

## Management of cucurbit fly using physical techniques

### Recognize the problem

Cucurbit fly is the most important insect pest in cucurbits and destroys up to 100% of the yield. The use of insecticides against this pest is not advised due to the toxic effects on people & the environment. Therefore, physical techniques are very useful in the management of this pest.

### Background

Adult cucurbit fly is a fast & long-distance flier that flies up to about 2m in height. Adult females lay masses of eggs underneath the peel of young cucurbit fruits. Newly hatched larvae (maggots) feed in to the middle of the fruit & grow up. Fully grown larvae jump to the soil and pupate up to a depth of 15cm. They can complete their lifecycle within 25 days under favorable conditions.

### Management

- Cover the crop with physical barriers like nets, dried leaves or a live fence up to 2m in height
- Practise deep ploughing up to 20cm
- Flood the field for three weeks
- Solarisation of soil
- Cover young fruits with thick polythene bags
- Collect all young fruits with laid eggs & with young larvae and allow for sun drying. (Fruits with eggs & young larvae can be identified by latex secretions on fruit peel)
- Collect fruits with mature larvae, being careful not to give them a chance to jump to soil. The fruit can then be burned, heated to 80°C, placed in a thick polythene bag or buried to a more than 30cm depth (Fruits with mature larvae can be identified by yellowing, becoming paler and softening)

Covering field with dried leaves.  
(Photo by S.S. Weligamage)



Bagging cucurbit fruits. (Photo by S.S. Weligamage)



Scientific name(s) > *Bactrocera cucurbitae*

The recommendations in this factsheet are relevant to: Sri Lanka



Authors: S. S Weligamage, W. M.D.H. Kulatunga, N. P Haritha Nimalananda, A. Priyatharsini  
Research Officer, Plant Protection Service  
tel: 0094 0812388316 email: senaniweligamage@gmail.com

Edited by Plantwise.