# **Corybas iridescens**

**COMMON NAME** spider orchid, big red

## **SYNONYMS**

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

# FAMILY

Orchidaceae

AUTHORITY Corybas iridescens Irwin et Molloy,

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, South Island, Chatham Islands.

## 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





Flowering on road-side mudstone bank; Junction Road, Kaiiwi, Whanganui. Photographer: Colin C. Ogle, Date taken: 09/09/2018, 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, fleshy, more or less subcoriaceous, usually spreading and held flat to the ground surface; shortly petiolate, petiole 3.0–10.0 × 1.5–3.0 mm; lamina 20–40 × 15–35 mm, or larger, ovate-oblong or bluntly wedge-shaped, often pandurate, squared and apiculate at apex, with apiculus decurved, rounded and cordate at base; midrib grooved above, ridged beneath; leaf colour dull dark green above with purple flecks on margins, on midrib, or overall, silvery beneath. Flowers 1-(2), 12-20 mm long, dark red-green, dominated by labellum, dorsal sepal and long filiform petals and lateral sepals; peduncle 4–5 mm long. Ovary 4–8 mm long, green or cream, purple-flecked, curved, subtended by two unequal floral bracts, the smaller 3-5 mm long, linear-subulate, terete the larger equal to or exceeding the ovary, 7-10 mm long, lanceolate, green flecked with purple. Dorsal sepal extending well past labellum 20–35 × 8–12 mm, narrowly ovate in outline when flattened, concave, cucullate and arching over the labellum tube, with apex usually recurved; green spotted and/or striped with purple. Lateral sepals 50-70 × 0.5-1.0 mm at widest point; filiform, greatly exceeding labellum; translucent white with purple striations, horizontal to suberect and projecting forwards and outwards; suberect to erect and spreading; channelled, and twisted. Petals 40–60 × 0.5–1.0 mm at widest point, slightly shorter than lateral sepals, filiform, greatly exceeding labellum, translucent white with purple striations, horizontal to suberect, projecting forwards and outwards; channelled, auriculate on the base of the column. Auricles short, projecting downwards and forwards, with apertures 1.5-2.5 mm across. Labellum conspicuous, dark red, maroon-red to almost black, sometimes striped with green at front, iridescent when wet; labellum tube 5-7 mm long, erect at first then abruptly deflexed through 160–180 degrees, and expanding into the lamina with a prominent bead-like callus in throat of tube at bend; lamina 10-20 × 10-15 mm, broadly ovate to orbicular; upper margins folded inwards, mostly overlapping; lower surface spreading, deflexed against ovary; with margins erose-papillose, and a long median apiculus; inner surface with dense, minute, retrorse papillae and ridged veins; throat of labellum tube high on lamina. **Column** 3–4 mm long, broadest and ridged at base, inclined backwards, minutely winged. Stigma scutiform to oblong, 1 mm diameter, concave. Anther 1 mm, purple-obtuse. Pollinia 4, united in pairs, 1.0 × 0.7 mm, oblong, mealy, yellow. Capsule  $12-20 \times 5-7$  mm, elliptic, initially pale green later brown, on greatly elongated peduncle.

## MANAAKI WHENUA ONLINE INTERACTIVE KEY Key to native orchids of New Zealand

#### **SIMILAR TAXA**

Distinguished by the combination of shortly petiolate, broadly wedge-shaped, usually spotted leaves; broad dorsal sepal; subequal petals and lateral sepals; abruptly deflexed, dark red, almost black labellum, which is strongly iridescent when wet; and by the prominent bead-like callus at the entrance to the labellum tube.

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 **iridescens**: Becoming iridescent (from the Latin iridis, meaning the rainbow)

## 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

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.

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.

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.

**MORE INFORMATION** 

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