

Polystichum wawranum

SYNONYMS

Aspidium wawranum Szyszyl. in Wawra

FAMILY

Dryopteridaceae

AUTHORITY

Polystichum wawranum (Szyszyl. in Wawra) Perrie

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

POLWAW

CHROMOSOME NUMBER

2n = c.164

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: North Island (northern), Chatham Islands.

HABITAT

Coastal to montane. Often on cliff faces, especially those composed of base-rich substrates such as calcareous sandstone, limestone, basalt and schist. A rupestral or terrestrial fern of coastal shrublands and forest, gorges, riparian forest as well as open sites on hillsides, in rough pasture or on alluvial terraces. It has also colonise urban areas where it sometimes a feature of roadside banks and cuttings.

DETAILED DESCRIPTION

Rhizomes short, erect. **Stipes** 150–550 mm long. Stipes and rachises densely scaly. **Scales** filiform (hair-like); almost always widest at base; those from the stipe-rachis junction 40–120 microns wide at mid length; usually dark brown, but often appearing black to the naked eye; apex long and tapering; margins often with protrusions, which are usually blunt; often densely fimbriate around base, so much so that in young fronds the stipe and rachis scales appear to be underlain by a dense white tomentum. **Lamina** 270–590 × 110–280 mm; bipinnate with the basal primary pinnae of some large fronds becoming tripinnate; varying in colour from olive-green to blue-green, usually with primary and secondary costae blackish blue. **Primary pinnae** in 18–35 pairs, the longest 55–140 × 13–35 mm. **Secondary pinnae** usually adnate, but becoming free and sessile to almost stalked towards the base of primary pinnae, particularly in basal primary pinnae; often with only sparse marginal toothings, sometimes almost entire but for apical point. **Sori** round. **Indusia** peltate, ± flat, ± round, with entire, although often undulate and/or scalloped, margins; often deciduous; central dark area usually insignificant (c. < 10% of surface area).



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At Maunganui Bluff. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

SIMILAR TAXA

Polystichum wawranum is recognised by its hair-like scales, closely inserted and relatively long narrow pinnae, indusia mostly lacking obvious dark centres, and relatively small spores. It is likely to be confused only with *P. neozelandicum* subsp. *neozelandicum* and subsp. *zerophyllum*, which are distinguished from *P. wawranum* by having wider scales, indusia with larger dark centres, and larger spores. *Polystichum wawranum* is commonly sympatric with *P. neozelandicum* subsp. *neozelandicum* in northern New Zealand, otherwise its range overlaps with both *P. neozelandicum* subspecies only on the Chatham Islands.

PROPAGATION TECHNIQUE

Easily grown from fresh spores and transplants. However, often slow to establish. Does best in a shaded site planted within a deep, free draining humus-enriched fertile soil. *Polystichum wawranum* benefits from regular applications of lime.

THREATS

Not Threatened—though very scarce on the Chatham Islands.

ETYMOLOGY

polystichum: Many rows (of sori); from the Greek *polus* and *stikhos*; parallel rows of spore cases

WHERE TO BUY

Occasionally sold by specialist native plant nurseries, usually as *P. richardii*

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (12 November 2012). Description adapted from Perrie et al. (2003)

REFERENCES AND FURTHER READING

Perrie LR, Brownsey PJ, Lockhart PJ, Large MF. 2003. Evidence for an allopolyploid complex in New Zealand *Polystichum* (Dryopteridaceae). *New Zealand Journal of Botany* 41(2): 189–215.
<https://doi.org/10.1080/0028825X.2003.9512841>.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/polystichum-wawranum/>