Food-attractant trap: Mediterranean fruit fly

M2i technology

- Unique patented process of active substances micro-encapsulation
- Constant and extended rate of active substances release for greater efficiency
- 100% biodegradable
- Easy storage at room temperature
- Extended shelf life: 2,5 years

User guide

M2i recommends: sealed aluminium pouch Capitata Pro Caps® + Mac Phail trap.

Trap setup: tear open the pouch and avoid touching the product with your fingers. Place the bag at the bottom of the trap. Fill the bottom of the trap with water and unscented soap. Close the trap. The food-attractant will attract the fly and the soapy water will trap them.

Characteristics of Capitata Pro Caps®

Type of product	Food-attractant dispenser
Use	Monitoring
Active substance	Trimedlure
Quantity of formulation	20 g
Indicative diffusion*	60 days
Targeted pest life-stage	Adult (fly)
Estimated radius of diffusion	Approximatively 10 m

*at an average temperature of 30°C and without strong wind.

Monitoring setup

<u>Detection period</u>: from May to November (adapt and renew the dispenser according to recommended diffusion time).

Trap location : hung more than 10m from the orchard, in a tree, 1.5m from the ground

Recommended density : 1-2 traps/ha

Pest monitoring and recommendations

Trap follow-up frequency	Weekly
Recommended intervention threshold	8 flies caught /trap /day
Pest control methods	Harvest the fruits once the intervention threshold is exceeded to limit the damages. Collect the fruits on the ground. Remove all the rotten fruit on the tree to avoid pest attraction. Insecticide treatments are not recommended before harvest
Preventive measures	Entrapment is the only preventive technique

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The Mediterranean fruit fly or Medfly (*Ceratitis capitata*)

Pest life-stage : adult and maggot

Order : Diptera

A native from sub-Saharian Africa, this diptera measures approximately 5mm. Adults have a yellowish body bearing 3 parallel orange strips, and wings with 1 longitudinal and 2 transverse orange strips. Fruit damage can be either caused directly by the wound inflicted by the oviposition and larval depredation on the fruits, or indirectly by the development of microorganisms around the wound. These can lead to the rotting of the fruit. Without pest control, the fly can cause a loss close to 100% of the harvest.

The development time of *C. capitata* mainly depends on the temperature and the climate. For instance, at 26°C, the fly's life-span is 20 days. After a mild summer (< 13°C) spent in the ground as a pupa, adult emerge at the end of Spring (mid/end of June). Even a freshly-hatched female is able to lay its eggs on the fruit, with a maximum of 300 eggs in her life. This pest is able to carry out its life cycles on a large number of fruit trees, allowing it to spawn several generations per year on different host plants. In the South-West of France, it can reach 5 generations/year.







Recommandations / Security Keep out of reach of children. Keep away from domestic animals. Store away from food and drink. Do not freeze. Do not eat, drink or smoke during use. Wash hands after use. Store in original packaging. Comply with doses, conditions, instructions and precautions for use mentionned in the user's guide. Dispose of the empty and clean packaging in the household trash. First aid_

If eye contact occurs, rinse with water for several minutes. In case of skin contact, wash with plenty of water. If swallowed, do not induce vomiting, rinse mouth and see a doctor.

In case of faintness, see a doctor and show him the product label.

Product approved for organic agriculture

Host plants

This species can feed on more than 300 species but is commonly found on stone fruits such as peaches, pears, apricots, apples, persimmons, figs, citrus fruits, but also on grapes.

Detection strategies : food attractants

Food attractants are mimicking substances produced by the host plant in order to attract a targeted insect. Monitoring using such molecules can attract either males or females from this pest. It allows the detection of the fly in the orchard. For Medfly, males have a gregarious behavior. Consequently, they are more attracted in the trap than females. In case of high pest pressure, performing a curative treatment and measuring its efficiency can also help.

Benefits

This method is efficient, selective and harmless for fauna, flora, operators and local residents. It does not generate residues, inputs or resistance mechanisms. It can be used in organic farming.

Detection period of C. capitata

Trapping period: before harvest, depending on the fruit and the region



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