New Bait for Worms, Hoppers

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NEW BAIT FOR

WORMS, HOPPERS

Sodium Fluosilicate Is Poison to Be Used for Armyworms, Cutworms, and Grasshoppers

Breathing any of the poison.

Stir thoroughly and keep stirring as about half of the poisoned water is poured slowly over the bran. Then thoroughly mix the bran with a garden hoe. Stir the rest of the water before pouring again and then mix the bait material until each flake of bran has been moistened and coated with the poison. Stirring the water prevents the poison from settling to the bottom of the container.

The finished bait should contain just enough water so that the bran flakes will not adhere to each other when broadcast, but instead will fall to the ground as individual flakes. Broadcast very thinly as a farmer would sow oats from a pail by hand. Five pounds of dry bran will make 10 pounds of poisoned wet bait and is sufficient to poison ½ acre, even in heavy infestations when the “worms” are marching in armylike hordes.

Farmers and gardeners know cutworms that cut off young corn and garden plants near the surface of the ground. The armyworm is a climbing cutworm, and outbreaks usually originate in small grain or grass fields where there is a rank growth of vegetation or the grain has lodged or fallen down. Watching such areas in small grain enables one to poison the caterpillars while they are small and before much damage is done. Small grain fields should be examined about dusk, for the “worms” then become active.

Baiting the Worms

Look for signs of their work, such as grain plants stripped of leaves and for “droppings” of the worms on the ground. Also turn over cornstalks or any other debris which caterpillars might be under. Several species of cutworms are usually found feeding along with the armyworms.

Certain cutworms, such as the variegated, often breed up in large numbers in alfalfa and clovers. In alfalfa the
worms usually become numerous about the time of the first cutting for hay. Unless baited then, the new growth is eaten off about as rapidly as it appears and the plants are soon killed.

Do not broadcast bait on windy, cold, cloudy or wet days nor just before a rain. The weather should also be calm, warm and sunny for best results. It is not necessary to add molasses or seasoning material to the bait ingredients for armyworms, cutworms or grasshoppers. As grasshoppers feed mostly in the morning, the wet bait should be broadcast soon after sunrise. Broadcast at the same rate as recommended for armyworms.

**FORMULA NO. 2**
Grasshopper Control: County or Community Mixing Station

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Larger Quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millrun bran</td>
<td>100 pounds</td>
</tr>
<tr>
<td>Sawdust</td>
<td>equal in bulk to 300 pounds of bran</td>
</tr>
<tr>
<td>Sodium fluosilicate</td>
<td>16 pounds</td>
</tr>
<tr>
<td>Water( variable, depending upon condition of sawdust)</td>
<td>20-30 gallons</td>
</tr>
</tbody>
</table>

Makes enough bait to treat 40 acres once.

Formula No. 2 is recommended for baiting grasshoppers in large areas, such as on a community or county mixing station basis. The sawdust is used to lower the cost of materials and to save bran for feeding farm animals. Millrun bran is composed of bran, flour middlings and low-grade flour. Any kind of sawdust may be used, providing it is clean and not too rotten.

Pieces of wood and other objects should be removed by screening, because of the danger of damaging end-large amounts of baits are needed this summer, the baits will be prepared at county mixing stations under the supervision of the county extension directors.

**Federal, State Help**

We do not advise farmers and growers to prepare dry baits, or to mix large quantities of baits at home. As instructions for handling, storing and mixing sodium fluosilicate dust differ in several respects from those of sodium arsenite solution, detailed instructions for county mixing stations have been sent to all county extension directors.

Above: These Decatur County farmers near Leon are using an endgate seeder to scatter poisoned bait for the control of grasshoppers. The same kind of poisoned bait, scattered in the same way, can be used for armyworms, too.

Left: These armyworms, which are a climbing cutworm, are feeding on rye.

In all of the feeding tests at the Iowa Station, the Landrace (Danish breed) pigs have averaged 18 pounds more in weight at 180 days of age than the Poland China pigs with which they have been compared.

The average daily gain of the Landrace pigs has been 0.1 pound more per head daily. It has taken 6 pounds more of feed, however, for each 100 pounds of gain in the Landrace breed.

When these differences were examined statistically, it was found that the weight difference was significant and the daily gain nearly so, but that the difference in feed requirement might have been due to chance.