

Cystopteris tasmanica

COMMON NAME

bladder fern

SYNONYMS

Cystopteris fragilis sensu Allan (1961); *Woodsia laetevirens* Prent. ex F.M.Bailey; *Cystopteris fragilis* var. *tasmanica* (Hook.) Hook.f.; *Cystopteris fragilis* var. *laetevirens* (Prent.) C.Chr.; *Cystopteris fragilis* sensu Hook.f.; *Cystopteris novae-zealandiae* J.B.Armstr.

FAMILY

Cystopteridaceae

AUTHORITY

Cystopteris tasmanica Hook.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

CYSTAS

CHROMOSOME NUMBER

2n = 168

CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: SO

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Indigenous. New Zealand: North Island (uncommon from the Kaimai Ranges to the Tararua Ranges including Mt Taranaki), South Island (widespread). Also Australia (New South Wales, eastern Victoria), Tasmania.

HABITAT

Montane to subalpine in northern part of range descending to lower elevations in the far south. Usually found in crevices on cliff faces, under rock overhangs or in shaded sites amongst boulders. Very occasionally found growing in open grassland or on rocks within beech (*Nothofagaceae* spp.) forest.



Arthurs Pass. January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Arthurs Pass. January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DETAILED DESCRIPTION

Terrestrial often lithophytic, deciduous ferns. **Rhizome** short-creeping, scaly; scales thin, brown, glossy, hair-tipped. **Fronds** tufted, crowded, 100–430 mm long. **Stipes** 20–180 mm long, thin, brittle, pale brown, scaly at base, glabrous above. **Laminae** 20–250 × 15–75 mm wide, yellow-green to green, narrowly ovate, narrowly oblong, oblong-lanceolate, 2-pinnate, membranous, very delicate, glabrous, with widely spaced pinnae. **Primary pinnae** up to 5–40 × 4–15 mm, ovate to oblong, apices blunt or rounded; those of smaller fronds divided into elliptic secondary pinnae up to 3–10 × 2–6 mm, apices blunt or rounded. **Veins** free. **Sori** numerous, rounded, in one row either side of midrib set away from pinna margins, submarginal; indusium ovate, pale delicate, attached at broader end to a vein arching over sori.

SIMILAR TAXA

Distinguished from the naturalised *Cystopteris fragilis* by the smaller size, shorter more sparsely divided fronds, and by the shorter primary pinnae with broadly obtuse apices.

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Easily grown in colder areas with best results obtained if it is planted in a shady site, in a humus rich, free draining but moist soil. It benefits from regular applications of lime. *Cystopteris tasmanica* is deciduous.

ETYMOLOGY

cystopteris: From the Greek kystis 'bag' and pteris 'wing' or 'fern', alluding to the sack-like covering of the sori
tasmanica: Named after Abel Janszoon Tasman (1603-1659) who in the 17th century was the first European to sight Van Diemen's land (now known as Tasmania)

WHERE TO BUY

Not commercially available

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (18 January 2012). Description adapted from Brownsey & Smith-Dodsworth (2000). Family follows Rothfels et al. (2012).

REFERENCES AND FURTHER READING

- Jones DL. 1998. Athyriaceae. *Flora of Australia* 48, *Ferns Gymnosperms and allied groups*: 418–429. ABRIS/CSIRO Victoria, Australia.
- Brownsey PJ, Smith-Dodsworth JC. 2000. New Zealand Ferns and Allied Plants. David Bateman, Auckland, NZ. 168 p.
- Rothfels CJ, Sundue MA, Kuo Li-Y, Larsson A, Kato M, Schuettpelz E, Pryer KM. 2012. A revised family-level classification for eupolypod II ferns (Polypodiidae: Polypodiales). *Taxon* 61(3): 515–533. <https://doi.org/10.1002/tax.613003>.
- 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>.

NZPCN FACT SHEET CITATION

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<https://www.nzpcn.org.nz/flora/species/cystopteris-tasmanica/> (Date website was queried)

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/cystopteris-tasmanica/>