

Mating Disruption/SIR

Codling moth and leafroller mating disruption evaluated using sprayable pheromones

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Abstract: The effect of sprayable pheromones (Suterra, Inc. and 3M Corp.) was evaluated for codling moth and obliquebanded leafroller in commercial orchards. Codling moth sprayable treatments were applied at varying rates (5, 10, 20 and 40 grams AI per acre) and compared with either a non-pheromone treated area or one treated with hand-applied dispensers (Isomate C+, 200 and 400 dpa, Pacific Biocontrol Corp.). Leafroller sprayable treatments were applied at four rates (1, 2.5, 10 and 20 grams AI per acre) and compared to a non-pheromone treated area at each location. Each treatment block was monitored with large delta-style traps baited with a standard load pheromone lure and/or a high-load (10X) pheromone lure. To determine female and male activity, the “DA” lure was used for codling moth and the acetic acid lure for leafroller. Females collected from the “DA” and acetic acid baited traps were dissected in the laboratory to determine mating status. Leafroller larval densities were evaluated throughout the season and fruit injury was evaluated at harvest. Codling moth fruit injury was evaluated after 1st and 2nd generations. Although codling moth and leafroller sprayable pheromone did reduce capture in most pheromone-baited traps, no consistent pattern of decreased larval populations or fruit injury was noted. Mating success for both codling moth and leafroller was not significantly different between treatments.