Polystichum vestitum

COMMON NAMES
pūniu, prickly shield fern

BIOSTATUS
Native – Endemic taxon

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

CATEGORY
Vascular

STRUCTURAL CLASS
Ferns

DETAILED DESCRIPTION
Rhizome erect, sometimes forming a trunk up to 0.9 m tall. **Stipe** 90–410 mm long. **Stipe and rachis** densely clothed with scales of diverse form. **Larger rachis scales** usually ovate-lanceolate (those from the mid rachis 340–1620 µm at their mid length) to lanceolate-acicular (Chatham Islands and these from the mid rachis 180–780 µm at their mid length); usually bicolorous, with an obvious dark brown centre surrounded on all sides by pale brown margins, but dark centre sometimes much reduced (Chatham Islands, Subantarctic Islands and islands around Stewart Island/Rakiura especially) such that the rachis scales are uniformly pale brown; apex usually long and tapering; usually without marginal projections except for plants from the Chatham Islands, in which they may be very well developed; usually underlain by pale bristle-like scales. **Lamina** 0.23–2.0 m, long, 90–350–(480) mm; narrowly elliptic to narrowly oblong; bipinnate; adaxially usually dark green (sometimes purple-green), abaxially paler. **Primary pinnae** in 20–62 pairs, oblong. **Secondary pinnae** all stalked except those towards the apex of primary pinnae; with sharply pointed apex and prominent marginal teeth and/or crenulations. **Sori** round. **Indusia** peltate, ± flat, ± round; with entire although sometimes undulate and/or scalloped margins; central dark area usually insignificant (< 10% surface area, and usually < 5%).



Polystichum vestitum. Photographer: John Barkla, Licence: CC BY.



Developing sori. Wellington. Photographer: Jeremy R. Rolfe, Date taken: 23/10/2012, Licence: CC BY.

SIMILAR TAXA
Perrie et al. (2003) note that *Polystichum vestitum* can generally be distinguished from the other native New Zealand species of *Polystichum* by: the presence of indusia, which are more or less flat and have a rather small dark centre; secondary pinnae which are all stalked except for those near the apices of the primary pinnae; relatively long and narrow fronds, with parallel sides; scales on the stipe and rachis which are large, ovate-lanceolate, with a prominent dark brown centre completely surrounded by a pale brown margin, and with few, if any, marginal projections. They further note that some plants from the Chatham Islands have wider fronds (relatively longer primary pinnae in particular), and scales that are more acicular-lanceolate, uniformly pale brown, and with many prominent marginal projections. Nevertheless, with their generally larger size, larger numbers of stalked secondary pinnae, indusia with relatively small dark centres, and smaller spores, these plants are unlikely to be confused with *P. neozelandicum*, the only other superficially similar member of the genus on the Chatham Islands (see de Lange et al. 2011). Similarly, some plants of *P. vestitum* from islands around Stewart Island/Rakiura and the Subantarctic (particularly, the Snares and Auckland Islands) have uniformly pale brown scales and wider frond (relatively longer primary pinnae in particular). These can be readily distinguished from the only other *Polystichum* of those islands, *P. neozelandicum* subsp. *zerophyllum* and *P. cystostegia*, by their more or less flat indusia with rather small dark centres, larger number of stalked secondary pinnae, scales with few, if any, marginal projections, and smaller spores (Perrie et al. 2003).

DISTRIBUTION
Endemic. New Zealand: North Island (scarce north of Auckland and the Coromandel Peninsula), South Island, Stewart Island/Rakiura, Chatham Islands, Snares Islands/Tini Heke, Antipodes Islands, Auckland Islands, Campbell Island/Motu Ihupuku, Macquarie Island.

HABITAT
Coastal to alpine. In the northern part of its range *P. vestitum* is confined to montane regions or cold ('temperature inversion') situations, further south it progressively extends to lower elevations; in the South Island it ranges from coastal to alpine regions. *Polystichum vestitum* is a species of exposed habitats, such as forest margins, gully floors and tussock grasslands, but it also commonly extends into forest in colder, wetter parts of New Zealand.

GENUS
Polystichum

FAMILY
Dryopteridaceae

AUTHORITY
Polystichum vestitum (G. Forst.) C. Presl

SYNONYMS
Polystichum aculeatum var. perelegans (Colenso) Domin; Polystichum venustum Hombr.; Aspidium aculeatum var. vestitum (G.Forst.) Hook. ex Hook.f.; Polystichum aculeatum var. vestitum (G.Forst.) Domin; Aspidium waikarense Colenso; Polypodium vestitum G.Forst.; Polystichum perelegans (Colenso) C.Chr.; Aspidium pulcherrimum Colenso; spidium venustum (Hombr.) Hook.f.; Aspidium vestitum (G.Forst.) Sw.; Aspidium aculeatum sensu F.Muell.; Aspidium perelegans Colenso; Aspidium proliferum sensu A.Rich.

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

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.

WETLAND PLANT INDICATOR STATUS RATING
FACU: Facultative Upland
Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).

ETYMOLOGY
polystichum: Many rows (of sori); from the Greek polus and stikhos; parallel rows of spore cases
vestitum: Clothed (with chaffy scales); from the Latin vestire; dense cover of scales on its leaf stalks

NVS CODE
POLVES

CHROMOSOME NUMBER
2n = 164

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

REGIONAL CONSERVATION STATUSES

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

de Lange PJ, Heenan PB, Rolfe JR. 2011. Checklist of vascular plants recorded from Chatham Islands. Department of Conservation, Wellington, NZ. 57 p. https://www.doc.govt.nz/globalassets/documents/conservation/native-plants/chatham-islands-vascular-plants-checklist.pdf

Perrie LR, Brownsey PJ, Lockhart PJ, Large MF. 2003B. Morphological and genetic diversity in the New Zealand fern *Polystichum vestitum* (Dryopteridaceae), with special reference to the Chatham Islands. *New Zealand Journal of Botany 41(4)*: 581–602. https://doi.org/10.1080/0028825X.2003.9512872.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (13 November 2012). Description adapted from Perrie et al. (2003).

NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): Polystichum vestitum Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. https://www.nzpcn.org.nz/flora/species/polystichum-vestitum/ (Date website was queried)

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/polystichum-vestitum/

PDF DATE

27 May 2026