

Fruit fly on tomato

Bactrocera aquilonis, *B. atrisetosa*, *B. cucumis*, *B. dorsalis*, *B. tryoni*, *B. dorsalis*, *B. latifrons*



Bactrocera dorsalis (Oriental fruit fly); adult. (©Clive Lau)



Many 0.5 to 1 cm fly larvae (= maggots) in a tomato (CABI)

Prevention	Monitoring	Direct Control
<ul style="list-style-type: none"> • Bag immature fruits with polythene, paper or silk clothing within one month of flowering • Timely planting to avoid tomato ripening and harvesting period during ripening seasons of other fruit hosts (see below). Otherwise flies may migrate from the fruits of these trees into tomato fields. • In order to prevent the spread of the insect pest, avoid rotating or planting near alternative hosts; guava, chillies, citrus, melons, avocado, pear, mango, banana, pepper, wild fruits • Expose pupae to sun by raking up soil surrounding tomato plants • Harvest fruits at physiological maturity before they become very ripe and soft which makes it easy for the flies to lay eggs in them 	<ul style="list-style-type: none"> • Tomato fruits rot when larvae of fruit flies live and feed inside. • The fly adult is a small winged insect of nearly 1 cm in length. It is like a house fly in shape but smaller, and its body can be colourful. Look for adult flies on the flowers and fruits. • For early detection, use commercial pheromone traps with trimedlure (TML), or cue lure (CL), or methyl eugenol (ME) attractants (3 traps/ km²). Follow infestation regularly, once flies are detected. • Inspect fruits for soft black spotted ovi-punctures on the fruits weekly. Larvae enter the tomato and are yellowish whitish, 0.5 to 1 cm long, 2 to 3 mm thick. • When damage is detected on 1 to 2 tomatoes/ 10 plants on average, consider act quickly before more eggs are laid and hatching larvae feed inside tomatoes • At high infestations, i.e. in case of mass invasion, your tomatoes are likely to be lost. Then no action is needed 	<ul style="list-style-type: none"> • Apply neem oil or neem seed extract to kill pupating larvae • Grind 50 g wild basil leaves; soak overnight in 2-3 litres water; strain; add 10g soap; then spray over un-ripened tomatoes (reach coverage) early in the mornings. • Collect all fallen fruits from below nearby fruit trees because they host many fruit fly larvae. Place in black polythene bags, tie them up and expose to sun or bury infested fruits more than 50 cm deep in soil in order to kill larvae

Note: Pesticides may be available to control this pest. Please check with the Ministry of Agriculture in your country to find out which pesticides are registered in your country and the local restrictions for their use.