

# Inside the Australian Seed Bank Partnership Vault: the Myrtle Mayday Project

BRADLEY DESMOND\*

Australian Seed Bank Partnership

\*Corresponding author: [coordinator@seedpartnership.org.au](mailto:coordinator@seedpartnership.org.au)

Myrtle Rust, a plant disease caused by the invasive fungal pathogen *Austropuccinia psidii*, poses significant threats to Australia's floral diversity. Since its introduction to the country in 2010, the disease has spread rapidly across the east coast, the Northern Territory and more recently into Western Australia. Myrtle Rust attacks plants in the Myrtaceae family, including iconic species such as paperbarks, tea-trees, eucalypts, guavas and lilly pillies. To date, around 400 native species have been impacted, with some experiencing severe decline towards extinction.

With no feasible landscape-scale treatment, *ex situ* conservation provides the best insurance for species survival. In 2022, the Council of Heads of Australian Botanic Gardens, and Botanic Gardens Australia and New Zealand undertook a national stocktake of *ex situ* Myrtaceae collections <https://chabg.org.au/myrtle-rust-survey/>. The survey revealed 23 nationally listed species were missing entirely, and many more were poorly represented. The findings underscored an urgent need for coordinated national action.

## The project

Running from December 2024 to mid-2026, our Myrtle Mayday Project is a national response to this call. We will secure germplasm collections from 31 threatened Myrtaceae species across Queensland, New South Wales, Victoria, and Western Australia to build insurance for threatened species at risk. The project will be delivered in collaboration with four conservation seed banks: the Australian PlantBank, the Western Australian Seed Centre – Kensington, the Victorian Conservation Seedbank, and the National Seed Bank. Importantly, the project also includes the ANPC's Queensland Threatened Plant Network in partnership with the Stanthorpe Rare Wildflower Consortium, marking a significant expansion of conservation collection activity in Queensland.

## Project aims

The Myrtle Mayday Project aims to safeguard 31 EPBC-listed Myrtaceae species, including nine missing from collections and 22 that are poorly represented. Partners will conduct reconnaissance surveys, germplasm collection, seed processing, and germination trials to understand collection viability. Where required, living collections may also be established from cuttings as an additional safeguard.



*Darwinia meeboldii* (vulnerable) is a target in Western Australia. Photo: Andrew Crawford



*Kardomia sylvestris* (Endangered) will be collected from Southern QLD. Photo: Paul Donatui

Our project also contributes to targets under the Commonwealth's Threatened Species Action Plan 2022–2032. At its core, the project supports Targets 13 and 14, securing nationally listed threatened plant species affected by Myrtle Rust in insurance collections. The project also addresses Target 3 by supporting species at high risk of imminent extinction, and Target 4 through work in designated Priority Places including the Fitz-Stirlings, remnant wheatbelt woodlands, and the Australian Alps. In addition, the project contributes to Target 21, with over \$160,000 provided in-kind support from partner seed banks. Together, these actions demonstrate the power of national collaboration in meeting multiple conservation priorities while building long-term resilience for Myrtaceae under threat.

In addition, a key legacy of the project will be the expansion of national seed banking capacity through the inclusion of QTPN in our Partnership. For the first time, local expertise and community-driven efforts in Queensland are being directly linked with our established network of conservation seed banks. This collaboration not only fills a critical gap in the state, but also lays the foundations for ongoing partnerships and knowledge exchange into the future.

## Looking ahead

By mid-2026, the Myrtle Mayday Project will have delivered crucial *ex situ* collections for some of Australia's most threatened Myrtaceae. These collections will serve as insurance against decline, while germination research and data will underpin recovery and restoration in the future. Our efforts to communicate project outcomes also ensure that the threat of Myrtle Rust, and the value of seed banking are understood beyond the scientific and conservation sectors. By sharing results widely, including through our Australian Virtual Seed Bank Portal, the project aims to raise awareness, inspire action, and build long-term support for plant conservation.

## Acknowledgement

We acknowledge the support provided for this project by the Australian Government's Saving Native Species Program. Funding was provided under a grant that aims to improve outcomes for nationally listed Threatened Species.