

Mating disruption of the Oriental fruit moth by concentrated applications of microencapsulated pheromone in Turkey

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The efficacy of ultra low-volume, concentrated applications of a microencapsulated sex pheromone formulation for the Oriental fruit moth (OFM) *Grapholita molesta* (Busck) was evaluated in 2006. Large plots, 4 ha for each treatment, were established at two locations near Bursa, northwestern Turkey. Thiacloprid was applied for control of first-generation OFM and sex pheromone treatments were initiated in June. Pheromone treatments included Checkmate SF hand-applied dispensers, and three airblast spray applications of Checkmate OFM-F at 15.0 g a.I. applied either in an ultra low volume (24 l per hectare) or in a high volume (HV) of 768 l per water. These treatments were compared to plots treated only with insecticides. Pheromone treatments significantly reduced moth catches compared with insecticides but no difference in levels of fruit injury was found between the insecticide and pheromone treatments. The ultra low volume sprayable pheromone applications appeared to perform better than high volume applications in terms of trap catches. Therefore, additional studies are planned to improve the deposition of microencapsules in the tree canopy using different kinds of sprayers in 2007.

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