

Mating Disruption of *Grapholitha molesta* (Lepidoptera: Tortricidae) by Synthetic Sex Pheromone in Pear Orchards

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Field trials were undertaken in Naju, Korea during 1998–1999, to see whether synthetic sex pheromone could be used to control the oriental fruit moth in pear orchards. All pheromone treatments significantly reduced pheromone trap catches of male moths compared with those in non-treated blocks. Pheromone traps placed in the outer areas in pheromone-treated orchard always caught higher numbers of male moths than those in inner areas. At harvest time, shoot and fruit infestation level were significantly lower only in the plots treated with 150g, 300g or 450g/ha than that in the untreated control, but there were no statistical differences in the percentage of fruits with feeding damage among the 30g/ha treatment and untreated plots. In pheromone-treated plots, the pear trees planted in the outer areas had significantly higher infestation level than those planted in the inner areas. However, the infestations in 30g/ha and untreated plots were independent of position. These results indicated that mating disruption with pheromone can control infestation by the oriental fruit moth in pear orchards as efficiently as commercial insecticide sprays.