Whitefly takes a toll on coconut groves across south India

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It sucks out sap from the leaves, inducing stress on plant

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An alien invasive crop pest is blighting coconut groves across Kerala and the neighbouring States.

Native to Central America, the Rugose Spiralling Whitefly (RSW) (*Aleurodicus rugioperculatus*) was first reported in India from Palakkad and Pollachi in July 2016. It has now spread to all parts of the State, signalling a serious threat to coconut plantations. Scientists at the Kerala Agricultural University have reported the occurrence of RSW in mango and guava also. A tiny insect measuring up to 2 mm in length, the whitefly sucks out sap from under the leaves, inducing stress on the host plant from the loss of water and nutrients. The honeydew excreted by the fly attracts ants and encourages the growth of a fungus which leads to a sooty mould, affecting the photosynthtic efficiency of the plant.

The National Bureau of Agricultural Insect Resources (NBAIR) has classified RSW as a destructive, invasive pest threatening coconut in India. The Central Plantation Crops Research Institute (CPCRI), Kasaragod, has recorded the presence of RSW from all districts of Kerala and parts of Tamil Nadu, Karnataka, and Andhra Pradesh.

A whitefly-infested coconut palm leaf.

CPCRI Director P.Chowdappa told *The Hindu* that biological control by parasitic insects had been found to be effective against RSW.

"We noticed that more than 70% of whitefly colonies were parasitised by its natural predator *Encarsia guadeloupae*. In fact, RSW infestation has come down in some of the southern districts where the natural buildup of the parasitic wasp had occurred. We are now trying to multiply the predator species."

Another beetle, *Leiochrini nilgirianus*, has been found to be effective in scavenging the sooty mould on whitefly-infested plants.

Dr.Chowdappa advocates a sensitisation campaign focussing on biocontrol methods instead of chemical pesticides. "Encouraging the niche survival of *E. guadeloupae* and habitat conservation of *L. nilgirianus* are critical for effective bio-suppression of the whitefly."

The CPCRI is convening a meeting of agricultural commissioners, vice chancellors of agricultural universities, and senior officials in the Agriculture Department from the coconut-growing south Indian States on December 6 to discuss a control and management strategy for the whitefly menace.