Supporting Tools to the Introduction of the Mating Disruption of Controlling Codling Month (*Cydia Pomonella*) in Pear and Apple Orchards in the Province of Modena: 2002-2007

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Abstract

This paper reports the results of a project coordinated by the Consorzio fitosanitario of Modena during the period 2002-2007. The aim of this project was to introduce and promote the mating disruption method in controlling the codling moth in apple and pear orchards in the province of Modena. The introduction of this technique is considered to be of strategic importance to reduce some common problems. One of the most important problems is the difficulty in controlling codling moth, which is due to sharp increases in population growth, as well as a decreasing efficacy of available products. Furthermore, mating disruption is essential to the control of codling moth in organic production possible, together with granulovirus and nematodes.

This project achieves some important results, including: (i) diffusion of mating disruption application on about 450 Ha in the province of Modena; (ii) the introduction of mating disruption in organic farms improved the control of codling moth infestation effectively; (iii) a decrease of 30-40% in the number of insecticide treatments in those farms that have introduced mating disruption; (iv) validation and dissemination of various mating disruption products; and (v) dissemination of knowledge of biological and biotechnological techniques available to control codling moth (mating disruption, granulovirus, and entomopathogenic nematodes).

This activity also permitted a consolidation of the role of the Consorzio Fitosanitario as a provincial technical-specialist reference point for extension services.

In general, these results gave a very positive drive, but further efforts will have to be made in order to achieve a more widespread use of this technique in the province of Modena, where about 7000 hectares of pear crop are cultivated, and more than 100 hectares are grown organicanically.

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