

Pellaea falcata

COMMON NAMES

sickle fern, Australian cliff brake

BIOSTATUS

Native

CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: DP

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CATEGORY

Vascular

STRUCTURAL CLASS

Ferns

DETAILED DESCRIPTION

Shortly rhizomatous, tufted fern. **Stipes** 70–250 mm, stipes and rachises erect, dark brown, densely clad in spreading scales. **Fron**d linear, pinnate, 200–500 × 30–70 mm. **Pinnae** shortly stalked, oblong-falcate to distinctly falcate, 15–40 × 7–15 mm, evenly spaced, margins smooth, glossy green above, paler below. **Sori** in two marginal bands reaching toward but not meeting at pinna apices.

SIMILAR TAXA

Differs from *P. calidirupium* by a more northerly habit, has larger, distinctly falcate pinnules, smaller less offset terminal pinna, spreading stipe and frond scales, and by the sori which are not continuous along the margin of the pinna. Differs from *P. rotundifolia* by oblong-falcate pinnules. Inland intermediates are frequent but seem to represent another form or complex of forms allied to *P. rotundifolia*. True *P. falcata* is rarely seen in NZ except on some northerly offshore islands.

DISTRIBUTION

Indigenous. New Zealand: North Island (primarily a species of northern offshore islands but also known from a few locations in Northland, Auckland and Coromandel). Common in eastern Australia.

HABITAT

Coastal in short scrub, on cliff faces and in open forest. Often on small islands, also inland on scoria and basalt rocks around Auckland City.

THREATS

Its status has been confused due to the occurrence of intermediate forms between it and *P. rotundifolia*. Some appear to be stable, apomictic races requiring further study. Excluding these forms means the typical species is very uncommon primarily confined to northern offshore islands, on several of which it is now threatened by weeds. It has also been collected from mainland stations as far south as Kawhia and Thames. Many mainland sites are threatened by weeds and coastal development. In some places it is or has recently been threatened by over-collection. Herbarium evidence shows this species was once common on the volcanic cones of Auckland City, but due to targeted collection, the species has all but vanished from this area within the last forty years.

GENUS

Pellaea

FAMILY

Pteridaceae



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



Close up at Matapaua (July). Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

AUTHORITY

(R.Br.) Fée

SYNONYMS

Pteris falcata R.Br., *Platyloma falcata* (R.Br.) J.Smith, *Allosorus falcatus* (R.Br.) Kunze, *Pteris seticaulis* Hook.

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

LIFE CYCLE AND DISPERSAL

Spore-bearing fronds may be found throughout the year.

PROPAGATION TECHNIQUE

Easy from fresh spores. Very fast growing and an excellent pot plant. Does well in a variety of soils, light levels and moisture regimes but intolerant of weeds.

CULTIVATION

Occasionally available from some specialist native plant nurseries. However, most nursery stock seems to be of Australian origin.

ETYMOLOGY

pellaea: Dark fern; from the greek pellos; dark leaf and leaf stalk

falcata: From the Latin falx 'scythe' or 'sickle', meaning sickle-shaped

NVS CODE

PELFAL

CHROMOSOME NUMBER

2n = 116

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Declining | Qualifiers: PD, SO

2009 | At Risk – Relict | Qualifiers: SO, DP

2004 | Gradual Decline

[Jump to current conservation status](#)

REGIONAL CONSERVATION STATUSES

Auckland: 2025 | Regionally Threatened – Regionally Critical | Qualifiers: Sp, DPR, DPS, DPT, PF Help

The regional threat classification system leverages off the national assessments in the NZTCS, providing information relevant for the regional context. Auckland conservation status information is sourced from the "[Conservation status of vascular plant species in Tāmaki Makaurau / Auckland](#)" Simpkins E et al. (2025) report.

REFERENCES AND FURTHER READING

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

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (21 April 2006). Description adapted from Brownsey & Smith-Dodsworth (2000).

NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/pellaea-falcata/>

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25 May 2026