



Management of Rugose Spiraling Whitefly, *Aleurodicus rugiopectus* Martin: A Major Pest of Horticultural Crops

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Rugose spiraling whitefly (RSW), *Aleurodicus rugiopectus* Martin (Hemiptera: Aleyrodidae) is highly polyphagous and invasive pest, recorded for the first time in India during 2016 in Tamil Nadu on coconut (Selvaraj *et al.*, 2019). It has now become a regular pest of several horticultural crops, warranting control measures to avoid crop losses.

Common management practices suggested to control RSW

- Conduct regular surveys and monitoring at least weekly for early detection of the pest and decision-making based on AESA.
- Encourage the buildup of the natural parasitoid, *Encarsia* sp.
- Install yellow sticky traps @ 5 per acre to monitor the RSW. Maximum adult RSW were attracted to yellow sticky traps smeared with castor oil, erected facing east at a rate of 270.59 adults/trap/week (Elango *et al.*, 2021).
- RSW adults are most active during the morning between 6:00 am and 10:00 am, and in the evening from 6:00 pm to 10:00 pm.
- Avoid transplanting infested seedlings.
- Restrict the movement of infected seedlings between locations.
- Follow recommended spacing guidelines. Avoid dense planting and adhere to the proper spacing of 7.5 x 7.5 m.
- Apply the optimum recommended doses of fertilizers based on soil health card (soil testing).
- Place yellow light traps @ 2 per acre during night hours between 7:00 pm and 11:00 pm to monitor and trap flying RSW adults (Pavithran *et al.*, 2021).
- A significant reduction in rugose spiraling whitefly was observed in coconut orchards sprayed with *Isaria fumosorosea* fungus (NBAIR- Pfu-5) at 5 g/l with Sticker at 10 g/l, applied twice with an introductory release of the parasitoid *Encarsia guadeloupae* (Visalakshi *et al.*, 2021).
- Spraying neem oil 0.5% or 5% NSKE along with Teepol or Sandovit reduces RSW development (Alagar *et al.*, 2021).
- Pesticides should only be used as a last resort since they can kill biological control agents and non-target pests. Azadirachtin 10000 ppm (1.7 ml), Dinotefuran 20 SG (0.93 gm), Pymetrozine 50 WG (0.85 gm), and Thiamethoxam 25 WG (0.84 gm) are effective in suppressing the pest population in field conditions.

- Profenophos 50 EC and buprofezin 25 SC showed maximum ovicidal effect under field conditions, with *I. fumosorosea* achieving 100% mortality, significantly superior compared to dinotefuran 20 SG (97.23%), thiamethoxam 25 WG (95.02%), and azadirachtin 10000 ppm (94.98%) at 6 DAT (Pradhan et al., 2020).

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