

# Corybas orbiculatus

## COMMON NAME

spider orchid

## SYNONYMS

*Corysanthes orbiculata* Colenso,; *Nematoceras orbiculatum* (Colenso) Molloy, D.L.Jones et M.A.Clem.

## FAMILY

Orchidaceae

## AUTHORITY

*Corybas orbiculatus* (Colenso) L.B.Moore

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Orchids

## NVS CODE

NEMORB

## CHROMOSOME NUMBER

2n = 36

## CURRENT CONSERVATION STATUS

2017 | Not Threatened

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Endemic. New Zealand: North Island, South Island, Stewart Island/Rakiura, Chatham Islands.

## HABITAT

Coastal to montane (up to 1000 m a.s.l.). Favouring well-lighted, permanently damp sites such as coastal turf, banks and cliff faces. Favouring base-rich substrates such as calcareous mudstones, siltstones, limestones, marble, basalt and basaltic-andesite and recent soils derived from these.

## WETLAND PLANT INDICATOR STATUS RATING

FAC: Facultative

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



Omoana 16/8/97. Photographer: Eric Scanlen, Licence: CC BY-NC.



View of the rear of flower - Boundary Stream. Photographer: Matt Ward, Date taken: 27/09/2017, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Mainly solitary, terrestrial, tuberous, glabrous, winter to spring-green herb. Plant at flowering 30–35 mm tall, erect. **Tuberoïds** globose to ellipsoid on extended roots. **Leaf** solitary, fleshy, more or less subcoriaceous, usually spreading and held flat to the ground surface; shortly petiolate, petiole 2.5–6.0 × 1.5–2.0 mm; lamina 15–25 mm long, generally elliptic-cordate, sometimes somewhat broadly cordate, rarely pandurate, apex rounded and shortly apiculate; midrib grooved above, ridged beneath; leaf colour dull dark green to yellow-green above often with purple flecks on margins, or overall, silvery pellucid beneath. **Flower** solitary, large for plant 15–20–(25) mm long, dark red-green to reddish-purple; peduncle almost sessile, very short and stout, 1.5–2.0 mm long. **Ovary** 2.5–5.0 mm long, narrowly oblong to ellipsoid, green, yellow-green, or cream, erect or slightly curving back from leaf; subtended by two unequal floral bracts, the smaller forward projecting toward leaf, 1.5–3.0 mm long, linear-subulate, pale green to cream, terete, the larger equal to or exceeding the ovary, 2.5–6.8 mm long, lanceolate to linear-lanceolate, curved, deeply keeled and closely sheathing ovary for about half of length, apex acute, long, drawn out deeply keeled, green, usually with purple or reddish striae or flecks. **Dorsal sepal** membranous, 15–20 mm long, more or less equal to labellum length, greenish-purple or purple red striate, or more or less translucent flecked or streaked with purple, lanceolate-acuminate, apex acute, usually recurved away from labellum. **Lateral sepals and petals** 10–15–(18) mm long, filiform equal to or shorter than dorsal sepal; green, greenish-yellow flecked or striped with purple or maroon, horizontal to suberect or erect, lateral sepals projecting forwards more or less closely embracing labellum; petals projecting forwards and more or less downwards, often touching the leaf. **Labellum** conspicuous, dark purple-red, maroon to red; labellum tube 3–8 mm long, erect at first then abruptly deflexed 110–130 degrees, and expanding into the lamina; lamina (10)–15–20–(25) × 4–10 mm, narrowly orbicular when flattened, upper margins sharply folded inwards, upper  $\frac{1}{3}$  more or less overlapping; lower surface spreading, apex usually touching leaf at about  $\frac{1}{2}$  leaf length from petiole; margins initially more or less smooth, becoming finely denticulate and then distinctly and broadly deltoid toothed 2–4 times on either side or crenate-denticulate, and with a short median down-curved apiculus.

## MANAAKI WHENUA ONLINE INTERACTIVE KEY

[Key to native orchids of New Zealand](#)

## SIMILAR TAXA

Close to *Corybas rivularis* and other entities within that species complex. From these it consistently differs by the sepals and petals which are shorter than the labellum. The labellum had distinctly inrolled finely to coarsely toothed margins, and when viewed from the front is distinctly narrowly pointed.

## FLOWERING

August–November

## FLOWER COLOURS

Green, Red/Pink

## FRUITING

October–January

## PROPAGATION TECHNIQUE

Difficult—should not be removed from the wild.

## ETYMOLOGY

**corybas**: Helmet flower

## WHERE TO BUY

Not commercially available

## TAXONOMIC NOTES

Considerable research is underway to investigate the validity of the segregate genera split from *Corybas* R.Br. by Jones et al. (2002). Whilst much of that work has yet to be published, on advice from Australian Orchidologists Peter Weston and Stephen Hopper (pers. comm., July 2011, November 2014), all of the segregate genera recognised for New Zealand by Jones et al. (2002) are returned to *Corybas*.

Based on rDNA ITS sequence data there is some evidence that suggests that Chatham Island plants referred to this species may be distinct. This requires further research.

Lehnebach (2016) made three combinations for those *Nematoceras* lacking valid names in *Corybas*. This action now enables the full transfer of *Nematoceras* back to *Corybas*. However, as of writing, a formal publication rejecting the segregation of *Corybas* by Jones et al. (2002) has yet to be published. Lehnebach cites an unpublished PhD (Lyon 2014) that indicates this move is imminent.

## ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 14 April 2007. Description based on herbarium material and Colenso (1891).

## REFERENCES AND FURTHER READING

Jones DL, Clements MA, Sharma IK, Mackenzie AM, Molloy BPJ. 2002. Nomenclatural notes arising from studies into the Tribe *Diurideae* (Orchidaceae). *The Orchadian* 13(10): 437–468.

<https://www.biodiversitylibrary.org/item/310769#page/2/mode/1up>.

Colenso W. 1890 [1891]. A Description of some Newly-discovered Indigenous Plants, being a Further Contribution towards the making known the Botany of New Zealand. *Transactions and Proceedings of the Royal Society of New Zealand* 23: 381–391.

Lehnebach C. 2016. New combinations and a replacement name for three New Zealand spider orchids (*Corybas*). *The New Zealand Native Orchid Journal* 139. 4–5.

Lyon SP. 2014. Molecular systematics, biogeography, and mycorrhizal associations in the Acianthinae (Orchidaceae), with a focus on the genus *Corybas*. PhD Thesis, University of Wisconsin-Madison, USA.

<https://asset.library.wisc.edu/1711.dl/UAXO3VHO6P7EH8Y/R/file-19145.pdf>.

## NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Corybas orbiculatus* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/corybas-orbiculatus/> (Date website was queried)

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/corybas-orbiculatus/>