Asplenium chathamense

COMMON NAMES
Chatham Island spleenwort

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | At Risk – Naturally Uncommon | Qualifiers: IE
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Ferns

FLOWER COLOURS
No flowers

At Maunganui, Chatham Islands (January). Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

Chatham Islands. Photographer: John Sawyer, Licence: CC BY-NC.

DETAILED DESCRIPTION
Rhizome short, erect, bearing blackish-brown subulate scales up to 25 × 3 mm. **Stipes** 50–350 mm long, 2–4 mm diameter, stiff, pale brown at the base, green above, bearing scattered subulate scales 1–4 mm long. **Laminae** elliptic or rhombic to ovate, 50–450 × 35–200 mm, dark shiny green on upper surface, lighter on undersurface, stiff, erect, glabrous except for a few scattered scales, bipinnate to often tripinnate at base. **Rachis** green, or occasionally pale brown on undersurface, bearing a few small scattered scales. **Primary pinnae** in 6–17 pairs, the upper ones narrowly elliptic to narrowly ovate decreasing regularly in size towards the apex, the lower ones narrowly ovate to ovate, the longest below the middle 25–150 × 10–70 mm. **Secondary pinnae** on the upper primary pinnae ± linear, undivided, with obtuse apices; those on the lower primary pinnae narrowly elliptic or ovate and divided into tertiary pinnae, the longest 10–60 × 6–20 mm. **Tertiary pinnae** usually linear, undivided, up to 10 × 2 mm, occasionally larger and divided into 2–4 ultimate segments, apices obtuse. **Sori** extending along ultimate pinnules, 2–10 mm long, margins of indusia entire. **Spores** 34–52 × 21–37 µm; perispores prominently winged, sometimes with a few ridges.

SIMILAR TAXA
Most similar to *A. appendiculatum* (Labill.) C.Presl. which is not known from the Chatham Islands. However, *A. chathamense* is a tetraploid species whereas *A. appendiculatum* is octoploid, and the spores of the two have a rather different pattern of ridges. On the Chatham Islands it is most similar to *A. flaccidium* G.Forst. from which it differs by its terrestrial habitat preferences, erect rather than pendulous, more heavily divided glossy fronds, much longer secondary pinnae, and rather larger spores (40.0–50.0 × 26–33 µm cf. 36.0–43.0 × 23.0–26.5 µm).

DISTRIBUTION
Endemic. Chatham Islands (Rēkohu / Wharekauri / Chatham Island, Rangihaute / Rangiauria / Pitt Island, Maunga're / Mangere Island, Tapuaenuku / Little Mangere Island, Hokorereoro / Rangatira / South East Island, Motuhope / Star Keys, Motchu Hara / The Forty Fours, Rabbit Island, and on most other smaller islets and rock stacks).

HABITAT
Primarily found on coastal rocks and cliffs in rock crevices or on the ground. Also found in coastal scrub, open coastal forest and along creeksides.

THREATS
No apparent threats. A naturally Uncommon, Range Restricted endemic abundant on all the main Chatham Islands and surrounding islets and rock stacks.

GENUS
Asplenium

FAMILY
Aspleniaceae

AUTHORITY
Asplenium chathamense Brownsey

SYNONYMS
None (fescribed in 1985)

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
Not applicable—spore producing

FRUITING
Not applicable—spore producing

LIFE CYCLE AND DISPERSAL
Minute spores are wind dispersed (Thorsen et al., 2009).

PROPAGATION TECHNIQUE
Easy from spores and rooted pieces. Very attractive but can be rather slow growing. Best in a large pot or planted in a deep, rich, moist soil in semi-shade. Prone to getting scale infections.

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.
chathamense: From the Chathams

NVS CODE
ASPCHA

CHROMOSOME NUMBER
2n = 144

PREVIOUS CONSERVATION STATUSES
2017 | At Risk – Naturally Uncommon | Qualifiers: IE
2012 | At Risk – Naturally Uncommon | Qualifiers: IE
2009 | At Risk – Naturally Uncommon | Qualifiers: IE
2004 | Range Restricted
Jump to current conservation status

REFERENCES AND FURTHER READING
Brownsey PJ. 1985. *Asplenium chathamense* – a new fern species from the Chatham Islands, New Zealand. *New Zealand Journal of Botany 23(1)*: 135–140. https://doi.org/10.1080/0028825X.1985.10425314.
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
Fact Sheet prepared for NZPCN by P.J. de Lange (3 February 2006). Description from Brownsey (1985)

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/asplenium-chathamense/

PDF DATE

27 May 2026