Chemical Control/New Products

New Materials and Methods for Control of Cherry Fruit Fly

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Abstract: The advent of the USA Federal Food Quality Protection Act has caused special concern to sweet cherry growers, as the two products most commonly used to control cherry fruit fly, azinphosmethyl and carbaryl, are receiving special regulatory attention during their re-registration process. The recent ESA/waterway buffer zones ruling potentially affects application of these two products, as well as malathion, malathion ULV, diazinon and dimethoate. Few choices remain. Organic growers have reported great difficulties in controlling cherry fruit fly (CFF), and both adults caught on traps and larvae found during fruit inspections have been increasing in their orchards for the past three seasons. Six candidate products were screened for their effect on CFF during summer 2003. Replicated plots were set up in two small infested orchards. Also, 61 highly infested trees on 16 separate sites were treated to assess effect of various product rates and/or application intervals. Two commercial organic orchards were treated with bait to test application equipment and practicality of this treatment method.

Significant Findings

Product included in this project included imidaclorpid (Provado), Entrust (spinosad), GF-120NF Bait (ai spinosad), acetamiprid (Assail), thiacloprid (Calypso) and a numbered product too secret to mention even by number. All products, rates and timings were tested under pest pressure conditions far in excess of what would be expected in commercial orchards. All products tested were effective at preventing larval infestation of fruit, did not damage the fruit or foliage, did not appear to induce excessive mite damage, and some of the products appeared to control other important pests. GF-120NF bait and Entrust applications proved to be effective, practical options for organic and conventional growers.