

# Pittosporum patulum

## COMMON NAME

pitpat

## SYNONYMS

None

## FAMILY

Pittosporaceae

## AUTHORITY

*Pittosporum patulum* Hook.f.

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

## NVS CODE

PITPAT

## CHROMOSOME NUMBER

2n = 24

## CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Vulnerable | Qualifiers: CD, PD, RF, Sp

## PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Endangered | Qualifiers: CD, RF, Sp

2009 | Threatened – Nationally Endangered | Qualifiers: CD, RF, Sp

2004 | Threatened – Nationally Endangered

## BRIEF DESCRIPTION

Small tree (tree sized individuals very rare) bearing brownish green leathery leaves that are deeply lobed on juveniles but become smooth as plant ages inhabiting South Island mountain valleys. Flowers reddish, on long stalks. Fruit a hard capsule, splitting into two to show the black seeds in a orange pith.

## DISTRIBUTION

Endemic. New Zealand: South Island (North-west Nelson, and from eastern Nelson south to the head of Lake Hawea).

## HABITAT

This is a species of subalpine scrub and canopy gaps in mountain beech forest. It often occurs in sites that have undergone disturbance (e.g., avalanche chutes, fire induced scrub, and river margins), although it is not always required for regeneration. Strongholds of adults occur in subalpine scrub that are recruiting without disturbance, and bluffs in beech forest are similarly little-disturbed.



*Pittosporum patulum*. Photographer: A. J. Townsend, Licence: CC BY-NC.



*Pittosporum patulum*. Photographer: A. J. Townsend, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Gynodioecious tree up to 5 m tall. **Trunk** of juvenile and sub adults slender, becoming stouter in adults. **Bark** firm, pale-brown to grey-brown. **Branches** ascending to spreading, in juveniles absent or scarce until sub adult stage, becoming more frequent in plants bearing mature foliage; in either case branchlets marked by scars from fallen leaves. **Shoots, emergent foliage and peduncles** distinctly though sparsely puberulent; hairs fulvous. **Leaves** coriaceous, dark brown-green, chocolate-brown to dark-green, often blemished along margins with chocolate; juvenile leaves erecto patent, ascending, 30–60 × 5–8 mm, linear, lamina coarsely toothed, very rarely pinnatifid; leaves of sub adults similar but wider, with margins less deeply toothed, and never pinnatifid; adult foliage crowded toward branchlet ends; petioles stout, 5–15 mm long, lamina 40–50 × 10–20 mm, oblanceolate, narrow-obovate to obovate, rarely elliptic, margins entire, toothed or with fine teeth in upper ⅓, base attenuate, apex obtuse to subacute. **Flowers** in distinct, terminal, 4–8–10-flowered umbels, night-fragrant. **Pedicels** gracile, 10–20 mm long. **Sepals** 5, 3–6 mm long, narrow-ovate, acute, grey-green pilose hairy, becoming glabrescent. **Petals** 5, 6–8 mm, broadly lanceolate, apex obtuse to sub acute, recurving almost to base at anthesis, dark-red, pink, very rarely yellow. **Male flowers** with 5 functional stamens, anthers yellow, stigma rudimentary, rarely functional. **Female flowers** with 5 rudimentary stamens (often reduced to staminodes), stigma globose, functional. **Capsules** subglobose, 10 mm diameter, 2-valved, valves initially green, glabrescent, maturing grey-black to charcoal, woody. **Mucilage** dark orange to red. **Seeds** 5–8, irregular globose, black, surface glossy.

## SIMILAR TAXA

Juvenile plants of *Pittosporum patulum* could be confused with juvenile pōkākā (*Elaeocarpus hookerianus* Raoul) and *Aristotelia fruticosa* Hook.f. Species from which *P. patulum* juvenile plants can be distinguished by their tall slender, scarcely branching growth form (divaricating in pōkākā and *Aristotelia fruticosa*), and dark brown-green to chocolate brown, deeply toothed, linear leaves (variable in shape and colour in pōkākā and *Aristotelia fruticosa*). Adult plants are very distinctive and could not easily be confused with anything else.

## FLOWERING

Late spring – mid summer

## FLOWER COLOURS

Red/Pink, Yellow

## FRUITING

No information

## PROPAGATION TECHNIQUE

Grows readily from cuttings and fresh seed, although sometimes seed germination can vary in this species from 1–3 years. An excellent specimen tree. Although it does well in a range of conditions it prefers a fertile, moist soil.

## THREATS

*Pittosporum patulum* is palatable. Ungulates eat juvenile foliage, and possums eat both the juvenile and adult foliage and flowers. Rodents predate seed in litter beneath adult trees, and insect browse can deform new growth. Natural disturbance has eliminated some populations.

## ETYMOLOGY

**pittosporum**: Pitch seed

## ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 30 August 2006. Description adapted from Cooper (1956).

## REFERENCES AND FURTHER READING

Cooper RC. 1956. The Australian and New Zealand species of *Pittosporum*. *Annals of the Missouri Botanical Garden* 43: 87–188. <https://www.biodiversitylibrary.org/page/26841965#page/95/mode/1up>.

Townsend A. 1999. *Pittosporum patulum* recovery plan, 1999–2009. *Threatened Species Recovery Plan 28*.

Department of Conservation. <https://www.doc.govt.nz/globalassets/documents/science-and-technical/tsrp28.pdf>.

## NZPCN FACT SHEET CITATION

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

**MORE INFORMATION**

<https://www.nzpcn.org.nz/flora/species/pittosporum-patulum/>