

# Thelymitra formosa

## COMMON NAME

sun orchid

## FAMILY

Orchidaceae

## AUTHORITY

Thelymitra formosa Colenso

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Orchids

## NVS CODE

THEFOR

## CHROMOSOME NUMBER

2n = 40

## CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: EF, Sp

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: EF, Sp

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

2004 | Sparse

## DISTRIBUTION

Endemic. New Zealand: North Island, South Island, Stewart Island/Rakiura.

## HABITAT

Mainly found in lowland to montane wetlands, scrub and open forest.

Occasionally colonises roadside banks.

## WETLAND PLANT INDICATOR STATUS RATING

FAC: Facultative

Commonly occurs as either a hydrophyte or non-hydrophyte (non-wetlands).



Tuateawa Hill. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Subsoil bank, nr Tongariro. Photographer: Eric Scanlen, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Very stout, robust, usually solitary (sometimes colonial) orchid which at flowering is up to 0.8 m tall. **Stem** dark red-green or dark green (sometimes glaucous) stout, smooth. **Leaf** 100–400 × 10–20 mm, linear-lanceolate to lanceolate, usually dark green to red-green, channelled and finely ridged, rather fleshy (almost succulent) and thick, sheathing high up stem. **Inflorescences** 10–15-flowered. **Perianth** 9–13 mm long, light to dark blue, without stripes or spots. **Sepals, petals and labellum** similar, all narrowly-obovate. **Column-arms** flattened, more or less channelled, with yellow or orange fringes and cilia arising from margins, each arm projecting from inner face of side lobule, usually standing much taller than anther. **Post-anther lobe** shorter than anther, erect, margins yellowish red and more or less thickened into finger-like callii; side lobules taller than anther, pinkish or yellowish, fleshy, with subulate erect projections on margins and with similar or more elongated tubercles across the surface.

## MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to native orchids of New Zealand

## SIMILAR TAXA

A very distinctive and singular species of *Thelymitra*. It has no obvious close relatives though sterile plants or those in bud have some similarity to *T. ixioides* Sw., from which they can be distinguished by their smooth rather than finely rough stems and overall dark-green to reddish green, rather than somewhat glaucous-green to silvery red-green leaves. When in flower, the combination of pale to dark blue unspotted to striped flowers, distinctively flattened yellow or orange fringed/ciliate column-arms which project from the inner face of the side lobule are especially diagnostic of *T. formosa*. *Thelymitra formosa* is a very robust orchid which is usually found as solitary plants, though on occasion it may found quite substantial colonies.

## FLOWERING

November–January

## FLOWER COLOURS

Blue, Violet/Purple

## FRUITING

December–March

## PROPAGATION TECHNIQUE

Difficult. Should not be removed from the wild

## THREATS

An apparently naturally uncommon, biologically sparse species. Based on old herbarium specimens it does not appear to have ever been common at any particular location.

## ETYMOLOGY

**thelymitra**: Woman's hat

## WHERE TO BUY

Not commercially available.

## NOTES ON TAXONOMY

There is some uncertainty over the application of the name *Thelymitra formosa*—the type suite is largely another species *T. hatchii* L.B.Moore so further work on the status of plants referred to by the New Zealand Flora Series, Vol. II as *T. formosa* is needed. Description adapted from: Moore, L.B.; Edgar, E. 1970: Flora of New Zealand. Vol. II. Government Printer, Wellington.

## ATTRIBUTION

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

## 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.

### **NZPCN FACT SHEET CITATION**

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

### **MORE INFORMATION**

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