



# Gardennote

## Myrtle rust

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*Melaleuca quinquenervia* affected by Myrtle rust © State of Queensland (Department of Employment, Economic Development and Innovation) 2011

### Background

Myrtle rust, which is caused by the fungus *Uredo rangelii*, is a serious disease that attacks and kills many plants belonging to the Myrtaceae family including eucalypts, bottlebrushes, paperbarks and peppermint trees.

The disease was first discovered in Australia in April 2010, in a New South Wales (NSW) nursery. It is now widespread in numerous locations throughout NSW and Queensland. Ongoing detections have revealed its presence in commercial nurseries, public landscapes and state forests. It is imperative that myrtle rust is

prevented from becoming established in Western Australia.

### Threat to the landscape

Laboratory trials have shown that a large number of plant species will succumb to this disease, although it is not yet known how climate differences might influence its spread in Western Australia compared to its spread on the eastern seaboard. But, in a worst case scenario, myrtle rust could devastate forests and other native habitats. Iconic eucalypts such as jarrah, karri, tuart and wandoo are all at risk as well as the Western Australian peppermint tree.

### Important disclaimer

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*Syzygium jambos* © State of Queensland (Department of Employment, Economic Development and Innovation) 2011

Myrtle rust could also damage plantation eucalypts such as blue gum, and other industries would be affected. Timber, pulp wood and oil mallee production, apiculture and the nursery trade are obvious examples, but the spread of myrtle rust would also harm tourism if natural landscapes were badly damaged.

The visual appeal of streetscapes would be greatly reduced, especially where the council has multi-planted one particular tree, such as red-flowering gum, bottlebrush or paperbark, to create a uniform roadside planting. Native trees in streets and parks are important as green corridors through suburbia that provide food, shelter and nesting places for wildlife, so their loss could affect local fauna populations.

Certain plants in domestic gardens are vulnerable to myrtle rust. Indeed, the first detection in NSW involved a purple-leaved cultivar of the Western Australian peppermint tree (*Agonis flexuosa* 'Afterdark') which is often grown in the home garden, either as a small feature tree or as a hedge. Some lilly-pillies (*Syzygium* species) are

also susceptible to the disease, as are other favourite ornamental shrubs including *Beaufortia*, *Kunzea*, *Verticordia* and *Calothamnus* species.

However, home gardens could be protected in the event of myrtle rust occurring, because three chemicals (copper oxychloride, triforine and mancozeb) that control the disease are the active ingredients in several readily available sprays. But chemical control is not a viable option for large-scale landscapes and, in particular, for our vast forests and other natural ecosystems.

### **Keeping myrtle rust out of Western Australia**

Individual members of the public could well be the first people to find myrtle rust should it enter Western Australia. Even though relevant government departments and industry organisations nationally took immediate action after the first detection in NSW and continue their monitoring and management plans, home gardeners and bush walkers are invaluable as "eyes on the ground". Unfortunately, individual



*Myrtle rust on Rhodamnia sp.*

members of the public are also the people most likely to inadvertently bring this disease into Western Australia.

Wind disperses myrtle rust spores but wind alone is unlikely to carry them across the desert which separates Western Australia from the eastern states. However, the tiny spores are highly transportable by other means as they stick to clothing, hats, footwear and equipment. Consequently anyone who visits NSW or Queensland and then returns to Western Australia should take the following precautions:

- If travelling by road, shake out floor mats, wash down tyres and check that the vehicle, caravan, trailer and any gardening equipment contain no plant material. Do this before leaving NSW or Queensland and do it again before crossing the border back into Western Australia. The reason for performing the first clean-up is that if any spores are accidentally transported even a short distance into other states they could



*Myrtle rust on Rhodamnia sp.*

allow myrtle rust to become established further westward and, consequently, begin the spread of the disease towards Western Australia.

- If possible, change into fresh clothing and footwear before re-entering Western Australia and pack away the attire that was worn in NSW and Queensland. Once home, wash everything that was used on the trip.
- Rail and domestic airline passengers are reminded that any plant material or items contaminated by soil are prohibited entry into Western Australia. If friends or relatives from eastern Australia are planning to visit Western Australia please pass on this advice.

### **Recognising myrtle rust**

Myrtle rust produces bright orange to yellow clumps of powdery spores or pustules. The appearance of these spores or pustules on foliage or twigs varies slightly depending on the species of host plant, so expert identification is needed.

Anyone who finds what they suspect is myrtle rust should ring the Exotic Plant Pest Hotline on Freecall 1800 084 881 to report the location. If possible take a photograph and email it to the address in the contact box (as indicated in the next column). Do not take a sample to post to the Pest and Disease Information Service, because snipping off a piece of the diseased plant could dislodge the spores and accelerate the local spread of myrtle rust.

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