

Corybas rivularis

SYNONYMS

Acianthus rivularis A.Cunn., *Corysanthes rivularis* (Hook.f.) Hook.f.,
Nematoceras rivulare (A.Cunn.) Hook.f.

FAMILY

Orchidaceae

AUTHORITY

Corybas rivularis (A.Cunn.) Rchb.f.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Orchids

NVS CODE

NEMRIV

CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: DP, RR, Sp, St

PREVIOUS CONSERVATION STATUSES

2012 | Data Deficient

2009 | Data Deficient

2004 | Data Deficient

DISTRIBUTION

Endemic. New Zealand: North Island (Northland and Taranaki probably elsewhere).

HABITAT

Lowland. Confined to wet, shaded sites within tall indigenous forest. Usually found along stream sides (often within moss on stones and rocks within the stream bed), but also on seepages on cliff faces and within damp, mossy, dripping holes on talus slopes.



Mangamuka Gorge, October. Photographer: Eric Scanlen, Licence: CC BY-NC.



Waikanae River. Photographer: Jeremy R. Rolfe, Date taken: 24/09/2016, Licence: CC BY.

DETAILED DESCRIPTION

Colonial, terrestrial, tuberous, glabrous, late winter to summer-green herb. **Tuberoids** globose to ellipsoid on extended roots. **Plant** at flowering to 40 mm tall. **Leaf** solitary (rarely paired), fleshy, subsessile or with a short petiole 5–10 mm long; lamina 20–30 × 15–25 mm long, oval to orbicular, apiculate, rounded to cordate at base; dark green to yellow green, margins and sometimes whole of upper surface flecked with purple or red, underside silvery pellucid. **Flower** erect, mostly large for plant, (15)–20–(25) mm long, held well above leaf, mostly dark crimson black; peduncle short and stout, 2.5–3.5 mm long. **Ovary** 8.5–10.0 mm long, narrowly oblong to ellipsoid, yellow-green, erect or slightly curving forward over leaf; subtended by two unequal floral bracts, the smaller projecting toward leaf, 1.5–2.0 mm long, linear-subulate to lanceolate-subulate, terete, pale green to cream, spotted or flecked with crimson, the larger smaller than, equal to or exceeding the ovary, (2.5)–8.8–(11.0) mm long, lanceolate to linear-lanceolate, curved, deeply keeled and mostly closely sheathing ovary for about one third to half of length, apex acute, green, usually with purple or reddish striae or flecks. **Dorsal sepal** membranous, more or less equal to labellum length 15–20 mm long, greenish with purple-red crimson-black striate or flecks, lanceolate-acuminate, apex acute, erect then arched forwards, or downwards, very rarely upwards. **Lateral sepals and petals** subsimilar, 20–30 mm long, filiform, cream to yellow green more or less flecked with red, greatly exceeding the labellum, held well above leaf. **Labellum** conspicuous, dark crimson-black, auriculate at base,; labellum tube 1.5–3 mm long, erect at first then abruptly deflexed at c. 90 degrees and expanding into a gradually broadening lamina; lamina (15)–20–(25) × (6)–10–(16) mm, narrowly obtuse when flattened, upper margins sharply folded inwards, upper $\frac{1}{3}$ – $\frac{1}{2}$ more or less overlapping, lower surface spreading and deeply grooved; apex usually held well above leaf; margins initially entire, becoming erose to finely and irregularly denticulate on either side, and with a short to moderately long down-curved apiculus; apiculus not or only rarely touching leaf.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to native orchids of New Zealand

SIMILAR TAXA

Corybas rivularis is a very variable and at least four forms occur within it that probably merit formal taxonomic recognition (Irwin 1994, 1996). *Corybas rivularis* was long confused with *C. orbiculatus* (e.g., Moore & Edgar 1970).

FLOWERING

October–November

FLOWER COLOURS

Black, Red/Pink

FRUITING

November–January

PROPAGATION TECHNIQUE

Difficult—should not be removed from the wild.

THREATS

Corybas rivularis sens. str. does seem to be genuinely uncommon but not threatened. Other segregates from the species are now well known and are awaiting formal taxonomic recognition. Past uncertainty over the conservation status of *C. rivularis* was because of past uncertainty over the status of these forms.

ETYMOLOGY

corybas: Helmet flower

rivularis: Of streams

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*.

Nematoceras panduratum (Cheeseman) Molloy, D.L.Jones et M.A.Clem. is probably conspecific with *Corybas rivularis*. It differs by its slightly larger size and pandurate leaf. It is a poorly known species that grows in similar habitats to *C. rivularis*.

ATTRIBUTION

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

REFERENCES AND FURTHER READING

Irwin B. 1994. *Corybas rivularis* - one species or several? *Wellington Botanical Society Bulletin* 46: 48–53.

Irwin B. 1996. Further notes on *Corybas rivularis*. *Wellington Botanical Society Bulletin* 47: 55–58.

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/5/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.

https://www.nativeorchids.co.nz/site/assets/files/2005/nznoj_139.pdf

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>.

Moore LB, Edgar E. 1970. Flora of New Zealand, Volume II. Indigenous Tracheophyta: Monocotyledones except Gramineae. Government Printer, Wellington, NZ. 354 p.

St George I, Irwin B, Hatch D. 2005. Field guide to the New Zealand Orchids. The New Zealand Native Orchid Group, Wellington, NZ. 136 p.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

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