

CROP GUIDE PERENNIAL SPECIES

		CROP STAGE						
	PEST/DEFICIENCY	PROPAGATION, SEEDS, CUTTINGS	GROWING ON	FINISHING	OVERWINTERING	WAKE UP PERIOD		
WILES WILES	Soilborne Diseases	RootShield® <i>PLUS</i> + WP, RootShield <i>PLUS</i> + G	RootShield <i>PLUS</i> ⁺ WP		RootShield <i>PLUS</i> ⁺ WP	RootShield <i>PLUS</i> ⁺ WP		
	Powdery Mildew, Downy Mildew	C T A C T ®	MilCton® CD DED.	DED DILIC	DED DILIC			
	Fungal Leaf Spot	CEASE	, MilStop® SP, PERpo	PERpose PLUS	PERpose PLUS			
	Botrytis	BotryStop® WF	P, PERpose Plus, CEA	PERpose PLUS	BotryStop, PERpose PLUS			
	Bacterial Leaf Spot	CEASE,	PERpose Plus, Botry					
	Aphids, Whiteflies, Thrips	Molt-X®, Suff(Oil-X®, EpiShield®, PF		Molt-X, SuffOil-X, EpiShield, PRINCIPLE WP			
	Fungus Gnats, Shore Flies	NemaShield®, Molt-X						
	Mites	SuffOil-X, EpiShield						
	Black Vine Weevils	Molt-X	NemaShield	HB, Molt-X				
	Mealybugs	SuffOil-X, EpiShield, Molt-X						
***	Efficient nutrient use and stress reduction	ON-Gard®				ON-Gard		



	PRODUCT	REI, PHI	OMRI	PEST/DEFICIENCY	RECOMMENDED RATE	TYPE OF APPLICATION	
DISEASES	RootShield <i>PLUS</i> ⁺ WP²	4-hour O-day	Yes	Phytophthora, Pythium, Fusarium, Rhizoctonia, Cylindrocladium, and	Drench: 4-8 oz/100 gal Dip (URC): 1.5 oz/5 gal	Dip URC at sticking. Drench at seeding, sticking or transplant. Reapply drench application at 8–12 weeks through crop cycle. Treat prior to overwinting and again during wake up period.	
	RootShield <i>PLUS</i> ⁺ G ²	4-hour 0-day	Yes	Thielaviopsis species	1.5-3 lb/cu yd	Incorporate in potting media.	
	MilStop SP	1-hour 0-day	Yes	Powdery Mildew, Downy Mildew, <i>Botrytis</i> , Fungal Leaf Spot	1.25–3.0 lb/100 gal	Foliar application every 7-14 days. Tank mix rates: CEASE 4-6qt/100gal + MilStop SP 1.25/100 gal.	
	CEASE	4-hour 0-day	Yes	Bacterial and Fungal Leaf Spot, Powdery	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	Mildew, Downy Mildew, <i>Botryti</i> s	1/3-1 fl oz/gal	Foliar preventative application: 1/3 fl oz/gal weekly; Foliar curative rate: 1 fl oz/ gal for 1-3 consecutive days.	
	BotryStop WP	4-hour 0-day	Yes	Botrytis, Bacterial Leaf Spot¹	2-4 lb/100 gal	Foliar application every 7-10 days.	
MITES	PRINCIPLE WP1	4-hour 0-day	Yes	Thrips, Whiteflies, Aphids	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	
TS /	Molt-X²	4-hour 0-day	Yes	Aphids, Whiteflies, Thrips, Mealybugs, Fungus gnats	8–10 fl oz/100 gal	For foliar application. Tank mix with contact insecticides for added efficacy. In tank mix use 1/2 rate.	
INSE	SuffOil-X	4-hour 0-day	Yes	Mites, Aphids, Thrips, Whiteflies, Leafminers, Mealybugs, Scales	1-2 gal/100 gal	Foliar application every 7 days. Suppresses Powdery Mildew & Rust. Tank mix partner for leafminer control. Use 1% when in bloom or on sensitive crops.	
	EpiShield	N/A	No	Mites, Aphids, Thrips, Whiteflies, Mealybugs	Spray: 9-12 fl oz/100 gal Dip: 2.7 ml/gal	Foliar application every 5-7 days. Dip URC for 10-30 seconds & let dry.	
	NemaShield HB N/A N/A Weevils, White Gru Cutworms		Weevils, White Grubs, Cutworms	50 million/1000-2000ft²	Apply as a drench to the substrate as needed.		
	NemaShield	N/A	N/A	Fungue anata Chara	100 million/1100-3400 ft²	Apply as a drench to the substrate as needed.	
	Molt-X²	4-hour 0-day	Yes	Fungus gnats, Shore flies, Weevils	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. Tank Mix with RootShield® PLUS WP.	

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

©2025 BioWorks, Inc. The following are registered trademarks of BioWorks, Inc.: RootShield, CEASE, MilStop SP, PERpose Plus, BotryStop, Molt-X, NemaShield, SuffOil-X, EpiShield, and ON-Gard. PRINCIPLE is a trademark of BioWorks, Inc.



BIOWORKS, INC.

100 Rawson Road • Suite 205

Victor, NY 14564

bioworksinc.com • 800.877.9443

¹Not available for use in CA

²Not available for use in AK

³Not labeled for use in MT, ND, SD, WY