

Pome Fruits—Implementation

Surveying Barriers to the Effective Implementation of Mating Disruption for the Control of
Codling Moth

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Mating disruption for codling moth (*Cydia pomonella*) offers exceptional promise in supplementing and reducing reliance on conventional chemical pesticides. In order to evaluate barriers to the effective and widespread field implementation of CMMD, the California Pear Growers Association provided funds to survey a wide range of CMMD related experience in British Columbia, the Pacific Northwest and California. Objectives of the study included 1) evaluating the level of experience with CMMD, 2) surveying perspectives on the cost of CMMD, 3) assessing perceptions of efficacy and 4) surveying perspectives on the future of CMMD technology.

Weddle, Hansen and Associates, Inc., surveyed 43 individuals representing 84 person-years of experience with CMMD. Those surveyed included packing house field personnel, extension agents, consultants and researchers. Of those surveyed, 92% believed product cost to be "high" or "very high" and considered cost to be the primary constraint on implementation of CMMD. Concerns about efficacy ranked a close second as a constraint on implementation. Most (69%) believed application costs to be "low" to "reasonable." Most importantly, almost three-quarters (73%) of the survey participants characterized their control with CMMD to be successful compared to 96% success with conventional chemical controls. Most users of CMMD combined it with one application of conventional pesticides. Secondary pest infestation was a problem in 62% of the CMMD treatments. Desired improvements to CMMD included improved efficacy, the need for a single application per season, lower material costs and leafroller blends. Participants also desired a range of supplemental tools to aid CMMD, including preservation of existing pesticides, registration of IGRs, development of mating disruption for leafrollers and improved biological control of codling moth. When asked if CMMD had a future place in orchard IPM, a "yes" response was almost unanimous. Three-quarters of the those responding believed the future of CMMD to be "very promising," predicting that CMMD would result in an overall reduction in conventional pesticide applications. Most (81%) stated that they would use CMMD in 1993 and 61% stated that they would increase the acreage treated.

This study demonstrates a broad interest in CMMD in the orchard crop protection community and a desire to see the technology succeed as a primary tool in orchard IPM. The economics of CMMD need to be carefully analyzed and communicated to growers.