

Ophioglossum coriaceum

COMMON NAME

adder's tongue

SYNONYMS

Ophioglossum lusitanicum subsp. *coriaceum* (A.Cunn.) R.T.Clausen;
Ophioglossum elongatum R.Cunn. ex A.Cunn.; *Ophioglossum pedunculosum* sensu Cheeseman

FAMILY

Ophioglossaceae

AUTHORITY

Ophioglossum coriaceum A.Cunn.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Ferns

NVS CODE

OPHCOR

CHROMOSOME NUMBER

$2n = 240,700,700-720$

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Indigenous. New Zealand: Kermadec (Raoul Island), North Island, South Island, Stewart Island/Rakiura, Chatham Islands. Also Australia and South America (in Australia plants are referred to *O. lusitanicum* L. which has a wider distribution though North and South America, Europe, Africa and Asia).

HABITAT

Coastal to alpine. Throughout in mostly open or sparsely vegetated habitats including sand swales and dunes systems, grassland, forest clearings, lake, pond and river margins, peat bogs, fell field, river flats, tuft associations and occasionally as a low epiphyte.

WETLAND PLANT INDICATOR STATUS RATING

FAC: Facultative

Commonly occurs as either a hydrophyte or non-hydrophyte (non-wetlands).



Sabine river, January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Sabine River. January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DETAILED DESCRIPTION

Rhizome erect, cylindrical roots orange-brown, fleshy, spreading; horizontal ones producing vegetative buds often resulting in large colonies. **Fron**ds 1–2–(4). Common stipe (usually ill-defined) 5–15 mm long. **Sterile lamina** 8–30–(90) mm long, 4–20 mm wide, fleshy, green to yellow-green, elliptic, ovate, obovate to rhomboid (rarely deltoid), acute or obtuse; base rounded, truncate, cuneate or gradually tapering into common stipe venation single, mostly obscure, sometimes prominently reticulate; areole variable, usually as long as wide, rarely wider than long or elongated. **Sporophore** 5–140 mm long; fertile portion 3–20 mm long, with 4–15–(24) pairs of sporangia; sterile tip of sporophore 0.8–1.5 mm long (rarely more).

SIMILAR TAXA

Currently we follow Brownsey & Smith-Dodsworth (2000) in accepting the New Zealand plant as *Ophioglossum coriaceum* (cf. Chinnock 1998). In New Zealand *O. coriaceum* is most often confused with *O. petiolatum*. Both species in their typical states are easily distinguished, *O. coriaceum* is usually shorter (with sterile blades up to 90 mm long) and carrying fewer sporangia per sporophore (5–15 pairs) while *O. petiolatum* has a well defined petiole (common stipe), typical deltoid sterile lamina (up to 120 mm long × 50 mm wide), and a fertile lamina up to 200 mm long with the sporophore bearing 15–48 pairs of sporangia (see de Lange et al. 2010). However, numerous intermediates occur suggestive of hybridisation between both species. Also *O. coriaceum* is cytologically variable and there is little doubt more than one taxon exists under the current circumscription. *Ophioglossum* are taxonomically difficult and in this respect the New Zealand species are no different—there is urgent need for a comprehensive, world-wide revision using DNA-based techniques as main driver (see comments by de Lange & Rolfe 2010).

FLOWERING

N.A.

FLOWER COLOURS

No flowers

FRUITING

N.A.

PROPAGATION TECHNIQUE

Easily grown by the division of whole plants. Does best in a fertile soil kept permanently moist (but not saturated). Will tolerate full sun but does better in semi-shade. Intolerant of competition from taller faster growing plants and very vulnerable to slug and snail browsing. This species makes an interesting and unusual pot plant.

ETYMOLOGY

ophioglossum: Snake's tongue; from the Greek ophis and glossa; appearance of the fertile leaf

coriaceum: Leathery; from the Latin corium; texture of the leaves

WHERE TO BUY

Not commercially available.

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 21 March 2011. Description adapted from Chinnock (1998), Brownsey & Smith-Dodsworth (2000) and also based on herbarium specimens and measurements.

REFERENCES AND FURTHER READING

- Brownsey PJ, Smith-Dodsworth JC. 2000. New Zealand Ferns and Allied Plants. David Bateman, Auckland, NZ. 168 p.
- Chinnock RJ. 1998. Ophioglossaceae. *Flora of Australia 48, Ferns Gymnosperms and allied groups*: 99–109. ABR/CSIRO Victoria, Australia.
- de Lange PJ, Heenan PB, Norton DA, Rolfe JR, Sawyer JWD. 2010. Threatened Plants of New Zealand. Canterbury University Press, Christchurch. 471 p.
- de Lange PJ, Rolfe JR. 2010. New Zealand indigenous vascular plant checklist. New Zealand Plant Conservation Network, Wellington, NZ. 131 p.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/ophioglossum-coriaceum/>