

# CPCRI advice: Let nature deal with the whitefly menace

NIE dt 23/12/17

According to CPCRI, several insects and a good monsoon are enough to get rid of whiteflies

## Integrated pest-control methods

Apply 1 per cent starch solution on leaflets to flake out sooty moulds

Yellow attracts flies. Hang small yellow papers coated with grease or castor oil on palm trunk to trap them

Encourage build up of parasitoids such as *Encarsia*

In severe cases, spray neem oil (0.5 pc solution), insecticide not recommended

Keep spraying water on leaves

Fertilise the soil to keep coconut trees healthy

## EXPRESS NEWS SERVICE @ Kozhikod

RATHER than using chemicals to rid crops of pests, let nature do its work.

An advice of this kind is what the Central Plantation Crops Research Institute (CPCRI) is giving coconut

and banana farmers. CPCRI has reported the second outbreak of the invasive rugose spiralling whitefly in coconut and banana plantations and has advised farmers not to use chemicals on them.

CPCRI scientists said several insects lived of the exotic whiteflies

and eventually killed them. "Encouraging such insects, which are also called parasitoids, is the best way to suppress the rugose spiralling whitefly," said CPCRI director P Chowdappa. In plantations infested with the whiteflies, CPCRI scientists found a natural build-up of a parasitoid called *Encarsia guadeloupae* Viggiani. "We found the parasitoid in 70 per cent of whitefly colonies where no chemical was sprayed. It will take care of the whiteflies," Chowdappa said.

The exotic fly, native to Belize, Guatemala and Florida in southern United States, was first reported in 2004. In India, the pest which has a lifespan of just 40 days, was first reported in Pollachi and Palakkad in August, 2016. In six months, its infestation was recorded across Kerala and parts of Tamil Nadu, Andhra Pradesh and Karnataka, mostly in coconut trees.

The good monsoon in southern Kerala districts almost washed away the whiteflies, said Prathiba P S, an entomologist in CPCRI. In the second outbreak, the dry northern districts of Kerala have been more affected, she said.

The rugose spiralling whitefly attracts a fungus, too. The flies form colonies under leaflets of lower coconut fronds. Early morning, the flies excrete honey dews which drop on the leaflets below. Later, black sooty moulds are formed on the leaflets when a fungus attacks the honeydews.

Scientists said a *Leiochirini* beetle was found feeding on the sooty mould. "Complete cleaning of the sooty mould from the leaves was accomplished in experimental plots at Kayamkulam," Chowdappa said.

Alternatively, starch solution or neem oil can be used to flake off black moulds, he said. "Farmers should focus on bio-control strategies and not use chemicals at any cost," he said.



## Parasitoids (*Encarsia guadeloupae* Viggiani)

Parasitoids are organisms that attach themselves to a single host for most of their lifespan, ultimately killing the host. The *Encarsia* parasitoid is a major natural enemy of the spiralling whitefly

