

Queensland and Mediterranean fruit flies

What are they?

Mediterranean fruit fly (*Ceratitis capitata*; MedFly) is one of the world's most destructive agricultural pests, and the Queensland fruit fly (*Bactrocera tryoni*; Qfly) is also considered a very serious pest of a wide variety of fruit and vegetables. The presence of these flies in production regions has severe consequences on trade, both locally and internationally.

Both QFly and MedFly have short life cycles in warmer weather. Each has egg, larval (maggots), pupa (in soil) and adult stages. The larval stage is the most damaging as larvae feed within fruit or vegetable tissue. Secondary infections with fungi cause rot and decay around wounds. 'Stinging' sites (where eggs are laid) may also provide entry points for secondary organisms.

It is the falling of infested fruit/vegetables to soil that allows the life cycle of the flies to be continued as the pupation occurs in soil.

What do they look like?

MedFly is 3-5 mm long, has a light brown body with mottled wings. The wings have distinctive brown bands extending to the tips. Larvae are creamy-white and about 7-8 mm long. The life cycle in warmer conditions is completed in about a month.

QFly is wasp-like and about 7-8 mm long, reddish brown, with yellow markings. Larvae are cream-white, legless, and they develop in three stages. They reach 9 mm in length. QFly prefers warm-hot and humid conditions for development.

What can they be confused with?

The damage symptoms of Medfly and Qfly will aid in distinguishing them from other endemic fruit fly species.



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The adult Medfly is light brown and about 3-5 mm in length



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Qfly adult laying eggs through fruit surface, which results in 'stinging sites' and allows the entry of pathogens



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Medfly larvae feed in fruit and vegetables causing severe damage



What should I look for?

Infested fruit and vegetables may show “sting” marks, indicative of egg-laying. Maggots found within any produce may indicate the presence of these fruit flies.

How do they spread?

These flies are spread through the movement of maggot-infested produce. There should be no produce or green waste movement from known infested zones to fruit fly-free zones. The adult flies can also fly short distances.

Where are they now?

Medfly is a pest in most parts of the world, including Western Australia. QFly is native to Australia, but it is not present in South Australia, Western Australia or Tasmania.

How can I protect my farm from MedFly and QFly?

Dispose of rotten produce appropriately. Do not move any produce out of fruit fly infested areas. Early detections of fruit fly can be monitored using lure traps.

South Australia is a declared Fruit Fly Exclusion Zone. If an Medfly or Qfly is suspected, contact PIRSA through the Exotic Plant Pest Hotline.

If you see anything unusual, call the Exotic Plant Pest Hotline



Medfly pupae, which develop in the soil following infested fruit falling from the tree

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Medfly wings have distinctive brown bands

Pest and Diseases Image Library, Bugwood.org



Qfly adults are 7-8 mm long and wasp-like in appearance

K. Walker, Pest and Diseases Image Library

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