

## Effects of Pheromone Loading, Dispenser Age, and Trap Height on Pheromone Trap Catches of the Oriental Fruit Moth in Apple Orchards

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The effects of field aging (0–28 days) and pheromone loading rate on the longevity of red rubber septa loaded with the sex pheromone blend of the oriental fruit moth *Grapholita molesta* (Busck), were evaluated in North Carolina apple orchards in 2002. Separate field tests examined the influence of trap height and pheromone loading rate of rubber septa on trap catches of adult *G. molesta* males in an abandoned orchard. The loss of the major pheromone component, (Z)-8-dodecenyl acetate (Z8-12:OAc), from red rubber septa over a 4-week period exhibited a relatively constant release rate with 30, 100 and 300  $\mu\text{g}$  pheromone. Trap catch was significantly higher in pheromone traps placed in the upper canopy than in those in the lower canopy. Pheromone traps baited with 100- $\mu\text{g}$  lures caught more moths compared with those loaded with 300  $\mu\text{g}$ . There was no apparent relationship between pheromone trap catch and septa age, with trap catch appearing to be primarily a function of *G. molesta* population density.

KEY WORDS: *Grapholita molesta*; (Z)-8-dodecenyl acetate; apple; red rubber septa; release rate; septa dose; trap placement.

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Received July 2, 2005; accepted Dec. 7, 2005; <http://www.phytoparasitica.org> posting May 14, 2006.

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