ROSY APHIS
EXPERIMENT
IN
BECKWITH ORCHARD

New York Agricultural Experiment Station
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Insect often destructive.

The rosy aphis is a destructive insect pest of apple trees. During years when it is abundant it checks the growth of the young apples, causing them to become knotty. Serious infestation usually decreases the "June" drop, as clusters of small, deformed apples remain on the trees, which are often called "aphis apples" or "cluster apples." Leaves attacked by the aphides become tightly curled and later turn yellow and drop. During severe outbreaks infested trees lose many leaves.

Developing efficient spraying methods

Until recent years growers have been powerless to prevent losses in seasons when these insects were superabundant, as existing spraying practices were ineffective. Experiments during recent years by the Experiment Station at Geneva have pointed to a delayed dormant application with lime-sulphur and nicotine solution (lime-sulphur diluted 1 to 8, 100 gallons, and nicotine solution 40 per cent, ¾ pint) as the most practical means of preventing injuries by the rosy aphis. The experiment in the Beckwith orchard is one of a series that is being conducted for a period of years in Oswego, Orleans and Niagara counties to demonstrate to owners of apple orchards the value of the delayed dormant treatment for the prevention of important damage.

Details of the Beckwith experiment

In this experiment **14** bearing Greenings were sprayed on May 8, when the leaves of the more advanced buds were projecting about half an inch, with lime-sulphur and nicotine solution in the proportions previously mentioned. For checks on this treatment **6** large bearing Greenings and two small trees were left unsprayed. The application was made with a Friend "Nu-System Spray Gun," the operator spraying from the ground. In examining the individual trees of these two plats, which are plainly labeled, kindly note the following points:

Sprayed trees

1. Color and vigor of foliage.
2. Quantity and condition of marketable apples.
3. Reduction in numbers of "aphis" or "cluster apples."

Unsprayed trees

1. Weak foliage on worst aphis-infested trees.
2. Numbers of "cluster" or "aphis apples" on most bearing trees.
3. Defoliation of certain trees.

Growers interested in control of rosy aphis are invited to visit the Experiment Station at Geneva where effective results in controlling rosy aphis may also be observed.