Pellaea falcata

COMMON NAME
Sickle fern, Australian cliff brake

SYNONYMS

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.
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 targetted 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

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

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