

Pteris macilenta

COMMON NAME

Sweet fern

SYNONYMS

Pteris pendula Colenso

FAMILY

Pteridaceae

AUTHORITY

Pteris macilenta A. Rich.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

PTEMAC

CHROMOSOME NUMBER

2n = 116, 120

CURRENT CONSERVATION STATUS

2012 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: North, South and Chatham Islands. Widespread in the North Island (except for the central volcanic plateau and adjacent main axial ranges), common in the northern part of the South Island reaching a western southern limit near Greymouth and in the east on Banks Peninsula where it may have been planted (Wilson 2009).

HABITAT

Coastal to montane (in northern areas). Usually in dry, less heavily vegetated sites in forest but also on cliff faces and banks in light scrub. Especially common overlying calcareous or other base-rich rocks.

FEATURES

Terrestrial ferns. Rhizomes short, erect, scaly. Stipes 0.1-0.5 m long, yellow-brown, base scaly. Laminae 0.25-0.9 × 0.15-0.5 m, light green, 3-pinnate, ovate, thin,; veins reticulated along midribs but free elsewhere, Pinnae widely spaced; most lower secondary pinnae stalked or sessile. Ultimate segments 5-15 × 3-5 mm, oblong, apices deeply toothed, margins almost smooth. Sori continuous along pinna margins on a marginal vein, protected by a membranous inrolled pinna margins.



Cambridge. Photographer: John Smith-Dodsworth



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SIMILAR TAXA

Pteris macilenta is most similar to *P. saxatilis* which is rather like a diminutive form of it. *Pteris saxatilis* differs from *P. macilenta* by the very widely spaced primary and secondary pinnae; laminae 0.15-0.5 × 0.12-0.25 m, and the ultimate segments up to 15 × 5 mm. Although Brownsey & Smith-Dodsworth (2000) state that intergrades exist between *P. macilenta* and both *P. comans* and *P. saxatilis*, this seems more likely to refer to hybrids between the latter two species as *P. macilenta* is genetically distinct from both *P. comans* and *P. saxatilis* and unable to hybridise with them (J.E. Braggins pers. comm.). The New Zealand form of *Pteris comans* differs from both *P. macilenta* and *P. saxatilis* by the coriaceous (leathery) fronds, reticulate venation, overlapping pinnae and large ultimate segments

FLOWERING

Not applicable - spore producing

FLOWER COLOURS

No flowers

FRUITING

Not applicable - spore producing

PROPAGATION TECHNIQUE

Easily grown from fresh spores and young plants transplant readily. Prefers semi-shade in garden settings, planted into a moist, rich free draining soil. Can be cold sensitive

ETYMOLOGY

pterus: A fern known to the ancient Greeks; from the Greek pteris

TAXONOMIC NOTES

The unpublished work of J.E. Braggins suggests that the name *P. macilenta* as applied by Allan (1961) and other authors is incorrect and that this name is actually the first legitimate name for the fern known as *P. saxatilis*. His work suggests that the correct name for the plant called here *P. macilenta* is in fact *P. pendula* Colenso. However, until such time as that research is published, and in line with other published works (e.g., Brownsey & Smith-Dodsworth 2000), the current usage of the names *P. macilenta* and *P. saxatilis* are retained.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (17 January 2012). Description adapted from Brownsey & Smith-Dodsworth (2000).

REFERENCES AND FURTHER READING

Allan, H.H. 1961: New Zealand Flora. Vol. I. Wellington, Government Printer.
Brownsey, P.J.; Smith-Dodsworth, J.C. 2000: New Zealand Ferns and Allied Plants. Auckland, David Bateman.
Wilson, H. 2009: Natural History of Banks Peninsula. Christchurch, Canterbury University Press.

CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/pterus-macilenta/>