

Sophora molloyi

COMMON NAME

Cook Strait kōwhai, Molloy's kōwhai

SYNONYMS

None (described in 2001)

FAMILY

Fabaceae

AUTHORITY

Sophora molloyi Heenan et de Lange

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

CHROMOSOME NUMBER

2n = 18

CURRENT CONSERVATION STATUS

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

PREVIOUS CONSERVATION STATUSES

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

2009 | At Risk – Naturally Uncommon

2004 | Range Restricted

BRIEF DESCRIPTION

A small dense kowhai tree to 3m tall bearing leaves to 100mm long that have equal-sized leaflets 5-12mm long and with bunches of drooping yellow flowers and dry ridged and knobbly seed pods 50-200mm long containing hard yellow seeds. Juveniles and adults similar. Inhabiting shores of Cook Strait.

DISTRIBUTION

Endemic. New Zealand: North Island (Cape Terawhiti, Turakirae, Palliser Bay) and the Cook Strait (Stephens, Rangitoto, Chetwode, Titi, Arapawa, and Kapiti Islands)

HABITAT

Coastal. Locally within grey scrub developed on cliff, talus, and active alluvial fans, or in extremely exposed locations, where drought, salt burn, and severe wind damage are significant constraints on plant growth and diversity



In cultivation. Photographer: Jeremy R. Rolfe, Date taken: 05/06/2004, Licence: CC BY.



Te Humenga, Cape Palliser. Photographer: Peter J. de Lange, Licence: CC BY-NC.

DETAILED DESCRIPTION

Bushy, spreading to decumbent shrub, up to 3 m high, with several prostrate, decumbent and/or spreading main branches arising at or near ground level. Divaricating and/or flexuose juvenile branchlets absent; branchlets prostrate, decumbent to spreading, moderately to densely pubescent becoming glabrous with age; hairs appressed, straight. Seedlings and juveniles moderately to densely leafy, leaves with increasing numbers of leaflets. Leaflets of juveniles 2.5-3.5 × 2.0-2.5 mm, rotund to broadly elliptic, sparsely to moderately hairy, not crowded or overlapping. Leaves on adults up to 100 mm long, imparipinnate, subconduplicate, petioles and rachides channelled above, leaflets 23-37. Leaflets on adults 5.0-12.0 × 2.0-6.0 mm, elliptic, elliptic oblong, to broadly elliptic, distal and proximal leaflets similar in size, not crowded or overlapping, distant, upper surface dark green, lower surface light green; apices round to slightly retuse; bases obtuse; petiolules 0.4-0.5 mm long; petioles, rachides, petiolules, and leaflets usually pubescent, hairs c.0.2 mm long, appressed, straight. Inflorescences racemose, with up to 5 flowers, flowers usually hidden among foliage; peduncles and rachides 10-20 mm long; Pedicels up to 15 mm long, each subtended by a bract; bracts 1-2 mm long; peduncles, rachides, pedicels, bracts, and calyces moderately to densely pubescent hairs brown, appressed. calyx 9-12 × 10-16 mm, cupulate, rim shallowly lobed, with deeper notch adjacent to standard. Corolla Yellow; keel Petal blade 26-30 × 7.5-11 mm; wing Petal blade 25-30 × 6.5-8.5 mm; standard petal blade 20-23 × 18-21 mm; petals with distinct claws, 4.5-7.5 mm long. stipe 5-7 mm long, glabrous to sparsely pubescent. Ovary 18-20 mm long, densely pubescent; hairs 0.2-0.4 mm long, off-white to light brown, appressed. Style 11-12 mm long, glabrous to sparsely pubescent. Stigma fringed with short hairs. Filaments 24-30 mm long. Anthers 1.7-2.1 × 0.8-0.9 mm. Fruit 50-100 mm long 4-winged, brown, sparsely to moderately pubescent, with up to 9 seeds. Seeds 4.3-8.8 × 3.0-4.0 mm, oblong, light brown to yellow.

SIMILAR TAXA

Easily recognised by its shrub growth habit, prostrate plants that are usually wider than high; with the main branches spreading to decumbent, sometimes prostrate, and lacking underground branches and rhizomes; and by the leaves which have 23-37 leaflets; these measuring 5.0-12.0 × 2.0-6.0 mm, elliptic, elliptic oblong, to broadly elliptic, and sparsely hairy; and by its geographic restriction to the Cook Strait islands and immediate southern North Island headlands where it is restricted to dry and exposed windy bluffs.

FLOWERING

April – October

FLOWER COLOURS

Yellow

FRUITING

June – May

PROPAGATION TECHNIQUE

Easy from seed. The hard seed coat should be lightly nicked or sanded and then soaked in water overnight before sowing to improve germination. Popular in cultivation where it is known as *Sophora* cv. Dragon's Gold

THREATS

A Naturally Uncommon, sparsely distributed, range restricted endemic, secure within its island habitats but possibly threatened in some of its North Island locations by browsing animals such as goats.

ETYMOLOGY

sophora: After the Arabic name for a similar tree

molloyi: The epithet "molloyi" honours Brian P. J. Molloy (1930–) an eminent New Zealand botanist, biosystematist, ecologist, and conservationist. Molloy's taxonomic interest covered New Zealand conifers, Melicytus, Pachystegia, Hebe, Leucogenes and especially New Zealand orchids.

ATTRIBUTION

Description from Heenan et al. (2001).

REFERENCES AND FURTHER READING

Heenan, P.B.; de Lange, P.J.; Wilton, A.D. 2001: *Sophora* (Fabaceae) in New Zealand: taxonomy, distribution, and biogeography. New Zealand Journal of Botany, 39: 17-53

MORE INFORMATION

