

# Management of Bean stem maggot

## Recognize the problem

Bean stem maggots feed at the base of stems, which blocks the movement of water and nutrients from the roots to the upper parts of the plant. This can cause wilting and death of plants.

## Background

The bean fly has shiny wings and a black body. It lays its eggs on the first leaves of the bean seedlings as they emerge from soil. The maggots hatch and enter inside the plant, where they feed. When the maggots are full grown, they turn into black and brown pupae. The pupae can be seen bulging behind the plant skin at the base of stem. These hatch into bean flies which fly around bean plants.

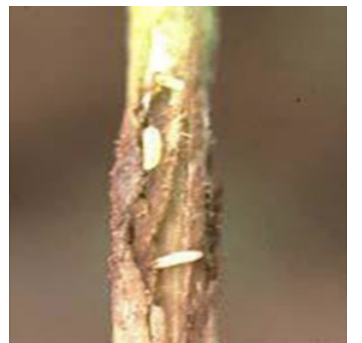
## Management

- Plant beans early in high altitude areas and plant late in mid-altitude areas
- Supply enough water in irrigated crop to encourage root growth above damaged area
- Earth up infested plants to stop the stems falling over and encourage root development above damaged tissue
- Before planting, dress bean seeds with Imidacloprid 70WP (Gaucho) by: a) making a paste with water in a basin; b) mixing with beans; c) dry the seed in shade; d) sow the seeds
- In the field, spray with Diamethoate 400 EC (Dimethoate) according to recommended rates on the label. Start as soon as bean seedlings emerge. Repeat spraying weekly for the first 4 weeks after emergence.

A bean fly adult on a bean leaf.  
(Photo by A.M. Varela, icipe)



Bean fly maggot inside a stem.  
(Photo by CIAT - Tanzania)



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) > *O. spencerella*, *O. centrocematis*, *Ophiomyia phaseoli*

The recommendations in this factsheet are relevant to: Malawi



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