

RECENT PUBLICATIONS.

Part 3 of Volume 73 of the Transactions of the Royal Society of New Zealand, issued in December 1943, contains three botanical papers, all as it happens, by members of our Society.

Miss E. J. Batham describes the vascular anatomy of New Zealand species of Gunnera. She studied seven out of our eight species, and found the internal structure of the stems and stolons, though sufficiently complicated, still much simpler than that of the big Gunneras of South America and Hawaii. Some of these giant Gunneras we see in gardens, e.g. Gunnera chilensis, looking more like heavy overgrown rhubarb, than like our modest little soil-hugging species.

Mr. V. D. Motou's paper "Germin Changes in the Homopolymers of N.Z. Species of Gramineae" is addressed especially to agronomologists, but the ordinary botanist who hopes to be able to grant a few common grasses by name, will note several changes with interest. A few are given here.

Arundo conspicua becomes A. kakaha, but we may still call it toetoe. Dicellaechne crinita and D. sciurea appear under Dasyxuxia, as Dasyxuxia crinita and Dasyxuxia conspicua respectively. The two species of Hierochloa or holy grass both change their specific names, H. fraseri becoming H. alpina and H. recolens, H. antarctica. The tall dainty grass that was much admired and discussed at Mr. Duncan's, once known as Stipa arundinacea is now named Oxyopsis rigida. Two new genera are erected, Cockaynea, nearly related to Myrag and Petriella which has affinities with Microlaena.

Mr. G. Simpson of Dunedin is co-author with the late Mr. J. Scott Thomson of "Notes on Some N.Z. Plants and Descriptions of New Species".

Geranium microphyllum is given two new varieties, obtusatum with orbicular brownish, pubescent leaves, and discolor with yellowish brown leaves mottled with pale yellow. Cassipouliiflorum var. maculatum var. nov. is distinguished by its leaves, purple-spotted above, and its shortly-pedicelled pink flowers, while in the same species var. arenarium is similar to var. glabrum but everywhere soft and fleshy, with leaf-blades pale glaucous grey. Other species getting new varieties are Aristotelia fruticosae, Rarsonia capsularia, Myrsotis pygmaea, M. macrantha, Habe lygocodioides, Myrsotis barka, Celmisia insularis, Cassipouliiflora, Abrotanella linearis and Senecio bellidiflorae. New species appear in Epilobium, Myrsotis, Habe (4 species), and Brachycome (2 species).

Full descriptions with details of distribution and habitats are provided. Without name changes, useful notes are given about distribution and occurrence of a number of other species. The fact that many of these plants have been grown in gardens, either by the authors, or by Mr. W. B. Brookie in Christchurch, adds great value to these revisions.

A LETTER FROM LEVIN.

We were away up the Waiopuha track on 25th March. The rains lately have greatly benefited the vegetation there, and mosses and other small things were looking quite revived and fresh again. We did not go all the way to the end of the track that has been roughly remade since the great storm of February, 1936, when windfall trees completely blocked the old one.

I found a lovely bronze-leaved hinau up high on the upturned roots of a large tree that had fallen. At Palmer's Camp there was Danthonia cunninghamii, only two clumps of it cut in the open amongst Blechnum discolor which practically covers the flat there. The flower heads that were so showy up the Wai-iti in late January were just about done.

There were plenty of miro berries here and there along the track, and the Dianella was a thing of great beauty with lovely long sprays of blue berries. I found one lonesome berry on a tall slender plant of Myrtus pedunculata, and all admired it as it was the first we had seen; but further on I spotted a more open plant with quite a number

of berries from green to orange-scarlet. The season appears to have suited the Myrtus family as all kinds on our tramps have shown a fine lot of flower -- some bushes were almost white -- like the faintly aromatic scent of their flowers.

One of the party found a clump of very long Dendrobium on an old piece of rata vines by the side of the track. He decided to take it home, and carrying it on his shoulder had to gather up the long stems as they trailed on the ground.

E. C. PARSONS.

COLONIAL KNOB, 26.2.44.

The excursion to Colonial Knob (between Tawa Flat and the Ohariu coast) was attended by 13 members. Resisting the temptation to stay in Mr. Duncan's garden we soon reached the small stream below the Mental Hospital dam, where small frogs and tadpoles proved a further and more unexpected counter-attraction. The bush filling one main gully and petering out into more or less scrubby growth on the ridges, was cool and damp even after the dry summer. Half-ripe tawa berries along the track showed opossum trademarks, and there was considerable evidence that farm animals graze from time to time within the bush. This seems a pity when it is considered that a few years ago money was spent on fences to keep stock from this valuable forest remnant.

Billies were boiled in a glade of nikau, beside a rapid little stream flowing over rocks stained with the bright maroon colour of the alga Hildenbrandia. Toasted mushrooms were a special feature of menu.

From where the scrub abuts on a grassy ridge we could see that the Knob was fogged over, and there would be no view. Some of the party decided to go on to the top to see the interesting scrub, dominated in parts by Coprosma foetidissima, and the single surviving plant of Nothopanax anomalum. The rest returned by a steep side gully where mangora, mahoe and supplejack were especially noted. This took them into the upper part of the stream bed, where the wealth of lush growth especially of bryophytes, was so attractive that progress was very slow. The two parties joined forces again over a second billy + mushrooms interlude, and then returned to Mr. Duncan's garden. Only a few of the high lights can be mentioned. The climbing Senecio sciadophilus with dainty yellow flowers; Fuchsia procumbens with erect little flowers and disproportionately big fruits; the kauri tree, planted about 70 years ago and now 70 feet high, 50 inches in girth a foot above the ground, and bearing dozens of almost ripe cones; Olearia pachyphylla (the one that has a very restricted distribution in the Bay of Plenty) and Olearia avicennaeifolia, in flower; Meliccytus ramiflorus with a wonderful show of purple fruits; Marina autumnalis in perfect flower here and there along tracks.

The Society's thanks are due to Mr. Duncan for his hospitality and leadership, and for his enthusiasm towards preserving one of the few representative patches of damp forest in his immediate district.

THE VEGETATION OF THE WAITAKERE RANGES.

On March 20th Miss J. Hillary gave an account of the plant covering of this low range to the north west of Auckland City. After a brief sketch of the geological history of the area she described the chief plant communities, with the help of lantern slides.

The mixed-dicotylous rain forest is extensive, mostly dominated by tawa though rimu-rata forest is characteristic especially of the heads of valleys to the west and south. Taraira, Litsea calicaris, Phyllocladus glauca, tanekaha, and the large flowered Alseuosmia, Weinmannia silvicola, Libocedrus plumosa, all common species there, are notably absent at the latitude of Wellington. Platostemma rugosa, there very abundant, extends to the Tararua foothills.