

Thelymitra longifolia

COMMON NAME

white sun orchid, māikuku

SYNONYMS

Thelymitra alba Colenso, *Thelymitra nemoralis* Colenso, *Thelymitra angustifolia* Hook.f., *Thelymitra aristata* sensu Hatch nom. inv., *Thelymitra forsteri* Sw., *Thelymitra grandis* F.Muel. ex Benth., *Thelymitra longifolia* var. *alba* (Colenso) Cheeseman, *Thelymitra longifolia* var. *forsteri* (Sw.) Hatch, *Thelymitra purpureo-fusca* Colenso

FAMILY

Orchidaceae

AUTHORITY

Thelymitra longifolia J.R.Forst. et G.Forst.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

No

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Orchids

NVS CODE

THELON

CHROMOSOME NUMBER

2n = 26

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Indigenous. New Zealand: Manawatāwhi / Three Kings Islands, North Island, South Island, Stewart Island/Rakiura, Chatham Islands, Auckland Islands. Also on Norfolk Island.

HABITAT

Coastal to subalpine (up to 1200 m a.s.l.). Occupying a wide range of habitats from open ultramafic talus to dense forest. However, it is most common in shrublands. This species is extremely variable and it is likely that following taxonomic revision, a number of forms, some with distinct ecologies, may be formally segregated.



Thelymitra longifolia. Photographer: Department of Conservation, Licence: Public domain.



Thelymitra longifolia. Photographer: Department of Conservation, Licence: Public domain.

DETAILED DESCRIPTION

Terrestrial, tuberous, glabrous, spring to summer-green perennial herb, either solitary or in dense colonies of 4–20 plants arising through vegetative extension. Plant at flower up to 1 m tall (usually much less). **Leaf** solitary, erect, suberect or trailing the ground, very fleshy to subcoriaceous, deeply to weakly channelled and prominently ribbed longitudinally, 50–380 × 10–40 mm, green, dark green, reddish-green, reddish brown or yellow-green, lanceolate to linear-lanceolate, base closely sheathing, margins, surface and apex often disfigured by black spots and sometimes by prominent dark orange-brown rust pustules. **Flowering stem** stiffly erect, rather wiry, green, reddish green to brownish green. **Bracts** 1–2–(3), foliaceous, closely-sheathing, fleshy, of similar colour to stem and leaf. **Raceme** bearing (1)–5–(20) scented or unscented flowers. **Flowers** 8–18 mm diameter, externally red-green to dark green, internally white or very pale pink, segments spreading, widely spreading or scarcely opening. **Dorsal sepal** slightly broader than lateral sepals. **Petals and labellum** alike, narrowly ovate, subacute. **Column** up to 8 mm long, erect, basally brown or white grading to dark brown to almost black toward apex; column arms terete, mostly bent inwards such that they are lying more or less under post-anther lobe; cilia abundant, floccose (like cotton) or coarsely ciliate, white or cream, short and crowded in globose masses; post anther lobe overtopping anther, dark and smooth above middle, and usually yellowish on the semi-circular cucullate apex.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to native orchids of New Zealand

SIMILAR TAXA

Most likely to be confused with *Thelymitra colensoi* Hook.f. and *T. pauciflora* R.Br., from both of which it differs by its usually white, sometimes pale pink flowers. From *T. pauciflora* it is readily separated by the broad, undivided, hooded column which usually completely encloses the cilia of the column arms. Smaller forms are separated from *T. colensoi* by their white flowers and broader, taller column which completely encloses the cilia of the column arms.

FLOWERING

September–February

FLOWER COLOURS

Red/Pink, White

FRUITING

October–April

PROPAGATION TECHNIQUE

Moderately easy to grow. Does well in a pot. Should not be removed from the wild. This species often naturalises into gardens adjoining indigenous vegetation. It is sometimes seen as a pot contaminant of commercial plant lines.

ETYMOLOGY

thelymitra: Woman's hat

longifolia: Long leaf

WHERE TO BUY

Not commercially available.

TAXONOMIC NOTES

At least three forms of *T. longifolia* are included here. One is usually associated with montane beech (Nothofagaceae) forests. This is a small slender plant, which has a linear-lanceolate yellow-green leaf and usually a single, scarcely opening, self-pollinating white flower. Another is a widespread variable plant with numerous flowers, which are unscented, and mostly only open on hot, still, sunny days. This form has column arm cilia that are distinctly floccose (like cotton wool). It is self pollinating and matches the type. The last form has numerous scented flowers, which open in sunny or cloudy weather, and coarse column arm cilia. This form is insect pollinated.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 14 April 2007. Description subsequently published in de Lange et al. (2007) and Rolfe & de Lange (2010).

REFERENCES AND FURTHER READING

de Lange P, Rolfe J, St George I, Sawyer J. 2007. Wild orchids of the lower North Island. Department of Conservation, Wellington, NZ. 194 p.

Rolfe JR, de Lange PJ. 2010. Illustrated guide to New Zealand sun orchids, *Thelymitra* (Orchidaceae). Jeremy Rolfe, Wellington, NZ. 57 p.

NZPCN FACT SHEET CITATION

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MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/thelymitra-longifolia/>