

Chemical Control/New Products

Small-Plot and On-Farm Evaluation of New Fruit Fly Controls

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Abstract: Over the past few years we have been evaluating various options for control of eastern cherry fruit fly and apple maggot. In replicated small and large plot trials, several neonicotinoids have reduced infestation to a level equivalent to that achieved using the industry standard, Guthion. Calypso and Actara have consistently controlled both fruit fly species. On-farm trials have indicated that Assail is a reliable option for apple maggot control. Provado has been highly effective against cherry fruit fly, but results of small-plot trials have been mixed with respect to apple maggot control. In on-farm trials in 2004, apple maggot control was achieved with three applications of Provado. In a series of small-plot trials, weekly applications of GF-120 lowered infestation compared to untreated or bait-only control plots. However, fruit infestation was not completely prevented. Behavioral observations indicated that the bait acted as an arrestant, rather than an attractant. In 2004, a study was conducted aimed at making GF-120 attractive to CFF in order to achieve the very high level of control demanded by the zero tolerance for wormy fruit. The number of flies observed visiting treated foliage was significantly increased by the addition of 5% and 10% ammonium acetate. The presence of the attractant in GF-120 also appeared to entice flies to visit and feed on droplets.