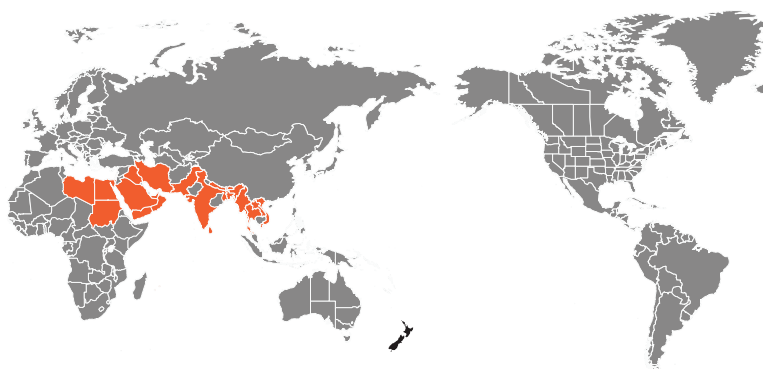


# Peach fruit fly *Bactrocera zonata*

**What is it?** Peach fruit fly has a wide range of host plants such as prunus, citrus, apples, mangoes and pawpaw and is found in more than 20 countries. The main summerfruit crops affected are peaches. If introduced into New Zealand it could easily adapt and spread in our conditions due to its numerous host plants. It will also have an impact on market access. Peach fruit fly is a strong flier and can be active throughout the year.

**Distribution.** It is present in East Africa, Libya, Middle East and some countries in South Asia including India and Thailand.

For current distribution go to <https://gd.eppo.int/taxon/DACUZO/distribution>



**Morphology.** The eggs are white and about 1mm long. The maggots (larvae) are creamy-white and may reach a length of 7-10mm. The pupa is dark brown, cylindrical and about 5mm in length. The adult is about the size of a housefly, 5-6mm in length. It is reddish-brown, with yellow patches on the top and sides of the torso, two black spots on the face, a faint dark T-shaped mark on the abdomen and transparent wings with a small brown spot at the tip. The female has a pointed slender ovipositor to lay eggs under the skin of a host fruit.

**Biology.** Winter is passed in the pupal stage in the soil. The adults emerge when the ambient temperature increases during spring time and start mating. The mated female, after selecting a suitable site for oviposition, inserts her ovipositor in the host fruit and deposits 3-9 eggs at one time. The hatched larvae feed and grow inside the fruit. The duration of various immature stages varies at different temperatures. No stages develop at 15°C or less, the optimum temperature is 25-30°C. Full-grown larvae drop and enter the soil for pupation. Pupal duration is quite long in the winter. The adults hatch from pupae mainly in the early hours of the morning. It has a high reproductive potential (as many as 564 eggs in a lifetime), producing several generations in a year.

**Dispersal.** Peach fruit fly has a rapid dispersal ability. During the warmer hours of the day they scatter and fly actively. Larvae can be transported longer distances inside infested fruit.

**Symptoms.** Damage occurs when the female lays eggs in the fruit. These eggs hatch into larvae, which tunnel through the flesh of the fruit making it inedible. The activity of the first larvae stage is restricted in the area below the oviposition puncture. The second and third-stage larvae are voracious feeders, go deeper in the host and are mainly responsible for complete deterioration of the fruit. In juicy fruit, fluid exudes from the oviposition puncture in the form of a droplet that later dries up and appears as a brown, sticky deposit.

## Preventative measures:

- Become familiar with peach fruit fly in all its different life stages.
- Fruit should be inspected for puncture marks and any associated rots. Suspect fruit should be cut open and checked for larvae.
- If you believe you have found peach fruit fly in your orchard, call MPI's pest and disease hotline on 0800 80 99 66 or contact Summerfruit NZ.

Source: CABI

Photo – Vivat Wornayporn / IAEA



23mm



7mm



6mm

**Familiarise yourself with the common pests and diseases in your orchard so you can distinguish them from the attack of exotic organisms.**



Photo – IAEA Imagebank, Vivat Wornayporn / IAEA



Photo – Centre for Overseas Pest Research, London, Centre for Overseas Pest Research, London, Bugwood.org

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To report any suspected exotic organism, call MPI on:

**0800 80 99 66**