

Mnioloma novaezelandiae

COMMON NAME

Liverwort

SYNONYMS

The New Zealand species was first recognised in this country as *Mnioloma fuscum* (Lehm.) R.M.Shust.

FAMILY

Calypogeiaceae

AUTHORITY

Mnioloma novaezelandiae J.J.Engel

FLORA CATEGORY

Non-vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Liverworts

CURRENT CONSERVATION STATUS

2009 | Sparse

DISTRIBUTION

Endemic. North and South Islands



DETAILED DESCRIPTION

Plants forming brown-green mats. Shoots up to 50 mm long, 1000-1450 micrometre wide. Growth habit distinctly procumbent-pendent, branching frequent but irregular, exclusively ventral-intercalary. Stems 120-190 micrometre diameter with 10-14 cortical and 16-24 medullary cell rows, cortical cells with slightly thickened, heavily brown-pigmented cell walls, concave trigones present at angles, medullary cell walls unthickened with the exception of concave trigones at cell angles, free external wall thickened and pigmented as internal cortical cell walls, cortical stem cells rectangular, 75-93 x 25-29 micrometre. Leaves 460-690 x 430-670 micrometre, contiguous to remote, alternate, widely spreading from the stem at 60-75 degrees, ovate-oblong, rounded-triangular, ventral margin flaring slightly toward stem. margins entire but outline irregular, somewhat scalloped, unlobed, leaf-apex broadly rounded, except for the first two branch appendages, which are frequently equally trifid. Vittae and ocelli absent. Leaf insertion weakly incubous, almost longitudinal, J-shaped at antical apex though not attaining the dorsal stem midline, leaving two dorsal stem-cell rows leaf free, leaf spot obscuring the stem with the dorsal surface visible along entire length. Medial cells 30-40 x 28-53 micrometre, cells of leaf base slightly larger, elongate parallel to stem 60-85 x 25-28 micrometre, marginal cells smaller than medial cells, quadrate, 19-25 x 23-25 micrometre, free external cell wall smooth, not toothed or otherwise by wall thickening or projecting cell apices. Leaf cell walls unthickened except for small concave trigones at cell angles, intermediate wall thickenings absent. underleaves 170-270 x 250-340 micrometre, reniform, distinctly wider than long, distant up to 2x stem width, inserted on 4-5 rows of ventral stem cells, margins entire, equally or somewhat unequally bilobed, with notch-like sinus, in which two slime-papillae are situated. Underleaf cells rectangular, 27-43 x 15-23 micrometre, apical cells more elongate, oblong-triangular, often slightly narrowed at their apical ends, 40-53 x 17-20 micrometre, rhizoids few, produced from underleaf bases on vegetative shoots, magenta-brown, proliferating at apices, surface papillose, up to 620 microns long. Dorsal and ventral surfaces of leaves, underleaves and stem bearing dense coarse granular ornamentation, which becomes elongated and striated towards basal cells of the leaves. Oil-bodies, gemmae and caducous leaves not seen. Dioicous. Male plants not seen. Gynoecia whitish, produced terminally on very short ventral-intercalary branches, borne within axils of the underleaves; bearing 1-4 archegonia, these surrounded by two achlorophyllous, delicate bracts and a bracteole, bracts irregularly and shallowly trilobed 530-590 x 400-435 micrometre, incurved inwards toward each other and the bracteole and arching over the archegonia, bracteole shallowly bifid 185-245 x 135-160 micrometre.

FRUITING

Not seen

THREATS

Not threatened. Listed because it is a biological sparse species.

SUBSTRATE

Terricolous, saxicolous and terricolous in montane habitats in the North Island but down to sea level in the south.

ATTRIBUTION

Fact Sheet Prepared for NZPCN by P.J. de Lange (5 October 2007). Description adapted from Engel (2006) and Renner & Braggins (2006)

REFERENCES AND FURTHER READING

Engel, J.J. 2006: Austral Hepaticae 42: The Austral species of *Mnioloma* (Calypogeiaceae), together with a new species, *Mnioloma novaezealandiae* n.sp.. *Cryptogamie, Bryologie* 27(1): 111-117.

Renner, M.A.M.; Braggins, J. 2006: Hepatic records for Australia and New Zealand. *Australasian Bryological Newsletter* 52: 9-13

NZPCN FACT SHEET CITATION

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<https://www.nzpcn.org.nz/flora/species/mnioloma-novaezealandiae/> (Date website was queried)

MORE INFORMATION

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