

European cherry fruit fly *Rhagoletis cerasi*

What is it? The European cherry fruit fly is the most significant pest of cherry orchards in Europe. Damage associated with this pest is caused by larva feeding on the fruit pulp, which can result in losses of up to 100% if left uncontrolled. It mainly affects cherries and has not been reported in other summerfruit crops.

Distribution. This species occurs throughout most of Europe, except the British Isles. It is also found in temperate regions of Asia, including areas of the Middle East, Canada and Central Asia. For current distribution go to <https://gd.eppo.int/taxon/RHAGCE/distribution>



Morphology. The adult is small (3.5-4mm length), with both male and female flies predominantly black in colour. The wings are transparent, with characteristic dark crossbands. The lower part of the back is yellow (scutellum). There are three larval stages of this species and the third stage is medium sized (5-6mm length, 1.2-1.5mm width) and white or yellowish in colour. The pupa is almost identical in appearance to the third larval stage as it is the hardened skin version of this stage.

Biology. It has only one generation per year and overwinters as a pupa in the soil underneath or near the host tree where it requires temperatures of 7°C or lower to develop successfully. Adults start to fly in spring or early summer, depending on the geographical environment and climate. Females first feed for about 10-15 days, then start egg-laying. Eggs are laid singly in young cherry fruit. Hatching takes 5-10 days. The young larvae bore into the fruit flesh close to the cherry stone. They reach maturity after 10-30 days, emerge and fall to the ground where they pupate. Adults typically emerge in the spring and have an average lifespan of two weeks.

Dispersal. This pest may be introduced to new areas with fresh cherries or with soil or fruit from host plants grown in areas where this pest is present.

Symptoms. Main damage associated with this pest is caused by larva feeding. Attacked cherry fruits are pitted with oviposition puncture marks and the tissue surrounding these punctures will appear soft and brownish. Brown rotten spots on cherry fruit may also be noticeable when the larva inside is fully grown. Exit holes are visible on cherries where larvae have emerged. Cutting into fruit may also reveal larvae and internal feeding damage evident due to characteristic tunnelling.

Preventative measures:

- Become familiar with the European cherry fruit fly in all its different life stages.
- Monitoring the presence of adults in cherry orchards by using yellow sticky traps is highly recommended.
- Feeding attractants may be used to enhance the efficacy of insecticides.
- If you believe you have found European cherry fruit fly in your orchard, call MPI's pest and disease hotline on 0800 80 99 66 or contact Summerfruit NZ.

Source: CFIA

Photo – Jeff DeLong



23mm

4mm

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

Photos – Bauer Karl



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To report any suspected exotic organism, call MPI on:

0800 80 99 66