CUTWORMS AND THEIR CONTROL.

By ARTHUR GIBSON, Chief Assistant Entomologist.

SUMMARY.

Cutworms are noctuid caterpillars which are more or less abundant every year and which, as a class, rank in importance with our worst insect pests. These caterpillars are smooth and in shape cylindrical and have sixteen feet; in colour, most of them resemble the soil in which they hide during the day.

The life-histories of even our commoner entworms are by no means complete. Some hibernate in the pupal state, or as half-grown caterpillars, and others in the egg or adult state. A single female moth lays several hundreds of eggs. These are deposited in clusters on the leaves of weeds, grasses, shrubs, etc. When full grown, the cutworms are about an inch and a half in length, and enter the ground to the depth of an inch or two to transform to the pupal condition, the adult moths emerging, as a rule, in June, July, and August.

Under normal conditions, eutworms feed at night. As the name "cutworm" indicates, these caterpillars cut off plants near the surface of the ground, or a little below it. Some kinds climb fruit and other trees and destroy the buds or young fruit, etc. Others feed entirely below the surface of the ground, attacking the roots of grasses and other plants. Cutworms when they become excessively abundant march ahead in true army-worm habit.

The destruction wrought every year throughout Canada by these insects amounts to a large sum of money. In some seasons when they occur in extraordinary abundance, this loss totals hundreds of thousands of dollars.

Clean cultivation is an important factor in the control of cutworms. This includes the collection and burning of all refuse remaining after the removal of crops, and the destruction of weeds. Infested land should be ploughed deeply in the fall. These methods destroy many hibernating caterpillars and pupze in the soil.

For the protection of plants which are set out annually, cylinders made of tin or paper may be placed around the stems of the plants. As the surfacefeeding eutworms cannot elimb such bands, their attacks in this way will be prevented.

Birds, beneficial insects, and parasitic diseases, help materially to control cutworms. Farmers, horticulturists, and others should aid in the work of protecting our insectivorous birds. They are among the best friends the farmer has, and this fact should be more fully realized.

Bran, poisoned with Paris green, is the best remedy for the destruction of most kinds of cutworms, and should be applied immediately their presence is detected. Fresh bundles of elover, etc., which have been sprayed with a strong Paris green or arsenate of lead mixture, are also very useful, and should be placed at short intervals apart throughout an infested field.

When cutworms assume the marching habit, deep furrows should be ploughed across the fields ahead of the caterpillars. In these furrows, at intervals of about fifteen feet apart, post holes should be dug. The caterpillars, when they reach the furrows, wander along in them and fall into the holes, where they may be crushed by means of a post or a piece of fence rail, or a small quantity of coal oil may be poured over them.