

Pterostylis silvicultrix

COMMON NAMES

tutukiwi, Chatham Island greenhood

BIOSTATUS

Native

CATEGORY

Vascular

STRUCTURAL CLASS

Orchids

FLOWER COLOURS

Green, White

DETAILED DESCRIPTION

Terrestrial tuberous orchid growing in colonies, sometimes found as a low epiphyte perching on the bases of tree fern trunks. Plants dimorphic.

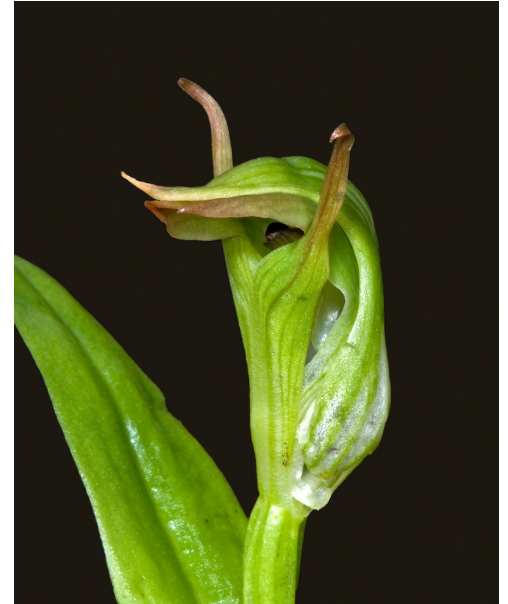
Sterile plants 20–150 mm tall; leaves 30–80 × 10–20 mm, light green, elliptical to elliptical-lanceolate, margins entire or rarely minutely sinuate.

Flowering plants with 3–6 cauline leaves obliquely erect to spreading; lamina 40–150 × 0.6–22 mm, elliptical to elliptical-ovate to lanceolate, sessile, sheathing at base; margins entire; apex acute to acuminate.

Pedicel 5–30 mm long, stout. **Ovary** 10–15 mm long, asymmetric, ribbed.

Flower solitary, 18–25 mm long, erect, translucent white and green with red brown suffusions toward the tips of the galea and lateral sepals; galea erect and gibbous at base, then curving forwards to the apex. **Dorsal sepal** slightly longer than the petals, 20–25 × 10–16 mm ovate-lanceolate, expanded in proximal $\frac{1}{3}$ then narrowed and tapered to the acute apex.

Lateral sepals erect, loosely embracing the galea leaving a narrow lateral gap to the petal margins, upper part of sinus curved when viewed from the side, sloping to a broad V when viewed from the front; conjoined part 10–15 mm long, 8–10 mm at the top, narrowed to 3 mm wide at the base, the margins inrolled, tapered towards the free points; free points 8–10 mm long curved forwards, tips equal to or protruding slightly above the galea (often curled forward). **Petals** 25–30 × 4–6 mm, obliquely oblong-lanceolate, falcate, acute, green with a narrow white central area towards the base, the apex reddish-brown; flange vestigial. **Labellum** erect, curved forward distally, the apex prominent through the sinus in the set position; labellum hinge ligulate 3 × 1 mm; lamina 12–14 mm, green narrow-obovate, callus 0.5–0.7 mm reddish green, raised; appendage 2 mm, decurved, apex penicillate. **Column** 15 mm, green and white, column foot 4 mm, wings 7 mm; basal lobes 3 × 1 mm, apex obtuse, inner margins incurved, sparsely ciliate; mid-section 3 mm, green; apical lobe 1 mm. **Stigma** 5 × 1.5–2 mm, elliptic scutiform, medial on the column to edges, raised. **Rostellum** 0.5 mm diameter, brownish, below anther and high up above stigma and connected to it by a narrow groove. **Capsule** 25–30 × 6–8 mm, initially green to brown, narrowly obovoid, peduncle up to 50 mm long.



In cultivation. Photographer: Jeremy R. Rolfe, Date taken: 03/11/2008, Licence: CC BY.



Tuku, Chatham Islands. Photographer: John Sawyer, Licence: CC BY-NC.

SIMILAR TAXA

Distinguished from other indigenous *Pterostylis* R.Br. species by the relatively short, broad, suberect to erect, ovate to lanceolate leaves, the upper most overtopping the solitary green and white striped flower whose sepals and petals are characteristically orange-tipped. The lateral sepals are distinctive in that they curl forward while the dorsal sepals only just exceed the petals and are often curved upwards. On the Chathams *P. silvicultrix* has often been confused with *P. banksii* A.Cunn., which though highly variable is, on the Chathams at least, a much smaller plant whose uppermost leaves overtop the flower and whose flower is more darkly green-striped, and without any orange colouration.

DISTRIBUTION

Endemic. New Zealand: Chatham Islands (Rēkohu / Wharekauri / Chatham Island, Rangihau / Rangiauria / Pitt Island; possibly on Maunga're / Mangere Island.

HABITAT

A widespread species of forests, restiad bog and stream, lake, pond and other wetland margins. Often found as a low epiphyte on tree fern trunks.

CURRENT CONSERVATION STATUS

2023 | At Risk – Naturally Uncommon | Qualifiers: IE

THREATS

Although very common in suitable habitat it cannot be denied that forest clearance has decreased the available habitat for this species. Cattle, sheep, pigs and weka browse, trample and—weka especially—uproot the tubers.

DETAILED TAXONOMY

FAMILY

Orchidaceae

AUTHORITY

Pterostylis silvicultrix (F.Muell.) Molloy, D.L.Jones et M.A.Clem.

SYNONYMS

Pterostylis banksii var. *silvicultrix* F.Muell.

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

ECOLOGY

FLOWERING

November–December

FRUITING

Late summer

PROPAGATION TECHNIQUE

Difficult—should not be removed from the wild.

OTHER INFORMATION

WHERE TO BUY

Not commercially available

ETYMOLOGY

pterostylis: Winged column

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to native orchids of New Zealand

NVS CODE

PTESIL

CHROMOSOME NUMBER

2n = 44-46

PREVIOUS CONSERVATION STATUSES

2017 | At Risk – Naturally Uncommon | Qualifiers: IE

2012 | At Risk – Naturally Uncommon | Qualifiers: IE

2009 | At Risk – Naturally Uncommon | Qualifiers: IE

2004 | Range Restricted

REFERENCING AND CITATIONS

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 14 April 2007: Description and recognition notes are based on information and details kindly provided by Dr B.P.J. Molloy supplemented with observations made from fresh material collected from the Chatham Islands.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

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

PDF DATE

12 October 2024