

Sophora godleyi

COMMON NAME

papa kōwhai, Godley's kōwhai

SYNONYMS

None (described in 2001)

FAMILY

Fabaceae

AUTHORITY

Sophora godleyi 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 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

BRIEF DESCRIPTION

A weeping kowhai tree bearing leaves to 170mm long that have equal-sized yellowish-hairy leaflets 2-8mm long and with bunches of drooping yellow flowers and dry ridged and knobbly seed pods 60-120mm long containing hard yellow seeds. Juveniles with zig-zagging branches. Occurring in Central North Island.

DISTRIBUTION

Endemic. New Zealand: North Island (in the west from Mokauiti River to the Manawatu)

HABITAT

Mainly on limestone and calcareous mudstones, siltstones, and sandstones (Papa), and on alluvium derived from these parent materials. It has also been collected from old sand dunes in the vicinity of Bulls and Lake Alice



Mataroa, Taihape, May. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Mataroa, Taihape, May. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DETAILED DESCRIPTION

Small to large tree, often up to 25 m high, with 1 main trunk or several prominent main branches; main branches upright to spreading. Divaricating and/or strongly flexuose, juvenile branchlets absent; branchlets densely pubescent, becoming glabrous with age; hairs appressed, spreading or patent, predominantly curly, curved, or twisted, also straight. Seedlings and juveniles moderately to densely leafy, leaves with increasing numbers of leaflets. Leaflets on juveniles 6.0–9.0 × 3.5–6.0 mm, ovate, ± orbicular to elliptic, glabrous to sparsely pubescent, becoming moderately pubescent, not crowded or overlapping. Leaves on adults up to 170 mm long, imparipinnate, petioles and rachides channelled above, leaflets 47–75. Leaflets on adults 2.0–8.0 × 2.0–5.0 mm ovate to broadly elliptic sometimes ± orbicular, distal leaflets usually smaller than proximal leaflets, sometimes crowded but not overlapping, adaxial surface grey to green; grey, abaxial surface lighter than adaxial surface and often concave; apices usually retuse to sometimes rounded; bases obtuse; petiolules up to 2 mm long, often only up to 0.5 mm long on leaflets < 3 mm long; petioles, rachides, petiolules, and leaflets usually pilose, sometimes villous, hairs 0.2–0.6 mm appressed, decumbent, spreading or patent, predominantly curly, curved, or twisted, but also straight. Inflorescences racemose, with up to 7 flowers; peduncle and rachis 20–40 mm long; pedicels up to 20 mm long, each subtended by a bract; bracts 1.5–3.5 mm long; peduncles, rachides, pedicels, bracts, and calyces moderately to densely pubescent; hairs brown appressed, decumbent, spreading, or patent. Calyx 9–13 × 10–16 mm, cupulate, rim shallowly lobed, with deeper notch adjacent to standard. Corolla yellow; keel petal blade 34–50 × 9–14 mm, wing petal blade 25–18 × 6–9 mm, standard petal blade 20–35 × 11–21 mm; petals with distinct claws, 5.0–6.5 mm long. Stipe 6–11 mm long, ± glabrous. Ovary 17–23 mm long, densely pubescent; hairs 0.4–0.7 mm long, off-white to light brown, appressed, spreading or patent, straight, curved or twisted. Style 12–14 mm long, exerted beyond anthers glabrous or with a few twisted hairs. Stigma fringed with short hairs. Filaments 25–40 mm long; anthers 1.8–2.0 × 0.9–1.0 mm. Fruit 60–120 mm long, 4-winged, brown, sparsely to moderately pubescent, with up to 11 seeds. Seeds 5–8 × 4–5 mm, oblong, yellow to yellow-brown.

SIMILAR TAXA

Distinguished from *Sophora fulvida* (Allan) Heenan et de Lange by the leaves which have 47–75 leaflets; by the ovate, broadly elliptic, to sometimes more or less orbicular leaflets, with a more or less distinct petiolule; by the leaflet hairs appressed, decumbent, spreading, or patent, predominantly curly, curved, or twisted; and restriction to the central North Island, where it grows on siltstone, sandstone, and mudstone (papa)

FLOWERING

October – December

FLOWER COLOURS

Yellow

FRUITING

January - 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. Can be grown from cuttings but these are usually very slow and hard to strike.

ETYMOLOGY

sophora: After the Arabic name for a similar tree

godleyi: Named after Eric John Godley (10 May 1919 – 27 June 2010[1]) OBE, FRSNZ, Hon FLS, Hon DSc (Cantuar.), AHRNZIH who was a New Zealand botanist and academic biographer.

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

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

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