

ROSELLINIA WHITE ROOT ROT

Macadamia
Protection
Programme



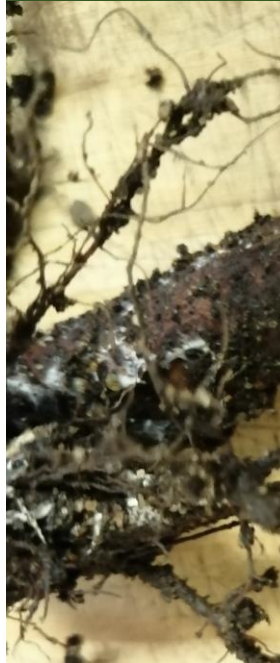
Background *Rosellinia necatrix* is a soil-borne fungus responsible for causing white root rot disease in over 400 different plant hosts. The pathogen has resulted in significant economic losses within the agricultural and forestry industries of numerous temperate and tropical countries. The ability of *R. necatrix* to switch between saprophytic and pathogenic lifestyles allows it to persist in soil for long periods of time. It has been found in apple and pear orchards in the Western Cape and as well as avocado orchards across South Africa. In 2019, *R. necatrix* was first detected in South African macadamia orchards.

Disease *Rosellinia necatrix* is spread through contact with diseased root material, leading to higher risk of spreading in densely populated orchards. *Rosellinia necatrix* infection is often indistinguishable from other common root pathogens and needs to be confirmed via cultural and molecular techniques.

Pathogen type
Fungus

Family
Xylariaceae

Genus
Rosellinia



Treatment

- Removal of dead organic material and infected soil
- Thorough cleaning of machinery after use in affected orchard blocks
- Constant monitoring of orchards for presence of symptoms
- Currently there are no registered chemical products for white root rot of macadamia

Symptoms

- White, cotton-like growth on infected roots and white mycelial “fans” between the bark and wood
- Brown discolouration and root rot
- Wilting and drying of leaves
- Infected trees may exhibit signs of slow growth, loss of foliage and dieback of branches and foliage
- Death occurs during the final stages of infection



SAMAC
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