

Fissidens perangustus

COMMON NAME

Moss

FAMILY

Fissidentaceae

AUTHORITY

Fissidens perangustus

FLORA CATEGORY

Non-vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Mosses

CURRENT CONSERVATION STATUS

2009 | Data Deficient | Qualifiers: ?SO

DISTRIBUTION

Indigenous. New Zealand: North Island (Ahipara, Kaihu Valley, Waitakere Ranges). Also present in eastern Australia (Queensland, New South Wales)

HABITAT

Lowland. In riparian forest on the margins of streams in sites that are prone to periodic inundation through flooding. New Zealand specimens have been gathered from basalt, sandstone and silt encased willow (*Salix fragilis*) trunks in sluggishly flowing streams.

DETAILED DESCRIPTION

Plants to 4 mm long, yellow-green, densely gregarious. Stems simple, with rhizoids at base only. Leaves in 8–12 pairs, distant, when moist slightly falcate, patent, when dry lightly twisted, lanceolate, 0.60–0.80 x 0.16–0.18 mm; apex acute; laminae unistratose; vaginant lamina 2/3 of leaf length, closed, but with minor half often invaginated near its apex; dorsal lamina tapered to leaf base, with border adhering to nerve in proximal part; margins entire; marginal cells on all laminae distinct in 2–4 rows, narrow, thick-walled and prosenchymatous, forming well-defined borders which fail at the leaf apex; cells of apical and dorsal laminae quadrate to irregularly hexagonal, smooth, non-bulging, thin-walled, (7.5–)9–14(–15) x (6–)7–9(–10) μm . Costa subpercurrent. Autoicous. Perigonia bulbiform at base of female shoot. Perichaetia terminal; perichaetial leaves longer than vegetative. Setae straw-coloured to orange-brown, stiff, 2–3 mm; capsules erect to inclined, slightly asymmetric, 0.50–0.75 mm, short-rectangular; operculum conic-rostellate, 1/2 length of theca. Peristome of 'bryoides-type'; teeth 48–57 μm wide at base. Calyptra smooth, cucullate. Spores 19–25 μm .

SIMILAR TAXA

The species is close to *F. curvatus*, but differs in a number of features, including the larger spores, and shorter beak on the operculum. The costa and border become red with age. The habitat may also differ, with *F. perangustus* occurring in moister sites.

FRUITING

Sporophytes are present in most New Zealand gatherings



THREATS

Fissidens perangustus is so far known from only three gatherings all made from the west coast of the northern North Island, in lowland riparian forest remnants. This species seems to be genuinely scarce and it may be threatened. However, as it is easily confused with *Fissidens curvatus* which is widespread and common it is possible that *F. perangustus* has been overlooked. Further survey is needed to ascertain its exact conservation status in New Zealand. Beever & Stone (1999) suggest that this species is very uncommon in Australia

SUBSTRATE

Terricolous and Saxicolous.

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 (11 October 2011). Description adapted from Beever et al (2002) by J.E. Beever.

REFERENCES AND FURTHER READING

Beever, J.E.; I.G. Stone 1999: Studies of *Fissidens* (Bryophyta: Musci): new taxa and new records for New Zealand. *New Zealand Journal of Botany* 37: 643-657.

Beever, J. Malcolm, B.; Malcolm, N. 2002: The moss genus *Fissidens* in New Zealand – an illustrated key. Nelson, Micro-Optics Press.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

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