Tiakitanga Pūtaiao Aotearoa

Biosecurity New Zealand

Myrtle Rust – Austropuccinia psidii



Myrtle rust is a fungal disease that can kill plants from the Myrtle family (Myrtaceae).

Department of

Conservation

Te Papa Atawhai

Myrtle rust is a damaging and invasive form of fungal rust. While most rusts infect just one species of plant, myrtle rust can infect the entire myrtle family, and there are hundreds of known susceptible hosts. World-wide there are nearly 6000 species in the myrtle family – everything from pōhutukawa, rātā and mānuka, to feijoa and eucalypts, monkey apples and bottlebrush.

Myrtle rust can spread large distances

Myrtle rust spores are microscopic and can easily travel large distances by wind, or via insects, birds, people, or machinery. Once the spores reach a susceptible myrtle plant they attach and germinate on the leaves, stems or flowers and the myrtle rust fungus grows, stealing nutrients and energy from its host.

Infected myrtles can show different symptoms

The disease attacks growing leaves, shoot tips, young stems, flowers and fruit. The disease can cause deformed



Upper and lower surface of the same leaf of Pōhutukawa (Metrosideros).

leaves, leaf loss, damaged fruits, canopy dieback, stunted plant growth, and eventually plant death.

Symptoms to look out for on myrtle plants



1. Bright yellow powdery eruptions appear on the underside of the young leaf in early infection.



3. Over time the yellow colour darkens and becomes brown-grey.



2. Bright yellow powdery eruptions of spores appear on both sides of the leaf.



4. In severe infections, leaves may become twisted and die.



Myrtle rust threatens New Zealand ecosystems

Myrtle rust poses a significant threat to many of New Zealand's species and ecosystems. If there are impacts on forest species like pohutukawa and rata, other native flora and fauna in those ecosystems are also likely to suffer.

All myrtle species are at some risk from myrtle rust infection, some more than others. Some of the more common myrtle plants you may recognise are:



Ramarama (Lophomyrtus spp.)

Mānuka (Leptospermum spp.)



Rātā (Metrosideros spp.)

You can help by: **Reporting suspected myrtle rust**

Bottlebrush (Callistemon spp.)

It is important to understand where the rust is spreading nationally and where and when it is most active so we can build a national picuture of spread and impacts across New Zealand. Look out for signs of myrtle rust. If you think you see the symptoms of myrtle rust:

- Don't touch it as you may spread it. »
- Call the MPI Exotic Pest and Disease Hotline on » 0800 80 99 66.
- » 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 or affected area of the plant.
- Don't try to collect samples as this may increase the » spread of the disease.

Arriving clean and leaving clean

The forest you visit could be infected with myrtle rust without you knowing it. Before entering such areas for work or recreation, you should minimise the risk of spreading the rust by ensuring your equipment, clothing and tools arrive clean.

Buying healthy plants, and pruning in cool weather

Make sure myrtle plants bought for your garden are free from the symptoms of myrtle rust. Inspect the leaves and stems of plants before you buy them, and avoid purchasing plants that have signs of disease.

We recommend avoiding pruning during warm weather as this will encourage susceptible new growth. Instead, prune myrtles only in late autumn and early winter to avoid encouraging new growth during warm weather when myrtle rust spores are more likely to form. When pruning, use good hygiene practice, sterilise, and disinfect tools and equipment with methylated spirits.

Monitoring your plants

We recommend regular monitoring of myrtle plants for any sign of myrtle rust, particularly new, young growth, shoots and seedlings. Early detection in your garden will give you time to consider options for myrtle rust control on your property.

For more information: www.mpi.govt.nz/myrtlerust

