

Zoopsis matawaia

COMMON NAME

Liverwort

SYNONYMS

None (first described in 2006)

FAMILY

Lepidoziaceae

AUTHORITY

Zoopsis matawaia M.A.M.Renner

FLORA CATEGORY

Non-vascular – Native

STRUCTURAL CLASS

Liverworts

CURRENT CONSERVATION STATUS

2009 | Range Restricted | Qualifiers: DP

DISTRIBUTION

Endemic. New Zealand: South Island (West Coast) and Chatham Island

DETAILED DESCRIPTION

Plants soft textured, forming loose mats; shoots procumbent, 600-1050 microns wide, at least 25 mm long, copiously branched, intertwined. Lateral branching Frullania-type, pseudodichotomous, predominantly from one side of stem; ventral-intercalary branches present, giving rise to leaf shoots, rarely microphyllous. Stems subterete, 260-280 microns diameter, with six massively inflated cortical cell rows, two ventral rows smallest. Dorsal cortical cells uniformly leptodermous, 90-180 microns long, 110-140 microns wide by 115-130 microns deep. Medullary cells in 7-9 rows (15-21 microns diameter) forming a band discernible throughout stem, though not continuous through Frullania-type branches. Ventral merophyte two cells wide. Rhizoids present, hyaline, smooth, bulbous, produced from small distinct rhizoid initial field at underleaf bases, never from leaf bases. Leaves succubously inserted, remote, separated on stem by one cortical cell, widely patent, bilobed, postical lobe lying slightly over antical in dorsal view, lobes of two or three large, inflated, thin-walled moniliform cells constricted at junctions with neighbouring cells. Leaves equally bilobed, leaf-lobes initially up to seven or eight uniseriate cells (particularly visible in embryonic leaves), readily fragmenting, leaving 2-3 uniseriate inflated cells on mature shoot sectors. Lobes not capped by hyaline papilla. Basal leaf cells fused for approximately two-thirds of their length, similar in size to dorsal stem cells. 115-175 microns long, 105-130 microns wide. Leaf cells serially decreasing in size towards lobe apex; second cell 115-135 microns long, 80-100 microns wide, third cell (usually apical on mature shoot sectors), 70-90 microns long, 45-55 microns wide. Underleaves sitting atop a field of small rhizoid initial cells, bifid, divided to near base, lobes divergent, occasionally separated to leaf base, initially 3-4 or more uniseriate cells, soon fragmenting leaving only two basal cells or none. Underleaves occasionally composed of two single-celled lobes, each capped by single obpyriform hyaline papilla. Two pairs of ventral merophyte cells produced between successive underleaves, except at Frullania-type branches, where three pairs are produced between successive underleaves. Basal cells 90-100 microns long, 60-70 microns wide, typically united for 0.15 of their length. Oil bodies in stem and leaf cells granular-botryoidal, ellipsoid, 6-9 x 2-4 microns, scattered irregularly throughout cell lumen, (0-)4-6(-8) per cell.

FRUITING

Not yet seen

THREATS

Not well known, and being recently described its distribution and exact status is unclear. It probably merits Sparse status



SUBSTRATE

Terricolous on humic material, saxicolous on rock. Usually found on the undersides of rotting logs and on deeply shaded humic banks

ATTRIBUTION

Fact Sheet Prepared for NZPCN by: P.J. de Lange (5 October 2007). Description adapted from Renner et al (2006)

REFERENCES AND FURTHER READING

Renner, M.A.M.; Brown, E.A.; Glenny D.S. 2006: Two new *Zoopsis* species and their relationships to other zoopsids (Jungermanniopsida: Lepidoziaceae). *Journal of Bryology* 28: 331-344

NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/zoopsis-matawaia/>