

# Prasophyllum hectorii

## COMMON NAME

swamp leek orchid

## SYNONYMS

*Gastrodia hectorii* Buchanan

## FAMILY

Orchidaceae

## AUTHORITY

*Prasophyllum hectorii* (Buchanan) Molloy, D.L.Jones et M.A.Clem.

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Orchids

## CHROMOSOME NUMBER

2n = 42

## CURRENT CONSERVATION STATUS

2017 | At Risk – Declining | Qualifiers: PD

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Declining | Qualifiers: PD

2009 | At Risk – Relict | Qualifiers: CD, EF

2004 | Threatened – Nationally Vulnerable

## DISTRIBUTION

Endemic. New Zealand: North Island (formerly known from Te Paki south to near Waiouru; current records exist for Te Paki, Waikato and Central Volcanic Plateau), Chatham Islands (one site on Rēkohu / Wharekauri / Chatham Island).

## HABITAT

Coastal to subalpine, in wetlands (0–1100 m a.s.l.), and associated slow flowing streams. Usually found partially submerged in or at the margins of pools and streams, where the plants tubers may be seen floating just above the sediment. It is often associated with the sedge genera *Machaerina* and *Eleocharis* (Cyperaceae) where it easily overlooked unless flowering.

## WETLAND PLANT INDICATOR STATUS RATING

OBL: Obligate Wetland

Almost always is a hydrophyte, rarely in uplands (non-wetlands).



Near Waiouru. Feb 2007. Photographer: Colin C. Ogle, Licence: CC BY-NC.



Near Waiouru. Feb 2007. Photographer: Colin C. Ogle, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Stout orchid of wetlands. Plants sweetly scented, 0.15–1 m tall at flowering. **Tuber** ovoid usually paired with previous season's tuber, roots few, stout, peg-like. **Stem** erect, fleshy, terete, dark green. **Leaf** solitary, usually overtopping raceme; lamina yellow-green to dark green, fleshy, terete, apex acute. **Inflorescence** a few to many flowered raceme. **Flowers** more or less evenly spaced, 10–80-flowered, fleshy-succulent. **Perianth** yellow, yellow-green to green. **Dorsal sepal** 6–8 mm, broad-ovate, concave. **Lateral sepals** somewhat longer, narrow-oblong, free to base, margins thin, apex often hooded, sometimes appearing bidentate. **Petals** slightly shorter, thinner. **Labellum** yellow, white or black, prominent, narrowed at base to a short, stout claw, ovate, sharply bent at a right angle halfway from base; margin undulate; callus confined to proximal tip. **Lateral processes of column** oblong, falcate, as tall as rostellum. **Anther** sessile, overtopped by rostellum. **Stigma** prominent.

## MANAAKI WHENUA ONLINE INTERACTIVE KEY

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

## SIMILAR TAXA

A distinctive species with a very specific habitat requirement, such that it rarely grows with other orchid species. It could be confused with some forms of *Prasophyllum colensoi* Hook.f. that sometimes grow in wetlands but these are usually much shorter plants, with fewer reddish coloured flowers. The callus of the labellum in *P. colensoi* extends the whole length, almost to the apex, whereas that of *P. hectorii* is confined to the proximal part.

## FLOWERING

(November)– December–February

## FLOWER COLOURS

Green, Yellow

## FRUITING

November–May

## PROPAGATION TECHNIQUE

Difficult. Should not be removed from the wild.

## THREATS

This species has declined from most of its former coastal and lowland wetland haunts as a consequence of drainage, competition from weeds and on occasion excessive collection by botanists and plant collectors. Drainage is still the main threat to the majority of its remaining populations, several large ones of which are entirely on private land. Invasive weeds, particularly royal fern (*Osmunda regalis*) are a problem in Waikato. Previously recorded as *Prasophyllum* aff. *patens* (AK 236408; New Zealand) by de Lange et al. (2004).

## ETYMOLOGY

**prasophyllum**: From the Greek 'prasos' leek and phyllos 'leaf'

**hectorii**: Named after Sir James Hector, 19th century New Zealand geologist and botanist who was originally from Scotland

## WHERE TO BUY

Not commercially available

## TAXONOMIC NOTES

Until recently *Prasophyllum hectorii* has been known in New Zealand as *P. patens* R.Br. which is an Australian endemic. New Zealand plants have also been referred to *P. suttonii* Rogers et B.Rees, another Australian endemic. Recent molecular and morphological studies, as yet unpublished suggest that the two New Zealand *Prasophyllum* will need to be placed in another, as yet undescribed, new genus (Peter Weston pers. comm. November 2014).

## ATTRIBUTION

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

## REFERENCES AND FURTHER READING

de Lange PJ, Norton DA, Heenan PB, Courtney SP, Molloy BPJ, Ogle CC, Rance BD, Johnson PN, Hitchmough R. 2004. Threatened and uncommon plants of New Zealand. *New Zealand Journal of Botany* 42(1): 45–76.

<https://doi.org/10.1080/0028825X.2004.9512890>.

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

## NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Prasophyllum hectorii* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

<https://www.nzpcn.org.nz/flora/species/prasophyllum-hectorii/> (Date website was queried)

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/prasophyllum-hectorii/>