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# ORIENTAL FRUIT MOTH


*A*, Life stages: *a*, young larva; *b*, mature larva; *c*, pupa; *d*, adult. *B*, Damage to tender new tips. *C*, External evidence of fruit moth damage to ripe peach. *D*, Internal damage with *e*, larva and frass next to the stone. (*A*, six times natural size; *B*, *C*, and *D*, natural size.)

# Oriental Fruit Moth

The oriental fruit moth, an important pest of peaches, has apparently established itself in the northern half of the Willamette Valley. In 1956 State Department of Agriculture entomologists trapped a few moths near Portland and in the Salem area. In 1957 they trapped 183 moths and in 1958 nearly 350 moths.

The pest is present throughout much of the United States, but has been most destructive in the East and Midwest. On the Pacific Coast it has been of importance in restricted areas of Washington and California. This leaflet will acquaint growers with the appearance and habits of the insect and the similarity between the damage it causes and that of other orchard pests already established in Oregon.

The moth favors peaches and quinces but may attack other deciduous fruits such as apples, cherries, apricots, pears, and plums. In the larval stage the insect injures both twigs and fruit. Early in the season the larvae bore into the tips of tender twigs and cause them to wilt and dry up. Later as the twigs harden and the fruit nears maturity most of the larvae bore into the fruit. Moths appear in early spring about the time peach trees are in bloom. The females usually lay their eggs on the leaves.

The newly hatched larvae feed on twigs or fruit until mature. They then spin cocoons in a protected place on the tree or ground. Usually there are 4 or 5 generations each year. The insect passes the winter as a full grown larva inside a cocoon nearly one-half inch long. Cocoons may be found attached to fruit, under loose bark, in bark crevices, mummified fruit, or hollow weed stems near the tree.

The early season injury to twigs (flagging) is very similar to that caused by the peach twig borer, which is common throughout the state. Larvae of the peach twig borer also will enter fruit, especially near harvest time. Although there is similarity in the damage caused, the larvae of the two insects can be readily distinguished. The larva of the oriental fruit moth is pink in color and when full grown is about one half-inch long. The larva of the peach twig borer is brown in color with a black head. The black color is disposed in rings encircling each segment, giving the larva a characteristic segmented or ringed appearance.

Structurally, larvae of the peach twig borer can be distinguished from many other larvae, including that of the oriental fruit moth, by the presence of two short rows of hooks (crochets) on each anal proleg.

Details of life history and control of the oriental fruit moth in Oregon conditions have not been fully developed. Apparently DDT and parathion, properly applied, will give good control. The present suggested control recommendations are applications of DDT and/or parathion at petal fall, a second application 10 to 12 days later, and a third application about mid-June. DDT is suggested at the rate of 2 pounds of 50% wettable powder or parathion at the rate of 1 pound of 25% wettable powder per 100 gallons of water. (DDT spray also is effective against the peach twig borer when applied at the petal fall stage. Parathion will aid in the control of aphids, spider mites, and bud moth.) Growers who do not have access to a sprayer may use a 10% DDT dust or a 1% parathion dust or a combination of these two materials at a rate of 40 pounds actual dust per acre. Do not apply DDT within 30 days or parathion within 14 days of harvest.

Fungicides for brown rot control may be added to the petal fall spray, but do not combine Puratized Agricultural Spray or TAG with parathion.

Because parathion is highly toxic to warm-blooded animals, it is not recommended for use in residential areas.

This leaflet was prepared by the Federal Cooperative Extension Service, Oregon State College, in cooperation with the OSC Department of Entomology, the State Department of Agriculture, and the U. S. Department of Agriculture.

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