

Connecticut Agricultural Experiment Station
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THE APPLE AND THORN SKELETONIZER.

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This European insect was discovered in this country in Westchester County, New York, in 1917. It appeared in Connecticut at Greenwich and Stamford late in 1920, has now spread all over southern New England, and is present in northern New Jersey and in the Hudson River Valley of New York State at least as far north as Albany.

There are three generations each year, and the insect passes the winter in the adult stage (as a moth). The first moths this season were observed flying in New Haven on April 10. Larvae of the first generation will feed upon the apple trees the last half of May and first part of June; those of the second generation during July, or from late June to early August; the third generation larvae from late August up to about the middle of October.

The eggs are mostly laid singly on the under surface of the leaves, often beside the mid-rib or a large vein, and the egg-laying period is extended over two or three weeks. The eggs hatch about a week after being laid and the tiny larvae eat away small patches from the under surface, then go to the upper surface of the leaf where they spin a light web across the leaf, fastened at the opposite edges. Under this web the larva feeds upon the leaf tissue, often devouring all except the lower epidermis and the veins; and becoming full grown in about three weeks.

A white cocoon is then made, usually in a fold or along the mid-rib of a leaf, about three-fourths of an inch long and pointed at both ends. In about two weeks the moth emerges.

Further information may be obtained about this insect by consulting Bulletin No. 246 of this Station.

CONTROL MEASURES.

Commercial orchards are usually properly sprayed and are not injured by this pest. Unsprayed trees may be completely de-

foliated and seriously weakened. Fruit trees around the home are prized both for their shade and for their fruit and should by all means be given the attention which they deserve.

The usual spray schedule, providing for a number of applications of lead arsenate will control the apple and thorn skeletonizer. Even where trees are not injured by the first generation of larvae, the second or third may defoliate them. From one to one and one-half pounds of dry or powdered lead arsenate in fifty gallons of water, sprayed upon the leaves is effective. The sprays should be applied when the larvae are just beginning to feed rather than when they are ready to make their cocoons. The approximate dates of these applications are: May 15 (or calyx spray), July 1, and August 10.

THE APPLE AND THORN SKELETONIZER

By E. H. SNYDER

The fruit skeletonizer was discovered in this country in Westchester County, New York, in 1907. It was first reported in Connecticut and Massachusetts in 1909, but now occurs all over southern New England and is present in northern New Jersey and in the Hudson River Valley of New York State as far as north as Albany.

There are two generations each year and the insect passes the winter in the leaf as a pupa. The first to be seen in this country were observed feeding in New Haven on April 10. Larvae of the first generation will feed upon the apple trees the last half of May and the last of June, those of the second generation during July and the first of August. The first generation larvae feed on both leaves and fruit, the second generation larvae feed only on leaves.

The eggs are usually laid singly on the under surface of the leaves. The first to be seen are the eggs and the egg-laying period is extended over two or three weeks. The eggs hatch about a week after being laid and the tiny larvae at once begin feeding. The under surface of the leaf is the usual place of the first feeding, but they soon migrate to the upper surface of the leaf where they again begin to feed. The first feeding of the second generation takes place with the larvae when the leaf is still young. In all cases the leaves are eaten and the veins and the veins and the veins are eaten in a few days.

A white cocoon is formed usually in a hole or a slit in the middle of a leaf. The cocoon is of an oval form and is about 1/16 inch in length. In about two weeks the moth emerges. Further information may be obtained from the insectary at the University of Connecticut, Storrs, Conn.

Control Measures

Commercial orchards are usually properly sprayed and are not injured by this pest. In general, trees may be successfully de-