

THE RIJKSHERBARIUM DURING THE WAR

by

H. J. LAM

(Director).

Now that the war in Europe is over it seems appropriate, before returning to our regular duties, to devote some words to the fate and the activities of our institution during that period. For Dutch readers many particulars may be found in the "*Jaarverslagen*" (Annual Reports); for sister-institutions abroad the following points may be of some interest.

First of all it may be stated with deep gratitude that the National Herbarium of Holland has suffered no severe losses in man or material during the war.

PERSONNEL.

Of the personnel of about 20 people (of which 16 were men) only one (C. Mulder) was in active military service. He took part in the defense of the Waalhaven aerodrome near Rotterdam in May 1940 and resumed his duties after the capitulation. When in June 1943 the release of the prisoners of war was revoked, he refused to go and hiding himself at great personal risk, he joined the Interior Forces.

Two other young men (C. L. Marks and A. K. Groenewegen), equally members of the technical staff, were, in September 1943 and February 1944 respectively, summoned to work in Germany. They equally refused and hid themselves until the end of the war.

Although none of the other members of the personnel committed any heroic deeds, it may be stated with great satisfaction that none of them collaborated in any way with the usurpator. This implied that practically all members between the ages of 17 and 40 could not show themselves in the periods of the raids which were particularly frequent from November 1944 onward. Consequently, the general routine work was greatly slowed down, the more so as economic circumstances grew so extremely difficult that even a leave of about a quarter of the working time, granted since the beginning of December 1944, proved to be insufficient to meet the individual needs regarding the procuring of food and fuel. During the last eight months of the war very little work was done. During the last winter the central heating plant had to be put out of function and the whole of the personnel gathered in two rooms, the director's room and the reading-room, each heated by a stove. However, in the middle of February 1945 all heating was officially prohibited for the sake of the community-kitchens and the bakeries. What with the

lack of electric current, this made things not exactly alluring to night-watchmen and young men hiding in the building. It may be added that an excellent — though cold and draughty — hiding-place was fitted up between the concrete roof and the concrete ceiling of the topmost collection room. This was in critical moments successfully used as a retreat, though fortunately no actual raid on the building has been made. In addition, an inconspicuous basement room was used as a hiding-place for spare metals, instruments, bicycles, precious, radio's and other valuables.

The Director sent in his resignation as a Professor of Botany at the University in the middle of 1942. This action formed part of an almost general movement intended to oppose the purposed nazification of the university, which was founded in 1575 by Prince William of Orange as a stronghold of liberty ("*Praesidium Libertatis*"). The obstruction was successful and the university remained closed. Part of the Professors were imprisoned as hostages as early as 1942 and dismissed without payment; others — among whom the director of the "Rijksherbarium" — could continue their work as leaders of their institutes and received a reduced salary. The last-named group was dismissed in February 1943. Only one professor died in a German concentration camp. All others returned safely and resumed their task immediately after the liberation on May 5th, 1945.

COLLECTIONS.

In order to protect the building and the collections against bomb-splinters the basement floor was provided with sand-bags and wainscotings as early as August and September 1939. In May 1940 and again from September 1944 to the capitulation of the German forces in May 1945 the building was guarded overnight by the personnel. When the front approached our frontiers, it was decided to evacuate the topmost floor and to take some other measures so as to reduce as much as possible the risk of damage to the collections. Thus, in January 1944 all unidentified collections, some parts of the general collection (e. g. such type specimens as could be laid hands upon), the collections received on loan from other herbaria and the most valuable books and manuscripts were transported to those portions of the basement which promised the greatest amount of safety in case of fire or bombardments. Some very valuable books, such as the Rauwolff Herbarium of 1575 and some other invaluable copies were granted abode in the fireproof basement of the Museum of Ethnography. At the end of the war only 5570 herbarium specimens were on loan in foreign countries viz.:

Germany:

Stuttgart	32	(<i>Begoniaceae</i>)
Munich	59	(<i>Amarantaceae</i>)
Heidelberg	172	(<i>Filices</i>)
Berlin	290	(<i>div.</i>)
Breslau	1316	(<i>Urticaceae</i>)

France (Paris)	725
Sweden	396
Czechoslovakia (Prague) (<i>Fungi</i>)	226
Rest of Continent (Helsinki 20, Budapest 2, Lwow 20, Zürich 8)	50
Great Britain (London, Kew)	59
United States of America	1512
Buitenzorg (Java) (<i>div.</i>)	715
Singapore (<i>Myrtaceae</i>)	18
Total.....	5570

It is practically certain that the specimens in Berlin are to be considered lost on account of the destruction of the herbarium at Dahlem in 1943. What remains of the loans to Breslau, Budapest, Lwow and other places which have greatly suffered by the war — to say nothing about Buitenzorg and Singapore — remains to be seen.

The following statement may give some idea of the internal activities of the institute between 1938—1939 and 1944—1945 (p. 429), which may be elucidated by the following notes:

- (I) The number of specimens mounted rapidly decreased during 1944 on account of the fact that the stock of sheets was almost exhausted and could not be replenished.
- (II)a. The number of specimens lent increased during the war on account of the work on behalf of the "*Flora Neerlandica*" to be published by the Netherland Botanical Society.
 - b. The number of specimens borrowed — as a matter of course mostly from other herbaria, both public and private, in Holland — remained fairly high on account of the work on behalf of the "*Flora van Java*" by Dr C. A. Backer c.s. (see underneath).
- (IV)a. The number of plant acquisitions remained fairly high except during the last year, partly on account of the collecting activities of the junior staff members (Lichens, Mosses, Algae), partly as a consequence of war circumstances. The number of acquisitions during 1938—1939 includes the collection Lam & Meeuse from South Africa and Madagascar (2169 nrs) and some important exchange collections from Kew, Honolulu, etc. Those of the following years include gifts of European plants collected by Dutch collectors who, on account of personal difficulties desired to be relieved from the cares of their collections. The more important among these are an historically important collection of 2041 specimens from the "Vereeniging tot Beoefening van Overijsselsch Regt en Geschiedenis" (Society for the Study of Law and History in the Province of Overijssel) at Zwolle, comprising among others specimens from De Gorter (18th century); several collections of Mosses, Lichens and Phanerogams from Europe, presented by Mr W. H. Wachter; a Netherland collection by Mr J. A. V. van Embden of 1555 specimens; several collections of Java plants presented by Dr C.

Year (Sept. 1st— Aug. 31st)	(I) Number of specimens		(II) Number of specimens		(III) Duplicates		(IV) Acquisitions				(V) Photographs made	
	(a) Mounted	(b) Inserted in the collections	(a) Lent	(b) Borrowed	(a) Received for distribution	(b) Distributed	(a) Plant specimens	(b) Icones and Carpologicae	(c) Books	(d) Reprints	(a) Negatives	(b) Prints
1938—1939	16290	14001	7702	1614	37	1373	8187	75	31	303	166	450
1939—1940	13947	15733	3834	554	609	349	3258	50	57	238	437	773
1940—1941	19129	1737	5626	53	121	—	4621	4	21	3773	107	195
1941—1942	25849	24733	7467	2412	10	28	3414	60	19	406	140	290
1942—1943	16997	20173	8757	235	27	some	4361	1830	275	1475	157	336
1943—1944	7605	5192	13269	1924	579	some	5361	40	172	177	some	some
1944—1945	4669	1147	1368	—	13	—	677	—	5	78	some	some

- A. Backer; a collection of Netherland Phanerogams by Mr L. B. Holthuis; a collection of Phanerogams from Southern Europe and Holland by Dr C. G. F. H. Bayer (1263 spec.); a small but important collection of Celebes plants by Mr Ch. Monod de Froideville (548 spec.).
- b. The number of Icones acquired during 1942—1943 includes 750 water-colours and drawings of Fungi, Mosses and Hepatics by Mr J. A. V. van Embden, as well as 1071 original water-colours which have served for the "Flora Batavia", presented by Mr Wouter Nijhoff of Messrs Martinus Nijhoff, Ltd.
- c. The number of book acquisitions increased during the later war years. As the international (German) book market disappeared, it was endeavoured to buy useful and valuable books from private botanists. This was a great success and several botanists presented our library with valuable specimens. The years 1942—1943 include a legacy from Mrs A. Weber—Van Bosse, 1943—1944 a number of books purchased from private botanists.
- d. The number of reprints in 1940—1941 include a large collection of copies hailing from the estate of the late Dr J. P. Lotsy, those of 1942—1943 comprise a legacy from Mrs A. Weber—van Bosse.
- (V) On account of the lack of electricity during the last year of the war very little photographic work could be done in that period.

In addition to the above-mentioned acquisitions a number of private herbarium-collections and libraries were offered abode on request of their owners for the duration of the war.

STAFF-WORK.

As far as the regular work by staff-members was concerned, this was fairly normally continued during the war, as far as the lack of international contact permitted, except during the last six or eight months of the war when the perpetual strain and the far-reaching daily sorrows of the individual workers — hunting for food and chopping of wood was for many of them their main occupation, theft of property and kidnapping of people their perpetual fear for months and months — proved to be too heavy to allow a sufficient concentration or even enough time.

The lack of international intercourse enabled the staff to carry out several projects of internal reorganisation which in happier and more prosperous times were prevented from being accomplished on account of the overwhelming amount of current duties. Some of these could be completed during the war, of others a start was made in the expectation to continue them after the war (which will only be possible if the staff is considerably extended). Many of them were carried out under the daily supervision of Dr S. J. van Ooststroom. The more important items are:

A. Collections.

1. Rearrangement of the collections of
 - a. Manuscripts.
 - b. Specimina in liquor.
 - c. Carpologica.
 - d. Seeds.
 - e. Teratologica.
 - f. Netherland galls
 - g. Icones.
2. Arrangement of a collection of Personalia.
3. Arrangement of the Collection Weber—van Bosse (*Algae*) by Dr J. Th. Koster.
4. Mounting of about 80.000 herbarium-specimens.
5. Revision of the collection of duplicates in order to prepare them for distribution.
6. Preparation of unidentified collections (Carr — New Guinea, Clements — Borneo and New Guinea, Elbert — Lesser Sunda Islands, Lam & Meeuse — South Africa and Madagascar) to be distributed to specialists.
7. Reparation of damaged specimens (started).
8. Severing historically valuable collections (several pre-Linnean) from the general collection (started).
9. Identification of specimens on account of recent monographs (started).
10. Geographical arrangement of Malaysian specimens within the species (started).
11. Geographical arrangement of Netherland specimens within the species (started).

B. Catalogi.

1. Card index system to wall plates for lectures (systematic).
2. Ditto to reprints and literature-fishes concerning items of current interest.
3. Ditto to specimens in liquor and carpologica (systematic with an index according to numbers).
4. Ditto to the general library (started in 1936).
5. Lists of collections represented in the National Herbarium.
 - a. according to collectors' names.
 - b. geographically arranged.
6. Card index system to recent monographs and keys for determination (started).

C. Publications.

Of the journal "*Blumea*" the following numbers were issued since May 1940:

Vol. III, nr 3 (105 pp.)

Vol. IV, nrs 1—3 (542 pp.)

Suppl. II (Jubilee Vol. to Mrs. A. A. Weber—van Bosse, 118 pp.)

Vol. V, nrs 1—2 (422 pp.).

The manuscript of Vol. V, nr. 3 was ready for the press in the spring of 1944 but was withheld on account of the fact that the German authorities would not permit publication with the majority of the papers in English.

Almost every one of the staff-members contributed to some extent to the completion of Dr C. A. Backer's "Flora van Java". Two staff-members, Mr A. G. L. Adelbert en Dr R. C. Bakhuizen van den Brink were, since April 1942 and December 1943 respectively, full-time assistants to this work, a third, since April 1944, was kindly put at disposal by the Utrecht University Herbarium (Miss Dr G. J. H. Amshoff).

A provisional typescript of this Flora was published as an emergency edition in a limited number of copies. This was started towards the end of 1940. Up to the middle of 1945 seven parts were issued and its completion may be looked forward to in the beginning of 1946. New species, varieties and nomenclatural alterations are separately published in "*Blumea*".

For other activities in this field may be referred to the present number and to the notes regarding the individual workers underneath.

D. General.

In addition to the particulars mentioned under the names of individual staff-members the following points may throw some light upon the general staff-activities of the institute.

The usual staff-meetings were more or less regularly continued during the war. Of these there are two types, domestic business and scientific lectures. The following numbers of meetings were held since May 1940 till the end of the war:

	1940	1941	1942	1943	1944	1945
domestic	1	3	2	3	3	2
scientific	1	3	—	3	8	1

Botanical inventarisations of some ancient private country seats in the vicinity of Leyden (Oud-Poelgeest, Zuydwijk, Raaphorst) were carried out by some junior members of the staff (R. A. Maas Geesteranus, J. J. Barkman).

E. Individual.

The personal activities of staff-members, apart from their many scattered daily duties, largely appear from their publications, issued and intended. The following lines contain the titles of these publications — as far as they are of a botanical nature and have not been published in "*Blumea*" (the present number inclusive) — together with such remarks as are relative to their activities as far as they are not apparent from these titles. The arrangement is, first of all, according to the rank of the staff-member and is further chronological.

Dr H. J. Lam, director (*Phanerogams*) — Devoted a great part of his time to the preparation of a textbook of special botany, to be edited

by J. Lanjouw (Utrecht), A. A. Pulle (Utrecht) and himself. In this book (written in Dutch), Dr Lam expects to deal with Phytogeography (of which about one half was completed by the middle of 1945), Theoretical Taxonomy, Evolution and Phylogeny. Furthermore preparations were made to a collaboration to three separate Encyclopaediae (in Dutch).

Publications:

- LAM, H. J., Een botanische Studiereis naar Madagascar — Voordr. reeks Mij. *Diligentia* 1940, pp. 112—137.
- , Plantengeografisch beeld van Nederlandsch-Indië — Eenentwintigste Koloniale Vacantie cursus voor Geografen, Amsterdam 1940, pp. 12—20.
- , The life of Gronovius — *Chronica Botanica* VI, 2, 1940, 28—30.
- , Een historisch-plantengeografisch probleem van den Stillen Oceaan — Handel. 28ste Ned. Nat. & Geneesk. Congr. Utrecht 1941.
- , Trois nouveaux *Planchonella* de la Nouvelle Guinée avec une note sur *Krausella* — *Boissiera* VII, mars 1943, 91—99.
- , Hedendaagsche opvattingen over evolutie en phylogenie — *Vakbl. voor Biologen* 247, 1943, 73—81.
- , Contemporary opinions concerning Evolution and Phylogenetics — *Resumptio Genet.* XVI⁴, 1944, 161—174.

Ready for the press:

- , Flora (in Dutch) — to be published in a monograph of Celebes, to be issued by the "Molukken-Instituut".
- (with W. K. H. KARSTENS). *Plantkunde* (in Dutch) — to be published in an edition relative to the scientific work, during the last 25 years accomplished in Holland on behalf of the overseas parts of the empire, prepared by the "Werk-gemeenschap van Wetenschappelijke Organisaties in Nederland".

Dr J. Th. H e n r a r d, Conservator (*Phanerogams*) — Devoted most of his time to the completion of his monograph of the genus *Digitaria* (*Gramineae*), which by now is almost completed and for which the greater part of the text and illustrations are ready for the press. This important work of long years comprises about 90 % of the 300 species; 10 % (30 species) had to be left out. Of these 13 were formerly described by Germans and 4 by an Italian investigator. It is to be feared that the type specimens of all or most of these species (Berlin, Catania) have been destroyed during the war. The remaining 13 species can possibly be studied after the war. On account of the possible destruction of type specimens it is very fortunate that the types of almost all species could be studied, described and pictured.

Dr Henrard furthermore continued the arrangement of the extensive *Gramineae*-collections in the general herbarium and made a start with the study of the grasses of New Guinea and the Lesser Sunda Islands and of the genus *Setaria* (monograph).

Publications:

- HENRARD, J. TH., New Grasses from Suriname — *Rec. Trav. Bot. néerl.* 39, 1942, 141—146, 3 fig.
- , Notes on the genus *Bothriochloa* — *Gedenkboek J. Valckenier Suringar*, 1942, 181—187.
- (with G. J. H. AMSHOFF), *Gramineae* in PULLE, *Flora of Suriname* Vol. I, Part 1, 1943, 273—442.

Ready for the press:

- , Monograph of the genus *Digitaria* — to be published either separately or as a supplement to "Blumea". This typescript of about 800 pages with about 350 figures is practically ready for the press except some few particulars which, on account of the lack of international contact could thusfar not be obtained. This work is subdivided into three parts: A. Introductory and general considerations; B. Critical treatment of the literature, alphabetically arranged; C. Taxonomic subdivision, with keys.

Dr S. J. van Ooststroom, Conservator (*Phanerogams*) — Devoted much of his time to numerous internal reorganisations (see above) and further to the organisation of the "*Flora Neerlandica*", to be edited by the Netherland Botanical Society as a Centenary Publication, for which he also prepared and completed the elaboration of the Pteridophyta. In collaboration with J. G. Sloff, the same was done on behalf of the 2nd Edition of the "*Prodromus Florae Batavae*".

Publications:

- OOSTSTROOM, S. J. VAN (with O. DEGENER), *Ipomoea tuboides* Degener & Van Oostr. — *Flora Hawaiiensis*, Fam. 307, 1940.
- , *Lamium album* L. var. *splendens*, nov. var. — *Ned. Kruidk. Arch.* 50, 1940, 159—161, 1 fig.
- , *Teratologische Aanteekeningen* IV. — *Ned. Kruidk. Arch.* 50, 1940, 162—168, 1 fig.
- , *Convolvulus lineatus* L. in *Zeeland ontdekt* — *De Levende Natuur* XLVI, 1941, 153—155.
- , *Colobanthus* spec. en *Oenothera contorta* Dougl. in A. W. KLOOS, *Aanwinsten van de Nederlandse Flora in 1940*. — *Ned. Kruidk. Arch.* 51, 1941, 109—110 en 114—115.
- , *Het herbarium van David de Gorter* — *Ned. Kruidk. Arch.* 51, 1941, 252—274.
- , *Dr J. J. Smith vijf en zeventig jaar* — *Orchideeën* 9, 1942, 39—43.
- , *Weer een vondst van Proboscidea* — *De Levende Natuur* XLVII, 1942, 123.
- , *Een 17de eeuwsch herbarium uit de omgeving van Danzig* — *Gedenkboek J. Valckenier Suringar*, 1942, 208—217.
- , *Geastrum nanum* Pers. met twee peristomen — *Fungus* 14e jaarg., 1943, 49.
- , *Het geslacht Cuscuta in Nederland* — *Ned. Kruidk. Arch.* 52, 1942, 159—210.
- , *Portulacaceae* in PULLE, *Flora of Suriname* Vol. I, Part 1, 1943, 486—491.
- , *Ranunculus Cymbalaria* Pursh in A. W. KLOOS Jr., *Aanwinsten van de Nederlandse Flora in 1942* — *Ned. Kruidk. Arch.* 53, 1943, 37—39.
- (with J. TH. KOSTER), *Een nieuwe vorm van Crepis biennis* L. — *Ned. Kruidk. Archief* 53, 1943, 72—74.

Ready for the press:

- , *Lamium album* L. var. *caudatum* nov. var. — to be published in "*Nederlandsch Kruidkundig Archief*".
- , *Pteridophyta* — to be published in "*Flora neerlandica*". The Pteridophytes of the Netherlands, with particular stress on the taxa subordinate to the species.
- , *Eenige nieuwe combinaties en nieuwe vormen bij Nederlandse Pteridophyta* — to be published in "*Nederlandsch Kruidkundig Archief*".
- , *Convolvulaceae* — to be published in "*Nova Guinea*".

Dr Josephine Th. Koster, Assistant (*Compositae, Algae*) — Devoted much of her time to the rearrangement and the modernisation of the Herbarium Weber—van Bosse. This task, started in 1934, was completed during the war. Furthermore she assisted Dr Van Ooststroom in some of the internal reorganisations, particularly the rearrangement and the sorting of the duplicate collections. Finally she continued the elaboration of Herzog's Bolivia *Compositae*.

Publications:

KOSTER, J. TH. (with S. J. VAN OOSTSTROOM), Een nieuwe vorm van *Crepis biennis* L. — Ned. Kruidk. Archief 53, 1943, 72—74.

Dr J. S. Zaneveld, Assistant, in September 1942 succeeded by R. A. Maas Geesteranus, Assistant (*Fungi*) — Mr Maas Geesteranus devoted most of his time to a revision of the Netherland Lichens on behalf of his thesis. This work is very nearly completed. He furthermore made numerous collecting trips in all parts of the Netherlands.

Publications:

ZANEVELD, J. S., Nieuwe Nederlandse Myxomycetes en Fungi ontvangen aan het Rijksherbarium gedurende de jaren 1933 tot en met 1939 — Ned. Kruidk. Arch. 50, 1940, 98—104.

—, Lijst van Nederlandse Myxomycetes en Fungi ontvangen aan het Rijksherbarium gedurende de jaren 1933 tot en met 1939 — Med. Ned. Myc. Ver. 25, 1941, 31—60.

—, Het vruchtlichaam van *Polyporus Tuberastrer* Jacq. ex Fr. in Nederland gevonden — Fungus XIII, no. 1, 1942, 1—5, 2 fig.

—, Some Notes on Charophyta collected in the Netherlands West Indies, North Venezuela and Colombia — Rec. Trav. bot. néerl. 38, 1942, 141—146 (Meded. Bot. Museum en Herbarium Utrecht, No. 82).

Ready for the press:

MAAS GEESTERANUS, R. A., Revision of the Dutch Lichens I — to be published in "Blumea" (thesis).

A. G. L. Adelbert (since April 1942) and Dr R. C. Bakhuizen van den Brink (since December 1943), temporary assistants (*Phanero-gams*) to Dr C. A. Backer, unofficial collaborator — Devoted practically all of their time to the elaboration of natural orders on behalf of the new "*Flora van Java*" (see above and also under Dr C. A. Backer).

Mr Adelbert started a monographical study of the genus *Erycibe* (*Convolvulaceae*) on behalf of his thesis. This work, however, was interrupted on behalf of that on the "*Flora van Java*".

Dr Bakhuizen van den Brink started an elaboration of the *Urticaceae* on behalf of the "*Flora Neerlandica*" as well as an investigation of the diagnoses comprised in various Netherland Indian plant catalogi.

J. J. Barkman, temporary assistant (since July 1943, *Mosses*) — Devoted much of this time to an investigation of the cryptogamic epiphytic associations in the Netherlands. To that purpose he made, in some cases together with R. A. Maas Geesteranus, many collecting trips in several parts of the Netherlands during which also Mosses and Lichens were collected. Of some of these exsiccata were prepared.

Publications:

BARKMAN, J. J., Over eenige vondsten van Nematodengallen op bladmossen — De Levende Natuur XLVIII, n. 11, 1944, 137—139.

Ready for the press:

—, Over oecologie en sociologie der cryptogame epiphyten — to be published in "Vakblad voor Biologen".

—, Enige sociologische en plantengeografische opmerkingen over de flora van het Berger bosch — to be published in "Nederlandsch Kruidkundig Archief".

- , Bryologische zwerftochten door Nederland. I. Brabant. — to be published in "Nederlandsch Kruidkundig Archief".
- , Aanvullingen op de mosflora van de omgeving van Alkmaar (with W. MEYER) —
- , Mosgezelschappen aan meeroevers — to be published in "De Levende Natuur".

Dr J. J. Smith, Unofficial Collaborator, formerly, keeper of the Herbarium and Museum for Systematic Botany of the Government Botanic Garden, Buitenzorg, Java.

Publications:

SMITH, J. J., *Dendrobium cymbidioides* Lindl. en zijn naaste verwanten — *Orchideeën* 9, 1942, 44—48.

Ready for the press:

—, *Orchid flora of Java.*

This is an extensive typescript of more than 800 pages. It was ready for the press by the middle of 1941 but permission to be printed could not be obtained from the German authorities on account of the fact that it was written in English. It is a very augmented revision of the former work by the same author: *Die Orchideen von Java*, 1905.

Some progress was made in the picturing of Malay Orchids, for Dr Smith's series "*Icones Orchidacearum malayensium*".

Dr C. A. Backer, Unofficial Collaborator, formerly botanist for the Java flora at the Government Botanic Garden at Buitenzorg, Java and later at the Sugar Experiment Station at Pasoeroean, Java.

Publications:

BACKER, C. A. (with collaborators), *Flora van Java*, Afl. I, II, III, IV A—C, V, 1940—1944, to be continued.