

Rugose spiralling whitefly - A new invasive pest on Coconut and other crops

The rugose spiralling whitefly, *Aleurodicus rugioperculatus* has been recently reported from India (Selvaraj et al., 2016) from Tamil Nadu, Karnataka, Kerala and Andhra Pradesh. It is an invasive pest that attacks a wide range of host plants including palms, woody ornamentals, and fruits. Coconut and banana are among the most preferred host plants. During recent surveys the pest incidence was recorded in Goa on different crops

Damage symptoms and Diagnosis

- Nymphs and adults of the whitefly suck the sap on the under surfaces of the leaflets.
- Extensive feeding of the insect leads to the excretion of honey dew which subsequently gets deposited on the upper surface of the leaves
- Honey dew excrement, being sweet and watery, attracts ants and encourages growth of the fungus *Capnodium* sp. which causes disfigurement of hosts affecting the photosynthetic efficiency of the plant.



Presence of large number of white flies colonies on the under surface of leaf



Black sooty mould growth on the upper surface of leaf



Different stages of rugose spiralling whitefly

Host plants

Coconut and banana were found to be common and preferred hosts. The other host plants includes Heliconia, Guava, Henna, Mango, Arecanut and Oilpalm,





Management

- Spraying starch solution (1%) to dislodge the heavy sooty mould deposition on the leaves of infested plants.
- Use of yellow sticky traps to trap the adult whiteflies
- Encourage build up of parasitoids (*Encarsia* sp.) and re-introduce parasitized pupae to emerging zones of whitefly outbreak.
- In case of severe infestation, spray neem oil 0.5%
- No insecticides should be applied to manage the pest.



Parasitoid



Predator

Further details contact

Director

ICAR - Central Coastal Agricultural Research Institute

Ela, Old Goa - 403 402, Goa