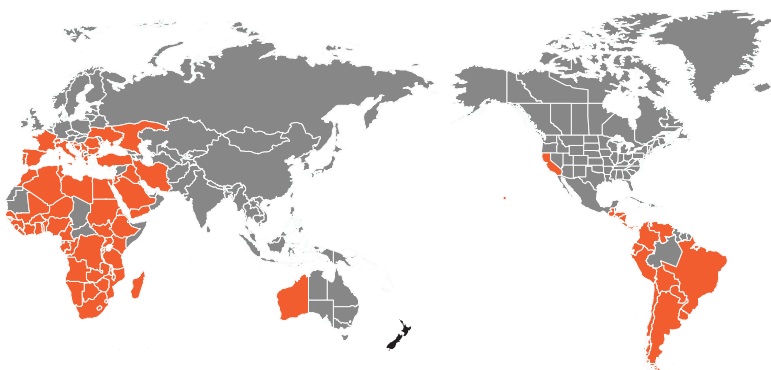


# Mediterranean fruit fly *Ceratitis capitata*

**What is it?** Mediterranean fruit fly (MedFly) is a highly invasive species and one of the most significant quarantine pests. The economic impact of this pest includes reduced production, increased control costs and lost markets. It has successfully established in many countries, often as a result of multiple introductions. MedFly incursions require expensive eradication treatments and cause trade interruptions, which is why many countries have opted to maintain extensive monitoring networks. Among other fruit crops, it affects all types of commercial summerfruit – apricot, cherry, nectarine, peach and plum.

**Distribution.** It is present in several areas across Europe, Middle East, Africa, South America and Western Australia.

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



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

**Biology.** The eggs are laid below the skin of the host fruit. They hatch within 2-4 days (up to 16-18 days in cool weather) and the larvae feed for another 6-11 days. Pupation occurs in the soil under the host plant, the adults emerge after 6-11 days depending on weather conditions and after emergence, egg development takes approximately 5 days.

**Dispersal.** It has a high dispersive ability, a very large host range and a tolerance of both natural and cultivated habitats over a comparatively wide temperature range. Like many other pests, the risk of introduction comes from the import of fresh fruit containing larvae either as part of a cargo or through smuggling of fruit in airline passenger luggage or mail. There is also evidence that *Ceratitis* can fly at least 20km.

**Symptoms.** Following egg-laying, MedFly may also transmit fruit-rotting fungal agents and it is particularly damaging to peaches and citrus fruit. The damage caused is considerable and predominantly in summer and autumn. Infestation becomes apparent on the fruit by a mark surrounding the oviposition puncture, which increases later in size. Rotting of the underlying tissue due to secondary pathogens causes a depression on the surface making the fruit drop prematurely. The larvae feeding through the pulp causes the extra damage. Even if the fruit has only been pierced, it becomes completely unsaleable.

## Preventative measures:

- Become familiar with Mediterranean fruit fly in all its different life stages. The adults are readily recognisable by external morphology, particularly chest and wing patterns.
- It is important to gather all fallen and infected fruit in the orchard and destroy them to avoid MedFly's development.
- Traps baited with male lures can be used to monitor this pest. Where present, it is possible to catch hundreds of flies in a single trap over a few days.
- If you believe you have found Mediterranean fruit fly in your orchard, call MPI's pest and disease hotline on 0800 80 99 66 or contact Summerfruit NZ.

Source: CABI

Photo – Scott Bauer, USDA Agricultural Research Service, Bugwood.org



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

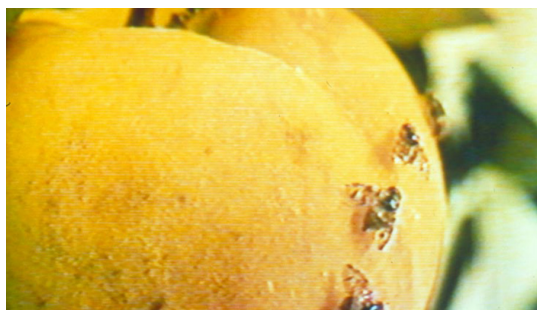


Photo – Mariano Muñiz, Centro de Ciencias Medioambientales, Bugwood.org



Photo – Florida Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Bugwood.org

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To report any suspected exotic organism, call MPI on:

**0800 80 99 66**