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## EC80-1509 Insect Control Guide for Corn and Sorghum in Nebraska

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## INSECT CONTROL GUIDE FOR CORN AND SORGHUM

## NEBRASKA

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Insect control suggestions in this guide are based on University of Nebraska research results, U.S.D.A. recommendations, and label registrations. Insect control is never perfect. The suggestions are designed to benefit Nebraska farmers when they need control programs.

In some instances trade names have been used. No endorsement is implied by the Nebraska Cooperative Extension Service and no discrimination is intended.

Recommendations enclosed in boxes indicates that these compounds may provide more consistent or efficient results based on University of Nebraska and other states' research and field experience. This does not indicate that these products are the only ones that should be used or that other products are not effective.

IMPORTANT

All insecticides listed in this publication are subject to many label restrictions on use or on use of the crop after application. Restrictions are so lengthy it is not practical to list all of them here. It is essential that labels be examined before purchasing or using any product to be certain that its use does not result in illegal application, danger to the user or environment, or residues that exceed tolerances.

Insecticides that are classified RESTRICTED USE included in this circular are: Furadan 4F, Di-Syston emulsifiable concentrates greater than 65%, Dyfonate emulsifiable concentrates greater than 44%, methomyl, ethyl parathion, and methyl parathion. Application of these products must be made by, or under the direct supervision of a certified applicator. Other products may be classified restricted use in 1980.

## TOXICITY OF INSECTICIDES

All insecticides are poisonous and must be used with caution. They should always be stored in the original container out of the reach of children, uninformed adults, and livestock. It is very important that the labels of every insecticide be studied until they are understood. Follow these completely to avoid accidental poisoning or death, and to prevent illegal residues in crops.



Extension work in "Agriculture, Home Economics and subjects relating thereto," The Cooperative Extension Service, Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln, Cooperating with the Counties and the U.S. Department of Agriculture  
Leo E. Lucas, Director

Revised November, 1979



The highly toxic insecticides in this publication are ethyl parathion, Furadan 4F, methyl parathion, EPN, Di-Syston, Thimet, Counter, and Dyfonate. Skull and crossbones and the word Poison appear in red on the label of highly toxic materials. The chemicals are not recommended for farm application as sprays. They must be applied only by certified operators. However, with proper precautions, farmers should be able to use granular formulations for soil application to control corn rootworms. Furadan 4F is highly toxic orally--farmers can use this product only if special precautions are taken.

Moderately toxic insecticides are Diazinon, Furadan 10G, Mocap 10G, Lorsban, Sevin, Malathion, dimethoate, Metasystox-R, toxaphene, Ethion, Trithion and lindane. They must be used with special care. Familiarize yourself with all warnings given on the labels.

Registrations of some chemicals listed in this publication are subject to review and withdrawal in 1980. Visit with your county agricultural agent before making the final decision of which insecticide to use.

### INSECTS BELOW GROUND

#### CORN ROOTWORM LARVAE

Corn rootworm larval damage is most likely to occur in continuous corn production fields. If one or more beetles per plant were observed the previous August, a soil insecticide is indicated. Corn following other crops may be damaged by rootworm larvae if beetles in adjacent corn fields were numerous the previous August. Rotation is usually an effective prevention for corn rootworms and soil insecticides are not necessary in most first year corn fields.

Effectiveness of soil insecticides is reduced if soil remains dry after application, if excessive rainfall occurs, if soils are highly alkaline, or if applied at planting time (especially true on early planted corn). Control is more reliable if an insecticide is applied at cultivation time in early June. If corn is to be planted in late April or the first week of May, it may be best to delay soil insecticide application until first cultivation, before June 10. Cultivation treatment is particularly desirable if soil is alkaline, since high pH accelerates decomposition.

Many failures to control rootworms can be traced to poor calibration of granular applicators. In many cases, amounts used are below those recommended on the label. REMEMBER THAT LABEL RECOMMENDATIONS ARE BASED ON 40 INCH ROW SPACINGS. If corn is planted in rows narrower than 40 inches, there are more linear feet of row per acre. This means that more insecticide must be applied per acre to obtain the proper rate needed to protect the corn. By calibrating applicators to deliver the suggested amount per 1000 feet (305 meters) of row, the amount per acre will be correct regardless of row spacing. Refer to Nebguide G76-283 (Revised in 1979).

It is essential that insecticides be covered with soil. Granules or liquids remaining on the surface are lost and poor control is likely.

Fertilizer in combination with a soil insecticide must be applied in bands on each side of the seed furrow at seed level, not in the furrow or below the seed. Placement below seed level is not effective. Seed furrow applications of liquid or granular insecticides for rootworm control are not recommended



because some compounds may reduce the stand when in direct contact with germinating seeds, also seed furrow placement reduces the effectiveness of any compound because the treated zone is too narrow to protect lateral roots.

Some feeding on roots will occur, regardless of material or placement used. When rootworm numbers are high or egg hatch is extended, do not expect complete control.

Growers who have experienced unsatisfactory results at planting time with any insecticide, especially after using it 2 or more years, should consider switching to one in a different category. If an organic phosphate (Counter, Dyfonate, Lorsban, Mocap, or Thimet) has not provided acceptable control, rotate to a carbamate (Furadan). If Furadan has not performed well, rotate to an organic phosphate.

RECOMMENDATIONS FOR REDUCTION OF CORN ROOTWORM LARVAE:

1. Rotate corn with other crops.<sup>1/</sup>
2. Apply one of the following granular insecticides at cultivation time between May 25 and June 10. Rates are ounces of formulation per 1000 feet (305 m) of row:  

Counter (terbufos) 15G.....	8.0 oz. (227 g)	(Basal only)
Diazinon 14G.....	8.5 oz. (241 g)	
Dyfonate (fonofos) 20G.....	6.0 oz. (170 g)	
Furadan (carbofuran) 10G.....	12.0 oz. (340 g)	<sup>2/</sup>
Mocap (ethoprop) 10G.....	12.0 oz. (340 g)	(Basal only)
Thimet (phorate) 15G.....	8.0 oz. (227 g)	

Distribute granules evenly in a narrow band on each side or over rows, and cover with soil.

REGISTERED FOR PLANTING TIME APPLICATION: (Research in Nebraska the past 3 years indicate that Counter and Dyfonate provide more consistent results.) Amounts per 1000 feet (305 m) of row.

Counter (terbufos) 15G.....	8.0 oz. (227 g)
Diazinon 14G.....	8.5 oz. (241 g)
Dyfonate (fonofos) 20G.....	6.0 oz. (170 g) <sup>3/</sup>
Dyfonate (fonofos) 4E.....	2.4 fl. oz. (71 ml)
Furadan (carbofuran) 10G.....	12.0 oz. (340 g) <sup>2/</sup>
Furadan (carbofuran) 4F.....	2.4 fl. oz. (71 ml) <sup>2/</sup>
Lorsban (chlorpyrifos) 15G.....	8.0 oz. (227 g)
Mocap (ethoprop) 10G.....	12.0 oz. (340 g) <sup>3/</sup>
Thimet (phorate) 15G.....	8.0 oz. (227 g) <sup>3/</sup>

- <sup>1/</sup> Rotation is effective in most cases. Exceptions may occur when beetles invade sweet clover-oats stubble, weedy soybeans, and sunflowers to feed on pollen the previous summer, or if volunteer corn was present in any field the previous summer.
- <sup>2/</sup> In some fields Furadan has not provided consistent control. If there has been any evidence of Furadan inefficiency, use another product.
- <sup>3/</sup> If Dyfonate, Mocap, or Thimet are applied at planting, do not allow granules to fall into seed furrow, as stand reduction may occur.



## CUTWORMS

Corn following sod, soybeans, or small grain stubble or fields with heavy crop residues are most likely to be damaged by cutworms. Treatment is justified when one plant out of 20 shows cutworm feeding injury. Early detection is essential. Crusting, or dry surface soil will reduce efficacy of control. If surface is dry or crusted, rotary hoeing immediately before or after insecticide application may increase control if soil is not dry more than one inch.

RECOMMENDATIONS FOR CONTROL OF CUTWORMS IN CORN WHEN  
5% OF PLANTS HAVE BEEN CUT OR HAVE FEEDING INJURY:

Lorsban (chlorpyrifos) 4E.....1 pound AI per acre  
(1.12 kg per hectare) broadcast, followed immediately  
by a rotary hoe.

### OTHER PRODUCTS REGISTERED:

#### Amounts Active Ingredient Per Acre

Dylox (trichlorfon).....1 pound (1.12 kg per hectare)  
Diazinon.....2 pounds (2.24 kg per hectare)  
Toxaphene.....3 pounds (3.36 kg per hectare)  
Sevin (carbaryl).....2 pounds (2.24 kg per hectare)  
Sevin (carbaryl) 5% bait..20-40 pounds formulation per  
acre (21 to 42 kg per hectare)

## WIREWORMS AND SEED DESTROYING INSECTS

First year corn, eco-fallow and early planted fields are more likely to be damaged.

RECOMMENDATIONS FOR CONTROL OF WIREWORMS, SEEDCORN  
MAGGOTS, AND SEEDCORN BEETLES IN CORN:

Counter (terbufos) 15G.....8 oz. (227 g) per 1000 feet  
(305 m) of row in seed furrow.  
Furadan (carbofuran) 10G.....12 oz. (340 g) per 1000 feet  
(305 m) of row in the seed  
furrow.

### OTHER PRODUCTS REGISTERED:

Mocap (ethoprop) 10G.....12 oz. (340 g) per 1000 feet  
(305 m) of row as a 7" band  
over rows. Seed furrow placement  
will reduce stand.  
Planter box treatments of diazinon, lindane, or Lorsban  
(chlorpyrifos). See label for rates and restrictions.



# SOD WEBWORMS

Sod webworms frequently occur in first year corn following pasture, or when slot planting in grass.

MATERIAL	AMOUNT ACTIVE INGREDIENT PER ACRE - HECTARE	RESTRICTIONS
Toxaphene	2.5 lbs.      2.8 kg (1.13 kg)	Do not feed treated forage to dairy animals or animals being finished for slaughter. Broadcast or apply in 10" band, using at least 20 gallons water per acre.

## INSECTS DAMAGING CORN ABOVE GROUND

### CORN ROOTWORM ADULTS TO PREVENT SILK CLIPPING

Corn rootworm beetles occasionally interfere with pollination if there are sufficient beetles to chew silks to husks during the pollen-shedding period. Controls are indicated only when severe silk chewing is occurring at 25-50 percent pollen shed. In an average year, few fields will need to be sprayed to prevent silk clipping by beetles. Beetles are most likely to cause a problem in late-planted or late-silking fields. Be certain to warn beekeepers within 2 miles (3.22 km) of a field if a field must be sprayed when it is shedding pollen.

REGISTERED TO CONTROL CORN ROOTWORM ADULTS TO PREVENT SILK CLIPPING: Amounts are active ingredient per acre.

Diazinon.....	8 oz. (561 g per hectare)
Di-Syston (disulfoton).....	4 oz. (279 g per hectare)
EPN.....	4 oz. (279 g per hectare)
Imidan (phosmet).....	8 oz. (561 g per hectare)
Malathion.....	1 lb. (1.12 kg per hectare)
Malathion ULV.....	4 oz. (279 g per hectare)
Parathion (ethyl or methyl)...	4 oz. (279 g per hectare)
Sevin (carbaryl).....	1 lb. (1.12 kg per hectare)

### CORN ROOTWORM ADULTS TO REDUCE LARVAE THE NEXT YEAR

Controlling rootworm adults to reduce the number of larvae the next season may not be as reliable as soil insecticides because precise timing of control is essential, and more than one application of an insecticide may be necessary. If this method is used, it should be under the supervision of trained pest management personnel. To have a reasonable chance of success, begin scouting in early July. Control should be applied when there is an average of one rootworm beetle per plant and 10 percent of the female beetles have mature eggs. When this population is first recorded, apply one quart of Sevin 4-Oil per acre. The length of time one application is effective will depend upon rainfall or irrigation practices. If beetles reoccur, make a second application when populations reach one beetle per two plants. The cost of two treatments will exceed that of a single soil treatment.



RECOMMENDATIONS FOR CONTROL OF CORN ROOTWORM ADULTS  
TO REDUCE EGG DEPOSITION :

Sevin 4-Oil (carbaryl).....1 qt. formulation per acre  
(2.21 per hectare)

CHINCH BUGS

Preventing chinch bug damage by cultural practices is more reliable than chemical controls. Where possible, do not plant corn into wheat stubble or adjacent to wheat fields. If chemical controls are necessary, apply a suggested insecticide in at least 30 gallons of water per acre. Use drop pipes from sprayer booms, so that spray is directed onto the lower stalks and soil around the plants. Broadcast sprays over plants are not effective. Sprays will not last more than 4 to 7 days. If migrations from adjacent wheat fields are heavy, reapplication may be necessary.

Seed furrow application of Furadan 10G at planting time is registered on corn for rootworm and wireworm control. These applications have reduced chinch bug infestations in sorghum plots. Use 12 ounces (340 g) of Furadan 10G per 1000 feet of row, and drop granules into the seed furrow.

RECOMMENDATION FOR CONTROL OF CHINCH BUGS IN CORN:  
Amount active ingredient per acre applied as a spray  
directed onto the lower stalks and soil in at least  
30 gallons of water.

Sevin (carbaryl).....2 pounds (2.24 kg per hectare)

OTHER PRODUCTS REGISTERED:

Toxaphene.....3 pounds (3.36 kg per hectare)

EUROPEAN CORN BORER

The need for insecticide treatment for first brood is determined by examining whorls. Treat if 50 percent of the corn plants on dryland; 35 percent on irrigated; 25 percent on popcorn; or 5-10 percent on seed fields show shotholes in whorl leaves. Heaviest first brood borer activity is expected in earliest planted fields, or fields planted to susceptible varieties. Ask your seedcorn dealer if a variety is available for your area that produces high yields and has some resistance to European corn borers. If borers have already entered stalks, control is impossible. It is difficult to tell when control of second brood borers will be profitable. Fields that have green silks during the second brood moth flight in late July and August are attractive to moths for egg laying. When late developing fields have an average of one egg mass per 2 plants, or 50% of plants have small borers feeding in leaf axils, control may be feasible. Harvest heavily infested fields early to reduce field losses. Second brood borers are most serious in late planted or long season hybrid corn.



RECOMMENDATIONS FOR CONTROL OF EUROPEAN CORN BORERS:

Amounts are formulation per acre.

Furadan (carbofuran) 10G.....10 lbs. (10.8 kg per hectare)  
Dyfonate (fonofos) 20G.....5 lbs. (5.6 kg per hectare)

REGISTERED FOR CONTROL OF EUROPEAN CORN BORERS:

Amounts are formulation per acre.

Diazinon 14G.....7 lbs. (7.6 kg per hectare)  
EPN 4G.....10 lbs. (10.8 kg per hectare)  
Parathion 10G.....10 lbs. (10.8 kg per hectare) <sup>1/</sup>  
Sevin (carbaryl) 20G.....10 lbs. (10.8 kg per hectare)  
Toxaphene 15G.....14 lbs. (15.2 kg per hectare)  
Thimet (phorate) 15G.....7 lbs. (7.6 kg per hectare) <sup>1/</sup>

Sevin, diazinon, EPN and parathion are registered as sprays.  
Spray applications have not been effective.

<sup>1/</sup> First brood only

GRASSHOPPERS ON CORN

Prevent damage to corn by controlling grasshopper nymphs when there are 20 or more immature grasshoppers per square yard in field margins.

RECOMMENDATIONS FOR CONTROL OF GRASSHOPPERS ON CORN:

Amounts are active ingredient per acre.

Dimethoate.....8 oz. (561 g per hectare)  
Furadan (carbofuran).....4 oz. (280 g per hectare)  
Sevin 4-Oil (carbaryl).....1.5 lbs. (1.68 kg per hectare)

REGISTERED FOR GRASSHOPPER CONTROL ON CORN:

Lorsban (chlorpyrifos).....8 oz. (561 g per hectare)  
Dibrom (naled).....12 oz. (0.8 kg per hectare)  
Malathion.....1 lb. (1 kg per hectare)  
Parathion.....8 oz. (561 g per hectare)  
PennCap M.....8 oz. (561 g per hectare) <sup>1/</sup>  
Sevin (carbaryl) 80.....2 lbs. (2.24 kg per hectare) <sup>1/</sup>  
Sevimol (carbaryl).....1.5 lbs. (1.68 kg per hectare) <sup>1/</sup>  
Toxaphene.....2 lbs. (2.24 kg per hectare)

<sup>1/</sup> Do not use PennCap M or Sevin on corn shedding pollen, if beehives are within 2 miles.

WESTERN BEAN CUTWORMS

Use chemical controls when 14% of the plants infested with larvae in tassels and/or eggs on leaves and corn is 95-100 percent tasseled, and before worms have entered silks.



RECOMMENDATIONS FOR CONTROL OF WESTERN BEAN CUTWORMS ON CORN:

Amounts are active ingredient per acre.

Sevimol (carbaryl).....2 lbs. (2.24 kg per hectare)  
Sevin 4-0il (carbaryl).....2 lbs. (2.24 kg per hectare)

REGISTERED FOR CLIMBING CUTWORMS ON CORN:

Active ingredient per acre.

Methyl parathion + EPN.....8 oz. (561 g per hectare)

SPIDER MITES

Apply chemical control if 1 lower leaf is yellowing and mite colonies are present to the ear zone before corn has reached the hard dent stage. Insecticides do not kill eggs, so reinfestation frequently will occur. More likely to develop when grassy weeds are in or adjacent to fields.

REGISTERED FOR CONTROL OF SPIDER MITES ON CORN:

Amounts are active ingredient per acre

Dimethoate.....8 oz. (561 g per hectare)  
Diazinon.....8 oz. (561 g per hectare)  
Di-Syston (disulfoton) 15G...1 lb. (1.12 kg per hectare)<sup>1/</sup>  
Di-Syston (disulfoton) EC....1 lb. (1.12 kg per hectare)  
Metasystox-R (oxydemetonmethyl)...8 oz. (561 g per hectare)  
Thimet (phorate) 15G.....1 lb. (1.12 kg per hectare)<sup>1/</sup>  
Trithion (carbophenothion)...1 lb. (1.12 kg per hectare)  
Parathion.....12 oz. (0.8 kg per hectare)<sup>2/</sup>

<sup>1/</sup> Granular formulations of Di-Syston or Thimet have provided longer control in Nebraska tests.

<sup>2/</sup> Parathion has been very erratic in field use, which may be due to resistance.

ARMYWORMS

Control when migration from adjacent grassy fields is sufficient to damage margin rows, or when field infestations are consuming lower leaves before hard dent stage. Develop in fields with grassy weeds.

RECOMMENDATIONS FOR CONTROL OF ARMYWORMS IN CORN:

Amounts are active ingredient per acre

Dylox (trichlorfon).....1 lb. (1.12 kg per hectare)  
Lannate (methomyl).....6 oz. (415 g per hectare)  
Sevin (carbaryl).....1.6 lbs. (1.79 kg per hectare)



REGISTERED FOR ARMYWORM CONTROL ON CORN:

Parathion.....	8 oz. (561 g per hectare)
Malathion.....	1.5 lbs. (1.68 kg per hectare)
Toxaphene.....	2.5 lbs. (2.8 kg per hectare)

SORGHUM INSECTS

GREENBUGS AND CORN LEAF APHIDS

Corn leaf aphids (referred to as "aphids") are not known to cause economic damage to grain sorghum grown under Nebraska conditions. Treatments applied for this insect would seldom result in a yield increase that would pay for the cost of treatment.

Greenbugs have frequently caused serious yield losses in Nebraska grain sorghum since 1968. For a discussion of treatment guidelines on susceptible and resistant grain sorghum hybrids, refer to Nebguide G76-266, available at your county extension office.

Certain sorghum varieties may be sensitive to organic phosphate insecticides. Red or brown spots where spray droplets contact leaves frequently occur. Usually these are not serious. Sensitivity can be determined by spraying a small area of a field and observing for several days for crop injury.

REGISTERED FOR CONTROL OF GREENBUGS ON SORGHUM:

Amounts are active ingredient per acre

Diazinon.....	8 oz. (561 g per hectare)
Dimethoate.....	6 oz. (420 g per hectare)
Di-Syston (disulfoton)15G...	1 lb. (1.12 kg per hectare) <sup>1/</sup>
Di-Syston EC (disulfoton)...	8 oz. (561 g per hectare)
Dyfonate (fonofos).....	1 lb. (1.12 kg per hectare)
Furadan 4F (carbofuran)....	8 oz. (561 g per hectare)
Furadan 10G (carbofuran)....	1 lb. (1.12 kg per hectare) <sup>2/</sup>
Malathion.....	1 lb. (1.12 kg per hectare)
Metasystox-R (oxydemetonmethyl)....	8 oz. (561 g per hectare) <sup>3/</sup>
Parathion.....	8 oz. (561 g per hectare)
PennCap E.....	8 oz. (561 g per hectare)
Thimet 15G (phorate).....	1 lb. (1.12 kg per hectare) <sup>1/</sup>

<sup>1/</sup> Di-Syston and Thimet granules can be used broadcast or as a band at time of planting.

<sup>2/</sup> Furadan granules registered only for time of planting.

<sup>3/</sup> CAUTION: Since certain sorghum varieties may be sensitive to organophosphate insecticides, Metasystox-R should be applied to a small area and observed for a few days to determine if any crop injury will occur.

WIREWORMS, CORNSEED MAGGOT AND CORNSEED BEETLE

Planter box seed treatment with lindane or diazinon. Follow package directions for amounts and restrictions.



## CHINCH BUGS

Preventing chinch bug damage to sorghums by cultural practices is more reliable than chemical controls. Do not plant sorghums following wheat stubble, or adjacent to winter wheat. Chinch bugs do not feed on legumes, so soybeans are ideal alternatives for sorghums in high chinch bug probability fields.

Research in Nebraska and Kansas indicates that Furadan granules applied in the seed furrow at time of planting provides the longest lasting control of chinch bugs moving into sorghums from adjacent wheat.

### RECOMMENDATIONS FOR CHINCH BUG CONTROL IN SORGHUM:

Furadan 10G (carbofuran).....12 oz. (340 g) per 1000 feet  
of row (305 m) in the seed  
furrow at planting time.

### OTHER PRODUCTS REGISTERED:

Sevin (carbaryl).....2 lbs. per acre (2.24 kg per hectare)  
as a spray in at least 30 gal. (113 L)  
water per acre directed with drop  
pipes onto plant stalks and soil.

Furadan 4F.....8 oz. per acre (0.56 kg per hectare)  
as a spray - same as Sevin.

Toxaphene.....2 lbs. (2.24 kg per hectare)

### CONTAINER DISPOSAL

Proper disposal of insecticide containers is very important. Serious accidents have occurred when "empty" containers have not been disposed of safely. Suggested methods of disposal are:

PAPER BAGS: Be certain that all contents have been emptied into applicators or tanks. Burn paper containers, not to exceed 50 pounds, in open fields where; (1) regard is given to wind direction in relation to people, domestic animals, and water supplies, (2) where such burning is not in violation of Federal, State, or local ordinances, and (3) provisions are made to avoid contamination of surface water.

METAL, GLASS, OR PLASTIC CONTAINERS: Thoroughly rinse containers at least 3 times with water and dump rinse material into tanks to be used with regular applications. Recycle 5 gallon or larger metal drums where possible after complete decontamination. Containers that cannot be recycled should be punctured, crushed, and buried in a landfill, or 24 inches (60 cm) below the soil surface in a location that will not result in contamination of water, crops, man, or animals.



For more detailed information on corn and sorghum insects refer to the following Nebguides:

- G 78-427 - "Chinch Bugs"
- G 76-206 - "Corn Rootworm Control - 1980"
- G 76-283 - "Rootworm Insecticide Rate Conversions" (Revised)
- G 76-217 - "European Corn Borer - 1980"
- G 76-290 - "Western Bean Cutworm in Corn"
- G 75-50 - "Spider Mites in Corn"
- G 76-266 - "Sorghum Greenbug Control" (Revised)
- G 74-106 - "Grasshoppers" (Revised)
- EC 78-1534 - "Insect Prevention and Control in Farm Stored Grain" (Revised)

These and many other Nebguides on important insects are available from County Cooperative Extension Offices or the Cooperative Extension Service of the Institute of Agriculture and Natural Resources in Lincoln, Nebraska, 68583.

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Insecticides that are classified with the USE included in this publication are: Parathion 4F, D-D-T, and other insecticides with a concentration greater than 6%, D-D-T, and other insecticides with a concentration greater than 4%, and other insecticides with a concentration greater than 4%. Application of these products must be made by or under the direct supervision of a certified applicator. Other products may be classified restricted use in 1980.

All insecticides are extremely toxic and must be used with caution. They should always be stored in the original container out of the reach of children, uninformed adults, and livestock. It is very important that the labels of every insecticide be studied until they are understood. Follow these directions to avoid accidents, injuries or death, and to prevent official rejections in stock.