

# A GUIDE TO IDENTIFYING Myrtle Rust

This guide describes New Zealand myrtles, myrtle rust and what to look for in your neighbourhood in order to identify myrtle rust.

## **Myrtles in your backyard**

Myrtles, are a type of evergreen tree or shrub common to New Zealand. These include native plants such as pōhutukawa, mānuka, kānuka, ramarama, rātā, and exotic plants like feijoa, eucalypts, bottlebrush, guavas, willow myrtle and lilly pilly (also known as monkey apple).

All of these plants are susceptible to myrtle rust and may get the disease.

## **Myrtles and myrtle rust**

Myrtle rust is a fungus from the sub-tropics that only affects myrtle plants. Myrtle rust generally attacks the soft, new growth of myrtle plants including leaves, stems, buds, flowers and fruit.

**Images in this guide with an orange border have myrtle rust.**



## How and when to identify myrtle rust



Early signs: Bright yellow powdery eruptions appear on the underside of the young leaf



As the infection progresses bright yellow powdery eruptions of spores appear on both sides of the leaf



Overtime the pustules darken and become brown/grey



In case of severe infection, leaves may become twisted and die.

Myrtle rust prefers high humidity and warm temperatures so be vigilant from spring to autumn, checking every three weeks, while plants are actively putting on new growth.

## **What to do if you find it**

Use this guide to check your plants against images of myrtle rust and if you think you've found myrtle rust, do not touch it.

Call the MPI Exotic Pest and Disease Hotline immediately on



**0800 80 99 66**



## **You can also help**

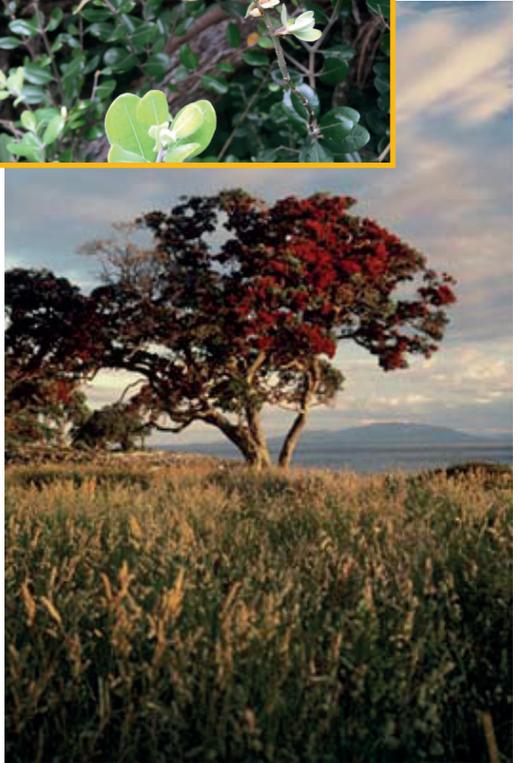
If you have a camera or phone camera, take clear photos, including the whole plant, the whole affected leaf, and a close up of the spores/affected area of the plant.

By understanding where myrtle rust is we can better understand the distribution of the disease which might help us find better ways to deal with it in the future.

# NATIVE NEW ZEALAND MYRTLES

## Pōhutukawa

- Large sprawling mainly coastal trees.
- Leaves are leathery and oval shaped.
- Branches can sprawl up to around 20 metres, often with masses of dangling reddish rootlets with masses of red bristly flowers over Christmas.
- Native birds such as the tui, bellbird and kākā all benefit from the presence of Pōhutukawa trees.



## Mānuka, kānuka and tea tree

- A shrub, or small tree with the bark peeling in long papery flakes, curling with age.
- Leaves are small and narrow in shape and the leaf tip is stiffened to prickly point.
- Plants produce white or pinkish red-centred flowers throughout the year.
- Mānuka, kānuka and tea tree flowers provide an important source of pollen and nectar for native bees, flies, moths, beetles and geckos.



## Ramarama

- Grows as a brownish- or reddish- green bushy shrub or small tree.
- Leaves are paired and rounded ovals that are much paler underneath with fuzzy new growth.
- Its flowers are white and fruit can be red to black, on a long stalk.
- A range of native species, such as liverworts, reptiles, birds and other plants, are dependent on myrtles, either partially or wholly.



## Rātā

- Tall forest trees with pairs of oval leaves and masses of red bristly flowers in summer.
- Leaves are leathery, dark green, and have a distinct notch in their tips.
- Red flowers are clustered each with 5 petals.
- Native birds such as the tui, bellbird and kākā all benefit from the presence of rātā trees.



# EXOTIC MYRTLES

## Feijoa

- An evergreen shrub or small tree, 1-7 m in height
- Fruit is about the size and shape of an egg
- Feijoa season is from mid-March to June



## Eucalyptus or Gum Trees

- May form a low shrub or a very large tree.
- The woody fruits are called gumnuts and are roughly cone-shaped and open at one end to release seeds.



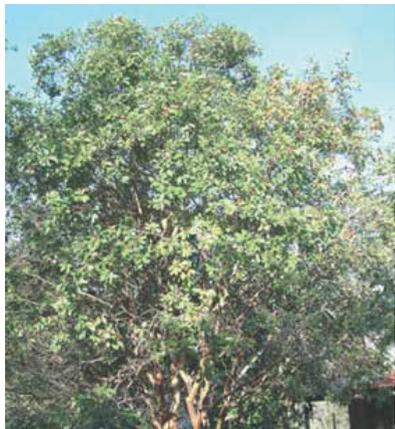
## Bottle brush

- A small to medium-sized woody plant or small tree.
- Leaves are narrow and slightly leathery with young growth being hairy.
- The mostly red flowers are stalk less and clustered tightly together at the branch tips (like a bottle brush), each with five petals.



## Guava

- An evergreen shrub or small tree native to Southern and Central America
- Guava fruits can range in size from as small as an apricot to as large as a grapefruit
- Flowers in autumn with fruit in winter



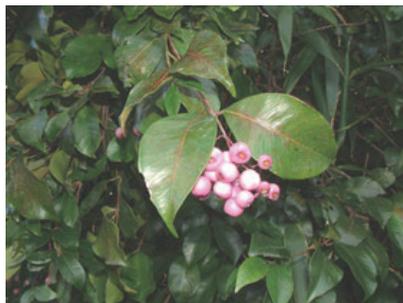
## Willow myrtle

- A small and robust tree, usually less than 10 metres tall.
- It has fibrous brown bark, long narrow dull-green leaves, and tightly clustered small white flowers.
- Willow myrtle flowers between August and December.



## Lilly pilly or monkey apple

- Planted as a shrub or hedge with rough, woody bark
- Cream and green smooth, waxy leaves
- Flushes of pink new growth and white to maroon edible berries.



## **Giving your plants the best chance against myrtle rust**

Any myrtle plant exposed to myrtle rust may become infected, but you can give your myrtle plants the best chance to withstand the disease by keeping them in good health. Carry out any necessary pruning in cool weather when any new growth is less vulnerable. Use good hygiene in your garden by cleaning your gardening tools. If your young plants need watering during warm weather, apply water gently to the soil and not the leaves.

## **How myrtle rust affects New Zealand myrtles**

All myrtle species in New Zealand are at some risk from myrtle rust but the impact on their long-term health is unclear. Young plants are likely to be especially vulnerable because of their small size and young foliage. Left untreated, infected myrtles will likely weaken over time and may die, but the time it takes will vary depending on the plants' species, size, and general health.

## **What can people do to deal with myrtle rust?**

Biosecurity NZ have commissioned research to better understand how the fungus behaves in New Zealand conditions and to identify risk factors, resistant species, and potential treatment and management tools. For the most up to date advice on dealing with myrtle rust go to [www.mpi.govt.nz](http://www.mpi.govt.nz) and search "myrtle rust".