

Podocarpus acutifolius

COMMON NAME

Westland tōtara, needle-leaved tōtara

FAMILY

Podocarpaceae

AUTHORITY

Podocarpus acutifolius Kirk

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Gymnosperms

NVS CODE

PODACU

CHROMOSOME NUMBER

2n = 34

CURRENT CONSERVATION STATUS

2017 | Not Threatened

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

DISTRIBUTION

Endemic. New Zealand: South Island (mostly westerly from the Buller River and adjoining tributaries, west and south to Martins Bay)

HABITAT

Lowland to montane along river flats, in forest or open shrubland and grassland. Often forming dense thickets along active and passive river channels.

WETLAND PLANT INDICATOR STATUS RATING

FAC: Facultative

Commonly occurs as either a hydrophyte or non-hydrophyte (non-wetlands).



Rotoiti, Nelson, January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Podocarpus acutifolius. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DETAILED DESCRIPTION

Shrub or small tree up to 15 m tall. **Trunk** often several (due to suckering from base), main trunk up to 0.4 m diameter breast height. **Bark** somewhat chartaceous, stringy and thin, flaking readily in long or short strips. **Branches** erect, slender up to 9 m. **Branchlets** erect, slender initially densely leafy, leaves shedding along branchlet with age. **Leaves** 15.0–23.0 × 0.75–3.5 mm, dark green to yellow-green, linear, acuminate, pungent, mid-vein indistinct; stomatal lines often conspicuous. **Male strobili** axillary, solitary or up to 4 together on common peduncle 2–3 mm long; peduncle furnished above with 2 narrow-triangular keeled scales and below with 4 ovate scales; strobilus 10–20 mm long; apiculus obtuse. **Ovules** solitary or in pairs on peduncle c.1 mm long; receptacle 2.5–7.0 mm long, red irregularly elliptic-oblong to obovate-oblong, slightly compressed, smooth, swollen (fleshy). **Seeds** solitary or paired, 4.0–5.5 mm long, green when fresh, elliptic to ovate-elliptic, slightly asymmetric, narrow-acuminate, blunt or subacute.

SIMILAR TAXA

Podocarpus acutifolius is superficially similar to *P. totara* var. *waihoensis*—which is believed to be a hybrid arising from introgression between *P. acutifolius* and *P. totara* var. *totara* (see Wardle 1972). Both tōtara species are occasionally found growing sympatrically or even syntopically. *Podocarpus acutifolius* differs from *P. totara* var. *waihoensis* by its usually smaller shrubby growth habit, much narrower leaves, tree habit, and seeds which are elliptic to ovate-elliptic and narrowly beaked (cf. broadly elliptic, shortly and more broadly beaked). From the other totara, *P. acutifolius* differs by the suckering and multi-trunked often shrubby growth habit, much slender branches, narrow-linear leaves, and elliptic to ovate-elliptic, narrowly beaked seeds.

FLOWERING

September–November

FLOWER COLOURS

No flowers

FRUITING

December–June

PROPAGATION TECHNIQUE

Easily grown from hardwood cuttings and fresh seed. Does well in full sun in a well drained, moist fertile soil. *Podocarpus acutifolius* is moderately fast growing due to its compact, upright branching growth habit makes an excellent hedge. The species is rather variable ranging from large shrubs to small trees and there does seem to be some genetic basis for this. The most commonly cultivated form of it (at least in the North Island) makes a densely branched shrub up to 4 m tall and 2 m wide. Although reasonably drought tolerant, *P. acutifolius* does best in a damp soil, and is an excellent shrub to plant along waterways in urban areas. When planted in mass its fine sharp needles serve as an almost unequalled deterrent to animals and unwanted “visitors”.

ETYMOLOGY

podocarpus: Foot or stalk fruit

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 4 January 2012. Description adapted from Allan (1961) and Webb & Simpson (2001).

REFERENCES AND FURTHER READING

- Allan HH. 1961. Flora of New Zealand, Volume I. Indigenous Tracheophyta: Psilopsida, Lycopsida, Filicopsida, Gymnospermae, Dicotyledones. Government Printer, Wellington, NZ. 1085 p.
- Wardle P. 1972. *Podocarpus totara* var. *waihoensis* var. *nov.*: the result of introgressive hybridisation between *P. totara* and *P. acutifolius*. *New Zealand Journal of Botany* 10(1): 195–201.
<https://doi.org/10.1080/0028825X.1972.10430218>.
- Webb CJ, Simpson MJA. 2001. Seeds of New Zealand Gymnosperms and Dicotyledons. Manuka Press, Christchurch. 428 p.

NZPCN FACT SHEET CITATION

Please cite as: de Lange, P.J. (Year at time of access): *Podocarpus acutifolius* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

<https://www.nzpcn.org.nz/flora/species/podocarpus-acutifolius/> (Date website was queried)

MORE INFORMATION

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