

The following are a few of the results selected from 18 experiments and comprise those in which Kansas Grasshopper mixture, and a modification of it in which Shorts were used, were compared:

Poison was applied at the rate of 20 lbs. per acre. Examinations were made 48 hours after application. This was necessary, since dead worms are eaten readily by those still alive.

Applied to moist soil, and moistened by a shower.

20 lbs. Bran, 2 quarts Molasses, 1 lb. Paris Green, 3 Oranges, 3½ gallons Water.—26% dead.

20 lbs. Shorts, 2 quarts Molasses, 1 lb. Paris Green, 3 Oranges, 1 gallon Water.—56% dead.

Applied dry two days after mixing.

20 lbs. Bran, 2 quarts Molasses, 1 lb. Paris Green, 3 Oranges, 3½ gallons Water.—24% dead.

20 lbs. Shorts, 2 quarts Molasses, 1 lb. Paris Green, 3 Oranges, 1 gallon Water.—76% dead.

In the second case the weather was warmer, and more normal.

We found that the fruit in these and other mixtures had a slight beneficial effect, though the killing was as good with the following mixture: Shorts, 50 lbs.; Molasses, 2 gallons; Paris Green, 1 lb., applied at the rate of 20 pounds per acre. In this case no water was used, and we find that the benefit derived from using Paris Green in greater quantities than one pound to fifty pounds of Shorts (or Bran) does not warrant the extra cost.

The only objection to Shorts is the difficulty of mixing, but if lots of not more than 50 pounds are mixed at a time, and the reduced quantity of water is added slowly during the mixing, the difficulty is minimized. Strangely enough, the greater the proportion of molasses to water the more readily the mixture is made.

From the above figures, which represent very few of the results obtained from our numerous experiments, all pointing to the same conclusions, it will be seen that we are having great difficulty in poisoning worms under our dry conditions, but by substituting bran with shorts the problem of control is brought nearer to solution, and since this modification has proved beneficial under a variety of conditions we believe that it will be found to be of value wherever poisoning is practised for the control of cutworms.