

Caladenia lyallii

SYNONYMS

Stegostyla lyallii (Hook.f.) D.L.Jones et M.A.Clem.

FAMILY

Orchidaceae

AUTHORITY

Caladenia lyallii Hook.f.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Orchids

NVS CODE

CALLYA

CHROMOSOME NUMBER

$2n = 48$

CURRENT CONSERVATION STATUS

2017 | Not Threatened | Qualifiers: SO?

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: North Island, South Island, Stewart Island/Rakiura.

HABITAT

Montane in tussock grassland, subalpine scrub, or in beech (*Nothofagaceae*) forest. Also common in montane pine plantations.

WETLAND PLANT INDICATOR STATUS RATING

FACU: Facultative Upland

Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).



Mt Arthur, January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Mt Arthur, January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DETAILED DESCRIPTION

Mostly solitary, terrestrial, hirsute, perennial herb. Plant at flowering up to 200 mm tall. **Stem** erect, slender and wiry, green to dark reddish-green, pilose hairy near base otherwise glandular-pubescent. **Leaf** solitary, up to 180 mm long, green, linear-lanceolate, pilose hairy. **Floral bracts** 1–4, foliaceous, closely sheathing stem, dark green to reddish-green. **Flowers** 2–(4) in a lax raceme, ovary usually > bract. **Perianth** up to 40 mm diameter, white (very rarely pink), rarely obscurely striped with red, externally glandular-pubescent. **Sepals** elliptic-oblong; dorsal sepal wider and arching over column; lateral sepals wide-spreading, subacute. **Petals** similar to lateral sepals. **Labellum** trilobed; mid-lobe narrowly triangular and recurved; lateral lobes broad, transversely barred with red; calli stipitate, clavate to ellipsoid, yellow, in four more or less regular rows on disc, smaller and more corded on mid-lobe and its margin. **Column** curved; wings of uniform width from base to anther, transversely barred with red.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to native orchids of New Zealand

SIMILAR TAXA

Distinguished from *Caladenia atradenia* by the usually 2-flowered, rather than solitary, white rather than dark green to reddish green flowers, and by the white labellum with red transverse bars, rather than initially white grading into dark purple-black labellum; and also by the yellow rather than dark purple-black calli.

FLOWERING

November–December

FLOWER COLOURS

Red/Pink, White

FRUITING

December–March

PROPAGATION TECHNIQUE

Difficult—should not be removed from the wild.

ETYMOLOGY

lyallii: Named after David Lyall (1817–1895), 19th century Scottish naturalist and surgeon with the Royal Navy, who explored Antarctica, New Zealand, the Arctic and North America and was a lifelong friend of Sir Joseph Hooker.

WHERE TO BUY

Not commercially available.

TAXONOMIC NOTES

Jones et al. (2001) erected the genus *Stegostyla* for what they regarded as a distinct clade of South-eastern Australian, Tasmanian and New Zealand orchids that had usually been referred to as *Caladenia*. Subsequently Hopper et al. (2004) showed how the reorganisation of *Caladenia* by Jones et al. (2001) was unworkable and they recommended a return to *Caladenia* and the other allied Australian genera that had been recognised previously. Following discussion with S. Hopper and P. Weston (pers. comm., 2011, 2014) the treatment of Hopper et al. (2004) is preferred to that of Jones et al. (2001) and so is followed here.

New Zealand populations of *Caladenia lyallii* are somewhat variable and some orchidologists maintain that the Tasmanian *C. alpina* is also present in New Zealand. However Hopper et al. (2004) treat that species as a synonym of *Caladenia lyallii*—this needs further investigation. Irrespective of that view, as currently circumscribed, *C. lyallii* remains extremely variable with respect to flower size and number of calli. Some of these forms have a clear geographic basis and they may warrant formal taxonomic recognition.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange (12 February 2007). Description adapted from Moore and Edgar (1970).

REFERENCES AND FURTHER READING

- Hopper SD, Brown AP. 2004 Robert Brown's *Caladenia* revisited, including a revision of its sister genera *Cyanicula*, *Ericksonella* and *Pheladenia* (Caladeniinae: Orchidaceae). *Australian Systematic Botany* 17(2): 171–240. <https://doi.org/10.1071/SB03002>.
- Jones DL, Clements MA, Sharma IK, Mackenzie AM. 2001. A New Classification of *Caladenia* R.Br. (Orchidaceae). *The Orchadian* 13(9): 389–419. <https://www.biodiversitylibrary.org/item/310770#page/1/mode/1up>.
- Jones DL, Molloy BPJ, Clements MA. 1997. Three new species and a new combination in *Caladenia* R.Br. (Orchidaceae) from New Zealand. *The Orchadian* 12: 221–229.
- 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

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/caladenia-lyallii/>