

Asplenium lepidotum

SYNONYMS

None - first described in 2016

FAMILY

Aspleniaceae

AUTHORITY

Asplenium lepidotum Perrie et Brownsey

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: DP, RR

DISTRIBUTION

Endemic. New Zealand: South Island (North-west Nelson to north Westland).

HABITAT

A species of basicolous rocks, bluffs and outcrops (especially limestone). Very occasionally epiphytic in the vicinity of rock outcrops and cliffs faces bearing this species. *Asplenium lepidotum* has been collected from sea level to about 1000 m above sea level.

DETAILED DESCRIPTION

Terrestrial (usually growing on rocks) fern. **Rhizomes** stout, erect, rarely short-creeping, bearing scales; scales ovate or narrowly ovate, 10–30 mm long, 2–5 mm wide, dark brown. **Fronds** 120–1100 mm long. **Stipes** 43–600 mm long, green or brown, densely to sparsely covered throughout in narrowly ovate or ovate scales with acute or acuminate or filiform apices. **Rachises** often green on both surfaces but occasionally at least partially brown (especially below), grooved, scaly; scales narrowly ovate, 100–470 µm wide at their mid-length, with acute or very short filiform apices. **Fronds** pinnate, narrowly ovate or ovate, narrowed to a long terminal segment that is usually undivided but rarely lobed proximally, 65–650 mm long, 22–260 mm wide, green on both surfaces, sometimes darker and glossy on upper surface, herbaceous, bearing abundant narrowly ovate or subulate scales with long filiform apices on adaxial surface (at least of young fronds) and on abaxial surface, lacking hairs. **Primary pinnae** in 0–16 pairs below the apical segment, usually not overlapping, often narrowly lanceolate but occasionally narrowly elliptic or narrowly ovate or rarely ovate, the longest at or below the middle, 26–205 mm long, 9–39 mm wide; pinna apices often acute, occasionally acuminate, or rarely obtuse, margins prominently to weakly serrate, bases stalked and often cuneate or occasionally acute or obtuse. **Sori** away from margins; indusia 5–20 mm long, usually straight, rarely curved; free margins of indusia entire.



SIMILAR TAXA

Asplenium lepidotum is distinguished from *A. oblongifolium* (with which it grows) and *A. obtusatum* by the abundant presence of scales on the upper surface of the pinnae. This is best seen in emerging and young fronds. These scales not only readily distinguish *A. lepidotum* from *A. oblongifolium* and *A. obtusatum* but also *A. decurrens* and *A. scleroprium* (species with which it has not yet been found growing), and some plants of *A. lyallii*. However, these diagnostic scales can be lost on mature fronds. In addition to the abundance of scales on adaxial surfaces of the pinnae, *Asplenium oblongifolium* can also be distinguished from *A. lepidotum* by having broader scales on the rachises. In addition to the abundance of scales on upper surfaces of the pinnae, *A. lepidotum* and *A. obtusatum* are ecologically separated, with *A. obtusatum* restricted to the coast and *A. lepidotum* extending far inland. Current evidence suggests that *A. lepidotum* rarely, if ever, occurs in open coastal habitats. *Asplenium lepidotum* can closely resemble pinnate plants of *A. lyallii* (especially small ones) with abundant scales on the adaxial surface of their pinnae. In these situations both species can usually be separated by the less divided terminal pinna of *A. lepidotum*.

PROPAGATION TECHNIQUE

Unknown. Probably similar to *Asplenium oblongifolium* and *A. obtusatum*.

THREATS

Asplenium lepidotum faces no apparent threats. It is a naturally uncommon species that is restricted in its distribution.

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.

lepidotum: From the Latin 'lepidotus' meaning covered with small scales

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange (3 March 2017). Description based on Perrie & Brownsey (2016).

REFERENCES AND FURTHER READING

Perrie LR, Brownsey PJ. 2016. *Asplenium lepidotum*, a new fern species from New Zealand allied to *Asplenium oblongifolium* and *Asplenium obtusatum*. *New Zealand Journal of Botany* 54(3): 377–391.

<https://doi.org/10.1080/0028825X.2016.1205108>.

Townsend AJ, de Lange PJ, Norton DA, Molloy J, Miskelly C, Duffy C. 2008. New Zealand Threat Classification manual. Department of Conservation, Wellington, NZ. 35 p.

<https://www.doc.govt.nz/globalassets/documents/science-and-technical/sap244.pdf>

NZPCN FACT SHEET CITATION

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MORE INFORMATION

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