

MACADAMIA HUSK ROT

Macadamia
Protection
Programme



Background Husk rot is a fungal disease of the pericarp or husk. Disease symptoms can cause premature nut drop as well as prevent adequate nut. The disease is becoming more important in South African macadamia orchards and could significantly reduce yield if not controlled effectively. Multiple fungal genera are known to cause husk rot including *Diaporthe* (Phomopsis husk rot, PHR – black shiny lesions) *Colletotrichum* (Anthracnose husk rot, AHR – concentric fruiting bodies on lesions in ideal conditions) and *Calonectria* (Calonectria husk rot, CHR – white mycelia). Different species, however, differ in their ability to cause disease, both in terms of incidence and severity. Both PHR and AHR require wounding to trigger disease while CHR does not. These genera can occur separately or simultaneously on diseased tissue. All of the above should be taken into consideration when implementing management options.

Pathogen type
Fungus

Anthracnose husk rot
Colletotrichum

Phomopsis husk rot
Diaporthe

Calonectria husk rot
Calonectria



Symptoms

- Soft and spongy black lesions on pericarp
- Premature nut drop
- Inadequate maturation
- Internal discoloration



Disease Husk rot symptoms are often observed after prolonged (2 - 5 days) wet weather conditions with air temperatures above 15°C. Infection can occur during nut development and remain latent or dormant until disease development is triggered. It is hypothesized that disease is most commonly triggered by wounds caused by insect damage and/or mechanical damage such as wind rub combined with favourable climatic conditions.

Treatment

- Insect control in orchards
- Removal of infected tissue
- Application of fungicides

Registered product

- Refer to MacShield

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