

Notoscyphus lutescens

COMMON NAME

Liverwort

FAMILY

Acrobolbaceae

AUTHORITY

Notoscyphus lutescens (Lehm. et Lindenb.) Mitt.

FLORA CATEGORY

Non-vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Liverworts

CURRENT CONSERVATION STATUS

2009 | Data Deficient | Qualifiers: OL, SO

DISTRIBUTION

Indigenous. Kermadec Islands (Raoul Island). Widespread throughout the Pacific from Japan to Indonesia and across the western Pacific Islands to Samoa. Also known from Rarotonga. Extending in the east through Indochina to India with an outlier in South Africa (Natal)

HABITAT

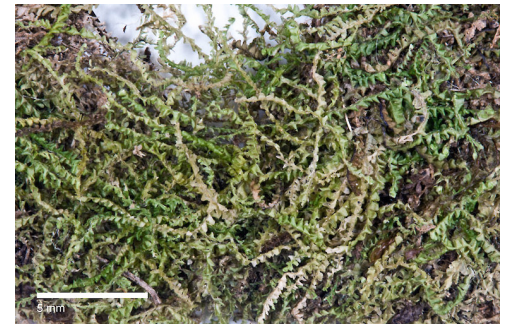
The sole known gathering came from a tree cave made from the trunk and roots of a massive *Metrosideros kermadecensis* tree growing on the eastern flank of Prospect, a local high point on the eastern crater wall of the main caldera of Raoul Island

DETAILED DESCRIPTION

Plant forming a light green loose weft, with individual stems to 14.0 x 1.2-1.4 mm. Branching infrequent, ventral intercalary, stems slender, terete, 94-120 µm diameter, cortical cells very thick walled and stem is 7 cells high in TS. Cortical cells in surface view are variable in size and shape 37-59 x 19-26 µm wide. Rhizoids are usually produced in groups at or near underleaf bases or occasionally scattered on stem, near base they are 9-15 µm diameter. The plant is anisophyllous the underleaves being small and deeply bifid. Lateral leaves are alternate, succubous, nearly horizontal, flat when damp, dorsally assurgent when dry, contiguous, short oblong, 430-700 µm long, 270-500 µm wide, margin entire, to slightly bilobed, not inserted to stem midline dorsally but with a single row of cells forming a leaf free gutter, the dorsal leaf bases are slightly decurrent. Underleaves small bifid the lobes lying parallel to the stem and being unequal one being shorter by one or two cells. They are small 250-374 x 94-187 µm, longest lobes 150-210 µm long with 4-7 uniseriate cells based on one biseriate row. Single celled lateral spurs are variably developed on the disc 0-3, usually 1-2, one sometimes has 2 cells. Uniseriate cell walls are thick (c.4.4 µm) and swollen at the corners, the cells are rectangular and 1.3-1.4:1 the tip cell being narrower (c1.5:1) Lateral leaf cells are variable in size the median cells 31-55 x 24-31 µm, The surface usually bears low striae over the whole surface about 20 per cell. Near the base the cells often but not always wider. Trigones triangular, bulging slightly Y shaped 9.0 x 7.5 µm, no intermediate thickening. Oil bodies 2-5 / cell ovoid to spherical, more or less homogenous, pale yellow brown, variable in size 9-13 µm diameter. Sex organs not seen in Kermadec material.



Raoul Island (Nov 2011) from a specimen collected by Peter de Lange (May 2011).
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Raoul Island (Nov 2011) from a specimen collected by Peter de Lange (May 2011).
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FLOWERING

Not Applicable - Spore Producing

FRUITING

Not Applicable - Spore Producing

THREATS

Notoscyphus lutescens was first recognised from New Zealand from a gathering made in May 2011 from the eastern flank of Prospect, Raoul Island (Braggins et al. 2014). It is not clear how common it is on Raoul Island but it is probably quite uncommon there as the island has now been pretty thoroughly searched from bryophytes and *Notoscyphus* has not been recorded before. At this stage, because the species was not recognised from New Zealand when the Bryophyte Threat Listing Panel met in May 2009, *Notoscyphus* has no formal listing, however, it probably warrants listing as "Data Deficient" until the bryophyte panel next meet to undertake a new listing.

ETYMOLOGY

lutescens: From the Latin luteo 'yellow', meaning 'pale yellow'

ATTRIBUTION

Fact Sheet Prepared for NZPCN by P.J. de Lange (18 June 2011). Description based on Kermadec material and prepared by J.E. Braggins & P.J. de Lange published later in Braggins et al. (2014)

REFERENCES AND FURTHER READING

Braggins, J.E.; Renner, M.A.M.; de Lange P.J. 2014: Additions to the liverwort flora of the Kermadec Islands, New Zealand Botanical Region. *Telopea* 17: 183-194.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/notoscyphus-lutescens/>