Hymenophyllum multifidum

COMMON NAMES
much-divided filmy fern

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | Not Threatened | Qualifiers: SO
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Ferns

DETAILED DESCRIPTION
Terrestrial or epiphytic fern often forming thick patches on substrate. **Rhizomes** long-creeping, slender, much branched and interwoven. **Fronds** bright or dark green. **Stipes** 20–100 mm, slender, glabrous, sometimes winged above; rachises winged throughout. **Laminae** broader than long or elliptic to deltoid, 3–4-pinnate, 30–200 × 15–100 mm, glabrous. **Ultimate segments** linear, margins toothed. **Sori** large and conspicuous, on short segments, 1-several on each primary pinna, usually set at 90° to plane of frond. **Indusium** connate, tubular; flaps margins entire, sometimes also undulose, receptacle usually exserted. (Description adapted from Brownsey & Smith-Dodsworth (2000)).

Rangaika, Chatham Island. Photographer: Jeremy R. Rolfe, Date taken: 01/06/2013, Licence: CC BY.

Sori. Stokes Valley, Lower Hutt. Photographer: Jeremy R. Rolfe, Date taken: 13/09/2006, Licence: CC BY.

SIMILAR TAXA
Except for reduced specimens, *Hymenophyllum multifidium* is easily recognised by the deeply toothed pinnae, and prominent sori bent at right-angles to the plane of the frond, by the tubular indusia, entire often undulose indusial flaps and exserted recaptacle. Reduced states can be confused with *Hymenophyllum minimum* which is easily distinguished by the solitary sori terminating the rachises, and by the toothed indusial flaps and spinose abaxial surfaces of the indusia, and from *H. cupressiforme* by the stipe which is only partially winged rather than winged throughout, and by the sori which are bent at right-angles to the plane of the frond. The indusial flaps of *Hymenophyllum cupressiforme* are often slightly toothed.

DISTRIBUTION
Endemic. New Zealand. North Island, South Island, Stewart Island/Rakiura, Chatham Islands, Antipodes Islands, Auckland Islands, Campbell Island/Motu Ihupuku.

HABITAT
Widespread in coastal to montane forest and subalpine scrub. A common ground cover of the forest floor, as well as epiphytic, also common on rock faces, boulders and on shaded rock overhangs.

GENUS
Hymenophyllum

FAMILY
Hymenophyllaceae

AUTHORITY
Hymenophyllum multifidum (G. Forst.) Sw.

SYNONYMS
Mecodium multifidum (G. Forst.) Copel.; Hymenophyllum multifidum var. oligocarpum (Colenso) Domin; Trichomanes multifidum G.Forst.; Hymenophyllum multifidum var. truncatum (Colenso) Domin; Hymenophyllum multifidum var. alpinum (Colenso) Domin; Hymenophyllum oligocarpum Colenso; Hymenophyllum truncatum Colenso; Davallia multifidum (G.Forst.) Spreng.; Hymenophyllum alpinum Colenso

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

LIFE CYCLE AND DISPERSAL
Minute spores are wind dispersed (Thorsen et al., 2009).

PROPAGATION TECHNIQUE
Difficult—should not be removed from the wild

WETLAND PLANT INDICATOR STATUS RATING
UPL: Obligate Upland
Rarely is a hydrophyte, almost always in uplands (non-wetlands).

ETYMOLOGY
hymenophyllum: Membranous leaf, from the Greek humen and phullon
multifidum: Much divided; from the Latin multus and findere; the leaf

NVS CODE
HYMMUL

CHROMOSOME NUMBER
2n = 52

PREVIOUS CONSERVATION STATUSES
2017 | Not Threatened | Qualifiers: SO
2012 | Not Threatened
2009 | Not Threatened
2004 | Not Threatened
Jump to current conservation status

REGIONAL CONSERVATION STATUSES
Auckland: 2025 | Regionally Not Threatened | Qualifiers: DPS, DPT Help
The regional threat classification system leverages off the national assessments in the NZTCS, providing information relevant for the regional context. Auckland conservation status information is sourced from the "Conservation status of vascular plant species in Tāmaki Makaurau / Auckland" Simpkins E et al. (2025) report.
Otago: 2025 | Regionally Not Threatened Help
The regional threat classification system leverages off the national assessments in the NZTCS, providing information relevant for the regional context. Otago conservation status information is sourced from the "Conservation Status of Indigenous Vascular Plants in Otago, 2025" Jarvie S et al. (2025) report.

REFERENCES AND FURTHER READING
Brownsey PJ, Smith-Dodsworth JC. 2000. New Zealand Ferns and Allied Plants. David Bateman, Auckland, NZ. 168 p.
Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics 11*: 285–309. https://doi.org/10.1016/j.ppees.2009.06.001.

ATTRIBUTION

Fact Sheet Prepared for NZPCN by P.J. de Lange (20 April 2011). Description adapted from Brownsey & Smith-Dodsworth (2000).

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/hymenophyllum-multifidum/

PDF DATE

25 May 2026