

The Control of Locusts in Eastern Canada.

By Arthur Gibson, *Chief Assistant Entomologist.*

Locusts, or "grasshoppers" as they are more generally spoken of, have long been known to devastate crops of various kinds in Eastern Canada. During the years 1912, 1913 and 1914, they were extremely numerous and destructive in the provinces of Ontario and Quebec. One correspondent in Lanark county, Ont., reported that crops in his district alone had been destroyed to the extent of 75 per cent, the loss being estimated at \$6,000. In many instances, fields of oats and barley were cut green to save for feed. In some parts of the province of Quebec, farms have been abandoned within the years mentioned owing to the large numbers of locusts present.



Fig. 1.—Egg pod of locust opened to show arrangement of eggs: individual eggs at side,—natural size. (Original).

The locusts are true biting insects and feed actively throughout all their stages after hatching from the eggs. The latter are deposited freely in packets or pods, as shown in fig. 1, chiefly in old, neglected pasture lands, and along roadsides, etc., in spots where the soil is dry and largely free of vegetation. The number of eggs in each pod varies with the species. Some pods contain only 10 eggs while others contain as many as 70. They are deposited in late summer and in autumn, the young locusts not hatching until about May of the following year.

The crops attacked by these insects are oats, barley, timothy, rye, wheat, buckwheat, corn, turnip, rape, clover, potato, cabbage, onion, bean, carrot, etc.

THE DESTRUCTIVE SPECIES.

The species of locusts which have been chiefly responsible for damage to crops in Eastern Canada are four in number, as follows:—

THE LESSER MIGRATORY LOCUST, (*Melanoplus atlantis* Riley). This species is the most regularly-occurring destructive locust in Canada. It is found commonly from British Columbia to Nova Scotia. It is shown natural size in figure 3.