Chemical Control/New Products

Areawide II Demonstration Project: 2003 Update for Oregon’s Hood River Valley

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Keywords: phosmet, methoxyfenozide, natural enemies, codling moth, Cydia pomonella, apple, pear, organophosphate alternatives, Areawide II

Abstract: Areawide II is a collaborative project to evaluate selective alternatives to organophosphate (OP) insecticides for control of codling moth and to enhance biological control in pear and apple orchards. The study has been ongoing since 2001 and is being conducted in three commercial Hood River Valley orchards (two pear, one apple). Orchard blocks treated with OPs (phosmet) or with OP alternatives (methoxyfenozide) had similar codling moth control. Codling moth damage levels have gradually decreased since 2001, which is also indicated by pheromone trap catches. Trap catches with the DA food lure remained low through the season at both pear sites and were not indicative of actual population levels. Pheromone traps baited with the high load (10X) Suterra Biolure caught on average four to 16 times more moths than traps baited with the DA lure. In general, OP-treated blocks had more serious secondary pest problems and fewer natural enemies compared with blocks treated with OP alternatives. Pear psylla levels were generally higher where OPs were applied, except in blocks where Agri-Mek was used. Natural enemies consisted primarily of spiders, earwigs and Deraeocoris brevis, a mirid predator, and were more plentiful in orchard sections where no OPs were used. Any insecticide applications after late June had a tendency to reduce natural enemy populations.