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# Traps to forecast armyworm outbreaks

## Recognize the problem

Armyworms are pests that live and move in large groups. The moth is 1.5 cm long but has a wingspan of up to 3cm. Forewings are dark-brown and hindwings are white with thin dark veins. The destructive stage is the larva which is black with a green stripe running down each side of the body. In the field they damage cereal crops (mazao aina ya nafaka) that look green. The pests are known as 'Viwavi jeshi'.

Armyworms. (Photo by FAO/ Lesotho/ Lechoko Noko, via Flickr)



## Background

Armyworm moth monitoring is done to forecast the likelihood of armyworm larvae outbreaks and to prepare farmers for mitigation/intervention. Pheromone traps, which take the form of a bowl with a lid, can be used. Pheromones are chemicals that attract male but not female moths. The male moths come out at night, lured by the smell of the pheromone and enter the trap. Captures are then centrally reported to the National Armyworm Control Programme. Following this, farmers and local governments are informed of precautionary measures for the expected larval outbreak.

## Management

Pheromone trap for armyworm moths. (Photo by EC/ECHO/Anna Chudolinska, via Flickr)



- The government distributes the traps to cereal growing villages with smallholder farmers
- Place 1–2 traps into a green cereal or grassy area per village
- Place traps in an open place near a home, but shaded to avoid rainfall and direct sun. Traps should be out of reach of children.
- It is good if rainfall is measured in the village, as at least 5 mm rains are required per day for a few days to allow egg hatching of armyworm
- Place traps in November or December to capture moths that will then lay eggs that hatch in January or February (outbreak period)
- Place two wooden poles 1.5 to 2 m high about 1.5 m side by side. Put a cross bar on top of poles and hang the trap in the middle of this bar.
- Count and record the trapped insects early in the morning and hang the empty trap back in the field
- If you find 100 to 300 armyworm moths per day over a few days in a trap, then report to the village governments and to the district agricultural irrigation and cooperatives office
- You can also fill out an armyworm daily record form. It has entries for date, number of insects captured per trap, name of station and name of the recording personnel.
- An armyworm outbreak warning is made for farmers if several taps in a region report the captures AND if 5 mm rain is recorded at least at two days AND if cereals or grasses are green in an ear
- Warnings are communicated through village meetings, schools, churches, mosques, village announcers and radio announcements

Scientific name(s) > ***Spodoptera exempta***

The recommendations in this factsheet are relevant to: Tanzania

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