Mating Disruption/SIR

Key Results of a 3-Year Project on SIR for Sustainable Codling Moth Management

Howard Thistlewood, Gary Judd, and Markus Clodius
Agriculture and Agri-Food Canada, Pacific Agri-Food Research Centre, Summerland, B.C., Canada

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*Abstract:* We are conducting research into a minimal and sustainable areawide management program for codling moth, using semiochemical suppression, sterile insect release, and a precision GIS. Experimental releases of wild and irradiated moths provide insight into movement and activity of sterile moths and are correlated with larger scale studies of results from the existing sterile insect release program. A pilot project was conducted in 131 ha of apple orchards and 12 ha of pears set in 895 contiguous hectares, in 39 properties worked by 25 growers, from May 2001 to July 2003. Results are presented from monitoring of moths by codlemone-baited or pear ester lures (DA kairomone) in traps, using cardboard tree bands, by visual inspection of fruit and surveys when moths or damage were found, and surveys of insecticide use. Movement of diapausing moths in or on bins presented the most serious reinfestation risk to apparently moth-free areas.