

Welcome to our Conservation Collection

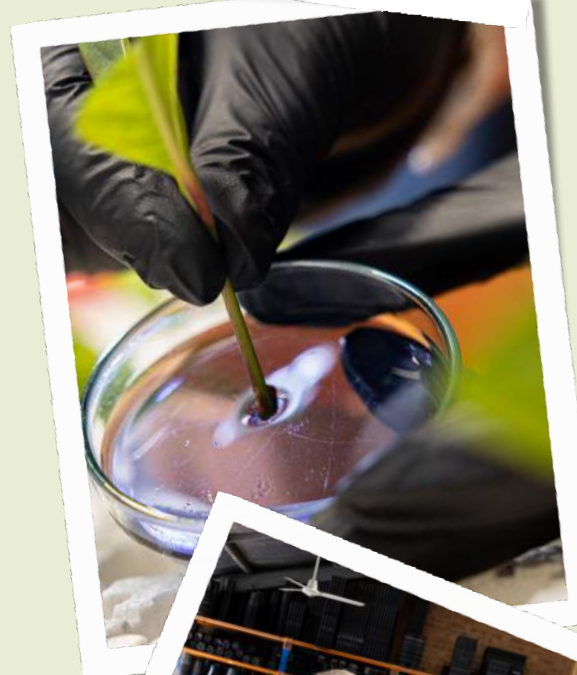
*We are part of a network of
Gardens protecting Australia's
most vulnerable plant species
from Myrtle Rust*

What is Myrtle Rust?

Myrtle Rust is a disease caused by the fungus *Austropuccinia psidii*. Since its arrival in 2010 Myrtle Rust has spread across Australasia and threatens many Australian plants. The disease kills new growth, buds and flowers, meaning severely impacted species can no longer reproduce. The worst affected species will disappear from the wild.

How are we protecting plants from Myrtle Rust?

A network of gardens is housing our most susceptible plants in 'living conservation collections.' The plants growing here are genetically representative of the wild populations which occurred along the east coast of Australia. This collection is replicated at multiple botanic gardens as insurance, in case of damage or disease outbreak.



LEARN MORE

• www.anpc.asn.au/myrtle-rust

• ANPC YouTube Myrtle Rust



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Why aren't these plants in seed collections?

The seeds of these plants don't tolerate freezing so can't be stored for long in a seed bank. The best option for conserving these species currently is keeping plants in living collections; the more expensive technique of tissue culturing is also being investigated.



What species are growing here?

This collection contains two species, Native Guava (*Rhodomyrtus psidioides*) and Scrub Turpentine (*Rhodamnia rubescens*). Both species were once common mid-storey rainforest plants that now are facing the threat of extinction in the wild. In their absence the structure of the rainforest is changing, with unknown consequences.

Research helping us protect the species

- Wild populations are being monitored to track changes and identify any natural resistance.
- Geneticists have identified which collections of individuals best represent the wild population diversity
- Seed from the living collections is being used to research storage methods
- Controlled exposure is identifying Myrtle Rust resistant individuals
- Geneticists are identifying the alleles which promote resistance.
- Controlled breeding to introduce resistance into living collections
- The long term goal is to return resistant plants to the wild.
- Trials of RNA-based treatments as a non-toxic, non-GM control as an alternative to conventional fungicides in horticulture

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TECHNICAL
INFO?**

Watch presentations from the Myrtle Rust Conference



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