Fruit flies

Recognize the problem

Fruit flies cause damage that lowers the market value of fruits such as mango and passion fruit. Adult fruit flies are small insects about 5-8 mm in length. They puncture the fruit and lay eggs under the skin. This leaves the fruit with small spots on the skin and leakage of fruit sap. The eggs hatch into whitish maggots within 1 to 2 days. The maggots feed on the fruit flesh causing faster ripening and rot. Between 5 and 20 days, the maggots exit the fruit leaving holes.

Fruit fly damage on unripe mango. (Photo by Kengap Horticulture)



Background

Fruit flies have many host plants. When fruit fly maggots leave the fruits, they move into the soil and develop into adults. The fruit flies may live and fly from other favourable plants to the mango tree at the beginning of the harvest season. Fruit flies get attracted to sex attractants and protein food baits.

Mango rot with fruit fly maggots. (Photo by Kengap Horticulture)



Management

Non-chemical control

- Gather and destroy all infected fallen fruits twice a week and bury them about 50cm deep.
- Uproot non-useful host plants with fruits e.g. neglected citrus, guava, hot and sweet pepper in the farm or nearby.
- Pick out infected fruits with dimples and those that leak clear sap and destroy.
- If possible, cover young fruits in paper bags or newspapers to put off fruit flies. This may be impractical on a large scale.
- Harvest overripe fruits as they attract fruit flies.
- Use fruit fly traps with protein bait to attract the adults.

Chemical control

- Use poison baits that contain protein hydrozylate or molasses mixed with Bifenthrin, Buprofezin, Deltamethrin or L-cyhalothrin.
- Spot treatment with insecticide sprays can be applied to non-fruiting regions.

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) > ***Ceratitis* spp.; *Bactrocera dorsalis (previously B. invadens); Bactrocera cucurbitae***

The recommendations in this factsheet are relevant to: many countries where this pest or problem is present

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