

Metrosideros robusta

COMMON NAME

northern rātā

SYNONYMS

Metrosideros florida Hook.f.

FAMILY

Myrtaceae

AUTHORITY

Metrosideros robusta A.Cunn.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Trees & Shrubs - Dicotyledons

NVS CODE

METROB

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

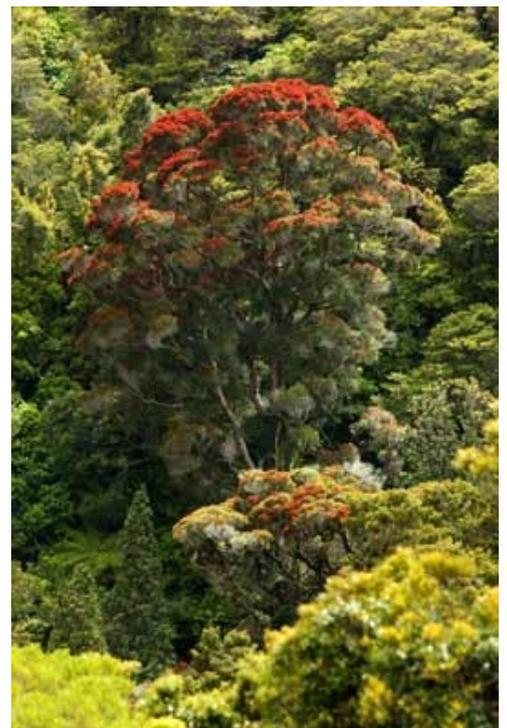
Tall forest tree that sends roots down a host tree which is eventually strangled bearing pairs of oval leaves with a small dent at the tip and masses of red bristly flowers in summer. Twigs square in cross section and fuzzy when young. Leaves 2.5–5 cm long by 1.5–2 cm wide.

DISTRIBUTION

Endemic. New Zealand: Manawatāwhi / Three Kings Islands, North Island (formerly widespread from Te Pahi south to Wellington, now scarce over large parts of this range, and apparently absent from the Hawke's Bay), South Island (abundant from Nelson west and south to Greymouth, from there locally common to about Hokitika, reaching a southern limit just south of Lake Mahinapua. In the east recently recorded from one site near Okiwi Bay, western Marlborough Sounds—though this site is unusual and may not be natural).



Pinehaven, Upper Hutt. Photographer: Jeremy R. Rolfe, Date taken: 31/12/2004, Licence: CC BY.



Northern rata. Photographer: Robyn Smith, Licence: CC BY-NC.

HABITAT

Coastal and lowland forest occasionally extending to montane forest in some parts of the country. Once the co-dominant emergent tree of a distinctive vegetation type called rimu (*Dacrydium cupressinum*)/rātā forest.

WETLAND PLANT INDICATOR STATUS RATING

FACU: Facultative Upland

Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).

DETAILED DESCRIPTION

Stout tree 25–40 m tall, often starting life as epiphyte, so basal trunk is hollow, and composed of interlocking roots. **Trunk** 2–3–(4) m diameter. **Bark** firm, persistent, grey-brown, brown or rarely pale yellow, tessellated, shallowly furrowed, somewhat corky. **Branchlets** numerous, very twiggy (broom-like), puberulent with rust-brown hairs when young. **Leaves** (excluding water shoots) 25–50–(65) × (10)–15–25–(30) mm, leathery, dark-green, elliptic, ovate-oblong, to rhomboidal, apex obtuse, distinctly notched. **Young growth** pink, finely covered in rust-brown hairs, becoming glabrescent with age (hairs long persistent on midrib and leaf base). **Water shoots**: variable shape and size, glabrescent, pale green or yellow-green, delicate and wilting if detached from tree. **Inflorescence** a broad, terminal corymbiform, cymose, cluster of numerous flowers apically dominated by a temporarily dormant vegetative bud, which recommences growth following flowering. **Pedicels** 5–8 mm long. **Hypanthia** obconic, 9 mm long, sepals broad-triangular, petals shedding early, 2 × 3 mm, oblong, dark red, pink, orange or yellow, stamens numerous (25)–30–40 mm long, anthers versatile, pollen dark yellow to orange. **Pistil** similar length, stigma capitate. **Ovary** fused to hypanthium, ovules numerous. **Capsules** oblong 6–9 mm, distinctly raised above sepals and hypanthial rim. **Seeds** 2.5–5.5 mm, narrowly elliptic to linear, often twisted with apices usually curved or hooked.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the Myrtaceae of New Zealand

SIMILAR TAXA

A distinctive species easily recognised by the small elliptic, ovate-oblong to rhomboidal dark green leaves, which possess a prominent apical notch. The young growth is often pink and is always finely covered in rust-coloured hairs. The hairs are slowly shed as the foliage matures but usually persists along the midrib and near the leaf base.

FLOWERING

(October)–November–January–(February)

FLOWER COLOURS

Orange, Red/Pink

FRUITING

(December)–January–(March)

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

Northern rātā is most at risk from possum (*Trichosurus vulpecula*) browse. Possums can seriously damage and kill trees, and have, in some situations been directly responsible for the regional loss of northern rata. The species remains common over large parts of range, a situation being improved by the efforts of people encouraged by the national coordination of Project Crimson. Another threat to northern rata comes from hybridisation with pohutukawa (*Metrosideros excelsa*) which has now become established well south of its presumed natural southern limits. Ideally people should be discouraged from planting pohutukawa in places it is not natural to, especially when this borders habitats containing northern or southern rata (*Metrosideros umbellata*).

When myrtle rust (*Austropuccinia psidii*) was detected in New Zealand (May 2017) the conservation status was upgraded as a precautionary measure to 'Threatened – Nationally Vulnerable' because, on best advice, it was believed that no indigenous Myrtaceae had resistance to the myrtle rust disease (de Lange et al. 2018).

Myrtle rust (*Austropuccinia psidii*) is an invasive fungus that threatens native myrtle species. Learn more myrtlerust.org.nz.

ETYMOLOGY

metrosideros: Iron heart

robusta: Sturdy

WHERE TO BUY

Sold by a number of mainline and specialist native plant nurseries. However, many plants sold as northern rata are hybrids between it and pohutukawa.

VIDEO STORY

[Project Crimson](#) - 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, Lycopsidea, Filicopsida, Gymnospermae, Dicotyledones. Government Printer, Wellington, NZ. 1085 p.

Beddie AD. 1953. Root behaviour in *Metrosideros*. *Wellington Botanical Society Bulletin* 26: 2–6.

Hosking G. 1994: Report on Northern rata dieback - Minginui faces. *Department of Conservation Advisory Science Notes* 66. 12 p. Available online in to parts:

<https://www.doc.govt.nz/globalassets/documents/science-and-technical/casn66.pdf>,

<https://www.doc.govt.nz/globalassets/documents/science-and-technical/casn66a.pdf>.

Sawyer JWD, Mckessar K. 2007. Northern rata (*Metrosideros robusta*): a species in decline? *Wellington Botanical Society Bulletin* 50: 48–55.

NZPCN FACT SHEET CITATION

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

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

MORE INFORMATION

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