



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

June 2, 2021

Erika Rohr Luke
Regulatory Affairs Specialist
Marrone Bio Innovations,
D/B/A Marrone Bio Innovations, Inc.
1540 Drew Ave
Davis, CA 95618

Subject: Labeling Notification per Pesticide Registration Notice (PRN) 98-10 – Update the OMRI logo
Product Name: MBI-601 EP
EPA Registration Number: 84059-26
Application Date: 04/02/2021
Action Code Case Number: 00296589

Dear Erika Rohr Luke:

The U.S. Environmental Protection Agency (EPA) is in receipt of your application for notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Biopesticides and Pollution Prevention Division (BPPD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The labeling submitted with this application has been stamped “Notification” and will be placed in our records. You must submit one (1) copy of the final printed labeling with the modifications.

Should you wish to add/retain a reference to your company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance Assurance.

If you have any questions, please contact Andrew Queen by phone at 703-308-8135 or via email at queen.andrew@epa.gov.

Sincerely,

**DANIEL
SCHOEFF**

 Digitally signed by DANIEL
SCHOEFF
Date: 2021.06.02 20:48:45
-04'00'

Daniel Schoeff, Acting Senior Regulator Advisor
Microbial Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)
Office of Pesticide Programs

MBI-601 EP

Alternate Brand Names: Chieftain, Patron, Ennoble, Ennoble CG, Ennoble Biofumigant, Ennoble CG Biofumigant

MASTER LABEL, containing:
Sublabel A: Agricultural Crop Use
Sublabel B: Home & Garden Use

EPA Reg. No.: 84059-26

Manufactured (by)(for): Marrone Bio Innovations, Inc.
1540 Drew Ave.
Davis, CA 95618 USA
1-877-664-4476; www.marronebioinnovations.com; info@marronebio.com

NOTIFICATION

84059-26

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

06/02/2021

Sublabel A: Agricultural Crop Use

MBI-601 EP

Alternate Brand Names: Chieftain, Patron, Ennoble, Ennoble CG, Ennoble Biofumigant, Ennoble CG Biofumigant

For control or suppression of the labeled plant-parasitic nematodes, soil-borne plant diseases and insects in horticultural and agricultural soils.

**(Biofumigant) (Biological) (Microbial) (Nematicide) (Bionematicide) (Fungicide) (Biofungicide)
(Granular) soil treatment**



(Can Be Used in Organic Production) (For Organic Production) (OMRI Logo)

Active Ingredient:

Muscodor albus strain SA-13 and spent and unspent fermentation media*100%

*Contains a minimum of 1×10^3 cfu/g of product

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID	
If swallowed	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
If in eyes	<ul style="list-style-type: none">• 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 center or doctor for treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-222-1222 for emergency medical treatment information.	

EPA Reg. No.: 84059-26

EPA Est. No.: XXXXX-XX-XXX

Net Weight: XX

(Batch)(Lot) No: XXXX

Manufactured (by)(for):

Marrone Bio Innovations, Inc.

1540 Drew Ave.

Davis, CA 95618 USA

1-877-664-4476; www.marronebioinnovations.com; info@marronebio.com

Marrone Bio Innovations, Inc.'s name and logo are registered trademarks of Marrone Bio Innovations, Inc.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear
- A NIOSH-approved particulate respirator with any N, R or P filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. (Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.)

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS: When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

USER SAFETY RECOMMENDATIONS: Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment washwater or rinsate. This pesticide is toxic to nontarget insects inhabiting treated soil.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4 hours.

EXCEPTION: If the product is soil incorporated or soil injected, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas (that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water) is:

- Coveralls
- Waterproof gloves
- Shoes plus socks
- Protective eyewear
- A NIOSH-approved particulate respirator with any N, R or P filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. (Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.)

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are **not** within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep unprotected persons out of treated areas until 4 hours after the product has been applied and activated with water.

PRODUCT INFORMATION

MBI-601 EP controls or suppresses labeled soil-borne plant diseases, plant-parasitic nematodes and insects in horticultural and agricultural soils. The active ingredient, *Muscodor albus* strain SA-13 and spent and unspent fermentation media, which is made by inoculating sterile grain with *Muscodor albus* strain SA-13, when properly activated, produces volatile organic compounds that inhibit the growth of or kill target pests. MBI-601 EP is incorporated into

the soil with discs or other similar equipment before planting, or applied in furrow or post planting along the planting rows and watered in to activate the volatile compounds.

APPLICATION AND MIXING INSTRUCTIONS

Incorporate MBI-601 EP into soil (as a pre-plant, (at planting), (or) (post-planting in-furrow soil treatment)). Do not mix with water prior to application as the microbe will activate and become degraded when wetted. At the broadcast rate, incorporate the product into the top 6 inches of soil by discing or using similar equipment according to the chart below. If applied in furrows, apply the product at rates based on row spacing. See the chart below for typical 22" row spacing. Treatment area must be watered immediately after application. If rain is not expected following planting and soil is dry, water until the top one inch of soil has a moisture content of 20-50%. [Optional: Keep the soil moisture at 20-50% capacity for 5-7 days before planting.] Use higher application rates for heavy clay soils or soils with high pest pressure. Use lower application rates in loose, sandy soils or soils with low pest pressure.

NOTE: Application rates may exceed individual package size. Acquire sufficient product for intended application rate.

MBI-601 EP Application Rates for 22" Row Spacing			
Heavy clay soil or high pest pressure		Loose, sandy soil or low pest pressure	
Pounds/Acre	Pounds/1000 feet of row	Pounds/Acre	Pounds/1000 feet of row
500-1000	21-42	125-500	5-21

Cubic Foot Rates: Mix MBI-601 EP into the soil at a rate of 0.6 to 1.2 pounds per cubic foot. Incorporate the product throughout the soil with a shovel, rototiller or similar equipment. Activate MBI-601 EP by uniformly moistening the soil with water. Keep the soil moisture at 20-50% capacity for 5-7 days before planting.

APPLICATION RATES FOR SELECTED CROPS

Apply MBI-601 EP to the soils of the listed agricultural crops at the following rates based on row spacing. MBI-601 EP can be used in either the field or greenhouse for the prevention of any labeled disease, nematode or insect.

Crop Group

Root and Tuber Vegetables

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Artichokes Beets Cassava Celeriac Chayote Chicory Chinese artichoke Edible burdock Ginger Ginseng Horseradish	Seed maggots Flea beetle larvae Garden symphylans White grubs (<i>Scarabaeidae</i>) Wireworms <i>Belonolaimus</i> spp. (sting nematodes)	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Jerusalem artichoke Malanga Parsnips Potatoes Radishes Rutabaga Salsify Skirret Sugar beets Sweet potatoes Turmeric Turnips Turnip-rooted chervil Turnip-rooted parsley Yams	<p><i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes)</p> <p><i>Helicotylenchus</i> spp. (spiral nematodes)</p> <p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p> <p><i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes)</p> <p><i>Meloidogyne</i> spp. (root-knot nematodes)</p> <p><i>Pratylenchus</i> spp. (lesion nematodes)</p> <p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p> <p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p> <p><i>Sclerotium rolfsii</i> (Southern blight)</p> <p><i>Verticillium dahliae</i> (Verticillium wilt)</p>		

Leaves of Root and Tuber Vegetables (Human Food or Animal Feed)

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Carrots Greens: Beets Malanga	Seed maggots Garden symphylans White grubs (<i>Scarabaeidae</i>) Wireworms <i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes) <i>Helicotylenchus</i> spp. (spiral nematodes) <i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes) <i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes) <i>Meloidogyne</i> spp. (root-knot nematodes) <i>Pratylenchus</i> spp. (lesion nematodes) <i>Rotylenchulus</i> spp. (reniform nematodes) <i>Botrytis cinerea</i> (Botrytis fruit rot or blight) <i>Fusarium oxysporum</i> (Fusarium root rot) <i>Macrophomina phaseolina</i> (Charcoal rot)	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<i>Pythium</i> spp. (Damping off) <i>Sclerotinia minor</i> (Sclerotinia blight) <i>Sclerotium rolfsii</i> (Southern blight) <i>Verticillium dahliae</i> (Verticillium wilt)		

Bulb Vegetables (*Allium* spp.)

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Chives Garlic Onions Shallots Leeks	Seed maggots Wireworms <i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes) <i>Helicotylenchus</i> spp. (spiral nematodes) <i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes) <i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes) <i>Meloidogyne</i> spp. (root-knot nematodes) <i>Pratylenchus</i> spp. (lesion nematodes) <i>Rotylenchulus</i> spp. (reniform nematodes)	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<i>Botrytis cinerea</i> (Botrytis fruit rot or blight) <i>Fusarium oxysporum</i> (Fusarium root rot) <i>Macrophomina phaseolina</i> (Charcoal rot) <i>Pythium</i> spp. (Damping off) <i>Sclerotinia minor</i> (Sclerotinia blight) <i>Sclerotium rolfsii</i> (Southern blight) <i>Verticillium dahliae</i> (Verticillium wilt)		

Leafy Vegetables (Except Brassica Vegetables)

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Arugula Celery Chervil Cilantro Corn salad Cress Dandelion Dock Edible-leaved chrysanthemum Endive (Escarole) Greens: Dandelion, Turnip Lettuce: Head, Leaf, Romaine Parsley Purslane Radicchio Spinach Swiss chard Watercress	Seed maggots Flea beetle larvae Garden symphylans White grubs (<i>Scarabaeidae</i>) Wireworms <i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes) <i>Helicotylenchus</i> spp. (spiral nematodes)	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p> <p><i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes)</p> <p><i>Meloidogyne</i> spp. (root-knot nematodes)</p> <p><i>Pratylenchus</i> spp. (lesion nematodes)</p> <p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p> <p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p> <p><i>Sclerotium rolfsii</i> (Southern blight)</p> <p><i>Verticillium dahliae</i> (Verticillium wilt)</p>		

Brassica (Cole) Leafy Vegetables

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Bok choy Broccoli Broccoli raab Brussels sprouts Cabbage Cauliflower Cavalo broccolo Chinese broccoli Chinese cabbage (Napa) Chinese mustard cabbage (Gai Choy) Collards Greens: Mustard, Rape Kale Mizuna Mustard Spinach	Seed maggots Flea beetle larvae Garden symphylans Wireworms <i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes) <i>Helicotylenchus</i> spp. (spiral nematodes) <i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes) <i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes) <i>Meloidogyne</i> spp. (root-knot nematodes) <i>Pratylenchus</i> spp. (lesion nematodes) <i>Rotylenchulus</i> spp. (reniform nematodes) <i>Botrytis cinerea</i> (Botrytis fruit rot or blight) <i>Fusarium oxysporum</i> (Fusarium root rot) <i>Macrophomina phaseolina</i> (Charcoal rot) <i>Pythium</i> spp. (Damping off)	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<i>Sclerotinia minor</i> (Sclerotinia blight) <i>Sclerotium rolfsii</i> (Southern blight) <i>Verticillium dahliae</i> (Verticillium wilt)		

Legume Vegetables (Succulent or Dried)

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Beans—including: Dried, Succulent, Adzuki, Fava, Field, Garbanzo, Pinto, Kidney, Lima, Mung, Navy, Runner, Snap, Tepary, Wax, Yardlong Chickpea Lentils Lupin Peas—including: Garden, Dried, Succulent, Blackeyed, Cowpea, Crowder, Edible- pod, English, Field, Green, Pigeon, Snow, Sugar snap Soybean	Seed maggots White grubs (<i>Scarabaeidae</i>) Wireworms <i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes) <i>Helicotylenchus</i> spp. (spiral nematodes) <i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes) <i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes) <i>Meloidogyne</i> spp. (root-knot nematodes) <i>Pratylenchus</i> spp. (lesion nematodes)	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<i>Rotylenchulus</i> spp. (reniform nematodes) <i>Botrytis cinerea</i> (Botrytis fruit rot or blight) <i>Fusarium oxysporum</i> (Fusarium root rot) <i>Macrophomina phaseolina</i> (Charcoal rot) <i>Pythium</i> spp. (Damping off) <i>Sclerotinia minor</i> (Sclerotinia blight) <i>Sclerotium rolfsii</i> (Southern blight) <i>Verticillium dahliae</i> (Verticillium wilt)		

Foliage of Legume Vegetables

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Soybean foliage	Seed maggots White grubs (<i>Scarabaeidae</i>) Wireworms <i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes) <i>Helicotylenchus</i> spp. (spiral nematodes)	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p> <p><i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes)</p> <p><i>Meloidogyne</i> spp. (root-knot nematodes)</p> <p><i>Pratylenchus</i> spp. (lesion nematodes)</p> <p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p> <p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p> <p><i>Sclerotium rolfsii</i> (Southern blight)</p> <p><i>Verticillium dahliae</i> (Verticillium wilt)</p>		

Fruiting Vegetables (Except Cucurbit Vegetables)

Crops	Target Pests	Product Use Rate per Application	Application Instructions

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Eggplant Groundcherry Okra Pepino Peppers Tomatillo Tomatoes	Seed maggots Flea beetle larvae White grubs (<i>Scarabaeidae</i>) Wireworms <i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes) <i>Helicotylenchus</i> spp. (spiral nematodes) <i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes) <i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes) <i>Meloidogyne</i> spp. (root-knot nematodes) <i>Pratylenchus</i> spp. (lesion nematodes) <i>Rotylenchulus</i> spp. (reniform nematodes) <i>Botrytis cinerea</i> (Botrytis fruit rot or blight) <i>Fusarium oxysporum</i> (Fusarium root rot) <i>Macrophomina phaseolina</i> (Charcoal rot) <i>Pythium</i> spp.	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	(Damping off) <i>Sclerotinia minor</i> (Sclerotinia blight) <i>Sclerotium rolfsii</i> (Southern blight) <i>Verticillium dahliae</i> (Verticillium wilt)		

Cucurbit Vegetables

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Cucumber Edible gourds Melons: Cantaloupe, Crenshaw, Honeydew, Muskmelon, Watermelon Pumpkins Squash	Spotted cucumber beetle larvae Striped cucumber beetle larvae Seed maggots Flea beetle larvae Garden symphylans White grubs (<i>Scarabaeidae</i>) Wireworms <i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes) <i>Helicotylenchus</i> spp. (spiral nematodes) <i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes) <i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp.	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	(lance nematodes) <i>Meloidogyne</i> spp. (root-knot nematodes) <i>Pratylenchus</i> spp. (lesion nematodes) <i>Rotylenchulus</i> spp. (reniform nematodes) <i>Botrytis cinerea</i> (Botrytis fruit rot or blight) <i>Fusarium oxysporum</i> (Fusarium root rot) <i>Macrophomina phaseolina</i> (Charcoal rot) <i>Pythium</i> spp. (Damping off) <i>Sclerotinia minor</i> (Sclerotinia blight) <i>Sclerotium rolfsii</i> (Southern blight) <i>Verticillium dahliae</i> (Verticillium wilt)		

Citrus Fruit

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Grapefruit Lemons Limes Oranges Tangerines	Root weevil larvae (<i>Diaprepes</i>) White grubs (<i>Scarabaeidae</i>) Wireworms <i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<p>genera (ring nematodes)</p> <p><i>Helicotylenchus</i> spp. (spiral nematodes)</p> <p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p> <p><i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes)</p> <p><i>Meloidogyne</i> spp. (root-knot nematodes)</p> <p><i>Pratylenchus</i> spp. (lesion nematodes)</p> <p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p> <p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p> <p><i>Sclerotium rolfsii</i> (Southern blight)</p> <p><i>Verticillium dahliae</i> (Verticillium wilt)</p>		

Pome Fruit

Crops	Target Pests	Product Use Rate per Application	Application Instructions
<p>Apples Crabapple Loquat Mayhaw Pears Quince</p>	<p><i>Belonolaimus</i> spp. (sting nematodes)</p> <p><i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes)</p> <p><i>Helicotylenchus</i> spp. (spiral nematodes)</p> <p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p> <p><i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes)</p> <p><i>Meloidogyne</i> spp. (root-knot nematodes)</p> <p><i>Pratylenchus</i> spp. (lesion nematodes)</p> <p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p> <p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p> <p><i>Sclerotium rolfsii</i> (Southern blight)</p> <p><i>Verticillium dahliae</i> (Verticillium wilt)</p>	<p>125-1000 pounds per acre</p>	<p>Mix into planting soil.</p>

Stone Fruit

Crops	Target Pests	Product Use Rate per Application	Application Instructions
<p>Apricots Cherries Nectarines Peaches Plums Prunes</p>	<p><i>Belonolaimus</i> spp. (sting nematodes)</p> <p><i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes)</p> <p><i>Helicotylenchus</i> spp. (spiral nematodes)</p> <p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p> <p><i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes)</p> <p><i>Meloidogyne</i> spp. (root-knot nematodes)</p> <p><i>Pratylenchus</i> spp. (lesion nematodes)</p> <p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p> <p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p> <p><i>Sclerotium rolfsii</i> (Southern blight)</p>	<p>125-1000 pounds per acre</p>	<p>Mix into planting soil.</p>

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<i>Verticillium dahliae</i> (Verticillium wilt)		

Berries and Small Fruit

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Blackberries Blueberries Cranberries Currants Elderberry Gooseberry Grapes Huckleberry Juneberry Kiwi Lingonberry Loganberries Raspberries: Black, Red, and Cultivars and Hybrids Salal Strawberries	White grubs (<i>Scarabaeidae</i>) Wireworms <i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes) <i>Helicotylenchus</i> spp. (spiral nematodes) <i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes) <i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes) <i>Meloidogyne</i> spp. (root-knot nematodes) <i>Pratylenchus</i> spp. (lesion nematodes) <i>Rotylenchulus</i> spp. (reniform nematodes) <i>Botrytis cinerea</i> (Botrytis fruit rot or blight) <i>Fusarium oxysporum</i> (Fusarium root rot)	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p> <p><i>Sclerotium rolfsii</i> (Southern blight)</p> <p><i>Verticillium dahliae</i> (Verticillium wilt)</p>		

Tree Nuts

Crops	Target Pests	Product Use Rate per Application	Application Instructions
<p>Almonds</p> <p>Cashew</p> <p>Chestnuts</p> <p>Filberts (Hazelnuts)</p> <p>Macadamia Nut</p> <p>Pecans</p> <p>Pistachios</p> <p>Walnuts</p>	<p>White grubs (<i>Scarabaeidae</i>)</p> <p>Wireworms</p> <p><i>Belonolaimus</i> spp. (sting nematodes)</p> <p><i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes)</p> <p><i>Helicotylenchus</i> spp. (spiral nematodes)</p> <p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p> <p><i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes)</p> <p><i>Meloidogyne</i> spp. (root-knot nematodes)</p> <p><i>Pratylenchus</i> spp.</p>	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	(lesion nematodes) <i>Rotylenchulus</i> spp. (reniform nematodes) <i>Botrytis cinerea</i> (Botrytis fruit rot or blight) <i>Fusarium oxysporum</i> (Fusarium root rot) <i>Macrophomina phaseolina</i> (Charcoal rot) <i>Pythium</i> spp. (Damping off) <i>Sclerotinia minor</i> (Sclerotinia blight) <i>Sclerotium rolfsii</i> (Southern blight) <i>Verticillium dahliae</i> (Verticillium wilt)		

Cereal Grains

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Corn: Field, Sweet, Popcorn, Seed Rice Buckwheat Amaranth grain Millet Oats Rye Sorghum (Milo)	Seed maggots Garden symphylans White grubs (<i>Scarabaeidae</i>) Wireworms	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Triticale Wheat	<p>Southern corn rootworm larvae</p> <p><i>Belonolaimus</i> spp. (sting nematodes)</p> <p><i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes)</p> <p><i>Helicotylenchus</i> spp. (spiral nematodes)</p> <p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p> <p><i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes)</p> <p><i>Meloidogyne</i> spp. (root-knot nematodes)</p> <p><i>Pratylenchus</i> spp. (lesion nematodes)</p> <p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p> <p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p> <p><i>Sclerotium rolfsii</i> (Southern blight)</p>		

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<i>Verticillium dahliae</i> (Verticillium wilt)		

Forage, Fodder and Straw of Cereal Grains

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Forage, fodder, stover and straw of all cereal grains	<p>Wireworms</p> <p><i>Belonolaimus</i> spp. (sting nematodes)</p> <p><i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes)</p> <p><i>Helicotylenchus</i> spp. (spiral nematodes)</p> <p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p> <p><i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes)</p> <p><i>Meloidogyne</i> spp. (root-knot nematodes)</p> <p><i>Pratylenchus</i> spp. (lesion nematodes)</p> <p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p>	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<i>Macrophomina phaseolina</i> (Charcoal rot) <i>Pythium</i> spp. (Damping off) <i>Sclerotinia minor</i> (Sclerotinia blight) <i>Sclerotium rolfsii</i> (Southern blight) <i>Verticillium dahliae</i> (Verticillium wilt)		

Grass Forage, Fodder, and Hay

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Forage, fodder, stover and hay of any grass (except sugarcane and those in the cereal grains) fed to or grazed by livestock, all pasture and range grasses and grasses grown for hay or silage	Wireworms <i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes) <i>Helicotylenchus</i> spp. (spiral nematodes) <i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes) <i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes) <i>Meloidogyne</i> spp. (root-knot nematodes) <i>Pratylenchus</i> spp. (lesion nematodes)	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p> <p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p> <p><i>Sclerotium rolfsii</i> (Southern blight)</p> <p><i>Verticillium dahliae</i> (Verticillium wilt)</p>		

Nongrass Animal Feeds (Forage, Fodder, Straw, and Hay)

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Alfalfa: Hay, Seed Lupine	<p>Seed maggots</p> <p>White grubs (<i>Scarabaeidae</i>)</p> <p>Wireworms</p> <p><i>Belonolaimus</i> spp. (sting nematodes)</p> <p><i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes)</p> <p><i>Helicotylenchus</i> spp. (spiral nematodes)</p> <p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p>	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes) <i>Meloidogyne</i> spp. (root-knot nematodes) <i>Pratylenchus</i> spp. (lesion nematodes) <i>Rotylenchulus</i> spp. (reniform nematodes) <i>Botrytis cinerea</i> (Botrytis fruit rot or blight) <i>Fusarium oxysporum</i> (Fusarium root rot) <i>Macrophomina phaseolina</i> (Charcoal rot) <i>Pythium</i> spp. (Damping off) <i>Sclerotinia minor</i> (Sclerotinia blight) <i>Sclerotium rolfsii</i> (Southern blight) <i>Verticillium dahliae</i> (Verticillium wilt)		

Herbs, Spices, and Mints

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Angelica Balm Basil Borage Burnet Catnip Chamomile	White grubs (<i>Scarabaeidae</i>) <i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Chervil Chives Clary Coriander (Cilantro) Costmary Curry Dill (Seed) Dillweed Fennel Horehound Hyssop Lavender Lemongrass Lovage Marjoram Mint Nasturtium Oregano Parsley— including Dried Peppermint Rosemary Sage Savory: Summer, Winter Spearmint Sweet bay Tansy Tarragon Thyme Wintergreen Woodruff Wormwood	genera (ring nematodes) <i>Helicotylenchus</i> spp. (spiral nematodes) <i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes) <i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes) <i>Meloidogyne</i> spp. (root-knot nematodes) <i>Pratylenchus</i> spp. (lesion nematodes) <i>Rotylenchulus</i> spp. (reniform nematodes) <i>Botrytis cinerea</i> (Botrytis fruit rot or blight) <i>Fusarium oxysporum</i> (Fusarium root rot) <i>Macrophomina phaseolina</i> (Charcoal rot) <i>Pythium</i> spp. (Damping off) <i>Sclerotinia minor</i> (Sclerotinia blight) <i>Sclerotium rolfsii</i> (Southern blight) <i>Verticillium dahliae</i> (Verticillium wilt)		

Oilseeds

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Canola (Rapeseed) Cottonseed Evening primrose Meadowfoam Jojoba Safflower Sunflowers: Oil, Seed	Seed maggots Flea beetle larvae White grubs (<i>Scarabaeidae</i>) Wireworms <i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes) <i>Helicotylenchus</i> spp. (spiral nematodes) <i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes) <i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes) <i>Meloidogyne</i> spp. (root-knot nematodes) <i>Pratylenchus</i> spp. (lesion nematodes) <i>Rotylenchulus</i> spp. (reniform nematodes) <i>Botrytis cinerea</i> (Botrytis fruit rot or blight) <i>Fusarium oxysporum</i> (Fusarium root rot) <i>Macrophomina phaseolina</i> (Charcoal rot) <i>Pythium</i> spp. (Damping off)	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<i>Sclerotinia minor</i> (Sclerotinia blight) <i>Sclerotium rolfsii</i> (Southern blight) <i>Verticillium dahliae</i> (Verticillium wilt)		

Stalk, Stem and Leaf Petiole Vegetables

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Asparagus Kohlrabi Rhubarb Ti Palm	Seed maggots Flea beetle larvae White grubs (<i>Scarabaeidae</i>) Wireworms <i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes) <i>Helicotylenchus</i> spp. (spiral nematodes) <i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes) <i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes) <i>Meloidogyne</i> spp. (root-knot nematodes) <i>Pratylenchus</i> spp. (lesion nematodes)	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p> <p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p> <p><i>Sclerotium rolfsii</i> (Southern blight)</p> <p><i>Verticillium dahliae</i> (Verticillium wilt)</p>		

Tropical and Subtropical Fruit, Edible Peel

Crops	Target Pests	Product Use Rate per Application	Application Instructions
<p>Acerola</p> <p>Feijoa</p> <p>Figs</p> <p>Guava</p> <p>Jaboticaba</p> <p>Olives</p> <p>Persimmons</p> <p>Starfruit</p> <p>Wax jambu (Wax Apple)</p>	<p><i>Belonolaimus</i> spp. (sting nematodes)</p> <p><i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes)</p> <p><i>Helicotylenchus</i> spp. (spiral nematodes)</p> <p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p> <p><i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes)</p>	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<p><i>Meloidogyne</i> spp. (root-knot nematodes)</p> <p><i>Pratylenchus</i> spp. (lesion nematodes)</p> <p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p> <p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p> <p><i>Sclerotium rolfsii</i> (Southern blight)</p> <p><i>Verticillium dahliae</i> (Verticillium wilt)</p>		

Tropical and Subtropical Fruit, Inedible Peel

Crops	Target Pests	Product Use Rate per Application	Application Instructions
<p>Atemoya</p> <p>Avocado</p> <p>Bananas</p> <p>Biriba</p> <p>Black sapote</p> <p>Canistel</p> <p>Cherimoya</p> <p>Custard apple</p> <p>Ilama</p> <p>Longan</p> <p>Lychee</p>	<p><i>Belonolaimus</i> spp. (sting nematodes)</p> <p><i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes)</p> <p><i>Helicotylenchus</i> spp. (spiral nematodes)</p>	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Mamey sapote Mango Papaya Passionfruit Pineapple Pomegranate Pulasan Rambutan Sapodilla Soursop Spanish lime Star apple Sugar apple White sapote	<p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p> <p><i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes)</p> <p><i>Meloidogyne</i> spp. (root-knot nematodes)</p> <p><i>Pratylenchus</i> spp. (lesion nematodes)</p> <p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p> <p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p> <p><i>Sclerotium rolfsii</i> (Southern blight)</p> <p><i>Verticillium dahliae</i> (Verticillium wilt)</p>		

Cardoni

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Cardoni	<p><i>Belonolaimus</i> spp. (sting nematodes)</p> <p><i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related</p>	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<p>genera (ring nematodes)</p> <p><i>Helicotylenchus</i> spp. (spiral nematodes)</p> <p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p> <p><i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes)</p> <p><i>Meloidogyne</i> spp. (root-knot nematodes)</p> <p><i>Pratylenchus</i> spp. (lesion nematodes)</p> <p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p> <p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p> <p><i>Sclerotium rolfsii</i> (Southern blight)</p> <p><i>Verticillium dahliae</i> (Verticillium wilt)</p>		

Coffee

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Coffee	<p><i>Belonolaimus</i> spp. (sting nematodes)</p> <p><i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes)</p> <p><i>Helicotylenchus</i> spp. (spiral nematodes)</p> <p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p> <p><i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes)</p> <p><i>Meloidogyne</i> spp. (root-knot nematodes)</p> <p><i>Pratylenchus</i> spp. (lesion nematodes)</p> <p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p> <p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p> <p><i>Sclerotium rolfsii</i> (Southern blight)</p> <p><i>Verticillium dahliae</i> (Verticillium wilt)</p>	125-1000 pounds per acre	Mix into planting soil.

Hops

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Hops	<p>White grubs (<i>Scarabaeidae</i>)</p> <p>Wireworms</p> <p><i>Belonolaimus</i> spp. (sting nematodes)</p> <p><i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes)</p> <p><i>Helicotylenchus</i> spp. (spiral nematodes)</p> <p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p> <p><i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes)</p> <p><i>Meloidogyne</i> spp. (root-knot nematodes)</p> <p><i>Pratylenchus</i> spp. (lesion nematodes)</p> <p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p> <p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p>	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<i>Sclerotium rolfsii</i> (Southern blight) <i>Verticillium dahliae</i> (Verticillium wilt)		

Peanuts

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Peanuts	Seed maggots Flea beetle larvae White grubs (<i>Scarabaeidae</i>) Wireworms Southern corn rootworm larvae <i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes) <i>Helicotylenchus</i> spp. (spiral nematodes) <i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes) <i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes) <i>Meloidogyne</i> spp. (root-knot nematodes) <i>Pratylenchus</i> spp. (lesion nematodes) <i>Rotylenchulus</i> spp. (reniform nematodes)	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<i>Botrytis cinerea</i> (Botrytis fruit rot or blight) <i>Fusarium oxysporum</i> (Fusarium root rot) <i>Macrophomina phaseolina</i> (Charcoal rot) <i>Pythium</i> spp. (Damping off) <i>Sclerotinia minor</i> (Sclerotinia blight) <i>Sclerotium rolfsii</i> (Southern blight) <i>Verticillium dahliae</i> (Verticillium wilt)		

Tobacco

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Tobacco	Flea beetle larvae White grubs (<i>Scarabaeidae</i>) Wireworms <i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes) <i>Helicotylenchus</i> spp. (spiral nematodes) <i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)	125-1000 pounds per acre	Mix into planting soil.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes) <i>Meloidogyne</i> spp. (root-knot nematodes) <i>Pratylenchus</i> spp. (lesion nematodes) <i>Rotylenchulus</i> spp. (reniform nematodes) <i>Botrytis cinerea</i> (Botrytis fruit rot or blight) <i>Fusarium oxysporum</i> (Fusarium root rot) <i>Macrophomina phaseolina</i> (Charcoal rot) <i>Pythium</i> spp. (Damping off) <i>Sclerotinia minor</i> (Sclerotinia blight) <i>Sclerotium rolfsii</i> (Southern blight) <i>Verticillium dahliae</i> (Verticillium wilt)		

Ornamentals

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Ornamentals— including: Flowers, Annual and Bedding Plants, Potted Flowers, Cut Flowers, Flowering Plants and Tropical Foliage	<i>Belonolaimus</i> spp. (sting nematodes) <i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes) <i>Helicotylenchus</i> spp. (spiral nematodes)	125-1000 pounds per acre	Mix into planting soil. This product may be used to control certain pests of container, bench, flat, plug, or field- grown ornamentals in

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Woody ornamentals—including: Deciduous, Forest, Shade Trees, Nursery Trees, and Conifers (including Christmas Trees)	<p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p> <p><i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes)</p> <p><i>Meloidogyne</i> spp. (root-knot nematodes)</p> <p><i>Pratylenchus</i> spp. (lesion nematodes)</p> <p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p> <p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p> <p><i>Sclerotium rolfsii</i> (Southern blight)</p> <p><i>Verticillium dahliae</i> (Verticillium wilt)</p>		greenhouses, shadehouses, outdoor nurseries, retail nurseries, and other landscape areas.

Turf

Crops	Target Pests	Product Use Rate per Application	Application Instructions
Turf—including turf grown for	White grubs (<i>Scarabaeidae</i>)	250-1000 pounds per acre	Apply to soil as a pre-plant soil

Crops	Target Pests	Product Use Rate per Application	Application Instructions
seed	<p>Wireworms</p> <p><i>Belonolaimus</i> spp. (sting nematodes)</p> <p><i>Criconemoides</i> spp., <i>Criconemella</i> spp. and related genera (ring nematodes)</p> <p><i>Helicotylenchus</i> spp. (spiral nematodes)</p> <p><i>Heterodera</i> spp. and <i>Globodera</i> spp. (cyst nematodes)</p> <p><i>Rotylenchus</i> spp. and <i>Hoplolaimus</i> spp. (lance nematodes)</p> <p><i>Meloidogyne</i> spp. (root-knot nematodes)</p> <p><i>Pratylenchus</i> spp. (lesion nematodes)</p> <p><i>Rotylenchulus</i> spp. (reniform nematodes)</p> <p><i>Botrytis cinerea</i> (Botrytis fruit rot or blight)</p> <p><i>Fusarium oxysporum</i> (Fusarium root rot)</p> <p><i>Macrophomina phaseolina</i> (Charcoal rot)</p> <p><i>Pythium</i> spp. (Damping off)</p> <p><i>Sclerotinia minor</i> (Sclerotinia blight)</p> <p><i>Sclerotium rolfsii</i> (Southern blight)</p>		treatment.

Crops	Target Pests	Product Use Rate per Application	Application Instructions
	<i>Verticillium dahliae</i> (Verticillium wilt)		

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Refrigerate at 39°F (4°C) or lower. Keep container closed when not in use. Store for up to one year after the date of purchase. After storage time under the specified conditions has been exceeded, do not use and dispose of product in accordance with the instructions below.

Pesticide Disposal: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, or product is past specified storage time, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

Container Handling: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

ACRC Logo Placeholder

Marrone Bio Innovations, Inc. is a member of the Ag Container Recycling Council located at 223 South Main Street, Lexington, VA 24450. Visit <http://www.acrecycle.org/Contact> for information on how to arrange pick-up of this empty pesticide container.

WARRANTY

To the extent consistent with applicable law, the seller makes no warranty, expressed or implied, of merchantability, fitness or otherwise concerning use of this product. The user assumes all risks of use, storage or handling that are not in accordance with the accompanying directions.

Sublabel B: Home & Garden Use

MBI-601 EP

Alternate Brand Names: Chieftain, Patron, Ennoble, Ennoble CG, Ennoble Biofumigant, Ennoble CG Biofumigant

For control or suppression of the labeled plant-parasitic nematodes, soil-borne plant diseases and insects in home garden soils.

(Biofumigant) (Biological) (Microbial) (Nematicide) (Bionematicide) (Fungicide)

(Biofungicide)

(Granular) soil treatment



(Can Be Used in Organic Gardening) (For Organic Gardening) (OMRI Logo)

Active Ingredient:

Muscodor albus strain SA-13 and spent and unspent fermentation media*100%

*Contains a minimum of 1×10^3 cfu/g of product

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID	
If swallowed	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
If in eyes	<ul style="list-style-type: none">• 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 center or doctor for treatment advice.
HOTLINE NUMBER Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-222-1222 for emergency medical treatment information.	

EPA Reg. No.: 84059-26

EPA Est. No.: XXXXX-XX-XXX

Net Weight: XX

(Batch)(Lot) No: XXXX

Manufactured (by)(for):

Marrone Bio Innovations, Inc.

1540 Drew Ave.

Davis, CA 95618 USA

1-877-664-4476; www.marronebioinnovations.com; info@marronebio.com

Marrone Bio Innovations, Inc.'s name and logo are registered trademarks of Marrone Bio Innovations, Inc.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

ENVIRONMENTAL HAZARDS

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Sweeping any product that lands on a driveway, sidewalk, or street back onto the treated area of the garden will help to prevent run off to water bodies or drainage systems. This pesticide is toxic to nontarget insects inhabiting treated soil.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

HOW IT WORKS

MBI-601 EP controls or suppresses labeled soil-borne plant diseases, plant-parasitic nematodes and insects in home garden soils. The active ingredient, *Muscodor albus* strain SA-13 and spent and unspent fermentation media, when properly activated, produces gases that stop the growth of or kill target pests. MBI-601 EP is incorporated into the soil with a shovel, rototiller or similar equipment before planting, or applied in furrow or post planting along the planting rows and watered in to activate the volatile compounds.

Target pests affected are:

Seed maggots
Flea beetle larvae
Garden symphylans
White grubs (*Scarabaeidae*)
Wireworms
Diabrotica spp. larvae
Belonolaimus spp. (sting nematodes)
Criconemoides spp., *Criconemella* spp. and related genera (ring nematodes)
Helicotylenchus spp. (spiral nematodes)
Heterodera spp. and *Globodera* spp. (cyst nematodes)
Rotylenchus spp. and *Hoplolaimus* spp. (lance nematodes)
Meloidogyne spp. (root-knot nematodes)
Pratylenchus spp. (lesion nematodes)
Rotylenchulus spp. (reniform nematodes)
Botrytis cinerea (Botrytis fruit rot or blight)
Fusarium oxysporum (Fusarium root rot)
Macrophomina phaseolina (Charcoal rot)
Pythium spp. (Damping off)
Sclerotinia minor (Sclerotinia blight)
Sclerotium rolfsii (Southern blight)
Verticillium dahliae (Verticillium wilt)

HOW TO APPLY

Mix MBI-601 EP into the soil at a rate of 0.6 to 1.2 pounds per cubic foot. MBI-601 EP is applied by thoroughly incorporating the product into the top 6 inches of soil with a shovel, rototiller or similar equipment. Activate MBI-601 EP by uniformly moistening the soil with water. Keep the soil moisture at 20-50% capacity for 5-7 days before planting. The most economical and efficient way to measure soil moisture is to use a soil moisture sensor available at any home and garden retail location. Seeds or transplants can be planted 7 days after the product has been activated.

WHERE TO APPLY

Incorporate MBI-601 EP into soil in which the following plants will be grown:

- Annuals
- Perennials
- Bedding plants
- Ground covers
- Potted flowers
- Flowering plants
- (Ornamental) Trees and Shrubs
- Nut trees
- Foliage plants
- Tomatoes
- Peppers
- Cucumbers
- Pumpkins
- Watermelon
- Muskmelon:
 - True cantaloupe
 - Casaba
 - Crenshaw melon
 - Golden pershaw melon
 - Honeydew melon
 - Honey balls
 - Mango melon
 - Persian melon
 - Pineapple melon
 - Santa Claus melon
 - Snake melon
- Summer squash:
 - Crookneck squash
 - Scallop squash
 - Straightneck squash
 - Vegetable marrow
 - Zucchini
- Winter squash:
 - Acorn squash
 - Butternut squash
 - Calabaza

Hubbard squash
Spaghetti squash
Arugula
Beets
Berries
Celery
Cress
Endive
Head lettuce
Leaf lettuce
Radicchio
Rhubarb
Spinach
Swiss chard
Watercress
Garlic
Onions
Broccoli
Broccoli raab/rabe
Brussels sprouts
Cabbage
Chinese broccoli
Chinese cabbage
(Bok choy)
Chinese cabbage
(Napa)
Chinese mustard
cabbage (Gai choy)
Cauliflower
Collards
Kale
Mustard greens
Mustard spinach
Rape greens
Hops
Ornamental flowering tobacco
Turnips

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage: Refrigerate at 39°F (4°C) or lower. Keep container closed when not in use. Store for up to one year after the date of purchase. After storage time under the specified conditions has been exceeded, do not use and dispose of product in accordance with the instructions below.

Pesticide Disposal and Container Handling: Nonrefillable container. Do not reuse or refill this container. **If empty:** Place in trash or offer for recycling if available.

If partially filled, or if storage time has been exceeded: Call your local solid waste agency or (800) 858-7378 (National Pesticide Information Center) for disposal instructions. Never place unused product down any indoor or outdoor drain.

WARRANTY

To the extent consistent with applicable law, the seller makes no warranty, expressed or implied, of merchantability, fitness or otherwise concerning use of this product. The user assumes all risks of use, storage or handling that are not in accordance with the accompanying directions.


THE FOLLOWING OPTIONAL CLAIMS MAY APPEAR ON ANY LABEL PANEL:

OPTIONAL CLAIMS FOR SUBLABEL A

1. Controls or Suppresses/Prevents labeled diseases common in soils
2. Controls or Suppresses/Prevents labeled fungal diseases common in soils
3. Defending crops against labeled diseases...one plant at a time!
4. Use on fruits, vegetables and ornamentals
5. For use on ornamental plants and edible crops/fruits/vegetables
6. For use on vegetables, fruits, berries, nuts, flowers, bedding plants and (ornamental) trees and shrubs
7. MBI-601 EP can be used on vegetable(s) [crops], fruits, berries, nuts, flowers and trees and shrubs
8. MBI-601 EP can be used on vegetable(s) [crops], fruits, berries, nuts, flowers and ornamental trees and shrubs
9. Made in the U.S.A.
10. Label date:
11. US Patents No. XXX
12. © insert company copyright information
13. World rights reserved
14. Distributed by: insert company name and address
15. Company website
16. [For] questions/comments



17. For Organic Use - OMRI.org

18.  (Can Be Used in Organic Production) (For Organic Production)
19. Optional Language: (*) and (*= Not labeled for this use in California)
20. Repackaging or relabeling of this product without express written permission from Marrone Bio Innovations, Inc. is prohibited.
21. UPC symbol
22. Bio with Bite
23. Read full label (enclosed) prior to use.
- 24.




OPTIONAL CLAIMS FOR SUBLABEL B

1. Controls or Suppresses/Prevents labeled diseases common in garden soils
2. Controls or Suppresses/Prevents labeled fungal diseases common in garden soils
3. Defending gardens against labeled diseases...one plant at a time!
4. Use on fruits, vegetables and ornamentals
5. For use on ornamental plants and edible plants/fruits/vegetables

6. For use on vegetables, roses, fruits, berries, nuts, flowers, bedding plants and (ornamental) trees and shrubs
7. MBI-601 EP can be used on vegetable(s), roses, fruits, berries, nuts, flowers and (ornamental) trees and shrubs
8. Made in the U.S.A.
9. Label date:
10. US Patents No. XXX
11. © insert company copyright information
12. World rights reserved
13. Distributed by: insert company name and address
14. Company website
15. [For] questions/comments



16. For Organic Use - OMRI.org
17.  Can Be Used in Organic Gardening) (For Organic Gardening)
18. Optional Language: (*) and (*= Not labeled for this use in California)
19. Repackaging or relabeling of this product without express written permission from Marrone Bio Innovations, Inc. is prohibited.
20. UPC symbol
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