

Mealy bug management in coffee

Recognize the problem

Coffee mealy bugs, also called Kenya mealy bugs, are pests of coffee. The pest attacks both Arabica and Robusta coffee. These small oval and flattened insects are just big enough to be seen by eyes (2.5 mm long and 1.5 mm wide). Their body is whitish-yellowish and segmented, but this is not easily seen as the body is often covered with white wax. White masses of bugs can be seen on upper side of leaves, and between berries, flower buds or on sucker tips. Infected coffee plants shed their leaves. Coffee plants can die under heavy infestation.

Background

Mealy bugs multiply rapidly during dry weather. They produce a sugary substance called honeydew that covers the leaves and provides food for a black fungus (sooty mould) to grow. The mould blocks light from reaching the leaves and reduces crop growth. Young mealy bugs can be spread over long distances by wind. Adults can be carried by ants that travel from affected to unaffected plants. Ants also protect the mealy bugs from predatory insects. Therefore, controlling ants will allow predators to feed and reduce mealy bugs.

Management

This pest can only be controlled by a combination of measures:

- If no chemicals are sprayed, the mealy bugs are often naturally controlled by parasitic wasps (*Anagyrus kivuensis*) that eat inside the bug.
- Band tree trunks with 20 cm wide plastic bands covered with a sticky substances (e.g. warmed up and then cooled oils) mixed with insecticides (e.g. products containing chlorpyrifos) to prevent ants accessing the bugs. Be careful when mixing pesticides because they are toxic (WHO toxicity class II moderately hazardous).
- Remove suckers and branches that touch the ground to prevent ants.
- Spray the ground where ant nests are located by using insecticides, but they are toxic to you. Products containing malathion are slightly hazardous (WHO toxicity class III). Products containing dimethoate, diazinon, ethion, carbaryl are more toxic (class II, moderately hazardous). Wear protective clothing. Read and follow product label.
- Apply oils (such as vegetable oils, neem oil or mineral oils) or soapy solutions (1 to 2%) to kill mealy bugs by suffocation. Use soapy water or oils only during non-hot and non-sunny periods to prevent discolouration of leaves. Prior to applying them extensively, apply to a branch and after 48 hours check for adverse reactions of the coffee plant.

2.5 mm (0.1") adult mealy bug.
(Photo by Robert Reeder, CABI)



Coffee leaves, covered by mealy bugs.
(Photo by Fredrick Magina)



When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval.

Scientific name(s) > *Planococcus kenyae*

The recommendations in this factsheet are relevant to: Ghana, Tanzania



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