



Greenhouse Cucumbers

BioWorks delivers a full line of biological solutions to control pests, prevent disease and improve plant health. For organic and conventional production, BioWorks products help you improve yield and grow the highest quality cucumbers.

PEST/DEFICIENCY	CROP STAGE			
	SEED	SEEDLING (3-5 LEAVES)	VEGETATIVE STAGE	FRUIT PRODUCTION STAGE
DISEASES	Soilborne Diseases	RootShield PLUS ⁺ WP		
	Powdery Mildew		CEASE, MilStop SP	MilStop SP + CEASE, PERpose Plus
	Downy Mildew			
	Botrytis		CEASE	MilStop SP + CEASE, BotryStop
	Gummy Stem Blight		CEASE	
	Aphids, Whiteflies		BotaniGard + Molt-X, SuffOil-X	
	Thrips		BotaniGard, Molt-X, SuffOil-X	
	Lepidopterans		Molt-X, BotaniGard	
	Tarnished Plant Bugs		BotaniGard, SuffOil-X	
	Cucumber Beetles		NemaShield HB, BotaniGard MAXX	
INSECTS / MITES	Fungus Gnats, Shore Flies		NemaShield, BotaniGard MAXX, Molt-X	
	Spider Mites		SuffOil-X	
	Efficient nutrient use and stress reduction		ON-Gard	
	Calcium (Ca) deficiency		ON-Gard CALCIUM	
	Base fertilizer or top-dressing fertilization		Verdanta EcoVita	
NUTRITION	Potassium (K) deficiency			Verdanta K-Vita, Verdanta PL-2
	Iron (Fe) deficiency		Verdanta OFE	

DISEASES
INSECTS / MITES
NUTRITION

PRODUCT	REI	PHI	PEST/DEFICIENCY	RECOMMENDED RATE	TYPE OF APPLICATION
RootShield® PLUS+ WP*	4-hour	0-day	Damping Off, Pythium, Fusarium, Phytophthora	4-8 oz/100 gal	Drench at seeding and transplant; reapply at 4-6 week intervals.
CEASE®*	4-hour	0-day	Gummy Stem Blight	4-6 qt/100 gal	Foliar application every 3-7 days.
MilStop® SP*	1-hour	0-day	Powdery Mildew, Downy Mildew, Botrytis	1.25-5 lb/100 gal	Foliar application 7-14 days. Tank mix rates: CEASE 4-6qt/100gal + MilStop SP 1.25-3 lb/100 gal.
PERpose Plus®*	0-1-hour	0-day		1/3-1 fl oz/gal	1/3 fl oz/gal preventative foliar application weekly; 1 fl oz/gal curative application.
BotryStop®*	4-hour	0-day	Botrytis	2-4 lb/100 gal	Foliar application every 7-10 days.
BotaniGard® MAXX	12-hour	0-day	Aphids, Thrips, Lepidopterans, Tarnished Plant Bug, Whiteflies	0.5-1 qt/100 gal	Foliar application every 5-10 days.
BotaniGard® / Mycotrol®†	4-hour	0-day		WP: 0.5-2 lb/100 gal	Foliar application every 5-10 days. For thrips use 1-2 lb/100 gal.
				ES: 0.5-2 qt/100 gal	Foliar application every 5-10 days. For thrips use 1-2 qt/100 gal.
Molt-X®*	4-hour	0-day		8-10 fl oz/100 gal	For foliar application. In tank mix, use 1/2 rate.
NemaShield® HB	N/A	N/A	Cucumber Beetles	100-300 million/100 gal	Apply as a drench to the substrate near the stem as needed.
BotaniGard® MAXX	12-hour	0-day		0.5-1 qt/100 gal	Apply every 7-10 days as a foliar application to eliminate adults.
NemaShield®	N/A	N/A	Fungus Gnats, Shore Flies	100-300 million/100 gal	Apply as a drench to the substrate as needed.
Molt-X®*	4-hour	0-day		8 fl oz/100 gal	Apply as a drench. In tank mix, use 1/2 rate.
BotaniGard® MAXX	12-hour	0-day		0.5-1 qt/100 gal	Apply every 7-10 days as a foliar treatment to eliminate adults.
SuffOil-X®*	4-hour	0-day	Mites	1-2% v/v	Apply every 7 days. Suppresses powdery mildew.
ON-Gard®* (5-0-0)	N/A	N/A	Nutrition supplement and stress reduction	1 qt-2 gal/100 gal	Weekly foliar spray: 1 qt in seedling stage to 2 gal in vegetative & fruiting stages. Fog rates: 6.4-11.2 fl oz/3 L water.
ON-Gard® CALCIUM* (1-0-0 + 5% Ca)			Calcium (Ca) deficiency	Spray: 8-16 fl oz/100 gal Fog: 1.6-5.6 fl oz/3 L	Weekly foliar spray: 8 fl oz in seedling stage to 16 fl oz in vegetative & fruiting stages.
Verdanta® EcoVita®* (7-5-10)			Base or top-dressing fertilization	10-40 lb/1000 ft ²	Incorporate in substrate at 6-9 lb/yd ³ ; or apply as a top dress, placing product near drip emitters.
Verdanta® K-Vita* (2-0-20)			Potassium (K) deficiency	10-16 lb/1000 ft ²	Optional top dress every 6-8 weeks.
Verdanta® PL-2* (2-0-6)				30-40 fl oz/100 gal	Apply 2 times weekly as a K supplement with low salt index.
Verdanta® OFE (3-0-0 + 3% Fe)			Iron (Fe) deficiency	1 qt/100 gal	Foliar application as needed.

Please refer to product labels for complete application instructions. Always read and follow label directions.



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