

Pittosporum turneri

COMMON NAME

Turner's kōhūhū, tent pole tree

SYNONYMS

None

FAMILY

Pittosporaceae

AUTHORITY

Pittosporum turneri Petrie

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

CHROMOSOME NUMBER

2n = 24

CURRENT CONSERVATION STATUS

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

PREVIOUS CONSERVATION STATUSES

2012 | Threatened – Nationally Vulnerable | Qualifiers: CD, Inc, PD

2009 | Threatened – Nationally Vulnerable | Qualifiers: CD, Inc, PD

2004 | Threatened – Nationally Endangered

BRIEF DESCRIPTION

Rare small tree that goes through a column-shaped wide-angled juvenile form bearing a variety of small uneven often glossy leaves before becoming a normally-branched tree with 3–5cm long thick leathery leaves that are widest towards the tip. Twigs of juveniles bulge at junction. Capsule 7–10mm wide and splits into two.

DISTRIBUTION

Endemic. Confined to the central North Island, from southern Pureora to the Ruahine Range. Formerly present near Otorohanga.

HABITAT

A montane to subalpine small tree of forest/frost flat margins and grey scrub developed alongside streams.



Flower detail, Whenuakura Clearing (November). Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Kuratau. Photographer: Jeremy R. Rolfe, Date taken: 17/01/2009, Licence: CC BY.

DETAILED DESCRIPTION

Gynodioecious, small tree up to 8 m tall. Growth form columnar, juveniles and sub adults distinctly divaricating. Branches and branchlets of seedlings and saplings up to 1 m tall, sparse, spreading, divaricating, more or less interlacing and filiramulate; sub adult branches and branchlets, numerous, strongly divaricating, hexagonally interlacing and filiramulate; adult branches erect to shortly spreading, more or less fastigiated, weakly divaricating, non-filiramulate. Seedling leaves 5-20 x 2-4 mm, linear, deeply lobed or coarsely toothed, sometimes pinnatifid to lyrate-pinnatifid, bronze-green, red-green to cream or grey-green, often blemished with darker tones of red or brown. Sub adult leaves, firmly fleshy to coriaceous, 3-10 x 2-6 mm, red-green, cream, bronze-green, often flushed pink or maroon, linear to lanceolate, sometimes obovate or narrow-obovate, usually irregularly lobed, toothed or pinnatifid; these forms gradually giving way to adult foliage toward top of tree. Adult leaves rather coriaceous. Petioles stout, 1-2 mm long, fleshy. Leaf lamina 30-60 x 5-10 mm, dark green, green, often flushed with red; oblanceolate, obovate to narrowly obovate, clavate to linear-lanceolate, base cuneate to attenuate, apex obtuse to subacute, margins entire to weakly lobulate. Flowers in terminal 4-10-15-flowered umbels. Pedicels 10-15 mm long. Flowers night-fragrant. Sepals 5, 3-6 mm long, ovate-lanceolate, acute, pale green, sparsely pilose hairy. Petals 5, 8-10 mm, lanceolate, apex obtuse, recurving almost to base at anthesis, pink, red-pink, margins often darker than central portion; sometimes completely white. Male flowers with 5 functional stamens and one rudimentary or functional stigma, anthers yellow. Female flowers with 5 rudimentary stamen, stigma globose. Capsules subglobose, 7-10 mm diameter, 2-valved, valves weakly woody to woody, initially dark green maturing grey-black. Mucilage dark red. Seeds 5-8, globose to irregularly globose, black, surface glossy.

SIMILAR TAXA

Juvenile specimens of pokaka (*Elaeocarpus hookerianus*) can look rather similar because of their narrowly, erect, columnar growth habit and divaricating branches. However, pokaka branchlets lack the distinctive hexagonal branching pattern typical of *Pittosporum turneri*. Also juvenile pokaka leaves are more numerous, larger, more variable, usually heavily lobed, and the linear variations of this species are more deeply serrated.

FLOWERING

October to December.

FLOWER COLOURS

Green, Red/Pink

FRUITING

January - March.

PROPAGATION TECHNIQUE

Easy from fresh seed, which germinates within 6-12 months. An interesting specimen tree that is easily grown in a range of conditions, but does best in cooler climates, on free draining but moist soils. Specimens many take 10-15 years to reach adult stage

THREATS

The adult foliage of *Pittosporum turneri* is a favourite of possums and it is suspected that saplings are eaten by deer and goats. Several historic sites were eliminated due to land development for grazing and forestry. At most sites the species is vulnerable to weed invasion, a constant problem as the habitat *P. turneri* usually occupies requires frequent disturbance to maintain itself. Because of this requirement the species is also vulnerable to habitat loss through natural succession as vegetation matures. Some populations exhibit skewed sex ratios, others lack adult specimens, while others have hybridism issues with *P. divaricatum* Cockayne.

ETYMOLOGY

pittosporum: Pitch seed

WHERE TO BUY

Not commercially available.

NOTES ON ITS STATUS

Pittosporum turneri is a conservation anomaly. There are believed to be 30,000-50,000 plants in the wild. However, fewer than 400 of these are adults. Which is why this abundant species remains seriously threatened.

ATTRIBUTION

Fact sheet prepared by P.J. de Lange 30 August 2004. Description from de Lange et al. (2010).

REFERENCES AND FURTHER READING

de Lange, P.J.; Heenan, P.B.; Norton, D.A.; Rolfe, J.R.; Sawyer, J.W.D. 2010: Threatened Plants of New Zealand, Christchurch, Canterbury University Press.

Rogers, G. 1988. Parentless *Pittosporum turneri*. Wellington Botanical Society Bulletin, 44: 26-36

NZPCN FACT SHEET CITATION

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

MORE INFORMATION

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