

# Ophioglossum coriaceum

## COMMON NAMES

adder's tongue

## BIOSTATUS

Native

## CATEGORY

Vascular

## STRUCTURAL CLASS

Ferns

## FLOWER COLOURS

No flowers

## DETAILED DESCRIPTION

**Rhizome** erect, cylindrical, roots orange-brown, fleshy, spreading; horizontal ones producing vegetative buds often resulting in large colonies. **Fronde** 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 the main driver (see comments by de Lange & Rolfe 2010).

## DISTRIBUTION

Indigenous. New Zealand: Kermadec Islands (Raoul Island), North Island, South Island, Stewart Island/Rakiura, Chatham Islands.

Also Australia and South America (in Australia plants are referred to *O. lustanicum* 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, fellfield, river flats, tuft associations and occasionally as a low epiphyte.



Ohakune Mountain Road. Photographer: Jeremy R. Rolfe, Date taken: 27/12/2008, Licence: CC BY.



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## CURRENT CONSERVATION STATUS

2023 | Not Threatened

## DETAILED TAXONOMY

### FAMILY

Ophioglossaceae

### AUTHORITY

Ophioglossum coriaceum A.Cunn.

### SYNONYMS

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

### ENDEMIC TAXON

No

### ENDEMIC GENUS

No

### ENDEMIC FAMILY

No

### ECOLOGY

### FLOWERING

N.A.

### 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 browsing by slugs and snails. This species makes an interesting and unusual pot plant.

### WETLAND PLANT INDICATOR STATUS RATING

FAC: Facultative

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

### OTHER INFORMATION

### 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

### NVS CODE

OPHCOR

### CHROMOSOME NUMBER

2n = 240,700,700-720

### PREVIOUS CONSERVATION STATUSES

2017 | Not Threatened

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

### REFERENCING AND CITATIONS

## REFERENCES AND FURTHER READING

- Brownsey PJ, Smith-Dodsworth JC. 2000. *New Zealand Ferns and Allied Plants*. David Bateman, Auckland, NZ. 168 pp.
- Chinnock RJ. 1998. Ophioglossaceae. *Flora of Australia 48, Ferns Gymnosperms and allied groups*: 99-109. ABRS/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 pp.
- de Lange PJ, Rolfe JR. 2010. *New Zealand indigenous vascular plant checklist*. New Zealand Plant Conservation Network, Wellington, NZ. 131 pp.

## ATTRIBUTION

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

## NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Ophioglossum coriaceum* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

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

## MORE INFORMATION

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

## PDF DATE

13 October 2024