

Pterostylis tasmanica

COMMON NAME

plumed greenhood

SYNONYMS

Plumatichilos tasmanicum (D.L.Jones) D.L.Szlach.

FAMILY

Orchidaceae

AUTHORITY

Pterostylis tasmanica D.L.Jones

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Orchids

CHROMOSOME NUMBER

2n = c.50, 50-54

CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Vulnerable | Qualifiers: EF, SO, Sp

PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Vulnerable | Qualifiers: EF, SO

2009 | Threatened – Nationally Endangered | Qualifiers: EF, PD, SO

2004 | Serious Decline

DISTRIBUTION

Indigenous. New Zealand: Manawatāwhi / Three Kings Islands, North Island (Northland, Waikato, Wellington), South Island (Nelson).

HABITAT

Scrub or forest margins, in damp mossy areas or drier more exposed sites. Often under gorse or manuka on clay hillsides.



Surville Cliffs. Photographer: Gillian M. Crowcroft, Licence: All rights reserved.



Kaueranga. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DETAILED DESCRIPTION

Tuberous, terrestrial spring to summer-green, glabrous orchid either solitary or growing in loose groups. Plants at flowering up to 180 mm tall. **Stem** wiry, smooth, enclosed in 3–(6) foliaceous leaves. **Rosette leaves** (4)–8–(18); petiole 6–15 mm long, distinctly winged; lamina 15–25 × 6–8 mm, yellow-green to dark green, broadly ovate, elliptical to elliptical-lanceolate, acute. **Cauline leaves** 1–2, narrower and broadly sheathing (closely embracing the stem). **Flower** 1–(2), up to 25 mm long, clearly separated from subtending foliaceous bract; translucent green with dark green longitudinal and transverse veins, brownish towards galea apex and lateral sepals, galea erect in proximal  then obliquely erect or curved forwards nearly at 90 degrees. **Dorsal sepal** 18–23 × 12–13 mm, inflated at base and tapered to apex, with a short filiform apex 0.5–1.5 mm long. **Lateral sepals** deflexed; conjoined part 7–9 × 3–4 mm, tapered to c. 2 mm across at the base, with a thickened, dark green central pad, the margins incurved; free points 7–11 mm long, linear, usually brown, parallel or slightly divergent, apex subacute. **Petals** asymmetric, falcate 15–20 × 1.5–2.0 mm, dark green, narrowed in distal ½ to an attenuate, long-acuminate apex. **Labellum** prominent, protruding from sinus, arching, 13.0–15.0 × 0.5 mm, linear-filiform, clad for most of its length in long yellow plumose cilia, apex terminated by a dark brown, glabrous, somewhat irregular, spheroidal, knob-like callus 2.0 × 1.3 mm. **Column** erect, 12–14 mm long; column wings 4–5 mm long, basal lobe 1.5 × 1.0 mm, set at an angle of 20 degrees, inner margins incurved, sparsely white ciliate, apex obtuse; mid-section 3 mm long, transparent; apical lobe 1.8 mm long, shortly rostrate. **Pollinia** 2 mm long, yellow, oblong, mealy. **Capsule** asymmetrical, 1.2–1.6 × 6.0–8.0 mm, obovoid.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to native orchids of New Zealand

SIMILAR TAXA

None.

FLOWERING

October–December.

FLOWER COLOURS

Green, Yellow

FRUITING

November–February

PROPAGATION TECHNIQUE

Difficult—should not be removed from the wild. Strongly mycorrhizal this species will not flourish in cultivation and within a few years it exhausts itself and dies.

THREATS

Lack of fires, competition from weeds (gorse) and over-collection by orchid enthusiasts. This species requires frequent disturbance, usually from fires to maintain an open habitat.

ETYMOLOGY

pterostylis: Winged column

tasmanica: Named after Abel Janszoon Tasman (1603-1659) who in the 17th century was the first European to sight Van Dieman's land (now known as Tasmania)

TAXONOMIC NOTES

Jane et al. (2010) following a thorough rDNA (ITS) based analysis of the segregate genera erected for *Pterostylis* R.Br. by Szlachekto (2001) and Jones et al. (2002) found no support to continue their recognition (though that study did treat those orchids referred to *Plumatichilos* as *Pterostylis* sect. *Catochilus* Benth.). This view is followed here.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 7 April 2007: Description adapted from Jones (1994).

REFERENCES AND FURTHER READING

- Janes JK, Duretto MF. 2010. A new classification for subtribe Pterostylidinae (Orchidaceae), reaffirming *Pterostylis* in the broad sense. *Australian Systematic Botany* 23: 260–269. <https://doi.org/10.1071/SB09052>.
- Jones DL. 1994. New species of Orchidaceae from south-eastern Australia. *Muelleria* 8: 177–192. <https://www.biodiversitylibrary.org/page/51467892#page/83/mode/1up>.
- Jones DL, Clements MA, Molloy BPJ. 2002. A Synopsis of the Subtribe *Pterostylidinae*. *Australian Orchid Research* 4: 129–146.
- Szlachekto, D.L. 2001: Genera et Species Orchidaliium 1. *Polish Botanical Journal* 46(1): 11–26.

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/pterostylis-tasmanica/>