

labour, 6 hours, \$1.20; total, \$5.00. Applying 20 pounds of the bran so as to treat 4 acres, the cost comes to 25 cents per acre. At St. Etienne des Grés, the cost was found to be about 18 cents per acre, exclusive of labour, and in western Ontario one correspondent reported that the cost was about 20 cents per acre.

The preparation of the mixture at Bowesville, on most farms, was carried out on a cement floor in an outbuilding. The bran was simply placed on the floor and the Paris green mixed in by means of an ordinary garden hoe, after which the fluids were added and the whole kept constantly stirred by the hoe until all the bran was thoroughly dampened. Any vessel or floor used in the mixing of the formula should be thoroughly cleaned afterwards in order to prevent all possible danger of poisoning to live stock.



Fig. 5.—Oat field, Bowesville, Ont., showing injury to locusts. (Original).

In treating large areas with such a mixture it is of the utmost importance in order to secure the results desired—that is, the destruction of a very large percentage of the locusts—to make the application while the insects are in the hopping stage and before they begin to migrate. Farmers should make special arrangements to co-operate and apply the mixture at the same time. This was done in Kansas, and as a result, from 60 to 80 per cent of the insects were destroyed. Prof. Dean states: "The remaining grasshoppers were so left to the mercy of the parasitic and predaceous enemies that only a few of them escaped."

The Criddle Mixture.—This mixture, which has controlled outbreaks of locusts in certain parts of Manitoba but which has not given the same results in Eastern Canada, was given a trial at Bowesville, Ont., in 1914. Four days after the application counts were made in various parts of the field and these averaged 50 dead locusts to the square yard. The Criddle Mixture is made by adding one pound of Paris green and one pound of salt to 15 gallons by measure of fresh horse droppings. Sufficient water should be added to the droppings to make a moist, but not sloppy, mash, and the Paris green and salt then added and thoroughly mixed by means of a fork or rake. The mixture may be scattered lightly from a low barrel, box or tub, by means of a trowel or shingle, in the infested fields, chiefly where the insects are feeding.