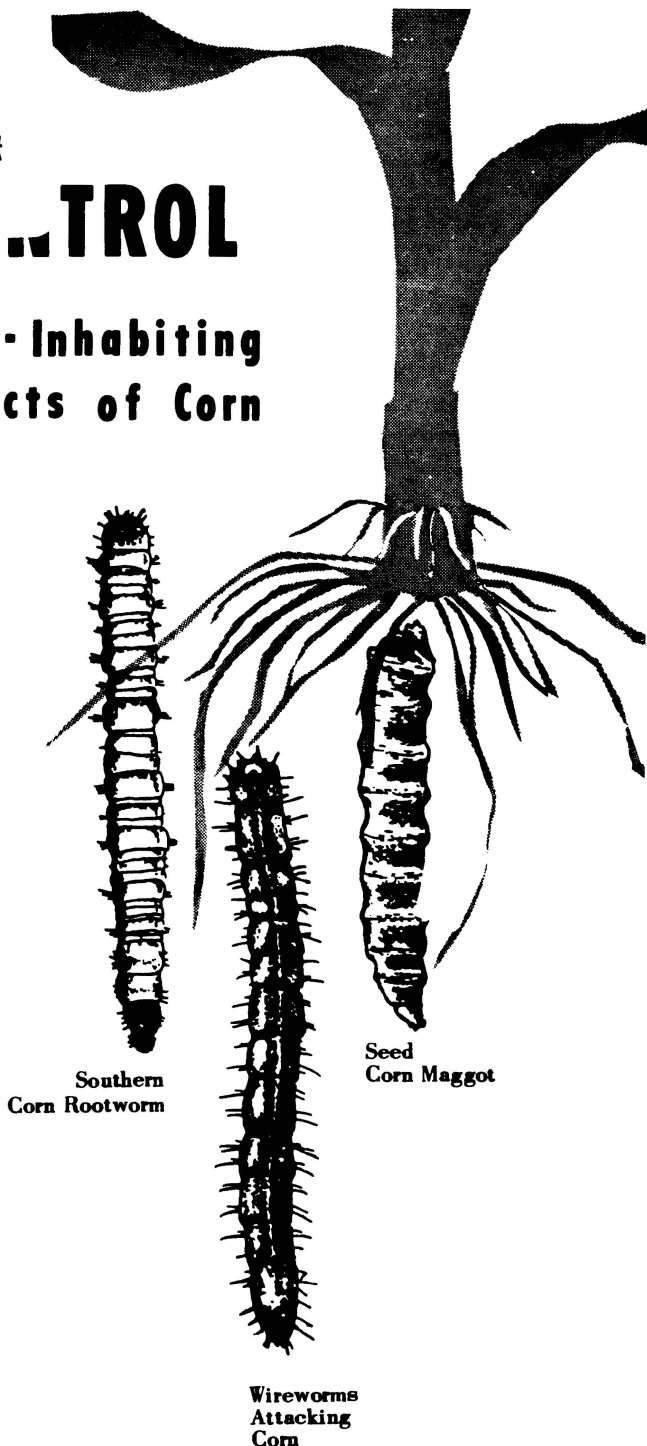


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# CONTROL

## Soil-Inhabiting Insects of Corn



Southern  
Corn Rootworm

Seed  
Corn Maggot

Wireworms  
Attacking  
Corn

Virginia Agricultural Extension Service  
Virginia Polytechnic Institute  
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# CONTROL SOIL-INHABITING INSECTS OF CORN

The southern corn rootworm inflicts its greatest damage to young corn plants by tunneling through the lower part of the stalk and larger roots, and destroying smaller roots. Infested plants often start growth normally but fail to develop beyond 8'' to 10'' in height.

The seed corn maggot attacks the seed and either prevents it from sprouting or causes the plant to be weak and stunted.

Wireworms attack the seed in much the same manner as seed corn maggots, and also may be destructive to the root system of corn throughout the season.

Injury to corn from all these insects is usually greater in heavier soils, and/or during seasons of heavy rainfall.

## Control

There are several ways of controlling soil-inhabiting insect pests of corn: (1) Using diazinon in granulated form; (2) Using diazinon as emulsifiable concentrate; and (3) Seed treatment before the corn is planted, using any one of several different insecticides. Field treatment is suggested only where corn is to be planted in moderately heavy to heavy soils or where previous injury has been experienced.

### Diazinon

#### How Much To Use:

1. Apply diazinon 14% granules as a preplant, broadcast application at the rate of 14 to 28 lbs. per acre, or

5% granules at 40 to 80 lbs. per acre. Use equipment calibrated to deliver an even distribution of the insecticide to the soil surface at the proper dosage.

Or

2. Apply diazinon 14% granules as a row treatment at the rate of 7 to 14 lbs. per acre, or 5% granules at 20 to 40 lbs. per acre in a 7'' to 10'' band in front of the press wheel at the time of planting.

Or

3. Apply diazinon spray, made from emulsifiable concentrate containing 4 lbs. of diazinon per gallon, at the rate of



Corn plant showing injury by southern corn rootworm to growing point or "bud."

2 to 4 lbs. of actual diazinon in 15 to 20 gallons of water per acre. Use low-pressure, low-gallonage, weed-type sprayers. Follow closely label directions for mixing and applying the spray treatment.

When To Apply:

The diazinon broadcast treatment should be applied preferably before planting, or at the time of planting corn. If the spray treatment is used, apply only when the wind velocity is low, usually in early morning or late afternoon. Set the boom about 12'' above the ground. The chemicals should be disked into the soil to a depth of 4'' to 6'' immediately after the application.

## Seed Treatment

Seed treatment will give satisfactory control of the seed corn maggot, but is relatively ineffective against wireworms. This treatment may give moderate control of southern corn rootworm. However, when used as a supplement to soil treatments described above, near perfect control can be obtained.

Insecticide To Use: Seed corn should be treated with a dry dust form of dieldrin, aldrin, lindane, or heptachlor just before planting. Most seed corn is treated with a fungicide before it is sold. If your seed has not been so treated, it would be advisable to treat with a fungicide in addition to the insecticide. Commercial combination preparations containing recommended materials are available.

The insecticide should be thoroughly mixed with the seed before placing it in the planter box. This can be done by spreading seed on a canvas, sprinkling the powder on it, and then rolling the grain back and forth several times until

the seeds are well coated. It is usually not satisfactory to attempt mixing the powder with the seed in the planter box.

How Much To Use:

The following table shows amounts of different insecticides that should be used per bushel of corn.

<u>Insecticide</u> <u>Wettable Powder</u>	<u>Ounces per bushel</u> <u>of corn</u>
Dieldrin, 50%	1 to 2
Aldrin, 25%	2 to 4
Lindane, 25%	4
Heptachlor, 25%	2 to 4

CAUTION: DIAZINON, ALDRIN, HEP-  
TACHLOR, AND LINDANE ARE  
POISONOUS TO MEN AND ANIMALS.  
HANDLE WITH CARE ACCORDING  
TO DIRECTIONS ON THE INSECTI-  
CIDE CONTAINER LABEL.



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