

Caleana minor

COMMON NAME

flying duck orchid

SYNONYMS

Paracaleana minor (R.Br.) Blaxell, Sullivania minor (R.Br.) D.L.Jones et M.A.Clem.

FAMILY

Orchidaceae

AUTHORITY

Caleana minor R.Br.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Orchids

NVS CODE

SULMIN

CURRENT CONSERVATION STATUS

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

PREVIOUS CONSERVATION STATUSES

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

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

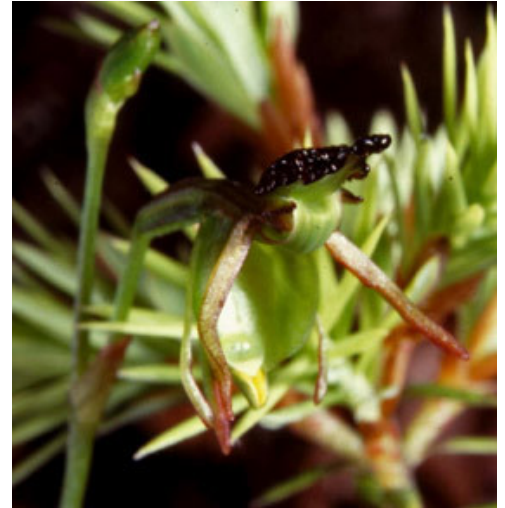
2004 | Non-resident Native – Vagrant

DISTRIBUTION

Indigenous. North Island. formerly known from the vicinity of Kaitaia and around the shore line of Lake Rotorua. Currently known from one site near Whakarewarewa geothermal field, Rotorua.

HABITAT

The only known New Zealand habitat for this orchid is within open mossy sites, bare clay and shallow leaf litter under low, open *Kunzea tenuicaulis* dominated shrubland near geothermally active ground.



Close up of flower, November, Whakarewarewa. Photographer: Eric Scanlen, Licence: CC BY-NC.



Sullivania minor plant, November, Whakarewarewa. Photographer: Eric Scanlen, Licence: CC BY-NC.

DETAILED DESCRIPTION

Dark reddish-green plant forming small colonies of 2–10 plants; at flowering up to 200 mm tall, usually with leaf withered. Stems slender, somewhat wiry, terete, dark red-green to wine-red, smooth. Leaf 90 × 3 mm, narrowly linear, deeply channelled, withering early. Inflorescence a open 1–3(–7)-flowered raceme. Flowers yellowish-green to reddish brown (labellum dark red-brown to black). Perianth segments to 10 mm long, linear, channelled, margins inrolled, apices acute. Dorsal sepal up to 8 mm long, linear-spathulate, down curved close to column; lateral sepals obliquely down curved, divergent, fused basally to column foot; petals incurved against column wings. Labellum-claw irritable, 5 mm long, strap-like, broad, smooth, curved with its connective toward column (extremely sensitive to touch); labellum lamina 6 × 4 mm, bifid, prolonged into a triangular pointed process with a flattened duckbill-shaped (hollow beneath) process; this spurred on either side; centre inflated and hollow, upper surface covered with dark black, glossy, somewhat tuberculate calli except near base. Column at right angles to ovary, almost as long as petals, very broadly petaloid winged, with wings extending from the base to apex to form an upwardly directed, patent cup.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to native orchids of New Zealand

SIMILAR TAXA

None—no other indigenous new Zealand orchid has such a distinctive flower, whose irritable glossy black, tuberculed labellum closely resembles the profile of a small black duck in flight.

FLOWERING

October–December

FLOWER COLOURS

Green, Yellow

FRUITING

December–February

PROPAGATION TECHNIQUE

Difficult. Should not be removed from the wild.

THREATS

Seriously at risk of extinction through human modification of its habitat, which is on private land administered as a tourist attraction. Aside from the potential risk of loss through gross habitat modification, this orchid is threatened by insect and wallaby browsing and the constant risk of plants being removed by plant collectors. The species is currently managed by one individual who carefully guards this species from these threats. *Caleana minor* is abundant in Australia.

ETYMOLOGY

minor: Smaller

WHERE TO BUY

Not commercially available

TAXONOMIC NOTES

Caleana minor has over the last two decades has been moved to several genera, initially *Paracaleana* (a genus proposed by Blaxell (1972)) and more recently a reinstated *Sullivania* (Jones & Clements 2005). Recently both genera have been reduced to synonymy within the original *Caleana* (Miller & Clements 2014) and this view is followed here

ADDITIONAL NOTES

Although long regarded as a vagrant, it is evident that this species has been present in the Rotorua region for at least 100 years. Its main threats are no longer natural (e.g., reproductive failure due to natural factors, or an ecological constraint) but entirely human induced. For this reason this species has now been listed for New Zealand as 'Threatened / Nationally Critical' (de Lange et al. 2013).

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 14 April 2007: Description adapted from Moore and Edgar (1970).

REFERENCES AND FURTHER READING

- Blaxell, D.F. 1972: *Arthrochilus* F.Muell. and related genera (Orchidaceae) in Australia. *Contributions from the New South Wales National Herbarium* 4: 275-283.
- de Lange, P.J.; Rolfe, J.R.; Champion, P.D.; Courtney, S.P.; Heenan, P.B.; Barkla, J.W.; Cameron, E.K.; Norton, D.A.; Hitchmough, R.A. 2013: Conservation status of New Zealand indigenous vascular plants, 2012. *New Zealand Threat Classification Series* 3. Department of Conservation, Wellington.
- Jones, D.L.; Clements, M.A. 2005: Miscellaneous Nomenclatural Notes and Changes in Australian, New Guinea and New Zealand Orchidaceae. *The Orchadian* 15: 33-42.
- Miller J.T.; Clements, M.A. 2014: Molecular phylogenetic analyses of Drakaeinae: Diurideae (Orchidaceae) based on DNA sequences of the internal transcribed spacer region. *Australian Systematic Botany* 27: 3-22.
- Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/caleana-minor/>