Myrtle Rust

Myrtle rust is a disease limited to plants in the Myrtaceae family. It is a member of the guava rust complex caused by *Puccinia psidii*, a known significant pathogen of Myrtaceae plants outside Australia.

In Australia, infestations are currently limited to New South Wales, Victoria, Queensland and Tasmania. Tasmanian infestations appear to be limited to nursery plant hosts (predominately Lophomyrtus species) in residential gardens i.e. it has not been found in native bushlands.

The biosecurity risk to Tasmania

Myrtaceae imports are currently banned into Tasmania. DPIPWE may grant an exemption from the ban for an importer that can demonstrate they have an effective risk management process in place.

There are still some significant gaps in the scientific knowledge about myrtle rust – including whether it could establish and spread in a cooler climate such as ours.

Spread risks

Myrtle rust produces spores that can be spread by wind, with rain splash, by animals (particularly insects) and by people contaminated after handling infected material. In particular, movements of infected plants in the nursery trade or home gardening are both potentially significant vectors for long distance spread of the disease. It is worth noting that myrtle rust infections may not be observed for some weeks following infection.

Identifying Myrtle Rust

Look on the soft growing tips of Myrtaceae leaves, stems and buds for bright yellow rust pustules during the warmer months.

Myrtle rust is most easily seen in the warmer months, when the humidity is high and the leaves are wet for 6 hours or more. These are the conditions that encourage spore production, spread and infection of new plants. Current scientific knowledge suggests that temperatures of 15-25°C are required for the myrtle rust life cycle. Under these conditions, fresh active infections are readily identified by the pustules of bright yellow spores on the leaves, petioles, buds and soft fruit of Myrtaceae species.

These yellow pustules distinguish it from other Myrtaceae diseases.

In old myrtle rust infections, the pustules become grey and look withered. In young infections, the early signs may be purple flecks and leaf spots. With both young and old infections, it can be more difficult to distinguish between myrtle rust and other Myrtaceae diseases.

If you see what you think might be myrtle rust in the natural environment e.g. native bush, forest areas (not gardens)

1. Avoid contamination of yourself and any equipment with the spores.
2. Take a photograph (do not collect samples or handle the plant).
3. Record the location of the infected plant(s) - GPS is ideal, but a detailed description of the location is important.
4. Record what you see (what the infection looks like, the extent of the infection, how many plants are infected etc.). If you know the species of plant infected, record that as well.
5. As soon as you can, ring the Exotic Plant Pest Hotline 1800 084 881 (all hours)

If you find myrtle rust in your garden

1. As much as possible avoid contact with spores.
2. Check symptoms with the images in this factsheet.
3. Recommended action is to remove the diseased plants, bag up all material and dispose in household waste. Not green waste or compost, to avoid further spread.

More Information

Further information on myrtle rust can be found on the **Biosecurity Tasmania website**.

You can also access a PDF list of the plants in the Myrtaceae family.

Grey rust pustules on the surface of a lesion on *Agonis*

Mature infections produce yellow pustules, *Melaleuca quinquenervia*

Necrotic lesions on leaves of *Agonis*

Infected *Lophomyrtus* leaves and stems showing mature pustules

Infected Chilean guava (*Ugni molinae*) or Tazziberry™

Photos by DPIPWE staff and by Dr Angus Carnegie (reproduced by kind permission of NSW Department of Industry and Investment)

Biosecurity Tasmania
www.dpipwe.tas.gov.au/biosecurity
☎ General Enquiries:03 6165 3777

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