Chemical Control/New Products

New Materials and Application Timing for Control of Cherry Fruit Fly

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Abstract: Various insecticides, rates and spray intervals were tested for efficacy of control of western cherry fruit fly in very highly infested “backyard” trees or small orchards. Assail, Calypso, Entrust, Provado, DPX-E2Y45 and two other numbered products prevented larval infestation of fruit in almost all instances. Control was less certain as rates were reduced and spray intervals were extended beyond 10 days.

An insect growth regulator was tested for effect on a tree that had almost 100% CFF infested fruit in 2004. The IGR had no apparent current season effect on adults, as over 100 adults were captured on one trap in four weeks. However, fruit infestation dropped to 11 larvae in 1000 fruit. Adult emergence will be followed on this site in 2006 to assess possible effect, and the tree will be treated again to determine if failure to completely control CFF was due to the very high infestation level and the overly large tree. The IGR-based control will be much more extensively tested in 2006 with both sprays and baits as treatments.

For the second season, various current or proposed cherry fruit fly control materials were tested for effect on larvae inside of fruit on a very highly infested tree. On fruit that was 135% infested (339 larvae emerged from a 250 fruit check sample), no, or very few, larvae emerged from fruit treated with Provado, Assail, Calypso, or the currently recommended dimethoate.

GF-120 bait was evaluated as a CFF control for the fourth season. Eighty-seven well-infested trees on 30 sites have been included in these trials. Two larvae have been found in 21,400 fruit sampled from the treated trees (none in the 13 sites treated in 2005). A second season of treatment eliminated infestation of fruit on the two “failure” sites. During the same period, 2428 larvae have been recovered from 8000 fruit taken from untreated check trees.