

Autumn treat: *Metrosideros fulgens*

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Metrosideros fulgens is a native plant I always enjoy seeing in flower. A New Zealand endemic, it is a stout vine of forest edges, or sometimes a bushy shrub in open areas, with shiny broad leaves that are large in comparison with the small-leaved climbing rata vines. It is usually inconspicuous until it attracts attention in autumn to early winter with its bright orange to scarlet flower heads (Fig. 1), often appearing scattered amongst foliage of other broad-leaved trees or swathing the stems of tree ferns. There are rare occurrences of yellow-flowered forms (Fig. 2). It has a variety of names, including akatawhiwhi, rātā, climbing rātā, scarlet rātā, akatea.



Fig. 1 Orange-red flower head of *Metrosideros fulgens*. Cultivated, Otari-Wilton's Bush, Wellington. Photo: Murray Dawson, April 2018.



Fig. 2 Yellow flowered variant of *Metrosideros fulgens*. Ohineangaanga Stream, Te Puke. Photo: Colin Ogle, March 1965.

The flowers, each up to 15 mm in diameter, and with a boss of stamens up to 25 mm long, are in rounded clusters at branch tips, the small orange-red or rarely yellow petals insignificant, but the much longer stamens, usually scarlet or orange-red, tipped by yellow pollen, are eye-catching. In the centre of the flower is a small green 'bowl', the top of the ovary, which holds nectar that attracts nectar-feeding birds, insects, and short-tailed bats. The woody seed capsules take about a year to ripen, and seeds are released by breakdown of the capsule, rather than shed by the valves opening at the top.

Metrosideros fulgens is placed in sub-genus *Mearnsia*, along with the other New Zealand native climbing species such as *M. carminea* and *M. perforata*. The large tree species such as pōhutukawa, northern rātā and southern rātā are in sub-genus *Metrosideros*, which release seed from the opened valves at the top of the capsule. There are more than 50 species of *Metrosideros* trees, shrubs, and vines, found mostly in the Pacific region.

Metrosideros fulgens initially attaches to host trees by short adventitious roots, but later these roots wither and the mature vine is described as 'hanging free' with thick twisted stems. The stems are strong enough to have been used by Māori, along with supplejack (kareao), for tying fences, platforms, and house timbers. It not only attaches to trees but may also branch repeatedly over the ground or rocky surfaces such as cliffs, then form upright shoots from those branches, showing the potential to form a thicket.

A single plant can cover an extensive area and could be regarded as being potentially invasive in garden situations, as in our garden.

It is recorded from coastal and lowland forest on the Three Kings Islands north of Cape Reinga, throughout most of the North Island, particularly Northland to Auckland and the wider Bay of Plenty, also western areas in the lower North Island, and from Marlborough Sounds down the coastal regions of Nelson and Westland districts, preferring warm moist habitats (Fig. 3). It is well-represented from the Bay of Plenty and Rotorua areas in the National Forestry Herbarium and is common around the Rotorua lakes.

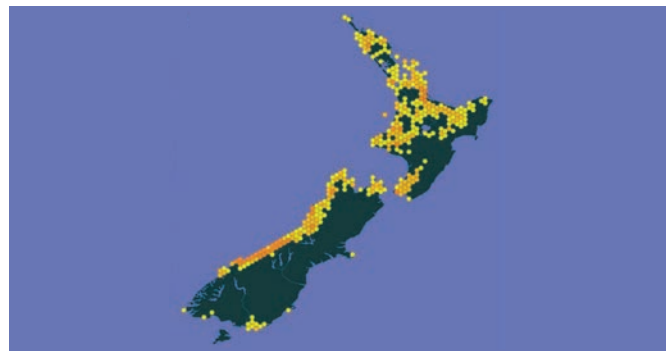


Fig. 3 Distribution map of *Metrosideros fulgens* generated from GBIF data (www.gbif.org/species/3185442).

Metrosideros fulgens is not widely grown in cultivation, although it is available from time to time from garden centres as well as specialist nurseries. Several cultivars have been selected for flower colours. At least in the Rotorua district, it can occur in gardens as a remnant of former vegetation, or as an import on punga logs commonly used for garden fencing in the central North Island. I am not sure which of these options is the origin of the plant a few metres from our house, but we appreciate it particularly in autumn when the flowers appear amongst other shrubs and trees. However, its display was completely outclassed this year by a plant on a Rotorua suburban roadside (Fig. 4). Our daughter photographed this impressive display on a 'lockdown walk' in April this year and sent it to us. By mid-June it was densely covered in clusters of maturing capsules.



Fig. 4 Plant of *Metrosideros fulgens* in full flower, cultivated in a Rotorua garden. Photo: Claire Miller, April 2020.

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