

IV. THE PAPUA AND NEW GUINEA HERBARIUM

by

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A short account of the establishment of the Herbarium of the Department of Forests, Papua and New Guinea appeared on p. 61, no 3, volume I of Flora Malesiana Bulletin.

This Herbarium has now been firmly established and is constantly receiving collections of plants from various parts of Papua and New Guinea. As a routine measure these are being distributed to the following herbaria: The Queensland State Herbarium at Brisbane, Queensland; The Herbarium of the Division of Plant Industry, Commonwealth Scientific and Industrial Research Organisation, Canberra; The Arnold Arboretum, America; The Herbarium at Kew, England; The Herbarium at Leiden, Holland; The Herbarium at Bogor, Indonesia; The Herbarium at Singapore, Malay States; The Herbarium of the Imperial Forestry Institute, Oxford, England. Duplicates of Coniferae are also sent to M.Y. O r r at Edinburgh, Scotland and to E.S t i r l i n g B o o t h at Adelaide, South Australia.

The botanical work within the Department of Forests has been organised into the Division of Forest Botany. The staff consists at present of the writer as Forest Botanist and clerical assistants. A Forest Ranger has been stationed with the Division from time to time. Applications have been called for the positions of Assistant Botanist-Ecologist and a Technical Assistant but neither have yet been filled. The European staff is assisted by a small labour force of natives.

The clerical staff is engaged almost entirely on the compilation of a card index which will include all available references to species which have been described from Dutch New Guinea, British New Guinea, Papua, the Bismark Archipelago and the Solomon Islands. The library of the Division is steadily growing both with original publications and photocopies obtained from Australian libraries. These are supplemented by photocopies obtained by the writer when in Australia for

leave periods. The species cards in the index covering our common forest trees include many references and from these and other information in Departmental files distribution maps are being prepared.

A series of notes dealing with the botanical features and timber characteristics of the principal timber trees is in the course of preparation.

Recent field work has provided quite large collections from the Sepik Valley up to the confluence of the October River and the Sepik River. This is some distance further upstream than the highest point reached by the German botanists and Ledermann. Approximately 300 numbers, mostly of ligneous species were collected. So far these have been partially determined into families and the duplicates distributed. It is necessary to distribute specimens as soon after they have been dried and identified, as satisfactory box and cupboard space here is limited and is taxed by our reference collections. Adequate field notes are prepared for each number and distributed with the sheets.

A collection from the Bulolo valley area at an altitude of 3,500 feet and above includes some interesting plants. Almost pure communities of Banksia dentata, a species previously known only from the coastal lowlands of the Papuan Gulf and the Gulf of Carpentaria in Northern Australia, have been discovered.

Some further examples of plants of decidedly Australian affinities have recently been discovered in the Central Highlands area of North Eastern New Guinea. In the vicinity of Nondugl in the Wahgi valley of the Central Highlands an undescribed species of Eucalyptus, a Scaevola, a species of Dodonaea which seems quite distinct from the usual D. viscosa and several Proteaceae have been collected. It is probable that a more thorough investigation of this area will reveal further examples of plants related to Australian types. Some remarks on this subject will shortly be published elsewhere. Plans are in hand to continue collecting work in this locality which ranges in altitude from 4,500 feet in the bottom of the valley to 10,500 feet on the mountain ridges where there are alpine communities.

The existence of these plants in an area where the Malayan type of flora is to be expected has raised some interesting problems in the recent history of the Central Highlands of New Guinea.

Future work of the Division as planned at present is designed to investigate the flora of as many areas as possible which were not reached by the German botanists and secondly to systematically work over the type localities of the more prolific collectors. For example Sogeri in Papua should provide many of Forbes species.

In Lae an area of 64 acres has been reserved within the town boundaries and the Department of Forests has been charged with the task of converting this into a botanic garden. I hope that these coastal gardens will be supplemented by various reservations up to the alpine communities.