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Implementation

Reduced-risk pest management programs for North Carolina apples

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Abstract: An apple pest management program that relied heavily on reduced-risk pesticides and mating disruption was evaluated on approximately 800 acres in North Carolina over a three-year period from 2000 to 2002. Before initiation of the project, tufted apple bud moth, codling moth and Oriental fruit moth were the primary insect pests of apples in this region. The use of insect growth regulators and mating disruption provided excellent control of lepidopterous pests, but insects that were sporadic or of minor importance under organophosphate-based systems increased in importance, including San Jose scale, Comstock mealybug, plum curculio, and apple maggot. The recent registrations of new insecticides (Esteem, Actara and Avaunt) have helped to solve these initial problems. However, the cost of alternative pest management programs was higher than conventional organophosphate-based programs.