PEST MANAGEMENT DECISION GUIDE: GREEN AND YELLOW LIST

Stone weevil of Mango

Sternochetus mangiferae

Adult mango stone weevil (USDA APHIS PPQ , USDA APHIS PPQ, Bugwood.org)

Adult weevil emerging from stone (Pjeganathan, Wikimedia Commons)

Mango seed weevil damage (CABI)

Prevention

- Collect and destroy all leftover seeds, fruits and debris in the orchard after havest, bury 50cm befow the soil
- Avoid planting in a field with previous pest history of weevil damage
- Avoid planting seeds from infested fields because weevils develop in them and emerge from seeds left on the ground
- Avoid the movement of infested fruits for propagaton or consumption.
- Establish orchards with weevil-free nursery stock
- Remove non-commercial mango trees or treat them with insecticide

Monitoring

- Visit to the field weekly and look for the adult at their hiding sites. The adults can be black, greyish, reddish or yellowish, 7.5-9.5 mm long with a long 'nose', hiding under loose barks, around the base of mango trees or in the fork of branches or leaf litter
- Check for feeding damage on new growth prior to flowering
- Look for presence of eggs in the fruits at the marble size
- Look for sap flow on the immature fruits
- Cut fruits and seeds at harvest to look for larvae and adult
- Act two weeks after flowering

Direct Control

- Clean by brushing using old broom at junctions of branches on the trunk and crushing adult.
- Use sticky bands placed on tree trunck below the branches just before flowering to trap migrating weevils
- Collect and destroy all fallen fruits by chopping and burying more than 50cm deep at weekly interval during the growing season until after harvest
- Control adult stone weevil with the biocontrol agent Oecophylla smaragdina(ant) if available. Integrate with orchard sanitation for effective control

Direct Control / Restrictions

Direct Control	Restrictions
• When using a pesticide or botanical, always wear protective clothing and follow the instructions on the product label	
• Do not use chemicals with the same mode of action year after year as this can lead to resistance	
• Always consult the most recent list of registered pesticides of MOFA, Ghana	
• Alpha cypermethrin (e.g. Fastrack 10SC, Fendona 5SC). Apply at 40 ml /15L of water. Contact pyrethroid, IRAC group 3A	• WHO class II (Moderately Hazardous), Apply at flowering, early fruit set or when first eggs are noticed (Feb-April). Apply early morning and late evening, Apply at most two times per palnting season. Re-entry period 24 hours.
• Acetamiprid (e.g Golan 20SP). Apply at 50 ml /15L of water. Systemic neonicotinoid, IRAC group 4A	• WHO class II (Caution). Apply at flowering,early fruit set or when first eggs are noticed (Feb-April). Apply early morning and late evening, Apply at most two times per planting season. Re-entry period 24 hours .
• Fenitrothion+fenvalerate (e.g. Hockli Combi 40EC). Apply at 50 ml /15L of water. Fenitrothion is a non-systemic organophosphate, IRAC groug 1B; Fenvalerate Systemic is a contact pyrethroid, IRAC group 3A	• WHO class II (Moderately Hazards). Spray at flowering, early fruit set or when first eggs are noticed. Apply early morning or late evening. Apply at most two times per planting season. Re-entry period 24 hours.

Ghana

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