## Macadamia Protection Programme

## MACADAMIA FELTED COCCID

Background Macadamia felted coccid (MFC) is an invasive pest, native to Australia. It was first recorded in South Africa in 2017. It is also a problematic pest in Hawaii.



Description MFC is small insect: а immatures are 0.2-0.8 mm in size, while adults are 0.7-1mm. Male and female adults look morphologically different i.e. sexually dimorphic. Adult females are covered by a felted sac, which is initially white and turns pale yellow with age. The felted sac also has a conspicuous opening at the posterior. Males are slightly slenderer than females in the late instar stage. Females remain sessile while males pupate and emerge winged adults.

Biology After emergence, a male adult will find and mate with a female. Females oviposit eggs underneath the felted sac. Upon egg hatch, crawlers emerge from the felted sac. MFC immatures are referred to as crawlers and will develop through three larval stages. If a crawler is a female, it will settle and develop a felted sac. If a crawler is a male, it will pupate and emerge as a winged male adult.

## Feeding & symptoms

MFC feeds by inserting a threadlike stylets into macadamia tissue. All above ground become infested. tissue can infestations result in dieback of branches and reduced yields.





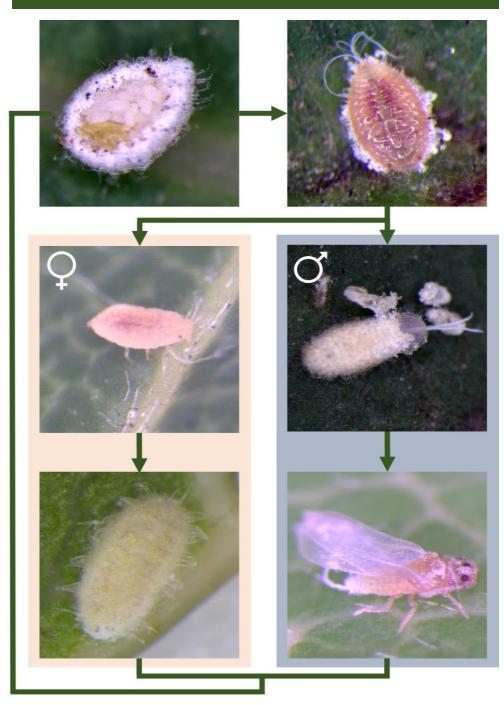








Control Insecticidal oils and insect growth regulators may provide some control, however an integrated pest management programme that include biological control, needs to be developed. For registered pesticides, refer to the MacShield App.



References

Schoeman P.S. & Millar I.M. 2018.. African Entomology. 26(1): 247-249. Photos by: Rosali Moffat.







