Implementation

FINAL YEAR OF AN IPM DEMONSTRATION PROGRAM USING "SOFT INSECTICIDES" TO MANAGE INSECTICIDE RESISTANCE AND DAMAGE FROM THE OBLIQUEBANDED LEAFROLLER IN NY APPLE ORCHARDS.

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Abstract: This study was conducted from 1999-2001 to compare organophosphate (OP) resistance and control of OBLR in plots treated with soft insecticides. (OP) resistance remained stable in field populations of OBLR during the 3 years of the study. OBLR control in the soft plots was better than that obtained with standard treatments. Plum curculio (PC) control was not adequate in most of the soft blocks and in 2001, damage was observed even in blocks that had no PC damage during the first year of the study. This soft insecticide program did not provide adequate control of internal lepidoptera in some of the blocks for multiple seasons, although control of the apple maggot was acceptable. Foliar pests such as tentiform leafminers, green apple aphids, white apple leafhoppers, and mites were not serious problems in the soft pesticide blocks. Tarnished plant bug damage was generally similar in grower's standard programs and the soft pesticide blocks. Secondary pests, such as rosy apple aphids and the San Jose Scale were problems in some of the soft pesticide blocks. The overall insect damage in the standard and soft pesticide was fairly similar during all seasons of the 3 year study, except in one orchard, which suffered severe damage from curculio and internal lepidoptera. The costs of insecticides applied in the standard and soft pesticide programs were similar.