

Medfly EGO

A New and Highly Efficient Monitoring Lure for the Mediterranean Fruit Fly, Natal Fruit Fly and Marula (Mango) Fruit Fly

The Mediterranean fruit fly, or Medfly, *Ceratitis capitata*, is one of the world's most destructive fruit pests. Because of its wide distribution over the world, its ability to tolerate cooler climates better than most other species of fruit flies, and its wide range of hosts, it is ranked first among



economically important fruit fly species. This pest attacks more than 260 different fruits, flowers, vegetables and nuts. Natal Fruit Fly, *Ceratitis rosa*, and Natal (Mango) Fruit

Fly, *Ceratitis Cosyra* are also serious fruit pests of several fruit and vegetables. These two species are native to sub-Saharan Africa, however they pose constant threat to neighboring countries.

Medfly EGO is a plant based attractant that attracts mostly males and some females of all three species fruit flies enabling the implementation of pheromone-based monitoring and trapping of these three species of fruit flies as a part of Integrated Pest Management System. *Medfly EGO*, an innovative new pheromone lure, is a highly efficient alternative to chemical control of the most dangerous insect pests of fruits and vegetables Worldwide. Alpha Scents designs, engineers, manufactures, registers, and sells semiochemical-based products that are the foundation of modern integrated pest management strategies

Medfly EGO: An Effective Lure

Several laboratory and field studies on monitoring and trapping of the Ceratitis spp. were conducted. Results reported from two studies in South Africa Grove et al. 2009, Manrakhan et al. 2011) showed that the new attractant *Medfly EGO* captured mainly males of *C. capitata* and *C. Cosyra* and only

males of *C. rosa* and that *Medfly EGO* is the best pheromone lure for monitoring fruit fly populations in the



field. In addition, the *Medfly EGO* attractant can be used to in "MalEx Ceratitis" the attract&kill formulation for management of Ceratitis species in the field.

Medfly EGO Formulation

The active ingredient of *Medfly EGO* is a yellow liquid with pleasant odor. This enriched plant extract is enclosed in a permeable plastic bulb. The walls of the plastic are releasing into atmosphere just right amount of attractant to lure male flies to the trap. Because male flies will contact the attractant, the *Medfly EGO* can be used in MalEx – Attract and Kill technology to control *Ceratitis spp.* in the field.

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INSECT MONITORING SYSTEMS

Medfly EGO Longevity

Pheromone is released from the lure at a controlled rate over time. Basically, the release rate of *Medfly EGO*,



after reaching equilibrium (usually 48-72 hours), will remain constant for the most of life of the lure and will diminish over time. *Medfly EGO* is formulated using high quality plastic to assure a constant release rate. It is important to replace lures in the field at the following recommended intervals:

Load rate	Period of
per lure	pheromone release
	and replacement
400 mg	30 days
800 mg	60 days
1600 mg	120 days
2400 mg	180 days

* Release rate: 12 mg/24 hr at constant 24°C.

Attractant Baited Trap

Monitoring Trap: Yellow Delta Trap or Yellow Sticky Cards baited with a Medfly EGO lure should be used for monitoring the fruit fly



population on a weekly basis. (Every 7 days)



Trap Maintenance

Inspecting traps weekly is sufficient to determine fruit fly population trends. Once you have place the Medfly EGO onto the center of the sticky liner it will last for a period of 1-6 months in the field. Medfly EGO lure should not be removed. Only sticky liner or entire Yellow Sticky Card should be replaced every 30-45 days.

Record number of flies at each visit for population studies. Graphing the recorded numbers gives a visual reference of flight peaks. By servicing the traps regularly, you will help maintain their efficiency.

Placement of Traps

Yellow Delta Trap or Yellow Sticky Card to be placed in the top third of the tree, allowing the attractant to be dispersed by the wind ensuring a good distribution within the orchard. Insert a Sticky Liner into the bottom of the Yellow Delta Trap and place the lure in the center of the liner. Similarly, hang the lures on top of Yellow Sticky Card.

Trap density

Place one (1) Yellow Delta Trap or Yellow Sticky Card per Ha or 10 000 m².

Care and Storage of Medfly EGO

Store lures in a cool, dark place until ready to use. It is recommended to store lures in a refrigerator or freezer. Never leave them in the trunk of a car or in areas where they may be exposed to unusually high temperatures.

T. Grové, M.S. De Beer, P.H. Joubert. 2009. Monitoring Fruit Flies In Mango Orchards In South Africa And Determining The Time Of Fruit Infestation ISHS Acta Horticulturae 820: VIII International Mango Symposium

A. Manrakhan, J-H. Daneel and R. Beck. 2011. Evaluation of attractants for *Ceratitis* flies in citrus orchards, Experiment 1035 (April 2011 - June 2011) Citrus Research International, PO Box 28, Nelspruit 1200.

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