

Asplenium Iyallii

COMMON NAME

Lyall's spleenwort

SYNONYMS

Asplenium anomodum Colenso; *Asplenium bulbiferum* var. *triste* (Raoul) Hook.f.; *Asplenium lucidum* var. *anomodum* (Colenso) Cheeseman; *Asplenium obtusatum* var. *anomodum* (Colenso) Domin; *Asplenium obtusatum* var. *Iyallii* G.M.Thomson; *Asplenium triste* Raoul; *Asplenium lucidum* var. *Iyallii* Hook.f.

FAMILY

Aspleniaceae

AUTHORITY

Asplenium Iyallii (Hook.f.) T. Moore

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

ASPLYA

CHROMOSOME NUMBER

2n = 288

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: North Island (from Port Waikato south to Wellington), South Island (North-west Nelson otherwise mainly eastern), Stewart Island/Rakiura, Chatham Islands.

HABITAT

Coastal to alpine. A basicole favouring base rich substrates but especially calcareous rocks (limestone and marble) and basalt rock. In tall forest, scrub or on exposed rock surfaces. Often present in cave entrances.



Castlehill. Photographer: Melissa Hutchison, Licence: CC BY-NC.



South Karori, Wellington. Photographer: Jeremy R. Rolfe, Date taken: 11/08/2012, Licence: CC BY.

DETAILED DESCRIPTION

Rhizome stout, ascending, bearing brown subulate to narrowly triangular scales up to 25 × 2 mm. **Stipes** 30–200 mm long, pale brown at base and on underside, green elsewhere, covered with scales similar to but smaller than those of the rhizome. **Laminae** lanceolate to elliptic, 40–400 × 20–200 mm, dark shiny green to dull grey-green, pinnate to bipinnate. **Raches** normally green, occasionally brown on the underside, often grooved, scaly. **Pinnae** 2–16 pairs, ovate to narrowly oblong, obtuse to acuminate, serrate to ± entire, stalked, 10–100 × 5–50 mm, often covered on both surfaces with tiny scales. **Lowermost pinnae** usually at least partially lobed or divided at the base, sometimes completely pinnate; pinnules stalked, lanceolate to elliptic, obtuse, serrate to entire, up to 30 × 15 mm. **Sori** up to 10 mm long, not reaching lamina edge.

SIMILAR TAXA

Asplenium lyallii is rather variable and segregates into two distinct frond forms. The first of these, once known as *A. anomodum* Colenso, is almost exclusively associated with calcareous rocks and soils and has fronds < 30 mm wide, not thick and fleshy; pinnae often with scales on both surfaces; the second is more widespread in coastal to alpine situations, though always on base-rich rocks and has fronds that are 2- or more pinnate, but lack bulbils; are dull above; and without a creeping rhizome. The sori of both forms is consistently remote from margin, and 4–10 mm long.

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Although rather slow growing this is a very attractive species which is excellent in a pot or on a shaded rock wall.

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.

lyallii: Named after David Lyall (1817-1895), 19th century Scottish naturalist and surgeon with the Royal Navy, who explored Antarctica, New Zealand, the Arctic and North America and was a lifelong friend of Sir Joseph Hooker.

ATTRIBUTION

Description 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-lyallii/>