

# Mango midge

## Recognize the problem

Mango midge is a serious pest of flowers and fruit stalks of mango. They look like small house flies and live for a day. Midges are very small, and are black and brown in colour. Young midges are yellowish but change in size and colour as they develop. The female lays eggs in the tissue of young leaves which causes a small reddish brown spot to form on the leaf. The leaf tissue under the brown spot becomes swollen and soft.

The midge damages the mango tree in three ways: when the flower buds come out, when the fruits are setting and when new leaves appear near the flowers. Midges destroy the inflorescence before flowering and fruit setting. The inflorescence shows stunted growth, leaves are curved at the bud point and the plant dies before fruit setting.

## Background

Mango midges lay eggs one by one on the flowers, new fruit and leaves. Eggs hatch in less than a week. When they hatch, young midges go to feed on the tender parts of fruits and leaves. They feed for about a week then drop down into the soil at the depth of a finger to sleep. They stay in the soil for less than a week, unless the weather is hot and dry, in which case they stay in the soil for longer. This is repeated from January to March. From April to November, they are inactive and stay in the soil as the weather is too hot.

## Management

### Cultural control:

- Field sanitation: collection and destruction of all fallen fruits at weekly intervals until harvest
- The pest can be managed by ploughing orchards so that sleeping insects can be eaten by birds and other insects or killed by exposure to the sun
- Spread a plastic sheet under the canopy of each mango tree from January to march

### Biological control

- Parasitoid wasps and ants (*Camponotus* sp., *Monomorium* sp.) are beneficial insects and found in the canopies of orchards. Do not kill them if you see them!

### Chemical control

- Spray primary branches and junctions of branches prior to flowering (November/ December) with chlorpyrifos 5ml per 100 l water. Only use 2 applications per season.
- Spray profenofos (5ml per 100 l water.) or imidacloprid (2.5ml per 100 l water) when the buds are showing in February. Only use 2 applications per season.
- Foliar application of bifenthrin 70ml/100 l with 7-10 day intervals in the flowering season up to pinhead stage of the fruit setting.

Note: chlorpyrifos and imidacloprid have non-target effects.

Midge. (Photo by Christophe Quintin (CC BY-NC))



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) > *Erosomyia mangiferae*

The recommendations in this factsheet are relevant to: Pakistan



Authors: M. Hasnain, M. Naeem Aslam, M. Ashiq Sangi, Shuhrab Khan  
Plantwise

Edited by Plantwise.