



«Addressing Med fly with an innovative and environment friendly attractant through an Integrated Pest Management Strategy»



Running the third year of Life-Biodelear project all partners, Elgo-Dimitra, University of Thessaly, Aristotle University of Thessaloniki and Benaki Phytopathological Institute have been focused on the control of Med fly (*Ceratitis capitata*) in citrus orchards with the new attractant Biodelear. At the same time, dissemination actions have been organized in order to motivate local society.

In this 2nd issue the main results of the last semester's actions are presented, as well as the dissemination activities of the project and future events.

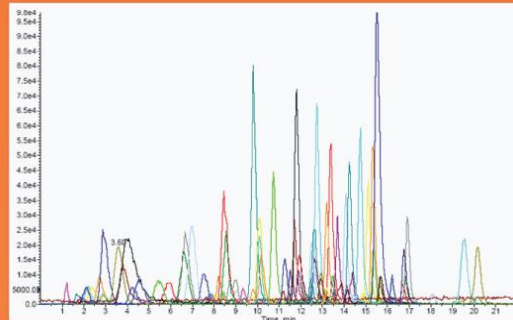
Mass trapping of *Ceratitis capitata* using the new attractant BIODELEAR

The efficacy of mass trapping was evaluated by comparing a) the level of *C. capitata* population, b) fruit infestation rates and c) ground diversity of arthropods using pitfall traps. According to the so far results, the LIFE program strongly suggests that mass trapping with the new attractant Biodelear can effectively control the population of *C. capitata*, lower citrus fruit infestation and preserve biodiversity of arthropods.



Pesticide and plant growth regulators residues in citrus fruits

Up to now 300 citrus fruit samples have been sampled according to Directive 91/271/2003, and analysed with a multiresidue analytical method capable of analysing 334 pesticides and 18 plant growth regulators. Those preparatory samplings depicted the pesticide residues fingerprint of the experimental areas prior to the application of mass trapping with Biodelear.



Soil analysis

One of the main objectives of BIODELEAR is to study the effects of conventional and alternative cultivated practices, related to the protection from Med fly, on soil quality. Up to now, three soil samplings from the pilot experimental orchards with citrus trees were conducted, and approximately 150 samples were analyzed. Soils were taken bellow citrus tree canopies and between the tree rows from soil depths of 0-10 cm and 0-30 cm. The results showed that most of the pilot fields are poor in organic matter and nitrogen, low in available P, with high amounts of Ca, Mg, adequate CEC, and low content in micronutrients. By the end of the projects, alternative cultivations practices for soil management related to the protection from Med fly will be recommended in order to improve soil fertility, fruit yield and quality.

Information signs



Information signs were placed in the citrus orchards involved in the project. The new notice boards display full information on partnerships, funding, duration and short description of the project.

Dissemination actions

2nd workshop of Life-Biodelear

The 2nd workshop of Life-Biodelear project was successfully held in the 7 June 2016 in Citrus Museum, Kampos Chios. Representatives of local authorities, of the agricultural cooperative of citrus growers of Chios, agronomists, farmers and citizens of Chios participated in the workshop. High was their interest regarding the positive effects of the project Life-Biodelear, which are the optimization of the local citrus production and the depiction of the ecological fingerprint of Kampos. Invited experts presented in detail the insects and the diseases that are damaging citrus crops and furthermore the pesticide residues monitoring program in which citrus fruits participate. Life-Biodelear research group were focused on the present situation in the area of Kampos and the contribution of the project. Participants were informed about all the parameters that are being monitored and evaluated during the project, such as the population of Med fly, pesticides and plant growth regulators residue analysis in citrus fruits, biodiversity monitoring and soil analysis.



Farmers visited the experimental orchards of Life-Biodelear

On 8 June 2016 farmers of Chios visited the experimental orchards of Life-Biodelear. During their visit all participants had the opportunity to be informed about the mass trapping technique and its use in the control of Med fly. Moreover, they were informed about all the parameters that are being monitored and evaluated during the project, such as the population of Med fly, pesticides and plant growth regulators residue analysis in citrus fruits, biodiversity monitoring and soil analysis.



The objective of the visit was the awareness of rural people about the potential abilities that LIFE-Biodelear project provides. Besides the control of Med fly with a cheap and environmental / human friendly attractant, the project also assists in the estimation of the environmental fingerprint of Chios.

Press Conference of Dr S. Theocharopoulos, Director of the Soil Institute of ELGO-DIMITRA in Alithia TV Station

Press Conference of Dr V.Mavraganis, coordinator of Life-Biodelear, in Alithia radio Station.

Broadcast of the 2nd Life-Biodelear workshop in Alithia TV Station.

Life-Biodelear project participated in the 9th International Conference on Integrated Fruit Production, which was carried out on 4-8 September 2016 in Thessaloniki, Greece. The title of the presentation was «Mass trapping of *Ceratitis capitata* using the new attractant BIODELEAR».

Life-Biodelear project participated in the European Pesticide Residues Workshop 2016, which was carried out on 24-27 May 2016 in Limassol, Cyprus. The title of the presentation was «Addressing Med fly with an innovative and environment friendly attractant through an Integrated Pest Management Strategy».

Next steps:

Mass trapping of Med fly using the attractant Biodelear in the real-scale experimental orchards.
Presentation of the project Life-Biodelear in scientific conferences.
Educational / Informative visits of the Life-Biodelear team in rural areas of Greece in which infestation of citrus fruits by *Ceratitis capitata* has been reported.

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