

# Cystopteris fragilis

## COMMON NAME

brittle bladder fern

## SYNONYMS

*Cystopteris laciniata* Colenso

## FAMILY

Cystopteridaceae

## AUTHORITY

*Cystopteris fragilis* (L.) Bernh.

## FLORA CATEGORY

Vascular – Exotic

## STRUCTURAL CLASS

Ferns

## NVS CODE

CYSFRA

## CONSERVATION STATUS

Not applicable

## DISTRIBUTION

Naturalised. New Zealand: North Island, South Island (from Auckland south to Dunedin). Also Northern Hemisphere, South Africa and South America.

## HABITAT

Locally common in suitable sites along stream sides, ditches on damp stone walls, in muddy ground under willows (*Salix* spp.), and in shaded sites in grassland, along track sides and on roadside banks. In some areas it can be a very common fern on damp basalt and concrete walls bordering streams, ditches and channels.

## DETAILED DESCRIPTION

Terrestrial or lithophytic, deciduous ferns. **Rhizome** short-creeping, scaly, scales thin, black, black-brown, glossy. **Fronde** tufted, crowded, 100–450 mm long. **Stipes** 50–150 mm long, scaly at base, glabrous above. **Laminae** 10–300 × 60–140 mm wide, yellow-green, ovate to narrowly ovate, membranous, very delicate, glabrous, with widely spaced pinnae. **Primary pinnae** 30–80 × 15–40 mm, ovate to deltoid, apices tapering. **Secondary pinnae** 10–20 × 5–10 mm, ovate to oblong, lower most deeply lobed and/or divided into tertiary pinnae, apices acute. **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 *Cystopteris tasmanica* by the larger, more divided fronds and longer primary pinnae with tapering apices.

## PROPAGATION TECHNIQUE

Somewhat weedy. Prefers a damp, shaded site, planted in a deep, moist, lime-enriched soil. However, this fern is not particularly fussy about soil fertility, flourishing in a range of soil types provided the sites are seasonally damp and shaded.

## YEAR NATURALISED

1899

## ORIGIN

N. Temperate, C. and S. America



*Cystopteris fragilis*. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



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## ETYMOLOGY

**cystopteris:** From the Greek kystis 'bag' and pteris 'wing' or 'fern', alluding to the sack-like covering of the sori

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

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>.

## MORE INFORMATION

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