



Crop *Protection*



Fungicide / Bactericide Reference Chart

Always Refer to Product Label!

Product	Active Ingredient	OMRI Listed	Alternaria	Anthracoze	Bacterial spots	Black Spot	Botrytis	Cylindrocladium	Downy Mildew	Fire Blight	Fusarium	Leaf Spot	Phytophthora	Powdery Mildew	Pseudomonas	Pythium	Rhizoctonia	Rust	Scab	Thielaviopsis	Xanthomonas	
3336	Thiophanate-Methyl			X	X	X	X	X		X	X	X		X			X	X	X	X		
6672	Thiophanate-Methyl			X	X	X	X	X		X	X	X		X			X	X	X	X		
Actinovate	Streptomyces lydicus	OMRI	X	X			X		X		X	X	X	X		X	X	X				
Adorn	Fluopicolide								X				X			X						
Affirm	Polyoxin D zinc salt		X	X			X		X			X		X			X			X	X	
Agri-Mycin 50	Streptomycin sulfate				X					X		X			X							X
Aliette	Aluminum tris		X	X	X				X	X			X		X	X		X				X
Areca	Aluminum tris		X		X		X		X	X	X	X	X			X						X
Astun	Isofetamid						X															
Banner Maxx	Propiconazole		X	X		X					X	X		X			X	X	X			
Banol	Propamocarb hydrochloride												X			X						
Banrot	Etridiazole, Thiophanate-Methyl										X		X			X	X				X	
Botrystop	Ulocladium Oudemansii						X															
Broadform	Fluopyram, Trifloxystrobin		X	X		X	X		X			X	X	X			X	X	X			
Camelot O	Copper Octanoate	OMRI	X	X	X		X		X	X		X		X	X		X	X				X
Cease	Bacillus subtilis	OMRI	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	X		X
Chipco 26GT	Iprodione		X				X	X			X	X					X					
Chipco 26019	Iprodione		X				X	X			X	X					X					
Compass	Trifloxystrobin		X	X		X	X	X	X			X	X	X		X	X	X	X	X		X
Daconil	Chlorothalonil		X	X		X	X	X			X	X	X	X			X	X	X			
Decree	Fenhexamid						X							X								
Eagle	Myclobutanil			X		X					X	X		X			X	X	X			
EcoSwing	Extract of Swinglea glutinosa	OMRI	X				X					X		X								
Empress	Pyraclostrobin										X		X			X	X					
Fame	Fluoxastrobin		X	X			X		X		X	X	X	X		X	X	X				
FungOUT	Citric Acid	OMRI				X			X	X				X			X			X		X
Grotto	Copper Octanoate	OMRI	X	X	X	X	X		X	X		X	X	X	X		X	X	X			X
Heritage	Azoxystrobin		X	X		X	X	X	X		X	X	X	X		X	X	X	X			
Kleengrow	Didecyl dimethyl ammonium chloride				X		X		X		X	X	X	X	X	X	X				X	X
Medallion	Fludioxonil		X				X	X			X	X					X				X	
Micora	Mandipropamid								X				X									
Milstop	Potassium Bicarbonate	OMRI	X	X		X	X		X			X		X				X	X			
Mural	Azoxystrobin, Benzovindiflupyr		X	X		X	X	X	X		X	X	X	X		X	X	X	X			
Nordox	Cuprous Oxide	OMRI	X	X	X	X	X		X	X		X	X	X	X		X	X	X			X

Fungicide / Bactericide Reference Chart

continued

Always Refer to Product Label!

Product	Active Ingredient	OMRI Listed	Alternaria	Anthracoze	Bacterial spots	Black Spot	Botrytis	Cylindrocladium	Downy Mildew	Fire Blight	Fusarium	Leaf Spot	Phytophthora	Powdery Mildew	Pseudomonas	Pythium	Rhizoctonia	Rust	Scab	Thielaviopsis	Xanthomonas	
Obtego	Trichoderma Asperellum, gamsii	OMRI									X		X			X	X				X	
Orkestra	Fluxapyroxad, Pyraclostrobin		X	X			X	X	X		X	X	X	X		X	X	X	X	X	X	
Orvego	Ametoctradin, Dimethomorph								X				X									
OxiPhos	Hydrogen peroxide, Phosphorous acid				X		X		X	X	X	X	X	X	X	X				X		X
Pageant	Pyraclostrobin, Boscalid		X	X			X	X	X		X	X	X	X		X	X	X	X			
Palladium	Cyprodinil, Fludioxonil		X	X			X	X			X	X		X			X		X			
Phostrol	Mono and dibasic sodium, potassium, and ammonium phosphites			X	X	X			X	X			X		X	X	X			X		X
Phyton 35	Copper Sulphate Pentahydrate				X	X	X	X	X					X	X					X		X
Prostar	Flutolanil											X					X	X				
Protect	Mancozeb		X	X	X	X	X	X	X		X	X	X			X	X	X	X			
Pipron	Piperalin													X								
Regalia	Extract of Reynoutria sachalinensis	OMRI	X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X		X
RootShield	Trichoderma harzianum	OMRI						X			X					X	X				X	
RootShield Plus	Trichoderma harzianum & virens	OMRI						X			X		X			X	X				X	
Segovis	Oxathiapiprolin								X				X									
Segway O	Cyazofamid								X				X			X						
Spectro 90	Chlorothalonil, Thiophanate methyl		X	X		X	X	X	X		X	X	X	X			X	X	X			
Spirato	Fludioxonil		X				X	X			X	X		X			X				X	
Stargus	Bacillus amyloliquefaciens Strain F727	OMRI			X	X	X		X		X	X	X	X		X	X					X
Stature	Dimethomorph								X				X									
Subdue MAXX	Mefenoxam								X				X			X						
Terraclor 400	Pentachloronitrobenzene (PCNB)											X					X					
Terraguard	Triflumizole		X				X	X	X		X	X		X			X	X	X	X		
Terrazole L	Etridiazole												X			X						
Terrazole WP	Etridiazole												X			X						
Thymox	Thyme Oil				X		X		X					X								
Transom	Thiophanate-Methyl			X		X	X	X		X	X	X		X			X	X	X	X		
Triathlon BA	Bacillus amyloliquefaciens	OMRI	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		X
Trinity TR	Triticonazole		X				X	X	X		X			X			X					
Truban	Etridiazole												X			X						
Zerotol	Hydrogen Peroxide, Peroxyacetic Acid	OMRI	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X

REFERENCE GUIDE for GREENHOUSE and NURSERY PRODUCTION FUNGICIDES

RESISTANCE MANAGEMENT

As with other pesticides, fungicides must be used in a program to avoid or delay resistance. Do not rely on products with the same mode of action. Rotation of products with different modes of action, and using product combinations with different modes of action are parts of a resistance management strategy. Be especially careful when using products considered to be high risk for resistance development. This category includes many of our newer products. See the explanation of resistance risk at the end of the fungicide section.

Most fungicides work more effectively to prevent disease from becoming established, rather than eradicating disease that is already present. Constant monitoring – and modification where possible – of environmental conditions and scouting crops for signs of disease symptoms are vital parts of effective fungicide use and resistance management.

Always read the label and check with local authorities for further information regarding resistance management.

****Use Site(s) Key:** GH = Greenhouse, N = Nursery



Fungicides

(by Mode of Action Group and Class)

MOA Code* & Group	Class	Common Name	Trade Name	REI	Use Site(s)**	Company	
1	Thiophanates	Thiophanate-methyl	OHP 6672 [†]	12	GH/N	OHP, Inc.	
			3336 [™]	12	GH/N	Nufarm	
MBC-fungicides (Methyl Benzimidazole Carbamates) Resistance risk: High (See explanation of resistance risk following the mode of action listing)							
2	Dicarboximides	Iprodione	OHP Chipco [®] 26019	12	GH/N	OHP, Inc.	
			Chipco [®] 26019 FLO	12	GH/N	Bayer Environmental Science	
Resistance risk: Medium to High							
3	Imidazoles	Triflumizole	Terraguard [†]	12	GH/N	OHP, Inc.	
			Rubigan [†]	12	N	Gowan Company	
	Pyrimidines	Fenarimol	Banner [†] MAXX [®] II	12	N	Syngenta	
			Myclobutanil	Eagle [†] 20 EW	24	GH/N	Corteva Agriscience
			Triticonazole	Trinity [†]	12	GH/N	BASF
		Trinity [†] TR	4-12	GH	BASF		
DMI-fungicides (DeMethylation Inhibitors) Resistance risk: Medium							
4	Acylamines	Metalaxyl-M (=Mefenoxam)	Subdue [†] MAXX [®]	0-48	GH/N	Syngenta	
PA-fungicides (PhenyAmides) Resistance risk: Medium to High							
5	Piperadines	Piperalin	Pipron [†]	12	GH	SePRO Corp.	
Amines ("Morpholines") Resistance risk: Low to Medium							
7	Thiopene amides	Isofetamid	Astun [†]	12	GH/N	OHP, Inc.	
	Phenyl-Benzamides	Flutolanil	ProStar [†]	12	GH/N	Bayer Environmental Science	
SDHI (Succinate dehydrogenase inhibitors) Resistance risk: Medium to High							

* Depends on Greenhouse ventilation

** Greenhouse and/or nursery uses depend on the formulation. Check labels for uses.



Fungicides *continued*

(by Mode of Action Group and Class)

MOA Code* & Group	Class	Common Name	Trade Name	REI	Use Site(s)**	Company
11	Oximino-acetates	Trifloxystrobin	Compass [®] O	12	GH/N	Bayer Environmental Science
	Methoxy-acrylates	Azoxystrobin	Heritage [®]	4	GH/N	Syngenta
	Methoxy-carbamates	Pyraclostrobin	Empress [™] Intrinsic	12	GH/N	BASF
	Imidazolinones	Fenamidone	FenStop [®]	12	GH	Gowan Company
		Fluoxastrobin	Fame SC	12	GH/N	FMC
QoI-fungicides (Quinone outside inhibitors) Resistance risk: High						
12	Phenylpyrroles	Fludioxonil	Medallion [®]	12	GH/N	Syngenta
			Spirato	12	GH/N	Nufarm
PP-fungicides (PhenylPyrroles) Resistance risk: Low to Medium						
14	Aromatic Hydrocarbons	PCNB	Terraclor [®]	12	GH/N	OHP, Inc.
			Thiadiazole	Etridiazole	Terrazole [®]	12
				Truban [®]	12	GH/N
AH fungicides (Aromatic Hydrocarbons) Resistance risk: Low to Medium						
17	Hydroxyanilides	Fenhexamid	Decree [®]	12	GH/N	SePRO Corp.
(SBI: Class III) Resistance risk: Low to Medium						
19	Polyoxins	Polyoxin-D	Affirm [™]	4	GH/N	Nufarm
Polyoxins Resistance risk: Low to Medium						
21	Cyano-imidazole	Cyazofamid	Segway [®] O	12	GH/N	OHP, Inc.
Qil-fungicide (Quinone inside inhibitor) Resistance risk: Medium to High						
28	Carbamates	Propamocarb	Banol [®]	24	GH/N	Bayer Environmental Science
Carbamates Resistance risk: Low to Medium						
40	Cinnamic Acid Amides	Dimethomorph	Stature [®] SC	12	GH/N	BASF
	Mandelic Acid Amides	Mandipropamid	Micora [™]	4	GH/N	Syngenta
CAA-fungicides (Carboxylic Acid Amides) Resistance risk: Low to Medium						
43	Pyridinylmethyl-benzamides	Fluopicolide	Adorn [®]	12	GH/N	Nufarm
Benzamides Resistance risk: Unknown						
49	Piperidinyl-thiazole-isoxazolines	Oxathiapiprolin	Segovis [®]	4	GH/N	Syngenta
Piperidinyl-thiazole-isoxazolines Resistance risk: Medium to High						
BM 01	Fungal	Extract from the cotyledons of lupine plantlets ("BLAD") C108	Regime [™]	4	GH/N	FMC Corporation
Resistance risk: Unknown						

* Depends on Greenhouse ventilation

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Fungicides *continued*

(by Mode of Action Group and Class)

MOA Code* & Group	Class	Common Name	Trade Name	REI	Use Site(s)**	Company
BM 01	Biopesticide	<i>Singlea glutinosa</i>	EcoSwing™	4	GH/N	Gowan Company
Resistance risk: Unknown						
BM 02	<i>Bacillus</i> sp. and the fungicidal lipopeptides produced	<i>Bacillus amyloliquefaciens</i> strain D747	Triathlon[®] BA	4	GH/N	OHP, Inc.
		<i>Bacillus subtilis</i> GB03	Companion [®]	4	GH/N	Growth Products
		<i>Bacillus subtilis</i> MBI600	Subtilex™ NG	4	GH	BASF
		<i>Bacillus subtilis</i> QST713	Cease [®]	4	GH/N	BioWorks, Inc.
		<i>Bacillus amyloliquefaciens</i> F727	Stargus™	4	GH/N	Marone Bio Innovations
	Biopesticide	<i>Streptomyces lydicus</i> WYEC108	Actinovate [®] SP	4	GH/N	Mycorrhizal Applications, LLC
	Polypeptide (lectin)	<i>Trichoderma asperellum</i> (ICC 012) <i>Trichoderma gamsii</i> (ICC 080)	Obtego™	4	GH/N	SePRO Corp.
	Fungal	<i>Gliocladium virens</i> GL21	SoilGard[®]	4	GH/N	OHP, Inc.
	Biopesticide	<i>Trichoerma harzianum</i> T22	PlantShield [®] HC RootShield [®]	0 0	GH/N GH/N	BioWorks, Inc. BioWorks, Inc.
		<i>Trichoderma harzianum</i> T22 + <i>Trichoderma virens</i> G41	RootSheild [®] Plus	0	GH/N	BioWorks, Inc.
Resistance risk: Unknown						
M 01	Inorganic	Copper octanoate Copper sulfate	Grotto™ Cuproxat [®]	4 24	GH/N GH/N	OHP, Inc. Nufarm
			Phyton [®] 27	24	GH/N	Phyton Corp.
			Phyton [®] 35	24	GH/N	Phyton Corp.
		Copper hydroxide	CuPro™ 5000 T/N/O	48	GH/N	SePro Corp.
			Kalmor[®]	24	GH/N	OHP, Inc.
Inorganic		Cuprous Oxide	Nordox 75WG	12	GH/N	Nordox AS
Resistance risk: Low						
M 03	Dithiocarbamates and relatives	Mancozeb	Dithane [®]	24	GH/N	Corteva Agriscience
			Fore [®]	24	GH/N	Corteva Agriscience
			Junction™	24	GH/N	SePRO Corp.
			Pentathlon™	24	GH/N	SePRO Corp.
		Manganese + zinc	Protect™ DF	24	GH/N	Nufarm
Dithiocarbamates and relatives Resistance risk: Low						
M 05	Chloronitriles (phthalonitriles)	Chlorothalonil	Daconil [®] Ultrex [®]	12	GH/N	Syngenta
			AllPro [®] Exotherm Termil	*	GH	Value Garden Supply
Dithiocarbamates and relatives Resistance risk: Low * Depends on Greenhouse ventilation						
P 05	Ethanol Extract	<i>Reynoutria sachalinensis</i>	Regalia [®]	4	GH/N	Marrone Bio Innovations
Resistance risk: Unknown						
P 07	Ethyl Phosphonates	Fosetyl-Al	Alliette [®]	12	GH/N	Bayer Environmental Innovations
			Areca[®]	12	GH/N	OHP, Inc.
Phosphonates	Phosphite	Phosphorous acid	Alude™	4	GH/N	Nufarm
Resistance risk: Low						

* Depends on Greenhouse ventilation

** Greenhouse and/or nursery uses depend on the formulation. Check labels for uses.



Fungicides *continued*

(by Mode of Action Group and Class)

MOA Code* & Group	Class	Common Name	Trade Name	REI	Use Site(s)**	Company
NC	Biopesticide	<i>Ulocladium oudemansii</i> (U3 Strain)	BotryStop™	4	GH/N	BioWorks, Inc.
			Actino Iron	4	GH/N	Mycorrhizal Applications, LLC
	Biocarbonate	Potassium bicarbonate	Carb-O-Nator™	4	GH/N	Certis USA, LLC
			MilStop™	1	GH/N	BioWorks, Inc.
	Hydrogen Dioxide/Peroxide	Hydrogen dioxide + peroxyacetic acid	ZeroTol™	0-1	GH/N	Biosafe Systems
			X3™	0-2	GH/N	Phyton Corp.
	Oils	Carified hydrophobic extract of neem oil (also classified by EPA as a biopesticide) Petroleum Oil	Triact™ 70	4	GH/N	OHP, Inc.
			Suffoil-X™	4	GH/N	BioWorks, Inc.
	Quaternary Ammonium	Quaternary Amines	Greenshield™	0	GH	BASF
			KleenGrow™	0	GH	Pace 49
Soaps	Potassium salts of fatty acids	Kopa™ Insecticidal Soap	12	GH/N	OHP, Inc.	
	potassium salts of fatty acids	M-Pede™	12	GH/N	Gowan Company	
Resistance risk: Unknown						
1+2	Thiophanate + Dicarboxamide	Thiophanate-methyl + Iprodione	26/36™	12	GH/N	Nufarm
1+14	Thiophanate + Thiadiazole	Thiophanate-methyl + Etridiazole	Banrot™	12	GH/N	IC Specialty Fertilizers
1+ M 05	Thiophanate + Chloronitrile	Thiophanate -methyl + Chlorothalonil	Spectro™ 90	12	GH/N	Nufarm
3+11	Demethylation Inhibitors (DMI fungicides) + Strobilurins	Triadimefon + Trifloxystrobin	Trigo™	12	GH/N	Bayer Environmental Science
3+M 05	Demethylation inhibitor + Chloronitrile	Propiconazole + Chlorothalonil	Concert™ II	12	N	Syngenta
7+11	SDHI + Strobilurin	Boscalid + Pyraclostrobin	Pageant™ Intrinsic™	12	GH/N	BASF
		Fluopyram + Trifloxystrobin	Broadform™	12	GH/N	Bayer Environmental Science
		Benzovindiflupyr + Azoxystrobin	Mural™	12	GH/N	Syngenta
		Fluxapyroxad + Pyraclostrobin	Orkestra™ Intrinsic™	12	GH/N	BASF
45+40	Triazolo-pyrimidylamines + Cinnamic Acid Amides	Ametoctradin + Dimethomorph	Orvego™	12	GH/N	BASF
9+12	Anilo-pyrimidine +	Cyprodinil + Fludioxinil	Palladium™	12	GH/N	Syngenta

* Depends on Greenhouse ventilation

** Greenhouse and/or nursery uses depend on the formulation. Check labels for uses.

*Fungicides Modes of Action

1. Inhibition of tubulin formation in mitosis
2. MAP histidine-kinase in osmotic signal transduction, E3
3. DMI (DeMethylation Inhibitors) Demethylase in sterol biosynthesis
4. Phenylamidoes-Affect RNA synthesis
5. Inhibition of reductase and isomerase in sterol biosynthesis
7. Inhibitors of succinate-dehydrogenas (SDHs) and respiration
11. Quinone outside inhibitors (Qo)
12. MAP histidine-kinase in osmotic signal transduction E2
14. Cell peroxidatrin (proposed)
17. 3-keto reductase during C4 demethylation
19. Chitin synthase inhibition in cell wall development
21. Quinone inside inhibitors (Qi)
28. Affect cell membrane permeability, fatty acids (proposed)
40. Cell wall biosynthesis: cellulose synthase
43. Delocalization of spectrin-like proteins
45. Respiration Complex III: cytochrome bc1 (ubiquinone reductase) at Qo site
49. Lipid homeostatis and transfer/storage
- BM. Biologicals with multiple modes of action.
- BM 02. Microbial disruptors of pathogen cell membranes (Biologicals)
- M. Multi-site activity. Chemicals that act at several sites, which may differ among the group members.
- NC. Unknown: *The mode of action cannot be placed within any other defense*
- P. Host plant defense induction

Explanation of Resistance Risk

This list is from the U.S. Environmental Protection Agency, in cooperation with the Fungicide Resistance Action Committee (FRAC). FRAC is a technical working group within the Global Crop Protection Federation (GCPF). More information on the Fungicide Resistance Action Committee and the Mode of Action Classification is available from: www.frac.info. Resistance risk categories were developed by FRAC. There are ways to estimate the potential for resistance development. The resistance risk is generally based on whether the fungicide mode of action (MOA) is single or multi-site. Single site MOA products have a higher resistance risk than multi site MOA products. The pathogen types targeted by the fungicides also are factors.

Fungicides should always be used by rotating MOA types. Users need to be especially careful not to rotate or alternate among fungicides in any one high resistance risk category. Follow resistance management instructions on product labels.



Fungicides and Bactericides

26GT® Fungicide

by BAYER CROPSCIENCE

A broad spectrum fungicide that can be applied to a wide range of ornamental plants, either as a foliar spray, dip, or drench. Provides 14 days or longer control with quick knockdown.

REI 12 Hrs

RATE 32 to 80oz per 100gal

ACTIVE INGREDIENT Iprodione

CONTROLS Rhizoctonia, Fusarium, Botrytis, Alternaria



2.5gal bottle

PROKZ4250930 Min. Buy 1ea



Actinovate® SP Biological Fungicide

by MYCORRHIZAL APPLICATIONS LLC

Actinovate® SP Biological Fungicide suppresses and controls root rot, damping-off fungi and foliar fungal pathogens. When used as a soil drench, it also suppresses and controls soil-borne fungi.

REI 1 Hr

RATE Varies according to application method. See label.

ACTIVE INGREDIENT Streptomyces lydicus

CONTROLS Phythium, Phytophthora, Verticillium, Fusarium, Rhizoctonia, Powdery Mildew, Downy Mildew, Botrytis and other root and foliar fungi.



18oz

NOVZ5000-725 Min. Buy 1ea



3336® EG Fungicide

by NUFARM AMERICAS INC.

A broad-spectrum disease control for turf and ornamental plants. Combines the power of thiophanate-methyl with the convenience of an extruded granular formulation for control of troublesome plant diseases such as Rhizoctonia. A low-dust extruded granule with quick-dissolve properties, 3336 EG extends many benefits to the user including easy measuring and easy mixing.

REI 12 hours

RATE Varies according to application method. See label.

ACTIVE INGREDIENT Thiophanate-methyl

CONTROLS Anthracnose, Brown Rot, Leaf Scabs, Fusarium, Rhizoctonia, and many more.



5lb

NTS10556045 Min. Buy 1ea



Affirm™ WDG Fungicide

by NUFARM AMERICAS INC.

A concentrated, easy-to-mix water dispersible granule formulation that delivers excellent disease control and minimal spray residues. Use for disease control on turf, ornamentals, Christmas trees and various crops including: cucurbit vegetables, fruit vegetables, pome fruits, strawberries, non-bearing fruit vines and non-bearing fruit and nut trees.

REI 4 Hrs

RATE 4 to 8oz per 100gal

ACTIVE INGREDIENT Polyoxin D

CONTROLS Alternaria, Anthracnose, Apple scab, Botrytis, Powdery mildew, Rhizoctonia aerial blight, Rhizoctonia, Scabs



2.4lb

NTS10500324 Min. Buy 1ea



3336® F Fungicide

by NUFARM AMERICAS INC.

3336 F is a broad spectrum fungicide for control of a wide range of diseases in turf and ornamentals. Use for annual and perennial flowers, bedding and foliage plants, turf, trees and evergreens.

REI 12 hours

RATE 2 to 6 oz per 1,000 sq ft

ACTIVE INGREDIENT Thiophanate-methyl

CONTROLS Anthracnose, Brown Rot, Leaf Scabs, Fusarium, Rhizoctonia, and many more.



32oz

NTS10498121 Min. Buy 1ea

2.5gal

NTS10498225 Min. Buy 1ea

Shipping Info HAZARDOUS



Agri-Mycin® 50 Fungicide

by NUFARM AMERICAS INC.

Agri-Mycin 50 is a bactericide for control of bacterial blight, soft rot, bacterial spot and more on select vegetable and fruit crops.

REI 12 hours

RATE Varies according to application method. See label.

ACTIVE INGREDIENT Streptomycin sulfate

CONTROLS Bacterial diseases.



3lb Bag

NTS10719063 Min. Buy 1ea



Adorn® Fungicide

by NUFARM AMERICAS INC.

Adorn fungicide controls ornamental plant diseases such as Downy Mildew, Phytophthora and Pythium in greenhouse ornamentals, outdoor nurseries, landscape ornamentals and shrubs. Can be used as a spray or drench.

REI 12 Hrs

RATE 1 to 4oz per 100gal

ACTIVE INGREDIENT Fluopicolide

CONTROLS Downy Mildew, Phytophthora, Pythium.



32oz

VAL61510.928 Min. Buy 1ea



Aliette® WDG Fungicide

by BAYER CROPSCIENCE

Provides long lasting Phytophthora and Downy Mildew control. Aliette has a unique upward and downward systemic activity to protect the entire plant for up to 30 days.

REI 48 Hrs

RATE 2.5 to 5lbs per 100gal

ACTIVE INGREDIENT Aluminum Tris

CONTROLS Phytophthora, Pythium, Downy Mildew and more.



5lb

BYR84956465 Min. Buy 1ea



Fungicides and Bactericides

Areca® Fungicide

by OHP, INC.

Areca is an up-and-down systemic fungicide that may be applied to a wide range of ornamental flowering and foliage plants for control of diseases caused by Pythium, Phytophthora and Downy Mildew pathogens. Areca may be used on ornamentals and bedding plants grown in field nursery, greenhouse, landscape and conifer nurseries.

REI 12 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Aluminum tris**CONTROLS** Pythium, Phytophthora, Downy Mildew and more.

5lb

OHP981145 Min. Buy 1ea

**Astun® Ornamental Fungicide**

by OHP, INC.

Astun Ornamental Fungicide provides preventative and early curative activity on botrytis diseases of plants grown in commercial greenhouses and nurseries. Astun is most effective when used as a protectant fungicide and applied before the disease damages the crop.

REI 12 Hrs

RATE 10 to 17oz per 100gal**ACTIVE INGREDIENT** Isfetamid**CONTROLS** Botrytis

32oz

OHP981150 Min. Buy 1ea

**Badge® SC Fungicide**

by GOWAN

Badge fungicide controls a wide range of fungal diseases on vegetable crops, fruit and nut trees, ornamental plants, herbs in greenhouses and nurseries.

REI 24 hours in enclosed structures

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Copper Oxchloride and Hydroxide**CONTROLS** Phytophthora, Pythium, Powdery Mildew, and more.

2.5gal Bottle

GOW60903 Min. Buy 1ea

**Banner® Maxx® II Fungicide**

by SYNGENTA CROP PROTECTION

Banner Maxx II provides broad-spectrum control of foliar diseases on ornamentals grown in the landscape and outdoor nurseries. Works quickly and controls diseases for up to 28 days.

REI 12 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Propiconazole**CONTROLS** Rusts, Phomopsis, Alternaria, Cercospora, Septoria leaf spots, Anthracnose, Scabs, Rhizoctonia

1gal AGENCY

SYN39961 Min. Buy 1ea

**Banol® Fungicide**

by BAYER CROPS SCIENCE

Banol is an outstanding control product for Pythium and Phytophthora. Labeled for turf applications and as a drench in greenhouse and container grown ornamentals.

REI 24 Hrs

RATE 2 to 4oz per 1000sq ft, Drench: 20-30oz per 100gal**ACTIVE INGREDIENT** Propamocarb hydrochloride**CONTROLS** Pythium and Phytophthora.

1gal Bottle

PROKZ4192957 Min. Buy 1ea

2.5gal AGENCY

BYR79895402 Min. Buy 1ea

**Banrot® 40WP Fungicide**

by ICL/SPECIALTY FERTILIZERS

A broad spectrum fungicide for use in commercial greenhouses and nurseries to control damping-off, root and stem rot diseases of ornamental and nursery crops caused by Pythium, Phytophthora, Rhizoctonia, Fusarium and Thielaviopsis. 40 WP is a wettable powder formulation for liquid applications

REI 12 Hrs

RATE 4 to 8oz per 100gal**ACTIVE INGREDIENT** Etridiazole, Thiophanate Methyl**CONTROLS** Pythium, Phytophthora, Thielaviopsis, Fusarium, Rhizoctonia

2lb

EVR957252E Min. Buy 1ea

**Banrot® 8G Fungicide**

by ICL/SPECIALTY FERTILIZERS

A broad spectrum fungicide for use in commercial greenhouses and nurseries to control damping-off, root and stem rot diseases of ornamental and nursery crops caused by Pythium, Phytophthora, Rhizoctonia, Fusarium and Thielaviopsis. Banrot 8G is a granular formulation for incorporation into growing media

REI 12 Hrs

RATE 8oz per 1cu yd**ACTIVE INGREDIENT** Etridiazole, Thiophanate Methyl**CONTROLS** Pythium, Phytophthora, Thielaviopsis, Fusarium, Rhizoctonia

40lb

EVR950241E Min. Buy 1ea



Fungicides and Bactericides

BioWorks® MilStop® SP Foliar Fungicide

by **BIOWORKS INC.**

MilStop® SP is a broad spectrum foliar fungicide. Highly effective on powdery mildews, it also helps prevent other foliar diseases. Use sites include greenhouse, nursery and field crops. It can also be used on interiorscapes and woody herbs.

REI 1 hour

RATE 1 to 5 lbs per 100 gallons

ACTIVE INGREDIENT Potassium bicarbonate

CONTROLS Powdery Mildew and other foliar diseases.



5lb bag

BW1M112B04 Min. Buy 1ea

25lb Pail

BW1M112B06 Min. Buy 1ea

Shipping Info **DIRECT**

Bioworks® PERpose Plus®

by **BIOWORKS INC.**

A broad-spectrum algacide and fungicide for the prevention, suppression and control of fungus and algae on equipment and hard surfaces, in all stages of crop production, and for post-harvest and storage applications. Labeled for use in greenhouses, garden centers, landscapes, agricultural crops, nurseries and interiorscapes.

REI 0 to 1 hour

RATE 1 oz per gallon of water,

ACTIVE INGREDIENT Hydrogen peroxide and Hydrogen dioxide

CONTROLS Kills algae and fungus on contact



5gal

BW1HP44A55 Min. Buy 1ea

Shipping Info **HAZARDOUS**

30gal

BW1HP44A38 Min. Buy 1ea

Shipping Info **DIRECT HAZARDOUS**

55gal

BW1HP44A57 Min. Buy 1ea

Shipping Info **HAZARDOUS**

BotryStop® Biofungicide

by **BIOWORKS INC.**

BotryStop is a biological fungicide for the control of Botrytis and Sclerotinia. Labeled for use on a wide variety of field or greenhouse grown vegetables, grapes and other small fruits. Also for use on ornamentals in the greenhouse or nursery. OMRI listed.

REI 4 Hrs

RATE 2 to 4lbs per 100gal

ACTIVE INGREDIENT Ulocladium oudemansii (U3 strain)

CONTROLS Botrytis and Sclerotinia.



6lb

BW1U98A70 Min. Buy 1ea

Shipping Info **DIRECT**

12lb

BW1U98A61 Min. Buy 1ea

Shipping Info **DIRECT**

Broadform™ Fungicide

by **BAYER CROPSCIENCE**

Broadform is a broad spectrum fungicide that helps maximize foliar disease control on key pathogens including Botrytis, leaf spot and dieback diseases. Two modes of action control multiple diseases that could be attacking the plant at a given time. Labeled for use on greenhouse and nursery-grown ornamentals, including fruits, nuts and Christmas trees.

REI 12 Hrs

RATE 2 to 8oz per 100gal

ACTIVE INGREDIENT Fluopyram and Trifloxystrobin

CONTROLS Controls 50+ diseases including Botrytis, Diplodia, Botryosphaeria, Phomopsis black spot, anthracnose, rusts, and powdery mildew



12oz AGENCY

BYR85758497 Min. Buy 1ea



Camelot™ O Fungicide / Bactericide

by **SEPRO CORPORATION**

A liquid copper formulation using proven technology to provide broad-spectrum bacterial and fungal disease control on a wide variety of ornamental plants, greenhouse vegetable / herb crops and turf grass. Formulated with fixed copper combined with fatty acids to form a true soap providing outstanding performance. Requires minimal elemental copper for excellent disease control through its superior coverage ability and foliar adherence.

REI 4 Hrs

RATE 0.5 to 2gal per 100gal

ACTIVE INGREDIENT Copper Octanoate

CONTROLS Bacterial and Fungal pathogens.



1gal

SEPRO19-0452A Min. Buy 1ea



CEASE® Microbial Fungicide / Bactericide

by **BIOWORKS INC.**

Cease microbial fungicide controls a wide array of fungal and bacterial pathogens, both foliar and soil-borne. For use on ornamentals, trees, shrubs and greenhouse vegetables.

OMRI listed.

REI 4 Hrs

RATE 96 to 192oz per 100gal

ACTIVE INGREDIENT Bacillus subtilis strain QST 713

CONTROLS Botrytis, Powdery Mildew, Fusarium, Pythium and more.



1gal

BW300100 Min. Buy 1ea

2.5gal

BW1C19A24 Min. Buy 1ea



Chipco® 26019 Fungicide

by **BAYER CROPSCIENCE**

Broad spectrum fungicide for use as a spray, drench, or dip for the control of diseases on a wide range of ornamental plants and turf applications.

REI 12 Hrs

RATE 32-80oz per 100gal

ACTIVE INGREDIENT Iprodione

CONTROLS Botrytis, Phytophthora, Pythium, Downy Mildew, Brown Patch, Fusarium Blight and more.



2.5gal bottle

PROKZ4251007 Min. Buy 1ea



Fungicides and Bactericides

Compass® 50WG Fungicide

by BAYER CROPSCIENCE

Compass is a broad spectrum fungicide for the prevention and treatment of foliar and soil pathogens. Mesostemic and translaminar movement provides disease control in and around the plant tissue.

REI 12 Hrs

RATE 2oz per 100gal

ACTIVE INGREDIENT Trifloxystrobin

CONTROLS Fusarium, Rhizoctonia, Black Spot, Botrytis, Downy Mildew, Powdery Mildew and more. See label.



1lb

BYR2584569 Min. Buy 1ea



Daconil ZN® Fungicide

by SYNGENTA CROP PROTECTION

For control of turf and ornamental diseases. Works as a contact fungicide for the control of many turf and ornamental diseases and has low resistance risk. Registered for control of 50 diseases on more than 75 ornamental plants. Provides residual control for 14 to 21 days.

REI 12 Hrs

RATE 5oz per 1,000gal

ACTIVE INGREDIENT 38.5% Chlorothalonil

CONTROLS Dollar Spot, Leaf Spot, Brown Patch, Anthracnose and more.



2.5gal AGENCY

SYN31214 Min. Buy 1ea



CuPRO® 5000 Fungicide

by SEPRO CORPORATION

CuPRO 5000 is an advanced copper fungicide/bactericide technology that delivers excellent disease control with all the advantages of a dry flowable: decreased handling, decreased dust exposure, easier packaging, and shortened loading times. Use CuPRO 5000 for control of bacterial and fungal diseases of foliage, flowers, and stems on ornamentals in greenhouses, shadehouses, outdoor nurseries, and outdoor landscape plantings.



3lb Bag

SEPRO19-0711M Min. Buy 1ea



Decree® 50WDG Fungicide

by SEPRO CORPORATION

With excellent crop safety and no residue concerns, Decree Fungicide is an exceptional tool throughout the season. Decree's 12-hour REI allows for Botrytis control in propagation and at retail, while its residual control gives growers the best value per application.

REI 12 Hrs

RATE 1 to 1.5lb per 100gal

ACTIVE INGREDIENT Fenhexamid

CONTROLS Botrytis



2.5lb

SEPRO19-0460 Min. Buy 1ea



Daconil Ultrex® Fungicide

by SYNGENTA CROP PROTECTION

A contact fungicide that exhibits a multi-site mode of action which can delay or prevent resistance to single-site fungicides. It contains a built-in surfactant to provide superior sticking power for extended coverage and unsurpassed protection of the leaf surface, even after heavy rains or watering. Registered for control of 50 diseases on more than 75 ornamental plants and provides residual control for 14 to 21 days.

REI 12 Hrs

RATE 2 to 3oz per 1,000sq ft

ACTIVE INGREDIENT 82.5% Chlorothalonil

CONTROLS Dollar Spot, Leaf Spot, Brown Patch, Anthracnose and more.



5lb AGENCY

SYN31215 Min. Buy 1ea



Dithane 75DF Fungicide

by Corteva

A broad-spectrum protectant fungicide labeled for use on outdoor or greenhouse grown crops and turfgrass.

REI 24 hours

RATE 6 to 8oz per 1,000sq ft.

ACTIVE INGREDIENT Mancozeb

CONTROLS Rhizoctonia, Fusarium, Gray and Pink

Snow Mold, and more.



12lb Bag

DOW19-0512 Min. Buy 1ea



Daconil WeatherStik® Fungicide

by SYNGENTA CROP PROTECTION

For control of turf and ornamental diseases. Works as a contact fungicide for the control of many turf and ornamental diseases and has low resistance risk. Sticks and stays for broad spectrum disease control for up to 14 days. Contains a sticking agent that keeps the fungicide on the plant.

REI 12 Hrs

RATE 22oz per acre

ACTIVE INGREDIENT Chlorothalonil

CONTROLS Botrytis, Rust, powdery mildew, anthracnose, leaf spots, scabs, and more



2.5gal AGENCY

SYN31217 Min. Buy 1ea



Eagle® 20EW Fungicide

by Corteva

Systemic protectant fungicide for use on ornamentals in greenhouses, nurseries and landscapes as well as turf and golf applications. Controls key diseases like powdery mildew, rust, scab and anthracnose.

REI 24 hours

RATE 1 to 3 oz per 1,000 sq ft

ACTIVE INGREDIENT Myclobutanil

CONTROLS Thrips, lepidopterous larvae, foliage feeding worms and many more. See label for complete list.



16oz

DOW173917 Min. Buy 1ea

1gal

DOW19-2505B Min. Buy 1ea





ON GUARD

Shield your greenhouse and nursery crops from chewing and sucking insect pests, including thrips, whiteflies, aphids, caterpillars and leaf-feeding beetles. As part of a preventive pest management strategy, put Mainspring® GNL insecticide on guard to keep pests out and crops clean.

- Systemic activity provides extended protection to save you time and labor on repeated applications
- Four-hour restricted-entry interval makes it less disruptive to work schedules
- Alternative to neonicotinoid chemistries
- Compatible with many biological control agents

Contact me to learn more.

Chris Threadgill | chris.threadgill@syngenta.com | 573-201-1483
GreenCastOnline.com/MainspringGNL



Mainspring® GNL
Insecticide

syngenta®

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Fungicides and Bactericides

EcoSwing® Botanical Fungicide

by GOWAN

EcoSwing botanical fungicide controls fungal diseases on outdoor and greenhouse food crops, ornamental plants, flowers, trees and shrubs.

REI 4 Hrs

RATE 24 to 32oz per Acre

ACTIVE INGREDIENT Swinglea glutinosa

CONTROLS Botrytis, Powdery Mildew, Alternaria, Stem rots



32oz

GOW76811

Min. Buy 1ea



Grotto™ Fungicide

by OHP, INC.

Grotto™ is a liquid copper fungicide for broad spectrum control of fungal and bacterial diseases on greenhouse and shadehouse vegetables and herbs, ornamentals and turf. OMRI listed for organic production.

REI 4 hours

RATE Varies according to application. See label.

ACTIVE INGREDIENT Copper Octanoate

CONTROLS Bacterial diseases, Botrytis, Downy Mildew, Powdery Mildew and more.



1 Gallon

OHP982900

Min. Buy 1ea



Empress® Intrinsic® Fungicide

by BASF CORP

Drench application with Empress fungicide will protect young, susceptible plants from root-infecting pathogens in rooted plug, propagation and transplant stages of production. Intrinsic brand fungicides enhance growth efficiency for strong, dense root growth.

REI 12 Hrs

RATE 3 to 6oz per 100gal

ACTIVE INGREDIENT Pyraclostrobin

CONTROLS Fusarium, Phytophthora, Pythium, Rhizoctonia.



24 oz bottle

BAS59014402

Min. Buy 1ea



Heritage® SC Fungicide

by SYNGENTA CROP PROTECTION

Heritage SC fungicide protects plants from root to leaf tip, providing exceptional disease control for extended intervals. Broad-spectrum control of over 25 turf diseases and over 30 ornamental diseases. Hazardous via air.

REI 4 Hrs

RATE Varies by application. See label.

ACTIVE INGREDIENT Azoxystrobin

CONTROLS Phomopsis Blight, Alternaria Leaf Spot, Downy Mildew, Anthracnose, Botrytis, Rhizoctonia, and more.



4oz

SYN69643

Min. Buy 1ea



Fame® SC Fungicide

by FMC

Fame fungicide for the control of foliar, stem and root diseases in turf and ornamentals. Foliar spray or soil drench applications providing fast penetration into leaf tissues and rain fast within 15 minutes. For commercial production and in landscape areas around residential, municipal and commercial properties, field grown ornamentals and ornamentals in greenhouses, interiorscapes and other enclosed structures.

REI 12 hours

RATE 1 to 4oz per 100gal

ACTIVE INGREDIENT Fluoxastrobin

CONTROLS Anthracnose, Brown Spot, Dollar Spot, Fusarium, Powdery Mildew and more.



16oz AGENCY

FMC10064759

Min. Buy 1ea



Heritage® WDG Fungicide

by SYNGENTA CROP PROTECTION

Heritage WDG is a broad-spectrum fungicide for control of more than 33 diseases including all four classes of pathogens. Labeled for use on greenhouse ornamentals, vegetable and herb plants, fruit and nut trees.

REI 4 Hrs

RATE 1 to 4oz per 100gal

ACTIVE INGREDIENT Azoxystrobin

CONTROLS Phomopsis Blight, Alternaria Leaf Spot, Downy Mildew, Anthracnose, Rose Blackspot, Powdery Mildews, Rusts, Botrytis, Rhizoctonia, Sclerotium, Fusarium



1lb AGENCY

SYN74240

Min. Buy 1ea

6lb AGENCY

SYN74818

Min. Buy 1ea



FungOut® Fungicide

by AEF GLOBAL INC.

FungOut® forms a protective barrier on the surface of the leaves that inhibits pathogen development. Anti-fungal and anti-bacterial properties offer disease protection for food and non food crops. Labeled for use on both outdoor and greenhouse crops.

REI 4 hours

ACTIVE INGREDIENT Citric Acid

CONTROLS Powdery mildew, Downy mildew, bacterial canker and black spot.



2.5 Gallon

AEF10025

Min. Buy 1ea



JH Biotech Fosphite®

by JH BIOTECH, INC.

For control of Phytophthora, Pythium, and Downy Mildew on food crops, turf, and ornamentals. Fosphite® is an effective systemic fungicide. It has been approved by the EPA as a 'Reduced Risk Pesticide' for control of Phytophthora, Pythium, and Downy Mildew on food crops, ornamentals and bedding plants, Phytophthora in conifers and Pythium in turf.



2.5gal

JH011005

Min. Buy 1ea



Junction®

by **SEPRO CORPORATION**

Two chemistries combined to create a broad-spectrum fungicide/bactericide. The new formulation is highly soluble, easily mixes into suspension, and can be sprayed through screens and nozzles. Labeled for turf and ornamental, Junction® provides disease control in a wide array of greenhouse and nursery crops.



5lb bottle

SEPRO103385 Min. Buy 1ea

Kalmor® Fungicide/Bactericide

by **OHP, INC.**

A copper-hydroxide based product that controls a number of diseases in both greenhouses and nurseries including bacterial diseases. The high-quality formulation allows for gradual release of copper and may be used on ornamentals, fruits, and vegetables.

REI 24-48 Hrs

RATE 0.5 to 2.00lbs per acre

ACTIVE INGREDIENT Copper Hydroxide

CONTROLS Bacterial Leaf Spots, Anthracnose, Botrytis, Cercospora, Downy Mildew and more



2.5lbs

OHP984900 Min. Buy 1ea



KleenGrow™ Disinfectant / Bactericide / Algacide / Fungicide

by **PACE 49 INC.**

KleenGrow™ is a biodegradable, 4th generation DDAC quaternary ammonium which provides curative and preventative broad - spectrum control of algae, fungi, and bacteria on greenhouse flowers and ornamentals. KleenGrow can safely be applied as a spray, drench, or drip on crops, from propagation, bulbs/ seeds, to finished crops, while offering residual disease control by way of membrane disruption with no worry of crop resistance. Kleengrow can also be used to control algae, bacteria, and viruses on hard surfaces. Product can safely be used to disinfect greenhouse structures, floors, benches, cool pads, irrigation lines, plastic pots/trays, tools, coolers, and in footbaths to reduce the spread of algae and diseases.

REI 12 Hrs - For Recirculated Water, 48 Hrs - For Use On Crops, 0 Hrs

RATE 6-25oz per 100gal (see label for rate per crop size), 0.5-2oz per 1gal Hard Surface Disinfecting, 0.34-1.20oz per 100gal in Irrigation Water

ACTIVE INGREDIENT Didecylidimethyl ammonium chloride

CONTROLS Algae, foliar diseases, crown and root rots, Powdery Mildew, Botrytis, Pythium, Phytophthora, Fusarium, Erwinia and Xanthomonas



1gal

PAC4919-0603I Min. Buy 1ea

Shipping Info **HAZARDOUS**

5gal

PAC4919-0603J Min. Buy 1ea

Shipping Info **HAZARDOUS**

30gal Drum

PAC4919-0603K Min. Buy 1ea

Shipping Info **HAZARDOUS**

55gal Drum

PAC4919-0603B Min. Buy 1ea

Shipping Info **HAZARDOUS**



Medallion® WDG Fungicide

by **SYNGENTA CROP PROTECTION**

Formulated as a water dispersible granule, providing growers with a more user-friendly way to control major foliar, root and stem diseases. Delivers 21-28 day residual control as a drench and 7-14 day residual control as a foliar spray. Labeled for use in greenhouses, shade houses, outdoor nurseries, interiorscapes and landscapes.

REI 12 Hrs

RATE 1 to 4oz per 100gal

ACTIVE INGREDIENT Fludioxonil

CONTROLS Botrytis, Fusarium, Rhizoctonia and more.



8oz AGENCY

SYN51008 Min. Buy 1ea



Mefenoxam 2AQ Fungicide

by **CONTROL SOLUTIONS, INC.**

Water-based formulation features low odor. Systemic mode of action and translocation through the plant can provide up to 3 weeks protection. Flowable formulation is effective for the control of numerous diseases in various ornamental, nursery and turf crops caused by the Oomycete class of fungi.

REI 48 Hrs

RATE Varies depending on application method.

ACTIVE INGREDIENT Mefenoxam

CONTROLS Pythium, Phytophthora, Downy Mildew



1gal

QCM83013852 Min. Buy 1ea

2.5gal

QCM83013861 Min. Buy 1ea

32oz

QCM83013851 Min. Buy 1ea



Micora® Fungicide

by **SYNGENTA CROP PROTECTION**

Provides immediate contact protection and long-lasting disease control by locking to the leaf surface and slowly flowing into the leaf over an extended period of time. May be used as a spray to control downy mildew diseases and stem blights caused by Phytophthora spp. or as a drench to control Phytophthora crown and root rots on a variety of crops

REI 4 Hrs

RATE 4 to 8oz per 100gal

ACTIVE INGREDIENT Mandipropamid

CONTROLS Downy Mildew and Phytophthora.



32oz AGENCY

SYN47280 Min. Buy 1ea



Mural® Fungicide

by **SYNGENTA CROP PROTECTION**

Two active ingredients provide broad-spectrum disease control in one versatile solution. Powered by an advanced generation SDHI and Heritage® fungicide to control the widest range of root diseases in ornamental and vegetable plants. Mural provides control of key foliar, stem and root diseases including Botrytis, Rhizoctonia and leaf spots like powdery mildew and anthracnose. Provides disease control in both nursery and greenhouse operations and prevents and controls more than 50 root and foliar diseases.

REI 12 Hrs

RATE 4 to 7oz per 100gal

ACTIVE INGREDIENT Azoxystrobin, Benzovindiflupyr

CONTROLS Botrytis, Fusarium, Rhizoctonia and more.



1lb AGENCY

SYN56731 Min. Buy 1ea



BOTRYTIS *Control Strategies*

Background:

Botrytis affects numerous ornamentals and vegetables. Botrytis can also cause many problems such as stem cankers, damping off, leaf spots and blighting. Botrytis belongs to the family Sclerotiniaceae. There are about 30 different species. The most common species is *Botrytis cinerea*.

Symptoms:

Botrytis produces large areas of gray spores that usually infect lower leaves that are close to the moist soil and underneath the plant canopy. It can also infect dead plant parts that are either in the pot or on the table or floor that can then be a source of future infections. It can start out as a small spot and then get larger and kill the leaf and then it can spread into the stem and kill the entire plant.

Favorable Development Conditions/Disease Cycle:

The favorable conditions for the development of Botrytis are when there is high humidity, cool temperatures and moisture present. Water is needed for the spores to germinate and then to infect the plant. Botrytis quickly produces spores that infect the plant, grow, and then produce more spores which can start the cycle again. It has a repeating disease cycle that can last the life of the plant and allows it to build up disease pressure. In some cases the spores can lie dormant on a plant for the life of the plant.

Cultural Control:

There are several ways to help prevent Botrytis. Prune lower leaves so that there is better air circulation underneath the plant canopy. Water in the morning so plants have a chance to dry out before nightfall. Space plants farther apart so that the humidity between them is lower and air circulation is better. After the crop has left make sure to clean up any leaves or dead plants that are left so that Botrytis doesn't have a chance of starting on them. All these ways would be possibilities to help prevent Botrytis.

Chemical Control:

There are a number of fungicides that are labeled and are effective for Botrytis.



Always read and follow label directions before applying any pesticide and follow state and local regulations

For more information or to place an order

Please contact your BFG Sales Representative or our Customer Service Team!



Pageant Intrinsic 1lb BAS59012349 12lb BAS59012429 TR BAS59012766



(Boscalid, Pyraclostrobin) Group 7,11. Caution. 12hr REI. Rate: 12-18oz/100gal. Contact. Labeled for use in the greenhouse and nursery as well as vegetables.



Daconil Ultrex 5lb SYN31215



(Chlorothalonil) Group M05. Danger. 12hr REI. Rate: 1.4lb/100gal. Contact. Labeled for use in the greenhouse and nursery. Do not use on Ferns, Schefflera or green or variegated Pittosporum.



Decree 2.5lb SEPRO19-0460



(Fenhexamid) Group 17. Caution. 12hr REI. Rate: 1-1.5lb/100gal. Contact. Labeled for use in the greenhouse and nursery as well as vegetables and herbs.



Chipco 26019 2lb OHP981462



(Iprodione) Group 2. Caution. 12hr REI. Rate: 1-2.5lb/100gal. Contact. Labeled for use in the greenhouse and nursery. Do not use as a drench on Impatiens or Pothos. Do not use on Spathiphyllum.



Affirm WDG 0.5lb NTS10500415 2.4lb NTS10500324



(Polyoxin D zinc salt) Group 19. Caution. 4hr REI. Rate: 4-8oz/100gal. Contact. Labeled for use in the greenhouse and nursery as well as vegetables.



Bayer 26GT 2.5gal PROKZ4250930



(Iprodione) Group 2. Caution. 12hr REI. Rate: 1-2.5qts/100gal. Contact. Labeled for use in the greenhouse and conifer nursery. Do not use on Spathiphyllum and as a drench on Impatiens and Pothos.



BotryStop 6lb BW1U98A70 12lb BW1U98A61



(Ulocladium oudemansii) OMRI Group UN. Caution. 4hr REI. Rate: 2-4lbs/100gal. Contact. Labeled for use in the greenhouse and nursery as well as vegetables, fruits, and tree nuts.



Palladium 2lb SYN38781



(Cyprodinil, Fludioxonil) Groups 9,12. Caution. 12hr REI. Rate: 4-6oz/100gal. Contact and Systemic. Labeled for use in the greenhouse and nursery. Do not use Palladium of leather leaf fern.

Fungicides and Bactericides

Nordox 75 WG Fungicideby **BRANDT CONSOLIDATED INC.**

A high performance natural copper fungicide / bactericide for high retention and effectiveness in adverse weather conditions. A wettable granule used to control fungal and bacterial diseases on fruits, vegetables, flowers and ornamentals. OMRI® listed

REI 12 Hrs when used in enclosed structures

ACTIVE INGREDIENT Cuprous Oxide**CONTROLS** Anthracnose, Fusarium, Downy Mildew and many more.**12.5lb****BRANDT3000-01-020** Min. Buy 1ea**Obtego® Fungicide**by **SEPRO CORPORATION**

Obtego® Fungicide and Plant Symbiont serves as a multi-functional tool for growers by protecting the plant from damaging soil-borne pathogens and enhancing root growth. Obtego and plant roots live in a mutually beneficial symbiosis. As Obtego colonizes the root system, the Obtego fungi promote competition and parasitism of plant damaging pathogens in the soil.

REI 4 Hrs

RATE 2.5 to 7.5oz per 100gal**ACTIVE INGREDIENT** Trichoderma asperellum (ICC 012), T. gamsii (ICC 080)**CONTROLS** Fusarium, Phytophthora, Pythium, Rhizoctonia, Sclerotium**1lb AGENCY****SEPRO1017121** Min. Buy 1eaShipping Info **DIRECT****5lb AGENCY****SEPRO101045** Min. Buy 1eaShipping Info **DIRECT****OHP 6672® 4.5F Fungicide**by **OHP, INC.**

OHP 6672 4.5F fungicide controls a broad spectrum of diseases of bedding, flowering, herbaceous, vegetable plants, shrubs and trees grown in the greenhouse, nursery, landscapes and interiorscapes.

REI 12 Hrs

RATE 10 to 20oz per 100gal**ACTIVE INGREDIENT** Thiophanate-methyl**CONTROLS** Anthracnose, Botrytis, Fusarium, Thielaviopsis, and many more.**2.5gal****OHP986125** Min. Buy 1eaShipping Info **HAZARDOUS****OHP 6672® 50WP Fungicide**by **OHP, INC.**

OHP 6672 50WP fungicide controls a broad spectrum of diseases of bedding, flowering, herbaceous, vegetable plants, shrubs and trees grown in the greenhouse, nursery, landscapes and interiorscapes.

REI 12 Hrs

RATE 10 to 20oz per 100gal**ACTIVE INGREDIENT** Thiophanate-methyl**CONTROLS** Anthracnose, Botrytis, Fusarium, Thielaviopsis, and many more.**2lb****OHP986188** Min. Buy 1ea**OHP Chipco® 26019 N/G Fungicide**by **OHP, INC.**

Chipco 26019 is a broad spectrum fungicide that may be applied safely to a wide range of ornamental flowering and foliage plants, either as a foliar spray, drench, or dip.

REI 12 Hrs

RATE 1 to 2lbs per 100gal**ACTIVE INGREDIENT** Iprodione**CONTROLS** Rhizoctonia, Fusarium, Botrytis and more.**2lb****OHP981462** Min. Buy 1ea**Orkestra® Intrinsic® Fungicide**by **BASF CORP**

Orkestra Intrinsic brand fungicide provides nursery and greenhouse growers with fast, long-acting disease control during production, resulting in healthier, more consistent, high quality plants. Orkestra Intrinsic brand fungicide provides preventive, early curative and residual protection against key ornamental diseases, quickly stopping the growth of fungal cells. Delivers dual modes of action for better efficacy and resistance management.

REI 12 Hrs

RATE 4 to 10oz per 100gal**ACTIVE INGREDIENT** Fluxapyroxad & Pyraclostrobin**CONTROLS** Botrytis, rust, powdery mildew, downy mildew, anthracnose, leaf spots, thielaviopsis, aerial phytophthora**16 oz bottle AGENCY****BAS59014379** Min. Buy 1ea**80 oz bottle AGENCY****BAS59016487** Min. Buy 1ea**Orvego® Fungicide**by **BASF CORP**

Controls Phytophthora and Downey Mildew on ornamentals. Orvego offers a quick knockdown of spores to stop the disease from spreading. Use in greenhouses, lathouses, container and field nurseries and interiorscapes.

REI 12 Hrs

RATE 11 to 14oz per 100gal**ACTIVE INGREDIENT** Ametoctradin & Dimethomorph**CONTROLS** Phytophthora, Downey Mildew.**28 oz bottle****BAS59012736** Min. Buy 1ea**OxiDate® 2.0 Bactericide/Fungicide**by **BIOSAFE SYSTEMS**

Treat and control plant pathogens on a wide range of crops. It is a keystone chemistry that strengthens conventional and organic IPM programs by reducing disease pressure.

RATE 32 to 64oz per 100gal.**ACTIVE INGREDIENT** Hydrogen peroxide and peroxyacetic acid**CONTROLS** Bacterial and Fungal pathogens.**2.5gal Bottle****BSF510025** Min. Buy 1eaShipping Info **HAZARDOUS**

Fungicides and Bactericides

OxiPhos® Fungicide / Bactericide

by BIOSAFE SYSTEMS

Use throughout the season to treat and control pythium, phytophthora, bacterial blights, downy mildew, and more. OxiPhos has a dual mode of action (systemic and contact) and can be applied as a foliar spray or root drench and is tank mix compatible with ZeroTol® 2.0 and AzaGuard®.

REI 4 Hrs

ACTIVE INGREDIENT Phosphorus acid and Hydrogen Peroxide

CONTROLS Pythium, Phytophthora and Downy Mildew.



2.5gal

BSF7700-2.5

Min. Buy 1ea

Shipping Info

HAZARDOUS

55 Gal drum

BSF770055

Min. Buy 1ea

Shipping Info

HAZARDOUS



Pageant® Intrinsic® Fungicide

by BASF CORP

Pageant is a broad-spectrum fungicide that is effective on many plant diseases. Pageant Intrinsic brand fungicide also provides plant health benefits such as improved tolerance to stress and increased efficiency of plant processes.

REI 12 Hrs

RATE 4 to 18oz per 100gal

ACTIVE INGREDIENT Boscalid & Pyraclostrobin

CONTROLS Fusarium, Rhizoctonia, Pythium, Phytophthora, Botrytis and fungal leaf spots.



1 lb bottle AGENCY

BAS59012349

Min. Buy 1ea

12 lb bag AGENCY

BAS59012429

Min. Buy 1ea



Palladium® Fungicide

by SYNGENTA CROP PROTECTION

Combines two active ingredients to provide contact and systemic activity. Effective on a wide range of foliar and stem diseases found in the nursery and greenhouse, including Botrytis, Rhizoctonia, powdery mildew and certain leaf-spotting and stem rot pathogens. Provides preventive and curative disease control with 7-14 days of residual activity.

REI 12 Hrs

RATE 2 to 4oz per 100gal

ACTIVE INGREDIENT Cyprodinil and Fludioxonil

CONTROLS Botrytis, Fusarium, Rhizoctonia and more.



2lb AGENCY

SYN38781

Min. Buy 1ea



Pageant® TR Intrinsic® Fungicide

by BASF CORP

Pageant is a broad-spectrum fungicide that is effective on many plant diseases. Pageant Intrinsic brand fungicide also provides plant health benefits such as improved tolerance to stress and increased efficiency of plant processes. Total release fogger. Can also be used in the cargo area of trucks to protect plants during transportation.

REI 12 Hrs

RATE One can Covers up to 3,000sq ft. Must be used in a closed greenhouse or truck.

ACTIVE INGREDIENT Boscalid & Pyraclostrobin

CONTROLS Alternaria, Botrytis, Cercospora, Cylindrocladium, Myrothecium, powdery mildew and rust (Uromyces).



3 oz aerosol

BAS59012766

Min. Buy 1ea



Phostrol Fungicide

by NUFARM AMERICAS INC.

Phostrol provides both preventive and curative treatments for pythium and yellow tuft diseases in a clear, odorless liquid formulation. Combining easily with other fungicides, Phostrol is an essential component of any broad spectrum fungicidal program.

REI 4 hours

RATE 2 to 5 pints per acre

ACTIVE INGREDIENT Mono- and dibasic sodium, potassium and ammonium phosphites

CONTROLS Phytophthora, Downy mildew, Pythium



2.5 gal bottle

NTS10264225

Min. Buy 1ea



Fungicides and Bactericides

Phyton 27®

by PHYTON CORP

Phyton 27 is a broad spectrum bactericide/fungicide effective against many pathogens including Botrytis, Leaf Spot, Powdery Mildew, and more. The active ingredient works systemically and provides residual control for up to 21 days. Labeled for use on turf, greenhouse and field grown ornamentals, and nursery stock.

REI 24 hours

RATE Varies depending on application.

ACTIVE INGREDIENT Copper Sulfate Pentahydrate.

CONTROLS Botrytis, Leaf Spot, Downy Mildew, Anthracnose, Powdery Mildew and many more.



1 liter bottle

PHTNP27-101031 Min. Buy 1ea

1 gal bottle

PHTNP27-101011 Min. Buy 1ea



Phyton 35®

by PHYTON CORP

A broad-spectrum systemic bactericide + fungicide labeled for use on fruit, vegetables, and herbs, as well as ornamentals. Quickly absorbed into plants, enabling the active ingredient to move throughout the plant and be retained in the plant. Leaves no visible residue and won't clog spray nozzles. Formulated for use from propagation up to the time of harvest, it is effective against your most stubborn disease challenges like Botrytis, Bacterial Leaf Spot, Powdery Mildew, Pythium, and more.

REI 48 hours

RATE Varies depending on application.

ACTIVE INGREDIENT Copper Sulfate Pentahydrate.

CONTROLS Botrytis, Leaf Spot, Downy Mildew, Anthracnose, Powdery Mildew and many more.



1 liter bottle

PHTNP35-300034 Min. Buy 1ea

1 gal bottle

PHTNP35-300128 Min. Buy 1ea



Pipron® Fungicide

by SEPRO CORPORATION

Fast, reliable control of powdery mildew for greenhouse ornamentals. Pipron is a contact fungicide, which provides excellent eradication activity on powdery mildew. It is fast acting, reliable and non-phytotoxic to most species. Pipron boasts a visible mildew kill the same day as it is used, but has no residual activity.

REI 12 Hrs

RATE 4 to 8oz per 100gal

ACTIVE INGREDIENT Piperalin

CONTROLS Powdery mildew



32oz

SEPRO19-0560 Min. Buy 1ea



ProStar® 70WG Fungicide

by BAYER CROPSCIENCE

ProStar WG is a locally systemic fungicide that includes control of Rhizoctonia and rust diseases. It is the standard control for Sclerotium rolfsii (Southern blight).

REI 12 Hrs

RATE 3 to 12 oz per 100gal

ACTIVE INGREDIENT Flutolanil

CONTROLS Fairy Ring, Brown Patch, Gray Snow Mold, Southern Blight and more.



3lb

BYR80007809 Min. Buy 1ea



Protect™ DF Fungicide

by NUFARM AMERICAS INC.

Protect DF fungicide provides control of many key diseases in commercial turf, field ornamentals and shade trees, golf courses, groundcovers and herbaceous plants.

REI 24 Hrs

RATE 6 to 8oz per 1,000sq ft

ACTIVE INGREDIENT Mancozeb

CONTROLS Rust, Leaf Spot, Red Thread, Copper Spot, Fusarium and more.



6lb

NTS10506660 Min. Buy 1ea



Regalia® CG Fungicide / Bactericide

by MARRONE BIO INNOVATIONS

Regalia CG is a preventative biofungicide for control of many foliar and soil borne diseases. Use sites include greenhouse crops, ornamental plants, turf, edible crops, and field crops. Labeled for use on fruits, vegetables, herbs and spices, ornamentals and more.

REI 4 hours

RATE 6 to 11 oz per 100 gal

ACTIVE INGREDIENT Reynoutria sachalinensis

CONTROLS Anthracnose, Downy Mildew, Botrytis, Powdery Mildew, and more.



1qt

MB10084 Min. Buy 1ea

1gal

MB10081 Min. Buy 1ea

2.5 Gallon

MB10096 Min. Buy 1ea

55gal Drum

MB10090 Min. Buy 1ea



Don't See What You Need?

Use the BFG Mobile app or visit www.bfgsupply.com to see a much larger selection of Fungicides

RootShield® Biofungicide

by **BIOWORKS INC.**

RootShield grows on roots, "shielding" them against fungi. One application protects for up to 12 weeks. OMRI listed.



RootShield® Granules Biofungicide

by **BIOWORKS INC.**

REI 4 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Trichoderma harzianum Rifai strain T-22

CONTROLS Soilborne plant pathogens and root diseases.



10lb

BW2H03A05 Min. Buy 50ea

Shipping Info [DIRECT](#)

40lb

BW2H03A08 Min. Buy 1ea

Shipping Info [DIRECT](#)

500lb

BW2H03A10 Min. Buy 1ea

Shipping Info [DIRECT](#)

1,000lb

BW2H03A11 Min. Buy 1ea

Shipping Info [DIRECT](#)

RootShield® PLUS+ Granules Biofungicide

by **BIOWORKS INC.**

REI 4 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Trichoderma harzianum Rifai strain T-22 and Trichoderma virens strain G-41

CONTROLS Pythium, Rhizoctonia, Fusarium, Cylindrocladium, Thielaviopsis, Phytophthora



10lb

BW2HR46A05 Min. Buy 50ea

Shipping Info [DIRECT](#)

40lb

BW2HR46A08 Min. Buy 1ea

Shipping Info [DIRECT](#)

500lb

BW2HR46A10 Min. Buy 1ea

Shipping Info [DIRECT](#)

1,000lb

BW2HR46A11 Min. Buy 1ea

Shipping Info [DIRECT](#)

RootShield® WP Biofungicide

by **BIOWORKS INC.**

REI 4Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Trichoderma harzianum Rifai strain T-22

CONTROLS Soilborne plant pathogens and root diseases.



1lb

BWRSWP1 Min. Buy 1ea

Shipping Info [DIRECT](#)

3lb

BW2H02A03 Min. Buy 1ea

Shipping Info [DIRECT](#)

30lb

BW2H02A07 Min. Buy 1ea

Shipping Info [DIRECT](#)

RootShield® PLUS+ WP Biofungicide

by **BIOWORKS INC.**

REI 4 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Trichoderma harzianum Rifai strain T-22 and Trichoderma virens strain G-41

CONTROLS Pythium, Rhizoctonia, Fusarium, Cylindrocladium, Thielaviopsis, Phytophthora



1lb

BW2HR45A02 Min. Buy 1ea

Shipping Info [DIRECT](#)

3lb

BW2HR45A03 Min. Buy 1ea

Shipping Info [DIRECT](#)

30lb

BW2HR45A07 Min. Buy 1ea

Shipping Info [DIRECT](#)

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insect puzzle.



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- Excellent 30 day control
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PGRS
HERBICIDES



Segovis® Fungicide

by SYNGENTA CROP PROTECTION

Segovis® fungicide sets a higher standard for control of downy mildew and Phytophthora spp. diseases. Its strong activity and systemic properties provide long-lasting control when applied as a drench or foliar spray at low use rates. Novel mode of action provides a good tool for growers to diversify rotation programs and manage resistance concerns.

REI 4 Hrs

RATE 0.6 to 3.2oz per 100gal

ACTIVE INGREDIENT Oxathiapiprolin

CONTROLS Downy Mildew, Phytophthora.



16oz

SYN58199 Min. Buy 1ea



Segway O® Fungicide

by OHP, INC.

A flowable suspension concentrate formulation that controls Pythium, crown and root rots, and aerial phytophthora and downy mildews on ornamental plants and vegetables and herbs grown in commercial greenhouses. Should be utilized as a protectant fungicide and applied before conditions are favorable for disease development. Depending on disease pressure, Segway O offers protection for a period of 7 to 28 days.

REI 12 Hrs

RATE 1.5 to 6oz per 100gal

ACTIVE INGREDIENT Cyazofamid

CONTROLS Pythium, Phytophthora, Downy Mildew.



16oz

OHP987200 Min. Buy 1ea

64oz

OHP987245 Min. Buy 1ea



Spectro® 90WDG Fungicide

by NUFARM AMERICAS INC.

Spectro 90 WDG combines two broad-spectrum fungicides to deliver contact and systemic protection. It prevents and controls disease in turf, annual and perennial flowers, as well as bedding plants, groundcovers and trees and shrubs.

REI 12 Hrs

RATE 1 to 2lbs per 100gal

ACTIVE INGREDIENT Chlorothalonil and Thiophanate-methyl

CONTROLS Anthracnose, Brown Rot, Leaf Scabs, Fusarium, Rhizoctonia and many more.



5lb

NTS10501045 Min. Buy 1ea



Spirato® GHN Fungicide

by NUFARM AMERICAS INC.

Spirato GHN fungicide controls foliar, stem and root diseases in ornamentals grown in greenhouses and landscapes. Also labeled for control of certain diseases on select vegetable plants.

REI 12 Hrs

RATE 2 to 4oz per 100gal

ACTIVE INGREDIENT Fludioxanil

CONTROLS Rhizoctonia, Botrytis, Fusarium and more.



16oz

NTS10726861 Min. Buy 1ea



Stargus® Fungicide

by MARRONE BIO INNOVATIONS

Stargus® is a biological fungicide for control of fungal and bacterial plant diseases. Use sites include field and greenhouse crops. Can be used on bushberries and caneberries, bulb vegetables, citrus crops and most vegetables.

REI 4 hours

RATE Varies according to application. See label for rate information.

ACTIVE INGREDIENT bacillus amyloliquefaciens strain F727

CONTROLS Downy Mildew, Black Spot, Botrytis, Fusarium, Pythium, Rhizoctonia and more.



2.5 Gallon

MB10077 Min. Buy 1ea



Stature® SC Fungicide

by BASF CORP

Stature SC fungicide is a flowable formulation of dimethomorph. Proven performance for preventative control of Phytophthora and Downy mildew diseases. Can be applied as a spray, drench, or through chemigation.

REI 12 Hrs

RATE 3.06 to 12.25oz per 100gal

ACTIVE INGREDIENT Dimethomorph

CONTROLS Downy Mildew, Aerial Phytophthora, Phytophthora Root/Crown/Stem Rot



25oz

BAS59011288 Min. Buy 1ea



Subdue MAXX® Fungicide

by SYNGENTA CROP PROTECTION

Subdue MAXX is a systemic fungicide that provides control of damping off, root and stem diseases caused by Pythium and Phytophthora as well as foliar diseases including Downy Mildew. Labeled for use on ornamentals, foliar and flowering plants, non bearing fruit and nut trees and landscapes and interiorscapes.

REI 48 Hrs

RATE 1oz per 100gal

ACTIVE INGREDIENT Mefenoxam

CONTROLS Phytophthora, Pythium, Downy Mildew.



32oz

CH149 Min. Buy 1ea

1gal AGENCY

SYN53195 Min. Buy 1ea

10gal Link Pak AGENCY

SYN53185 Min. Buy 1ea



Subdue® G Fungicide

by SYNGENTA CROP PROTECTION

A granular formulation of Subdue Maxx. Use on bedding plants, flowers, perennials, shrubs and other ornamental plants in outdoor landscapes and interiorscapes to control damping-off, downy mildew and root and stem rot diseases caused by Pythium and Phytophthora. Apply either as a soil surface application or incorporate into the soil at the time of seeding and transplanting.

REI 48 Hrs

RATE 1.6 to 8oz per cubic yard

ACTIVE INGREDIENT Mefenoxam

CONTROLS Phytophthora, Pythium, Downy Mildew.



25lb

SYN53181 Min. Buy 1ea



Fungicides and Bactericides

Terraclor 400® Fungicide

by OHP, INC.

An effective ornamental soil fungicide for prevention and control of soil borne diseases caused by Rhizoctonia solani and other soil borne diseases. For use on ornamentals and vegetable bedding plants. Works primarily as a preventative agent through contact activity and should be applied before disease symptoms appear in order to achieve optimum results. Applications at first sign of disease have curative properties as well.

REI 12 Hrs

RATE 6 to 12oz per 100gal

ACTIVE INGREDIENT PCNB

CONTROLS Root Rot/Stem Rot, Bulb Rot/Crown Rot, Magnolia Leaf Spot.



1gal

OHP988464 Min. Buy 1ea

**Terraguard® SC Fungicide**

by OHP, INC.

A locally systemic fungicide that provides protection of hard to control diseases. Can be used as a cutting soak, soil drench, foliar spray or through chemigation for control of diseases on ornamental plants and greenhouse grown tomatoes and cucumbers in enclosed commercial structures, shade houses and interiorscapes. It prevents diseases from attacking leaf surfaces as it penetrates the plant where applied to stop disease development.

REI 12 Hrs

RATE 2 to 16oz per 100gal

ACTIVE INGREDIENT Triflumizole

CONTROLS Rhizoctonia, Powdery Mildew, Thielaviopsis and more.



32oz

OHP988466 Min. Buy 1ea

**Tourney® Fungicide**

by NUFARM AMERICAS INC.

Controls a broad spectrum of diseases affecting outdoor woody ornamental plants in nursery and landscape settings, including powdery mildew, apple scab, rusts, leaf spots, anthracnose and Rhizoctonia root and crown rot-all with just one product. Also takes out tough diseases in turf like anthracnose, brown patch, summer patch, take-all patch, fairy ring, dollar spot, necrotic ring spot, gray leaf spot, snow mold and other patch diseases.

REI 12 Hrs

RATE 1 to 4oz per 100gal

ACTIVE INGREDIENT Metconazole

CONTROLS Anthracnose, Brown Rot, Leaf Scabs, Fusarium, Rhizoctonia and many more.



5lb

VAL19-0401A Min. Buy 1ea

Transom™ 4.5F Fungicide

by PROKOZ, INC

A liquid flowable systemic turf and ornamental fungicide for control of a broad spectrum of diseases of herbaceous, bedding, flowering and tropical foliage plants, shrubs, trees and flowers in the landscape, interiorscape, nursery and greenhouse, containerized woody shrubs and trees and turf grass.

REI 12 Hrs

RATE 12 to 20oz per 100gal

ACTIVE INGREDIENT Thiophanate-Methyl

CONTROLS Anthracnose, Botrytis, Powdery Mildew, Rhizoctonia and more.



2.5gal bottle

PROKZ10349225 Min. Buy 1ea

Shipping Info HAZARDOUS

**Terrazole® 35W Fungicide**

by OHP, INC.

An effective soil fungicide for prevention and control of damping-off, root rot and stem diseases caused by Pythium and Phytophthora species in ornamental, nursery crops and golf course tees and greens.

REI 12 Hrs

RATE 3.5 to 10 oz per 100gal

ACTIVE INGREDIENT Etridiazole

CONTROLS Pythium and Phytophthora.



2lb

OHP988472 Min. Buy 1ea

**Terrazole® L Fungicide**

by OHP, INC.

An effective soil fungicide for prevention and control of damping-off, root rot and stem diseases caused by Pythium and Phytophthora species in ornamental, nursery crops and golf course tees and greens.

REI 12 Hrs

RATE 2.5 to 7 oz per 100gal

ACTIVE INGREDIENT Etridiazole

CONTROLS Pythium and Phytophthora.



32oz

OHP988478 Min. Buy 1ea

**Triathlon BA® Biofungicide / Bactericide**

by OHP, INC.

A broad-spectrum preventative biofungicide for control of a wide variety of fungal and bacterial diseases on ornamentals, fruits, vegetables, herbs and spices grown in greenhouses, nurseries and shade houses, Triathlon BA is approved for use in organic production.

REI 4 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Bacillus amyloliquefaciens strain D747

CONTROLS Botrytis, Powdery Mildew, Downy Mildew and more.



1gal

OHP988544 Min. Buy 1ea



Trinity® TR Fungicide

by **BASF CORP**

Provides broad spectrum control of several key diseases. Total release fogger. For use in greenhouses on bedding plants, cut flowers, flowering hanging baskets, foliage, potted flowering plants, ornamentals and perennials.

REI 12 Hrs

RATE One can Covers 1,500sq ft

ACTIVE INGREDIENT Triconazole

CONTROLS Alternaria, Botrytis, Cythrodcladium, Fusarium, Myrothecium, Powdery Mildew, and Rhizoctonia.



4 oz aerosol

BAS59012781 Min. Buy 1ea



Truban® 25EC Fungicide

by **ICL/SPECIALTY FERTILIZERS**

Soil fungicide for the control of damping off, root and stem rot diseases caused by Pythium and Phytophthora in bedding plants, ornamental and nursery crops. Labeled for use in commercial greenhouses and nurseries. Liquid formulation.

REI 12 Hrs

RATE 4 to 8oz per 100gal

ACTIVE INGREDIENT Etridiazole

CONTROLS Damping Off, Stem and Root Rot Diseases caused by Pythium and Phytophthora



32oz

EVR950441E Min. Buy 1ea



Truban® 30 WP Fungicide

by **ICL/SPECIALTY FERTILIZERS**

Soil fungicide for the control of damping off, root and stem rot diseases caused by Pythium and Phytophthora in bedding plants, ornamental and nursery crops. Labeled for use in commercial greenhouses and nurseries. Wettable powder formulation.

REI 12 Hrs

RATE 3 to 10oz per 100gal

ACTIVE INGREDIENT Etridiazole

CONTROLS Damping Off, Stem and Root Rot Diseases caused by Pythium and Phytophthora



2lb

EVR957001E Min. Buy 1ea



ZeroTol® 2.0 Fungicide / Bactericide

by **BIOSAFE SYSTEMS**

Treat and control foliar and root diseases on contact. ZeroTol 2.0 is ideal for flowering plants, trees and shrubs, food crops, cannabis/hemp, and more. Leaves no harmful residue and can be applied as a foliar spray or drench.

REI 1 Hr

RATE Varies according to application method. See label.

ACTIVE INGREDIENT Hydrogen peroxide and peroxyacetic acid

CONTROLS Botrytis, Powdery Mildew, Phytophthora, Pythium and more.



2.5gal

BSF600025 Min. Buy 1ea

Shipping Info HAZARDOUS

30gal Drum

BSFTO600030 Min. Buy 1ea

Shipping Info HAZARDOUS

55gal Drum

BSFTO600055 Min. Buy 1ea

Shipping Info HAZARDOUS



ZeroTol® HC Hydro

by **BIOSAFE SYSTEMS**

Quickly eliminate plant pathogens such as powdery mildew, botrytis, and pythium. ZeroTol HC is ideal for the indoor or hydroponics grower with under 500 sq. ft. Use as a foliar spray, hard surface treatment, and in hydroponics or aquaponics systems.

RATE .75 to 1 oz per gallon

ACTIVE INGREDIENT HHydrogen peroxide and peroxyacetic acid

CONTROLS Algae, Powdery Mildew, Botrytis, and more



1 Gallon

BSF62001 Min. Buy 1ea



Zio® Fungicide

by **SEPRO CORPORATION**

Zio® Fungicide is a revolutionary bacteria hand-selected from a library of 60k+ microbes to protect plants against destructive diseases and improve quality. It colonizes the plant while producing compounds to control harmful plant pathogens including Rhizoctonia (Brown Patch), Pythium and anthracnose. Zio has been scientifically proven to provide preventative control of resistant fungi utilizing multiple modes-of-action (MoA).

REI 4 Hrs

ACTIVE INGREDIENT Pseudomonas chlororaphis strain AFS009

CONTROLS Dollar Spot, Rhizoctonia, Pythium, Phytophthora, Botrytis, Anthracnose, Fusarium, Brown Patch and Pythium Blight



5lb AGENCY

SEPRO454545 Min. Buy 1ea



PYTHIUM/PHYTOPHTHORA ROOT ROTS

Control Strategies

Background:

Pythium infects a wide host range and is more common in the greenhouse. Phytophthora is less common in the greenhouse and more common in the nursery and is more host-specific. Phytophthora has been shown to be more aggressive than Pythium. Both of them can survive for many years in the soil and on debris in the greenhouse. Pythium and Phytophthora are referred to as the water molds and they are both in the family Pythiaceae.

Symptoms:

Pythium can cause damping off, and crown/stem rots. Phytophthora causes root/crown rots as well as foliar blight. Symptoms on the leaves are the first to show because the roots are too compromised to take up the nutrients needed for the plant. The leaves could be yellow, stunted or wilted. When the roots are examined they will be soft and mushy and may appear to be water soaked, glassy, and dark brown. The outer covering of the root will separate easily from the inner root by gently pulling on it and it will appear slimy. Healthy roots are white and hard, so it is very easy to tell when you have Pythium or Phytophthora. To differentiate between the two though a sample will need to be sent to a lab for identification.

Favorable Development Conditions/Disease Cycle:

The favorable conditions for Pythium and Phytophthora are wet soils, mild temperatures, high soil EC and low oxygen in the soil. They can be spread by fungus gnats and shore flies. They can also be spread by using spore contaminated media, supplies or water. Recirculation of contaminated irrigation water in an irrigation system can spread the disease as well. The spores can last a long time until the roots are stressed and then that allows the spores to infect the roots and then the disease will spread.

Cultural Control:

Previously used pots or supplies need to be washed and disinfected before use. If using field soil, have it disinfected before use. Throw away infected plants as soon as possible to limit the spread of the disease. If using recycled irrigation water, have it tested and treat if necessary. Sanitation of all areas is key to limiting the spread of the disease.

Chemical Control:

There are a number of fungicides that are labeled and are effective for Pythium/Phytophthora root rots. Some species of Pythium in the greenhouse have been shown to be resistant to Subdue Maxx. All fungicides for Pythium and Phytophthora control should be applied as a drench.



Always read and follow label directions before applying any pesticide and follow state and local regulations

For more information or to place an order

Please contact your BFG Sales Representative or our Customer Service Team!



Empress 24oz BAS59014402



(Pyraclostrobin) Group 11. Warning. 12hr REI. Rate: 1-6oz/100gal. Contact. Labeled for use in the greenhouse and nursery, and on fruit and nut trees. Do not use on grapes, nine bark, and wintercreeper.



Terrazole 35WP 2lb OHP988472



(Etridiazole) Group 14. Caution. 12hr REI. Rate: 3.5-10oz/100gal. Contact. Labeled for use in the greenhouse and nursery.



Segway O 16oz OHP987200 64oz OHP987245



(Cyazofamid) Group 21. Caution. 12hr REI. Rate: 1.5-6oz/100gal. Contact, Limited Systemic. Labeled for use in the greenhouse and nursery, as well as on some vegetables and herbs.



Aliette WDG 5lb BYR84956465



(Aluminum Tris) Group 33. Caution. 12hr REI. Rate: 6-12oz/100gal. Systemic. Labeled for use in the greenhouse and nursery, as well as on some vegetables and herbs.



RootShield Plus WP 1lb BW2HR45A02 3lb BW2HR45A03 30lb BW2HR45A07



(Trichoderma harzianum Rifai strain T-22, Trichoderma virens strain G-41) OMRI Group BM-02. Caution. 4hr REI. Rate: 3-8oz/100gal. Contact. Labeled for use in the greenhouse and nursery, as well as on fruits, vegetables, herbs, and tree nuts.



Adorn 32oz VAL61510.928



(Fluopicolide) Group 43. Caution. 12hr REI. Rate: 1-4oz/100gal. Locally Systemic, Translaminar. Labeled for use in the greenhouse and nursery. Should trial for phytotoxicity on plants not on label prior to use. Adorn must be tank mixed with another product labeled for Pythium/Phytophthora for resistance management.



Subdue Maxx 1gal SYN53195 32oz CH149



(Mefanoxam) Group 4. Caution. 48hr REI. Rate: 0.5-1oz/100gal. Systemic. Labeled for use in the greenhouse and nursery.



Phostrol 2.5gal NTS10264225



(Mono and dibasic sodium, potassium, and ammonium phosphites) Group 33. Caution. 4hr REI. Rate: 5-10oz/100gal. Systemic. Labeled for use in the greenhouse and nursery, as well as on vegetables, fruits, and herbs.

Beneficial Soil Inoculant**BioWorks® R.S.S.I.™ WP Microbial Inoculant**by **BIOWORKS INC.**

R.S.S.I.™ is a microbial soil inoculant that can be drenched on all types of vegetables, herbs, ornamentals and tree seedlings. It will augment the natural microbial activity in the soil and increase the available nutrients to the plant.

RATE 4 to 8 oz per 100 gallons**ACTIVE INGREDIENT** Trichoderma harzianum strain T-22 + Trichoderma virens strain G-41**30lb bag****BW2HR41A07** Min. Buy 1eaShipping Info **DIRECT****Nature's Source® Plant Probiotic**by **BALL DPF, LLC**

Contains a beneficial microbial complex to feed your soil. Aids in nutrient breakdown, availability, and absorption while reducing nutrient leaching. Reduce planting/transplant shock for better plant establishment. Stimulates root development and nutrient uptake also increases tolerance to environmental stress.

**5lb****DANL7502US** Min. Buy 1eaShipping Info **DIRECT****PerFect Amendment Soil Additive**by **AL-PAR PEAT CO.**

Patented beneficial Streptomyces on an iron and humic acid carrier that when added to the soil produces healthier plants that more effectively resist stress and may reduce or eliminate the need for chemical fungicides. PerFect Amendment allows for faster and stronger rooting, more robust root zones, larger, healthier plants, long term greening and vigor. Enhances root development. Includes complexed iron & humic acid. Promotes plant vigor & strength. For Greenhouse, Nursery, Turf Grass and Agricultural use. Substitute for Actino-Iron

REI 0 Hours**ACTIVE INGREDIENT** Streptomyces, Iron, Humic Acid**50lb****ALP10020** Min. Buy 1ea**TerraGrow® Beneficial Soil Inoculant**by **BIOSAFE SYSTEMS**

A beneficial soil inoculant designed to improve soil characteristics and plant stress tolerance. Quickly re-establishes beneficial bacteria/fungal populations in and around the root zone.

RATE 1 to 4oz per 100gal**ACTIVE INGREDIENT** Blend of six microbial organisms.**4lb****BSF71004** Min. Buy 1eaShipping Info **DIRECT****10lb****BSF710010** Min. Buy 1eaShipping Info **DIRECT****25lb****BSF710025** Min. Buy 1eaShipping Info **DIRECT****Sustane® Bolster® MycoBio™**by **SUSTANE NATURAL FERTILIZER INC**

Bolster® MycoBio™ is a blend of endo mycorrhizae species and beneficial bacteria, with humic acid and compost to support the proliferation of soil microorganisms. Bolster® MycoBio™ is used for inoculating soils and growing media with beneficial microbiology for improved nutrient cycling and to amend soil to improve seedling success and promote vigorous plant establishment.

**1lb (12/cs) Case Only****SNF60606061** Min. Buy 1ea**6lb (4/cs) Case Only****SNF60606065** Min. Buy 1ea**40lb (40/pl)****SNF60606060** Min. Buy 1ea**"BOLSTER" PLANT GROWTH,
AND YOUR BOTTOM LINE!**

SUSTANE
Naturally...

NEW!

Proven products to promote rapid root development, superior growth, and protect roots from drought, stress, transplant shock, pathogens, and soil contaminants.

Known world-wide as... *simply the best...*
fertilizers and soil builders.

Visit www.sustane.com today for more information
or call +1 (507) 263 3003 or 1 (800) 352 9245.

Mycorrhizae

MycoApply® Professional Products

by MYCORRHIZAL APPLICATIONS LLC

These beneficial fungi greatly increase the effective rooting area of plants, thereby enhancing plant growth, vigor, and tolerance of environmental extremes.

MycoApply Injector Endo

by MYCORRHIZAL APPLICATIONS LLC

MycoApply Injector Endo is a suspendable powder mycorrhizal inoculum, formulated for use with horticulture injector dosing equipment.

REI 0 hours

RATE See label

ACTIVE INGREDIENT 4 species of Endomycorrhizae.



100gr

MAAS1011504455 Min. Buy 1ea



MycoApply® Endo

by MYCORRHIZAL APPLICATIONS LLC

MycoApply Endo is a granular material containing mycorrhizal propagules, which colonize roots and extend into the surrounding soil forming an essential link between plants and soil resources. Increasing the root area allows improved access to water and nutrients, promoting plant quality and crop performance.

ACTIVE INGREDIENT 4 species of Endomycorrhizae.

Glomus intraradices, Glomus mosseae, Glomus aggregatum, Glomus etunicatum



40lbs

MAFMAEN40 Min. Buy 1ea

Shipping Info [DIRECT](#)



MycoApply® Endo / Ecto

by MYCORRHIZAL APPLICATIONS LLC

MycoApply Endo/Ecto is a granular mycorrhizal inoculum.

ACTIVE INGREDIENT 4 species of Endomycorrhizae. Plus 7 species of Ectomycorrhizae.



40lbs

MAFMAENEC40 Min. Buy 1ea

Shipping Info [DIRECT](#)



MycoApply® Soluble MAXX

by MYCORRHIZAL APPLICATIONS LLC

MycoApply Soluble Maxx is a suspendable powder mycorrhizal inoculum.

ACTIVE INGREDIENT 9 species of Endomycorrhizae. Plus 10 species of Ectomycorrhizae. Plus 12 species of beneficial bacteria and 2 species of Trichoderma.



1lb

MAFMASOLMX10 Min. Buy 1ea



MycoApply® Ultrafine Endo

by MYCORRHIZAL APPLICATIONS LLC

MycoApply Ultrafine Endo is a suspendable powder mycorrhizal inoculum consisting of 4 species of endomycorrhizal fungi. OMRI Listed. Bullet Points: 4 species Endomycorrhizae, Glomus intraradices, Glomus mosseae, Glomus aggregatum, Glomus etunicatum, 130,000 Endomycorrhizal Propagules per lb.

ACTIVE INGREDIENT 4 species of Endomycorrhizae.



1lb

MAAS1000304455 Min. Buy 10ea

20lbs

MAFMAUEN20 Min. Buy 1ea

Shipping Info [DIRECT](#)



MycoApply® Ultrafine Endo / Ecto

by MYCORRHIZAL APPLICATIONS LLC

MycoApply Ultrafine Endo/Ecto is a suspendable powder mycorrhizal inoculum consisting of 4 species of endomycorrhizal fungi and 7 species of ectomycorrhizal fungi. OMRI Listed. Bullet Points: 4 species Endomycorrhizae, Glomus intraradices, Glomus mosseae, Glomus aggregatum, Glomus etunicatum, 130,000 Endomycorrhizal Propagules per lb., 7 species Ectomycorrhizae, Rhizopogon villosulus, Rhizopogon luteolus, Rhizopogon amylopogon, Rhizopogon fulvigleba, Pisolithus tinctorius, Scleroderma cepa, Scleroderma citrinum, 110 million Ectomycorrhizal Propagules per lb.

ACTIVE INGREDIENT 4 species of Endomycorrhizae. Plus 7 species of Ectomycorrhizae.



1lb

MAAS1050204455 Min. Buy 1ea

20lb

MAFMAUENEC20 Min. Buy 1ea

Shipping Info [DIRECT](#)



PRO-MIX® Mycorrhizal Inoculant

by PREMIER TECH

PRO-MIX® Mycorrhizal Inoculant is a highly concentrated formulation designed to help professional growers to CONNECT and improve the value of their crops. Based on the growth cycle of plants, it is intended to be applied at key moments to ensure a quick connection in order to establish an extra radicular network. The extended root system resulting from the symbiotic relationship allows to enhance water and nutrient uptake, resulting in stronger, healthier crops.



250gr

PRBMC025179NPBX Min. Buy 1ea



5.5lb

PRBMC250179NP Min. Buy 1ea

Shipping Info [DIRECT](#)



REFERENCE GUIDE for GREENHOUSE and NURSERY PRODUCTION INSECTICIDES / MITICIDES

RESISTANCE MANAGEMENT

Pest populations that are over exposed to a single pesticide may develop resistance to that pesticide. Resistance is due to the innate ability of some individuals in the pest population to survive even after being treated with a pesticide. When using pesticides repeatedly for crop protection, it is important to manage pesticide resistance by rotating chemicals with different modes of action (MOA) on the target pest or combining chemicals with different modes of action in the tank/spray mix.

When labels permit, make two (2) applications of a product or tank mix in sequence, then rotate to products with different modes of action to improve coverage on target life stages of the pest. Try to avoid applying pesticides with the same mode of action to more than one generation of the pest per cycle.

Good resistance management starts with accurate identification of the pest problem and good record-keeping of all pesticide applications.

Time pesticide applications to coincide with the susceptible life stage of the pest based on their life cycle.

The appropriate and labeled (legal) method of application is also a very important factor to consider.

Low volume (L.V.) applications (smoke generator, thermal fog, cold fog, aerosol, and electrostatic) are commonly used in greenhouses. Low volume sprays generally are more effective against adults than immature stages. Use high volume sprays, directed under the leaves for best results against insect and mite eggs and nymphs.

Always read the label and check with your state or county extension specialists for further information regarding resistance management.

****Use Site(s) Key:** GH = Greenhouse N = Nursery



(by Mode of Action Group and Class)

MOA Group*	Class	Common Name	Trade Name	REI	Use Site(s)**	Company
1A	Carbamates	Carbaryl	Sevin [®]	12	N	Bayer Environmental Science
		Methiocarb	Mesuro [®]	24	GH/N	Gowan Company
1B	Organophosphates	Acephate	Orthene [®] TT&O	24	GH/N	Amvac Chemical Corp.
		Chlorpyrifos	Orthene [®] TR	24	GH	BASF
			DuraGuard [®] ME	24	GH/N	BASF
			Dursban [®] 50 WP	24	N	Corteva Agriscience
		Malathion	Gowan Malathion 8F	12	N	Gowan Company
Phosmet	Imidan [®] 70W	24	N	Gowan Company		
2B	Phenylpyrazoles	Fipronil	TopChoice [®]	24	N	Bayer Environmental Science
3	Pyrethroids	Bifenthrin	Talstar [®]	12	GH/N**	FMC Corp.
			OnyxPro [®]	12	N	FMC Corp.
			Attain [®] TR	12	GH	BASF
		Cyfluthrin	Decathlon[®]	12	GH/N	OHP, Inc.
		Fenpropathrin	Tame [®]	24	GH/N	Nufarm
		Fluvalinate	Mavrik [®] Aquaflo	12	GH/N	Wellmark International
		Lambda-Cyhalothrin	Scimitar [®] GC	24	GH/N	Syngenta
		Permethrin	Astro [®]	12	GH	FMC Corp.
			Permethrin 3.2 EC	12	GH/N***	Helena / Agri-Enterprise
		Ambush [®]	12	GH/N***	Amvac Chemical Corp.	
*** Greenhouse roses only						
	Botanicals	Pyrethrins	Pyrethrum [®] TR	12	GH	BASF
			PyGanic [®]	12	GH/N	Mycorrhizal Applications

* Depends on Greenhouse ventilation

** Greenhouse and/or nursery uses depend on the formulation. Check labels for uses.



Insecticides / Miticides *continued*

(by Mode of Action Group and Class)

MOA Group*	Class	Common Name	Trade Name	REI	Use Site(s)**	Company
4A	Neonicotinoids	Acetamiprid	TriStar [®]	12	GH/N	Nufarm
		Dinotefuran	Safari [®]	12	GH/N	Nufarm
		Imidacloprid	Marathon[®]	0-12	GH/N	OHP, Inc.
			Corectect Tree & Shrub Tablets™	12	GH/N	Bayer Environmental Science
	Thiamethoxam	Flagship [®]	12	GH/N	Syngenta	
4D	Butenolides	Flupyradifrone	Altus™	4	GH/N	Bayer Environmental Science
5	Spinosyns	Spinosad	Conserve [®]	4	GH/N	Corteva Agriscience
			Entrust [®]	4	GH/N	Corteva Agriscience
6	Glycosides	Abamectin	Avid [®]	12	GH/N	Syngenta
		Milbemectin	Ultiflora [®]	12	N	Gowan Company
7A	Juvenile hormone mimics	s-Kinoprene	Enstar [®] AQ	12	GH	Wellmark International
7B	Juvenile hormone mimics	Fenoxycarb	Award [®]	12	N	Syngenta
7C	Pyridine - Insect Growth Regulators	Pyriproxyfen	Distance [®]	12	GH/N	Nufarm
			Fulcrum[®]	12	GH/N	OHP, Inc.
9A	Pyridine azomethines	Pymetrozine	Endeavor [®]	12	GH/N	Syngenta
9B	Pyridine azomethines	Pyrifluquinazon	Rycar [®]	12	GH	SePRO Corp.
10A	Tetrazines	Clofentezine	Notavo[®]	12	GH/N	OHP, Inc.
	Thiazolidinones	Hexythiazox	Hexygon [®] IQ	12	GH/N	Gowan Company
10B	2, 4 - Diphenyloxzoline Derivatives	Etoxazole	TetraSan [®]	12	GH/N	Nufarm
			Beethoven™ TR	4-24*	GH	BASF
11	Biopesticides	<i>Bacillus thuringiensis</i> Kurstaki	DiPel [®] Pro DF	4	GH/N	Nufarm
		<i>Bacillus thuringiensis</i> Israelensis	Gnatrol [®]	4	GH/N	Nufarm
13	Pyrroles	Chlorfenapyr	Pylon [®]	12	GH	BASF
15	Benzoylureas - Insect Growth Regulators	Diflubenzuron	Adept[®]	12	GH	OHP, Inc.
			Dimilin[®] WP	12	GH/N**	OHP, Inc.
			Pedestal[®]	12	GH/N	OHP, Inc.
16	Buprofezin	Buprofezin	Talus [®]	12	GH/N	SePRO Corp.
17	Cyromazine - Insect Growth Regulators	Cyromazine	Citation [®]	12	GH/N	Syngenta

* Depends on Greenhouse ventilation

** Greenhouse and/or nursery uses depend on the formulation. Check labels for uses.

Insecticides / Miticides *continued*

(by Mode of Action Group and Class)

MOA Group*	Class	Common Name	Trade Name	REI	Use Site(s)**	Company	
18	Diacylhydrazines	Tebufenozide	Confirm [®]	4	N	Gowan Company	
		Methoxyfenozide	Intrepid [®]	4	GH/N	Corteva Agriscience	
20A	Trifluoromethyl Aminohydrazone	Hydramethylnon	Amdro [®] Pro	12	N	BASF	
20B	Napthoquinone Derivatives	Acequinocyl	Shuttle[®] O	12	GH/N	OHP, Inc.	
20D	Carbazates	Bifenazate	Floramite[®]	12	GH/N	OHP, Inc.	
21A	METI Acaricides and Insecticides	Pyridaben	Sanmite [®]	12	GH/N	Gowan Company	
		Fenpyroximate	Akari [®]	12	GH	SePRO Corp.	
		Tolfenpyrad	Hachi-Hachi [®]	12	GH	SePRO Corp.	
		Fenazaquin	Magus [®]	12	GH/N	Gowan Company	
22B	Semicarbazone	Metaflumizone	Siesta [™]	12	GH/N	BASF	
23	Tetronic acids	Spiromesifen	Savate [®]	12	GH/N	Bayer Environmental Science	
		Tetramic acids	Spirotetramat	Kontos [®]	0-24	GH/N	Bayer Environmental Science
25A	Beta-ketonitrile	Cyflumetofen	Sultan [™]	12	GH/N	BASF	
28	Anthranillic diamide	Cyantraniliprole	Mainspring [®]	4	GH/N	Syngenta	
		Chlorantraniliprole	Acelepryn [®]	4	GH/N	Syngenta	
		Diamide	Cyclaniliprole	Sarisa[®]	4	GH/N	OHP, Inc.
29	Pyridine carboxamides	Fonicamid	Aria [®]	12	GH/N	FMC Corp.	
UN	Biopesticide Insect	Azadirachtin	Azatin[®] O	4	GH/N	OHP, Inc.	
		Pyridalyl	Pyridalyl	Overture [®]	12	GH	Nufarm
UNF	Biopesticides: Fungal Agents	<i>Beauveria bassiana</i>	BotaniGard [®]	4	GH/N	BioWorks Inc.	
			BioCeres WP [®]	4	GH/N	Biosafe Systems	
			Mycotrol [®] O	4	GH/N	BioWorks, Inc.	
			<i>Isaria fumosorosea</i> Apopka Strain 97 (ATCC20874)	Ancora[®]	4	GH/N	OHP, Inc.
UNE	Oils	Botanical oil	Captiva [®]	4	GH/N	Gowan Company	
		Clarified hydrophobic extract of neem oil	Triact[®] 70[®]	4	GH/N	OHP, Inc.	
UNM	Soaps	Potassium salts of fatty acids	AllPro [®] Insecticidal Soap	12	GH/N	Value Garden Supply	
			Kopa[™] Insecticidal Soap	12	GH/N	OHP, Inc.	
			M-Pede [®]	12	GH/N	Gowan Company	
			Mineral oil	Ultra-Pure [™] Oil	4	GH/N	BASF
			Suffoil-X [™]	4	GH/N	BioWorks, Inc.	

* Depends on Greenhouse ventilation

** Greenhouse and/or nursery uses depend on the formulation. Check labels for uses.



Insecticides / Miticides *continued*

(by Mode of Action Group and Class)

MOA Group*	Class	Common Name	Trade Name	REI	Use Site(s)**	Company
3+UN	Pyrethrins + Oils	Pyrethrins + Canola Oil	Pycana [†]	12	GH/N	OHP, Inc.
	Pyrethrins	Pyrethrins + Piperonyl butoxide	Evergreen [®] Pro 60-6	12	GH/N	Mycorrhizal Applications
1+3	Organophosphate + Pyrethroid	Chlorpyrifos + Cyfluthrin	DuraPlex [®] TR	24	GH	BASF
3+4A	Pyrethroid + Neonicotinoid	Cyfluthrin + Imidacloprid	Discus [†] L	12	GH/N	OHP, Inc.
4C+5	Sulfoximines + Spinosyns	Sulfoxaflor + Spinetoram	Xxpire	12	GH/N	Corteva Agriscience
6 + 20D	Glycoside+Carbazate	Abamectin + Bifenazate	Sirocco [†]	12	GH/N	OHP, Inc.
28 + 29	Diamide + Pyridine carboxamides	Cyclanilprole + Flonicamid	Pradia [†]	12	GH/N	OHP, Inc.

*Insecticides / Miticides Mode of Action

1. Acetylcholinesterase inhibitors. Inhibition of the enzyme acetylcholinesterase, interrupting the transmission of nerve impulses.
 2. GABA-gated chloride channel antagonists: Interferes with GABA receptors of insect neurons, leading to repetitive nervous discharges.
 3. Sodium channel modulators: Acts as an axonic poison by interfering with the sodium channels of both the peripheral and central nervous system stimulating repetitive nervous discharges, leading to paralysis.
 4. Nicotinic acetylcholine receptor (nAChR) agonists. Binds to nicotinic acetylcholine receptor disrupting nerve transmission.
 5. Nicotine acetylcholine receptor allosteric modulators - Site I.
 6. Glutamate-gated chloride channel allosteric modulators.
 7. Juvenile hormone mimics (Insect growth regulator): Mimic juvenile hormones, which prevent molting from the larval to the adult stage.
 9. Chordotonal organ TRPV channel modulators.
 10. Mite growth inhibitors affecting CHS1
 11. Microbial disruptors of insect midgut membranes.
 12. Inhibitors of mitochondrial ATP synthase.
 13. Uncoupler of oxidative phosphorylation via disruption of the proton gradient.
 15. Inhibitors of chitin biosynthesis affecting CHS1
 16. Inhibit chitin biosynthesis – type 1
 17. Molting disruptor, Dipteran
 18. Ecdysone receptor agonists.
 20. Mitochondrial complex III electron transport inhibitors. Energy metabolism.
 21. Mitochondrial complex I electron transport inhibitors
 22. Voltage-dependent sodium channel blockers: Nerve action
 23. Inhibitors of acetyl CoA carboxylase
 25. Mitochondrial complex II electron transport inhibitors
 28. Ryanodine receptor modulators
 29. Chordotonal organ Modulators – undefined target site: Nerve
- UN Products with unknown or uncertain MoA
 UNE Botanical essence including synthetic, extracts and unrefined oils with unknown or uncertain MoA
 UNF Fungal agents of unknown or uncertain MoA
 UNM Non-specific mechanical disruptors

This list is from the U.S Environmental Protection Agency, in cooperation with the Insecticide Resistance Action Committee (IRAC). IRAC is a technical working group within the Global Crop Protection Federation (GCPF). More information on the Insecticide Resistance Action Committee and the Mode of Action Classification is available from: www.irac-online.org.

Insecticide Reference Chart

**Always Refer to
Product Label!**

Product	Active Ingredient	OMRI Listed	Aphids	Beetles	Borers	Caterpillars	Fungus Gnats	Leafhoppers	Leafminers	Leafrollers	Mealybugs	Mites	Plant Bug	Scale	Shore Flies	Slugs & Snails	Thrips	Whiteflies
Acephate 97 WDG	Acephate		X	X	X	X		X	X	X	X		X	X			X	X
Adept	Diflubenzuron						X		X						X			
Akari 5SC	Fenpyroximate										X	X						X
Altus	Flupyradifurone		X	X				X	X		X		X	X			X	X
Ancora	Isaria fumosorosea Apopka Strain 97	OMRI	X			X			X		X	X	X				X	X
Aria	Flonicamid		X					X			X		X	X			X	X
Astro	Permethrin		X	X	X	X	X	X	X	X	X		X				X	X
Attain TR	Bifenthrin		X			X	X			X	X	X	X	X			X	X
Avalon	Bifenthrin		X	X	X	X	X	X	X	X	X	X	X	X			X	X
Avid	Abamectin		X						X			X					X	X
Aza-Direct	Azadirachtin	OMRI	X	X	X	X	X	X	X	X	X	X		X	X		X	X
AzaGuard	Azadirachtin	OMRI	X	X	X	X	X	X	X	X	X	X		X	X		X	X
Azatin O	Azadirachtin	OMRI	X	X	X	X	X	X	X	X	X	X		X	X		X	X
Beethoven TR	Etoxazole											X						X
Benefit 60WP	Imidacloprid		X	X	X		X	X	X		X			X			X	X
BioCeres WP	Beauveria bassiana		X	X	X								X				X	X
BotaniGard	Beauveria bassiana		X	X				X			X		X				X	X
Botanigard Maxx	Beauveria bassiana, Pyrethrins		X	X	X	X	X	X		X	X	X	X				X	X
Captiva Prime	Capsicum, Garlic Oil, Soybean Oil	OMRI			X	X		X			X	X	X				X	X
Citation	Cyromazine						X		X						X			
Conserve SC	Spinosad			X		X			X	X					X		X	
CoreTect	Imidacloprid		X	X	X			X	X	X	X		X	X			X	X
Deadline Ornamental	Metaldehyde															X		
Decathlon 20WP	Cyfluthrin		X	X		X	X	X		X	X		X				X	X
Dimilin 25W	Diflubenzuron					X	X		X						X			X
DiPel Pro DF	Bacillus thuringiensis kurstaki	OMRI			X	X				X								
Discus L	Cyfluthrin, Imidacloprid		X	X		X	X	X	X		X	X	X	X			X	X
Distance IGR	Pyriproxyfen		X				X		X		X			X	X			X
Duraguard ME	Chlorpyrifos		X	X		X	X	X	X		X	X	X	X	X		X	
Dursban 50W	Chlorpyrifos		X	X	X	X		X	X	X	X	X	X	X			X	X
Endeavor	Pymetrozine		X															X
Enstar AQ	S-Kinoprene		X				X		X		X			X			X	X
Entrust SC	Spinosad	OMRI		X		X			X	X					X		X	
EverGreen Pro	Pyrethrins, Piperonyl butoxide		X	X	X	X	X	X		X	X		X				X	X
Flagship 25WG	Thiamethoxam		X	X			X	X	X		X		X	X			X	X
Floramite SC	Bifenazate											X						
Forbid 4F	Spiromesifen											X						X
Fulcrum	Pyriproxyfen						X		X		X			X	X			X
Gnatrol WDG	Bacillus Thuringiensis israelensis	OMRI					X											
Grandevo	Chromobacterium	OMRI	X	X	X	X		X	X	X	X	X	X	X			X	X
Hachi-Hachi SC	Tolfenpyrad		X			X		X			X			X			X	X
Hexygon IQ	Hexythiazox											X						
IronFist	Sodium Ferric EDTA															X		

Insecticide Reference Chart

continued

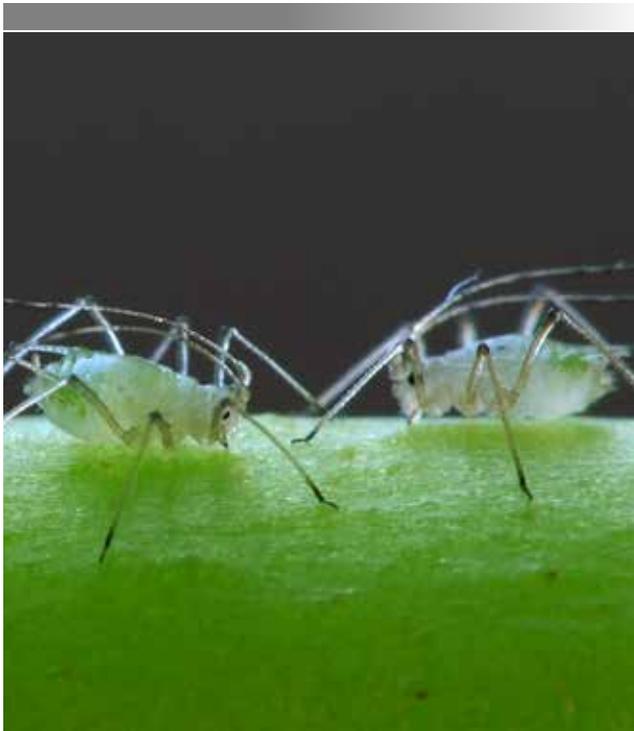
Always Refer to Product Label!

Product	Active Ingredient	OMRI Listed	Aphids	Beetles	Borers	Caterpillars	Fungus Gnats	Leafhoppers	Leafminers	Leafrollers	Mealybugs	Mites	Plant Bug	Scale	Shore Flies	Slugs & Snails	Thrips	Whiteflies
Kontos	Spirotetramat		X					X			X	X		X			X	X
Kopa	Potassium salts Fatty Acid	OMRI	X	X		X		X			X	X	X	X				X
Mainspring GNL	Cyantranilprole		X	X	X	X			X				X	X			X	X
Magus	Fenazaquin											X						X
Mallet .5G	Imidacloprid		X	X	X		X	X	X		X			X			X	X
Mallet 2F	Imidacloprid		X	X	X		X	X	X		X			X			X	X
Marathon 1G	Imidacloprid		X	X	X		X	X	X		X			X			X	X
Marathon II	Imidacloprid		X	X	X		X	X	X		X			X			X	X
Mavrik Aquaflow	Tau-fluvalinate		X	X		X		X			X	X	X				X	X
Millenium	Steinernema carpocapsae						X								X			
Minx 2	Abamectin		X						X			X					X	X
M-Pede	Potassium salts Fatty Acid	OMRI	X	X		X		X			X	X	X	X				X
Mycotrol	Beauveria bassiana	OMRI	X	X				X			X		X				X	X
Nemashield	Steinernema feltiae						X										X	
Nemasys	Steinernema feltiae						X										X	
NoFly WP	Isaria fumosorosea FE 9901	OMRI	X	X			X	X			X	X	X				X	X
Notavo	Clofentezine											X						
Onyx Pro	Bifenthrin		X	X	X	X	X	X	X	X	X	X	X	X			X	X
Orthene	Acephate		X	X		X	X	X	X	X	X	X	X	X			X	X
Overture	Pyridalyl					X											X	
Pedestal	Novaluron					X			X				X				X	X
Pradia	Cyclanilprole, Flonicamid		X	X	X	X			X	X	X		X	X			X	X
Pycana	Pyrethrins, Canola oil	OMRI	X	X	X	X	X	X	X	X	X	X	X	X			X	X
Pyronyl Crop Spray	Pyrethrins, Piperonyl butoxide		X	X	X	X	X	X	X	X	X		X				X	X
Pyganic Specialty	Pyrethrins	OMRI	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
Pylon	Chlorfenapyr					X	X					X					X	
Pyrethrum TR	Pyrethrins		X	X		X	X	X			X	X		X			X	X
Rycar	Pyrifluquinazon		X					X			X						X	X
Safari 20SG	Dinotefuran		X	X	X	X	X	X	X		X		X	X			X	X
Sanmite SC	Pyridaben		X					X				X						X
Sarisa	Cyclanilprole		X	X	X	X			X	X	X			X			X	X
Savate	Spiromesifen											X						X
Scimitar GC	Lambda-cyhalothrin		X	X		X		X	X	X	X	X	X	X			X	X
Sevin SL	Carbaryl		X	X	X	X		X	X	X	X	X	X	X			X	X
Shuttle O	Acequinocyl											X						
Sirocco	Bifentate, Abamectin		X						X			X					X	X
Spear-T	GS-Omega/Kappa-HXTA-HV1A		X									X					X	X
Suffoil-X	Mineral Oil	OMRI	X	X			X	X		X	X	X	X	X			X	X
Sultan	Cyflumetofen											X						
Talstar	Bifenthrin		X	X	X	X	X	X	X	X	X	X	X	X			X	X
Talus 70DF	Buprofenzin							X			X			X				X
Tame 2.4EC	Fenpropathrin		X	X		X		X	X	X	X	X	X	X			X	X
TetraCURB	Rosemary Oil		X								X	X					X	X

Insecticide Reference Chart *continued*

Always Refer to Product Label!

Product	Active Ingredient	OMRI Listed	Aphids	Beetles	Borers	Caterpillars	Fungus Gnats	Leafhoppers	Leafminers	Leafrollers	Mealybugs	Mites	Plant Bug	Scale	Shore Flies	Slugs & Snails	Thrips	Whiteflies
TetraSan 5WDG	Etoxazole											X						
Triact 70	Neem oil	OMRI	X					X			X	X	X					X
Tristar 8.5SL	Acetamiprid		X	X	X	X	X	X	X	X	X	X	X	X			X	X
Ultra-Pure Oil	Mineral Oil		X	X			X	X	X	X	X	X	X	X			X	X
Velifer	Beauveria bassiana strain PPRI 5339		X								X	X					X	X
Venerate CG	Burkholderia spp. Strain A396 cells	OMRI	X		X	X		X	X	X	X	X	X	X			X	X
Ventigra	Afidopyropen		X								X		X					X
XXpire	Spinetoram, Sulfoxaflor		X	X		X				X	X	X	X	X	X		X	X



Acelepryn® Insecticide

by SYNGENTA CROP PROTECTION

Acelepryn insecticide provides season long grub control with a single application in April or May. Also controls many surface feeding pests including beetles and weevils. Liquid formulation for foliar ornamental applications.

REI 4 hours

RATE 2 to 8oz per 100gal.

ACTIVE INGREDIENT Chlorantraniliprole

CONTROLS White Grub, Japanese Beetles, Caterpillars, Black Cutworms, Sod Webworms, Bluegrass Weevil.



4oz

SYN70042 Min. Buy 1ea

64oz Bottle AGENCY

SYN57749 Min. Buy 1ea



Altus® Insecticide

by BAYER CROPSCIENCE

Altus Insecticide is used for the control of insect pests in a wide variety of greenhouse vegetable and ornamental crops and in outdoor nursery and landscape ornamentals. A broad-spectrum insecticide that is acropetally systemic, moving from roots to the leaves in the case of soil applications. Moves translaminarily through the leaf tissue in the case of foliar applications and can provide control of pests on the underside of leaves.

REI 4 Hrs

RATE Foliar: 7 to 14oz per 100gal. Drench: 3.7 oz per 100gal

ACTIVE INGREDIENT Flupyradifurone

CONTROLS Adelgids, Aphids, Leafhoppers, Mealybugs, Scales and more.



64oz AGENCY

BYR84989509 Min. Buy 1ea



Acelepryn® G Insecticide

by SYNGENTA CROP PROTECTION

Acelepryn turf insecticide provides season long grub control with a single application in April or May. Also controls many surface feeding pests including beetles and weevils.

REI 4 Hrs

RATE 50-100lbs per Acre

ACTIVE INGREDIENT Chlorantraniliprole

CONTROLS White Grub, Caterpillars, Black Cutworms, Sod Webworms, Bluegrass Weevil.



25lb

SYN53199 Min. Buy 1ea



Ancora® Microbial Insecticide

by OHP, INC.

Ancora contains a naturally occurring fungus that infects both foliage and soil insect pests. Ancora is compatible with beneficial arthropods and is labeled for use on herbs, vegetables and ornamentals. Ancora has a 4-hour REI and can be used in organic production.

REI 4 Hrs

RATE 14 to 28 oz per 100gal

ACTIVE INGREDIENT Isaria fumosorosea Apopka strain 97

CONTROLS Aphids, Leafminers, Mealybugs, Thrips, Mites and more.



1lb

OHP981070 Min. Buy 1ea



Adept® WSP Insecticide

by OHP, INC.

An effective tool for controlling fungus gnats, shore flies and foliar feeding pests found in ornamental crops grown in greenhouses, shade houses and interiorscapes.

REI 12 Hrs

RATE 1-2oz per 100gal

ACTIVE INGREDIENT Diflubenzuron

CONTROLS Armyworms, Leafminers, Fungus Gnats, Shore Flies.



16 x 1oz Packets

OHP981012 Min. Buy 1ea



Aria® Insecticide

by FMC

Through contact and ingestion, the active ingredient in Aria stops both adult and immature aphids from feeding within one hour of treatment and eliminates them within three to five days as a result of dehydration and starvation. Effectively controls many species of aphids that attack greenhouse plant investments. Designed for minimized impact on birds and honeybees with no effect on coleopterans, lepidopterans or arachnids.

REI 12 hours

RATE 80 to 100grams per 100gal

ACTIVE INGREDIENT Fonicamid

CONTROLS Aphids, Thrips, Whiteflies, Mealybugs and more.



160g

FMC19-0303B Min. Buy 1ea



Akari® 5SC Miticide / Insecticide

by SEPRO CORPORATION

A unique "stop-feeding action" not only stops further damage to your plants but also halts the laying of eggs immediately after application. Mites are dead in 4 to 7 days. Active on all life stages, but especially effective on the plant damaging larvae, nymph and adult stages, Akari provides residual action of 21-28 days.

REI 12 Hrs

RATE 16 to 24oz per 100gal

ACTIVE INGREDIENT Fenpyroximate

CONTROLS Mites, Mealybugs, Whiteflies



32oz

SEPROAKARI Min. Buy 1ea



Insecticides and Miticides

Astro® Insecticide

by FMC

Astro insecticide controls insect pests on lawns, ornamental trees and shrubs, ornamental plants grown in greenhouses and perimeters of residential, industrial and commercial landscaped areas.

REI 12 Hrs

RATE 4 to 8oz per 100gal

ACTIVE INGREDIENT Permethrin

CONTROLS Aphids, Adelgids, Beetles, Leafhoppers and more.



1gal

FMC19-1001C Min. Buy 1ea



Attain® TR Insecticide

by BASF CORP

A ready-to-use, ultra-low-volume insecticide fogger that controls a variety of greenhouse insect pests, including aphids, fungus gnats, mealybugs, mites, thrips and whiteflies, along with several other secondary insect pests.

REI 12 Hrs

RATE One 2 oz can treats up to 3,000sq ft.

ACTIVE INGREDIENT Bifenthrin

CONTROLS Aphids, Thrips, Caterpillars, Armyworms, Mealy bugs and more



2oz

BAS59011825 Min. Buy 1ea



Avalon® GN Insecticide

by PROKOZ, INC

Provides long-lasting residual control of aphids, black vine weevils, scale and other nursery and greenhouse pests without the risk of damaging sensitive plants. It is non-staining and contains no odorous or plant-damaging solvents, so it can be applied to open blooms and colored bracts right up to the day of shipment.

REI 12 Hrs

RATE 5 to 10oz per 100gal

ACTIVE INGREDIENT Bifenthrin

CONTROLS Aphids, Black Vine Weevil, Lace Bugs, Fungus Gnats and many more. See label for complete list.



1 gal bottle

PROKZ10064852 Min. Buy 1ea

Shipping Info RESTRICTED USE



Avid® .15EC Miticide / Insecticide

by SYNGENTA CROP PROTECTION

For control of leaf miners and mites and suppression of aphids, whiteflies and thrips on ornamental plants. Rain fast within hours of application, offering outdoor application flexibility and is odorless. Also leaves no unsightly residue on plants.

REI 12 Hrs

RATE 4 to 8oz per 100gal

ACTIVE INGREDIENT Abamectin

CONTROLS Leafminers, Mites and suppresses Aphids, Whiteflies and Thrips.



8oz

SYN25873 Min. Buy 1ea

32oz

SYN81141 Min. Buy 1ea

1gal AGENCY

SYN15128 Min. Buy 1ea



Avid® + Mainspring® GNL

by SYNGENTA CROP PROTECTION

Avid and Mainspring GNL Multipak offers a complete, non-neonic insecticide solution for nursery and greenhouse growers. Contains one gallon Avid 0.15EC and four pints of Mainspring GNL. Minimum buy – 1 case.

REI 12 Hrs

RATE Varies according to application. See label.

ACTIVE INGREDIENT Avid - Abamectin, Mainspring GNL - Cyantraniliprole

CONTROLS Aphids, Thrips, Whiteflies and more



Multipack / Contains 1gal Avid® 0.15EC & 4ea 16oz Mainspring® GNL AGENCY

SYN60499 Min. Buy 1ea

Shipping Info

HAZARDOUS



Aza-Direct® Biological Insecticide

by GOWAN

Aza-Direct is a broad spectrum biological insecticide that controls key insect pests on greenhouse and outdoor food crops, ornamental plants and shrubs and nursery crops. Its primary mode of action is as an insect growth regulator which inhibits molting and the development of immature insects into healthy adults. Effective repellent and antifeedant thereby affecting both immature and adult insect pests.

REI 4 Hrs

RATE 16 to 32oz per Acre

ACTIVE INGREDIENT Azadirachtin

CONTROLS Aphids, Thrips, Fungus Gnat, Whitefly and more.



2.5gal

GOW14022 Min. Buy 1ea



Insecticides and Miticides

AzaGuard® Insecticide / Nematicide

by BIOSAFE SYSTEMS

Azadirachtin-based insect control effective on more than 300 species. Acts as an insect growth regulator, anti-feedant, and ovi-position deterrent. Has no known resistance and can be used indoors and outdoors.

REI 4 Hrs

RATE Varies according to application method. See label.

ACTIVE INGREDIENT Azadirachtin

CONTROLS Insects in the larval, pupal and nymphal stages.



32oz

BSF7000-32OZ Min. Buy 1ea

1gal

BSFT070001 Min. Buy 1ea



Beethoven® TR Miticide / Insecticide

by BASF CORP

Beethoven TR provides control of mites including two-spotted spider mites and suppresses whiteflies. Total release fogger. Beethoven offers quick and easy application, thorough coverage and excellent plant safety.

REI 12 Hrs

RATE 1 Can per 3,000sq ft

ACTIVE INGREDIENT Etoxazole

CONTROLS Mites, Whitefly (Suppression)



2 oz aerosol

BAS5902321 Min. Buy 1ea



Azatin® O Insecticide

by OHP, INC.

Azatin O is a biological insect growth regulator used to control the larval stage of a broad-spectrum of greenhouse and nursery pests. Azatin O is OMRI listed for organic production and is soft on beneficial insects. Suitable for use on crops such as ornamentals, vegetables, herbs and berries grown in the greenhouse, nurseries, interiorscapes, hydroponics and turf.

REI 4 Hrs

RATE 4 to 16 oz per 100gal

ACTIVE INGREDIENT Azadirachtin

CONTROLS larval stages of many insect pests. See label.



32oz

OHP981221 Min. Buy 1ea



Benefit® 60WSP Insecticide

by ICL/SPECIALTY FERTILIZERS

A nursery and greenhouse insecticide in a wettable powder formula that controls the most common insect problems. Controls white grub larvae, aphids, mealybugs and other common insects and can be applied as a foliar spray or drench.

REI 12 Hrs

RATE 20g per 100gal

ACTIVE INGREDIENT Imidacloprid

CONTROLS Adelgids, Aphids, Japanese Beetles (adults), Fungus Gnat (larvae), Lacebugs, Leaf Beetles, (including Elm and Viburnum Leaf Beetles), Leafhoppers, Leafminers, Mealybugs, Psyllids, Sawfly larvae, Soft Scale, Thrips (suppression), Whiteflies



100g

EVR956601E Min. Buy 1ea



- Plant Health**
- Scouting**
- Implement Biological Control**

Implementing BioCeres WP, *Beauveria bassiana* bioinsecticide, into IPM programs can greatly reduce pest populations.



For high pest populations combine with most insecticides for additional control and resistance management.

Less extensive infestations can be controlled solely by BioCeres WP or partnered with biological organisms.



BioSafe Systems

1.888.273.3088 | BioSafeSystems.com

APHID *Control Strategies*

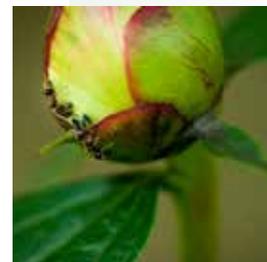
There are many different species of Aphids (*Aphis* sp.) that are pests of horticultural crops and landscape plants. Most are small, soft bodied, pear shaped insects with piercing and sucking mouthparts that are used to suck out plant fluids. Aphids can be many colors from green, brown, or black, sometimes covered in a waxy or wooly secretion. One common identifier are the cornicles, two protrusions on their hind end. Adults are usually wingless, although they will produce wings when feeding opportunities decline so they can disperse to other crops.

Aphids can mature from newborn to adult in as little as one week, so populations can explode quickly. They are also capable of reproducing asexually and can give birth to 12 or more live nymphs per day. They typically inhabit newer shoots, leaves and stems. Aphid feeding can cause leaf yellowing, curling and distorted leaves and shoots. This insect exudes a honeydew waste that often turns black with sooty mold. Aphids are also known vectors of plant viruses.

Aphid control can be challenging when using contact insecticides if thorough coverage of the plant and the pest is not achieved. Proper spray volume, pressure, and the use of a spray adjuvant can improve results. Growers can benefit by using systemic or translaminar insecticides when good spray coverage is difficult. Soil applications of systemic insecticides can give longer term control by moving to growing shoots and remaining in the plant tissue.

Brand Name	BFG Item #	Active Ingredient	Mode of Action Group	Notes
Rycar	SEPRO1056.128	Pyrifluquinazon	UN	Contact & Translaminar Soft on Beneficials Greenhouse Only Vegetable Label
Altus	BYR84989509	Flupyradifurone	4D	Translaminar & Systemic Foliar or Drench Application Soft on Beneficials
Pradia	OHP986300	Cyclaniliprole, Flonicamid	28, 29	Contact Soft on Beneficials
Mainspring	SYN58664	Cyantraniliprole	28	Translaminar & Systemic Foliar or Drench Application Soft on Beneficials
AzaGuard	BSF7000-32OZ BSFTO70001	Azadirachtin	UN	Insect Growth Regulator Labeled for Fruits & Vegetables
Enstar AQ	WLMK100502416 WLMK100502900	S-Kinoprene	7	Insect Growth Regulator Greenhouse only
BotaniGard 22WP	BW1B15A02	Beauveria bassiana	UN	Fungal Spore that infects insects Soft on Beneficials, Vegetable label

Always read and follow label directions before applying any pesticide and follow state and local regulations



For more information or to place an order

Please contact your BFG Sales Representative or our Customer Service Team!



BIOLOGICAL CONTROLS

The main agents are *Aphidius colemani* for smaller species of Aphids and *Aphidius ervi* for larger species of Aphids. Chrysoperla (Lacewings) are another agent that can be used.



Rycar SEPRO1056.128



(Pyrifluquinazon) MOA: UN unknown. Caution. 12 HR REI. RATE: 2.4-3.2oz /100gal. Next Generation, new class. Insects stop feeding immediately. Alternative to neonicotinoids. Gentle on pollinators. Contact, ingestion, translaminar. Greenhouse only. Vegetable label.



Altus BYR84989509



(Flupyradifurone) MOA: 4D. Caution. 4 HR REI. RATE: Foliar 7 - 10.5oz/100gal, Drench 2.8 - 3.7oz/100gal. Translaminar & Systemic, broad spectrum activity. Soft on Beneficials.



Pradia OHP986300



(Cyclaniliprole, Flonicamid) MOA: 28, 29. Caution. 12 HR REI. RATE: 10 - 17.5oz/100gal. Contact. Soft on Beneficials. Quick knockdown and lasting residual control.



Mainspring SYN58664



(Cyclaniliprole) MOA: 28. Caution. 4 HR REI. RATE: Foliar 4 - 8oz./100gal., Drench 8 - 12oz/100gal. Translaminar & Systemic. Soft on Beneficials. Broad spectrum activity & lasting residual control.



AzaGuard BSF7000-32OZ BSFTO70001



(Azadirachtin) MOA: UN unknown. 4 HR REI. OMRI RATE: 8 - 16oz/100gal. Prevents molting, anti-feedant. Insect growth regulator. Can be used on fruits & vegetables.



Enstar AQ WLMK100502416 WLMK100502900



(S-Kinoprene) MOA: 7. Caution. 4 HR REI. RATE: Preventative rate 16oz/100gal. Curative rate 32oz/100gal. Insect growth regulator, interrupts molting. Broad spectrum activity.



BotaniGuard 22WP BW1B15A02



(*Beauveria bassiana*) MOA: UN unknown. Caution. 4 HR REI. RATE: 8 - 16oz/100gal. A naturally occurring fungal spore that quickly infects the target insect. Spray must contact pest. Soft on beneficial insects, labeled for vegetables.

Insecticides and Miticides

BioCeres® WP Insecticide

by BIOSAFE SYSTEMS

BioCeres WP uses a proprietary strain of *Beauveria bassiana* fungus to target foliar feeding or soil-borne insect pests and is perfectly suited for reducing insecticide resistance in IPM programs.

REI 4 Hrs

RATE 1 to 3lbs per Acre

ACTIVE INGREDIENT *Beauveria bassiana*

CONTROLS Whiteflies, aphids, thrips, and plant bugs



1lb

BSF68001 Min. Buy 1ea

BT NOW® Biological Insecticide

by BIOSAFE SYSTEMS

BT NOW® is a water-based biological insecticide that offers broad spectrum control of Lepidoptera populations on a wide variety of crops. Labeled for outdoor food, non-food, and greenhouse crops.

REI 4 hours

RATE Varies depending on application. See label.

ACTIVE INGREDIENT *Bacillus thuringiensis* ssp. Kurstaki strain EVP-113-19

CONTROLS Armyworm, loopers, leafrollers, moths, caterpillars and more.



1 Gallon

BSF70501 Min. Buy 1ea

Molt-X® Insect Growth Regulator

by BIOWORKS INC.

Molt-X is an insect growth regulator for control of a wide variety of greenhouse pests. Safe for beneficial insects. Use sites include: greenhouse vegetable and ornamental crops, nursery, turf, trees and shrubs.

REI 4 Hrs

RATE 8 to 10oz per 100gal

ACTIVE INGREDIENT Azadirachtin

CONTROLS Aphids, Thrips, Whiteflies and more



32oz

BW1MX27A22 Min. Buy 1ea



1gal

BW1MX27A23 Min. Buy 1ea

BotaniGard® 22WP Mycoinsecticide

by BIOWORKS INC.

BotaniGard 22WP is a mycoinsecticide for the control of Whitefly, Aphids, Thrips and more. Labeled for use on ornamentals and vegetables in greenhouses, nurseries, commercial landscapes, interiorscapes and turf. Wettable powder formulation.

REI 4 Hrs

RATE 1lb per 100gal

ACTIVE INGREDIENT *Beauveria bassiana* strain GHA

CONTROLS Aphids, Thrips, Whiteflies and more



1lb

BW1B15A02 Min. Buy 1ea

BotaniGard® ES Mycoinsecticide

by BIOWORKS INC.

BotaniGard ES is a mycoinsecticide for the control of Whitefly, Aphids, Thrips and more. Labeled for use on ornamentals and vegetables in greenhouses, nurseries, commercial landscapes, interiorscapes and turf. Liquid formulation.

REI 4 Hrs

RATE 32oz per 100gal

ACTIVE INGREDIENT *Beauveria bassiana* strain GHA

CONTROLS Aphids, Thrips, Whiteflies and more



32oz

BW1B14A22 Min. Buy 1ea

1gal

BWB14A23 Min. Buy 1ea

Shipping Info **DIRECT****BotaniGard® Maxx Insecticide**

by BIOWORKS INC.

BotaniGard Maxx is an insecticide for the control of Whitefly, Aphids, Thrips and more. Labeled for use on ornamentals and vegetables in greenhouses, nurseries, commercial landscapes, interiorscapes and turf. Emulsifiable dispersible oil formulation of *Beauveria bassiana* and natural pyrethrins.

REI 12 Hrs

RATE 32oz per 100gal

ACTIVE INGREDIENT *Beauveria bassiana* and natural pyrethrins

CONTROLS Aphids, Thrips, Whiteflies and more



32oz

BW1B103A22 Min. Buy 1ea

1gal

BW1B103A23 Min. Buy 1ea

2.5gal

BW1B103A24 Min. Buy 1ea

**Captiva Prime® Botanical Insecticide**

by GOWAN

Captiva Prime botanical insecticide agitates Mites and Thrips, flushing them from cover and enhancing contact with the pest. Captiva® Prime can be used as a stand-alone product to repel thrips and mites, stop their feeding and inhibit ovipositing. When used as a tank mix partner with traditional insecticides, it will enhance their activity.

REI 4 Hrs

RATE 16 to 32oz per Acre

ACTIVE INGREDIENT Capsicum extract, Garlic Oil, Canola Oil

CONTROLS Thrips, mites, whitefly



32oz

GOW65700 Min. Buy 1ea

**Citation® 75W Insect Growth Regulator**

by SYNGENTA CROP PROTECTION

Citation is an insect growth regulator that is highly effective against major dipterous pests in ornamentals. Labeled for use on greenhouse crops including ornamentals and vegetable transplants, landscape and container grown ornamentals and bedding plants.

REI 12 Hrs

RATE 2.66oz per 100gal

ACTIVE INGREDIENT Cyromazine

CONTROLS Leafminers, Fungus Gnats, Shoreflies.



1lb

SYN52855 Min. Buy 1ea



Conserve® SC Insecticide

by **Corteva**

A turf and ornamental insect control with a unique mode of action derived from a naturally occurring organism. Makes a great rotational insecticide and is highly active at very low use rates. Great for control of thrips and lepidopterans larvae on herbaceous and woody ornamentals grown outdoors, in nurseries or in greenhouses; tree farms or plantations; and turf grass.

REI 4 Hrs

RATE Varies depending on application method. See label for complete information.

ACTIVE INGREDIENT Spinosad

CONTROLS Thrips, lepidopterous larvae, foliage feeding worms and many more. See label for complete list.



32oz

DOW19-0007Z Min. Buy 1ea



CoreTect® Insecticide Tablets

by **BAYER CROPSCIENCE LP**

CoreTect Tree and Shrub Tablets Insecticide will control or significantly reduce populations of insects that attack containerized, newly planted or established trees and shrubs. For use in landscape, interiorscapes and forested areas.

REI 12 Hrs

RATE One to two tablets per gallon container.

ACTIVE INGREDIENT Imidacloprid

CONTROLS Adelgids, Aphids, Leafhoppers, Mealybugs, Scales and more.



250ct Tablets per Bottle

BYR79283261 Min. Buy 1ea



Decathlon® 20WP Insecticide

by **OHP, INC.**

A wettable powder insecticide effective for broad spectrum control of crawling and flying insect pests on ornamental and nursery stock. Will not stain.

REI 12 Hrs

RATE 1.3 to 1.9 oz per 100gal

ACTIVE INGREDIENT Cyfluthrin

CONTROLS Aphids, Armyworms, Bagworms, Beetles, Caterpillar, Cutworm, Fungus Gnats, Gypsy Moths, Lace Bugs, Leaf Hopper; Mealybugs, Scales, Thrips, Webworm, Whiteflies



8oz

OHP981789 Min. Buy 1ea



Dimilin® 25W Insect Growth Regulator

by **OHP, INC.**

Offers control of a variety of insect pests found on trees and shrubs grown in public and private forests, forest plantings and forest nurseries and Christmas tree and conifer nurseries. Dimilin is effective on foliar feeding insects like armyworms and lepidopterous leafminers.

REI 12 Hrs

RATE 2 to 8 oz per acre

ACTIVE INGREDIENT Diflubenzuron

CONTROLS Fungus Gnat, Shorefly, Sciarid Fly and more.



5LB

OHP982380 Min. Buy 1ea

Shipping Info **RESTRICTED USE**



DiPel® PRO DF Biological Insecticide

by **NUFARM AMERICAS INC.**

Dipel Pro is a biological insecticide for control of lepidopterous worms in greenhouse vegetables and ornamentals and landscape plantings.

REI 4 Hrs

RATE Varies according to application method. See label.

ACTIVE INGREDIENT Bacillus thuringiensis

CONTROLS Armyworms, Loopers, Budworms and many more.



1lb

VAL89030.169 Min. Buy 1ea



Discus® L Insecticide

by **OHP, INC.**

Discus L Insecticide's two active ingredients provide fast knockdown and broad-spectrum control on ornamentals and non-bearing fruit and nut trees in greenhouses and nurseries.

REI 12 Hrs

RATE 25 to 50oz per 100gal

ACTIVE INGREDIENT Cyfluthrin and Imidacloprid

CONTROLS Armyworms, Japanese beetles, Ticks, Aphids, Thrips, Whitefly and more.



1gal

OHP982420 Min. Buy 1ea



Distance® Insect Growth Regulator

by **NUFARM AMERICAS INC.**

Distance insect growth regulator controls whiteflies, fungus gnats, scales and other insects by preventing eggs, larvae and pupae from maturing into adults. Labeled for use on greenhouse and outdoor ornamentals, groundcovers, shrubs and ornamental trees.

REI 12 Hrs

RATE 6 to 8oz per 100gal

ACTIVE INGREDIENT Pyriproxyfen

CONTROLS Fungus Gnat, Leafminers, Scales, Shore flies, Whitefly.



32oz

VAL69730.915 Min. Buy 1ea



Duraguard® ME Insecticide

by **BASF CORP**

Broad spectrum insecticide for control of many greenhouse pests. Microencapsulated formulation gives a timed release action that can last up to 30 days. Labeled for use on bedding plants, cut flowers, blooming hanging baskets, foliage and ornamentals.

REI 24 Hrs

RATE 25 to 50oz per 100gal

ACTIVE INGREDIENT Chlorpyrifos

CONTROLS Ants, Aphids, Beetles, Caterpillars, Flies, Fungus Gnat, Leafhoppers, Leaf Miner, Mealybugs, Shore Flies, Spider Mites, Thrips and more



1gal

BAS59011817 Min. Buy 1ea

Shipping Info **RESTRICTED USE HAZARDOUS**



Insecticides and Miticides

Dursban® 50W Insecticide

by *Corteva*

An insecticide in water soluble packets designed for use as a spray to control insect pests on trees, turf and ornamental plants. Long-lasting control on over 280 pests on ornamentals and nursery crops.

REI 12 Hrs

RATE 2 to 4 (4.4oz) water soluble packets per 100gal

ACTIVE INGREDIENT Chlorpyrifos

CONTROLS Aphids, Adelgids, Beetles, Leafhoppers and more.



7 x 4oz Packets

DOW19-0079B Min. Buy 1ea

Shipping Info RESTRICTED USE HAZARDOUS



Entrust® SC Insecticide

by *Corteva*

Entrust SC insecticide provides control of lepidopterous larvae, leafminers, thrips and fire ants. Labeled for use on vegetable crops, fruit, herbs, turf, ornamentals and more.

REI 4 Hrs

RATE 4 to 8oz per Acre.

ACTIVE INGREDIENT Spinosad

CONTROLS Caterpillars, worms, leafminers, thrips and more.



32oz

SA33253

Min. Buy 1ea

Shipping Info

HAZARDOUS



Ecotec Plus Botanical Insecticide

by *BRANDT CONSOLIDATED INC.*

Ecotec Plus is a botanical insecticide that offers broad spectrum control of many greenhouse pests. Suitable for use on ornamental and vegetable crops, herbs, fruit and berries and plants grown for medicinal purposes. OMRI® listed

RATE 16 to 64oz per 100gal

ACTIVE INGREDIENT Rosemary Oil, Geraniol and Peppermint Oil

CONTROLS Aphids, beetles, mites, mealybugs, thrips, whitefly and many more.



2.5gal

BRANDT102601101 Min. Buy 1ea



Evergreen® Pro 60-6

by *MYCORRHIZAL APPLICATIONS LLC*

Evergreen® Pro 60-6 is a botanical based multi-purpose insecticide for use on growing crops, ornamentals, stored products, and harvested fruits and vegetables. Can be also used as a water system treatment for hydroponically grown vegetables.

REI 12 hours

RATE 12 to 24 oz per 100 gallons

ACTIVE INGREDIENT Pyrethrins and Piperonyl butoxide

CONTROLS Most insect pests. See label for complete list.



1 Gallon

MAAS1750204012 Min. Buy 1ea



Endeavor® Insecticide

by *SYNGENTA CROP PROTECTION*

Safely eliminates sap-sucking aphids and whiteflies with its unique mode of action. When sprayed on the plant, there is some initial contact activity, but the primary mode of action and residual control occurs through insect feeding inhibition. Works in tandem with biological pest control programs to further protect plants.

REI 12 hours

RATE 3 to 5oz per 100gal

ACTIVE INGREDIENT Pymetrozine

CONTROLS Aphids and Whiteflies.



15oz bottle

SYN62959 Min. Buy 1ea



Flagship® 25WG Insecticide

by *SYNGENTA CROP PROTECTION*

Flagship 25WG is a broad spectrum insecticide that is effective against many sucking and chewing insects when applied to the foliage and soil. Flagship has rapid translaminar movement and is readily taken up by the plant roots.

REI 12 Hrs

RATE 4 to 8oz per 100gal

ACTIVE INGREDIENT Thiamethoxam

CONTROLS Aphids, Thrips, Whiteflies, Leaf Beetles and many more.



2lb AGENCY

SYN27748

Min. Buy 1ea



Enstar® AQ Insect Growth Regulator

by *CENTRAL LIFE SCIENCES*

Enstar AQ insect growth regulator offers broad-spectrum control of many insect pests. For use on ornamental plants in greenhouses, shade houses and interiorscapes.

REI 4 Hrs

RATE 16-32fl oz per 100gal

ACTIVE INGREDIENT S-Kinoprene

CONTROLS Aphids, Fungus gnats, Beetles, Mites, Thrips, Whitefly and more.



32oz

WLMK100502416 Min. Buy 1ea

1gal

WLMK100502900 Min. Buy 1ea



Floramite® SC Miticide

by *OHP, INC.*

Produces quick knockdown through contact activity and long residual control of more than 21 days. Soft on predacious mites and beneficial insects. Provides outstanding control of a variety of mite pests on ornamental plants. Labeled for commercial greenhouses and nurseries

REI 12 Hrs

RATE 4 to 8oz per 100gal

ACTIVE INGREDIENT Bifenazate

CONTROLS Spider mites



32oz

OHP982718

Min. Buy 1ea



Insecticides and Miticides

Floramite® SC/LS Miticide

by OHP, INC.

Produces quick knockdown through contact activity and long residual control of more than 21 days. Soft on predacious mites and beneficial insects. Provides outstanding control of a variety of mite pests on ornamental plants. Labeled for interiorscapes, landscapes and residential (not for plants grown for resale).

REI 12 Hrs

RATE 4 to 8oz per 100gal

ACTIVE INGREDIENT Bifenazate

CONTROLS Spider mites



8oz

OHP982714 Min. Buy 1ea



Grandevo® CG Insecticide / Miticide

by MARRONE BIO INNOVATIONS

Grandevo® is a microbial-based insecticide. Grandevo contains several active compounds that repel, stop feeding, reduce reproduction and induce mortality to prevent the development of damaging populations of sucking and chewing insects, flies and mites. Grandevo can be used on a wide range of organic and conventional crops, including fruits, vegetables, nuts and turf and ornamentals.

REI 4 hours

ACTIVE INGREDIENT Chromobacterium subsugae strain PRAA4-1

CONTROLS Aphids, Whitefly, Psyllids, Mealybugs, Thrips, and more.



11b

MB10085 Min. Buy 1ea



Forbid® 4F Miticide

by BAYER CROPSCIENCE

Offers outstanding knockdown and residual control of mites and all stages of whiteflies for four to eight weeks. Excellent translaminar activity for easier coverage and has minimal effects on beneficial insects when used according to label directions.

REI 12 Hrs

RATE 1.4 to 4oz per 100gal

ACTIVE INGREDIENT Spiromesifen

CONTROLS Spider mites, Tarsonemid mites, Whiteflies.



8oz bottle

PROKZ19-0522W Min. Buy 1ea



Grandevo® WDG Insecticide / Miticide

by MARRONE BIO INNOVATIONS

Grandevo® is a microbial-based insecticide. Grandevo contains several active compounds that repel, stop feeding, reduce reproduction and induce mortality to prevent the development of damaging populations of sucking and chewing insects, flies and mites. Grandevo can be used on a wide range of organic and conventional crops, including fruits, vegetables, nuts and turf and ornamentals.

REI 4 Hr

RATE 1 to 3lbs per 100gal

ACTIVE INGREDIENT Chromobacterium subsugae strain PRAA4-1

CONTROLS Mites, whitefly, mealybug, thrips, aphids



61b

MB10047 Min. Buy 1ea



Fulcrum® Insect Growth Regulator

by OHP, INC.

Fulcrum Insecticide is highly effective against a broad-spectrum of greenhouse and nursery insects. Fulcrum controls nymphs/larvae and pupae and negatively affects development of viable eggs. Use sites include: shrubs, ornamentals, flowering and foliage plants, ground covers and non-bearing fruit and nut trees.

REI 12 Hrs

RATE 2 to 8oz per 100gal

ACTIVE INGREDIENT Pyriproxyfen

CONTROLS Aphids, Fungus Gnats, Leafminers, Whiteflies and more.



32oz

OHP982840 Min. Buy 1ea



Hachi-Hachi® SC Insecticide

by SEPRO CORPORATION

Hachi-Hachi SC provides superior thrips and aphid control with no known resistance and excellent efficacy on scale, leafhoppers and early instar lepidopteran insects.

REI 12 Hrs

RATE 14 to 32oz per 100gal

ACTIVE INGREDIENT Tolfenpyrad

CONTROLS Thrips, Aphids, Scale, Leafhoppers, Lepidopteran Insects, Whiteflies



64oz AGENCY

SEPRO1159.464 Min. Buy 1ea



Gnatrol® WDG Insecticide

by NUFARM AMERICAS INC.

Gnatrol biological insecticide offers effective control of fungus gnat larvae in greenhouse ornamentals and vegetable plants and nurseries. Gnatrol is OMRI listed for organic production.

REI 4 Hrs

RATE 3.2 to 26oz per 100gal

ACTIVE INGREDIENT Bacillus thuringiensis

CONTROLS Fungus Gnat larvae.



16lb

VAL60215.146 Min. Buy 1ea



Hexygon IQ Ovicide/Miticide

by GOWAN

Hexygon miticide provides long-lasting control of mites in ornamental plants and nonbearing fruit trees grown in greenhouses and nurseries. Other use sites include greenhouse tomatoes and select peppers, established ornamental landscape plantings and turf.

REI 12 hours

RATE 4 to 8 oz per 100 gal

ACTIVE INGREDIENT Hexythiazox

CONTROLS Many species of spider mite



1qt

GOW76283 Min. Buy 1ea



Insecticides and Miticides

Kontos® Insecticideby **BAYER CROPPSCIENCE**

Highly effective control of sucking pests including Adelgids, Aphids, Leafhoppers, Mealybugs, Psyllids, Scales, Thrips and Whiteflies. Up to 30 days of residual control. Can be applied by spray or drench application. For use in nurseries, greenhouses and interior plantscapes on ornamentals, vegetable transplants and non-bearing fruit trees.

REI 24 Hrs

RATE 1.7 to 3.4 oz per 100gal

ACTIVE INGREDIENT Spirotetramat

CONTROLS Adelgids, Aphids, Leafhoppers, Mealybugs, Scales and more.



250ml (8.45oz) AGENCY

BYR84915440 Min. Buy 1ea

**Kopa® Insecticidal Soap**by **OHP, INC.**

Kopa insecticidal soap for control of insect and mite pests on vegetables, fruits and ornamental plants grown in greenhouses and outdoors.

REI 12 Hrs

RATE 1 to 3gal per 100gal

ACTIVE INGREDIENT Potassium salts of fatty acids

CONTROLS Wide variety of soft bodied insects and powdery mildew.



2.5gal

OHP985025 Min. Buy 1ea

**LEPROTEC® bt Bioinsecticide**by **VESTARON CORPORATION**

Leprotec is a versatile, liquid formulation of the lepidopteran active Bt kurstaki strain EVB-113-19. It may be used in a wide range of crops including outdoor food, non-food and greenhouses for control of loopers, worms and other caterpillars. Leprotec is OMRI listed, giving growers the flexibility to use on conventional as well as organic acreage.

REI 4 hours

RATE 1-3.5 pints per acre

ACTIVE INGREDIENT Bacillus thuringiensis ssp. kurstaki strain EVB-113-19

CONTROLS Lepidopteran pests such as caterpillars, loopers and worms



1gal

VES192441 Min. Buy 4ea

**Magus® Miticide**by **GOWAN**

A highly effective broad-spectrum miticide with excellent contact and ingestion activity against tetranychid, eriophyid and other key mite pests. It provides quick knockdown and residual activity against mites on a wide range of ornamental crops. Magus is also highly effective at controlling powdery mildew in susceptible crops.

REI 12 Hrs

RATE 12 to 24oz per 100gal

ACTIVE INGREDIENT Fenazaquin

CONTROLS Mites and Whitefly.



32oz

GOW54293 Min. Buy 1ea

Shipping Info HAZARDOUS

**Mainspring® GNL**by **SYNGENTA CROP PROTECTION**

Mainspring GNL insecticide guards greenhouse and nursery crops from key chewing and sucking pests, including thrips, whiteflies, aphids, caterpillars, leafminers, leaf-feeding beetles, soft scales and lacebugs. Controls multiple key pests as a spray or drench, providing extended protection through its systemic and translaminar movement to prevent pest populations from building to damaging levels

REI 4 hours

RATE Foliar- 1 to 12 oz per 100 gal.

Drench - 8 to 12oz per 100 gal.

ACTIVE INGREDIENT Cyantraniliprole

CONTROLS Leafminers, Thrips, Whiteflies, Beetles and more.



16oz AGENCY

SYN58664 Min. Buy 1ea

1 Gallon AGENCY

SYN66345 Min. Buy 1ea

**Mallet® .5G Insecticide**by **NUFARM AMERICAS INC.**

Mallet 0.5G Insecticide protects plants from within, providing fast knock-down, broad-spectrum control, long-lasting grub and insect control with preventive and curative properties. Labeled for use on greenhouse ornamentals, nursery, landscape and turfgrass.

REI 12 hours

RATE 1 to 2 lbs per 1,000 sq ft

ACTIVE INGREDIENT Imidacloprid

CONTROLS Most turf insect pests including Weevils, June bugs, European Chafer, Crickets, and more.



30lb

NTS10176032 Min. Buy 1ea

**Mallet® 2F T&O Insecticide**by **NUFARM AMERICAS INC.**

Mallet 2F Insecticide is a liquid concentrate for the contact and systemic control of insect pests in nearly all residential and commercial settings. Mallet 2F is a neonicotinoid insecticide with long-lasting, residual control in ornamentals, turfgrass, nurseries, vegetable plants in greenhouses and more.

REI 12 Hrs

RATE 2oz per 100gal

ACTIVE INGREDIENT Imidacloprid

CONTROLS Aphids, Lace bugs, Mealybugs, Thrips, Whitefly and more.



1gal

NTS10432041 Min. Buy 1ea

2.5gal

NTS10432225 Min. Buy 1ea



Marathon® G Insecticide

by OHP, INC.

A highly-active insecticide that demonstrates systemic activity in plants and offers residual control on ornamental plants. A granular formula when applied to the soil surface or incorporated into the media offers up to 8 weeks of residual control.

REI 12 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Imidacloprid

CONTROLS Aphids, Fungus Gnat, Whitefly and more.



5lb

OHP985495 Min. Buy 1ea

50lb

OHP985350 Min. Buy 1ea



Mavrik Aquaflow® Insecticide / Miticide

by CENTRAL LIFE SCIENCES

The fast-acting formulation kills a broad-spectrum of greenhouse and nursery pests on contact or through ingestion. It is non-phytotoxic, even on open blooms, which makes it ideal for all plants.

REI 12 Hrs

RATE 4-10oz per 100gal

ACTIVE INGREDIENT Tau-fluvalinate

CONTROLS Aphids, Fungus gnats, Beetles, Mites, Thrips, Whitefly and more.



32oz

WLMK38060A Min. Buy 1ea

1gal

WLMK38040A Min. Buy 1ea



Marathon® II Insecticide

by OHP, INC.

A highly-active insecticide that demonstrates systemic activity in plants and offers residual control on ornamental plants for resale grown in the greenhouse, nursery, and interior plantscapes. A flowable formulation that allows for a foliar spray application. At very low rates Marathon II as a spray offers 3 to 4 weeks of control on sucking and piercing insects.

REI 12 Hrs

RATE 50ml per 100gal

ACTIVE INGREDIENT Imidacloprid

CONTROLS Aphids, Fungus Gnat, Whitefly and more.



250ml (8.45oz)

OHP985250 Min. Buy 1ea



Minx 2® Insecticide

by NUFARM AMERICAS INC.

Delivers quick and broad-spectrum mite and leafminer control in a new low volatile organic compound (VOC), water-based formula. It also works to suppress aphids, whiteflies and thrips. Compared to many other Abamectin products, Minx 2 offers added application flexibility and applicator comfort.

REI 12 Hrs

RATE 4 to 8oz per 100gal

ACTIVE INGREDIENT Abamectin

CONTROLS Mites, Leafminers, Thrips, Aphids, Whiteflies



32oz

NTS10666432 Min. Buy 1ea

1gal

NTS10666041 Min. Buy 1ea



MIGHT VS MITE

WE'LL BET ON MIGHT

INTRODUCING OUR MOST POWERFUL MITE PROGRAM YET

Team proven TetraSan® and Minx™ 2 with NEW Engulf™ GHN Greenhouse and Ornamental Miticide to knock down mites at every life stage.



NUFARM.COM/USTURF

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Insecticides and Miticides

M-Pede® Insecticide / Miticide / Fungicide

by GOWAN

Natural, safe, insecticide, miticide and fungicide that provides excellent contact control of various soft bodied insects, mites and powdery mildew throughout their life cycles.

REI 12 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Potassium Salts of Fatty Acids

CONTROLS Aphids, Thrips, Fungus Gnat, Whitefly and more. Effective against Powdery Mildew.



2.5gal

GOW52822

Min. Buy 1ea

Mural® + Mainspring® GNL Fungicide / Insecticide

by SYNGENTA CROP PROTECTION

Mural fungicide and Mainspring GNL insecticide together in one multipak offers protection from ornamental diseases and pests. Multipak contains 3lbs of Mural and 2 pts of Mainspring.

REI 12 Hrs

RATE Varies according to application. See label.

ACTIVE INGREDIENT Mainspring-Cyantraniliprole, Mural-Azoxystrobin, Benzovindiflupyr

CONTROLS Aphids, Thrips, Whiteflies and more as well as ornamental diseases.



Multipack / Contains 3lb Mural® & 2ea 16oz

Mainspring® GNL AGENCY

SYN60500

Min. Buy 1ea

Mycotrol® ESO Mycoinsecticide

by BIOWORKS INC.

Mycotrol ESO is a mycoinsecticide for the control of Whitefly, Aphids, Thrips and more. Labeled for use on ornamentals and vegetables in greenhouses, nurseries, commercial landscapes, interiorscapes and turf. Organic version of BotaniGard.

REI 4 Hrs

RATE 16 to 64oz per 100gal

ACTIVE INGREDIENT Beauveria bassiana strain GHA

CONTROLS Aphids, Thrips, Whiteflies and more



32oz

BW1B16A22

Min. Buy 1ea

Shipping Info [DIRECT](#)

1gal

BA1B16A23

Min. Buy 1ea

Shipping Info [DIRECT](#)

Mycotrol® WPO Mycoinsecticide

by BIOWORKS INC.

Mycotrol WPO is a mycoinsecticide for the control of Whitefly, Aphids, Thrips and more. Labeled for use on ornamentals and vegetables in greenhouses, nurseries, commercial landscapes, interiorscapes and turf. Organic version of BotaniGard. Wettable powder formulation.

REI 4 Hrs

RATE 1lb per 100gal

ACTIVE INGREDIENT Beauveria bassiana

CONTROLS Aphids, Thrips, Whiteflies and more



1lb

BW1B16A02

Min. Buy 1ea

Shipping Info [DIRECT](#)

NoFly® WP Biological Pesticide

by BLACKSMITH BIOSCIENCE

NoFly WP is a biological pesticide for the control of many early stage greenhouse insect pests. Labeled for use on greenhouse and indoor crops, both food and ornamental.

REI 4 Hrs

RATE 1 to 4lbs per Acre

ACTIVE INGREDIENT Isaria fumosoroseus

CONTROLS Eggs and larvae of Whiteflies, Aphids, Thrips and Mealybugs.



2 lb bag

BBSLGNF0022

Min. Buy 1ea

Shipping Info [DIRECT](#)

Notavo® Miticide

by OHP, INC.

Notavo Ovicide/Miticide is highly effective at controlling eggs and early instar mite stages. Notavo may be used for mite management on commercial ornamental plants grown in greenhouses, saran and shade houses, outdoor containers and field-grown nursery stock.

REI 12 Hrs

RATE 2 to 8oz per 100gal

ACTIVE INGREDIENT Clofentezine

CONTROLS Spider mites



16oz

OHP981081

Min. Buy 1ea

Onyx Pro® Insecticide

by FMC

Onyx Pro insecticide prevents beetles and borers in Christmas trees and nursery grown trees. Also labeled for use on outdoor ornamentals, lawns, sod farms and golf courses to control a wide range of insect pests. Application can be made as a foliar spray or media drench.

REI 12 hours

RATE Varies depending on application method. See label for complete information.

ACTIVE INGREDIENT Bifenthrin

CONTROLS Beetles and borers plus a wide range of other turf and ornamental insect pests.



32oz

FMC19-0032

Min. Buy 1ea

Shipping Info [RESTRICTED USE](#)**Don't See What You Need?**

Use the BFG Mobile app or visit
www.bfgsupply.com to see a
much larger selection

Ornazin® 3EC Insecticide

by **SEPRO CORPORATION**

Insect growth regulator (IGR) that is effective as an antifeedant and as an insect repellent. Practically odorless with a superior formulation that stays in suspension and doesn't clog sprayers. Proven to be non-phytotoxic on most plants and is safe to beneficials. Can be used on ornamentals and greenhouse vegetables and herbs.



32oz Bottle

SEPRO19-0557T Min. Buy 1ea



Overture® 35WP Insecticide

by **NUFARM AMERICAS INC.**

A wettable powder that fights resistance and controls thrips at all life stages, including tough western flower thrips, while also controlling lepidopteran insects. Safe on most beneficial insects.

REI 12 Hrs

RATE 8oz per 100gal

ACTIVE INGREDIENT Pyridalyl

CONTROLS Thrips, Budworm and Cabbage Looper larvae and more.



1lb

VAL62120.084 Min. Buy 1ea



Pedestal® Insect Growth Regulator

by **OHP, INC.**

Effective in controlling a variety of insect pests on ornamental plants. Provides an effective means for controlling whiteflies, thrips, leaf miners, armyworms and certain other foliar feeding insects on container and field grown ornamentals in greenhouses, shade houses and nurseries. Applied as a foliar spray to control immature stages of the target pests.

REI 12 Hrs

RATE 6 to 8oz per 100gal

ACTIVE INGREDIENT Novaluron

CONTROLS Whiteflies, Thrips, Leafminers, lepidoptera



32oz

OHP986195 Min. Buy 1ea



Pradia™

by **OHP, INC.**

Pradia™ insecticide is a combination of two active ingredients for control of a wide variety of pests on ornamental and nursery crops. Pradia™ delivers quick knockdown and lasting residual control of Aphids, Thrips, Whiteflies, Lepidopteran species, and many more.

REI 12 hours

RATE 10 to 17 oz per 100 gallons.

ACTIVE INGREDIENT Cyflumetofenuron and Flonicamid

CONTROLS Adelgids, Gypsy Moth, Japanese Beetles Aphids, Leafminers, Mealybugs, and many more.



32oz

OHP986300 Min. Buy 1ea



Pycana® Insecticide / Miticide

by **OHP, INC.**

Pycana™ is a OMRI Listed Insecticide/Miticide combination product containing pyrethrins and canola oil. Pycana provides quick knockdown of many insects and mites including aphids, leafhoppers, earwigs, plant bugs, psyllids, mealybugs, thrips, whiteflies and spider mites. May be used on ornamentals, fruits, vegetables and herbs grown in greenhouses, shade houses, hoop houses and container grown nurseries.

REI 12 Hrs

RATE 1 to 2% Concentration

ACTIVE INGREDIENT Canola oil and pyrethrins

CONTROLS Aphids, Leafminers, Mealybugs, Thrips, Mites and more.



1gal

OHP986400 Min. Buy 1ea



PyGanic® Specialty Insecticide

by **MYCORRHIZAL APPLICATIONS LLC**

Pyganic Specialty is a professional botanical insecticide that rapidly knocks down and kills pests in greenhouses and nurseries. Labeled for use on ornamental plants, vegetables, fruit and nut trees.

REI 12hours

RATE 2 to 8 oz per 100 gal

ACTIVE INGREDIENT Pyrethrins (5.0 EC)

CONTROLS Aphids, Cabbage Loopers, Fungus Gnats, Whiteflies, and many more.



1gal

MGK19-0545M Min. Buy 1ea

1qt

MGK7444-D30A Min. Buy 1ea



Pylon® Miticide / Insecticide

by **BASF CORP**

A broad-spectrum miticide / insecticide that provides control of mites, thrips and adult fungus gnats. Controls the target insect or mite by interfering with energy production of the pests. Its translaminar movement and mode of action results in mortality of most pests in 72 hours.

REI 12 Hrs

RATE 2 to 10oz per 100gal

ACTIVE INGREDIENT Chlorfenapyr

CONTROLS Mites, Thrips, Foliar Nematodes, Caterpillars, Fungus Gnats



16 oz bottle

BAS59012156 Min. Buy 1ea

64 oz bottle AGENCY

BAS59012566 Min. Buy 1ea



Pylon® TR Miticide / Insecticide

by **BASF CORP**

Easy to use total release fogger for enclosed areas including greenhouses, shade houses and truck trailers.

REI 12 Hrs

RATE One can treats up to 3,000sq ft.

ACTIVE INGREDIENT Chlorfenapyr

CONTROLS Mites, Thrips, Foliar Nematodes, Caterpillars, Fungus Gnats



2 oz aerosol

BAS59012595 Min. Buy 1ea



Insecticides and Miticides

Pyrethrum® TR Insecticide

by BASF CORP

Total release insecticide fogger for indoor use in Garden Centers, Greenhouses and Nurseries. Fast and easy control of many pests including Aphids, Beetles, Fungus Gnats, Caterpillars and many more. For use on ornamentals, flowering plants, vegetables, hanging baskets, bedding plants and more.

REI 12 Hrs

RATE One can treats up to 3,000sq ft.

ACTIVE INGREDIENT Piperonyl butoxide and Pyrethrins

CONTROLS Aphids, Caterpillars, Beetles, Fungus Gnats and more.



2oz aerosol

BAS59011861 Min. Buy 1ea



Pyronyl™ Crop Spray

by CENTRAL LIFE SCIENCES

Pyronyl Crop Spray Is approved for many vegetables, herbs, fruit and nut trees, flowering and foliage plants. It provides a quick knockdown and broad-spectrum control of damaging insects and mites.

REI 12 Hrs

RATE 12 to 24fl oz per 100gal

ACTIVE INGREDIENT Pyrethrins and Piperonyl butoxide

CONTROLS Aphids, Fungus gnats, Beetles, Mites, Thrips, Whitefly and more.



32oz

WLMK100208914 Min. Buy 1ea

1gal

WLMK100208715 Min. Buy 1ea

Shipping Info

HAZARDOUS



Rycar® Insecticide

by SEPRO CORPORATION

Excellent for controlling whiteflies and aphids. It also has extremely good activity on chilia thrips, mealybugs and leafhoppers. Perfect alternative to traditional neonicotinoids. Rycar is very gentle on both beneficial insects and pollinators.

REI 12 Hrs

RATE 1.6 to 6.4 fl oz per 100gal

ACTIVE INGREDIENT Pyriproxyfen

CONTROLS Mealybugs and Leafhoppers



8oz AGENCY

SEPRO1056.128 Min. Buy 1ea



Safari® 20SG Insecticide

by NUFARM AMERICAS INC.

A super-systemic insecticide with quick uptake and knockdown. Controls a broad spectrum of pests including Q- and B-biotype whitefly. Used for indoor and outdoor ornamentals. Can be applied by foliar spray, soil drench, soil injection, or bark application.

REI 12 Hrs

RATE Varies according to application method. See label.

ACTIVE INGREDIENT Dinotefuran

CONTROLS Q- and B-biotype whitefly, Hemlock woolly adelgid, emerald ash borer, mealybug, leafminer, fungus gnat, black vine weevil, glassy-winged sharpshooter, armored and soft scales and aphids



12oz

VAL69712.261 Min. Buy 1ea

3lb

VAL69712.430 Min. Buy 1ea



Sanmite® SC Insecticide

by GOWAN

Sanmite insecticide controls a broad spectrum of pests including aphids, mites, whitefly and leafhoppers on ornamental plants, flowers and foliage crops. Also labeled for use on greenhouse tomatoes and cucumbers. Sanmite provides residual control for 30-45 days.

REI 12 Hrs

RATE 6 to 9oz per Acre

ACTIVE INGREDIENT Pyridaben

CONTROLS Aphids, Thrips, Fungus Gnat, Whitefly and more.



32oz

GOW76279

Min. Buy 1ea

Shipping Info

HAZARDOUS



Sarisa™

by OHP, INC.

Sarisa™ insecticide delivers broad spectrum control of pests on greenhouse ornamentals and nursery crops. Sarisa™ controls leaf feeding beetles and chewing-sucking insects.

REI 4 hours

RATE 10 to 27 oz per 100 gallons.

ACTIVE INGREDIENT Cyclopyridiflupropyl

CONTROLS Adelgids, Gypsy Moth, Japanese Beetles, Aphids, Thrips, Leafminers, Webworms, and many more.



64oz

OHP987100

Min. Buy 1ea



Savate® Insecticide / Miticide

by BAYER CROPSCIENCE

Savate is a staple in a spider mite rotational program and controls all stages of Mites and Whiteflies including eggs and immature stages. The translaminar movement protects upper and lower leaf surfaces and Savate's unique mode of action group (23) makes it a great rotational tool to combat resistance. Up to 30 days of residual control.

REI 12 Hrs

RATE 1 to 4 oz per 100gal

ACTIVE INGREDIENT Spiromesifen

CONTROLS Whiteflies and mites.



8oz AGENCY

BYR84907898

Min. Buy 1ea



Scimitar® GC Insecticide

by SYNGENTA CROP PROTECTION

Scimitar GC insecticide is a microencapsulated pyrethroid formulation that provides time-release control on both surface and subsurface insects. Labeled for use on turf, greenhouse grown ornamentals and outdoor landscapes and ornamentals.

REI 24 Hrs

RATE 3 to 5oz per 100gal

ACTIVE INGREDIENT Lambda-cyhalothrin

CONTROLS Ants, Aphids, Leafminers and many more.



32oz

SYN73419

Min. Buy 1ea

Shipping Info RESTRICTED USE



Sevin® 4SL Insecticide

by **BAYER CROPSCIENCE LP**

Sevin 4SL insecticide is a fast-acting, broad-spectrum, contact insecticide for use on ornamentals, vegetable and fruits. Controls more than 80 ornamental pests.

REI 12 Hrs

RATE 0.75-1qt per 100gal

ACTIVE INGREDIENT Carbaryl

CONTROLS Over 80 key ornamental insect pests



2.5gal bottle

PROKZ3636589 Min. Buy 1ea



Shuttle O® Miticide

by **OHP, INC.**

An excellent choice as a rotational tool for control of two-spotted spider mites, spruce spider mites and other mites. For use on ornamentals grown in greenhouses, container and field nurseries, lath and shade houses, arboretums, interiorscapes and on greenhouse grown fruiting vegetables.

REI 12 Hrs

RATE 6 to 12oz per 100gal

ACTIVE INGREDIENT Acequinolyl

CONTROLS Two spotted spider mites, Spruce spider mites, Strawberry spider mites and more.



16oz

OHP987400 Min. Buy 1ea



Sirocco® Miticide

by **OHP, INC.**

Provides quick knockdown and long residual control of a wide variety of insects and pests such as thrips and mites. May be used in greenhouse, shade houses, nurseries including Christmas tree and conifer plantations, landscapes and interiorscapes.

REI 12 Hrs

RATE 3 to 6oz per 100gal

ACTIVE INGREDIENT Bifenazate + Abamectin

CONTROLS Mites, thrips, aphids, whiteflies



8oz

OHP987832 Min. Buy 1ea

Shipping Info **HAZARDOUS**



SPEAR®-Lep Bioinsecticide

by **VESTARON CORPORATION**

Spear®-Lep is a biological insecticide that contains the peptide active ingredient GS-omega/kappa-Hctx-Hv1a. It is for use on ornamental plants and edible crops. To be effective against the labelled lepidopteran and coleopteran pests, Spear®-Lep must be tank mixed with Bacillus thuringiensis (Bt) products or another product that assists in moving the active ingredient to the site of activity. When ingested at labelled rates along with Bt, Spear®-Lep functions as a central nervous system inhibitor

REI 4 hours

RATE 1-2 pints per acre

ACTIVE INGREDIENT GS-omega/kappa-Hctx-Hv1a

CONTROLS Lepidopteran pests such as caterpillars, loopers and worms



1gal

VES191241 Min. Buy 4ea



Spear-T® Insecticide / Miticide

by **VESTARON CORPORATION**

Spear-T® Liquid Concentrate is a biological insecticide/miticide for treatment of thrips, whiteflies, two spotted spider mites, broad mites and aphids in vegetables in greenhouses. It features a new mode of action, environmentally friendly, safe for honeybees. Can be sprayed or fogged, labeled for greenhouse use only.

REI 4 Hr

RATE 25% v/v

ACTIVE INGREDIENT GS-omega/kappa-Hctx-Hv1a

CONTROLS Thrips, whiteflies, two-spotted spider mites, broad mites, aphids, spotted wing drosophila



1gal

VESBT128 Min. Buy 1ea



SuffOil-X® Insecticide/Miticide/Fungicide

by **BIOWORKS INC.**

Suffocates and kills eggs, larvae, nymphs and adult soft bodied insects and mites and controls fungi including powdery mildew. The unique spray oil emulsion formulation stays in suspension better than other oils and the smaller oil particles provide uniform coverage with less chance of phytotoxicity. Use on vegetables, nursery, landscape, ornamental and greenhouse crops.

REI 4 Hrs

RATE 1 to 2gal per 100gal

ACTIVE INGREDIENT Mineral Oil

CONTROLS Many pests and diseases. See label.



2.5gal

BW1SX25A24 Min. Buy 1ea

30gal Drum

BW1SX25A38 Min. Buy 1ea

Shipping Info **DIRECT**



Sultan® Miticide

by **BASF CORP**

Sultan is a contact miticide for rapid spider mite control on ornamentals grown in greenhouses, shade houses, nurseries and residential and commercial landscapes. Sultan has excellent plant safety and has shown no adverse effects on beneficial insects.

REI 12 Hrs

RATE 13oz per 100gal

ACTIVE INGREDIENT Cyflumetofen

CONTROLS Spider mites



16 oz bottle AGENCY

BAS59013978 Min. Buy 1ea

Shipping Info **HAZARDOUS**



Insecticides and Miticides

Talstar® Nursery Granular Insecticide

by FMC

Talstar Nursery granular insecticide penetrates soil to control target pests without altering the pH balance of the soil. Talstar Nursery features a light stable active ingredient in a sand granule allowing optimal distribution in the soil with a long lasting residual effect. Granular formulation for incorporation into potting media.

REI 12 hours

RATE 1 to 2lbs per 200cu yd of media.

ACTIVE INGREDIENT Bifenthrin

CONTROLS Fungus Gnat larvae, Mealybugs, Black Vine Weevil, White Grubs, and more.



50lb Bag

FMC19-0303H Min. Buy 1ea



Talstar® Professional Insecticide

by FMC

Controls pests indoors and outdoors on residential, commercial and industrial buildings, greenhouses, lawns, ornamentals and more. Talstar Pro Insecticide provides broad-spectrum control of the toughest lawn and ornamental pests.

REI 12 hours

RATE 0.125 to 1.0 FL oz/per 1,000sq ft

ACTIVE INGREDIENT Bifenthrin



32oz

FMC19-0303F Min. Buy 1ea

1gal

FMC10056776 Min. Buy 1ea



Talstar® Select Insecticide

by FMC

Talstar Select provides long-lasting residual control of aphids, black vine weevils, scale and other nursery pests without the risk of damaging sensitive plants. It is non-staining and contains no odorous or plant-damaging solvents, so it can be applied to open blooms and colored bracts right up to the day of shipment.

REI 12 hours

RATE 5 to 40oz per Acre

ACTIVE INGREDIENT Bifenthrin

CONTROLS Aphids, caterpillars, scale, mites, fungus gnats, mealybugs, thrips, whiteflies and many more



1gal

FMC19-0303G Min. Buy 1ea

Shipping Info RESTRICTED USE



Talus® 70DF Insect Growth Regulator

by SEPRO CORPORATION

Talus delivers toxicity to pests via contact, ingestion and vapor activity. There is little or no systemic movement of Talus in plants, but its vapor activity allows it to reach leaf undersides where many pest species dwell and it helps protect new growth. In addition to its primary mode of action, Talus also suppresses egg-laying and causes egg sterility in treated adults through secondary hormonal activity.

REI 12 Hrs

RATE 6 to 14oz per 100gal

ACTIVE INGREDIENT Buprofezin

CONTROLS Whiteflies, Mealybugs, Leafhoppers, Planthoppers, Scales



3lb

SEPRO19-0307B Min. Buy 1ea



Tame® 2.4EC Insecticide / Miticide

by NUFARM AMERICAS INC.

Broad spectrum insecticide that can be used in commercial lath houses, shade houses and greenhouses, as well as outdoors. It's gentle on delicate ornamentals and it's deadly to whitefly, aphid, scale and mites. Can be used on most ornamentals without fear of phytotoxicity.

REI 12 Hrs

RATE 5-1/3 to 10-2/3oz per 100gal

ACTIVE INGREDIENT Fenpropathrin

CONTROLS Aphids, Glassy-winged sharpshooters, Mites, Whitefly and more.



32oz

VAL69670.928 Min. Buy 1ea

Shipping Info RESTRICTED USE HAZARDOUS



TetraCURB™ Concentrate Miticide-Insecticide

by KEMIN INDUSTRIES INC

Kills and repels mites and small soft-bodied insects such as two-spotted spider mites, aphids, whiteflies, thrips, lygus or mealybugs. Labeled for use on all crops. Controls all pest life stages. Emulsifiable concentrate, smart blend of soap and emulsifier for greater spread, efficacy and minimal phytotoxicity. Recommended application rate: 64 fl. oz./100 gal water. Foliar spray.

REI 0 Hours

RATE 32 to 128 oz per 100 gal

ACTIVE INGREDIENT Rosemary Oil

CONTROLS Mites, Whitefly, Aphids, and other small soft-bodied insects.



1gal

KEM018139GL Min. Buy 1ea

Shipping Info HAZARDOUS



TetraSan® WDG Insecticide

by NUFARM AMERICAS INC.

With contact and translaminar movement, TetraSan controls spider mites on the underside of leaves, even when it's difficult to get good under-leaf spray coverage. Formulated to affect all stages of the mite life cycle, offers residual control up to five weeks and is safe to most beneficials.

REI 12 Hrs

RATE 8 to 16oz per 100gal

ACTIVE INGREDIENT Etoxazole

CONTROLS Mites



1lb

VAL69760.084 Min. Buy 1ea



Triact 70® Botanical Oil

by OHP, INC.

A broad-spectrum fungicide, miticide and insecticide. Highly effective and economical botanical oil that may be used indoors as well as outdoors on ornamental flowering plants, trees, shrubs and foliage grown in greenhouses, interiorscapes and commercial landscapes. As a fungicide, it is a preventative as well as a curative. It coats fungal spores and then dehydrates them to stop the disease cycle.

REI 4 Hrs

RATE 0.5 to 2gal per 100gal

ACTIVE INGREDIENT Neem oil

CONTROLS Wide range of insect pests and powdery mildew. See label for complete list.



2.5gal

OHP988500 Min. Buy 1ea



Insecticides and Miticides

TriStar® 8.5SL Insecticide

by NUFARM AMERICAS INC.

An odorless, water-based formulation that mixes easily and works with contact, systemic and translaminar activity to protect plants. Absorbs and spreads within the plant to provide quick knockdown of a wide spectrum of insects, in as little as 15 minutes as a direct spray. Up to 4 weeks residual control on bedding plants, 4 to 6 weeks on woody ornamentals and trees.

REI 12 Hrs

RATE 8 to 16oz per 100gal

ACTIVE INGREDIENT Acetamiprid

CONTROLS Aphids, Lace bugs, Mealybugs, Thrips, Whitefly and more.



32oz

NTS10520432 Min. Buy 1ea

1gal

NTS10520041 Min. Buy 1ea



Ventigra® Insecticide

by BASF CORP

Ventigra provides effective control of piercing/sucking insect pests in production and landscape ornamentals and vegetable transplants. A unique mode of action subgroup allows control of pests that have developed resistance to other insecticides. Ventigra exhibits low acute toxicity to beneficial insects and pollinators. Labeled for use in the following sites: nurseries, commercial and residential landscapes, greenhouses, shadehouses, and interiorscapes.

REI 12 hours

RATE 1.7 to 7 oz per 100 gal.

ACTIVE INGREDIENT Afidopyropen

CONTROLS Aphids, Whitefly, Mealybugs



20 oz bottle AGENCY

BAS59014680 Min. Buy 1ea



Ultra Pure® Horticultural Oil

by BASF CORP

Ultra Pure Oil is a year round spray oil for control of insects, mites and fungus. 98% mineral oil labeled for use on fruit and nut crops, outdoor and greenhouse vegetables, flowering and foliage ornamentals, trees and shrubs. OMRI

REI 4 Hrs

RATE 0.5 to 2gal per 100gal

ACTIVE INGREDIENT Mineral Oil

CONTROLS Adult, larval and egg stages of soft-bodied insects and mites. Effective on powdery mildew.



2.5 gal bottle

BAS59011962 Min. Buy 1ea

30gal drum

BAS59011963 Min. Buy 1ea



Venerate® CG Insecticide / Miticide

by MARRONE BIO INNOVATIONS

Venerate bioinsecticide features multiple modes of action is effective against a wide variety of chewing and sucking insects and mites, yet easy on beneficials. The unique and novel modes of action will complement and improve integrated pest management and insect resistance management programs.

REI 4 hours

RATE 2 to 3 oz per 1,000 sq ft.

ACTIVE INGREDIENT Burkholderia spp. Strain A396 cells

CONTROLS Aphids, Mites, Thrips, Whitefly, Mealybugs and more



1qt

MB10086 Min. Buy 1ea

1gal

MB10083 Min. Buy 1ea

2.5 Gallon

MB10097 Min. Buy 1ea



UPL Acephate® 97UP Insecticide

by UPL

Acephate 97UP is an insecticide that provides systemic control of pests on selected agricultural crops and ornamentals. Crop use includes beans, brussel sprouts, cauliflower, celery, and more. Acephate is also labeled for use on non-crop areas such as field borders, fencerows, roadsides and ditchbanks.

REI 24 hours

RATE Varies according to application. See label.

ACTIVE INGREDIENT Acephate

CONTROLS Aphids, Cabbage Looper, Grasshopper, Thrips, Whitefly, and more.



1 lb pack

PROKZ742011 Min. Buy 1ea



Velifer® Fungal Contact Insecticide/Miticide

by BASF CORP

Velifer controls the labeled piercing and sucking insect or mite pests in enclosed commercial greenhouses on ornamentals, fruits, vegetables, herbs and spices, including vegetable, fruit, herb, and spice transplants for the consumer market. Velifer is compatible with beneficial insects.

REI 4 hours

RATE 3 to 13 oz per 100 gallons

ACTIVE INGREDIENT Beauveria bassiana strain PPRI 5339

CONTROLS Aphid, Whitefly, Thrips, Mites, Mealybug, and more.



32 oz bottle

BAS59018345 Min. Buy 1ea



XXpire™ WG insecticide

by Corteva

Effective on 39 pests, and seven of the top 10 most troublesome ornamental insects. Controls chewing and sap-feeding insects commonly found in nurseries, greenhouses and commercial landscapes.

REI 12 hours

RATE 4 to 7 oz per acre

ACTIVE INGREDIENT sulfoxaflor and spinetoram

CONTROLS aphids, lepidopterous larvae, mealybugs, thrips, whiteflies, and more.



1lb

DOW11080911 Min. Buy 1ea

Shipping Info HAZARDOUS



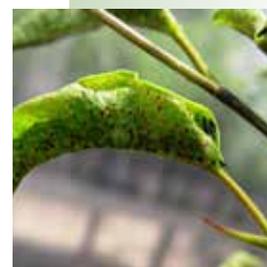
THRIPS *Control Strategies*

Importance: Western Flower Thrips (*Frankliniella occidentalis*) are known to vector plant pathogens such as Impatiens necrotic spot virus, and tomato spotted wilt virus. They cause stippling, scarring, silvering of the leaf surface, distorted leaves, and corky lesions on fruits by piercing leaves with one mouthpart and sucking the plant fluids through a stylet.

Identification: Thrips are minute insects that have an elongated body shape. Adults have fringed wings while the immature stages are wingless, off white to translucent in color, 1/20 inch long. Feeding is evidenced by black specks of frass excrement. Scouting can be as simple as smacking a leaf over a white paper, or using yellow or blue sticky cards, then examining with at least a 10X hand lens.

Life Cycle: A typical life cycle is 21 days but can be as little as 14 days in high temperatures. Eggs are inserted into leaf tissue and deep in flower buds, followed by two larval stages, two non-feeding pupal stages which drop to the soil media, then adulthood.

Control: Chemical control is challenging due to larvae deep inside buds being protected from insecticide sprays. Some growers add irritants like Captiva Prime to their tank mix in order to draw the thrips from hiding and into contact with insecticides. Soil applied systemics may not control thrips inhabiting flower buds and blooms, as movement of these materials into flower tissues is limited. Practicing resistance management is vitally important with this pest due to rapid life cycles and the potential of resistance development to overused control agents. Avoid resistance by rotating across the mode of action groups (MOA's).



Brand Name	BFG Item #	Active Ingredient	Mode of Action Group	Notes
Overture	VAL62120.084	Pyridalyl	UN	Contact and ingestion. Greenhouse use only. Soft on beneficials.
Hachi-Hachi SC	SEPRO1159.464	Tolfenpyrad	21A	Contact. Greenhouse use only.
Pylon	BAS59012156 BAS59012566	Chlorfenarpyr	13	Contact and stomach. Greenhouse use only. Vegetable label.
Mainspring	SYN55664 SYN66345	Cyantraniliprole	28	Translaminar & Systemic. Foliar or Drench Application. Soft on Beneficials.
Pedestal	OHP986195	Novaluron	15	Insect growth regulator, excellent on immatures. Tomato label.
Safari	VAL69712.430 VAL69712.261	Dinotefuran	4A	Translaminar & Systemic. Foliar or Drench Application. Vegetable label.
Conserve	DOW19-0007Z	Spinosad	5	Contact. Fruit and Vegetable label.

Always read and follow label directions before applying any pesticide and follow state and local regulations.



For more information or to place an order

Please contact your BFG Sales Representative or our Customer Service Team!



BIOLOGICAL CONTROLS

These agents are the predacious mites *Amblyseius cucumeris* and *Amblyseius swirskii*, whose larvae feed on the eggs and immatures of thrips. Orius (Predatory bugs) are another agent that can be used.



Overture VAL62120.084



(Pyridalyl) MOA: UN unknown. Caution. 12 HR REI. RATE: 8oz/100 gal. Contact and ingestion. A novel mode of action, makes it a great rotation partner. Enclosed greenhouses only. Translaminar within the leaf. Controls immatures and adults. Apply no more than 2 times per crop to manage resistance. Soft on beneficials.



Hachi-Hachi SC SEPRO1159.464



(Tolfenpyrad) MOA: 21A. Warning. 12HR REI. RATE: 21-32 0z/100 gal. Contact. Greenhouse use only. Non neonicotinoid option. Improved SC formulation allows better crop safety than original EC version. Potential phytotoxic on some species, do not apply to Geranium, Impatiens, New Guinea Impatiens, Poinsettia bracts, Vinca, Salvia.



Pylon BAS59012156 BAS59012566



(Chlorfenapyr) MOA: 13. Caution. 12 HR REI. RATE: 5.2-10 oz/100 gal. Contact and stomach. Translaminar activity Cost effective, broad spectrum, including Chili thrips, the only product in Class 13. Greenhouse use only. Not ovicidal. No more than 3 applications per crop. 14-21 day residual. Vegetable label.



Mainspring SYN55664 SYN66345



(Cyantraniliprole) MOA: 28. Caution. 4HR REI. RATE: Foliar spray 2-8oz /100gal, drench 8-12oz /100 gal. Unique new class, insects stop feeding immediately, Translaminar and systemic activity, soft on beneficial insects. Broad spectrum activity & lasting residual control.



Pedestal OHP986195



(Novaluron) MOA: 15. Caution. 12 HR REI. RATE: 6-8oz /100 gal. Insect growth regulator, excellent on immatures. Do not apply to poinsettias. Compatible with IPM programs. Tomato label.



Safari VAL69712.430 VAL69712.261



(Dinotefuran) MOA: 4A. Caution. 12 HR REI. RATE: Vegetable transplants & foliar spray 4-8oz /100 gal. Drench 12-24oz /100 gal. Quick systemic & translaminar activity. Broad spectrum.



Conserve DOW19-0007Z



(Spinosad) MOA: 5. 4 HR REI. RATE: indoor 6oz /100 gal, outdoor rate 11oz / 100 gal. Contact activity. Labeled for fruits & vegetables. Quick kill via contact & ingestion.

Biological Control Agents

	Aphids	Fungus Gnat	Leafminer	Shore Fly	Mealybug	Mites	Thrips	Whitefly
<i>Amblyseius andersoni</i>						X		
<i>Aphidoletes aphidimyza</i>	X							
<i>Amblyseius californicus</i>						X		
<i>Amblyseius cucumeris</i>						X	X	
<i>Amblyseius swirskii</i>							X	X
<i>Aphidius colemani</i>	X							
<i>Aphidius ervi</i>	X							
<i>Cryptolaemus montrouzieri</i>					X			
<i>Dalotia (Atheta) coriaria</i>		X (larvae)		X (larvae)				
<i>Diglyphus isaea</i>			X					
<i>Encarsia formosa</i>								X
<i>Eretmocerus eremicus</i>								X
<i>Hypoaspis miles</i>		X (larvae)					X (larvae)	
<i>Orius insidiosus</i>							X	
<i>Phytoseiulus persimilis</i>						X		
<i>Steinernema carpocapsae</i>		X (larvae)		X (larvae)				
<i>Steinernema feltiae</i>		X (larvae)					X	



Biological Control Agents - Black Vine Weevils

BASF® Nemasys® L Beneficial Nematodes
by BASF CORP

Nemasys L (steinernema kraussei) beneficial nematodes provide biological control of the larval stage of Black Vine Weevil. Can be applied by spray or drench. They attack and kill targeted pests without affecting any other organisms. Sold in a tray containing 250 million nematodes. Minimum order is 2 trays.

REI 0 Hrs

RATE 250 Million Will Treat Approximately 5,500sq ft

ACTIVE INGREDIENT Steinernema kraussei

CONTROLS Black Vine Weevil.



2 Trays of 250 Million

BAS59014482 Min. Buy 5ea

Shipping Info **DIRECT**



Biological Control Agents - Fungus Gnats & Thrips

BASF® Nemasys® Beneficial Nematodes
by BASF CORP

Nemasys (steinernema feltiae) beneficial nematodes provide biological control of Thrips and the soil dwelling stages of Fungus Gnats. They attack and kill targeted pests without affecting any other organisms.

REI 0 Hrs

ACTIVE INGREDIENT Steinernema feltiae

CONTROLS Thrips and Fungus Gnats.



5 Trays of 250 Million

RATE 250 Million Will Treat Approximately 5,500sq ft

BAS59014486 Min. Buy 1ea

Shipping Info **DIRECT**

5 Trays of 50 Million

RATE 50 Million Will Treat Approximately 1,100sq ft

BAS59014493 Min. Buy 5ea

Shipping Info **DIRECT**



Biological Control Agents - Shore Flies

Millenium® Beneficial Nematodes
by BASF CORP

Millenium (Steinernema carpocapsae) beneficial nematodes protect plants from damage from Shore flies and other soil dwelling insects. They attack and kill targeted pests without affecting any other organisms. Sold in a tray of 250 million nematodes. The minimum purchase is 5 trays.

REI 0 Hrs

RATE 250 Million Will Treat 2,750 to 5,400sq ft

ACTIVE INGREDIENT Steinernema carpocapsae

CONTROLS Shore flies



5 Trays of 250 Million

BAS58067388 Min. Buy 1ea

Shipping Info **DIRECT**



**Plant Health from seed to shelf
with Intrinsic® Brand Fungicides**

Incorporate Intrinsic brand fungicides into your rotation for broad-spectrum disease control and plant health benefits providing stronger, denser roots and increased growth efficiency throughout the growing cycle.

betterplants.basf.us

Always read and follow label directions.

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Pageant®
Intrinsic® Brand Fungicide

Empress®
Intrinsic® Brand Fungicide

Orkestra®
Intrinsic® Brand Fungicide



Biological Control Agents - Aphids

Adaline b™ Adalia bipunctata Aphid control

by BIOLINE AGROSCIENCES, INC.

Adalia bipunctata is also known as the two-spotted ladybug. Both larvae and adults are voracious predators of many aphid species. This ladybug consumes all aphid stages and can eat up to 100 aphids per day. Adalia bipunctata is used in many ornamental, fruit and vegetable crops. Sold as a bottle containing 250 beetles.

RATE Covers up to 500 sq ft

ACTIVE INGREDIENT Adalia bipunctata

CONTROLS Aphids



250 per bottle

BIOLNP0041-04 Min. Buy 1ea

Shipping Info **DIRECT**

Aphidoline™ Aphidoletes aphidimyza Aphid Control

by BIOLINE AGROSCIENCES, INC.

Aphidoletes aphidimyza is a curative treatment for aphid infestation; larvae reported as feeding on 60 species. The emerging midges mate and then lay eggs near aphid colonies. The eggs hatch into highly visible orange larvae which feed on the colonies of all types of aphids.

RATE Covers up to 1,000sq ft

ACTIVE INGREDIENT Aphidoletes aphidimyza

CONTROLS Aphids



Loose Larvae in Bottles

1,000 Loose Midge per Bottle

BIOLNP0151-01 Min. Buy 1ea

Shipping Info **DIRECT**

Larvae in Blister Packs

4ea of 250 Midge per Controlled Released Blister Packs

BIOLNP0151-05 Min. Buy 1ea

Shipping Info **DIRECT**



Aphiline™ Aphidius colemani + Aphidius ervi Aphid Control

by BIOLINE AGROSCIENCES, INC.

Aphid parasite mix, ideal for ornamental producers and professional nurseries, as well as hobby gardeners. Mix contains 2 parasites (Aphidius colemani and Aphidius ervi) in one pack providing multiple control of all important aphids. Adults begin to emerge in transit ready for action.

RATE Covers up to 1,000sq ft

ACTIVE INGREDIENT Aphidius ervi and Aphidius colemani

CONTROLS Aphids



500 Loose Parasites per Bottle

BIOLNP0182-01 Min. Buy 1ea

Shipping Info **DIRECT**



Aphiline™ Aphidius colemani Aphid Control

by BIOLINE AGROSCIENCES, INC.

Aphiline biological control agent contains the Braconid wasp, Aphidius colemani. This wasp stings and parasitizes smaller aphid species, such as the melon or cotton aphid, peach aphid and tobacco aphid. Suitable for all greenhouse crops.

ACTIVE INGREDIENT Aphidius colemani

CONTROLS Aphids



Loose Larvae in Vials or Bottles

1,000 Loose Larvae per Hot Spot Vial

RATE Covers up to 20,000sq ft

BIOLNP0102-04 Min. Buy 1ea

Shipping Info **DIRECT**

5,000 Loose Larvae per Bottle

RATE Covers up to 100,000sq ft

BIOLNP0102-05 Min. Buy 1ea

Shipping Info **DIRECT**



Larvae in Blister Packs

10ea of 100 Larvae per Controlled Released Blister Packs

RATE Covers up to 10,000sq ft

BIOLNP0102-09 Min. Buy 1ea

Shipping Info **DIRECT**



Chrysoline™ Chrysoperla carnea (Lacewing) Aphid Control

by BIOLINE AGROSCIENCES, INC.

Chrysoperla carnea larvae are predators of aphids and other pests before developing into Lacewing adults. Chrysoline arrives as young larvae with full feeding potential. One larvae can eat 200 aphids. As adults they disperse and hunt down aphid colonies. Easy to observe and monitor.

RATE covers up to 1000 sq ft

ACTIVE INGREDIENT Chrysoperla carnea

CONTROLS Aphids



1000 larvae per bag

BIOLNP0301-04 Min. Buy 1ea

Shipping Info **DIRECT**



Chrysoline™ Chrysoperla carnea Aphid Control

by BIOLINE AGROSCIENCES, INC.

Chrysoperla carnea larvae are predators of aphids and other pests before developing into lacewing adults. Young larvae with full feeding potential, one larva can eat 200 aphids. As adults they disperse and hunt down aphid colonies. Easy to observe and monitor.

RATE Covers up to 2,500sq ft

ACTIVE INGREDIENT Chrysoperla carnea

CONTROLS Aphids



2,500 Loose Larvae per Bag

BIOLNP0301-07 Min. Buy 1ea

Shipping Info **DIRECT**



Biological Control Agents - Aphids

Cryptoline™ Cryptolaemus montrouzieri Aphid Control

by **BIOLINE AGROSCIENCES, INC.**

The Cryptoline vial contains 25 adult Cryptolaemus montrouzieri. Females can lay 10 eggs per day. Both the adults and larvae feed on Aphids, their eggs and their larvae. Release near Aphid infestations.

RATE Varies

ACTIVE INGREDIENT Cryptolaemus montrouzieri

CONTROLS Aphids



25 beetles per bottle

BIOLNP0351-01 Min. Buy 1ea

Shipping Info **DIRECT**

Erviline™ Aphidius ervi Aphid Control

by **BIOLINE AGROSCIENCES, INC.**

Aphidius ervi females seek out and parasitize aphids. The main targets for this parasitoid in commercial crops are Macrosiphum euphorbiae and Aulacorthum solani. Erviline is supplied as emerging adult parasites in vials with a feeding strip. Adults begin to emerge in transit, so they are ready for release directly onto identified aphid colonies.

RATE Covers up to 5,000sq ft

ACTIVE INGREDIENT Aphidius ervi

CONTROLS Aphids



250 Loose Adult Wasps per Bottle

BIOLNP0103-01 Min. Buy 1ea

Shipping Info **DIRECT**



Biological Control Agents - Black Vine Weevils

Exhibitline Hb™ Heterorhabditis bacteriophora Weevil and Grub control

by **BIOLINE AGROSCIENCES, INC.**

Heterorhabditis bacteriophora nematodes help control weevil and grub larvae. Can be applied by spray or drench. Sold in a tray of 250 million.

RATE One 250 Million Tray Will Cover 5,000sq ft

ACTIVE INGREDIENT Heterorhabditis bacteriophora

CONTROLS Black Vine Weevil



250 mil tray

BIOLNP1021-02 Min. Buy 1ea

Shipping Info **DIRECT**

Biological Control Agents - Caterpillars

Tricholine® TB Biological Insect control

by **BIOLINE AGROSCIENCES, INC.**

Trichogramma brassicae is a parasitic wasp that controls lepidopteran pests including caterpillars and cabbage loopers. It can be used in a wide range of crops including tomato, bell peppers, aubergines, ornamentals, tobacco and bananas.

RATE varies

ACTIVE INGREDIENT Trichogramma brassicae

CONTROLS Lepidopteran pests, Cabbage Loopers, Caterpillars



Parasitized Eggs Attached to Cards

25 Cards, 2,500 Parasitized Eggs per Card

BIOLNP0451-32 Min. Buy 1ea

Shipping Info **DIRECT**

Parasitized Eggs in Capsules

100 Capsules, 2,700 Parasitized Eggs per Capsule

BIOLNP0451-23 Min. Buy 1ea

Shipping Info **DIRECT**

Tricholine® TP Biological Insect Control

by **BIOLINE AGROSCIENCES, INC.**

Trichogramma pretiosum is a parasitic wasp that controls lepidopteran pests. A more generalized predator, pretiosum can attack up to 200 different species of lepidoptera. It can be used in a wide range of crops including vegetables, ornamentals, vineyards, and other row crops. Sold as a case of 90 biodegradable capsules each containing 1000 parasitized eggs.

RATE varies

ACTIVE INGREDIENT Trichogramma pretiosum

CONTROLS Lepidopteran pests, Cabbage Loopers, Caterpillars



Parasitized Eggs in Capsules

90 Capsules, 1,000 Parasitized Eggs per Capsule

BIOLNP0461-03 Min. Buy 1ea

Shipping Info **DIRECT**

Parasitized Eggs Attached to Cards

50 Cards, 2,500 Parasitized Eggs per Card

BIOLNP0461-05 Min. Buy 1ea

Shipping Info **DIRECT**



Biological Control Agents - Fungus Gnats

Exhibitline™ GH Mix *Steinernema feltia* - *carpocapsae* Fungus Gnat, Thrips, Cutworm control

by **BIOLINE AGROSCIENCES, INC.**

Steinernema feltia and *carpocapsae* together in one mix for control of Fungus Gnat, Thrips, Leather Jacket and Cutworms.

RATE Varies

ACTIVE INGREDIENT *Steinernema feltia* and *Steinernema carpocapsae*

CONTROLS Fungus Gnat, Thrips, Leather Jacket and Cutworms



1 million on sponge

BIOLNP1011-10 Min. Buy 1ea

Shipping Info **DIRECT**

6 million on sponge

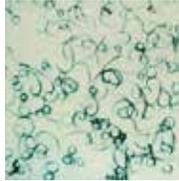
BIOLNP1011-11 Min. Buy 1ea

Shipping Info **DIRECT**

24 million on sponge

BIOLNP1011-12 Min. Buy 1ea

Shipping Info **DIRECT**



Exhibitline sc™ *Steinernema carpocapsae* Leather Jacket and Cutworm Control

by **BIOLINE AGROSCIENCES, INC.**

Steinernema carpocapsae beneficial nematodes protect plants from damage caused by shore flies (*Scatella stansalis*) and a variety of other soil-dwelling insects and borers. They also destroy the larvae of many turf, ornamental and tree pests including flea, billbug and bluegrass weevil larvae as well as cutworm, armyworm, sod webworm, tropical sod webworms and chinch bugs.

ACTIVE INGREDIENT *Steinernema carpocapsae*

CONTROLS Leather Jackets and Cutworms.



250 Million Tray

RATE One 250 Million Tray Will Cover 5,000sq ft

BIOLNP1012-01 Min. Buy 1ea

Shipping Info **DIRECT**

50 mil tray

RATE One 50 Million Tray Will Cover 1,000sq ft

BIOLNP1012-02 Min. Buy 1ea

Shipping Info **DIRECT**



Exhibitline sf™ *Steinernema feltia* Fungus Gnat and Thrips control

by **BIOLINE AGROSCIENCES, INC.**

Steinernema feltia nematodes help control Fungus Gnat and Thrips. Harmless to the ornamental crops, humans, the environment and other beneficial insects, these nematodes actively seek out fungus gnat larvae by swimming in the thin film of water on soil particles. They locate hosts by detecting carbon dioxide and other waste products. Sold in a gel tray with 50 million nematodes each.

RATE 50 mil tray will cover 1,000 sq ft

ACTIVE INGREDIENT *Steinernema feltia*

CONTROLS Fungus Gnat and Thrips



50 mil tray

BIOLNP1011-01 Min. Buy 1ea

Shipping Info **DIRECT**



Biological Control Agents - Fungus Gnats

Hypoline™ *Hypoaspis miles* Fungus Gnat Control

by **BIOLINE AGROSCIENCES, INC.**

Hypoaspis miles attacks and kills the larvae of sciarid flies and will also consume thrips larvae that drop to the growing medium to pupate, making it a useful addition to other Western Flower Thrips control products. Also attacks and kills larvae of Fungus Gnats, but not eggs or pupae. Up to eight, first instar larvae may be attacked and consumed each day by adult *Hypoaspis*. Normally found within the top half inch of soil / growing media, females lay eggs which hatch after six days. The larvae activity feed for 10 days and continue to feed as an adult. Adults live for several months when food is readily available. Feeding on a wide range of soil / growing media pests.

ACTIVE INGREDIENT *Hypoaspis miles*

CONTROLS Fungus Gnat, Shore Fly and Thrips pupae.



125,000 Loose Larvae per Tub

RATE Covers up to 5,000sq ft

BIOLNP0091-04 Min. Buy 1ea

Shipping Info **DIRECT**

25,000 Loose Larvae per Tube

RATE Covers up to 1,000sq ft

BIOLNP0091-03 Min. Buy 1ea

Shipping Info **DIRECT**



Staphyline™ *Atheta coriaria* Fungus Gnat and Shore Fly Control

by **BIOLINE AGROSCIENCES, INC.**

Staphyline biological control agent contains the predatory beetle, *Atheta coriaria*. It can be used in crops such as herbs and ornamentals to protect against soil and compost pests. This rove beetle is a generalist arthropod feeder, but the adults and young stages are particularly good at feeding on the larvae of Fungus Gnat and Shore Flies. Formulation contains mixed life stages – adults, larvae, pupae and eggs – for a balanced population.

ACTIVE INGREDIENT *Atheta coriaria*

CONTROLS Fungus Gnat and Shore Flies.



3,000 Loose Larvae per Tub

RATE Covers up to 3,000sq ft

BIOLNP0061-02 Min. Buy 1ea

Shipping Info **DIRECT**

500 Loose Larvae per Tube

RATE Covers up to 500sq ft

BIOLNP0061-01 Min. Buy 1ea

Shipping Info **DIRECT**



Biological Controls - Leafminers

Digline™ *Diglyphus* Leaf Miner Control

by **BIOLINE AGROSCIENCES, INC.**

Diglyphus isaea is a widespread parasitoid of leaf miner larvae. It is reported from a large number of host species, but commercially is of interest as a parasite of *Liriomyza bryoniae*, *L. trifolii* and *L. huidobrensis*, as well as of the Chrysanthemum Leaf miner *Phytomyza syngenesiae*. The adult wasps are very variable in size and are a dark metallic green in color. They search for host larvae of suitable size within leaf tissue and sting them through the leaf cuticle. The sting paralyzes the host larva within a short time and the female wasp then lays one or more eggs alongside it.

RATE Covers up to 5,000sq ft

ACTIVE INGREDIENT *Diglyphus isaea*

CONTROLS Leafminer pests



250 Loose Larvae per Vial

BIOLNP0551-01 Min. Buy 1ea

Shipping Info **DIRECT**



Biological Control Agents - Mealy Bugs

Cryptoline Cryptolaemus montrouzieri Mealy Bug Control

by BIOLINE AGROSCIENCES, INC.

The Cryptoline bottle contains 500 adult Cryptolaemus montrouzieri. Females can lay 10 eggs per day. Both the adults and larvae feed on Mealy bugs, their eggs and their larvae. The life cycle of the Cryptolaemus montrouzieri takes from 4 to 7 weeks depending on temperature. Release near Mealy bug infestations.

ACTIVE INGREDIENT Cryptolaemus montrouzieri

CONTROLS Mealy bugs



500 Adult Beetles per Vial

BIOLNP0351-03 Min. Buy 1ea

Shipping Info **DIRECT**



Biological Control Agents - Mites

Anderline™ Amblyseius andersoni Spider Mite & Rust / Russet Mite Control

by BIOLINE AGROSCIENCES, INC.

Amblyseius andersoni is a predatory mite that can be used in the control of a range of mite pests. This predatory mite is ideal for vegetables, hardy ornamentals and fruit crops, controlling red or two-spotted spider mite, fruit-tree red spider mite and russet mites. It is active at lower temperatures than other predatory mites, which means that it can be introduced much earlier in the growing season than some other predators.

ACTIVE INGREDIENT Amblyseius andersoni

CONTROLS Mites



Buglines (String of Sachets)

6ea of 328ft Buglines - A Continuous String of Controlled Release Sachets

RATE Covers up to 10,000sq ft

BIOLNP0016-05 Min. Buy 1ea

Shipping Info **DIRECT**



Sachets on Sticks

1,000 Sachets on Sticks

RATE One sachet covers one sq yd.

BIOLNP0016-50 Min. Buy 1ea

Shipping Info **DIRECT**



200 Mini Sachets on Sticks

RATE One sachet covers one sq yd.

BIOLNP0016-52 Min. Buy 1ea

Shipping Info **DIRECT**

Sachets with Hooks

200 Controlled Release Mini Sachets with Hooks

RATE Covers up to 4,000sq ft

BIOLNP0016-31 Min. Buy 1ea

Shipping Info **DIRECT**



Loose Mites in Bags, Blister Packs & Bottles

125,000 Loose Mites per Bag

RATE Covers up to 12,500sq ft

BIOLNP0016-02 Min. Buy 1ea

Shipping Info **DIRECT**



4000 Bottle

RATE one bottle will cover approximately 2000 sq ft.

BIOLNP1013 Min. Buy 1ea

Shipping Info **DIRECT**

2000 Blister Pack

RATE one blister pack will cover approximately 200 sq ft.

BIOLNP1012 Min. Buy 1ea

Shipping Info **DIRECT**



25,000 Loose Mites per Tube

RATE Covers up to 2,500sq ft

BIOLNP0016-03 Min. Buy 1ea

Shipping Info **DIRECT**



Biological Control Agents - Mites

Californiline™ Amblyseius californicus Spider Mite Control

by **BIOLINE AGROSCIENCES, INC.**

Amblyseius (Neoseiulus) californicus is an active predatory mite that has specialized in feeding on mites in the family Tetranychidae. This includes the common Red Spider Mite or Two-Spot Mite Tetranychus urticae and the Carmine Mite Tetranychus cinnabarinus. It is less specialized than Phytoseiulus persimilis and while it prefers to feed on spider mites, it can feed and reproduce on other arthropod prey or pollen. Where few spider mites are present, it is able to survive by feeding on these alternative sources of food and so can persist in a crop longer than Phytoseiulus persimilis.

ACTIVE INGREDIENT Amblyseius californicus

CONTROLS Spider Mites, Carmine Mites and other small arthropods.



Loose Mites in Bottles or Tubes

4000 Bottle

RATE one bottle will cover approximately 4000 sq ft.

BIOLNP2009 Min. Buy 1ea

Shipping Info **DIRECT**

2,000 Loose Mites per Bottle

RATE One Bottle Covers 2,000 sq ft

BIOLNP0013-01 Min. Buy 1ea

Shipping Info **DIRECT**

25,000 Loose Mites per Tube

RATE One Tube Covers 10,000sq ft

BIOLNP0013-04 Min. Buy 1ea

Shipping Info **DIRECT**



Sachets with Hooks

200 Controlled Release Mini Sachets with Hooks

RATE One Sachet per sq yd

BIOLNP0013-31 Min. Buy 1ea

Shipping Info **DIRECT**



Mites in Blister Packs

1,000 individuals in five mini blisters of 200 each

RATE one blister will cover approx.250 sq ft

BIOLNP0013-09 Min. Buy 1ea

Shipping Info **DIRECT**

Feltiline™ Feltiella acarisuga Spider Mite control

by **BIOLINE AGROSCIENCES, INC.**

Feltiella acarisuga is a beneficial gall midge for control of spider mites. Midge lay their eggs near spider mite eggs. The hatching midge larvae eat spider mite eggs. Sold in a tub of 250 midges.

RATE one tub will cover 25 sq meters

ACTIVE INGREDIENT Feltiella acarisuga

CONTROLS Spider mite



250 per pkg

BIOLNP1501-01 Min. Buy 1ea

Shipping Info **DIRECT**

Per-Cal Mix Mini Blister

by **BIOLINE AGROSCIENCES, INC.**

Per-Cal mix combines the quick knockdown effect of P. persimilis with the longer staying power of A. californicus for greater spider mite control. Sold in a pack of 5 blisters, each containing 200 mites (100 P. persimilis and 100 A. californicus)

RATE one blister will cover approx.250 sq ft

ACTIVE INGREDIENT Phytoseiulus persimilis and Amblyseius californicus

CONTROLS Spider mite



1,000

BIOLNP0321-09 Min. Buy 1ea

Shipping Info **DIRECT**



Phytoline™ Phytoseiulus persimilis Mite Control

by **BIOLINE AGROSCIENCES, INC.**

Phytoline biological control agent contains the predatory mite, Phytoseiulus persimilis. This well-known predator will eat large numbers of two-spotted spider mite. Recommended for spider mite control in many crops, particularly tomatoes, cucumbers, strawberries and ornamentals.

ACTIVE INGREDIENT Phytoseiulus persimilis

CONTROLS Spider mites



Loose Mites in Bottles or Vile

1,000 per Bottle

RATE One Bottle Covers 1,000sq ft

BIOLNP1201-09 Min. Buy 1ea

Shipping Info **DIRECT**

2,000 per Bottle

RATE One Bottle Covers 2,000sq ft

BIOLNP1201-01 Min. Buy 1ea

Shipping Info **DIRECT**

20,000 per Bottle

RATE Covers up to 20,000sq ft

BIOLNP1201-21 Min. Buy 1ea

Shipping Info **DIRECT**

2,000 per 1oz Hot Spot Vial

RATE Varies depending on infestation.

BIOLNP1201-02 Min. Buy 1ea

Shipping Info **DIRECT**



Biological Control Agents - Thrips

Amblyline™ Amblyseius cucumeris Thrips Control
by **BIOLINE AGROSCIENCES, INC.**

Amblyseius cucumeris sachets on a stick are perfect for early propagation protection. Place one sachet on a stick in each propagation tray, pot or hanging basket. Your crop will be protected before the Thrips larvae have a chance to become a problem. Amblyseius cucumeris is a predator that feeds on a wide range of small arthropod prey. Besides small thrips and mites it will prey on spider mites, but does not offer significant control. Because Amblyseius cucumeris is small, it feeds only on the smaller thrips larvae and cannot attack large larvae or adults. For best results it is necessary to have as many predatory mites present as possible to prevent thrips larvae reaching maturity.

ACTIVE INGREDIENT Amblyseius cucumeris
CONTROLS Thrips, Broad mites, Cyclamen mites.



Bugline (String of Sachets)

6 continuous sachets, each 262.5 ft long.

RATE Each Bugline covers an area 4 ft wide by 262.5 ft long.

BIOLNP0011-27 Min. Buy 1ea

Shipping Info **DIRECT**

6 continuous sachets, each 328 ft long.

RATE Each Bugline covers an area 4 ft wide by 328 ft long.

BIOLNP0011-26 Min. Buy 1ea

Shipping Info **DIRECT**



6ea of 525ft Buglines - A Continuous String of Controlled Release Sachets

RATE Each Bugline Covers an area 4ft W x 525ft L

BIOLNP0011-30 Min. Buy 1ea

Shipping Info **DIRECT**

Loose Mites in Bags & Bottles

100,000 Loose Mites per Bag

RATE Covers Approximately 4,000sq ft.

BIOLNP0011-12 Min. Buy 1ea

Shipping Info **DIRECT**

250,000 Loose Mites per Bag

RATE Covers Approximately 10,000sq ft

BIOLNP0011-13 Min. Buy 1ea

Shipping Info **DIRECT**

250,000 Loose Larvae per Bag (Bran/Vermiculite)

RATE Covers Approximately 10,000sq ft.

BIOLNP0011-17 Min. Buy 1ea

Shipping Info **DIRECT**

50,000 Loose Mites per Bottle

RATE Covers Approximately 2,000sq ft

BIOLNP0011-04 Min. Buy 1ea

Shipping Info **DIRECT**

50,000 Loose Mites per Tube

RATE Covers Approximately 2,000sq ft

BIOLNP0011-19 Min. Buy 1ea

Shipping Info **DIRECT**



Mites in Blister Packs

2000 Blister Pack

RATE one blister pack will cover approximately 200 sq ft.

BIOLNP3034 Min. Buy 1ea

Shipping Info **DIRECT**



Sachets with Hooks

200 Controlled Release Sachets with Hooks

RATE 3 to 5 Sachets per 10sq ft

BIOLNP0011-01 Min. Buy 1ea

Shipping Info **DIRECT**

400 Controlled Release Mini Sachet with Hooks

RATE One per sq yd

BIOLNP0011-31 Min. Buy 1ea

Shipping Info **DIRECT**

1,000 Controlled Release Mini Sachet with Hooks

RATE One Sachet Covers a sq yd

BIOLNP0011-33 Min. Buy 1ea

Shipping Info **DIRECT**

1,000 Controlled Release Larvae Mini Sachets with Hooks

RATE One Sachet Covers 6sq ft

BIOLNP0015-33 Min. Buy 1ea

Shipping Info **DIRECT**



Sachets on Sticks

500 Controlled Release Mini Sachet on Sticks

RATE One per Tray or Pot

BIOLNP0011-51 Min. Buy 1ea

Shipping Info **DIRECT**

1,000 Controlled Release Mini Sachets on Sticks

RATE One per Tray or Pot

BIOLNP0011-50 Min. Buy 1ea

Shipping Info **DIRECT**

2,000 Controlled Release Mini Sachets on Sticks

RATE One per Tray or Pot

BIOLNP0011-49 Min. Buy 1ea

Shipping Info **DIRECT**



Biological Control Agents - Thrips

Exhibitline sf™ *Steinernema feltia* Fungus Gnat and Thrips Control

by **BIOLINE AGROSCIENCES, INC.**

Steinernema feltia nematodes help control Fungus Gnat and Thrips. Harmless to the ornamental crops, humans, the environment and other beneficial insects, these nematodes actively seek out fungus gnat larvae by swimming in the thin film of water on soil particles. They locate hosts by detecting carbon dioxide and other waste products.

ACTIVE INGREDIENT *Steinernema feltia*

CONTROLS Fungus Gnat and Thrips.



Sea of 50 Million per Tray

RATE One 50 Million Tray Will Cover up to 1,000sq ft

BIOLNP1011-02 Min. Buy 1ea

Shipping Info **DIRECT**

Sea of 250 Million per Tray

RATE One 250 Million Tray Will Cover up to 5,000sq ft

BIOLNP1011-03 Min. Buy 1ea

Shipping Info **DIRECT**



Oriline i™ *Orius insidiosus* Thrips Control

by **BIOLINE AGROSCIENCES, INC.**

Orius insidiosus is the only biological control agent that kills adult Thrips. A single Orius bug can kill up to 80 Thrips per day. Orius populations establish well on pollen rich crops. Feeding Epehstia eggs will enhance the establishment of Orius. It takes 4 to 6 weeks to establish a population.

RATE One Orius Covers a sq ft

ACTIVE INGREDIENT *Orius insidiosus*

CONTROLS Thrips and others.



500 per Bottle

BIOLNP1102-01 Min. Buy 1ea

Shipping Info **DIRECT**

1,000 per Bottle

BIOLNP1102-06 Min. Buy 1ea

Shipping Info **DIRECT**

2,000 per Bottle

BIOLNP1102-07 Min. Buy 1ea

Shipping Info **DIRECT**



Biological Control Agents - Whiteflies

Encarline™ *Encarsia formosa* + Eretline™ *Eretmocerus eremicus* Whitefly Control

by **BIOLINE AGROSCIENCES, INC.**

Encarline mix contains the hymenopterous parasites, *Encarsia formosa* and *Eretmocerus eremicus*. It controls the larvae of greenhouse whitefly and silverleaf / sweet potato whitefly. Using the two species in combination provides improved control of whitefly throughout the season.

RATE covers 5,000 sq yd

ACTIVE INGREDIENT *Encarsia formosa* and *Eretmocerus eremicus*

CONTROLS Whitefly



Wasps Attached to Cards

250 Cards per Pack, 60 Wasps per Card

BIOLNP0831-15 Min. Buy 1ea

Shipping Info **DIRECT**

Wasps in Blister Packs

40 Blister Packs, 250 Adults per Blister

RATE Covers up to 3,000sq yd

BIOLNP0831-02 Min. Buy 1ea

Shipping Info **DIRECT**



Encarline™ *Encarsia formosa* Whitefly Control

by **BIOLINE AGROSCIENCES, INC.**

Encarsia formosa is a hymenopterous parasite of whitefly, attacking larvae at the 3rd and 4th larval stage. It is supplied as parasitized scales (pupae) attached to cards, which are hung in the crop from where tiny wasps hatch out and attack the whiteflies. Each card will produce either a minimum of 60 or 100 female wasps.

ACTIVE INGREDIENT *Encarsia formosa*

CONTROLS Whitefly



Parasitized Scales Attached to Cards

100 Cards, 60 Female Wasps per Card

RATE Covers up to 2,500sq yd

BIOLNP0801-13 Min. Buy 1ea

Shipping Info **DIRECT**

250 Cards, 60 Female Wasps per Card

RATE Covers up to 5,000sq yd

BIOLNP0801-15 Min. Buy 1ea

Shipping Info **DIRECT**



Hesperusline™ *Dicyphus hesperus* Whitefly Control

by **BIOLINE AGROSCIENCES, INC.**

Hesperusline biological control agent contains the predatory bug, *Dicyphus hesperus*. *Dicyphus hesperus* is a generalist predatory bug that is primarily released for whitefly control, but will feed on other pests such as Thrips, moth eggs and mites. It is best to establish the *Dicyphus* population with the help of mullein banker plants.

RATE 40 Banker Plants per Acre

ACTIVE INGREDIENT *Dicyphus hesperus*

CONTROLS Many pests, see label.



250 Adults & Late Instar Nymphs per Bottle

BIOLNP0411-02 Min. Buy 1ea

Shipping Info **DIRECT**



Biological Control Agents - Whiteflies

Eretline™ Eretmoceris eremicus Whitefly Control

by **BIOLINE AGROSCIENCES, INC.**

Eretmoceris eremicus is a parasitic wasp that attacks Greenhouse Whitefly and Sweet Potato Whitefly. Compared to Encarsia formosa, Eretmoceris is better adapted to high temperatures and those that fluctuate from day to night and is likely to last all season.

ACTIVE INGREDIENT Eretmoceris eremicus

CONTROLS Whitefly



Wasps Attached to Cards

60 Hanging Cards, 50 Wasps per Card

RATE One Card Covers up to 50sq ft

BIOLNP0821-03 Min. Buy 1ea

Shipping Info **DIRECT**

200 Hanging Cards, 50 Wasps per Card

RATE One Card Covers up to 50sq ft

BIOLNP0821-07 Min. Buy 1ea

Shipping Info **DIRECT**

250 Hanging Cards, 60 Wasps per Card

RATE One Card Covers up to 50sq ft

BIOLNP0821-15 Min. Buy 1ea

Shipping Info **DIRECT**



Wasps in Blister Packs

20 Blister Packs, 250 Wasps per Blister

RATE One blister Pack Cover up to 250sq ft

BIOLNP0821-02 Min. Buy 1ea

Shipping Info **DIRECT**

20 Blister Packs, 500 Wasps per Blister

RATE One Blister Pack Covers up to 500sq ft

BIOLNP0821-90 Min. Buy 1ea

Shipping Info **DIRECT**



Swirskiline™ Amblyseius swirskii Whitefly Control

by **BIOLINE AGROSCIENCES, INC.**

Swirskiline biological control agent contains the predatory mite, Amblyseius swirskii. It is primarily used to control whiteflies and thrips but it will provide some reduction in other small pest species. In the absence of prey it can survive by feeding on pollen, allowing it to survive longer in the crop. They breed extremely quickly under warm, humid conditions. They will also survive in cooler night temperatures and through winter months in semi-protected crops. Amblyseius swirskii sachets allow you to establish a breeding colony of mites on the plants before the target pest is present. Mites emerge from the sachet over several weeks and in much higher numbers than a single broadcast release.

ACTIVE INGREDIENT Amblyseius swirskii

CONTROLS Whitefly, Thrips and more.



Loose Mites in Bags & Bottles

125,000 Loose Larvae per Bag

RATE 125,000 Covers 2,500sq yd

BIOLNP0015-02 Min. Buy 1ea

Shipping Info **DIRECT**

25,000 Loose Larvae per Tube

RATE One Tube Covers 500sq yd

BIOLNP0015-03 Min. Buy 1ea

Shipping Info **DIRECT**



Bugline (String of Sachets)

6ea of 328ft Buglines - A Continuous String of Controlled Release Sachets

RATE One Bugline Sachets Covers an Area 4ft W x 328ft

BIOLNP0015-07 Min. Buy 1ea

Shipping Info **DIRECT**



Mites in Blister Packs

2000 Blister Pack

RATE one blister pack will cover approximately 200 sq ft.

BIOLNP5019 Min. Buy 1ea

Shipping Info **DIRECT**

Sachets with Hooks

200 Controlled Release Larvae Mini Sachets with Hooks

RATE One sachet covers one sq yd.

BIOLNP0015-34 Min. Buy 1ea

Shipping Info **DIRECT**

500 Controlled Release Sachet with Hooks

RATE One sachet covers one sq yd.

BIOLNP0015-05 Min. Buy 1ea

Shipping Info **DIRECT**

1,000 Mini Sachets with Hooks

RATE One Sachet Covers 3sq ft

BIOLNP0015-31 Min. Buy 1ea

Shipping Info **DIRECT**



Sachets on Sticks

500 Controlled Release Larvae Mini Sachets on Sticks

RATE One sachet covers one sq yd.

BIOLNP0015-50 Min. Buy 1ea

Shipping Info **DIRECT**





Biological Control Agents - Other

Bugfood E™ Ephestia eggs

by **BIOLINE AGROSCIENCES, INC.**

Ephestia Eggs are used as a supplemental food source to maintain predators such as Orius I, Dicyphus hesperus, and Chrysoperla rufilabris when pest levels are low. Sold in a 250 gram bottle.

ACTIVE INGREDIENT Ephestia eggs



250 gram bottle

BIOLNP8141-02 Min. Buy 1ea

Shipping Info **DIRECT**

Ephestia Eggs (Beneficial Predator Food)

by **BIOLINE AGROSCIENCES, INC.**

Used as a supplemental food source to maintain predators such as Orius insidiosus, Chrysoperla rufilabris (larval stage) and Dicyphus hesperus when pest levels are low.

ACTIVE INGREDIENT Ephestia eggs



10g

BIOLNP8141-01 Min. Buy 1ea

Shipping Info **DIRECT**



Release Boxes

by **BIOLINE AGROSCIENCES, INC.**

Keep beneficial insects safe from predators as they hatch. Suspend from a shaded location near your pest infestation and the beneficials will go where they are needed.



BIOLNP8042-01 Min. Buy 1ea

Shipping Info **DIRECT**



Dupoline™ Duponchiela Pheromone Lure

by **BIOLINE AGROSCIENCES, INC.**

Duponchiela pheromone lure for attracting lepidopteran pests to sticky traps. Sold as a pack of 10 lures.

ACTIVE INGREDIENT Duponchiela pheromone



10 per pkg.

BIOLNP8054-04 Min. Buy 1ea

Shipping Info **DIRECT**

Thripline™ Lure

by **BIOLINE AGROSCIENCES, INC.**

Thripline lure contains the aggregation pheromone of Western Flower Thrips, Frankliniella occidentalis. The product is designed to improve the sensitivity of monitoring traps for thrips, particularly at low levels of infestation or in easily damaged crops. Sold in a pack of 10 lures.



10 per pkg.

BIOLNP8061-02 Min. Buy 1ea

Shipping Info **DIRECT**

Thripline™ Sticky Thrips Pheromone Trap

by **BIOLINE AGROSCIENCES, INC.**

Designed to improve the sensitivity of monitoring traps for thrips, particularly at low levels of infestation or in easily damaged crops. Thripline contains a synthetic version of a sexual aggregation pheromone for Western Flower Thrips (Frankliniella occidentalis). The natural pheromone is produced by males and attracts both males and females into mating aggregations. The Thrips will move to the top of the crop to look for mates and to display. Thripline combines this pheromone with Taki-traps® to catch these Thrips. The pheromone is impregnated into rubber septa which are sealed in foil sachets to maintain viability.



10pk

BIOLNP8061-01 Min. Buy 1ea

Shipping Info **DIRECT**



Biological Control Agents - Aphids

Aphidius colemani

by *BIOWORKS INC.*

Aphidius colemani are natural aphid parasites and very useful and effective for the management of larger Aphid species. 10 blisters cover one acre as a preventative measure. Once Aphids are found 10 blisters will cover one half acre.



10 Blisters with 100 mummies and adults per blister

BWAC10BP Min. Buy 1ea

Shipping Info *DIRECT*

50 Blisters with 100 mummies and adults per blister

BWAC50BP Min. Buy 1ea

Shipping Info *DIRECT*

Aphidius Colemani and Ervi Mix

by *BIOWORKS INC.*

Aphidius colemani and ervi mix for control of larger aphid species in vegetable and ornamental crops. These 2-3 millimeter mini-wasps are best used for preventing the establishment of aphid infestations.



Loose Mummies in Bottles

500 mummies per bottle

BWACE5 Min. Buy 1ea

Shipping Info *DIRECT*

1000 mummies per bottle

BWACE1K Min. Buy 1ea

Shipping Info *DIRECT*

Mummies in Bottles

10 blisters with 100 mummies in each blister

BWACE1KBP Min. Buy 1ea

Shipping Info *DIRECT*

50 Blisters with 100 mummies and adults per blister

BWACE5KBP Min. Buy 1ea

Shipping Info *DIRECT*

Aphidius matricariae

by *BIOWORKS INC.*

Predatory wasp for control of Aphids. Use in combination with Aphidius colemani for effective aphid control.

CONTROLS Aphids



500 mummies and adults

BWAMAT5 Min. Buy 1ea

Shipping Info *DIRECT*

5000 mummies and adults

BWAMAT5K Min. Buy 1ea

Shipping Info *DIRECT*

BioWorks® Amblyseius Abdominalis

by *BIOWORKS INC.*

Aphelinus abdominalis is a parasitic wasp for control of many species of young aphids. Aphelinus is shipped as mummies which quickly hatch and begin feeding.

CONTROLS Aphids



1,000 mummies per vial

BWAD10 Min. Buy 1ea

Shipping Info *DIRECT*

250 mummies per bottle

BWAD25 Min. Buy 1ea

Shipping Info *DIRECT*

BioWorks® Aphidius Colemani

by *BIOWORKS INC.*

Aphidius colemani are natural aphid parasites and very useful and effective for the management of larger aphid species.

CONTROLS Aphids.



500 mummies per bottle

BWAC5 Min. Buy 1ea

Shipping Info *DIRECT*

1,000 mummies per bottle

BWAC10 Min. Buy 1ea

Shipping Info *DIRECT*

5,000 mummies per bottle

BWAC50 Min. Buy 1ea

Shipping Info *DIRECT*

BioWorks® Aphidius Ervi

by *BIOWORKS INC.*

Aphidius ervi is a tiny braconid wasp that stings and parasitises large aphid species. Works very well in conjunction with Aphidius colemani. Useful and effective for the prevention and low-infestation management of various aphid species.

CONTROLS Aphids.



250 mummies per bottle.

BWAE25 Min. Buy 1ea

Shipping Info *DIRECT*

500 mummies per bottle

BWAE50 Min. Buy 1ea

Shipping Info *DIRECT*

1,000 mummies per bottle

BWAE1K Min. Buy 1ea

Shipping Info *DIRECT*

10 blisters with 100 mummies in each blister

BWAE1KBP Min. Buy 1ea

Shipping Info *DIRECT*



Biological Control Agents - Aphids

BioWorks® Aphidoletes aphidimyza

by *BIOWORKS INC.*

Aphidoletes aphidimyza is a parasitic gall midge. Attracted to aphid honeydew, the adult midge lays between 60-250 eggs amongst the aphid colonies. When the larvae hatch they begin feeding voraciously. Works well as a "hot spot" treatment with a single larvae able to kill more than 35 aphids in it's lifespan.

CONTROLS Aphids.



2,000 pupae per bottle

BWAA2 Min. Buy 1ea

Shipping Info [DIRECT](#)

10,000 pupae per bottle

BWAA10 Min. Buy 1ea

Shipping Info [DIRECT](#)

BioWorks® Chrysoperla rufilabris

by *BIOWORKS INC.*

Chrysoperla rufilabris (Green Lacewing) are aphid predators. Lacewing adults feed only on nectar, pollen and honeydew but the Lacewing larvae are voracious predators of aphids and other small soft bodied insects, larvae and eggs. One larvae can consume up to 200 aphids. Lacewing eggs and larvae should be dispersed within aphid colonies. Adult Lacewing will find and lay their eggs within the aphid colony.

CONTROLS Aphids and other small insect larvae and eggs.



5l bag 5,000 Lacewing larvae

BWLWBG Min. Buy 1ea

Shipping Info [DIRECT](#)

4oz bottle 5,000 Lacewing eggs

BWL5K Min. Buy 1ea

Shipping Info [DIRECT](#)

16oz bottle Lacewing larvae

BWLWB Min. Buy 1ea

Shipping Info [DIRECT](#)

.1k Lacewing adults

BWLWA1 Min. Buy 1ea

Shipping Info [DIRECT](#)

.25k Lacewing adults

BWLWA2 Min. Buy 1ea

Shipping Info [DIRECT](#)

10,000 Lacewing eggs per bottle

BWL10K Min. Buy 1ea

Shipping Info [DIRECT](#)

5,000 Lacewing eggs on cards

BWLWCD Min. Buy 1ea

Shipping Info [DIRECT](#)

10,000 Lacewing larvae per 5L bucket

BWLWL10K Min. Buy 1ea

Shipping Info [DIRECT](#)

1k tube Lacewing adults

BWLWA3 Min. Buy 1ea

Shipping Info [DIRECT](#)

400 Lacewing larvae per hex cell.

BWLWFR Min. Buy 1ea

Shipping Info [DIRECT](#)

Biological Control Agents - Black Vine Weevils

Bioworks® Nemashield® Hb

by *BIOWORKS INC.*

Fast, effective biological control of root feeding grubs and larvae in the soil. The beneficial nematodes actively seek out grubs and larvae and infect them. Once infected the target pests die within a few days.



1 Tray of 50 Million

BWN33B43 Min. Buy 1ea

Shipping Info [DIRECT](#)

2 Trays of 250 Million Each

BWN33B28 Min. Buy 1ea

Shipping Info [DIRECT](#)

Bioworks® Nemashield® Hb Invivo

by *BIOWORKS INC.*

Fast, effective biological control of root feeding grubs and larvae in the soil. The beneficial nematodes actively seek out grubs and larvae and infect them. Once infected the target pests die within a few days. Packaged on a sponge with no clay or gel carrier means no more clogged filters.



6 Million on Sponge

BWSB4BW06 Min. Buy 1ea

Shipping Info [DIRECT](#)

24 Million on Sponge

BWSB4BW24 Min. Buy 1ea

Shipping Info [DIRECT](#)

Biological Control Agents - Caterpillars

Podisus maculiventris

by *BIOWORKS INC.*

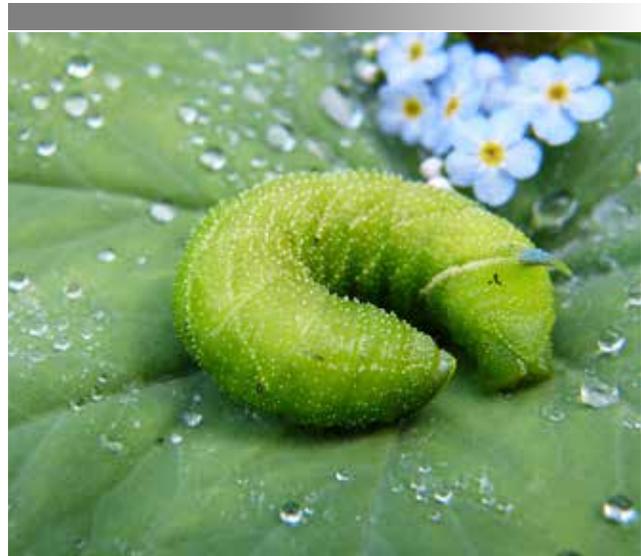
Podisus maculiventris is a larger predatory stink bug preying on caterpillars, loopers, and beetle larvae.



50 nymphs

BWSB210103700 Min. Buy 1ea

Shipping Info [DIRECT](#)



Biological Control Agents - Fungus Gnats

BioWorks® Dalotia coriaria

by **BIOWORKS INC.**

Dalotia (Atheta) coriaria is a generalist predator of soil and compost pests. This rove beetle is particularly good at feeding on the larvae of Sciarid flies, Shore flies, and Thrips pupae. Introduce early in the season to give Dalotia time to build up a good population.

CONTROLS Sciarid flies, Shore flies



Loose Beetles in Bottles & Buckets

500 beetles per bottle

BWDCS Min. Buy 1ea

Shipping Info [DIRECT](#)

1,000 beetles per bottle - No vermiculite in carrier

BWDC1N Min. Buy 1ea

Shipping Info [DIRECT](#)

1,000 beetles per bottle

BWDC10 Min. Buy 1ea

Shipping Info [DIRECT](#)

3,000 beetles per bucket - No vermiculite in carrier

BWDC3N Min. Buy 1ea

Shipping Info [DIRECT](#)

3,000 beetles per bucket

BWDCBK Min. Buy 1ea

Shipping Info [DIRECT](#)

5000 in bucket

BWDC5K Min. Buy 1ea

Shipping Info [DIRECT](#)

Bioworks® Nemashield® Sc Invivo

by **BIOWORKS INC.**

Steinernema carpocapsae provides biological control of Shorefly, Leather jackets, Cutworms and other soil dwelling insects. They attack target pests without harming any other organisms. Safe for ornamental crops. Packaged on a sponge with no clay or gel carrier means no more clogged filters.



6 Million on Sponge

BWSBBW006 Min. Buy 1ea

Shipping Info [DIRECT](#)

24 Million on Sponge

BWSBBW024 Min. Buy 1ea

Shipping Info [DIRECT](#)

Don't See What You Need?

Use the BFG Mobile app or visit www.bfgsupply.com to see a much larger selection of Fungicides

BioWorks® Stratiolaelaps scimitus

by **BIOWORKS INC.**

Stratiolaelaps scimitus (Hypoaspis miles) attacks and kills the larvae of sciarid flies and will also consume thrips larvae that drop to the growing medium to pupate, making it a useful addition to other Western Flower Thrips control products. Also attacks and kills larvae of Fungus Gnats. Normally found within the top half inch of soil / growing media, females lay eggs which hatch after six days. The larvae actively feed for 10 days and continue to feed as an adult. Adults live for several months when food is readily available.

CONTROLS Fungus gnat, Shore fly, Thrips



Loose Mites in Bottles & Buckets

125,000 per bucket - No vermiculite

BWSSGN Min. Buy 1ea

Shipping Info [DIRECT](#)

125,000 per bucket

BWSSBK Min. Buy 1ea

Shipping Info [DIRECT](#)

25,000 mites per bottle - No vermiculite

BWSSN Min. Buy 1ea

Shipping Info [DIRECT](#)

25,000 mites per bottle

BWSS25 Min. Buy 1ea

Shipping Info [DIRECT](#)

Bioworks® Nemashield® Sfc Invivo

by **BIOWORKS INC.**

Steinernema feltia and carpocapsae together in one mix for control of Fungus Gnat, Thrips, Leather Jacket and Cutworms. Packaged on a sponge with no clay or gel carrier means no more clogged filters. The lack of a carrier also makes it more useful for organic production.



6 Million on Sponge

BWSB3006 Min. Buy 1ea

Shipping Info [DIRECT](#)

24 Million on Sponge

BWSB3024 Min. Buy 1ea

Shipping Info [DIRECT](#)

Bioworks® Nemashield® Sf Invivo

by **BIOWORKS INC.**

Provides excellent biological control of fungus gnats by eliminating damaging fungus gnat larvae. A single application is sufficient for preventing fungus gnat outbreaks or for control in the beginning phase of an outbreak. Effective in a Western Flower Thrips control program for treatment of pupae.



1 Million on Sponge

BWSB200BW Min. Buy 1ea

Shipping Info [DIRECT](#)

6 Million on Sponge

BWSB2006 Min. Buy 1ea

Shipping Info [DIRECT](#)

24 Million on Sponge

BWSB2004 Min. Buy 1ea

Shipping Info [DIRECT](#)



Biological Control Agents - Leafminers

BioWorks® Diglyphus isaea

by *BIOWORKS INC.*

Diglyphus isaea is a parasitic wasp for Leafminer control. It lays its eggs next to leafminer larvae. The eggs quickly hatch and begin to feed on the larvae. Diglyphus is known to establish quickly after release in the greenhouse, making it perfect for controlling growing populations of leafminers.

CONTROLS Leafminer



250 adults per bottle.

BWDI25 Min. Buy 1ea

Shipping Info *DIRECT*

Dacnusa sibirica

by *BIOWORKS INC.*

Predatory wasp for leafminer control. Very effective at low levels of leafminer infestations.

CONTROLS Leafminer



250 wasps per bottle

BWDSIB25 Min. Buy 1ea

Shipping Info *DIRECT*

Biological Control Agents - Mealybugs

BioWorks® Cryptolaemus montrouzieri

by *BIOWORKS INC.*

Cryptolaemus montrouzieri are Mealy Bug predators. Useful for controlling Mealy Bug infestations in vegetables, indoor ornamentals, and citrus trees. Both adult and juvenile Cryptolaemus are voracious predators.

CONTROLS Mealy Bug



100 adults per bottle.

BWCR1 Min. Buy 1ea

Shipping Info *DIRECT*

500 adults per bottle.

BWCR50 Min. Buy 1ea

Shipping Info *DIRECT*

Biological Control Agents - Mites

BioWorks® Amblyseius andersoni

by *BIOWORKS INC.*

Amblyseius andersoni is a predatory mite for control of mite pests. This predator is ideal for vegetables, hardy ornamentals and fruit crops, controlling red or two-spotted spider mite, fruit-tree red spider mite, and russet mites. It is active at lower temperatures than other predatory mites and can be introduced much earlier in the growing season than some other predators.

CONTROLS Two spotted spider mites, red spider mites, and russet mites



Sachets with Hooks

250 sachets with hooks containing 250 mites each

BWAI2H Min. Buy 1ea

Shipping Info *DIRECT*

Mites in Tubes

25,000 mites in a tube

BWAI25 Min. Buy 1ea

Shipping Info *DIRECT*

BioWorks® Amblyseius californicus

by *BIOWORKS INC.*

Amblyseius californicus is an active predatory mite that feeds on mites in the family Tetranychidae including the common Red Spider Mite or Two-Spotted Mite, and the Carmine Mite. Where few spider mites are present, it is able to survive by feeding on alternative sources of food, and so can persist in a crop longer.

CONTROLS Two spotted spider mites, red spider mites, and russet mites



Mites in Bags, Bottles & Tubes

200,000 mites per bag

BWCA200K Min. Buy 1ea

Shipping Info *DIRECT*

5,000 mites per bottle

BWCA5 Min. Buy 1ea

Shipping Info *DIRECT*

25,000 loose mites in a bottle.

BWCA25 Min. Buy 1ea

Shipping Info *DIRECT*

Sachets with Hooks

100 sachets with hooks containing 100 mites each.

BWCA1H Min. Buy 1ea

Shipping Info *DIRECT*

500 sachets with hooks containing 100 mites each.

BWCA5H Min. Buy 1ea

Shipping Info *DIRECT*



Biological Control Agents - Mites

Biological Control Agents - Mites

BioWorks® Amblyseius fallacis

by **BIOWORKS INC.**

Neoseiulus (Amblyseius) fallacis is an all purpose predatory mite used for the prevention and control of various spider mites including two spotted spider mites, carmine mites and several species of red mites. Fallacis mites can live off of pollen when no prey are present so they can be released early as a preventative measure. Sold in a bottle with a vermiculite carrier.

CONTROLS Spider mites, carmine mites, and red mites.



2,000 mites per bottle

BWNF2 Min. Buy 1ea

Shipping Info [DIRECT](#)

5,000 mites per bottle

BWNF5 Min. Buy 1ea

Shipping Info [DIRECT](#)

10,000 mites per bottle

BWNF10 Min. Buy 1ea

Shipping Info [DIRECT](#)

25,000 mites per bottle

BWNF25 Min. Buy 1ea

Shipping Info [DIRECT](#)

BioWorks® Phytoseiulus persimilis

by **BIOWORKS INC.**

Phytoseiulus persimilis is an active spider mite predator. This species has become the standard spider mite treatment in a wide variety of crops. Persimilis develops twice as fast as the spider mite which allows a rapid control of outbreaks.

CONTROLS Two Spotted Spider mites



2,000 per bottle

BWPP2 Min. Buy 1ea

Shipping Info [DIRECT](#)

2,000 per vial

BWPP2V Min. Buy 1ea

Shipping Info [DIRECT](#)

5,000 per bottle

BWPP5 Min. Buy 1ea

Shipping Info [DIRECT](#)

10,000 per bottle

BWPP10 Min. Buy 1ea

Shipping Info [DIRECT](#)

20,000 per bottle

BWPP20 Min. Buy 1ea

Shipping Info [DIRECT](#)

25,000 per 16oz bottle

BWPP25 Min. Buy 1ea

Shipping Info [DIRECT](#)

25,000 per 1L bottle

BWP25L Min. Buy 1ea

Shipping Info [DIRECT](#)

Stethorus punctillum

by **BIOWORKS INC.**

Stethorus punctillum is a voracious lady bug beetle for the control of Spider mites. Larvae and adults are predators and feed on all stages of several mite species such as two-spotted spider mite, spruce spider mite, southern red mite and European spider mite.

CONTROLS Spider mites



50 per bottle

BWABSP50 Min. Buy 1ea

Shipping Info [DIRECT](#)

100 per bottle

BWABSP100 Min. Buy 1ea

Shipping Info [DIRECT](#)

BioWorks® Feltiella acarisuga

by **BIOWORKS INC.**

Feltiella acarisuga is a predatory midge highly specialized for feeding on spider mite. This is a voracious predator best suited to curative control of established spider mite colonies.

CONTROLS Spider Mite



250 midges per tray

BWFA25 Min. Buy 1ea

Shipping Info [DIRECT](#)

Biological Control Agents - Thrips

BioWorks® Orius insidiosus

by **BIOWORKS INC.**

Orius insidiosus is an aggressive Thrips predator and one of the few beneficial insects that can kill adult thrips. Orius takes a little longer to establish a population which makes it a good follow up treatment after Amblyseius cucumeris or Amblyseius swirskii releases.

CONTROLS Thrips



In Bottles

500 per bottle

BWOIS Min. Buy 1ea

Shipping Info [DIRECT](#)

1,000 per bottle

BWOIM Min. Buy 1ea

Shipping Info [DIRECT](#)

2,000 per bottle

BWOIM2 Min. Buy 1ea

Shipping Info [DIRECT](#)

In Buckwheat Carriers

1,000 adults in a buckwheat carrier

BWOIN Min. Buy 1ea

Shipping Info [DIRECT](#)

500 adults in a buckwheat carrier

BWOISBW Min. Buy 1ea

Shipping Info [DIRECT](#)

2,000 adults in a buckwheat carrier

BWOIM2BW Min. Buy 1ea

Shipping Info [DIRECT](#)



Biological Control Agents - Thrips

NemaShield® Steinernema Beneficial Nematodes

by *BIOWORKS INC.*

Provides excellent biological control of fungus gnats by eliminating damaging fungus gnat larvae. A single application is sufficient for preventing fungus gnat outbreaks or for control in the beginning phase of an outbreak. Effective in a Western Flower Thrips control program for treatment of pupae and pre-pupae. It will also control thrips species that spend a portion of their life cycle in the soil or potting media.

REI 0 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Steinernema feltiae

CONTROLS Fungus Gnat, Thrips.



100 Million Pack

BW1N20A26 Min. Buy 1ea

Shipping Info [DIRECT](#)

250 Million Pack

BW1N20A27 Min. Buy 1ea

Shipping Info [DIRECT](#)



BioWorks® Amblyseius cucumeris

by *BIOWORKS INC.*

Amblyseius cucumeris is a predator that feeds on a wide range of pests including Thrips, Broad mites, and Cyclamen mites.

CONTROLS Thrips, Broad mites and Cyclamen mites



Mites in Bags or Bottles

100,000 mites per bag in vermiculite

BWNC100VG Min. Buy 1ea

Shipping Info [DIRECT](#)

100,000 mites per bag

BWNCBB Min. Buy 1ea

Shipping Info [DIRECT](#)

250,000 mites per bag in bran carrier

BWNCGN Min. Buy 1ea

Shipping Info [DIRECT](#)

250,000 mites per bag in vermiculite

BWNCVG Min. Buy 1ea

Shipping Info [DIRECT](#)

250,000 mites per bag

BWNCBG Min. Buy 1ea

Shipping Info [DIRECT](#)

20,000 mites per bottle in vermiculite

BWNC20KVM Min. Buy 1ea

Shipping Info [DIRECT](#)

20,000 mites per bottle

BWNCB2 Min. Buy 1ea

Shipping Info [DIRECT](#)

50,000 mites per bottle - no vermiculite

BWNCBN Min. Buy 1ea

Shipping Info [DIRECT](#)

50,000 mites per bottle

BWNCB Min. Buy 1ea

Shipping Info [DIRECT](#)

Sachets on Hooks

100 sachets with hooks containing 250 mites each

BWN1H Min. Buy 1ea

Shipping Info [DIRECT](#)

500 sachets with hooks containing 250 mites each

BWNC5H Min. Buy 1ea

Shipping Info [DIRECT](#)

1000 sachets with hooks containing 250 mites each

BWNC1H Min. Buy 1ea

Shipping Info [DIRECT](#)

Sachets on Sticks

500 Mini Sachets on Long Sticks containing 250 mites each

BWNC5KL Min. Buy 1ea

Shipping Info [DIRECT](#)

1000 Mini Sachets on Long Sticks containing 250 mites each

BWNC1KL Min. Buy 1ea

Shipping Info [DIRECT](#)

100 sachets on sticks containing 250 mites each

BWN1K Min. Buy 1ea

Shipping Info [DIRECT](#)

500 sachets on sticks containing 250 mites each

BWNC5K Min. Buy 1ea

Shipping Info [DIRECT](#)

1000 sachets on sticks containing 250 mites each

BWNC1K Min. Buy 1ea

Shipping Info [DIRECT](#)

Biological Control Agents - Whiteflies

BioWorks® Amblyseius swirskii

by **BIOWORKS INC.**

Amblyseius swirskii is a predatory mite for control of Whitefly and Thrips. Establishment will be fastest on crops with ample pollen as the pollen acts as an alternative food source. Recommended for vegetable, ornamentals, fruit trees, citrus, and berries.

CONTROLS Whitefly, Thrips and more.



Mites in Bags or Bottles

125,000 mites per bag no vermiculite

BWASGN Min. Buy 1ea

Shipping Info **DIRECT**

125,000 mites per bag

BWASBG Min. Buy 1ea

Shipping Info **DIRECT**

25,000 mites per bottle

BWASB Min. Buy 1ea

Shipping Info **DIRECT**

25,000 mites per bottle no vermiculite

BWASBN Min. Buy 1ea

Shipping Info **DIRECT**

50,000 mites per bottle

BWASB5 Min. Buy 1ea

Shipping Info **DIRECT**

Sachets on Hooks

100 sachets with hooks, each containing 250 mites each

BWA1H Min. Buy 1ea

Shipping Info **DIRECT**

500 sachets with hooks, each containing 250 mites

BWAS5H Min. Buy 1ea

Shipping Info **DIRECT**

1,000 sachets with hooks, each containing 250 mites each.

BWAS1H Min. Buy 1ea

Shipping Info **DIRECT**

Sachets on Sticks

100 sachets on sticks, each containing 250 mites

BWA1K Min. Buy 1ea

Shipping Info **DIRECT**

500 sachets on sticks, each containing 250 mites

BWAS5K Min. Buy 1ea

Shipping Info **DIRECT**

1,000 sachets on sticks, each containing 250 mites

BWAS1K Min. Buy 1ea

Shipping Info **DIRECT**

500 sachets on long sticks, each containing 250 mites

BWAS5KL Min. Buy 1ea

Shipping Info **DIRECT**

1,000 sachets on long sticks, each containing 250 mites

BWAS1KL Min. Buy 1ea

Shipping Info **DIRECT**

BioWorks® Encarsia formosa

by **BIOWORKS INC.**

Encarsia formosa is a parasitic wasp for control of Whitefly. It is supplied as parasitised scales attached to cards, which are hung in the crop from where they hatch out and attack the whiteflies. Each card will produce either a minimum of 50 or 100 female wasps.

CONTROLS Whitefly



Wasps Attached to Cards

100 cards with 50 wasps per card.

BWEF5 Min. Buy 1ea

Shipping Info **DIRECT**

100 cards with 100 wasps per card.

BWEH10 Min. Buy 1ea

Shipping Info **DIRECT**

150 cards with 50 wasps per card.

BWEF75 Min. Buy 1ea

Shipping Info **DIRECT**

150 cards with 100 wasps per card.

BWEH15 Min. Buy 1ea

Shipping Info **DIRECT**

BioWorks® Encarsia formosa and Eretmocerus eremicus

by **BIOWORKS INC.**

Encarsia and Eretmocerus mix control a wider variety of whitefly species than either alone. Cards are a 50/50 mix of the two species. Hang in the crop where they will hatch out and attack the whitefly.

CONTROLS Whitefly



Wasps Attached to Cards

50 cards with 100 wasps per card

BWEM5 Min. Buy 1ea

Shipping Info **DIRECT**

100 cards with 100 wasps per card

BWEM10 Min. Buy 1ea

Shipping Info **DIRECT**

150 cards with 100 wasps per card

BWEM15 Min. Buy 1ea

Shipping Info **DIRECT**

Wasps in Blister Packs

30 Blisters with 250 wasp pupa per blister

BWEM75BP Min. Buy 1ea

Shipping Info **DIRECT**

60 Blisters with 250 wasp pupa per blister

BWEM15KBP Min. Buy 1ea

Shipping Info **DIRECT**



Biological Control Agents - Whiteflies

BioWorks® Eretmocerus eremicus

by *BIOWORKS INC.*

Eretmocerus eremicus is a parasitic wasp that attacks Greenhouse Whitefly and Sweet Potato Whitefly. Compared to Encarsia formosa, Eretmocerus is better adapted to high temperatures and those that fluctuate from day to night and is likely to last all season.

CONTROLS Whitefly



Wasps in Blister Packs

30 Blisters with 250 wasp pupa per blister

BWEE75BP Min. Buy 1ea

Shipping Info [DIRECT](#)

60 Blisters with 250 wasp pupa per blister

BWEE15KBP Min. Buy 1ea

Shipping Info [DIRECT](#)

Wasps Attached to Cards

50 cards with 100 wasps per card

BWEE5 Min. Buy 1ea

Shipping Info [DIRECT](#)

100 cards with 100 wasps per card

BWEE10 Min. Buy 1ea

Shipping Info [DIRECT](#)

150 cards with 100 wasps per card

BWEE15 Min. Buy 1ea

Shipping Info [DIRECT](#)

Wasps in Vials

30ml vial containing 10,000

BWEE1L Min. Buy 1ea

Shipping Info [DIRECT](#)

Delphastus catalinae

by *BIOWORKS INC.*

Delphastus catalinae is a predator beetle particularly suited for cleaning up infestations of Whitefly eggs (hotspots). Not suitable for tomato crops.



100 per bottle

BWABDC100 Min. Buy 1ea

Shipping Info [DIRECT](#)

1000 per bottle

BWABDC1K Min. Buy 1ea

Shipping Info [DIRECT](#)

Dicyphus hesperus

by *BIOWORKS INC.*

Dicyphus hesperus is a generalist predator that should be used with Mullein banker plants. It feeds on Whitefly, Thrips, moth eggs, and mites.



250 per bottle

BWSB210001600 Min. Buy 1ea

Shipping Info [DIRECT](#)

Biological Control Agents - Other

BioWorks® Aphid Banker Plants

by *BIOWORKS INC.*

Banker plants are a self-contained sustainable system that supplies a non-pest prey species to support a continual source of natural enemies that disperse into the crop in search of other pests.



4 Cherry Oat plants

BWBANK Min. Buy 1ea

Shipping Info [DIRECT](#)

BioWorks® Ephestia kuehniella

by *BIOWORKS INC.*

Ephestia Eggs are used as a supplemental food source to maintain predators such as Orius I, Dicyphus hesperus, and Chrysoperla rufilabris when pest levels are low.



Loose Eggs in Bottles

10 grams

BWEK10 Min. Buy 1ea

Shipping Info [DIRECT](#)

25 grams

BWEK25 Min. Buy 1ea

Shipping Info [DIRECT](#)

50 grams

BWEK50 Min. Buy 1ea

Shipping Info [DIRECT](#)

Eggs Attached to Cards

35,000 eggs

BWEKH Min. Buy 1ea

Shipping Info [DIRECT](#)

Universal Release Boxes

by *BIOWORKS INC.*

For distributing other organisms not sold in sachets without over-the-top applications. Ideal for flowering crops to keep buds free from debris.



BWURB Min. Buy 1ea

Shipping Info [DIRECT](#)



Pest Monitoring

Insect Monitoring Sticky Cards (Blue + Yellow)

by **BIOWORKS INC.**

Features a unique double sided yellow / blue format. The Yellow side attracts flying adult aphids, whitefly, fungus gnats, leaf miners and more. Blue side attracts flying adult thrips. Each card is 4in x 5in with 1in grid on both sides for easy monitoring. Weather resistant with a easy peel-off backing. Includes a hole punched for hanging.

**100pk****BW1GS40A41** Min. Buy 1eaShipping Info **DIRECT**

Sensor® Yellow Sticky Cards

by **BASF CORP**

Durable, long-lasting pest monitoring and trapping cards are designed to catch a variety of pests, including aphids, leafminer, thrips, whiteflies, fungus gnat and other flying insects. Offers growers the best way to eliminate guesswork and evaluate if insect control programs are working. Features non-sticky edges for easier handling.

RATE One card per 500 sq feet.**ACTIVE INGREDIENT****CONTROLS** Greenhouse insect pests.**50pk****BAS45182529** Min. Buy 1ea

Stiky Stuff® Insect Glue

by **OLSON PRODUCTS INC**

Make sticky traps with this brush on insect trapping adhesive. It spreads easily and remains tacky through repeated wetting and drying cycles. Clear and odorless.

**32 oz can****OPSS32OZ** Min. Buy 1ea

Trapline T+ Blue Roller Trap

by **BIOLINE AGROSCIENCES, INC.**

Trapline T+ Blue Roller Trap is a non toxic, double-sided sticky tape for trapping and monitoring flying pests. Features includes specific color, patterning, adhesive and attraction pheromone to increase control of Western Flower Thrips in soft fruits, vegetables and flowers grown in greenhouses.

**6in W x 328ft L - Can Be Cut to Any Size****BIOLNP8052-15** Min. Buy 1eaShipping Info **DIRECT**

Trapline T Roller Trap

by **BIOLINE AGROSCIENCES, INC.**

Trapline Roller Trap is a non toxic, double-sided sticky tape for trapping and monitoring flying pests.



Blue Roller Trap

6in W x 328ft L - Can Be Cut to Any Size**BIOLNP8052-05** Min. Buy 1eaShipping Info **DIRECT**

Yellow Roller Trap

The yellow color is especially attractive to Whitefly.

6in W x 328ft L - Can Be Cut to Any Size**BIOLNP8051-05** Min. Buy 1ea

Wire Holder for Sticky Cards

by **OLSON PRODUCTS INC**

Wire holders designed for use with sticky pest monitoring cards. Holds cards above plants and off the ground.

**100ct****OP100SS12** Min. Buy 1ea

Trapline M Yellow Sticky Trap

by **BIOLINE AGROSCIENCES, INC.**

Trapline M dry glue sticky traps are made of high impact polystyrene with dry, non toxic glue and easy to peel silicon paper covers

**10pk - 3in x 10in****BIOLNP8051-01** Min. Buy 1eaShipping Info **DIRECT**

Yellow Sticky Tape

by **OLSON PRODUCTS INC**

Monitor and reduce populations of Whiteflies, Aphids, Thrips and Fungus Gnats. Tape is coated on both sides with safe non toxic adhesive.

**6in x 530ft****OPPCR5306** Min. Buy 1ea

Animal Repellents and Controls

Hawk® All-Weather Rodent Bait

by **MOTOMCO LTD.**

Made with bromadiolone, Hawk is a single-feed anticoagulant rodenticide with Patented gnawing edges. Use with confidence for unsurpassed control, even against warfarin resistant "super-rats." The superior formulation is irresistible to rats and mice and kills them in 4 or 5 days after eating just a single-feeding. Highly weatherable.

ACTIVE INGREDIENT Bromadiolone

CONTROLS Norway Rats, Roof Rats, House Mice



Bait Chunx

9lb Pail

MT0312705 Min. Buy 1ea

Place Packs

150 x 1.5oz Place Packs

MT0311654 Min. Buy 1ea



Ramik® Green Rodenticide

by **NEOGEN CORPORATION**

A diphacinone anticoagulant rodenticide. Excellent rodent palatability and weather resistant packaging.

ACTIVE INGREDIENT Diphacinone

CONTROLS Norway Rats, Roof Rats, House Mice



45 x 43g Packets

NGN116316 Min. Buy 1ea

60 x 4oz Packets

NGN116305 Min. Buy 1ea

Rampage® Rodent Bait Chunx

by **MOTOMCO LTD.**

Rampage is a key component in the fight against resistance as it contains Bromethalin, a non-anticoagulant capable of killing even anticoagulant resistant rats and mice. It delivers a proven combination of bait acceptance and speed of kill. In fact its formula can kill rodents in as little as two days after consuming a toxic dose. Using Rampage also reduces the amount of bait required for control since rodents ingesting a toxic dose may not feed again.

ACTIVE INGREDIENT Bromethalin

CONTROLS Norway Rats, Roof Rats, House Mice



Bait Chunx

9lb Pail

MT0222912 Min. Buy 1ea

Place Packs

121 x 15g Place Packs

MT0221212 Min. Buy 1ea



Selontra® Rodenticide

by **BASF CORP**

Selontra rodent bait offers effective control of mice and rats, even anti-coagulant resistant rodents. Labeled for use in/around agricultural buildings, warehouses, homes, industrial buildings and transport vehicles. Single Feed and Stop Feed mode of action. Contains Bitrex to prevent harm to non-target animals.

ACTIVE INGREDIENT Cholecalciferol

CONTROLS Mice and rats



8lb - Approximately 182 Baits per 8lb Pail

BAS59014503 Min. Buy 1ea

Spring/Summer Animal Repellent

by **GREAT OAK, INC.**

DeerPro animal repellent reduces browsing and chewing damage from deer, rabbits, and voles. One application will protect treated plants from 3 to 6 weeks.

REI 24 hours

RATE See label

ACTIVE INGREDIENT Putrescent whole egg solids



2.5gal

DP44320 Min. Buy 1ea



Winter Animal Repellent

by **GREAT OAK, INC.**

DeerPro animal repellent is a long lasting solution to winter foraging animals.

Can be applied as early as October and it will still be protecting shrubs and trees in early spring. Reduces browsing and chewing damage from deer, rabbits, and voles.

REI 24 hours

RATE See label

ACTIVE INGREDIENT Thiram



2.5gal

DP44318 Min. Buy 1ea

Shipping Info **HAZARDOUS**



DEERPRO®
SPRING/SUMMER ANIMAL REPELLENT

DEERPRO®
WINTER ANIMAL REPELLENT

Year-round, professional strength protection. DeerPro™: The ONLY one that works.

learn more at DeerProProfessional.com

Animal Repellents and Controls

Talpid Mole Worms

by BELL LABORATORIES INC

A worm-shaped mole bait that kills moles in lawns and gardens. Moles usually die in their tunnels, often within 12-24 hours of ingesting the bait.



20pk

BLI7150

Min. Buy 1ea



Tomcat® Bullet Rodent Bait Station

by MOTOMCO LTD.

Tier-1 tamper-resistant bait station with a secure, low-profile design. Easy to clean and easy to open. Holds 4 1oz Bait Chunx on 4 vertical rods.



For Use with Bait Chunx

MTO33432

Min. Buy 6ea



Tomcat® All-Weather Bait Chunx

by MOTOMCO LTD.

Tomcat baits are manufactured with food-grade ingredients and enhancers, resulting in a palatable bait with consistent results. All-weather 1oz block is mold and moisture resistant and can be secured in a bait station. Peanut flavored for maximum bait acceptance and performance.

ACTIVE INGREDIENT Diphacinone



4lb Pail

MTO32444

Min. Buy 1ea

18lb Pail

MTO32448

Min. Buy 1ea



Slug and Snail Control

Deadline® Ornamental Molluscicide

by AMVAC ENVIRONMENTAL PRODUCTS

Ornamental labeled specifically for use as a barrier around gardens or plants. Deadline uses SNARE, a powerful attractant, to lure slugs and snails to Deadline and away from plants. It is formulated into mini-pellets that are rain fast and can withstand as much as six inches of rain or heavy watering over 14 days.

REI 0 hours for adults. See label for children and pets.

RATE 0.25lb per 1,000sq ft

ACTIVE INGREDIENT Metaldehyde

CONTROLS Snails, slugs.



25lb

AMVC11534

Min. Buy 1ea



IronFist™ Slug & Snail Bait

by BELCHIM CROP PROTECTION USA, LLC

Kills snails and slugs on turf, ornamentals, vegetables and fruit. Slug and snails ingest the bait, causing them to stop feeding and die.

Immediate plant protection will be observed through the decrease in feeding. Safe to pets and wildlife.

REI 0 Hours

RATE 10 to 40lb per Acre

ACTIVE INGREDIENT Sodium Ferric EDTA

CONTROLS Snails, slugs.



50lb

RNG700001.050 Min. Buy 1ea



IRONFIST™ Slug & Snail Bait

Broad Spectrum Control of Slugs and Snails

- **PROVEN** Performance- Kills Snails and Slugs
- Small, Uniform Pellet Size **MAXIMIZES** baiting points
- **EFFECTIVE** in all weather conditions, including cool and wet
- **IDEAL** for application at planting
- **REGISTERED** for use on ornamentals, shrubs, gardens, turf, citrus, vegetables, fruit trees, berries, etc..

EPA Registration No.:
67702-32-87865



Belchim Crop Protection USA, LLC
2751 Centerville Road | Suite 100
Wilmington, DE 19808
Phone: 855-445-7990
Email: info.usa@belchim.com

REFERENCE GUIDE for GREENHOUSE and NURSERY PRODUCTION

PLANT GROWTH REGULATORS



****Use Site(s) Key:** GH = Greenhouse N = Nursery

Plant Growth Regulators (PGRs)

(by Mode of Action Group and Class)

MOA Group*	Class	Activity Level**	Common Name	Trade Name	REI	Use Site(s)***	Company	
1	Pyrimidine	Medium	Ancymidol	A-Rest ¹	12	GH/N	SePRO Corp.	
			Flurprimidol	Topflor ¹	12	GH/N	SePRO Corp.	
	Quaternary Ammonium	Medium	Chlormequat chloride	Cycocel ¹	12	GH/N	OHP, Inc.	
			Hydrazide	Daminozide	B-Nine ¹	24	GH/N	OHP, Inc.
			Triazole	High	Pacllobutrazol	PAC O™ <i>*formerly Paczol¹</i>	12	GH/N
Uniconazole-p	Sumagic ¹	12			GH	Nufarm		
2	Cyclohexaketone	Medium	Dikegulac-sodium	Atrimmec ¹	12	GH/N	PBI Gordon Crop.	
3	Fatty acid	Medium	Methyl esters of fatty acids	Off-Shoot-O ¹	0	GH/N	Cochran Corp.	
4	Gibberellin (GA)	High	Gibberellic acid (A3)	ProGibb ¹ T&O	12	GH/N	Mycorrhizal Applications, LLC	
	Synthetic Cytokinin/ Gibberellin	High	Cytokinin/ Gibberellic acid	Fascination ¹	4	GH	Nufarm	
	Synthetic Cytokinin	High	N-(phenylmethyl)- 1H-purine-6-amine	Configure ¹	12	GH	Fine Agrochemicals, LTD.	
5	Organophosphorus	Medium	Ethephon	Florel Brand Pistill	48-72	GH/N	Monterey Chemical	
				Florel Brand Ethephon	48-72	GH/N	Southern Agricultural Insecticides, Inc.	
6	Rooting Hormones Synthetic Auxin		IBA	Hormodin ¹	0	GH/N	OHP, Inc.	
			IBA + NAA	Dip'N Grow	0-24	GH/N	Dip'N Grow, Inc.	

** PGR activity varies greatly depending on product class; e.g. the triazole class is very active. The low, medium and high ratings are guides to product activity. The higher the level of activity the more care must be taken when using.

Thank you to Dr. Joyce Latimer, Virginia Tech, for help in preparing the PGR chart.

*Plant Growth Regulators Modes of Action

- Gibberellic Acid synthesis inhibitors
- DNA synthesis inhibitor
- Chemical pincher
- Growth promoter
- Ethylene generator
- Rooting hormones
- ABA abscisic acid
- UN. Unknown mode of action

Plant Growth Regulators

Advocate™ Plant Growth Stimulant

by FINE AMERICAS, INC.

Advocate is a plant biostimulant which can improve the rooting of plant cuttings for plant propagation. For use on annual, perennial, and woody ornamental cuttings.

REI 12 hours

RATE Varies, see label for more information.

ACTIVE INGREDIENT IBA (Indole-butyric acid)

CONTROLS Plant growth.



32oz Bottle AGENCY

FINE190639 Min. Buy 1ea

Alesco® Ethylene Inhibitor

by CHRYSAL AMERICAS

Chrysal Alesco® is a foliar spray to apply before shipping to avoid ethylene damage. It prevents shrinkage and premature dropping of buds, leaves and flowers. Ensures top quality plants throughout the chain. Ethylene sensitive potted plants that have been treated with Chrysal Alesco® have more blooms in retail.

ACTIVE INGREDIENT Silver nitrate



200ml (6.76fl oz)

CHRYSALEB250 Min. Buy 1ea



A-Rest™ Plant Growth Regulator

by SEPRO CORPORATION

A-Rest provides just the right amount of growth regulation. Gentle enough on tender plugs and transplants yet strong enough to adequately regulate perennials. A-Rest reduces internode elongation resulting in a more compact plant with darker green leaves. A-Rest has no adverse effects on flowers including no flower delay, no residue and no phytotoxicity. A-Rest also strengthens and tones plants, readying them for transplanting and shipping.

REI 12 Hrs

ACTIVE INGREDIENT Ancymidol



32oz

SEPROA-REST Min. Buy 1ea

2.5gal AGENCY

SEPRO1012.225 Min. Buy 1ea

30gal Drum AGENCY

SEPRO1012.30 Min. Buy 1ea



B-Nine® WSG Plant Growth Regulator

by OHP, INC.

Reduces plant height in ornamental plants by reducing internode length. Other benefits include a deeper green color and reduced breakage during shipping. When applied to plant foliage is absorbed into the leaf, moves within the plant to the growing points to reduce internode elongation.

REI 24 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Daminozide



1lb

OHP981312 Min. Buy 1ea

5lb

OHP981318 Min. Buy 1ea



Bonzi® Plant Growth Regulator

by SYNGENTA CROP PROTECTION

The leading ornamental plant growth regulator (PGR), Bonzi® keeps plants uniformly compact, hardy and looking their best. It results in one consistent crop after another, with well-proportioned plants achieving identically ideal form and color. While a small amount may be taken in through leaves, it is primarily absorbed through the stems and roots.

REI 12 Hrs

RATE Varies according to application. See label.

ACTIVE INGREDIENT Paclobutrazol



32oz

SYN13869 Min. Buy 1ea

2.5gal AGENCY

SYN27714 Min. Buy 1ea



Citadel® Plant Growth Regulator

by FINE AMERICAS, INC.

Citadel is an effective growth regulator for use on a wide variety of ornamental crops. It reduces plant height by limiting internode elongation, resulting in more desirable, compact and marketable plants.

REI 12 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT chlormequat



1gal AGENCY

FINE19-0731A Min. Buy 1ea



Collate® Plant Growth Regulator

by FINE AMERICAS, INC.

Used to increase lateral branching in many popular ornamental varieties, including azaleas, chrysanthemums, geraniums, lantana, petunias and verbena. It is also ideal for controlling plant height and stem topple in daffodils and hyacinth, as well as delaying flowering in a wide range of ornamental crops.

REI 12 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT ethephon



1gal AGENCY

FINE19-0638 Min. Buy 1ea



Concise® Plant Growth Regulator

by FINE AMERICAS, INC.

Concise is an effective growth regulator for use on a wide variety of ornamental crops. It reduces plant height by limiting internode elongation, resulting in more desirable, compact and marketable plants.

REI 12 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Uniconazole



1gal AGENCY

FINE19-0636C Min. Buy 1ea

15gal Drum AGENCY

FINE19-0636D Min. Buy 1ea



Plant Growth Regulators

Configure® Plant Growth Regulator

by FINE AMERICAS, INC.

Increases lateral branching and flowering in a number of popular ornamental species. Applications may reduce the height of treated plants, resulting in more compact and marketable crops. Labeled for use on containerized annual and perennial flowering and foliage crops as well as tropical plants.

REI 12 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Benzylaminopurine



64oz AGENCY

FINE19-0163D Min. Buy 1ea

15gal Drum AGENCY

FINE19-0163MID Min. Buy 1ea



Crest™ Plant Growth Stimulant

by FINE AMERICAS, INC.

Crest is a plant biostimulant which can improve the germination of seed, plant emergence in cool conditions, root growth, seedling development, and plant growth and development throughout the growing season.

REI 4 hours

RATE Varies, see label for more information.

ACTIVE INGREDIENT Cytokinin, Indole Butyric Acid, Gibberellic Acid

CONTROLS Plant growth.



1 Gallon AGENCY

FINE190638 Min. Buy 1ea

Cycocel® Plant Growth Regulator

by OHP, INC.

May be used on any crop in the greenhouse or nursery including but not limited to, poinsettias, hibiscus, azaleas and geraniums to reduce stem elongation, induce early flowering, improve flowering and to produce compact plants with multiple buds per shoots.

REI 12 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Chlormequat



32oz

OHP981660 Min. Buy 1ea

1gal

OHP981661 Min. Buy 1ea

30gal Drum

OHP981662 Min. Buy 1ea



Dazide® 85WSG Plant Growth Regulator

by FINE AMERICAS, INC.

Provides greener, stronger and more compact ornamental plants. Effective growth control that helps growers manage plant growth and development to ensure plants are more compact, stronger and better suited to cope with transportation and transplanting.

REI 12 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Daminozide



5lb AGENCY

FIN403 Min. Buy 1ea



Dip 'N Grow® Rooting Hormone

by DIP 'N GROW

Dip 'N Grow liquid rooting hormone for rooting new plants from cuttings. Easy to use liquid formulation.



1pt

DIPNDG01612 Min. Buy 1ea

1gal

DIPNDG12804 Min. Buy 1ea

Shipping Info **HAZARDOUS**



Fascination® Plant Growth Regulator

by NUFARM AMERICAS INC.

Fascination plant growth regulator for Lilies, Poinsettias and other ornamentals. Fascination delays leaf yellowing, increases flower size and number and prolongs flowering.

REI 12 Hrs

RATE Varies according to application method. See label.

ACTIVE INGREDIENT Cytokinin/Giberrellic Acid



64oz

VAL89020.922 Min. Buy 1ea



Florel® Growth Regulator

by BRANDT CONSOLIDATED INC.

Applied as a foliar spray, Florel will increase lateral branching, prevent flower initiation and development and inhibit internode elongation on greenhouse ornamentals.

REI 48 Hrs

RATE Varies according to crop

ACTIVE INGREDIENT Ethephon



1gal

MLGNLG4110 Min. Buy 1ea



Florgib® 4L Plant Growth Regulator

by FINE AMERICAS, INC.

Florgib enhances stem elongation and flowering in ornamental plants.

REI 4 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Gibberellic Acid



1gal AGENCY

FINE19-0760A Min. Buy 1ea

Shipping Info **HAZARDOUS**



Plant Growth Regulators

Fresco® Plant Growth Regulator

by FINE AMERICAS, INC.

Provides a reduction of lower leaf yellowing in lilies and promotes bract expansion on poinsettia. Maybe used to counteract Gibberellin inhibiting PGR applications if needed.

REI 4 Hrs

RATE Varies, see label

ACTIVE INGREDIENT Cytokinin/Gibberellic Acid



32oz AGENCY

FINE19-0736A Min. Buy 1ea



Pac O™ Plant Growth Regulator

by OHP, INC.

Pac O plant growth regulator is for use on commercially grown ornamental plants grown in containers in greenhouses and nurseries. Long lasting plant growth regulator that can be applied as a liner dip, spray, or drench

REI 12 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Paclobutrazol



1gal

OHP986192 Min. Buy 1ea



Hormodin® Rooting Hormone

by OHP, INC.

Hormodin enhances rooting, which reduces propagation bench time and plant loss. Hormodin is easy to use, yielding steadfast performance of rooted cuttings and zero disease migration.

REI 0 Hrs

RATE 1lb treats 35,000 cuttings

ACTIVE INGREDIENT Indole-3-butyric acid



Hormodin® 1

by OHP, INC.

Hormodin 1 rooting hormone is a general purpose powder designed for the grower who propagates plants such as roses, carnations, poinsettias, some shrubs and most soft herbaceous plants. (00.1% (IBA).

1lb

OHP983111 Min. Buy 1ea

Hormodin® 2

Hormodin 2 rooting hormone is prepared specially for propagating many woody and semi-woody plants, including some of the evergreens.(00.3% (IBA).

1lb

OHP983221 Min. Buy 1ea

Hormodin® 3 Rooting Hormone

by OHP, INC.

Hormodin 3 rooting hormone is prepared specially for propagating the more difficult to root varieties, including many of the evergreens and dormant leafless cuttings. (00.8% (IBA).

.5lb

OHP983380 Min. Buy 1ea

Phytrtronics® Hortus® IBA Water Soluble Salts™ 20%

by PHYTOTRONICS, INC.

Hortus IBA Water Soluble Salts are used to propagate new plants from cuttings. This rooting hormone uses 20% IBA Water Salts as its medium and contains No Alcohol. Because of this, it is EPA registered for "spray drip down or over the top" safe application to plants in propagation beds. No need to "dip" each individual plant.

REI 0 hours



.25 kilo

PHT0339 Min. Buy 1ea

1 kilo

PHT0337 Min. Buy 1ea



Piccolo® 10XC Plant Growth Regulator

by FINE AMERICAS, INC.

Brings out the best in ornamentals by producing compact, consistent quality plants. By delivering outstanding height and radius control, Piccolo enhances the quality of bedding plants, flowering and foliage crops, bulb crops, perennials and woody ornamentals, making them easier to market and more profitable to produce. As a spray or drench, Piccolo has been proven in dozens of university trials and ranks among the most popular PGRs among quality-minded growers. Plus, one quart of Piccolo 10 XC equals 2.5 gallons of regular Piccolo.

REI 12 Hrs

RATE Varies according to application method

ACTIVE INGREDIENT paclobutrazol



32oz AGENCY

FINE19-0636E Min. Buy 1ea



Piccolo® Plant Growth Regulator

by FINE AMERICAS, INC.

Brings out the best in ornamentals by producing compact, consistent quality plants. By delivering outstanding height and radius control, Piccolo enhances the quality of bedding plants, flowering and foliage crops, bulb crops, perennials and woody ornamentals, making them easier to market and more profitable to produce. As a spray or drench, Piccolo has been proven in dozens of university trials and ranks among the most popular PGRs among quality-minded growers.

REI 12 Hrs

RATE Varies according to application method

ACTIVE INGREDIENT paclobutrazol



1gal AGENCY

FINE190636 Min. Buy 1ea



Plant Growth Regulators

ProGibb® LV Plus T&O

by MYCORRHIZAL APPLICATIONS LLC

ProGibb LV Plus T&O enhances overall plant growth, increases stem elongation, and induces flowering and fruiting of plants. Also used to promote stem elongation of tree form plants.

REI 4 Hrs

ACTIVE INGREDIENT Gibberellic Acid



32oz

VAL22055.911 Min. Buy 1ea

Shipping Info HAZARDOUS



Sumagic® Plant Growth Regulator

by NUFARM AMERICAS INC.

Offers a broad label for use on numerous plants, from bedding plants to woody ornamentals to poinsettias. Applications produce plants with denser, more consistent compact growth with increased plant shelf life and no phytotoxicity when used according to label directions.

REI 12 Hrs

RATE Varies according to application method. See label.

ACTIVE INGREDIENT Uniconazole-p



1gal

VAL85100.935 Min. Buy 1ea

15gal Drum

VAL85100.939 Min. Buy 1ea



SePRO Cutless® 0.33G Plant Growth Regulator

by SEPRO CORPORATION

Cutless® is a systemic landscape and ornamental growth regulator that effectively suppresses shoot growth of perennial landscape and container grown ornamental plants. Treated plants require less trimming and maintain a more compact form.

RATE 1 to 3 grams per pot. See label for landscape rates.

ACTIVE INGREDIENT Flurprimidol



21lb

SEPRO102921 Min. Buy 1ea



Topflor™ Plant Growth Regulator

by SEPRO CORPORATION

Topflor is a versatile PGR for ornamentals including bedding, annual and perennial plants, bulb crops and woody ornamentals. It has the strength to regulate vigorous species yet provides the proper amount of growth control for slower growing crops. Topflor can be applied using spray, drench, or pre-plant soak applications.

REI 12 Hrs

RATE Varies. See label for specific crops

ACTIVE INGREDIENT Flurprimidol



2 Liter AGENCY

SEPRO1035.42 Min. Buy 1ea

5gal AGENCY

SEPRO1035.5 Min. Buy 1ea



SMO Floralife® EthylBloc® Truck Kit

by SMITHERS-OASIS USA

EthylBloc inhibits the negative effects of ethylene. For use by professional greenhouse and nursery growers and retail florists to protect crops from ethylene damage during handling, staging, and shipping. Truck kits protect whole trailer shipments. Also available in sachets for in-box use.



75gr

SM5FL9075K Min. Buy 1ea



Herbicides Quick Reference Chart

Always Refer to Product Label!

Product	Pre-Emergent	Post-Emergent	Broadleaves	Grasses	Sedges	Greenhouse Label	Spray(S) or Granular (G)		
Axxe		X	X	X		X	S	Ammonium Nonanoate	OMRI listed herbicide labeled for greenhouse use. Nonselective contact burndown of weeds
Barricade	X		X	X			S	Prodiamine	Preemergent Sprayable herbicide for use in nurseries, turf, landscapes & noncrop areas
Basagran T&O		X	X		X		S	Bentazon	Contact herbicide for use in turf, nurseries, ornamentals & noncrop areas
Biathlon	X		X	X			G	Oxyfluorfen, Prodiamine	2 Active ingredients that control broadleaf & grassy weeds in nurseries and noncrop areas
Broadstar G	X		X	X			G	Flumioxazin	Granular for use in nurseries and landscapes. Same active ingredient as Sureguard
Casoron G	X	X	X	X	X		G	Dichlobenil	Controls tough weeds like Thistle, Horsetail, and Nutsedge. For use on woody ornamentals and noncrop areas
Cheetah Pro		X	X	X	X	X	S	Glufosinate Ammonium	Contact non-selective herbicide for use in nurseries, greenhouses, turf & noncrop areas
Confront		X	X				S	Clopyralid, Triclopyr	Broadleaf turf herbicide
Dimension	X		X	X			S	Dithiopyr	Sprayable for use in nurseries, turf, landscapes & noncrop areas
Envoy Plus		X		X		X	S	Clethodim	Postemergence control of annual & perennial grasses
Finale		X	X	X	X	X	S	Glufosinate-Ammonium	Contact non-selective herbicide for use in nurseries, greenhouses, turf & noncrop areas
FireWorxx		X	X	X		X	S	Capric and Caprylic Acid	Rapid contact non-selective herbicide for use in nurseries, greenhouses, landscape & noncrop areas
Fortress	X		X	X			G	Isoxaben, dithiopyr	Combination product with the active ingredients from Gallery and Dimension. Broad spectrum control of weeds, but with a safe profile for sensitive shrubs and perennials
Freehand G	X		X	X	X		G	Dimethenamid-P, Pendimethalin	2 Active ingredients that control broadleaf & grassy weeds and yellow nutsedge
Fuerte G	X		X	X			G	Flumioxazin, Prodiamine	Preemergent granular herbicide with two active ingredients for use in nurseries and landscape ornamentals
Fusilade II		X		X			S	Fluazifop	Postemergence control of annual & perennial grasses
Gallery SC	X		X				S	Isoxaben	Sprayable for use in nurseries, turf, landscapes & noncrop areas. Excellent crop safety
Gemini SC	X		X	X			S	Isoxaben, Prodiamine	Combination product to control wide array in containers and field ornamentals.
Goal	X	X	X	X			S	Oxyfluorfen	For use on conifers & certain woody ornamentals. Contact burn and preemergence control
Lontrel T&O		X	X				S	Clopyralid	Excellent on thistle. Sprayable for use in landscapes, nurseries & turf
Marengo SC	X		X	X		X	S	Indaziflam	Long lasting preemergent control of weeds in nurseries and greenhouses.
Marengo G	X		X	X			G	Indaziflam	Long lasting herbicide for broadcast applications in nurseries
OH2	X		X	X			G	Oxyfluorfen, Pendimethalin	Granular for container and field grown ornamentals
Pendulum Aquacap	X		X	X			S	Pendimethalin	Sprayable for use in landscapes, nurseries & noncrop areas
Pennant Magnum	X		X	X	X		S	Metolachlor	Sprayable for use in nurseries, landscapes & noncrop areas. Preemergent control of yellow nutsedge
Pramitol 25E	X	X	X	X			S	Prometon	Long lasting vegetation management. Residual control of most weeds for 1+ years
Preen Plus	X		X	X			G	Isoxaben, Trifluralin	Granular herbicide with 2 active ingredients. Labeled for use in nurseries, landscapes
Ranger Pro		X	X	X	X	X	S	Glyphosate	Sprayable nonselective systemic postemergent control of most weeds. Roundup equivalent.
RegalStar	X		X	X			G	Oxadiazon, Prodiamine	Can be applied to woody ornamental shrubs, vines, trees, and evergreens in field and container nurseries and landscapes
Reward		X	X	X		X	S	Diquat	Sprayable non-selective contact control of most weeds. Rapid burndown
Ronstar FLO	X		X	X			S	Oxadiazon	Active on shoots only with no root activity
Roundup ProMax		X	X	X	X	X	S	Glyphosate	Improved formulation of glyphosate with concentrated surfactant
Roundup QuikPro		X	X	X			S	Glyphosate, Diquat	Contains Roundup for systemic control and diquat to deliver rapid burndown
Scythe		X	X	X		X	S	Pelargonic acid	Sprayable non-selective contact control of most weeds
Sedgehammer Plus		X			X		S	Halosulfuron-methyl	Postemergence control of Nutsedge for use in turf, landscapes, & noncrop areas
Segment II		X		X			S	Sethoxydim	Selective control of grassy weeds in nursery and landscape crops
Snapshot	X		X	X			G	Isoxaben, Trifluralin	Granular for use in nurseries, landscapes and noncrop areas
Sureguard SC	X	X	X	X		X	S	Flumioxazin	Labeled for use in nurseries, landscapes and noncrop areas. Contact burndown and preemergence control
Tower	X		X	X	X		S	Dimethenamid-P	Controls broadleaf & grassy weeds and sedges in nurseries and landscapes
Treflan G	X		X	X			G	Trifluralin	Granular for use in nurseries, landscapes and noncrop areas
Vessel		X	X				S	2,4-D, Dicamba	3-Way broadleaf herbicide for turf and noncrop sites

REFERENCE GUIDE for GREENHOUSE and NURSERY PRODUCTION

HERBICIDES

RESISTANCE MANAGEMENT

Herbicide rotation is just as important as the rotation of other pest control products. Herbicide mode of action (MOA) groups are listed by the Herbicide Resistance Action Committee (HRAC). Rotating MOAs on a regular basis is key to controlling weeds and maintaining the effectiveness of herbicides.

Please read and follow all label directions and precautions.

****Use Site(s) Key:**

PO = post emergence
A = Annual Grasses
S = Sedges

PR = pre emergence
BW = Broadleaf Weeds
WO = Certain Woody
Ornamentals

SF = Soil fumigant
P = Perennials

GH = registered for use in greenhouses
MA = Most annuals



Herbicides

(by Mode of Action Group and Class)

MOA Code* & Group	Class	Common Name	Trade Name	REI	Use Site(s)**	Company
1	Aryloxyphenoxy propionate 'FOPs'	Fenoxaprop-p-ethyl	Acclaim [®] Extra	24	PO; A, P	Bayer Environmental Science
		Fluazifop-P-butyl	Fusilade [®] II	12	PO; A, P	Syngenta
	Cyclohexanedione 'DIMs'	Clethodim	Envoy Plus [®]	24	PO; A, P	Nufarm
		Sethoxydim	Segment [®]	12	PO; A, P	BASF
2	Imidazolinone	Imazaquin	Image [®]	12	PR/PO; A, P, BW, S	BASF
3	Pyridine	Dithiopyr	Dimension [®]	12	PR;A,BW	Corteva Agriscience
	Benzamide	Pronamide	Kerb [®]	24	PR/PO; A, BW	Corteva Agriscience
	Dinitroaniline	Pendimethalin	Pendulum [®]	24	PR; A, BW	BASF
			Corral [®]	24	PR; A,BW	ICL Specialty Fertilizers
	Benzoic acid	Prodiamine	Barricade [®]	12	PR; A, BW	Syngenta
4	Pyridine carboxylic acid	DCPA	Dacthal [®]	12	PR; A,BW	Amvac Chemical Corp.
4	Pyridine carboxylic acid	Clopyralid	Lontrel [®]	12	PO; WO	Corteva Agriscience
5	Triazine	Simazine	Princep [®]	12	PR; A, BW	Syngenta
6	Benzothiadiazinone	Bentazon	Basagran [®] T/O	48	PO; BW, S	BASF



Herbicides *continued*

(by Mode of Action Group and Class)

MOA Code* & Group	Class	Common Name	Trade Name	REI	Use Site(s)**	Company
9	Glycine	Glyphosate	Roundup Pro [®]	4	PO; A, P, BW, GH	Bayer Environmental Science
			Refuge [™]	12	PO; A, P, BW, GH	Syngenta
10	Phosphinic acid	Glufosinate	Finale [®]	12	PO; MA, P, GH	Bayer Environmental Science
12	Pyridazinone	Norflurazon	Predict [®]	12	PR; A, BW	Syngenta
14	Diphenylether	Oxyfluorfen	Goal [®]	24	PR; PO, A, BW	Corteva Agriscience
			Ronstar [®]	12	PR; A, BW	Bayer Environmental Science
	N-phenylphthalimides	Flumioxazin	BroadStar [®]	12	PR; A, BW	Nufarm
			SureGuard [®]	12	PR; PO, A, BW	Nufarm
15	Acetamide	Napropamide	Devrinol [®]	12-24	PR; A, BW	United Phosphorous
	Chloroacetamide	S-metolachlor	Pennant [®] Magnum	24	PR; A, BW	Syngenta
		Dimethenamid-P	Tower [®]	12	PR; A, BW, S	BASF
20	Nitrile	Dichlobenil	Casoron [®]	12	PR; A, P	OHP, Inc.
21	Benzamide	Isoxaben	Gallery [®]	12	PR, A, BW	Corteva Agriscience
22	Bipyridylum	Paraquat	Gramoxone [®] Inteon	12-24	PO; MA, P, BW	Syngenta
			Reward [®]	24	PO; MA, P, GH	Syngenta
26	Unknown	Dazomet	Basamid [®]	24	SF; MA, P	Certis USA, LLC
		Metam	Vapam [®]	48	SF; MA, P	Amvac Chemical Corp.
		Pelargonic acid	Scythe [®]	12	PO; MA, P, GH	Gowan Company
29	Alkylazines	Indaziflam	Marengo [®]	12	PR; A, GH, BW	Bayer Environmental Science
			Marengo [®] G	12	PR; A, BW	Bayer Cropscience Science
3+21	Diphenylether + Benzamide	Prodiamine + Isoxaben	Gemini [®] G	12	PR; A, BW	ICL Speciality Fertilizers
14+3	Diphenylether + Dinitroaniline	Oxyfluorfen + Pendimethalin	OH2 [®]	24	PR; A, BW	ICL Speciality Fertilizers
14+3	Diphenylether + Dinitroaniline	Oxyfluorfen + Prodiamine	Biathlon	24	PR; A, BW	OHP, Inc.



Herbicides *continued*

(by Mode of Action Group and Class)

MOA Code* & Group	Class	Common Name	Trade Name	REI	Use Site(s)**	Company
14+3	N-phenylphthalimides + Dinitroaniline	Flumioxazin + Proflumicarb	Fuerte [®]	12	PR; A, BW	OHP, Inc.
14+3	Oxadiazole + Dinitroaniline	Oxadiazon + Proflumicarb	RegalStar [®] II	12	PR; A, BW	Regal Chemical Co.
14+14	Diphenylether + Oxadiazole	Oxyfluorfen + Oxadiazon	Regal O-O [®]	24	PR; A, BW	Regal Chemical Co.
15+3	Chloroacetamide + Dinitroaniline	Dimethenamid-P + Pendimethalin	Freehand [®]	12	PR; A, BW, S	BASF
21+3	Benzamide + Pyridine	Isoxaben + Dithiopyr	Fortress [®]	12	PR; A, BW	OHP, Inc.
21+3	Benzamide + Dinitroaniline	Isoxaben + Trifluralin	Snapshot [®] TG	12	PR; A, BW	Coreteva Agriscience
M	Soaps	Ammonium Nonanoate	Axxe [®]	24	PO; GH	BioSafe Systems
		Caprylic + Capric Acid	FireWorxx	24	PO; GH	OHP, Inc.

*Herbicides Modes of Action

1. Inhibition of acetyl CoA carboxylase (ACCase)
2. Inhibition of acetolactate synthase ALS (acetohydroxyacid synthase AHAS)
3. Microtubule assembly inhibition
4. Action like indole acetic acid (synthetic auxins)
5. Inhibition of photosynthesis at photosystem II (C1)**
6. Inhibition of photosynthesis at photosystem II (C3)**
7. Inhibition of photosynthesis at photosystem II (C2)**
9. Inhibition of EPSP synthase
10. Inhibition of glutamine synthetase
12. Bleaching: inhibition of carotenoid biosynthesis at the phytoene desaturase step (PDS)
14. Inhibition of protoporphyrinogen oxidase (PPO)
15. Inhibition of VLCFAs (Inhibition of cell division)
20. Inhibition of cell wall (cellulose) synthesis
21. Inhibition of cell wall (cellulose) synthesis
22. Photosystem -I- electron diversion
26. Unknown
29. Inhibit cellulose biosynthesis
- M. Miscellaneous

**Subclasses with different binding behavior at the binding protein D1, or different classes

*This mode of action listing is based on the Herbicide Resistance Action Committee (HRAC) and the Weed Science Society of America (WSSA). More information on the Herbicide Resistance Action Committee and the Mode of Action Classification is available from: www.hracglobal.com.



Herbicides

AXXE® Broad Spectrum Herbicide

by BIOSAFE SYSTEMS

A non-selective, post emergence broad spectrum herbicide labeled for use on many sites including greenhouses, nurseries and landscapes. Controls grasses and broadleaf weeds, mosses, liverworts and lichens. Provides a rapid burn down of weeds within hours and then biodegrades quickly, leaving no harmful residue behind. Does not volatilize or migrate through soil and is safe to use in all areas of production, both inside and outside.

REI 4 Hrs

RATE Varies according to application method. See label.

ACTIVE INGREDIENT Ammonium nonanoate

CONTROLS Broadleaf weeds, grasses, moss, and liverwort



2.5gal

BIOS7600-2.5 Min. Buy 1ea

**Barricade® 4FL Herbicide**

by SYNGENTA CROP PROTECTION

Barricade 4FL for preemergence control of grasses and broadleaf weeds in established turfgrasses, container grown and landscape ornamentals, nurseries and commercial landscapes.

REI 12 Hrs

RATE Varies by application. See label.

ACTIVE INGREDIENT Proflamifone

CONTROLS Many broadleaf and grassy weeds. See label for complete list.



4oz

SYN70648 Min. Buy 1ea

1gal AGENCY

SYN37150 Min. Buy 1ea

**Barricade® 65WG Herbicide**

by SYNGENTA CROP PROTECTION

Barricade 65 WG for preemergence control of grasses and broadleaf weeds in established turfgrasses, container grown and landscape ornamentals, nurseries and commercial landscapes.

REI 12 Hrs

RATE 0.5-1.5lbs per acre

ACTIVE INGREDIENT Proflamifone

CONTROLS Many broadleaf and grassy weeds. See label for complete list.



5lb AGENCY

SYN51637 Min. Buy 1ea

**Basagran® T/O Herbicide**

by BASF CORP

A turf and ornamental herbicide that offers reliable, post-emergent control of tough broadleaf weeds, yellow nutsedge and annual sedges in turf and ornamentals.

REI 48 Hrs

RATE 24 to 32oz per Acre

ACTIVE INGREDIENT Bentazon

CONTROLS Broadleaf weeds, yellow nutsedge, annual sedges and more. See label for complete list



1gal

BAS59011636 Min. Buy 1ea

**Biathlon® G Herbicide**

by OHP, INC.

A pre-emergent granular herbicide for control of a wide range of problem grass and broadleaf weeds. Works by creating a barrier in the soil and is active for several months. Biathlon works by inhibiting cell division and disrupting cell wall formation in shoots and roots of emerging seedling weeds.

REI 24 Hrs

RATE 100lb per Acre

ACTIVE INGREDIENT Oxyfluorfen and Proflamifone

CONTROLS Broadleaf and grassy weeds. See label for complete list.



50lb

OHP981350 Min. Buy 1ea

**BroadStar® Herbicide**

by NUFARM AMERICAS INC.

BroadStar herbicide controls tough broadleaf and grassy weeds with a long lasting residual activity. Low odor and dust free granular formulation for easy broadcast spreading. For use on container and field grown ornamentals, landscape ornamentals and non-bearing fruit and nut trees.

REI 12 Hrs

RATE 150lb per Acre

ACTIVE INGREDIENT Flumioxazin

CONTROLS Broad spectrum of annual broadleaf and grassy weeds such as spurge, bittercress, oxalis, common groundsel and crabgrass



50lb

VAL88560.29 Min. Buy 1ea

**Casoron® 4G Fine 16-30 Mesh Herbicide**

by OHP, INC.

A pre-emergent herbicide which easily handles many troublesome weeds in and around established woody landscape ornamentals, non-crop areas, fruit and nut trees and respective nurseries. It develops a vapor barrier and is active for 9-10 months after application. Applications should be made under cool weather conditions in late fall or very early spring. Active ingredient is dichlobenil, which acts by inhibiting germination and actively dividing cells of meristems of growing points and root tips.

REI 12 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Dichlobenil

CONTROLS Broadleaf and grassy weeds. See label for complete list.



25lb

OHP981520 Min. Buy 1ea

**Cheetah® Pro**

by NUFARM AMERICAS INC.

Cheetah Pro is a non-selective, post-emergent herbicide that provides fast, effective control of the toughest broadleaf and grassy weeds including those resistant to glyphosate. Minimal soil residue makes it an effective pre-plant treatment for turf, ornamentals, and greenhouses.

REI 12 hours

RATE 5 to 20 oz per 100 gal

ACTIVE INGREDIENT glufosinate-ammonium

CONTROLS Many grassy and broadleaf weeds.



1 Gallon

NTS10761041 Min. Buy 1ea

2.5gal

NTS10761225 Min. Buy 1ea

64oz

NTS10761464 Min. Buy 1ea



Herbicides

Dimension Ultra® WP Herbicide

by Corteva (Dow Agro)

Dimension herbicide provides pre-emergence control of more than 45 grassy and broadleaf weeds as well as post-emergence control of crabgrass. Use sites include turf, landscape and container grown ornamentals. It is safe to use on established turfgrasses and most ornamental plants.

REI 12 hours

RATE Varies depending on application method. See label for complete information.

ACTIVE INGREDIENT Dithiopyr**CONTROLS** Broadleaf weeds.**40oz****DOW19-0008D** Min. Buy 1ea**Finale® Herbicide**

by BASF CORP

Provides fast, effective control of a broad spectrum of emerged annual and perennial grasses, broadleaf weeds, woody species and controls even the toughest weeds, like poison ivy, dandelion and thistle. Only kills what you spray it on and produces results in 1 to 4 days under many conditions. Shows rapid control without the regrowth of typical burndowns, has a long application window, is effective in spring and fall and does not translocate in most plants. Minimal soil-residual activity means transplanting or seeding is possible hours after application.

REI 12 hours

RATE 3 to 4 qts per acre**ACTIVE INGREDIENT** Glufosinate-ammonium**CONTROLS** Many broadleaf and grassy weeds**2.5gal bottle****PROKZ4193473** Min. Buy 1ea**Dimension® 2EW Herbicide**

by Corteva (Dow Agro)

A specialty selective herbicide provides pre-emergence and early post-emergence control of crabgrass, and season-long control of crabgrass, goose grass, foxtail, spurge and annual bluegrass (Poa Annua). It also is proven effective for more than 45 other grassy and small-seeded broadleaf weeds.

REI 12 hours

RATE Varies depending on application method. See label for complete information.

ACTIVE INGREDIENT Dithiopyr**CONTROLS** Broadleaf weeds.**2.5gal****DOW19-0008A** Min. Buy 1ea**Fortress® Herbicide**

by OHP, INC.

Fortress is a pre-emergent herbicide containing two active ingredients that is formulated on a dust and odor-free granule. May be used on many ornamental grasses and perennials. Controls a wide range of both grassy and broadleaf weeds by creating a barrier in the soil. Fortress works by inhibiting cell division and disrupting cell wall formation in roots and shoots of emerging weed seedlings.

REI 12 Hrs

RATE 150lb per Acre**ACTIVE INGREDIENT** Isoxaben and Dithiopyr**CONTROLS** Many broadleaf and grassy weeds. See label for complete list.**50lb****OHP982800** Min. Buy 1ea**Drive® XLR8**

by BASF CORP

Drive XLR8 turf herbicide provides control of crabgrass, torpedograss, several broadleaf weeds and more. Drive delivers quicker uptake by the plant and is rainfast in less than an hour. Labeled for use in residential, industrial, and commercial turfgrasses, sod farms, sports and recreation fields.

REI 4 hours

RATE varies, see label**ACTIVE INGREDIENT** Quinclorac**CONTROLS** crabgrass and broadleaf weeds in turf grass**64oz Bottle****BAS59011404** Min. Buy 1ea**FreeHand® 1.75G Herbicide**

by BASF CORP

Features two active ingredients; Pendimethalin and Dimethenamid-P. This unique combination makes the perfect tool for pre-emergent weed control of annual grasses, sedges and many broadleaf weeds. Use sites include nurseries, residential and commercial landscapes, turfgrass.

REI 12 Hrs

RATE 100 to 200lb per Acre**ACTIVE INGREDIENT** Dimethenamid-P + Pendimethalin**CONTROLS** Annual grasses, sedges and many broadleaf weeds. See label for complete list.**50lb AGENCY****BAS59011296** Min. Buy 1ea**Envoy Plus® Herbicide**

by NUFARM AMERICAS INC.

Envoy Plus herbicide provides effective post-emergent control of grassy weeds. It provides over-the-top control of both annual and perennial grasses with excellent plant safety. For use on garden flowers and plants, groundcovers and ornamental trees and shrubs.

REI 12 Hrs

RATE 9 to 32oz per Acre**ACTIVE INGREDIENT** Clethodim**CONTROLS** Many annual and perennial grassy weeds. See label for complete list.**1gal****VAL86793.935** Min. Buy 1ea**Fuerte™ Herbicide**

by OHP, INC.

Fuerte is a selective pre-emergent herbicide for control of grassy and broadleaf weeds in field and container ornamentals. Fuerte combines two selective herbicides in a dust free granular form to provide broad spectrum weed control.

REI 12 hours

RATE 100 lbs per acre**ACTIVE INGREDIENT****CONTROLS** Most grassy and broadleaf weeds. See label for complete list.**50lb****OHP982825** Min. Buy 1ea

Herbicides

Fusilade® II Herbicide

by SYNGENTA CROP PROTECTION

Fusilade II herbicide is a selective post emergent herbicide for control of perennial and annual grass weeds. Can be applied over-the-top or as a directed spray without damaging ornamental plants and shrubs.

REI 12 Hrs

RATE 32oz per Acre

ACTIVE INGREDIENT Fluazifop-P-Butyl

CONTROLS Grassy weeds



32oz

SYN73215 Min. Buy 1ea

**Woodace® Preen Plus®**

by LEBANON SEABOARD CORP-PROF

Combines the power of two active ingredients (Trifluralin and Isoxaben) for unsurpassed control of both grassy and broadleaf weeds. One application can prevent over 150 weeds from invading shrub beds and other landscape areas for up to eight months.

REI 12 Hrs

RATE 133-267lbs per acre

ACTIVE INGREDIENT Trifluralin, Isoxaben

CONTROLS Wide variety of broadleaf weeds and annual grasses



20lbs

WO2456320 Min. Buy 1ea

**Gallery® SC Herbicide**

by Corteva

Pre-emergent herbicide that provides excellent plant tolerance and long-lasting control of more than 95 species of broadleaf weeds for up to 6-8 months. Labeled for use on all established turf grasses and can be applied with confidence on more than 700 labeled nursery, landscape and ornamentals.

REI 12 hours

ACTIVE INGREDIENT Isoxaben

CONTROLS Broadleaf weeds.



32oz

RATE 16 oz per acre

DOW11079207 Min. Buy 1ea

2gal

RATE 0.5 oz per 1,000sq ft

DOW11103357 Min. Buy 1ea

**Lontrel® Herbicide**

by Corteva

A specialty herbicide that provides postemergence control of hard-to-manage weeds around labeled ornamentals, golf course fairways and roughs without injuring even the most sensitive turfgrasses.

REI 12 Hrs

RATE 3 to 8oz per 1,000sq ft

ACTIVE INGREDIENT Clopyralid

CONTROLS Broadleaf weeds.



32oz

DOW19-1043 Min. Buy 1ea

**Gemini® Granular Herbicide**

by ICL/SPECIALTY FERTILIZERS

Gemini G is a pre-emergent herbicide for control of over 120 grassy and broadleaf weeds. Use sites include container, field grown and landscape ornamentals and Christmas tree farms. Granular formulation for easy broadcast application.

REI 12 Hrs

RATE 100 to 200lbs per Acre

ACTIVE INGREDIENT Prodiamine, Isoxaben



50lb

EVRE95765 Min. Buy 1ea

**Gemini™ 3.7 SC Liquid Pre-Emergent Herbicide**

by ICL/SPECIALTY FERTILIZERS

Gemini 3.7 SC is a pre-emergent herbicide for control of over 120 grassy and broadleaf weeds. Use sites include container, field grown and landscape ornamentals and Christmas tree farms. Concentrated liquid formulation for easy tank mixing.

REI 12 Hrs

RATE Varies depending on use site. See Label.

ACTIVE INGREDIENT Prodiamine, Isoxaben

CONTROLS More than 120 broadleaf and annual grasses, including: Annual Bluegrass, Bittercress, Chickweed, Crabgrass, Foxtail, Goosegrass, Groundsel, Henbit, Oxalis, Spurge.



64oz

EVRE95450 Min. Buy 1ea

2.5gal

EVRE95224 Min. Buy 1ea



What's your actual cost-in-use?
Go from rough idea to real savings

Calculate your herbicide costs at:
es.bayer.us/marengo-calculator

BAYER Marengo®

Visit EnvironmentalScience.Bayer.US/Marengo to learn more.

ALWAYS READ AND FOLLOW LABEL INSTRUCTIONS
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Herbicides

Marengo® G Herbicideby **BAYER CROPSCIENCE**

Marengo is a preemergent herbicide that provides up to 8 months control of over 70 different weeds. Features a Verge carrier for uniform, virtually dust-free application. Marengo G is labeled for use in outdoor nurseries only.

REI 12 Hrs

RATE 100 to 200lb per Acre

ACTIVE INGREDIENT Indaziflam

CONTROLS Over 98 grassy and broadleaf weed species



50lb AGENCY

BYR84922757 Min. Buy 1ea

**Marengo® SC Herbicide**by **BAYER CROPSCIENCE**

Marengo is a preemergent herbicide that provides up to 8 months control of over 70 different weeds. Effective on hard to control weeds and labeled for weed control in greenhouses and outdoor nurseries.

REI 12 Hrs

RATE 7 to 15oz per Acre

ACTIVE INGREDIENT Indaziflam

CONTROLS Over 98 grassy and broadleaf weed species



18oz

BYR84927600 Min. Buy 1ea

64oz AGENCY

BYR84967874 Min. Buy 1ea

**OH2® Pre-Emergent Herbicide**by **ICL/SPECIALTY FERTILIZERS**

OH2 is a pre-emergent herbicide for container and field grown ornamentals in nurseries. OH2 combines two selective herbicides on one granule, giving the user a broad spectrum of weed control and ornamental plant tolerance. No dust, granular formulation for easy broadcast application.

REI 24 Hrs

RATE 100lb per Acre

ACTIVE INGREDIENT Pendimethalin, Oxyfluorfen

CONTROLS Bittercress, Common Chickweed, Cudweed, Dandelion, Eclipta, Fleabane, Fireweed, Groundsel, Marestail, Oxalis, Pearlwort, Pepperweed, Pigweed, Shepherdspurse, Sowthistle, Spurge Garden-Prostrate-Spotted



50lb

EVR95715 Min. Buy 1ea

**OHP Fireworxx™ Herbicide**by **OHP, INC.**

Fireworxx is a non-selective herbicidal soap containing a fatty acid blend of caprylic and capric acids. Controls weeds, grasses, and moss on contact. Fireworxx is non-systemic. Labeled for use in greenhouses, nurseries, landscapes, and outdoor areas. Fireworxx can be used around bedding plants, vegetables, trees and shrubs.

REI 12 hours

RATE 3 to 9 gallons per 100 gallons water.

ACTIVE INGREDIENT Caprylic and Capric Acids

CONTROLS Weeds, grasses, moss



1 Gallon

OHP982644 Min. Buy 1ea

**Pendulum® 2G Herbicide**by **BASF CORP**

Pendulum 2G herbicide controls more than 40 grassy and broadleaf weeds in turfgrass, container-grown ornamentals, and nonbearing fruit and nut trees.

REI 24 Hrs

RATE 75 to 100lb per acre.

ACTIVE INGREDIENT Pendamethalin

CONTROLS Crabgrass, goosegrass, oxalis, foxtail and many more.



40lb

AC54878 Min. Buy 1ea

**Pendulum® Aquacap Herbicide**by **BASF CORP**

Pendulum Aquacap is a pre-emergent herbicide effective in many broadleaf and grassy weeds. Labeled for use in nurseries, turf and landscape or grounds maintenance applications.

REI 24 Hrs

RATE 24 to 32oz per Acre

ACTIVE INGREDIENT Pendamethalin

CONTROLS Many broadleaf and grassy weeds. See label for complete list.



2.5 gal bottle

BAS59049276 Min. Buy 1ea

**Pennant Magnum® Herbicide**by **SYNGENTA CROP PROTECTION**

Pre-emergent herbicide offering long-lasting residual control of yellow nutsedge, tough annual grasses and broadleaf weeds. Can be used in a wide range of ornamentals and can be tank mixed with other herbicides for broader control.

REI 24 Hrs

RATE 20.8oz to 41.6oz per Acre

ACTIVE INGREDIENT S-metolachlor

CONTROLS Yellow nutsedge, Crabgrass and more.



1gal

SYN38782 Min. Buy 1ea

**Ranger Pro® Herbicide**by **BAYER CROPSCIENCE**

Ranger Pro is a post-emergent systemic herbicide with no residual soil activity. Ranger Pro provides broad spectrum control of many annual and perennial weeds, woody brush and trees. 41% Glyphosate with surfactant.

REI 4 Hrs

RATE Varies depending on application method. See label for complete information.

ACTIVE INGREDIENT Glyphosate

CONTROLS Annual, perennial grassy and broadleaf weeds, woody brush and trees.



2.5gal

MON339020 Min. Buy 1ea

30gal Drum

MON50030 Min. Buy 1ea

265 Gallon

MON86741296 Min. Buy 1ea

Shipping Info HAZARDOUS



Herbicides

RegalStar® G Pre-Emergent Herbicide

by REGAL CHEMICAL COMPANY

RegalStar G is a selective pre-emergent herbicide that combines two effective active ingredients to control many grassy and broadleaf weeds. Granular formula for easy broadcast spreading. Can be used over the top of plant material.

REI 12 hours

RATE 4 Lbs per 1,000 sq ft.

ACTIVE INGREDIENT Oxidiazon + Prodiamine.

CONTROLS Grassy and broadleaf weeds in turf and around ornamental shrubs and trees..



50lb

REGAL190478 Min. Buy 1ea



Resolute® 65WG Herbicide

by SYNGENTA CROP PROTECTION

Resolute 65 WG for preemergence control of grasses and broadleaf weeds in established turfgrasses, container grown and landscape ornamentals, nurseries and commercial landscapes.

REI 12 Hrs

RATE 0.5-1.5lbs per acre

ACTIVE INGREDIENT Prodiamine

CONTROLS Many broadleaf and grassy weeds. See label for complete list.



5lb

SYN34443 Min. Buy 1ea



Reward® Herbicide

by SYNGENTA CROP PROTECTION

Fast-acting, non-selective, contact herbicide for control of weeds in the greenhouse, nursery and aquatic environments. Superior formulation for fast burn-down.

REI 24 Hrs

RATE 32 to 64oz per 100gal

ACTIVE INGREDIENT Diquat dibromide

CONTROLS Aquatic, turf and landscape weeds.



1gal

SYN73711 Min. Buy 1ea

Shipping Info HAZARDOUS

2.5gal AGENCY

SYN73710 Min. Buy 1ea

Shipping Info HAZARDOUS



Ronstar® FLO Herbicide

by BAYER CROPSCIENCE

Offers exceptional root safety on container and field-grown ornamentals. Can be applied to newly transplanted ornamentals and liners. Doesn't inhibit root growth or recovery from stress. Controls difficult to control weeds including bittercress, groundsel and oxalis.

REI 12 Hrs

RATE 80 to 120oz per Acre

ACTIVE INGREDIENT Oxadiazon

CONTROLS Crabgrass, Goosegrass, Annual Bluegrass and Annual Sedge.



2.5gal AGENCY

BYR80847505 Min. Buy 1ea



Roundup ProMax® Herbicide

by BAYER CROPSCIENCE

Roundup ProMax® controls a broad spectrum of weeds with virtually no re-growth. The surfactant system of Roundup PROMAX allows the solution to penetrate weed leaf surfaces faster, which means it is rain fast in half the time of Roundup PRO®. Roundup ProMax® has a concentrated potassium salt formulation, so one gallon of Roundup ProMax® contains the glyphosate equivalent of 6 quarts of Roundup PRO®.

REI 4 Hrs

RATE Varies depending on application method. See label for complete information.

ACTIVE INGREDIENT Glyphosate

CONTROLS Annual, perennial grassy and broadleaf weeds, woody brush and trees.



1.67gal

MON19-1058A Min. Buy 1ea

30gal Drum

MON19-1058B Min. Buy 1ea



Roundup QuikPRO™ Herbicide

by BAYER CROPSCIENCE

Roundup QuikPro is a post-emergent systemic herbicide with no residual soil activity. Roundup Pro provides broad spectrum control of many annual and perennial weeds, woody brush and trees. 73% Glyphosate with Diquat and surfactant. Rainfast in one hour.

REI 4 Hrs

RATE Varies depending on application method. See label for complete information.

ACTIVE INGREDIENT Glyphosate

CONTROLS Annual, perennial grassy and broadleaf weeds, woody brush and trees.



5 x 1.5oz Pack

MON88603 Min. Buy 1ea

6.8lb

MONCH362 Min. Buy 1ea



Roundup® Custom Herbicide

by BAYER CROPSCIENCE

REI 4 Hrs

RATE Varies depending on application method. See label for complete information.

ACTIVE INGREDIENT Glyphosate

CONTROLS Aquatic weeds and annual, perennial grassy and broadleaf weeds, woody brush and trees.



2.5 gal bottle

MON12151770 Min. Buy 1ea



Scythe® Herbicide

by GOWAN

A non-selective, contact herbicide composed of Pelargonic Acid and related fatty acids. Readily mixes with water to be applied as a foliar spray for the burn down of actively growing, emerged green vegetation of both annual and perennial broadleaf and grassy weeds as well as most mosses and cryptogams.

REI 12 Hrs

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Pelargonic Acid

CONTROLS Broadleaf and grassy weeds



2.5gal

GOW52823 Min. Buy 1ea



Herbicides

SedgeHammer® Herbicideby **GOWAN**

SedgeHammer® turf herbicide is a selective herbicide for control of nutsedge and other weeds in turfgrass, ornamentals, and landscaped areas.

REI 12 hours

RATE one 1.33 oz pouch per 1,000 sq ft.

ACTIVE INGREDIENT Halosulfuron-methyl

CONTROLS Nutsedge, Wild Mustard, Pigweed, and many more.

**10x1.33oz****GOW35720** Min. Buy 1ea**Sedgehammer® Plus Herbicide**by **GOWAN**

Sedgehammer plus turf herbicide is a selective herbicide for control of nutsedge and other weeds in turfgrass, ornamentals and landscaped areas.

REI 12 hours

RATE 1 to 2 pouches per 1,000 sq ft.

ACTIVE INGREDIENT Halosulfuron-methyl

CONTROLS Nutsedge, Wild Mustard, Pigweed, and many more.

**12pc Box of 13.5g Packets****GOW51516** Min. Buy 1ea**Segment® II Herbicide**by **BASF CORP**

Segment II is a post-emergent herbicide for control of grassy weeds. For use on bedding plants, ground covers, field and container nurseries.

REI 12 Hrs

RATE 36oz per Acre

ACTIVE INGREDIENT Sethoxydim

CONTROLS Grassy weeds

**2.5 gal bottle****BAS59014427** Min. Buy 1ea**Snapshot® 2.5TG Herbicide**by **Corteva**

A granular pre-emergence herbicide for the control of certain annual grasses and broadleaf weeds. Controls or suppresses more than 111 broadleaf weeds and annual grasses. It can be used over the top of 413 field-grown and 235 container-grown ornamentals.

REI 12 hours

RATE 100 to 200 lbs per acre

ACTIVE INGREDIENT trifluralin and isoxaben

CONTROLS Broadleaf weeds.

**50lb****DOW19-1067H** Min. Buy 1ea**Specticle® Total Herbicide**by **BAYER CROPSCIENCE**

Specticle Total herbicide has a dual action formula to knockdown existing weeds immediately with residual activity to prevent new weeds and grasses for up to 6 months. Labeled for use in non-crop areas including paths, parking lots, around buildings, hardscapes and landscape beds.

RATE 16oz per 1,000sq ft

ACTIVE INGREDIENT Glyphosate, Indizaflam, Diquat

CONTROLS Grassy and Broadleaf weeds

**144oz****BYR80972768** Min. Buy 1ea**SureGuard® SC Herbicide**by **NUFARM AMERICAS INC.**

SureGuard SC provides long-lasting pre-emergent and post-emergent control on a wide variety of grassy and broadleaf weeds. Use sites include established woody landscape ornamentals, bare ground applications and cracks and crevices.

REI 12 Hrs

RATE 8 to 12oz per Acre

ACTIVE INGREDIENT Flumioxazin

CONTROLS Broadleaf, grassy and aquatic weeds. See label for complete list.

**16oz****NTS10698861** Min. Buy 1ea**64oz****NTS10698464** Min. Buy 1ea**Tenacity® Herbicide**by **SYNGENTA CROP PROTECTION**

Manage weeds, both broadleaves and grasses, without limiting other key aspects of turf management. Systemic, selective pre- and post-emergence herbicide. Safe on established and newly seeded turf. Controls 46 broadleaf weed and grass species and kills crabgrass.

REI 12 Hrs

RATE 5 to 8oz per Acre

ACTIVE INGREDIENT Mesotrione

CONTROLS Many broadleaf and grassy weeds, including pre and post-emergence control of crabgrass

**8oz****SYN46256** Min. Buy 1ea**Tower® Herbicide**by **BASF CORP**

Tower is a pre-emergent herbicide for the control of numerous weeds that cause problems in field-grown and landscape ornamentals. It provides unsurpassed control of yellow nutsedge and effectively controls more than 50 other troublesome weeds.

REI 12 Hrs

RATE 0.5 to 0.75oz per 1,000sq ft

ACTIVE INGREDIENT Dimethenamid-P

CONTROLS Annual sedges, yellow nutsedge, nightshade, spurge, carpetweed, crabgrass and more.

**2.5 gal bottle AGENCY****BAS59014247** Min. Buy 1ea**Treflan™ 500G Herbicide**by **KNOX FERTILIZER COMPANY INC**

A pre-emergence herbicide which provides long lasting control of a wide range of annual grasses and broadleaf weeds. Recommended for use on a wide variety of ornamental trees, shrubs and flowers.

**40lb****SW1103409** Min. Buy 1ea**Vessel™ Herbicide**by **PROKOZ, INC**

Vessel is a post-emergent systemic herbicide for control of a wide range of broadleaf weeds. The combination of three active ingredients provide effective control of troublesome weeds in turfgrass sites including residential, commercial and industrial.

**2.5gal****PROKZ9921126** Min. Buy 1ea

Herbicides choosing between spray and granular products

	Spray	Granular
Cost/Acre	Less \$	Cost more due to bulk
Ease of Use	Most growers already have sprayers and are well trained to calibrate and spray herbicides.	Requires a calibration pan to check rate. Most growers don't have a herbicide spreader attached to a tractor where speed can be controlled. Belly grinder rates vary due to walking and hand crank speed.
Flexibility	Ability to tank mix preemergents together and option to add post-emergents to control existing weeds	Cannot be mixed with other herbicides.
Weed Control-Shrubs, Large Trees	Stronger herbicides like Marengo SC and Sureguard SC can be applied as a directed spray near the stem. Also can add post-emergent herbicides to tank mix to kill existing weeds.	Effective, but costs more per acre and can't be combined with post-emergent herbicides
Weed Control-Shrubs, Small Trees	Over the top spray options are limited to softer herbicides that won't harm foliage but also don't control weeds as well	Over the top of shrubs and small trees, Granulars are the best way to deliver a stronger herbicide (ex: Broadstar, Marengo G) safely through the canopy to the soil surface
Weed Control - Perennials	Softer herbicides like Gallery SC + Barricade can be safely sprayed over the top of many varieties, particularly early before they leaf out and late in the season	Granulars (ex: Snapshot, Freehand) are a good choice mid-season when spraying herbicides onto foliage is a concern
Weed Control - Evergreens	Evergreens are generally tolerant of sprays of Sureguard SC or Marengo over the top. However, sprays can be blocked from making contact with soil by larger evergreens	Granulars can potentially give better coverage of soil surface in large canopied evergreens due to horizontal angle of entry



When to Apply & How Often

Many nurseries delay applying herbicides to new plantings until they're rooted. This is not necessary for most crops and leads to unnecessary weediness. The goal is to apply as soon as possible after planting.

Growers in the South make as many as 6 herbicide applications per year. Nurseries in the Northern states often get by with 2-3 applications due to the shorter growing season and cold weather killing annual weeds.

Key application windows:

- After planting
- Summer: One or several summer mid-season applications depending on weed pressure.
- Fall: Early Fall to prevent fall germinating weeds. Late Fall applications will carry over for spring weed prevention.

Aquatic Herbicides and Algaecides

Captain® XTR Algaecide

by SEPRO CORPORATION

Captain XTR is optimized to increase the penetration of copper into algae cells, enhancing the efficacy of the product. This formulation is especially impactful when targeting tough to control mat-forming, colonial, and mucilaginous species. Waters treated with Captain XTR may be used for swimming, fishing, watering livestock, and irrigation of food and non-food crops during and after application.

REI 0 hours

RATE 1 to 3 gallons per acre-foot.

ACTIVE INGREDIENT Copper Ethanolamine Complex

CONTROLS Algae.



2.5gal Bottle

SEPROCAPXTR2.5 Min. Buy 1ea



Citrine® Plus Algaecide

by Applied Biochemists

Contains elemental copper for control of algae in lakes, industrial ponds, water hazards.

RATE Varies according to application. See label.

ACTIVE INGREDIENT Copper Ethanolamine



1gal Bottle

PROKZ337464 Min. Buy 1ea

2.5gal Bottle

PROKZ337466 Min. Buy 1ea



GreenClean® Pond Block

by BIOSAFE SYSTEMS

A blend of naturally occurring bacteria formulated to increase water quality and clarity by reducing excess nutrients in water sources. GreenClean Pond Block breaks down undesirable organic debris buildup and is non-toxic, easy to use, and doesn't require an application license.



5lb - Treats 5 Acre for 30-60 Days

BSF30064 Min. Buy 1ea

Shipping Info *DIRECT*



Komeen® Crystal Aquatic Herbicide

by SEPRO CORPORATION

Komeen Crystal provides consistent, on-contact, broad-spectrum control of submersed aquatic weeds and bottom algae in a wide variety of application situations, including high turnover and small spot-treatment areas. This concentrated formulation allows for low use rates and improved control of nuisance aquatic weeds in deep water, high flow sites, or for spot treatments along shorelines.

RATE 20 to 60lbs per acre-foot.



20lb Bag

SEPRO118620 Min. Buy 1ea



PAK® 27 Algaecide

by SEPRO CORPORATION

PAK 27 is an effective non-copper and environmentally compatible algaecide, delivering both selective and broad-spectrum algae control. Approved for the selective control of cyanobacteria in lakes, ponds, drinking water reservoirs, aquaculture and wastewater, PAK 27's active ingredient, sodium carbonate peroxyhydrate, creates a powerful oxidation reaction that destroys algal cell membranes and chlorophyll, providing immediate algae control. PAK 27 is the ideal choice to keep your lakes, fishing and stock ponds, aquaculture sites, and other private water bodies pleasing to the eye and safe for enjoyment. HAZARDOUS.



50lb Bag

SEPROPAK27 Min. Buy 1ea

Shipping Info *HAZARDOUS*



Phoslock® Water Quality Treatment

by SEPRO CORPORATION

Phoslock is a phosphorus locking technology to restore water quality in ponds, lakes and reservoirs. Phoslock has been successfully used in water resource restoration programs around the world. Although a new technology to the United States, it is rapidly emerging as the most effective phosphorus inactivation and water quality restoration solution for ponds, lakes and reservoirs.



55lb Bag

SEPRO1092.55 Min. Buy 1ea



SeClear® Granular Algaecide

by SEPRO CORPORATION

SeClear is the first aquatic algaecide and water quality enhancer in one designed to replace routine algaecide treatments. Delivering longer-lasting results, improved water quality and reduced maintenance through time, SeClear provides effective control of a broad-range of algae species while reducing in-water phosphorous levels with each application. Water treated with SeClear is completely safe on turfgrass and ornamental plants and can be used for irrigation immediately. The granular formulation allows penetration to deeper growing algae.

REI 0 hours

RATE 15 to 25lbs per acre-foot.

ACTIVE INGREDIENT Copper Sulfate Pentahydrate

CONTROLS Algae.



50lb Bag

SEPROSECLEARG Min. Buy 1ea



SeClear® Liquid Algaecide

by SEPRO CORPORATION

SeClear is an aquatic algaecide and water quality enhancer in one designed to replace routine algaecide treatments. Delivering longer-lasting results, improved water quality and reduced maintenance through time, SeClear provides effective control of a broad-range of algae species while reducing in-water phosphorous levels with each application. Water treated with SeClear is completely safe on turfgrass and ornamental plants and can be used for irrigation immediately.

REI 0 hours

RATE 1.6 to 6gal per acre-foot.

ACTIVE INGREDIENT Copper Sulfate Pentahydrate

CONTROLS Algae.



2.5gal Bottle

SEPROSECLEAR Min. Buy 1ea



Aquatic Herbicides and Algaecides

SePRO Natural Reflection™ Pond Dye

by SEPRO CORPORATION

A proprietary blend of environmentally friendly, non-toxic, water soluble dye. Natural Reflections provides a natural reflective quality to the surface of water while reducing the amount of sunlight penetration available to undesired aquatic vegetation. One gallon covers approximately 8 acre-feet of surface water. Water maybe used for irrigation or fishing immediately after treatment. Natural Reflection will not harm fish, waterfowl, pets or wildlife.

REI 0 hours

RATE 16oz covers approximately 1 acre-foot of water

ACTIVE INGREDIENT

CONTROLS Nuisance aquatic vegetation



1gal

SEPROBKDYE Min. Buy 1ea



SonarOne® Aquatic Herbicide

by SEPRO CORPORATION

SonarOne is the most effective solution available for controlling duckweed, watermeal, and many other undesirable aquatic weeds and eliminates unwanted vegetation from lakes or ponds for a year or longer. SonarOne is a pellet formulation that delivers an effective dose to targeted plants within the first day. The easy-to-apply pellet formulation eliminates overspray onto sensitive shoreline vegetation, making it ideal for landscapes with highly maintained vegetation, including golf courses.



20lb Bag

SEPRO117320 Min. Buy 1ea



Sanitizers, Cleaners, and Disinfectants

BioMat Boot Sanitation Pad

by BIOSAFE SYSTEMS

BioMat is a durable foot pad that controls plant pathogens at entryways. One BioMat holds 2.5gal of disinfecting solution to clean the soles of shoes/boots, keeping contamination out of your facility.



BSFN09574 Min. Buy 1ea



BioSafe Systems® Peracetic Acid Test Strips

by BIOSAFE SYSTEMS

Peracetic acid (PAA) test strips are used to test and verify levels of PAA in your solution. 100 Strips per tube.



100ct

BSF9000STRIP Min. Buy 1ea

Shipping Info DIRECT



SaniDate® 15.0 Sanitizer/Disinfectant

by BIOSAFE SYSTEMS

SaniDate 15.0 for use in commercial, industrial, agricultural, post harvest, and horticultural water treatment applications. Labeled for fruit and vegetable processing to control spoilage.

ACTIVE INGREDIENT Hydrogen Peroxide and Peroxyacetic Acid

CONTROLS Water-borne pathogens and their dormant spores caused by algae, bacteria and biofilm.



55gal

BSF200655 Min. Buy 1ea

Shipping Info HAZARDOUS



Sanitizers, Cleaners, and Disinfectants

GreenClean® Acid Cleaner

by BIOSAFE SYSTEMS

Removes greenhouse whitewash coatings, biofilms, organic deposits, calcium and other hard minerals. Sanitizes and disinfects most hard surfaces. The formulation of surfactants and organic acid detergents will help lift away organic mineral deposits without any odor.

REI 0-1 Hrs

RATE 5 to 10gal per Surface Acre



5gal

BSF7500-5 Min. Buy 1ea

Shipping Info HAZARDOUS



GreenClean® PRO Algaecide/Fungicide/Bactericide

by BIOSAFE SYSTEMS

Treat and control algae on concrete walkways, ground cloth, or dirt, or gravel floors, and other hard surfaces to improve workplace safety. Additionally, GreenClean PRO can be used to treat water storage tanks and irrigation ponds to reduce algae and waterborne pathogens.

RATE 1 to 2lb per 1,000sq ft

ACTIVE INGREDIENT Sodium Carbonate Peroxyhydrate



50lb

BSF3300-50 Min. Buy 1ea

Shipping Info HAZARDOUS



Green-Shield® II Disinfectant / Algicide

by BASF CORP

Provides greenhouse and nursery growers a biodegradable, cost-effective way to control unwanted plant pathogens and algae on hard surfaces. EPA-registered for broad-spectrum control of pathogens and algae in and around greenhouses and causes no damage to clothing from splashes. Lasts four times longer in solution than bleach and provides residual control as long as treated surfaces stay wet.

REI 12 Hrs

ACTIVE INGREDIENT Quaternary ammonium



1 gal bottle

BAS59014302 Min. Buy 1ea

Shipping Info HAZARDOUS

30 gal Drum

BAS59014303 Min. Buy 1ea

Shipping Info HAZARDOUS



Sanitizers, Cleaners, and Disinfectants

HORTI-KLOR™

by PACE 49 INC.

HORTI-KLOR™ is a heavy-duty detergent that is formulated for cleaning and sanitizing throughout the food plant and grower industries. Can safely be used to clean indoor growing facilities, packing houses and coolers. HORTI-KLOR™ is an active, high-foaming detergent designed to help meet the highest food plant and greenhouse grower sanitation standards and is HACCP approved. Thorough rinse required.

REI 0 Hrs

RATE 2.5oz per 1gal for irrigation line cleaning, 5oz per 1gal for hard surface cleaning

ACTIVE INGREDIENT Sodium Hydroxide**5gal****PAC4919-0604A** Min. Buy 1eaShipping Info **HAZARDOUS****55gal****PAC4919-0604C** Min. Buy 1eaShipping Info **HAZARDOUS****KleenGrow™ Disinfectant / Bactericide / Algaecide / Fungicide**

by PACE 49 INC.

KleenGrow™ is a biodegradable, 4th generation DDAC quaternary ammonium which provides curative and preventative broad - spectrum control of algae, fungi, and bacteria on greenhouse flowers and ornamentals. KleenGrow can safely be applied as a spray, drench, or drip on crops, from propagation, bulbs/ seeds, to finished crops, while offering residual disease control by way of membrane disruption with no worry of crop resistance. Kleengrow can also be used to control algae, bacteria, and viruses on hard surfaces. Product can safely be used to disinfect greenhouse structures, floors, benches, cool pads, irrigation lines, plastic pots/trays, tools, coolers, and in footbaths to reduce the spread of algae and diseases.

REI 12 Hrs - For Recirculated Water, 48 Hrs - For Use On Crops, 0 Hrs

RATE 6-25oz per 100gal (see label for rate per crop size), 0.5-2oz per 1gal Hard Surface Disinfecting, 0.34-1.20oz per 100gal in Irrigation Water

ACTIVE INGREDIENT Didecylidimethyl ammonium chloride**CONTROLS** Algae, foliar diseases, crown and root rots, Powdery Mildew, Botrytis, Pythium, Phytophthora, Fusarium, Erwinia and Xanthomonas**1gal****PAC4919-0603I** Min. Buy 1eaShipping Info **HAZARDOUS****5gal****PAC4919-0603J** Min. Buy 1eaShipping Info **HAZARDOUS****30gal Drum****PAC4919-0603K** Min. Buy 1eaShipping Info **HAZARDOUS****55gal Drum****PAC4919-0603B** Min. Buy 1eaShipping Info **HAZARDOUS****MASTER MHW™**

by PACE 49 INC.

MASTER MHW™ is a powdered detergent that easily emulsifies dirt, oils and organic material, leaving surfaces spotless. It is designed to work without producing excessive foam in high-agitation environments. The low-foaming characteristics make it ideal for removing deposits from plastic and Styrofoam plug trays and pots, using automated washing equipment.

REI 0 Hrs

RATE 1-2oz per 1gal**ACTIVE INGREDIENT** Sodium Metasilicate, Sodium Carbonate, Sodium Alkylbenzene Sulfonate**45lb****PAC4919-0600A** Min. Buy 1eaShipping Info **HAZARDOUS****Phyton X3®**

by PHYTON CORP

Triple-powered, broad-spectrum formula for efficient, cost-effective disease control and sanitation. A powerful, highly concentrated bactericide / fungicide / algaecide / sanitizer with a zero-hour re-entry and a low risk of phytotoxicity, when used as directed. Labeled for use as a fungicide/bactericide on greenhouse bedding plants, ornamentals, and flowering plants, nursery stock and trees. Can be used as a pre-plant dip to control root and stem rot diseases. Used as a soil drench, it will control soil borne diseases. As a foliar spray it works on contact to control fungi and bacteria.

REI 0 to 2 hours

ACTIVE INGREDIENT Hydrogen Peroxide, Peroxyacetic acid, and Octanoic acid**CONTROLS** Algae and many plant and soil pathogens.**96 oz bottle****PHTNX3-31096** Min. Buy 1eaShipping Info **HAZARDOUS****4 gal bottle****PHTNX3-31004** Min. Buy 1eaShipping Info **DIRECT HAZARDOUS****12 gal bottle****PHTNX3-31012** Min. Buy 1eaShipping Info **HAZARDOUS****ProKure® D**

by ProKure

ProKure D slow-release gas is the perfect solution for improving air quality and for on-going control of odors caused by mustiness, perspiration and more. 30-days of ClO2 protection. Improves air quality. Suitable for use with plants in the room.

**10gm Packet****CLRE010C12** Min. Buy 12eaShipping Info **DIRECT****50gm Packet****CLRE050C12** Min. Buy 12eaShipping Info **DIRECT**

ProKure® G

by ProKure

ProKure G fast release gas is EPA-registered to clean the air you breathe and remove foul odors. Kills mold and mildew, odor-causing bacteria, and chemical odors. Used in agricultural facilities, greenhouses, commercial buildings, residential properties and more. For use in un-occupied, confined spaces. *See EPA label for claims.



10gm Packet

CLRF010C12 Min. Buy 12ea

Shipping Info **DIRECT**

25gm Packet

CLRF025C12 Min. Buy 12ea

Shipping Info **DIRECT**

25gm Packet

CLRF025CNC20 Min. Buy 20ea

Shipping Info **DIRECT**



ProKure® V

by ProKure

ProKure V liquid is EPA-registered hospital-type disinfectant and deodorizer. Water-activated (ships dry). It destroys bacteria, viruses*, mold, fungi, and odor-causing bacteria. EPA List N product. Suitable for use with plants in the room. *See EPA label for claims.



.042oz Packet

CLR0042C12 Min. Buy 12ea

Shipping Info **DIRECT**

.17oz Packet

CLR017C12 Min. Buy 12ea

Shipping Info **DIRECT**

.84oz Packet

CLR084C12 Min. Buy 12ea

Shipping Info **DIRECT**

3.36oz Packet

CLR336C12 Min. Buy 12ea

Shipping Info **DIRECT**



QAC Test Strips

by PACE 49 INC.

Used to maintain correct disinfectant strength by comparing tested color with provided chart. . REI: 0



100 Strips Per Vial

PAC49TXQAC001 Min. Buy 4ea

Shipping Info **DIRECT**



SaniDate® 12.0 Sanitizer / Disinfectant

by BIOSAFE SYSTEMS

For use in commercial, industrial, agricultural, postharvest, and horticultural water treatment applications. Labeled for fruit and vegetable processing to control spoilage.

REI 2 Hrs

ACTIVE INGREDIENT Hydrogen Peroxide and Peroxyacetic Acid

CONTROLS Water-borne pathogens and their dormant spores caused by algae, bacteria and biofilm.



30gal Drum

BSF200630 Min. Buy 1ea

Shipping Info **HAZARDOUS**



SaniDate® 5.0 Sanitizer / Disinfectant

by BIOSAFE SYSTEMS

The ideal cleaner, sanitizer, and disinfectant for hard, nonporous surfaces and equipment with no rinse required. Foam, fog, or apply solution with a mop, cloth, sponge, brush, scrubber, or coarse spray device or by soaking..

REI 1 Hr

RATE Varies according to application method. See label.

ACTIVE INGREDIENT Hydrogen Peroxide and Peroxyacetic Acid

CONTROLS Pathogens



2.5gal

BSF200325 Min. Buy 1ea

Shipping Info **HAZARDOUS**

5gal

BSF20035 Min. Buy 1ea

Shipping Info **HAZARDOUS**

30gal Drum

BSF200330 Min. Buy 1ea

Shipping Info **HAZARDOUS**

55gal Drum

BSF200355 Min. Buy 1ea

Shipping Info **HAZARDOUS**



SMO Floralife® MicroBLOC®

by SMITHERS-OASIS USA

MicroBLOC is an antimicrobial disinfectant for disinfecting hard, nonporous surfaces such as flower buckets, tools, floors and walls of coolers, benches, and more. Effectively eliminates offensive odors caused by mold and mildew.



30gal

SM5FL3930 Min. Buy 1ea

Shipping Info **HAZARDOUS**

SMO Floralife® Strip-It®

by SMITHERS-OASIS USA

Strip-It cleaner is designed for between season cleaning of greenhouse structures and irrigation lines as well as water storage tanks and sunshade wash.



30gal

SMFL6161A Min. Buy 1ea

Shipping Info **HAZARDOUS**



Sanitizers, Cleaners, and Disinfectants

STRIP-IT PRO™

by PACE 49 INC.

STRIP-IT PRO™ is a powerful combination of cleaning and wetting agents that effectively remove whitewash coatings, algae, dirt and mineral deposits including calcium due to hard water issues. Safely removes all common soils found in and around greenhouses, grower structures during crop rotation. Unlike other cleaning products, STRIP-IT PRO™ will not harm the greenhouse structure and can safely be used to clean under benches with no harmful fumes to effect plants. Thorough rinse required.

REI 0 Hrs

RATE 2.5oz per 1gal for Irrigation line cleaning, 5oz per 1gal for hard surface cleaning

ACTIVE INGREDIENT Sulfuric Acid, Ammonium Bifluoride

**5gal****PAC4919-0603D** Min. Buy 1eaShipping Info **HAZARDOUS****30gal Drum****PAC4919-0603E** Min. Buy 1eaShipping Info **HAZARDOUS****55gal Drum****PAC4919-0604** Min. Buy 1eaShipping Info **HAZARDOUS**

Spray Adjuvants

CapSil® Spray Adjuvant

by AQUATROLS CORP OF AMERICA

Waxy leaf surfaces can cause spray droplets to bead up, resulting in coverage gaps that can reduce the efficacy of foliar sprayed materials. CapSil® allows foliar sprays to spread evenly over the entire leaf surface, giving you full coverage with every application. CapSil is a 100% active blend of organo-silicone and non-ionic surfactants that enables solutions to spread over the entire leaf surface evenly.

RATE 6 to 16fl oz per 100gal

ACTIVE INGREDIENT

Polyether-polymethylsiloxanecopolymer

**1gal****AQCAP-4X1** Min. Buy 1ea**Indicate 5® pH Indicator, Acidifier, Water Conditioner & Wetter / Spreader**

by BRANDT CONSOLIDATED INC.

Indicate 5 is a multi-functional adjuvant and water conditioner that counters the detrimental effects of high pH and hard water on sensitive pesticides. It adjusts water pH and contains a patented, built-in pH indicator that turns the spray water pink as soon as the optimum pH is reached. It also acts as a wetting/spreading agent that helps create an even film of spray over the plants surface.

RATE 5 to 30fl oz per 100gal

ACTIVE INGREDIENT Alkyl Aryl Ethoxylates & Water Conditioning Agents

**1gal****PROKZ19-0409** Min. Buy 1ea**2.5gal Bottle****BRANDT2214-01-100** Min. Buy 1ea**Pentra-Bark® Penetrating Surfactant**

by QUEST PRODUCTS CORPORATION

Nonionic surfactant that improves penetration into the plant stems, leaves and through woody plant bark surfaces enabling translocation of systemic fungicides, insecticides, herbicides and fertilizers.

RATE 0.25-2.5% by volume (highest rate for bark applications)

ACTIVE INGREDIENT Alkylphenol ethoxylate, polysiloxane polyether copolymer, propylene glycol

**32oz****QPC100** Min. Buy 1ea**Super 7 Surfactant, Penetrant, Deposition Aide, Acidifier**

by BRANDT CONSOLIDATED INC.

Super 7 is an all-in-one spreader, acidifier, deposition aid and penetrant. A non-ionic, low foam surfactant that enhances the activity and effectiveness of pesticides and foliar nutrients. Provides more uniform coverage by decreasing surface tension of spray solutions, thus aiding in penetration. It may be used as an acidifying agent to lower pH of spray solutions, thus preventing alkaline hydrolysis of pesticides sensitive to high pH.

REI 0 Hrs

RATE 8 to 64oz per 100gal

ACTIVE INGREDIENT Alcohol Ethoxylate, Lecithin and Propanoic Acid

**1gal****BRANDTSUPER71.0** Min. Buy 1ea**2.5gal****BRANDTSUPER72.5** Min. Buy 1ea



Spray Adjuvants

Super Wetter Premium Organosilicone Wetting Agent by BRANDT CONSOLIDATED INC.

Super Wetter is an organosilicone spreader that can be tank mixed with spray oils and EC formulations. Increases coverage of fungicides, insecticides, etc. by spreading the formulation across leaf and stem surfaces for complete coverage.

REI 0 Hrs

RATE 3 to 16oz per 100gal

ACTIVE INGREDIENT Siloxane polyalkyleneoxide copolymer and polyalkyleneoxide



1gal

BRANDT1047BRN101 Min. Buy 1ea

Tank Cleaner

Pesticide Equipment Cleaner by BRANDT CONSOLIDATED INC.

Pesticide equipment & tank cleaner will remove and deactivate residual pesticide contamination from storage tanks and spray equipment. Use before changing from one pesticide to another, or before storing equipment.

REI 0 Hrs

ACTIVE INGREDIENT Potassium Hydroxide, anticorrosion compounds, surfactants and polydimethylsiloxane



32oz

BRANDTTANKCLEAN Min. Buy 1ea

Torpedo® Adjuvant

by BRANDT CONSOLIDATED INC.

BRANDT TORPEDO is a 99% active methylated vegetable oil, lecithin, and surfactant blend. It is designed for use with pesticides when a non-ionic surfactant, crop oil concentrate, or methylated seed oil is recommended. It is also pH neutral, which makes it well suited for systemic chemistries and nutrition products. BRANDT TORPEDO's unique multi-functional properties enhance penetration, spreading and deposition of spray droplets. It also reduces the production of fine droplets, which can go off-target. BRANDT TORPEDO may be used on agricultural, horticultural, aquatic*, forestry, vegetation management, and other non-crop sites.

REI 4 hours

RATE varies according to application. See label.

ACTIVE INGREDIENT methyl soyate, lecithin and polyethylene



2.5gal Bottle

BRANDT05009BRN100 Min. Buy 1ea

Wetting Agents

AquaGro® 2000 G Media Surfactant by AQUATROLS CORP OF AMERICA

AquaGro® G ensures the continual wettability of your bark or peat based mix. It provides faster, more uniform water distribution and better moisture retention.

RATE 1lb per cu yd

ACTIVE INGREDIENT Ethoxylated Alkyl Phenols and Fatty Acid Esters



120lb

AQ2KG-120 Min. Buy 1ea

AquaGro® L Media Surfactant by AQUATROLS CORP OF AMERICA

AquaGro® L ensures the continual wettability of your bark or peat based mix. It provides faster, more uniform water distribution and better moisture retention.

RATE 2 to 7fl oz per cubic yard

ACTIVE INGREDIENT Alkoxyated Polyols



2.5gal

AQAGPSI-2X2.5 Min. Buy 1ea

55gal Drum

AQAGPSI-55 Min. Buy 1ea

Ultra 90 Surfactant

by BRANDT CONSOLIDATED INC.

Ultra 90 Spreader is a low cost 90% non-ionic adjuvant that improves wetting of foliage and enhances the effectiveness of spray applications. May be used on agricultural, aquatic, forestry, turf and ornamental crops.



2.5gal

BRANDT01037BRN100 Min. Buy 1ea

Wetting Agents

H2Pro® Wetting Agent

by ICL/SPECIALTY FERTILIZERS

H2Pro is a unique blend of surfactants with long residual activity for use in containers, pots, hanging baskets, flats, trays and more. Uniform moisture distribution creates a better root environment, eliminates dry spots and allows for an even distribution of fertilizer and or pesticide solutions added during the growing cycle. Liquid formulation for easy spray and drench application.

RATE 5.5 to 16oz per 100gal

ACTIVE INGREDIENT Ethylene oxide-propylene oxide copolymers



2.5gal

EVRG95830 Min. Buy 1ea

22lb

EVRG95820 Min. Buy 1ea

30gal

EVRG95833 Min. Buy 1ea

55gal

EVRG95835 Min. Buy 1ea



Suffusion® Surfactant

by OHP, INC.

An effective blend of surfactants for use on all types of growing media in nurseries, greenhouses, interior plantscapes and soil production. Suffusion works by reducing surface tension of applied water, penetrating into dry and water repellent areas and linking together water-repellent soil and water. Peat, bark or alternative compost substrates are typically candidates for Suffusion.

RATE 4 to 6oz per cubic yard

ACTIVE INGREDIENT Blend of 3 surfactants



2.5gal

OHP988425 Min. Buy 1ea

30gal Drum

OHP988430 Min. Buy 1ea



UpTake™ Soil Wetting Agent & Surfactant

by PACE 49 INC.

UpTake™ is a biodegradable soil adjuvant and wetting agent designed for turf grass, trees, nursery stock, field crops, greenhouses and orchards. UpTake™ increases penetration of water through soil, resulting in improved root growth and plant quality.

RATE 0.34-1.20oz per 100gal in Irrigation Water

ACTIVE INGREDIENT Didecylidimethyl ammonium chloride



1gal

PAC4919-0603S Min. Buy 1ea

Shipping Info **HAZARDOUS**

5gal

PAC4919-0603T Min. Buy 1ea

Shipping Info **HAZARDOUS**

30gal Drum

PAC4919-0603V Min. Buy 1ea

Shipping Info **HAZARDOUS**

55gal Drum

PAC4919-0603W Min. Buy 1ea

Shipping Info **HAZARDOUS**



Defoamer

Shakedown Antifoaming Agent

by BASF CORP

Eliminates unwanted foam in spray applications involving recirculating sprayers and other high agitation equipment to help ensure even distribution of pest control product applications.

RATE 1oz per 100gal



32oz

BAS19-0202A Min. Buy 1ea



Foaming Agents

BioFoamer Foaming Agent

by BIOSAFE SYSTEMS

Additive for use in foaming equipment to enhance foam during application. Ensures that foam delivers thorough coverage and extended contact time on treated surfaces, increasing efficacy of cleaning agent or crop protection product.



5gal

BSF9005-5 Min. Buy 1ea



Anti-Transpirants

PlantCoatPro™

by GREAT OAK, INC.

PlantCoatPro™ is designed to reduce the transpiration of water from plants. By locking in some of the moisture, plants can be protected from sudden environmental changes that can cause damage to foliage and overall plant health. For ornamental plants, trees and shrubs. Not labeled for fruit, vegetable or other crops intended for human consumption.

RATE See label

ACTIVE INGREDIENT Emulsified acrylic polymers



2.5 Gallon

DP44319 Min. Buy 1ea



pH Adjusters

CAL-FLO® Liquid Lime

by Burnett Lime Co

CAL-FLO liquid limestone soil can be used to increase the pH of your soilless media. It also provides a source of calcium and magnesium for plants.

RATE Varies depending on application method. See label.

ACTIVE INGREDIENT Calcium carbonate



2.5gal

SA44298 Min. Buy 1ea



CalOx® Micronized Calcium Carbonate

by BIOSAFE SYSTEMS

A micronized flowable lime made up of over 70% active ingredient and is specifically formulated to immediately raise soil pH. Ideal product for crops like geraniums, poinsettias and greenhouse tomatoes. Since it won't clog lines, it is easily direct injected as a drench application, stabilizing the soil pH for more than 35 days.

REI 0 Hrs

ACTIVE INGREDIENT Calcium carbonate



2.5gal

BSF201125 Min. Buy 1ea

Shipping Info **DIRECT**



Citric Acid pH Reducer

by GROWTH PRODUCTS

MacrOrganics is a 100% plant derived N-P-K fertilizer. Absorption takes place through both the roots and the leaf pores. It is especially effective for giving fast-growing plants, like vegetables, an extra boost during the growing season.

ACTIVE INGREDIENT Citric Acid



2.5gal

GRWP30520 Min. Buy 1ea



RIV Sulfuric Acid 93% HAZ

by RIVERSIDE CHEMICAL

Sulfuric acid is effective at acidifying water to reduce alkalinity.



1gal

RIVSULFACID Min. Buy 1ea

Shipping Info **HAZARDOUS**



IRAC-MAX

And The Family of GT Performance Greenhouse Films



NO FILM HAS EVER DONE SO MUCH FOR SO LITTLE.

New GT **IRAC-MAX** is the new versatile king of the market. Here's why:

✓ IR TREATMENT

Preserves the sun's IR heat radiation at night.

✓ ANTI-CONDENSATE

Reduces/eliminates droplets and light stopping fog on the inside layer from forming.

✓ HIGH DIFFUSION

75% diffusion! New feature spreads light throughout the canopy of your crop. More diffusion = less shadows!

✓ UV OPEN

An industry first! Transmits UV light to crops that need it for color, flavenoids, cannabis, roses and more.

Don't need UV Open? Use GT-4 four year clear as a top layer to block UV!

