

# Repelling fruit flies by weaver ants in oranges

## Recognize the problem

Fruit flies lay eggs in mature orange fruits causing black dots and yellowing of fruits. The flies are a bit smaller than house flies and much more colourful. They have orange silvery patterns around the abdomen, and transparent wings with dark patterns. The larvae hatch from eggs, feed inside fruits, and destroy them. Fruits rot and fall off early.

## Background

Fruit flies are flying insects that search for mature fruits of different types. Many farmers experience postharvest loss of oranges, damaged before harvesting or during collection for sale. One of the techniques that can be used for control is the use of weaver ants to repel these flies. Weaver ants (maji moto in Kiswahili) are reddish, and live in colonies by building nests in trees using old leaves. The introduction of weaver ants to orange trees can be done by collecting weaver ant nests and hanging them on top of the orange trees before flowering. The weaver ants try to attack the fruit flies when they land on mature fruits to lay their eggs. Fruit flies will fly off and will not have had a chance to lay their eggs.

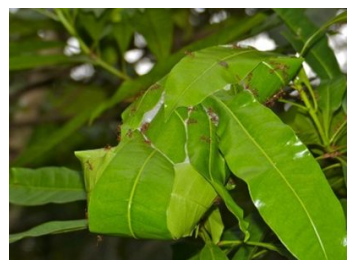
## Management

- Search for weaver ants in branches of mango trees, guava trees or other wild trees
- Take plastic containers and pull a branch with nests full of weaver ants towards the container to collect the ants in their nests
- Weaver ant collection is easiest during the rainy season because weaver ants stay unmovable in their nest
- The ant nests can be hung up using rope to the upper branches of orange trees where fruit flies are expected
- This is done at flowering stage of orange trees
- Care should be taken since the ants can bite you but an operator in this activity can tolerate and finish the job
- Note: subsequent pesticide sprays may kill the ants so is not recommended unless necessary

Fruit fly on fruit. (Photo by Ko Ko Maung, Bugwood)



Weaver ant nest. (Photo by Bernard DUPONT, via Flickr)



Scientific name(s) > *Bactrocera zonata*, *Bactrocera cucurbitae*, *Bactrocera dorsalis* (previously *B. invadens*)

The recommendations in this factsheet are relevant to: Tanzania



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