THE CANADIAN ENTOMOLOGIST

were used in each case, viz., 1 pound to 25 of filler and 1 pound to 50 of filler, the bait being scattered broadcast at the rate of 10 lbs. per acre. The applications were made late one evening, and counts made the following morning with the following results:

Paris	green	and	bran, 1–25		worms doad
Paris	green	and	bran, 1-50	65 707	worms dead.
Paris	oreen	and	considerat 1 OF		worms dead.
Dati	Siccin	and	sawdust, 1-25		worms dead.
Paris	green	and	sawdust, 1-50		worms dead

Examinations made two days after the application showed approximately 75% value in the sawdust bait area and practically all were dead in the bran bait area, and approximately the same results were obtained by using these baits in the furrow plowed around the field.

The continuation of these experiments has been possible through the courtesy of Prof. C. G. Woodbury, Director of Purdue Agricultural Experiment Station, who placed at our disposal space in the station greenhouse and during the months of January and February, 1918, 95 individual experiments were conducted with a view to determining the relative value of sawdust in comparison with bran, different kinds of arsenicals, and varying formulæ. The insect used in these tests was the common army worm (Cirphis unipuncta) and the method adopted was some hat as follows: enamel trays 4 x 8 and 3" deep were used, these being banded on the inside with tree tanglefoot to prevent escape of worms. Twelve army worms were used in each cage, and a small amount of poison material together with a similar amount of a comparable bait unpoisoned and wheat foliage was placed in the cage, giving the worms every possible opportunity to utilize the unpoisoned bait or foliage if they so desired. The results may be summarized as follows: Of the 18 individual experiments representing 216 larvæ, where the comparative value of bran and sawdust was tested, we found 52.5% of the worms killed where sawdust was used as a filler and 86.1% where bran was used. In the same number of experiments testing a half and half bran and sawdust mixture in comparison with bran alone we found 72.5% killed where the combination was used, and 90.7% where bran alone was the filler.

188