Pome Fruits—Implementation

Codling Moth in Apple

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Mating disruption will control codling moth, but not in all situations. Sometimes mating disruption affects only a percentage of the females and needs to be supplemented with insecticides. Over the two years we have found that mating disruption did not succeed in the small orchards of 2 and 2.5 acres. It is not robust enough to stand alone when there is moderate or high codling moth pressure. Environmental conditions, which vary from year to year, have a strong influence on the degree of mating disruption obtained. Warm evening temperatures favor mating disruption. Even with supplemental measures mating disruption has advantages (fewer chemicals and cover sprays and improved biological control of other pests) not available using a standard chemical spray program, especially considering both programs are comparable economically. Because the insects remain viable, a strong monitoring program is needed to detect a breakdown in mating disruption, if it occurs, in time to remedy the situation before incurring significant insect damage. IPM techniques will change when using mating disruption. New approaches to IPM in this system will evolve and hopefully make pest control more efficient.