

IV. ATTACKING THE FRUIT.

1. THE CODLING WORM (*Carpocapsa pomonella*). In the Eastern and Northern parts of Ontario there is but one brood, but in the South-western part there are two broods.

The small moths appear at the close of the blossoming period and deposit their eggs on the young fruit at the calyx end. The caterpillars bore into the fruit at the core, and when full grown, emerge and spin cocoons under the loose bark on the trunk in June and July, where they change into pupæ. Where there are two broods the moths appear in July and August to deposit eggs for a second generation. This brood of caterpillars may enter the half-grown apples at any point, but they emerge in the fall to form cocoons in which they remain hidden all winter. In spring they transform to pupæ, and later to moths just as the blossoms have fallen.

When there is but one brood the caterpillar after forming the cocoon remains in it until the following spring. The worms which fall to the ground with the apple make their way to some cover and form cocoons.

Treatments. Band the trunk with burlap or other suitable material about the tenth of June. Examine these bands every ten days or two weeks and destroy the cocoons which collect underneath; destroy the wormy and fallen apples; spray with arsenic solution soon after the blossoms have fallen; spray again in August to kill the young caterpillars of second brood.

2. THE APPLE MAGGOT (*Trypeta pomonella*). The adult of this Apple Maggot is a fly which deposits its eggs in the apple, and the maggots tunnel the fruit in every direction. They pupate in the ground or under any convenient cover.

Treatment. Prompt destruction of wind-falls. Spraying is not effective.

3. THE PLUM CURCULIO (*Conotrachelus nenuphar*.) This curculio does more harm in Ontario than the Apple Curculio. The fruit is often badly punctured and disfigured.

Treatment. Arsenical sprays will do much to control this insect, but so long as plum trees are uncared for, there will be much injury to apples.

4. GREEN FRUIT WORMS (*Xylina spp.*) There are several species of Green Fruit Worms. "There is but one brood in a year. They work mostly in May, pupate in the soil in June, live as pupæ during the summer and sometimes all winter, and most of the moths emerge in the fall and hibernate, laying their eggs in the spring." (Slingerland).

Treatment. Spray with arsenic solution before the blossoms open; cultivate ground in summer to kill the pupæ.