# NZ Myrtaceae Key - Online edition

# Metrosideros robusta A.Cunn.

## **Common Names**

northern rātā, rakapika, rātā

## Origin

New Zealand endemic.

### Cultivation

Easily propagated from fresh seed but takes many years to flower in cultivation. Two cultivars have been named (*Metrosideros robusta* 'Kawa Copper' and 'Krinkley'), but are not widely grown.

#### Distribution

Three Kings, North Island (apparently absent from Hawkes Bay district) and northern South Island (from western Marlborough Sounds (French Pass) through Nelson and Westland to Lake Mahinapua). Mostly in coastal and lowland forest.

# **Distinguishing Features**

- Starts off as epiphyte in forests, with roots encircling the host tree to leave a hollow basal trunk composed of interlocking roots.
- Leaves elliptic to ovate-oblong.
- Lower surface of leaves not velvety.
- Leaf tips usually notched.
- Flowers mostly dark red, rarely orange or yellow.
- Flower-cluster stalks, individual flower stalks, base of flowers and outer surface of sepals all with short, brown hairs.
- Stamens 30–40 mm long.

#### Habit

Emergent tree up to 25 m or more tall, often starting off as an epiphyte, adult tree with hollow basal trunk composed of interlocking roots which enclose the space left by the former host tree.

### Bark and Stem/Trunk

Bark firm, mostly brown to grey-brown, slightly corky. Branchlets thin and square-shaped, appearing broom-like, covered in short, soft hairs when young, but becoming hairless with age.

#### Leaves

Leaves arranged in opposite pairs, each pair being at right angles to the pair below, leathery, elliptic to ovate-oblong, 25-50(-60) mm long, 15-25(-40) mm wide, upper surface of adult leaves dark green, slightly paler below, leaf surface flat, not puckered, upper surface and lower surface hairless (juvenile leaves may have scattered hairs along the midrib), midrib hardly raised, oil glands not readily visible on either surface; margins entire; tips rounded, though sometimes narrowing abruptly, usually notched; leaf stalks  $\pm$  3–5 mm long, hairy when young, hairless with age.

# **Flowers**

Flowers in rounded terminal clusters, cluster-branchlets often 3-flowered, or flowers solitary on cluster axis. Flowers  $\pm$  8–12 mm in diam., mature flower stalks  $\pm$  5–6 mm long,  $\pm$  1 mm wide, petals 5, red; sepals 5, tips free, persistent; stalks and base of flowers and outer surface of sepals all with short, brown hairs; stamens mostly dark red (rarely orange or yellow), filaments  $\pm$  30–40 mm long, much longer than petals. Main flowering period: spring to summer.

#### **Fruit**

Fruit dry,  $\pm$  6–7 mm wide, upper dome of capsule distinctly raised above the calyx tube, calyx tube as wide as fruit, seeds released through open valves.

# Similar Species

Sterile branches of *M. bartlettii* and *M. robusta* are frequently confused in cultivation and in the wild. The leaf tips of *M. robusta* are usually notched whereas those of *M. bartlettii* are narrowed gradually (attenuate) and not notched; the juvenile leaves and their margins of *M. bartlettii* are sparsely hairy, whereas in *M. robusta* they are hairless.

Metrosideros robusta and M. umbellata are also commonly confused in places where their ranges overlap (and they also sometimes hybridise). Metrosideros umbellata differs from M. robusta in that the young branchlets are virtually hairless, and the leaves have very glossy surfaces and a consistently acute leaf apex. The ranges of both species overlap in Northland, Coromandel, the Kaimai and Tararua Ranges and in North West Nelson.

Metrosideros excelsa is also similar to M. robusta (with which it can hybridise) but differs in that adult trees possess leaves mostly velvety below as opposed to hairless below; without notched tips as opposed to with notched leaf tips; midrib raised as opposed to not raised; flower-cluster stalks, individual flower stalks, base of flowers and outer surface of sepals all copiously hairy as opposed to flower-cluster

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stalks, individual flower stalks, base of flowers and outer surface of sepals all with short hairs; mature flower stalks stout ( $\pm$  2 mm wide) as opposed to  $\pm$  1 mm wide.

Hybrids between *M. excelsa* and *M. robusta*, which occur naturally where their ranges overlap and also in cultivation, having characteristics between those of the parents, may be confused with whichever parent they appear most similar to. For instance, a specimen with larger leaf size, the leaf margin somewhat rolled under, and presence of some velvety hairs on the leaf underside, but similar in other ways to *M. robusta*, would suggest a hybrid with *M. excelsa*.

*Metrosideros robusta* also has some similarities with *M. kermadecensis*, but differs in that the adult leaves are generally hairless (if present, then hairs red) as opposed to grey-white velvety hairs on the lower leaf surface of *M. kermadecensis*. Also, the stamen filaments are longer in *M. robusta* (30–40 mm long as opposed to 10–23 mm long).

#### **Notes**

Metrosideros robusta is susceptible to myrtle rust (caused by Austropuccinia psidii). Metrosideros robusta was given a conservation status of Threatened – Nationally Vulnerable in 2018. In large parts of its range this species is also at risk from possum (*Trichosurus vulpecula*) browse. Possums can seriously damage and kill trees, and have, in some situations, been responsible for the regional loss of northern rātā.

Metrosideros is a genus of more than 50 species of trees, shrubs and vines, mostly found in the Pacific region. New Zealand is well represented by having 12 endemic species.

#### **External Links**

- CitSciHub
- Flora of New Zealand Online
- GBIF
- iNaturalist NZ
- NZPCN

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