

The Canadian Entomologist.

Vol. XLVII.

LONDON, JULY, 1915

No. 7

POPULAR AND ECONOMIC ENTOMOLOGY.

POISONED BAIT FOR CUTWORMS.

BY E. H. STRICKLAND,

Dominion Entomological Laboratory, Lethbridge, Alberta.

Experiments conducted at the Dominion Entomological Laboratory at Lethbridge, Alberta, during the past two years upon the control of *Porosagrotis orthogonia* and *Euxoa ochrogaster*, and again this Spring upon a species of *Chorizagrotis* have proved to us that shorts are far more valuable than bran as a bait for the purpose of poisoning.

In 1913, when experiments were first started, bran only was tried, and results were extremely disappointing, for it was seen that this material lost most of its attractiveness when dry. Under our semi-arid conditions it seems impossible to obtain a bran mixture that will remain sufficiently attractive after it has lost its moisture, some fifteen minutes after its application to the heated soil. In this connection it should be noted that we have no dew at night.

Numerous mixtures were given thorough, and repeated, trials under varying conditions, in which different quantities of salt, sugar, and various syrups were used as attractive agents. In all cases 1-10 acre plots were treated at, or after, sundown, and they were examined once or twice during the three or four days following the date of application. The bran was applied at the rate of 100 lbs. per acre, but even with this amount never more than 26% of the worms were killed.

The following are a few typical results from about 40 observations:—

On Fall Wheat

100 lbs. Bran, 2 lbs. Sugar, 2 lbs. Paris Green, 2½ gallons Water.
—20% dead.

100 lbs. Bran, 6 lbs. Sugar, 2 lbs. Paris Green, 2½ gallons Water.—10% dead.