




Integrated Management of Avocado False Codling Moth

KALRO E-mimea Plant Clinic

KALRO/NAVCDP Factsheet No. 094/2024

		
<p>Healthy avocado fruit Source: L.Wasilwa KALRO</p>	<p>False codling moth Source: http://www.padil.gov.au</p>	<p>Avocado damage by false codling moth Source: fmk.co.ke</p>

Description

False codling moth (*Thaumatotibia leucotreta*) (FCM) is small (6-9 mm long) and active at night. After hatching, the larvae feed in the fruit, develops, exits and drops on the ground for pupation. Adult moths lay eggs on the fruit in batches. Frass and damage inside infested fruit is seen when the fruit is cut open.

Diagnosis/identification

Symptoms

- Presence of a discoloured entry point on premature ripened and fallen fruits
- The larvae is yellowish-white with dark spots and a yellow-brown head. The young larvae mines fruit surfaces or bore the skin causing premature ripening of the fruit
- Adult moths have grey, brown, black forewings with orange-brown markings. False codling has a triangular marking near the edges of the wings
- Dissect the fruits and look for larva or fruit rot
- Dark brown frass signs on fruit and the skin around infestation turns yellowish-brown as tissue decays and collapses.
- Presence of white exudate and granular excreta in holes on the fruit

Management strategy

The following management options are recommended:

Cultural practices

1. Plant clean seedlings that are free of the pest.
2. Scout 2-3 times a week for initial symptoms and timely control.
3. Hang yellow thick polythene sheets pasted with gel/sticky surface about five feet by two feet close to the crops.
4. Collect and dispose infected fruits, leaves, twigs and destroy by burying 40 cm deep to prevent FCM larvae from emergence.
5. Prune to remove infected twigs and also improve on air circulation.
6. Weed the orchard regularly to remove alternate weeds.
7. Avoid inter-cropping avocado with beans, grape, citrus, guava, chili, peppers, pomegranate, and pineapple as they are infested by false codling moth.
8. Use two sex pheromone traps to monitor the adult moths per acre or CRYTRACK trap from Kenya Biologics.

Biological control

1. Use BACIGUARD 16 WDG or *Bacillus thuringiensis* (Bt) to effectively control the pest.
2. Spray with entomopathogenic fungus, Beauvitech or entomopathogenic nematodes (*Heterorhabditis bacteriophora*) based products such as Larvanem.

Chemical control

1. Apply insecticides from flower-bud formation, flowering period, and early fruit development. Spray indoxcarb-based products (Indox) or deltamethrin-based products (Atom 2.5 EC, Decis 2.5 EC) at the manufacturer's recommendations.

Note: Agro-chemicals should be used in consultation with professional practitioners and considering existing cautionary/safety measures, particularly the manufacturer's instructions.

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Disclaimer: The content of this publication is for general information to avocado farmers and technical staff only and no person should act, or fail to act on the basis of the information herein without professional advice from crop health experts affiliated to Kenya Agricultural and Livestock Research Organization (KALRO). This factsheet was produced by KALRO as part of commercialization of avocado with support of National Agriculture Value Chain Development Project (NAVCDP).

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Date last modified: June, 2022