



Thysananthus spathulistipus

Common Name(s):

liverwort

Current Threat Status (2009):

Data Deficient

Distribution:

Indigenous. New Zealand: Kermadec Islands (Raoul Island). Otherwise a widespread pantropical species (see comments by Renner & de Lange 2011).

Habitat:

Known only from a permanently shaded, seasonally dry north-facing andesitic breccia cliff within the 'dry' forest type of Oliver (1910) and Sykes (1977).

Features*:

Forming diffuse pure patches. Shoots brown-green when fresh, fading to brown in herbaria, small for subfamily, to 20 mm long and 980-1580 microns wide branching infrequent and irregular, shoot system monomorphic, lateral branches same stature as parent branch. Stems with external and internal walls heavily and irregularly thickened by larger trigones of yellow-brown pigmented secondary wall, 18-25 cortical cells and 30-40 medulla cells the same size as the cortical cells. Dorsal leaf-free strip absent. Branching Lejeunea-type, collar persistent. Lobes ovate, 720-920 × 500-660 microns wide, widely spreading, in situ strongly falcate due to reflexed basispic margin, contiguous to imbricate, when dry lobes adpressed to and surrounding stem. Lobe apex obtuse to acute, usually with an apiculus and several small accessory teeth, shallowly arched, curvature increasing toward the stem insertion, stem not visible between lobes in dorsal view. Lobe margins irregularly crenulate. Surface of lobe cells smooth. Lobules small relative to lobe size, c. 1/20 the lobe area, oblong 190-230 × 95-130 microns, carinal region weakly and broadly inflated, keel straight most of its length, slightly curved toward keel-lobe junction. Acroscopic margin not inrolled, curved at internal base otherwise straight until the notch within which the lobule papilla is situated. Lobule typically bearing no obvious teeth, occasionally one obsolete tooth present, margin exterior to papilla straight to arched, also lacking obvious dentition. Underleaves unlobed, obovate to obtrapeziform, truncate, broadest at or above midpoint, margins entire or irregular, apex weakly denticulate, with one or both lateral margins reflexed completely or in part on larger underleaves, 2-3× wider than the stem, 220-340 × 215-355 microns wide. Underleaf insertion transverse across seven or eight ventral cortical cell rows. Asexual reproduction absent. Dioicous? (Female plants not seen.) Antheridial bracts in 2-4 pairs produced intercalary on leafy shoots that continue vegetative growth. Antheridial bract lobes 220-360 × 390-520 microns wide, lobules 220-270 × 260-320 microns, keel deeply curved, apex triangular, hypostatic. Antheridial bracteoles 280-310 × 230-250 microns, obovate, entire.

Fruiting:

Not seen in the sole New Zealand Gathering

Threats:

In the New Zealand Botanical Region (see de Lange & Rolfe 2011) *Thysananthus spathulistipus* is known only from Raoul Island in the Kermadec Islands group (Renner & de Lange 2011). There it was collected once in May 2009 during a brief bryological surveys of that island and it was not seen again during the more extensive May 2011 Kermadec Biodiscovery bryophyte survey (though the area from which it had been recorded in May 2009 was not surveyed again). For this reason *Thysananthus spathulistipus* has been cautiously awarded the status of "Data Deficient".

*Attribution:

Fact Sheet Prepared for NZPCN by: P.J. de Lange (2 October 2011). Description adapted from Renner & de Lange (2011).

References and further reading:

de Lange, P.J.; Rolfe, J.R. 2010: New Zealand Indigenous Vascular Plant Checklist. Wellington, New Zealand Plant Conservation Network. 164pp.

Oliver, W.R.B. 1910. The vegetation of the Kermadec Islands. Transactions of the New Zealand Institute 42: 118-175.

Renner, M.A.M.; de Lange, P.J. 2011. Additions to the Lejeuneaceae Flora of New Zealand: New Species from the Kermadec Islands and Range Extensions of New Zealand species into the South Pacific. New Zealand Journal of Botany 49: 421-433.

Sykes, W.R. 1977. Kermadec Islands Flora - an annotated checklist. Wellington, New Zealand Department of Scientific and Industrial Research Bulletin 219. 216 p.

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=6710