The melon fly is the most important insect pest of cucurbits in Mauritius and Rodrigues. The hosts include cucumber, pumpkin, calabash, bittergourd, chouchou, ridge gourd, water melon, snakegourd, squash, courgette etc. An integrated melon fly management practice is recommended in order to produce quality vegetables with minimum pesticides.

1. **Plantation of a trap crop**

It is very important to have a trap crop in the plantation. Melon flies rest under leaves of plants such as maize, guava, pawpaw, cassava, mango, citrus, ricin (castor oil) etc. It is recommended that maize be planted in the field at least one month before transplantation of cucurbit seedlings as per layout given below.

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<th>20 m</th>
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<td>Crop</td>
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Maize (2 to 4 rows)

*Layout of field planted with maize*

Maize plants should be planted in rows.

2. **Bait application with either Success bait or Protein hydrolysate (e.g. Fly-O-Bait) two weeks after transplantation.**

*Application of Success bait under leaves of maize plant.*

Either *Success bait* or *Protein hydrolysate* can be used.

- *Success bait* is diluted with water in the ratio of 1:4 i.e. 10 ml *Success* is mixed with 40 ml of water. The bait mixture is applied as spot sprays of 2-3 ml under leaves of the trap crop.

- 20 ml of *Protein hydrolysate* (e.g. Fly-O-Bait), is poured in 1 litre of water. The solution is mixed with one of the following insecticides: Baythroid 50 SL, Dacs 2.5 EC, Cymbush 10 EC, Karate 5 CS, Lebaycid 50 EC or Selecron 500 EC, 2 ml/L or Dipterex 2 g/L of water. The bait is applied as spot sprays of 5-10 ml/spot under leaves of the trap crop.

3. **Mass trapping of males two weeks after transplantation**

Traps are made up of plastic bottles or yellow plastic containers with openings on the sides. Cotton wicks baited with cuelure and insecticide in the ratio of 1:1 (10 drops) are placed inside the trap. Any insecticide mentioned in Section 2 can be used. Traps are placed in the trap crop 20 m apart. They are renewed after 15 days.

*Plastic bottle trap baited with cuelure and insecticide*

*Yellow trap baited with cuelure and insecticide*

*Melon flies caught in a yellow trap.*
All infested fruits should be regularly collected from fields and disposed off by:

(i) placing them in sealed plastic bags or fruit cages.
(ii) composting, or
(iii) burying at a depth of at least 30 cm.

Distortion of cucumber fruit caused by melon fly punctures

Cucumber fruit showing internal damage caused by the melon fly

Female melon fly resting on a cucumber fruit

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