

Polyphlebium colensoi

COMMON NAME

bristle fern

SYNONYMS

Trichomanes colensoi Hook.f., *Vandenboschia colensoi* (Hook. f.) Copel.,

FAMILY

Hymenophyllaceae

AUTHORITY

Polyphlebium colensoi (Hook.f.) Ebihara et K.Iwats.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

TRICOL

CHROMOSOME NUMBER

2n = 72

CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: DP

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: Sp

2009 | At Risk – Naturally Uncommon | Qualifiers: DP

2004 | Sparse

DISTRIBUTION

Endemic. North Island (from Mt Karioi (Western Waikato) and Te Moehau (Coromandel Peninsula) south), South Island, Stewart Island/Rakiura, Chatham Islands (known from only one site on Chatham Island (Rēkohu).

HABITAT

An uncommon fern that most commonly occurs on wet rock faces, usually within overhangs or beside streams in dark, wet, lowland to montane forest. It may also be found as a low epiphyte in cloud forest, or within holes amongst exposed roots, or on trees rooted over boulder falls. Often associated with *Abrodictyum strictum* and *Hymenophyllum australe*.

DETAILED DESCRIPTION

Colony forming, extensively rhizomatous fern of dark recesses, rock faces and overhangs usually near to or partially immersed in water. **Rhizomes** long creeping. **Stipes** 5–30 mm long. **Stipe and rachises** not winged, dark black, rather wiry and pliant. **Frond lamina** 30–120 × 10–30 mm, dark green (rarely bright green), narrowly elliptic, 2–3-pinnate. **Primary pinnae** widely spaced, stalked, finely divided; ultimate segments linear, deeply toothed, with the veins forking 1–2 times per segment. **Sori** distinctly stalked, usually solitary (sometimes paired) at bases of primary pinnae. **Indusia** tubular, widened at mouth.



Bull Creek, Akatarawa. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

SIMILAR TAXA

Could possibly be confused with *Polyphlebium endlicherianum* which often grows in similar habitats and has a superficially similar frond shape and morphological. However, *P. colensoi* differs from that species by the absence of a rachis wing, more deeply divided fronds and distinctly stalked indusia.

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

colensoi: Named after William Colenso (7 November 1811 - 10 February 1899) who was a Cornish Christian missionary to New Zealand, and also a printer, botanist, explorer and politician.

WHERE TO BUY

Not commercially available.

TAXONOMIC NOTES

NZPCN now follows Ebihara et al. (2006) in recognising *Polyphlebium* as distinct from *Trichomanes*. Although Brownsey & Perrie (2016) rejected this idea, the generic segregation was adopted by the PPG I (2016) and is now widely followed throughout the world.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (July 2007). Description adapted from Brownsey & Smith-Dodsworth (2000).

REFERENCES AND FURTHER READING

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

Brownsey PJ, Perrie LR. 2016. Hymenophyllaceae. In: Breitwieser I, Heenan PB, Wilton AD. Flora of New Zealand - Ferns and Lycophytes. Fascicle 15. Manaaki Whenua Press, Lincoln, NZ. <https://doi.org/10.7931/B1QP4Z>.

Ebihara A, Dubuisson, J-Y, Iwatsuki K, Hennequin S, Ito M. 2006. A taxonomic revision of the Hymenophyllaceae. *Blumea* 51: 2–57. <https://doi.org/10.3767/000651906X622210>.

PPG 1: The Pteridophyte Phylogeny Group 2016. A community-derived classification for extant lycophytes and ferns. *Journal of Systematics and Evolution* 54: 563–603. <https://doi.org/10.1111/jse.12229>.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/polyphlebium-colensoi/>