

Sanitation to control mango seed weevil

Recognize the problem

Mango seed weevil is an insect pest of mango. The weevils are less than 1 cm brownish small beetles with a long nose. When weevils lay eggs early, meaning on just forming fruits, then the feeding of the hatched small larvae leads to premature fruit fall. If the attacks occur at a later stage, infested fruits are difficult to detect by the untrained eye. The holes made by egg-laying female weevils are tiny and heal soon. Only a very small, dark mark remains on the fruit skin. Farmers can detect the pest by dissecting suspected fruits (with small dark mark) and checking the inside for weevil larvae in the seed and seed damage. The larvae are often about ½ a cm long, white, curved, with a small dark head. The seed turns black and becomes a rotten mass. The infested fruits rot inside. If you see many larvae in the fruit flesh, then these are fruit fly larvae and not weevil larvae.

Less than 1 cm long mango seed weevil. (Photo by Georg Goergen/IITA Insect Museum, Cotonou, Benin)



Background

The weevils usually lay eggs when mango fruits are at least 3 cm or bigger. The larvae of the weevil enter the fruit burrowing through the flesh into the seeds. Inside the seed, larvae feed until they destroy the seed. Adult weevils spread to uninfested orchards via transported infested fruits or seeds. Since there are no easy-to-see outside signs of infestation, infestation often remains undetected. Therefore, chemicals are difficult to apply. Preventive measures, such as field sanitation, are often the only effective measure. Weevil attack can be detected by weekly monitoring for egg-laying marks on young fruits, and subsequent slicing of fruits to confirm weevil larvae.

Less than ½ a cm larvae of the weevil feeding on mango seed. (Photo by Peter A. Follett)



Management

- Collect and destroy all fallen fruits whenever they are seen on the ground. Bury them at least ½ a metre deep and preferably outside the orchard.
- Keep the tree basins clean by removing any fallen plant debris.
- Avoid movement of fruits from areas known to have mango seed weevils to areas where young orchards, free of seed weevil, are established. A strict policy of not bringing mango fruit into the orchard and its surroundings will greatly reduce the chance of infestation.

Scientific name(s) > *Sternochetus mangiferae*

The recommendations in this factsheet are relevant to: Zambia



Authors: Chanda Bwalya
Ministry of Agriculture and Livestock
tel: +260978135251 email: chandab2005@yahoo.co.uk

Edited by Plantwise.