# **Corybas papillosus**

COMMON NAME spider orchid

#### **SYNONYMS**

Corysanthes papillosa Colenso; Nematoceras papillosum (Colenso) Molloy, D.L.Jones et M.A.Clem.

## FAMILY

Orchidaceae

AUTHORITY Corybas papillosus (Colenso) Lehnebach

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS No

ENDEMIC FAMILY No

STRUCTURAL CLASS Orchids

CURRENT CONSERVATION STATUS 2017 | Data Deficient

# **PREVIOUS CONSERVATION STATUSES**

2012 | Data Deficient 2009 | Data Deficient 2004 | Not Threatened

**DISTRIBUTION** Endemic. New Zealand: North Island (Hawke's Bay—exact distribution still uncertain).

#### HABITAT

Montane (up to 1000 m a.s.l.) in damp, shaded sites under tall forest or associated with rock overhangs. Favouring base-rich substrates such as calcareous mudstones, siltstones and limestones.





28/11/02 from Miner Creek. Photographer: Eric Scanlen, Licence: CC BY-NC.

#### **DETAILED DESCRIPTION**

Terrestrial, tuberous spring to summer-green perennial forming extensive colonies through vegetative extension. Plant at flowering 90–100 mm tall. Leaf 20–25 mm diameter, petiole 6–55 mm long, white or pinkish white; lamina orbicular-cordate, apex slightly retuse with an apiculate; light green sometimes with a purple midrib, margin spotted with purple; membranous, finely and regularly papillose on upper surface, veins anastomosing with an intramarginal vein running all round; lamina. Flower solitary 12–18 mm diameter, mostly held over leaf or just below it. Ovary subangular, purple striped. Peduncle 6.9–9.2 mm long, purple spotted, Floral bracts 2, situated at base of ovary; unequal, the one facing the flower minute, white, ovate-acuminate; the one facing the back of the flower much larger, green, ovate-acuminate. Dorsal sepal projecting far beyond lip, membranous, 17–20 × 5.8 mm, greenish white spotted with purple-red, suboblong-lanceolate, apex acute, recurved and acuminate. Lateral sepals fleshy,14-22 mm long, whitish or pale pink in basal half otherwise purple-red or spotted with maroon, filiform with acute apices, more or less flexuose. Petals fleshy, c. 30-48 mm long, white in basal half otherwise purple-red, minutely spotted dark-maroon, filiform with obtuse apices, flexuose. Labellum 14-16 × 16-18 mm, orbicular, very narrow at base, otherwise funnelform, with mouth widely flaring, deeply cleft into two slightly notched lobes above, basally more or less entire with retuse and apiculate apices; upper labellum margins dark red-purple externally and internally, rounded, entire, very minutely undulate, or finely denticulate, lower labellum surfaces more or less transparent grading through whitish to pink, red-purple flecked or maculate. Capsules broadly ovoid on greatly elongated peduncles.

## MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to native orchids of New Zealand

#### SIMILAR TAXA

<u>Corybas macranthus</u> is very similar and *C. papillosus* has long been considered merely a form of that variable species. Most populations of *C. macranthus* differ from *C. papillosus* by the dark maroon-black or wine red labellum, sometimes with a green throat; in contrast *Corybas papillosus* has a distinctly bicoloured labellum (dark red-purple in the upper half, and pale pink grading through to whitish in the lower half). Colenso (1884) stressed that the leaf of *C. papillosus* (as *Corysanthes papillosa*) was distinctly papillate on the upper leaf surface. it is not clear if this is a consistent difference from the highly variable *C. macranthus*.

FLOWERING October–December

FLOWER COLOURS Red/Pink, Violet/Purple

FRUITING November–March

#### **PROPAGATION TECHNIQUE**

Difficult—should not be removed from the wild. Can be grown in basic orchid mix consists of 2 parts medium coarse sand, ideally clean river sand; 2 parts soil, humus or leaf-mould; 1 part weathered sawdust or rotting wood; 1 part granulated bark. Many *Corybas* thrive if leaf-mould is added, and the plants grown in 50–70% shade, in the cooler, darker end of the shade-house, in pots kept moist throughout the growing period.

THREATS Data Deficient

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*.

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 modified from Colenso (1884).

## **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: 437–468.

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

Colenso W. 1884. A further contribution towards making known the botany of New Zealand. <u>*Transactions and Proceedings of the New Zealand Institute 16*: 325–363.</u>

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

# NZPCN FACT SHEET CITATION

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

## **MORE INFORMATION**

https://www.nzpcn.org.nz/flora/species/corybas-papillosus/