

Control of *C. pomonella* L. by false trail following: performance of the dispensers and field efficacy.

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The results of three years experimentation on *Cydia pomonella* L. control by the method of false-trail following using Ecodian dispensers are reported. Ecodian act as a sort of female, luring the males with low pheromone dosage able to compete with the female insect, thus disorientate males in their search for partners.

Two types of biodegradable dispensers have been used: Ecodian cp, that release (E,E)-8,10-dodecadien-1-ol, the main component of the pheromone of *C. pomonella* and Ecodian comby loaded with (E,E)-8,10-dodecadien-1-ol and (Z)-8-dodecenyl acetate, the main components of the pheromones of *Cydia molesta*. Dispensers have been applied at the rate of 2000/ha (20 g a.i).

Twelve trials in small apple orchards (0.8-6 ha) were carried out from 2000 to 2002. One to three applications of Ecodian dispensers per season were intalled; high pest population density required sometime combination with insecticides control.

Gas-chromatographic analysis of the dispenser's hexane extract showed that the release rate of codlemone from the Ecodian cp and Ecodian comby is similar; in the climate conditions of the Trentino region (Italy) the life time of the two types of dispensers is at least 75-90 days.

Fruit damage, male trap catches, mating of tethered females as well as over-wintering population have been taken into consideration to evaluate the efficacy of this new control method.

The peculiar mode of action of the false-trail following method (low pheromone dosage and efficacy in small plot size) as well as the possibility to use a unique dispenser for the combined control of *C. molesta* and *C. pomonella* open new opportunities to a widespread use of the pheromone based strategy for apple pest control.