

Pterostylis patens

COMMON NAME

tutukiwi, greenhood

SYNONYMS

Pterostylis banksii var. *patens* (Colenso) Hatch, *Pterostylis speciosa* Colenso, *Pterostylis subsimilis* Colenso

FAMILY

Orchidaceae

AUTHORITY

Pterostylis patens Colenso

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Orchids

NVS CODE

PTEPAT

CHROMOSOME NUMBER

2n = 44

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: North Island (from about Mt Pirongia south), South Island, Stewart Island/Rakiura.

HABITAT

Mostly montane to subalpine (up to 1200 m a.s.l.) but extending to lower elevations in the southern Wairarapa and Rimutaka Ranges. Frequenting beech (*Nothofagaceae*) forest but also found in montane cloud forest, and under subalpine scrub, usually in damp, semi-shaded sites. Often found in thick patches of moss or deep, drifts of leaf litter.



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



Mount Ruapehu. Photographer: Jeremy R. Rolfe, Date taken: 27/12/2008, Licence: CC BY.

DETAILED DESCRIPTION

Terrestrial, tuberous, glabrous, spring to summer-green perennial herb, forming dense colonies of numerous plants through vegetative extension. Plant at flowering 100–480 mm tall. **Stem** stiffly erect, smooth, green, dark green to reddish green, internodes very short near base, otherwise shorter than leaves throughout. **Leaves** 4–6, sessile, stiffly erect, dark green to reddish green with entire margins; in sterile plants lamina of similar size, oblong-elliptic to broadly lanceolate; in flowering plants lamina scarcely changing from base to top of stem; lamina of largest leaves 50–180 × 10–20 mm, broadly lanceolate, lanceolate to linear-lanceolate, prominently and deeply keeled, often with 2–3 laterals on either side of midrib, apex acute, acuminate, base wider than rest of lamina broadening into a long sheathing base; more or less even within base of flower, rarely slightly overtopping flower. **Flower** solitary, erect, front mostly green finely striped with white, stripes of white widening toward back of galea with green narrowing, with the back often completely. **Ovary** erect. **Dorsal sepal** distinctly globose, 40–50 mm tall, erect, distal portion initially horizontal, soon steeply inclined, apex steeply keeled, tapering to a strongly deflexed caudate tip up to 30 mm long. **Lateral sepals** diverging at a narrow angle, caudae of lobes up to 40 mm long, tapered, strongly deflexed down and sometimes meeting behind ovary. **Petals** much shorter than dorsal sepal with acuminate apices. **Labellum** elliptic-oblong, scarcely arched, flat in cross-section, narrowing slightly towards tip, bending forward smoothly and symmetrical, protruding from lateral sepals sinus, midrib initially prominent soon evanescent toward the obtuse, emarginate, often cucullate apex. **Column** as tall as or slightly taller than labellum; stigma ellipsoid, scarcely distinguished from column and rather flat.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to native orchids of New Zealand

SIMILAR TAXA

Closest to *P. oliveri* Petrie, from which it differs by the stiffly erect rather than weakly erect, decumbent or sprawling growth habit, broadly lanceolate to linear-lanceolate (grassy) rather than oval to broadly elliptic leaves; and by the lateral sepals whose caudae are consistently strongly deflexed back and down, sometimes meeting at the back of the ovary, rather than mostly erect. *Pterostylis patens* was placed in Flora II of the New Zealand Flora series (Moore & Edgar 1970) within *P. banksii*. From that widespread and variable species it differs by the much larger, distinctly globose flower, by the greatly attenuated and strongly deflexed dorsal and lateral sepals, and by the mostly wider grassy leaves. Both species are frequently sympatric in the central North Island.

FLOWERING

November–January

FLOWER COLOURS

Green, White

FRUITING

December–April

PROPAGATION TECHNIQUE

Difficult—should not be removed from the wild. Basic orchid mix consists of 2 parts medium coarse sand, ideally clean river sand; 2 parts soil, humus or leaf-mould; 1 part weathered sawdust or rotting wood; 1 part granulated bark. For *Pterostylis* shade of 50% and pots kept evenly moist.

ETYMOLOGY

pterostylis: Winged column

patens: Spreading

WHERE TO BUY

Not commercially available

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 14 April 2007: Description adapted from Moore and Edgar (1970) and Hatch (2005).

REFERENCES AND FURTHER READING

Moore LB, Edgar E. 1970. Flora of New Zealand, Volume II. Indigenous Tracheophyta: Monocotyledones except Gramineae. Government Printer, Wellington, NZ. 354 p.

St George I, Irwin B, Hatch D. 2005. Field guide to the New Zealand orchids, 3rd edition. New Zealand Native Orchid Group, Wellington, NZ. 136 p.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

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