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**insect answers**

## **CONTROLLING THE GREEN PEACH APHID ON PEACH TREES**

The green peach aphid is a comparatively small green insect. Mature, winged aphids measure about 1/8 inch from wing tip to wing tip. Don't let this insect's small size fool you, however. It looms large when evaluated on its damage to commercial crops.

In central Washington, the green peach aphid causes serious damage to potatoes, sugar beets, and peaches.

Unlike many insects, the green peach aphid only occasionally causes extreme damage from direct feeding. The main damage is caused by its virus-carrying ability. It carries the leaf roll virus, a very severe disease in potatoes. It also carries the yellows virus of sugar beets.

Damage to peach trees is usually confined to foliage damage in the spring of the year.

### **Life Cycle**

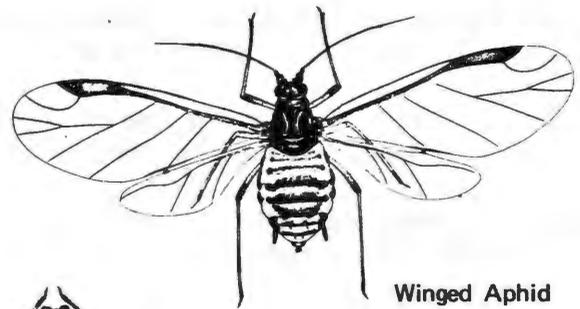
In the milder areas of the United States, the green peach aphid overwinters as an adult. In central Washington, the aphid spends the winter primarily as tiny black eggs on peach trees. In early spring (February and March), the eggs hatch and give rise to both winged and wingless forms of aphids.

The aphids build up rapidly and go through three to four generations on the peach trees. The aphids develop wings during May and June and move to over 200 summer host plants, including potatoes and sugar beets.

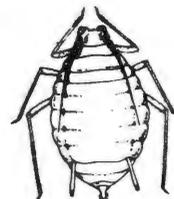
The aphids quickly pick up either the leaf roll virus from the infected (volunteer) potatoes or

the beet yellows virus from the weed hosts. They then travel to commercial potato or sugar beet fields and infect the young plants.

Many aphids remain on the peach trees for considerable periods in some areas. These aphids may cause rolling of leaves and will occasionally exude excessive honeydew, which severely smuts leaves and fruit.



**Winged Aphid**



**Wingless Aphid**

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### **Control**

To control green peach aphid, it is essential to eliminate or greatly reduce this pest using either a delayed-dormant or a March-April spray while the aphids are still on the peach trees.

#### **Delayed-Dormant Spray Program**

This spray will kill overwintering eggs on the trees. Use one of the following:

**Superior or Supreme Oil**—Apply 1 1/2 tablespoons per gallon of water or 1 gallon per

100 gallons water using 400 to 500 gallons per acre.

**Diazinon**—Apply 2 teaspoons 50% wettable powder per 1 gallon of water *or* 1 pound per 100 gallons water using 400 to 500 gallons per acre.

The above sprays will also control scale insects and some mite eggs.

### **Spring—March or April Program**

Apply sprays to kill aphids on the peach trees before they damage the trees and migrate to potatoes and beets.

**Thiodan** 50% wettable powder—1 pound per 100 gallons water using 400 to 500 gallons per acre or 2 teaspoons per 1 gallon of water.

**Thiodan** 9.15% EC—2 tablespoons per 1 gallon of water (primarily for back yard use.)

The following materials will reduce but not control green peach aphids:

**Diazinon** 50% wettable powder—1 pound per 100 gallons of water using 400 to 500 gallons per acre or 2 teaspoons per 1 gallon of water.

OR

**Diazinon** 25% emulsifiable concentrate—1 tablespoon per 1 gallon of water. (primarily for back yard use.)

The above sprays will also control other aphids and twig borer.

For more detail on aphid control in tree fruits, see E.B. 419, *Spray Guide for Tree Fruits in Eastern Washington*.

Thiodan is effective in controlling aphids on potatoes and sugar beets during the growing season. Di-Syston may also be used as an early treatment in potato fields. For exact recommendations for control of aphids in potatoes and sugar beets, see EM 3316, *Insect and Mite Pests of Vegetable Crops*.

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