

TRIPHELIO - AN INTERNATIONAL RESEARCH PROJECT FOR SUSTAINABLE CONTROL OF LEPIDOPTEROUS PESTS IN OLIVE GROVES.

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The olive moth (*Prays oleae*, Lepidoptera: Plutellidae) is known as one of the key pests in olive cultivation. In particular areas, also the jasmine moth (*Palpita unionalis*, Lepidoptera: Pyralidae) can cause serious damage to both leaves and fruits of the olive tree. Both pests are mainly controlled by insecticide applications. In November 2001, an international research project was started to promote biological and biotechnical methods for the control of these pests. The project is funded by the European Commission within the specific programme "Confirming the International Role of Community Research" (Contract ICA4-CT-2001-10004) and is coordinated by the Institute for Biological Control, Darmstadt, Germany. Scientific experts of both the public and the private sector seek for economically feasible technologies which can be used in a wide range of olive producing countries of South Europe and North Africa. The project aims on the application of three complementary approaches:

- Available pheromone-based techniques for monitoring and for control by mating disruption are optimised for their application in a wide range of olive growing regions.
- Strategies for maintenance and enhancement of natural enemies in the olive grove habitat are explored.
- The technology for efficient and biosafe inundative releases of mass reared egg parasitoids of the genus *Trichogramma* (Hym., Chalcidoidea) is developed as a new concept in the control of Lepidopterous olive pests.

Beyond that, a conceivable synergism of these methods and their possible integration into an effective management system of major olive pests are essential topics of the research. Therefore, reasonable application schedules of the developed control measures are worked out taking into account different infestation levels and unavoidable pesticide treatments to control other olive pests, e. g. *Bactrocera oleae*. The acceptance of the developed control measures by olive growers is explored in questionnaires in the participating olive countries (Portugal, Greece, Egypt and Tunisia). In the last year of the project, a workshop demonstrating the practical implementation of methods to scientific experts and alliances of olive growers is planned.