

South Island: Head of L. Manapouri to Wilmott Pass, coll. G. Simpson H830 herb. Allison; Takahe Valley in *Danthonia* snowgrass, *D. teretifolia* and *D. crassiuscula* 12287 coll. C. J. Burrows.

Subantarctic Islands: On a boulder in an opening in the *Dracophyllum* scrub, North-east Harbour, Campbell Is. 2576 G. Einer Du Rietz; picked out from a cushion of *Dicranoloma robustum*, Mt. Honey, Campbell Island H6188 Herb. Allison, coll. A. F. Rae; with *Lembidium cucullatum*, bush above Musgrave Pen. Auckland Is. 11825, coll. R. L. Oliver; on ground under *Cassinia* scrub, Enderby Is., Auckland Is. Group, coll. B. Fineran 23/i/66, No. 1635; tussock grassland, Antipodes Is., coll. Dr E. J. Godley, Feb. 1969, No. 161607 CHR.

The type was from Campbell Is. coll. Hooker.

*Adelanthus schusterianus* (Grolle) Hodgs. Subgenus *Wettsteinia* Hodgs. (1967).

This species, described in English (Hodgson, 1967), is robust with tufted stems and stolons, stems rough with ruptured hyaloderm cells, sulcate when dry, leaves rounded, margins denticulate all round, underleaves absent, calyptras basal as in *Adelanthus falcatus*, bracts hyaline, fragile, margins longly toothed.

The structure of the capsule wall in both *Adelanthus* and *Wettsteinia* Schiff. is practically the same. In *Wettsteinia* Schiff. 6–7 stratose (Schuster 1963: 219). In *Adelanthus falcatus* (type of genus) normally 6-stratose (Schuster 1966: 691).

Grolle's type of *Wettsteinia schusterianus* was from Beech Forest, Cascade Crk. Fiordland coll. J. Taylor.

First collected by Dr Allan at Doubtful Sound, Golden Hind Exped. Jan.-Feb. 1945.

*Adelanthus gemmiparus* (Schust.) Hodgs. comb. nov.

Basionym *Calyptrocolea gemmipara* Schust.: Studies on Hepaticae VII-X. *Rev. Bry. et. Lichèn.* XXXIV, Fasc. 3–4, 1966, 676–703.

Plants dioicous, sterile (in specimens seen), small, light brown, usually amongst other bryophytes. Stems mostly procumbent, smooth, a little flexuous, but mainly straight, simple or rarely branched, branches ventral, intercalary, rhizoids scarce but more or less clustered at the junction of a branch (in one instance); in cross-section with 2–4 rows of small dark brown cortical cells ca 10 $\mu$ , enclosing hyaline medullary cells ca 20 $\mu$ , surface cortical cells variably elongate to as much as 45 $\mu$ . Leaves succubous, variable in size and shape, remote to contiguous, subtransversely spreading; mainly entire to 0.8mm, oval to broadly oval, the ventral margin more arched than the dorsal, a little concave at the base with the basal margin curved slightly upwards; upper and sometimes median ones acute to bilobed, lobes irregular, but ventral ones often larger, gemmae marginal, apparently mainly on the near apical margins of the upper leaves, minute, green, also in clusters at the apices of stolons (Schuster). Underleaves absent. Cells 10–15 $\mu$ , tightly packed in vertical rows, partly obscure with contents, marginal usually quadrate, median basal larger. Schuster (1966: 697), with much detail describes the fructification—usually from the bases of ventral branches, an erect shoot-calyptra with bracts and bracteole, and with perianth absent, as in *Adelanthus falcatus* (Hook.) Mitt.

This species has long been in my collection under the herbarium name of "*Adelanthus variifolius*"—from the following localities.

North Island: Forming a mat on roots with *Telaranea gottscheana*, western shore of L. Waikare-iti, 3,000ft, Urewera, on thinly shaded soil, nos. 6389, 2562, 6391, E. A. H., Dec. 1937; Makorako, Kaimanawas, with *Pallavicinia connivens* and *Lepidozia laevifolia*, 2,286 A. P. Druce; Otupae Station, N. W. Ruahines, with *Lepidozia laevifolia*, 1397 A. P. & H. M. Druce.