

# Metrosideros bartlettii

## COMMON NAME

Rata moehau, Bartlett's rata

## SYNONYMS

None

## FAMILY

Myrtaceae

## AUTHORITY

*Metrosideros bartlettii* J.W.Dawson

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Dicotyledonous Trees & Shrubs

## NVS CODE

METBAR

## CHROMOSOME NUMBER

$2n = 22$

## CURRENT CONSERVATION STATUS

2012 | Threatened – Nationally Critical | Qualifiers: CD, RR

## PREVIOUS CONSERVATION STATUSES

2009 | Threatened – Nationally Critical | Qualifiers: CD, RR

2004 | Threatened – Nationally Critical

## BRIEF DESCRIPTION

Forest tree (up to 30 m tall). Bark grey-white to white, spongy, tissue-like, and readily flaking. Emergent leaves yellow-green, mature leaves dark green, margins distinctly hairy. Inflorescences white.

## DISTRIBUTION

Endemic. North Island, Northland, Te Pahi, where it is only known from three forest remnants near Spirits Bay. These are Radar Bush, Kohuronaki and Unuwahao Bush.

## HABITAT

An emergent or canopy tree of northern coastal and lowland broad-leaved forest. Usually starting life as an epiphyte on puriri (*Vitex lucens*), taraire (*Beilschimedia tarairi*), rewarewa (*Knightia excelsa*) and tree ferns (*Cyathea* spp.). Occasional specimens have been found growing terrestrially on rock outcrops, boulders and cliff faces.



Te Pahi, Northland. Photographer: Peter de Lange



*Metrosideros bartlettii* tree, Radar Bush, Te Pahi. Photographer: John Smith-Dodsworth

## FEATURES

Tree up to 30 m with a trunk up to 1.5 m diameter, often initially epiphytic on trees or tree ferns; bark pale grey to whitish, spongy, separating into soft flakes, shedding freely; young twigs dark red, 4-angled to rounded and with long-persistent, white spreading hairs. Leaves on petioles 4–5 × 1 mm, lamina 30–50 × 15–26 mm, elliptic to ovate, base cuneate, apex acute to attenuate, often twisted; young leaves pale green to yellow-green, somewhat glossy, petioles, margins and midribs pubescent, with the hairs tending to persist on midribs and petioles; mature leaves dark green above pale beneath, upper surface glossy, veins evident, lower surface glossy, entire vein network evident, oil glands obscure, midrib raised below, impressed above. Inflorescences with 3-4 pairs of cymules, ± densely tomentose, tomentum of spreading white hairs; bracts and bracteoles shedding early during inflorescence maturation; peduncles up to 9 × 1 mm. Flowers white; pedicels up to 3 × 1 mm; hypanthium 2.5-3.0 × 2.0-2.5 mm; sepals triangular, spreading, 1.0–1.5 × 1.0–1.5 mm; petals elliptic to ovate, 2.5–3.0 × 1.8–2.0 mm; stamens 5–9 mm long; style 10–11 mm long. Fruit hypanthium puberulent, 2.0–2.5 × 2.5–3.0 mm, sepals persistent, deflexed, capsules exerted for 1.5–2.5 mm. Seeds pale orange-yellow, 2.3–3.0 mm long, narrowly elliptic to narrowly oblong, straight or slightly curved.

## SIMILAR TAXA

Bartlett's rata could only be confused with northern rata (*Metrosideros robusta*) from which it can immediately be distinguished by the acute tipped rather than notched leaves. The flowers of northern rata are red or yellow, never white, and the capsule valves of that species never protrude beyond the calyx rim. No other New Zealand *Metrosideros* has such easily detached, white, tissue-paper-like bark.

## FLOWERING

October - November

## FLOWER COLOURS

White

## FRUITING

March - April

## PROPAGATION TECHNIQUE

Easily grown from fresh seed. Can also be grown by hardwood cuttings but these can be slow to take root. Plants have proved tolerant of a wide range of conditions, and have survived mild frosts and even snow falls. However specimens do best in open, sunny sites within well drained, fertile soils.

## THREATS

As of 2015 there were 13 adult rata moehau left in the wild (down from the 34 known in 1992). Three trees occur on private land where they are isolated from other specimens. There is negligible viable seed set because there is not an abundance of nectar-feeding birds to pollinate the flowers and Bartlett's rata is self-incompatible. There are now only five genotypes left in the wild, only one of which is widespread in cultivation. Aside from these problems, the species is at severe risk from browsing animals, fire and myrtle rust (*Austropuccinia psidii*). Rata moehau also supports two endemic liverworts, *Frullania wairua* and *Siphonolejeunea raharaha-nehemiae*, which are also now at severe risk of extinction.

## ETYMOLOGY

**metrosideros**: Iron heart

## ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (30 September 2003). Description adapted from Dawson (1985) supplemented with observations made from herbarium and fresh material.

## REFERENCES AND FURTHER READING

Dawson, J.W. 1985: *Metrosideros bartlettii* (Myrtaceae) a new species from North Cape, New Zealand. *New Zealand Journal of Botany* 23: 607–610.

## CITATION

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

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

**MORE INFORMATION**

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