Myrtle rust

Myrtle rust (Uredo rangelii) is a serious fungal disease affecting the plant family Myrtaceae, which includes eucalypts and many other Australian native species.

After the first Australian detections in 2010, myrtle rust has recently been found in Victoria.

Myrtle rust is of serious concern because the fungus spreads very easily and because the Myrtaceae is a dominant plant group in both natural ecosystems and the plantation industry.

Myrtle rust poses no threat to human or animal health.

What does myrtle rust look like?

Myrtle rust attacks young, soft, actively growing leaves, shoot tips and young stems, as well as fruits and flower parts of susceptible plants.

The first signs of myrtle rust infection are tiny raised spots that are brown to grey, often with red-purple haloes. Up to 14 days after infection, the spots produce masses of distinctive yellow/orange spores.

Which plants are affected?

All members of the Myrtaceae plant family are potential hosts of myrtle rust.

The family includes:
- gum trees (Eucalyptus)
- bottlebrush (Callistemon, Melaleuca)
- tea tree (Leptospermum)
- lilly pilly (Syzygium, Acmena, Waterhousea)
- paperbark (Melaleuca)
- myrtle (Backhousia)
- guava (Psidium)
- midyim (Austromyrtus)
- rose apple (Syzygium)
- brush box (Lophostemon)
- New Zealand Christmas bush (Metrosideros).

Which plants are not affected?

Plants which are not in the Myrtaceae family and therefore not hosts of myrtle rust include:
- citrus
- azaleas
- camellias
- stone fruit
- pines
- grevilleas
- pome fruit
- roses
- wattles
- vegetables
- daisies
- banksias
- clovers
- rhododendrons
- ferns
- crepe myrtle
- orchids
- lilies.

However, these and other non-Myrtaceae plants may show similar symptoms due to infection by other rusts.

How does it spread?

Rusts are highly transportable because they can produce large numbers of very small spores.

Myrtle rust can be dispersed by:
- movement of infected plant material (e.g. nursery stock, cut flowers, plant cuttings, germplasm)
- movement of contaminated equipment (e.g. secateurs, chainsaws)
- wind, water (wind-driven rain, irrigation) and gravity
- animals (e.g. insects including bees, birds, other wildlife, pets)
- humans (e.g. on clothing, shoes and jewellery)
- vehicles.
What do I do if I think I’ve found myrtle rust?

Report any suspected detection on a Myrtaceae plant species to DPI on 1800 084 881.

Alternatively, you can take electronic photos of the suspect material and email to plant.protection@dpi.vic.gov.au, together with a contact phone number and the plant’s location.

If you suspect you have found myrtle rust, do not touch the infected plant material or collect samples, as this could spread the disease.

Suspected rusts on non-Myrtaceae species should not be reported via this number or email address.

How can I treat plants for myrtle rust in my garden?

- **Use an approved fungicide**
  The Australian Pesticides and Veterinary Medicines Authority (APVMA) has issued permits for the use of certain fungicides to control myrtle rust in home gardens and to decontaminate infected myrtle rust host plant material before disposal.

  The permits can be accessed via the DPI website at www.dpi.vic.gov.au/myrtlerust. Your local nursery or chemical supplier may also be able to assist.

  Before using a fungicide, read the permit together with the product label to determine the applicable directions for use.

  In severely infected areas, susceptible host plants should be removed, since re-infection after fungicide treatment is highly likely.

  Protection may be improved by treating a plant with fungicide after removing infected parts.

- **Remove infected plants**
  Infected plants should be removed and disposed of in a way that minimises the spread of myrtle rust.

  1. Spray infected and unaffected plants with a fungicide 3-4 days prior to removal. If fungicide treatment is not possible, carefully wet the plants prior to removal to dampen any spores likely to be dispersed during removal.

  2. Remove plants. Small plants should be enclosed in a plastic bag before being either pulled or dug out. For potted plants, the whole plant, plus the pot, should be placed into the bag and sealed, if practical. If pots need to be retained, they should be thoroughly scrubbed with detergent and water, then left to dry completely before they are used again.

  Larger plants that do not fit in waste bins can be cut into smaller pieces, securely covered with black plastic or similar and put in a sunny place for 3-4 weeks to kill spores.

  3. Dispose of bagged plants by burying on-site, placing in general domestic waste bins, or transporting in a covered vehicle/trailer to a general waste disposal site (not a green waste site). Do not use infected plants as mulch.

- **Remove healthy plants**
  To reduce the risk of a significant infection developing on your property, plant species known to be highly susceptible to myrtle rust can be removed prior to infection.

  Healthy plants showing no signs of infection can be discarded as normal garden waste. If you are unsure whether plants are infected with myrtle rust, use the methods outlined above for removing diseased plants.

  **Please note:** The removal of native vegetation may require a planning permit. Residents who are considering this option should seek advice from their local council on whether or not a permit is required.

Hygiene

After removing and disposing of infected plants, wash clothing and clean any equipment with water and detergent before starting other activities that may infect further plants.

You can reuse pots, wooden stakes and other items that have been in contact with an infected plant. However, you should thoroughly scrub these items with detergent and water, and leave them to dry completely, before reusing them.

Replanting

If infected plants have been removed, replanting with similar species, or other Myrtaceae plants, may result in re-infection. Select replacement plants that are unlikely to become infected. Contact your local nursery for advice.

In bushland areas, including regeneration sites, use local plants not known to be affected by myrtle rust.

Further information