

CEASE[®]
Biological Fungicide

An Aqueous Suspension Biofungicide

COMMERCIAL

GUARANTEE: QST 713 strain of dried *Bacillus subtilis*, contains a minimum of 1×10^9 CFU/g

KEEP OUT OF REACH OF CHILDREN

READ THE LABEL BEFORE USING

POTENTIAL SKIN SENSITIZER

REGISTRATION NO.: 30522 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 3.87L

BioWorks, Inc.
100 Rawson Rd, Suite 205
Victor, New York, USA 14564
Phone: 1-800-877-9443
www.bioworksinc.com

Date of Manufacture:

Made in Mexico

NOTICE TO USER:

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

FIRST AID:

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

If on skin/clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

If in eyes: Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION: Treat symptomatically.

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. DO NOT APPLY BY AIR. May cause sensitization. Avoid contact with eyes, skin or clothing. Avoid inhaling/breathing mist. Wear a long-sleeved shirt, long pants, shoes plus socks, water-proof gloves and NIOSH approved respirator with any N-95, R-95, P-95 or HE filter for biological products when handling, and during all clean-up and repair activities. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

STORAGE AND DISPOSAL:

To prevent contamination, store this product away from food or feed.

STORAGE: Store in a dry area inaccessible to children. Store at room temperature for up to two years from the date of manufacture. Store in original container only. Keep container closed when not in use.

DISPOSAL:

1. Triple or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.

5. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

GENERAL USE INFORMATION:

CEASE Biological Fungicide is a broad spectrum, preventative biofungicide for the suppression of many ornamental, crop, turf and lawn diseases. It may be applied as a foliar spray or in an alternating spray program with other registered crop protection products. CEASE Biological Fungicide may be applied to greenhouse and outdoor ornamentals as a soil drench. For maximum effectiveness, apply CEASE Biological Fungicide prior to or in the early stages of disease development. When conditions are conducive to heavy disease pressure, use CEASE Biological Fungicide in a rotational program with other registered fungicides. CEASE Biological Fungicide may be applied with ground application equipment.

INTEGRATED PEST MANAGEMENT (IPM):

For disease resistance management, CEASE Biological Fungicide can be integrated into an overall disease and pest management strategy whenever fungicide use is necessary. Follow practices known to reduce disease development. Consult local agricultural authorities for specific IPM strategies developed for your crop(s) and location.

USE RATE DETERMINATION:

Carefully read and follow all label directions, use rates and restrictions. Apply CEASE Biological Fungicide prior to or in the early stages of disease development. Use maximum label rates and shortened spray intervals for conditions conducive to rapid disease development. For proper application, determine the area to be treated, the recommended label use rate and select appropriate application volume to give good canopy penetration and coverage of plant parts to be protected. Prepare only the amount of spray solution required to treat the measured area. Accurate spray equipment calibration is essential prior to use.

PREHARVEST INTERVAL:

CEASE Biological Fungicide can be applied up to and including the day of harvest.

APPLICATION INSTRUCTIONS:

GENERAL: Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower/treatment coordinator are responsible for considering all of these factors when making decisions. Where provinces/territories have more stringent regulations, they should be observed.

As this product is not registered for the control of pests in aquatic systems, **DO NOT** use to control aquatic pests.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of washwater.

DO NOT apply by air.

DO NOT Allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds, or other waters.

GROUND: Be sure to maintain agitation during mixing and application to assure uniform product suspension. Thorough coverage of all foliage is essential for effective disease control.

CEASE Biological Fungicide can be applied in commonly used ground application equipment. To achieve good coverage, use the appropriate spray pressure, water volume, nozzles, nozzle spacing and ground speed. Consult spray nozzle and accessory catalogues for specific information on proper equipment calibration.

MIXING INSTRUCTIONS:

CEASE Biological Fungicide must be diluted with water for spray application. Partially fill the spray tank with clean water and begin agitation. Add the specified amount of CEASE Biological Fungicide to the tank. Finish filling the tank to the desired volume to obtain the proper spray concentration. It is critical that the spray solution be agitated during mixing and application to assure a uniform suspension. Do not allow spray mixture to stand overnight or for prolonged periods.

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DIRECTIONS FOR USE

When applied with ground spray equipment as directed, CEASE Biological Fungicide will suppress the following listed diseases on the

following crops (including transplants) grown indoors, in greenhouses and nurseries. For maximum effectiveness, apply CEASE Biological Fungicide prior to or during early stages of disease development. Apply the product until run-off.

Crop	Disease	Rate (litre/ 100 litres of water)	Application Instructions
Crop Group 4 Crops (Leafy vegetables): Amaranth, arugula, celery, Chinese celery, celtuce, chervil, edible chrysanthemum, corn salad, cress, dandelion, dock, endive, fennel, lettuce, orach, parsley, purslane radicchio, spinach (all types), and swiss chard, including transplants.	Sclerotinia rot <i>(Sclerotinia sclerotiorum, Sclerotinia minor)</i>	1.0-2.0	Head and leaf drop: Apply as a directed spray with multiple nozzles to each seed line in sufficient water to ensure thorough coverage of lower plant leaves and surrounding soil surface within 7 days of thinning or transplanting. Repeat applications on 10-14 day intervals if conditions for disease development persist. Use higher rate and lower application intervals under conditions of moderate to high disease pressure.
	Grey mould <i>(Botrytis cinerea)</i>	1.0-2.0	For suppression, begin applications soon after emergence or transplant and continue as necessary on a 7 to 10 day interval. When environmental conditions in the greenhouse are conducive to rapid disease development, use CEASE Biological Fungicide in a rotational program with other registered fungicides. Thorough coverage is essential.
	Powdery mildew <i>(Erysiphe cichoracearum)</i>	1.0-2.0	Begin applications when conditions are conducive to disease development. Repeat as necessary on a 7 to 10 day interval. Apply in sufficient water to ensure complete coverage of entire plant. For improved performance use CEASE Biological Fungicide in a rotational program with other registered fungicides.
Lettuce	Downy mildew <i>(Bremia lactucae)</i>	1.0-2.0	Begin application soon after emergence or transplant and when conditions in the greenhouse are conducive to disease development. Repeat as necessary on a 7 to 10 day interval.
Crop Group 5 (Cole Crops) Broccoli, Chinese broccoli, Broccoli raab,	Pin rot <i>(Alternaria/Xanthomonas complex)</i>	1.0-2.0	For suppression, begin applications when environmental conditions in the greenhouse are conducive to rapid disease development and repeat as necessary on 7 to 10 day intervals.

Brussels sprouts, cabbage (all types), cauliflower, cavalo broccoli, collards kale, kohlrabi, mizuna, mustard greens, mustard spinach, rape greens, including transplants.			Thorough coverage is essential. For improved performance, use CEASE Biological Fungicide in a rotational program with other registered fungicides.
	Powdery mildew (<i>Leveillula taurica</i>) Downy mildew (<i>Peronospora parasitica</i>)	1.0-2.0	Begin application soon after emergence or transplant and when conditions in the greenhouse are conducive to disease development. Repeat as necessary on a 7 to 10 day interval.
Crop Group 8: Fruiting vegetables Eggplant, ground cherry, okra, pepino, peppers (all varieties), tomatillo and tomatoes, including transplants.	Bacterial blight (<i>Pseudomonas syringae</i>) Grey mould (<i>Botrytis cinerea</i>)	1.0-2.0	Begin application when environmental conditions in the greenhouse are conducive to disease development. Repeat as necessary on a 7- to 10-day interval.
Pepper (bell pepper, chili pepper, pimento and sweet pepper) , including transplants	Bacterial spot (<i>Xanthomonas campestris</i>) Bacterial Speck (<i>Pseudomonas syringae</i> pv. <i>Tomato</i>)	1.0-2.0	Begin application soon after emergence or transplant and when conditions in the greenhouse are conducive to disease development. Repeat as necessary on a 7 to 10 day interval.
Crop Group 9 Crops (Cucurbits) Cantaloupe, Chinese waxgourd, cucumber, gherkin, edible gourd, melon, Momordica spp, muskmelon, pumpkin, squash (all types), and watermelon, including transplants.	Gummy stem blight (<i>Didymella bryoniae</i>) Cercospora leaf spot (<i>Cercospora citrullina</i>) Downy Mildew (<i>Pseudoperonospora cubensis</i>) Powdery Mildew (<i>Erysiphe</i> spp. <i>Sphaerotheca</i> spp.)	1.0 – 2.0	Begin applications soon after emergence or transplant when environmental conditions in the greenhouse and plant stage are conducive to rapid disease development. Repeat as necessary on 7 to 10 day intervals. Thorough coverage is essential. CEASE Biological Fungicide can be rotated with other registered fungicides.
Crop Group 19: Herbs and Spices Anise, balm, basil, borage, chamomile, caraway, catnip, celery seed, chervil, chive, coriander, costmary, dill, fennel, fenugreek, horehound, juniper	Botrytis gray mould (<i>Botrytis cinerea</i>); White mould (<i>Sclerotinia sclerotiorum</i>)	1.0 – 2.0	Begin application in the greenhouse when environmental conditions are conducive to disease development. Repeat as necessary on a 7- to 10-day interval.

berry, lavender, lemongrass, lovage, marigold, mustard (seed), nasturtium, parsley, rosemary, sage, savory, sweet bay, thyme, wintergreen, woodruff, and wormwood including transplants			
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WASABI (Greenhouse grown)

FOLIAR APPLICATION			
Crop	Disease	Rate (litre/100 litres of water)	Application Instructions
Wasabi (greenhouse grown)	Powdery mildew (<i>Erysiphe cruciferarum</i>)	1.0 – 2.0	Begin applications when conditions are conducive to disease development. Apply in sufficient water to ensure complete coverage of entire plant. For improved performance use CEASE Biological Fungicide in a rotational program with other registered fungicides. Repeat as necessary on a 7 to 10 day interval.
DRENCH APPLICATION			
Crop	Disease	Rate (litre/100 litres of water)	Application Instructions
Wasabi (greenhouse grown)	Pythium root rot (<i>Pythium dissotocum</i> , <i>P. intermedium</i>) Phytophthora crown and root rot (<i>Phytophthora cryptogea</i>)	1.0 – 2.0	Apply finished mixture at a rate to thoroughly soak the growing media through the root zone as a drench or directed spray using hand held, mechanical or motorized spray equipment, or as a chemigation drench or directed spray using applicable sprinkler irrigation systems. Begin applications during or after seeding, sticking of cuttings or after transplanting to propagation beds, containers, pots or trays. For improved performance use CEASE Biological Fungicide in a rotational program with other registered fungicides. Optimal performance is obtained with

			preventative treatments repeated every 21 – 28 days throughout the growing cycle.
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When applied with ground spray equipment as directed, CEASE Biological Fungicide will suppress the following listed diseases on the following ornamental plants (including transplants) grown indoors, outdoors, in greenhouses and nurseries. For maximum effectiveness, apply CEASE Biological Fungicide prior to or during early stages of disease development. Apply the product until run-off.

Crop	Disease	Rate (litre/ 100 litres of water)	Application Instructions
Poinsettia	Powdery mildew (<i>Oidium</i> spp.)	1.0-2.0	Apply on a 7 day schedule. Under high disease pressure, use higher rate or in a rotational program with other registered fungicides. Thorough coverage of plants is essential for effective disease control.
	Botrytis blight (<i>Botrytis cinerea</i>)	1.0-2.0	
Garden phlox	Powdery mildew (<i>Erysiphe cichoracearum</i>)	1.0-2.0	
Dwarf bee balm	Powdery mildew (<i>Erysiphe cichoracearum</i>)	1.0-2.0	
Geranium	Botrytis leaf blight (<i>Botrytis cinerea</i>)	1.0-2.0	
	Leaf spot (<i>Xanthomonas campestris</i> pv. <i>pelargonii</i>)	1.0-2.0	
Delphinium	Leaf spot (<i>Pseudomonas delphinii</i>)	1.0	
Aglaonema	Leaf spot (<i>Xanthomonas</i> spp.)	1.0-2.0	
Leatherleaf fern	Anthrachnose (<i>Colletotrichum acutatum</i>)	1.0-2.0	
White petunia	Botrytis lesion (<i>Botrytis cinerea</i>)	1.0-2.0	
Roses	Powdery mildew (<i>Spaerotheca</i> spp.) Black spot (<i>Marssonina rosae</i>)	1.0-2.0	

CEASE Biological Fungicide may be applied to greenhouse and outdoor ornamentals as a soil drench. See the table below for application rates and instructions.

Crop	Disease	Rate (litre/ 100	Application Instructions
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		litres of water)	
Ornamentals	<p>Rhizoctonia <i>(Rhizoctonia solani)</i></p> <p>Pythium <i>Pythium ultimum</i></p> <p><i>Phytophthora</i></p>	1.0-2.0	<p>Apply finished mixture at a rate to thoroughly soak the growing media through the root zone as a drench or directed spray using hand held, mechanical or motorized spray equipment, or as a chemigation drench or directed spray using applicable sprinkler irrigation systems. Begin applications during or after seeding, sticking of cuttings or after transplanting to propagation beds, containers, pots or trays. Optimal performance is obtained with preventative treatments repeated every 21 – 28 days throughout the growing cycle.</p>

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