

Plants sterile, medium, epiphytic on *Dracophyllum* shrub with other hepatics. Stem to 2cm long, 0.2mm wide in the thickest part, minutely papillose; rhizoids scattered, sparse or plentiful, colourless; branches few, lateral-terminal with an incomplete dorsal leaf. Leaves succubous, a little dorsally decurrent, horizontally spreading or dorsally secund, sub-imbricate or a little remote, to 0.9mm on main stems, sub-symmetrical with dorsal and ventral margins a little arched, bilobed to one half, lobes more or less equal, triangular, acute or obtuse, sinus obtuse. Cells ca. 20μ , incrassate, sub-stellate, trigones very large, confluent, cuticle minutely papillose, roughly hexagonal, basal larger to 35μ , with smaller trigones. Underleaves linear-lanceolate occasionally with a small basal lobe, ca 0.2mm, arcuate.

This species differs from *A. cinerascens* in the pale leaves, equally bilobed, the small papillae, the incrassate, stellate, almost empty cells, and the conspicuous underleaves; nor does Stephani describe any species having these correlated characteristics. In *A. cinerascens* the dorsal lobe is much smaller than the ventral.

Typus on *Dracophyllum* with *Cuspidatula*, *Lepicolea*, *Frullania* and *Leptocolea cucullifolia*, Mangawaru Plateau, Raukumara Range, coll. A. P. Druce, Jan. 1953, no. 9274 Herb. E. A. Hodgson.

GOEBELOBRYUM Grolle

Goebelobryum paradoxum (Schust.) Hodgs. comb. nov.

Austrolophozia paradoxa Schust. *Journ. Hattori Bot. Lab.* No. 26, 1963.

Small, amongst other hepatics in snowgrass. Stems to 1.5cm, usually shorter, simple, or sparsely branched, 0.4mm in diameter, cells numerous with little differentiation, from a creeping densely rhizeriferous axis, rhizoids also present, long, on the basal portion of the leafy stem. Leaves succubous, with a wide arched insertion, from the mid-ventral stem, and somewhat dorsally decurrent, concave, to 1.4mm wide, ca. 1mm long, smaller on the branches, trilobate, lobes broadly triangular, apices acute or apiculate to shortly aristate, ending in 1-3 single cells. Underleaves absent or rudimentary. Cells rounded-hexagonal or oval-hexagonal, ca. 30μ to $30 \times 45\mu$, basal rectangular walls thick in older leaves trigones absent or minute, marginal cells quadrate or quadrate-rectangular. Oil-bodies small to comparatively large, mostly oval, 1-3 in each cell. Marsupium just forming at the stem apex, sheathed in small bracts.

The habit, wide concave, succubous, 3-lobed, soft-substantiated leaves, oil-bodies and rudimentary underleaves suggest *Goebelobryum* for this taxon. It lacks the network of basal stolons to be found in Marsupidium. From *G. unguiculatum* (H. & T.) Grolle it differs in the non-ciliate leaves and its alpine habitat.

With *Lepidozia obtusiloba*, *Telaranea patentissima* in snow grass, Kelly Range, Westland, 4,500ft, coll. C. J. Burrows, Mar. 1963, in Herb. C. J. Burrows, Canterbury University, No. 12584 Herb. Hodgson.

Experience with such genera as *Temnoma*, *Schistochila*, *Balantiopsis*, *Lepidolaena*, etc., shows that the presence or absence of marginal spines or cilia need not constitute a generic determinant.

The relationship of this supposedly new species to *Goebelobryum unguiculatum* (Hook. & Tayl.) Grolle is being investigated. Hooker (1967, p. 519) records *Gymnanthe unguiculata* (Hook. & Tayl.) Mitt. from Middle Island, which is the South Island. Schuster's type was from Mt Maunganui, Dunedin.

Goebelobryum unguiculatum (Hook. & Tayl.) Grolle

In his description of the new genus *Goebelobryum*, Grolle (1962) misquotes me as listing *Acrobolbus unguiculatus* for the Auckland Islands (Hodgson, 1946). The Auckland here listed is the Auckland of the North Island of New Zealand.

In Hooker's *Handbook of the New Zealand Flora*, Supplement p. 753, 1876, Mitten stated: "*Acrobolbus* Lehm. & Lindb. includes *Gymnanthe unguiculata* and *Gymnanthe lophocoleoides*". Grolle (1962b) does not allow these as new combinations for Mitten.