

MICHIGAN AGRICULTURAL COLLEGE
EXPERIMENT STATION

PRESS BULLETIN NO. 58

To the Editor:

The notice below will be of value to many of your readers. We, therefore, ask you to cooperate with us in calling attention to this timely matter.

R. S. SHAW, Director.

THE CHERRY LEAF-BEETLE.

The cherry leaf-beetle or "cherry galerucella" as it is sometimes called, is a springtime pest in Michigan, confining its attacks, for the most part, to the northern half of the state. As the name indicates, this insect gets the greater portion of its food from the cherry; the pin or fire-cherry being its principal breeding place. From the wild cherries it migrates to the commercial varieties of cherry, peach and plum.

This insect is a small dark-red beetle a little less than a quarter of an inch in length, oval in shape with dark markings on its legs. For the past three years this pest has been gaining in prominence, becoming one of the worst enemies of the cultivated cherry in the North. These insects, if not checked when numerous, will completely riddle the foliage. Both the adults and the larvae feed on the undersides of the leaves, eating small irregular holes in their under surfaces and sometimes through the entire leaves. These holes may be so close together that the leaves present a skeletonized appearance, showing work similar to that done by the rose or pear-slug. Such leaves dry and fall to the ground, sometimes even defoliating the entire tree. The fruit is also injured, although not to the same extent as the leaves. The beetles eat a little of the surface, scarring it so that the fruit becomes unsightly and easily rots. It has been observed that this pest has a preference for weak or unhealthy trees. An unhealthy limb on a tree is more attractive to the adult beetles than a healthy limb. These beetles feed at first on the lower branches of the tree. There are two generations each year, the first generation appearing on the foliage in the latter part of May or the first of June, the second in September, these latter being the ones that hibernate over winter.

The cherry leaf-beetle is a native of Michigan, its natural food being the wild varieties of cherry such as the pin-cherry (*Prunus pennsylvanica*). However, the advent of the

cultivated cherry into the northern part of the state, has tempted this pest to include the latter in its bill of fare.

The adult beetles pass the winter several inches below the surface of the ground. Emerging from hibernation in the spring, they feed again for a time, mate, and the females deposit their eggs. In less than two weeks these eggs hatch, and the larvae require about the same length of time to become full grown. They then burrow a short distance in the ground, pass through their pupal stage, and, in from two to three weeks after entering the ground, the adult beetles appear. These feed until the weather compels them to seek shelter for the winter.

Control.

Inasmuch as these beetles breed for the most part, on the wild or pin cherry which thrives in out-of-the-way and neglected places, here would be a good place to start controlling the pest. In many instances these trees grow at a distance from the orchard, rendering the control of this insect all the more difficult. It might be advisable for several growers to cooperate, should this become a permanent pest. On the cultivated cherry a spray of arsenate of lead, three pounds to a barrel of water will be found to be efficient.

Now, the cherry leaf-beetle is not a difficult insect to control if one takes it in time. The difficulty arises from the fact that the creatures make their first attack at the time when the cherries are well along in size, and continue to work through the time of coloring of the fruit. One hesitates to spray with poison after the fruit is of good size, because of the danger to man and to birds, and, therefore, one is forced to watch very carefully and to spray once for all on the first appearance of the beetle, before the fruit attains much size, trusting the poison will stick to the foliage and kill the main army of beetles when it appears.

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March 7, 1917.