

Fruit Fly

There are two species of fruit fly, the Mediterranean fruit fly (*Ceratitis capitata*) and the



Mediterranean fruit fly. (A)

Australian native Queensland fruit fly (*Dacus tryoni*).

The Queensland fruit fly is, reddish-brown with yellow markings and is about 7mm long. The Mediterranean fruit fly is smaller than the Queensland fruit fly, and is yellow with brown bands on its wings.

These flies lay their eggs in small groups just beneath the skin of the fruit. When the creamy, 9mm long maggot-like larvae hatch and feed, the fruit flesh

becomes rotten inside. The only evidence usually seen on the outside of the fruit is small

'sting' marks. Fruit may also fall from the tree after being stung and fungi, such as blue mold, can

invade the puncture site further accelerating the

rot. All states of Australia have very strict

regulations regarding this pest. Fruit must be

removed from the ground or tree and destroyed by

burning or boiling or being immersed in water with

a layer of kerosene on the surface for ten days or

placing fruit in sealed plastic bags in the sun for

several days.



Mediterranean fruit fly larvae and damage to fruit

Grasshoppers



Wingless grasshopper

There are many grasshoppers but only a few species

damage citrus. These include Giant grasshopper

(*Valanga irregularis* and Wingless grasshopper

(*Phaulacridium*). Grasshoppers nibble leaves and can

strip everything bare. Do not take control action

based solely on damage. Caterpillars, earwigs,

beetles, and snails also chew leaves. Organic

growers utilize chickens in the orchard to control



numbers. Insect proof netting is another option. Neem, a plant oil, may be available soon for grasshopper control. Where abundant, grasshoppers can be observed during the day feeding openly and flying or jumping among plants. For chemical control, apply insecticide combined with bait or spraying.

Katydids

There are two species of Katydids: the Inland katydid (*Caedicia simplex*) and the Citrus katydid (*Caedicia strenua*). These insects belong to the long-horned grasshopper family and are green and about 45mm long but when they are young (nymph stage) they look rather like ants with long antennae.



Katydid damaged on fruit showing depressions below uninjured area

They feed on very small soft leaves at first, producing a lace-like affect then move to older leaves where they chew holes. They also feed on very young fruit, creating a sunken, scarred surface, at first whitish but turning grayish and speckled as the fruit matures.

As these insects invade in small numbers, removal by hand is effective.

Light Brown Apple Moth



Light brown apple moth

This moth (*Epiphyas postvittana*) is very common on most fruits and often attacks citrus. The adult moth is about 12mm long and brown-grey in color. Larvae are light green, around 20mm long and very active when disturbed. They web leaves together or roll one into a tunnel for a shelter. They eat leaves, chew holes and cause damage to young fruit, scarring the stem end when the skin is soft. Remove weeds as weeds can play host to the moth. Spray with the biological agent, *Bacillus thurengiensis*, commonly available as Dipel™

