

FIELD CROP INSECTICIDE PRODUCTS - QUICK REFERENCE CHARTS

The following charts are for use as a quick reference to locate possible insecticides available for use against insect pests in field crops. For complete information, restrictions, and precautions, **ALWAYS READ THE PRODUCT LABEL.**

CORN

Insecticide	Aphids	Armyworm	Cutworm	Corn rootworm Larvae	Corn rootworm Adults	Wireworm	European Corn Borer	White Grubs	Grasshopper
Asana XL		●	●		●		●		●
Aztec 2.1 G				●		●		●	
<i>Bacillus thuringiensis</i>							●		
carbaryl (Sevin)		●			●		●		●
Counter 15 G				●		●		●	
Capture 2EC				●		●	●	●	●
Di-syston	●								
Dimethoate (Digon 400, Dimethoate 400)	●								●
Force 1.5 G and 3 G				●		●		●	
Fortress 2.5 G and 5 G				●		●		●	
Furadan 4F							●		●
Lannate LV	●	●							
Lorsban 15 G				●		●	●	●	
Lorsban 4E	●	●	●	●	●	●	●		●
Malathion (ULV)									●
Malathion 57EC	●	●							●
Methyl parathion 8EC	●	●							●
Mocap 10 G						●			
Mustang		●	●				●		●
Pennacap-M	●	●			●		●		●
permethrin (Ambush 2E, Pounce 3.2E & 1.5G)		●	●				●		
Phorate 15 G				●					
Phorate 20G							●		
Sevin 5% bait			●						
Thimet 20 G				●		●			
Tracer (spinosad)		●					●		
Warrior		●	●		●		●		●

SORGHUM

Insecticide	Aphids	Armyworms	Cutworms	Grasshoppers
Dimethoate (Digon 400, Dimethoate 400)	●			
Di-syston	●			
Lorsban 4E	●	●		●
Mustang		●	●	●
Warrior		●	●	●

WHEAT

Insecticide	Aphids	Armyworm	Cutworms	Wireworm	Grasshopper	Stem sawfly	Hessian fly	Wheat midge	Stem maggot	Cereal leaf beetle
carbaryl (Sevin)		●			●					●
Di-syston	●									
Dimethoate (Digon 400, Dimethoate 400)	●				●					
Furadan 4F					●					●
Lannate LV	●	●								●
lindane				●						
Lorsban 4E-SG	●	●	●		●			●		
Malathion 57EC	●	●			●					●
Malathion (ULV)					●					●
Methyl parathion 8EC	●	●			●					
Mustang		●	●		●					●
Pennacap-M	●				●			●		
Thimet 20 G					●*		●			
Tracer (spinosad)		●								
Warrior		●	●		●					●

* Only for winter wheat field border treatments.

BARLEY

Insecticide	Aphids	Armyworms	Barley Thrips	Wireworms	Grasshopper	Cereal leaf beetle
Di-syston	●					
Dimethoate (Digon 400, Dimethoate 400)					●	
Ethyl parathion 8EC	●	●			●	
Ethyl or methyl parathion 8EC			●			
Furadan 4F					●	●
Lannate LV	●	●				●
lindane				●		
Malathion (ULV)					●	●
Malathion 57EC	●	●			●	●
Methyl parathion 8EC	●	●				
Pennacap-M	●	●			●	

OATS

Insecticide	Aphids	Armyworms	Wireworms	Grasshoppers	Cereal leaf beetle
Dimethoate (Digon 400, Dimethoate 400)				●	
Furadan 4F				●	●
Lannate LV	●	●			●
lindane			●		
Malathion 57EC	●	●		●	●
Malathion (ULV)				●	●
Methyl parathion 8EC	●	●		●	
Pennacp-M	●	●		●	

DRY BEANS

Insecticide	Leafhoppers	Aphids	Armyworms	Bean Leaf Beetle	Cutworms	Green Cloverworm	Grasshopper	Seed Corn Maggot
acephate (Orthene 75S, Address 75S)	●	●	●	●	●	●	●	
Asana XL	●	●			●	●	●	
carbaryl (Sevin)			●	●	●		●	
Di-Syston G	●	●						
diazinon								●
dimethoate (Digon 400, Dimethoate 400)	●	●						
endosulfan 3EC (Phaser, Thiodan)	●	●						
Lannate LV	●	●						
Lorsban 30 F								●
Malathion ULV						●		
Malathion 57EC	●	●						
Methoxychlor 2EC				●				
Mustang	●	●	●	●	●	●	●	
Pennacp-M	●	●				●		
Thimet 20 G	●	●						●

FORAGE CROP INSECTS

Insecticide	Alfalfa Weevil	Alfalfa Bloch Leafminer	Pea Aphid	Leafhopper	Cutworm	Grasshopper Forage	Grasshopper Pasture	Lygus or Plant Bugs
Baythroid	●	●	●	●				
Capture 2EC								●
carbaryl (Sevin)	●		●	●	●	●	●	
dimethoate (Digon 400, Dimethoate 400)			●	●		●		●
Furadan 4F (alfalfa only)	●	●	●	●		●		●
Imidan 50 WP	●		●					
Lannate LV		●	●	●	●			●
Lannate	●							
Lorsban 4E (alfalfa only)	●	●	●	●	●	●		●
Malathion ULV						●		
Malathion 57EC	●		●	●		●	●	●
Malathion ULV 95% Tech.							●	
Methoxychlor 2EC	●							
Methyl parathion 8EC						●		
Mustang	●			●	●	●		●
PennCap-M	●	●	●	●		●	●	
permethrin (Ambush 2E, Pounce 3.2EC)	●		●	●	●			●
Warrior	●	●	●	●	●	●		●

SUGARBEET INSECTS

Insecticide	Sugarbeet Root Maggot	Beet Webworm	Wireworm	Cutworm	Flea Beetles	Grasshopper	Tarnished Plant (Lygus) Bugs
Asana XL		●		●		●	
carbaryl (Sevin)		●		●	●		
chlorpyrifos - Chlorfos 15G	●						
chlorpyrifos - Lorsban 15G	●						
chlorpyrifos - Lorsban 4E	●	●		●	●	●	●
chlorpyrifos - Nufos 4E			●	●			
Counter 15G	●		●				
Diazinon AG 500						●	
Dibrom							●
Endosulfan EC (Phaser, Thiodan)		●					
Lannate SP		●			●		
Lannate LV		●			●		
Malathion 57 EC							
Methyl parathion					●	●	
Mustang	●	●	●	●	●	●	●
Sevin XLR							
Temik 15G	●						

POTATO INSECTS

Insecticide	Aphids	Colorado Potato Beetle	Flea Beetle	Potato Leafhopper	Cabbage Looper	Potato Insect Complex
Asana XL	●	●	●	●	●	
Baythroid		●	●	●	●	
carbaryl (Sevin)		●	●	●		
dimethoate (digon 400, Dimethoate 400)	●		●	●		
Disulfoton 15 G (Di-Syston)						●
Endosulfan 3EC (Phaser, Thiodan)	●	●	●	●		
Fulfill	●					
Furadan 4F		●	●	●		
Guthion 3 F		●	●	●		
imidacloprid - Admire 2F	●	●				
imidacloprid - Provado 1.6F	●	●				
Imidan 50 WP		●	●	●		
Lannate LV	●					
Monitor	●	●			●	
Oxamyl(Vydate L)	●	●	●	●		
PennCap-M		●	●	●		
permethrin (Ambush 2E, Pounce 3.2EC)		●	●	●		
Phorate 20 G (Thimet)						●
Spin Tor 2SC (spinosad)		●				
thiamethoxam - Actara		●		●		
thiamethoxam - Platinum	●	●		●		
Thimet 20 G	●	●	●	●		

CARROTS

Insecticide	Aster Leafhopper
Asana XL	●
Baythroid	●
carbaryl (Sevin)	●
endosulfan 3EC (Thiodan and Phaser)	●
Lannate LV	●
Methoxychlor	●

SOYBEAN INSECTS

Insecticide	Armyworm	Cutworm	Leaf Feeding Caterpillars*	Grasshopper	Bean Leaf Beetle	Potato Leafhopper	Soybean aphid	Seedcorn Maggot	Spider Mites
Asana XL		●	●	●	●	●	●		
carbaryl (Sevin)	●	●	●	●	●	●			
diazinon								●	
dimethoate (Digon 400, Dimethoate 400)				●	●	●			●
Furadan 4F				●			●		
Lannate LV			●		●				
Lorsban 4E	●	●	●	●	●		●		●
Mustang	●	●	●	●	●	●	●		
Pennacp-M			●	●	●	●	●		
permethrin (Pounce 3.2 EC, Ambush)		●	●		●	●	●		
Scout X-TRA	●	●	●	●		●			
Tracer	●		●						
Warrior	●	●	●	●	●	●	●		

* Leaf Feeding Caterpillars include Green Cloverworm, Cabbage Looper, Velvetbean Caterpillar, and Thistle Caterpillar.

CANOLA (RAPESEED) INSECTS

Insecticide	Flea Beetles	Diamondback Moth	Bertha Armyworms
Capture 2 EC	●	●	●
clothianidin (Poncho, Prosper) (seed treatment)	●		
Ethyl-methyl parathion 6-3	●	●	●
Gaicho (seed treatment)	●		
Helix, Helix Xtra (seed treatment)	●		
Methyl parathion 8EC	●	●	●

SUNFLOWER INSECTS

Insecticide	Banded Moth	Sunflower Moth	Sunflower Midge	Sunflower Seed Weevil	Sunflower Stem Weevil	Sunflower Beetle	Cutworm	Grasshopper	Wireworm
Asana XL	●	●		●	●	●	●	●	
Baythroid	●	●		●		●			
Cruiser (seed treatment)									●
carbaryl (Sevin 20% Bait, Sevin XLR)							●		
carbaryl (Sevin)					●	●		●	
Endosulfan 3EC (Phaser, Thiodan)		●							
Furadan 4F	●	●		●	●	●		●	
Lorsban 15G							●		
Lorsban 4E	●	●		●	●	●	●	●	
Methyl parathion 8EC		●		●					
Scout X-TRA	●	●		●	●	●		●	
Warrior	●	●		●	●	●	●	●	

FIELD PEA INSECTS

Insecticide	Pea Aphid	Lygus bug	Grasshopper
Asana XL	●	●	●
carbaryl (Sevin)	●	●	●
dimethoate (Digon, Dimethoate)	●	●	●
Lannate LV and SP	●	●	●
Mustang	●	●	●

LENTIL INSECTS

Insecticide	Pea Aphid	Lygus bug	Grasshopper
Asana XL	●	●	●
Baythroid		●	●
carbaryl (Sevin)		●	●
dimethoate (Digon, Dimethoate)	●		
malathion	●		
Mustang	●	●	●

CHICKPEA / GARBANZO BEAN INSECTS

Insecticide	Pea Aphid	Lygus bug	Grasshopper	Cutworms	Armyworm
Asana XL	●		●	●	
Baythroid		●	●	●	
dimethoate (Digon, Dimethoate)	●				
Lannate LV and SP				●	
Mustang	●	●	●	●	
Spintor 2SC					●

VEGETABLE CROP INSECTICIDE PRODUCTS - QUICK REFERENCE CHARTS

The following charts are for use as a quick reference to locate possible insecticides available for use against insect pests in field crops. For complete information, restrictions, and precautions, **ALWAYS READ THE PRODUCT LABEL.**

Carrots	Aphids	leaf eating caterpillars	cutworms	flea beetles	grasshopper	leafhopper
<i>General use Insecticide</i>						
Azadirachtin (Neem)						
Carbaryl						
Endosulfan						
<i>Bacillus thuringiensis</i>						
Malathion						
Methoxychlor						
M-Pede						
Pyrellin						
Pyrethrins						
<i>Restricted use Insecticide - see previous chart, page 47</i>						

Cole crops	Aphids	leaf-eating caterpillars	cutworms	grasshoppers
<i>General use insecticides</i>				
Acephate				
Azadirachtin				
Bt & sulfur premix				
Carbaryl				
Chlorpyrifos				
Cryolite				
Dibrom				
Dimethoate				
Endosulfan				
<i>Bacillus thuringiensis</i>				
Malathion				
Methoxychlor				
M-pede				
Petroleum oil				
Pyrellin				
Pyrethrins				
<i>Restricted use pesticides</i>				
Asana				
Azinphos-methyl				
Lambda-Cyhalothrin				
Cypermethrin				
zeta-Cypermethrin				
Diazinon				
Di-syston				
Imidacloprid				
Lannate				
Metasystox-R				
Methyl parathion				
Permethrin				
Scout x-tra				

Cucurbits	aphids	cucumber beetle	leaf-eating caterpillars	cutworms	flea beetles	grasshoppers
<i>General use insecticides</i>						
Azadirachtin						
Carbaryl						
Cryolite						
Dibrom						
Dimethoate						
Endosulfan						
Malathion						
Methoxychlor						
M-pede						
Petroleum oil						
Pyrellin						
Pyrethrins						
<i>Restricted use insecticides</i>						
Asana						
Azinphos-Methyl						
Diazinon						
Lannate						
Metasystox-R						
Permethrin						
Vydate						

Lentils	Aphids	leaf-eating caterpillars	cutworms	bean-leaf beetle	flea beetles	grasshoppers	tarnished plant bug
<i>General use Insecticides</i>							
Azadirachtin							
Carbaryl							
Dimethoate							
Malathion							
Pyrellin							
Pyrethrins							
<i>Restricted use Insecticides - - see page 85</i>							

Peas	aphids	bean beetle	leaf-eating caterpillars	cutworms	grasshoppers	leafhoppers	lygus bugs
<i>General use Insecticides</i>							
Azadirachtin							
Carbaryl							
Dibrom							
Dimethoate							
Endosulfan							
Malathion							
Methoxychlor							
M-pede							
Pyrellin							
Pyrethrins							
<i>Restricted use pesticides</i>							
Asana							
Diazinon							
Di-syston							
Lannate							
Methyl parathion							

Peppers	aphids	Colorado Potato Beetle	leaf-eating caterpillars	cutworms	flea beetles	grasshoppers	Lygus bugs
<i>General use Insecticides</i>							
Acephate							
Azadirachtin							
Carbaryl							
Cryolite							
Dibrom							
Dimethoate							
Endosulfan							
Imidacloprid							
Malathion							
Methoxychlor							
M-pede							
petroleum oil							
Pyrellin							
Pyrethrins							
<i>Restricted use Insecticides</i>							
Asana							
Azinphos-methyl							
Baythroid							
Diazinon							
Di-syston							
Lannate							
Metasystox-R							
Permethrin							
Vydate							

Sweet corn	aphids	armyworms	corn rootworm	cutworm	European corn borer	grasshoppers	grubs	sap beetles	seedcorn maggots	wireworms
General use pesticides										
Carbaryl										
Chlorpyrifos										
Diazinon (seed treatment)										
Endosulfan										
<i>Bacillus thuringiensis</i>										
Malathion										
Methoxychlor										
Permethrin (seed treatment)										
petroleum oil										
Pyrellin										
Tracer (spinosad)		●			●					
Restricted use insecticides										
Asana										
Aztec										
Counter										
Baythroid										
Warrior										
Diazinon										
Fortress										
Furadan										
Lannate										
Metasystox-R										
Mocap										
Permethrin										
Phorate										

Tomatoes	aphids	Colorado potato beetle	cutworms	European corn borer	flea beetles	grasshoppers	plant bugs	Wireworms
General use Insecticides								
Azadirachtin								
Carbaryl								
Cryolite								
Dimethoate								
Endosulfan								
Imidacloprid								
Malathion								
Methoxychlor								
M-pede								
petroleum oil								
Pyrellin								
Pyrethrins								

Tomatoes	aphids	Colorado potato beetle	cutworms	European corn borer	flea beetles	grasshoppers	plant bugs	Wireworms
<i>Restricted use Insecticides</i>								
Abamectin								
Asana								
Azinphos-methyl								
Cyfluthrin								
lambda-Cyhalothrin								
Diazinon								
Di-syston								
Lannate								
Methyl parathion								
Permethrin								
Vydate								

TREES AND SHRUB INSECTICIDE PRODUCTS - QUICK REFERENCE CHARTS

Insecticides for the Management of Insect and Mite Pests of trees and shrubs.

The "Alternative" products represent those that would be generally be classified as "organic," representing botanicals, microbials, and soaps. Always Read and Follow the Label!

('●' indicates listed pest is found on the pesticide label)

	Aphids	Plant Bugs	Leathoppers	Scale Insects	Spider Mites	Gall Insects	Leaf Beetles	Caterpillars	Sawflies	Wood Borers
General Use Insecticides										
acephate (Orthene® and Isotox®)	●	●	●	●	●		●	●	●	
cyfluthrin (Advanced Garden®)	●	●	●				●	●	●	
* diazinon	●	●	●		●		●	●		
* chlorpyrifos (Dursban®)				●			●	●	●	●
carbaryl (Sevin®)	●	●	●	●		●	●	●	●	
imidacloprid (Advanced Garden®)	●	●	●				●		●	
malathion	●	●	●	●		●	●			
dimethoate (Cygon®)	●									
dicofol (Kelthane®)					●	●				
methoxychlor	●						●		●	
lindane										●
horticultural oils				●	●	●				
permethrin (Astro™ and others)	●	●	●					●	●	●
spinosad (Conserve®)					●		●	●		
Alternative Products										
pyrethrins	●	●	●				●	●		
<i>Bacillus thuringiensis</i>								●		
neem (Bioneem®)	●							●	●	
insecticidal soaps	●	●	●		●					
rotenone							●			
Professional Use Only										
fluvalinate (Mavrik®)	●		●			●		●	●	
fenpropathrin (Tame®)	●		●		●					
disulfoton (Di-Syston®)	●		●				●	●		
imidacloprid (Merit®)	●	●	●				●		●	
oxythioquinox (Morestan®)					●	●				
cyfluthrin (Tempo®)	●	●	●				●	●	●	
lambda-cyhalothrin (Scimitar®)	●	●	●	●	●		●	●	●	
deltamethrin (Deltagard® and Suspend®)	●	●	●	●	●		●	●	●	
bifenthrin (Talstar®)		●	●	●		●		●	●	●

* For all garden and turf uses of diazinon, manufacturing stops in June 2003; all sales and distribution to retailers end in August 2003. Chlorpyrifos (Dursban and other products) will no longer be approved for use for garden and turf beyond December 31, 2001.

FLOWER GARDEN INSECTICIDE PRODUCTS - QUICK REFERENCE CHARTS

The "Alternative" products represent those that would be generally classified as "organic," representing botanicals, microbials, and soaps. Always read and follow the label. Before treating flowering plants, check the label for comments pertaining to plant sensitivity to the chemical. Always read and follow the label!

('●' indicates listed pest is found on the pesticide label)

	Aphids	Leaf Beetles	Grasshoppers	Rose Curculio	Rose Slug	Spider Mites	Leafhoppers	Plant Bugs	Thrips	Scale Insects	Caterpillars	Cutworms	Millipedes	Sowbugs	Slugs & Snails
General Use Insecticides															
acephate (Orthene® and Isotox®)	●	●	●		●	●	●	●	●	●					
carbaryl	●	●	●	●	●		●	●	●	●	●	●	●	●	
chlorpyrifos*										●		●	●	●	
cyfluthrin (Advanced Garden®)	●	●	●		●		●	●		●	●	●	●	●	
diazinon*	●	●	●			●	●	●	●		●	●	●	●	
dicofol (Kelthane®)						●									
dimethoate	●								●						
imidacloprid (Advanced Garden®)	●						●	●	●	●					
malathion	●	●					●	●	●	●					
mesurol															●
metaldehyde															●
methoxychlor	●	●			●				●						
Alternative Products															
<i>Bacillus thuringiensis</i> (Bt)											●				
insecticidal soaps	●					●	●	●							
neem (Bioneem®)	●								●		●				
pyrethrins	●	●					●	●			●				
rotenone		●							●						
Professional Use Only															
cyfluthrin (Tempo®)	●	●	●				●	●			●	●	●	●	
disulfoton (Di-Syston®)	●	●					●		●						
fenpropathrin (Tame®)	●					●	●								
fluvalinate (Mavrik®)	●						●		●		●				
imidacloprid (Merit®)	●	●					●	●	●						
lambda-cyhalothrin (Scimitar®)	●	●				●	●	●	●		●	●		●	
oxythioquinox (Morestan®)						●									

* For all garden and turf uses of diazinon, manufacturing stops in June 2003; all sales and distribution to retailers end in August 2003. Chlorpyrifos (Dursban and other products) will no longer be approved for use for garden and turf beyond December 31, 2001.

INSECTICIDES FOR LAWN PEST CONTROL - QUICK REFERENCE TABLE

Insecticide	Rate	Remarks
WHITE GRUBS		
carbaryl (several formulations) (Sevin)	Follow label rates for white grubs.	Water into sod after application.
* diazinon 25% EC	4 fl. oz. in 12 gal./500sq. ft.	Water immediately into soil after application. Do not use on golf courses or sod farms.
* diazinon 5 G	2.5 lbs./1000 sq. ft.	Apply when grass is dry and water after application. Do not use on golf courses or sod farms.
imidacloprid (Advanced Lawn ®)	3 lbs/1000 sq. ft.	Apply in mid-May. Water after application.
isazophos 4E (Triumph)	1.5 fl. oz./1000 sq. ft.	Apply in sufficient water to ensure uniform coverage. As soon as application is complete, apply ½ inch of water but stop watering before puddling or runoff occurs. Do not treat golf course fairways.
isofenphos 22% EC (Oftanol 2)	3.0 fl. oz./1000 sq. ft. or 1 gal./acre	Water lawn thoroughly within 12 hours of the application, using sufficient water to wet the soil to a depth of 1 to 1½ inches.
SOD WEBWORM		
bendiocarb 76% EC (Turcam)	½ to 1 fl. oz./1000 sq. ft.	Apply when pest is evident. Use adequate quantity of water to thoroughly moisten grass and thatch.
carbaryl (several formulations) (Sevin)	Follow label rate for sod webworm.	Insure good penetration of turf. For best results mow lawn and apply after a rain or watering. Repeat at 2 to 3 week intervals if needed.
* diazinon 25% EC	8 fl. oz. in 24 gal. water/1000 sq. ft.	Thoroughly wet down grass a few hours before applying. Do not use on golf courses or sod farms.
* diazinon 5 G	2 lb./1000 sq. ft.	Apply when grass is dry and water after application. Do not use on golf courses or sod farms.
isazophos 4E (Triumph)	0.75 fl. oz./1000 sq. ft.	Apply in sufficient water to ensure uniform coverage. As soon as application is complete, apply ½ inch of water but stop watering before puddling or runoff occurs. Do not treat golf course fairways.
isofenphos 22% EC (Oftanol 2)	1.5 to 3 fl. oz./1000 sq. ft. treatment.	Apply ¼ to ½ inch of water within 12 hours of application.
ANTS		
bendiocarb 76% EC (Turcam)	0.5 to 1.0 oz./1000 sq. ft.	Apply to hills and surrounding areas. Use adequate quantities of water to thoroughly moisten grass and thatch.
carbaryl (several formulations) (Sevin)	Follow label rates for ants.	Same as above.
* diazinon 25% EC	2 tsp./gal.	Spot treat ant hills and surrounding areas. Thoroughly moisten the grass and thatch. Do not use on golf courses or sod farms.
* diazinon 5 G	2 lbs./1000 sq. ft.	Spot treat ant hills and surrounding areas. Water with ¼ to ½ inch to activate the insecticide granules. Do not use on golf courses or sod farms.
isazophos 4E (Triumph)	0.75 fl. oz./1000 sq. ft.	Apply in sufficient water to ensure uniform coverage. As soon as application is complete, apply ½ inch of water but stop watering before puddling or runoff occurs. Do not treat golf course fairways.
EARTHWORMS		
<p>There are no lawn insecticides that list earthworms on the label of pests controlled. Publications from Ohio State University have listed the toxicity of the common lawn insecticides to earthworms. The only lawn insecticide that is listed as highly toxic to earthworms is carbaryl (Sevin). From this information the following control procedure is suggested:</p> <ol style="list-style-type: none"> 1. In early spring, lightly roll or power rake the lawn to remove old worm castings. 2. Thoroughly water the lawn several hours before the application is to be applied. 3. Apply liquid carbaryl (Sevin) insecticide at the label rate recommended for sod webworms. Evening applications are most effective. Do not water the lawn for several days after application. 4. Repeat if castings continue to appear. 		

* For all turf uses of diazinon, manufacturing stops in June 2003; all sales and distribution to retailers end in August 2003.