# FACTSHEETS FOR FARMERS

#### Created in Zambia, August 2013



# Pheromone traps against fruit flies in citrus

#### **Recognize the problem**

Fruits are attacked by small insects called fruit flies. These flies lay eggs inside fruit. Worm-like larvae hatch from the eggs and feed on the fruit causing it to rot. This results in low yields and reduced fruit quality. Affected fruits have black spots on and cannot be eaten because they contain young fruit fly larvae.

## Background

Special traps made from yellow buckets with white lids are used to manage the fruit flies. These buckets are filled with female sex pheromones, which attract the male flies who think it is a female fly. Inside the trap, there is an insecticide to kill the flies as soon as they enter. This reduces the number of males available for mating with females. As a result, the females cannot produce eggs containing larvae. Traps can be collected from Agriculture Offices near the farmers' orchards or from registered agro-input dealers.

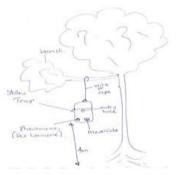
## Management

- Hang pheromones traps on orchard fruit trees about 4 m above the ground
- Three traps with three different types of pheromones are put 30 m apart in the orchard
- Add an insecticide such as malathion (pellets or granules) to the trap together with the pheromone. Do not use dichlorphos insecticides pellets because they are very toxic to people
- Indicate 'POISON' or 'DANGER' on the traps to warn people that the traps contain a chemical
- This method works best if many citrus growers participate

Adult female fruit fly, 0.5 to 1 cm. (Photo by Viwat Wornoayporn / IAEA, CC BY-SA)



Placement of traps. (Photo by Vincent Simwinga)



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) > Bactrocera dorsalis (previously B. invadens)

The recommendations in this factsheet are relevant to: Zambia



Authors: Vincent Simwinga, Mathews Matimelo Zambia Agricultural Research Institute ZARI of Ministry of Agic. & Livestock tel: +260-211-278130/ 278380/ 974917828 email: vsimwinga@yahoo.co.uk

Edited by Plantwise.