

### III. Stone Fruits

#### d. Chemical Control - Pheromones (mating disruption)

1. San Jose scale
2. Peach Twig Borer
3. Oriental Fruit Moth

R.E. Rice, University of California, Parlier 93648

C. Atterholt, University of California, Davis 95616

J. Krochtz, University of California, Davis 95616

M. Delwiche, University of California, Davis 95616

#### Mating Disruption of Stonefruit Pests Using Sprayable Formulations of Biodegradable Films and Pheromone

Cooperative research with the Departments of Food Science and Ag Engineering at UC Davis has been directed toward development of sprayable formulations of pheromones to replace the hand-applied point source dispensers currently used in mating disruption programs. Pheromones of peach twig borer, oriental fruit moth, and San Jose scale added to 10% aqueous solutions of starch showed reduction of male insect collections in pheromone monitoring traps but only for short periods of time (usually less than 2-3 days). When pheromones were added to soy protein films or pure soy oil, pheromone residual was extended and response of male insects to monitoring traps was disrupted for longer periods of time.

Sprays of some materials, particularly starch, have been phytotoxic to flowers and foliage of peach, nectarine, and plum trees.