BOTANY OF THE HARTZ AND ADAMSON RANGES.

By L. RODWAY.

(Read May 20th, 1895.)

The south-west of Tasmania has many attractions to the botanist, the principal of which are, firstly, that the district has not been examined botanically beyond a few flying visits to a few places; secondly, that there are many plants growing in this district that are seldom or never found elsewhere.

It is only my intention to refer to plants of unusual interest, whether of distribution or other detail, and in doing so I shall deal with them in the order they occur in Bentham's Flora Australiensis.

Eriostemon oldfieldii, F. v. M., occurs on a northern spur of Adamson's Peak. It has hitherto been only recorded from Mount La Perouse and Cradle Mountain, where it was obtained in young fruit only. I am now in a position to describe the flower. Sepals about $\frac{1}{3}$ line long, broad; petals white and pink, narrow, oblong, about $2\frac{1}{2}$ to 3 lines long; both sepals and petals vary in number from 5 to 7, but are generally 6; stamens usually 12, filaments long, slender, glabrous; style slender; cocci verrucose. Flowering about December.

Eucryphia billardieri, Spack, abounds throughout the district, ascending to nearly 4,000ft. At high altitudes the habit is a small shrub, and in places even procumbent and creeping over rocks, the leaves being reduced to $\frac{1}{2}$ in. Hooker, in the Flora Tasmaniæ, describes the smaller leaved as a distinct species, E. milligani. In this district the transition is unbroken.

Anodopetalum biglandulosum, Cunn., is very abundant.

Drosera arcturi, Hook, is found everywhere at a high altitude, and D. binata, Lab., is common at the foot of Adamson's.

Leptospermum lanigerum, Sm., departs greatly from the type on the plateau of Adamson's, being nearly glabrous, with large leaves and flowers. A nearly allied form occurs in N.W. Tasmania and probably elsewhere.

Eucalyptus vernicosa, H., occurs on the Hartz, and here appears to constantly bear but one flower in an axil; specimens from other localities are usually 3-flowered.

Geum renifolium, F. v. M., grows in the crevices of the rocks on the Calf at the back of Adamson's, as well as on the main ridge.

Diplaspis hydrocotyle, H., in swampy land on the plateau on the eastern side of the summit of Adamson's.

Actinotus suffocata, H., is widely distributed throughout the range, but I did not meet with the coarser A. bellidioides, H., which is the much commoner form towards the West Coast.

Actinotus moorei, F. v. M. et R., grows in quantity in a button-grass swamp on the track to the Hartz at about 1,700ft.

Aciphylla procumbens, F. v. M., hitherto only recorded from Mount La Perouse, grows both on the Hartz and Adamson's. This plant, though agreeing with Aciphylla in general habit, differs in the structure of the fruit in this feature approaching Ligusticum. Von Müeller proposed to suppress the genus and include it in Gingidium.

Comprosma moorei, F. v. M. et R., occurs on Adamson's.

Abrotanella scapigera, F. v. M., grows on the northern spur of Adamson's, near the Calf, but A. forsterioides, H., appears to be quite absent, its place being taken by Donatia novæzelandieæ.

Helichrysum milligani, H., is very common on Adamson's, and the more common H. pumilum also occurs but sparingly.

Pterygopappus lawrencei, H., I observed in one small patch at the back of the Calf.

Senecio papillosus, F. v. M. Also only recorded from Mount La Perouse, is very common on Adamson's, but it did not appear to extend to the Hartz. The more scarce S. primulifolius, F. v. M., which occurs on La Perouse, I looked for in vain.

Senecio pectinatus, D. C., in divers forms occurs throughout the district. The type plant, var. ochroleuca, and var. pleiocephalus, also known as S. leptocarpus, D.C., grow all together with many intermediate forms.

Donatia novæzelandiæ, H., whose dense green cushions are exactly like Abrotanella forsterioides, H., so common on Mount Wellington, is very abundant throughout these ranges. This plant has a much wider Tasmanian distribution than has hitherto been recorded. It extends from Cradle Mountain to La Perouse, and from the Hartz to Mount Reid.

Archeria serpillifolia, H., appears at the back of the Calf.

Trochocarpa disticha, Spreng., T. gunnii., F. v. M., and Prionotes cerinthoides, are very abundant.

Richea pandanifolia, H., is also very abundant, and R. milligani, F. v. M., occurs in quantity in the dip between Hartz and Adamson's.

Dracophyllum milligani, H., is tolerably common at the back of the Calf. By some mistake Bentham records this as attaining the height of Richea pandanifolia, and the Rev. Spicer, in his handbook, refers to the plant being erect, and 3 to 40 feet high. The habit of the plant is creeping, subterranean, sending up flowering branches that reach a height of 1 to 4 feet.

Cenarrhenes nitida, Lab., and Agastachys odorata, R. Br., are very common.

Arthrotaxis selaginoides, Don., occurs sparingly on the Hartz and the northern spur of Adamson's; but in the latter locality there are very many old dead stems, the remains of a forest that was destroyed many a long year ago. The oldest inhabitant says it was due to an extraordinarily hard winter.

Microcachrys tetragona, H., Podocarpus alpina, R. Br., and Phyllocladus rhomboidalis, Rich., are the only other conifers observed.

Milligania densiflora, H., is very common, and nearly replaces the more widely distributed Astelia alpina, R. Br.

Milligania stylosa, F. v. M., occurs on the eastern side of Adamson's. The perianth segments are quite 4 to 5 lines long. In the original description they are recorded as about 2 lines.

Juncus capillaceus, Hook, forms dense patches.

Centrolepis monogyna, Hook, also is most abundant, at least on Adamson's.

Gaimardia fitzgeraldi, F. v. M. et R., which has hitherto only been found sparingly on Mount Geikie by W. Fitzgerald,

F.R.G.S., I found in great abundance in the dip between Hartz and Adamson's, and on the plateau to the east near the summit of Adamson's.

Ehrharta (Diplax) Tasmaniæ, F. v. M., is very common from the foot to the summit of Adamson's. I also found an Ehrharta, probably new to science, on the northern spur. I hope to shortly describe it.

Lomaria vulcanica, Blume, occurs on the Hartz.

Hymenophyllum malingii also occurs on the Hartz on the bark of Arthrotoxis selaginoides.

Cyathea cunninghami occurs between Esperance and Adamson's. This interesting fern has hitherto been recorded in Tasmania from Circular Head, near Scottsdale, Port Cygnet, Long Bay, Geeveston, and Oyster Cove. In Spicer's Handbook Alsophila cooperi is recorded from Adamson's. I am very disposed to think it an error; probably a barren frond of Cyathea is responsible for it.

Pleurophascum grandiglobum, Splachnum (Tetraplodon) tasmanicum also grow on Adamson's.

Forstera bellidifolia, Hook, grows throughout both ranges. Its place in this list should have been next Donatia. This interesting little plant has hitherto been found only on the western mountains of Tasmania.

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