3. Killer blocks
Killer blocks (lure + insecticide) are placed at 10 metres intervals to reduce the populations of male flies. Fruit flies are killed by the insecticide upon contact with killer blocks. Killer blocks are renewed every 4-5 months.

4. Fruit bagging
Fruits can be protected from fruit fly attack by physically covering them. This is done by covering fruit in breathable bags (plastics pierced with small holes, old newspapers, khaki pockets and nylon screen material).

5. Sanitation
Fallen and infested fruits are collected from orchards/ backyards. They are then sealed in plastic bags and exposed to direct sunlight for a few hours to kill the maggots. Fruits can also be buried deeply (more than 30cm).

6. Augmentation
To conserve natural enemies of fruit flies, an Augmentorium can be set up to collect fallen fruit. The Augmentorium should prevent emerged adult fruit flies from scaping but allow natural enemies like parasitoids to escape and flourish.

HELP TO STOP THE SPREAD OF FRUIT FLIES
Do not bring fruits and vegetables in your luggage from out of Zimbabwe. Fruits and vegetables may harbour exotic fruit flies.

For more information contact:
National Plant Protection Organisation

MINISTRY OF AGRICULTURE, MECHANIZATION AND IRRIGATION
DEPARTMENT OF RESEARCH & SPECIALIST SERVICES (DR&SS)
RESEARCH SERVICES DIVISION
ZIMBABWE

CONTROL FRUIT FLIES IN YOUR ORCHARDS AND BACKYARDS AND OBTAIN HEALTHY FRUITS AND VEGETABLES

FRUIT FLY CONTROL

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FRUIT FLY PROBLEM

**Egg Stage**
Female adults deposit their eggs inside the fruits. Eggs hatch within 1-2 days.

**Larval Stage**
Maggots undergo 3 larval stages in about 10-15 days and damage fruits by feeding on the fruit pulp.

**Pupal Stage**
Maggots leave fruit and burrow into the soil to form pupae. This stage lasts for about 9 days during which the insect develops into an adult.

**Adult Stage**
Adults emerge from the pupae after about 9 days.

CONTROL METHODS

The National Plant Protection Organisation recommends a sustainable and environmentally safe strategy to reduce fruit fly populations in orchards, gardens and backyards. Follow these control methods regularly and harvest good fruits.

1. **Mass trapping**
Mass trapping of fruit fly males is done through the use of plastic bottles or containers with holes. Traps are baited with fruit fly lures and insecticides and then placed in orchards or backyards.

2. **Protein bait application**
Treat your fruit trees every 7 days with a bait mixture (protein + insecticide) which attracts both males and females. Adults are killed by the insecticide when feeding. Start treatment from fruit set till harvest. Apply bait under leaves at 5 metre intervals.

**Economically important fruit flies**

- **African invader fly**
  *Bactrocera invadens*

- **Melon Fly**
  *Bactrocera cucurbitae*

- **Natal fruit fly**
  *Ceratitis rosa*