Leptospermum scoparium var. scoparium

COMMON NAME

mānuka, kahikātoa

SYNONYMS

None - a myriad of varieties have been proposed none of which has been strictly synonymised within L. scoparium. Allan (1961) discusses some of these, and accepted one (var. incanum). A modern taxonomic assessment of Leptospermum scoparium is urgently needed.

FAMILY

Myrtaceae

AUTHORITY

Leptospermum scoparium J.R.Forst. et G.Forst. var. scoparium

FLORA CATEGORY

Vascular - Native

ENDEMIC TAXON

No

ENDEMIC GENUS

Nο

ENDEMIC FAMILY

Nο

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

CHROMOSOME NUMBER

2n = 22

CURRENT CONSERVATION STATUS

2017 | At Risk - Declining | Qualifiers: DP, De

PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

BRIEF DESCRIPTION

Common small prickly shrub or small tree with flaky bark and more or less hairy new growth and bearing masses of oval pointed leaves and white or pinkish red-centred flowers. Leaves hard, 5–20 mm long by 1–8 mm wide, prickly to grasp. Flowers to 25 mm wide. Fruit a dry 5–7mm wide capsule.





Southern Tararua Range. Photographer: Jeremy R. Rolfe, Date taken: 23/12/2007, Licence: CC BY.



Taken in Coromandel, February. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DISTRIBUTION

Indigenous. New Zealand and Australia. Most Australian forms of *L. scoparium* do not match the range seen in New Zealand. However, plants from Tasmania are very similar, if not identical, to some South Island forms, differing in having a lignotuber, wider leaf bases, and longer, more pungent leaf apices. *Leptospermum scoparium* was also collected once from Rarotonga by Thomas Cheeseman in the 1800s. It has not been found there since. It's biostatus on that island is unclear.

HABITAT

Abundant from coastal situations to low alpine habitats.

WETLAND PLANT INDICATOR STATUS RATING

FAC: Facultative

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

DETAILED DESCRIPTION

Decumbent shrub, subshrub, or small tree up to 5 m in height and in decumbent forms 2–4 m across. **Bark** light grey to charcoal grey, peeling in long papery flakes, these curling with age. **Wood** red. **Branches** numerous erect, spreading or decumbent, arising from base, sometimes sprouting adventitious roots and/or layering on contact with soil; young branches densely to sparingly clad in long silky, white hairs. **Leaves** leathery, pale to dark green, glabrescent to glabrous, linear-filiform, narrowly lanceolate, lanceolate, oblanceolate, to elliptic or obovate $(5)-10-15-(20) \times 1-2-5-(8)$ mm, invariably apex drawn out into a long stiff, pungent point, midrib usaully distinct sometimes obscure, leaf margin finely crenate, veins simple, scarcely branched; young leaves densely to sparingly clad in long silky, white hairs. **Flowers** solitary in leaf axils, (8)-10-20-(25) mm diameter; flower buds densely to sparingly clad in long silky, white hairs. **Receptacle** dark red, crimson or pink. **Petals** white, sometimes flushed pink or dark red. **Stamens** numerous.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the Myrtaceae of New Zealand

SIMILAR TAXA

With the exception of *L. scoparium* var. *incanum* a broad circumscription of the New Zealand forms of mānuka (*L. scoparium*) has been adopted. In this sense, mānuka could only be confused with kānuka (*Kunzea* spp.) and Great Barrier Island kānuka (*Kunzea* sinclairii), from which it can be easily distinguished by the hard, persistent, circular, nut-like fruits, with non persistent sepals, sharp-tipped minutely denticulate leaves, and flowers which appear to be solitary.

FLOWERING

Throughout the year

FLOWER COLOURS

Red/Pink, White

FRUITING

The capsules are long persistent so invariably mature plants possess at least some capsules.

PROPAGATION TECHNIQUE

Very easy from fresh seed. Seed must be sown fresh, even if left for a few weeks before sowing viability can drop, especially if seed is allowed to dry out. Difficult from cuttings.

THREATS

Although widespread and common, some stands are at risk from clearance for farmland or through felling for firewood. The recent (2017) arrival of myrtle rust (*Austropuccinia psidii*) may pose a more serious threat to *Leptospermum* (see below). See <u>myrtlerust.org.nz</u> for more information about this invasive fungus.

ETYMOLOGY

leptospermum: Slender seed **scoparium**: Like a broom

WHERE TO BUY

Commonly cultivated. However many garden forms are horticultural selections based on crosses between *L. scoparium* var. *incanum* and white or red-flowered *L. scoparium* var. *scoparium*. Some seem to represent natural variations, others may stem for deliberate crosses with Australian forms of *L. scoparium* and allied species. Recently a number of Australian *Leptospermum* have been introduced into New Zealand, and these have been deliberately crossed with manuka.

MYRTLE RUST THREAT

Myrtle rust (*Austropuccinia psidii*) was first detected in New Zealand in 2017. As there is as yet no known effective treatment for that rust. Overseas indications are that this rust is having a serious impact on Myrtaceae worldwide, including causing such severe declines in some that extinction of some species and genera seems inevitable. As such the New Zealand Threat Listing Panel elected to list all indigenous Myrtaceae using the 'Precautionary Principle' as 'Threatened' (de Lange et al. 2018). Hopefully this assessment will be proved wrong. As of 2018 there have been very few occurrences of myrtle rust on *Leptospermum*. However, the rust is still in its early establishment phase. Australian experience suggests it may take 10 or more years to truly establish which New Zealand Myrtaceae will be most affected.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 1 February 2004. Description by P.J. de Lange.

REFERENCES AND FURTHER READING

de Lange, P.J.; Rolfe, J.R.; Barkla, J.W.; Courtney, S.P.; Champion, P.D.; Perrie, L.R.; Beadel, S.M.; Ford, K.A.; Breitwieser, I.; Schönberger, I.; Hindmarsh-Walls, R.; Heenan, P.B.; Ladley, K. 2018: Conservation status of New Zealand indigenous vascular plants. 2017. *New Zealand Threat Classification Series 22*: 1–82.

Gardner, R. 2002. Notes towards an excursion Flora .Manuka *Leptospermum scoparium* myrtaceae. Auckland Botanical Society Journal, 57: 147-149

NZPCN FACT SHEET CITATION

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https://www.nzpcn.org.nz/flora/species/leptospermum-scoparium-var-scoparium/ (Date website was queried)

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/leptospermum-scoparium-var-scoparium/