

## PRESS BULLETIN NO. 8.

Michigan Experiment Station, April 1, 1895.

### CANKER WORMS IN THE APPLE ORCHARD.

The time for the orchard canker worm is near. The wingless female moths are now climbing the trees from their winter quarters in the ground to deposit their eggs, and the canker worms that hatch from them will soon appear. They are not a difficult pest to control if dealt with intelligently.

Some of the moths lay their eggs in the fall on the apple tree limbs, but more deposit them in the spring. The eggs hatch at the time the buds are swelling, and the young canker worms scatter over the trees and begin feeding at once on the tender foliage. By the time the leaves are partly open the worms are large enough to be easily seen. They are nearly half an inch long, a little larger around than a common pin and vary in color from a light brown, with darker stripes, to a chocolate brown. Annoy one of them and it will stand out like a dead twig, or start off at a looping gait. Jar or shake the limb lightly, and many of them will drop, and suspend themselves in mid air by a web which they spin as they fall.

It is while the canker worms are in this very young stage that the trees should be given a thorough spraying with Paris green or London purple at the rate of three ounces to forty gallons of water.

A quart or two of glucose or molasses, or a pound of freshly slaked lime (strained) added to each barrel of water, will help to retain the poison on the foliage. The lime will at the same time insure the leaves against injury from soluble arsenic.

Up to this time the canker worms have merely eaten a few holes in the leaves, but if they remain a week or two longer they will destroy every leaf on the trees, if as common as they were last spring. They grow very fast and soon are from an inch and a quarter to an inch and a half long and as large around as a small twig. This is the time when people usually notice that something is eating the leaves in their orchard. Last spring letters came from all parts of the southern and central portions of the state, asking for help, but there was little that could be done as the calls came too late; the canker worms were mostly grown and were leaving the trees.

These facts regarding the canker worms demonstrate the importance of *early* spraying. Heavy rains may prevent complete success and a second spraying may occasionally be necessary.