



Rata and pohutukawa

Native plants

Rata and pohutukawa are known as New Zealand's native Christmas trees because of the bright red blooms that decorate them during the Christmas and summer season. Rata have glossy, dark green leaves while pohutukawa leaves are leathery and olive green. Trunks on both species are typically gnarled and twisted.

Rata and pohutukawa are closely related (i.e. members of the same genus) and they both belong to the myrtle family, which also includes trees such as guavas, feijoas and eucalypts as well as the native manuka, kanuka and swamp maire.

Where are they found?

There are two main types of tree rata. Northern rata is found throughout the North Island and in the South Island, south to about Westport. Southern rata is found from sea level to the treeline and distributed from Whangarei south to Stewart Island, although it is rare in the North Island. A third, white-flowering tree species, called Bartlett's rata, is extremely rare with

only about 30 adult trees in the wild. There are also six species of rata vine and one shrub.

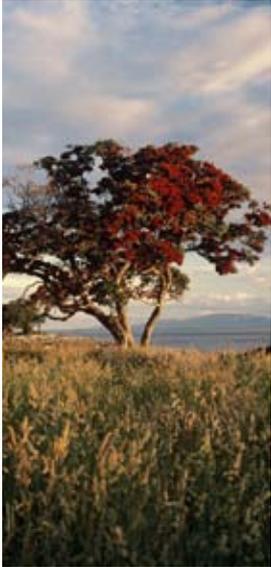
Pohutukawa grows primarily along coastlines and in coastal forests, as it is well-adapted to withstand salt-laden winds and drought. It grows naturally as far south as Gisborne and north of Taranaki, although it has been planted as far south as Dunedin.

Northern rata
S. Barnett



Rata and pohutukawa facts

- Rata and pohutukawa produce dry woody capsules with hundreds of small seeds.
- Their peak flowering time is from November to February, depending on location, and the flowers can be seen from some distance away.
- Both rata and pohutukawa have very dense, strong, dark red wood, which helps them withstand wind damage and drought. They are very slow-growing and can live over 1000 years.
- Northern rata usually begins life as an epiphyte, a plant perched on a host tree. Its roots grow down to the ground, finally enclosing the host tree and producing a huge tree up to 25 metres tall with a trunk of up to 2.5 metres wide.
- Southern rata grows from a seed in the ground to become a tree up to 15 metres high with a trunk 1 metre wide.
- Pohutukawa timber was greatly favoured by early European boat builders. Its natural bends were ideal for boat construction and the timber was immune to seaworms when exposed to salt water.
- Pohutukawa has the ability to sprout root systems as and where needed. These adventitious roots form out of trunks and branches, and are able to grow through the air as they search for crevices, pockets of soil and moisture.
- Rata trees tend to flower well only once every few years and seem to favour the high rainfall conditions of the West Coast. Native birds such as the tui and kākā all benefit from the presence of rata trees in the forest.
- Close relatives of the rata and pohutukawa grow throughout the South Pacific. Many of these look virtually identical to the New Zealand species.



Pohutukawa
T. Greene

Kermadec pohutukawa
R. Stanley



Did you know?

In 1990, the Department of Conservation and Carter Holt Harvey teamed up to fight the decline of rata and pohutukawa in New Zealand. The charitable trust, called Project Crimson, has funded the planting of more than 70,000 new trees. They also fund numerous community and research projects and have identified a selection of Crimson Trails, which highlight some wonderful walks, hikes, and drives throughout New Zealand that lead locals and visitors to some of the most stunning pohutukawa and rata specimens and stands.

Threats

The brushtail possum is the biggest threat to rata and pohutukawa. Possums eat a wide range of plants, but show strong preferences for some species like rata and pohutukawa. Studies have shown that they will often browse one or a few trees, while ignoring others of the same species nearby.

Rata and pohutukawa trees cannot tolerate browsing. A mature tree can be killed in three years with intensive browsing and even young trees, although they can survive for longer, will eventually die if browsed regularly. When the browsed trees die, the canopy, or top layer of the forest, is then opened up. Once the canopy is open, the remaining trees are exposed to storms, insects and diseases and will suffer further. Other threats include coastal development, disturbance from humans and the growth of exotic grasses, which can prevent regeneration by smothering seedlings.

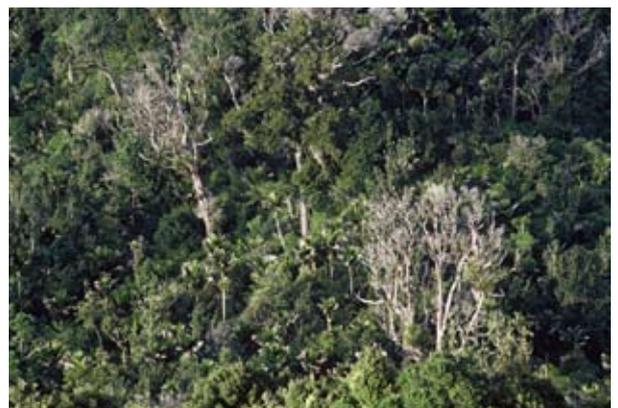
How can you help?

Volunteer your time to a tree planting or other restoration project. See Project Crimson's website for a list of what's happening in your area and how and when you can help: <http://www.projectcrimson.org.nz/WSMApage/>

Further information

For further information about rata and pohutukawa please contact your local Department of Conservation office or visit Project Crimson's website at www.projectcrimson.org.nz.

See also: Simpson, P. (2005) *Pohutukawa and Rata: New Zealand's Iron-Hearted Trees*.



Possum browse on Northern rata and rimu
R. Stanley