

WHAT YOU NEED TO KNOW ABOUT MYRTLE RUST

Myrtle rust (*Austropuccinia psidii*) is an introduced and highly invasive fungal disease of Myrtaceae plants. It is found in all Australian states except Western Australia and South Australia.

It was first detected in New South Wales in 2010 and has spread across the eastern seaboard and to parts of the Northern Territory, Tasmania and Victoria.

To protect WA from myrtle rust, import measures were introduced in 2010 to restrict the entry of Myrtaceae plants and plant parts into the state—including cut flowers, foliage, seed, fruit, tissue cultures and dry plant material—except under approved conditions. Imports from overseas to Australia are regulated by the Federal government.

However, there still exists the risk of Myrtle rust spores spreading to WA via wind, as well as on equipment, vehicles and clothing that have been in contact with infected plants in the eastern states.

Experience in other states has demonstrated the difficulties in containing this pathogen, with eradication not being achieved. It is unlikely then that myrtle rust can be eradicated if detected in WA, unless it is detected early, and contained to a small or isolated area and the spore load is light.

This highlights the urgent need to learn the signs and symptoms of myrtle rustle, and to report anything that might look like myrtle rust.

Impact of myrtle rust

Myrtle rust attacks young plants and new growth on plants in the Myrtaceae family, including eucalypts, bottle brush, paperbark and peppermint.

The plant family Myrtaceae dominates many major WA ecosystems, including iconic eucalypts such as jarrah, karri, tuart and wandoo. More than half of Australia's Myrtaceae species occur in WA, and more than 1800 species are found in the south-west of the state.

Two of the most susceptible host trees are endemic to WA – WA peppermint and Geraldton wax. Heavy infection can result in the death of highly susceptible hosts.

If myrtle rust was to establish in WA, it has the potential to cause broad scale damage to national parks, bushland reserves, home gardens, commercial operations and amenity settings, such as parks and street plantings.

What to look for

There is almost nothing else that causes similar symptoms on Myrtaceae. Look for:



- Masses of bright yellow or orange-yellow spores.
- Lesions on young, actively-growing foliage, as well as floral buds and young fruits.
- Rust lesions on plant species such as bottlebrush are purple in colour and sometimes spores are dark brown.
- Buckled or twisted leaves.
- Severe disease in young trees may kill shoot tips, causing loss of leaders and a bushy habit.
- Over time or in association with other threats myrtle rust may kill plants.

How does it spread?

Spores of myrtle rust are wind borne and spread readily under suitable climatic conditions.

Rusts are highly transportable. In addition to wind, the below are examples of what can easily transport spores, or transport contaminated soil/plant material, if they have been in infected plants:

- Infected plant material.
- Equipment/machinery.
- Freight containers.
- Vehicles.
- Clothing, shoes, hats.
- Tools.
- Walking sticks.
- Tent pegs.
- Phones.
- Glasses.
- Watches.
- Wallets.
- Other personal items.
- Skin and hair.

Preventing spread

Gardeners/nurseries

- Current import restrictions restrict the entry of myrtaceae plants into WA except under approved conditions.
- Familiarise yourself with signs of myrtle rust, and check plants often for signs of the rust.
- Keep records of inspections and plant movements.
- Practice good nursery and garden hygiene.



• When purchasing new plants or cuttings, ensure they are healthy and free from disease.

Visitors to natural areas

Any activity in natural areas has the potential to spread myrtle rust, including bushwalking, cycling, weeding, revegetation, camping and more.

- When entering bushland areas, arrive clean, leave clean (refer to Arrive Clean, Leave Clean <u>Commonwealth guidelines</u>).
- Ensure all items that could be contaminated are disinfected, laundered, or brushed free of mud, soil and organic matter before entering and exiting bushland.
- This is particularly important if you have been in contact with natural areas outside of WA.
- Use a solution of 70% ethanol or methylated spirits in 30% water to disinfect items.
- Washing your clothes using a standard washing machine with detergent will kill myrtle rust spores.
- Do not move soil or plant material into or out of bushland areas.
- Use wash-down stations and boot cleaning stations if they are available (in WA these stations are used to prevent spread of phytophthora dieback).
- Always stay on roads and trails.