Pterostylis silvicultrix

COMMON NAME tutukiwi, Chatham Island greenhood

SYNONYMS Pterostylis banksii var. silvicultrix F.Muell.

FAMILY Orchidaceae

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

FLORA CATEGORY Vascular – Native

ENDEMIC TAXON Yes

ENDEMIC GENUS No

ENDEMIC FAMILY No

STRUCTURAL CLASS Orchids

NVS CODE PTESIL

CHROMOSOME NUMBER 2n = 44-46

CURRENT CONSERVATION STATUS 2017 | At Risk – Naturally Uncommon | Qualifiers: IE

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: IE 2009 | At Risk – Naturally Uncommon | Qualifiers: IE 2004 | Range Restricted

DISTRIBUTION

Endemic. New Zealand: Chatham Islands (Rēkohu / Wharekauri / Chatham Island, Rangihaute / Rangiauria / Pitt Island, Maunga're / Mangere Island, Hokorereoro / Rangatira / South East 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.





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



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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 $40-150 \times 0.6-22$ mm, elliptical to elliptical-ovate to lanceolate, sessile, sheathing at base; margfins 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, $20-25 \times 10-16$ 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 $25-30 \times 4-6$ 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; appendange 2 mm, decruved, apex penicillate. **Column** 15 mm, green and white, column foot 4 mm, wings 7 mm; basal lobes 3 × 1 mm, apex obtuse,inner margins incruved, 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.

MANAAKI WHENUA ONLINE INTERACTIVE KEY Key to native orchids of New Zealand

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 <u>P. banksii A.Cunn.</u>, 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.

FLOWERING November–December

FLOWER COLOURS Green, White

FRUITING Late summer

PROPAGATION TECHNIQUE

Difficult—should not be removed from the wild.

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.

ETYMOLOGY pterostylis: Winged column

WHERE TO BUY Not commercially available

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/