

Mediterranean fruit fly - *Ceratitis capitata* Wiedeman (male-attractive bait)



agspsrv34.agric.wa.gov.au

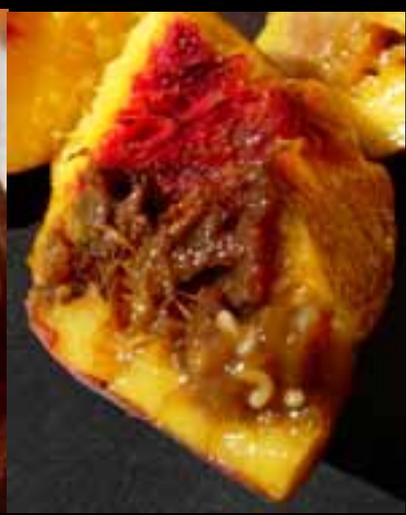
The fly which is captured in the trap

The male fly is 4 mm long. The head is ochre yellow, the first orrial hair is conspicuously lengthened, and its end is spade-shaped. On the dorsal part of the thorax there are glistening black dots and lines, the legs are yellow, the basic part of the wings are with grey dots. The wing is transparent, with transversal bands and brownish-black dots.

Its host plants include citrus fruits, apricots, peaches, pears, apples, cherries, plums, strawberries, grapes, olives, bananas, tomatoes, coffee, *Opuntia*, *Lycium halimifolium*, *Passiflora*, and many other plants.

Damage: on the place of egg laying a discoloured patch becomes visible, which is cone-shaped at the beginning, then it sinks in. The fruit (i.e. peach) starts to rot, around the stone becomes brown, the fruit becomes soft, then it drops down.

The attractant trap should be suspended from branches at a height of 1 - 1.5 m in the tree canopy. Usual beginning of trapping in Central Europe is beginning of May, or when its introduction (by largescale fruit imports) is to be expected. In Central Europe it can be swarming to the end of November.



Selectivity of the CSALOMON® trap (based on tests performed in Italy): the active ingredient of the bait attracts only male Mediterranean fruit flies.

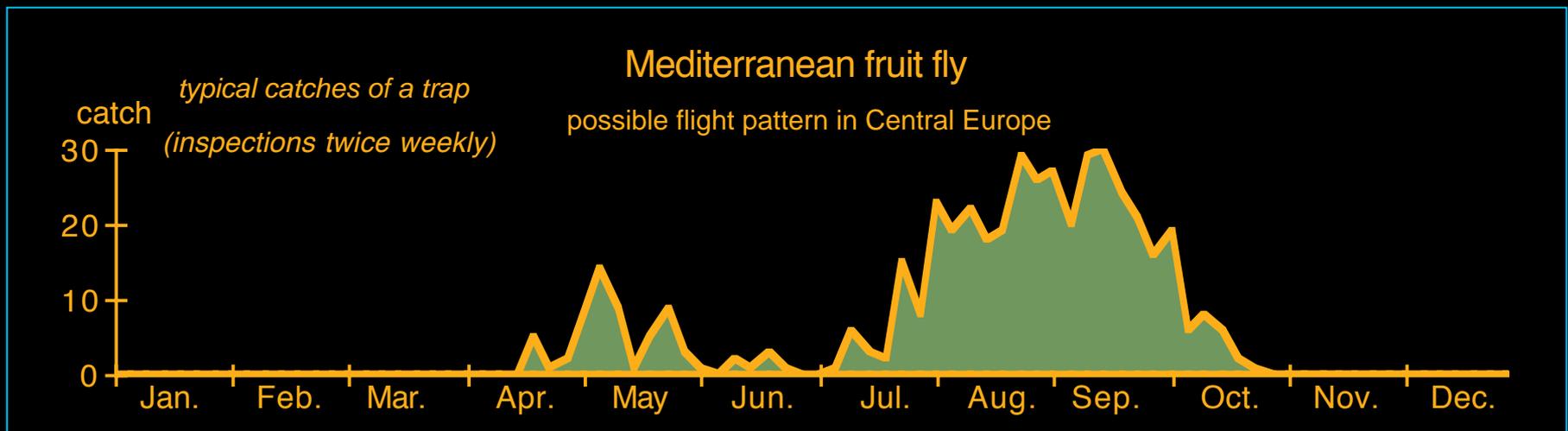
Longevity of the CSALOMON® trap in field conditions: depending on the warmth of the weather at least 4-6 weeks. After this period we suggest to replace the bait with a fresh one.

The damage of the maggot, which should be averted

The modified funnel trap VARs+ proved to be the best among our trap types tested.[1] This trap type can be used for both sensitive detection and for quantitative monitoring of population changes. For satisfactory performance a killing agent (not provided with the trap) should be placed into BOTH the upper and lower catch containers.

Attractant traps can be used for detecting the occurrence and for monitoring the flight pattern of the pest. If its introduction becomes possible, it is advisable to check citrus fruits in transfer. During transfer fruits can be cold-treated (12 days / 1.1 °C) or in certain fruits hot steam treatments (8 hours, at 44°C) are possible. Another option is immersing fruits into hot water [2,3].

[1] Tóth et al, *Növényvédelem* 40:179-183, (2004) [2] *USDA Treatment Manual, USDA/APHIS, USA, Frederick, 1994.* [3] *Smith és mtsai, Quarantine Pests for Europe. CAB International, Wallingford, 1997.*



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To order / to inquire: MTA ATK Növényvédelmi Intézet (Plant Prot. Inst. MTA ATK) Budapest, Pf 102, H-1525, Hungary; phone. +(36-1)-391-8637, +(36)-30-9824999; fax +(36-1)-3918655; e-mail: <csalomon.orders@julia-nki.hu> or <h2371tot@ella.hu>; internet: <<http://www.julia-nki.hu/traps/>>.

When using our KLP+, VARs+ or VARb3z+ trap designs it is **absolutely necessary** to kill insects getting into the trap. The most widespread insecticide used in pheromone traps worldwide is an anti-moth strip with dichlorvos (DDVP 15-20%) active ingredient. (This from 2010 is not permitted in some countries!)

Colleagues in Italy successfully used an anti-moth strip VAPE bought in Italian supermarkets. This strip is having transfluthrin as active ingredient.

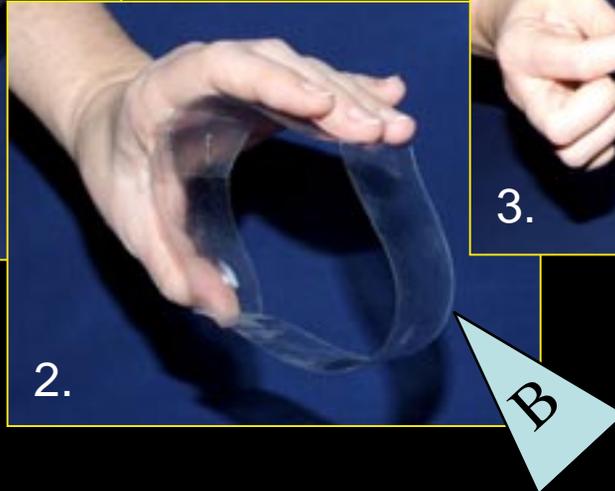
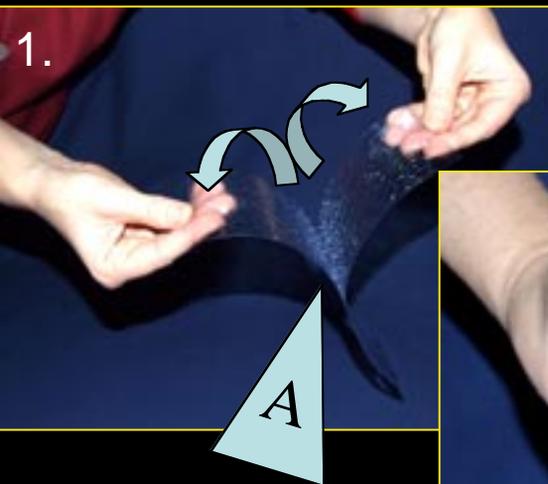
Another successful solution was to use pieces of dog collars (anti mite collars for pets) with diazinone (15%).

One can also spray the inside surface of the traps and catch containers (the largest surface possible) with sprayable household insecticides (permethrin, empethrin or deltamethrin active ingredients all found suitable), however, in this case one has to re-spray at weekly intervals.

For users who find the application of insecticides inconvenient for any reasons, as an alternative we supply our **cylindric sticky insert** (sent as a supplement to KLP+, VARs+ and VARb3z+ trap types).



Assembling instructions for Cylindric sticky insert



1. Separate one sticky insert (A) from the pair of inserts!
- 2-4. Place the sticky insert into the holder ring (B), so that the **STICKY SIDE FACES INSIDE!**
5. Put the assembled cylindrical sticky insert into both of the catch containers of the trap!
6. In case of the upper container place on it the plastic cone and assemble the trap as usual!



Among our trap designs the CSALOMON® VARs+ trap was found to be most efficient in catching the Medfly [1]

