



Myrtle Rust Update

August 2018

In this monthly update you will find:

- Myrtle rust detections over the last month from Biosecurity New Zealand
- Myrtle rust identification guide is now available for download
- Myrtle rust working group update
- Seed banking update from the Department of Conservation
- Where the Department of Conservation is looking for myrtle rust
- Science Spotlight
- Symptoms to look out for on myrtle plants
- Links to further information

Detections in the last month

The total number of infected properties reported is **769**.

New finds since last update by town/city/suburb – 9 new sites:

- **Auckland:** Pukuranga (1), Mission Bay (1), and Epsom (1)
- **Waikato:** Hampton Downs (1)
- **Bay of Plenty:** Tauranga (1)
- **Nelson:** The Wood (3), and Tahunanui (1)

Property type:

Private (618), public land (68), commercial (43), school (15), nursery (13), public conservation land (4), retailer (2), golf course (2), orchard (2), depot (1), cemetery (1).

Susceptible plants

The plants that appear to be most susceptible to myrtle rust in New Zealand so far include ramarama, pōhutukawa, rātā, monkey apple and bottle brush.

MPI surveillance findings

Host	Total	Confirmed
Ramarama: <i>Lophomyrtus</i> spp.	13,664	657
Pōhutukawa, Northern rata, Southern rata: <i>Metrosideros</i> spp.	43,517	412
Monkey apple: <i>Syzygium</i> spp.	9,940	159
Bottle brush: <i>Callistemon</i> spp.	11,334	21
Willow myrtle: <i>Agonis flexuosa</i>	479	7
Feijoa: <i>Acca</i> spp.	17,724	5
Mānuka: <i>Leptospermum scoparium</i>	19,163	3
Chilean Guava: <i>Ugni molinae</i>	1,225	2
Gum: <i>Eucalyptus</i> spp.	6,760	1
Australian Tea Tree: <i>Thyptomene</i> spp.	80	1
Australian Water Gum: <i>Tristaniopsis</i> spp.	322	1
Other	15,873	0
Total:	140,081	1,260

Myrtle rust identification guide available



It takes skill and practice to be able to accurately identify myrtle plants and to recognise myrtle rust symptoms. This helpful guide provides images of the most common native and exotic myrtle plants in New Zealand as well as different images of myrtle rust to help you recognise and

report it. Remember, if you think you've seen myrtle rust, do not touch it and call the MPI Exotic Pest and Disease hotline on 0800 80 99 66.

This guide was developed by Biosecurity New Zealand.

[Download the myrtle rust ID guide here](#)

Myrtle rust working group update

A cross-sector Working Group has been established to provide input and recommendations on agreed long-term management objective(s) that will underpin a collaborative long-term management plan across Aotearoa New Zealand. This group includes members from the Ministry of Primary Industries, Department of Conservation, Ministry for Culture and Heritage, Regional Councils, Project Crimson, and Māori organisations with an interest in biosecurity.

The Working Group is meeting monthly and has prepared a draft vision statement and objectives for the Myrtle Rust Governance Group for consideration and endorsement.

Over the coming months, these draft statements and objectives will be further developed to identify the supporting activities that each participating agency or group can contribute to achieve the objectives.

A final draft is expected to go to the Myrtle Rust Governance Group in late September for review, pending approval from the Governance Group. A draft Long Term Management Strategy and Action Plan for myrtle rust will be circulated to a wider audience for comment, before being finalised in late December 2018.

Seed banking update

The Department of Conservation's (DOC's) 2018 seed collection programme will be coming to a close at the end of August, as most Myrtle species are not producing seed at this time of year.

So far around 57% of the desired native Myrtle seed has been collected, from 29 of the 36 bankable species. Planning has already started for the next round, which will commence early in 2019. We will take stock of what we have collected and what still needs to be collected, and build capability within the field teams nationally.

Where DOC is looking for myrtle rust

The Department of Conservation is surveying for myrtle rust on public conservation land. Surveillance will be undertaken progressively across the country.

The status of public conservation land surveillance as of July 2018 can be viewed on the map below. Click the button below the map to see a larger version of the map.



[DOC's Myrtle rust surveillance map](#)

Science Spotlight

For a full list of current and completed research projects check out the link below:

[Myrtle rust research programme webpage](#)

Here's what's been happening this month:

- Scion Research, in collaboration with Manaaki Whenua Landcare Research, Plant & Food Research, AgResearch,ASUREQuality, Biosecurity Research Ltd, Massey University, and international myrtle rust researchers, led a series of hui across the country to better understand community and scientific needs around myrtle rust monitoring.
- New Zealand Plant Producers Inc. has made further progress in developing a plant production biosecurity scheme for nurseries and garden centres.

And here's what's coming up:

- MPI will soon begin work on developing a Lucid™ interactive key for Myrtaceae - a tool for identifying different hosts of myrtle rust that can be used on smartphone devices.

Research outputs are expected quarterly and we will ensure the findings are shared with you via this newsletter.

Meet a researcher - Julia Soewarto



Julia is originally from New Caledonia and worked on Myrtle Rust during her PhD at the New Caledonian Agronomic Institute (IAC). Her work involved the assessment of Myrtle Rust impacts in terms of host range, geographic distribution and Myrtaceae susceptibility level to the disease in New Caledonia. She also worked on plant selection for resistance to Myrtle Rust using an RNA-Sequencing approach.

She previously completed a Master of Science in Tropical Biotechnology at the University of Montpellier (France). Julia's Post Doc work will involve:

- the surveillance monitoring of Myrtle Rust on indicator species in New Zealand,
 - testing of native and important exotic host species susceptibility against different strains of *Austropuccinia psidii*,
 - understanding environmental influences and life cycle of Myrtle Rust under New Zealand conditions
 - improving disease management through development of biological control tools
-

Symptoms to look out for on myrtle plants



Small bright yellow powdery eruptions first appear on the underside of the leaf



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



Overtime, the damaged leaf darkens and becomes brown and rust pustules turn grey



Some heavily infected leaves may become buckled or twisted and die off

Myrtle rust prefers relatively high humidity and warm temperatures to produce spores from spring to autumn, while plants are actively putting on new growth.

Find out more

About myrtle rust:

[Biosecurity New Zealand myrtle rust page](#)

[DOC myrtle rust page](#)

[Myrtle rust fact sheet](#)

[Read more about myrtle rust](#)

Video on Youtube featuring 'Bug Man' Rudd Kleinpaste:



For information about this update, contact MyrtlerustNZ@mpi.govt.nz

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