

**Project No. 93-ZB4 - Large Scale Field Test of New Mating Disruption Pheromone  
Blend for Peach Twig Borer**

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**Objectives:** To conduct large-scale field tests with our experimental  
each twig borer pheromone formulation.

**Results:**

In 1993, we followed up on promising results obtained with experimental peach twig borer pheromone blends in the previous two years. Trials were expanded to two 10 acre blocks of Nonpareil almonds. Three treatments were used: 1) a standard commercial pheromone blend (Consep Membranes); 2) the standard blend adulterated with our test material; 3) an untreated check block. At the first test site, peach twig borer nut meat and hull damage levels were: check block, 1.1 and 10.1%; experimental treatment, 1.0 and 7.0%; standard pheromone treatment, 0.1 and 4.3%. However, navel orangeworm damage levels in these blocks was very high (28-35%).

At the second site, twig borer pressure was very low. Nut meat and hull damage levels were: check block, 0 and 0.7%; experimental treatment, 0 and 0.8%; standard pheromone treatment, 0 and 0.5%.

Interpretation of the results was further complicated by the fact that the standard pheromone blend was contaminated with a manufacturing impurity which strongly inhibits male moth flight. This inhibitor, which was also present in and affected the performance of some of the monitoring lures sold this year, has been identified as 5-decyn-1-yl acetate.