

Asplenium flaccidum

COMMON NAME

drooping spleenwort, hanging spleenwort

SYNONYMS

Darea odontites (Thunb.) Willd.; *Asplenium bulbiferum* var. *flaccidum* (G.Forst.) Domin; *Asplenium marinum* var. *flaccida* (G.Forst.) F.Muell.; *Caenopteris novae-zeelandiae* Spreng.; *Caenopteris odontites* Thunb.; *Darea flaccida* (G.Forst.) Willd.; *Asplenium heterophyllum* A.Rich.; *Asplenium odontites* (Thunb.) R.Br.; *Caenopteris flaccida* (G.Forst.) Thunb.

FAMILY

Aspleniaceae

AUTHORITY

Asplenium flaccidum G.Forst.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

ASPFLA

CHROMOSOME NUMBER

2n = 144

CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: SO

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Indigenous. Kermadec Islands, Manawatāwhi / Three Kings Islands, North Island, South Island, Stewart Island/Rakiura, Chatham Islands, Snares Islands/Tini Heke. Also present in Australia and the wider Pacific.

HABITAT

Coastal to montane (at the tree limit). In tall forest, scrub or rough boulder strewn ground. Mostly epiphytic on various native trees but also found on the ground.

WETLAND PLANT INDICATOR STATUS RATING

UPL: Obligate Upland

Rarely is a hydrophyte, almost always in uplands (non-wetlands).



Mangaone Track. Photographer: Jeremy R. Rolfe, Date taken: 14/04/1984, Licence: CC BY.



Peel Forest. Photographer: Jeremy R. Rolfe, Date taken: 20/01/1983, Licence: CC BY.

DETAILED DESCRIPTION

Mostly epiphytic. **Rhizome** short, stout, erect, bearing dark brown subulate scales up to 20 × 2 mm. **Stipes** 50–200 mm (or more) long, brown on underside, green above, flaccid, sparingly covered in small subulate scales with long filiform apices. **Laminae** lanceolate to elliptic, 150–900 (or more) × 50–250 mm, dull green, thick, leathery, limp and pendulous, pinnate to bipinnate. **Raches** green, sparingly scaly. **Pinnae** in 5–20 (or more) pairs, linear, acuminate, long stalked, 50–150 × 5–20 mm; degree of dissection very variable, sometimes only divided into very short obtuse segments, sometimes pinnate. **Pinnules** very variable in length, from oblong and obtuse to linear and acute, up to 15 × 2 mm. **Basal acroscopic pinnule** occasionally much longer than that next to it. **Sori** submarginal, linear, 2–10 mm long. **Spores** (31)–36–44–(50) × (19)–23–27–(33) µm.

SIMILAR TAXA

Allied to *Asplenium haurakiense* (Brownsey) Ogle from which it differs by its mostly epiphytic growth habit, wider ecological range (from exposed coastal areas through forest to the tree line), tetraploid (2n = 144) rather than octoploid (2n = 288) chromosome number, subulate rhizome and stipe scales (with long filiform apices and thin cell walls); pendulous rather than stiffly erect, dull green rather than usually glossy green, lanceolate to elliptic fronds; by the basal acroscopic pinnule which is only occasionally much longer than that next to it, and rarely pinnatifid; and by the smaller spores. *Asplenium appendiculatum* (Labill.) C.Presl subsp. *appendiculatum* occupies similar habitats and is somewhat similar. It can be distinguished from *A. flaccidum* by its usually terrestrial growth habit, octoploid (2n = 288) rather than tetraploid (2n = 144) chromosome number, and by having a more or less erect frond and a larger spore size.

LIFE CYCLE

Minute spores are wind dispersed (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Easily grown. An excellent pot and hanging basket fern. Can be slow establish. Prefers semi-shade, and should be planted in a fertile, free draining soil.

ETYMOLOGY

asplenium: From the Greek a- 'without' and splene 'spleen', a northern hemisphere species, the black spleenwort (*Asplenium adiantum-nigrum*), was once believed to be a cure for diseases of the spleen.

flaccidum: Weak or limp; from the Latin flaccidus; habit of the leaves

NOTES ON TAXONOMY

Kermadec Island plants are potentially distinct and seem closer to *A. haurakiense*. Further research into their status is needed.

ATTRIBUTION

Description modified from Brownsey (1977)

REFERENCES AND FURTHER READING

Brownsey PJ. 1977. A taxonomic revision of the New Zealand species of *Asplenium*. *New Zealand Journal of Botany* 15(1): 39–86. <https://doi.org/10.1080/0028825X.1977.10429618>.

Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285–309. <https://doi.org/10.1016/j.ppees.2009.06.001>.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/asplenium-flaccidum/>