

Thelymitra pulchella

COMMON NAME

striped sun orchid, beautiful sun orchid

SYNONYMS

Thelymitra concinna Col., *Thelymitra fimbriata* Col., *Thelymitra pachyphylla* Cheeseman, *Thelymitra caesia* Petrie

FAMILY

Orchidaceae

AUTHORITY

Thelymitra pulchella Hook.f.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Orchids

NVS CODE

THEPUL

CHROMOSOME NUMBER

2n = 66

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. new Zealand: North Island, South Island, Stewart Island/Rakiura, Chatham Islands.

HABITAT

Widespread from coastal to montane areas (up to 800 m a.s.l.). Preferring open shrubland, clay plans and gumland vegetation, often in wetlands. Sometimes under mature kauri (*Agathis australis* (D.Don.) Lindl.) or along ridge lines in mature forest.

WETLAND PLANT INDICATOR STATUS RATING

FACW: Facultative Wetland

Usually is a hydrophyte but occasionally found in uplands (non-wetlands).



White Hills. Photographer: Eric Scanlen, Licence: CC BY-NC.



Karikari Peninsula. Photographer: Jeremy R. Rolfe, Date taken: 29/10/2008, Licence: CC BY.

DETAILED DESCRIPTION

Terrestrial, tuberous, glabrous, spring to summer-green perennial herb; found as solitary plants or growing in colonies of 4-many plants arising through vegetative extension. Plants at flower up to 800 mm tall. **Stem** robust, fleshy, erect, 2.5–4.8 mm diameter, yellow green to dark green (sometimes almost glaucous green). **Leaf** firmly fleshy to subcoriaceous, rather thick, erect to suberect, 80–240 × 6–20 mm, yellow-green, dark green to reddish green, channelled, deeply keeled and v-shaped in cross section. **Bracts** 2–4, foliaceous, closely sheathing, broadly to narrowly lanceolate, of similar colour to stems and leaves. **Inflorescence** a (1)–6–14-flowered raceme. **Flower** 10–18 mm diameter, segments usually blue or pink, rarely white, petals usually prominently striped with dark blue, sepals less markedly so; sometimes segments pink or blue without stripes. **Sepals and petals** similar, broadly ovate, lateral sepals slight narrower than the rest. **Labellum** slightly obovate. **Column** erect 6–8 mm tall, dark blue, pink, mauve, or white; post-anther lobe variable, mostly shorter than or equal to anther height, rarely taller; margins variable, usually thickened, sometimes slightly to prominently incurved, or irregularly denticulate and often tuberculate; usually dark orange, red-brown or red in the upper portion with the distal margins usually yellow; column-arms usually higher than anther, flat, red-brown to red, variably ornamented within a single raceme or population; most commonly with the margins thinly membranous, basally coloured red, toothed or lobed (anteriorly, posteriorly or both), the upper teeth grading into branched fimbriae, these extending to the top of the arm, or plain without ornamentation, or plain grading into teeth, or plain grading into fimbriae; teeth and fimbriae red, orange, yellow or in gradations between these.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to native orchids of New Zealand

SIMILAR TAXA

The prominently keeled, erect to suberect, rather thick and fleshy leaves are distinctive, while the usually striped flowers and rather variable, though usually reddish column arms of varying ornamentation are diagnostic of this species. It is most likely to be confused with *T. cyanea* (Lindl.) Benth. which differs by the absence of a post-anther lobe, and by its consistently ribbon-like, more or less spirally twisted, yellow column arms. It could also be confused with *T. xdentata* L.B.Moore a sterile hybrid that differs by the less brightly-coloured, inconspicuous column-arm teeth that extend down the from margin of the column-arm wing; and yellow cilia held in globose masses.

FLOWERING

October–January

FLOWER COLOURS

Blue, Red/Pink

FRUITING

December–April

PROPAGATION TECHNIQUE

Very easily grown in a sunny, well drained site. Often naturalises in gardens within urban areas abutting indigenous vegetation in northern New Zealand. Although easily cultivated, like all orchids it should not be removed from the wild.

ETYMOLOGY

thelymitra: Woman's hat

pulchella: Pretty little thing

WHERE TO BUY

Not commercially available.

NOTES ON TAXONOMY

An extremely variable plant that evolved through hybridisation with *Thelymitra cyanea* and *T. longifolia* J.R.Forst. et G.Forst. Both parents account for the wide variation in flower colour, column and column-arm shape, colour and ornamentation.

ATTRIBUTION

Description adapted from Moore and Edgar (1970).

REFERENCES AND FURTHER READING

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

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

MORE INFORMATION

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