



Ornamentals: Information About Insecticides/Miticides

David Shetlar and Daniel Herms. 2003.
 Insect and mite control on woody ornamentals and herbaceous perennials,
 The Ohio State University Extension Bulletin 504.

Pesticide (Common Name)	Trade Name(s)	Classification	Oral LD ₅₀ ¹ (mg/kg) ²	Dermal LD ₅₀ ¹ (mg/kg) ²	Manufacturer
abamectin	Avid	microbial toxins	650	>2000	Syngenta
acephate	Orthene, Isotoxiv, Orthenex	organophosphate	980	10250	Valent, Agrilience, TopPro
azadirachtin (=neem, azatin)	Azatin, BioNEEM	botanical	>5000	>2000	Scotts, Olympic
<i>Bacillus thuringiensis</i> var. <i>kurstaki</i>	Biobit, Bactospeine, Caterpillar Attack, Dipel, Javelin, Larvo-BT, Thuricide, Victory, and others	spores + crystalline delta-endotoxin, microbial	none	none	Numerous - Abbott, DuPont,
<i>Bacillus thuringiensis</i> var. <i>tenebrionis</i> (=san diego)	M-One, Novodor	microbial	none	none	Valent
<i>Beauveria bassiana</i>	<i>Beauveria</i> , Naturalis-O	fungus	none	none	Troy Biosciences
beta-cyfluthrin	Tempo Ultra	pyrethroid	630-670	>5000	Bayer
bifenazate	Floramite	diphenyl	5000	>5000	Uniroyal
bifenthrin	Talstar	pyrethroid	375	>2000	FMC
carbaryl	Carbaryl, Sevimol, Sevin	carbamate	246	>4000	Aventis, Drexel, UAP, United Hort Supply
carbofuran	Furadan	carbamate	8	>3000	FMC
chlorpyrifos	Dursban, Pageant	organophosphate	270	2000	DowAgrosciences, TopPro, United Hort Supply
cryolite	Cryolite, Prokil, Kryocide	inorganic fluorine	practically nontoxic	practically nontoxic	Gowan, Cerexagri
cyfluthrin	Decathlon, Tempo	pyrethroid	826	>2000	Bayer, Olympic
cyromazine	Citation	triazine growth inhibitor	3387	>2000	Syngenta



Ornamentals: Information About Insecticides/Miticides (continued)

Pesticide (Common Name)	Trade Name(s)	Classification	Oral LD ₅₀ ¹ (mg/kg) ²	Dermal LD ₅₀ ¹ (mg/kg) ²	Manufacturer
deltamethrin	DeltaGard, Suspend	pyrethroid	128	>2000	Aventis, Bayer
dicofol	Docofol, Kelthane	chlorinated hydrocarbon	595	>5000	DowAgrosciences, Makhteshim-Agan, Gowan
dicrotophos	Bidrin, Inject-a-cide B	organophosphate	17	224	Mauget
diflubenzuron	Dimilin	insect growth regulator	>4640	>10,000	Uniroyal
endosulfan	Endocide, Phaser, Thiodan	chlorinated hydrocarbon	160	359	FMC
esfenvalerate	Asana XL	pyrethroid	458	>2000	DuPont
fenbutatin-oxide	Vendex	organo-tin	2630	>2000	Griffin
fenoxycarb	Precision	carbamate IGR	9220	>2000	Syngenta
fenpropathrin	Tame	pyrethroid	71-164	>2000	Valent
fluvalinate	Mavrik Aqua Flow	pyrethroid	282	20000	Wellmark
halofenozide	Mach 2	molting accelerator	2850	>2000	DowAgrosciences
hexythiazox	Hexygon	carboxamide	5000	>5000	Gowan
imidacloprid	Marathon, Merit	chloronicotinyl	450	>2000	Bayer, Olympic
iron phosphate	Sluggo	iron salt	>5000	>5000	Western Farm Service
lambda-cyhalothrin	Scimitar, Battle, Demand	pyrethroid	79	632	Syngenta, Lesco
malathion	Cythion, Malathion	organophosphate	1000	4100	UAP, Micro Flo, Agrilience, Gowan
metaldehyde	Deadline, Prozap	metacetaldehyde	360		Valent, Pace International, Amvac, UAP
metam-sodium	Vapam	carbamate	1891	>3000	Amvac



Ornamentals: Information About Insecticides/Miticides (continued)

Pesticide (Common Name)	Trade Name(s)	Classification	Oral LD ₅₀ ¹ (mg/kg) ²	Dermal LD ₅₀ ¹ (mg/kg) ²	Manufacturer
methiocarb	Grandslam, Mesurol	carbamate	20	>5000	Olympic, Gowan
methoxychlor	Marlate, Methoxychlor	chlorinated hydrocarbon	6000	>6000	Prentiss
naled	Dibrom	organophosphate	272	1100	Amvac
oxydemeton-methyl	Inject-a-cide, Harpoon	organophosphate	48	112	Gowan
oxythioquinox	Joust, Morestan	dithiocarbonate	1500	>2000	Bayer, Olympic
parathion	Parathion	organophosphate	2	50	Platte
permethrin	Ambush, Pounce, Astro	pyrethroid	4000	>4000	FMC, Agrilience, TopPro
petroleum oils	Dormant, Summer, Superior Oils, etc.	hydrocarbon oils	exempt	exempt	numerous
phosmet	Imidan	organophosphate	147	>4640	Gowan
propargite	Ornamite	sulfite ester	4029	2940	Uniroyal
pymetrozine	Endeavor	pyridine	>2000	>2000	Syngenta
pyrethrum	Pyrethrin, Pyrellin, Pyrenone, etc.	botanical	1500	1800	MGK, etc.
pyridaben	Sanmite	pyradazinole	820-1350	>2000	BASF
resmethrin	Resmethrin	pyrethroid	>2500	>3000	
soaps, pesticidal	Aphid-Mite Attack, Insecticidal Soap, M-Pede, etc.	fatty acid salts	practically nontoxic	practically nontoxic	
spinosad	Conserve	microbial	3783	>5000	DowAgrosciences
sulfur, elemental	Suffa	inorganic	>2000	>2000	Drexel
tralomethrin	Saga	pyrethroid	284	>2800	Bayer/Aventis
trichlorfon	Dylox	organophosphate	250	> 2100	Bayer

¹Farm Chemicals Handbook '2000 (Meister Publishing Co., Willoughby, OH), and technical data information where available.

²Equals milligrams per kilogram of body weight applied orally or dermally. (1 milligram = 1/1,000 of a gram, 454 grams = 1 lb.)