

Threatening weather again interfered with activities on November 19th. The leader, Mr. Millener, who had been out the previous day seeking out matters of interest, found the bush extremely wet, so when rain fell at the time when many people should have been leaving, the excursion was officially called off. Perhaps it may be held next year! I am indebted to Mrs. Hynes for kindly forwarding an account of the trip.

EXCURSION TO TITIRANGI.

The party of keen members who did venture out were amply rewarded for their enthusiasm. First of all the party visited the property of Mr. Bishop, a happy hunting ground for the botanist who have not time to go further afield. Here lunch was partaken, and our sincere thanks are due to Mr. Bishop for his hospitality. The afternoon was spent very profitably on Exhibition Drive and the Scenic Drive, this route being taken for the return journey to Titirangi. Here along the roadsides is to be found a wealth of trees, shrubs, climbers and ferns, typical of the lower part of the Waitakere Ranges. Great interest was taken in Cythea cunninghamii, one of our rarer tree-ferns, and specimens of Libocedrus plumosa (kawaka) received the notice they merit. The flowers of our beautiful native iris, Libertia ixiodes, was another attraction. Other natives found in flower were Carpodetus serratus (putaputa-weta) Pennantia corymbosa (Kaikomako) with its juvenile and adult forms showing, Paratrophis microphylla, Elaeocarpus dentatus, (hinau), Cordyline banksii, Carmichaelia australis, Fuchsia excorticata, and Solanum aviculare (Poroporo) with its large purple flowers. Of the orchids Pterostylis banksii was still flowering, and our roadside friends - Thelymitra longifolia, Microtis unifolia, Orthoceras strictum, and Caladenia minor - could not be missed.

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GENERAL.

The Orchids of New South Wales, by the Rev. H.M.R. Rupp. Issued by the National Herbarium, Sydney, price 9/-
Although the book deals with N.S.W. orchids, it is well to remember that 19 of the genera described are represented in N.Z. In some cases we have identical species, ex. Thelymitra ixiodes. N.Z. has 66 recognised species of orchids. N.S.W. has 248, but even

this seems a small number when we remember that the sum total of orchid species is at least 20,000. The Rev. Rupp's book is an authoritative account of N.Z.W. orchids by an acknowledged expert, it is illustrated by excellent line drawings and provided with a glossary and explanation of specific and varietal names.

Botany Division Publication, No. 9, is of particular interest to the Society as it is written by one of our foundation members, Miss L.B. Moore, and deals with "New Zealand Seaweed for Agar-Manufacture". Miss Moore has studied in this connection the two species of Pterocladia, (P. lucida and P. capillacea) and has many interesting and encouraging comments to make on them. She finds that both the species are able to reproduce themselves by means of stolons, so that the fields will regenerate, and it seems possible that with suitable care a steady supply may be maintained. Much of the collecting is done by Maoris. Sometimes the amount collected is surprising. During May 1943, for instance, the yield from the Bay of Plenty reached 25,580 tons dry weight of P. lucida ! The paper contains much of interest both botanically and commercially. It was first published in the N.Z. Journal of Science and Technology (Vol. 25, No. 5; (Sec. B) 1944.)

A new country member, Mr. R. Green of Otorohanga, writes that he has been studying the genus Pittosporum, and would be pleased to help any one interested. He says: "I have here all growing mentioned in Cheeseman's Manual, except the very dubious. Pintermedium" (this is a species identified from a solitary tree since cut down!) Mr. Green would like material of P. anomolum from National Park. His address is Puketarata Rd. Kio Kio, Otorohanga.

Mr. Green is studying a group of particular interest. There are 23 species of Pittosporum listed in Cheeseman, to which Laing and Gourlay add three new ones, P. crassicaule, P. anomolum, and P. lineare. The small leaved members of the genus have been the subject of study by the last two named gentlemen, their results are published in the Transactions (Vol. 65, 1936, p. 44-62.) The authors point out that all six species studied (except P. lineare) are extremely variable, in addition all five have distinct juvenile and shade forms "differing in habit, leaf size and shape from the corresponding adult plant. Sometimes there is more than one adult form, and the juvenile may go through many stages." In addition to these complications, some members of the genus hybridize together.

Under the circumstances, we think Mr. Green very wise to grow these plants for himself.

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We have much pleasure in publishing the following record of observations made by one of our members, Mr. V.F. Fisher, of the War Memorial Museum, while on Service in New Caledonia. Mr. Fisher is not able to attend our meetings, but in the ensuing article he makes a most helpful contribution to our activities.

NOTES ON NEW CALEDONIAN PLANTS.

V.F. Fisher.

The purpose of this article is to make brief reference to certain characteristic features of the vegetation and then to dwell more especially on those genera common to both New Caledonia and New Zealand, which the writer observed during a stay of many months.

On the lowlands, which we may define as up to 1,000 feet, the arborescent growth is usually restricted largely to the niaouli (Melaleuca viridiflora), an occasional patch of gaiac (Acacia spirorbis) and several species of Casuarina. Other odd trees do occur but the niaouli commonly predominates over many hundreds of acres. It is an attractive tree with light green leaves, a white or sometimes creamish "bottle brush" flower, and a white papery bark which is commonly used by the natives for covering the roofs and walls of their dwelling huts. The undergrowth consists of the imported Lantana, which frequently covers many acres to the exclusion of almost everything else, but sometimes the wild guava competes for space.

The most attractive portions of the lowlands are the river banks, which, although meandering through niaouli country, nevertheless contain a variety of plants. From surrounding hills this feature stands out like a ribbon of green winding through less attractive forest. The composition of this riverside flora varies considerably, but usually has Pandanus predominating, with Casuarina (the "bois de fer" of the French) Cerbera manghas, Eugenia, and other members of the Myrtaceae, the Acachou, a plant possessing poisonous leaves, an occasional Banyan (Ficus) with its hundreds of spreading roots, and not infrequently