

Thelymitra tholiformis

COMMON NAME

domed sun orchid

SYNONYMS

None

FAMILY

Orchidaceae

AUTHORITY

Thelymitra tholiformis Molloy et Hatch

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Orchids

CHROMOSOME NUMBER

2n = 65, c.66

CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: Sp

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened | Qualifiers: EF

2004 | Sparse

DISTRIBUTION

Endemic. New Zealand: North Island (Te Paki south to northern Waikato).

HABITAT

A species favouring open clay pans, gumland scrub, or sparsely vegetated slopes in site where there once was, or still is kauri (*Agathis australis* (D.Don) Lindl.) forest. It may also colonise grassy verges along roadsides traversing kauri forest remnants and gumland scrub. This species responds well to periodic burning provided of course the former habitat had few or no fire-adapted weed species.



Mahurangi West. Photographer: Jeremy R. Rolfe, Date taken: 29/11/2008, Licence: CC BY.



Mahurangi West. Photographer: Jeremy R. Rolfe, Date taken: 29/11/2008, Licence: CC BY.

DETAILED DESCRIPTION

Stout plants either solitary or forming colonies, up to 0.6 m tall at flowering. **Leaf** up to 360 × 15 mm, green, often reddish-green near margins and base, linear-lanceolate, sub-erect, shallowly concave with exterior ridges on mature plants. **Basal sheath** up to 30 mm long, pale, truncate, mucronate. **Stem bracts** 2, 20–90 × 3–6 mm, lanceolate, sheathing in basal ½. **Floral bracts** 10–20 × 3–6 mm, lanceolate. **Inflorescence** 1–15-flowered. **Flowers** 10–15 mm diameter, pale to strong mauve, on short pedicels. **Perianth** cupped, parts ovate, apiculate, up to 12 × 5 mm; sepals narrower than petals; petals minutely papillate externally. **Column** 5 mm tall, erect, concave in side view, pale purple with yellow striae and a narrow purple band near top. **Post-anther lobe** as high as or exceeding anther, tholiform (dome-shaped) not hooded (cucullate), bright yellow, margin irregularly denticulate. **Column arms** more or less terete, horizontal or upturned, with short, dense, globose tufts of white cilia. **Anther** erect, apex pointed, sometimes curving forward. **Stigma** short, broad, more or less concave, bilobed; rostellum orbicular, very prominent. **Capsule** 10–15 × 5–7 mm, elliptic, green.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to native orchids of New Zealand

SIMILAR TAXA

Most likely to be confused with *Thelymitra aemula* Cheeseman and *T. ixioides* Sw., species with which it often grows. From *T. ixioides*, *T. tholiformis* can be immediately distinguished by its unspotted darker mauve flowers, and smooth, green leaves with reddish margins and ridges rather than reddish-green to glaucous silvery reddish-green leaves whose surfaces are finely rough to the touch. From *T. aemula*, *T. tholiformis* may be distinguished by its smaller overall size (0.4–0.6 cf. 0.7–0.9 m), narrow-linear rather than linear leaves that are coloured green with reddish margins and ridges, rather than dark green with reddish bases. The column of *T. aemula* is coloured white to mauve, flushed darker mauve near the apex, whereas in *T. tholiformis* the column is coloured pale purple with yellow striae and a purple band near the apex. In *T. aemula* the column has a prominent low, forward projecting fleshy yellow side lobe which is absent in *T. tholiformis*. *Thelymitra tholiformis* has 2n = 66 chromosomes, while *T. aemula* has 2n = 40 and *T. ixioides* 2n = 28.

FLOWERING

(October)–November–(December)

FLOWER COLOURS

Violet/Purple, White

FRUITING

October–February

PROPAGATION TECHNIQUE

Difficult. Should not be removed from the wild.

THREATS

Habitat loss and plant collectors. This species is usually associated with kauri forest remnants and gumland. In gumland it is very vulnerable to habitat modification and from competition by weed species. Fires seem to temporarily benefit this orchid which increases in abundance soon after a fire. Some populations near to Auckland have been seriously damaged by plant collectors. Despite these losses, over all the species appears to be much common than was once thought, having an apparently naturally sparse distribution.

ETYMOLOGY

thelymitra: Woman's hat

WHERE TO BUY

Not commercially available

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

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 tholiformis* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network. <https://www.nzpcn.org.nz/flora/species/thelymitra-tholiformis/> (Date website was queried)

MORE INFORMATION

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