# Apple maggot



# What is apple maggot?

The apple maggot (Rhagoletis pomonella) is one of the most serious fruit fly pests of North America, mainly damaging apples, but also attacking a range of stone fruit. Direct host fruit damage occurs through feeding activities of the larvae and secondary infections can occur through egg laying wounds.

#### What does it look like?

Adult flies are smaller than house flies (up to 5 mm in length with a wingspan of just over 10 mm) with black bodies, yellowish head and legs and greenish eyes. Wings are clear with characteristic black bands and a white spot can be seen on the thorax. The abdomen is black with three (males) or four (females) light coloured cross bands.

The larvae can grow up to 10 mm in length and are usually cream coloured. The larvae are normally contained within the fruit tissue of hosts. Pupae are yellow/brown, about 5 mm long and oval shaped.

#### What can it be confused with?

Apple maggot adults look similar to other small flies, but are recognisable by the four irregular or zigzag black bands on the wings and the pronounced white spot on their back. Fruit symptoms are similar to damage caused by Mediterranean and Queensland fruit flies.

### What should I look for?

On the surface of the fruit, oviposition punctures and sunken dimples can been seen, together with occasional discolouration around the puncture marks. When fruit is cut open, characteristic brown trails left by larvae can be seen. The honeycombed flesh may eventually break down and apples may drop prematurely.



The apple maggot can be distinguished by the zigzag pattern on the wings and the pronounced white spot on its back

Joseph Berger, Bugwood.org



Internal fruit symptoms of apple maggot feeding

E.H. Glass, New York State Agricultural Experiment Station, Bugwood.org



Dimpling of the fruit surface resulting from infestation

New York State Agricultural Experiment Station Archive, "Cornell University, Bugwood.org"





Fruit surface dimpling and internal larval feeding tracks in infested apples

Whitney Cranshaw, Colorado State University, Bugwood.org



Monitoring for apple maggot can be completed using a yellow sticky trap

Whitney Cranshaw, Colorado State University, Bugwood.org

## How does it spread?

Adult flies can spread small distances around the orchard, but longer distance dispersal occurs through movement of infested material. Pupae can be transferred in contaminated soil, whilst eggs and larvae spread widely in infested fruit.

#### Where is it now?

Apple maggot is widespread in the USA and also has a restricted distribution in Canada and Mexico.

# How can I protect my orchard from apple maggot?

Source plant material only from clean, accredited suppliers, and preferably material that is certified. Check your orchard frequently for the presence of new pests and unusual symptoms. Make sure you are familiar with common pome fruit pests so you can tell if you see something different.

If you see anything unusual, call the Exotic Plant Pest Hotline on 1800 084 881.



Whitney Cranshaw, Colorado State University, Bugwood.org

the zigzag pattern on the wings and white dot on back

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