

Mating Disruption/SIR

TRAP SUPPRESSION USING DIFFERENT CM PHEROMONE DISPENSERS

Lucia G. Varela and Greg Balog
University of California Cooperative Extension and Statewide IPM Project
Santa Rosa, CA

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Two hand-applied dispensers of codling moth pheromone are commercially available, BioControl's Isomate-C and Concep's Checkmate in California. To compare these two products we measured trap suppression in side-by-side plots by releasing sterile codling moth males, assessing trap catches in each plot. The release of sterile males gives a greater population with which to measure trap shutdown than that of the natural population. Two plots of 10 acres each were set up, one with Isomate-C and the other with Checkmate, and replicated in three orchards. Sterile codling moths obtained from Canada were released at a rate of 800 moths per acre in each plot. Traps were set at the top of the trees in a grid pattern in each of the 10-acre plots. Traps were checked every other day for 10 days following release. Four releases were done at approximately 300, 650, 1200 and 2000 degree-days. The release times were chosen to coincide with codling moth flights to estimate how the dispensers were performing during those periods. There was a statistically significant difference among treatments ($p < .01$) and release dates ($p < .01$). We also measured dispenser longevity through periodic laboratory analysis and by following weight loss for the BioControl dispensers.