Monitoring myrtle rust on native forests

Myrtle rust is a highly invasive airborne fungal disease that was first detected on mainland Aotearoa New Zealand in 2017 and has since established in urban areas and native forests. Understanding the spread of myrtle rust and its effect on native trees is critical information for effective management of the disease.

The first monitoring study of myrtle rust in New Zealand native forests was undertaken by researchers from Scion and Plant & Food Research. Monitoring focused on two endemic species, ramarama and rōhutu; both are considered highly susceptible to the disease.

Disease symptoms observed include pustules with bright yellow spores that formed on new growth leaves, shoots, flowers and fruit.

Monitored trees had up to 90% of all new growth infected which caused the death of the branch tips.

Developing fruit that became infected dropped off the trees before maturity, which questions whether natural regeneration in the future will be possible.

The long-term impacts of myrtle rust on these species is unknown, but it is likely that heavily infected trees could die after continued reinfection, which has happened in other countries where myrtle rust has established.

A short note on Monitoring Austropuccinia psidii (myrtle rust) on New Zealand Myrtaceae in native forest has been published in the New Zealand Journal of Ecology.

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