Pterostylis tristis

SYNONYMS

Hymenochilus tristis (Colenso) D.L.Jones, M.A.Clem. et Molloy

FAMILY

Orchidaceae

AUTHORITY

Pterostylis tristis Colenso

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

Νo

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Orchids

NVS CODE

HYMTRI

CHROMOSOME NUMBER

2n = 52

CURRENT CONSERVATION STATUS

2017 | At Risk - Declining | Qualifiers: DP, EF, Sp

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Declining | Qualifiers: DP, EF, Sp

2009 | At Risk - Naturally Uncommon | Qualifiers: DP, EF

2004 | Sparse

DISTRIBUTION

Endemic. New Zealand: North Island (scarce being known from a few old gatherings made between the Rangipo Desert and Hawke's Bay), South Island (east of the main ranges from North Canterbury south), Stewart Island/Rakiura (known from one old record).

HABITAT

Lowland to subalpine (confined to upper montane to subalpine in the North Island). A species of open ground, usually in short tussock grassland within intermontane basins, along river flats and terraces, and also in open ground within grey scrub. It may also grow within mainly exotic pastures and along roadside verges, in loose gravel or shingle, or within sparsely vegetated gaps amongst boulders.





Brown form. Photographer: Eric Scanlen, Licence: CC BY-NC.



Wairau Valley. Dec 2004. Photographer: A. J. Townsend, Licence: CC BY-NC.

DETAILED DESCRIPTION

Diminutive orchid mainly of short tussock grassland. Plants rather stout, 20–100 mm tall when flowering. **Stem** more or less hidden by conspicuous leafy bracts. **Rosette leaves** fleshy to fleshy-coriaceous, numerous, these 5–15 \times 3–10 mm; brown-green, dark to yellow-green, somewhat glaucous, rhombic, more or less alveolate, lamina tapering into a broadly winged petiole. **Cauline leaves** similar but smaller and sheathing. **Inflorescence** a raceme of 1–6–(8) flowers, each partially enclosed within a sheathing floral bract; perianth green, greenish to brownish-green with pale stripes. **Dorsal sepal** 5–10 mm, broad, apiculate; lateral sepals slightly shorter, almost completely fused into a flat, apically bidentate lamina, this strongly deflexed in fully opened flowers. **Petals** shorter than dorsal sepal, the anterior minutely (but distinctly) denticulate. **Labellum**, short and squat, broadly obtuse, extended backwards into a smoothly rounded appendage with a low, somewhat thickened median ridge. **Column** short and broad; wings broader than long, ciliate over most of the free margins; stigma broadly ovate.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to native orchids of New Zealand

SIMILAR TAXA

Could only be confused with the South Island endemic <u>Pterostylis tanypoda</u>, from which it differs in its darker, often brownish-green rather than glaucous foliage, and its usually brownish-green rather than uniformly green flowers whose labellum base possesses a backward (reflexed) or decurved appendage, rather than a prominent forward-pointing knob.

FLOWERING

September-January

FLOWER COLOURS

Brown, Green

FRUITING

October-April

LIFE CYCLE

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

PROPAGATION TECHNIQUE

Difficult-should not be removed from the wild.

THREATS

An easily overlooked orchid of mainly short tussock grasslands. Herbarium data suggests that it is naturally uncommon and biologically sparse. However, it is very easily overlooked. Plants have been found growing in pastures dominated by exotic grasses and also along roadside verges. In the North Island it needs to be surveyed for, as it the areas in which it was recorded retain plenty of suitable habitat and the species is probably still there. Over all the exact conservation status of this species requires a more critical field survey.

ETYMOLOGY

pterostylis: Winged column

TAXONOMIC NOTES

Jane et al. (2010) following an 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.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange (14 April 2007). Description based on Moore & Edgar (1970) (as *Pterostylis mutica*) and Colenso (1886) (as *P. tristis*).

REFERENCES AND FURTHER READING

Colenso W. 1886. A description of some newly-discovered and rare Indigenous plants: being a further contribution towards the making known the Botany of New Zealand. <u>Transactions and Proceedings of the New Zealand Institute</u> 18: 256–287.

Janes JK, Dorothy AS, Vaillancourt RE, 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, Molloy BPJ, Clements MA. 1997. Six new species of *Pterostylis* R.Br. (Orchidaceae) from New Zealand. *The Orchadian 12(6)*: 266-281.

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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. Szlachekto, D.L. 2001: Genera et Species Orchidalium 1. *Polish Botanical Journal* 46(1): 11–26.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/pterostylis-tristis/