



Triandrophyllum symmetricum

Common Name(s):

liverwort

Current Threat Status (2009):

Data Deficient

Distribution:

Endemic. North Island. Wellington (Hawkins Hill)

Features*:

Plants erect, pale olive-green, tinged rose, shoot tips straight, comprising closely imbricate leaves and underleaves forming a loose capitulum; shoots to 2.4 mm wide. Branching frequent, of ventral- and lateral-intercalary types, originating from median and lower sectors of shoots, becoming erect and leafy. Leaves rigid, obliquely spreading, imbricate, the stem hidden dorsally and ventrally, the insertion feebly recurved at dorsal end, the leaves concave, \pm symmetric to asymmetrically quadrate to very short-rectangular, consistently 3-4-lobed to 0.45-0.55, 1.2-1.3 \times 1.2-1.4 mm; lobes subequal, slightly to distinctly concave, acute, often apiculate, tip terminating in a single cell or at most a uniseriate row of 3 thick-walled elongated cells, the lobe margins mostly entire, occasionally with a tooth; lamina c.20-30 cells from dorsal sinus base to leaf base; dorsal margin dilated at the base, \pm cordate; dorsal and ventral lamina margins with 1-2 irregular, laciniiform to lobuliform, uncinately appendages, dorsal margin entire, ventral usually with 1-4 teeth. Leaf cell walls thickened, trigones distinct, median cells of lamina 24-32 \times 36-46 micrometre; leaf surfaces densely striolate-papillose.

Underleaves slightly smaller than leaves, obliquely spreading, ventrally convex, symmetrically subquadrate to broad ovate, consistently 3-lobed; lobes as in leaves with tip occasionally terminating in 2 laterally juxtaposed cells and the margins more often with a tooth, and a basal appendage similar to that of the leaves, otherwise entire or sparsely toothed. Androecia on main shoot, initially terminal becoming intercalary, little wider than sterile sectors; bracts and bracteoles a little more closely imbricate than leaves and underleaves, in 4-5 pairs; similar to leaves and underleaves except less deeply lobed, lamina ventricose, margins with several coarse teeth; antheridia 3-4, stalk long. Gynoecia on main shoot or leading branches; bracts of innermost series > leaves, erect, ensheathing \pm symmetrically ovate, \pm symmetrically 3-4-lobed (dorsal lobe larger), lobes slenderly attenuate, entire lamina coarsely toothed at times entire, base with a conspicuous appendage. Perianth not exerted, short, broadly ovate, plicate to base, perianth narrowing to 9-lobed mouth, lobes long, slender, often parallel-sided, entire or with several teeth or long cilia toward base. Seta with c.60 rows of outer cells surrounding an inner core of scattered, larger cells. Capsule \pm spherical, wall 71-76 micrometre thick; outer layer cells \pm = in thickness; subquadrate to short-rectangular, radial walls with 1-3 red-brown, nodular thickenings on longitudinal and transverse walls. Spores 17.3-18.2 micrometre diameter, red-brown. Elaters straight or feebly tortuous, bispiral, the spirals 3.4-3.8 micrometre wide, rather closely wound, extending to tips.

Fruiting:

Unknown

Threats:

Known only from a single gathering. Searches of the type locality have failed to find further plants

***Attribution:**

Fact sheet prepared for NZPCN by P.J. de Lange (30 August 2009). Description adapted from Engel (1999).

References and further reading:

Engel, J.J. 1999: Austral Hepaticae 30. A critical new species of *Triandrophyllum* (Herbertaceae) from New Zealand. *Haussknechtia* 9: 115-119

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=5115