

# 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

2017 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

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

## 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.

## DETAILED DESCRIPTION

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.



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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. carsei* (as *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.). *Pteris carsei* differs from both *P. macilenta* and *P. saxatilis* by the coriaceous (leathery) fronds, reticulate venation, overlapping pinnae and large ultimate segments. *Pteris epaleata* can be distinguished from *P. macilenta* as well as *P. carsei* and *P. saxatilis* by its dull adaxial frond surface.

## 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

**pteris:** 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 HH. 1961. Flora of New Zealand, Volume I. Indigenous Tracheophyta: Psilopsida, Lycopsida, Filicopsida, Gymnospermae, Dicotyledones. Government Printer, Wellington, NZ. 1085 p.
- Brownsey PJ, Smith-Dodsworth JC. 2000. New Zealand Ferns and Allied Plants. David Bateman, Auckland, NZ. 168 p.
- Wilson H. 2009. Natural History of Banks Peninsula. Canterbury University Press, Christchurch, NZ. 144 p.

## NZPCN FACT SHEET CITATION

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## MORE INFORMATION

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