

Thresholds, Monitoring, and Sampling

Using kairomone lures to monitor codling moth in California apple orchards under mating disruption

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Keywords: Codling moth, kairomone, apple, California

Abstract: Kairomone lures were compared to supercharged (Megalure and/or Biolure 10X) and standard (L2) pheromone lures in apple orchards using mating disruption in the northern San Joaquin Valley of California. Weekly trap catch and gender data were collected from 29 sets of traps in 16 orchards over a 3-year period. The kairomone lures caught consistently more moths during the 1st and 2nd flights and a similar number during the 3rd flight in comparison to the pheromone lures. Male and female moths caught in the kairomone traps had similar seasonal flight patterns and numbers except during the spring flight when males predominated in 2 out of 3 years. Both mated and virgin females were attracted to the kairomone traps with more mated females caught in high population orchards and more virgins caught in low population orchards. In orchards NOT using mating disruption, the kairomone lures caught significantly fewer moths than the standard pheromone lure.