

white population of Apia.

From the gardens we drove to a remnant of bush where milling was under way. The appearance and structure of the bush was very similar to that of the Waitakere ranges, although all the plants were new to me. The buttresses of the many species of tall canopy trees were most remarkable - (up to 8 feet or more high near the trunk, many feet in length, only an inch or so thick, and radiating from the base of the trunk like the spokes of a wheel). A mosquito possessed of a sharp sting infested the Mile-a-minute, (Mikania micrantha a composite weed from tropical South America), which springs up wherever trees are felled. A stinging shrub, name forgotten, was sampled, at first voluntarily, and later involuntarily. Adventitious roots and leaves dangle from many trees, and perching plants are larger and more noticeable than in the N.Z. forest.

On our last day at Apia, we were driven for some miles round the island to a rocky headland clad in coastal forest, very similar in appearance to that of N.Z. but the species were all new.

The flora of Samoa was studied by Erling Christophersen, who visited N.Z. in 1949 for the 7th Pacific Science Congress, but large areas are unexplored and much remains to be done. Bower acted as guide to Christophersen, and is familiar with the Samoan names and uses of the plants, but there are no professional or amateur botanists in the islands - so I was told. A surplus of food (bananas, coconuts, taro, manihot, breadfruit, pawpaws etc.) is available at all times and there is little need for the Samoans to work. Consequently there is little need for the services of economic botanists and a plant introduction station - the main problem of the authorities is to maintain the existing plantations with the labour available. Another most profitable field awaits a young botanist, prepared to climb hills (one mountain in Savaii exceeds 6000'), and work under most difficult conditions, but there is little chance of financial assistance from the Samoan authorities. The complete absence of keen amateurs is puzzling. "

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We are grateful to Miss Nancy Bamford for this brief account of a much occupied trip:

"Miss Stevenson and I recently had an unexpected visit to Rarotonga in the Cook Islands. We left in a hurry and did

not have time to study beforehand the botanical surveys made by Cheeseman in 1903 and Wilder in 1931 but we found a copy of Wilder's survey available in Rarotonga. The Cook Island Maoris still make very practical use of their native plants and would quickly volunteer the Maori names of fruits and flowers.

The first tree to attract our interest along the coastal road was Hernandia peltata (puka). This is a tall tree with peltate leaves and bunches of pink or white fruit which are balloon-like sacs containing a single black seed. Another large coastal tree Barringtonia butonica has large leaves like N.Z. puka and large square fruits which can be used for poisoning fish. Along the beach the commonest plant is a large shiny-leaved shrub about 10 ft. high, Scaevola frutescens. Its half-sided flowers show its close relationship of N.Z. Pratia. An attractive pinkish mauve flowered creeper, Ipomoea pes-caprae crawled all over the coral sand together with the leafless Cassytha filiformis. The commonest tree everywhere was Hibiscus tiliaceus which has large round leaves and beautiful yellow flowers fading to pinkish brown. Many varieties also of red hibiscus were growing as hedges or on hill-sides. Drooping Casuarinas grew along the coast. The scarlet flamboyant trees, Delonix regia, were only just coming into flower but we saw large numbers of scarlet Spathoda campanulata, the African tulip which is spreading round the island.

Exploring up the many valleys (for the island is of volcanic origin and the centre is very broken country) we found the various forest trees - candlenuts, Aleurites moluccana, very lovely with their whitish backed leaves; Inocarpus edulis, a large tree with buttressed trunks belonging to the legume family. The endemic composite, Fitchia speciosa, was very interesting. Its large red paint brush flowers are composed of pistils and stamens only. These are surrounded at their base by stiff, overlapping bracts. The flowers hang down but when we saw them were faded to brown and were even more like paint brushes. This is the only gregarious tree on the island and it has prop roots like the pandanus.

We did not reach the mountain peaks which are about 2,000 feet high and are the same formation as Mannaia at Whangarei Heads.

Other plants which were most interesting or spectacular were - Psilotum, growing quite plentifully in one valley; Phajus grandifolius, a lovely pinkish brown ground orchid with stalks about 2 ft. high; Entada phaseloides, a creeper with pods 3 ft.

long; giant specimens of Marattia in the valleys; Centella asiatica along the stream banks; Piper latifolia, like N.Z. Macropiper excelsum but with shinier, brighter leaves; Clerodendron fragrans, a tree member of the verbena family with a cluster of pinkish flowers and soft grey leaves; Clerodendron fallax known as the "ghost flower" which has black seeds set on long red pedicels; blue Ageratum conyzoides growing like a weed.

The cultivated plants were all interesting - various coconuts (Cocos nucifera), mangoes, tomatoes, kumara. Taro (Colocasia esculenta - 18 varieties) was grown in flat damp fields with waterlilies in the intervening ditches or in smaller patches up the valley streams. Arrowroot was plentiful. Banana plantations were not very numerous as shipping is not available for exporting the fruit.

We visited Department of Agriculture citrus nurseries and the orchards which have been planted out since 1945. As little animal feed is available, horses have to be tethered to prevent their doing damage to the orange trees. Commelina nudiflora is the most succulent herb for food - it has blue flowers.

Very large flowers of introduced plants with beautiful colours and scents grow luxuriantly in the gardens in the villages - Cestrum nocturnum, gerberas, crotons, coleus, pointsettias, gingers, gardenias and frangipanni (Plumeria)."

- Nancy Bamford.

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We are indebted to Mr. Hannken, for kindly writing an account of the Society's trip to Oratia, and also for providing the excursion with competent leadership:

"The first day of Spring 1951 fell on Saturday the 15th of September which was, by a happy and unusual coincidence, the day on which the society visited the University reserve at Kelly's Rd. Oratia.

The problem of sorting out Olea lanceolata and Mida salicifolia proved most entertaining. Both occur abundantly and under the guidance of Mr. G. Atkinson ("O" for "Olea", "O" for "opposite") we learnt the main points of difference. The rather thick glossy leaf of Olea has a prominent light-coloured midrib on the upper surface, while the Mida leaf, thinner and duller, is markedly net-veined on the underside. In addition,