

Pellaea falcata

COMMON NAME

sickle fern, Australian cliff brake

SYNONYMS

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

FAMILY

Pteridaceae

AUTHORITY

(R.Br.) Fée

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

PELFAL

CHROMOSOME NUMBER

2n = 116

CURRENT CONSERVATION STATUS

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

PREVIOUS CONSERVATION STATUSES

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

2004 | Gradual Decline

DISTRIBUTION

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

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.

FEATURES

Shortly rhizomatous, tufted fern. Stipes 70–250 mm, stipes and rachises erect, dark brown, densely clad in spreading scales. Frond linear, pinnate, 200–500 x 30–70 mm. Pinnae, shortly stalked, oblong-falcate to distinctly falcate, 15–40 x 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.



Matapaua, Coromandel. Photographer: John Smith-Dodsworth



Close up at Matapaua (July). Photographer: John Smith-Dodsworth

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.

FLOWERING

Spore bearing fronds may be found throughout the year

FLOWER COLOURS

No flowers

FRUITING

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.

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.

ETYMOLOGY

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

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

WHERE TO BUY

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

ATTRIBUTION

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

REFERENCES AND FURTHER READING

Brownsey, P.J.; Smith-Dodsworth, J.C. 2000: New Zealand Ferns and Allied Plants. Auckland, David Bateman

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

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