

# Pteris saxatilis

## FAMILY

Pteridaceae

## AUTHORITY

Pteris saxatilis Carse

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Ferns

## NVS CODE

PTESAX

## CHROMOSOME NUMBER

2n = 58

## CURRENT CONSERVATION STATUS

2017 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Endemic. New Zealand: North Island (North Cape to Taranaki), South Island (North-west Nelson and the Marlborough Sounds).

## HABITAT

Mostly coastal, though occasionally recorded well inland. Usually in open habitats such as grassy and/or rubble strewn slopes, in open forest, or amongst flax (*Phormium tenax*), *Cyperus ustulatus* (or *C. insularis*) and carices at the bank of boulder or cobble beaches.

## DETAILED DESCRIPTION

Terrestrial ferns. **Rhizomes** short, erect, scaly. **Stipes** 80–200 mm long, pale brown, glabrous or scaly at very base. **Laminae** 0.15–0.5 × 0.12–0.25 m, dark green to yellow-green, 2–3-pinnate at base, ovate, coriaceous, veins reticulate. **Pinnae** not overlapping, distinctly widely spaced; most lower secondary pinnae adnate. **Ultimate segments** 5–10 × 3–5 mm, oblong, apices tapering or bluntly pointed, margins toothed (often deeply so). **Sori** continuous along pinna margins on a marginal vein, protected by a membranous inrolled pinna margins.



Fantail bay, Coromandel. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



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## SIMILAR TAXA

*Pteris saxatilis* is most similar to *P. macilenta* which superficially appears to be merely a larger 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. saxatilis* and both *P. carsei* (as *P. comans*) and *P. macilenta*, this seems more likely to refer to hybrids between *P. saxatilis* and *P. carsei* than any involving *P. macilenta*, which is genetically very distinct from both *P. carsei* 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.

## PROPAGATION TECHNIQUE

Brownsey & Smith-Dodsworth (2000) suggest that cultivation of *Pteris saxatilis* is difficult. However, rather like *P. carsei*, it would seem better to say that results are variable. *Pteris saxatilis* seems to thrive best when planted in semi-shade, in a deep, free draining, fertile but light soil. It often responds well to regular applications of lime.

## ETYMOLOGY

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

## WHERE TO BUY

*Pteris saxatilis* is very rarely available from specialist native plant nurseries.

## TAXONOMIC NOTES

According to the unpublished research of J.E. Braggins the correct name for *Pteris saxatilis* is in fact *P. macilenta* A.Rich. 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* is 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

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

## NZPCN FACT SHEET CITATION

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

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/ptēris-saxatilis/>