Asplenium lyallii

COMMON NAMES
Lyall's spleenwort

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | Not Threatened
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Ferns

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.

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


Henga, Chatham Island. Photographer: Jeremy R. Rolfe, Date taken: 31/05/2013, Licence: CC BY.

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.

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.

GENUS
Asplenium

FAMILY
Aspleniaceae

AUTHORITY
Asplenium lyallii (Hook.f.) T. Moore

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. lyallii G.M.Thomson; Asplenium triste Raoul; Asplenium lucidum var. lyallii Hook.f.

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

LIFE CYCLE AND DISPERSAL
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.

NVS CODE
ASPLYA

CHROMOSOME NUMBER
2n = 288

PREVIOUS CONSERVATION STATUSES
2017 | Not Threatened
2012 | Not Threatened
2009 | Not Threatened
2004 | Not Threatened
Jump to current conservation status

REGIONAL CONSERVATION STATUSES
Otago: 2025 | Regionally Not Threatened Help
The regional threat classification system leverages off the national assessments in the NZTCS, providing information relevant for the regional context. Otago conservation status information is sourced from the "Conservation Status of Indigenous Vascular Plants in Otago, 2025" Jarvie S et al. (2025) report.

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.

ATTRIBUTION
Description from Brownsey (1977).

MORE INFORMATION
https://www.nzpcn.org.nz/flora/species/asplenium-lyallii/

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