

Fissidens dietrichiae

COMMON NAME

Moss

FAMILY

Fissidentaceae

AUTHORITY

Fissidens dietrichiae Müll.Hal.

FLORA CATEGORY

Non-vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Mosses

CURRENT CONSERVATION STATUS

2009 | Data Deficient | Qualifiers: OL, SO

DISTRIBUTION

Indigenous. New Zealand: Kermadec Islands (Raoul Island only)

HABITAT

Terricolous and saxicolous on weathered andesitic rock and clay within ravine systems. Also collected once admixed with the aquatic moss *Cyclodictyon blumeinum* on a dripping wet rock wall.

DETAILED DESCRIPTION

Plants up to 20 mm tall, densely tufted, pale green to dull dark green, usually erect, sparingly branched. Leaves ± crowded, 1.4-1.6 x 0.36-0.48 mm, lanceolate to oblong-lanceolate, based narrowed, margin entire; apex curled when dry, erect when moist, acuminate, very weakly crenulate; border prominent to just below apex; costa prominent, reaching apex or just below, reddish brown, up to 45 µm wide at the base. Laminal cells mostly hexagonal, to 12 µm long, with those nearer the costa often slightly larger; basal juxtacostal cells on dorsal lamina rectangular, to 38 µm long, bordered by c.2 rows of thin-walled linear cells to 60 x 2 µm; cells moderately hick-walled, lacking papillae. Vaginant lamina 3/4 leaf length, joining half-way between costa and margin; cells similar to dorsal lamina. Rhizoids sparse, reddish, smooth, to 1.1 mm x 20 µm wide; cells 120-180 µm long. Monoicous or dioicous. perichaetia c.200 µm long. Seta erect, dull red, 4-10 mm long. Capsule suberect, ± oblong, 0.7-0.9 mm long, brownish. Operculum slightly conical-acute. Exostome teeth strongly incurved, deep red, 160-300 µm, papillose. Spores opaque, 16-25 µm, reddish brown. Fruiting material not known from New Zealand description based on Norfolk Island material.

FRUITING

Fruiting specimens not yet seen in New Zealand

THREATS

Known from three gatherings made from Raoul Island in 2009 and 2011. The gatherings come from two distinct populations neither large. *Fissidens dietrichiae* is one of a small number of bryophytes recently recognised from Raoul Island whose threat status still requires resolving. However, based on the results of the May 2011 Kermadec Biodiscovery Expedition it would seem that this species is extremely uncommon on the island, and it may warrant a future listing of "Nationally Critical". Aside from the small number of plants in the wild there are no obvious threats affecting this species on Raoul.



SUBSTRATE

Terricolous and saxicolous on weathered andesitic rock and clay

ETYMOLOGY

fissidens: From the Latin fissio 'fission' and dens 'tooth, prong' meaning split tooth and referring to shape of the lamina.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 13 October 2011.

REFERENCES AND FURTHER READING

Streimann, H. 2002: The mosses of Norfolk Island. Flora of Australia Supplementary Series 16. Canberra, Australian Biological Resources Study.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/fissidens-dietrichiae/>