

Hymenophyllum australe

COMMON NAME

filmy fern

SYNONYMS

Mecodium atrovirens (Colenso) Copel.; *Hymenophyllum australe* var. *atrovirens* (Colenso) C.Chr.; *Hymenophyllum javanicum* var. *atrovirens* (Colenso) Hook. et Baker; *Hymenophyllum montanum* Kirk; *Mecodium montanum* (Kirk) Copel.; *Hymenophyllum atrovirens* Colenso

FAMILY

Hymenophyllaceae

AUTHORITY

Hymenophyllum australe Willd.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

HYMATR

CHROMOSOME NUMBER

2n = 72

CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: DP, RR, SO, Sp

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: DP, RR, Sp

2009 | At Risk – Naturally Uncommon

2004 | Sparse

DISTRIBUTION

Endemic. New Zealand: North Island, South Island.

HABITAT

Hymenophyllum australe is almost and exclusively rheophytic species found in dark dripping wet overhangs and holes within the flood zone of deeply shaded or densely forested steep sided rivers, river canyons, river gorges, under and around waterfalls and in seepages along the banks of narrow streams. It is only very rarely found away from waterways.



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DETAILED DESCRIPTION

Inconspicuous, colonial fern of dark holes, overhangs and rock faces, usually growing in or near water. **Fron**ds dark green to black-green. **Stipes** 10–60 mm, membranous, glabrous, winged almost to base; wing initially rather broad but tapering gradually from the rachis along the stipe, almost to the stipe base, wing flat, sometimes undulating, occasionally markedly crinkly (this often varying within the same plant). **Fron**d distinctly deltoid to narrowly deltoid, 2–3-pinnate, 30–140 × 10–60 mm, very dark green to black green (sometimes purple-black). **Ultimate segments** linear or oblong, margins smooth. **Sori** terminal on ultimate segments, protruding (not sunken into lamina), solitary or paired, mainly on the primary pinna. **Indusium flaps** either smooth-edged or notched.

SIMILAR TAXA

This species is most likely to be confused with *H. flexuosum* from which it differs by its usually much smaller, strongly deltoid, dark green to almost black-green rather than bright green to green fronds, and a very broad, less markedly undulating (crisp) stipe and rachis membranous wing which gradually tapers from the rachis (its widest point) to almost the stipe base. *Hymenophyllum pluviatile* is superficially similar but in New Zealand it occupies a completely different habitat on boulders rocks and stones in dense forest (though often near streams and rivers). On occasion *H. pluviatile* can be epiphytic.

PROPAGATION TECHNIQUE

Difficult - should not be removed from the wild

THREATS

Not threatened. A naturally uncommon, biologically sparse species which may be abundant in suitable habitats and then absent from other apparently suitable sites nearby.

ETYMOLOGY

hymenophyllum: Membranous leaf, from the Greek humen and phullon

australe: Southern, from the Latin australis

WHERE TO BUY

Not commercially available

ATTRIBUTION

Fact Sheet Prepared for NZPCN by P.J. de Lange (June 2004 and updated 17 April 2011). Description adapted from Brownsey & Smith-Dodsworth (2000).

REFERENCES AND FURTHER READING

Bostock PD, Spokes TM. 1998. Hymenophyllaceae. *Flora of Australia 48, Ferns Gymnosperms and allied groups*: 116–148. ABRIS/CSIRO Victoria, Australia.

Brownsey PJ, Smith-Dodsworth JC. 2000. New Zealand Ferns and Allied Plants. David Bateman, Auckland, NZ. 168 p.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

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