Cystopteris fragilis

COMMON NAMES
brittle bladder fern

BIOSTATUS
Exotic

CONSERVATION STATUS
Not applicable

CATEGORY
Vascular

STRUCTURAL CLASS
Ferns

DETAILED DESCRIPTION
Terrestrial or lithophytic, deciduous ferns. **Rhizome** short-creeping, scaly, scales thin, black, black-brown, glossy. **Fronds** 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.

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

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

SIMILAR TAXA
Distinguished from *Cystopteris tasmanica* by the larger, more divided fronds and longer primary pinnae with tapering apices.

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.

GENUS
Cystopteris

FAMILY
Cystopteridaceae

AUTHORITY
Cystopteris fragilis (L.) Bernh.

SYNONYMS
Cystopteris laciniata Colenso

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

YEAR NATURALISED
1899

ORIGIN
N. Temperate, C. and S. America

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.

ETYMOLOGY
cystopteris: From the Greek kystis ‘bag’ and pteris ‘wing’ or ‘fern’, alluding to the sack-like covereing of the sori

NVS CODE
CYSFRA

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-leve classification for eupolypod II ferns (Polypodiidae: Polypodiales). *Taxon 61(3)*: 515–533. https://doi.org/10.1002/tax.613003.

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).

MORE INFORMATION
https://www.nzpcn.org.nz/flora/species/cystopteris-fragilis/

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