Myrtle rust We need your help

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Background

A strong, blustery westerly wind could blow a new significant pest over the Tasman Sea and infect our native Myrtaceae species. Please help us get prepared!

Myrtle rust (*Puccinia psidii*) is a fungus that attacks the new growth leaves, shoots and flowers of native Myrtaceae species and also the introduced eucalyptus, guava and feijoa.

This fungus is NOT in New Zealand yet, but has spread and established on Australia's east coast.

What does it look like?

The rust will generally appear as bright yellow spots on the new growth, flower buds or even on the fruit of some plants. It could kill the new growth completely, cause brown spots on the upper leaves and holes in the leaves. The fruit could fail to develop, and even fall from the tree. The rust can appear red when the sexual types of spore are being produced.

Red and yellow spores of Myrtle rust on a susceptible tree in Australia

Where might you see it?

You might find it on native plants pohutukawa, rata, ramarama, rohutu, manuka and kanuka, and the introduced eucalyptus, guava and feijoa.

Where did it come from, where is it now?

Myrtle rust is a native of South America that jumped from native species there to planted eucalypt forests. It is not yet known to be in New Zealand but the rust is now established in Australia's east coast, New Caledonia, South Africa, Hawaii and is also considered established in parts of Indonesia, China and Japan.

Studies show the impacts vary between species and within species; but the rust has the potential to have devastating impacts on some key New Zealand species, including pohutukawa, manuka and kanuka, and ramarama and rohutu, and the communities that depend on these plants.

There are three predominant strains that all affect the host plants very differently. Plants of the same species growing next to each other may also respond very differently.

Lophomyrtus Ã—raphii, a commonly planted native shrub that is susceptible to Myrtle rust

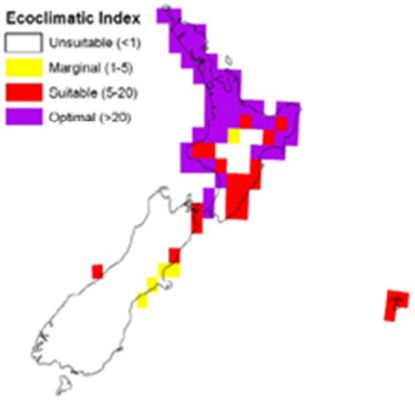
The impacts on New Zealand species are currently unknown and we can't assess them in advance because of the very complex life cycle which includes three spore types. We have a limited knowledge about what the strain in Australia may do in New Zealand, but no information on what the other strains could do in New

Zealand. The strain in Australia is the most likely one we could get because of the large number of flights to and from Australia, the westerly winds and the movement of migratory birds and insects.

Where could it survive in Auckland?

Myrtle rust is likely to be able to establish survive across the Auckland Region.

In New Zealand Myrtle rust could establish in all of the Kermadec Islands, low altitude North Island and parts of the South Island and the Chatham Islands. It requires moist warm conditions and six hours of darkness to get going on a plant.



What you can do?

If you see something that you think may be myrtle rust, call the Ministry for Primary industries (MPI's) Exotic Pests and Diseases hotline on:

0800 80 99 66.

Do not touch or collect samples as this may spread the disease.

Report any red or yellow looking rust on the undersides of newly growing leaves, on the buds or flowers of Myrtaceae plants to MPI immediately on **0800 80 99 66**, and let the Biosecurity team know of the affected area.

Auckland Council's Biosecurity Team can be contacted at I **09 3010101** email: **biosecurity@aucklandcouncil.govt.nz**

MPI response teams will collect it and send it to Auckland for genetic identification, and delimit the infected area.

We need prompt reporting of any suspect sightings as we will only have a very small window of eradication opportunity before it escapes our control. If you even suspect you see it, don't wait to get a second opinion, call the 0800 hotline.

Do not touch the rust as this can disperse it. Look carefully at the photos and do your best to memorise the symptoms. Please keep your eyes open for any rust on

the new leaves of Myrtaceae in your garden (species like ramarama, rohutu and their hybrid Lophomyrtus Ã—raphii are very susceptible); check out rata, pohutukawa and the manuka and kanuka species when you're visiting native ecosystems.

If you are visiting Australia remember to avoid bringing rust spores back into New Zealand by cleaning your shoes, clothing and equipment before transit.

Who's leading this biosecurity programme?

MPI are trying to plan and prepare for this expected incursion in collaboration with Auckland Council, but there is only a very limited amount that can feasibly be done. There has been considerable research on the rust in Australia and the Australian nursery association has defined spray programmes for its control.

Key Contacts:

Call the Ministry of Primary Industry's (MPI) Biosecurity Exotic disease and pest hotline 0800 80 99 66

For any additional internal Council advice / assistance contact the Biosecurity team: Call **09 3010101** email: **biosecurity@aucklandcouncil.govt.nz**

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