

# Hymenophyllum pluviatile

## COMMON NAME

filmy fern

## SYNONYMS

None - first described in 2013

## FAMILY

Hymenophyllaceae

## AUTHORITY

Hymenophyllum pluviatile Perrie et Brownsey

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Ferns

## NVS CODE

HYMPLU

## CURRENT CONSERVATION STATUS

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

## PREVIOUS CONSERVATION STATUSES

2009 | At Risk – Naturally Uncommon

2004 | Sparse

## DISTRIBUTION

Endemic. New Zealand: North Island and South Island from about the Waima Forest, Hokianga south, and mainly in the west

## HABITAT

Coastal to montane. Usually on base-rich rocks in dark but dry places—though often in the vicinity of waterfalls, streams or rivers. Sometimes epiphytic in cloud forest. This species is often found growing with *Hymenophyllum demissum* and *H. flexuosum*.



Flexuose rachis and sori viewed from above. Pirongia, from a specimen collected by Peter de Lange. Photographer: Jeremy R. Rolfe, Date taken: 20/04/2012, Licence: CC BY.



A posed specimen from Pirongia collected by Peter de Lange. Photographer: Jeremy R. Rolfe, Date taken: 20/04/2012, Licence: CC BY.

## DETAILED DESCRIPTION

Epiphytic, terrestrial or rupestral ferns. **Rhizomes** brown, long-creeping, 360–840 microns in diameter, glabrous or with colourless hairs clustered around stipe bases. **Stipes** brown to dark brown, 30–90 mm long, 330–800 µm diameter; wings poorly developed, often obvious only in the distal half of the stipe, with each wing usually less than 170 microns wide at mid-stipe and less than 500 µm at the stipe–rachis junction. **Laminae** 45–130 mm long, 20–67 mm wide; ovate or rarely triangular; apex attenuate to acute; base obtuse to truncate; green; glabrous; planate, or rachis wings and sometimes proximal axes flexuous; 4–5 pinnatifid, with 3–14–19 primary axes bearing quaternary axes, and the basal primary axis with 5–12 secondary axes bearing tertiary axes; primary pinnae 11–50 × 6–25 mm; axis-branching divaricate; segments entire, apices round or truncate, or sometimes shallowly emarginate. **Sori** orbicular or ovate. **Indusial flaps** 750–1340 × 660–1170 µm; apices round, truncate, or acute; apex usually irregularly dentate, or sometimes subentire.

## SIMILAR TAXA

*Hymenophyllum pluviatile* is distinguished from *H. flexuosum* by its smaller size, narrower wings on the stipe and rachis, flatter lamina, narrower sori and usually irregularly dentate (cf. subentire) indusial flaps. *Hymenophyllum pluviatile* is distinguished from New Zealand populations of *H. australe* by its epiphytic, rupestral or terrestrial habitat (cf. growing in or around streams), its generally broader and more divided fronds, divaricating (cf. incurved) lamina axes, less developed stipe wings, and at most shallowly emarginate segment apices.

## PROPAGATION TECHNIQUE

Difficult—should not be removed from the wild

## THREATS

An extremely uncommon and localised fern threatened by its small population sizes, and at one site—Mt Burnett—by dolomite mining. Previously regarded (as *Hymenophyllum* aff. *flexuosum* (AK 177370; Mt Burnett)) and treated either as 'Sparse' by de Lange et al. (2004) or 'Naturally Uncommon' by de Lange et al. (2009).

## ETYMOLOGY

**hymenophyllum**: Membranous leaf, from the Greek humen and phullon

**pluviatile**: From the Latin pluviatilis, meaning of rain or pertaining to rain.

## ATTRIBUTION

Fact Sheet prepared by P.J. de Lange 11 December 2013. Description from Perrie et al. (2013)

## REFERENCES AND FURTHER READING

de Lange PJ, Norton DA, Heenan PB, Courtney SP, Molloy BPJ, Ogle CC, Rance BD, Johnson PN, Hitchmough R. 2004. Threatened and uncommon plants of New Zealand. *New Zealand Journal of Botany* 42(1): 45–76.

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<https://doi.org/10.1080/00288250909509794>.

Perrie LR, Shepherd LD, de Lange PJ, Batty EL, Ohlsen DJ, Bayly MJ, Brownsey PJ. 2013. *Hymenophyllum pluviatile*, a new and uncommon fern from New Zealand. *New Zealand Journal of Botany* 51(4): 308–320.

<https://doi.org/10.1080/0028825X.2013.834830>.

## NZPCN FACT SHEET CITATION

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

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

## MORE INFORMATION

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