

Hymenophyllum lyallii

COMMON NAME

filmy fern

SYNONYMS

Sphaerocionium lyallii (Hook. f.) Hook. et Barker; *Trichomanes lyallii* (Hook.f.) Hook. ex Hook. et Baker;

FAMILY

Hymenophyllaceae

AUTHORITY

Hymenophyllum lyallii Hook. f.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

HYMLYA

CHROMOSOME NUMBER

2n = 72

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

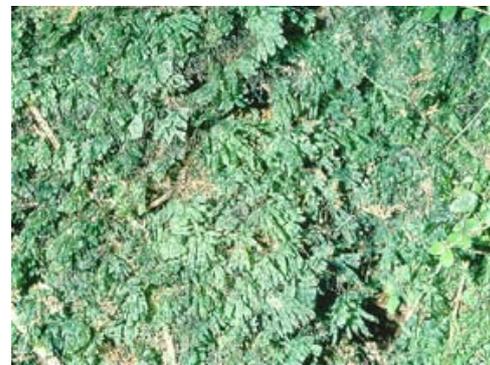
2004 | Not Threatened

DISTRIBUTION

Indigenous. New Zealand: North, South, Stewart, Chatham and Auckland Islands. Also Australia. From the Mangamuka Range and Ahipara south but mostly westerly and uncommon in the southern North Island.

HABITAT

Lowland to montane (mostly montane in northern part of range). Usually epiphytic (rarely on rocks or mosses banks) on tree fern trunks, or at the base of trees in cloud forest, or in root and trunk caves.



Tokatea, Coromandel. Photographer: John Smith-Dodsworth



Tokatea, Coromandel. Photographer: John Smith-Dodsworth

FEATURES

Epiphytic (rarely rupestral) diminutive fern. Rhizome long creeping, much branched, slender, filiform, 0.1-0.2 mm diameter, dark brown to black, glossy, hairy; hairs red-brown, simple or once-forked. Frond lamina 10-50 mm long. Stipe 10-70 mm long, filiform, wiry, widely spaced; hairs similar to those of rhizome, tufted near the base, scattered above. Lamina flabellate to almost round, divided into dichotomous segments, very rarely simple, deltoid to very broadly obovate or round, 5-40 mm long, 10-30 mm wide, dull green-black to glaucous-black, membranous; conventional laminal blades present. Ultimate segments 1-20, opposite, ascending, 0.8-11 mm long, 0.8-1.8 mm wide, glabrous; margins bearing small persistent teeth with fugacious simple or forked hairs. Sori marginal, solitary or rarely in pairs, at the apex of the ultimate segments, deeply sunken in the lamina; involucre obcordate or cuneate-obconical, sometimes bilabiate, 0.5-2.3 mm long, 0.8-2.5 mm wide, apex retuse, erose or toothed. Each toothed bearing a reddish forked hair; receptacle included.

SIMILAR TAXA

A very distinctive species that is nonetheless occasionally confused with reduced states of *Hymenophyllum flabellatum* (which has flabellate fronds) which has the rhizomes, base of the stipe copiously covered in yellow to yellow-white simple hairs (the same hairs may also be present on the abaxial surface of the fronds (especially immature expanding fronds)) and yellow-green to emerald green pinnae.

FLOWERING

N.A.

FLOWER COLOURS

No flowers

FRUITING

N.A.

LIFE CYCLE

Minute spores are wind dispersed (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Difficult - should not be removed from the wild

ETYMOLOGY

hymenophyllum: Membranous leaf, from the Greek humen and phullon

lyallii: Named after David Lyall (1817-1895), 19th century Scottish naturalist and surgeon with the Royal Navy, who explored Antarctica, New Zealand, the Arctic and North America and was a lifelong friend of Sir Joseph Hooker.

WHERE TO BUY

Not commercially available

ATTRIBUTION

Fact Sheet Prepared for NZPCN by P.J. de Lange (11 April 2011). Description adapted from Bostock & Spokes (1998) and Brownsey & Smith-Dodsworth (2000).

REFERENCES AND FURTHER READING

Brownsey, P.J.; Smith-Dodsworth, J.C. 2000: New Zealand Ferns and Allied Plants. Auckland, David Bateman

Bostock, P.D.; Spokes, T.M. 1998: Hymenophyllaceae: Flora of Australia 48: 116-148.

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora.

Perspectives in Plant Ecology, Evolution and Systematics 11: 285-309

NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/hymenophyllum-lyallii/>