

# Calochilus robertsonii

## COMMON NAMES

red bearded orchid

## BIOSTATUS

Native

## CURRENT CONSERVATION STATUS

2023 | Threatened – Nationally Vulnerable | Qualifiers: Sp, CD, DPS, DPT, SO

[Jump to previous conservation statuses](#)

## CATEGORY

Vascular

## STRUCTURAL CLASS

Orchids

## FLOWER COLOURS

Green, Red/Pink

## DETAILED DESCRIPTION

Slender to rather stoutly robust orchid 100–800 mm tall. **Stem** fleshy, erect, dark green to blue-green (glaucous). **Leaf** fleshy, lanceolate, green to blue-green, channelled, sheathing at base apex acute. **Cauline bracts** similar but much shorter. **Inflorescence** a raceme of (1)–2–(4) flowers. **Floral bracts** narrow, acute, overtopping ovary. **Perianth** mostly green, except for bright red lamina, and red cilia of labellum (cilia copious). **Dorsal sepal** 10–15 mm long, broad-elliptic, acute, somewhat folded about column; lateral sepals similar though smaller. **Petals** shorter, obliquely deltoid, apex subacute, directed toward dorsal sepal, green striped with red. **Labellum** 2× length of sepals and petals; green suffused with red, with a red apex, not much larger than sepals and petals; ligulate apex, short, twisted usually hidden within cilia; disc broad with long, dense processes; base covered with numerous short, rounded red calli. **Column wings** each with one, prominent dark basal gland or callus.

## SIMILAR TAXA

Of the three species of *Calochilus* R.Br. known from New Zealand, *C. robertsonii* is easily distinguished by the column-wings which are each surmounted by a single rounded (bead-like) gland near the base, and also by the rather short, twisted, glabrous labellum apex. The flowers are distinctly striped with red and cilia on the labellum are red, copious and frequently hide the labellum apex.

## DISTRIBUTION

Indigenous. New Zealand: North Island (Hauraki Plains south to the Taupo Volcanic Zone, where it is particularly common around parts of the Kaingaroa Plain and Rotorua), South Island (known from one 1965 gathering from Kaiteriteri (Abel Tasman) and from scattered sites in western Nelson). Also Australia where it is common.

## HABITAT

A species of usually open, disturbed habitats. Often found in acidic peat bogs, nutrient poor pumice ground and in open sites within frost flats. Also commonly found under Eucalyptus plantations and in and around active geothermal areas. One very large population grows in shortly mown turf within a race course at Rotorua.



Rainbow Mountain, Waiotapu. Photographer: Bill Campbell, Date taken: 19/11/2018, Licence: CC BY.



Rainbow Mountain, Waiotapu. Photographer:

## THREATS

Although quite widespread, this species is usually not abundant at any particular place and, because it has attractive flowers, it is often picked and/or dug up by people. Because it is strongly mycorrhizal it is virtually impossible to cultivate. Indiscriminate plant collection has been a factor in its loss from some parts of the country. However, it would also appear to be spreading well within plantation forestry and it has turned up in some recently logged pine plantations. Over all this species is probably the least threatened of the three *Calochilus* known from New Zealand.

## GENUS

Calochilus

## FAMILY

Orchidaceae

## AUTHORITY

Calochilus robertsonii Benth.

## SYNONYMS

None

## ENDEMIC TAXON

No

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## FLOWERING

(September)–October–December

## FRUITING

October–February

## LIFE CYCLE AND DISPERSAL

Minute seeds are wind dispersed (Thorsen et al., 2009).

## PROPAGATION TECHNIQUE

Impossible to cultivate—should not be removed from the wild.

## ETYMOLOGY

**calochilus**: From Greek kalos (beautiful) and cheilos (lip), referring to the attractive labellum

## MANAAKI WHENUA ONLINE INTERACTIVE KEY

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

## NVS CODE

CALROB

## CHROMOSOME NUMBER

2n = 24

## PREVIOUS CONSERVATION STATUSES

2017 | At Risk – Naturally Uncommon | Qualifiers: DP, EF, SO, Sp

2012 | At Risk – Naturally Uncommon | Qualifiers: EF, SO, Sp

2009 | At Risk – Naturally Uncommon | Qualifiers: SO, EF

2004 | Sparse

[Jump to current conservation status](#)

## REFERENCES AND FURTHER READING

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

Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285–309. <https://doi.org/10.1016/j.ppees.2009.06.001>.

## ATTRIBUTION

Description adapted from Moore and Edgar (1970)

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## NZPCN FACT SHEET CITATION

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

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/calochilus-robertsonii/>

## PDF DATE

25 May 2026