Caladenia atradenia

SYNONYMS

Caladenia carnea var. minor f. calliniger Hatch nom. illeg., Caladenia calliniger Matthews nom. nud., nom. illeg., Stegostyla atradenia (D.L.Jones, Molloy et M.A.Clem.) D.L.Jones et M.A.Clem.

FAMILY Orchidaceae

AUTHORITY

Caladenia atradenia D.L.Jones, Molloy et M.A.Clem.

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS No

ENDEMIC FAMILY No

STRUCTURAL CLASS Orchids

NVS CODE CALATR

CURRENT CONSERVATION STATUS 2017 | At Risk – Naturally Uncommon | Qualifiers: EF, Sp

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: EF, Sp 2009 | At Risk – Naturally Uncommon 2004 | Sparse

DISTRIBUTION

Endemic. New Zealand: North Island, South Island (northern).

HABITAT

Coastal to montane (0–1000 m a.s.l.). Favouring infertile substrates, especially clay podzols and pumice soils, where ti may be found in the open or more usually in thick leaf litter under *Kunzea* spp. and <u>Leptospermum scoparium J.R.Forst. et G.Forst.</u> shrubland, or in secondary regrowth. Also known from pine plantations and from geothermal areas in low scrub. Despite its colourful flowers its tendency to grow as solitary or small scattered, somewhat diffuse populations means that it is easily overlooked, even in sites where it is well known.





Stegostyls atradenia at Kennedy Bay (October). Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Immature capsules. Waikumete, Auckland. Photographer: Jeremy R. Rolfe, Date taken: 22/10/2007, Licence: CC BY.

DETAILED DESCRIPTION

Tuberous, terrestrial orchid growing as solitary plants or in small groups of 2–10 individuals, all vegetative parts markedly hairy. Leaf solitary, erect, 100–160 × 1–3 mm, narrowly linear, dark green to red-green; hairs sparse comprising mixtures of eglandular and glandular hairs upto 1 mm long. Scape 100-300 mm long, slender, somewhat wiry though brittle, reddish-green, covered with short hairs similar to those of leaf. Sterile bracts closely sheathing, 9-12 × 2-3 mm, narrowly obovate, subacute, abaxially hirsute. Floral bracts closely sheathing, 5-7 × 3 mm, oblongelliptic to elliptic, abaxially hirsute. Flowers 1-(2), 20 mm diameter, dark green to dark reddish-green, usually marked with maroon or dark magenta, externally darker from numerous sessile ovoid glands; dorsal sepal strongly incurved over the column; lateral sepals spreading and erect (divergent); petals widely spreeading, suberect, distally incurved. Dorsal sepal 7-10 × 2-3 mm, narrowly obovate, cucullate (hooded); apex apiculate. Lateral sepals $7-11 \times 2-3$ mm, asymmetrically lanceolate, falcate, acute to subobtuse. **Petals** $7-10 \times 1.5-2$ mm, narrowly oblanceolate, asymmetrical, falcate, acuminate. Labellum articulated on short claw, whitish with few, broad purple transverse bars; callii dark purplish-black, lamina 5-6 × 4-4.5 mm, ovate in outline when flattened, erect in proximal half the curved forwards, apex recurved, 3-lobed; lateral lobes 1.5 mm wide, erect, embracing column, entire; midlobe 2 mm long, recurved with 4-8 pairs of dark purplish-black linear, papillate marginal calli 0.3 mm long, irregular of shape, decrescent to the apex; lamina calli in 2 irregular rows, extending well onto the mid-lobe; stalks whitish; heads dark purplish-black, papillate; basal calli 2, 0.5 mm, subsessile to sessile; head more or less oboid, curved; longest callus 0.6 mm long; head 0.5 mm across, globose, papillate; stalk 0.3 mm long, slender; distal calli subsessile to sessile, of irregular shape and arrangement. **Column** $5-6 \times 2-2.5$ mm, erect, incurved toward apex, greenish, spotted and blotched red, narrowly winged; central ridge 0.8 mm wide. Capsule 18-24 × 5-6 mm, green stripe with red, narrowly obovoid, very hairy.

MANAAKI WHENUA ONLINE INTERACTIVE KEY Key to native orchids of New Zealand

SIMILAR TAXA

A well marked species easily separated from the other New Zealand *Caladenia* by its tendency to grow as single often widely scattered plants; by its very tall, slender growth form; dark reddish-green, selfing flowers up to 20 mm diameter; labellum decorated with sparse, rather broad, dark purple bands; broad labellum lateral lobes which incurve abruptly at the apex; 5–6 pairs of narrow marginal calli up to 0.6 mm long on the mid-lobe; and by the large dark-purplish black laminal callii arranged in two irregular rows which tend to become more closely spaced toward the mid-lobe apex.

FLOWERING August–December

FLOWER COLOURS

Green, Red/Pink

FRUITING October–February

PROPAGATION TECHNIQUE

Difficult—should not be removed from the wild.

THREATS

Caladenia atradenia is a rather sparsely distributed and naturally uncommon orchid. However, it is quite likely that the apparent rarity of this species is also in part due to its being overlooked for despite its colourful flowers it is not easily seen amongst the leaf litter in which it usually grows. Nevertheless some populations have been lost due to weed invasions and land development.

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.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange (12 February 2007). Description based on Jones et al. (1997).

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. <u>https://doi.org/10.1071/SB03002</u>.

Jones DL, Clements MA, Sharma IK, Mackenzie AM. 2001. A New Classification of *Caladenia* R.Br. (Orchidaceae). *The Orchadian 13(9)*: 389–419. <u>https://www.biodiversitylibrary.org/item/310770#page/1/mode/1up</u>. 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.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/caladenia-atradenia/