

Two Monitoring Techniques for Insect Pests of Avocados

J. Blair Bailey

Department of Entomology, University of California, Riverside, c/o University of California South Coast Research & Extension Center, 7601 Irvine Blvd., Irvine, CA 92718, USA

Abstract. Monitoring for insect pests is one of the most important parts of any pest management program. We recently completed the research necessary to monitor for two Lepidopterous insect pests found in California, the omnivorous looper (*Sabulodes aegrotata* Guenee) and the western avocado leafroller (*Amorbia cueana* Walsingham). The monitoring method used most at this time is that of insect traps baited with the synthetic insect sex attractant (pheromone) for the insect you want to monitor. Several insect trap designs have been field-evaluated. A second monitoring technique, referred to as the degree day ($^{\circ}\text{D}$) concept, is also available for those who want a more precise measure of the time when each stage of an insect species will be active in a particular avocado grove. This concept is based on the accumulation of heat units, known as degree days, which effect the rate of development of all plants and animals, and which can actually be measured using a simple high-low thermometer located in your own avocado grove (high temperature plus low temperature for 24 h divided by 2 minus the low temperature threshold value for the development of the insect being monitored equals the $^{\circ}\text{D}$ for that 24 h period). Free literature on various types of monitoring equipment will be available as well as literature on sources of *Trichogramma platneri*, the beneficial wasp used to kill eggs of the two California moth pests.