## **Avocado Pest Management**

Avocados are still a relatively new crop in California. The commercial growing of avocados was not seriously considered until about 1910. As is usually the case when a fruit industry is newly established in a region. there was an initial period of relative freedom from serious pests. Certain native species became established on the avocado in California, however, and others were introduced. At present, the avocado can be said to have its share of insect pests, although fortunately they are more easily controlled than those attacking certain other subtropical fruits. The natural enemies of avocado pests also seem to be more effective in keeping pest population down to sub-economic levels.

## Planning your pest management program

The avocado orchards in California are under good biological control. Due to natural enemies, climatic conditions and good farm management practices, the avocado grower enjoys fewer pest problems than any crop grown in California. With biological control beneficial insects (predators and parasites) prey on harmful insects to maintain a biological balance naturally making the use of chemical insecticides to control pests unnecessary. When chemical sprays are applied to avocados, not only is this target insect killed, but also the natural enemies of other pests. This reduction of beneficial insects causes the eventual buildup of the harmful insects. Therefore, unless there is an extremely heavy infestation of harmful insects causing economic loss, it is better to sustain minor damage and wait for the beneficial insects to increase in number and begin attacking the destroying and harmful insects.

Before spraying, consider these alternatives:

- 1. Wait Be willing to sustain a little damage to allow the beneficial insects to do their job.
- 2. Spot Spray Treat trees or areas where pest population is highest to permit beneficial insects to increase and migrate back into treated areas.
- 3. Control Dust Dust interferes with beneficial insects, so consider watering down ranch roads or washing off trees along dusty roads.
- 4. Control Ants Ants do not feed on avocado trees, but they do interfere with beneficial insects and should be controlled.
- 5. Release Beneficials If available, consider release of beneficial insects such as Trichogramma sp. For omnivorous looper; Stethorus sp., lacewings and predacious mites for brown mite; Bacillus thuringensis, a bacterium, for omnivorous looper.

If chemical sprays are absolutely necessary,

- 1. Consult your Pest Control Advisor for specific recommendations. Use only chemicals registered for use on avocados and only the product with a label for use on avocados.
- 2. Read the label completely.
- 3. Follow directions.
- 4. Use safety equipment and handle with care.