

Pterostylis trullifolia

COMMON NAMES

trowel-leaved orchid

BIOSTATUS

Native

CATEGORY

Vascular

STRUCTURAL CLASS

Orchids

FLOWER COLOURS

Green, White

DETAILED DESCRIPTION

Terrestrial, colony forming, perennial herb. Plants at flowering up to 320 mm tall. **Stem** green or reddish-green, slender, terete, mostly smooth, sometimes with the upper internodes minutely rugose; internodes usually > leaves. **Petiolate leaves** in a compact rosette at base of flowering stem; petiole distinct up to 10 mm long (usually less) not winged; leaf lamina 5–10 × 5–10 mm, dark green to green or reddish-green, broad-ovate to orbicular-cordate, apex acute to subacute, veins raised on upper leaf surface imparting a distinctly rugose, bullate-alveolate (embossed) texture. **Cauline leaves** 2–8, 5–20 × 2–5 mm, dark green, green to reddish-green, lowermost shortly petiolate and more or less trowel-shaped, grading into sessile, linear-lanceolate leaves, uppermost rarely overtopping ovary. **Flower** 1–(2) erect, green and white striped rarely tinged with red. **Dorsal sepal** 10–15 mm tall, apex acuminate, more or less horizontal; lateral sepals diverging at a wide angle forming a U or wide W shape when viewed from the front, sinus abruptly and prominently jugate in side view, tips long-caudate and much overtopping galea. **Petals** almost as long as dorsal sepal, with only a narrow marginal strip exposed. **Labellum** narrow-triangular, arched and protruding, apex subacute. **Column** shorter than labellum; stigma elliptic, slightly prominent.

SIMILAR TAXA

Most likely to be confused with *Pterostylis alobula* from which it differs by its distinctly embossed rosette leaves, more slender, taller habit, smaller often red-tinged flowers, and by the more slender apex of the labellum which lacks the inverted U typical of *P. alobula*.

DISTRIBUTION

Endemic. New Zealand: Manawatāwhi / Three Kings Islands, North Island, South Island (to about Canterbury and north Westland).

HABITAT

Coastal to montane (up to 1100 m a.s.l.). Usually on the forest floor in sparse leaf litter, open clay pans under scrub or amongst mosses in semi-shaded successional forest. Occasional invades rough pasture and lawns bordering forest remnants. Often found growing with *Pterostylis alobula*.

CURRENT CONSERVATION STATUS

2023 | Not Threatened

DETAILED TAXONOMY



The distinctive 'jug spout' lip at the base of the opening into the flower. Upper Hutt. Photographer: Jeremy R. Rolfe, Date taken: 30/05/2007, Licence: CC BY.



The distinctive alveolate venation of the rosette leaves. Stokes Valley, Lower Hutt. Photographer: Jeremy R. Rolfe, Date taken: 31/05/2015, Licence: CC BY.

FAMILY

Orchidaceae

AUTHORITY

Pterostylis trullifolia Hook.f.

SYNONYMS

Pterostylis rubella Colenso; *Pterostylis trullifolia* var. *gracilis* Cheeseman; *Diplodium trullifolium* (Hook.f.) D.L.Jones, Molloy et M.A.Clem.

TAXONOMIC NOTES

Janes 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. This view is followed here.

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

ECOLOGY

FLOWERING

May–September

FRUITING

July–January

LIFE CYCLE AND DISPERSAL

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

PROPAGATION TECHNIQUE

Moderately easy to grow, especially in a pot. Should not be removed from the wild.

OTHER INFORMATION

ETYMOLOGY

pterostylis: Winged column

MANAAKI WHENUA ONLINE INTERACTIVE KEY

[Key to native orchids of New Zealand](#)

NVS CODE

PTETRU

CHROMOSOME NUMBER

2n = 50

PREVIOUS CONSERVATION STATUSES

2017 | Not Threatened

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

REFERENCING AND CITATIONS

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, Clements MA, Molloy BPJ. 2002. A Synopsis of the Subtribe *Pterostylidinae*. *Australian Orchid Research* 4: 129–146.
- Moore LB, Edgar E. 1970. Flora of New Zealand, Volume II. Indigenous Tracheophyta: Monocotyledones except Gramineae. Government Printer, Wellington, NZ. 354 p.
- Szlachekto, D.L. 2001: Genera et Species Orchidaliium 1. *Polish Botanical Journal* 46(1): 11–26.
- Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285–309. <https://doi.org/10.1016/j.ppees.2009.06.001>.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange (14 April 2007). Description adapted from Moore & Edgar (1970) Some of this factsheet information is derived from [Flora of New Zealand Online](#) and is used under a [Creative Commons Attribution 3.0 New Zealand](#) licence.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

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

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