

B. Harrowed in immediately after application.

25 lbs. Bran and 25 lbs. Shorts, $\frac{1}{2}$ gallon Molasses, 1 lb. Paris Green, 4 gallons Water.—70% dead.

50 lbs. Shorts, $\frac{1}{2}$ gallon Molasses, 1 lb. Paris Green, 4 gallons Water.—80% dead.

Most of the experiments were repeated from three to ten times under varying conditions, and the relative killing values were in every case similar to those given above. A few experiments in which sugar was used showed a marked inferiority.

For *Euxoa ochrogaster* the unharrowed plots gave slightly better results than the harrowed, and it was observed that this species feeds more frequently above the ground than does *P. orthoënia*.

By experimenting with varying amounts of Paris Green, and sweetening substances, we arrived at the following formula as giving the best results: Shorts, 50 pounds; Molasses, $\frac{1}{2}$ gallon; Paris Green, 1 pound, and Water, $2\frac{1}{2}$ gallons.

This mixture costs from \$1 to \$1.25 per acre for the ingredients alone, but since cutworms begin to damage a field in nearly every case in small well-defined areas, from which they spread subsequently over far larger areas, prompt treatment as soon as damage is seen reduces the cost per acre of the area saved to a small figure.

The superiority of Shorts over Bran has been again established in the control of Army Cutworms (*Chorizagrotis* spp.), which invaded part of the Province early this year. Results from field experiments upon these species are rather uncertain, since the migratory habits are so pronounced. In specially constructed field cages definite results were obtained, and comparisons show that the value of poisoned Shorts is certain, while the application of poisoned Bran is of very doubtful benefit when judged from the aspect of cost and results. The cages were set out in a clean field of spring wheat, so that the 50 worms placed in each, though confined to nine square feet, were in every other respect under identical conditions with those experienced in nature.

Unfortunately the weather turned cold when we started these experiments, and has remained so ever since, so that our percentage killings are not quite so high as they might have been had feeding been more general. Little of the wheat was eaten.