

Myrtle Rust on K'gari

Help the Butchulla Rangers to Manage Myrtle Rust

Myrtle Rust

Austropuccinia psidii (myrtle rust) is a rust fungus native to South America. The pathogen arrived in New South Wales in 2010 & began attacking species of the Myrtaceae family all along Eastern Australia. The first confirmed rust detection on K'gari was made in 2013 by Dr. Geoff Pegg & Dr. Fiona Giblin from the Department of Agriculture & Fisheries. It is likely that myrtle rust was on K'gari before then. The mature foliage of infected hosts is resistant to rust symptoms; however, the new growth is highly susceptible. Symptoms typical of myrtle rust include red-purple leaf spots with yellow pustules. The pathogen can cause blighting, leaf deformity, dieback & tree death. Additionally, the pathogen can prevent the infected host from producing flower and fruit.

Myrtle Rust & Cultural Values

The Butchulla people value the Myrtaceae family greatly as many Myrtaceae species are edible, medicinal &/or cultural resources. Such resources could be utilised for ceremony, constructing shelters, utensils, tools & weapons. Some Myrtaceae species also serve as seasonal indicators, &/or contain spiritual connections to sacred stories. Myrtle rust has devastating impacts on country & can impede our ability to practise culture.



Myrtle rust on immature midyim berry, K'gari.
Photo by Matilda Davis, BAC.



Myrtle rust on a satinay seedling, K'gari. Photo by Dr. Geoff Pegg, DAF.



Myrtle Rust & Fire

Hot burns, like wildfires, can accelerate myrtle rust infection & severity rates. Wildfires have high, hot flames that destroy the forest's foliage & canopy. The burnt forest produces an abundance of stress-induced epicormic growth (new growth) which is highly susceptible to myrtle rust infection.



Butchulla Rangers & DAF Forest Pathologists surveying for rust post-fire. Photo by Alana Hazel, DES.

Myrtle Rust & Cultural Fire Management

Butchulla fire practitioners observe country, wildlife & the seasons & apply regular cool burns accordingly, this is called 'cultural fire management'. Cultural fire management is integral to restoring & maintaining the health of country (healing country) & is only implemented in vegetation communities that benefit from fire. Butchulla fire practitioners apply cool, low flames to 'thin out' the forest where necessary & burn the debris on the ground, this significantly reduces the risk of wildfires & encourages new growth among grasses & ground-dwelling vegetation. The cool, low flames minimise any disturbance to the mature trees or 'parent trees.' The cool burning method protects the mature foliage & minimises stress-induced epicormic growth, significantly reducing the rate & severity of myrtle rust infections in some species.



Dr. Louise Shuey talking to Butchulla women about myrtle rust. Photo by Alana Hazel, DES.

Bust the Biosecurity Baddie – Recognise & Report Myrtle Rust

You can help us to keep an eye out for myrtle rust on K'gari by emailing photographs of myrtle rust to blsr@bac-k'gari.org, be sure to include the location & date discovered. Then we can add it to our list of sites to monitor, assess & manage with the help of forest pathologists, Dr. Geoff Pegg & Dr. Louise Shuey, from DAF.

You may also report this to DAF ([Report a biosecurity pest or disease | Department of Agriculture and Fisheries, Queensland](#) (daf.qld.gov.au)) or Biosecurity Queensland (13 25 23).

