

Metrosideros albiflora

COMMON NAME

white flowering rātā, akatea

FAMILY

Myrtaceae

AUTHORITY

Metrosideros albiflora Sol. ex Gaertn.

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Lianes & Related Trailing Plants - Dicotyledons

NVS CODE

METALB

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

Woody long-climbing vine. Mature plants only reproductive. Adult leaves green, without hairs, elliptic in shape, surfaces without any obvious glandular spotting. Flowers white, fluffy, in dense terminal clusters.

DISTRIBUTION

Endemic. New Zealand: North Island (confined to the north where it ranges from Te Pahi south to Pukemokemoke (north of Hamilton) and the northern Kaimai Ranges)

HABITAT

Coastal to montane in forest. *Metrosideros albiflora* is virtually confined to kauri (*Agathis australis*) forest associations.



Photo of White rata. Photographer: Department of Conservation, Licence: Public domain.



Metrosideros albiflora. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

DETAILED DESCRIPTION

Stout vine up to 20 m. Juvenile and climbing vines sparingly branched, mature (adult) vines much-branched. **Bark** initially dark brown, maturing grey, ± tessellated, and flaking in tabular shards. **Branchlets** terete, often curved from base, stiffly erect (sometimes pendent), initially reddish and finely pubescent, soon glabrous. **Leaves** not markedly dimorphic, evenly spaced (i.e. not close-set), coriaceous, glabrous, petiolate; petioles 2–6 mm long, ± terete, stout; juvenile lamina 10–20 × 10–20 mm, ovate to elliptic-ovate, adaxially green to dark green, paler abaxially, oil glands minute (not evident to naked eye), margins weakly recurved, sparsely hairy, glabrescent; adult lamina 35–90 × 20–46 mm, ovate, elliptic-ovate to elliptic-lanceolate, apex abruptly narrowed, acute or subacute, base cuneate, adaxially green to dark green, abaxially paler, oil glands as for juvenile. **Inflorescences** in large terminal, compound cymose botyria, each carrying 6–10 white flowers. **Hypanthium** 8 × 5 mm, broadly urceolate to funnellform, ± fleshy, glabrous, margins exceeding ovary (so forming broad disc); calyx lobes 1.8–2.2 mm long, ovate, obtuse, patent or reflexed at maturity. **Petals** 5 × 5 mm, caducous, suborbicular to orbicular, margins entire; stamens numerous, 15–30 mm long. **Anthers** yellow. **Style** 20–35 mm long, stigma capitate. **Capsule** 5–10 mm diameter, urceolate, 3–4-valved, woody, dark brown to brown-black when mature. **Seeds** 1.2–2.4 mm long, narrowly elliptic or narrowly obovate, straight (often curved near apex), light orange-yellow or orange, unfilled seeds darker.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

Key to the Myrtaceae of New Zealand

SIMILAR TAXA

Metrosideros albiflora, despite the unfortunate vernacular “white rata” is not very similar to the other “white rata” *M. perforata*, which has much smaller, glandular punctate leaves, and smaller more numerous clusters of white flowers. The glabrous stems, tinged red when young, large, glabrous, elliptic-ovate to elliptic-lanceolate (rarely ovate), acute to subacute, green adult leaves, much larger, white flowers, and late winter to spring flowering habit serve to distinguish it from all other similar *Metrosideros* vines.

FLOWERING

August–November

FLOWER COLOURS

White

FRUITING

January–April

PROPAGATION TECHNIQUE

Although a beautiful species, *M. albiflora* is not commonly cultivated and it has a reputation for being difficult. Like all other climbing rata it can be grown from rooted pieces and from semi-hardwood cuttings. However like all *Metrosideros* cuttings can be fickle to strike. This species is cold sensitive.

THREATS

Metrosideros albiflora is often absent from large parts of potential range. It is most common in central and western Northland and the Coromandel Peninsula. Adult vines are often browsed by possums.

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

albiflora: From Latin albus ‘white’ and florus ‘flower’

WHERE TO BUY

Occasionally sold by specialist native plant nurseries

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange (6 January 2013). Description from herbarium specimens and fresh material

NZPCN FACT SHEET CITATION

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

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

MORE INFORMATION

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