

Thresholds/Monitoring/Sampling

Monitoring Codling Moth in Mating Disruption Orchards with Long Lasting Lures

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Pheromone lures used to monitor codling moth (CM) in pheromone and nonpheromone-treated orchards were compared for efficacy and longevity. In pheromone-treated orchards, a high load lure referred to as a "bubble" lure engineered by Pherotech, Inc. was the most effective lure. It was as attractive as the commercial standard, a red septum loaded with 10 mg of codlemone (Trécé, Inc.) and maintained its attractancy for a longer period of time. The bubble cap lure remained at least as attractive as a red septum replaced at regular intervals (9 days) throughout 54 days of testing during the first generation and 48 days during the second generation. Two experimental lures (Trécé 8395 and Trécé 8450) engineered by Trécé, Inc. were less effective than the red septum.

The more stable release rate of the bubble lure across a whole generation as opposed to the rapidly degrading attractancy provided by the red septum should provide a more consistent and reliable monitoring system. In Washington state, a season-long trapping program would require only 2 bubble cap lures. This year's test indicated that a red septum lost attractancy after only 9 days in the spring as well as the summer. Thus, 7-8 red septa lures would be required for a season-long trapping program. At a cost of \$1 for a high load red septum lure plus the labor cost required to change lures in large scale monitoring programs (i.e., 1 trap/2.5 acres in the Codling moth Areawide Management Programs), use of a longer life lure could represent a substantial savings in monitoring costs.

