




We deliver a full line of biological solutions to control pests, prevent disease and improve plant health. Our products help you grow all season and produce the highest quality mums.



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CROP GUIDE MUMS

	PEST/DEFICIENCY	CROP STAGE			
		PRE-PLANT (STOCK PLANTS)	CUTTINGS (PROPAGATION)	VEGETATIVE	FLOWERING
DISEASES 	Soilborne Diseases	RootShield® PLUS+ WP, RootShield PLUS+ G			
	Powdery Mildew, Downy Mildew	CEASE®, MilStop® SP	CEASE, MilStop SP, PERpose Plus®	MilStop SP + CEASE, PERpose Plus	
	Fungal Leaf Spot				
	Rust			BotryStop® WP, MilStop SP + CEASE	
	Botrytis				
	Bacterial Leaf Spot	CEASE, PERpose Plus, BotryStop WP			
INSECTS / MITES 	Aphids, Whiteflies, Thrips	Molt-X®, SuffOil-X®, EpiShield®, PRINCIPLE™ WP			
	Leafminer	Molt-X, SuffOil-X			
	Mealybugs	Molt-X, SuffOil-X, EpiShield			
	Fungus Gnats, Shore Flies	NemaShield®, Molt-X, SuffOil-X			
	Mites	SuffOil-X, EpiShield			
	NUTRITION 	Efficient nutrient use and stress reduction	ON-Gard®		



ABOVE AND BEYOND IS WHERE WE BEGIN

CROP GUIDE MUMS

	PRODUCT	REI, PHI	OMRI	PEST/DEFICIENCY	RECOMMENDED RATE	TYPE OF APPLICATION
DISEASES 	RootShield PLUS ⁺ WP ²	4-hour 0-day	Yes	<i>Pythium</i> , <i>Fusarium</i> , <i>Phytophthora</i> , <i>Rhizoctonia</i>	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.
	RootShield PLUS ⁺ G ²	4-hour 0-day	Yes		1.5-3 lb/cu yd	Incorporate in potting media.
	MilStop SP	1-hour 0-day	Yes	Powdery Mildew, Leaf Spots, <i>Botrytis</i> , Rust	1.25-5.0 lb/100 gal	Foliar application every 7-14 days. Tank mix rates: CEASE + MilStop SP
	CEASE	4-hour 0-day	Yes	Powdery Mildew, <i>Botrytis</i> , Rust, Fungal and Bacterial Leaf Spot, Bacterial Blight	4-6 qt/100 gal	Foliar application every 3-7 days. Safe for use with young seedlings.
	PERpose Plus	0-1-hour 0-day	Yes		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.
	BotryStop WP	4-hour 0-day	Yes	<i>Botrytis</i> , Bacterial Leaf Spot ¹	2-4 lb/100 gal	Foliar application every 7-10 days.
INSECTS / MITES 	PRINCIPLE WP ¹	4-hour 0-day	Yes	Aphids, Whiteflies, Thrips	0.5-2 lb/100 gal Dip rate: 0.25-0.5 oz/gal	Foliar application every 5-10 days. For thrips use 1-2 lb/100 gal.
	Molt-X ²	4-hour 0-day	Yes	Aphids, Whiteflies, Thrips, Mealybugs,	8-10 fl oz/100 gal	Foliar spray to glisten on a 7-10-day interval or as needed.
	SuffOil-X	4-hour 0-day	Yes	Mites, Aphids, Thrips, Whiteflies, Leafminers, Fungus Gnats	1-2 gal/100 gal	Foliar application every 7 days. Suppresses Powdery Mildew, rust. Tank mix partner for leafminer control.
	EpiShield	N/A	No	Mites, Aphids, Thrips, Whiteflies, Mealybugs	Foliar spray 9-12 fl oz/100 gal Dip rate 2.7 ml/gal	Foliar spray to glisten on 5-7-day intervals or as needed. Dip unrooted cuttings for 10-30 seconds while moving plants around in solution.
	NemaShield	N/A	N/A	Fungus Gnats, Shore Flies	100 million/1100-3400 ft ²	Apply as a drench to the substrate as needed.
	Molt-X ²	4-hour 0-day	Yes		8 fl oz/100 gal	Apply as a drench.
NUTRITION 	ON-Gard (5-0-0) ³	N/A	Yes	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.

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

¹Not available for use in CA; ²Not available for use in AK; ³Not labeled for use in MT, ND, SD, WY

Please refer to product labels [bioworksinc.com](https://www.bioworksinc.com) for fogging application details and rates.

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