

Corybas carsei

COMMON NAME

swamp helmet orchid

SYNONYMS

Corysanthes carsei Cheeseman; *Corybas matthewsii* (Cheeseman) Schltr.; *Corysanthes matthewsii* Cheesem.; *Anzybas carsei* (Cheeseman) D.L.Jones et M.A.Clem.

FAMILY

Orchidaceae

AUTHORITY

Corybas carsei (Cheeseman) Hatch

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Indeterminate

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Orchids

NVS CODE

ANZCAR

CHROMOSOME NUMBER

$2n = 36$

CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Critical | Qualifiers: CD, EF, OL, RR, TO

PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Critical | Qualifiers: CD, EF, OL, RR

2009 | Threatened – Nationally Critical | Qualifiers: CD, RF, EF, OL

2004 | Threatened – Nationally Critical

DISTRIBUTION

Possibly endemic (see Notes on taxonomy, below). New Zealand: North Island (from near Kaitaia south to Moanatuatua). Now known in New Zealand only from the Te Reao Arm of the Whangamarino Wetlands near Te Kauwhata, in the Huntly Basin, northern Waikato. Also Australia (New South Wales and Victoria, where it is now regarded as very uncommon).

HABITAT

Known only from one site where it grows in open *Schoenus* / *Empodisma* sedge/wirerush vegetation, though it was formerly more common in several, now drained, *Sporadanthus*-dominated bogs.

WETLAND PLANT INDICATOR STATUS RATING

OBL: Obligate Wetland

Almost always is a hydrophyte, rarely in uplands (non-wetlands).



Corybas carsei Te Reao. Photographer: Eric Scanlen, Licence: CC BY-NC.



Waikato. Oct 2008. Photographer: Craig Purvis, Licence: CC BY-SA.

DETAILED DESCRIPTION

Terrestrial orchid of restiad-dominated peat bogs. Plant 10–30 mm tall at flowering. **Stem** erect. **Leaf** 1–(2), 10–25–(30) mm long, green, sessile, ovate. **Floral bract** 1. **Flower** solitary, conspicuous, raised well above leaf. **Perianth** 8–10–(15) mm long, horizontal. **Dorsal sepal** spatulate from narrow arching claw, obtuse, hooded, slightly shorter than labellum, apex deeply cleft; base to mid section dark maroon-red, fading to yellow-green at apex, faintly striped maroon 2–6 times. **Lateral sepals and petals** linear 4–5–(8) mm long, white, more or less appressed to labellum. **Labellum** tubular, margins overlapping, entire, apex usually extending well beyond dorsal sepal; basal portion dark maroon-red, otherwise white, maroon colour extending as 8–(10) stripes, these almost reaching apex. Internal portion of labellum covered in prominent, retrorse, hair-like calli, forming a distinct band near labellum mouth, extending along mid-line and nerves for about half labellum length.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

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

SIMILAR TAXA

Corybas rotundifolius, is similar but larger. The dorsal sepal lacks the cleft tip seen in *C. carsei*. The labellum is as long or slightly longer than the dorsal sepal, while the internal hairlike inward facing labellar calli are more prominent and extend nearly towards the column. *Corybas rotundifolius* flowers in mid-winter, and is more usually found in forested habits and on the margins of gumland scrub, only rarely does it grow within peat bogs.

FLOWERING

September–(November)

FLOWER COLOURS

Red/Pink, White

FRUITING

December

PROPAGATION TECHNIQUE

Difficult—should not be removed from the wild.

THREATS

Wetland drainage and plant collectors have contributed to the decline of this species in the past. The single remaining population is now mainly at risk through natural succession.

ETYMOLOGY

corybas: Helmet flower

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* (see also Lyon 2014). In addition the taxonomic status of *Corybas carsei* and the Australian *C. fordhamii* needs resolution. Morphologically there seems little to distinguish them. For now *Corybas carsei* is accepted as 'possibly' endemic. If these two species prove conspecific then *C. carsei* as the older name has priority.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange (1 January 2005). Description adapted from Moore and Edgar (1970)

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>.

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.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

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