



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.



BioWorks
DIVISION OF BIOFIRST GROUP

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			BotryStop® WP, MilStop SP + CEASE	
	Rust	CEASE		BotryStop® WP, MilStop SP + CEASE	
	<i>Botrytis</i>			BotryStop® WP, MilStop SP + CEASE	
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, Fusarium, Phytophthora, 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 ¹	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	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 for fogging application details and rates.

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BIOWORKS, INC.

100 Rawson Road • Suite 205

Victor, NY 14564

bioworksinc.com • 800.877.9443