# **Corybas papa**

COMMON NAME mudstone spider orchid

**SYNONYMS** 

Corysanthes papa (Molloy et Irwin) Szlach.; Nematoceras papa (Molloy et Irwin) Molloy, D.L.Jones et M.A.Clem.

## FAMILY

Orchidaceae

AUTHORITY Corybas papa Molloy et Irwin

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS No

ENDEMIC FAMILY No

STRUCTURAL CLASS Orchids

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 (seems to be wholly western in distribution from about Port Waikato south to the western Ruahine Range).

#### HABITAT

Coastal to montane (up to 1100 m a.s.l.). Favouring base rich substrates, especially calcaerous mudstones, siltstones (both known as Papa rock), and limestone but also on basalt. Usually in, or near seepages or on the margins of slow-flowing streams





Roadside at Mt Messenger, 6/8/95. Photographer: Eric Scanlen, Licence: CC BY-NC.



Flowering on road-side mudstone bank; Junction Road, Kaiiwi, Whanganui. Photographer: Colin C. Ogle, Date taken: 09/09/2018, Licence: CC BY-NC.

#### **DETAILED DESCRIPTION**

Terrestrial, tuberous, glabrous, summer-green herb forming extensive colonies. Tuberoids globose to ellipsoid on extended roots. Leaf solitary, firm and fleshy, sessile; usually spreading and held flat to the ground surface; lamina 18-40 × 15-35 mm, blunt wedge-shaped to ovate-oblong, sometimes pandurate, apiculate at apex, with apiculus decurved, rounded and cordate at base; midrib slightly grooved above, flat beneath; leaf colour dull green above with purple flecks on margins, on midrib, or overall, silvery beneath. Flowers 1-(2), 10-15 mm long, generally green throughout except for labellum tube, dominated by the labellum, filiform petals and lateral sepals, on a usually purple streaked peduncle  $3.0-5.0 \times 1.5-2.0$  mm. **Ovary**  $5-8 \times 2-4$  mm, green, sometimes streaked with purple, curved, subtended by two unequal floral bracts, the smaller vestigial to 3 mm long, subulate, the larger 6–10 × 3-5 mm, narrowly ovate-lanceolate, green, equaling the ovary. **Dorsal sepal** 15-20 × 5-8 mm, exceeding the labellum, lanceolate in outline when flattened, concave, cucullate and arching over the labellum tube, with apex upturned; green, slightly diffused with purple on the veins. Lateral sepals 50–70 × 0.5–1.0 mm at widest point; filiform, greatly exceeding labellum; green, sometimes flecked with purple; suberect to erect and spreading; channelled, and twisted. Petals  $40-60 \times 0.5-1.0$  mm at widest point, usually shorter than lateral sepals, filiform, greatly exceeding labellum, projecting forwards and outwards; channelled, auriculate at base of the column. Auricles short, projecting downwards and forwards, with apertures 1.0–1.5 mm across. Labellum usually green except for labellum tube and upper margins of lamina which are often purple-flushed or streaked; labellum tube 8–10 mm long, erect at first then doubly deflexed through 90°–180°, expanding into the lamina; lamina 6–8 × 8–10 mm, broadly ovate; upper margins folded inwards and overlapping; lower surface spreading, deflexed against ovary; rounded or obtuse with slightly erose margins and a median apiculus; inner surface with scattered minute papillae, veins ridged; throat of labellum tube notched, barely over half-way on lamina. Column 2.5-3.0 mm long, broadest and ridged at base, inclined backwards, minutely winged. Stigma scutiform, 0.7 mm diameter, concave. Anther 1 mm, obtuse. Pollinia 4, united in pairs, 0.6 × 0.4 mm, oblong, mealy, yellow. Capsule 10–16 × 4–6 mm, elliptic, initially green later brown, on greatly elongated peduncle.

#### MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to native orchids of New Zealand

#### SIMILAR TAXA

Allied to <u>Corybas rivularis</u>, C. papa is distinguished from that species and indeed all other Corybas by the combination of sessile, bluntly wedge-shaped, usually spotted leaves; relatively small, predominantly green flowers; broad concave dorsal sepal; subequal petals and lateral sepals; doubly deflexed labellum spreading against the ovary, compressed front to back; and with a flared, rounded or obtuse, apiculate lamina.

FLOWERING

August-October

FLOWER COLOURS Green, Violet/Purple

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*.

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 Molloy and Irwin (1996).

# **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.

Molloy BPJ, Irwin JB. 1996. Two new species of *Corybas* (Orchidaceae) from New Zealand, and taxonomic notes on *C. rivularis* and *C. orbiculatus*. *New Zealand Journal of Botany* 34(1): 1–10.

https://doi.org/10.1080/0028825X.1996.10412686.

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 papa Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <u>https://www.nzpcn.org.nz/flora/species/corybas-papa/</u> (Date website was queried)

# **MORE INFORMATION**

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