

# Metrosideros excelsa

## COMMON NAME

pōhutukawa

## SYNONYMS

*Metrosideros tomentosa* Richard

## FAMILY

Myrtaceae

## AUTHORITY

*Metrosideros excelsa* Sol. ex Gaertn.

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

## NVS CODE

METEXC

## CHROMOSOME NUMBER

2n = 22

## CURRENT CONSERVATION STATUS

2017 | Threatened – Nationally Vulnerable | Qualifiers: DP, De

## PREVIOUS CONSERVATION STATUSES

2012 | Not Threatened

2009 | Not Threatened

2004 | Not Threatened

## BRIEF DESCRIPTION

Large sprawling mainly coastal tree with leathery oval leaves, bearing masses of red bristly flowers over Christmas. Naturally occurring north of Poverty Bay and north Taranaki, but can be now found as far south as Dunedin. Branches sprawling up to around 20 metres, often with masses of dangling reddish rootlets.

## DISTRIBUTION

Endemic. New Zealand: Manawatāwhi / Three Kings Islands, North Island from North Cape to about Pukearuhe, (northern Taranaki) in the west and near Mahia Peninsula (in the east). However, exact southern limit is difficult to ascertain as it has been widely planted and there is evidence that old time Maori cultivated the tree in some southerly areas. Found inland around the Rotorua Lakes and at Lake Taupo—though these occurrences could stem from Maori plantings (though the association of other usually coastal species around these lakes argues against this). Now widely planted throughout the rest of New Zealand (especially around Nelson, the Marlborough Sounds, the Kaikoura Coast and on the west coast to about Hokitika).



A Pohutukawa flower. Photographer: Department of Conservation, Licence: Public domain.



Pohutukawa flower. Photographer: Department of Conservation, Licence: Public domain.

## HABITAT

Coastal forest and on occasion inland around lake margins. Also in the far north occasionally an associate of kauri forest. In some northerly locations it forms forest type in its own right—this forest is dominated by pōhutukawa, other associates often include tawāpou (*Planchonella costata*), kohekohe (*Didymocheton spectabilis*), pūriri (*Vitex lucens*), karaka (*Corynocarpus laevigatus*) and, on rodent-free offshore islands, the frequent presence of coastal maire (*Nestegis apetala*), and milk tree (*Streblus banksii*) suggests these species too may once have been important in mainland examples of pōhutukawa forest.

## WETLAND PLANT INDICATOR STATUS RATING

UPL: Obligate Upland

Rarely is a hydrophyte, almost always in uplands (non-wetlands).

## DETAILED DESCRIPTION

Tree up to 20 m tall with canopy spread of 10–50 m. Specimens typically multi-trunked from base, trunks up to 2 m diameter, branches spreading, and often arching, sometimes looping over ground, and/or bearing “brooms” of aerial adventitious roots. **Branchlets** numerous, twiggy and long-persistent; young branchlets tomentose, being covered in fine, deciduous, greyish-white hairs. **Bark** firm, persistent and difficult to detach, often deeply furrowed, grey to grey-brown, somewhat corky. **Leaves** of all but water shoots leathery, 25–120 × 25–60 mm, elliptic, oblong, rarely lanceolate, apex acute or obtuse, dark olive-green, undersides thickly clad in white tomentum, adaxial surface at first distinctly tomentose but hairs shedding with leaf maturation. **Flowers** borne on stout, tomentose pedicels crimson, orange, pink, yellow (or very rarely white). **Hypanthium** obconic, calyx lobes triangular (deltoid).

## MANAAKI WHENUA ONLINE INTERACTIVE KEY

[Key to the Myrtaceae of New Zealand](#)

## SIMILAR TAXA

In New Zealand it is most frequently confused with the Kermadec pōhutukawa (*Metrosideros kermadecensis*) which is endemic to Raoul Island (Kermadec Islands). This island endemic differs by the smaller, rounder leaves, and much smaller inflorescences. It also has a tendency to sporadically flower throughout the year and on the New Zealand mainland at least it has a more erect, shrubby growth form, and rarely (if ever) makes a big tree.

## FLOWERING

(August)–November–December–(March)

## FLOWER COLOURS

Red/Pink, Yellow

## FRUITING

(January)–March–April–(May)

## 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. Very difficult from cuttings, though soft wood water shoots give the best results. Can be grafted onto seedlings.

## THREATS

Like all New Zealand tree *Metrosideros*, pōhutukawa is most at risk from possum (*Trichosurus vulpecula*) browse. These can seriously damage and even kill trees. Often where their browsing occurs within sites of unrestricted stock and vehicle access, pōhutukawa forest is in danger of becoming locally extinct. It does remain common over large parts of its range, a situation being greatly improved by the efforts of people encouraged by the national coordination of Project Crimson—a non profit organisation set up to protect, enhance and/or establish pōhutukawa forest, as well as promote the species use, and its conservation.

Myrtle Rust (*Austropuccinia psidii*) is an invasive fungus which threatens native myrtle species—learn more [myrtlerust.org.nz](http://myrtlerust.org.nz)

## ETYMOLOGY

**metrosideros**: Iron heart

**excelsa**: Tall

### **WHERE TO BUY**

Commonly sold by most retail nurseries.

### **VIDEO STORY**

[Project Crimson in Kawhia - TVNZ / DOC Meet the Locals Story.](#)

### **ATTRIBUTION**

Fact sheet prepared for NZPCN by: P.J. de Lange (4 January 2004). Description adapted from Allan (1961).

### **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.

### **NZPCN FACT SHEET CITATION**

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

### **MORE INFORMATION**

<https://www.nzpcn.org.nz/flora/species/metrosideros-excelsa/>