

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®)						●									

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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. 		

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