Apayao, *etc.*

COLLECTIONS. *Herb. Manila:* about 3600 *nos* from Bauco and vicinity (pres. 1910–17);[1] *Herb. Paris:* 820 *nos* (purch. 1912/13); *Herb. Field* (= *Nat. Hist.*) *Mus. Chicago:* 507 *P.I.* plants (1913); *U.S. Nat. Herb. Wash.:* 116 Philip. dupl. (mostly orchids); *Herb.* DELESS. (*Genevà*): 158 plants of the mountains in *N. Luzon* (? purch. betw. 1916–21); *Herb. Vienna:* 80 *nos* (purch. 1915). Other duplicates in *Herb. Louvain* (Belgium); *Herb.* O. AMES, Cambr., Mass. (orchids);[2] *Herb. Lund, Stockholm, Berl.*, and *N.Y. Bot. Gard.; Herb. Leyden: c.* 200 *Luzon* plants (purch. 1917–20); *Herb. Utrecht;*

Herb. Groningen: ± 205 *nos* (purch. 1918–20). Partly numbered in B.S. series (*cf. sub* Bur. of Science, Manila).

LITERATURE. (1) E. D. MERRILL: 'Sertulum bontocense: New or interesting plants collected in Bontoc Subprovince, Luzon, by Father MORICE VANOVERBERGH' (Philip. Journ. Sci. C. Bot. 7, 1912, p. 71–107 and *l.c.* 9, 1914, p. 443–459).

(2) Many orchids described by O. AMES.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; inf. in litt. from 'Missions de Scheut'.

Vaughan, *cf.* GWYNNE VAUGHAN, D. T.

Vaupel

collected 11 *nos* of *Ficus* at Garoet, *W. Java, before 1899.* In *Herb. Bog.*

Vecht, Jacobus van der

(1906, The Hague, Holland; x), entomologist, educated and graduated (Ph.Dr 1933) at Leyden University; since 1928 on the staff of the Institute for Plant Diseases at Buitenzorg, Java; after World War II Head of that Institute.

In 1932 he was stationed for two months at Pangkal Pinang in Banka to make investigations into the pepper disease.

COLLECTING LOCALITIES. *W. Java:* slope G. Salak above Waroengloa (July 14, *1929*); *Celebes* (Oct. *1930*); *Banka* (Febr. *1932*), at Pangkal Pinang *etc.; W. Java:* Malimping (Apr. *1940*); Rantja Bali, G. Patoeha (Sept. 27, *1941*); *Banka* (1941).

COLLECTIONS. *Herb. Bog.:* some tens of numbers (in 1932, 22 from *Banka*). 2 Plants from G. Salak are numbered in the series of VAN STEENIS (*leg.* VAN DER VECHT) *nos* 2950–2951.

Veen, van der

collected plants with J. H. COERT (see there, *Addenda*) at ? Gadoengan Paree (Febr. 21, *1926*), *E. Java.*

Veen, P. van der, *cf. sub* Forest Research Institute, Buitenzorg.

Veen, Rutger van der

(1904, Bandoeng, Java; x), studied biology at Utrecht University, taking his Ph.Dr's degree in 1930; subsequently on the staff of the Java Sugar Experiment Station at Pasoeroean, and from 1931–32 stationed at Kediri as a Group-Adviser. Since 1933 Agriculturist of the Djember Experiment Station (E. Java).

Author of several agricultural papers.

COLLECTING LOCALITIES. *W. Java:* environs of Bandoeng and Batavia (*1923*).—*E. Java:* near Kali Sat (SE of Djember) (*1935*).—*1936. E. Java:* G. Jang (Apr. 10–14, climbing the Argapoera on the 13th; possibly no collections made);[1] G. Smeroe (collected ?);[2] *Lombok* (*Lesser Sunda Islands*): G. Rindjani (July);[3] *E. Java:* Zuidergebergte, Kali Sanen (Oct.).—Watangan Mts (? Dec. *1939*) near Batoe-oeloe.

COLLECTIONS. *Herb. Bog.:* small collection, mainly from *Lombok;* dupl. in *Herb. Djember Exp. Station* (except from Lombok); *Herb. Leyden:* ± 50 *nos* of plants from *W. Java* (coll. 1923); in *Herb. Pasoer.:* 1 *no* from Djember.

LITERATURE. (1) J. G. KOOIMAN & R. VAN DER VEEN: 'Een excursie naar het Jang-plateau' (Trop. Nat. 25, 1936, p. 160–167, 5 fig.).

(2) R. VAN DER VEEN: 'Enkele merkwaardigheden van den Smeroekegel' (*l.c.* 25, 1936, p. 191–193, 4 fig.).

(3) R. VAN DER VEEN: 'De Segara Anak in het Rindjani gebergte' (*l.c.* 26, 1937, p. 195–201, 8 fig.).

Veenhuizen

is cited as the collector of *Selaginella longiaristata* HIERON., *no* la, 'Used as medicine', in *Billiton* (*cf.* ALSTON in Bull. Jard. Bot. Buit. sér. 3., vol. 14, 1937, p. 178). Material of the cited specimen in *Herb. Bog.* and *Herb. Leyden.*

? Possibly A. C. VEENHUYZEN, Resident of Riouw in about 1914.

Veenhuyzen, H. W.

Resident of Bali and Lombok, who in *1913* sent several species of *Spathoglottis* to *Buitenzorg.*

Veer, H. de, *cf. sub* Forest Research Institute, Buitenzorg.

Veerman

COLLECTIONS. In *Herb. Bog.:* material of *Rafflesia patma* from Tipar, 50 m alt. (*W. Java*) (March 25, *1921*).

Veitch, Harry James

(1840, Exeter, England; 1924, Slough, W of London, England), the last member of the well-known horticultural firm of VEITCH & Sons at Chelsea, London. To my knowledge he never travelled in the tropics.

He was the author of many papers on ornamental plants and a hybridizer of orchids.

Betula harryana HORT. was named after him.

COLLECTIONS. *Herb. Kew:* General Herb., 1884; *Malaya etc.* 1886–98 (incl. plants from BURKE, C. CURTIS, J. G. VEITCH, LOBB); *Herb. Brit. Mus.:* 140 plants from Juan Fernandez, S. America and *Java,* from various collectors (pres. 1877); 40 from Costa Rica (pres. 1872); species of *Nepenthes* (pres. 1876 and 1878). Probably *all* of these collections were made by others on behalf of the firm of VEITCH.

BIOGRAPHICAL DATA. Gard. Chron. 3rd ser. 48^2, 1910, p. 72–73 + portr.; Kew Bull. 1924, p. 300–301; CURTIS' Bot. Magaz. Dedic. 1827–1927, p. 331–332 + portr.; Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Veitch, James Herbert

(1868, Chelsea, England; 1907, Exeter, England), of the horticultural firm of VEITCH & Sons, commenced work at Chelsea in 1885. Some six years later he made a tour of inspection of the great Botanic and Public Gardens maintained by govern-

ments in various centres and besides of many private horticultural establishments, to endeavour whether their own gardens might be enriched by further additions.[1] In 1900 he was appointed Manager of the Nurseries, and subsequently had a breakdown.

Author of 'The Veitchian Nurseries' (London 1903).

ITINERARY.[1] Sailing from Napels (Oct. *1891*) for British India; *Straits Settlements: Penang* (Hill and Public Gardens); *Singapore* Botanic Gardens; Johore; at the return in *Singapore* climbing Bt Timah with Mr W. FOX of the Gardens (Febr. *1892*); *W. Java:* Buitenzorg Botanic Garden, crater of G. Papandajan, and Lake Bagendit near Garoet; Japan; Corea; Australia; New Zealand; returning to England in 1893.

COLLECTIONS. *Herb. Kew:* Corea, W. Australia (pres. 1886–93), 598 *nos; Herb. Brit. Mus.:* 138 *nos* from W. Australia, 72 *nos* from Corea (pres. 1893). Though no plants from the *Malaysian region* are mentioned in these records, it still seems possible that the collection includes some plants from the Malay Peninsula and Java.

LITERATURE. (1) J. H. VEITCH: 'A traveller's notes' (Gard. Chron. 1892 and 1893, *pag. div.*); 'Notes on a tour through India, Malaysia, Japan, Corea, the Australian colonies and New Zealand during the years 1891–93' (Chelsea 1896).

cf. also Hortus Veitchii 1906, p. 89–91.

BIOGRAPHICAL DATA. Hortus Veitchii 1906 (portr.); Gard. Chron. 3rd ser. 42, 1907, p. 360, w. portr.; Orch. Review 15, 1907, p. 371; Garden 71, 1907, p. 562, fig.; Proc. Linn. Soc. Lond. 1907/08, p. 65–66; 3rd Suppl. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 46, 1908, p. 14 and in 2nd ed. by RENDLE, 1931; Journ. Roy. Hort. Soc. 73, 1948, p. 289–290.

Veitch, John Gould

(1839, Exeter, England; 1870, Coombe Wood, Surrey, England), son of JAMES VEITCH the founder of the renowned horticultural firm of VEITCH & SONS. He made some travels for importing new plants, one to the Philippines with the special object of obtaining plants of various species of *Phalaenopsis*. After his return he was appointed a Fellow of the Linnean Society. He was taken ill in 1867 and remained an invalid until his death.

The genera *Veitchia* WENDL., *Gouldia* A. GRAY, and several plant species were named in his honour.

ITINERARY.[1] In April 1860 he started on a *voyage to the Far East*, arriving at Nagasaki, Japan, in July following; he remained about a year there, and made the ascent of the Fujiyama; towards the end of *1861* he proceeded to the *Philippines.—2nd Voyage to the East*, sailing in *1864* for Australia and the South Sea Islands, returning to England in Febr. *1866*.

COLLECTIONS. In *Herb.* H. J. VEITCH = *Herb. Kew:* from Polynesia and Australia 245 *nos*.

LITERATURE. (1) *cf.* Hortus Veitchii 1906, p. 49–52; 'Extracts from the Journal of Mr J. G. VEITCH during a trip to the Australian Colonies and the South Sea Islands' (in Gard. Chron. 1866; in *l.c.* 1860–62 *ditto* of the trip to Japan *etc.*).

BIOGRAPHICAL DATA. Gard. Chron. 1870, p. 1117; Proc. Linn. Soc. Lond. 1870/71, p. xc; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 29, 1891, p. 84, and in 2nd ed. by RENDLE, 1931; J. H. VEITCH, The Veitchian Nurseries, 1903, portr.; Hortus Veitchii 1906 (portr.); BACKER, Verkl. Woordenb., 1936; Journ. Roy. Hort. Soc. 73, 1948, p. 286.

Veitch, Peter Christian Massyn

(1850, Cape of Good Hope, S. Africa; 1929, Exeter, England), travelled for several years, and returned to Chelsea in the spring of 1878; in 1880 he left for Exeter, entering the horticultural firm of ROBERT VEITCH and Son. In 1916 he was awarded the Victorian Medal of Honour.

ITINERARY.[1] He left England for Sydney in 1875 and collected in Fiji, New Zealand, the South Sea Islands and Australia; in Aug. *1877* he was making his way to New Guinea, but was shipwrecked off the N. coast of Australia; he was instructed to join F. W. BURBIDGE in *Borneo*, started for that island, stopping in *Penang*, *Sumatra* and *Singapore* en route, and arrived in *Labuan* in Nov. of the same year. He accompanied BURDIDGE (see there) on several excursions to the mainland of *N. Borneo* (Mt Kinabalu) and adjacent islands; in spring *1878* he returned to England.

COLLECTIONS. When going homeward he brought his plants from *Borneo*. They are *probably* at *Kew* and in the *Herb. Brit. Mus.* In the published accessions of those herbaria only plants from S. Africa (pres. 1884) are recorded, but probably they were presented by the firm of H. J. VEITCH (see there). On two occasions his collections were lost.

LITERATURE. (1) *cf.* Hortus Veitchii 1906, p. 67–69 + portr.; Gard. Chron. 3rd ser. 72, 1922, p. 62 + portr. and *l.c.* 85, 1929, p. 214 + portr.; Journ. Roy. Hort. Soc. 73, 1948, p. 287–288.

BIOGRAPHICAL DATA. See *sub* Literature.

Velasco, *cf. sub* Forestry Bureau, Manila.

Velders

of the Rubber Estate Tjibioek (Pandeglang), Bantam, *W. Java*, collected some weeds in July *1922*. Material in *Herb. Bog., s.n.*

Veldhuis, Emma Aleida Maria

(1909, Weltevreden, Java; x), studied botany at Utrecht University; in 1930 she made a voyage to Java, and after having finished her studies she returned thither and was appointed teacher at a secondary school at Batavia (1935–38). Subsequently she married Mr Y. IWEMA, who in 1947 was 1st Lieutenant of the Military Aerial Service.

COLLECTING LOCALITIES. *W. Java:* in July *1930* in Djampang Koelon, above Bandoeng, Tjinjiroean, *etc.;* Batavia (*1934*).

COLLECTIONS. *Herb. Bog.* Part of the coll. 1930 in *Herb. Brit. Mus.; Herb. Utrecht:* 228 *Java nos.*

Velzen, van, *cf.* WEERT VAN VELZEN.

Ven, Leendert Albert van der
(1872, Probolinggo, Java; x), Forest Officer who entered the employ of the D.E. Indian Forest Service in 1897 and retired in 1932. During his term of office he was stationed in several places in Java.
COLLECTIONS. He collected some plants numbered in BEUMÉE's series (see there), *e.g. Cinnamomum iners* REINW., *no* 6616, at S. Batjem in Kediri Res., *E. Java* (Nov. 21, *1923*).



MRS AND DR VERDOORN

Venning, Alfred Reid
(† 1927), in the Malayan Civil Service from 1893–1908; when Secretary of the Resident, *Perak* (1900–1903), residing at Taiping, he collected some plants in *1901 or 1902*. Material in *Herb. Sing.* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5).

Ventenat, Louis
(1765, Limoges, France; 1794, Île de France (Mauritius)), Roman Catholic priest who, at the instigation of his brother, the botanist E. P. VENTENAT, joined the expedition of BRUNY D'ENTRECASTEAUX (in search of the expedition of LA PÉROUSE; Itiner. and Liter. *cf. sub* BILLARDIÈRE), as chaplain-naturalist.
In October 1793 they reached Soerabaja, where the ships were transferred to the Dutch Government, and VENTENAT and other members imprisoned, first at Soerabaja, later at Semarang. In the latter place VENTENAT fell seriously ill, and was granted the permission of the Governor of Semarang to depart for Île de France, in which island he died shortly after.
He is commemorated in *Peperomia ventenatii* MIQ.
COLLECTIONS. What remains of his collections is in *Herb.* DELESS. (*Geneva*), it was presented together with part of the collection of LAHAIE (see there).
BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Verapha
a native collector employed by W. GRIFFITH (see there). The editor of the latter's 'Posthumous Papers' mistook his name for a place and spelled it in more than one way (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 133).
COLLECTIONS. With *Herb.* GRIFFITH at *Kew.*

Verboom, Willem Cornelis
(1909, Buitenzorg, Java; x), educated at the Colonial Agricultural School at Deventer, Holland; planter, Regional Agent of SW. Sumatra Syndicate, in 1947 at Palembang, about the middle of Jan. 1948 transferred to Lahat; Dec. 1949 to Holland.
COLLECTING LOCALITIES. *S. Sumatra:* Forest Reserves (*Pinus*) between Palembang and aerodrome Talang Betoetoe (Apr. and Dec. 26, *1947*), Sg. Ringit (Dec. 26).
COLLECTIONS. *Herb. Leyden:* 16 phanerogams; some dupl. in *Herb. Bog.*

Verdoorn, Frans
(1906, Amsterdam, Holland; x), bryologist, educated and graduated (Ph.Dr 1934) at Utrecht University. In 1930 he made a collecting tour in the Dutch East Indies; in 1940 he migrated to the U.S.A., and settled at Waltham, Mass.; in 1941 appointed Honorary Research Associate Farlow Herbarium, Harvard University; since 1942 bibliographer of the Arnold Arboretum (Harvard), preparing a biographical dictionary of botanists.
Founder and owner of the Chronica Botanica Co., besides, editor of the Annales Bryologici, a series of Plant Science books, *etc.* In recognition of his editorial and international relation work he was awarded the first MARY SOPER POPE Medal of the Cranbrook Inst. of Science, Michigan, in 1946.
COLLECTING LOCALITIES. *1930. Malay Peninsula:* Mt Ophir (at Easter with HOLTTUM); *Java* and *Sumatra* (Apr.–Sept.), in *W. Java* collecting at: Tjigombong, G. Gede-Pangrango, Tjibodas; in *Centr. Java:* G. Slamat; in *E. Java:* G. Kawi, G. Tengger.
COLLECTIONS. Principally bryophytes;[1] *Selaginellaceae* too. Owner of a *private Herbarium*, now in FARLOW *Herb.*, Cambr. (Mass.); editor of *exsiccatae.* Dupl. in *Herb. Bog.*, *Sing.*, and *Brit. Mus.*
LITERATURE. (1) FR. VERDOORN: 'On the Indomalayan Hepaticae in the Herbarium of FR. VERDOORN' (Ann. Bryol. 8, 1935, p. 168–169).
BIOGRAPHICAL DATA. Wie is dat? 1938; Who's who in America 1946–47.

Verduyn Lunel, F. A., *cf. sub* Forest Research Institute, Buitenzorg.

Vergara, P., *cf. sub* Forestry Bureau, Manila.

Verhey, B. J. C.
of Wonosarie, Malang, collected some orchids *etc.* at Toeren and Malang, *E. Java*, which he sent to J. J. SMITH, *Hort. Bog.*, in *1898*.

Verhoef, Laurens
(1901, Oudewater, Z.H., Holland; Dec. 22, 1945, Beatrix camp, Singapore), Forest Officer who went to the Dutch East Indies in 1925; in 1935 he was stationed at Manado, N. Celebes. He died as a consequence of imprisonment by the Japanese.

Author of some sylvicultural papers in the periodical 'Tectona'.

COLLECTING LOCALITIES. *E. Java:* forest district of Oost Brantas (*1928*); *SE. Borneo: P. Laoet*, Tanah Boemboe, Batoe Litjin (*1928–29*);[1] *N. Celebes* (*1935*).[2]

COLLECTIONS. *Herb. Bog.:* 38 *nos* from *E. Java* (acq. Aug. 1928), *nos* 65–104 from *Borneo*. Besides these private numbers which mainly concern herbaceous plants, he collected material of trees in the F.R.I. bb. series of the *Forest Research Institute Buitenzorg;* duplicate in *Herb. Bog.* too.

LITERATURE. (1) *cf.* typed report on a trip to P. Laoet and Tanah Boemboe (Febr. 8–24, 1928) in the Forest Research Institute, Buitenzorg.

(2) *cf.* typed reports on the following trips: Bolaäng Mongondow (Apr. 3–16, 1935), Donggala & Paloe (Aug. 17–Sept. 1, 1935), Poso (Oct. 20–26, 1935), Donggala & Paloe & Parigi (early in Dec. 1936), in above-mentioned Institute.

L. VERHOEF: 'Een tocht naar het Natuurmonument Tongkoko-Batoeangoes' (Natuur in Indië 1937, p. 91–92, w. ill.).

Ver Huell, Quirijn Maurits Rudolf
(1787, Zutfen, Gld, Holland; 1860, Arnhem, Gld, Holland), entered the Dutch Navy at the age of fifteen, and was pensioned off in the rank of rear-admiral in 1850. He made natural history collections in the *Malay Archipelago* (*1815–19*), and was a skilful draughtsman. He was the illustrator of MIQUEL's 'Flora van Ned. Indië', of the report of REINWARDT's voyage to the eastern part of the Malay Archipelago (edited by W. H. DE VRIESE), and of numerous other works.

He is the author of reminiscences of his voyage to the Dutch East Indies;[1] he visited Banda in 1817.[2]

He was commemorated in *Verhuellia* MIQ. and in *Symplocos verhuellii* JUNGH. & DE VRIESE.

COLLECTIONS. In the preface of his book he mentions the loss of his collections due to the wreck of H.M.S. 'Adm. Evertzen'. When leaving the ship he could rescue only his sketch-book.

Numerous unpublished pencil drawings in *Herb. Leyden.*

His entomological collection was bequeathed to the Leyden Nat. Hist. Museum.

LITERATURE. (1) Q. M. R. VER HUELL: 'Herinneringen van eene reis naar de Oost-Indiën' (Haarlem 1835–36, 2 vols).

(2) Q. M. R. VER HUELL: 'De ravijn Calhaboca, op het eiland Groot Banda' (in DE VRIESE, Tuinbouwflora, 3, 1856, p. 3–6).

BIOGRAPHICAL DATA. Hand. Mij Ned. Letterkunde 1860, p. 453–467; Tijdschr. v. Entom. 4, 1861, p. 55–63; MOLHUYSEN, BLOK & KNAPPERT, Nieuw Nederl. Biogr. Woordenb. 3, 1914, p. 1291–1292; BACKER, Verkl. Woordenb., 1936; H. ENGEL, Alphabetical list of Dutch zoological cabinets *etc.* (Bijdr. t.d. Dierk. 27, 1939), p. 325; Ned. Kruidk. Arch. 51, 1941, p. 373; *l.c.* 53, 1943, p. 254.

Vermeulen, Dr J.
chemist, from 1919–27 teacher at the K.W. III School, Batavia, Java; later for some time employed at the Laboratory for Chemical Analysis, Buitenzorg.

COLLECTING LOCALITIES. *W. Java:* Cheribon Residency (*1920*) on the slopes of G. Tjeremai, collecting at Madja (May 31), Argalinga, Telaga rainis (Mandirantjang Distr.), *etc.; Bali:* at Kintamani (June 4, *1921*), *etc.*

COLLECTIONS. *Herb. Bog.:* > 66 *nos.*

Vermoesen, Dr
collected ferns at Ngadiwono (G. Tengger), *E. Java;* evidently phanerogams too, as he is cited as the collector of *Polygonum plebejum* R.BR. in the Zandzee (G. Tengger) on March 10, *1912* (*cf.* DANSER in Bull. Jard. Bot. Buit. sér. 3, vol. 8, 1926, p. 141). Specimen in *Herb. Bog.*

Vernon, William
(*fl.* 1688), English bryologist who in 1698 collected in Maryland, U.S.A., and later in England.

He is commemorated in the genus *Vernonia* SCHREB. and in several plant species (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. Plants from the *East Indies* and Maryland in *Herb.* SLOANE = *Brit. Mus.* He sent his collections to the London pharmacist PETIVER, whose collections were purchased by SLOANE.

The statement 'East Indies' probably means British India, and *not* the Dutch East Indies; presumably not collected himself.

Verschueren, Johannis Cornelis
(1905, Oosterhout, N.Br., Holland; x), Roman Catholic missionary; since 1931 stationed at Merauke (*Dutch S. New Guinea*). In 1947 in Holland.

Author of numerous articles in Roman Catholic newspapers, mission periodicals *etc.* He is preparing a monograph on the Boadzjie of the Upper Fly River.

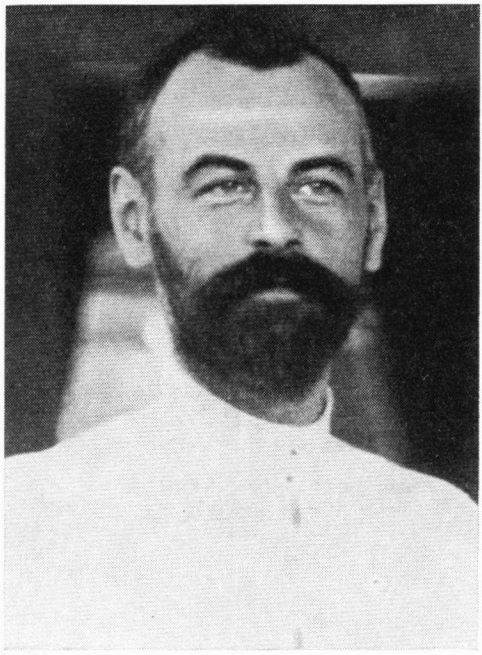
COLLECTIONS. No dried collections. He sent living orchids from the Fly, Maro, and Koembe rivers to *Hort. Bog.*, in the years *1933–36*.

Verschuur, H. P.
in 1918 engineer on board a surveying ship of the Royal Dutch Navy operating in Malayan waters. In the cited year he collected living orchids

in *Sumatra West Coast* and in the *Mentawai Islands* (*P. Siberoet*), which E. R. JACOBSON (see there) cultivated in his garden at Fort de Kock.

Dendrobium verschuurii J.J.S. is named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. His orchids were presented to



G. M. VERSTEEG

Hort. Bog. by JACOBSON together with his own collection in 1921. Of some plants material was dried on behalf of *Herb. Bog.*

Versluys, T. A., *cf. sub* Forest Research Institute, Buitenzorg.

Versluys, Willem

(1877, Groningen, Holland; 1939, The Hague, Z.H., Holland), Forest Officer; from 1902–04 stationed in the Java teak districts, from 1905–12 in Curaçao (West Indies); from 1912 in the Dutch East Indies again, respectively at Blora (Centr. Java), Fort de Kock (Sumatra West Coast, 1915–18), and since 1918 in Java again. In 1924 he was appointed Forest Administrator in the domain of the Mangkoenogoro (Solo); retired in 1931.

Author of some sylvicultural papers in the periodical 'Tectona'.

ITINERARIES & COLLECTING LOCALITIES. *Travels in Tapanoeli Residency,*[1] *W. Sumatra. 1915.* Starting from Fort de Kock (May 3); Sibolga (May 5–11); Meranti (12), Pagaranpisang (13), Banoehadji (15), slopes of the Dolok Malintang (16), Taroetoeng (17), Si Nara (19), Batoemardinding (20), Aik Botar (Loeboedolok), Djandiradja, Hoeta Djoeloe (23–25), Bonon Dolok (Si Napa, 26), Baringin (27), Onan Dolok, Aik Toeka, Palilitan (30), H. Batoegadja (June 1), H. Pakoe, Dagang Koebang, Sidakalang (5), Toetoengbatoe, Djandji, H. Boekit, H. Pinang, Laksa (11), Dk Soemoel, H. Manik, Sidikalang (14–16), Peboeloean, Baniara, Lintaeng (or ? Limbaeng), Pagoeroeran, Roenggoerna Hoeta (22), Lontaeng, Adjibata, Raoehboti, Hitenano, Sidjoekat (29), Hada-Hada, Gonting, H. Goegoek, Parloemboean, Taroetoeng (July 10–11) and *via* Banoehadji, Pagaranpisang, H. Meranti back to Sibolga (15), from where departing (22) to Padang Sidimpoean.—*1916.* To Lower and Upper Baros: by car (Aug. 23–25) from Fort de Kock to Sibolga; by K.P.M. steamer to Baros (arriving the 28th); Tanggabosi (29), Palilitan (30), Dk Poerba (31), Palilitan–Si Ringo (Sept. 1), Palilitan–Tanggabosi (2), Laksa (3), Tanggabosi–Baros (4), by car *vice versa* to Poelau Karang (5), stay at Baros (6–7), by proa to Sibolga (8), and returning by car to Fort de Kock (9–11).—From *1915–18* collecting in several localities in *Sumatra West Coast, viz* at Agam, Tanah Datar, G. Merapi, *etc.—Centr. Java:* Rongkop, Djokja (July *1925*).

COLLECTIONS. In *Herb. Bog.;* when in *Sumatra* he brought home several living orchids which were cultivated in *Hort.* JACOBSON (see E. R. JACOBSON). The latter orchid collection was presented to *Hort. Bog.* in 1921.

LITERATURE. (1) Typed reports in the files of Herb. Bog.

Versteeg, Ch., *cf. sub* Forest Research Institute, Buitenzorg.

Versteeg, Gerard Martinus

(1876, Zeist, U., Holland; 1943, The Hague, Holland), physician who joined two expeditions (as physician-botanist) to Surinam, respectively in 1903/04 and 1904/05; in 1905 appointed Medical Officer in the D.E.I. Army, in which capacity he joined two South New Guinea expeditions (see below), during the first of which, in 1907, undertaking besides the botany department, during the second the zoology department. In 1922 he retired; from 1928–31 Chief Government Physician in the Civil Health Department (for plague control) in the D.E.I.; in 1936 he settled at Delft, Holland.

The genus *Versteegia* VALET. and several plant species are named in his honour (*cf.* BACKER, Verkl. Woordenb., 1936).

ITINERARY. *1st* LORENTZ *Expedition to Dutch S. New Guinea, 1907,*[1] *cf.* also *sub* J. M. DUMAS and DJIBJA. Sailing from Soerabaja (Apr. 17); going up the Lorentz River (= Noordrivier) (May 3); Bivak Island (10); Sabang, van Weel's camp; Alkmaar bivouac (July 2–Aug. 16); going by land (Aug. 17) *via* the Resi Mts (900 m) to the Hellwig Mts (summit 2320 m alt.), staying from Sept. 4–7, and subsequently returning to Resi bivouac; some members (not VERSTEEG!) making reconnaissances of the Reiger and Dumas rivers from the end of Sept. to early in Oct., while VERSTEEG set out to Sabang (he had collected near the Reiger River in May–June); leaving Lorentz River (Oct. 25); Merauke

(Oct. 28–Nov. 30); *via* Dobo (*Aroe Islands*) (Dec. 4), *Timor*-Koepang (9), back to Soerabaja (15) and Priok (19).—*3rd Scientific Dutch S. New Guinea Expedition* under FRANSSEN HERDERSCHEE, *1912–13*.[2] Itinerary *cf. sub* A. A. PULLE. The latter botanist was not allowed to join the ascent of the summit of Mt Wilhelmina, and VERSTEEG made the botanical collection during that part of the trip, in Febr. *1913* collecting along the following route: Wichmannberg to Hubrecht Mts and back, Kajan Mts, Oranje Mts, Waterval Mts, Meerbivak, Quarles Valley, Lake Quarles; the highest point of the summit of Mt Wilhelmina was reached on Febr. 21.

COLLECTIONS. *Herb. Bog.:* 1973 *nos* of the 1st LORENTZ Exp. *1907*, and the *nos* 2401–2546 of the FRANSSEN HERDERSCHEE Exp. *1913*. Dupl. in *Herb. Utrecht: New Guinea 1907/08; Leyden:* 412 *New Guinea* plants (pres. 1909/10); *Kew, Berlin.*

The collections were elaborated.[3]

In 1907 he was assisted by mantri DJIBJA who collected living plants on behalf of *Hort. Bog.*

LITERATURE. (1) *cf.* Bull. Mij Bevord. Natuurk. Onderz. Ned. Kol. Bull. *nos* 50, 52–58; Tijdschr. K.N.A.G. 1907, p. 466–471, and *l.c.* 1908, p. 133–144; Versl. Milit. Expl. Ned. N.G. 1907–15, Weltevreden 1920, p. 28.

(2) *cf.* Mij Bevord. Natuurk. Onderz. Ned. Kol. Bull. *nos* 65–68; Tijdschr. K.N.A.G. 1913, p. 350–365, 789–794, 801–802; Versl. Milit. Expl. Ned. N.G. 1907–15, Weltevreden 1920, p. 29.

(3) J. J. SMITH: 'Vorläufige Beschreibung neuer papuanischer Orchideen' I (Bull. Dép. Agr. Ind. Néerl. *no* 19, 1908, p. 1–39).

In Nova Guinea vol. 8 and 12.

In 'Beitr. z. Flora Papuas.' (ENGL. Bot. Jahrb. 1912–).

Versteegh, Christiaan

(1913, Batavia, Java; x), first on monthly pay, later 'boscharchitect', in the employ of the D.E. Indian Forest Service. In April 1937 he was stationed at the Forest Research Institute (Buitenzorg), from June 1937–March 1938 at Fort de Kock (Sumatra West Coast), and subsequently at the Forest Research Institute again.

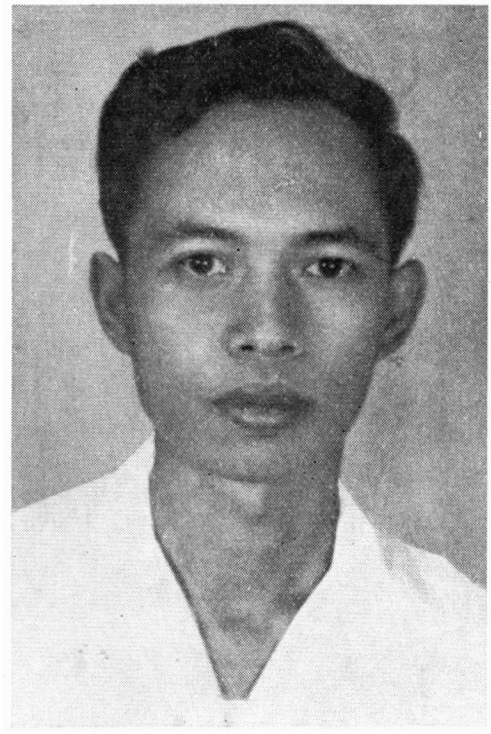
Parastemon versteeghii MERR. & PERRY was named after him.

COLLECTING LOCALITIES. *1937. W. Java:* Bandoeng; *Sumatra West Coast; Mentawai Islands.—1938. Sumatra West Coast.* With the *3rd* ARCHBOLD *Expedition to Dutch New Guinea*, itinerary *cf. sub* L. J. BRASS (after the departure of the Dutch Forest Officer MEIJER DREES, VERSTEEGH took over the latter's duties).—*1939. Dutch New Guinea*, continuation of the 3rd ARCHBOLD Expedition (see above); *W. Java:* G. Bentang (Soekaboemi), Takokah, and Buitenzorg.—*1940. E. Java:* G. Idjen, G. Baloeran and Djember; *W. Java:* Buitenzorg; *S. Sumatra:* Palembang, with NOERKAMAL.—*1941. SE. Borneo* with NOERKAMAL.

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg:* some hundreds of numbers from *W. Sumatra* and *Mentawai Islands;* some tens from *Java;* > 300 from *S. Sumatra*, Palembang *etc.*, all numbered in the F.R.I. bb. or Ja. series; dupl. BRASS & VERSTEEGH *New Guinea.* Dupl. in *Herb. Bog.*

Verstrijden, A.

(†), Assistant Pharmacist, at the time employed



VERSTEEGH

in the Military Hospital at Fort de Kock (W. Sumatra). His favourite pursuit was butterflies, but he occasionally collected living orchids which he presented to E. R. JACOBSON (see there).

In March *1917* he collected material of *Cinnamomum burmanni* BL., *no* 2806 (? series JACOBSON), near Fort de Kock, *Sumatra West Coast* (*cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 7, 1925, p. 452).

Vertenten, Petrus

(1884, Hamme, Belgium; x), Roman Catholic missionary, from 1910–26 working in *Dutch South New Guinea*, stationed at Merauke and Okaba. In 1926 he went back to Europe, and since 1927 he is working in the Belgian Congo.

COLLECTIONS. *Herb. Bog.:* 95 *nos* (coll. July *1923*), including *Stylidium alsinoides*, a new record for *New Guinea.*

Hort. Bog.: living *New Guinea* plants (pres. *1921–22*), including the Australian *Amaryllidacea Eurycles alba* (R.BR.) BACKER, a new record for the Papuan flora.

Verwey, H. M., *cf. sub* Forest Research Institute, Buitenzorg.

Vesterdal, A. P. N.

(1875, Funen, Denmark; x), was trained as a gardener, and studied in Germany and England; manager of a plantation, Mt Austin Estate, in Southern Johore, 1905–18; Head of the office of the Plantation Department, Head Offices of the East Asiatic Company at Copenhagen, from 1918 onwards. In the latter capacity he made several tours of inspection in the Malay Peninsula, Siam, and Java.

COLLECTING LOCALITIES. *Malay Peninsula:* Mt Austin, to the north of Johore Bahru (*1916 onwards*); Trengganu (*1919*); later collections in other parts of the Malay Peninsula and in Lower Siam; Trengganu, Selangor and *Singapore* (Nov.–Dec. *1935*). During tours of inspection he possibly collected in *Java* too.

COLLECTIONS. *Herb. Sing.:* plants (pres. 1917), and some dupl. of later collections; *Herb. Bog.:* material of *Acriopsis ridleyi* (pres. 1916); *U.S. Nat. Herb. Wash.:* 6 dupl. *Malacca*. Further collections were sent to *Copenhagen* (*c.* 1500 specim.).

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

Veth, Daniël David

(1850, Amsterdam, Holland; 1885, Kalahangka, W. coast of S. Africa), engineer, son of Prof. P. J. VETH, educated at polytechnical schools in Germany. He was from 1873–76 in the employ of the Swiss Railways, working near Zürich and on the St Gotthard line. He joined the Central Sumatra Expedition 1877/78 (*cf. sub* A. L. VAN HASSELT).[1] Together with VAN HASSELT he collected some plants on G. Kerintji (*Sumatra West Coast*) in Dec. *1877*. In 1884 he went to Africa as leader of the Cunene Expedition to the Portuguese colonies Angola and Benguela, where his health broke down.[2]

He is commemorated in *Frullania vethii* LAC.

COLLECTIONS. With A. L. VAN HASSELT's collection in *Herb. Leyden*.

LITERATURE. (1) *cf.* P. J. VETH: 'Reizen en onderzoekingen der Sumatra-expeditie, *etc.*' vol. 1, p. 7. D. D. VETH is the author of vol. 2 of this work, comprising the geographical description and atlas.

D. D. VETH: 'Reizen door Sumatra' (Aarde en haar Volken 1881, p. 1–16, 48–64, 105–120, 177–202, w. map and ill.); transl. 'A travers l'île de Sumatra' (Tour du monde 40, 1881, p. 145, 240); 'Von der Niederländischen Expedition nach Zentral-Sumatra, 1877–1879' (Aus allen Welttheilen 13, 1881/82, p. 36, 74, 92, 102, 138).

cf. also short articles on the expedition written by D. D. VETH and J. F. SNELLEMAN, previously published in newspapers, re-issued in P. J. VETH & J. SNELLEMAN, DANIËL VETH's reizen in Angola, *etc.*, *l.c. sub* 2, Bijl. A–C, p. 43–95.

(2) Dr P. J. VETH & JOH. SNELLEMAN: 'DANIËL VETH's reizen in Angola, voorafgegaan door een schets van zijn leven' (Haarlem 1887).

BIOGRAPHICAL DATA. Eigen Haard 1885, p. 456, 468, + portr.; in P. J. VETH & J. SNELLEMAN, DANIËL VETH's reizen in Angola *etc.*, *l.c. sub* Liter. 2, p. 3–4 + portr., bibliogr. on p. 115–116; P. C. MOLHUYSEN, BLOK & KNAPPERT, Nieuw Nederl. Biogr. Woordenb. 5, 1921, p. 1016–1017; Encyclop. N.I. 4, 1921.

Veyra, de, *cf. sub* Bureau of Science, Manila.

Vidal y Soler, Sebastian

(1842, Barcelona, Spain; July 28, 1889, Manila, Luzon, P.I.), came to the Philippines as Inspector General in the Forestry Bureau in 1871; from 1873–75 back in Spain, and in 1876 appointed Chief of the Commission for the Forest Flora of the Philippines.

He was the first of the local botanists in the Philippines to recognize the necessity of a local botanical library and herbarium, and further, the absolute necessity of comparing current collections of Philippine material with extant types in various European herbaria. In 1883 he accordingly worked in Europe on his collections, notably at Kew, in collaboration with R. A. ROLFE, then an Assistant in the Kew Herbarium, who prepared and published several papers on the Philippine flora. VIDAL himself wrote some publications on the Philippine flora.[1]

He is commemorated in several Philippine plant names.

COLLECTING LOCALITIES. *Philippine Islands.* Only few data are known, besides in *Luzon* he was some time in *Mindanao* in *1872*, and also visited *Palawan*. In June *1880* he climbed Mt Mahayhay in *Luzon*.

COLLECTIONS. The material he brought together in the Forestry Bureau Building at Manila, is labelled and cited 'Comision de la Flora Forestal de Filipinas' *no* . . .; it was collected (by R. GARCIA, MAESO, father M. RAMOS, *etc.*) in VIDAL's series; it was destroyed by fire in 1897, as was the botanical library. Dupl. sets are extant in *Herb. Kew:* 4063 *nos* (pres. 1883–86); in *Mus. d. Ultramarino Madrid;* and partial set (*c.* 2000) in *Herb. Leyden*. In 1895 about 2000 duplicates had been presented to the *Museo Biblioth. Manila*, which disappeared during the unsettled state of affairs of the defunct museum in 1898.[2] Also dupl. in *Herb.* BECCARI (= *Florence*),[3] in *Herb.* PIERRE (= *Paris*),[4] and in *Herb.* DECAND. (*Geneva*).

A catalogue of part of his plants was published by CERON.[5]

LITERATURE. (1) S. VIDAL Y SOLER: 'Sinopsis de familias y géneros de plantas leñosas de Filipinas. Introducción a la flora forestal del archipiélago filipino' (1883, + Atlas); 'Phanerogamae Cumingianae Philippinarum, ó Indice numérico y catálogo sistemático de las plantas fanerogamas colleccionadas en Filipinas por HUGH CUMING, con características de algunas especies no descritas y del género Cumingia (Malváceas)' (1885); 'Revision de plantas vasculares Filipinas' (1886); and many others.

(2) *cf.* MERRILL in Bull. Philip. Bur. of Agric.

Manila *no* 4, 1903, p. 35; and in 'A discussion and bibliography of Philippine flowering plants' (vol. 4 of Enum. Philip. Fl. Pl., 1926), p. 51 and 53.

(3) *cf.* MARTELLI in Boll. Soc. Bot. Ital. 1902, p. 89.

(4) *cf.* in Bull. Mus. Hist. Nat. Paris 15, 1909, p. 379–385.

(5) S. CERON: 'Catálogo de las plantas del herbario recolectado por el personal de la suprimida comisión de la flora forestal' (Manila 1892).

BIOGRAPHICAL DATA. Ann. Bot. 3, 1889/90, p. 488; MERRILL in Bull. Philip. Bur. of Agric. Manila *no* 4, 1903, p. 18–21 and in 'Discussion and bibliography *etc.*' 1926, p. 50–51; BACKER, Verkl. Woordenb., 1936.

Vidao, B., *cf. sub* Forestry Bureau, Manila.

Vidgen

is cited by J. MONACHINO as the collector of *Alstonia spectabilis* R.BR., *no* 143, in *Thursday Isl.*, Torres Strait, S. of New Guinea (*cf.* Pacif. Sci. 3, 1949, p. 162); specimen in *Herb. Brisbane.*

Viets, Johannes

(1893, Emmerik, Germany; x), came to Java towards the end of 1915 as a Field Assistant at the Experiment Station for the Java Sugar Industry at Pasoeroean; since 1918 in charge of the experimental gardens of that institution. In 1940 he was pensioned off and planned his final departure to Holland,[1] but the German invasion into that country compelled him to stay in Java, and in the same year he was temporarily attached to the Botanic Gardens at Buitenzorg. Soon afterwards he was stationed at Lawang as Overseer of a new branch of the Gardens, which was still to be laid out.

COLLECTING LOCALITIES. *1929. E. Java:* G. Smeroe (Ranoe Daroengan on the S. slope); G. Tengger (Soekapoera).

COLLECTIONS. *Herb. Pasoer:* 69 *nos.*

LITERATURE. (1) *cf.* Arch. Suikerindustrie in Ned. en Ned. Ind. 1, 1940, p. 86–89, w. portr.

Villamil, A.

Filipino, in the service of the Forestry Department of British North Borneo, collected a small but interesting herbarium, chiefly of commercial trees, in *Br. N. Borneo* (the dates known ranging from Aug. *1915* to Sept. *1917*).

Possibly he is identical with the VILLAMIL who collected in the *Philippines* on behalf of the F.B. series of the Forestry Bureau, Manila (see there).

Timonius villamilii MERR. and other Philippine plants were named after him.

COLLECTIONS. *Herb. Manila:* 286 *Borneo* plants collected with FOXWORTHY (pres. 1916), 283 *ditto* with AGAMA and WOOD (pres. 1917). In *Herb. Taihoku:* 1 specim. from *Borneo.*

Villanueva, Brigido R.

from 1929–32 Junior Botanist at the Bureau of Science, Manila. It seems probable that he collected plants, but no definitive data are known to me.

Villanueva, E., *cf. sub* Forestry Bureau, Manila.

Villar, *cf.* FERNANDEZ VILLAR, C.

Vilmorin, Mr & Mrs († *c.* 1937) Philippe L. de

of the nurseries VILMORIN & Co.; he was vice-president of the French 'Societé Nationale d'Horticulture *etc.*' In 1912 they made a voyage to Burma,[1] and subsequently in 1913 a trip through Java, paying a short visit to the Buitenzorg Botanic Gardens.

COLLECTING LOCALITIES. *1913. W. Java:* Tjibodas on the slope of G. Gede(h) (Jan. 5); Kahoeripan (= Koeripan) near Buitenzorg (13); *E. Java:* Nongkodjadjar (G. Tengger) (17).

COLLECTIONS. *Herb.* BONAPARTE (= *Paris*):[2] some ferns.

LITERATURE. (1) PH. L. DE VILMORIN: 'Rangoon et la Birmanie' (Rev. Hortic. Paris 85, 1913, p. 171–175, 197–199).

(2) *cf.* BONAPARTE, Notes ptéridol., fasc. 13, 1921, p. 214, 216.

Viloria

Philippine collector in *Luzon.*

Vincent, Jacques Alexander

(1886, Fort de Kock, Sumatra; x), Forest Officer, since 1917 serving in the Dutch East Indies; retired in 1941.

COLLECTING LOCALITIES. *1923. Centr. Java:* Semarang, in teak forest (Aug. and Nov. 20).

COLLECTIONS. Plants from the above-mentioned locality on behalf of BEUMÉE (see there), and numbered in the latter's series; in *Herb. Bog.*

Hort. Bog.: 1 orchid from *Ternate* (pres. *1917*).

Visch, H. G. de

of Goenoeng Rosa Estate, Lampegan, *W. Java*, sent a number of living orchids to *Hort. Bog.* in *1908.*

Vischer, Wilhelm

(1890, Basel, Switzerland; x), botanist, educated at Basel, Munich and Geneva (Ph.Dr 1914, Munich); in 1914 expedition to Paraguay with Prof. CHODAT;[1] subsequently at Geneva with Prof. CHODAT; from 1919–22 on the staff of the Rubber Experiment Station W. Java;[2] Professor of Taxonnomy at Basel University.

COLLECTING LOCALITIES. Between Aug. *1919–22.* In *W. Java*, at Tjibodas *etc.;* in *E. Java:* G. Raun (with W. H. ARISZ), Idjen Plateau, *etc.; Bali* (10 days, little or not collected); *S. Sumatra:* Lampong Distr. (2 or 3 days); *Sumatra West Coast:* Padang Highlands to Sg. Kwanten in Indragiri (*Centr. Sum.*).

COLLECTIONS. Several plants presented to C. A. BACKER and BAKHUIZEN VAN DEN BRINK Sr (see there). *Private herbarium* and demonstration material for his lectures at *Basel. Herb. Bot. Gard. Berne:* material of *Cladopus nymani*, diapositives of *Rafflesia patma* and *Cycas rumphii*, candles of Tjibodas (pres. 1925).

LITERATURE. (1) R. CHODAT & W. VISCHER: 'La végétation du Paraguay' (Bull. Herb. Boiss.

fasc. 2, 1918, p. 1–290, fig. 107; *l.c.* 3, 1920, p. 1–379).

(2) Author of several papers on rubber in Rubber Archief 1920–23 *etc.*

Visser, W.

of Semarang (*Centr. Java*), sent some rare wild *Leguminosae* to *Hort. Bog.* in *1920.*

Visser, Willem Anthony

(1913, Zoeterwoude, Z.H., Holland; x), passed his youth with his parents in Java; geologist, educated at Leyden University (Ph.Dr 1937); in 1937 he entered the employ of the B.P.M. (Batavian Oil Co.). He collected plants during secondary-school years.

COLLECTING LOCALITIES. *1927–31. W. Java:* Batavia, G. Gedeh-Pangrango, Tjilintjing (March 16 and 31, *1929*), Bantam, G. Tjibodas (Tjampea), Lembang, Pengalengan,[1] G. Papandajan, *etc.*

COLLECTIONS. *Herb. Leyden:* 141 phanerogams and *Fungi* from Switzerland and *Java* (pres. 1937/38). The cited[1] *Java* plants are numbered A 23101 and A 23102. These high numbers are the result of a decimal system whereby the units refer to the species, the tens to the genus, the hundreds to the family, *etc.*

LITERATURE. (1) *cf.* BAKHUIZEN V. D. BRINK *f.* in Rec. Trav. Bot. néerl. 40, 1943, p. 67, 77.

Visser Smits, Dirk de

(1881, Valburg, Z., Holland; x), biologist, teacher at secondary schools in Java from 1902 onwards.[1] In 1925 he took his Ph.Dr's degree at Utrecht University, and towards the end of the year was appointed teacher at the S.T.O.V.I.A. (Medical College) at Batavia; from 1927 teacher at the N.I.A.S. (Medical school at Soerabaja); in 1932 appointed Director of the Students' Hostel at Batavia. He retired in 1933, but stayed at Batavia; after World War II he returned to Holland and settled at Oegstgeest.

His main interest is medicinal plants.

COLLECTING LOCALITIES. *W. Java:* Selabintana (June *1915*); *Centr. Java:* Semarang (Aug. *1916*); Salatiga (*before 1918*); G. Oengaran (June *1919*).

COLLECTIONS. *Herb. Bog.:* few plants only.

LITERATURE. (1) Author of 'Excursie in de omgeving van Batavia' (Trop. Nat. 3, 1914, p. 88–91, 107–111).

Vlies, Adolf Pieter van der

(1909, Buitenzorg, Java; x), was educated at Wageningen Agricultural College, and came to Java at his own expense. In 1935 he was placed at the disposal of the Director of the Finance Department, and in 1936 at that of the Governor of Celebes, stationed in the office of the Consulting Agriculturist (for the Central Station for Kapok). Since 1938 appointed Forest Officer, at first at Makassar, and since 1940 at Manado,[1] respectively in SW. and N. Celebes; in 1948 on half-pay.

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg:* F.R.I. bb. *nos* from *SE. Celebes* (*1938*); Minahassa, *N. Celebes* (*1941*). He presented *Celebes* plants to *Herb. Bog.* in June *1940.* On Oct. 9, *1941* he evidently was for some time in *SW. Celebes* again, as he then collected on G. Bawakraèng (summit of G. Bonthain).

LITERATURE. (1) Author of 'De Agathisbosschen in de afdeeling Poso' (Tectona 32, 1940, p. 616–640).

Völke, J., *cf. sub* Forest Research Institute, Buitenzorg.

Völke, O. G., *cf. sub ditto.*

Vogel, C. J. de

coffee planter, possibly in 1904 Overseer at Tjipetir (Govt Gutta-percha Estate), W. Java.

COLLECTING LOCALITIES. *E. Java:* Kandangan (*1895–96*), Djember (*1897*), Pasirian (*1899*); *S. Sumatra,* Lampong Districts: Negara Ratoe Estate (*1915,* and March 15, *1920*); *W. Sumatra,* Tapanoeli: Padang Sidempoean (*1917*).

COLLECTIONS. *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam* (former Kol. Mus. Haarlem): coffee varieties, weeds from coffee plantations, and officinal plants from *Java* (above-mentioned localities); *Herb. Bog.: Sumatra* plants.

Voigt, Dr G. K. W.

on the staff of the 'Biologische Reichsanstalt für Land- und Forstwirtschaft, Filiale Naumburg/Saale' for applied chemistry and biology. During a 4-month stay at Batavia (*W. Java*), from end *1934–35,* he collected diseased, introduced, and pasture plants, on behalf of some German collectors. The plants were intended for somebody of the staff of the above-mentioned institution.

Voigt, Joachim Otto

(1798, Nordborg, Denmark; 1843, London, England), physician-botanist, from 1826 surgeon at Frederiksnagore (Serampore) in Br. India, from 1834 Director of Dr CAREY's Botanic Garden there, and from 1841 temporary Director of the Botanic Garden at Calcutta.

COLLECTIONS. His large herbarium is now in *Copenhagen Botanic Museum,* and contains mainly plants from Serampore and neighbourhood. There are also some plants collected in *Sumatra,* and in *Ins. Malaicae* (no date). As nothing is known to me of VOIGT ever having visited Malaysia, there remains the probability that the plants were collected by somebody else and later inserted in VOIGT's herbarium.

BIOGRAPHICAL DATA. C. CHRISTENSEN, Den Danske botaniks historie, 1924–26, p. 199–200; BACKER, Verkl. Woordenb., 1936, p. 663.

Volke, G.

collected herbarium specimens in (*? West*) *Sumatra, e.g.* in Indrapoera, *before 1914.* In *Herb. Bog.* at least a *no* 7, *Jackia ornata* WALL., of the above-mentioned locality.

He may be identical with O. G. VÖLKE (*cf. sub*

Forest Research Institute, Buitenzorg) who collected in West Sumatra about the same time.

Volkens, Georg Ludwig August

(1855, Berlin, Germany; 1917, Berlin, Germany), botanist, educated in the universities of Berlin and Würzburg; from 1889–1910 Lecturer at Berlin, since 1895 titled Professor, and besides in 1898 appointed Custodian of the Botanical Museum at Berlin.

In 1884 he explored the Egyptian-Arabian desert, from 1892–94 he visited East Africa, from 1899–1900 the Carolines,[1] Marianas, and the Palau Islands. As he did not receive a telegram which was to inform him to pay a visit to Java before returning home, he travelled from the Palau Islands straight back to Germany. The Java visit took place in 1901–02.[2]

Author of some papers on periodic leaf-change in the tropics,[3] *etc.*

He is commemorated in *Vitex volkensii* GUERKE.

ITINERARY. *1899–1900.* In July 1899 setting out on a voyage to the Carolines; he sailed *via Singapore*, Makassar (*SW. Celebes*), *Ambon*, *Banda Islands*, Friedrich Wilhelmshafen (former *Kaiser-Wilhelmsland*, *NE. New Guinea*) and Herbertshöhe (Gazelle Peninsula, *New Britain*). When touching at the above-mentioned harbours probably no collections were made. After visiting the Carolines (Oct. 7, 1899–June 25, 1900), the Marianas and the Palau Islands, he was back at Berlin early in October.—*Java* (Dec. *1901*–July *1902*), collecting on G. Gede(h)-Pangrango, G. Papandajan (1901), and in the Buitenzorg Botanic Garden (Febr. 1902).

COLLECTIONS. *Herb. Berl.: c.* 300 *Java nos*, including economic plants; 550 *nos* and wood samples in the *Show Mus. Berl.* He sent many living plants and seeds to Germany. In *Herb. Kew* only Africa material from him is recorded.

His plants are occasionally mentioned in S. H. KOORDERS: 'Exkursionsflora von Java' (Jena 1911–12).

LITERATURE. (1) G. VOLKENS: 'Die Vegetation der Karolinen mit besonderer Berücksichtigung der von Yap' (ENGL. Bot. Jahrb. 31, 1901, p. 412–477).

(2) *cf.* Ann. Jard. Bot. Buit. 45, 1935, p. 27, 71.

G. VOLKENS: 'Der botanische Garten in Buitenzorg und seine Bedeutung für den Plantagenbau auf Java und Sumatra' (Verh. Deutsch. Kolonialkongress 1902, p. 182–193).

(3) *E.g.* 'Laubfall und Lauberneuerung in den Tropen' (Berlin 1912); *cf.* also Ann. Jard. Bot. Buit. 45, 1935, p. 88, 91, 104.

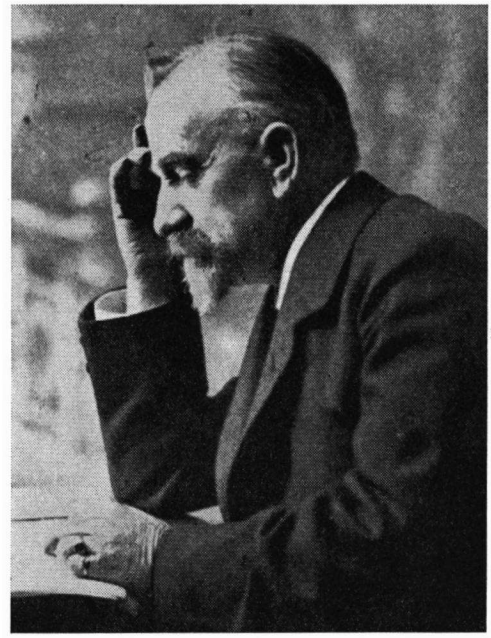
BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 1903, p. 146, *t.* 29; and *l.c.* 2, 1905, p. 155; Ber. D.B.G. 35, 1917, Gen. Vers. Heft p. (65)–(82), w. portr. & bibliogr.; Verh. Bot. Ver. Brandenburg 59, (1917) 1918, p. 1–23, w. portr. & bibliogr.

Volkers-Schippers, F. A.

of Semarang (*Centr. Java*), sent orchids (1 of the slope of G. Merbaboe, coll. Sept. 24; others cultivated) to *Hort.* and *Herb. Bog.* in *1931;* in *1937* cultivated plants to *Herb. Bog.*

Vollenhoven, A. van

of Padang (*Sumatra West Coast*), sent material of the Peru tree (*? Myroxylon balsamum* HARMS) to the *Herb. Kol.* (= *Ind.*) *Inst. Amsterdam* in *1926.*



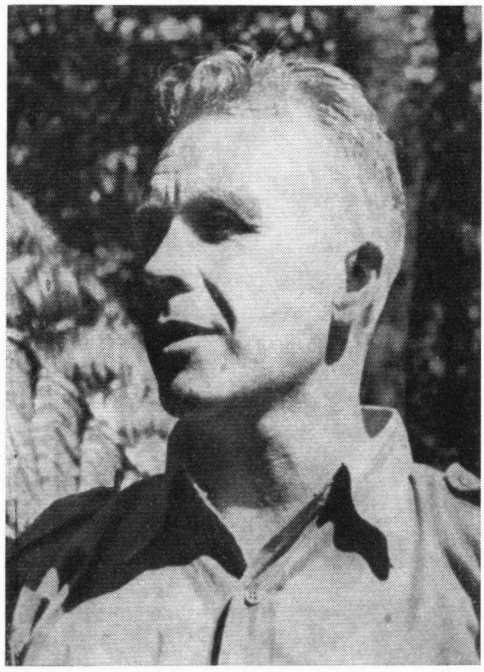
VOLKENS

Volz, Walter

(1875, Wynau, canton Berne, Switzerland; 1907, hinterland of Liberia, Africa), from early childhood had a lively interest in natural history. Circumstances compelled him to choose another branch of study, *viz* the building trade. As soon as he had the opportunity he zealously devoted himself to the study of zoology, botany and geology, mainly at Basel. After having finished his studies in 1899 he was offered a job as geologist in the employ of the 'Kon. Ned. Mij t. Expl. van Petroleumbronnen' in the D.E.I. through the intermediary of his professor. He stayed in Sumatra from early in 1900 till June 1902, making important zoological collections. On the way back to Europe he stayed for a month in Java, several weeks in the Malay Peninsula, Siam, Cochin-China, Japan, the Sandwich Islands and N. America, to return after a voyage of 5 months to Switzerland.[1] At Berne he spent his time in arranging his collections and preparing and publishing a series of scientific papers. In 1903 he was appointed Zoological Assistant on the staff of the Zoological Institute at Berne; since 1905 Lecturer at the University. In May 1906 he set out on an expedition to Liberia (Africa), where he was killed during skirmishes.[1]

COLLECTING LOCALITIES. *S. Sumatra*, Palembang: near kp. Belanie (Apr. *1901*); small lake near Talang Bangkuang in the neighbourhood of

the Balankalan Balei River (June 4, *1902*); *W. Java:* Botanic Gardens Buitenzorg (July 8, 1902); Lake (Sitoe) Lembang (July): Sitoe Bagendit near Garoet (July 16); in *Centr. Java* visiting Ajah, Nagasari and Karangbolong on the S. coast, from Keboemen; *Malay Peninsula: Singapore* Botanic Garden (Aug. 15).



DE VOOGD

COLLECTIONS. At least *Algae.*[2] No data about the location of these plants are known to me. He made zoological collections too.

LITERATURE. (1) Dr WALTER VOLZ: 'Reiseerinnerungen aus Ostasien, Polynesien, Westafrika' (Bern 1909).

(2) E. LEMMERMANN: 'Ueber die von Herrn WALTER VOLZ auf seiner Weltreise gesammelten Süsswasseralgen' (Abh. Naturw. Ver. Bremen 18, 1905, p. 143–174).

BIOGRAPHICAL DATA. In WALTER VOLZ, Reiseerinnerungen *l.c. sub* Liter. 1, p. 3–16 + portr.

Vonk, Hendrik Willem

(1897, Den Helder, N.H., Holland; x), joined the D.E. Indian Civil Service in 1919; in 1946/47 at the disposal of the delegate for Indonesian Affairs at The Hague; retired in 1947.

COLLECTIONS. When Assistant Resident of *Boeton* (= *Boetoeng*, S of Celebes), he sent a specimen of *Vandopsis* to *Hort. Bog.* in *1937.*

Voogd, Cornelis Nicolaas Abraham de

(1895, Utrecht, Holland; x), Forest Officer, in 1924 appointed in the employ of the D.E. Indian Forest Service. After some years in the teak districts of Java,[1] he was transferred to South Sumatra, respectively stationed at Palembang, Kepahiang, and Lahat. From 1933–37 he was in charge of the forests of the Lesser Sunda Islands, stationed at Singaradja in Bali; subsequently in the Head Office (Buitenzorg), and later in charge of the forests of Buitenzorg Residency. After the war he was evacuated to Holland, and pensioned off. At present employed by the Dutch Government on behalf of nature preservation.

Author of sylvicultural papers in 'Tectona', and of numerous enthusiastic reports on his trips in 'De Tropische Natuur' (see below).

Dendrochilum devoogdii J.J.S. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTING LOCALITIES. *1924. W. Java:* G. Gede(h) (Tjibodas, Tjibeureum); *Centr. Java:* Grobogan, G. Moeria (= Moerjo); *E. Java:* Krondong.—*1925. Centr. Java:* Grobogan, Getes; *E. Java:* Kedawak.—*1926. E. Java:* Krondong, Djombang teak forests, Moenoeng, G. Ardjoeno. —*1927. Centr. Java:* Gadoengan (slopes of G. Lawoe); teak forests in Rembang; *E. Java:* Moenoeng, Djombang, Wonosalam, Rawah Panas (Apr.), Tengger Mts (May, collecting at Ranoe Pani, Djarak Idjoe, Tosari), Sarangan (slope G. Lawoe), G. Kloet (= Keloed).—*S. Sumatra* (Dec. 4, *1927*–mid-Jan. *1930*), mainly in Palembang Residency,[2] but also in Benkoelen and the Lampong Districts: at Kajoeagoeng, Moeara Doea, Talang Batoetoe, Pladjoe, Ranau Lake (Dec. 16 and 27, *1927*), several times near Liwa and Kroë (= Kroeï), G. Tanggamoes (July 6–11, *1928*) and other localities in the Lampong Districts (Nov. 6, 1928, and in Jan., Febr. 27–28, and March 1, *1929*), G. Dempo (May 20, 1929), G. Kaba (Nov. 26); *S. Sumatra* (Jan. *1931*–March *1933*), principally in Benkoelen Res.,[3] and occasionally in Palembang Res., in *1931:* G. Kaba (Jan.), Bt Daoen (Febr. 27), G. Kaba (March 1), Bt Daoen (March 29), G. Kaba (May 31, Nov. 10), G. Dempo (Dec. 17); in *1932:* G. Kaba (March 15–24), Bt Daoen (Apr. 1), G. Dempo (July 9), G. Seminoeng (July 17–18), G. Dempo (Oct. 12); in *1933:* G. Serillo (Jan. 14), G. Pesagi (March 26–28), G. Dempo (Apr. 6); and several other localities in Benkoelen Res. in these years, *viz* at Kepahiang, Tambang Sawah, Tjoeroep, Lais, Lebong Pasir Lebar, Kroë, Kota Donak, Way Tenong, Rimbo Pengaden, G. Beriti, Djoepi besar, *etc.—Lesser Sunda Islands* (Apr. *1933–1936*),[4] principally in *Bali* in the following localities: Lake Bratan, Tedjagoela (on the N. coast), Tjatoer, Gilimanoek (W. coast), Tjandi kesoema, Karengasem, N. and NW. coast, G. Moengsoe, Perapatagoeng (NW. peninsula), Djembrana, Kintamani, Koeboe, Banjoewedan, Seraja, Soemberklampok, Sendang.—*1933.* In *Lombok:* G. Rindjani (June 25); *Bali:* G. Agoeng (July 4); *Soembawa* (July 13–19); *Flores:* Endeh (July 27–Aug. 1), climbing Keli Moetoe (July 30); *Lombok* (Aug.): above Soeranadi, Poesoeh Pass, G. Rindjani, Sembalong Plain; *E.* and *W. Soemba* (Sept. 24–25); *Soembawa* (Oct. 28–Nov. 1), Batoe-

lanta.—*1934. Bali:* G. Agoeng (March 2–5), Batoe Kaoe (Apr. 16); *Timor* (May 6–8), collecting in the Fatoelea Mts; *Flores:* Badjawi (= Badjawa) (May 14), Roeteng Mts (May 17), Keli Moetoe (May 19), S. coast Maomere (May 20); *Bali:* Peak of Tabenan (Sept. 27), Batoe Kaoe (Oct. 14); *Centr., E. & W. Soemba* (Nov. 25–27); *W., Centr. & E. Soemba* (Nov. 29–Dec. 5).—*1935. Bali:* Batoe Kaoe (Jan. 23, Apr. 8); *Lombok* (May 5–6): S. Praja and G. Rindjani; *Bali:* G. Batoer (May 17), Sangeh (May 21), G. Batoer (May 25, June 30); *W. Soembawa* (June 7); *Soemba*, principally in the eastern part (June 9); *Flores:* Keli Moetoe (June 16), Maomere (18), Endeh (19); *Bali:* G. Agoeng (Aug. 9, Sept. 20); *Lombok:* Sengkol (Oct. 28); *E. Soemba* (Oct. 28–Nov. 1): Arambola and Maria; *W. Soemba* (Nov. 5–8): Lambaja, Langa Liroe, Prailangina; *Timor* (Nov. 13–18): G. Moetis (in central part), Atanboea, Soë, *etc.; P. Semaoe* (Nov. 19).[5]—*1936.* In *Bali:* Batoe Kaoe (March), G. Abang (March 24), G. Batoer (May 13); *Noesa Penida* (islet near Bali) (May 27–29); *E. & W. Soemba* (May 28–June 6): Lea, Prailangina and Waingapoe; *Soembawa* (June 7–11): E. and W. part and Soembawabesar; *Lombok* (June 13–18): G. Rindjani, Segara Anak; *Bali:* G. Batoer (July 1); *Flores* (Sept. 1–18): Keli Moetoe, Keo Piek (= Peak), Manggarai; *P. Komodo* (Sept. 20).—*Java (1937–42). 1938. W. Java: P. Doea* (Bantam) (Apr. 10), G. Tjibodas–Tjianten, Sitoe Goenoeng; *Centr. Java:* Diëng Plateau.—*1939. W. Java:* environs of Buitenzorg, (D)Janglappa (Dec. 19).[6]—*1940. W. Java:* Djasinga (Jan. 30); Kramat, N of Tangerang (March), Pasar Ikan (Dec.), Janglappa,[6] Maoek, Ima Leutik, Oedjoeng Koelon, *Meeuwen Island* (W of Bantam) and *P. Pajong.*—*1941. W. Java:* G. Salak, G. Boender and Kawah Ratoe (Jan. 8); Peperbaai (June 28), Nirmala (Bantam) (Aug. 30), Tjipeundeuj above Tjinegara (Pondok Gedeh) (Nov. 12). In these years collecting certainly in numerous other localities in *W. Java.*

COLLECTIONS. *Herb. Bog.:* c. 3000 *nos*, partly also numbered in the F.R.I. bb. series (*cf. sub* Forest Research Institute, Buitenzorg). *Nos* 1–572 from *Sumatra* (mainly from Palembang Res.), *nos* 601–1026 from *Java* (coll. 1924–27), *nos* 1050–1573 from *Sumatra* (mainly from Benkoelen Res.), *nos* 1600–2873 from the *Lesser Sunda Islands*, subsequent numbers from *Java* again (1937 onwards); *Herb. Leyden: Sumatra* dupl. (1928–29), and partial set (*c.* 1450 *nos*) (purch. 1948).

LITERATURE. (1) C. N. A. DE VOOGD: 'Voorjaar in het djatibosch' (Trop. Nat. 16, 1927, p. 165–168, 9 fig.); 'Iets over de oro-oro's in onze djatibosschen' (*l.c.* 17, 1928, p. 98–101, 8 fig.).

(2) C. N. A. DE VOOGD: 'Van boomen en struiken rondom de stad Palembang' (*l.c.* 18, 1929, p. 105–111, 10 fig.); 'Van het waterland rond Palembang' (*l.c.* 21, 1932, p. 59–65, 10 fig.).

(3) C. N. A. DE VOOGD: 'Botanische aanteekeningen uit de Res. Benkoelen' (*l.c.* 21, 1932, p. 218–222, 9 fig.; 22, 1933, p. 224–229, 9 fig.; 23, 1934, p. 81–85, 8 fig.) (resp. dealing with Djoepi besar and vicinity, G. Kaba, and G. Beriti).

(4) C. N. A. DE VOOGD: 'Botanische aanteekeningen van de Kleine Soenda Eilanden' I–IX, comprising: 'Inleiding en Soemba' (*l.c.* 25, 1936, p. 113–119, 3 fig.), 'Soemba' (*l.c.* p. 145–152, fig. 4–17), 'Bali' (*l.c.* 26, 1937, p. 1–9, 8 fig., and p. 37–40, fig. 8–9), 'Een tocht naar Noesa Penida' (*l.c.* p. 161–165, 6 fig.), 'Naar de roode Eucalyptus-bosschen in het bergland van M. Timor' (*l.c.* 27, 1938, p. 57–63, 11 fig.), 'Naar de gekleurde meren van den Keli Moetoe op Flores' (*l.c.* p. 119–125, 8 fig.), 'Een tocht naar de Tambora op Soembawa' (*l.c.* p. 172–181, 7 fig.), 'De Batoer op Bali' (*l.c.* 29, 1940, p. 37–53, 15 fig.), 'De Rindjani op Lombok' (*l.c.* 30, 1941, p. 97–105, 119–127, 15 fig.); 'Naar de varanen van Komodo' (11e Versl. N.I. Ver. t. Nat. Besch. 1936–38, 1939, p. 304–309, fig. 108–115).

C. N. A. DE VOOGD & D. F. VAN SLOOTEN: 'Het heilige bosch van Sangeh (Zuid-Bali)' (Natuur in Indië 1939, p. 42–45, w. ill.).

Typed reports of the following trips are available in the Forest Research Institute at Buitenzorg: W. & Centr. Soembawa, E. Soemba and Flores (Endeh) (July 9–Aug. 9, 1933); Timor and Flores (Apr. 30–May 30, 1934); Soembawa and Soemba (Nov. 22–Dec. 12, 1934); Soembawa, Soemba and Timor (Oct. 27–Nov. 27, 1935); Soemba and Soembawa (May 24–June 11, 1936); Flores (Sept. 9–24, 1936).

(5) C. N. A. DE VOOGD: 'Naar de slijkvulkanen van Poelau Semaoe' (Trop. Nat. 25, 1936, p. 68–72, 9 fig.).

(6) C. N. A. DE VOOGD: 'De bosculturen van Janlappa' (Tectona 38, 1948, p. 63–76, incl. Engl. summary).

Voogt, Johannes George Heinrich de

(1855, Wageningen, Gld, Holland; 1935, The Hague, Holland), in 1876 appointed 2nd lieutenant in the D.E. Indian Army, in 1909 pensioned off with the honorary rank of major-general.

Vanda devoogtii J.J.S. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTING LOCALITIES. Year of collecting unknown, but *probably in the 19th century. N. Sumatra*, Atjeh: Melaboe; *Timor; N. Celebes:* at Palele on the N. coast.[1]

COLLECTIONS. He evidently collected living orchids on behalf of *Hort. Bog.;* dried material, made from some of these specimens, in *Herb. Bog.*

LITERATURE. (1) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 12, 1932, p. 146–147.

Vooren, Johannes Adrianus

(1905, Utrecht, Holland; x), schoolmaster in the employ of the D.E. Indian Government; in 1933 stationed at Buitenzorg, in 1935 transferred to Pemalang (Centr. Java), and subsequently at Batavia to follow a course of natural history.

COLLECTING LOCALITIES. *1939–41. W. Java:* Batavia, Buitenzorg, Mr Cornelis, Sindanglaja.

COLLECTIONS. *c.* 400 *nos* in *private herbarium*, a few duplicates in *Herb. Bog.*, all collected from *1939 onwards.*

As early as 1933 and 1935 he sent plants, respectively from Buitenzorg and Pemalang, for identifica ion to the Buitenzorg Herbarium; the 1st lot

was very incomplete, the 2nd mainly consisted of cultivated plants; of both *no* material in the Buitenzorg Herbarium.

Voort, Maximiliaan van der

(1910, Batavia, Java; x), was educated at Wageningen Agricultural College; in 1937 appointed Pedologist on the staff, later Head, of the Soil Science Institute at Buitenzorg. Till 1941 he visited several badly known areas in Sumatra in search of colonization possibilities for Javanese farmers.

COLLECTING LOCALITIES. *S. Sumatra* (July 14–Aug. 10, *1938*):[1] colonization ground Belitang, between S. Belitang and S. Matja, Simpang, Palembang; *W. & E. Sumatra* (resp. in Tapanoeli and Sumatra West and East Coast):[2] Padang Lawas (Febr. 12–17, *1939*),[3] Anai Plain (June),[4] Forest Reserve of North Batahan, between the Batang Natal and the Batang Si Noenoekan (June 20–25),[5] and near Daloe Daloe (on the Batang Sosa, a tributary of the Rokan River) (between Aug. 13–20); *S. Sumatra*, Lampong Districts: Rawa Sragi, lower course of the Wai Sekampoeng (*1940*); Palembang (*1941*); in *N. Sumatra*, Atjeh, a collection was made by ASDAT (see there).

COLLECTIONS. *Herb. Bog.*: some tens of plants.

LITERATURE. (1) M. VAN DER VOORT: 'Verslag van het bodemkundig onderzoek van het kolonisatieterrein Belitang nabij Martapoera (Res. Palembang)' (mimeographed report of the Soil Science Inst. Buitenzorg, March 1939).

(2) M. VAN DER VOORT: 'Verslag van een landbouw- en bodemkundige terreinverkenning in de onderafdeelingen Laboean Batoe en Rokan van de residentie Oostkust van Sumatra en de onderafdeeling Padang Lawas van de residentie Tapanoeli, ten behoeve van de emigratie en kolonisatie van Javanen' (mimeogr. report of the Soil Science Inst. Buitenzorg, May 1939).

(3) M. VAN DER VOORT: 'De merkwaardige Padang Bolak vegetatie' (Trop. Nat. 28, 1939, p. 201–209, 12 fig.).

(4) M. VAN DER VOORT: 'Veen en veencultuur in de Anaivlakte op Sumatra's Westkust' (Landbouw 18, 1942, p. 189–202, 1 map, 4 fig.).

(5) M. VAN DER VOORT: 'The soil exploration of the Batang Natal-area' (Contrib. *no* 7 of the Chuo Noozi Sikenzyoo, Bogor (Djawa) 2603, 17 pp. + map).

Vorderman, Adolphe Guillaume

(1844, The Hague, Holland; July 15, 1902, Batavia, Java), physician who came to the D.E.I. in 1866 as Medical Officer in the Navy; since 1871 appointed in the Civil Health Department, first stationed at Soemenep (Isl. of Madoera), in 1881 transferred to Batavia, and from 1890 till his death Inspector of the said department. On account of his numerous merits he was made a honorary doctor of Science in Utrecht University.

Author of several well-known papers on native poisons, drugs, and foods, published in medical periodicals, 'Teysmannia', and 'Het Natuurkundig Tijdschrift voor Ned. Indië'.[1] He wrote various ornithological papers too, and edited the journal of ALBERT COLFS (see there).

He is commemorated in *Myristica vordermannii* WARB.

VISITED LOCALITIES (where probably but partly botanically collected). In *Java* (*c. 1880–1902*). *W. Java:* Batavia (in *1886 etc.*), Cheribon (Kandanghouer), Wijnkoops Bay and Zand Bay (June 19–28, *1885*),[2] G. Salak, Pamanoekan (Krawang), Sewoe, W of Cheribon Res.; *Centr. Java:* Diëng Plateau,[3] G. Moeriah (= Moerjo), Djokjakarta; *E. Java:* Kediri, G. Tengger (Sept. *1894*), G. Kloet (May 30, *1901*).[4]—Besides Java he visited many other islands of the *Malay Archipelago: P. Bras*, off N. Sumatra (Nov. *1874*–July *1875*);[5] *S. Sumatra*, Lampong Districts (Sept. *1883*, immediately after the Krakatau eruption):[6] ashore near Gebang and on foot to Telok Betong and back, embarking again at Menangga (Ratai Bay); *Billiton* (June *1888*);[7] *Bawean:* from Sangkapoera to Tambak on the N. coast, Soewari, and back (*1891*);[8] *Sapoedi Islands* (E of Madoera) (May *1892*);[9] *Madoera* (May 1–18, *1894*):[10] from Soemenep by land to Batang Batang, principal town of Timordaja Distr., and back to Soemenep; *vai* Banding to Amboenten, by proa to Tamberoe Timor, on horseback to Pegantenan, *via* Beltoq to Pamekasan, along the southern beach to Sampang; back to the north coast as far as Ketapang daja, and *via* Sapolo and Arisbaja to Bangkalan; returning to Soerabaja *via* Kamal; *Lombok* (Lesser Sunda Isls) (Oct. 1894);[11] *Celebes* and *Moluccas* (first half of *1897*),[12] hunting in: *SW. Celebes*, in the vicinity of Makassar, and in some localities on the *W. and N. coast* of the island (his hunters were allowed ashore), in *N. Celebes* in the Minahassa (Manado, Tomohon, Tondano, Sonder, Amoerang), and in Gorontalo (Bone, Limbotto), on *P. Sanggir* (= *Sangihe*) at Taroena, in the *Moluccas* in *Ternate*, *Batjan* (from Laboeha), *Halmaheira* (Gani on the SW. coast), *Ambon*, *Haroekoe*, *Saparoea*, *Noesa-laoet*, *Boeroe* (Kajeli), *Ceram* (Wahaai, Waroe), coral islet of *Mado(e)rang*, *Gisser* (= *Geser*), *Banda; Banka:* Muntok and Blinjoe (*189 .*); *Billiton* (June 6, *1900*).

COLLECTIONS. *Herb. Bog.:* scarce material, mostly of officinal plants. The *Madoera* collection *1894* consists of 172 *nos;* in 1898 a collection of 63 *nos* of food plants from the Minahassa, Batjan, Banka, *etc.*, was sent for identification to *Herb. Bog.*

LITERATURE. (1) A list of papers which are published in the Nat. Tijdschr. N.I. may be consulted in *l.c.* 62, 1903, p. 273–284.

(2) A. G. VORDERMAN: 'Verslag van een tocht naar de Wijnkoopersbaai in Juni 1885' (Nat. Tijdschr. N.I. 49, 1890, p. 225–298).

(3) *cf.* KOORDERS, Exkursionsflora von Java, 1, 1911, p. 103.

(4) A. G. VORDERMAN: 'De oranje ontjomschimmel (Monilia sitophila MONT.) en hare verschijning als eerste vegetatie op de aschvelden van den Kloet' (Teysmannia 12, 1901, p. 274–279).

(5) A. G. VORDERMAN: 'Meteorologische waarnemingen op P. Bras' (Nat. Tijdschr. N.I. 37, 1877, p. 195–210).

(6) A. G. VORDERMAN: 'Naar de Lampongs' (Eigen Haard 1884, p. 234, 244, 261, 268, 284, and 289).

(7) *cf.* Nat. Tijdschr. N.I. 62, 1903, p. 280.

(8) A. G. VORDERMAN: 'Een tochtje naar Bawean' (in Express Nov. and Dec. 1891).

(9) *cf.* Nat. Tijdschr N.I. 52, 1893, p. 181–182.

(10) A. G. VORDERMAN: 'Madoereesche planten' (Nat. Tijdschr. N.I. 59, 1900, p. 140–197; includes itinerary of 1894!).

(11) *cf.* Nat. Tijdschr. N.I. 62, 1903, p. 280.

(12) Bird collections described in Nat. Tijdschr. N.I. 58, 1898, p. 26–121 (Celebes); and in *l.c.* p. 169–252 (Moluccas).

cf. Nat. Tijdschr. N.I. 62, 1903, p. 278; and Bull. Jard. Bot. Buit. sér. 3, vol. 3, 1921, p. 78.

BIOGRAPHICAL DATA. Nat. Tijdschr. N.I. 62, 1903, p. 147, w. portr. & bibliogr. in *l.c.* p. 273–283; Encyclop. N.I. 4, 1921; portr. in L. S. A. M. VON RÖMER, Historische schetsen, Batavia 1921, pl. 162; BACKER, Verkl. Woordenb., 1936.

Vore, de, & Hoover

two teachers who made a brief trip to collect for the St Louis Expedition.[1]

COLLECTING LOCALITIES. *1903. Philippines. Basilan* (at least in April); *Mindanao*, distr. of Davao, Mt Apo *etc.* (at least in May).

COLLECTIONS. *Herb. Manila:* 382 dupl. of the expedition.

LITERATURE. (1) *cf.* ELMER Leafl. Philip. Bot. 3, 1910, p. 792.

Vorstman, Adriana Geertruida

(1895, Kota Radja, Atjeh, Sumatra; x), zoologist, educated at Amsterdam University where she took her Ph.Dr's degree in 1922. For some time temporary teacher at a secondary school at Bandoeng, W. Java; from 1926–27 Assistant of the Zoological Museum at Buitenzorg. In 1928 she returned to Europe and was appointed First Assistant (since 1933 Custodian) in the Zoological Laboratory at Amsterdam.

Authoress of several zoological papers relating to her stay in Java, mainly published in 'Treubia' and 'De Tropische Natuur'.

COLLECTIONS. *Herb. Bog.:* material from Rawah Bening (coll. Sept. 20, *1927*), in Kediri Res., *E. Java.*

Vos, B. B., *cf. sub* Forest Research Institute, Buitenzorg.

Vos, F. de

(1891, Soerabaja, Java; x), entered the employ of the K.P.M. (Royal Packet Co.) in 1913; since 1926 Sub-Chief of that Company, stationed at Batavia.

He evidently cultivated orchids in his private garden. One of them, *Dendrobium devosianum* J.J.S., was named after him. The plant was *not* collected by himself, but bought; dried material in *Herb. Bog.* The same might be the case with *Aerides odoratum* from *P. Telo* (*Batoe Islands*).

Vos, Huguette Constance Cornelia Adriana Abdia

(1898, Breda, N.Br., Holland; x), biologist who studied and took her Ph.Dr's degree (1930) at Utrecht University. Subsequently she came to Java where she held various appointments as a teacher. Since 1939 stationed at Semarang. After internment by the Japanese, and evacuation to Holland, she returned to Indonesia in May 1947.

COLLECTIONS. *Herb. Bog.:* some plants from Pasir Nangka (Tjibeber, *W. Java*, June *1932* coll.), and from Soebah (*Centr. Java, 1939*).

Vriens, de

is cited by MARTELLI as the collector of *Pandanus vriensii* MARTELLI *n.sp.* at Bandai Barai, G. Sibajak in Jan. *1905* (*cf.* Webbia, 4, 1913, p. 434). In *Herb.* MARTELLI (= *Florence*).

Probably the collector rightly was Dr J. G. C. VRIENS, Head of the Research Laboratory for Deli Tobacco of the Agric. Department in the D.E.I. in 1905.

Vries, de, *cf. sub* Forest Research Institute, Buitenzorg.

Vries, A. M. de

probably a plantation assistant.

COLLECTING LOCALITIES. *W. Java* (as early as *1918*), at: Parangkoeda (Aug. 29, *1920*), Nieuw Tjisalak Estate near Rangkas Bitoeng in Bantam (May 4, *1922*), Buitenzorg (June 29, 1922).

COLLECTIONS. *Herb. Bog.:* > 79 *nos.*

Vries, Egbert de

(1901, Grijpskerk, Z., Holland; x), agriculturist, educated and graduated (Dr's degree) at Wageningen Agricultural College; since 1924 Consulting Agriculturist in the D.E.I., at first stationed at Pasoeroean (E. Java), subsequently at Malang (*ditto*) (1928–29), and Buitenzorg; in 1933 appointed Assistant in the Division of Agricultural Economy of the Department of Economic Affairs, later high official in the same department. In 1941 Professor of Agricultural Economy at the Agricultural Faculty at Buitenzorg, besides acting president of that faculty. He was interned by the Japanese, and was evacuated to Holland after the war. In 1947 he was appointed Professor of Rural Economy at Wageningen Agricultural College.

COLLECTING LOCALITIES. *E. Java:* Tengger Mts (near Bendo, Nongkodjadjar, Poros) in *1926–27*; *N. Celebes:* Manado (*1940*).

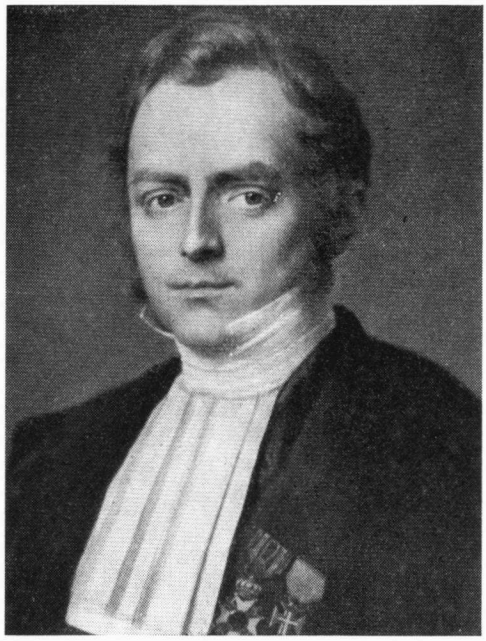
COLLECTIONS. *Herb. Pasoer.:* 127 *E. Java nos; Herb. Bog.:* 1 *Urticacea* from *N. Celebes; Herb. Wageningen.*

Vries, Ernst de

(1883, Amsterdam, Holland; x), son of Prof. HUGO DE VRIES, physician, educated at Amsterdam University. He took his M.Dr's degree at Zürich (Switzerland) in 1909; from 1913–25 Lecturer in Neurology at Leyden; from 1925–29 and 1930–32 Professor of Neurology of the Peking University Medical College, Peiping, and from 1929–30 acting Director of the Central Institute for

Brain Research at Amsterdam. Since 1932 he set up as a private mental specialist at Soerabaja, E. Java; after World War II he settled at Bandoeng, in the employ of the Juliana Hospital.

He devoted his spare time to the collecting and study of ferns.



DE VRIESE

COLLECTING LOCALITIES. From *1932 onwards* in *E. Java;* in *1937* making a trip to *Bawean* (Oct. or Nov.).

COLLECTIONS. Ferns in *private Herbarium* (presumed a total loss now); a few duplicates in *Herb. Bog.*, 1 in *Herb. Pasoer.*, and several in *Herb.* POSTHUMUS (still at Buitenzorg).

In China he also collected ferns; in *E. Java* he discovered many ferns new for the island, incl. *Egenolfia bipinnatifida* and *Pteris geminata.*

Vriese, Willem Hendrik de

(1806, Oosterhout, N.Br., Holland; 1862, Leyden, Holland), since 1834 Professor of Botany in the University of Amsterdam, since 1845 at Leyden; from 1834–45 with Prof. J. VAN DER HOEVEN editor of the 'Tijdschrift voor Natuurlijke Geschiedenis en Physiologie'; one of the founders of the 'Nederlandsche Botanische Vereeniging', editor of the scientific inheritance of REINWARDT (see there).

From 1858–61 he travelled in the D.E.I. to make investigations on the position of European and native crops.[1] In March 1861 he returned to Holland a sick man, dying within a year, hardly having started the lectures on his tours.

Author of several papers on the Malaysian flora, which for the greater part have no concern with his mission.[2]

He is commemorated in several plant names.

ITINERARY. *Mission to the Dutch East Indies, 1858–61. Singapore* (early in Jan. *1858*); *Java,* in *W. Java* visiting G. Tangkoeban Prahoe, Tjilaoeteureun (S. coast), *etc.*, towards the end of Sept. having proceeded so far that only the central part of the island remained to be done; in the 2nd half of *1859* he travelled through *Java* and *Madoera* with TEYSMANN;[3] *tour to the Moluccas* with TEYSMANN, end *1859–60,*[4] visiting *Timor* (1859) on the way thither, and *N. Celebes* on the home voyage (detailed itiner., liter., *etc.* see *sub* TEYSMANN); *W. Borneo, 1860:*[5] Pontianak (Oct. 10–15); by boat to Mampawa (16); to Sg. Doerie (19); Montrado (20); trip to Benkayang, *via* the Penarang Ridge to the gold-diggings, Sg. Betong, Doerian, and G. Singkawang (7000 ft) *via* Patingan; *S. Sumatra:* Benkoelen (probably early in *1861*).

COLLECTIONS. *Herb. Leyden* (purch. 1863); dupl. at *Kew,* a few in *Herb. Bog.* (H.B. *nos* from *Borneo*), *Utrecht, Cambridge, Vienna* (from *Java*); *Herb.* MARTIUS (= *Brussels*): 100 from *Java; Copenhagen* (*Celebes*).

Several of his plants were described by MIQUEL in his 'Annales' and in various monographs.

In 1851 he presented 200 ferns and other plants to the Herbarium of plants of the Dutch overseas possessions of the Dutch Botanical Society (Ned. Botanische Vereeniging, later pres. to *Leyden*) (*cf.* Kruidk. Arch. 3, 1851/55); with a view to the year this cannot possibly be his own Malaysian collection.

LITERATURE. (1) *cf.* 'Mission of Prof. DE VRIESE to D.E.I.' in HOOK. Journ. of Bot. & Kew Gard. Misc. 9, 1857, p. 346.

(2) His most voluminous work being: 'Tuinbouwflora van Nederland en zijne overzeesche bezittingen, *etc.*' (1856, 3 vols).

(3) *cf.* Koloniaal Verslag for 1858 and 1859 *sub* 'Kunsten en Wetenschappen'; and Flora N.R. 18, 1860, p. 159–160.

(4) *cf.* 'Mededeeling betreffende Boeroe' in Nat. Tijdschr. N.I. 23, 1861, p. 77–78.

(5) W. H. DE VRIESE: 'Minjak tangkawang, en andere voortbrengselen van het plantenrijk van Borneo's Westerafd., welke aanbeveling verdienen voor den Nederlandschen handel' (Leiden 1861).

cf. also Nat. Tijdschr. N.I. 23, 1861, p. 72.

BIOGRAPHICAL DATA. Bot. Zeitung 20, 1862, p. 48, 63–64; PRITZEL, Thes. Lit. Bot., 1872; BACKER, Verkl. Woordenb., 1936; Ned. Kruidk. Arch. 49, 1939, p. 450; *l.c.* 51, 1941, p. 375; beautiful painting in senate room of Amsterdam Municipal University.

Vrij, Johan Eliza de

(1813, Rotterdam, Holland; 1898, The Hague, Holland), set up as a dispenser at Rotterdam in 1832; in 1837 Dr of chemistry; in 1841 teacher at the Clinical School at Rotterdam. End 1857 he accompanied W. H. DE VRIESE (see there) on his tour to the East Indies,[1] and was appointed Chem-

ist for the Cinchona culture, put at the disposal of JUNGHUHN. He could not co-operate with the latter, and in 1863 got a certificate that through his own fault his health was so badly impaired that his immediate return to Europe was necessary! Subsequently he settled at The Hague, making scientific researches, more especially on Cinchona bark, until his death.

COLLECTIONS. *Herb.* HANBURY (London): some pharmaceutical plants from *Java* (pres. *1860, 1862,* and *1866*).

LITERATURE. (1) *cf.* HOOK. Journ. Bot. & Kew Gard. Misc. 9, 1857, p. 346.

BIOGRAPHICAL DATA. PRITZEL, Thes. Lit. Bot., 1872; Jaarversl. Gouvernements Kina Ond. for 1898; SIRKS, Ind. Nat. Onderzoek, Amsterdam 1915, p. 229–233 + portr.; Encyclop. N.I. 4, 1921; Ned. Kruidk. Arch. 50, 1940, p. 203; *l.c.* 51, 1941, p. 375; *l.c.* 52, 1942, p. 413; *l.c.* 53, 1943, p. 255.

Vuuren, Louis van

(1873, Bandjermasin, Borneo; x), in 1898 appointed a 2nd lieutenant in the D.E. Indian Army, in 1910 Head of the Encyclopaedic Bureau of the Civil Service Department at Weltevreden (the Bureau was discontinued in 1922). In the latter capacity he travelled over Celebes in 1912–14.[1] In 1922 he retired and was subsequently appointed Lecturer at Amsterdam University; since 1926 Professor of Economic Geography at Utrecht; retired now.

Several Indonesian plants were named after him.

COLLECTIONS. The mantris NOERKAS and RACHMAT (see those) collected in total *c.* 1500 *nos* of plants during the VAN VUUREN Expedition to *Celebes* in the years *1912–14*.

LITERATURE. (1) Author of 'Een woord ter inleiding bij den onderzeeschen vorm van Celebes' (Nat. Tijdschr. N.I. 76, 1916, p. 119–170); 'Het Gouvernement Celebes. Proeve eener monographie' (1920, 1 vol. + maps); and some papers on Sumatra.

BIOGRAPHICAL DATA. Wie is dat? ed. 3–4; BACKER, Verkl. Woordenb., 1936; Persoonlijkheden in Nederland, 1938, + portr.

Vuuren, Otto van

(1870, Martapoera, Borneo; x), brother of the former, went with his parents to Holland in 1874; since 1891 plantation assistant, and from 1897 onwards Estate-Manager, Superintendent, and Director of various plantation companies, *etc.* in the D.E.I. In connexion with his work he made several exploration tours in Priangan Residency and Sumatra. Before the outbreak of the Pacific war he settled at Soekamenak, Pengalengan (Priangan, W. Java); in 1946 he was evacuated to Holland.

COLLECTING LOCALITIES. *W. Java:* some plants (*before 1907*) (*cf.* Bull. Dép. Agric. Ind. néerl. 13, 1907, p. 68); Mandalagiri (Aug. 30, *1915*), Pamegatan near Garoet (*1916*).

COLLECTIONS. *Herb. Bog.:* a few plants.

W., G., *cf.* G. W.

Waanders, *cf.* BLOEMEN WAANDERS.

Waars, G. de

sent orchids from *Batjan* (*Moluccas*) to *Hort. Bog.* in *1937*.

Wada

a Japanese, former Assistant of the Dept of Agriculture, Imperial University, Tokyo; during the Japanese occupation of the D.E.I., Agricultural Officer at Makassar, *SW. Celebes;* he collected a few plants for *Herb. Bog.* in *1945*.

Wade, A.

COLLECTIONS. *Herb. Kew: New Guinea* plants (pres. *1928*).

Wade, Herbert Windsor

(1886, Haddonfield, N.J., U.S.A.; x), studied medicine at Tulane in the U.S.A., in which country he was on the staff of various institutions till 1915; 1916–18 on the staff of the Bur. of Sci. Manila; since 1918 Professor in the Univ. of the Philippines, from 1922–31 Pathologist in charge of research in the Culion Leper Colony, Philippines, and subsequently Medical Director of the Leonard Wood Memorial, Culion.

Cycas wadei MERR. and *Begonia wadei* MERR. & QUIS. were named after him.

COLLECTIONS. With Dr G. A. PERKINS he collected *Cycas wadei* MERR. in *Culion Isl.* (Apr. *1923*); he collected a few other plants too; material in *Herb. Manila*.

BIOGRAPHICAL DATA. Nat. Res. Counc. P.I. Bull. *no* 7, 1937, p. 759; Amer. Men of Sci. 1938.

Wänman

A plant specimen, collected at Manila, *Luzon* (*P.I.*), was in the HORNSTEDT (see there) collection, studied by Dr VAN STEENIS in March 1949; in *Herb. Acad. Sci. Stockholm*.

Wagiman, *cf. sub* Forest Research Institute, Buitenzorg.

Wagner Jr, Warren Herbert

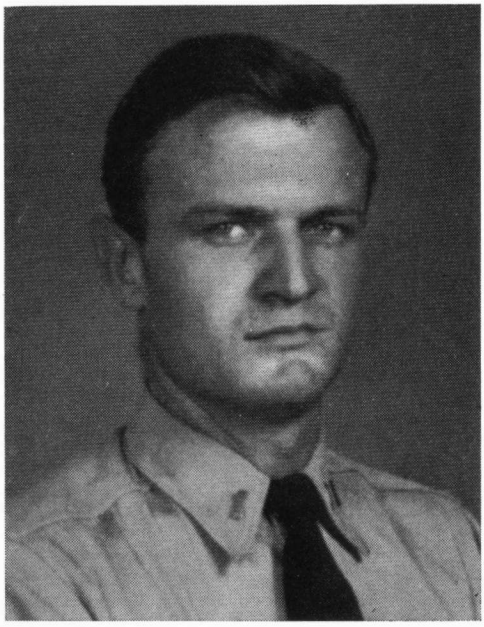
(1920, Washington, D.C., U.S.A.; x), studied zoology, attending Nebraska Wesleyan University, 1938–40, and the University of Pennsylvania, 1940–42, graduating (B.A.) in June 1942. Entered the U.S. Navy in July 1942, and became a flying officer, having duty in the Atlantic Fleet and in the Pacific Fleet, 1943–1946. In July 1946 he became a Teaching Assistant in the Department of Botany, University of California, Berkeley, California.

He is commemorated in *Schizaea wagneri* SELLING.

COLLECTING LOCALITIES. *1944. Admiralty Islands: Los Negros* (Nov. 16–19).—*1945. Philippines: Samar,* Guiuan (March 16–18); *Admiralties: Los Negros,* and eastern *Manus Isl.* (March 20 and May 11); expedition to the *Admiralty Islands* (Nov. 6–29): *Los Negros* (6–11, 15, 17, 21–22, 24, 27–29); *Manus;* Lorengau (8–9, 11–12, 18, 20), Drangot River (14), Patusi (24), Watani River (25); *Lou Isl.*

(13, 16); *Tawi Isl.* (24); Mount Tjajiak (Mt Dremsel Area, *Manus*, 25); *New Guinea, Biak* (*Schouten Isls*, Dec. 2–3); *Philippines: Samar*, Calicoan and Guiuan (Dec. 5).

COLLECTIONS. Botanical collections were made in the Philippines, Bismarck Archipelago,



WAGNER

Solomons, New Guinea, Marianas, Ryukyus, Marshalls, and Hawaiian Islands, during 1944–46, jointly with D. F. GRETHER, while flying in the Pacific Area. Number series, 3200–4639, including collections of D. F. GRETHER (see there). First series deposited at *Herb. Berkeley* (Cal.). The collections are mainly pteridophytes,[1] and often with numerous duplicates, distributed as follows: *U.S. Nat. Herb. Wash.; Nat. Hist. Mus. Dept of Agr. & Comm. Manila, P.I.; Herb.* E. B. COPELAND; *Bern. P. Bish. Mus. Honolulu; Herb. Sydney; Herb. Paris; State Mus. Stockholm; Univ. of Pennsylv. Herb.; Univ. of Wisconsin Herb.; Kew.*

LITERATURE. (1) W. H. WAGNER Jr: 'Ferns on Pacific Island coconut trees' (Amer. Fern Journ. 35, 1945, p. 74–76); 'Tree-climbing Gleichenias' (*l.c.* 37, 1947, p. 90–95); with D. F. GRETHER: 'Pteridophytes of the Admiralty Islands' (Univ. of Calif. Publ. in Bot. 23, 1948, p. 17–109, pl. 5–25); with D. F. GRETHER: 'Pteridophytes of Guam' (Occ. Pap. Bern. P. Bish. Mus. 19, 1948, p. 25–99, 11 fig.).

O. H. SELLING: 'Two new species of Schizaea and their affinities' (Svensk Bot. Tidskr. 40, 1946, p. 273–283).

Wahab, *cf. sub* Forest Research Institute, Buitenzorg.

Wahlbe(e)hm, Johan Hendrik

(*c.* 1788, Pera (former settlement of the E.I. Comp.); ? , ?), in 1839 tax-collector and auction-master in the Riouw Archipelago; since 1849 Resident of Riouw; pensioned off in 1860.

COLLECTIONS. He sent seeds, living plants and dried material of gutta-percha, *etc.* from *Riouw* to the 'Natuurkundige Vereeniging' at Batavia in *1852* and *1861*. The last consignment was presented to TEYSMANN, *Herb. Bog.*, through the intermediary of DE BRUYN KOPS (*cf.* Nat. Tijdschr. N.I. 24, 1862, p. 101, 261, 272–275, 290–291).

Wahlbeem

District Officer of the D.E. Indian Civil Service, sent living plants of *Nymphaea sp.* from the environs of Batavia (*W. Java*) to *Hort. Bog.* in *1897*.

Wahr, Mrs

of Soengei Gerong, Palembang (*S. Sumatra*), sent living orchids to *Hort. Bog.* in *1932*.

Waitz, Friedrich August Carl

(1798, Bückeburg, Schaumburg-Lippe, Germany; 1882, Batavia, Java), was sent to Java in the employ of the Civil Health Department in 1823, and was stationed at Semarang ; in 1828 and from 1836–44 on European leave. In 1849 he was pensioned off; from 1850–53 in Holland; in 1854 he was allowed to set up as a medical practitioner at Batavia, in 1855 he returned to Europe, and finally settled at Batavia in 1873. His interest mainly centred in native drugs;[1] as a token of appreciation of his work King Willem I presented him with a copy of BLUME's Flora Javae.

He is commemorated in several plant names.

COLLECTING LOCALITIES. Between *1823–55*. In *W. Java:* Mandalawangi and G. Pangrango; *Centr. Java:* G. Ungarang, northern slope near Medini; G. Merapi and Merbaboe; Tegal and G. Slamat; Grobogan (Rembang) (Oct. *1842*); coastal forest S of Djokja; beach and environs of Semarang; G. Muriah (= Moerjo);[2] *E. Java:* Djati Kalangan, G. Wilis, G. Kawi, G. Ardjoeno, G. Tengger.

In literature he is cited as the collector of plants in *Sumatra* (Indrapoera),[3] and *Borneo;*[4] no data of him having visited these islands are available, so there is a possibility that he did not collect the plants himself.

COLLECTIONS. *Herb. Berlin:* > 875 *nos;* dupl. in *Herb. Leyden;* evidently at least some in *Herb. Göttingen,*[5] and in *Herb. Bot. Gard. St Petersb.* (= *Leningrad*).

MIQUEL described plants of his in the Ann. Mus. Bot. Lugd. Bat.

LITERATURE. (1) FR. A. C. WAITZ: 'Practische waarnemingen over eenige Javaansche geneesmiddelen' (1829); *ditto* in German: 'Practische Beobachtungen über einige Javanische Arzneimittel' (Leipzig 1829).

(2) *cf.* BLUME, Rumphia, 3, 1837, p. 162.

(3) *cf.* VALCKENIER SURINGAR, Het geslacht Cyperus, 1898, p. 93; and Rec. Trav. Bot. néerl. 33, 1936, p. 137.

(4) *cf.* MERRILL, Enum. Born. Pl., 1921, p. 450 (by BLUME in Mus. Bot. Lugd. Bat. 1, 1849, p. 9, *no* collector is mentioned).

(5) *cf.* MEZ in Pflanzenreich 9, 1901, p. 32.

BIOGRAPHICAL DATA. Leop. Carol. Akad. *no* 1421 (*non vidi*); BACKER, Verkl. Woordenb., 1936; card index BARNHART in N.Y. Bot. Gard.

Wajan Pasek, I., *cf. sub* Forest Research Institute, Buitenzorg.

Walandouw, E. K.

physician on an estate of the H.V.A. (Handelsvereeniging Amsterdam) on the slope of G. Kerintji at Kajoe Aro, Soengei Penoeh (Sumatra West Coast).

COLLECTIONS. *Herb. Bog.:* 29 *nos* of plants from a pond at Soengei Assem (2 km from Danau Bento), *Sumatra West Coast* (collected early in *1934*). The material was presented through the intermediary of KEUCHENIUS (see there).

Walangitang, Lucas Thomas

(1887, Tondano, Celebes; x), joined the D.E. Indian Forest Service in 1909, and was stationed in Java till 1920. In August of the latter year he was transferred to Celebes, and stationed respectively at Mala-Mala (SW. Celebes), at Raha in Moena (since March 1924), in Boetoeng and Laiwoei (SE. Celebes) (since Dec. 1924), and at Manado (N. Celebes) since Jan. 1928; in Sept. 1930 transferred to Mataram in Lombok (Lesser Sunda Isls), and since Oct. 1932 serving once more in Java. He retired in 1933.

COLLECTING LOCALITIES. *SW. Celebes:* G. Bonthain (Jan. *1922*); *Salajar* Subdivision and *P. Djampea* (1922); G. Bonthain (*1923*); *Boeton* (= *Boetoeng*) (*1924*); *SE. Celebes:* Kendari (*1925*); *N. Celebes:* Minahassa, and Bolaäng Mongondow[1] (*1928–30*); *Lombok* (*1931*).

COLLECTIONS. *Herb. Bog.:* plants from G. Bonthain, *SW. Celebes* (coll. 1922), and dupl. F.R.I. bb. *nos.; Herb. For. Res. Inst. Buitenzorg:* F.R.I. bb. *nos* from the other localities.

LITERATURE. (1) A typed report on the subdivision of Bolaäng Mongondow (trip July 3–17, 1929) in the files of the Forest Research Insitute, Buitenzorg.

Walker, George Warren

(† 1844), colonel in the British Army, serving from 1803–14 in British India; in 1828 appointed Governor of St Helena, and in 1830 stationed in Penang.

Several plants were named after him.

COLLECTING LOCALITIES. From *1830–37* collecting in Ceylon, *Penang*, and *Singapore.*

COLLECTIONS. *Herb. Kew: c.* 1100 *nos* from Ceylon *etc.; Herb. Brit. Mus.:* 305 plants from *Singapore* and *Penang* (purch. 1862) + material with *Herb.* SHUTTLEWORTH (purch. 1877); *Herb.* DELESS. (*Geneva*): 218 *nos* from *Singapore* and *Penang* (1845).[1]

His letters are preserved at Kew.

LITERATURE. (1) *cf.* Bull. Herb. BOISS. 4, 1896, p. 101.

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 42, 1904, p. 384, and in 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Walker, H.

discoverer of *Pteris walkeri* BAKER (*cf.* BACKER, Verkl. Woordenb., 1936) near Silam in *Br. N. Borneo* in the *eighties of the 19th century.* Possibly it was one of the 24 plants sent by him to *Hort. Sing.* in *1883.*

He may be identical with the author of 'The State of North Borneo' (Journ. Soc. of Arts 51, 1903, p. 507–519), a paper *not* dealing with the natural history of the island.

Wallace, Alfred Russel

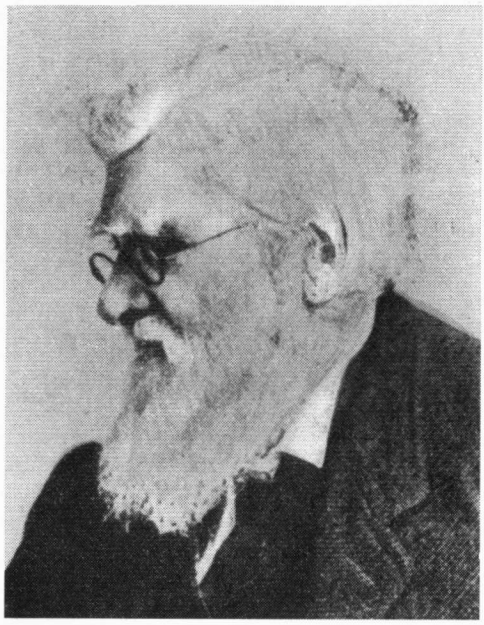
(1823, Usk, Wales, England; 1913, Broadstone near Wimborne, England), a self-made man who from his childhood had a lively interest in natural history and collected British plants. From 1848–52 he travelled in Brazil, from 1854–62 in the Malay Archipelago,[1] accumulating mainly large zoological collections. In 1881 he was granted a Civil List Pension.

Author of several famous zoogeographical studies[2] in which he pointed to the so-called 'line of WALLACE', a demarcation proved untenable by later researches.

He is commemorated in the genus *Wallaceodendron* KDS and in several other plant names.

ITINERARY.[1] *Malay Peninsula* (July–Oct. *1854*):[3] Malacca (a fortnight at Gading; at Ayer Panas for nearly a month), Mt Ophir, *Singapore; NW. Borneo*, Sarawak (Nov. 1, *1854*–Jan. 24, *1856*):[4] visiting various parts of the Sarawak River from Santubong to Bow and Bedé (Nov. 1854–Febr. *1855*); Simunjon River (March 14, 1855, remaining nearly 9 months); he was kept a prisoner in the house the whole of July and part of August by a severe inflamed ulcer; after he could get out again he made a trip to a branch of the Simunjon River to Semabang (1 week), and another branch of the river to Menyille; journey into the interior up to the sources of the Sadong River (Nov. 1855–Jan. *1856*): Gudong (Nov. 28), Jahi, Tabokan, Borotoi, Senankan, Sénna, Sarawak (early in Dec.), Peninjauh (with Sir J. BROOKE and SP. ST JOHN); return to *Singapore* (end of Jan.).—*Bali:* Boeleleng (June 13, 1856, 2 days' stay); *Lombok* (June–Aug. 29): Ampenan, Labuang Tring (= Laboehan Tereng); *SW. Celebes:* Macassar (Sept.–Dec. 12, making many excursions into the country); on board a proa (Dec. 13); *via* the Ké (= Kei or *Kai Islands*) (Jan. 1–5, *1857*), staying at Har (*Noehoetjoet*); to the *Aru Islands:*[11] *P. Wamar*, residing at Do(b)bo (Jan. 8–March 12), paying a visit to *P. Wokan* (= *Wokam*) (Febr. 5); residence in the interior of the mainland (March 13–May 9); Watelai, Wanumbai (6 weeks); 2nd stay at Dob(b)o (May 10–July 1); July 2 departing to *SW. Celebes:* Macassar (July 11, staying about a month); Maros, visiting the falls of the Maros River (Bantimoeroeng, 4 days' stay); Macassar (early in Nov.) and setting out to the *Moluccas*, touching at *Timor-*

Coupang (Lesser Sunda Isls) (1 day in Dec.) and *Banda* (probably Bandaneira) (Dec.) on his way to *Amboina* (= *Ambon*) (staying from Dec. 1857–Jan. 3, *1858*, of which 3 weeks in the interior, returning on Christmas Eve to the town of Amboyna); *Ternate* (from Jan. 8, 1858 onwards), obtaining a



WALLACE

house which he retained for 3 years as a place to return to after his voyages to various islands; Island of *Gilolo* (= *Halmaheira*) (March): Sedingole (= Sidangoli) (2 day's stay), Dodinga; *Ternate* (March), setting out (25) on a voyage to *Dutch N. New Guinea: P. Mansinam* (= *Mansiman*) (Apr. 11); Dorey (= Doré, Apr. 11–July 28), his zoological collectors staying for a month at Amberkaki; *Ternate* (arriving mid-Aug.); Island of *Gilolo* (= *Halmaheira*) (Sept.): Dj(a)ilolo and Sahoe; *Ternate*, from where sailing on Oct. 9; *Tidore* (10), *via P. Mare(h)* and *Moti(r)* to *P. Makian* (12); *Kaioa* (= *Kajoa*) *Islands* (14–19); *Batchian* (= *Batjan*) (Oct. 21, 1858–Apr. 12, *1859*): town of Batchian (probably Laboeha), kp. Sirani, paying a visit to Kasserota and Langundi (March 22–31, these places according to WALLACE on different islands, the former probably on *P. Kasiroeta*), and making a trip in the island of Batjan; *P. Makian, Ternate; Banda* (May); *Timor* (May, staying a fortnight), visiting *P. Semaoe* (4 days at Oeassa); *N. Celebes*, Minahassa: Manado (June 10–21); Lotta, Plateau of Tondano, Tomohon (22); Rurukan (arriving on the 23rd, staying a fortnight, making trips to Tondano Fall *etc.*); Tondano, crossing Lake Tondano by boat, Kakas, Lango(w)an (visiting hot springs and mud volcanoes); Panghu (3 weeks); return to Manado, staying a fortnight; Lempias (10 days), Licoupang (= Likoepang) (camping for 6 days on a 20 miles distant beach, in the large bay between the islands of Limbé = Lembeh, and Banca); return to Manado (Sept.); *Amboina* (end of Sept.–Oct. 28); *S. Ceram:* Hatosua (Oct. 31, staying some days), Elpaputi, Bay of Amahai at (A)Waija; journey from Makariki inland (Dec. 18) in the direction of Sawai on the N. coast; back at (A)Waija; *Amboina* (Jan.–Febr. *1860*), staying at Paso; *S. Ceram*, Febr. 24 starting by boat along the S. coast: Hoja, Teluli (March 3–5), Tobo, Kissa-laut (4 weeks); *Goram group* (= *Gorong Islands*): Manowolko (= *P. Manawoka*) (Apr. 8–12); *Matabello* (= *Watoebela*) *Islands:* Kissiwoi (= ? Kasioei) (15), Uta (15–17), Matabello (= Watoebela) (18–24); *Goram group:* Manowolko (25), Ondor (*P. Goram* = *P. Gorong*) (Apr. 26–May 26); *P. Kilwaru* (or *Kiliwara*, near Ceram) (May 29–30); *N. Ceram:* Warus-warus (= Waroe) (June 1–9), Wahai (15–17); probably staying on one of the *Jef Doif Islands* (23–25); *Waigiou* (= *Waigeo*): Muka on the south coast (July 4–Aug.), Be(s)sir (*P. Gam*) (Aug.–Sept., staying 6 weeks); *Waigiou* (till Sept. 28); *P. Gag(ie)* (Oct. 3); *Gilolo* (= *Halmaheira*), southern point (7–20), visiting Ganidiluar (11) and Gani (= probably Ganedidalem) (18–20); village of Kaioa (on *P. Kajoa*) (26–31); *Ternate* (Nov. 5, staying until departure to Timor); *Port. Timor:* Delli (= Dilly) (from Jan. 12, *1861*, leaving end of April), paying a visit to Baliba (1 week in Febr.); *Bouru* (= *Boeroe*) (May–June): Cajeli (= Kajeli) (May 4–*c.* 18), making minor excursions up the river to Wayapo, *etc.;* Waypoti (= Waepoetih) (May 19–June); Cajeli (some days, packing up his collections); *Ternate* (2 days); crossing over to Manado (*N. Celebes*), and touching at Macassar (*SW. Celebes*) on his way to *Java* (staying July 18–Oct. 31); partly in *E. Java:* Sourabaya (arriving July 18, staying a fortnight); making a tour, stopping at Modjokerto, Modjopa(h)it and Modjoagoeng on his way to Wonosalem, on the lower slopes of the Arjuna (= G. Ardjoeno) (1week stay); Djap(p)anan (3 weeks); return to Sourabaya and by steamer to *W. Java:* Batavia, Buitenzorg, Megamendoeng (a fortnight), climbing G. Gede-Pangrango; after return to Toego(e) moving to a coffee-plantation some miles to the north; Batavia, leaving by steamer (Nov. 1) for *Banca* (= *Banka*) (Muntok, staying a day or two) and *S. Sumatra* (Nov. 1861–Jan. *1862*): Palembang (Nov. 8, staying a week); Lorok (few days); in 3 days reaching Moearadoea (staying a fortnight); Lobo Raman (1 month); return to Palembang by water.

COLLECTIONS. Mainly zoological collections, with his assistant CHARLES ALLEN, generally assisted by some Malay servants. During his trips he was much handicapped by illness, and hardly penetrated into the interior. It is certain that he collected plants in *Borneo*,[5] *Timor*,[6] *Lombok*,[7] in *Singapore*, and on Mt Ophir (*Mal. Penins.*);[8] according to WARBURG *no* botanical collections were made in the Moluccas.[9] Sets of *Borneo* ferns were on sale with Mr S. STEVENS.[10]

In *Herb. Kew:* Brazil, *Indian Archipelago* (acq. 1868–74), 97 *nos*, *etc.* (evidently including a small

collection of grasses from *Timor*, mentioned by FORBES);[6] *Herb. Brit. Mus.: Borneo* ferns (acq. 1863); *Herb. Cambridge: Borneo* ferns; *Herb. Vienna: Borneo* ferns; *Herb. Paris:* some dupl. of ferns from *Borneo* and *Singapore*.

LITERATURE. (1) A. R. WALLACE: 'The Malay Archipelago' (London 1869, 2nd ed., 2 vols) (transl. into Dutch by P. J. VETH: 'Insulinde'; also transl. into German); 'Australasia' (1879, in STANFORD's Compendium of Geogr. and Travel).

(2) A. R. WALLACE: 'On the zoological geography of the Malay Archipelago'(in Journ. & Proc. Linn. Soc. Zool. 3, 1859); 'The geographical distribution of animals' (1876).

Also author of: 'Island Life *etc.*' (London 1880), and some books relating to Darwinism; 'Narrative of search after Birds of Paradise' (Proc. Zool. Soc. Lond. 1862, p. 153–161); and 'On some rare and new birds from New Guinea' (*l.c.* p. 164–166, pl. XIX–XXI).

(3) *cf.* Extract of a letter from WALLACE in HOOK. Journ. Bot. & Kew Gard. Misc. 7, 1855, p. 200–209.

(4) *cf.* Extract of a letter on the Bamboo and Durian of Borneo in *l.c.* 8, 1856, p. 225–230.

(5) Several Borneo ferns mentioned by M. KUHN in MIQUEL, Ann. Mus. Bot. Lugd. Bat. 4, 1868/69, p. 276 *seq.*

A *Bauhinia* mentioned in MERR., Bibliogr. Enum. Born. Pl., 1921, p. 297.

(6) *cf.* H. O. FORBES, Wanderings *etc.*, p. 498.

(7) *cf.* VALCKENIER SURINGAR, Het geslacht Cyperus, 1898, p. 123; Kew Bull. 1932, p. 290; Blumea 1, 1935, p. 413.

(8) *cf.* RIDLEY in 'The flora of Mt Ophir' (Journ. Str. Br. Roy. As. Soc. *no* 35, 1901, p. 1–28); ferns.

(9) In RUMPHIUS Gedenkboek 1902, p. 69.

(10) *cf.* HOOK. Journ. Bot. & Kew Gard. Misc. 9, 1857, p. 189–190; HOOK. Icon. Plant. 37, 1886–87, *t.* 1650.

(11) A. R. WALLACE: 'On the natural history of the Aru Islands' (Ann. & Magaz. Nat. Hist. Lond. 20, 1857, p. 473–485).

BIOGRAPHICAL DATA. A. R. WALLACE: 'My life. A record of events and opinions' (London 1905, 2 vols, w. portrs); Who's who 1913; Journ. Bot. 52, 1914, p. 15–18; Proc. Linn. Soc. Lond. 126. sess., 1914, p. 63–65; Encyclop. N.I. 4, 1921; Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Woordenb., 1936.

Walland

is cited by VAN SLOOTEN (in Bull. Jard. Bot. Buit. sér. 3, vol. 12, 1931, p. 35) as the collector of *Dryobalanops oocarpa* v.SL. (Sept. *1919*) in the Beraoe District, *NE. Borneo*.

The collector is C. B. WOLLAND (see there).

Wallich, Nathaniel

= NATHAN WOLFF (1786, Copenhagen, Denmark; 1854, London, England), since 1807 Danish Medical Attaché at Serampore in Bengal, from 1815–46 Superintendent of the East India Company's Garden at Calcutta (from 1828–33 to England, from 1842–45 GRIFFITH taking charge). From 1820–22 he explored Nepal, in 1822 he visited the Straits, in about 1833 Assam on a scientific expedition in connexion with tea cultivation, and making numerous other tours. He resigned in 1846, settling in London in the next year.

Author of important publications on the flora of British India.[1]

He is commemorated in several plant names, including the genus *Wallichia* ROXB.

COLLECTING LOCALITIES. *1822. Malay Peninsula: Penang* (Aug., on his way to Singapore); sojourn in *Singapore* (Aug.–Nov.); according to CURTIS[2] visiting many other parts of the Peninsula, evidently in the Straits of Malacca,? Dindings; *Penang* (Nov., on his way back).

COLLECTIONS. His largest collections are from India, where he collected in Nepal (1820), W. Hindostan (1825), Ava (1826 and 1827), *etc.* According to BURKILL he collected much in *Singapore* and a little in *Penang*.[3]

In 1828, 8000 species of plants collected by him with many duplicates arrived in London, and were distributed over the large herbaria of Europe and America at the expense of the East India Company; the distribution took place from 1828–32.[4] This collection, of mostly British Indian plants, was for the greater part identified by himself without describing, however, the new species. As these plants were represented in all large herbaria, it was formerly accepted that WALLICH's species should have the same claim to priority as if descriptions had been added. Some of these species occur in the D.E.I. too; HASSKARL was ignorant of these facts. The plants were numbered after study, all specimens of a species got one and the same number.[5]

The most complete set was in *Herb. Linn. Soc. Lond.* (in 1832 acq. the type set of the Herb. E.I.C., including plants collected by others), at present in *Herb. Kew* (pres. 1913/14),[6] where another set was available before then. Other sets and duplicates in *Herb. Brit. Mus., Bot. Gard. Calcutta, Oxford,*[7] *Cambridge, Berlin; Herb.* DELESS., DECAND., and BOISS. (*Geneva*); *Univ. Dublin, Bot. Gard. Edinburgh, Paris* (also with *Herb.* FRANQUEVILLE), *Munich, Bot. Gard. St Petersburg* (= *Leningrad*), *Imp. Acad. Sci. Petersb.* (= *Leningrad*), *Melbourne, Leyden, Turin, Vienna, Florence, Liverpool, Philadelphia, Graz* (with *Herb.* LEITGEB); *German Univ. Prague* and *Nat. Mus. Prague; Copenhagen; Herb. Lund; Univ. Michigan; Herb.* MARTIUS (= *Brussels*); *Herb.* v. HEURCK (= *Antwerp*), CESATI (= *Rome*), and NEES (later *Herb.* Baron ZSCHOK). Plants of his were sold with *Herb.* LAMBERT, and acquired by LEMANN;[8] also with *Herb.* ROBERT GRAHAM in 1846.

His correspondence between 1817–46 was originally preserved in the Library at Kew, but was returned to Calcutta in 1887/88; it consists of 33 large volumes, including some botanical papers. A series of botanical drawings (made between 1815–28) was transferred from the India House to Kew.

LITERATURE. (1) N. WALLICH: 'Tentamen Florae Nepalensis' (1824–26); 'Plantae Asiaticae Ra-

riores' (London 1830–32, 3 vols); 'Descriptions of plants more recently discovered by N. WALLICH' are appended to the 'Flora indica' of ROXBURGH, ed. by W. CAREY (Serampore 1832).

(2) *cf.* 'A catalogue of the plants of Penang' 1892, p. 97–98.



WALLIS

(3) In Gard. Bull. Str. Settlem. 4, 1927, p. 133.

(4) *cf.* 'Numerical list of dried specimens of plants, in the East Indian Company's Museum, collected under the Superintendence of Dr WALLICH, at Calcutta' (London 1828).

(5) *cf.* C. B. CLARKE in Journ. Bot. 31, 1893, p. 136.

(6) *cf.* 'The Wallichian Herbarium' (Kew Bull. 1913, p. 255–263).

(7) *cf.* HOOK. Journ. Bot. & Kew Gard. Misc. 6, 1854, p. 251 and 281.

(8) *cf.* Advertisement of LAMBERT sale in Athenaeum 1842, p. 44.

BIOGRAPHICAL DATA. Flora 3, 1820, p. 440–441; Gent. Mag. 11, 1854, p. 84; Athenaeum 1854, p. 556; Gard. Chron. 1854, p. 284; Proc. Linn. Soc. Lond. 2, 1854, p. 314–318; DE VRIESE, Tuinbouwflora, 1, 1855, p. 142; PRITZEL, Thes. Lit. Bot., 1872; Bot. Tidskr. 12, 1880/81, p. 105–106; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 29, 1891, p. 246 and in 2nd ed. by RENDLE, 1931; Gard. Chron. 1899[2], p. 252; WITTROCK, Icon. Bot. Berg., 1903, p. 158; *l.c.* 2, 1905, p. 172; J. D. MILNER, Catalogue portraits Kew, 1906, p. 103; in CHRISTENSEN, Den Danske botaniks historie, 1924–26, vol. 1, p. 251–253 + portr., and vol. 2, p. 157–166 incl. bibliogr.; BACKER, Verkl. Woordenb., 1936.

Wallis, Gustav

(1830, Lüneburg, SE of Hamburg, Germany; 1878, Cuança, Ecuador), was so deaf, that the first 6 years of his life he was supposed to be deaf and dumb. Horticulturist who from 1854–68 crossed South America. In 1858 he was appointed in the employ of the Belgian firm of J. J. LINDEN.[1] In 1868 he returned to Germany to undergo a treatment for a serious eye disease; in 1869 he entered the service of the firm of VEITCH & Sons (Exeter, England), for which he made several travels, *viz* in 1869–71 (see below), in 1872 to S. America, and in 1873–74 in Colombia (S. America). In 1875 he set out once more for America, working in that continent till his death.

Grammatophyllum wallisii RCHB. *f.* and other plants were named after him.

ITINERARY.[2] Leaving Dec. *1869 via* N. America, California, the *Philippines*, Japan (Yeddo), Hongkong, back to Manila (*Luzon, P.I.*);[3] homeward voyage by way of *Singapore*, *Penang*, Suez Canal; back in Germany in winter *1871*.—Data on a visit to *Timor* (*Lesser Sunda Isls*) (see *sub* collections) are not known to me.

COLLECTIONS. Mainly living plants, only scant herbarium material.[4] *Herb. Berl.:* 130 *nos* from the *Philippines* (1870–71 coll.); *Herb. Kew:* 160 *nos* from the *Philippines*, Colombia, *Timor* (pres. 1881–84); *Brit. Mus.: Muscineae* from the *Philippines* (1870) and New Granada (acq. with *Herb.* HAMPE and STEPHANI); *Herb. Vienna:* 250 *nos*, and orchids with *Herb.* REICHENBACH; a few in *U.S. Nat. Herb. Wash.*

LITERATURE. (1) G. WALLIS: 'Reiseerinnerungen' (REGEL'S Gartenflora 25, 1876, p. 39–45, 111–116, 144–146, 299–305; 26, 1877, p. 77–83, 166–171); 'Verzeichnis meiner Entdeckungen im äquatorialen Amerika' (*l.c.* 26, 1877, p. 344–352). *cf.* also in 'Natur' *l.c. sub* Biogr. data.

G. WALLIS: Deutsche Rechtfertigung gegen belgische Anmassung. Entgegnung auf Herrn LINDEN'S 'Mon ex-collecteur WALLIS' (Hamb. Gart. u. Blumen Zeit. 1875, p. 222–230, 273–281, 423–424).

(2) *cf.* Hamb. Gart. u. Blumen Zeit. 1878, p. 433–440.

(3) *cf.* Hortus Veitchii 1906, p. 122.

(4) C. MÜLLER: 'Musci indici novi adjectis nonnullis aliis exoticis' (Linnaea 37, 1872, p. 164–182; 38, 1874, p. 545–572).

H. G. REICHENBACH: 'Orchideae Wallisianae novae' (Linnaea 41 (N.R. 7), 1877, p. 99–118).

Hepaticae by J. B. JACK & F. STEPHANI in Hedwigia 31, 1891, p. 11–27.

BIOGRAPHICAL DATA. Die Natur 19, 1870, p. 33–36, 41–44 (biogr.), 59–62 (w. portr.), 67–70, 83–86, 89–92, 97–100, 113–116, 126–132, 150–156, 174–176, 180–182, 185–188; Hamb. Gart. u. Blumen Zeit. 1878, p. 433–440; La Belg. Hortic. 1879, p. 1–19, w. portr. (transl. from the former); Hortus Veitchii 1906, p. 62–64; BACKER, Verkl. Woordenb., 1936.

Waloewandja, K., *cf. sub* Forest Research Institute, Buitenzorg.

Walsh-Held, Maria Ernestine

(1881, Geneva, Switzerland; x), married in Australia; in 1911 she settled at Soekaboemi (W. Java), where she started making entomological collections, at the outset as a favourite pursuit, since 1913, when she became a widow, to make a living. She employed Indonesian collectors too. She travelled over Timor on behalf of a French collector; later she made travels in S. Sumatra and Borneo.

Vernonia walshae KOSTER and *Argyreia walshae* VAN OOSTSTR. were named after her (*cf.* BACKER, Verkl. Woordenb., 1936).

ITINERARY. *1928–29. Dutch Timor* (*Lesser Sunda Islands*): Soë (Dec. 24, 1928–March 24, *1929*); Niki-Niki (March 25); bivouac at Nipol (Apr. 14–20); Niki-Niki (20–24); *via* Bele-Kot Olim to Kolbano (staying Apr. 28–May 3); back at Niki-Niki (May 5); returning (11) to Soë *via* Pene and the Oïl Lakoe; to Nenas (21); G. Moetis (24); *via* Nenas to Bonleo (27), Noïl Toko (29), Kefamenanoe (30); Maoebesi (June 2), Manoefoei (3), Soefa (4), Aeroki Beloe (6), Webora (Mandeo, 7), Alas Zuid Beloe (8), Tobaki (9), Dafala (11), Atamboea (12); Ailomea (Fialaran, 24), Asoemanoe (25); *Port. Timor:* Balibo (26), Maliana (27), Bobonaro (28), Atsabe (July 1), Letfoho (2), Hatolia (3), Dilly (4).—*1937. E. Borneo*, see *sub* AËT.

In *S. Sumatra* (Benkoelen and Lampong Districts) to our knowledge no botanical collections were made.

COLLECTIONS. *Herb. Brit. Mus.:* 500 *nos* of *Timor* plants (the collected fossils in the Brit. Mus. too); *Herb. Bog.: nos* 1–517 from *Timor*, the *nos* 1–84 for the greater part having been given twice, so the collection really consists of 588 species (purch.); *Herb. Berl.:* 428 *nos* from *Timor* (purch. 1929/30); *Herb. Univ. Zürich:* set of *Timor* plants. The *Borneo* plants were collected by AËT (see there); in *Herb. Bog.*

Walter, Carl

(? 1831, Mecklenburg, Germany; 1907, ? Melbourne, Australia), photographer and excellent collector who went to Australia with ANATOLE Freiherr VON HÜGEL (see there). He accompanied Reverend G. BROWN (see there) of the Wesleyan Mission, on his voyage to the *Bismarck Archipelago* in *1875*, collecting in *Neu Lauenburg* (= *Duke of York Island*) and *Neu Pommern* (= *New Britain*).[1] Later he did a vast amount of botanical collecting in Victoria and south-eastern New South Wales during many years for Baron VON MUELLER. Finally he suffered from defective eyesight.

He is the author of some papers on Victorian plants.

Prostanthera walteri F.v.M. from Australia was named after him.

LITERATURE. (1) *cf.* F. VON MUELLER, Descr. Not. Pap. Pl. 1, pt 1, p. 14.

BIOGRAPHICAL DATA. Vict. Naturalist 24, 1907, p. 110, and *l.c.* 25, 1908, p. 114; MAIDEN in Rep. Assoc. Advanc. Sci. 13, 1911/12, p. 236 (he wrongly surmises WALTER to have travelled in company of CARL VON HÜGEL); Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931.

Walujan, D. F., *cf. sub* Forest Research Institute, Buitenzorg.

Warburg, O.

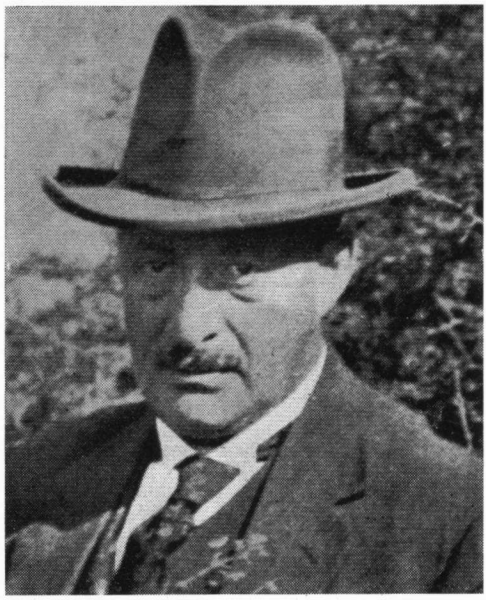
(1859, Hamburg, Germany; 1938, Berlin, Germany), botanist who was educated at several German universities, and took his Ph.Dr at Strassburg in 1883. From 1885–89 he made a world voyage during which he visited numerous localities in Malaysia (see itinerary below), India, Ceylon, Siam, Indo-China, China, Corea, Japan, Liukiu Islands, Bonin Islands, Formosa and Australia. When in Java he worked for several months in the Treub Laboratory of the Buitenzorg Botanic Gardens, where he made scientific researches.[1] In 1891 he was appointed Lecturer in the University of Berlin, from 1894 onwards Lecturer at the Oriental Seminary, Berlin, in 1898 appointed Professor; in 1921 Director Agricultural Research Station of the Zionist Organisation in Palestine, since 1925 Professor of Botany and Director Institute of Natural History of Palestine, Hebrew University, Jerusalem.

During many years editor of 'Der Tropenpflanzer'. Besides taxonomical papers, he wrote numerous other important ones, including several on useful plants.[2]

He is commemorated in some genera[3], and in many plant species.

ITINERARY. *World voyage, 1885–89.*[4] After having visited India and Ceylon (Oct.–Dec. *1885*), *via Penang* (end of 1885 or early in 1886) to *W. Java* (staying Jan.–Dec. *1886*), making several trips from Buitenzorg: to Batavia and the *islands in the Bay*, environs of Buitenzorg (chiefly at Tjampea), G. Gedeh-Pangrango, Parakansalak and Mt Endut, G. Tangkuban Prahu, highland plain of Pengalengan,[5] G. Malabar, G. Wajang, Tjilaki on G. Tilu, G. Patuha and Telaga Patengan, G. Papandajan, the Tjikahuripan, Tjisewu, Palabuhan Ratu (Wijnkoops Bay); *Centr. & E. Java* (Jan.-Febr. *1887*): Willem I near Ambarawa, Diëng Plateau, Borobudur, environs of Djokjakarta, Bojolali, Sello, G. Merapi, G. Merbabu, G. Lawu (reaching the pass with Karang-pandan and Gondosolo), G. Wilis and Putak, G. Dorowati, Telaga Ngebel, Lodaja near Blitar, Sengon on G. Kawi, slopes of G. Klut (= Keloed); G. Tengger with Tosari, G. Bromo, Wonosari and Sukopuro; *Singapore* (March 1887), climbing Bt Timah; travelling in China, Japan, *etc.; Philippines, Centr. Luzon* (March–Apr. *1888*): Manila, Mt Alban, Lukban and Sampolok in Tajabas Prov., Mariveles and Bagak; *N. Luzon* (Apr.–May): *prope* Cagajan with Aparri and Buguey on the coast, Lallo, Tigegarao with Enrile and Pinna blanca, Malagueg; *prope* Isabella with Malunu, Digamai; *South Mindanao* (June–July): Davao, Taumu, Mt Dagatpan, Sibulan, Kotta Batu, Zamboanga; *Basilan Island; Sulu Islands* (Aug.); *Jolo Island* and *Tawi-Tawi Isl.; N. Celebes*, Minahassa (Aug.–Sept.): Manado, Bojong (Mt Lollem–Bulan), Amurang, Sonder, Ton-

dano; *Moluccas: Batjan* (Sept.), visiting Mt Sibel(l)a and Brankadollong; *Buru* (Oct.); *Amboina* (Oct.); *Banda* (Oct.); *Lesser Sunda Islands, Sumbawa* (Nov.): Bima, Donggo Mts, Sambori Mts; *SW. Celebes* (Nov.–Dec.): Balan(gn)ipa, Bikeru, Tassosso, Wawo-Kraëng (one of the summits of



WARBURG

G. Bonthain, 1st ascent!, Nov.), Manipi, Tjamba, Maros and Bantimurung; *Moluccas* (Dec.): *Amboina* and *Banda; Ceram laut;*[6] *Dutch SW. New Guinea* (Dec.): MacCluer Gulf, Sigar (= Sekar); *Aru Islands* (Jan. *1889*); *Key* (= *Kai*) *Islands: Tual* and *Dular;* for a short time to Australia, Queensland (Febr.), and subsequently to *NE. New Guinea*, former Kaiser-Wilhelmsland (March–Apr.): Finschhafen, Sattelberg (Apr. 6–12 with HELLWIG, see there),[7] Bussum, Constantinhafen, Stephansort, Bili-Bili, Hatzfeldhafen; *Bismarck Archipelago* (March): *Neu Mecklenburg* (= *New Ireland*), *Nusa; Neu-Lauenburg* (= *Duke of York Island*); Kerawara, *Utuan Isl.* and Ulu, *Mioko; Neu-Pommern* (= *New Britain*): Matupi, Rabaul (Gazelle Peninsula), Ralum; Australia (Apr.–June).

COLLECTIONS.[8] *Herb. Berlin:* siphonogams '*Iter Warburgianum*' and '*Plantae papuanae*', in total *c.* 22000 *nos*, including *c.* 15000 from *Malaysia* (3000 from *New Guinea*, 3500 *Philip.*, 1000 *Moluccas, etc.*); besides collections of *Algae, Fungi, Musci* and *Hepaticae;* a large collection in the *Show Mus. Berlin.* Dupl. in *Herb. Kew* (pres. 1895); *Herb. Brit. Mus.; Herb. N.Y. Bot Gard.:* 1200 *nos Philip. Isls.* and *Malaysia* (acq. 1931); *Herb. Manila:*[9] 2300 *nos*, incl. a fairly representative set of the *Philippine* collections; *Herb. Arn. Arbor.:* 221 *New Guinea* plants (acq. 1936/37, in 1938/39 partly removed to the GRAY *Herb.;* in the latter Herb. 168 *W. Java* (Priangan) plants besides, dupl. from Berlin; some ferns in *Herb.* BONAPARTE (= *Paris*); *Herb. Leyden:* dupl. *Molucc.* and *N.G.* plants; *Cyperaceae* in private *Herb.* R. GROSS (Berlin); 16 *Myristic.* from *N.G.* in *Herb. Bot. Gard. St Petersb.* (= *Leningrad*); *Herb. Edinburgh:* '*Iter Warburgianum.*'

Hort. Bog.: living seeds from various islands (pres. 1889).[10]

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 12–13.

(2) O. WARBURG: 'Die Flora des asiatischen Monsungebietes' (in Verh. Ges. Naturf. u. Aerzte 1890, Allg. Teil (*ad liter.*)); 'Die Vegetationsverhältnisse von Neu-Guinea' (Verh. Ges. Erdkunde Berl. 19, 1892, p. 130–148); 'Die Muskatnuss' (Leipzig, 1897); 'Einige Bemerkungen über die Littoral-Pantropisten' (Ann. Jard. Bot. Buit. 11, 1898, p. 128–136); 'Das Pflanzenkleid und die Nutzpflanzen von Neu-Guinea' (in KRIEGER, Neu Guinea, 1899, p. 36–72); 'Die botanische Erforschung der Molukken seit RUMPH's Zeiten' (in RUMPHIUS Gedenkboek, 1902, p. 63–78); and numerous others.

(3) *cf.* Palest. Journ. Bot. J. ser. 1, 1938, p. 3.

(4) *cf.* Monsunia 1, 1900, p. vi–vii. The German 'u' instead of 'oe' in geographical names is used.

(5) O. WARBURG: 'Ein Besuch der Kina-Districte und Waldzone Preangers in Java' (Hamburg 1887).

(6) *cf.* Plant-geographical sketch of *Ceram Laoet* in ENGL. Bot. Jahrb. 17, 1893, p. 169–176.

(7) *cf.* Nachr. Kais. Wilh. Land 6, 1890, p. 20–21.

(8) O. WARBURG: 'Beiträge zur Kenntnis der papuanischen Flora' (ENGL. Bot. Jahrb. 13, 1891, p. 230–455; dealing with plants from *Ceram Laoet, Aroe* and *Kai Islands, Kaiser-Wilhelmsland* and the *Bismarck Archipelago*).

P. HENNINGS: 'Fungi Warburgiani' (Hedwigia 32, 1893, p. 216; ENGL. Bot. Jahrb. 25, 1898, p. 495–509).

Algae by F. HEYDRICH in Hedwigia 33, 1894, p. 267–306.

O. WARBURG in 'Monographie der Myristicaceen' (Halle 1897).

H. CHRIST in 'Die Farnflora von Celebes' I (Ann. Jard. Bot. Buit. 15, 1898, p. 73–186, pl. 13–16).

Araceae by ENGLER in ENGL. Bot. Jahrb. 25, 1898, p. 7, 24.

O. WARBURG and others in 'Monsunia' 1, 1900, viii + 207 pp., *t.* 1–11.

MEZ in 'Monographie der Myrsinaceae' (Pflanzenreich 9, 1902, p. 1–437, pl. 1–61).

J. PERKINS: 'Enumeration of the recently collected plants by AHERN, JAGOR, LOHER, MERRILL, WARBURG and others' (Fragm. Fl. Philip. 1904, p. 4–66, 77–202).

Ericaceae from *Celebes* by H. SLEUMER in ENGL. Bot. Jahrb. 71, 1941, p. 138–168.

(9) *cf.* MERRILL, A discussion and bibliography of Philip. Flow. Pl. (= Enum. Philip. Fl. Pl. vol. 4). 1926, p. 52.

(10) *cf.* Versl. Pl. Tuin Buitenzorg for 1889, p. 56–57.

BIOGRAPHICAL DATA. Palest. Journ. Bot. R. ser. 2, 1938, p. 2–16, incl. partial bibliogr. + portr.; Palest. Journ. Bot. J. ser. 1, 1938, p. 2–3, w. portr.; Chron. Bot. 4, 1938, p. 268–270, w. portr.; BACKER, Verkl. Woordenb., 1936.

Ward, Frank (or Francis) Kingdon

(1885, ? ; x), educated at Christ's College, Cambridge (England), went to Shanghai in 1907 as a schoolmaster. In 1909 he left, to make a journey across China during 1909/10; in 1911 he was engaged by the Nursery firm of Bees Ltd, Liverpool, as a collector in NW. Yunnan. In subsequent years, till the present, he made numerous expeditions in China, Indo-China, Burma, and British India.[1]

COLLECTIONS. He collected specimens of plants in Lower Siam in *1941;* material in *Herb. Sing.*

LITERATURE. (1) Author of several books and some papers, *e.g.:* 'The land of the blue poppy: travels of a naturalist in Eastern Tibet' (Cambridge 1913); 'A plant hunter in Tibet' (London 1934); 'Plant hunter's paradise' (1937); 'A sketch of the geography and botany of Tibet, being materials for a flora of that country' (Journ. Linn. Soc. Bot. 50, 1935, p. 239–265, 2 maps).

BIOGRAPHICAL DATA. CURTIS' Bot. Mag. 162, April 1940, dedicated to KINGDON WARD, w. portr. frontisp.; E. H. M. Cox, Planthunting in China, 1945, p. 180–190; Who's who 1946.

Ware, W. H.

Forest Officer of the Forestry Bureau at Manila (P.I.), collected 25 plants in Prov. of Bataan, *Luzon;* material in *Herb. Manila* (acq. *1903/04*); 23 *Philip.* plants in *U.S. Nat. Herb. Wash.*

Warnier, W. L. A.

of Makassar, *SW. Celebes,* sent some dried material of plants to the *Herb. Kol. Mus.* (= *Ind. Inst.*) *Amsterdam* in *1908.*

Warns, H. C.

of Bah Biroeng Oeloe, Pematang Siantar (*Sumatra East Coast*), sent an *Acanthacea* to *Hort. Bog.* in *1916.*

Warouw, G. F., *cf. sub* Forest Research Institute, Buitenzorg.

Warta, *cf. sub ditto.*

Waterhouse, Mrs

of *Singapore,* sent living material to *Hort. Sing.* in *1931.*

Waterhouse, J. H. L.

probably a forester, collected in *New Britain* in Nodup Distr., Rabaul, Gazelle Peninsula.

COLLECTIONS. *Herb. Forestry School Yale Univ.* (New Haven): *c.* 300 *nos* from Solomon Isls and *New Britain. Herb. Kew:* plants from Bougainville and the Solomon Islands (pres. 1931/32), and from the *Mandated Territory* (pres. 1935), incl. *New Britain* plants (coll. Dec. *1934*); partly dupl. in *Herb. Arn. Arbor.*, and *N.Y. Bot. Gard.* (*c.* 100 *nos*); *Herb. Sydney:* 150 to 200 Solomon Islands plants; 400 wood specimens in the Yale Univ. collection.[1]

LITERATURE. (1) M. RECORD: 'A collection of woody plants from Melanesia' (Trop. Woods 81, 1945, p. 9–45).

Waterstredt, Johannes

(1869, Copenhagen, Denmark; ?), a zoological collector who made extensive expeditions in Ceylon, Malaya and the Malay Archipelago (chiefly Borneo) since 1888, at least partly on behalf of the Tring Museum.

ZOOLOGICAL COLLECTING LOCALITIES.[1] *1889. Penang.—1890–1900. N. Borneo: Labuan,* Brunei, Mt Kinabalu (*1894* and *1899* according to information from the natives, but certainly at an earlier date too, as he wrote in 1902, that the ascent of G. Tahan took place 10 years after his 1st ascent of Mt Kinabalu), *Banguey Island; Philippines: Palawan* and *Balabac; Talaud Islands* (N of Celebes). *—c. 1900 or 1901. Malay Peninsula:* G. Tahan (7 months, setting out from Kelantan towards the end of April).[2]*—1901–04. Celebes, Moluccas, New Guinea, Waigeo (1902), Java, Sumatra, Lesser Sunda Islands.—c. 1908. N. Borneo:* Mt Kinabalu. *—1910–12. Malay Peninsula* (G. Tahan), *Borneo, Java.*

COLLECTIONS. He collected orchids for SANDER (English nursery firm) and brought various plants at different times to *Hort. Sing.* During a trip to G. Tahan (*Malay Peninsula*) he made a small orchid collection.[2] His name may appear on herbarium labels.

LITERATURE. (1) Data derived from: HORN & KAHLE, Ueber entomologische Sammlungen *etc.* (Entomol. Beih. II–IV, Berl. Dahl. 1935/37); GIBBS in Journ. Linn. Soc. Bot. 42, 1914, p. 26; J. C. MOULTON in Sarawak Mus. Journ. 2, 1915, p. 161.

(2) J. WATERSTREDT: 'Kelantan and my trip to Gunong Tahan" (Journ. Str. Br. Roy. As. Soc. *no* 37, 1902, p. 1–29).

Watson, James Gilbert

(1889, Kew, England; x), at first in the Agricultural Department and then a Forest Officer in the Malay Peninsula (1913 onwards).[1] In 1926 appointed Forest Economist, later in charge of the Forest Research Institute, Kepong. In June 1935 he visited Brunei and Sarawak. In Oct. 1940 he was appointed Director of Forestry, Malaya. During World War II he was interned by the Japanese, and repatriated to England in 1945, retiring in 1946.

Eugenia watsoniana HENDERSON is named after him.

VISITED LOCALITIES (possibly partly no collections made). *Malay Peninsula* (*1913 onwards*): Johore and elsewhere, also on G. Belumut (in one of the first months of *1923*) and on Kedah Peak; *NW. Borneo:* Brunei (June *1935*); *Malay Peninsula:*

Perlis (Jan. *1936*); Johore, Kedah and Trengganu (*1937*).

COLLECTIONS. *Herb. Kuala Lump.*, numbered in the C.F. (see *sub* Conservator of Forests) series.

LITERATURE. (1) Author of 'Malayan Plant-names' (Malay. For. Rec. *no* 5, 1928); 'Mangrove



WAWRA

forests of the Malay Peninsula' (*l.c. no* 6, 1928, 275 pp., 72 fotos).

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

Wattimena, *cf. sub* Forest Research Institute, Buitenzorg.

Waturandang, A. G., *cf. sub ditto.*

Wawaruntu, A. L.

collected some plants in the Minahassa (*N. Celebes*), numbered in the series of KOORDERS (*cf.* Pflanzenreich Heft 98 b, 1932, p. 924). *Probably* they were collected during KOORDERS's stay in that island (*1895*) or shortly after.

Wawra von Fernsee, Heinrich Ritter

(1831, Brünn, Austria; 1887, Baden near Vienna, Austria), studied medicine at Vienna (1849–55) and qualified in botany too. From 1856–78 surgeon in the Austrian Navy, travelling round the world, partly in attendance upon two German princes, making large collections of plants.[1]

Suttonia wawrae MEZ and several other plants (*cf.* Autobiogr. *l.c.* below, p. 43) were named after him.

ITINERARY. *Voyage in the 'Elisabeth', 1859–60,*[2] with Archduke FERDINAND MAXIMILIAN to Brazil. During this expedition Malaysia was *not* visited.—*Exploring expedition to Eastern Asia in 'Sr. M. Fregatte Donau', 1868–71,*[3] with Kaiser MAXIMILIAN VON MEXICO, *cf.* also *sub* E. WEISS. Sailing *via* Gibraltar, Madeira, Teneriffe, Cape of Good Hope (making trips inland); touching at *W. Java:* Anger (=Anjer) (Apr. 6–10, *1869*), proceeding to *Singapore* (staying Apr. 14–22), from where the forest of the opposite south point of the *Malay Peninsula* (Johore) was visited too; Siam, Saigon, China (June 2–Sept. 12), Japan, Hawaii, S. America; back at Pola (March 1, 1871).—*Voyage with the Princes* PH. *and* A. VON SACHSEN-COBURG-GOTHA, *1872–73* (*not* made in a special ship).[4] Travelling (July 30, *1872*) to Liverpool; visiting New York, San Francisco, Honolulu, New Zealand, Australia (making some trips with F. VON MUELLER); Ceylon (Nov. 28–Dec. 5); touching at *Singapore* (Dec.); Saigon, China, Japan, Hongkong, Macao; *Singapore* (Febr. *1873*); making a short trip to the *Malay Peninsula:* Johore; to *W. Java:* Batavia (11), Buitenzorg (Botanic Gardens), *via* Megamendoeng to Bandung (Febr. 13), G. Tangkuban Prahu, Lembang, back at Buitenzorg (18–19), Batavia (20); *Singapore;* trip to *P. Penang* (end of Febr.); Ceylon, Bombay (March 12), Brit. India, Suez, Alexandria; back at Vienna (Apr. 20).

He made several smaller voyages during which Malaysia was *not* visited.

COLLECTIONS. *Herb. Vienna:* of the voyage in the 'Donau' 4879 *nos*, *'Itin. princip.* COBURGI' 2421 *nos.*[5] In 1869 at Anjer (*W. Java*) 60 *nos* of plants were collected, in *Singapore* and *Johore* 81. Dupl. in: *Herb. Berlin;* 776 in *Herb.* DECAND. (*Geneva*); *Herb. Bot. Gard. St Petersburg* (= *Leningrad*): 17 from *Java*, 19 from *Singapore*. 100 Wood samples, also from *Java*, in FRANZENS *Museum* at *Brünn.*

LITERATURE. (1) Enumeration of voyages, publications, *etc.*, in MARTIUS, Flora Brasiliensis, vol. 1, pars 1, p. 134–136.

(2) H. WAWRA VON FERNSEE: 'Botanische Ergebnisse der Reise Sr Majestät des Kaisers von Mexico MAXIMILIAN I nach Brasilien' (Wien 1866). *cf.* als Flora N.R. 24, 1866, p. 497–506.

(3) H. WAWRA VON FERNSEE: 'Skizzen von der Erdumsegelung Sr. M. Fregatte Donau' (Oesterr. Bot. Zeitschr. 21, 1871, p. 358–365; *l.c.* 22, 1872, p. 24–32 (dealing with *Java* and *Singapore*), 60–69, 90–97, 127–133, 157–161, 198–201, 222–227, 229–265, 297–302, 332–335, 362–368, 397–405; *l.c.* 23, 1873, p. 23–29, 60–64, 94–99).

(4) *cf.* 'Reise Ihrer Hoheiten der Prinzen PHILIPP und AUGUST VON SACHSEN-COBURG-GOTHA um die Welt (1872–1873)' (in WAWRA VON FERNSEE, Itinera principum S. Coburgi *etc.* 1, 1883, p. ii–x).

(5) CHR. LUERSSEN: 'Verzeichnis der Gefässkryptogamen welche Dr H. WAWRA auf seiner Erdumsegelung mit der Fregatte "Donau" 1868–1871, und der Reise mit den Prinzen PHILIPP und AUGUST VON S. COBURG 1872 und 1873 sammelte' (Flora N.R. 34, 1876, p. 225–231, 285–287, 289–302).

H. WAWRA VON FERNSEE: 'Neue Pflanzenarten, gesammelt auf den Reisen der Prinzen VON SACHSEN-COBURG' (Oesterr. Bot. Zeitschr. 31, 1881, p. 69–71, 280–282; *l.c.* 32, 1882, p. 37–39).

H. WAWRA VON FERNSEE: 'Itinera principum S. COBURGI. Die botanische Ausbeute von den Reisen ihrer Hoheiten der Prinzen von SACHSEN-COBURG-GOTHA' (Wien 1883–88, 2 vols, 39 + 18 pl., mostly coloured; vol. 2 published posthumously by Dr G. VON BECK, using the manuscripts of WAWRA).

BIOGRAPHICAL DATA. Autobiography in Notiz. bl. Hist. Stat. Sect. d.k.k. Mähr.-Schles. Ges. z. Beförd. d. Ackerbaues, d. Natur- und Landeskunde 1878, *no* 10, 43 pp., and in MORREN, Broméliacées brésiliennes, 1881; Flora 70 (N.R. 45), 1887, p. 387–396, w. bibliogr.; Ann. Bot. 1, 1887/88, p. 412–413, w. bibliogr.; WITTROCK, Icon. Bot. Berg. 1903, p. 86, and *l.c.* 2, 1905, p. 71.

Way, W.

sent living material from Kedah (*Malay Peninsula*) to *Hort. Sing.* in *1924*. According to Mr HOLTTUM the record is not worth while.

Weaver

is cited as the collector of a plant in *Luzon, P.I.*, in MERRILL, Enum. Philip. Fl. Pl.

Weber

without known initials, collected plants in the *Kei* (= *Kai*) *Islands* in *1922*.

COLLECTIONS. In *Herb. Bog.*, including material of *Acacia auriculiformis*.

Weber, Charles Martin

(MERRILL informed C. A. BACKER that W. was possibly murdered by natives of Balabac), ex-soldier. From *1911–17* he collected plants in the *Philippines*, for example in *Mindanao* (March–July 1911).

Several plants were named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. *Herb. Manila:* 614 specim. *Philip. Isls* (acq. 1911/12), and other *Philippine* collections (acq. 1916/17). Dupl. in *Herb. Kew: Philip. Isls* plants (purch. 1912); *Paris:* 400 specim. (purch. 1912/13); *Herb. Sydney: Philip. plants* (by exch. 1912); *Herb. Field* (= *Nat. Hist.*) *Mus. Chicago:* 260 specim. *Philip. plants* (acq. 1912); *U.S. Nat. Herb. Wash.:* 305 *Philip.* orchids; some dupl. in *Herb.* DECAND. (*Geneva*), in GRAY *Herb.* (Cambr., Mass.), *Herb. Leyden* (1911–12), and *Herb. Edinburgh.*

Weber, Dr Friedrich

(1878, Zürich, Switzerland; x), geologist, till 1930 in the employ of the B.P.M. (Batavian Oil Company).

COLLECTIONS. *Herb. Bog.:* some plants from Jang Plateau, *E. Java* (coll. Oct. *1917*).

Weber, Gustav

District Judge in former Kaiser-Wilhelmsland, *NE. New Guinea*, where he collected on the mainland (*1912*), and in *Neu Pommern* (= *New Britain*) in the *Bismarck Archipelago* (*1912–13*).

COLLECTIONS. *Herb. Berl.:* 27 *nos* from *NE. New Guinea* (Sattelberg and Finschhafen), 10 *nos* from *New Britain* (Rabaul).

Weber, Max Wilhelm Carl

(1852, Bonn, Germany; 1927, Eerbeek, Gld, Holland), studied natural science and medicine in Germany; in 1879 appointed Prosector in the University of Amsterdam, in 1880 Lecturer in Anatomy at Utrecht University, and in 1883 Extraordinary Professor of Zoology at Amsterdam (in 1898 Director of the Zoological Museum besides); in 1922 he retired and settled at Eerbeek.

In the course of years he joined several expeditions, in 1881 an arctic expedition o/b the 'Willem Barentz'; in 1888/89 he made a private voyage to the D.E.I., from 1894–95 he stayed in South Africa; he visited British India too, and conducted the Siboga Expedition 1899/1900. His wife, Mrs A. WEBER-VAN BOSSE (see there), accompanied his Dutch East Indian voyages.

Author of numerous zoological papers.[1]

ITINERARY. *Malay Archipelago* (March *1888*–Apr. *1889*).[2] A stay of several months in *Sumatra West Coast:* Padang Highlands, visiting Lake Singkarak, Lake Manindjau, Danau di Atas, Sin(g)galang (June 1888), *etc.; W. Java* (July–Sept.): lakes near Buitenzorg, Tjipanas, Tjibodas, and Garoet (Telaga Bodas, Sitoe Bagendit); working for some weeks in the Foreigners' Laboratory at Buitenzorg;[3] *SW. Celebes:* Makassar (arrival Sept. 24), Maros, Bantimoeroeng, Principality of Tanette (Oct. 6), Pare Pare, Lake Sidenreng, Lake Tempe (Oct. 15–21), Pampanoea, Palima, Loka (S. slope G. Bonthain), exploring several rivers; sailing from Makassar (Nov. 21) to *Flores* (*Lesser Sunda Islands*), staying in the latter island till Jan. 9, *1889*, partly at Barabai; *via* Bima (*Soembawa*) to *Centr. Celebes:* Loewoe (Febr.), and a hasty visit to *P. Saleijer* (= *Salajar*).—'*Siboga*' *Expedition, 1899–1900.*[4] *cf. sub* A. WEBER-VAN BOSSE.

COLLECTIONS. *Herb. Leyden*, evidently of both expeditions (incl. *Sumatra* charophytes). In literature he is cited as the collector of plants in *Celebes, Ceram* (*Hepaticae*), *Flores, Soembawa, Salajar, Ambon, Halmaheira,* and *Sangihe Island.* He discovered *Dendrobium utile* J.J.S. *n.sp.*[5]

LITERATURE. (1) *E.g.* M. WEBER: 'Der Indo-australische Archipel und die Geschichte seiner Tierwelt' (Jena 1902).

(2) *cf.* Tijdschr. K.N.A.G. 1890, p. 454–462 (*Flores* and *Celebes*).

M. WEBER: 'Ethnographische Notizen über Flores und Celebes' (Int. Arch. Ethnogr. Leiden 3, 1890, Suppl. w. 8 pl. & ill.); 'Zoologische Ergebnisse einer Reise in Niederländisch-Ost-Indien' (Leiden, 4 vols, 1890–1907).

(3) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 14, *cf.* also p. 2.

(4) M. WEBER: 'Bulletin der Siboga-expeditie 1899, 1900' (Bull. Mij Bevord. Nat. Onderz. Ned. Kol. *nos* 26–35); 'Die Niederländische 'Siboga'-Expedition zur Untersuchung der marinen Fauna und Flora des Indischen Archipels und einige ihrer Resultate' (PETERM. Mitt. 46, 1900, p. 182–191); 'De Siboga-Expeditie, haar doel en enkele harer resultaten' (De Gids 64, 1900, p. 519–540); 'Verslag Siboga-Expeditie' (in Tijdschr. Ned. Dierk. Ver. 1900).

In co-operation with others: 'Résultats des explorations zoologiques, botaniques, océanographiques et géologiques, entreprises aux Indes néerlandaises orientales en 1899–1900, à bord du Siboga *etc.* (1902→), WEBER himself author of 'Introduction et description de l'expédition' (*l.c.* livr. 1, 1902, 159 pp., w. fig., maps, *etc.*).

Also in Encyclop. N.I. 3, 1919.

(5) *cf.* Icon. Bogor. *t.* 114.

BIOGRAPHICAL DATA. Amsterd. Stud. Almanak, 1923, p. 75–77, w. portr.; Wie is dat? 1935, p. 415; Nat. Tijdschr. N.I. 97, 1937, p. 54–57; Tijdschr. K.N.A.G. 54, 1937, p. 153–154; Vakbl. Biologen 18, 1937, p. 125–135; Obit. Not. Roy. Zool. Soc. 1938, p. 347–355; portr. in Bijdr. t. d. Dierk. 22, 1922 (Jubil. vol.); *l.c.* 27, 1939, p. 184, 331; Ned. Kruidk. Arch. 50, 1940, p. 203; *l.c.* 51, 1941, p. 375; *l.c.* 52, 1942, p. 413; *l.c.* 53, 1943, p. 255.

Weber-Van Bosse, Anna Antoinette

(1852, Amsterdam, Holland; 1942, Eerbeek, Gld, Holland), married young, was shortly after widowed, and then started her botanical studies at Amsterdam University. She married Prof. M. WEBER and accompanied him to the Dutch East Indies in 1888/89. During their stay in Java (July–Sept. 1888), she for some weeks studied a parasitic *Alga* of Tjibodas.[1] She visited Lapland, and also South Africa (1894–95), and was a member of the Siboga Expedition. In 1910 she was awarded the honorary Dr's degree of Utrecht University.

She wrote numerous phycological papers; for her merits Queen Wilhelmina made her a knight of Orange-Nassau.

The last years of her husband's life she assisted him in his work.

ITINERARY. *Malay Archipelago, 1888–89. cf. sub* MAX WEBER, also for literature.—*'Siboga' Expedition, 1899–1900.*[2] *Java:* staying some weeks at Buitenzorg for preparations; Batavia (Febr. 7–10, *1899*); Soerabaja, sailing on March 7; *Lombok*, W. coast (March 19–23); *Paternoster & Postillon Islands* (March 28–Apr. 8); *Soembawa:* Bima Bay (Apr. 8, some days); near *P. Savoe* (= *Sawoe*) (20), visiting kp. Seba (24); *P. Samau* (= *Semaoe*); *P. Solor* (30), Lamakera; *SW. Celebes:* Makassar (May 10–June 7), during which period the 'Siboga' went to Soerabaja to be overhauled; near *SE. Borneo* (June 10–14), mouth of the Mahakam (15); *Sulu Archipelago* (*Philippines*) (June 24–July 5); *N. Celebes:* Bay of Kwandang (= Koeandang) (July 8) and adjacent islands; *Sangir* (= *Sangihe*) & *Talaut* (= *Talaud*) *Islands* (23–27); *Ternate* (29); along the W. coast of *Halmahe(i)ra* (Aug. 3), visit to *Batjan* and *Groot-Obi;* anchoring on the SW. coast of *P. Gébé*, near *P. Fau* (10), which island was explored; N. coast of *Waigeo(u)* (12–15), visiting some bays; *Fam Islands; Doif Islands;* N. coast of *Kofiau;* W. coast of *Dutch New Guinea:* Segèt (18); *Daram Islands* (SE of Misoöl); *Pisang Islands*, Sabuda *etc.;* W. coast of *Dutch New Guinea:* Atjatoening (= Ati-ati-onin); *Gisser* (= *Geser*) (26–28); NE. coast of *Ceram:* Waroe (28–30); S. coast of *Miso(ö)l* (31); *P. Kelang* (W of Ceram); *Amboina* (= *Ambon*) (Sept. 4); *via* Manipi and Boeto(e)n(g) Straits; *P. Kabaëna; P. Saleijer* (= *Salajar*) (anchoring Sept. 26), staying a month during which the 'Siboga' was overhauled once more at Soerabaja; *P. Kabia* (Oct. 28); *Toekang-Besi Islands; P. Binongka; Lucipara Islands; Ambo(i)n(a)* (Nov. 14–19); N. coast of *Noesa laoet; Banda Islands; P. Tiur* (= *Tioör*) (Watoebela group); *P. Taäm; Kei* (= *Kai*) *Islands*, visiting Klein-Kei (= Toeal) (Dec. 12) and Groot-Kei (= Noehoetjoet), E(l)lat (16); *Aroe Islands* (Dobo); *Ambo(i)n(a)* (Jan. 2–7, *1900*); *P. Dammer* (= *Damar*) (9); *P. Roma(ng)*; between *E. Timor* and *Noesa Besi* (15); S. coast of *Timor; SE. Rot(t)i*, Bay of Boeka (27); *NE. Rot(t)i; P. Samaoe; P. Solor; Flores:* Ende(h), Ipih Bay; *E. Soembawa*, Sape(h) Bay; *P. Kangean* (N of Bali) (Febr. 20); back at Soerabaja (27).

COLLECTIONS. *Herb. Leyden:* principally *Algae*,[3] but also phanerogams,[4] from both expeditions; her *private herbarium* of *Algae* was presented in 1934.[5] Dupl. in *Herb. Brit. Mus.:* cryptogams (pres. 1894); *Herb. Univ. Kiel: Algae* trop. Asia; *Herb. N.Y. Bot. Gard.:* 30 spec. marine *Algae D.E.I.* (exch. 1907–08).

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 14; *cf.* also *l.c.* p. 24.

(2) A. WEBER-VAN BOSSE: 'Een jaar aan boord van H.M. Siboga' (Leiden 1904).

For other literature *cf. sub* M. WEBER.

(3) A. WEBER-VAN BOSSE: 'Note préliminaire sur les résultats algologiques de l'expédition du Siboga' (Ann. Jard. Bot. Buit. 17, 1901, p. 126–141, pl. 17–19); 'Notice sur quelques genres nouveaux d'Algues de l'Archipel Malaisien' (*l.c.* 24, 1911, p. 25–33); 'Liste des Algues du Siboga' (Siboga-Exp. Monogr. 59a–d, Leiden 1913–29).

A. WEBER-VAN BOSSE & M. FOSLIE: 'The Corallinaceae of the Siboga expedition' (Siboga-Exp. Monogr. 61, Leiden 1904).

(4) *Celebes Cyperaceae* by VALCKENIER SURINGAR in 'Het geslacht Cyperus' 1898, *passim. Pr.p.* elaborated in Nova Guinea vol. 8.

(5) J. KOSTER: 'Some preliminary notes on the Algae collection WEBER-VAN BOSSE' (Blumea 2, 1936, p. 229–234).

BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 2, 1905, p. 169, *t.* 144; F. A. F. C. Went in De Vrouw en haar Huis, May 1924; Wie is dat? 1935, p. 415; Blumea 1942, suppl. 2 ('Jubileum' vol.), p. 1–14 + portrs; Vakbl. Biologen 23, 1942, p. 37, 121; Ned. Kruidk. Arch. 50, 1940, p. 203; *l.c.* 52, 1942, p. 413.

Wechel, te

Civil Administrator of Boentoek, Doesoen Lands, *SE. Borneo*, sent excellent material of two rattan species (one new for science) to the Museum for Economic Botany at Buitenzorg, in *1911*, which was incorporated in the *Herb. For. Res. Inst. Buitenzorg.*

Weck, W.

German physician, originally in the employ of the D.E. Indian Government, later for pleasure and study in Bali.

Author of 'Heilkunde und Volkstum auf Bali' (Stuttgart 1937).

COLLECTIONS. *Herb. Bog.:* 11 *nos* of medicinal plants, mainly collected in the environs of Kintamani, *Bali* (pres. *1938*).

Weeda, Jan

(1910, Neurenberg, Bavaria, Germany; x), was educated in Holland; geologist, taking his Ph.Dr at Leyden in 1936; since 1936 in the employ of the B.P.M. (Batavian Oil Co.). At present of the Sarawak Oil Fields Ltd, Serian, Brunei.

COLLECTIONS. *Herb. Leyden:* some 13 plants in *Br. N. Borneo*, on *P. Mengaloen* (*Mangalum*) (coll. July–Aug. *1947*).

Weeda, Laurens Pieter

(1892, Salatiga, Java; 1924, ?), since 1911 in the employ of the D.E. Indian Forest Service, finally 'boscharchitect'. At first stationed in Pekalongan-Kendal, Central Java, since 1912 at the disposal of the Director of the Forest Research Institute, Buitenzorg.

COLLECTING LOCALITIES. *E. Java:* N. Soerabaja (Apr. *1918*); *W. Java:* Buitenzorg (Sept. 1918); *Centr. Java:* Margasari, with WOLFF VON WÜLFING (see there) (Oct. *1919*); Kradenan, Blora.

COLLECTIONS. *Herb. Bog.:* mainly plants from teak forests, collected on behalf of J. G. B. BEUMÉE (see there), and numbered in the latter's series.

Weehuizen, F.

pharmaceutical chemist, at the time teacher at the Medical School (S.T.O.V.I.A.), Batavia, the later Medical College.

COLLECTIONS. *Herb. Bog.:* > 50 *nos* from the environs of Batavia, Mr Cornelis, Pepango, *etc.* (coll. in *1916*, June *1917*, and *1919*), *W. Java.*

He discovered *Tenagocharis latifolia* BUCH. at Mr Cornelis, and collected fasciations of *Stachytarpheta.*

Weert van Velzen

is cited as the collector of *Pollinia rufispica* (STEUD.)HACK. on the Idjen Plateau (actually on G. Tengger!), *E. Java* (*cf.* KOORDERS, Exkurs. Flora 1, 1911, p. 105). In *Herb. Bog.;* from the label concerned it is evident that he was either manager or employee of a cattle-breeding farm at Ranoe Pani, G. Tengger.

Weghake, J. B.

of Boemi Redjo, Malang (*E. Java*), sent living orchids to *Hort. Bog.* in *1896*. They contained a specimen of *Chiloschista lunifera* J.J.S. (*cf.* J. J. SMITH, Die Orchideen von Java, 1905, p. 555).

Wehlburg, Cornelis

(1903, Bandoeng, Java; x), biologist, educated at Utrecht University; went to Java in 1935, where he was on the staff of the Java Sugar Experiment Station at Pasoeroean until the Japanese occupation. He resigned after World War II, was for some time employed at Wageningen, and subsequently left for the Argentine.

COLLECTING LOCALITIES. Occasionally some plants in *E. Java, before 1942.*—With Dr G. DE GROOT (see there) on the S slope of G. Smeroe, in the vicinity of Lake Ranoe Daroengan (Aug. *1942* –Febr. *1943*).

COLLECTIONS. *Herb. Pasoer.:* some odd numbers (collected 1939–42), and collection together with G. DE GROOT (several hundreds). Probably lost now.

Weichard, Dr Karl

is cited by SCHUSTER (in Pflanzenreich Heft 99, 1932) as the collector of *Cycas circinalis ssp. papuana* in former German (= *NE. New Guinea*), in Nov. *1890*. Probably the label was misread, the actual collector being WEINLAND (see there).

Weij . . ., *cf.* WEY . . .

Weinland, Dr Carl August Friedrich

(1864, Hohen Witlingen near Urach, SSE of Stuttgart, Germany; March 12, 1891, Finschhafen, former German New Guinea), physician, since 1889 in the employ of the German New Guinea Company in Kaiser-Wilhelmsland, alternately stationed at Stephansort and Finschhafen. He died of malaria.

Several plants were named after him.

COLLECTING LOCALITIES. *1889–91. NE. New Guinea* (former Kaiser-Wilhelmsland): Stephansort (Astrolabe Bay), Finschhafen, Sattelberg, Gulf of Huon.

COLLECTIONS. Part of his collection was lost during the hasty evacuation of Finschhafen on account of its extreme unhealthiness. *Herb. Berl.:* 421 *nos* of siphonogams.[1] Dupl. in *Herb. Bog.:* 202 *nos* (pres. 1902); *Herb. Leyden; Herb. Kew* (pres. 1902); *Herb. Bot. Gard. St Petersburg* (= *Leningrad*): 113 *nos* from *New Guinea; U.S. Nat. Herb. Wash.* (with *Herb.* DONNELL SMITH), several. Fern collection of 71 *nos* in *Herb.* CHRIST = *Paris.*[2]

LITERATURE. (1) Elaborated in SCHUMANN & LAUTERBACH: 'Nachträge z. Flora d. Deutschen Schutzgebietes i.d. Südsee' (Leipzig 1905).

(2) H. CHRIST: 'Reliquiae Weinlandianae' (Bull. Herb. BOISS. sér. 2, vol. 1, 1901, p. 445–460, 1 fig.).

BIOGRAPHICAL DATA. Bull. Herb. BOISS. sér. 2, vol. 1, 1901, p. 445–446; SCHUMANN & LAUTERBACH, Nachträge z. Flora d. Deutschen Schutzgebiete i.d. Südsee, Heft 1, 1905, p. 23–24; BACKER, Verkl. Woordenb., 1936.

Weismann, O. Th. J.

entered the employ of the D.E. Indian Forest Service on monthly pay; in 1935 appointed Forest Officer. He was stationed in Celebes and Dependencies, and operated in Boeton and Laiwoei (SE. Celebes), later in the employ of these self-governing districts.

COLLECTING LOCALITIES. *Centr. Celebes:* Malili (Dec. 21, *1932*);[1] *P. Moena* (*1936*); *SE. Celebes* (*1938* and *1941*).

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg:* F.R.I. bb. *nos* (see *sub* Forest Research Inst.); also in *Herb. Bog.*

LITERATURE. (1) *cf.* BLOEMBERGEN in Blumea 1, 1935, p. 287.

Weiss, Emanuel

(1835, Rokitnitz, Bohemen, Austria; May 25, 1870, o/b the corvette 'Friedrich'),[1] Naval Surgeon on the Austrian expedition in the 'Donau' and 'Friedrich', 1869–70. Early in May 1870 he made an inland excursion in Singapore Island; after his return he committed suicide as a result of some brain disease.

ITINERARY. *Expedition in the 'Donau' and 'Friedrich', 1869–70.* See *sub* WAWRA. The 'Friedrich' on which WEISS embarked, parted with the 'Donau' at Yokohama, the former being ordered to operate in Chinese waters. According to WAWRA the 'Friedrich' was delayed for a long time at *Singapore.*

COLLECTIONS. He collected in Japan, Hongkong, and the *Philippines* (*Luzon*, at Manila and Laguna de Bay). In the cited biography it is mentioned that WEISS wrote in his will to sell his herbarium either to Dr SCHEFFER at Buitenzorg or to Dr FENZL at Vienna. At the time of his death the Hungarian naturalist VON XANTUS was in Singapore, and bought it for the Pester Museum (= *Budapest*) (*c.* 5000 *nos*), and promised to give duplicates to Vienna. Evidently plants were presented to *Herb. Bog.* too in 1870; they were numbered in the H.B. series of that Herbarium. In *Herb. Berlin:* plants from Hongkong.[2] A set was presented to the *Herb. Bot. Zool. Soc. Vienna.*[3] In *Herb. Leyden:* 50 fern dupl. (pres. by Budapest).

LITERATURE. (1) *cf.* WAWRA in Oesterr. Bot. Zeitschr. 21, 1871, p. 359–360.

(2) *cf.* SYDOW, Deutscher Botaniker Kalender für 1899, p. 187.

(3) *cf.* R. VON WETTSTEIN, Die botanische Anstalten Wiens, 1894, p. 81.

BIOGRAPHICAL DATA. Verh. k.k. Bot. Zool. Ges. Wien 20, 1870, p. 621–625.

Wells & Lopez

Possibly this LOPEZ is identical with the one of the Forestry Bureau, Manila.

COLLECTIONS: *Herb. Manila:* 13 plants from *Luzon* (Baguio and Taal, *1925*).

Wells, A. E.

in 1898 Settlement officer; in the Forest Department *Malay Peninsula*, 1903–24, respectively as Assistant and Deputy Conservator of Forests; *cf. sub* Conservator of Forests series, Kepong.

Wells, T. H.

collector of a living specimen of *Eulophia papuana* BAIL. (*cf.* description in Queensl. Agric. Journ. N.S. 2, 1914, p. 75, pl. 38) in *E. New Guinea.* The plant was sent to the Brisb. Bot. Garden; dried material certainly in *Herb. Brisbane.*

Welsem, Johannes Wilhelmus Antonius van

(1866, Deventer, O., Holland; 1927, Batavia, Java), schoolmaster, since 1890 serving in the D.E.I. His first station was Depok (W. Java), about 1893 on Saparoea (island S of Ceram),[1] in 1904 transferred to Batavia, where he was attached to secondary schools from 1915–18, and subsequently at Bandoeng from 1919–22, retiring in the latter year, settling at Lembang, Priangan Residency, Java.

Together with C. A. BACKER (see there) he wrote a botanical text-book;[2] besides he published small papers in 'De Tropische Natuur'.

COLLECTING LOCALITIES. *c. 1916–18. W. Java:* Batavia, Lembang (1918), *etc.;* in *E. Java:* G. Smeroe, *etc.*

COLLECTIONS. *Herb. Bog.:* probably some hundreds of plants (a *no* 333 from G. Smeroe), but hardly any data are available. Also plants in *Herb. Mus. Econ. Bot. Buit.* = *Herb. For. Res. Inst. Buitenzorg.*

LITERATURE. (1) J. W. A. VAN WELSEM: 'Herinneringen uit de Molukken' (Trop. Nat. 4, 1915, p. 182–186; 5, 1916, p. 14–16, 72–76, w. several fig.; dealing with the beach fauna!).

(2) J. W. A. VAN WELSEM & C. A. BACKER: 'Leerboek der Plantkunde voor Nederlandsch-Indië' (Weltevreden 1920, 3rd ed.).

BIOGRAPHICAL DATA. Trop. Nat. 16, 1927, p. 109 + portr.

Welter, H. L.

Chemical Assistant at the Tea Experiment Station at Buitenzorg, 1907–12.

COLLECTIONS. *Herb. Pasoer.:* 3 *nos* from Buitenzorg, *W. Java* (coll. *1929*).

Wendover, R. F., *cf. sub* Forestry Bureau, Manila.

Wennerberg, Mag. D.

probably identical with HANS PETER WENNERBERG (1750–1821). The latter became a student in 1764, went to Lund in 1771, and in the next year passed his 'magister' examination. In 1776 he was a ship chaplain and made journeys to China and the East Indies in the years 1777–78, 1779–80, and 1781–82. In the latter year he passed a 'pastoral' examination, and in 1784 he was elected 'pastor' at Förslöv (inf. by O. GERTZ, Lund, to Dr H. C. D. DE WIT).

COLLECTIONS. *Herb. Lund.* Several plants collected by him in *Sumatra, Java,* and China, are cited in RETZIUS 'Observationes Botanicae' (*cf. l.c.* fasc. 4, 1786, p. 13, 16, 18, 23; and *l.c.* fasc. 5, 1789, p. 19, 29; and fasc. 6, 1791, p. 35).

Went, Friedrich August Ferdinand Christian

(1863, Amsterdam, Holland; 1935, Wassenaar, Z.H., Holland), botanist, from 1887–88 teacher at a secondary school at Dordrecht, in 1888 working for half a year at the Zoological Station at Naples, from 1889–91 teacher at The Hague. During the latter period he worked from March–July 1890 in the Foreigners' Laboratory at Buitenzorg.[1] From 1891–96 Director of the Sugar-cane Experiment Station at Kagok (Tegal, Centr. Java);[2] from 1896–1934 Professor of Botany at Utrecht University; in 1933 (after his official superannuation) appointed Extraordinary Professor at Leyden at the expense

of the University Fund. During many years president of the Natural Science Division of the Royal Academy, and a representative of the Dutch country at many congresses.

In 1901/02 he travelled in the West Indies, and visited Surinam for a second time in 1923; in 1929 he stayed for two months at Peradeniya (Ceylon).

Author of some text-books, of mainly phytopathological and physiological papers, and of some dealing with the family of the *Podostemonaceae*.[3]

He is commemorated in *Cochlospermum wentii* PULLE, and other plants.

COLLECTING LOCALITIES. Between *1890–96*. *W. Java:* Depok (Apr. 26, *1890*), Batavia, G. Salak, Tjiomas (May 2, 1890), Priangan Residency, Tjipetir (May 8, 1890), Telagabodas, G. Papandajan (1890); *Centr. Java:* G.Slamat with DE MONCHY (see there, in May *1892*); *E. Java:* G. Tengger.

After his return to Holland he revisited Java on several occasions, *viz* from June–Oct. 1914 to attend the Rubber Congress at Soerabaja, in 1927 on his way back from the 3rd Pac. Sci. Congr. at Tokyo, and in 1929 during the 4th Pac. Sci. Congress at Bandoeng.[4] On these occasions probably no collections were made.

COLLECTIONS. *Herb. Utrecht:* the greater part of his collections; dupl. in *Herb. Leyden;* plants from G. Slamat in *Herb. Bog.* under the name of DE MONCHY (see there).

LITERATURE. (1) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 16; and in *l.c.* p. 88, 91, 107–108,

(2) F. A. F. C. WENT & J. H. WAKKER: 'De ziekten van het suikerriet op Java, die niet door dieren veroorzaakt worden' (Leiden 1898).

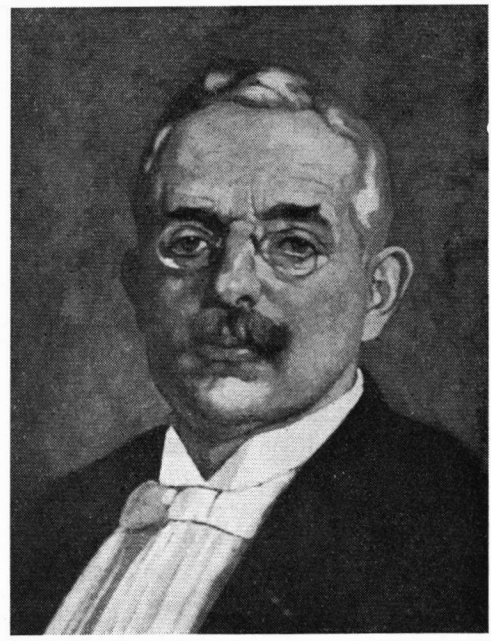
(3) F. A. F. C. WENT: 'De watervallenplant van Java, Cladopus Nymani MÖLL.' (Trop. Nat. 19, 1930, p. 53–60, 5 fig.); 'Watervallen van Java, Ceylon en Suriname en hun plantengroei' (Versl. Sect. Verg. Utr. Gen. K. en W. 3 Juni 1930, p. 72–82); *etc.*

(4) F. A. F. C. WENT: 'Reisbrieven I–IV' (Indische Mercuur of May 22, June 19, Aug. 14 and Sept. 25, 1929).

BIOGRAPHICAL DATA. Vakbl. Biologen 1932/33, p. 189–224, incl. bibliogr. & portr.; Bergcultures 9, 1935, p. 686; Nat. Tijdschr. N.I. 95, 1935, p. 164–170; Memorial Address (Herdenkingscollege) held in the Botanical Laboratory at Utrecht on Wednesday Oct. 9, 1935, 24 pp., w. portr. & bibliogr.; Wie is dat? 1935, p. 419; Kew Bull. 1935, p. 576–577; Ber. D.B.G. 53, II, Gen. Vers. Heft 1936, p. (97)–(120); BACKER, Verkl. Woordenb., 1936; Chron. Bot. 2, 1936, p. 236 + portr.; portr. in Album II of the 'Ned. Bot. Vereeniging'; Ned. Kruidk. Arch. 49, 1939, p. 450–451; *l.c.* 50, 1940, p. 203–204.

Went, Frits Warmolt

(1903, Utrecht, Holland; x), son of the former, botanist, educated at Utrecht University where he took his Ph.Dr's degree in 1927.[1] From 1928 employed in the laboratory of the Director of the Botanic Garden, Buitenzorg; in 1930 Chief of the Foreigners' Laboratory there. At the end of 1932 he went to the U.S.A., where he settled at Pasadena (Cal.), originally appointed Asst Professor, in the course of years rising to Ordinary Professor.



WENT SR

Author of many very important physiological papers.

COLLECTING LOCALITIES. *P. Sempoe* (S of E. Java) with H. BEGEMANN (see there) (Oct. 6, *1928*); *W. Java:* Telaga Warna (July *1929*); Tjibodas (Jan. *1931*),[2] G. Salak (May 31, 1931), *Purmerend* in the Bay of Batavia (March 4, *1932*), Tjibodas (1932).

COLLECTIONS. *Herb. Bog.*, only few numbers, mainly orchids and *Fungi*.

LITERATURE. (1) F. W. WENT: 'Wuchsstoff und Wachstum' (Thesis, Utrecht 1927).

(2) F. W. WENT: 'Over de sociologie der Epiphyten' (Hand. 6e N.I. Natuurwet. Congr. Bandoeng, Java, 1931 (1932), p. 381–389).

BIOGRAPHICAL DATA. Wie is dat? ed. 2–4; portr. in Ann. Jard. Bot. Buit. 45, 1935, pl. 3.

Wentholt, Frederick Anton

(1901, Siperok, Tapanoeli, Sumatra; x), attended the Colonial Agricultural School at Deventer (Holland); since 1930 Assistant Pedologist of the Soil Science Institute, Buitenzorg. In 1947 on sick-leave in Holland.

ITINERARY. *1932–33.*[1] *Dutch N. New Guinea:* Lake Sentani; *Vogelkop:* Manokwari Subdiv. (Oct. 4–28, 1932),[2] Angi Lakes, Sorong, War-Samson and Amberbaken District.—Nov. *1937*–Jan. *1938*.

Plain of the Wai Ransiki, between the lower course of this river and the coast, Manokwari Subdivision. —Dec. *1939. Dutch N. New Guinea:* basin of the Korime River (Grime and Sekoli plains), Hollandia Subdivision.—Febr. *1940. Vogelkop:* basin of the Legari River, Manokwari Subdivision.—*1940–41. Dutch S. New Guinea:* coastal region of Merauke (Oct. 15–31). Collecting was done by ANTA (itinerary *etc.* see there).

COLLECTIONS. *Hort. Bog.:* living orchids. For dried collections of the last expedition *cf. sub* ANTA, for 1939 *sub* H. L. HEYL.

LITERATURE. (1) *cf.* Rapport Studie-Commissie Nieuw Guinea. Uitg. I.C.v.W.O. (= Indian Comm. f. Scient. Research) 1932.

(2) *cf.* 'Voorloopig Verslag van de Bodemkundige Expeditie Noord-Nieuw-Guinea III. Onderafd. Manokwari. Het Angi-Angi-gebied en de kustvlakte bij Momi' (Mimeogr., 1934).

M. VAN DER VOORT & F. A. WENTHOLT: 'Soil expedition North New Guinea. II. The back-country of Manokwari' (Contrib. *no* 6 of the Chuo Noozi Sikenzyoo, Bogor (Djawa) 2603, 38 pp. + map).

Wenzel, Chester A.

(1882, Willesley, Mass., U.S.A.; 1929, probably Surigao, Mindanao, P.I.), at first school-teacher in the Philippines; subsequently cattle-breeder and professional plant collector in Mindanao.

He is commemorated in the genera *Wenzelia* MERR., and *Wenzelia* TANAKA, and in some plant species (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTING LOCALITIES. *Philippines. Leyte:* near Dagami, *etc.* (March *1913–15*, and possibly later too); *Mindanao*, evidently residing in the northern part at Surigao (till his death in *1929*).

COLLECTIONS. > 3300 *nos.* In *Herb. Manila: Philip.* plants (acq. 1913–16, from *Leyte etc.*), 846 *Philip.* plants (acq. 1929), 272 *Java* plants (purch. 1931) (no data on a Java voyage are known to us, neither to Dr E. D. MERRILL). Dupl. of the *Philippines* in *Herb. Bog.:* 540 *nos* from Surigao (pres. 1929); *Herb. Kew* (purch. 1928, 1932); *Univ. Zürich* (acq. 1928, 1931/32), *Herb.* DELESS. (*Geneva*): 1688 *nos* (acq. 1913–30), and some in *Herb.* DECAND. (*Geneva*); *Sydney:* 100 sheets (purch. 1915); *Herb. Berkeley* (Ca!.): > 800 dupl.; *Arn. Arbor.:* 160 *nos* (acq. 1931/32); GRAY *Herb.:* 164 *nos* (purch. 1916–17); *Field* (= *Nat. Hist.*) *Mus. Chicago:* 1623 *nos* (1914–16); *Herb. N.Y. Bot. Gard.:* 598 plants *P.I.; U.S. Nat. Herb. Wash.:* 744 *Philip.* plants; *Herb. Missouri Bot. Gard.*

The collection of *Leyte*, made in the years 1913–15, comprises about 1000 *nos* which were separately elaborated.[1]

LITERATURE. (1) E. D. MERRILL: 'Plantae Wenzelianae' (Philip. Journ. Sci. C. Bot. 8, 1913, p. 363–390; *l.c.* 9, 1914, p. 353–389; *l.c.* 10, 1915, p. 265–285).

Werkman

is cited as the collector of *Hydrocotyle sibthorpioides* LAMK from Tjisangiri, SE of Mandalagiri (Priangan Res., *W. Java*) in *1915;* material in *Herb. Bog., s.n.* (*cf.* BUWALDA in Blumea 2, 1936, p. 132).

Werner, Dr Eugen

(died before 1916), for nine months (since Nov. 1905) in the employ of the German New Guinea Company, stationed at Jomba Estate near Friedrich Wilhelmshafen; subsequently he rented the isle of Tabat from the Rhinish Mission, and made several collecting trips, more especially hunting for butterflies.

Several plants were named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

ITINERARY.[1] *NE. New Guinea*, former *Kaiser-Wilhelmsland.* Since Nov. *1905* stationed at Jomba, from where making minor tours to Kassub, Ou, exploring the upper course of the Gauta River (Jan. *1906*), *etc.* After having quitted the service of the Company, he visited: Prinz Friedrich Karlhafen, *Tab Isl.;* Hansemannberg (Oct. 12–Nov. 3), staying at Kamba, Mapóno, Grégare; the coast near Jabob (Astrolabe Bay); *Jabob* Isl. (Dec. 6), from where by boat (8) to Bongu, and proceeding to Kaliko as next base (staying 3 months, visiting Kadda, Bang, *etc.*); base at Damun (since March 5, *1907;* interrupted for a stay at Kaliko (May 31–June 10)), exploring the basin of the Kabenau; setting out (June 22) to the Finisterre Mts (climbing Mt Gelu, 1700 m alt., on the 25th for the 1st time), basin of the Mojo; leaving the mountain region (Aug. 30), to Bogadjim and proceeding by boat to the mouth of the Kabarang; Stephansort (*c.* 3 weeks); base on the Kabarang, at Rumba (Sept. 29); staying for some weeks on *Hansavulkan Island* (= *Manám*) (from Nov. 11), climbing the mountain, however, not reaching the crater; Nov. 27 returning to the mainland, Potsdamhafen, from where (29) on foot along the coast and the last part by proa to Friedrich Wilhelmshafen (arrival on Dec. 10); return to Europe. As he visited *Penang* and part of the mainland of the *Malay Peninsula* (which he calls the 'hills of the Sakai') in *1907*,[2] it seems probable that this visit took place during the home voyage.

COLLECTIONS. *Herb. Berl.:* > 153 orchids from *New Guinea* (acq. with *Herb.* SCHLECHTER in 1913); and possibly the remaining part of the collection, which, as far as concerns the other phanerogams, was elaborated in LAUTERBACH, Beitr. Flor. Papuas. (in ENGL. Bot. Jahrb. 1912 →); fern dupl. in *Herb. Leyden* (1907).

Lists of the collected ferns and mosses were published by ROSENSTOCK and HERZOG in WERNER's book,[3] while descriptions of the new ferns form a separate paper.[4] According to BURKILL[2] he collected some mosses in the *Malay Peninsula.* Mosses from both New Guinea and the Malay Peninsula were published.[5]

LITERATURE. (1) E. WERNER: 'Im westlichen Finisterregebirge und an der Nordküste von Deutsch-Neuguinea' (PETERM. Mitt. 55, 1909, p. 73–82, 107–113, map 7); 'Kaiser-Wilhelmsland. Beobachtungen und Erlebnisse in den Urwäldern Neuguineas' (Freiburg 1911, with textfig. + 1 map).

(2) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 133.
(3) *cf.* 'Kaiser-Wilhelmsland *etc.*' *l.c. sub* 1, p. 305–308.
(4) E. ROSENSTOCK in FEDDE Repert. 5, 1908, p. 34–44, 370–376.
(5) TH. HERZOG in Hedwigia 57, 1916, p. 242–244.

Werner, P. von, *cf. sub* Forest Research Institute, Buitenzorg.

Wersteed
is cited by MARTELLI[1] as the collector of *Pandanus aruensis* MARTELLI in *Dutch New Guinea* in *1907*. Mistake for 'G. M. VERSTEEG' (see there).
LITERATURE. (1) *cf.* Webbia 4, 1913, p. 420.

Wertheim, C. J. M.
(1859, Brussels, Belgium; 1931, The Hague, Holland), mining engineer who interrupted his years of study to accompany the expedition of the Royal Dutch Geographic Society to the Kai Islands (1888–90), as geologist-naturalist. To my knowledge botanical collections were exclusively made by JAHERI (see there for itiner., liter., *etc.*).
Mucuna wertheimii BURCK was named after him; the seeds of this species were collected by JAHERI (*cf.* BACKER, Verkl. Woordenb., 1936, also for additional biographical data on WERTHEIM).

Westenberg, Jacob
(1905, Pernau, Russia; x), came to Holland in 1915, studied botany at Amsterdam University where he took his Ph.Dr's degree in 1935. In 1936 he went to Java and was appointed in the Marine Biological Laboratory, Batavia.
COLLECTING LOCALITIES. *W. Java:* G. Tangkoeban Prahoe and Tjinjiroean (*c.* June *1936*); islands in the Bay of Batavia: *Dapoer* and *Kerkhof* (Apr. 30, *1938*); *W. Borneo* (March *1940*): Pontianak, the Kapoeas as far as Sanggau; *SE. Borneo* (May 1940): Barito region as far as Tandjoeng Djawa.
COLLECTIONS. Collection *1936* was dried and poisoned with sublimate in the Buitenzorg Herbarium, but subsequently sent back to WESTENBERG. *Herb. Bog.:* 10 *nos* of *Algae*, sea-weeds, *etc.*, coll. 1938 (1 from *Dapoer*).
Hort. Bog.: seeds from *Borneo* (pres. 1940).

Westenenk, Louis Constant
(1872, coffee estate Penawangan, Demak Div., Semarang, Java; 1930, The Hague, Holland), was educated in Holland, and in 1892 joined the D.E. Indian Civil Service. From 1893–97 he was stationed in W. Borneo, from 1897–1924 in Sumatra, *viz* in Sumatra West Coast (1897–1900), Atjeh (1900–04), Sumatra West Coast (1905–15), Resident of Benkoelen (1915–20), and Governor of Sumatra East Coast (1920–24); a Member of Council at Batavia, 1924–25; retired in 1925. Back in Holland he was for some years Adviser for Indonesian Students; in 1928 Government Director of the Netherlands Indian Airlines, and since 1929 *ditto* of the Royal Dutch Airlines (K.L.M.).
Author of some popular books, and some small ethnological papers on Sumatra[1] and Borneo. He brought about the *Rafflesia* reservates in Benkoelen.
Cordiglottis westenenkii J.J.S. was named after him.
COLLECTING LOCALITIES. *c. 1915–18. S. Sumatra:* Benkoelen Res.; Kepahiang (Palembang). —*1918. P. Mega* (N of Enggano), *P. Enggano*, Benkoelen Res.
COLLECTIONS. *Herb.* and *Hort. Bog.:* few plants.
LITERATURE. (1) L. C. WESTENENK: 'Simaloer. Bijdrage tot de kennis van dit eiland' (Tijdschr. K.N.A.G. 21, 1904, p. 65–87); 'De Minangkabausche Nagari' (Med. Encyclop. Bur. no 17, 1918, 149 pp.); 'Waar mensch en tijger buren zijn' ('s-Gravenhage 1927); 'Het rijk van Bittertong' ('s-Gravenhage 1932); and others.
BIOGRAPHICAL DATA. In WESTENENK, Het rijk van Bittertong, *l.c.* p. 135–256 + portr.; BACKER, Verkl. Woordenb., 1936.

Wester, Peter Johnson
(1887, Arbrå, Sweden; ?), horticulturist, on the staff of the Bureau of Agriculture, Manila, P.I., 1911–25; from 1917–19 Adviser Dept Mindanao-Sulu. In 1915 he paid a visit to Java to investigate various cultures.
Author of several papers on *Citrus* and other useful plants of the Philippines in the Philip. Agric. Review 1915–21.[1]
COLLECTING LOCALITIES. *c. 1915–17. Philippines. Luzon:* Abra, Ilocos Norte, Baguio (Benguet); Lamao (Bataän), Union Prov., Manila, Camarines, Albay, Sorsogon, *etc.; Mindanao, Cebu, Bohol.*
COLLECTIONS. *Herb. Manila* (acq. 1915–17), partly numbered in the B.S. series (*cf. sub* Bureau of Science), partly with private numbers. Mainly food plants (many *Citrus sp.*).
LITERATURE. (1) And of 'The food plants of the Philippines' (Bull. Bur. Agric. P.I. *no* 39, 3rd edit., revised 1924).
BIOGRAPHICAL DATA. Amer. Men of Sci. 1927.

Westerhout, J. B.
a Dutch inhabitant of Malacca, in 1832 put in charge of Naning, and in 1837 appointed Assistant Resident of Malacca; friend of GRIFFITH, who sent plants to the latter from Keru between Ayer Panas and Tebong, *Malay Peninsula*,[1] probably in the forties.
Arenga westerhoutii GRIFF. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).
COLLECTIONS. *cf. sub* GRIFFITH.
LITERATURE. (1) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 134, 182.

Westermann, Jan Hugo
(1906, Loosdrecht, U., Holland; x), geologist, educated at Utrecht University (Ph.Dr 1932), joined the B.P.M. (Batavian Oil Company) in 1934. After a short stay at Pladjoe (S. Sumatra), he

worked for three years in the Barito basin, SE. Borneo. In September 1937 he was transferred to Babo, Dutch SW. New Guinea, in the employ of the New Guinea Oil Company. After European leave in 1939, he departed to Venezuela for the Caribbean Petroleum Co.; from Nov. 1943–March 1946 in the employ of the D.E.I. Government, stationed successively at Sydney, Melbourne, Brisbane, and after the Japanese capitulation at Batavia; subsequently working for the Shell Co. in Holland and Colombia; from Dec. 1946 onwards Director International Office for the Protection of Nature, stationed at Amsterdam.

COLLECTIONS. *Herb. Bog.:* material of *Melaleuca* (leaves) and *Baeckea* from the vicinity of Babo, *SW. New Guinea* (coll. Oct. *1937*).

Westpalm van Hoorn

collected some medicinal plants at Tjigombong, *W. Java*, on behalf of KOORDERS in *1900;* material in *Herb. Bog.*

In *1895* he sent some coffee varieties to *Hort. Bog.*

Wethmar, Alexander Godert

(1893, Makassar, Celebes; x), was educated at the Agricultural College, Wageningen (Holland); from 1919–22 Consulting Agriculturist at Buitenzorg (W. Java) and Tapanoeli (NW. Sumatra); subsequently on the staff of the Java Sugar Experiment Station at Pasoeroean, as Group-Adviser at Kediri from 1923–37, and *ditto* at Djokja from 1937–41; since 1941 Agriculturist at Pasoeroean; retired in 1947.

COLLECTIONS. *Herb. Pasoer.:* 12 *nos* from Kediri, *E. Java* (coll. *1927–28*).

Weij, Hotze Gijsbert van der

(1906, Amsterdam, Holland; x), botanist, educated at Utrecht University, where he took his Ph. Dr's degree in 1932. From 1934–46 on the staff of the Deli Experiment Station (Medan Sumatra East Coast), subsequently Head of the Agricultural Service of the Deli-Batavia Company; after his evacuation to Holland, he returned to Medan in 1947.

COLLECTING LOCALITIES. *Sumatra East Coast* (Sept. 27, *1934*); also towards the end of 1934, or early in *1935*.

COLLECTIONS. *Herb. Bog.:* 1 specim. of *Exacum tetragonum* ROXB. and some ferns; *Herb. Deli Exp. Stat.:* few numbers.

Weyrich, Heinrich

(1828, Livonia; ? , ?), studied medicine at Dorpat (M.D. 1851); entered the Russian Navy as a surgeon, and accompanied Admiral PUTIATIN's naval expedition to Eastern Asia,[1] in 1852, at first sailing on the 'Pallas', but later transferred to the 'Fearless' (Vostok). He availed himself of every stay of the vessel to botanize.

He is commemorated in *Rhododendron weyrichii* MAXIM., *Cirsium* (*Cnicus*) *weyrichii* MAXIM., *etc.*

COLLECTIONS. *Herb. Bot. Gard. St Petersb.* (= *Leningrad*): plants from Japan and the *Philippines.*[2]

LITERATURE. (1) *cf.* Acta Hort. Petrop. 2, 1873, p. 250; ENGL. Bot. Jahrb. 9, 1888, p. 455; BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 618; Trav. Mus. Bot. Acad. Sci. St Pétersb. 4, 1908, p. 17.

(2) *cf.* W. H. LIPSKY in 'Gerbarii Imperatorskago S. Petersburgskago Botanischeskago Sada k kontsu ego 75-lietniago sushchestvovaniia (1823–1898)' 2nd ed. 1908, p. 192.

Whampoa, H. A. G. (or H. A. K.)

of Singapore, presented plants and seeds to *Hort. Sing.* in *1879* and *1881*.

White

about 1841 Chaplain of Singapore, collected plants and gave them to Dr THEODORE E. CANTOR. The latter, M.D. of the Bengal Medical Service, visited and collected in the island of Chusan in 1840 and 1841; his plant collections were identified and described by GRIFFITH[1] and are preserved in *Herb. Kew*, and *Cambridge*. His collection includes the plants collected by WHITE in the Straits, in all 73 species, incl. some ferns and lycopods (enumerated by GRIFFITH).

LITERATURE. (1) W. GRIFFITH: 'Some account of the botanical collection brought from the eastward in 1841 by Dr Cantor' (Journ. Asiat. Soc. Bengal 23, 1854, p. 623–650, 4 pl.).

White

of Reeds Beds, near Adelaide, S. Australia, was recorded in 'L'Exploration' of July 1, 1880, to have departed for New Guinea, for the purpose of making natural history investigations there.[1] The voyage was planned to take 2 years. It seems doubtful whether plant collections were made.

LITERATURE. (1) *cf.* Ind. Gids 1880[2], p. 306.

White, Cyril Tenison

(1890, Brisbane, Queensland, Australia; x), was appointed Pupil Assistant to F. M. BAILEY (his grandfather), Colonial Botanist of Queensland, in 1905; Acting Government Botanist in 1917; Government Botanist of Queensland in 1918. He received an invitation from his Excellency Sir J. H. P. MURRAY, Lt Gov. of Papua, to visit the Territory for the purpose of studying its vegetation in June 1918.[1] In 1944 he visited Papua with Dr H. E. DADSWELL, lecturing for the forestry units; in 1945 he visited the island once more.[2]

Author of several papers on the flora of Queensland, and elaborator of some New Guinea collections (see *sub* BRASS, LANE-POOLE, *etc.*).

Psychotria, *Mussaenda*, *Ixora whitei* SP. MOORE, and numerous other plants were named after him.

ITINERARY. *1918. SE. New Guinea, Papua:* after a few days at Port Moresby, leaving in company with the Papuan Government geologist EVAN R. STANLEY for the Sogeri Plateau and Javararie (= Iawarere), *via* Sapphire Creek and the Astrolabe Range (about 2000 ft); after spending a fortnight (July 26–Aug. 2)[1] in this region, he returned to Port Moresby and after a few days' stay left for Yule Island; in Yule Island making a journey over

to the mainland (Mafulu District, Aug. 5–21), up the Ethel River as far as Bioto, and a march of 5 days to Bella Vista (between Dilava and Mafulu, Ranges about Mafulu, 4000 ft). In total from 5 to 6 weeks of actual collecting was spent in the field. —*1944*. NE. New Guinea (6 weeks in July–Aug.),[2] headquarters at Lae.—*1945*. On the return voyage from the Solomon Islands visiting the Mandated Territory once more, *viz* Wau (Morobe Distr.) and the Bulolo Valley.

COLLECTIONS. *Herb. Brisbane: c.* 800 species of vascular *New Guinea* plants (coll. *1918*).[3] Dupl. *New Guinea* plants in *Herb. Berl.; Sydney; Herb. Kew: New Guinea* plants (pres. 1920); *Brit. Mus.; Arn. Arbor*. Time did not permit of much collecting in 1918.

In *1944* the collected plants were given N.G.F. (= New Guinea Forces, see there) numbers; also at *Brisbane* with the small collection *1945*.

LITERATURE. (1) *cf.* Ann. Rep. Papua 1918/19, p. 75.

(2) C. T. WHITE: 'New Guinea Timbers' (Queensl. Agric. Journ. Nov. 1944, 4 pp., 4 pl.).

H. E. DADSWELL: 'Report on visit to the Mandated Territory of New Guinea July–August 1944' (Div. For. Products, Counc. f. Scient. & Industr. Research, S. Melbourne, 1944, 22 pp., 33 fig., mimeogr., distrib. restr.); 'Timbers of the New Guinea region' (Trop. Woods 83, 1945, p. 1–14).

(3) R. S. ROGERS & C. T. WHITE: 'A contribution to the orchidaceous flora of Papua (British New Guinea)' (Transact. Roy. Soc. South Austr. 44, 1920, p. 110–119, pl. 5–8).

SP. LE M. MOORE: 'Acanthaceae Papuanae' (Journ. Bot. 58, 1920, p. 190–195).

C. T. WHITE: 'A contribution to our knowledge of the flora of Papua (Brit. N.G.)' (Proc. Roy. Soc. Queensl. 34, 1922, p. 5–65; including general notes on the vegetation).

White, J. Th.

(1893, Semarang, Java; Oct. 1945, murdered by extremists, near Buitenzorg, Java), agriculturist, educated at Wageningen Agricultural College, where he took his Dr's degree in 1926; for many years Assistant Agrogeologist and subsequently Chief of the Laboratory for Agrogeology and Soil Investigation at Wageningen; since 1930 Chief of the Pedological Institute at Buitenzorg.

COLLECTIONS. *Herb. Bog.:* material of *Rhynchospora* and *Dimeria* from *Java* (coll. Aug. *1933*).

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 476–477.

Whitehead, John

(1860, Muswell Hill, England; June 2, 1899, Hainan, China), ornithologist who incidentally collected plants.

He is commemorated in *Rhododendron* and in *Kuhlhasseltia whiteheadii* RENDLE.

ITINERARY.[1] Leaving England in Oct. *1884: Singapore;* trip of 3 months to *Malacca:* Alor Gajah, Pulo Sebang (end of Dec. →), Merlimau (end of Jan. *1885*→), Chin Chin (Febr. 17–24), trip to G. Ophir in Johore (Febr. 25–March 4), Chin Chin, Kesang, Malacca town (March 5), and sailing for *Singapore* again (8); sailing (Apr. 1) for *Br. N. Borneo: Labuan;* Sandakan (Apr. 10), *P. Gaya* (Apr. 28–May 8), Padas River, Patatan, return to *Labuan* (May 19), Padas River (June 1), Mempakol, Gadong (June 5), ascending the Padas River (till



C. T. WHITE

June 14), back at Mempakol (17), *Labuan;* leaving (Aug. 24) for Kudat (arriving Aug. 27); setting out to the Benkoker (= Bengkoka) River (31); back to Kudat (Nov. 16); *Labuan* (Nov. 22–end of Jan. *1886*), making a trip to *Singapore* and back during that period; leaving *Labuan* (Febr. 9) to set out on a Kinabalu expedition *via* the Tampassuk route, but not proceeding beyond Tampassuk-plain, from where he returned to Abai (25); departing (March 12) to *P. Gaya* and *Labuan; Br. N. Borneo:* Lawas River; Lukutan River (Apr. 10); Batu-Batu (17); to Mempakol (18); to *P. Tiga* (21); Qualla Penyu; *Labuan* (May 3); trip to *NW. Borneo:* Brunei (end of May–June). Aug. 1 sailing for Batavia, and Soerabaja (10), in *E. Java* visiting: Tosari (staying more than 2 months, leaving Oct. 25), G. Tengger; Lawang, Singosari; leaving Soerabaja (Nov. 19) for *Centr. Java:* Djokja, Magelang, Salatiga, Semarang; sailing (Dec. 16) for *Singapore.* Back at *Labuan* (Jan. 10, *1887*); *Br. N. Borneo:* start (Jan. 25) for Mt Kinabalu by Tampassuk route; collecting in the highlands (–Apr. 16), but once more failing to reach the higher altitudes; *Labuan,* leaving (June 18) for the *Philippines: Palawan* (Taguso), on Aug. 2 going to Blegi to make an abortive attempt to reach the highlands of the island; returning to *Labuan* (first half of Oct.); starting again (mid-Dec.) on an *expedition to Mt Kinabalu, via* Kiau,

this time reaching the highest summit (Febr. 11, *1888*), and exploring Kinokok Valley (March), returning in April.[1]—*1895–96* (according to Biogr. Index BRITTEN & BOULGER from 1893 onwards). *Journey in the Philippines: Luzon*, Manila; sailing (Oct. 19, 1895) for *Mindanao*, in which island col-



WHITFORD

lecting on Mt Dulangan, a spur of Mt Halcon; back in *Luzon*, Manila (Febr. 16, 1896).[2] In *NW. Luzon* collecting was done in the highland of Lepanto.

COLLECTIONS. *Herb. Brit. Mus.:* small collection from Mt Kinabalu (purch. 1889); coll. from the *Philippines* (pres. 1895, 1897). The last collection was elaborated by RENDLE.[3] No data on possible botanical collections from *Java* and the *Malay Peninsula* are known to me.

LITERATURE. (1) J. WHITEHEAD: 'Exploration of Mount Kinabalu, North Borneo, with an appendix, giving full descriptions of the various species of mammals, birds, reptiles, insects, *etc.*, collected by the author in Borneo, Palawan, and Eastern Java' (London 1893; no collected plants mentioned).

O. FINSCH: 'JOHN WHITEHEAD's Reisen, besonders in Nord Borneo und seine Besteigung des Kina Balu' (Deutsche Geogr. Bl. 16, 1893, p. 283–301).

Itineraries also in Sarawak Mus. Journ. 2, 1915, p. 152–157.

(2) *cf.* MERRILL in Philip. Journ. Sci. sect. A, 1907, p. 184.

(3) A. B. RENDLE: 'New Philippine plants' (Journ. Bot. 34, 1896, p. 355–358).

BIOGRAPHICAL DATA. Biogr. Index BRITTEN & BOULGER in Journ. Bot. 37, 1899, p. 526, and *l.c.* 42, 1904, p. 384, and in 2nd ed. by RENDLE, 1931.

Whitford, Harry Nichols

(1872, Manhattan, Kansas, U.S.A.; 1941, Bronxville, New York, U.S.A.), from 1904–12 collector and Forester of the Bureau of Forestry, Manila, P.I.; later employed by the Rubber Manufacturer's Association at New York.

Author of some sylvicultural papers.[1]

Several plants were named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTING LOCALITIES. *Philippines, 1903–12. Luzon:* Prov. of Bataan, Lamao Forest Reserve (Apr.–July *1904;* Dec. 1904–May *1905;* Sept. 1905), Mt Mariveles, Lamao River, *etc.*;[2] Tayabas Prov.; *Negros* (May *1906*); and probably in several other localities.

COLLECTIONS. *Herb. Manila;* dupl. in *Herb. Berl., Herb. Leyden.* He partly used private numbers, but numbered in the F.B. series (see *sub* Forestry Bureau, Manila) too; in the latter together with HUTCHINSON (see there). In the years 1903/04, 537 *nos* from Bataan Prov. (*Luzon*) were presented to *Manila;* in 1904/05, 892 *nos* were brought together in the Lamao Forest Reserve.[3]

LITERATURE. (1) H. N. WHITFORD: 'Studies in the vegetation of the Philippines. I. The composition and volume of the Dipterocarp forests of the Philippines' (Philip. Journ. Sci. C. Bot. 4, 1909, p. 699–723, 7 pl.); 'The forests of the Philippines' (Philip. Bur. For. Bull. 10^1, 1911, p. 1–94, pl. 1–28, map; 10^2, 1911, p. 1–113, pl. 1–103).

(2) H. N. WHITFORD: 'The vegetation of the Lamao Forest Reserve' I–II (Philip. Journ. Sci. C. Bot. 1906, p. 373–431, 637–682, pl. 1–45, 1 map).

(3) Elaborated by E. D. MERRILL in 'The flora of the Lamao Forest Reserve' (Philip. Journ. Sci. C. Bot. 1, 1906, Suppl. p. 1–141).

Whiting, Marian Muriel

(? , London, England; x), spent part of her youth with her parents in Hongkong, which gave her a lifelong affection for the Far East; later she matriculated at London University, and subsequently spent two years at the Horticultural College, Swanley. In 1914 she made a trip to the U.S.A., and across the Pacific to Hongkong; in 1920 she went to Canton for two years, in this period for the first time collecting plants. Since 1926 she spends part of every year volunteering in the Kew Herbarium. In the thirties she made a 2nd world trip for pleasure, during which plants were collected (see below).

ITINERARY. Nov. *1934*–June *1935*. By cargo steamer (stopping at *Penang*, Port Swettenham, and *Singapore*) to Hongkong, spending 3 months between that island and Canton; brief stay in *Luzon* (*P.I.*): Manila (March/Apr. 1935, 3 days), collecting a few specimens, chiefly at Montalban. The rest of the trip was outside the Malaysian region.

COLLECTIONS. *Herb. Kew: Philip.* plants *etc.* (pres. 1935); she evidently collected at Honolulu too. In total *c.* 600 specimens (incl. 300 from Canada). Partly dupl. in *Canton Sun Yatsen Herb.*

Whitty, R. H.

from 1923–33 in the Forest Department *Malay Peninsula*, finally as reconnaissance Plantations Officer. He collected all over Malaya. For collections *cf. sub* Conservator of Forests series, Kepong.

Wichers, Jan Hendrik Gabriël

(1870, Koevorden, Dr., Holland; 1945, Norg, Dr., Holland), in 1891 appointed lieutenant in the D.E. Indian Army, in 1904 promoted to the rank of captain, retired in 1911. When stationed at Padang Pandjang (Sumatra West Coast) in 1907, he owned a large collection of living orchids.

Dendrobium wichersii SCHLTR and *Eria wichersii* SCHLTR were named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. In Febr. 1907 he presented material of his living collection to SCHLECHTER, who elaborated it together with his own collection.[1] Probably with *Herb.* SCHLECHTER in *Berlin Herb.*

LITERATURE. (1) R. SCHLECHTER: 'Beiträge zur Kenntnis der Orchidaceen Flora von Sumatra' (ENGL. Bot. Jahrb. 45, 1911, Beibl. *no* 104, p. 1–61).

cf. also J. J. SMITH in FEDDE Repert. 32, 1933, p. 129–386.

Wichmann, Carl Ernst Arthur

(1851, Hamburg, Germany; 1927, Hamburg), was educated at Leipsic (Germany) where he took his Ph.Dr's degree in 1874; from 1879–1921 Professor of Geology at Utrecht, Holland. His first voyage to the D.E.I. was made in 1888/89;[1] in 1903 he led an expedition to Dutch North New Guinea, the so-called WICHMANN expedition (see below).

Author of many important geological papers and of an extremely valuable history of New Guinea exploration.[2]

The Wichmann Mountains in Dutch New Guinea were named after him.

ITINERARY. WICHMANN *Expedition, 1903.*[3] After visiting Giri near Grissee (*E. Java*), WICHMANN departed to *Ternate* (staying Jan. 11–17); as the other members had not yet arrived, he availed himself of the opportunity to visit the *W. coast of New Guinea* (probably only collecting geologically), visiting: Fak-Fak, Sekar Bay, Fak-Fak; ascending the Belangkat (= Horst) River part of the way; the islands *Lakahia, Dranai*, and *Aidoema;* Fort du Bus (Jan. 25); islands *Sangnoes, Namatote, Kelemala, Adi, Dapit, Karas;* kp. Waresa (27); *Otar Isl.* (= *Samei*), Fak-Fak; touching at *Saparoea* and *Ambon;* back in *Ternate* (Febr. 2); departure of the expedition (7) to *Dutch N. New Guinea:* Andai, Sjeri (Geelvink Bay); tour to Wasian, W of Horna (Febr. 14–28), visiting G. Siep ('padang' on the slope!); several *islands in the Geelvink Bay* (March 2–7), incl. *P. Jatoewar* near Wakobi; Wendesi (= Windehsi); Manokwari (9); Humboldt Bay (13); fixing camp at Metoe Debi; exploring Jotefa Bay, trip to Timména (= Temena) River; Tobadi; Lake Sentani and Cyclop Mts (G. Pisero, G. Sinagai, G. Pantjana, *etc.*, from March 31–Apr. 19; reaching the pass on the 14th); after return from this trip both mantris of the Botanic Garden returned to Buitenzorg, and during the latter part of the expedition (for this reason not extracted) no botanical collections were made.

COLLECTIONS. Botanical collecting was done by ATASRIP and DJIBJA (see those) of the Botanical Garden at Buitenzorg, from February to April 1903; in *Herb. Bog.*;[4] dupl. in *Herb. Leyden.*

LITERATURE. (1) C. E. A. WICHMANN: 'Bericht über eine im Jahre 1888–89 im Auftrage der Niederländische geographische Gesellschaft ausgeführte Reise nach dem Indischen Archipel' (Leiden 1890–92, 3 vols); *cf.* also Tijdschr. K.N.A.G. 7. 1890, p. 907–994, and *l.c.* 9^1, 1892, p. 161–276, 5 pl.

(2) C. E. A. WICHMANN: 'Onderzoek van Nieuw Guinea in vroegere eeuwen' (Bull. Mij Bevord. Nat. Onderz. Ned. Kol. *no* 49); 'Entdeckungsgeschichte von Neu Guinea' (Nova Guinea vol. $1–2^{1-2}$, 1909–12).

(3) *cf.* Bull. Mij Bevord. Nat. Onderz. Ned. Kol. *nos* 42–47; Versl. Milit. Expl. Ned. N.G. 1907–15, Weltevreden 1920, p. 19–21.

H. A. LORENTZ: 'Eenige maanden onder de Papoea's' (Leiden 1905).

C. E. A. WICHMANN: 'Bericht über eine im Jahre 1903 ausgeführte Reise nach Neu Guinea' (Nova Guinea 4, 1917, xviii + 494 pp., 3 maps, 8 pl. and 171 ill.).

(4) TH. VALETON: 'Plantae Papuanae' (Bull. Dép. Agr. Ind. Néerl. *no* 10, 1907, 72 pp.; also in FEDDE Repert. 5, 1908, p. 377–397).

J. J. SMITH in Nova Guinea vol. 8.

BIOGRAPHICAL DATA. Who's who 1913; Tijdschr. K.N.A.G. 1928, p. 153; BACKER, Verkl. Woordenb., 1936.

Wichura, Max Ernst

(1817, Neisse, Silesia, Germany; Febr. 24/25, 1866, Berlin, Germany), jurist-botanist, educated at Breslau and Bonn; from 1859 till his death 'Regierungsrat' at Breslau. In 1856 he made a journey to Lapland. From 1859–62 First Botanist of the 'Preussische Expedition nach Ostasien' (see below). In November 1865 he got the oppertunity to go to Berlin for the study of his collections, but an unfortunate accident caused his premature death.

Besides of an itinerary of the expedition (in letters),[1] he is the author of some papers in German periodicals on hybridization in European plants; he had a lively interest in plant geography too.

He is commemorated in many plant names.

ITINERARY. *Prussian Expedition to East Asia, 1859–62.*[1] *cf.* also *sub* E. VON MARTENS, O. SCHOTTMÜLLER, and F. VON RICHTHOFEN. The scientific members embarked on the 'Thetis' and sailed from Danzig (Oct. 2, 1859); leaving Spithead (March 15, *1860*); Madeira; Rio de Janeiro; *W. Java:* Anjer (July 24–25); *Singapore* (July 30–Aug. 11); Japan; China (*1861*); Siam; leaving Shanghai (March) for Hongkong; *Philippines* (May 2–June 19, 1861), in *Luzon:* Manila (May 2–8), Pasig River; Laguna del Bay (14–17): Bunang Onang, St. Cruz, Mahahai; St. Paulo (18), Tanauan (19); Laguna de Taal (19), ascending the volcano (20), Tanauan (21–22, at least WICHURA), Calamba (23–27); Manila (May 28–June 1): in *Mindanao:* Samboanga (= Zamboanga) (June 13–18), making trips in the vicinity;

SW. Celebes: Makassar (July 9–17), visiting Maros and Bantimoeroeng (10–12); *E. Java:* Pasoeroean (arrival 21), making trips to Malang, and Griseh (= Grissee); by land *via* Modjokerto (*c.* 30), Kediri (31), Modjun (= Madioen) (Aug. 1), and on horseback (3–6) across the mountains to Solo in *Centr. Java, viz via* Karambandan (slope G. Lawu), Djokja (7), Magelang (8), Ambarawa (9), Semarang (10), Pekalongan (12), Cheribon in *W. Java* (13), Sumadang (14–15); excursion to crater of Mt Papandajan from Bandoeng (17–18) *via* Tjisurupan; *via* Tjiandjur to Tjipan(n)as (19–20, visit to PLOEM!); *via* Makmendon (= Megamendoeng) to Buitenzorg (20), Botanic Gardens (21); Batavia (Aug. 21–Sept. 24); WICHURA decided to stay behind in Java for the study of tropical nature; Buitenzorg (Sept. 25–Nov. 9), at first ill with malaria, later spending much time in the Gardens; Tjipanas, Sindanglaja (10), Tjiandjur (12), Bandung (13–14); Pengalengan (15 or 16–18), making trips to G. Tiga (17, not on the summit), and G. Malabar; Gedong-Banteng on G. Malabar (19–21), climbing the mountain on the 20th; Bandung (22–24); thrice visiting G. Tangkuban Prahu from Lembang (25–27); Bandung (28–30), Sindanglaja and Tjipanas (Dec. 1–2); Tjibodas (3), trips to Tjibeureum, Kedung Badak, G. Gedeh (4), and Pangrango (5); Sindanglaja (6); Buitenzorg (7, on the way thither visiting lake near Puntjak); leaving (10) for Batavia (11–14); embarking (15) for *Singapore* (19), sailing *via* Muntok (*Ban(g)ka*, 17), *Riouw* (18); travelling by land *via* Ceylon and Calcutta to Europe, leaving Singapore on Jan. 9, *1862*. The expedition in the meanwhile visited: *Banka*, Muntok (Sept. 12, 1861); *Singapore* (Sept. 15–Nov. 5); Bangkok; *Singapore* (Febr. 17–March 15, *1862*), and subsequently returned to Europe, while E. VON MARTENS (see there) set out alone on a voyage in the Malay Archipelago.

COLLECTIONS. *Herb. Berl.* Part of his *Java* plants are numbered upwards of 2300; *Herb. Bot. Gard. St Petersb.* (= *Leningrad*): 28 mosses *Mal. Arch.* Also WICHURA plants (perhaps not from the expedition) in *Herb. Schles. Ges. Breslau, Bot. Gard. Breslau*, and *Herb.* FRITZE in *Rybnik.*[2]

They were partly elaborated in WARBURG, Monsunia (1900).

LITERATURE. (1) 'Die Preussische Expedition nach Ost-Asien' (Berlin 1864–73, 7 vols + atlas; containing 4 vols Itinerary, 2 vols Zoology by E. VON MARTENS, and 1 vol. Botany (*Algae*) by G. VON MARTENS).

M. WICHURA: 'Aus 4 Welttheilen. Ein Reise-Tagebuch in Briefen' (Breslau 1868).

In geographic names the German 'u' instead of the Dutch 'oe' is used.

(2) *cf.* SYDOW, Deutscher Botaniker Kalender für 1899, p. 187.

BIOGRAPHICAL DATA. Verh. Bot. Ver. Prov. Brandenburg 7, 1865, p. xix–xxii; Bot. Zeitung 24, 1866, p. 111–112; in WICHURA, Aus vier Welttheilen, 1868, p. 452–456 + portr.; ENGLER in RÜBEZAHL Schles. Prov. Bl. 13, 1874, Heft 8, 9 pp. + portr. (*non vidi*); BACKER, Verkl. Woordenb., 1936.

Wickle, G. S. van

Forest Officer of the Forestry Bureau, Manila; P.I., is cited as the collector of the *nos* 897 and 701 in *Luzon* (*P.I.*) by MERRILL in Enum. Philip.Fl. Pl.

In 1903/04, 21 *nos* of plants collected by him in Prov. of Camarines Sur, *Luzon*, were presented to *Herb. Manila.*

Widjana, E., *cf. sub* Forest Research Institute, Buitenzorg.

Wiesenthal, Franz

(1879, Neurode i/Schlesien, Germany; x), Roman Catholic missionary who arrived in former Kaiser-Wilhemsland (= NE. New Guinea) on Nov. 5, 1910; he was successively stationed at Alexishafen (1910–16), Mugil (30 km NW of Alexishafen, 1916–32),[1] Gayaba (hinterland of Alexishafen, 1934–42), Mingende (in the Bismarck Mts, since June 1947). From 1932–34 he was on European leave, and from 1943–46 in Japanese captivity and subsequently in American hospitals and at Epping near Sydney (N.S.W.); in Nov. 1946 he returned to New Guinea.

COLLECTIONS. *Herb. Berl.:* some 80 plants collected at Alexishafen and in the environs, *Kaiser-Wilhelmsland* (= *NE. New Guinea*), in *1912–13.*[2]

LITERATURE. (1) Author of 'Gartenbau der Eingeborenen im Mugil Bezirke' (in Steyler Missionsboten ? 1926/27) (*non vidi*).

(2) Partly described in LAUTERBACH, Beitr. Flor. Papuas. (in ENGLER Bot. Jahrb. 1912–→).

Wight

a brother of ROBERT WIGHT (the latter since 1819 surgeon in the employ of the Madras Settlement, from 1826–28 Superintendent of the Botanic Garden at Madras).[1] He visited *Malacca* (? Mt Ophir, *somewhat later than 1818*)[2] and collected a few plants for R. WIGHT; *cf.* also *sub* DAUD.

COLLECTIONS in *Herb.* R. WIGHT = *Kew.* Many dupl. of *Herb.* WIGHT in *Herb.* DECAND. & DELESS. (*Geneva*), DE FRANQUEVILLE (*Paris*), *Roy. Bot. Gard. Edinb., Linn. Soc. Lond., Munich, Bot. Gard. St Petersb.* (= *Leningrad*), *Acad. Sci. ditto*, Baron ZSCHOCK (Austria, *ex Herb.* NEES), LEITGEB (Graz), *Vienna, Bot. Gard. Zürich.*

LITERATURE. (1) For further biographical data of ROBERT WIGHT see BACKER, Verkl. Woordenb., 1936.

(2) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 134 and 185.

Wigman, Hendrik Jan

(1846, Zutfen, Gld, Holland; 1923, Buitenzorg, Java), in the employ of the Botanic Gardens at Buitenzorg, Java, since 1869; in 1870 appointed Assistant Curator, in 1883 Curator; retired in 1912.

He laid out the Buitenzorg Economic Garden (Cultuurtuin) in 1875, and was for several years editor of the periodical Teysmannia. In 1904 he made an official tour to Merauke in Dutch South New Guinea to select grounds for a planned branch-establishment of the Buitenzorg Garden

(*cf. sub* TJ. A. WOUTERS). In 1909 he evidently paid a visit to this new garden.

Several plants were named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. *Hort. Bog.:* living plants from Merauke (*Dutch S. New Guinea*), *Timor* (Koepang and Deli (= Dilly)), and Tanah Gondem (?) in *1904*;[1] *ditto* from *Aroe, Kei* (= *Kai*), Merauke (*S. New Guinea*) and Adaoet (*P. Selaroe, Tanimbar*) in *1909*. Though he made no dried collections, his name may appear on labels of the Garden Herbarium at Buitenzorg.

LITERATURE. (1) *cf.* Versl. Pl. Tuin Buitenzorg for 1904, p. 84.

Wigman Jr, Hendrik Jan

(1879, Buitenzorg, Java; x), son of the former, from 1902–30 Assistant Curator of the Buitenzorg Botanic Gardens; subsequently retired and living in Holland.

COLLECTIONS. From tours in *W. Java* he brought living plants on behalf of *Hort. Bog., viz* from: Tjibodas & Pangrango (*1907*), Tjibodas and Koeripan (*1910*), Kawah Manoek (*1911*), Tjibodas (ferns, *1912*), *etc.* His name may appear on some herbarium labels, though this is uncertain.

Wigman, Miss I.

of Magelang (*Centr. Java*), sent living orchids to *Hort. Bog.* in *1910*.

Wij . . ., *cf.* WY . . .

Wilcox, James Fowler

(1823, Somersetshire, England; 1881, South Crafton, Australia), passed his youth at Sydney. He spent most of his time as a naturalist, giving special attention to botany and taxidermy. He accompanied the voyage of H.M.S. 'Rattlesnake' in 1846–50 under Capt. STANLEY (liter., itiner., *etc.*, see under J. MACGILLAVRY), as collector in the interests of the Norwich Museum. After this voyage he was engaged in natural history pursuits in New South Wales; later in business at Sydney, going to South Grafton early in 1856, finally settling there in 1857. He made many expeditions on the northern rivers of New South Wales after birds and plants; in *1876* he went to *New Guinea* with his son JAMES CLARENCE, with the same purpose. In the latter year a WILCOX accompanied D'ALBERTIS's (see there) second exploration of the Fly River.

Pleiococca wilcoxiana F.v.M. was named after him.

COLLECTIONS. Up to now it could not be traced whether he actually collected plants in New Guinea.

BIOGRAPHICAL DATA. Journ. & Proc. Roy. Soc. N.S.W. 42, 1908, p. 129–130.

Wilde, André Gerard de

(1925, Dordrecht, Z.H., Holland; x), studied for a year at the Academy for Plastic Arts at Rotterdam, but subsequently turned to botany and still later to medicine at Leyden University (in 1947/48 in his 3rd year). In 1946 he made a voyage to the D.E.I. for assisting displaced persons.

COLLECTING LOCALITIES. The voyage covered May 26–Aug. 13, *1946*. Collections were made in *W. Java:* Tg Priok (June 20–23), Batavia (22), Tjililitan (July 5), Batavia (5), Tg Priok (5–6); *P. Weh* (N of Sumatra): Sabang (20).

COLLECTIONS. About 150 plants, for the greater part in *private Herbarium;* some in *Herb. Leyden.*

Wiles, James

(*fl.* 1790–1806), gardener of R. A. SALISBURY; he accompanied the voyage of the 'Providence' under Capt. BLIGH (see there), and botanized in Oct. *1792* with CHRISTOPH. SMITH (see there) in Timor, Lesser Sunda Islands. From *Timor* and other islands visited during BLIGH's 2nd voyage, they brought useful plants for cultivation to the West Indies. In Febr. 1793 they landed 300 young breadfruits at Jamaica, which were placed under WILES's care in the Botanic Garden at Liguanae; in 1805 he was still in charge of the gardens; his further history is unknown. In 1810 the garden was sold by the House of Assembly.

COLLECTIONS. *Herb. Brit. Mus.:* plants collected on the voyage of the 'Providence' (acq. with *Herb.* BANKS), and *c.* 800 species of the same voyage with *Herb.* LAMBERT.[1] Also duplicates in *Herb.* DELESS. (*Geneva*), *ex Herb.* LAMBERT.[2]

LITERATURE. (1) *cf.* Advertisement of LAMBERT sale in Athenaeum 1842, p. 44; Journ. Bot. 60, 1922, p. 24.

(2) *cf.* URBAN, Symbol. Antill., 3, 1902/03, p. 140.

BIOGRAPHICAL DATA. Kew Bull. 1891, p. 300–301; Biogr. Index BRITTEN & BOULGER in Journ. Bot. 37, 1899, p. 83, and in 2nd ed. by RENDLE, 1931.

Wiljes-Hissink, Elisabeth Adrienne de

(1910, Batavia, Java; x), studied horticulture at Wageningen Agricultural College; in 1938 she married H. O. DE WILJES and left for the D.E.I.

COLLECTING LOCALITIES. *1938–41. Sumatra East Coast:* at Bindjei, Brastagi, Prapat.—*1946–48. E. Borneo:* Samarinda; *SW. Celebes:* Kalosi, Pinrang; *Moluccas: Ambon.*

COLLECTIONS. *Ambon* plants (coll. *1947–48*), 105 *nos*, in *Herb. Leyden;* some dupl. in *Herb. Arn. Arbor.* Other collections lost.

Wilkes, Charles

(1798, New York, U.S.A.; 1877, Washington, D.C., U.S.A.), naval officer; Commander of the U.S. Exploring Expedition from 1838–42,[1] which was equipped in the interests of whale fishery in southern seas, and besides was instructed to make scientific observations in every branch of natural history. He entered the service of the American Navy in 1818, and was pensioned off with the rank of Rear-Admiral in 1866.

Some plants were named after him, and the genus *Wilkesia* A. GRAY.

ITINERARY. WILKES *U.S. Exploring Expedition, 1838–42*, in the 'Peacock', 'Porpoise', *etc.*[1] [2] Leav-

ing the American coast (Aug. 25, 1838); Madeira, Cape Verde Islands, S. America, Tahiti, Samoa, Australia, New Zealand, Fiji, Sandwich Islands, N. and S. America; part of the expedition was near *Luzon* (*Philippines*) as early as Nov. *1841*, while another part still visited the Carolines before joining the others at Manila; MERRILL[2] cites the following data on trips in the *Philippines: Luzon:* Manila (Jan. 13–19, *1842*), collecting in the vicinity of the city and on a trip inland up the Pasig River and across Laguna de Bay; PICKERING (see there) and ELD proceeded to Santa Cruz and Majaijai, from the latter place ascending Mt Majaijai (= Banajao) (Jan. 17), while RICH (see there), DANA and BRACKENRIDGE (see there) went to the town of Bay with the object of proceeding to Taal Volcano, but finding the latter trip impractible they went to Los Baños and made a partial ascent of Mt Maquiling, being later joined by PICKERING and ELD and then returning to Manila; leaving Manila (20) and sailing southward; *Mindanao:* Caldera near Zamboanga (31); Soung (= Jolo) on the Island of *Sulu* or *Jolo* (Febr. 4–5, also visiting *Marangas* islet); *Mangsee* (= *Mangsi*) *Islands* (Febr. 8–12), between Balabac and Banguey Island; *Singapore* (19–25) (other ships of the expedition had arrived on Jan. 22, and Febr. 16); proceeding through the straits of Banka and Sunda to the Cape of Good Hope, St Helena, *etc.*, reaching New York in June 1842.

COLLECTIONS. The botanical collections were made by WILLIAM RICH, the botanist of the expedition, by J. D. BRACKENRIDGE, assistant-botanist, and by CH. PICKERING, zoologist (see those).[3] Possibly the actual collectors are not mentioned on the labels, the plants are generally cited as collected by 'WILKES U.S. Expl. Expedition'. The 1st set in *U.S. Nat. Herb. Wash.* even lacks many specimens; partial sets in GRAY *Herb.* (Cambr., Mass.); *Herb. Columbia Univ.* (on loan in *Herb. N.Y. Bot. Gard.*); *Herb. N.Y. Bot. Gard.*: 40 *nos* + set Columbia Univers. + set pres. in 1900 by Mr JOHN J. CROOKE; *Herb. Missouri Bot. Gard. St Louis, Herb. Kew, Herb. Vienna* (orchids with *Herb.* REICHENBACH); *? Herb. Philadelphia:* plants Orient voyage, 1844–45;[4] *Herb. Bot. Gard. St Petersb.* (= *Leningrad*): 176 plants with *Herb.* GRAY, *etc.* In total about 9674 *nos* comprising 50.000 specimens have been collected; they include 381 *nos* from *Luzon*, 102 from *Mindanao*, 58 from the *Sulu Islands*, 80 from *Mangsee*, and 80 from *Singapore.*[5]

According to MERRILL it seems evident that a considerable number of the WILKES Expedition Philippine flowering plants are no longer extant.[6]

Numerous papers on the collections were published.[7]

LITERATURE. (1) Several volumes of the 'WILKES U.S. Exploring Expedition' were published officially and unofficially. CH. WILKES is the author of the 'Narrative' (vol. 1–5, 1844 + atlas) and of the hydrographical and meteorological results.

CH. WILKES: 'Voyage round the world, embracing the principal events of the narrative of the U.S.'s Exploring Expedition' (New York 1851); and numerous other, unofficial, issues in 5 or less volumes.

F. S. COLLINS: 'The botanical and other papers of the WILKES Exploring Expedition' (Rhodora 14, 1912, p. 57–68).

D. C. HASKELL: 'The United States Exploring Expedition, 1838–1842 and its publications 1844–1874' (Bull. N.Y. Public Library 44, 1940, p. 93–112, prelim. publ.; New York 1942).

'Centenary celebration. The WILKES exploring expedition of the United States Navy' (Proc. Amer. Philos. Soc. 82, 1940, p. 517–800; by several authors, *e.g.* H. H. BARTLETT).

(2) Data partly derived from: LASÈGUE, Mus. Bot. DELESS., 1845, p. 388–389; MARTIUS, Flor. Bras., vol. 1, pars 1, p. 144–146; MERRILL in Philip. Journ. Sci. C. Bot. 3, 1908, p. 73 *seq.*

(3) *cf.* MERRILL, A discussion and bibliography of Philip. Flow. Plants (vol. 4 of Enum. Philip. Fl. Pl., 1926), p. 49.

(4) *cf.* Bull. Torr. Bot. Club N.Y. 8, 1881, p. 42–44.

(5) *cf.* Bot. Zeitung 1, 1843, p. 750–751; LASÈGUE, Mus. Bot. DELESS., 1845, p. 389; and H. H. BARTLETT in Proc. Amer. Philos. Soc. 82, 1940, p. 678.

(6) PICKERING mentions in his 'The geographical distribution of Animals and Plants', many species of Philippine plants (pt 2, 1876, p. 491–524 in unofficial issue of vol. 19 of the WILKES Expl. Exp.) hitherto not found in the herbaria. The book ends abruptly at page 524 in the list of Mangsee plants, and apparently no more was published. This enumeration of plants, incl. ferns, is for the most part with identifications to the genus or family only.

(7) ASA GRAY: 'Botany of the U.S. Expl. Exp. during the years 1838–42 under the Command of Capt. WILKES, U.S.N.. Phanerogamia vol. 1' (vol. 15 of the whole, 1854, p. 1–777, + atlas, pl. 1–100), and other issues.

W. D. BRACKENRIDGE: 'Botany, Cryptogamia, Filices including Lycopodiaceae and Hydropterides' (vol. 16 *l.c.*, 1854; atlas 1855).

The mosses by W. S. SULLIVANT in Proc. Amer. Acad. Arts Sci. 3, 1855, p. 181–185, and in the publications of the 'WILKES Expedition' (1859, p. 1–32, pl. 1–26; corresponding with the missing p. 1–112 of vol. 17).

A. GRAY: 'Characters of new and obscure species of plants of the monopetalous orders in the collection of the U.S. South Pacif. Expl. Exp. under Capt. CH. WILKES, U.S.N., with occasional remarks, *etc.*' (Proc. Americ. Acad. 5, 1862, p. 321–352; the only Philippine plant mentioned is *Gaultheria luzonica* A. GRAY on p. 324).

'Botany' (no author's name) (vol. 17 of the whole, 1874, + atlas, 29 pl.).

H. G. REICHENBACH: 'Orchideae Wilkesianae indescriptae' (Xenia Orch. 3, 1878, p. 27–32; Otia Bot. Hamburg 1, 1878, p. 50–56).

J. H. MAIDEN: 'On the identification of a species of Eucalyptus from the Philippines' (Proc. U.S. Nat. Mus. 26, 1903, p. 691–692).

E. D. MERRILL: 'The Philippine plants collected by the WILKES U.S. Exploring Expedition' (Philip. Journ. Sci. C. Bot. 3, 1908, p. 73–84, pl. 1–4).

BIOGRAPHICAL DATA. Portr. in WILKES, Narrative, *l.c.* vol. 1; BACKER, Verkl. Woordenb., 1936; portr. in D. C. HASKELL, The U.S. Expl. Exp., 1838–1842, and its publications 1844–1874 (New York 1942). His autobiography *etc.* is in the MSS division of Library of Congress, Washington.

Williams, Major C. A.

COLLECTIONS. 1 *Philip.* plant in *U.S. Nat. Herb. Wash.*

Williams, G.

planter of Siliau in Negri Sembilan, *Malay Peninsula;* he studied and collected orchids about *1915–18* near Siliau (cf. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, nos 4–5).

COLLECTIONS. In *Herb. ? Sing.*

Williams, Robert Statham

(1859, Minneapolis, Minn., U.S.A.; 1945, Minneapolis, Minn., U.S.A.), was employed in the mines of Montana from 1879–98, in Alaska from 1898–99; since 1899 on the staff (Museum Aid) of the New York Botanical Garden. During his first ten years at this institution, he was sent on several extended collecting trips, *viz* to Bolivia (1901–03), the Philippine Islands (1903–05, see below), and to Panama (1908). He was sent to Manila by the board of Managers of that institution in September 1903, to make collections in co-operation with the Insular Bureaus of Agriculture and Forestry, in order to make a commencement of botanical exploration of the Philippine Archipelago.[1] After his return from Panama he was Assistant Curator of the Garden; from 1910–32 Administrative Assistant, and thereafter Research Associate in Bryology.

His early interest was in birds, but he later specialized in the study of mosses, and was a regular contributor to 'The Bryologist'.

A number of plants were named after him.

COLLECTING LOCALITIES. *Philippines,* Nov. *1903*–Aug. *1905.* After his arrival in *Luzon:* Manila (early in Nov.1903), he at once commenced making collections at: Mt Santo Tomas (Nov. 1904), Prov. of Benguet, Baguio, Mt Mariveles, Lamao River,[2] Los Baños, Mt Maquiling, Benguet (= Bangued), *etc.;* in *1905* he collected in *Mindanao*: Prov. of Zamboanga (Febr.), Mt Apo (at and above Todaya) (March), in Sax River region at San Remon, *etc.* (Febr.–March); Prov. of Davao (May–July); and in *Jolo* (July), *Sulu Islands.*

COLLECTIONS. *Herb. N.Y. Bot. Gard.:* 3126 *nos* from the *Philippines* (incl. ferns, mosses and lichens, excl. *Fungi* and seaweeds), representing 10.000 to 12.000 specimens (*c.* 2000 cryptog.). Dupl. in: *U.S. Nat. Herb. Wash.:* 519 *Philip.* ferns; GRAY *Herb.; Herb. Univ. of Michigan; Herb. Kew* (pres. 1906/08); *Manila:* 1721 *nos* (pres. 1907/08 and 1914); *Herb. Leyden; Herb. Berlin:* mosses (pres. 1928/29).

The collection was partly elaborated.[3] WILLIAMS made collections in America too.

LITERATURE. (1) *cf.* Journ. N.Y. Bot. Gard. 5, 1904, p. 40–41.

(2) R. S. WILLIAMS: 'Notes on Lamao forest reserve, Lamao, Bataan Prov., P.I.' (Report of the Chief of the Bur. of Forestry for 1903/04, p. 37 *seq.*).

(3) R. S. WILLIAMS: 'Notes on Luzon mosses' (Bryologist 8, 1905, p. 78–80); 'Philippine mosses' (Journ. N.Y. Bot. Gard. 15, 1914, p. 12–14; Bull. N.Y. Bot. Gard. 8, 1914, p. 331–377, pl. 171–174).

C. B. ROBINSON: 'Alabastra philippinensia' I–II (Bull. Torr. Bot. Club 35, 1908. p. 63–75; Philip. Journ. Sci. C. Bot. 3, 1908, p. 175–218).

Orchidaceae by O. AMES in 'Studies in the orchid flora of the Philippines' (Orchidaceae fasc. 2, 1908, p. 17–257).

E. B. COPELAND: 'Philippine ferns collected by R. S. WILLIAMS' (Brittonia 1, 1931, p. 67–70, 3 pl., 1 fig.).

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936 (also *sub Addenda*); Journ. N.Y. Bot. Gard. 46, 1945, p. 146–147.

Wilten, P. L., *cf. sub* Forest Research Institute, Buitenzorg.

Wiltens, Henri Maximiliaan Andrée

in 1859 Resident of the Civil Service in the Padang Highlands, Sumatra West Coast; in 1865 Governor of the Moluccas.

Bazzania wiltensii (SANDE LACOSTE ms. STEPH.) SCHIFFN. was named after him.

COLLECTIONS. *Herb. Leyden: Hepaticae* and *Musci* from *Sumatra West Coast* (*1859*), and from *P. Pandjang* (*Riouw Archipelago*).[1]

In *1865* he sent plants from the *Moluccas* to *Hort. Bog.*

LITERATURE. (1) *cf.* MIQUEL, Ann. Mus. Bot. Lugd. Bat. vol. 1; VERDOORN in 'Studien über asiatische Jubileae *etc.*' (Thesis, Utrecht 1934) p. 93 and 120; FR. STEPHANI in 'Species Hepaticarum' (Bull. Herb. BOISS. 2e sér., vol. 3, 1903).

Winantadipoera, *cf. sub* Forest Research Institute, Buitenzorg.

Winckel, W. F.

(1880, Batavia, Java; July 28, 1938, Bandoeng, Java), received his secondary education in Holland, and returned to Java in 1904, where he was appointed employee on the tea estate Panjairan (Priangan Res.). From 1907–24 Manager of the tea estate Tjidadap (S of Tjiandjoer, W. Java), from 1924–25 Manager of the 'Nederlandsch-Indisch Landbouwsyndicaat' (D.E. Indian Agricultural Syndicate) in Deli, from 1925–31 Manager and Manager in Chief of Kolèbèrès Estate near Bandoeng (W. Java). Together with R. C. BAKHUIZEN VAN DEN BRINK (see there) he investigated the flora of the environs of Tjidadap, specially of the present Tjadasmalang Nature Reserve.

Author of some small papers in the popular periodical 'Mooi Bandoeng' , 1933–35.

Some orchids and other plants were named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTING LOCALITIES. *W. Java:* Priangan Res. (*1916–19, 1923–24*), in the environs of Tjida-

dap and Tjibeber; summit G. Pangrango (Aug. 22, *1916*); G. Goentoer (Oct. 30, 1916; Aug. 12, *1917*); *Centr. Java:* Tegal (Oct. 1, 1917); *E. Java:* Segoenoeng, Modjokerto (Andjasmoro) (Oct. 4–7, 1917); Tosari (Nov. 28, *1920*); *Sumatra East Coast:*



WINCKEL

Pematang Siantar (Febr. 22, *1923*); *W. Java:* Bandoeng (*1929*); Kertamanah (Jan. *1933*).

COLLECTIONS. *Herb. Bog.:* > 2000 β *nos; Herb. Leyden: Java* plants; *Herb. Pasoer.:* 29 *nos; Herb. For. Res. Inst. Buitenzorg:* a number of plants (coll. 1918 from Tjadasmalang and Tjibeber) + wood samples; 34 dupl. in *U.S. Nat. Herb. Wash. Hort. Bog.:* living plants (pres. 1915–18).

Winckel-Sweep, E. H.

collected some orchids in Endeh, *Flores* (*Lesser Sunda Islands*) in January *1939* (*cf.* J. J. SMITH in Blumea 5, 1943, p. 314); material evidently in *Herb. Bog.*

Wind, Evert Jacob

(1891, Apeldoorn, Gld, Holland; x), Forest Officer who joined the D.E. Indian Forest Service in 1917. At first stationed in the teak districts of Java, from 1918–19 at Buitenzorg, since Sept. 1919 in the teak districts of Centr. Java, in 1922 in W. Cheribon–Soemedang, 1925–29 in SE. Borneo (at Kota Baroe and Bandjermasin), subsequently at Buitenzorg; after European leave in 1932/33, replaced at Bandjermasin, and transferred (end 1933) to Palembang (S. Sumatra); in 1936 at Salatiga (Centr. Java); in 1938 appointed Inspector of Forests at Buitenzorg, and in 1941 *ditto* at Medan (Sum. East Coast); retired in 1947.

COLLECTING LOCALITIES. *1917. W. Java:* G. Mandalagiri (end of Dec.).—*1918. W. Java:* G. Salak with KALSHOVEN (Nov. 20); Takokah (Nov. 27), Pengalengan (Dec. 14); Mandalagiri with KALSHOVEN (Dec. 20–21); about this year collecting in Tegal (*Centr. Java*) too.

COLLECTIONS. *Herb. Bog.* and *For. Res. Inst. Buitenzorg.*

BIOGRAPHICAL DATA. Tectona 37, 1947, p. 57–58.

Wind, Rutgert

(1888, Apeldoorn, Gld, Holland; x), Forest Officer, educated at Wageningen (Dr's degree in 1924),[1] went to the D.E.I. in 1909. At first stationed in the teak districts of Java; from 1917-31 on the staff of the Forest Research Institute at Buitenzorg, since 1921 as Director; in 1932 appointed Chief of the Division of Forests (excluding Teak) in Java and Madoera; from 1933–36 Chief Inspector of the D.E.I. Forest Service. After his retirement departing to Holland.

COLLECTING LOCALITIES. *Centr. Java:* in the forestries of Tanggoeng and Ngorogoenoeng near Semarang (*1917–19*); *E. Java:* N. Kediri (*1918*); *N. Sumatra:* Atjeh, Takengon (*1926*).[2]

COLLECTIONS. In *Java* he collected on behalf of BEUMÉE in the latter's series (see there); material in *Herb. Bog.. Herb. For. Res. Inst. Buitenzorg:* 29 bb. *nos* from Atjeh, and material from *Centr. Java.*

LITERATURE. (1) R. WIND: 'Het looistofvraagstuk in Nederlandsch-Indië' (Thesis, Wageningen/Leipzig 1924). *cf.* also Meded. *no* 9 Proefstat. Boschb. Dept v.L.N. en H. Buitenzorg, 1924.

(2) Typed report on Sumatra East Coast and Atjeh in Forest Research Institute (incomplete).

BIOGRAPHICAL DATA. Tectona 29, 1936, p. 405–410, w. portr.; Wie is dat? 1935, p. 477.

Wind Hzn, Rutgert

(1893, Genemuiden, O., Holland; x), Forest Officer, joined the D.E. Indian Forest Service in 1917; stationed in Java, in teak districts and elsewhere. In 1925 he took his Dr's degree at Wageningen. In 1938 he was appointed Inspector; retired in 1946.

COLLECTIONS. He collected plants in teak forests on behalf of BEUMÉE; numbered in the latter's series in *1922–23;* in *Herb. Bog.*

Winkler, Hans

(1877, Oschatz between Leipsic and Dresden, Germany; 1945, Dresden, Germany), botanist who took his Ph.Dr's degree in 1898 at Leipsic and was probably subsequently appointed at Tübingen. He visited the D.E.I. for the first time in 1903–04, working for several months in the Foreigners' Laboratory at Buitenzorg for ecological and plant-geographical researches; he studied the culture of coca and cinchona also.[1] Later he was appointed Professor in the University and Director of the Botanical Garden at Hamburg. In 1924–25 he paid a second visit to the D.E.I. with the main purpose

of collecting material on behalf of his institute.[2] The 10th volume of the 'Mitteilungen Inst. Allg. Botanik Hamburg' is a 'Festschrift' in his honour.

Several Bornean plants were named after him (*cf.* BACKER, Verkl. Woordenb., 1936, *sub* johannis winkleri).

ITINERARY. Nov. 9, *1903*–May 24, *1904*. *Java:* staying at Buitenzorg (*W. Java*) and making several trips to the volcanoes of Java and paying visits to various estates in *Centr. and East Java;* Tjibodas in W. Java was visited twice, the last time from Apr. 15–May 4, 1904.—*1924–25*. *W. Java:* staying at Buitenzorg (Sept.–Oct. *1924*). *Expedition to W. and Centr. Borneo,*[3] with P. W. M. DAKKUS and mantri RACHMAT (see those): Pontianak (Oct. 30, 1924); ascending the Kapuas as far as Sintang (Nov. 2) and the Melawi to Nanga Pinoh (5); Nanga Pinoh–Nanga Serawai (7–11); Sg. Melakoe (16); ascending the Serawai by sampan (19), Lebang Hara (arriving the 24th), from where making several tours, to Bukit Mulu (= Moeloet of DAKKUS), *etc.* (Nov. 30–Dec. 3); Dec. 5 (according to DAKKUS on the 7th) setting out on a trip to Bt Raja *via* Bt Mehipit (= Mehebit of DAKKUS) and Bt Bidang Menabai, reaching the summit of Bt Raja on the 22nd; back at Lebang Hara (30), from where visiting the N. side of Bt Mulu (= Moeloet) (Jan. 5, *1925*); downstream the Serawai (8–11) to Nanga Serawai; ascending Melawi River to Sg. Mentibar (16); Nanga Pinoh (18) and downstream to Sintang, from where ascending the Kapuas as far as Putus Sibau (23); proceeding (26); Sg. Mendalam, reaching Nanga obat (27); back at Putus Sibau (Febr. 2); to Nanga Kalis (on the Sg. Mandai) (4); ascending the Mandai as far as the junction with the Sg. Lebangan (6); foot Bt Tilung (8–10); Nanga Raun(g) in the valley of the Sg. Raun(g) (11); downstream the Mandai to Nanga Arung, Nanga Era; the Kapuas to Putus Sibau (staying 12–15); back at Pontianak (20). After his return in *W. Java*, he mainly spent his time in the preparation of the collected material (–March). During his stay at Buitenzorg, either in *1924* (see above) or in *1925*, he collected at Situ Gunong (S. slope G. Gedeh).

COLLECTIONS. The *Java* collection *1903/04* may be at *Tübingen* or at *Hamburg* (in 1915 a herbarium of H. WINKLER was presented to Hamburg, it might include his Java plants); collection *1924–25* in *Herb. Hamburg;*[4] an agreement was made that *Herb. Bog.* would be presented with a set, but up to now no more than 174 *nos* were received; *Herb. N.Y. Bot. Gard.:* part of *Borneo* dupl. and some from *Java; Herb. Leyden: Borneo* dupl.

LITERATURE. (1) H. WINKLER: 'Botanische Untersuchungen aus Buitenzorg' (1905–06, 2 vols).

cf. DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 29; and *l.c.* p. 91.

(2) *cf. l.c.* p. 46 and 72.

(3) H. WINKLER: 'Kurzer Bericht über den Verlauf meiner Reise in Central-Borneo' (Beitr. z. K. d. Fl. v. Borneo, Mitt. Inst. Allg. Bot. Hamburg 7, 1927, p. 3–7, 2 maps); 'Über eine Rafflesia aus Zentral Borneo' (Arch. Wiss. Bot. Planta 4, 1927, p. 1–97, 1 pl.).

cf. also literature *sub* DAKKUS.

(4) Elaborated in Mitt. Inst. Allg. Bot. Hamburg from 1927 onwards.

BIOGRAPHICAL DATA. Portr. in DAHLGREN, Botanisk Genetik, 2, Uppsala 1938, p. 169, pl. 122.



HANS WINKLER

Winkler, Hubert

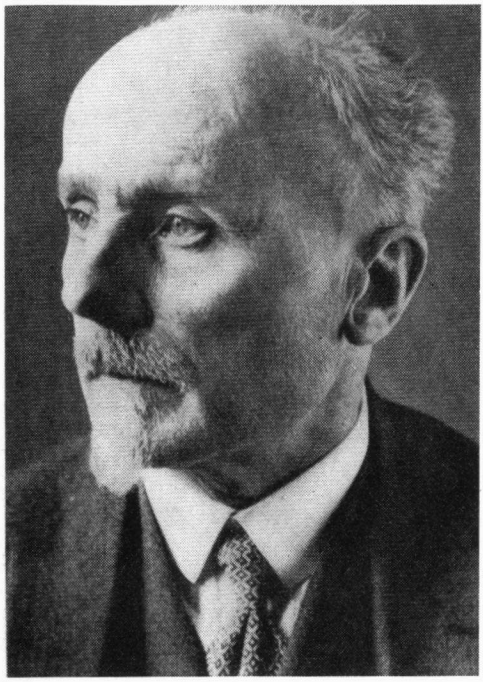
(1875, Prenzlau, Brandenburg, Germany; 1941, Breslau, Germany), botanist who took his Dr's degree at Breslau in 1901; from 1904–05 German official of a Botanic Garden at Victoria, Cameroon (Africa); in 1906 Lecturer at Breslau; in 1908 making a voyage to the Federated Malay States and the D.E.I.[1] to import seeds and young plants of rattan in the German colonies in Africa and the Southsea; in 1910 travelling in E. Africa. Since 1912 with the honorary rank of professor; in 1921 appointed Extraordinary Professor of the University of Breslau, at first for plant geography only, since 1927 for systematics too; since 1941 Ordinary Professor.

Author on the plant world of the tropics, of a paper on the vegetation of Borneo,[2] and of several papers on New Guinean and Malaysian *Urticaceae etc.*

Several Bornean plants were named after him.

ITINERARY. *1908*.[1] *Malay Peninsula* (March 24–Apr. 9): *Singapore;* Selangor, Kuala Lumpur, Batu Caves (Apr. 3); Negri Sembilan: Seremban (Perhantian Tinggi Estate), G. Angsi; *W. Java* (mid-April–mid-May), making agricultural trips, and visiting Buitenzorg, Tjibodas and G. Gedeh

(Apr. 19–21), and Tjipanas near Garoet (27), Kawah Manoek (28); *E. Java:* G. Tengger, Mungal Pass, Zandzee (May 5); in May sailing from Soerabaja to Borneo;[3] *SE. Borneo:* Bandjermasin, from where ascending the Barito and the Sg. Negara to Kayup or Hayup on the Sg. Tabelong, in the latter place staying for 2 months; the next 2 months were



HUB. WINKLER

spent on a trip crossing the eastern watershed to *E. Borneo:* Pas(s)ir (S of Balikpapan), by boat to Samarinda (mouth of the Mahakam), ascending the Mahakam, following Sg. Pahu and Sg. Lawa and crossing the watershed between the Mahakam and the Barito (between Lumo Sibak and Muarah Benangin, limestone plateau) on a 6-day trip; following Sg. Tewe and the Barito to Buntok, and proceeding by land to Kayup; finally a 2 days' trip in the environs of Martapura (Sept.); after return in Java paying visits to various experiment stations. According to BACKER (Verkl. Woordenb., 1936) he visited *Sumatra* too; in the 'Reiseberichte' WINKLER himself mentions[1] the possibility of a visit to Sumatra; evidence is still lacking.

COLLECTIONS. Presumably the 1st set in *Herb. Breslau; Borneo* plants numbered from 2100–3489.[4] According to BURKILL his collection includes *Malay Peninsula* plants also.[5] Dupl. in *Herb. Berl.:* 848 *Borneo* plants; *Herb. Paris; Herb. Leyden:* 774 *nos,* incl. cryptog. (purch.); partially in *Herb. Bog.; Herb.* DELESS. (*Geneva*): 542 *Borneo* plants (pres. 1911–13), also from *Java; Herb. Brit. Mus.:* 636 phanerogams + 130 cryptogams from *Malaya* (exch. 1910); *Herb. Manila:* 106 *Borneo* plants (exch. 1912/13); some in *Herb. Univ. Zürich.*

LITERATURE. (1) H. WINKLER: 'Reiseberichte aus den malaiischen Staaten und Niederländisch Indien' (Tropenpflanzer 1908, p. 357–372, 558–568).

(2) H. WINKLER: 'Die Pflanzenwelt der Tropen' (in 'Das Leben der Pflanze' 6, 1913, p. 245–534, 165 fig.); 'Die Pflanzendecke Südost-Borneos' (ENGL. Bot. Jahrb. vol. 50, Suppl. vol., 1914, p. 188–208, pl. 3–4; = Beitr. z. K. d. Fl. u. Pfl. Geogr. v. Borneo IV). Other references in Ann. Jard. Bot. Buit. 45, 1935, p. 91.

(3) *cf.* ENGL. Bot. Jahrb. 44, 1910, p. 497–498.

(4) H. WINKLER: 'Beiträge zur Kenntnis der Flora und Pflanzengeographie von Borneo' I–III (ENGL. Bot. Jahrb. 44, 1910, p. 497–571, 1 fig., pl. 5 (map); *l.c.* 48, 1912, p. 87–118; *l.c.* 49, 1913, p. 349–380).

Fungi by BRESADOLA in Ann. Mycol. 9, 1911, p. 549–553.

(5) *cf.* Gard. Bull. Str. Settlem. 4, 1927, p. 134.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936; Ber. D.B.G. 59, 1941, p. (145)–(169) + portr. & bibliogr.

Winkler, K. Johannes M.

(1874, Uichteritz near Weissenfels a/d Saale; x), from 1901–21 surgeon of the Rhinish Mission in the hospital at Péaradja near Taroetoeng (Batak Lands, Tapanoeli, *N. Sumatra*). Early in 1933 he departed to the Batak Lands again. Collector of ethnographica and ferns in the vicinity of his residence.

Author of some ethnological papers.[1]

ROSENSTOCK[2] named some ferns after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. He forwarded some 200 ferns (coll. 1910–13) to E. ROSENSTOCK (Gotha) (*Herb.* ROSENSTOCK = *Berlin*), who based a paper on this collection;[2] dupl. *Sumatra* ferns (1913) in *Herb. Leyden.* Possibly collections were made after 1914 too.

LITERATURE. (1) K. J. M. WINKLER: 'Bericht über die Untersuchungsreise nach der Insel Engano' (Tijdschr. Bat. Gen. K. &. W. 46, 1903, p. 558 *seq.*); 'Die Toba Batak auf Sumatra in Gesunden und Kranken Tagen' (Stuttgart 1925); *etc.*

(2) 'Filices sumatranae novae' (FEDDE Repert. 13, 1914, p. 212–221).

Winter

'*Tribunus militum*', is cited as the collector of *Calamus litoralis* near Batavia, *W. Java,* by BLUME (Rumphia 3, 1847, p. 43).

A Lieutenant-Colonel (Overste) WINTER made zoological collections in Java (*cf.* Mollusken Preuss. Expedition by E. VON MARTENS).

A Colonel A. F. WINTER († 1862, Dillenburg, Germany) was joint manager of the Fund for Raised Military Pensions in 1824, in 1828 a Member and subsequently President of the Audit-Office; retired in 1841. He may be identical with the collectors of botanical and zoological material.

Winter(s)bottom

collected *Adiantum diaphanum* BL. on G. Gede(h) (*cf.* KUHN in MIQUEL, Ann. Mus. Lugd. Bat. 4, 1868/69, p. 281), some plants between Buitenzorg and Tjipanas (*cf.* KOSTER in Blumea 1, 1935, p. 432), and at Batavia (*l.c.* p. 459); all localities situated in *W. Java* (coll. about June *1846*). The plants cited by KOSTER are preserved in *Herb. Kew.* Both Kew and the British Museum have a Himalayan herbarium of JAMES EDWARD WINTERBOTTOM (1803–54), who died in the island of Rhodes on the home voyage from the Orient and Egypt in 1854. Previously he made a voyage to India (*cf.* Flora N.R. 13, 1855, p. 144). He may be identical with the Java collector.

Wirio(sopoetro)

sometimes WIRIOSAPOETRO or WIRJOSAPOETRO, made a small collection of plants on the Diëng Plateau in *Centr. Java* (*cf.* KOORDERS, Exkurs. Flora, 1, 1911, p. vi). The more than 74 *nos* were presented to *Herb. Leyden;* the plants are cited by KOORDERS as WIRIO *no* . . .

Wirz, Dr Paul

(1892, Moscow, Russia; x), ethnographer, educated at the Technical College, Zürich, and the universities of Zürich and Basel; Lecturer at Basel. He lived for several years in New Guinea, exploring in both the British and Dutch part of the island. In 1921 and 1926 he was near Lake Sentani, in 1921/22 as a member of the KREMER Expedition (continuation of VAN OVEREEM Exp. of which LAM was the botanist) to the summit of Mt Wilhelmina; in 1930 he was in Papua.

Author of some books and numerous papers on New Guinea.[1]

ITINERARY. *Voyage 1929–31.*[2] *Bali;* from *Java* to *Papua, SE. New Guinea:* Port Moresby; Delta Division, Kikori; visiting several rivers, incl. the Turama, and those situated east of it; eastern part of the Western Division, visiting the Bamu, and Aramia rivers; from Daru to Merauke by boat (end *1930*); ascending Merauke River, and by land to the Fly River; returning to Java by way of Flores.

COLLECTIONS. *Herb. Bog.:* material of wild rice plants, collected between the Fly and Aramia River (Aug. *1930*), *S. New Guinea.*

LITERATURE. (1) P. WIRZ: 'Anthropologische und Ethnologische Ergebnisse der Zentral-Neu-Guinea-Expedition 1921–1922' (Nova Guinea 16, pt 1, 1924)'; 'Im Herzen von Neu-Guinea. Tagebuch einer Reise ins Innere von Holländisch Neu-Guinea' (Zürich 1925); 'Die Frederik-Hendrik-Insel, ein kleines Venedig in Neu-Guinea' (Umschau 29, 1925, p. 8–11); 'Dämonen und Wilde in Neuguinea' (1928); 'Bei liebenswürdigen Wilden in Neuguinea' (Stuttgart 1929); 'Im Lande des Schneckengeldes. Erinnerungen und Erlebnisse einer Forschungsreise ins Innere von Holländisch-Neuguinea' (Stuttgart 1931); 'Bericht über eine Forschungsreise nach Indonesien und Britisch-Neu Guinea 1929–1931' (Ethnol. Anzeiger 3^2, 1932, p. 54–57); 'Am See von Sentani' (Ned. Ind. Oud en Nieuw 1933, p. 15, 71, 153, 223); 'Beiträge zur Ethnographie des Papua-Golfes, Brit.-Neuguinea' (Leipzig 1934); and numerous other papers (*cf.* the Japanese New Guinea Bibliography 1942).

(2) *cf.* Ethnol. Anzeiger 3^2, 1932, p. 54–57.

BIOGRAPHICAL DATA. Schweiz. Zeitgenossen-Lexikon 1932.



WISSE

Wisse, Clemens Aloysius

(1884, Utrecht, Holland; x), school-teacher, entered the employ of the D.E. Indian Government in 1908, and was stationed in Java respectively at Ngandjoek, Buitenzorg (1911–13), Batavia (1913–18), Madioen (1918–21), Bandoeng (1922–26), Batavia, and Tondano (N. Celebes); retired in 1933, and subsequently returned to Holland. At present a resident of Spankeren (N. of Dieren, Gld).

He is commemorated in *Ficus wissei* BACKER.

COLLECTING LOCALITIES. *1918–22. E. Java:* Madioen and environs.—*1920.* Madioen, Doengoes (Apr. 30), Malang (June), G. Kawi (June 17), G. Sangka (June 24), G. Tengger, G. Wilis (Dec.).—*1921.* Madioen, Nongkodjadjar (May 28), G. Tengger (June 24),[1] Ngebel (Sept. 23).—*1922–27. W. Java:* Bandoeng and environs.—*1922. W. Java:* Tjitjalenka (June 12), Bandoeng (Aug.), G. Manglajang (Dec. 10).—*1923.* G. Manglajang (Jan. 3), Bt Toenggoel, G. Poelosari near Bandoeng, and other places in Priangan Residency.—*1924.* Bt Toenggoel, G. Gedeh.—*1926.* Lembang and G. Boerangrang.—*1927.* Lembang, G. Boerangrang, G. Tangkoeban Prahoe, Ardjasari, Bandoeng, Bandjaran, Poerwakarta.—*1932. N. Celebes:* Ton-

dano (Nov.), Tonsealama (Dec. 4), Lewet (Tondano), Roeroekan, G. Sopoetan (up to 1150 m alt.), Aisepoet.

COLLECTIONS. *Herb. Bog.:* 999 *Java nos*, 104 (1–104) *Celebes nos; Herb. Pasoer.:* 135 *Java nos* (coll. 1923–27); *Herb. Wageningen:* 106 *nos* from *N. Celebes*, Minahassa (coll. 1932–33).

LITERATURE. (1) C. A. WISSE: 'Nongkodjadjar' (Trop. Nat. 11, 1922, p. 106–110, 3 fig.).

Wissel, F. J.

(1907, Sneek, Fr., Holland; x), engineer, educated at the Technical College, Zürich (Switzerland); Flying Officer of the Roy. Dutch Navy, 1931–37; in charge of the B.P.M. (Batavian Oil Co.) Aerial Mapping Service of E. Borneo, 1938–39; in active service of the Roy. Navy, 1939–46; and since 1947 Head of the Aerial Service of the N.N.G.P.M. (Netherlands New Guinea Oil Co.). He was a member of the COLIJN Expedition to the Carstensz Mountains in New Guinea (see below).[1] The 3rd member was the geologist J. J. DOZY.

In 1937 he discovered the Wissel Lakes which were named in his honour. He is commemorated in the moss *Barbula wisselii* DIXON.

ITINERARY. COLIJN *Expedition, 1936.*[1] *Dutch New Guinea:* COLIJN & DOZY setting out from Babo (Oct. 23); leaving Aika on the mouth of the Newerip (29); WISSEL joining the others in a bivouac above 3000 m (Nov. 21); reaching the Ngga Poeloe (5040 m), one of the summits of the Carstensz Mts (Dec. 5); back at Babo (end of Dec.).

COLLECTIONS. *Herb. Bog.:* 153 *nos* of ferns and phanerogams, 31 *nos* of cryptogams. The collection is fragmentary, as the circumstances allowed but a little collecting.[2]

LITERATURE. (1) A. H. COLIJN: 'Naar de eeuwige sneeuw van tropisch Nederland' (Amsterdam, no date); *cf.* also Tijdschr. Nieuw Guinea 2, 1937, p. 18–29, and Tijdschr. K.N.A.G. 54, 1937, p. 576–587, 12 photogr.

(2) On the flora of Mt Carstensz *cf.* C. G. G. J. VAN STEENIS in A. H. COLIJN, Naar de eeuwige sneeuw *etc.*, p. 254–279.

H. N. DIXON: 'Alpine mosses from New Guinea' (Farlowia 1, 1943, p. 25–40).

Wit, Freerk

(1910, Groningen, Holland; x), botanist, educated and taking his Ph.Dr's degree (1936) at the University of Groningen. Since 1937 on the staff of the Botanical Laboratory of the General Experiment Station for Agriculture at Buitenzorg. After evacuation to Holland, following World War II, he was appointed Agriculturist at the State Institute for race investigation of crop plants, Wageningen.

COLLECTIONS. *Herb. Bog.:* 6 *nos* of plants from E of Pare-Pare (*SW. Celebes*, coll. March 8, *1941*), and material of wild relations of the clove tree in *Ambon* and *W. Ceram* (coll. Jan.–Febr. *1941*).

Wit, Hendrik Cornelis Dirk de

(1909, Purmerend, N.H., Holland; x), botanist, educated at Amsterdam University, went to S. Africa in 1938, working for some years at Pretoria, where he prepared his thesis on *Setaria* in S. Africa (Ph.D. in 1941, after his departure for Java). Since 1941 Botanist on the staff of the Herbarium of the Botanic Gardens at Buitenzorg (Java), specially appointed for the correct naming of the plants cultivated in the Botanic Gardens at Buitenzorg. In Jan. 1946 he was evacuated to Holland.

He published a guide to the Gardens and revised several genera, mostly *Leguminosae* (*Archidendron, Crudia, Sindora, etc.* in Bull. Jard. Bot. Buitenzorg). He prepared some manuscript papers, on the history of Netherlands Indian botany and the Botanic Gardens at Buitenzorg.

COLLECTING LOCALITIES. *W. Java. 1940.* With H. J. OPHOF at Tjitajam (Dec. 24); Moeara near Buitenzorg (Dec. 28).—*1941. Islands in the Bay of Batavia: P. Onrust* and *Purmerend* (Jan. 24); Poentjak (Febr. 18); crater Tangkoeban Prahoe (Apr. 12), road to Tangkoeban Prahoe Volcano (13), between Dawoehan and Kalari (14); Tjiboerial (Apr. 20); Palaboean Ratoe and Tjisolok (June 21); road to Djasinga (July 18); banks of Tjisedane, and Tjianten, S of Tjampea (July 20); Tjitalahab near Bodjong Lopang, limestone hill near Tjibadak (Sept. 16).

COLLECTIONS. In *W. Java* he collected a small amount of *Gramineae, Cyperaceae*, and some lichens and *Algae;* material in *Herb. Bog.* Phanerogams in private herbarium too.

Wit, Willem Karel Jan de

(1882, Rotterdam, Holland; x), Forest Officer who joined the D.E. Indian Forest Service in 1905. For many years stationed in Java, mainly in the teak districts; in October 1920 transferred to Pager Alam (Palembang Res., S. Sumatra), and from March till May 1921 in charge of the S. Sumatra Division and stationed at Palembang. Subsequently back to Java, in which island since 1923 working specially in the Cheribon region. He retired in 1929.

COLLECTING LOCALITIES. *1921. S. Sumatra:* Lampong Districts.

COLLECTIONS. *Herb. Bog.: nos* 1–18; also in *Herb. For. Res. Inst. Buitenzorg* (see Forest Res. Inst.).

Witkamp, H.

(1880, Poerworedjo, Java; x), mining engineer, from 1904–21 in the employ of the Royal Batavian Oil Company (B.P.M.). After 1921 still making numerous tours of exploration in several parts of the Malay Archipelago.

Author of several papers on the regions visited.[1]

Rafflesia witkampi KDS was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTING LOCALITIES. In *E. Borneo* collecting in *1905, 1907* (Koetei, Sakoeroeh (= Sĕkĕrat) Mts in April), *1910*, and *1928* (on Bt Tindjawan in W. Koetei, on Febr. 4).—*S. Sumatra:* Oeloe Semangko and other places in the Lampong Districts (*1933*); *Malay Peninsula:* Kelantan (*1935*); *W. Java:* Bantam (Aug. 1935); *E. Java:* S. coast of Besoeki (Aug. *1937*); *Dutch S. New Guinea:* Digoel (*1938*); *W. Java: pr.* Rantjasoesoek on the Tjipandak River (S. Priangan) (May *1940*).

COLLECTIONS. *Herb. Bog.: Borneo Rafflesiaceae*,[2] and some other plants; *Herb. Utrecht: Rafflesia* material (pres. 1910).[3] In about 1905 he sent rattans from *Borneo* to O. DRUDE (Dresden) through the intermediary of a professor of geology at Freiburg in Sachsen (oral information by W. himself).

LITERATURE. (1) Mainly published in Tijdschr. K.N.A.G., on the Banda group (1909), on Soemba (1912–13), on Sumatra (Kerintji, in 1923), on Borneo (1925, 1928–29, 1932).

H. WITKAMP: 'Langs de Digoel-rivier' (Trop. Nederl. 12, 1940, p. 387–395, 403–410, w. fotos).

(2) *cf.* KOORDERS: 'Botanisch overzicht der Rafflesiaceae van Nederlandsch-Indië' (Meded. *no* 4 N.I. Ver. t. Nat. Besch. 1918) p. 43, 48, 63.

(3) *cf. l.c.* p. 124.

Witsen, Nicolaas C.

(*c.* 1640, Amsterdam, Holland; 1717, Amsterdam), took his doctorate of law in 1664 at Leyden University. Subsequently he travelled in Russia, and in East and Southeast Europe, designing excellent maps. Later burgomaster of Amsterdam (like his father before him), and benefactor of travellers in the interest of science.

At his instigation plates of Java plants, drawn from nature, were made. This collection: 'Plantae Javanicae pictae ex Java transmissae anno MDCC. Curâ et sumtibus NICOLAI WITSEN consulis Amstelaedamensis', contains 232 large folio coloured plates of Javan plants, drawn under the supervision of WITSEN, and is preserved in the Library of the Teyler Museum at Haarlem (Holland). WITSEN himself made an inscription in the bound volume, present in the said Museum, running as follows: 'Planten, boomen, gewassen en kruiden voor mij doen aftekenen in Indiën en van Batavia besorgt' (signed N. WITSEN 1700). According to an other inscription, the plants were identified once more in 1758; a MS. list of the names of the figured plants is bound up with the collection.

According to LUBACH (Arch. Mus. Teyler 1, 1867, p. 140–143) the man who wrote the list was certainly no botanist, there being many mistakes in the spelling. BURMAN who made the above-mentioned inscription does give no information as to the scientist who classified the plants. The annotations on the plates are written in three different hand-writings, one of which evidently a 17th century one, and one of the remaining certainly BURMAN'S.

Though no collector of Malaysian plants, he is entered in this Cyclopaedia because of this important collection of plates.

BIOGRAPHICAL DATA. Autobiography in SCHELTEMA, Aemstels Oudheid 6, 1872; J. F. GEBHARD Jr: 'Het leven van Mr NICOLAAS CORNELISZ. WITSEN' (1881–82, 2 vols); Ned. Spectator 1882, *nos* 37–40; Alb. d. Natuur 1909, p. 125–153 + portr.; Encyclop. N.I. 4, 1921; H. ENGEL, Alphabetical list of Dutch zoological cabinets *etc.* (Bijdr. t. d. Dierk. 27, 1939), p. 333; Ned. Kruidk. Arch. 52, 1942, p. 414.

Woerden, Corneille Leon Lambert Henri van

(1903, Bergen op Zoom, N.Br., Holland; x), passed through the Horticultural School at Frederiksoord (Drente, Holland). In July 1927 he was appointed Assistant Curator of the Buitenzorg Botanic Gardens, and since August of the same year he was stationed in the Mountain Garden, Tjibodas. When in 1933 this post was discontinued, he stayed as Overseer. In 1940 he was put at the disposal of the 'Committee for Commercial Plants' (Commissie voor Handelsgewassen), after having returned to Buitenzorg in 1939. After World War II he was evacuated to Holland and was appointed Curator of the Buitenzorg Botanic Gardens in 1947.

COLLECTING LOCALITIES. During his stay at Tjibodas in *W. Java*, from *1927–39*, collecting many plants on G. Gedeh-Pangrango, Geger Bintang, and other ridges of this double-volcano; he also collected on G. Besser (= Bèsèr) near Sindanglaja (1929).—In *1938* he made 2 tours, one with O. JAAG (see there) to *Alor etc.* (*Lesser Sunda Islands*) in April–June, the other with A. J. G. H. KOSTERMANS (see there) to *Noesa Kambangan* (S of Java) from Nov. 20–23.

COLLECTIONS. *Herb. Bog.: W. Java* plants.

Hort. Bog.: living plants from *Alor* and *Noesa Kambangan.*

Wolfe, E. B.

doctor in the Malayan Medical Service, who occasionally collected plants.

COLLECTING LOCALITIES. *Malay Peninsula. Before 1942* in the northern part, *e.g.* Kedah (*1938*); *after 1945* in Johore and possibly in Kelantan.

COLLECTIONS. *Herb. Sing.:* small collections.

Wolferstan, Littleton Edward Pipe

of the Malayan Civil Service (1889–1922), collected plants in the Dindings when stationed there in *1900* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 134).

Wolff, J. H. J.

planter on Kertosari Estate in W. Java; in 1910 temporarily Assistant Curator of the Botanic Gardens at Buitenzorg.

COLLECTING LOCALITIES. *W. Java:* Tjigenteng near Garoet (Nov. *1906*); Garoet (*1916,1919*); G. Godok–G. Kratjak (G. Galoenggoeng) (Aug. *1918*).

COLLECTIONS. *Herb. Bog.:* small collection, including *Silvorchis colorata* J.J.S. *n.sp.* (coll. 1906), *Rafflesia* material, *etc.*

Hort. Bog.: living plants (pres. 1908–10, 1916).

Wolff, V. de, *cf. sub* Forest Research Institute, Buitenzorg.

Wolff van Westerroode, Willem Pilgrom Dirk de

(1857, Koudum, Fr., Holland; 1904, Weltevreden, Java), was educated in Holland, and subsequently joined the D.E. Indian Civil Service. In 1893 he was set to work in the office of the Secretary General at Buitenzorg, and in 1896 he was

appointed Assistant Resident at Poerwokerto (Centr. Java). He stimulated the foundation of agricultural credit-banks and pawnshops for the economical uplift of the Indonesian population. Towards the end of 1903 he was appointed temporary Inspector in Chief of the Pawnshop Service.

COLLECTIONS. *Herb. Bog.:* probably but few plants. CAMMERLOHER cited 2 *Cinnamomums* collected by him at Poerwokerto, *Centr. Java.*

Hort. Bog.: orchids and *Rafflesia* (pres. 1880), tubers of *Gloriosa, etc.* (pres. 1894).

BIOGRAPHICAL DATA. Tijdschr. Binnenl. Bestuur 28, 1905, p. 1; Tijdschr. K.N.A.G. 1905, p. 494; Encyclop. N.I. 4, 1921.

Wolff von Wülfing, Hermann Ernst

(1891, Mr Cornelis, Java; 1945, in Japanese civilian camp at Ambarawa, Centr. Java), was educated at Wageningen Agricultural College (Holland), and subsequently joined the D.E. Indian Forest Service in 1915. In 1915–16 he was stationed in the Java teak districts at Salatiga, Djembolo, Poerwodadi (Sinawah) and Moenoeng (near Djombang); since December 1916 working in the Forest Research Institute Buitenzorg, of which he was Director since 1932.

In 1933 he took his doctorate at Wageningen. Besides his thesis he wrote several other sylvicultural statistical papers.

COLLECTING LOCALITIES. *1918. E. Java:* South Soerabaja (Apr.); *W. Java:* Tjikampek-Poerwakarta with W. A. P. DE BOER; Krawang-Indramajoe with *ditto* (Dec.); *Centr. Java:* East Tegal (Dec.).—*1919. Centr. Java:* Pekalongan-Kendal (Apr.); Margasari (with L. P. WEEDA in Oct., alone in Dec.).—*1920.* Margasari (Jan.–March).—*1921.* Pajaman Forestry (possibly in 1920); *Noesa Kambangan* (S of Centr. Java) (March);[1] Djembolo (May).—*1923. E. Java:* Kediri, Gadoengan, *etc.* (May).

COLLECTIONS. *Herb. Bog.:* > 82 *nos,* collected in teak forests on behalf of BEUMÉE (see there) and numbered in the latter's series.

LITERATURE. (1) *cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 6, 1924, p. 45.

BIOGRAPHICAL DATA. Wie is dat? 1935, p. 477–478.

Wolk, van der

COLLECTIONS. *Herb. Bog.:* 11 plants (coll. March *1914*), from *? Java.*

Possibly the collector is PIETER CORNELIS VAN DER WOLK (1883, Tebingtinggi, Sumatra; x) who was appointed Assistant in the Division for Plant Diseases at Buitenzorg in 1912. Since 1922 he was teacher in natural history at Batavia, and from 1927–35 *ditto* at Soerabaja.

Walland, C. B.

in 1919 in the employ of the 'Ver. Bosch-exploitatie Mij Techn. Lab. J. PH. PFEIFFER' (see *sub* the latter), evidently collecting in *NE. Borneo* (see *sub* WALLAND). Later he joined the D.E. Indian Forest Service, collecting in *SE. Borneo* in *1922* (*cf. sub* Forest Research Institute, Buitenzorg).

Wollaston, Alexander Frederick Richmond

(1875, Glifton, Gloucestershire, England; 1930, Cambridge, England), physician, educated at Cambridge, who from 1905–07 explored the Ruwenzori Mountains in Uganda (Centr. Africa); later he made two New Guinea expeditions, aiming at the Carstensz Mountains in the Dutch part, succeeding only the 2nd time. In 1921 he made a Mt Everest expedition,[1] and explored in Colombia in 1923. After his return in England he settled as a private tutor at Cambridge, where he finally was murdered by a raffish student.

The genus *Neowollastonia* WERNH. and several New Guinea plant species were named in his honour.

ITINERARY. *Mimika Expedition, 1910–11.*[2] *Dutch S. New Guinea:* mouth of the Mimika River (Jan. 5, 1910; the Dutch Government had stipulated that the expedition was not to start before 1910, as this would give H. A. LORENTZ (see there) the first chance to reach the snow mountains); Wakatimi, base bivouac; exploring the Tuaba, Wataikwa, Iwaka, Mimika, Kamoera, and Kaparé rivers till up into the mountains, and making tours by land between the various river basins; in Oct. the leader, W. GOODFELLOW, was obliged to return on account of illness, but operations were continued under the surveyor Capt. RAWLING; back at Parimau (Febr. 14, *1911*); exploring Atoeka River; Wakatimi (March 10); leaving New Guinea (Apr. 7). —WOLLASTON *Expedition, 1912–13.*[3] *Dutch New Guinea, cf.* itinerary *etc. sub* C. B. KLOSS. By an accident, when going downstream the river, WOLLASTON's diary, collections, *etc.*, were lost.[4]

COLLECTIONS.[5] He accompanied the Mimika Expedition of the British Ornithologists' Union as medical officer, entomologist and botanist, but up till now we have no evidence of any plant collection, though RAWLING in his paper (*cf.* Literature 2) mentions the collecting of botanical specimens. During the second expedition C. B. KLOSS (see there) was in charge of the botany department, assisted by five native collectors from Sarawak.

LITERATURE. (1) *cf.* Journ. Bot. 59, 1921, p. 120.

(2) *cf.* Tijdschr. K.N.A.G. 1910, p. 817–821, 1043, 1254–1256; 1911, p. 393–394, 575, 714–720, and 832–833.

A. F. R. WOLLASTON: 'Pygmies and Papuans. The stone age to-day in Dutch New Guinea' (London 1912).

C. G. RAWLING: 'Explorations in Dutch New Guinea' (Geogr. Journ. Lond. 1911, p. 233–252 + map and ill.); 'The land of the New Guinea pygmies. Account of a pioneer journey of exploration into the heart of New Guinea' (London 1913).

cf. Versl. Milit. Expl. Ned. Nieuw Guinea 1907–15 (Weltevreden 1920), p. 29–30.

(3) Account of the 2nd expedition by A. F. R. WOLLASTON in Geogr. Journ. Lond. 43, 1914, p. 248–273 + map (incl. chapter on botany); *cf.* also in *l.c.* 42, 1913, p. 60–81.

cf. Tijdschr. K.N.A.G. 1913, p. 539–542, 671; *l.c.* 1914, p. 388–394, 2 fig.

(4) *cf.* Tijdschr. K.N.A.G. 1913, p. 542.

(5) The results of the expedition are embodied in 'Reports on the collections made by the British Ornithologists' Union Expedition and the Wollaston Expedition in Dutch New Guinea, 1910–13' (London 1916, 2 vols). The 'Botany' in the 2nd volume is a reprint of RIDLEY's paper in the Transact. Linn. Soc., *l.c. sub* KLOSS; no mention is made of botanical collections made during the Mimika Expedition.

BIOGRAPHICAL DATA. Nature 125, 1930, p. 944, 981–982; BACKER, Verkl. Woordenb., 1936; Who was who 1929–40.

Wood, Devillo D.

(1886, Rives Junction, Mich., U.S.A.; x), Forest Officer, educated at Michigan State College, East Lansing, Mich. (B.Sc. 1911, M.F. 1918); on the staff of the Bureau of Forestry at Manila (P.I.), 1911-16; in 1917 appointed Conservator of Forests at Sandakan, Br. N. Borneo, and from 1919–31 Director of Agriculture and Conservator of Forests; in the U.S. Forest Service, 1935–42.

MERRILL named several plants after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTING LOCALITIES. *Philippines. Before 1917.—Br. N. Borneo:* Tawao (June 5, *1917*), Marutai (June 6, 1917), Tawao (May 17 and 22, *1918*), Labuk (Sept. 30, 1918), in *1919*, Tawao (Sept. *1920*), Sandakan (Oct. 1920), Batu Lima near Sandakan (Oct. 14, 1920); *Banguey Island* (Oct. *1922*); *Balambangan Island* (*c.* May *1923*); in *1924* in *Br. N. Borneo* and *Brunei* (NW. Borneo), by his collectors.

The list is probably incomplete.

COLLECTIONS. *Philippine* plants, numbered in the F.B. series, *Herb. Manila.*

In 1918 E. D. MERRILL had made an agreement with the Forest Department in Br. N. Borneo, that the first set of all collections made by employees of that department was to go to Manila. When MERRILL went to California in 1924, the collections were sent thither.[1] Up to 1924 the first set of *Borneo* plants to *Herb. Manila*, 2nd set at *Sandakan.* Collection 1924 D. D. WOOD (coll. EVANGELISTA, P. OROLFO, PUASA and GOKLIN) in *Herb. Berkeley* (*Cal.*), including the actual types of the new species, while isotypes would be sent to several of the larger herbaria, including that of *Manila.* Dupl. in *Herb. Kew* (pres. 1929 by Berkeley, Cal.); *Herb. Bog.* (pres. 1927, 1929); *Herb. N.Y. Bot. Garden:* 305 *Borneo* plants (acq. 1931); *Herb.* DELESS. (*Geneva*): 12 *Br. N. Borneo* plants; O. AMES *Herb.* (Cambr., Mass.): orchids.

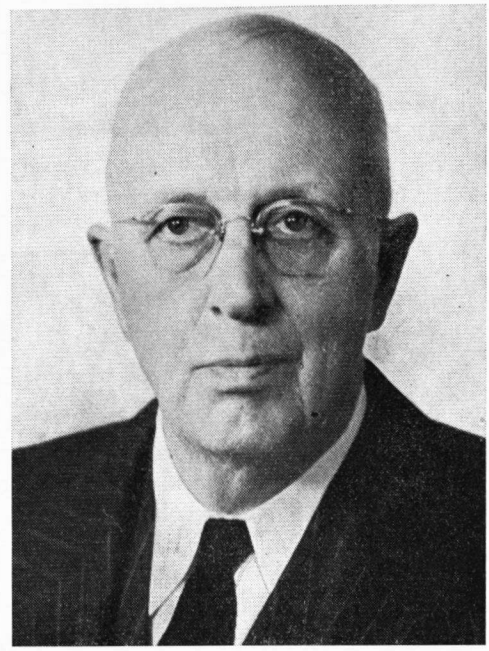
LITERATURE. (1) E. D. MERRILL: 'Plants from Banguey Island' (Philip. Journ. Sci. 24, 1924, p. 113–116)'; 'Additions to our knowledge of the Bornean Flora, II' (*l.c.* 30, 1926, p. 79–88); and scattered in other papers.

Wood, W. W.

an American who for many years resided in the Philippines, where he met GAUDICHAUD (see there) in 1836. He rendered essential service to HUGH CUMING, when the latter visited that Archipelago in the thirties of the nineteenth century.

Quercus woodii HANCE, a plant discovered by WOOD in *Luzon*, was named after him (*cf.* Journ. Bot. 12, 1874, p. 240–241).

Woods, *cf.* TENISON-WOODS, J. E.



D. D. WOOD

Wooldridge, Theodore A.

of *Penang about 1893*, collected living orchids through native agents (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 134).

Woolley, Hubert Worsley

(1887, London, England; x), Forest Officer, educated at Oxford (B.A.) and at Emmanuel College, Cambridge; in the Forest Dept Malay Peninsula, *1921–34.*

COLLECTIONS. He did little collecting, mainly in Pahang and Negri Sembilan, *Malay Peninsula;* in *Herb. Kuala Lump.*, *cf. sub* Conservator of Forest series, Kepong.

Worcester, Conant

(1866, Hetford, Vt, U.S.A.; 1924, Manila, Luzon P.I.), from 1887–88 Assistant in Botany, Univ. of Michigan; later zoologist; Dean, Secretary of the Interior of the Philippine Government. Author of a book on the Philippines.[1]

Worcesterianthus MERR. and *Clausena worcesteri* MERR. were named after him.

COLLECTIONS. *Herb. Manila:* plants numbered in the B.S. (*cf. sub* Bureau of Science) series. Possibly he previously collected with private numbers, but up till now there is no sure evidence.

In April 1891 he visited the slopes of Mt Halcon, Mindoro, but did not collect.

LITERATURE. (1) 'The Philippine islands and their people' (New York 1898).

BIOGRAPHICAL DATA. Amer. Men of Sci. ed. 3.

Woudenberg, L. van, *cf. sub* Forest Research Institute, Buitenzorg.

Woudt, B. D. van 't

employee of the commercial firm of HOPPENSTEDT at Palembang (S. Sumatra), amateur mycologist.

COLLECTIONS. *Herb. Bog.:* some ten phanerogams from the slope of G. Dempo, *S. Sumatra* (coll. *1939*).

Wouters, Tj. A.

was appointed Overseer of the Mountain Garden at Tjibodas (W. Java) in 1899. In November 1907 he went to Merauke (Dutch S. New Guinea) for one month, and in August 1908 he was appointed Overseer of the newly founded Agricultural Experiment Garden there. In August 1909 he went on European leave, and after his return in August next year, was replaced at Tjibodas. Early in 1911 he left the Gardens, for a better remunerated place elsewhere.

COLLECTIONS. *Herb. Bog.:* plants from Tjibodas, Kandang Badak, Poentjak, Telaga Warna, *etc.*, in *W. Java* (coll. betw. *1899–1906*); from his voyage to Merauke, about *1907/08*, he brought back to Buitenzorg an *Amorphophallus* from *S. New Guinea*, and orchids *etc.* from the *Tanimbar Islands*.

Wray, Cecil

brother of L. WRAY (see there), accompanied the latter on his expedition to the Eastern Districts of Kinta and Batang Padang in Perak (*Malay Peninsula*) in *1888*. During the trip he collected living plants (*cf.* Journ. Str. Br. Roy. As. Soc. *no* 21, 1890, p. 134).

Material (*Herb. Mus. Perak* 1890) in *Herb. Leyden*. The Perak or Taiping Herbarium is incorporated in *Herb. Sing.* now.

Wray (Jr), Leonard

(1853, of the Laurels, Grayshott, ? England; 1942), in 1881 appointed Superintendent of the Larut Hill Garden at Taiping (Perak), from 1883–1908 Curator of the Perak State Museum, and from 1905–08 Director of Museums, Federated Malay States.

Several plants were named after him.

COLLECTING LOCALITIES.[1] *Malay Peninsula*, Perak, between *1881–1909:* Plus River (*1883*), Piah River (*1885*), Kenering River (Aug. 1885); *exploration in the mountains east of Tapah* in the Eastern Districts of Kinta and Batang Padang:[2] leaving Taiping (June 6, *1888*), and proceeding to Telok Anson (mouth of the Perak River) by boat; by road to Tapa(h) (staying till the 25th); Kuala Woh (= Wok); SW. spur Batu Puteh (June 27–July 7); along the track to the north of the summit of Batu Puteh (8), downhill (15); Kuala Woh and Tapa(h) (19); during stay visiting tin-mine at Chendariang (= Chanderiang) (22); by road (Aug. 30) to Kuala Woh (staying Sept. 3–6); camp on Batu Puteh, summit (10); back (11) to Tapa(h); valley of the Sg. Klian Mas; Tapa(h) (Sept. 16–Oct. 4); Kuala Woh (5); up the valley of the Batang Padang, Rantau Tipus (7); Kuala of the Sengum (8); G. Chunam Prah (9); G. Ulu Batang Padang (11), summit (12–13); G. Ulu Sekum (15); G. Brumbun (= Beremban), camp at G. Ulu Batang Padang (17–18); Telum Valley; pass between the sources of the Telum and Kampar (22); down the Kampar River to Gopeng (23); Kota Bahru; Kuala Dipang; Tapa(h) (Oct. 26–Nov. 15); by boat to Telok Anson (16); back at Larut (18); Upper Perak (May *1889*); G. Bubu (March *1890*); G. Inas in N. Perak (*1892*); Upper Perak, Kenering River (Apr. *1905*); *Expedition to G. Tahan* (Pahang),[3] with H. C. ROBINSON (May–June 1905): leaving Taiping (May 11); Semangko Pass–Raub (12); Kuala Lipis (13–16); Kuala Tembeling (17), ascending the Tembeling River (18); Kuala Tahan (19); up the Tahan River, Kuala Tenok (20), Kuala Petai (21); Kuala Teku (24); Skeat's Camp, Observation Hill (June 2); WRAY ill with dysentery and carried down to Kuala Teku (25); Kuala Tenok; Kuala Tembeling (29); up the Jelai River (30); Kuala Lipis (July 1); back at Taiping; Plus River, collecting to the headwaters (Nov. 1905).

Other localities found on his labels are: Tupai, Batu Tugoh, Kota or Kampong Kota, Simpang, Blanda Mabok, Matang, Trong, Changkat Jering, Bukit Gantang, Matang Jambu, all relatively near Taiping.[1]

COLLECTIONS.[1] His earlier collections were listed and fully localized, they were sent in 1888 to *Herb. Calcutta*, referring for names to Sir GEORGE KING. The labelling of some of his collections was defective, *i.e.* those made in 1889 (only recorded Upper Perak 300 ft). According to NARAYANASWAMI,[4] WRAY's second and last batch of Perak specimens arrived at the Gardens *Calcutta*, at the end of 1890, and after that he still collected but kept his collections in the *Taiping Museum* (= *Mus. Perak*). This does not correspond with the annual reports of Calcutta, as in 1892/93 and 1894/95 plants of his were still received at *Calcutta*, though perhaps duplicates only. In 1916 the WRAY Herbarium was transferred from the Agricultural to the *Forest Dept Kuala Lumpur*.[7] In 1926 it was incorporated in the *Herb. Singapore;* also dupl. from Calcutta. In *Herb. Kew:* Perak, Malaya, 1884–95, 452 *nos; Herb. Brit. Mus.:* 1st set of plants from G. Tahan (the Brit. Museum having paid part of the expenses of this expedition!);[5] also dupl. in *Herb. Berl.;* orchids in *Herb. Vienna* (with *Herb.* REICHENBACH); *Herb. Bot. Gard. St Petersburg* (= *Leningrad*): 13 *nos* from *Mal. Penins.*, Perak; *Herb. Leyden* (dupl. Herb. Mus. Perak).

Previously to Calcutta, he evidently sent material to *Kew* (acq. since 1884!), which was partly elaborated.[6]

His collections are considerable, but we do not

know the exact amount; from his trip to Batang Padang *etc.* in 1888 he brought back 1200 *nos*, on this trip being assisted by HARISON, a Kling, formerly working for KUNSTLER; the collection made with H. C. ROBINSON on G. Tahan amounted to about 250 specimens.

He brought home living plants for the Taiping Garden.

LITERATURE. (1) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(2) L. WRAY: 'Journal of a collecting expedition to the Mountain of Batang Padang, Perak' (Journ. Str. Br. Roy. As. Soc. *no* 21, 1890, p. 123–165) (BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 161–162, wrongly stated the year of the expedition to be 1890).

(3) L. WRAY & H. C. ROBINSON: 'Report on the Gunong Tahan Expedition, May–September 1905' (Journ. Fed. Mal. Stat. Mus. 3, 1908, p. ix–xxv, pl. A–D).

(4) V. NARAYANASWAMI: 'Provenance of early Malayan plant collections' (Journ. & Proc. Asiat. Soc. Beng. N.S. 27, 1931 (1933), p. 327 *seq.*).

(5) H. N. RIDLEY: 'On a collection of plants made by H. C. ROBINSON and L. WRAY from G. Tahan, Pahang' (Journ. Linn. Soc. Bot. 38, 1908, p. 301–336); *cf.* also in Journ. Fed. Mal. Stat. Mus. 2, 1907, p. 107–161.

(6) W. B. HEMSLEY: 'New and interesting plants from Perak' (Journ. Bot. 25, 1887, p. 203–206).

(7) *cf.* Ann. Rep. on Forest Administration in the F.M.S. for the year 1918, p. 15.

BIOGRAPHICAL DATA. BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5; BACKER, Verkl. Woordenb., 1936; Obit. Notice in the Times 1942.

Wullur, H., *cf. sub* Forest Research Institute, Buitenzorg.

Wurth, Theophil

(1875, Davos, Switzerland; Nov. 10, 1922, Malang, Java), studied natural history at Neuchâtel and Berne, taking his Ph.Dr's degree in 1904 on a mycological subject. In June 1905 he came in Java as Botanist-Mycologist of the Cocoa Experiment Station at Salatiga (Centr. Java); in 1909 stationed at Malang, and in 1911 appointed Director of the newly erected Experiment Station there.[1]

COLLECTING LOCALITIES. *E. Java.* Between *1905–22.* In *1916:* G. Kawi with P. ARENS (see there) (Apr. 23); Jang Plateau (May); Lalidjiwo on the slope of G. Ardjoeno; *Centr. Java:* G. Merbaboe and other localities.—*E. Java:* Ranoe Koembolo (Jan. *1917*); *W. Java:* Tjibodas (Apr. 6–7, *1920;* possibly not collecting).

COLLECTIONS. *Herb. Bog.:* dried orchids *etc.* (pres. 1913 and 1916); *Herb. Berne:* botanical objects from *Java*, incl. a beautiful collection of Javan mountain plants (pres. 1914 and 1928), and parasitic *Fungi.* From a letter from VALCKENIER SURINGAR, dated July 13, 1928 (in the archives of the Buitenzorg Herbarium), it is evident that *Herb. Wageningen* has a collection of his plants too.

LITERATURE. (1) *cf.* extract of a lecture on 'Geologische und botanische Skizzen aus Java' in Mitt. Naturf. Ges. Bern (1914) 1915, p. xviii–xx.

TH. WURTH: 'De uitbarsting van de Kloet op 20 Mei 1919' (Publ. N.I. Landbouwsyndikaat 11, 1919, p. 943–950).

BIOGRAPHICAL DATA. Versl. 3e Verg. Ver. Proefstat. Pers. 1922, p. 12 + portr.; Teysmannia



L. WRAY

33, 1922, p. 529–533; Ber. Schweiz. Bot. Ges. 32, 1923, p. 1–12, incl. bibliogr.; Jahresber. Naturf. Ges. Graubündens N.F. 62, 1923, p. ix–xi; Ned. Kruidk. Arch. 52, 1942, p. 414.

Wyatt Gill, W., *cf. sub* GILL, W. W.

Wyatt-Smith, John

(1917, Swatow, China; x), was educated at Oxford University (Botany degree 1938, Forest degree 1939); subsequently to the Malay Peninsula as Assistant Conservator of Forests, State of Selangor and Perlis; after the war in Kedah and Perlis; in 1946 appointed Forest Botanist of the Forest Research Institute at Kepong, Selangor.

COLLECTIONS. *Herb. Kuala Lump.:* material from Port Dickson and Negri Sembilan (*1947*), and from other places where stationed; numbered in the C.F. series (see *sub* Conservator of Forests).

Wijck, Jhr Herman Constantijn van der

(1815, The Hague, Holland; 1889, The Hague), joined the D.E.I. Civil Service in 1837; in 1842 he was appointed Assistant Resident of Djokjakarta, in 1842 of Salatiga, and in 1846 of Buitenzorg; in 1853 Resident of Banjoemas, in 1855 of the Prian-

gan Regencies, and in 1858 of Soerabaja; from 1860–64 a Member of Council. ('Raad van Indië').

He is commemorated in *Pavetta wijckii* HASSK. (*cf.* BACKER, Verkl. Woordenb., 1936), a species collected in *Noesa Kambangan* (S of Centr. Java) 'unde misit ad hort. bot. speciem hanc elegantem Mr. H. C. VAN DER WIJCK, provinciae Banjumas tum tempore praefectus.'[1]

In 1854 he forwarded some cuttings of 'widjojo koesomo' (*Pisonia sylvestris* T. & B.) to *Hort.Bog.*[2]

LITERATURE. (1) *cf.* HASSKARL, Retzia (Nat. Tijdschr. N.I. 10, 1856, p. 21).

(2) *cf.* Nat. Tijdschr. N.I. 9, 1855, p. 349.

Wijk, Christiaan Leonard van

(1909, Rotterdam, Holland; x), forester, educated at the Agricultural College, Wageningen; rubber selectionist on some estates in E. Java, 1936–37; from 1937–41 in the employ of the Pedological Institute at Buitenzorg, especially charged with the investigation of tropical swamp forests in the coastal areas of Borneo.[1] After his return from internment as a P.O.W. in Siam and Japan, he was appointed Forest Officer in Lombok (Lesser Sunda Islands) in 1946; in 1948 on sick-leave to Europe.

COLLECTING LOCALITIES. *1938. SE. Borneo:* environs of Bandjermasin (Sept. 17–25): Mentawei and Kahajan Rivers, on so-called 'pematangs' which are only flooded in the rainy season during high tides.

COLLECTIONS. *Herb. Bog.:* 70 *nos*, including a new *Loranthacea, viz Macrosolen urceolatus* DANSER.[2]

LITERATURE. (1) Mimeographed reports in the Pedological Institute, Buitenzorg.

(2) *cf.* Blumea 4, 1941, p. 259–260.

Yakin bin A. Omar

joined the Forest Department *Malay Peninsula* in 1914, and mainly collected in S. Pahang. For collections *cf. sub* Conservator of Forests series, Kepong.

Yamamoto, Yoshimatsu

(1893, Sabae, Fukui prefecture, Japan; 1947, Taipei, Formosa), botanist, educated at Tokyo Imperial University, 1920–23 (Dr.Sci. 1934); Assistant of Professor HAYATA, 1923–28; Assistant Professor in Taihoku Imperial University (Formosa), since 1928; studying for some time in the U.S.A. (Univ. of California, under Dr E. D. MERRILL) and in England (Kew Herbarium), 1933–34. In connexion with his research on *Menispermaceae*, he made a study tour to Java, Sumatra, and Borneo, in 1939;[1] visit to Hainan Island in 1940. From 1942–43 stationed at Manila, Luzon (P.I.), subsequently returning to Formosa, where he was promoted to a full professorship in 1945. In 1947 he made a botanical trip to the island of Botel Tobago.

COLLECTING LOCALITIES & ITINERARY. *Malay Peninsula:* Bongol *pr. Singapore* (Oct. 5, *1935*).—*Malay Archipelago. 1939.* June 14 sailing for *W. Java:* Batavia (June 27–July 1); Buitenzorg (July 2–11); Batavia (12); sailing for *W. Sumatra:* Padang; Fort de Kock, Sibolga (20); Prapat (Toba Lake); *E. Sumatra:* B(e)rastagi, Langsa, Peurula (= Peureulah) (Aug. 2), Medan; *via Singapore* back to *W. Java:* Batavia (Aug. 10–11), Buitenzorg (from 11 or 12–17); from Batavia to Pontianak (*W. Borneo*) and back (18–30); *Bali:* Pantai, *pr.* Den Passar (31); *W. Java:* Buitenzorg (–Sept. 5); making a trip from *W.–E. Java* (Sept. 6–30; a plant is, however, recorded from Bandjermasin Sept. 12!): Bandoeng, Garoet, Semarang, Magelang, Malang, Soerabaja; to Bandjermasin (*S. Borneo*) and back (Oct. 1–14); *E. Java:* Banjoewangi (18); *SW. Celebes:* Makassar (20); *Br. N. Borneo:* Tawao (Oct. 25).

COLLECTIONS. *Herb. Taihoku:* > 1565 *nos.* Some *Menispermaceae* in *Herb. Bog.* Part of the Malaysian plants were elaborated.[2]

Some plants were collected with other Japanese (probably residents), *viz* with KATO, SEKI, and NARUSAWA (see those).

LITERATURE. (1) According to the obituary he is the author of a book 'Dutch East Indies botanical trip'. Probably in Japanese.

(2) Y. YAMAMOTO: 'Materials for a Flora of the Southeastern Asia' I–III (Journ. Soc. Trop. Agric. Taihoku Imp. Univ. Formosa 11, 1939, p. 275–281, 2 fig.; *l.c.* 12, 1940, p. 157–169, 7 fig.; *l.c.* p. 243–250, 1 fig.); 'Materials for a Flora of the Southeastern Asia' VI–VIII (Transact. Nat. Hist. Soc. Taiwan 34, 1944, p. 192–203; *l.c.* p. 224–235, 4 fig.; *l.c.* p. 307–315, 5 fig.); 'An enumeration of the Menispermaceous plants in the Great Sunda Islands (including Sumatra, Borneo, Java, & Bali)' I–III (Journ. Soc. Trop. Agric. Taihoku Imp. Univ. Formosa 16, 1944, p. 29–104, 137–150).

BIOGRAPHICAL DATA. Taiwania 1, 1948, p. 7–17, w. portr. & bibliogr.

Yapp, Richard Henry

(1871, Orleton, Herefordshire, England; 1929, Birmingham, England), studied botany at Cambridge (Ph.Dr 1898); Curator Cambridge University Herbarium from 1900–03; later Professor at Aberystwyth, Belfast, and since 1919 at Birmingham.

In 1899 he was attached to the SKEAT Expedition to Siam and the Siamese-Malay States (see below), performed under the auspices of Cambridge University.

Begonia yappii RIDL. was named after him.

ITINERARY. SKEAT *Expedition, 1899. cf.* also *sub* W. W. SKEAT, TH. N. ANNANDALE and D. TH. GWYNNE VAUGHAN. Mostly in Lower Siam, from March 29 onwards, but also in the *Malay Peninsula,*[1] *viz* in Kelantan: Kuala Aring (according to BURKILL[1] from Aug. 16–Sept. 26, according to SKEAT[2] reaching this locality on Aug. 6); about Kota Bahru (Sept. 29–Oct. 10); Kuala Essam; Trengganu: Trengganu town (Oct. 11–13); islands off the coast (14–19); Trengganu (Oct. 20–Nov. 4), at Kuala Ibar S of the town, *etc.;* Perak (possibly only YAPP): Selama village (Nov. 27–29); G. Inas (Dec. 6–24); Sira Rimau (Dec. 26–Jan. 4, *1900*).

COLLECTIONS. *Herb. Kew* (pres. 1909) and *Cambridge.*[1]

LITERATURE. (1) *cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, *nos* 4–5.

(2) *cf.* Journ. Fed. Mal. Stat. Mus. 3, 1908, p. 77. The Tahan trip of SKEAT was not accompanied by YAPP.

BIOGRAPHICAL DATA. Who's who 1913; Journ. Bot. 67, 1929, p. 85–86.

Yates, Harry Stanley

(1888, Marshall, Minnes., U.S.A.; 1938, Berkeley, California), from August 1915–April 1920 Mycologist of the Bureau of Science, Manila, P.I.;[1] from 1923–27 Phytopathologist of the U.S. Rubber Company in Asahan (Sumatra East Coast); since 1929 (according to Chronica Botanica since 1932) on the staff of the Calif. Forest Experiment Station at Berkeley.

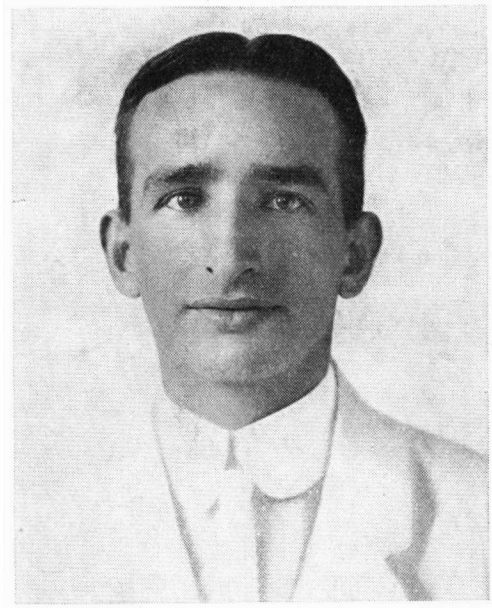
Several plants were named after him by MERRILL (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTING LOCALITIES. Between *1915–20* in various localities in the *Philippines.—1916. Luzon:* Mountain Province and in southern Tayabas. *—1917. Luzon:* Rizal Prov.; visit to *Java* (Buitenzorg, Tjibodas (May 13–16)) and *Singapore*;[2] extensive trip to *Mindanao*, *Basilan* and *Br. N. Borneo* (Oct. 17 at Sapeng).[3]—Oct. *1918*–Apr. *1919*. On leave in America.—*In or before 1921* he evidently collected in *Sumatra East Coast*, and seemingly in *Sarawak* too.—*1923–c. 1928*. Mainly in *Sumatra*, from May 28, 1923 onwards. *Sumatra East Coast*, and a little in Tap(i)anoeli (*W. Sumatra*):[4] principally in the Karo Lands, Asahan, Batoe Bara, Simeloengoen, and Deli; also on the Tapanoeli side of Toba Lake (Dec. 26, 1926; Apr. 2–3, *1927*); in *Sumatra West Coast:* Fort de Kock (Apr. 22, 1927). In 1927/28 he made a 2nd trip to *Java*, visiting Buitenzorg and Tjibodas once more,[5] collecting on G. Gedeh-Pangrango and at Kandangbadak (March *1928*), in *W. Java*. A few months after he left his position with the U.S. Rubber Co., he still made collections, for the greater part in *Sumatra West Coast*.

COLLECTIONS. *Herb. Manila: Philippine* plants (many *Fungi*) numbered in the B.S. series and a few in the F.B. (*cf.* respectively *sub* Bureau of Science and Forestry Bureau, Manila) series; 117 *Borneo* plants (1917);[3] 110 specim. of *Sumatra* plants for identification (1921); 569 *Sumatra* plants (by exch. 1930). In *U.S. Nat. Herb. Wash.:* 800 *Sumatra*, 44 *P.I.*, and 62 *Java* dupl.

His *Sumatra* collections 1923–28[6] comprised 11 sets; the 1st set, fully labelled with field notes, in *Herb. Berkeley* (Cal.); the others distributed by MERRILL, to the *U.S. Nat. Herb. Washington* (*c.* 300), *Herb. Kew* (pres. 1925), *etc.*. YATES retained personally the partial 11th set of the Sumatra collection 1923–Apr. 1927, which he presented to the *University of Michigan.*[7] This partial set was likewise accompanied by full field notes, and was used by BARTLETT to draw up the schedule of collecting localities with numbers. Several *Sumatra* duplicates in *Herb. Bog., Herb. Leyden; Herb. N.Y. Bot. Gard.:* 1223 specim. from *Sumatra* (acq. 1931); *Herb.* DELESS. (*Geneva*): 116 *Sumatra* plants; *Herb. Copenhagen;* 429 *Java* plants 1927 in *Herb. Berkeley* (Cal.) (*nos* 2667–3095); some *Java* dupl. in *Herb. Arn. Arbor.*

His *Sumatra* collections from 1923–Apr. 1927 are numbered from 520–2357, the highest number from Sumatra being 2665. We came across the *nos* 21, 36 and 81 from *Br. N. Borneo*, and a *no* 379



YATES

from *Sarawak*. In 1917 he possibly started numbering his plants from the Malay Archipelago from 1 upwards.

LITERATURE. (1) Author of papers on *Philippine Fungi* (in Philip. Journ. Sci. C. Bot. 1917–18), on the growth of *Hevea brasiliensis* in the Philippines (in *l.c.* 1919), *etc.*

(2) *cf.* Philip. Journ. Sci. C. Bot. 12, 1917, p. 305.

(3) *cf.* Philip. Journ. Sci. 21, 1922, p. 528–529. *Fungi* by H. S. YATES in *l.c.* C. Bot. 13, 1918, p. 233–240.

(4) *cf.* extensive list of localities with dates and numbers by BARTLETT in Nat. & Appl. Sci. Bull. Philip. 4, 1925, p. 221–227.

(5) *cf.* Versl. Pl. Tuin Buitenzorg for 1927, p. 2 and 4.

(6) *cf.* H. H. BARTLETT, The Batak Lands of North Sumatra, from the standpoint of recent American botanical collections (in Nat. & Appl. Sci. Bull. Philip. 4, 1925), p. 220–221.

(7) Together with the collection of BARTLETT, HAMEL, and RAHMAT SI BOEEA, they provided material for several papers, *e.g.*:

E. B. COPELAND: 'New pteridophytes of Sumatra' (Univers. Calif. Publ. Bot. 14, 1929, p. 371–378, pl. 55–61).

H. N. DIXON: 'Contributions to the moss flora of Sumatra' (Ann. Bryol. 5, 1932, p. 17–50).

A. W. EVANS: 'Some representative species of Bazzania from Sumatra' (Pap. Michig. Acad. 17, 1933, p. 69–118, pl. XIII–XVIII).

E. D. MERRILL: 'New Sumatran plants' I–VI (Pap. Michig. Acad. Sci. Arts & Lett. 19, 1934, p. 149–203, pl. XVI–XXXV; *l.c.* 20, 1935, p. 95–112; *l.c.* 23, 1937, p. 177–202; *l.c.* 24, 1938, p. 63–92).

BIOGRAPHICAL DATA. Madrono 4, 1938, p. 187–188.

Yeob Abdul Rahim

of the Forest Department Fed. Mal. States, and later in Johore, collected extensively in various parts of the *Malay Peninsula*, from *1916 onwards* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 134).

COLLECTIONS. *Herb. Kuala Lump.* (*cf. sub* Conservator of Forests series, Kepong).

Yoder, A. E.

(1878, Danvers, Ill., U.S.A.; x), Government teacher in the *Philippines*, collected plants in the early part of this century, in *Panay*, *Luzon*, and possibly elsewhere.

Some plants were named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. Probably in *Herb. Manila*, > 251 *nos.*

Young, H. S.

collected ferns in Sarawak (*NW. Borneo*), at Bau, *etc.* New species were described by E. B. COPELAND (in Philip. Journ. Sci. C. Bot. 3, 1908, p. 343–349). Material in *Herb. Sarawak.*

Yunus bin Rorok

joined the Forest Department *Malay Peninsula* in 1916. For collections *cf. sub* Conservator of Forests series, Kepong.

Yusof bin Addullah

joined the Forest Department *Malay Peninsula* in 1918; collected mainly in N. Perak. For collections *cf. sub* Conservator of Forest series, Kepong.

Yusop, *cf. sub* Conservator of Forests series, Kepong.

Yvan, Melchior

(? , Digne, France; ?), surgeon-naturalist of LAGRENÉ's embassy to China in the years 1844–46.[1] After his return from the East he first lived at Paris, but later retired to Digne (Dept d. Basses Alpes).

He is commemorated in *Pandanus yvanii* SOLMS LAUBACH.

ITINERARY.[1] The mission sailed from Brest in 'La Sirène' (Dec. 12, *1842*); *via* Teneriffe, Brazil, Cape of Good Hope, Bourbon; visiting *Malacca*, *Singapore*, and *P. Penang;* in the *Philippines: Basilan* (Malamawi), making a trip to Gunambarang River, and other excursions during which several rivers were ascended; proceeding (Febr. 4, *1844*) to Holo or *S(o)ul(o)u* (6); back to *Basilan* again (Malamawi, Maloso); arriving at Macao on Aug. 13, 1844.

Though he told by the way in his book (*l.c.* p. 208) to have visited the bird's nests caves in *Java*, no mention is made of this island in the itinerary.

COLLECTIONS. *Herb.* DELESS. (*Geneva*): 300 *nos* (pres. 1846);[2] also in *Herb.* DECAND. (*Geneva*). He collected both in the *Malay Peninsula* and China, but possibly also in the *Philippines.*

LITERATURE. (1) M. YVAN: 'La Chine et la presqu'île Malaise. Relation d'un voyage accompli 1843–1846' (1850); 'Voyages et récits' (Bruxelles 1853, 3 prts in 1 vol.; pt 1 'De Brest à Bourbon', pt 2 'Six mois chez les Malais', pt 3 'Un an en Chine'); 'Six months among the Malays, and a year in China' (transl., London 1854); and some other books especially relating to China.

(2) *cf.* Bull. Herb. Boiss. 4, 1896.

BIOGRAPHICAL DATA. BRETSCHNEIDER, Hist. Bot. Discov. China, 1898, p. 523–524.

IJzerman, Jan Willem

(1851, Leerdam, Z.H., Holland; 1932, The Hague, Holland), first in Dutch military service; went to the Dutch East Indies in 1873 as railway engineer; retired in 1897. From 1892–96 besides Head of the coal-mining in Sumatra West Coast; 1897–1917 Director of the Oil Company Moeara Enim in Sumatra. For many years president of the Royal Dutch Geographic Society.

Some plants were named after him.

COLLECTING LOCALITIES. *Sumatra, probably* on the IJZERMAN Expedition in *1891* (*cf.* itiner. *sub* KOORDERS).

COLLECTIONS. *Herb. Bog.:* 2 *Sumatra* ferns.

BIOGRAPHICAL DATA. Tijdschr. K.N.A.G. 1931, p. 373 (portr.) and *l.c.* 1932, p. 767; Tijdschr. Ind. Taal-, Land- en Volkenk. 72, 1932, fasc. 3, w. portr.; Bijdr. Taal-, Land- en Volkenk. N.I. 89, 1932, p. I, w. portr.; BACKER, Verkl. Woordenb., 1936.

Zahn, Heinrich

(1880, Edelsfeld, Germany; in the nineteen-forties, Germany), protestant missionary of the 'Neuendettelsauer Missionsgesellschaft', who worked at Hopoi Station, between Finschhafen and Lae, NE. New Guinea, since 1902.[1]

Selaginella zahnii HIERON. was named after him.

COLLECTING LOCALITIES. Former *Kaiser-Wilhelmsland, NE. New Guinea:* Sattelberg (*1904*); Yabim near Limbang (*1905*); and probably elsewhere.

COLLECTIONS. In *Herb. Berlin.*

LITERATURE. (1) Author of 'Die Jabim' (in NEUHAUSS, Deutsch-Neu-Guinea, 3, 1911, p. 289–394).

Zainal

of the Forest Department Fed. Mal. States, collected in Brunei (*NW. Borneo*) (*cf.* Bull. Jard. Bot. Buit. sér. 3, vol. 17, 1941, p. 95).

COLLECTIONS. *cf. sub* Conservator of Forests series, Kepong.

Zainoeddin, *cf. sub* Forest Research Instute, Buitenzorg.

Zainoellah, *cf. sub ditto.*

Zakaria, *cf. sub ditto.*

Zaldua, J., *cf. sub* Forestry Bureau, Manila.

Zambrano, Z., *cf. sub ditto.*

Zamuco, G., *cf. sub ditto.*

Zeano

collected at Sandakan, *Br. N. Borneo*, a *no* 2360 (*cf.* KOSTER in Blumea 1, 1935, p. 489). The cited material is in *Herb. Kew*, and was probably collected by the Forest Department, Br. N. Borneo (see there).

Zeiller, R.

In the lists of accessions of *Kew Herbarium* a collection of Perak plants (*Mal. Peninsula*) is mentioned, presented by R. ZEILLER in 1885. In all probability this was the collection of J. DE MORGAN (see there), of which the ferns were elaborated by ZEILLER.

Zewandowsky, misspelled for LEWANDOWSKY (see there).

Zeye, Captain Lieutenant

of S.M.S. 'Gazelle' (for detailed data on this expedition *cf. sub* NAUMANN) is cited by ENGLER (in ENGL. Bot. Jahrb. 7, 1886, p. 459) as the collector of a plant near Koepang, *Timor*. The expedition visited the island in May *1875*.

Probably the collector ZEYL (see there) is identical, the name being misread.

Zeyl

is cited as the collector of some plants in *Timor, viz* at Koepang near Babaoe, (*cf.* VAN OOSTSTROOM in Blumea 3, 1939, p. 272) in May *1875*, and without precise locality by KÜKENTHAL (*cf.* Pflanzenreich 101, 1936, p. 60). Material in *Herb. Berlin.*

The date of collecting leads one to suppose the collector may be one of the members of the 'Gazelle' Expedition (*cf. sub* NAUMANN). In all probability he is identical with ZEYE (see there).

Zeijlstra, Hein Hidde

(1881, Amsterdam, Holland; x), studied natural history at Amsterdam University. He was Temporary Assistant of the Botanical Laboratory at Buitenzorg (Java) from 1907–09, and then returned to Holland. From 1910–13 Custodian of the Colonial Museum at Haarlem, since 1914 Director of the Colonial Agricultural Museum at Deventer, in 1915 appointed teacher at the Colonial Agricultural School at Deventer, and since 1931 Director of that school. He resigned in 1947.

COLLECTING LOCALITIES. *1908. W. Java:* G. Tangkoeban Prahoe (May 28); *E. Java:* Tosari (June 6); *W. Java:* Tjinjiroean (July 1, possibly on an earlier date too); *E. Java:* G. Tengger (Aug. 8). —*1909. W. Java:* Antjol (March 11).

Before 1910 he sent orchids from G. Kendeng (near Garoet, *W. Java*) to J. J. SMITH, Buitenzorg.

COLLECTIONS. *Herb. Bog.; Herb. Kol. Mus.* (originally at Haarlem, later *Ind. Inst. Amsterdam*): *East Indian* fruits and dried material of coffee species (pres. 1910), and herbarium of *D.E. Indian* plants (pres. 1937).

BIOGRAPHICAL DATA. Wie is dat? ed. 2–5; Persoonlijkheden in Nederland, 1938, + portr.

Zij . . ., *cf.* ZY . . .

Zimmermann, Albrecht Wilhelm Philipp

(1860, Braunschweig, Germany; 1931, Berlin, Germany), was educated at Leipsic; from 1885–96 Lecturer in Botany and later Extraordinary Professor, successively at Leipsic, Tübingen, and Berlin; from *1896–1901* Botanist at Buitenzorg (*Java*) for the cultivation of coffee. Towards the end of 1901 he sailed for German East Africa, to be appointed on the staff of the 'Kais. Biol. Landwirtsch. Inst.' at Amani; from 1911–20 Director of the said institution. In 1920 he returned to Germany; since 1922 a member of the 'Biol. Reichsanstalt', Berlin-Dahlem; retired in 1925.

Author of several agro-botanical papers.

Oberonia zimmermanniana J.J.S. was named after him.

COLLECTIONS. Especially *Fungi.*[1] In *Herb. Berl.:* 34 dried *Fungi* and 22 *nos* in alcohol (pres. 1902) from *Java; Herb. Bog.:* an orchid from G. Malabar, *W. Java.*

LITERATURE. (1) P. HENNINGS: 'Fungi javanici novi a cl. Prof. Dr ZIMMERMANN collecti' (Hedwigia 41, 1902, p. 140–144).

BIOGRAPHICAL DATA. WITTROCK, Icon. Bot. Berg., 2, 1905, p. 157, *t.* 130; Who's who 1913; Ber. D.B.G. 49, Gen. Vers. Heft 2, 1931, p. (220)–(243) + bibliogr.; Bergcultures 5, 1931, p. 535–536; BACKER, Verkl. Woordenb., 1936.

Zimmermann, W. F. A.

when settled as a young physician at Batavia, accompanied a voyage o/b the trader 'Van der Kapellen' as scientific collector in the employ of the business-man VAN DER KAPELLEN.[1] Through the intermediary of a business-friend at Rotterdam a library of thousand books, for use on board, was ordered. As the latter, however, did not know chalk from cheese, he passed the order to an English firm without further indications. The latter sent all it wanted to get rid of at exorbitant prices, and accordingly the consignment consisted of beautifully-bound volumes, including theological, juridical works, *etc.!*

ITINERARY. *c. 1860.* Sailing from Batavia; *Lesser Sunda Islands: Bali, Timor* (Koepang), Ombai (= *Alor*), *Timor* (Dilly); *Moluccas: Banda* (G. Api), *Boeroe* (Cajeli), *Ambon, Ceram; Dutch SW. New Guinea:* Triton Bay; Torres Straits; Pacific Islands: Solomon Islands, Vanikoro, Fiji Islands, Tonga Islands, New Zealand, New Caledonia, Solomon Islands; *Bismarck Archipelago: New Ire-*

land, New Britain; Dutch NW. New Guinea: Doré; *Moluccas: Ambon, Ternate; N. Celebes:* Manado, and trip inland; *SW. Celebes:* Makassar and trip inland; *Sulu Archipelago; Borneo:* Sarawak, Pontianak, and from there taking a short cut by boat to Bandjermasin; *Philippines, Luzon:* Manila, Laguna, Taal Volcano, Laguna Bangbang, E. coast, San Mattheo Cave; Pacific Islands: Marianas, Sandwich Isls, Marquesas Isls, Tahiti, Peliu Isls, Carolines, Radack Isls, Sandwich Isls, Tahiti, Gambir Archipelago, Easter Islands, Cape Horn, and back to Java.

COLLECTIONS. The collections were made on behalf of VAN DER KAPELLEN. Possibly plants were collected too.

LITERATURE. (1) W. F. A. ZIMMERMANN: 'Die Inseln der indischen und stillen Meeres. Reise eines holländischen Arztes u. Naturforschers von Java über Timor, die Molucken, Neu Guinea und Neu-Seeland durch d. Tonga- u. Fidji Arch., durch Celebes, Borneo u. Sumatra ü.d. Carolinen, Philippinen u.d. Sandwich-Inseln u. Otaheite' (Leipzig 1863–65, 3 vols).

Zin bin Daring

joined the Forest Department *Malay Peninsula* in 1912, and mainly collected in Negri Sembilan. For collections *cf. sub* Conservator of Forests series, Kepong.

Zin bin Osman

joined the Forest Department *Malay Peninsula* in 1911; now retired. He collected mainly in W. Pahang. For collections *cf. sub* Conservator of Forests series, Kepong.

Zip(p)elius, Alexander

(1797, Würzburg, Germany; Dec. 31, 1828, Koepang, Timor), horticulturist, since 1823 Assistant Curator of the Buitenzorg Botanic Gardens. In 1826 he wrote a second catalogue of the latter garden[1] (the first one being published by BLUME, see there), which evidently was never published. In 1827 he joined the 'Natuurkundige Commissie' (Commission for Natural Sciences), and in the next year took part in the New Guinea voyage of that Commission, from which he was never to return to Java.

He is commemorated in the genus *Zippelia* BL., and in several plant species.

COLLECTING LOCALITIES & ITINERARY. *1823–28. Java,* at least from the following localities in *W. Java:* Buitenzorg Bot. Gardens, Djasinga, G. Tangkoeban Prahoe, G. Salak, G. Gedeh, and Megamendoeng.—*Voyage in the corvette 'Triton' and in the 'Iris', 1828.*[2] Scientific leader: H. C. MACKLOT; other members: G. VAN RAALTEN, P. VAN OORT and S. MÜLLER. *SW. Celebes:* Makassar (leaving March 15); short call at Bonthain (18); short visit to *P. Boeton* (= *Boetoeng*) (22), and an *uninhabited islet* in Boeton Straits (25); passing Boeton Straits; *Moluccas, Ambon* (March 29–Apr. 21): Batoe Lobang in the Soja Mts; *Banda* (Apr. 25–28), time failing to climb G. Api; *Dutch S.* and *SW. New Guinea:* mouth of the supposed Dourga River (in 1835 it became evident that this river in reality was Prinses Marianne Strait between Frederik Hendrik Island and the mainland of New Guinea) (May 21), ascending the latter till May 26, occasionally going ashore; heading round the north; kp. Oeta on the Oetanata (June 12), exploring the vicinity (–22); anchoring on the N. shore of *P. Aidoema* (June 28–July 2; ZIPELIUS mentions[2] collecting plants on *P. Namatote,* W of Triton Bay, and near Lobo in Triton Bay); in sloops (June 30) to Warangara on the eastern shore of Oeroe-Langoeroe Bay (on this occasion naming it Triton Bay); Triton Bay (July 4–Aug. 28); foot of the Lamantsjieri (Aug. 29); W. bank Timbona River; leaving the bight of Merkus-oord (31); *Ambon* (Sept. 5–Oct. 7); *Timor:* Koepang (Oct. 14), where the members of the 'Natuurkundige Commissie' disembarked. Till his death ZIPELIUS collected in the environs of Koepang; for data on trips of the other members *cf. sub* S. MÜLLER.

COLLECTIONS. *Herb. Leyden:* plants (phanerogams and cryptogams) from *Java, New Guinea, Timor, etc.* (*cf.* also *sub* G. J. A. KOLLMANN). Dupl. partly in *Herb. Utrecht,* and *Herb. Bog.* (incl. ferns from Megamendoeng, *W. Java,* + MS.); also dupl. in *Herb. Berl.; Herb.* DELESS. *(Geneva): Timor* plants;[3] *Herb.* MARTIUS (= *Brussels*).

The *New Guinea* material consists of bad specimens; it was partly elaborated.[4]

HOOKER[5] cites a plant collected by ZIPELIUS in *Malacca,* but it seems doubtful whether this record is correct.

His manuscripts and drawings, pertaining to the flora of New Guinea, Timor, Banda, Ambon, Celebes, *etc.*, together with the descriptions of some hundreds of plants from there, later came into the possession of the medical officer P. BLEEKER (bought from the personal estate of SCHWANER, see there), who presented them to the 'Natuurkundige Vereeniging' (Natural Science Society) at Batavia. In about 1852 an agreement was made with BLUME to send everything to Leyden, where it was to be published. As some time elapsed and nothing was heard of anymore, the 'Natuurkundige Vereeniging' sent some letters, and when no reply was received in due time, decided to make a close investigation.[6] Later the matter was left at that, as the secretary of the society made it plausible that ZIPELIUS's scientific inheritance would be published. As a matter of fact nothing came of it, though BLUME provided S. MÜLLER with a number of data on the flora of New Guinea, which MÜLLER used for his book.[2]

ZIPELIUS made excellent descriptions of the plants in their natural habitat; preserved in the archives of the Leyden Herbarium.

LITERATURE. (1) *cf.* Jaarb. Kon. Ned. Mij Tuinb. 1844, p. 52; MS. in Herb. Leyden.

(2) Letters from ZIP(P)ELIUS to C. L. BLUME on 'Vondsten in Nieuw Guinee' (finds in New Guinea) in Alg. Konst- en Letterbode 1829[1], p. 294–298, and in Flora 12[1], 1829, p. 281–287.

J. MODERA: 'Verhaal van een reize naar en langs de zuid-westkust van Nieuw-Guinea gedaan in

1828, door Z. M. Corvet Triton, en Z.M. Coloniale schoener de Iris' (Haarlem 1830).

cf. sub H. CHR. MACKLOT, Lit. 2; and Alg. Konst- en Letterbode 1829[2], p. 211.

S. MÜLLER: 'Reizen in den Indischen Archipel' (Amsterdam 1857, 2 vols in the series 'Werken van het Kon. Inst. v. Taal-, Land- en Volkenk. v. N.I.'). MÜLLER made some botanical and agricultural remarks, and described the vegetation of New Guinea after ZIPELIUS's notes, and statements of BLUME; *cf.* also in TEMMINCK, Verhandelingen (1839–44), vol. Land en Volkenkunde, p. 1–80.

(3) *cf.* H. O. FORBES, Wanderings *etc.*, 1885, p. 497.

(4) A list of plants (p. 177–181) in CHR. MACKLOT: 'Verslag van het land en de bewoners, *etc.* van eenige plaatsen op de kust van Nieuw Guinee' (VAN HALL, Bijdr. t. d. Natuurk. Wet. 5, 1830, p. 142–182).

In C. L. BLUME, 'Rumphia'; MIQUEL, 'Flora India Batavae' and in Ann. Mus. Lugd. Bat. (*Annonaceae* in *l.c.* 2, 1865, p. 1–45); by WARBURG in his monograph on the *Myristicaceae;* in Nova Guinea vol. 8.

(5) *Rhynchoglossum obliquum* BL. in 'Flora Br. India' 4, 1885, p. 367.

(6) *cf.* Nat. Tijdschr. N.I. 11, 1856, p. 468; *l.c.* 16, 1858/59, p. 362–364, and *l.c.* 20, 1859/60, p. 128 and 138–139.

BIOGRAPHICAL DATA. Encyclop. N.I. 4, 1921; BACKER, Verkl. Woordenb., 1936; see also *Addenda.*

Zollinger, Heinrich

(1818, Feuerthalen, Canton Zürich, Switzerland; May 19, 1859, Kandangan, SE. slope G. Tengger, E. Java), school-teacher at Küssnacht, Switzerland, who in 1837 went to Geneva for the study of botany, attending the lectures of ALPH. DECANDOLLE *etc.;* subsequently teacher at secondary schools; in Dec. 1841 he went as a professional plant collector (see *sub* Collections) to Java, where his compatriot A. J. MEYER took him with him to Tjikoja Estate in the western part (Bantam Res.) of that island. His difficulties were numerous and he often despaired; in 1847 he was recommended by TEYSMANN for the post of Assistant Curator of the Buitenzorg Botanic Gardens, but the appointment of VAN GESKER (see there) came off, and ZOLLINGER returned to Switzerland in July 1848, to enter upon his duties as 'Seminardirektor' at Küssnacht in January 1849. In 1855 he came to Java once more, as he feared a European war in the near future; this time he was deputy of a Dutch-Indian company who intended to plant coconut trees on grounds which were not yet put under cultivation.

Besides of many papers on his tours, he is the author of publications on meteorology, molluscs, plant taxonomy, and some very important ones on the vegetation.[1] All of his papers testify to an excellent power of observation, combined with a strict statement of the problem.

He is commemorated in several Indonesian plant names.

COLLECTING LOCALITIES. *1842. W. Java,* principally in Bantam and Buitenzorg residencies; staying at Tjikoja in Bantam (May 8–Sept.) and collecting in the environs, at Tjidoerian, Tangerang, Pas(s)ir Madang (Aug. 12–13), Passie, Moenjoel, Babakan, Tjikadoe; in the mountains at Janglapa, Angsana, (D)Jasinga; on the other side of the Tjidoerian at Sambora, Tjikandi; making a trip through Bantam *via* Serang, Anjer, Tjarita, Tjiringin (= Tjaringin), Pardana on the Panimbang, Soedimanik, Tjiboerial, Pandeglang, Menes, *etc.;* another trip to the mountains of Djasinga *via* Pas(s)ir Madang, longitudinally crossing Bolang Estate; Tjikandi–Buitenzorg–Djasinga (Oct.); G. Salak (Nov. 2–4)–Buitenzorg (Bantar Peteh on the 11th)–Tjibinong–Bantam (Nov.); G. Salak (Nov. 30–Dec. 8)–Koeripan (18)–Bantam (Dec.).—*1843.* Bantam (Jan.–Febr.), Djasinga; G. Gede(h)–Djamboe Dipa–Tjikoja (8)–Propoli (March); Tjaringin–Panimbang–Tjikandi–G. Poelo Saharie (= Poelasari) (May 10); between Soedimanik and Tjiboerial (Bantam)–G. Bongkak (June); Panimbang–Pas(s)ir (July); Tjikoja–Pas(s)ir Madang (Aug. 12–15)–Djasinga–Kendang (Buitenzorg) (Aug.); Tjiapoes (Salak)–Tjikoja (Sept.); Buitenzorg–Bantar Peteh–G. Salak (Oct.); G. Salak (crater-field and Tjiapoes, Nov. 2–4, 15–19);[2] Batavia–G. Salak–Tjikoja (Dec.).—*1844.* Tjipanas–G. Gedeh-Pangrango–Hortus Bogoriensis–G. Tangkoeban Prahoe (Febr.); Tjoeroeg Tjimahi–G. Tangkoeban Prahoe–Djamboe Dipa–Tjikapoendoeng Fall (Bandoeng)–Boekit Toenggoel (March 15)–Tjipanas–Tjibodas (March); Tjibodas–Megamendoeng–G. Tangkoeban Prahoe (Apr.); Hortus Bogoriensis–G. Gedeh–Telaga Warna (Apr.–May); leaving Buitenzorg (June); Tjikoja–Tjampea (Aug.). Tour in *E. Java* (1844–45):[3] Soerabaja (visiting G. Sahari, the vicinity of Naphta wells, *etc.*)–G. Penanggoengan (Aug.); Trètès near Bangil (Aug. 17); Trawas (19); Modjokerto–Modjopahit–Modjosarie (21); G. Welirang (27–28), climbing the summit; G. Penanggoengan summit (Sept. 4);[4] Semeroe–Djago (Tengger)–G. Welirang–Gebok Klak(k)a–G. Raoen(g)–G. Kendang (Malang)–G. Ardjoeno (13–14)–Srigontjo–Madjangtenga (30)–Dajoe (Bangil)–Pandahan–Pasoeroean–Malang–Loemadjang tengah (Sept.); Loemadjang tengah (Oct.)–G. Semeroe (Oct. 2–3)– Manding River (3)–G. Widodaren (4)–Boerang (4)–Loemadjang (7–8)–Madjangtenga (7)–Malang (11)–S. Pasoeroean (11)–Srigontjo–Kepandjen–Gondang legi (12–13)–G. Bromo–Poespo (Tengger)–Tosari–G. Welirang–summit G. Panan(d)ja(k)an–Sg. Gading (16)–beach near Gondang–Tobo (22)–Gebok Klak(k)a(h) (Tengger)–G. Kendang (Oct.); Gebok Klak(k)a (Tengger) (Nov. 7–9)–Malang–Windit–Tosari–G. Bromo–G. Ider Ider–summit G. Penanggoengan (Nov.); Poeger (S. coast) (Nov.–Dec.); Modjopahit–G. Ardjoeno–Malang Residency (Dec.); Soerabaja (Dec. 6–27).—*1845.* G. Taroeb (Jan. 4)–Tiris (6)–Ranau Sagaran (= Segaran) (6)–Klakah (15)–G. Taroeb (15)–G. Lamongan (16–18)–Poeger–*Noesa Baro(e)n(g)* (21)–Loemadjang and Pakis near Klakah (25)–Klakah (28–31); Loemadjang (Febr. 3, 6, 7)–Pasirian (7)–Loemadjang (13)–Poeger (15–16, 18)–Lamongan (18)–*Noesa Baro(e)n(g)* (21–22)–Srigontjo (22)–Sabrang–Poeger (Febr. 23, 28); Poeger (March 1)–

Djember (7)–Bondowoso (30–31); Bondowoso (Apr. 1–2)–Waringin (4–5)–G. Arak near Besoeki (Apr. 5, 7)–Segoro Anak (20)–G. Ringgit (21)–G. Baloeran (22)[5]–Panaroekan; Idjen Plateau (Apr. 28–May 3), at Litjin, G. Ranti (= Rante) (30), *etc.;* Rogodjampi (May 8, 11)–beach near Bomo



ZOLLINGER

and Pampang (= Pangpang) Bay (12)–Banjoewangi and G. Ikan (13)–Gradjagan and Bomo (14)–Banjoewangi (leaving on the 16th); *Bali* (arriving on the 17th), Bangli and Karangas(s)em, visiting G. Seraja (21),[6] *etc.: E. Java:* Banjoewangi (26); Selowojo Bay and beach of Gradjagan–Lodong River (May); Idjen Plateau (28–29); kali Tikoes and Pradjekan (June 1)–Pradjekan (3)–Maesan between Djember and Bondowoso (6)–Ardisarie (G. Raoeng) (10)–G. Hjang (= (I)Jang) (15, collecting *Rubus boschianus* ZOLL. & MOR.!)–G. Argopoero (16)–G. Krintjing (Jang Plateau too)–Gradjagan–Soerabaja (June); Soerabaja, visiting G. Sahari (July 13), *etc.. W. Java:* Tjampea (Aug. 17); G. Salak (31).[7] *S. Sumatra*, Lampong Districts (Sept. 15–Oct. 2):[8] Telok Betong (Sept. 15); hot springs SW of Telok Betong (Kadjadian); Goenoeng Talang, Natar, Tigennennang (Sekampong River), G. Sogi (= Goenoengsoegih) (16), Tarabangie (= prob. Terbanggi-besar) (19), Goenoeng Batin, Meng(g)ala (on the Toelang Bawang) and back to Telok Betong. *W. Java:* G. Salak (Nov. 10–11);[9] *E. Java:* G. Tengger (Nov.); Soerabaja (Dec. 14); *W. Java:* G. Gedeh (22), Gadok (23).—*1846.* G. Salak (Jan.); Tjisokan (Bandoeng) (Febr.). *Tour to Bali and Lombok:*[10] leaving Buitenzorg (May 1); Batavia (–May 11); Semarang (3 days); *E. Java:* Soerabaja (May 29–June 8); Besoeki (10), from where visiting G. Raoen(g)–G. Argopoero–Bondowoso; *Bali:* Beliling (= Boeleleng); Bandjir Djava (July 1); Singaradja (2); trip into the hinterland of Beliling as far as Pemboenoet; *Lombok:* Ampenan (July 18–Aug. 2), visiting Mataram (18, 25, 27, 30), Laboean Tring (= Laboehan Tereng); setting out (Aug. 3) to the Peak of Lombok, *via* Pringa Rata, Batoe kleang, Loijok (5), reaching the southern summit G. San(g)kareau (7–8), but not the summit proper of the Rindjani; back at Loijok (8); Aug. 23 found him at Ampenan again, not yet having climbed the Rindjani proper; though he still intended to ascend the latter, he did not succeed, and did not reach the lake (Segara Anak) either.—*1847. W. Java:* G. Pangrango (May 3). *Tour to Celebes and the Lesser Sunda Islands:*[11] *SW. Celebes:* Makassar (June 3–13), visiting Maros (*c.* 14–17); leaving Makassar (21); road of Bonthain (28) and trips in the environs (29); Boeloekomba (July 1); *Saleyer* (= *P. Salajar*) (2–4), visiting G. Haroe; *Flores* (12); *Soembawa* and Bima (July 20–Oct. 13): G. Tambora (Aug. 9–13);[12] G. Hoeroe *pr.* Bangie (16); between Mata and Ampang (18); G. So(e)nkar (Sept. 5); G. Padjo and Gempo (Sept.); G. Aroehasa (Oct. 9); G. Gempo (22); *SW. Celebes:* Makassar (Oct. 25–Nov. 15); Boni (= Bone) (Nov. 19–20); Bonthain Fall (Dec. 5); Makassar (7–17). *W. Java:* Tjipanas (? Dec. 19).—*1848.* G. Prabakti (Salak) (May 28–June 3); departing (July 28) for Switzerland by way of *Singapore*, Ceylon, and Egypt.—*1855. W. Java:* lime-depositing hot springs at Koeripan (Oct.).—*1856. E. Java:* Wonosalam (Jan.); G. Broeboe (Soerabaja Res.);[13] *Bali:* Djembrana (Oct.), Banjoewetan (= ? Bajoewedang on the N. coast) (Nov.), *etc.*—*1857. Bali:*[14] arrival at Tabean (Aug. 29) and proceeding to Singaradja; leaving for Koeboeklod (Sept. 4); Tamblang, Daoes(s)a (5); Batang–Kintamani–Bator village (6), making several minor trips to Bt Tjatoe (8), Lake Bato(e)r (9), G. Abang (ZOLLINGER did not reach the summit, but his companion BLOEMEN WAANDERS (see there) did), *etc.;* G. Batoer itself was not climbed; ascent of the Soekawana, Tjato(e)r (12); trip to the Tapsai (14); Pengadjaran–Tagal–Klampoek–Tamblang–Koeboeklod (15); embarking again (Sept. 17).—*1858. E. Java:* Rogodjampi (May). *Madoera* (*c.* June 6, discovering *Semeiocardium arriensii* ZOLL.):[15] Pamekas(s)an; G. Pa(d)joedan (= G. Tamboekoe); from Pamekas(s)an to the N. coast near Temboeroe (= Tamberoe), from where to the S. coast near Balega; visiting the N. coast NE of Ban(g)kal(l)an(g). *E. Java:* Rogodjampi (Aug. 5).—*1859.* Gradjagan (Febr. 4); Rogodjampi (Febr., Apr.), leaving when fallen ill; Kandangan (Tengger) († May 19).

ZOLLINGER is cited as the collector of *Mollusca* in *Rakata Island* (= *Krakatau*) by E. VON MARTENS (in Preuss. Exp. Ost-Asien, Zool. 2, 1867). The specimens are in MOUSSON's collection (Zürich) and are labelled ZOLLINGER 59 (stands for 1859) (Mrs W. S. S. VAN DER FEEN-VAN BENTHEM JUTTING *in litt.*). Theoretically there is a possibility that the

molluscs were collected in Jan. 1859 (from Febr. onwards Z. was in E. Java), but as no ZOLLINGER plants are known from Krakatau, it seems equally possible that the molluscs were collected by someone else and presented to MOUSSON through ZOLLINGER's intermediary; see also *Addenda.*[21]

COLLECTIONS. When planning his going to Java, at the instigation of ALPH. DE CANDOLLE, ZOLLINGER sent out a prospectus to get subscribers for future Java collections. Every subscriber was to pay 200 francs in advance, while he himself would insure his life at an amount high enough to compensate the subscribers if he should die untimely.[16] The collections were to be sent to Professor A. MORITZI at Solothurn, who would supervise the naming, numbering, and distribution.[17] This was done up to 1847; in the summer of 1845 MORITZI worked for this purpose in the Herbarium at Geneva. The total collections amount to *c.* 4000 *nos,*[18] they were partly elaborated.[19]

His *private* set (1842–48) (with H.Z. on the labels) came, when ZOLLINGER departed to Java for the second time, into the possession of Comte ALB. DE FRANQUEVILLE (the latter's herbarium was in due time incorporated in *Herb. Paris*), who financed the publication of the 'Verzeichnis'[18] (1854/55). This set was lent to MIQUEL, who used it for his Flora of the D.E.I.; later COGNIAUX elaborated the *Melastomataceae.* Plants from Japan (coll. GOERING) at Paris also.

MORITZI's set was offered for sale in 1851.[20]

Sets or specimens of his are in numerous herbaria. In *Herb.* DECAND. (*Geneva*): 3634 *nos; Herb.* DELESS. (*Geneva*); *Herb. Berl.*: '*Plantae Javanicae*' (1842–48) 3166 *nos* and '*Iter Javan. sec.*' (*a.* 1856–59); *Herb. Bog.*: a rather complete set; *Herb. Cambridge* (England): a rather complete set; *Herb. Acad. Sci. St Petersburg* (= *Leningrad*): 3200 *nos* from *Java* (one of the best sets); *Herb. Kew:* 330 *nos* and *nos* 1–1090 (pres. 1848–65), and *ex Herb.* BENTHAM (lacking some numbers); *Herb. Brit. Mus.*: 697 *Java* plants (purch. 1857–58), and a fine and extensive series from *Java* and Japan (the latter *not* coll. by ZOLLINGER but by GOERING) with *Herb.* SHUTTLEWORTH (acq. 1877); *Herb. Leyden:* several cryptogams, and a series of plants from the 2nd period, with detailed labels; *Herb. Nederl. Overz. Bezittingen Ned. Kruidk. Vereeniging* (= Bot. Vereeniging, *Leyden*) (purch.); *Herb. Univ. Amsterdam: Compos.* (from SCHULTZ BIP.); *Herb. Utrecht; Herb. Bot. Gard. St Petersburg* (= *Leningrad*): 677 *nos; Univ. Erlangen; Mus. Neuchâtel; Herb. Siles. Ges. Breslau:* 1 parcel; *Univ. Leipsic; Herb. Turin; Herb. Vienna* (also with *Herb.* REICHENBACH); *Herb. Bot. Gard.* (= *Univ.*) *Zürich:* 189 *nos* from *Java* (pres. 1896), rich series from *Java* (acq. with *Herb.* Prof. Dr ARN. MEYER in 1896 and 1900), and 28 sheets of cultivated plants (pres. 1906); *Herb.* MARTIUS (= *Brussels*): 800 from *Java; Mus. Techn. Coll. Zürich:* 100 wood samples from *Java; Herb.* M. WIGAND (= ?); *Herb. Caen* (also with *Herb.* FRANQUEVILLE); *Herb.* TURCZANINOW (= *Univ. Kharkov*); *Herb.* LINDEMANN (U.S.S.R.): 5 *nos; Herb. Florence: Java* plants; *Herb. State Mus. Stockholm; Herb. Univ. Kiel: Java* plants; *Herb. Berne:* some *nos* '*Plantae javanicae*' 1842–48 and from the *Sunda Islands; Herb. Hamburg: Java* ferns, also plants with *Herb.* SONDER; *Herb. Senckenb. Ges.* (at present in *Univ-Frankfurt*): vascular cryptogams; *Herb. Arn. Arbor.*: 1164 *nos;* GRAY *Herb.*: 3 *Java nos.*

To illustrate the importance of his collections, it may be mentioned that the plants collected in E. Java in 1844/45 contained 2 families new for Java, *viz: Geraniaceae* and *Epacridaceae.* They contained besides records of the genera: *Geranium, Alchemilla, Spergula, Torilis, Stellaria Lagenophora, Phaleria, Athroisma, etc.*, the new species: *Artocarpus venenosa* ZOLL. & MOR. and many new localities of rare species.

LITERATURE. (1) H. ZOLLINGER: 'Gedachten over plantenphysiognomie in het algemeen en over die der vegetatie van Java in het bijzonder' (Nat. en Geneesk. Arch. N.I. 3, 1846, p. 23–50; the same in German in the 3rd part of the 'System. Verzeichnis' 1855, p. 1–48); 'Over het begrip en den omvang eener Flora Malesiana' (Nat. Tijdschr. N.I. 13, 1857, p. 293–322).

(2) H. ZOLLINGER: 'Togt naar den Salak (Solfataren en Tjiapoes)' (Tijdschr. Neêrl. Ind. 6^2, 1844, p. 141–176, and *l.c.* 6^3, p. 37–60; Nat. en Geneesk. Arch. N.I. 1, 1844, p. 221–256, 347–369).

(3) *cf.* letters to BLEEKER on his voyage to E. Java in Nat. en Geneesk. Arch. N.I. 1, 1844, p. 483–485; *l.c.* 2, 1845, p. 165–169 (Taroeb-Lamongan); *l.c.* 2, 1845, p. 548–553); 'Bijdragen tot de kennis van de gebergtesytemen in het Oostelijk Java' (Tijdschr. Neêrl. Ind. 8^1, 1845, p. 125–190; *ditto* in German in Mitt. Naturf. Ges. Zürich 2, 1848).

(4) H. ZOLLINGER: 'Die Besteigung der Vulkanen Penanggungan und Ardjuno in Ost Java' (Ausland 1865, p. 925–930, 951–955).

(5) H. ZOLLINGER: 'Iets over den G. Baloeran' (Nat. Tijdschr. N.I. 13, 1857, p. 269–273).

(6) H. ZOLLINGER: 'Opgave der planten gezien gedurende een kort verblijf op het eiland Balie' (Nat. en Geneesk. Arch. N.I. 2, 1845, p. 588–595); 'Een uitstapje naar het eiland Bali' (Tijdschr. Neêrl. Ind. 7^4, 1845, p. 1–56).

(7) *cf.* Nat. en Geneesk. Arch. N.I. 3, 1846, p. 126.

(8) H. ZOLLINGER: 'De Lampongsche districten en hun tegenwoordige toestand' I–II (Tijdschr. Neêrl. Ind. 9^1, 1847, p. 1–38, 121–141, 249–320; transl. into English in Journ. Ind. Arch. & East. Asia 5, 1851, p. 625–641, 691–703).

(9) H. ZOLLINGER: 'Nog een uitstapje naar de solfataren van den Salak' (Nat. en Geneesk. Arch. N.I. 3, 1846, p. 126–127).

(10) H. ZOLLINGER: 'Natuurkundige reis naar Lombok 1846' (Nat. en Geneesk. Arch. N.I. 3, 1846, p. 597–598); 'Het eiland Lombok' I–II (Tijdschr. Neêrl. Ind. 9^2, 1847, p. 177–205, 301–383; transl. into English in Journ. Ind. Arch. & East. Asia 5, 1851, p. 323–344, 459–469, 528–537); 'Verhaal eener reis over de eilanden Bali en Lombok, gedurende de maanden Mei tot September 1846' (Verh. Bat. Gen. K. & W. 22, 1849, 15 pp.).

(11) H. ZOLLINGER: 'A visit to the Mountaineers, Dodongo, in the country of Bima' (Journ. Ind.

Arch. & East. Asia 2, 1848, p. 687–694); 'Verslag van een reis naar Bima en Soembawa en naar eenige plaatsen op Celebes, Saleier en Flores, 1847' (Verh. Bat. Gen. K. & W. 23, 1850, 224 pp.); 'Beschreibung der Insel Sumbawa' (Zeitschr. Allg. Erdk. Berlin 3, 1854, p. 501 *seq.*).

(12) H. ZOLLINGER: 'Besteigung des Vulkanes Tambora auf der Insel Sumbawa und Schilderung der Erupzion desselben im Jahr 1815, mit zwei Karten' (Winterthur 1855).

(13) H. ZOLLINGER: 'Eenige opmerkingen omtrent het Broeboegebergte (Res. Soerabaja)' (Nat. Tijdschr. N.I. 10, 1856, p. 455–457).

(14) H. ZOLLINGER: 'Ein Zug nach dem Gebirge Bator der Insel Bali' (PETERM. Mitt. 1864, p. 145 *seq.*); transl. into Dutch: 'Togt naar het gebergte Bator' (Bijdr. Taal-, Land- en Volkenk. N.I. 13 (3rd series vol. 1), 1866, p. 497–535).

(15) H. ZOLLINGER: 'Iets over de natuurlijke geschiedenis van Madoera' (Nat. Tijdschr. N.I. 17, 1858, p. 243–248); transl. into French: 'Quelques observations sur l'histoire naturelle de l'Île de Madoura' (Journ. Bot. néerl. 1, 1861, p. 130–134).

(16) *cf.* HOOK. Journ. Bot. 4, 1842, p. 207–209; and Flora 24^2, 1841, Intelligenzbl. *no* 1, p. 4–7.

(17) *cf.* Flora 27^1, 1844, p. 175; and Bot. Zeitung 2, 1844, p. 128, 248.

(18) A. MORITZI: 'Systematisches Verzeichnis der von H. ZOLLINGER in den Jahren 1842–44 auf Java gesammelten Pflanzen nebst einer kurzen Beschreibung der neuen Gattungen und Arten' (Solothurn 1845–46, xii + 144 pp.; dealing with the *nos* 1–2118).

H. ZOLLINGER: 'Systematisches Verzeichnis der im indischen Archipel in den Jahren 1842–48 gesammelten sowie der aus Japan empfangenen Pflanzen' (Zürich 1, 1854, p. 1–60, pl. 1; 2, 1855, p. 1–67; 3, 1855, p. 1–66); 'Observationes botanicae novae' (Nat. Tijdschr. N.I. 14, 1857, p. 144–176).

J. D. CHOISY: 'Plantae javanicae nec non ex insulis finitimis et etiam Japonia quaedam oriundae. In Cl. Zollingeri Catalogo javanensi elaboratae, et nunc denuo vulgatae cum variis additionibus et emendationibus' (Genevae 1858, 8°, 30 pp.).

(19) Manuscript: 'Bestimmungen meiner Orchideen von H. G. REICHENBACH *f.*', in the library at Buitenzorg.

G. KUNZE: 'In filices Javae Zollingerianas aliisque ex herbario Morincandiano observationes Kunzii' (Bot. Zeit. 4, 1846, p. 417–426, 441–447, 457–463, 473–478; *l.c.* 6, 1848, p. 97–103, 113–122, 141–146, 172–176, 189–199, 209–216, 234–239, 258–263, 282–285, 304–306).

Elaeocarpaceae by N. TURCZANINOW in Bull. Soc. Nat. Mosc. 19^2, 1846, p. 489–496; also plants in 'Animadversiones *etc.*' (*l.c.* 1854–63).

Liverworts by Dr GOTTSCHE in Nat. Tijdschr. N.I. 4, 1853, p. 573–576.

cf. also in Nat. Tijdschr. N.I. 14, 1857, p. 425; and *l.c.* 19, 1859, p. 1.

cf. also *Acanthaceae* by S. LE M. MOORE in Journ. Bot. 63, 1925, p. 166.

(20) *cf.* Bot. Zeitung 9, 1851, p. 359.

BIOGRAPHICAL DATA. Bot. Zeitung 13, 1855, p. 144, 615 (return to Java); Nat. Tijdschr. N.I. 23, 1861, p. 1–10; Bull. Kolon. Mus. *no* 33, 1905, p. 109–110 (tomb); Mitt. Naturf. Ges. Solothurn 3. Heft, 15. Ber. (1904–06) 1906, p. 305–320; Mitt. d. Gruppe Niederl. Ind. d. Neuen Helvet. Ges. 8, *no* 2, 1929, 22 pp. w. fig. + portr.; BACKER, Verkl. Woordenb., 1936; in BRIQUET, Biographies des botanistes à Genève, 1940, p. 484–487, incl. bibliogr.

Zon, Pieter van

(1882, Schiedam, Holland; x), Forest Officer who joined the D.E.I. Forest Service in 1909; originally stationed in the Java teak districts, in July 1912 transferred to Medan (Sumatra East Coast), and since Aug. 1916 in Java again. In 1927 he was appointed Inspector, in 1928 Adviser of the Service of the Forests of the Outer Provinces; retired 1933.

Author of some sylvicultural papers.[1]

COLLECTING LOCALITIES. *c. 1914. N. Sumatra:* Atjeh, Takengon.—*1914–15. Sumatra East Coast:* Toba, Simeloengan, Karo Lands, Bengkalis and Siak.

COLLECTIONS. *Herb. Bog.; Herb. For. Res. Inst. Buitenzorg* (*Sumatra East Coast*).

LITERATURE. (1) P. VAN ZON: 'Bijdrage tot de kennis der boschgesteldheid van de Res. van de Oostkust van Sumatra' (Tectona 9, 1916, p. 251–268, 349–374, 429–448, 2 maps); 'Kamferboom Dryobalanops' (*l.c.* 8, 1915, p. 220 *seq.*).

BIOGRAPHICAL DATA. Tectona 26, 1933, p. 447–449, w. portr.

Zschokke, Theodore C.

(1875, Wapello, Iowa, U.S.A.; x), educated at Yale University; Forest Officer of the Philippine Bureau of Forestry; from 1924–28 Forest Officer in Hawaii, and subsequently appointed at the University there.

Some plants were named after him.

COLLECTING LOCALITIES. *Philippines. Luzon:* Mt Pulog (Jan. 2–8, *1909*),[1] and possibly in other localities.

COLLECTIONS. *Herb. Manila*, numbered in the F.B. series (*cf. sub* Forestry Bureau); the Mt Pulog plants were elaborated by MERRILL.[1]

LITERATURE. (1) *cf.* Philip. Journ. Sci. C. Bot. 5, 1910, p. 287–401, pl. 1.

BIOGRAPHICAL DATA. Am. Men of Sci. ed. 5.

Zuidema, A., *cf. sub* Forest Research Institute, Buitenzorg.

Zurowetz, J. E.

owner of an orchid nursery at Sebidang, Sambas (*NW. Borneo*) from *c. 1905 onwards* (according to SAHEB of the Singapore Bot. Gard.).

Coelogyne zurowetzii CARR was named after him (*cf.* BACKER, Verkl. Woordenb., 1936).

COLLECTIONS. *Herb. Sing.:* specimens of a number of local *Bornean* orchids which he sent to Singapore for naming.

Zwaan, C. J. van der

(1902, Palembang, Sumatra; x), 'boscharchitect' of the D.E. Indian Forest Service, who was stationed at Palembang in 1920, later especially working under THORENAAR (see there). In June 1925 he was transferred to Buitenzorg, in May 1927 to Samarinda (later Kota Baroe, both in E. Borneo), in November 1928 to Tembilahan (Indragiri, Sumatra). In September 1930 he was stationed at Tandjong Pinang (Riouw), instructed to make a description of the mangrove forests; May 1932 found him at Tembilahan once more, and July 1933 he was transferred to Bandjermasin (SE. Borneo); since October 1938 on the subordinate staff of the Forest Research Institute at Buitenzorg. In 1939 he accompanied the Forest Officer L. J. VAN DIJK (see there) on a New Guinea tour; in 1948 stationed at Sampit, S. Borneo.

Author of some sylvicultural papers in 'Het Bosch', and of typed reports on Palembang and NE. Borneo.

COLLECTING LOCALITIES. *1920–25. S. Sumatra:* Palembang Residency.—*1927–28. SE. Borneo.—1929–30. Centr. Sumatra:* Indragiri.—*1934–37. SE.* and *NE. Borneo; P. Noenoekan* (*1935*).

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg*, and in *Herb. Bog.*. Some of his Palembang plants were numbered in the E. series (*cf. sub* ENDERT), the greater part in the T. series (*cf. sub* THORENAAR).

Zwaardemaker

COLLECTIONS. *Herb. Bog.:* > 103 *nos* collected at Kiara Pajoeng near Tjiandjoer, *W. Java*, from Apr.–May *1918*.

Zwager, J.

(1824, Zaandam, Holland; April 22, 1864, Pontianak, Borneo), came to Java at his own expense, and joined the Civil Service in 1845. From 1853–58 he was Assistant Resident of Koetei (E. Borneo), from 1858–63 *ditto* of Sambas (NW. Borneo), and subsequently Resident of the Western Division of Borneo. In 1864 he went to Sindanglaja (W. Java) on sick-leave.

Eusideroxylon zwageri TEYSM. & BINN. was named after him (*cf.* BACKER, Verkl. Woordenb., 1936). The authors made a special note that ZWAGER sent several interesting plants to the Buitenzorg Botanic Garden.

COLLECTIONS. In *Hort.*, and *probably* partly in *Herb. Bog.* In *1863* he sent material of gum-yielding plants.[1]

LITERATURE. (1) *cf.* Nat. Tijdschr. N.I. 26, 1864, p. 159.

Zwart, *cf. sub* Forest Research Institute, Buitenzorg.

Zwart, J. L., *cf. sub ditto.*

Zwart, W. J.

planter on Malabar Estate (*W. Java*), collected material of *Eupatorium adenophorum* in the ravine of the Tjilaki (end of *1934*). Material in *Herb. Bog.*

Zwickey, A. Lynn

made an expedition for the Arnold Arboretum (Jamaica Plain) and the Bot. Gard. Michigan, to investigate the flora of the Prov. of Lanao, *Mindanao, P.I.*, in *1938*.

COLLECTIONS. > 776 *nos; Herb. Arn. Arbor.*, GRAY *Herb.*, and *Michigan*; printed labels!; 214 dupl. in *Herb. N.Y. Bot. Gard.* (acq. 1942).

The collection included the new species *Isoetes philippinensis* MERRILL & PERRY.[1]

LITERATURE. (1) E. D. MERRILL & L. M. PERRY: 'A new Philippine Isoetes' (Amer. Fern Journ. 30, 1940, p. 18–20).

Zwier, W., *cf. sub* Forest Research Institute, Buitenzorg.

Zijl, Carel Ernest van der

(1885, Amsterdam, Holland; probably dead, brought to Poland by the Germans in 1943), was educated at Wageningen Agricultural College (Holland), taking his doctorate in tropical agriculture in 1930. After having been for some years a plantation assistant and estate manager in Java, he entered the employ of the Sugar Experiment Station at Pasoeroean (E. Java). He was successively stationed at Djokja (1917–21) as Group-Adviser, and at Pasoeroean (1921–25) as Inspector of the Field Service; subsequently Agricultural Adviser of the Pamanoekan and Tjiasem Lands at Soemedang (W. Java). Later he returned to Holland and in 1931 he was appointed teacher at the Colonial Agricultural School at Deventer; he was dismissed by the Germans in 1941. In 1943 the Germans brought him to Poland, after an attempt to escape to Paris.

COLLECTING LOCALITIES. *E. Java:* Soekapoera (*1925*); *W. Java:* Krawang, Soebang (*1930*).

COLLECTIONS. *Herb. Pasoer.:* 10 *nos* of plants.

Zijll de Jong, Johannes van

(1905, Weltevreden, Java; x), Forest Officer, educated at Wageningen Agricultural College, joined the D.E.I. Forest Service in 1930. At the outset he was stationed in Central Java, in July 1931 transferred to Celebes, and in 1937 to West Borneo.

COLLECTING LOCALITIES. *Celebes, 1932–36.*[1] Mostly in *SW. Celebes, e.g.* on the Peak of Bonthain (Lompobatang) (*1933*),[2] and on the other summit Bawakraëng (Oct. 9, 1933); also in *Centr. Celebes:* Malili (*1933–34*).—*W. Borneo, 1937–41.*[3]

COLLECTIONS. *Herb. Bog.* The plants from the Peak of Bonthain (*Celebes*) numbered 3–32. The *Borneo* material includes some 'padang' plants.

Herb. For. Res. Inst. Buitenzorg: material from *Celebes* and *Borneo*.

LITERATURE. (1) Some typed reports on Celebes trips in Forest Research Institute, Buitenzorg.

(2) J. VAN ZIJLL DE JONG: 'Een tocht naar den Lompobatang (Piek van Bonthain)' (Meded. N.I. Ver. Bergsport *no* 8, 1934, p. 11–15).

(3) Some typed reports on W. Borneo, in Forest Research Institute, Borneo.

Zylva, E. R. de
Ranger in the service of the Forest Department, Pahang, 1904– . ., collected in the *Malay Peninsula* (*cf.* BURKILL in Gard. Bull. Str. Settlem. 4, 1927, p. 120, *sub* DE ZYLVA).

COLLECTIONS. In *Herb. Kuala Lump.* (*cf. sub* Conservator of Forests series, Kepong).

Zijp, W. A., *cf. sub* Forest Research Institute, Buitenzorg.

ADDENDA & CORRIGENDA

(Among the additions and corrections new entries are marked by an asterisk)

Acuña
He is commemorated in *Elytranthe acuñae* MERR.

Alfaro Cardoso, J. G.
sylviculturist, once in the Agric. and Forestry Dept at Dilly, Port. Timor; now stationed in the Forestry Dept in Moçambique.
COLLECTIONS. *Herb. Colon. Gard. Lisbon:* 97 *nos* from *Port. Timor.*

Alcasid, G. L.
In *1947–48* he collected at Abra and on Mt Data in *Luzon*, 327 *nos* in the P.N.H. series.

Allen
He is commemorated in *Piper allenii* C.DC., ALLEN *no* 152 from the *Philippines.*

Alvarez, R. J.
He is commemorated in *Cyrtandra* and *Diospyros alvarezii* MERR.

Anderson, Thomas
Some plants collected in *1861* in *W. Java*, on G. Tangkoeban Prahoe, G. Malabar, *etc.*, were described and delineated by L. PIERRE in MS. (in Arch. Herb. (Phanérog.) Paris).

Appelman, F. J.
BIOGRAPHICAL DATA. Tectona 38, 1948, p. 195–196.

Arden, Stanley
(† 1942), in 1903 put in charge of a small garden in Malaya, which was abolished in 1906; planter in Johore, attacked by his coolies in 1908 and wounded one in defence, which caused his getting into trouble with the law; he subsequently left the Malay Peninsula and ran an estate in Sumatra; in 1911 he caught encephalitis and could never walk again, and hardly write or speak intelligibly (RIDLEY *in litt.*).

Arnold, Joseph
(† July 26, 1818), was recommended to RAFFLES by Sir J. BANKS in 1817.
COLLECTIONS. *Herb. Brit. Mus.:* plant from *Java* (coll. Oct. 30, *1815*).
BIOGRAPHICAL DATA. Add: In D. C. BOULGER, The life of Sir STAMFORD RAFFLES, London 1899, p. 282–283 + portr.

Arrhenius, O. W.
Author of numerous papers, mostly on agricultural pedology.
COLLECTING LOCALITIES. *1921. W. Java:* working in the Foreigners' Laboratory at Buitenzorg (Jan.–May), collecting on G. Pangrango–Gedeh; from May–June stationed in the Deli Experiment Station, Medan, collecting in the Padang Highlands (*Sumatra West Coast*).
COLLECTIONS. About 50–100 plants from above-mentioned localities in *Herb. State Mus. Stockholm.*

***Aspillera,** *cf. sub* Forestry Bureau, Manila.

Backer, C. A.
LITERATURE. (2) Add: Publ. dates in Flora Malesiana Bull. *no* 5, July 1949, p. 138.

Bäuerlen, W.
LITERATURE. (2) Add: F. VON MUELLER in WING's South. Sci. Rec. N.S. 2, Jan. 1886.

Bain, Vivian L.
(1899, Taiping, Perak, Malay Peninsula; x), was educated in forestry at Kuala Lumpur and at Rangoon University.

***Balajadin**
is cited as the collector of *Alstonia macrophylla* WALL. *ex* G. DON, *no* 4030, at Kudat in *Br. N. Borneo* (*cf.* J. MONACHINO in Pacif. Sci. 3, 1949, p. 165); the specimen in *Herb. Sing.*

***Balfour, Andrew Francis**
Lieutenant in the Royal Navy.
COLLECTIONS. *Herb. Edinburgh:* specim. of 9 plants from the summit of Ternati (5000 ft) in the Philip. Isles (probably the Peak of *Ternate* in the *Moluccas* is meant), and specim. of the 'Elang-Elang' plant from Manila (*Luzon, P.I.*) (pres. 1875/76).

Bally, W.
born at Aarau, Switzerland.

Bamler, Georg
(1868, Burghaslach, Germany; Nov. 12, 1928, Siassi Rook Isl., Mand. Territory of New Guinea), passed the last years of his life on Siassi Rook; his death was caused by a falling tree.

Banks, Ch. S.
He is commemorated in *Hedyotis banksii* ELM.

Barber, Edmund Scott

COLLECTIONS. Add: BURKILL's statement, apart from the spelling of the name, agrees with that of Miss L. S. GIBBS (*cf.* Journ. Linn. Soc. Bot. 42, 1914, p. 2, footnote). Evidently BACKER was wrong.

Barbey, Aug.

(† 1948 or '49).

COLLECTING LOCALITIES. *1891.* Hongkong; *W. Java* (March): Buitenzorg Bot. Garden, Batavia (8), Sindanglaja (11), Bandoeng (12); *Singapore* (March); Ceylon, Calcutta.

COLLECTIONS. 158 *nos* of his 'Tour du Monde'.

Baume, J.

COLLECTING LOCALITIES.[4] In *Luzon:* environs of Mercati, St. Nicolas, villages on the river of Manila (= ? Pasig), environs of the large lake of Manila; *Natoena Islands:*[5] *P. Sèdanaoung* (= *Sedanau*) (March *1831*); *Anambas Islands:*[5] *Siantan* (March–Apr.).

LITERATURE. (4) *cf.* Plant list in Arch. Herb. (Phanérog.) Paris. It includes 2 *nos* from Malacca Strait, 133 from *Luzon*, 5 from *Singapore* (incl. 2 ferns), 34 from *P. Sedanau* and 38 from *Siantan* + ferns.

(5) A MS. description of the Anambas and Natoena Islands in Arch. Herb. (Phanérog.) Paris too.

Baumhauer, Carel Matthias

(1779, Amsterdam, Holland; 1834, ?), joined the D.E.I. Civil Service in 1815; in 1820 appointed Resident in Banda (Moluccas), in 1821 at Bandjermasin (SE. Borneo), in 1823 at Cheribon (W. Java); since 1827 Director-General of Finance.

Bawan, F.

He is commemorated in *Cyclostemon bawanii* MERR.

Beccari, O.

COLLECTIONS. In *Sumatra* (*1878*) *c.* 1000 species of phanerogams were collected (see letter from BECCARI to ALPH. DECANDOLLE, dated Jan. 30, 1879, in Arch. Conserv. Bot. Geneva).

Benthem Jutting, W. S. S. van

P. 51, 7th line from top, read: In 1945 she married P. J. VAN DER FEEN, . . .

Bernard, Ch. J.

Botanical Assistant at Geneva, 1897–1902; custodian of the Leyden Herbarium, 1903–04.

Bernardo

He is commemorated in *Neonauclea bernardoi* MERR.

Beyer, H. O.

He is commemorated in *Boehmeria beyeri* C. B. ROB.

Billardière, J. J. H. de la

COLLECTIONS. In his 'Relation du voyage *etc.*'[2] BILLARDIÈRE charges D'AURIBEAU with the taking possession of all collections. In a document[4] he accuses DE ROSSEL of the same fact; the Dutch were said to have approved of this robbery; the Dutch fleet had the collections on board, when they were stolen by the English.



BILLARDIÈRE

LITERATURE. (4) Add: 'Notice de mes collections d'objets d'histoire naturelle, qui m'ont été enlevées par ROSSEL, lieutenant de vaisseau, devenu, par la mort des deux chefs et du premier lieutenant, commandant de l'expédition envoyée à la recherche du citoyen LA PEYROUSE' (Paris, le 13 germinal an IV, signed LA BILLARDIÈRE; document in Libr. Nat. Hist. Mus. Paris).

(6) Add: 'Mémoire sur un nouveau genre (l'Areng à sucre) de la famille des palmiers' (Mém. Math. & Phys. t. 4, p. 209–218, pl. 6–7).

Black, Rev. R. F.

He is commemorated in *Hetaeria blackii* AMES.

Blanco, F. M.

COLLECTIONS. When at Geneva, in April 1949, Dr VAN STEENIS found a sheet of *Exacum albens* BLANCO (reduced by MERRILL to *E. chironioides* GRIS.; possibly identical with *E. tetragonum* ROXB.); on the label is written: 'Ins. Philippines, M. BLANCO. 1853' in the handwriting of CAS. DECANDOLLE. It might have formed part of a collection presented by LLANOS to the Herb. DECANDOLLE.[4]

LITERATURE. (4) C. G. G. J. VAN STEENIS: 'Collection of Philippine plants of M. BLANCO at Geneva' (Bull. Bot. Gard. Buit. ser. 3, vol. 18, 1950, p. 468).

Bligh, William

LITERATURE. (1) First lines on p. 62 must read:

voyage of part of the crew, in the Ship's Boat, from Tofoa, one of the Friendly Islands, to Timor, a Dutch Settlement in the East Indies'.

Add: OWEN RUTTER: 'The true story of the mutiny in the Bounty' (Newnes, London, no date).

Blume, C. L.

LITERATURE. (2) Add: For publication dates of the 'Bijdragen *etc.*' and the 'Flora Javae' see respectively in Flora Malesiana Bull. *no* 4, Sept. 1948, p. 96–97; and *l.c. no* 2, Nov. 1947, p. 49, and *no* 5, July 1949, p. 138–141.

BIOGRAPHICAL DATA. Add: Note by WEIGEL at the head of the catalogue of the library of BLUME, which he offered for sale at Leipsic in 1863.

Boissieu la Martinière, de, *cf. sub* MARTINIÈRE in Alphabetical List.

Boldingh, I.

He is commemorated in *Stachytarpheta boldinghii* MOLDENKE.

Brink, G. van den

The herbarium of BALANSA at Leyden contains a specimen of *Erianthus velutinus* collected by G. VAN DEN BRINK (the name printed on a card). On the label is written *Java* in the same hand as the plant name. As this very rare species is known only from Further India, Khasia, *etc.*, the locality 'Java' seems very doubtful.

Brouwer, Hendrik Albertus

(1886, Medemblik, N.H., Holland; x), mining engineer, educated at the Technical College at Delft (1903–08); from 1909–10 he studied in the University of Paris, and made scientific investigations in South Africa; in 1910 he took his Dr's degree at Delft; mining engineer in the D.E.I., 1910–18; in 1918 appointed Professor at Delft, in 1925 Honorary Professor at Utrecht; since 1928 Professor of Geology at Amsterdam University.

BIOGRAPHICAL DATA. Wie is dat? 1948.

Brown, R.

BIOGRAPHICAL DATA. Add: Naughty jokes on him in a letter from J. E. GRAY to ALPH. DECANDOLLE, dated April 21, 1873 (in Arch. Conserv. Bot. Geneva).

Burcham, L. T.

LITERATURE. (1) Add: 'A "Grass-counter" in the Pacific' (Scient. Monthly 64, 1947, p. 21–32, w. ill.).

Burger, D.

At present Head of the Office for Agrarian Affairs of the Government Service of the National Plan in the Netherlands.

Busseuil, Fr. L.

COLLECTIONS. *Herb. Paris:* plants from Australia and New Zealand; various objects of natural history (partly in alcohol, both botanical and zoological) from *Anambas*, Manila (*Luzon*), *Java, etc.*[2]

On the two plants described in the Natural History part of vol. 2 of the 'Journal de la navigation *etc.*'[1] a note is published by Dr VAN STEENIS.[3]

LITERATURE. (2) *cf.* MS. list in Herb. (Phanérog.) Paris, made by BUSSEUIL at Brest on July 20, 1826.

(3) In Bull. Bot. Gard. Buit. ser. 3, vol. 18, 1950, p. 460–461.

Callery, J. J. M.

COLLECTIONS. *Philippine* plants (coll. *1840*) also in *Herb. Paris*, and some in *Herb.* DECAND. (*Geneva*).

***Canicosa**

collected together with M. SULIT in *Luzon, P.I.*, about *1937, 1938*. In *Herb. Manila*, numbered in the F.B. series.

Cardoso, J. G. Alfaro, *cf.* ALFARO CARDOSO, J. G.

***Castro,** A. P.

made a botanical field trip in *East Samar* (*cf.* Ann. Rep. Director Philip. Nation. Mus. for 1947/48).

***Celestino,** M.

made botanical field trips in *Luzon* (Mt Pauai, Mt Polis, Mt Pulog) and *Mindoro*, in *1947/48*.

COLLECTIONS. *Herb. Manila:* 311 plants from *Luzon*, 133 from *Mindoro* (*cf.* Ann. Rep. Director Philip. Nation. Mus. for 1947/48); numbered in the P.N.H. series.

Chaffanjon, J.

(† Sept. 7), Assistant Naturalist of the Lyons Museum, 1881–82; teacher in Natural History at Saint-Pierre, Martinique, 1882–84; from 1891–94 in France.

COLLECTIONS. In 1908, when still in P. Boulang, he sent living plants (orchids *etc.*) from the Botanic Gardens of Singapore and Buitenzorg, and from elsewhere, to Paris.[2]

LITERATURE. (2) See 'Archives Nationales', Paris AJ^{15} 555.

BIOGRAPHICAL DATA. In 'Arch. Nation.' Paris AJ^{15} 555; Ann. Soc. Bot. Lyon 49, 1915, p. 165–168.

***Cinatti (Vaz Monteiro Gomes),** Ruy

(1915, London, England; x), of Portuguese nationality, was educated in the College of Agriculture at Lisbon; meteorologist with the Pan-American Airways at Lisbon. He travelled in Europe, Africa, Indonesia, and Australia. In July 1946 he went to the East as Secretary to the Governor of Portuguese Timor. During his stay, till Nov. 1947, he travelled all over the island, including the Dutch part. He worked in Australia with Dr DADSWELL on the macroscopic features of some Timorese woods.

COLLECTIONS. *Herb. For. Res. Inst. Buitenzorg: c.* 100 plants from *Port. Timor*. About 44

wood samples + dried material in *private collection* (for the time being kept in the Herb. and Sylvic. Lab. of the Instituto Superior de Agronomia, Tapada da Ajuda, Lisboa). The wood samples were identified in the Nat. Herb. Melbourne.

***Clautriau**, Georges

(1863, Marchienne-au-Pont, Belgium; May 23, 1900, Davos, Switzerland), was educated in the University of Brussels (pharmacy 1883), and took his degree of 'Doct. de Sciences naturelles' in 1887, while settled as a pharmaceutical chemist at Marchienne; on the staff of the Botanical Institute at Brussels. In 1896–97 he made a voyage to Java and Ceylon;[1] at Buitenzorg he occupied himself with a study of the localization of the alcaloids in different plants.[2]

COLLECTING LOCALITIES. *Java* (Sept. *1896*–March *1897*); visiting *Krakatau* (in Sunda Strait); in *W. Java:* Buitenzorg, Tjibodas,[3] G. Salak, Garoet, G. Goentoer; in *Centr. Java:* Boeroe Boedoer (= Boroboedoer), Prambanan; in *E. Java:* Madioen, Bangil, Prigèn, G. Ardjoeno-Welirang (and Lalidjiwo on the slope).

COLLECTIONS. In *Herb. Brussels:* phanerogams from above-mentioned localities.

LITERATURE. (1) G. CLAUTRIAU: 'Les installations botaniques et l'organisation agricole de Java et de Ceylan' (in L'Ingénieur agric. de Gembloux 1899).

(2) *cf.* DAMMERMAN in Ann. Jard. bot. Buit. 45, 1935, p. 21.

(3) G. CLAUTRIAU: 'La digestion dans les urnes de Nepenthes' (in Mém. couronnés et autres Mém. Acad. Roy. Belg. 59, 1900).

BIOGRAPHICAL DATA. Ann. Soc. Roy. Sci. Médic. et Natur. Bruxelles 9, fasc. 2–3, 1900, 31 pp., incl. bibliogr. + portr.

Coert, J. H.

COLLECTING LOCALITIES.[3] *1916.* S. Africa: Tafelberg (June 8, 13); *E. Java:* Djember (Nov. 17).—*1918.* Zandzee and G. Bromo (Febr. 24).—*1919.* G. Keloed w. Ir M. VALKENBURG (June 16–17), Kali Poetih, between s.f. Garoem and Popoh (July 16), G. Keloed (Aug. 6, 21–22).—*1920. Centr. Java:* G. Merbaboe (Apr. 13), G. Merapi (Apr. 15), G. Merbaboe (Apr. 22), Selo (Apr. 22–27); *E. Java:* Kediri (June 2).—*1921.* Beach near Popoh[1] (July 31), Pasoeroean w. JESWIET & TENGWALL (Aug. 7), G. Wilis (Aug. 14, 1200 m alt.); Ceylon: Colombo (Sept. 15).—*1922. E. Java:* G. Keloed (Nov. 15), G. Pandan summit (Dec. 19).—*1923.* Kali Wides, *pr.* dessa Wilangan (Jan. 31); Sarangan (Apr. 10–11), Soerabaja w. RANT (July 15), Soetji w. DORGELO & RANT (Aug. 26), G. Lawoe (Apr. 16–25).—*1924.* Sarangan, slope G. Lawoe (Apr. 7–29).—*1925.* Sarangan (Jan. 7, 13, and March 10–27), Poedjon and Dorowati (March 31); s.f. Soedhono, Kediri-Madioen (June 19, w. ERKELENS); Poedjon–Ngantang w. BACKER (July 26), Sarangan (Dec. 26–27).—*1926.* Gadoengan Paree ? w. VAN DER VEEN (Febr. 21); *Centr. Java:* Parangtritis, S of Djokja (Dec. 29).—*1927. W. Java:* Priangan Res. (Jan.), collecting on G. Patoeha (12–13), G. Papandajan and at Tjileuleuh (19), on G. Tiloe (20), at Pengalengan (21), *etc.; E. Java:* Ngantang (March 6), teak forest of Saradan (March 29), Pasoeroean (March 31), Moenoeng Forestry (Apr. 4, May 5), s.f. Poerwodadi (Apr. 28), Rawah Bening[1] (June 26, w. SCHRÖTER), Moenoeng Forestry (July 10), Gadoengan Forestry (Aug. 1, w. GEERTS and Mrs GEERTS-RONNER), Rawah Bening (Sept. 19); Ceylon (Oct. 20); possibly in this year on G. Ardjoeno near Tretes.—*1928.* Switzerland: Lugano (March 17); *E. Java:* Besoeki on G. Wilis (Aug. 12), Soekoredjo (Aug. 21), Sarangan (Aug. 31, Sept. 2–4), Idjen Plateau (Oct. 3); *W. Java:* G. Tampomas (Oct. 28), Kawah Kamodjan (Nov. 4); *E. Java:* G. Keloed (Nov. 26, 28), Redjoso (Nov. 30).—*1929.* G. Keloed (Febr. 3), Poedjon and Tretes (March 3), coast near Sidoardjo (March 17), G. Keloed (March 23), Sarangan (Apr. 1), Rawah Bening[1] (Apr. 14), Lebaksari (Apr. 21, May 31); *Madoera:* Kamal and Boerni (Sept. 22); *E. Java:* Grissee (Oct. 2), iodine wells near Bangil (Oct. 12); *Madoera* (Oct. 13); *E. Java:* Sarangan (Dec. 23).—*1930.* Sarangan (Jan. 1–4, 14), iodine wells near Bangil (March 25), Soetji (Apr. 27), Altingstraat (? Soerabaja or ? Lawang) (May 4), Trawas (May 11), teak forest Pandjeran–Mantoep (June 25); G. Smeroe, Ajek Ajek and Ranoepani (Sept. 6–8); *P. Sempoe* (Sept. 21); *P. Bawean* (Oct. 10); *E. Java:* Nongkodjadjar (Nov. 5).—*1931.* Laboehan-Kesambi I (Apr. 24).—*1932.* Pogal, W. Tengger (Febr. 8); Patjet (July 3), G. Lawoe (Nov. 5); *W. Java:* Kadipaten (Dec. 7).—*1933. E. Java:* Ranoe Daroengan (S. slope G. Smeroe) (May 26); Ajek Ajek and G. Smeroe (Sept. 6); *Madoera* and *P. Kebanang* (Sept. 16).—*1934. E. Java:* G. Karanganjar (Jan. 25), G. Baloeran (Febr. 9), Ranoe Pani to Sendoero (slope 'Smeroehoeve' to Loemadjang) (Febr. 11), s.f. Kenongo in Kediri (Apr. 19–20), G. Semongkrong (July 13), G. Lawoe (Nov. 5–26).—*1935.* S.f. Kenongo (Jan. 24), N. Jang (May 13), Rawah Bening (May 30), G. Keloed (Aug. 4), Trawas–upper course Kali Gembolo (Aug. 25), Pass Trodjiwo–Sideramping (Nov. 16), G. Lawoe (Nov. 19), Rawah Bening (Nov. 30).—*1936. SW. Celebes:* Bantimoeroeng (May 27); *E. Borneo:* Balikpapan (May 30); *Luzon:* Manila (June 3); China: Hongkong (June 6–7), Canton (8), Biwa Lake (10), Shanghai (13); Japan: Nagasaki (15), Kobe (16), Mizoro-ga-ika (?) (19), Hacone telephone hill (20), Sanjoku–Nagao-toke (21); Honolulu (July); U.S.A.: San Francisco (9), Yosemite (11), Yellowstone (14).—*1937.* Port Saïd (Febr. 2); Ceylon: Colombo (Febr. 11); *Singapore* (Febr. 16); *E. Java:* G. Wilis (March 28), Kepoetih E of Soerabaja (Nov. 7); *P. Bawean* w. BUWALDA (Nov. 27–30);[2] *E. Java:* Pogal (Dec. 12).—*1938. W. Java:* Tjikidang, Lembang and G. Lingkoeng (Febr.13); *Madoera:* Boerni (Apr. 3); *E. Java:* G. Keloed (Apr. 10), G. Tengger-Smeroe (Apr. 16–18); G. Bahoeng near Lawang (Nov. 6).—*1939.* G. Keloed (Apr. 7), Rawah Bening (Aug. 27), G. Goenting above Tretes (Nov. 14); Indra near Grissee, and G. Lenggis (Nov. 26).—*1940. ? W. Java:* G. Kassoer near Lembang, and G. Poeloesari (Apr.

21); *E. Java:* Soetji (Sept. 29), Grissee and environs (Oct. 13); G. Smeroe, Soembermanis near Batjangan Plain (Nov. 4); *Centr. Java:* Kopeng (G. Merbaboe) (Dec. 25–26), G. Telomojo (Dec. 30).—*1941. E. Java:* Zandzee, G. Bromo and G. Penandjaän (Febr. 28); Zandzee, G. Bromo and



COMMERSON

Tosari (Apr. 12); *Madoera:* G. Waroe (May 7); Lapadaja, dunes (May 8); dunes near Sergang (9); *Banka:* Wadoek Rias and sand-pit Rias (Sept. 24), Sg. Selang (= Slan) (25), spit of land Bakit, Belinjoe (26); *E. Java:* G. Andjasmoro (end of Nov.).

COLLECTIONS. Add: In 1949 his private collection was presented to the Rijksherbarium at Leyden by Mrs COERT. The plants were consecutively numbered and provisionally named by Dr VAN STEENIS. The original numbers consisted of 2 figures, *e.g.* 35.44, standing for *no* 44 of the year 1935; they may still be found on his labels. The labels often provide data on field ecology *etc.* The plants are very well preserved (treated with corrosive sublimate), but during the Japanese occupation in Java, about 1/10 of the collection was water-damaged, and had to be thrown away (incl. Tengger coll. 1941). The total collections amount to 1676 *nos.*

LITERATURE. (3) Data taken by Dr VAN STEENIS from the herbarium labels. In several localities only one plant was collected; these have been omitted from this list.

Collett, Col. Sir H.

ITINERARY.[1] From *Singapore* (Apr. 26, *1893*); *W. Java:* Batavia (28), and proceeding to Buitenzorg; visits to the Buitenzorg Botanic Garden and the Govt Experimental Plantation (= ? Cultuurtuin); by train (May 3) to Bandoeng; trip to Lambeng (= Lembang) and G. Tangkoebanpraha (= prahoe); by train from Bandoeng to Garoet; trips in the environs, to hot springs at the base of a mountain (= ? Kawa Manuk), ? Wanaradja Lake, G. Papandajan (from Tjisoeroepan), Telaga Bodas; by train to Tjiandjoer, from where to Sindanglaja (staying nearly a week), making trips to Tjibodas, Tjiburram (= Tjibeureum, slope G. Gedeh) waterfalls, Megamendoeng Pass (= Poentjak) and Telaga Warna; return to Buitenzorg and Batavia, sailing (May 17) to *Centr. Java:* Semarang (arrival on the 19th) and proceeding to Ambarawa; trip to Temanogoeng (= Temanggoeng); to Magelang (3 days' stay), Boroboedoer; to Djokjakarta (25), Prambanan temples; by railway to Soerakarta or Solo and straight through to *E. Java:* Soerabaja; next day to Passoeroewan (= Pasoeroean); to Tosari and Bromo Volcano *via* Poespo (making a list of Himalayan flowers which he recognized, and it amounted to over 60 species!), 'Sea of Sand' (= Zandzee), to Djaboeng and Malang; by rail to Soekaredjo, from where to Prigen, trip to Lalidjiwo (slope G. Ardjoeno); from Porong by train to Soerabaja; sailing for Batavia (staying a few hours on *P. Bawean*); sailing for Singapore (arriving June 12).

Collignon, J. N.

Some unpublished letters from the voyage of LA PÉROUSE, the last one dated Febr. 15, 1788, in Libr. Nat. Hist. Mus. Paris.

Convocar, P.

In *1947/48* he collected on Mt Isarog in *Luzon,* 189 *nos* in the P.N.H. series.

Cowley, E.

COLLECTIONS. Also some from *Thursday Isl.* (1893).[3]

LITERATURE. (3) In F. M. BAILEY: 'A few words about the flora of the islands of Torres Straits and the mainland about Somerset' (Austr. Assoc. Adv. Sci. Sydney sess. 1898, p. 423–447).

Didrichsen, D. F.

COLLECTIONS. Add: Plants from the 'Galathea' Expedition were identified by Dr E. D. MERRILL in 1948.

***Dierckx,** E. P. Frans

(1863, Turnhout, Belgium; 1937, Godinne, Belgium), Roman Catholic priest (1895), biologist who specialized in the study of *Penicillium.* From May 1901–Sept. 1902 he made a study tour to Java, Ceylon[1] and British India. Since 1903 teacher in the Faculty of Sciences at Namur.

ITINERARY. *1901–02.*[2] *Java* (8 months, till Apr. 1902): mainly at Buitenzorg, in the Foreigners' Laboratory; climbing six volcanoes.

COLLECTIONS. *Herb. Namur:* 50 *Java* plants.

LITERATURE. (1) E. P. F. DIERCKX: 'Six semaines à Ceylon' (Missions Belges de la Compagnie de Jésus, 1903–04) (*non vidi*).

(2) *cf.* DAMMERMAN in Ann. Jard. Bot. Buit. 45, 1935, p. 26–27.

BIOGRAPHICAL DATA. Taxandria *nos* 1 and 2, 1938, 12 pp. + portr.

Dolman, Henry Charles

(1901, Bath, England; x), was educated at Oxford University (Diploma in Forestry, and B. A. in Botany). Since 1947 Conservator of Forests in the Malay Peninsula.

***Douglas**, Hon. John

COLLECTIONS. Some plants in *Thursday Isl.* (coll. *1888*), probably in *Herb. Brisbane.*[1]

LITERATURE. (1) Described in F. M. BAILEY: 'A few words about the flora of the islands of Torres Straits and the mainland about Somerset' (Austr. Assoc. Adv. Sci. Sydney sess. 1898, p. 423–447).

Edaño, G. E.

COLLECTING LOCALITIES. Add: *1947–48. Luzon:* Manila and vicinity; *Palawan; Mindanao:* Mt Apo, Mt McKinley, Cotabato; *Mindoro:* Mt Halcon; *Luzon:* Lamao; *Negros:* Cuernos Mts, Lakes Danao and Balinsasayao and vicinity (in the eastern part of the island).

***Edwards**, T. H.

collected taxonomic specimens in *Palawan, P.I.* (*cf.* Chicago Nat. Hist. Mus. Jan. 1948, Report 1947, p. 93).

Ekeberg, C. G.

(1716, Djursholm, N of Stockholm, Sweden; 1784, Altomto-gård, in Upland, N of Stockholm), studied medicine; later mate and subsequently captain in the employ of the Swedish East India Company; he made 10 voyages to East India and China and brought home important natural history collections; after his retirement he settled at Altomto.

He is commemorated in the genus *Ekebergia* SPARRM.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

Endert, F. H.

In May 1949 he returned to the Forest Research Institute at Buitenzorg, Java, to compile a work on Indonesian timbers.

***Erkelens**

collected with J. H. COERT (see there, *Addenda*) at the s.f. Soedhono, Kediri-Madioen, *E. Java* (June 19, *1925*).

Eyma, Pierre Joseph

COLLECTIONS. Add: Early in 1950 Dr VAN STEENIS could put on record that the damage done to the Celebes material was less than expected.

BIOGRAPHICAL DATA. Bull. Bot. Gard. Buit. ser. 3, vol. 18, 1950, p. 403–406 + portr.

Farquhar, William

LITERATURE. (1) Add: I. H. BURKILL: 'WILLIAM FARQUHAR's drawings of Malayan plants' (Gard. Bull. Str. Settlem. 12, 1949, p. 404–407).

Foenander, Eric Carl

(1902, Kuala Lumpur, Selangor, Malay Peninsula; x), took his diploma in forestry at Rangoon University in 1927.

COLLECTING LOCALITIES. *Malay Peninsula. 1923–25.* Kuala Lipis Distr. in Pahang.—*1927–37.* Temerloh Distr. in Pahang.—*1937–38.* Klang Distr. in Selangor.—*1938–41.* Lower Perak.

During a visit to the Bera River plants were collected also.[1]

LITERATURE. (1) E. C. FOENANDER: 'A trip up the Bera River' (Malayan Forester 1, p. 100–107 (*non vidi*).

Forbes, H. O.

LITERATURE. (9) F. VON MUELLER, add: in Austr. Journ. Pharm., Jan. 1887.

Forestry Bureau, Manila, P.I.

Add: CANICOSA.

***Fox**, R. B.

made a botanical field trip to Baler and Mt Pinatubo in *Luzon*, in *1947/48.*

COLLECTIONS. *Herb. Manila:* 568 *nos* from *Luzon*, numbered in the P.N.H. series (*cf.* Ann. Rep. Director Philip. Nation. Mus. for 1947/48).

Gaudichaud-Beaupré, Ch.

LITERATURE. (4) Add: Folio MS. of CH. GAUDICHAUD: 'Voyage autour du Monde. Journal de Botanique et notes remises à M. DE FREYCINET' (in Arch. Herb. (Phanérog.) Paris). It includes several plant lists; from the Malaysian region: 'Liste des plantes recoltées à Timor (Coupang)' (126 *nos* + seeds); '*Ditto* à Bitoca, île d'Ombay (= ? Paitoko on P. Alor) (20 *nos* + seeds); '*Ditto* à Diely, île de Timor' (33 *nos* + seeds); '*Ditto* à Pisang' (32 *nos* + seeds); '*Ditto* aux îles de Rawak et Waigeou' (160 *nos* + seeds).

***Gilbert**, G.

(1906, Belgium; x), sylviculturist; in 1930 or '31 visited the Forest Research Institute at Tjiomas near Buitenzorg (W. Java), in company with OPZOMER (at present professor at Louvain) and G. SLADDEN; now Head of the 'Wetenschappelijke Opzoekingen' at Yangambi, Stanleyville (Belgian Congo).

Gomes da Silva, J., *cf.* SILVA, J. GOMES DA

Graeffe, Ed(o)uard

Add: In 1862 and subsequent years he collected in the Fiji, Tonga and Ellices Islands; in 1872 returned to Europe.

He is commemorated in *Carex graeffeana* BOECK.

BIOGRAPHICAL DATA. BACKER, Verkl. Woordenb., 1936.

***Greiner**, Dr

COLLECTIONS. In *Herb.* MARTIUS (= *Brussels*): 3 specimens of *Desmodium triflorum* from *Java* (coll. *1866*).



GRIFFITH

Hagedoorn, H. J.

COLLECTING LOCALITIES. Add: *E. Java:* G. Hijang, basin kali Djeloewang (Oct. 19, *1913*); Moengal Pass near Tosari (Oct. 28, *1914*).

Hasselt, Johan Coenraad van

LITERATURE. (3) Add: In Febr. 1950 the MS. was returned from Batavia to Buitenzorg.

Hillebrand, W.

COLLECTING LOCALITIES. At Ambarawa in *Centr. Java* (*cf.* RUHLAND in Pflanzenreich 13, 1903, p. 41).

Hoed, G. den

COLLECTING LOCALITIES. Add: *1948. W. Java:* Pasar Ikan (Jan. 3, 17), *P. Purmerend* in the Bay of Batavia (Aug. 1), with P. VAN DER MEER.

COLLECTIONS. Add: *Herb. Leyden: nos* 2000–2100 from above-mentioned localities coll. DEN HOED & VAN DER MEER (pres. 1949).

***Hoekstra**, Marinus

(1893, Drachten, Fr., Holland; x), headmaster at Muntok, Banka; finally Inspector of Elementary Education in the D.E.I.; retired in 1946.

COLLECTIONS. Between 1926–31 he occasionally sent some dried plants to the *Buitenzorg* Botanic Gardens. ? Preserved in *Herb. Bog.*

Hoekstra, P.

Author of 'Paardenteelt op het eiland Soemba' (Vecartsenijkundige Meded. *no* 90, Batavia 1948, 190 pp., incl. App. A.–D. and Summary; App. C. is a list of 33 grasses).

Holttum, R. E.

Add: At present Professor of Botany, Raffles College, University of Malaya, Johore.

Hombron, J. B.

COLLECTIONS. HOMBRON & JACQUINOT collected in the following localities in the Malaysian region: *Ternate* (80 *nos*), *Ambon* (30), *Banda* (peak of G. Api, 10 *nos*), *Ceram* (Warrow = Waroe, 30 *nos*), *Îles Arrou* (= *Aroe Isls*, Wamar, 30 *nos*), Triton Bay (*SW. New Guinea*, 60 *nos* from the coast region), Makassar (*SW. Celebes*, interior, 40 *nos*), *Borneo* (near the coast, 40 *nos*), *Singapore* (5), *Soulou* (= *Sulu Islands*, 5 *nos*), Zamboangan (*Mindanao*, 60 *nos*), *Java* (Buitenzorg and Semarang, 80 *nos*), *Sumatra* (Lampong Bay, 30 *nos*), *Timor* (Coupang and S of it, 50 *nos*); besides some *Algae* in *Warrior Isl.* (Torres Strait) and *Île de Leyden* (= *P. Leiden*, Bay of Batavia).[4]

Drawings of the expedition (unsigned) in Libr. Nat. Hist. Mus. Paris.

LITERATURE. (4) *cf.* List in Arch. Herb. (Phanérog.) Paris.

***Hornemann**

COLLECTIONS. *Bauhinia* from *P. Penang* in *Herb. Copenhagen.*

Hornstedt, C. F.

COLLECTIONS. Add: The Java plants were identified by VAN STEENIS.[3]

LITERATURE. (3) C. G. G. J. VAN STEENIS: 'Account of Javan plants collected by C. F. HORNSTEDT in 1783–1784' (Acta Hort. Berg. 15, *no* 2, 1949, p. 39–43, 1 fig.).

Huell, Q. M. R. Ver, *cf.* VER HUELL, Q. M. R.

Hulstijn, Pieter van

(† 1944, in prisoner camp in Java).

Idenburg, A. G. A.

(† June 23, 1949, by plane crash, Bari, Italy).

Inokuma, T.

LITERATURE. (1) Add: S. KUBATA: 'Rutaceae collected by Prof. T. INOKUMA and K. HARA in Netherland North New Guinea' (Bull. Tokyo Univ. Forests *no* 36, Dec. 1948, p. 124–129, 2 pl.); 'A new species of Ternstroemia in Netherland North New Guinea' (*l.c.* p. 132–134, 1 pl.).

Jaag, O.
COLLECTIONS. The *Fungi* were identified by Dr K. B. BOEDIJN.[2]
LITERATURE. (2) 'The Fungi collected by Dr O. JAAG in Alor, Bali and Flores (Lesser Sunda Islands)' (Bull. Jard. Bot. Buit. sér. 3, vol. 16, 1940, p. 245–252, 3 fig.).

Junghuhn, F. W.
LITERATURE. (13) F. A. W. MIQUEL: 'Plantae Junghuhnianae *etc.*' *l.c.* Add: See publication dates in Flora Malesiana Bull. *no* 2, Nov. 1947, p. 50.

Jong, Dr Anne Willem Karel de
(1871, Utrecht, Holland; 1948, Wassenaar, Holland), from 1896–1903 in Dutch Government service; since 1904 on the staff of the Agricultural Chemical Laboratory at Buitenzorg, from 1910–21 Head of that Laboratory; retired in 1921. Probably identical with Dr A. W. DE JONGH, mentioned in the Cyclopaedia.

Jongh, Dr A. W. de, *cf.* JONG, Dr ANNE WILLEM KAREL DE, *sub Addenda.*

Joseph's collector, Chr. R. J.
JOSEPH was commemorated in *Sarcanthus josephii* J. J. SMITH (*cf.* BACKER, Verkl. Woordenb., 1936), which later proved identical with *S. terminus* RCHB. *f.*

Kaudern, W.
COLLECTING LOCALITIES. In *Centr. Celebes* he collected also at Ensa and Kolaka; in the *East Peninsula* at: Kalibambang, Pinapoean (8–900 m alt.), and Otampaitoenoe.

Kerr, A. F. G.
(† 1942, Hayes, Middlesex, England). Since 1932 he lived at Hayes, continuing the publication of numbers of the 'Florae Siamensis Enumeratio'.
BIOGRAPHICAL DATA. Add: Proc. Linn. Soc. Lond. 154, 1943, p. 285–286 (*non vidi*).

Kinsey, W. E.
(† 1943, England).
BIOGRAPHICAL DATA. Malayan Forester 11, 1948, p. 58.

Kock, Adrianus Cornelis de
(† 1949, The Hague, Holland).

Koning, A. de
(† 1949, Diepenveen near Deventer, Holland).

Kraemer, A. F.
(† 1941, Chile, S. America).
BIOGRAPHICAL DATA. Add: Ver. f. Vaterl. Naturk. in Württemberg 97–101, 1941–45, p. lv–lvii (1949), w. portr.

Kreke, M. C. A. van der
(1886, Alpen a/d Rijn, Holland; x). In 1946 she gave up her job and removed to Huis ter Heide (near Zeist).

Kruyt, Albertus Christiaan
from ? 1890–1932 missionary at Poso in Centr. Celebes; in 1913 Dr *hon. causa* at Utrecht University.
BIOGRAPHICAL DATA. Add: Bijdr. Taal-, Land- en Volkenk. 105, 1949, p. 143–146 + portr.

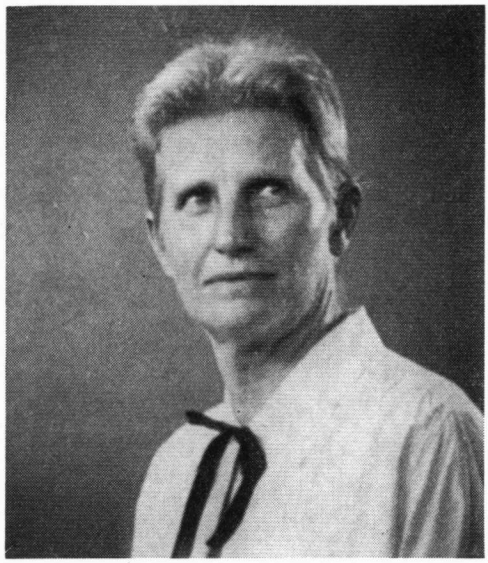


MONOD DE FROIDEVILLE

Loogen, J. G. T.
Also author of: 'Disperis javanica J.J.S.' (Trop. Nat. 27, 1938, p. 113–115, 2 fig.); 'Oekologie van eenige graswildernissen op den N. Diëng' (*l.c.* 30, 1941, p. 65–70, 4 fig.); 'Primula imperialis op den Soembing' (*l.c.* 30, 1941, p. 81–85, 4 fig.).

Möller, Hjalmar August
COLLECTIONS. Add: 53 *Nos* of *Java* plants were sent for identification to Dr E. D. MERRILL; dupl. in *Herb. Arn. Arbor.*
BIOGRAPHICAL DATA. Add: Bryologist 44, 1941, p. 128.

Monod de Froideville, Ch.
In 1949/50 settled at Buitenzorg and temporarily attached to the General Agricultural Experiment Station.
COLLECTING LOCALITIES. Add: *1949. Lesser Sunda Islands* (July 20–Aug. 8), in *Timor* (from Koepang to Atapoepoe) and *Soemba* (Waingapoe and vicinity).
COLLECTIONS. Add: Originally he numbered his collections separately, *viz* those from the Peak of Bonthain and Bawa Kraeng with B.K. *nos*, from the Lompo Batang with L.B. *nos;* from Karoea, Rante Karoea, region N of Makale, with K. *nos;* from Mamboeliling near Mamasa, Centr. mountains of Celebes with M. *nos*; also D. *nos* (sun-



MRS WALSH

dries); *etc.* The numbers mentioned in the Cyclopaedia are those given in the Buitenzorg Herbarium. The Leyden set was numbered anew too, but the numbers will not correspond with those given at Buitenzorg. The plants from the *Lesser Sunda Islands* (see above) will be inserted in *Herb. Bog.*

Pijl, L. van der
At present Professor of Botany in the University of Indonesia at Bandoeng.

Rappard, Fr. W.
COLLECTING LOCALITIES. *1948–49. E. Java:* Besoeki Res., *e.g.* on G. Ringgit and G. Baloeran.
COLLECTIONS. The above-mentioned collections in *Herb. Wageningen.*

Sauveur, Emile Gaston
After World War II he was wrongly supposed to have died in a prisoner camp in Siam. At present in the employ of the Indonesian Forestry Service, stationed in Borneo.

Speldewinde, C. A.
(† Dec. 6, 1949, Penang General Hospital), arrived from Ceylon in Malaya.

Thunberg, C. P.
LITERATURE. (4) Add: C. A. BACKER, R. C. BAKHUIZEN VAN DEN BRINK Jr. & C. G. G. J. VAN STEENIS: 'Identification of the new species and combinations proposed by C. P. THUNBERG in the Florula Javanica by L. WINBERG & F. O. WIDMARK (1825)' (Blumea vol. 6, 1950, p. 358–362).

Zip(p)elius, Alexander
BIOGRAPHICAL DATA. Add: Bull. Bot. Gard. Buit. ser. 3, vol. 18, 1950, p. 470–471.

Zollinger, Heinrich
LITERATURE. (21) M. J. VAN STEENIS-KRUSEMAN & C. G. G. J. VAN STEENIS: 'Did ZOLLINGER ever visit the Krakatoa Islands?' (Bull. Bot. Gard. Buit. ser. 3, vol. 18, 1950, p. 471–472).

SELECT INDEX

To add to the utility of the Cyclopaedia, *a selection was made of geographical names* (mostly islands, lakes, mountains, rivers and some botanically interesting regions).

Names of ships, expeditions and *scientific societies, nursery firms, committees, newspapers, etc.* financing expeditions, are included in this index.

Titles of subordinate paragraphs of the Introduction dealing with literature on special subjects have been entered.

Names of persons are entered when they are mentioned either in the Introduction, or in other people's entries in the Special Part (unless a cross-reference is made). No reference is made to collector's entries in the alphabetically arranged Special Part (including the Addenda). If *not* attached to the family name, the names preceded by 'van', 'van den', 'van der', 'du', 'd'', 'de', 'de la', *etc.*, are inserted under the proper name (*e.g.* VAN DEN BERG under BERG).

Plant names, except those mentioned in the Introduction, have not been inserted.

For the meaning of Indonesian prefixes used in combination with geographical names, such as 'Danau', 'Dolok', 'M(oear)a', 'Sitoe', 'Telaga', *etc.*, compare the legend on pp. 3–4.

The abbreviations placed in italics behind the geographical names are the following:

d = district (Residency, Province, or other administrative territory)
i = island(s)
l = lake
m = mountain(s)
p = place (settlement, village, town, *etc.*)
pen. = peninsula
r = river
s = ship

'Oe' versus 'u'. As is pointed to in the legend on pp. 3–4 the *'oe'* and *'u'*, both pronounced as 'oo' in good, are found in this index; generally the original spelling has been retained.

Cross-references to different spellings of geographical names have been made as far as possible. These will have to be consulted if one wishes to compile data on a certain locality.

Columnar reference. The letters *a* and *b* following the page references are chosen to indicate respectively the left and right columns of a page.

It is recommended to use the legend on pp. 3–4 next to this one, as this will enable the reader to get sufficient knowledge of the intricate questions of spelling and terminology in Malaysian geography.

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Adhatoda ramosissima xviiib.
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Agusan *r* 253b.
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Aird Mts 339a, 340a.
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