

Fissidens oblongifolius

COMMON NAME

Moss

SYNONYMS

Fissidens oblongifolius Hook.f. et Wilson var. *oblongifolius*

FAMILY

Fissidentaceae

AUTHORITY

Fissidens oblongifolius Hook.f. et Wilson var. *oblongifolius*

FLORA CATEGORY

Non-vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Mosses

NVS CODE

FISOBL

CURRENT CONSERVATION STATUS

2009 | At Risk – Naturally Uncommon | Qualifiers: DP, RR, SO, Sp

PREVIOUS CONSERVATION STATUS

2004 | Data Deficient

DISTRIBUTION

Indigenous. New Zealand: Kermadec Islands (Raoul Island), North Island (Te Pahi, Ahipara, Bay of Islands and Rangitoto Island), Chatham Islands (Rekohu). Also Australia.

HABITAT

Terricolous and saxicolous. Coastal to lowland in open scrubland (especially on exposed clay pans or under a light shrub canopy) but also in stream beds, on water saturated banks, in seepages, around cave entrances, amongst rocks, in crevices and in dense forest.

DETAILED DESCRIPTION

Plants 5-25 mm long, sometimes black below, loosely gregarious. Stems frequently branched by means of innovations below the terminal gametocia, with rhizoids at the base only. Leaves in 15-30(-40) pairs, overlapping in mid-stem, patent, plane when moist, tips loosely and irregularly rolled up when dry, tending toward the substratum, lingulate, 1.7-3.0 x 0.2-0.35 mm; the apex acute to obtuse; laminae unistratose; the vaginant lamina up to 2/3 the leaf length, half-open to closed; margins serrulate-crenate on the apical, dorsal, and the vaginant laminae, with cells of the suprabasal vaginant lamina margins isodiametric to oblate; cells of the apical and dorsal laminae irregularly hexagonal, smooth, strongly bulging. Dorsal lamina tapered to base, often failing above the insertion; cells of the apical and dorsal laminae (6-)8-11(-15) x (6-)8-11(-15) μm . Costa failing below the leaf apex. Gonioautoicous. Perigonia axillary on the fruiting stems, bulbiform, conspicuous. Perichaetia terminal on main shoots and innovations, perichaetial leaves longer than the vegetative leaves. Setae 5-10 mm; capsules horizontal to inclined, moderately to strongly asymmetric, 5.0-1.0 mm. Calyptra and mature spores not seen in New Zealand material.



Surville Cliffs, North Cape. Photographer: A. J. Townsend, Date taken: 21/10/2009, Licence: CC BY-NC.



Surville Cliffs. Nov 2010. Photographer: Jeremy R. Rolfe, Licence: CC BY.

SIMILAR TAXA

Most often confused with *Fissidens asplenioides* from which it differs by its dark green rather than yellow-green colour and by the suprabasal region of the vaginant lamina which in *F. asplenioides* has marginal cells taller than wide, and the margin itself is entire (or nearly so), whereas in *F. oblongifolius* the marginal cells are wider than tall and the margin is distinctly serrulate (see Beever et al. 2002). From the two other allied members of the *F. oblongifolius* complex, *F. oblongifolius* is distinguished by a suite of characters that include the presence of bulbiform axillary perigonia; perichaetial leaves longer than the vegetative leaves; by the longer setae and absence of calyptra and mature spores (Beever et al. 2002). *Fissidens oblongifolius* is usually terricolous and seems more tolerant than *F. capitatus* and *F. hyophilus* of drought and exposed conditions.

FRUITING

Sporophytes although not common may be seen throughout the year

THREATS

Fissidens oblongifolius is now known to be a sparsely distributed, naturally uncommon species of mostly northern New Zealand. It is most common in Te Paki where it is the dominant *Fissidens* species of the exposed ferricrete clay pans and erosion gullies of North Cape (which is a fully protected area). Elsewhere in New Zealand it seems to be genuinely scarce and in some areas is only known from a handful of plants. Beyond habitat loss in some coastal areas through residential development there seem to be no major threats affecting this species.

SUBSTRATE

Rock, saprolite, 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 August 2007. Description adapted from Beever et al. (2002).

REFERENCES AND FURTHER READING

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

Please cite as: de Lange, P.J. (Year at time of access): *Fissidens oblongifolius* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

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

MORE INFORMATION

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