Ophioglossum coriaceum

COMMON NAMES
adder's tongue

BIOSTATUS
Native

CURRENT CONSERVATION STATUS
2023 | Not Threatened
Jump to previous conservation statuses

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. **Fronds** 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 sporangiae; sterile tip of sporophore 0.8–1.5 mm long (rarely more).

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

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).

Photographer: Melissa Hutchison, Date taken: 25/10/2023, Licence: CC BY-NC.

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.

GENUS
Ophioglossum

FAMILY
Ophioglossaceae

AUTHORITY
Ophioglossum coriaceum A.Cunn.

SYNONYMS
Ophioglossum lusitanicum subp. 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

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).

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
Jump to current conservation status

REGIONAL CONSERVATION STATUSES

Auckland: 2025 | Regionally Threatened – Regionally Vulnerable | Qualifiers: Sp, DPR, DPS, DPT, EF, PF Help
The regional threat classification system leverages off the national assessments in the NZTCS, providing information relevant for the regional context. Auckland conservation status information is sourced from the "Conservation status of vascular plant species in Tāmaki Makaurau / Auckland" Simpkins E et al. (2025) report.
Otago: 2025 | Regionally Not Threatened Help
The regional threat classification system leverages off the national assessments in the NZTCS, providing information relevant for the regional context. Otago conservation status information is sourced from the "Conservation Status of Indigenous Vascular Plants in Otago, 2025" Jarvie S et al. (2025) report.

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

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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/

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