

heads. Underneath we found more Schizaea dichotoma, the kauri fern, than we had ever seen before. We noted quite a wide variety of trees, shrubs and smaller plants, miro, tawa, Nestegis montana, Persoonia toru, Senecio kirikii, Corokia huddleioides, rimu, tanekaha, Alseuosmia quercifolia, Pittosporum tenuifolium, Coprosma spathulata and C. rubra, Freyinetia banksii, Gleichenia microphylla and Nertera depressa a creeping herb. The floor was carpeted with many seedlings. The ferns we listed were Elechnum capense, B. filiforme, B. fraseri, Lindsaea trichomanoides, L. linearis, Cardiomanes reniforme, Hymenophyllum multifidum, H. dilatatum, Dicksonia squarrosa, Cyathea dealbata and Lygodium articulatum the climbing fern. The orchids Pterostylis brumalis and P. trullifolia were just starting to bloom, several clumps of Barina mucronata and one small patch of Bilbophyllum pygmaeum grew on trees. For members interested in the mosses:- on the ground clumps of pale green milk moss, Leucobryum candidum, Dicranoloma billardieri, Mniodendron dendroides, Campylopusis introflexus, Ptychomnion aciculare and in very damp places Breutelia pendula, one of the apple mosses so called as its capsules are round. On the tree trunks the feathery moss Lapidium concinnum and Leptostomum in thick clumps. Macromitrium species crept along the trunks and boughs of the trees.

After lunch we followed Mr Hatch along the road leading to the Waitakere dam. There we saw more rata in bloom and one with bright red flowers. Griselinia lucida, Gleichenia cunninghamii and the ferns Histiopteris incisae grew on the banks. We found Microsorium diversifolium with heavy leaves rather like scandens. At the foot of the dam two perfectly shaped young rims of a rich bronze green were thriving. Mosses on the banks, in the open were Polytrichadelphus magellanicus, Pogonatum subulatum and Polytrichum juniperinum. Thuidium furfuasum mixed with the grasses.

Though the return walk was all uphill we thought it worth the energy involved.

CRYPTOSTYLIS SUBULATA (Labill.) Reichb.f. A NEW ORCHID FOR NEW ZEALAND

E.D. HATCH

In the N.Z. Journal of Botany 1976: Vol.14: p 275-7 Mr D.K.F. Graham describes the fascinating discovery of several dozen plants of the Australian Cryptostylis subulata in the Motutangi swamp, between Houhora and Rangaunu, in the 'sand trap' area of the far northern peninsula. Growing as it often does actually in water, C. subulata has much the same basic structure as Spiranthes, from which it is easily distinguished when not in flower, by the petiolate leaves. I had Australian material in cultivation here for some years and the tall spindly flower stems always tumbled over and had to be staked. At Motutangi the plants were closely surrounded by rushes and sedges which solved the support problem. The spidery-looking flowers have a large red-purple labellum which is very attractive to pollinating wasps. This may be alright in the swamp but is rather embarrassing in the glasshouse. The illustration is from the famous painting by W.H. Nicholls.