

# Calochilus robertsonii

## COMMON NAME

red bearded orchid

## SYNONYMS

None

## FAMILY

Orchidaceae

## AUTHORITY

Calochilus robertsonii Benth.

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

No

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Orchids

## NVS CODE

CALROB

## CHROMOSOME NUMBER

2n = 24

## CURRENT CONSERVATION STATUS

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

## PREVIOUS CONSERVATION STATUSES

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

2004 | Sparse

## DISTRIBUTION

Indigenous. North and South Islands. In the North known from the Hauraki Plains south to the Taupo Volcanic Zone (where it is particularly common around parts of the Kaingaroa Plain and Rotorua). In the South known from one 1965 gathering from Kaiteriteri, western Tasman Bay (Nelson). Also in 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 grow sin shortly mown turf within a race course at Rotorua.



Rotorua. Nov 2004. Photographer: Paul Cashmore



Rotorua. Nov 2000. Photographer: Paul Cashmore

## FEATURES

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 twice length of sepals, 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.

## FLOWERING

(September-) October-December

## FLOWER COLOURS

Green, Red/Pink

## FRUITING

October - February

## LIFE CYCLE

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

## PROPAGATION TECHNIQUE

Impossible to cultivate - should not be removed from the wild

## 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.

## ETYMOLOGY

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

## ATTRIBUTION

Description adapted from Moore and Edgar (1970)

## REFERENCES AND FURTHER READING

Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. Perspectives in Plant Ecology, Evolution and Systematics 2009 Vol. 11 No. 4 pp. 285-309

## MORE INFORMATION

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