

# Pterostylis cernua

## COMMON NAME

Westland greenhood

## SYNONYMS

None (first described in 1997)

## FAMILY

Orchidaceae

## AUTHORITY

*Pterostylis cernua* D.L.Jones, Molloy et M.A.Clem.

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Orchids

## CHROMOSOME NUMBER

2n = 44

## CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: Sp

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: Sp

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

2004 | Sparse

## DISTRIBUTION

Endemic. New Zealand: South Island (West Coast in and around Hokitika, Kumara and Lake Mahinapua). Exact distribution still to be determined as this species was only recognised and described as new in 1997.

## HABITAT

Lowland (10–40 m a.s.l.) in swampy ground, roadside drains, ditches, margins of peat lakes and fens in sites subject to periodic inundation. Also on poorly drained gley soils overlying infertile, poorly drained gravels stemming from past glacial outwash.



Single flower 12/12/00. Photographer: Eric Scanlen, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Terrestrial greenhood orchid growing in small colonies of 1–8 plants. Plants dimorphic. **Sterile plants** 30–60 mm tall, 3–5-leaved; leaves 15–35 × 4–7 mm, dark green to yellow-green, elliptic to elliptic-lanceolate, margins entire or slightly irregular. **Flowering plants** 60–120 mm tall. **Leaves** 4–5, 20–65 × 5–7 mm, cauline, erect to spreading; narrowly lanceolate, dark green to yellow-green, sessile, sheathing at base; margins entire; apex acuminate. **Pedicel** 10–20 mm long, slender. **Ovary** 9–12 mm, asymmetric, ribbed. **Flower** solitary, 14–18 mm long, semi-nodding, translucent white and dark green with red-brown suffusions toward galea apex and on lateral sepals. **Galea** erect and gibbous at the base then leaning forwards before decurving in a shallow curve to the apex. **Dorsal sepal** ovate-lanceolate in outline then flattened, 25–28 × 11–13 mm, expanded in the proximal  $\frac{1}{3}$  then sharply narrowed, gradually tapering to the acuminate apex. **Lateral sepals** erect, loosely embracing galea, leaving a narrow gap to petal margins; conjoined portion 5–7 × 6–7 mm at top, narrowed to 2 mm wide at base, margins inrolled toward apex and tapered into the free points; free points 13–15 mm long, filiform, curved forwards, tips protruding over galea. **Petals** 17–20 × 3–4 mm, green with a narrow white central area towards the base, apex reddish-brown; obliquely oblong-lanceolate, falcate, acute, flange vestigial. **Labellum** erect, curved forwards distally, the apex protruding through the sinus in the set position; lamina 7–8 × 2–2.5 mm, dark green with a black-green central callus, narrowly obovate, apex subobtusely, labellum hinge ligulate 3 × 2 mm. **Capsules** ellipsoid, deeply grooved, yellow-brown to green-brown prior to dehiscence.

## MANAAKI WHENUA ONLINE INTERACTIVE KEY

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

## SIMILAR TAXA

When it was described, *P. cernua* was said to be part of the *P. montana* Hatch complex. However, it has little obvious relationship to entities within that species aggregate and is in fact much harder to distinguish from variants within the *P. graminea* Hook.f. complex. From these it chiefly differs by its somewhat broader and characteristically bunched leaves, and usually smaller (14–18 mm long), distinctly decurved, somewhat nodding narrow (6–7 mm wide) flowers and filiform free points on the lateral sepals. The most widespread form of the *P. graminea* complex in the South Island prefers drier habitats than *P. cernua*.

## 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.

## THREATS

The type locality is under constant threat from road maintenance and widening. Plants at this site are also at risk from weka predation (the birds plough up plants and eat the orchid tubers). Aside from the extreme vulnerability at this site *P. cernua* seems secure at the other sites in which it has been found. It is intensively monitored at the most of the known populations and more plants and locations are being discovered each season. These results suggest it is a biologically sparse, possibly widespread and easily overlooked plant. The declines happening at the type locality seem the exception rather than the rule for the species.

## ETYMOLOGY

**pterostylis**: Winged column

**cernua**: Drooping

## WHERE TO BUY

]Not commercially available

### **ATTRIBUTION**

Fact Sheet prepared for NZPCN by P.J. de Lange 14 April 2007. Description based on Jones et al. (1997).

### **REFERENCES AND FURTHER READING**

Jones DL, Molloy BPJ, Clements MA. 1997. Six new species of *Pterostylis* R.Br. (Orchidaceae) from New Zealand. *The Orchadian* 12: 266–281.

### **NZPCN FACT SHEET CITATION**

Please cite as: de Lange, P.J. (Year at time of access): *Pterostylis cernua* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/pterostylis-cernua/> (Date website was queried)

### **MORE INFORMATION**

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