



# Mums

BioWorks delivers a full line of biological solutions to control pests, prevent disease and improve plant health. BioWorks products help you grow all season and produce the highest quality Chrysanthemums.

	PEST/DEFICIENCY	CROP STAGE			
		PRE-PLANT (STOCK PLANTS)	CUTTINGS (PROPAGATION)	VEGETATIVE	FLOWERING
<b>DISEASES</b>	Soilborne Diseases	RootShield <i>PLUS</i> <sup>+</sup> WP, RootShield <i>PLUS</i> <sup>+</sup> G			
	Powdery Mildew				
	Fungal Leaf Spot	CEASE, MilStop SP	CEASE, MilStop SP, PERpose Plus	MilStop SP + CEASE, PERpose Plus	
	Rust				
	Botrytis	CEASE		MilStop + CEASE, BotryStop	
	Bacterial Leaf Spot, Bacterial Blight	CEASE, PERpose Plus			
<b>INSECTS / MITES</b>	Aphids, Whiteflies	BotaniGard, Molt-X, SuffOil-X	BotaniGard + Molt-X, SuffOil-X, BotaniGard MAXX		
	Thrips				
	Leafminer	Molt-X, SuffOil-X			
	Mealybugs	BotaniGard, SuffOil-X			
	Fungus Gnats, Shore Flies	NemaShield, BotaniGard MAXX, Molt-X			
	Mites	SuffOil-X			
<b>NUTRITION</b>	Efficient nutrient use and stress reduction	ON-Gard			
	Base fertilization, top dress	Verdanta EcoVita, N-Vita			
	Iron (Fe) deficiency	Verdanta OFE			
	Calcium (Ca) deficiency	ON-Gard CALCIUM			

**DISEASES**
**INSECTS / MITES**
**NUTRITION**

PRODUCT	REI	PHI	PEST/DEFICIENCY	RECOMMENDED RATE	TYPE OF APPLICATION
<b>RootShield® PLUS+ WP*</b>	4-hour	0-day	Pythium, Rhizoctonia, Fusarium, Phytophthora	Drench: 4-8 oz/100 gal Dip (URC): 1.5 oz/5 gal	Drench at sticking or transplant, or Dip unrooted cuttings (URC) prior to planting. Reapply at 10 weeks.
<b>RootShield® PLUS+ G*</b>	4-hour	0-day		1.5-3 lb/cu yd	Incorporate with potting media.
<b>MilStop® SP*</b>	1-hour	0-day	Powdery Mildew, Leaf Spots, Botrytis, Rust	1.25-5.0 lb/100 gal	Foliar application every 7-14 days. Tank mix rates: CEASE 4-6qt/100gal + MilStop SP 1.25-3 lb/100 gal.
<b>CEASE®*</b>	4-hour	0-day	Powdery Mildew Botrytis, Rust; Fungal and Bacterial Leaf Spot, Bacterial Blight	4-6 qt/100 gal	Foliar application every 3-7 days.
<b>PERpose Plus®*</b>	0-1-hour	0-day		1/3-1 fl oz/gal Mist: 1:1000-1:5000	1/3 fl oz/gal preventative application weekly; 1 fl oz/gal curative application. Mist in propagation: Apply 1:1000 for first week; 1:5000 for remainder of propagation.
<b>BotryStop®*</b>	4-hour	0-day	Botrytis	2-4 lb/100 gal	Foliar application every 7-10 days.
<b>BotaniGard® MAXX</b>	12-hour	0-day	Aphids, Whiteflies, Thrips, Mealybugs	0.5-1 qt/100 gal	Foliar application every 5-10 days.
<b>BotaniGard® / Mycotrol®†</b>	4-hour	0-day		WP: Foliar: 0.5-2 lb/100 gal Dip: 1.5 oz/5 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.
<b>Molt-X®*</b>	4-hour	0-day		8-10 fl oz/100 gal	For foliar application. In tank mix, use 1/2 rate.
<b>SuffOil-X®*</b>	4-hour	0-day	Mites, Aphids, Whiteflies, Thrips, Mealybugs, Leafminer	1-2% v/v	Foliar application every 7 days. Suppresses Powdery Mildew, rust. Tank mix partner for leafminer control.
<b>NemaShield®</b>	N/A	N/A	Fungus Gnats, Shore Flies	100-300 million/100 gal	Apply as a drench to the substrate as needed.
<b>Molt-X®*</b>	4-hour	0-day		8 fl oz/100 gal	Apply as a drench. In tank mix, use 1/2 rate.
<b>BotaniGard® MAXX</b>	12-hour	0-day		0.5-1 qt/100 gal	Foliar application every 7-10 days to eliminate adults.
<b>ON-Gard®* (5-0-0)</b>	N/A	N/A	Nutrition supplement and stress reduction	Foliar Spray/Drench/ Dip: 1 qt/100 gal	Pre-plant dip or drench at planting. Re-apply as a drench at 2 week intervals. Low Volume (Fogging): 6.4-11.2 fl oz/ 3 L water.
<b>Verdanta® EcoVita®* (7-5-10)</b>			Base fertilization	3.5-6.5 lb/cu yd soil mix	Incorporate in substrate.
<b>Verdanta® N-Vita®* (9-4-3)</b>					
<b>Verdanta® OFE (3-0-0 + 3% Fe)</b>			Iron (Fe) deficiency	1 qt/100 gal	Foliar application as needed.
<b>ON-Gard® CALCIUM* (1-0-0 + 5% Ca)</b>	Calcium (Ca) deficiency	16 fl oz/100 gal	Apply as a foliar spray at 2 week intervals, as needed.		



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

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