




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



**BioWorks**  
DIVISION OF BIOFIRST GROUP

# CROP GUIDE HYDROPONIC LETTUCE

	PEST/DEFICIENCY	CROP STAGE			
		SEED	SEEDLING (3-5 LEAVES)	EARLY ROSETTE	HEAD FORMATION
DISEASES 	Soilborne Diseases	RootShield PLUS®+ WP			
	Powdery Mildew, Downy Mildew	MilStop® SP + CEASE®, PERpose Plus®			
	<i>Botrytis</i>	BotryStop® WP, MilStop SP + CEASE, PERpose Plus			
	<i>Sclerotinia</i> Rot	BotryStop WP, CEASE, PERpose Plus			
INSECTS / MITES 	Aphids, Whiteflies, Thrips	PRINCIPLE™ WP, Molt-X, SuffOil-X, EpiShield®			
	Caterpillars	Molt-X, PRINCIPLE WP			
	Fungus Gnats, Shore Flies	NemaShield®, Molt-X			
NUTRITION 	Efficient nutrient use and stress reduction	ON-Gard®			



ABOVE AND BEYOND IS WHERE WE BEGIN

# CROP GUIDE HYDROPONIC LETTUCE

	PRODUCT	REI, PHI	OMRI	PEST/DEFICIENCY	RECOMMENDED RATE	TYPE OF APPLICATION
DISEASES	RootShield PLUS <sup>+</sup> WP <sup>2</sup>	4-hour 0-day	Yes	Root Diseases	Drench: 4-8 oz/100 gal	Drench at seeding and transplant.
	MilStop SP	1-hour 0-day	Yes	Powdery Mildew, Downy Mildew, <i>Botrytis</i>	1.25-5.0 lb/100 gal	Foliar application every 7-14 days. Tank mix rates: CEASE 4-6 qt/100 gal + MilStop SP 1.25-3.0 lb/100 gal.
	CEASE	4-hour 0-day	Yes		4-6 qt/100 gal	Foliar application every 3-7 days.
	PERpose Plus <sup>1</sup>	0-1-hour 0-day	Yes		1/3-1 fl oz/gal	1/3 fl oz/gal preventative foliar application weekly; 1 fl oz/gal curative application.
	BotryStop WP <sup>4</sup>	4-hour 0-day	Yes	<i>Botrytis</i> , <i>Sclerotinia</i> Rot	2-4 lb/100 gal	Foliar application every 7-10 days.
INSECTS / MITES	PRINCIPLE WP	4-hour 0-day	Yes	Whiteflies, Aphids, Thrips, Caterpillars	0.5-2 lb/100 gal	Foliar application every 5-10 days. For thrips use 1-2 lb/100 gal.
	Molt-X <sup>2</sup>	4-hour 0-day	Yes		8-10 fl oz/100 gal	For foliar application every 5-10 days.
	SuffOil-X	4-hour 0-day	Yes	Whiteflies, Aphids, Thrips	1-2 gal/100 gal	Foliar application every 7 days. Suppresses powdery mildew.
	EpiShield	N/A	No	Aphids, Thrips, Whiteflies, Mealybugs	9-12 fl oz/100 gal	Foliar spray to glisten on 5-7-day interval or as needed.
	NemaShield	N/A	N/A	Fungus Gnats, Shore Flies	100 million/1100-3400 ft <sup>2</sup>	Drench on plug trays.
	Molt-X <sup>2</sup>	4-hour 0-day	Yes		8 fl oz/100 gal	Apply as a drench.
NUTRITION	ON-Gard (5-0-0) <sup>3</sup>	N/A	Yes	Nutrition supplement and stress reduction	1 qt-2 gal/100 gal	Weekly foliar spray: 1 qt in seedling stage, increase through head formation stage, up to 2 gal. Fog rates: 6.4-11.2 fl oz/3 L water.

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

<sup>1</sup>Not available for use in CA; <sup>2</sup>Not available for use in AK; <sup>3</sup>Not labeled for use in MT, ND, SD, WY. <sup>4</sup>BotryStop WP not labeled for use on lettuce in CA

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

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