

grain to be fed to sheep under feedlot conditions, although this type of medication is not as effective as individual treatment.

All worm remedies are composed of poisonous materials. The alkaline anthelmintic contains sufficient arsenic to be highly toxic when improperly administered or when given in excessive amounts. It is advised that sheep be treated with this medicine only on the advice of a veterinarian. Under no circumstances should an arsenic containing anthelmintic be given to badly scouring lambs or to ewes in advanced pregnancy. When severe gastro-enteritis is present there is an increase in the rate of absorption of copper, arsenic and nicotine and poisoning may result. Losses will be held much lower if sheep are treated before they become too weak from parasitism to withstand

the effects of the treatments instituted. If scouring is very severe in a flock, it is advised to put sheep on dry feed with a grain supplement and to administer minimum doses of the anthelmintic chosen. After scouring stops, the standard dose should be given to the entire flock.

### Bibliography

1. A Preliminary Note on the Geographical Distribution of Gastro-Intestinal Parasites of Sheep in North Dakota and Adjacent Areas. Alice I. Goldsby and D. F. Eveleth. Bimonthly Bulletin, N. Dak. Agr. Expt. Sta., Vol. VII, No. 2, p. 35, 1944.
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## Effectiveness of DDT Against Potato Insects

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**P**RELIMINARY tests conducted in 1944 by the North Dakota Agricultural Experiment Station with a 5 percent DDT-Copper dusting mixture indicated this insecticide to be superior to other treatments including an arsenical, copper lime dust, DN-Copper dust, Dithane, and Sabadilla-copper dust. Two applications were made, July 12 and July 22 respectively, at the rate of about 20 pounds of dust per acre per application. The treatments were replicated in plots twice. Yield data were obtained by digging 30 hills of tubers in three separate locations in each of the replicated plots. The field was located near Fargo. The results are summarized as follows:

Where copper was used it was applied at the rate of two pounds copper (metallic basis) per acre. An arsenical was dusted on all plots except where DDT was applied.

Treatment	Yield computed on per acre basis
Arsenical only .....	160 Bushels
Copper-lime dust .....	166.1 Bushels
DN dust and copper .....	166.5 Bushels
Dithane .....	169.7 Bushels
Sabadilla and copper .....	173.4 Bushels
DDT 5 percent and copper .....	174.4 Bushels

### Abbreviations:

Dithane=(Disodium-ethylene-bisdithiocarbamate)

DN=(Dinitro)

DDT=(Dichloro-diphenyl-trichloroethane)

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