

Pellaea calidirupium

Family:

Pteridaceae

Botanical name

Pellaea calidirupium Brownsey & Lovis

Link to Australian Plant Name Index for publication details and synonyms:

<https://id.biodiversity.org.au/name/apni/154091>

Common name:

Rock Sickle Fern

Description

Rhizome long-creeping; scales ovate, to 2 mm long, with a midrib of black occluded cells and margins of paler brown open cells. Fronds 20–50 cm long, markedly but inconstantly dimorphic; sterile fronds usually shorter and with only 4–12 pinnae. Stipe 10–23 cm long (45–55% length of frond), 1–2 mm diam., 5–10 mm apart; stipe and rachis dark red-brown throughout, bearing scales and uniseriate hairs; scales to c. 4 mm long, dense, appressed, antrorse, narrowly ovate with long filiform apices, pale to mid-brown (whitish to pale-cream coloured when immature). Lamina 1-pinnate, narrowly elliptic, with 15–40 shortly-stalked pinnae, glossy dark green on upper surface, paler green beneath, with scattered narrowly-acuminate scales on both surfaces; stalks of basal pinnae at least 1.5 mm long; juvenile and mature sterile pinnae ±round or oblong with obtuse to emarginate apices and truncate bases; terminal pinna sometimes greatly enlarged. Fertile pinnae ±triangular, 14–30 mm long, 7–12 mm wide, progressively reducing in length and width from base to apex of frond, symmetric about midrib, rarely slightly falcate; base truncate to cordate; margins entire or minutely toothed; apex acute or acuminate, rarely mucronate; lower fertile pinnae widely spaced on 1.5–4.5 mm long stalks; upper pinnae close together and almost sessile. Sorus a continuous marginal band 1–2 mm wide, sometimes confluent at apex of pinna; indusium marginal, membranous, obscured by sporangia at maturity. Spores trilete, ±spherical, echinate.



Herbarium specimen. © Queensland Herbarium



Herbarium specimen. © Queensland Herbarium

Distribution

Occurs in Tas, Vic, NSW and southern QLD with putative records from the Atherton Tablelands in NE QLD. Endemic to Australia and New Zealand.

Habit and habitat

Terrestrial in soil pockets or lithophytic in rock crevices, usually in exposed rocky areas on dolerite or granite.

Similar species

Pellaea nana, *P. falcata* and *P. paradoxa*

1a. rachis scales and hairs mid- to dark-brown, spreading = 2

1b. rachis scales and whitish to pale-brown appressed = 3

2a. rachis scales mostly 3–4 mm long, pinnae 22–56 mm long = *Pellaea falcata*

2b. rachis scales mostly 1–2.5 mm long, pinnae 5–25 mm long = *Pellaea nana*

3a. pinnae 20–60 mm long; all lateral pinnae the same length = *Pellaea paradoxa*

3b. pinnae 14–30 mm long; lateral pinnae reducing in length and width towards the frond apex = *Pellaea calidirupium*

Citation of Australian Tropical Ferns and Lycophytes

Field AR, Quinn CJ, Zich FA (2022) Australian Tropical Ferns and Lycophytes. apps.lucidcentral.org/fern/text/intro/index.htm (accessed online INSERT DATE).

Field AR, Quinn CJ, Zich FA (2022) '*Platyserium superbum*', in Australian Tropical Ferns and Lycophytes. apps.lucidcentral.org/fern/text/entities/platyserium_superbum.htm (accessed online INSERT DATE).



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