

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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

September 27, 2018

Carolyn Link Regulatory and Government Affairs Manager Marrone Bio Innovations 1540 Drew Avenue Davis, CA 95618

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – Adding Alternate Brand Names, Adding Label Claims, and Consolidating Sublabels Product Name: MBI-206 EP EPA Registration Number: 84059-14 Application Date: 12/01/2017 OPP Decision Number: 539333

Dear Ms. Link:

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

The alternate brand names: VENERATE BIOINSECTICIDE, VENERATE CG, ZELTO, VENERATE ST, and MAJESTENE ST have been added to the registration, and our records have been updated accordingly. This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

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 FIFRA and is subject to review by the U.S. Environmental Protection Agency (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

Page 2 of 2 EPA Reg. No. 84059-14 OPP Decision No. 539333

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.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Seiichi Murasaki at (703) 347-0163 or murasaki.seiichi@epa.gov.

Sincerely,

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Seiichi Murasaki, Senior Regulatory Advisor Microbial Pesticides Branch Biopesticides and Pollution Prevention Division (7511P) Office of Pesticide Programs

Enclosure: Stamped Label

MBI-206 EP

(Alternate Brand Names: VENERATE, VENERATE BIOINSECTICIDE, VENERATE XC, VENERATE PTO, VENERATE H&G, CEREBIUS, SENTINAS, NEMORAX, MAJESTENE, MAJESTENE PNW, EVATE, VENERATE CG, ZELTO, VENERATE ST, MAJESTENE ST)

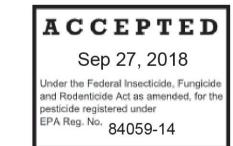
MASTER LABEL, containing:

Sublabel A: Agricultural (Insect, Mite, Nematode Uses), Greenhouse, Nursery, Turf & Professional Landscape Uses

Sublabel B: Home & Garden Use

EPA Reg. No.: 84059-14

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



Sublabel A: Agricultural (Insect, Mite, Nematode Uses), Greenhouse, Nursery, Turf & Professional Landscape Uses

MBI-206 EP

(BIOLOGICAL (INSECTICIDE), (NEMATICIDE), (MITICIDE) (BIOINSECTICIDE) (BIONEMATICIDE) (BIOMITICIDE)

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

Active Ingredient: Heat-killed Burkholderia spp. strain A396 cells and	spent
fermentation media	94.46%
Other ingredients:	<u>5.54%</u>
Total:	

*Contains not less than 1,500 Beet Armyworm Killing Units (BAWKU)/mg of active ingredient. <u>Note</u>: The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

KEEP OUT OF REACH OF CHILDREN CAUTION

	FIRST AID		
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 center or doctor for treatment advice. 		
HOT LINE NUMBER			
	act container or label with you when calling a poison control center or doctor, or going for may also contact 1-800-222-1222 for emergency medical treatment information.		

EPA Reg. No.: 84059-14 Net Contents: XX (Batch)(Lot) No: XXXX

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

US Patents No. XXXXX XXXX[®] is a registered trademark of Marrone Bio Innovations, Inc. Marrone Bio Innovations, Inc.'s name and logo are registered trademarks of Marrone Bio Innovations, Inc.

EPA Est. No.: XXXXX-XX-XXX

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. 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 P or R filter with NIOSH approval number prefix TC-84A or a NIOSH-approved powered air purifying respirator with a HE filter with NIOSH approval number prefix TC-21C. (Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.)

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables are available, 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.
- 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. See the Directions for Use section of this label for application instructions that minimize risk to bees and other beneficial insects, *including those used in Integrated Pest Management (IPM) programs or organic agriculture.*

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.

- (In New York State, aerial application is prohibited.)
- (Do not apply this product by aerial application.)
- (In New York State, application is prohibited within 100 feet of any surface water.)

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.

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:

- Protective eyewear
- Coveralls
- Chemical resistant gloves (made from any waterproof material)
- Shoes plus socks

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.

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.

For commercial seed treatment uses: Keep unprotected persons out of treatment area until seeds have dried or been packaged.

For all other non-WPS uses: Keep unprotected persons out of treated areas until sprays have dried.

PRODUCT INFORMATION

MBI-206 EP is a biological (insecticide,) (nematicide,) (and miticide) [*include at least one*] containing killed cells of *Burkholderia spp.* strain A396 and spent fermentation media, for use against the pests listed in the Directions for Use section. MBI-206 EP controls (insect,) (soil borne / dwelling insect,) (nematode,) (and mite) [*include at least one*] pests by enzymatic degradation of exoskeletal structures and interference with the molting process leading to mortality through contact and/or ingestion. MBI-206 EP controls or suppresses many (foliar feeding) pests (including) (caterpillars) (and foliage feeding coleopteran) (and many soft-bodied insects) (such as aphids, whiteflies and plant sucking mites) infesting labeled crops and plants.

USE INSTRUCTIONS

MBI-206 EP is an insecticide (nematicide,) (and miticide) [*include at least one*] for use against listed pests. Close scouting and early attention to infestations is highly recommended. Proper timing of application targeting newly hatched larvae, nymphs or immature pests is important for optimal results.

(MBI-206 EP can be used in either the field or greenhouse for the control of any labeled pest.)

(For greenhouse applications, dilute MBI-206 EP at the application rate per acre specified in use pattern instructions below into 50 gallons of water and spray plants to complete coverage, but not to runoff.) (For smaller volumes, 1 quart MBI-206 EP in 50 gallons of water approximates 4 teaspoons per gallon of water.)

Thorough coverage of infested plant parts is necessary for effective control. For some crops, directed drop nozzles by ground machine are required.

Repeat applications at a 3 to 10 day interval depending upon plant growth rate, (insect,) (and mite) [*include at least one*] activity, and other factors. If attempting to control pest population with a single application, make the treatment when egg hatch is essentially complete but before economic damage occurs.)

(For Insect and Mite Control

Under heavy pest populations, use the higher label rates, shorten the spray interval, increase the spray volume to improve coverage, and/or apply in tank mixture with another product that has activity on the target pest.)

(For Nematode Control

Nematode management considerations - To obtain maximum results in a nematode management program, it is important to take soil samples prior to application to assess nematode populations and determination of an appropriate management strategy. Take soil samples early enough to allow for the application of a pre-plant fumigant if warranted by nematode counts. Utilization of the services of a field person or crop consultant who is knowledgeable in nematode management is advised. For maximum crop protection, apply MBI-206 EP in-furrow following a shanked in pre-plant fumigant. Make subsequent foliar applications to root and tuber crops at crop emergence and on a 14-21 day interval until digging. For Columbia root knot nematodes, base the initial foliar application upon soil degree days with an initial post-emergence application made at 1440 degree days (41 F base). Use MBI-206 EP in rotation or combination with other registered foliar-applied nematicides. Foliar applications of MBI-206 EP must be watered in by rainfall or irrigation, or applied by overhead sprinkler irrigation to move the product into the soil profile. Use a higher product rate when higher nematode pressure is expected.)

Use adjuvants with MBI-206 EP to improve control of insect pests in situations where achieving uniform plant coverage is difficult such as closed crop canopy, dense foliage and penetration into waxy leaf surfaces or when rainfall may remove spray deposits.

Bees and beneficial insects:

- To minimize potential exposure to bees and other pollinating insects, do not apply while bees are foraging.
- Do not allow product to drift to blooming crops or weeds if bees are foraging.
- Minimize spray drift away from the target area to reduce effects to other non-target insects.

MBI-206 EP has been evaluated for toxicity to non-target insects in a variety of bioassays and on a variety of crops under various normal growing conditions. However, testing all beneficial insects, in all situations, mixtures and combinations, is not feasible. Prior to treating entire crop where the release of beneficial insects serve as part of an Integrated Pest Management (IPM) program, consult with an extension specialist, a pest control advisor (PCA) or with the product manufacturer.

MBI-206 EP has been evaluated for phytotoxicity on a variety of crops under various normal growing conditions. However, testing all crop varieties, in all mixtures and combinations, is not feasible. Prior to treating entire crop, test a small portion of the crop for sensitivity.

Mixing directions

Important –Fill tank with ½ to ¾ of the needed amount of water. Start the mechanical or hydraulic agitation to provide moderate circulation before adding MBI-206 EP. Add the MBI-206 EP to the mix tank and the remaining volume of water and continue circulation. Maintain circulation while loading and spraying. Do not mix more MBI-206 EP than can be used in 24 hours. Use a strainer no finer than 50 mesh in conventional spray systems.

Tank mixing

Do not combine MBI-206 EP in the spray tank with other pesticides, surfactants, adjuvants, or fertilizers if there has been no previous experience or use of the combination to show it is physically compatible, effective, or non-injurious under your use conditions.

To ensure compatibility of tank-mix combinations they must be evaluated prior to use. To determine the physical compatibility of this product with other products use a jar test. Using a quart jar, add the proportionate amounts of the products to one quart of water with agitation. Add dry formulations first, then flowables second, then emulsifiable concentrates last. After thoroughly mixing, let this mixture stand for 5 minutes. If the combination remains mixed or can readily be remixed, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

GROUND (AND AERIAL) APPLICATION

1-4 quarts MBI-206 EP per acre (Suppression)

Apply MBI-206 EP in ground (and aerial) equipment with quantities of water sufficient to provide thorough coverage of infested plant parts. Attention should be given to sprayer speed and calibration, wind speed, and foliar canopy to ensure adequate spray coverage.

For foliar applications using broadcast application equipment, apply MBI-206 EP in a minimum of 30 gallons of water per acre.

(For turf applications, apply MBI-206 EP in a minimum of 1.5 gallons of water per 1,000 square feet (65 gallons water per acre).

(For dilute applications to (bedding plants,) (trees,) (and shrubs), apply MBI-206 EP at a dilution of 2 to 8 quarts per 100 gallons of water. Use of a quality surfactant will aid performance. Do not use carrier volumes and/or adjuvants that create spray runoff or drip-accumulation at the base of the commercial commodity.)

Do not spray when wind speed favors drift beyond the area intended for use. (Avoiding spray drift is the responsibility of the applicator.)

Broadcast Application

For (suppression/control) of (labeled pests) apply MBI-206 EP at the rate of 1-8 quarts per acre by (broadcast application) or (sprinkler) (chemigation) (prior to planting), (at planting or shortly thereafter,) (at transplant or shortly thereafter) (and in season) on a 14-28 day interval as needed to maintain control.

Use calibrated power-operated ground equipment capable of providing uniform coverage of the target crop. Orient the boom and nozzles to obtain uniform crop coverage. A minimum of 10 gallons per acre (1 quart per 1000 sq. ft.) by ground or 5 gallons (1 quart per 2000 sq. ft.) by aerial application should be utilized, increasing volume with crop size and/or pest pressure. Use hollow cone, disc core/hollow cone or twin jet flat fan nozzles suitable for insecticide spraying. Under certain conditions, drop nozzles may be required to obtain complete coverage of plant surfaces. Follow manufacturer's recommendations for ideal nozzle spacing and spray pressure and minimize boom height to optimize uniformity of coverage and maximize deposition to reduce drift.

Orchard Spraying

- Dilute spray application: This application method is based on the premise that all plant parts are thoroughly wetted, to the point of runoff, with spray solution. To determine the number of gallons of dilute spray per acre, contact your extension specialist, state agricultural experiment station, or certified pest control advisor for assistance.
- Concentrate spray application: This application method is based on the premise that all plant parts are uniformly covered with spray solution but not to the point of runoff as with a dilute spray. Instead, a lower spray volume is used to deliver the same application rate of product per acre as is used for the dilute spray.

AERIAL DRIFT REDUCTION INFORMATION

General: Apply in a spray volume of 5 or more gallons per acre on row crops and 10 or more gallons per acre on tree or orchard crops. Insect control by aerial application may be less than control by ground application because of reduced coverage.

Spray drift: 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 are responsible for considering all these factors when making decisions. Where states have more stringent regulations, they should be observed. Note: This section is advisory in nature and does not supersede the mandatory label requirements.

Information on droplet size: The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that will provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

Controlling droplet size: Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets. <u>Pressure</u> - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When high flow rates are needed, use higher flow rate nozzles instead of increasing pressure. <u>Number of nozzles</u> - Use the minimum number of nozzles that provide uniform coverage. <u>Nozzle Orientation</u> - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential. <u>Nozzle Type</u> - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Use low-drift nozzles, such as solid stream nozzles that are oriented straight back to produce the largest droplets and the lowest drift.

Boom width: For aerial applications, the boom width must not exceed 75% of the wingspan or 90% of the rotary blade. Use upwind swath displacement and apply only when wind speed is 3–10 mph as measured by an anemometer. Use medium or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or crop canopy.

Application height: Do not make application at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure to droplets to evaporation and wind.

Swath adjustment: When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

Wind: Drift potential is lowest between wind speeds of 2–10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and humidity: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature inversions: Do not apply during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive areas: The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas). Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, non-target crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals. Do not allow product to drift to blooming crops or weeds if bees are foraging. Minimize spray drift away from the target area to reduce effects to other non-target insects.

SEED TREATMENT APPLICATION

Seed (seed pieces) treatment for Potatoes:

For early-season protection from (listed pests), apply 1-16 fluid ounces of MBI-206 EP per 100 pounds of seed pieces.

Seed treatment for all other listed crops:

For early-season protection from (listed pests), apply 1-8 fluid ounces of MBI-206 EP per 100 pounds of seed.

MBI-206 EP can be applied as a seed dressing (at plant) (or) (in commercial seed treatments) for (early season protection of) listed pest damage. Apply MBI-206 EP as a water-based slurry with other registered seed treatment insecticides, nematicides and fungicides through standard slurry- or mist-type commercial seed treatment equipment.

Mixing instructions: Prepare no more mixture than is required for the immediate operation. Agitate the solution continuously during mixing and application. Use mechanical mixing for proper mixing of MBI-206 EP mixtures. For seed treatment, apply 1-8 fluid ounces of MBI-206 EP per 100 pounds of seed, or 16 fluid ounces of MBI-206 EP per 100 pounds of potato seed pieces.

MBI-206 EP alone: Add ½ of the required amount of water to the mix tank. With the agitator running, add the MBI-206 EP to the mix tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the MBI-206 EP has completely dispersed into the mix water. Maintain agitation until all the mixture has been applied.

MBI-206 EP + tank-mixtures: Add ½ of the required amount of water to the mix tank. Start the agitation before adding any tank mix partners. In general, tank-mix partners should be added in this order: wettable powders, dry flowable formulations, liquid flowable formulations, and emulsifiable formulations. Always allow each tank-mix partner to become completely dispersed before adding the next component. Maintain continuous agitation until all components have been dispersed and throughout the application process.

Note: When using MBI-206 EP in tank-mixtures, all products in water soluble packaging should be added to the tank before any other tank-mix partner, including MBI-206 EP. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank-mix partner to the tank.

If using MBI-206 EP in a tank mixture with other seed treatment products, observe all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations that appear on the tank-mix partner label. No label dosage may be exceeded and the most restrictive label precautions and limitations must be followed. This product must not be mixed with any product that prohibits such mixing.

For Pre-plant Seed Treatment: Do not use treated seed for food or feed purposes or process for oil.

For Commercial Seed Treatment: This product does not contain dye. All seed treated commercially with this product must be colored with an EPA-approved dye or colorant of a suitable color to prevent accidental use as food for humans or feed for animals. The Federal Seed Act requires that bags containing seed treated with this product shall be labeled with the following information: "This seed has been treated with heat-killed *Burkholderia* spp. Strain A396. Do not use for food, feed or oil purposes."

SOIL TREATMENT USE DIRECTIONS

1-8 quarts MBI-206 EP per acre

(At planting, apply MBI-206 EP at the rate of 1-8 quarts per acre into the open seed furrow in a 6-8 inch band behind the seed tube.) (During cultivation, apply MBI-206 EP at the rate of 1-8 quarts per acre as a directed or banded application incorporating the spray into the soil profile.) For (low) (to medium) infestations of soil pests, use an at-planting in-furrow, or T-band application, in a minimum of 3 gallons of water per acre. (When high pest infestations are anticipated or encountered, use other effective soil treatments for improved control.) (Additional in-season applications can be made during cultivation, by a banded spray followed by overhead irrigation or by using overhead chemigation.)

(MBI-206 EP can be applied by soil treatment to protect against (labeled pests).) In general, MBI-206 EP can be applied by the following methods, (unless specified differently in the crops section)

Soil Drench Applications: Apply MBI-206 EP at a sufficient rate to thoroughly soak the growing media and root zone. (Nematode control treatments can occur (prior to planting,) (and (at) (or near planting) (or transplanting) as soil drench applications.) (Multiple drench applications can be made on a 10–14 day interval for insect control treatments.)

Shanked-In and Injected Applications: MBI-206 EP can be shanked-in or injected into the soil alone, or with most types of pesticides and nutrients (prior to planting,) (and at planting). Use a jar test to confirm physical compatibility prior to application.

Broadcast Soil Applications: MBI-206 EP can be applied to bare soil alone or with most types of pesticides and nutrients (prior to planting,) (at planting,) (and)(at transplant,). Apply with a minimum of 30 gallons of water and follow with a minimum of 0.5 inches of irrigation water or natural rainfall within 1-2 days to allow the material to move through the soil profile. Use of sufficient irrigation water to move the product into the root zone will vary depending upon initial soil moisture, organic matter and clay content of the soil. Use a jar test to confirm physical compatibility prior to application.

In-Furrow Applications: At planting, apply MBI-206 EP as an in-furrow spray or as a 5-7 inch band (T-band) over an open furrow at the rate of 1–8 quarts per acre, (or 0.5–19.6 fluid ounces per 1000 feet of row), according to the chart below. Apply MBI-206 EP in a minimum of 3 gallons of water per acre so as the spray is directed over the seed furrow just before the seeds are covered. MBI-206 EP applied as a T-band should be lightly incorporated into the top 1 inch of soil by drag chains or tines.

Rate	In-Furrow and T-band Application Rates Product per 1000 ft. row.							
, indee	7.5" Rows	15" Rows	30" Rows	32" Rows	34" Rows	36" Rows	38" Rows	40" Rows
1–8 quarts	-					a and an and a second		
MBI-206	0.5 – 3.7	0.9 – 7.4	1.8-14.7	2.0-15.7	2.1-16.7	2.2-17.6	2.3-18.6	2.4-19.6
EP per	fluid	fluid	fluid	fluid	fluid	fluid	fluid	fluid
acre	ounces	ounces	ounces	ounces	ounces	ounces	ounces	ounces

7.5" = 69,697 row ft./acre, 15" = 34,848 row ft./acre, 30" = 17,424 row ft./acre, 32" = 16,315 row ft./acre, 34" = 15,374 row ft./acre, 36" = 14,520 row ft./acre, 38" = 13,754 row ft./acre, 40" = 13,068 row ft./acre.

CHEMIGATION USE

1-8 quarts MBI-206 EP per acre

(Apply this product (only) through (sprinkler) (including) (center pivot,) (lateral move,) (end tow,) (side (wheel) roll,) (traveler,) (big gun,) (solid set,) (or hand moved) irrigation systems. (Do not apply this product through any other type of irrigation system.) (Do not connect an irrigation system (including greenhouse systems) used for pesticide applications directly to a public water system.)

For (suppression/control) of (labeled pests) apply MBI-206 EP at the rate of 1-8 quarts per acre by (broadcast application) or (sprinkler) (chemigation) (prior to planting), (at planting or shortly thereafter,) (at transplant or shortly thereafter) (and in season) on a 14-28 day interval as needed to maintain control.

Spray preparation

First prepare a suspension of MBI-206 EP in a mix tank. Fill tank with ½ to ¾ the needed amount of water. Start mechanical or hydraulic agitation. Add the required amount of MBI-206 EP, and then the remaining volume of water. Then set the sprinkler to deliver a minimum of 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly inject the suspension of MBI-206 EP into the irrigation water line so as to deliver the rate per acre targeted (which is within the labeled rate range). Inject the suspension of MBI-206 EP with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. Any questions on calibration should be directed to your State Extension Service Specialists, to equipment manufacturers or other experts.

(Do not combine MBI-206 EP with pesticides, surfactants or fertilizers for application through chemigation equipment unless prior experience has shown the combination physically compatible, effective and non-injurious under conditions of use.) (MBI-206 EP has not been fully evaluated for compatibility with all adjuvants or surfactants.) (It is advisable to conduct a spray compatibility test if a mixture with adjuvants or surfactants is planned.)

General Requirements

- 1) Apply this product (only) through (sprinkler) (including) (center pivot,) (lateral move,) (end tow,) (side (wheel) roll,) (traveler,) (big gun,) (solid set,) (or hand move) irrigation systems. (Do not apply this product through any other type of irrigation system.)
- 2) Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- 3) If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.
- 4) Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- 5) A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Application Instructions for All Types of Chemigation

- 1) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues may cause product to lose effectiveness or strength.
- 2) Determine the treatment rates as indicated in the directions for use and make proper dilutions.
- 3) Prepare a solution in the chemical tank by filling the tank with the required water and then adding product as required. Utilize agitation to keep solution in suspension.
- 4) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 5) The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid

from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

- 6) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 7) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 8) Do not apply when wind speed favors drift beyond the area intended for treatment.
- 9) Check to be sure that the system provides a uniform waterflow.
- 10) Irrigate crop with sufficient water to wet the root zone. Then, begin flow of the solution containing product solution from the chemical tank for a period to uniformly distribute the material. Discontinue flow of the MBI-206 EP mixture and let the system continue to run only as necessary to purge the line with fresh water. Let the MBI-206 EP solution remain in the root zone of the crop.

Specific Requirements for Chemigation Systems Connected to Public Water Systems

- 1) Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2) Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

Specific Requirements for (Sprinkler) (Drip) (Trickle) (Micro-emitter) (Low-pressure Micro-sprinkler) Chemigation

- 1) The system must contain a functional check valve, vacuum relief valve and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

New Tree / Orchard / Vine Plantings

Apply the target rate within the labeled range by chemigation into the root zone through low-pressure micro sprinkler, drip, or trickle irrigation equipment. For optimal results soil should be pre-wetted prior to chemigation. Multiple applications may be necessary, use an application interval of 14 - 28 days. Inject MBI-206 EP in the final 30-60 minutes of an irrigation cycle, sufficient to wet the root zone, maintaining a minimum concentration of 0.05% v/v to optimize product performance.

For situations where individual trees are being replanted, saturate the root ball and the soil at the planting site to the depth/ volume of the anticipated root zone of the new planting with a 1-2% v/v solution of MBI-206-EP. Subsequent applications should follow within 14 - 28 days.)

[Interchangeable language:

- 1 quart MBI-206 EP per acre interchangeable with 2 tablespoons (tbsp.) MBI-206 EP per 1,000 square (sq.) feet (ft.), and multiples thereof
- 1 quart MBI-206 EP per 50 gallons water interchangeable with 4 teaspoons MBI-206 EP per gallon water, and multiples thereof
- 1 quart MBI-206 EP per 50 gallons water interchangeable with 1.5 tablespoons MBI-206 EP per gallon water, and multiples thereof]

FOR USE ON THE FOLLOWING CROPS FOR CONTROL OR SUPPRESSION OF (THE FOLLOWING) (INSECTS) (NEMATODES) (SOIL BORNE / DWELLING INSECTS,) (AND MITES)

Insects

(Suppression)

- alfalfa caterpillar
- alfalfa weevil
- annual bluegrass weevil
- aphids (including blue alfalfa, cowpea, greenbug, pea, and spotted alfalfa)
- army cutworm
- armyworms
- artichoke plume moth
- Asian citrus psyllid
- azalea caterpillar
- azalea lace bug
- bagworm
- banana rust thrips
- banana skipper
- beet armyworm
- billbugs
- black vine weevil
- blackheaded budworm
- blueberry blossom weevil
- blueberry maggot (Begin applications as soon as adult flies are active and continue until adult activity is no longer present.
 During periods of adult fly activity, make applications at no more than a 7-day interval and more frequently, up to a 3-day interval, if necessary to maintain control.)
- bluegrass billbug
- brown marmorated stink bug
- cabbage looper
- cabbage webworm
- California oakworm
- cankerworm
- cherry fruitworm
- chinch bugs
- citrus cutworm
- citrus leafminer

- citrus peelminer
- citrus red mite
- citrus rust mite
- citrus thrips
- clover root curculio
- cloverleaf weevil
- codling moth
- Colorado potato beetle larvae (Colorado potato beetle larvae – apply when 30-50% of eggs have hatched and make a second application 5-7 days later targeting first and second instar larvae. If adult beetles are present, tank-mix with a product labeled for control of adult Colorado potato beetle.)
- corn earworm (headworm)
- corn leaf aphid
- cotton aphid
- cotton bollworm
- cranberry blossom weevil
- cranberry fruitworm
- cross-striped cabbageworm
- cutworms
- diamondback moth
- dingy cutworm
- Douglas fir tussock moth
- Egyptian alfalfa weevil
- ello moth
- elm spanworm
- European corn borer
- European red mite
- fall webworm
- filbert worm
- fireworms
- Florida red scale

- fruit flies (Begin applications as soon as adult flies are active and continue until adult activity is no longer present. During periods of adult fly activity, make applications at no more than a 7-day interval and more frequently, up to a 3-day interval, if necessary to maintain control.)
- grape berry moth
- grape leaf skeletonizer
- grape leafroller
- green cloverworm
- green fruitworm
- green peach aphid
- greenstriped mapleworm
- Gummosos-Batracheda Comosae (Hodges),
- gypsy moth
- Hawaiian flower thrips
- headworm
- Heliothis
- hemlock looper
- hickory shuckworm
- hop aphids
- hornworm
- imported cabbageworm
- jack pine budworm
- kudzu bug
- lace bugs
- leafhoppers
- leafrollers (including avocado, filbert, fruittree, obliquebanded, omnivorous, pandemic, red-banded, variegated), (Application timing: optimal timing for leafrollers can vary between species and geographic locations. Monitor moth flights with pheromone traps and scout regularly to determine larval populations. Use a 7–10-day re-treatment schedule to maintain control if the crop is growing rapidly or if there is heavy pest pressure. Use a 3–4-day re-treatment schedule at flowering.)
- light brown apple moth
- Io moth
- loopers (soybean and cabbage)
- Lygus
- McDaniel spider mite
- mealybugs
- melonworm
- mimosa webworm
- mites
- navel orange worm
- oleander moth
- olive fruit fly

- omnivorous leafrollers (Application timing: optimal timing for leafrollers can vary between species and geographic locations. Monitor moth flights with pheromone traps and scout regularly to determine larval populations. Use a 7–10-day re-treatment schedule to maintain control if the crop is growing rapidly or if there is heavy pest pressure. Use a 3–4-day re-treatment schedule at flowering.)
- omnivorous looper
- orange tortrix
- orangedog
- oriental fruit moth
- Pacific spider mite
- peach twig borer (Application timing: optimal timing for peach twig borer can vary between species and geographic locations. Monitor moth flights with pheromone traps and scout regularly to determine larval populations. Use a 7–10-day re-treatment schedule to maintain control if the crop is growing rapidly or if there is heavy pest pressure. Use a 3–4-day re-treatment schedule at flowering.)
- pear psylla
- pecan nut casebearer
- pepper weevil (Use pheromone traps to time applications for control of pepper weevil.)
- pickleworm
- pine butterfly
- pine tip moth
- plant bugs
- plum curculio (For plum curculio, begin applications when adults are active and prior to start of oviposition. Repeat applications on a 4-7 day interval until adults are no longer active and developing fruit in no longer susceptible to damage. Rotation or tank-mixing with other insecticides labeled for plum curculio is recommended.)
- podworm
- potato aphid
- potato leafhopper
- psyllids
- redhumped caterpillar
- rindworm complex
- rosy apple aphid
- saddle prominent caterpillar
- saddleback caterpillar

- San Jose scale (Apply at delayed dormant to tight cluster or target crawlers with two applications per generation)
- saltmarsh caterpillar
- six-spotted mite
- sod webworms
- southwestern corn borer
- soybean aphid
- soybean looper
- spanworms
- sparganothis fruitworm
- spider mites
- spittle bug
- spotted lanternfly
- spotted wing drosophila (Begin applications as soon as adult flies are active and continue until adult activity is no longer present. Use of MBI-206 EP for control of spotted wing drosophila should be part of an integrated management program that includes tank-mixes and rotation with other products labeled for control of spotted wing drosophila. During periods of adult fly activity, make applications at no more than a 7-day interval and more frequently if necessary to maintain control.)
- spruce budworm
- stink bugs

- Swede midge
- sweetpotato whitefly
- tent caterpillar
- Texas citrus mite
- Thecla-Thecla Basilides (Geyer),
- threecornered alfalfa hopper
- thrips
- tobacco budworm
- tomato fruitworm
- tomato pinworm
- tufted apple budmoth
- twospotted red mite
- twospotted spider mite
- variegated cutworm
- veletbean caterpillar
- walnut caterpillar
- walnut husk fly
- walnut scale
- webworm
- western bean cutworm
- western raspberry fruitworm
- western tussock moth
- whiteflies
- Willamette Spider Mite
- wooly apple aphid

Nematodes: (Early season protection against nematodes, including the following:) (Suppression)

- awl (Dolichodorus spp.) nematodes
- dagger (Xiphinema spp.) nematodes
- pin (Paratylenchus spp) nematodes
- (Columbia) root-knot (*Melodigyne* spp.) nematodes
- (Columbia) lance (*Hoplolaimus galeatus*, *Hoplolaimus columbus*) nematodes
- lesion (Pratylenchus spp.) nematodes

- sting (Belonolaimus spp.) nematodes
- stunt (Tylenchorhynchus spp.) nematodes
- ring (Bursaphelenchus spp.) nematodes
- soybean cyst (*Heterodera glycines*) nematodes
- stubby-root (*Paratrichodorus* spp.) nematodes
- reniform (Rotylenchulus spp.) nematodes

(Soil Dwelling) / (Soil Borne Insects) / (Early Season Soil Dwelling Insects): (Early season protection against soil dwelling insects, including the following:) (Suppression)

- aphids
- cutworms
- root and seed maggots
- Mexican, southern, western, and northern corn rootworm larvae
- seed corn beetle
- thrips
- white grubs
- wireworms

(SEED TREATMENT USE OF MBI-206 EP WILL ALSO AID IN THE EARLY SEASON PROTECTION AGAINST THE FOLLOWING SOIL BORNE INSECTS: Cutworms, root and seed maggots, seed corn beetle, wireworms, southern, western, and northern corn rootworm larvae, white grubs)

SHAKE WELL BEFORE USE

Pre-harvest Interval (PHI) = 0 days

ROOT AND TUBER VEGETABLES

Potatoes and Tuberous and Corm Vegetables

Artichoke, Cassava, Chayote Root, Chinese Artichoke, Garden Beet, Ginger, Jerusalem Artichoke, Potatoes, Sugar Beet, Sweet Potatoes, Turmeric, Yams

Black Salsify, Carrot, Celeriac, Chicory, Edible Burdock, Ginseng, Horseradish, Parsnip, Radish, Oriental Radish, Rutabaga, Salsify, Skirret, Spanish Salsify, Turnip, Turnip-rooted Chervil, and Turnip Rooted Parsley

4-16 quarts MBI-206 EP per acre by Broadcast Soil or Chemigation methods

By chemigation [alternatively list chemigation method] systems: Apply MBI-206 EP at the rate of 4-16 quarts per acre by chemigation [alternatively list chemigation method] irrigation systems prior to planting, at planting or shortly thereafter, at transplant or shortly thereafter and in season on a 14-28 day interval as needed to maintain control.

LEAVES OF ROOT AND TUBER VEGETABLES

Beets

BULB VEGETABLES

Leek, Garlic, Onion (bulb and green), and Shallot

4-16 quarts MBI-206 EP per acre by Broadcast Soil or Chemigation methods

For (**suppression/control**) of (labeled pests), apply MBI-206 EP at the rate of 4-16 quarts per acre by broadcast application or (sprinkler) chemigation (i.e., lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, hand move,) prior to planting, at planting or shortly thereafter, at transplant or shortly thereafter, and in season on a 14-28 day interval as needed to maintain control. If irrigation is not available, apply MBI-206 EP by broadcast application in a minimum of 30 gallons of water per acre followed by natural rainfall. Insufficient rainfall and delay in incorporation of residues can result in poor product performance. Use of sufficient irrigation water to move the product into the root zone will vary depending upon initial soil moisture, organic matter and clay content of the soil.

LEAFY VEGETABLES (EXCEPT BRASSICA VEGETABLES)

Arugula, Celery, Chervil, Cilantro, Corn Salad, Cress, Dandelion, Dock, Edible Chrysanthemum, Endive, Fennel, Head Lettuce, Leaf Lettuce, Parsley, Purslane, Radicchio, Rhubarb, Spinach, Swiss Chard, Turnip Greens and Watercress

BRASSICA (COLE) LEAFY VEGETABLES

Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage, Chinese Broccoli, Chinese Cabbage (Bok Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Cavalo, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens, Turnip Greens

LEGUME VEGETABLES (SUCCULENT OR DRIED)

Adzuki Bean, Black-eyed Pea, Beans, Chickpea, Cowpea, Crowder Pea, Edible-Pod Pea, English Pea, Fava Bean, Field Bean, Field Pea, Garbanzo Bean, Garden Pea, Green Pea, Kidney Bean, Lentils, Lima Bean, Lupins, Mung Bean, Navy Bean, Peas, Pigeon Pea, Pinto Bean, Runner Bean, Snap Bean, Snow Pea, Sugar Snap Pea, Tepary Bean, Wax Bean, and Yardlong Bean, Soybean

FOLIAGE OF LEGUME VEGETABLES

Garden Peas

FRUITING VEGETABLES

Tomato, Tomatillo, Pepper, Ground Cherry, Pepino, Okra and Eggplant

CUCURBIT VEGETABLES

Cucumber, edible gourds, muskmelon (cantaloupe, muskmelon, etc.), pumpkin, watermelon, winter and summer squash, zucchini

CITRUS FRUIT

Grapefruit, Lemons, Limes, Oranges, Tangerines

POME FRUITS

Apples, Crabapple, Loquat, Mayhaw, Pears and Quince

STONE FRUITS

Apricots, Cherry, Nectarine, Peach, Plum, Prune

BERRIES

Bushberries: Blueberry, High Bush Blueberry, Currant, Gooseberry, Huckleberry, Elderberry, Juneberry, Lingonberry, Salal Caneberries: Blackberry, Loganberry, Red and Black Raspberry, and Cultivars and/or hybrids of these

Cranberry

Grape, Kiwi, Mulberry (Morus spp.), Strawberry

For application to bushes during transplant and replant - apply MBI-206 EP in a concentration of 4-8 quarts per 100 gallons of water (1-2% v/v) into the excavated hole thoroughly saturating the surrounding soil medium prior to transplanting. Additional applications can be made through drip irrigation or micro-emitters during the growing season on a 14-28 day interval as needed to maintain control.

For application to established plantings, apply MBI-206 EP as a 2-4 foot band application over the row in at least 50 gallons of water per acre prior to imminent rainfall or followed by overhead irrigation of 0.25 - 0.5 inches of water to move the product into the top 2-3 inches of soil. Make the initial application when the soil temperature is at least 45°F at an 8 inch depth. Additional applications can be made on a 14 – 28 day interval prior to imminent rainfall or followed by sprinkler irrigation.

Inject MBI-206 EP mid-way into the irrigation event to allow for incorporation of the product into the soil profile. Additional applications can be made at 14-day or greater intervals.

TREE NUTS

Almond, Cashew, Chestnut, Filbert (Hazelnut), Macadamia, Pecan, Pistachio, Walnut

CEREAL GRAINS

Barley, Buckwheat, Grain Amaranth, Milo, Oats, Pearl Millet, Proso Millet, Rye, Sorghum, Triticale, Wheat, Rice, Corn (Field Corn, Sweet Corn, Popcorn and Corn Grown for Seed)

HERBS AND SPICES AND MINTS

(Outdoor or enclosed, including those grown as bedding plants)

Angelica, balm, basil, borage, burnet, chamomile, catnip, chervil, chive, clary, coriander, costmary, cilantro, curry, dillweed, horehound, hyssop, lavender, lemongrass, lovage, marjoram, nasturtium, parsley (dried), peppermint, rosemary, sage, savory (summer and winter), sweet bay, tansy, tarragon, thyme, wintergreen, woodruff and wormwood

Pre-plant;

Surface spray MBI-206 EP in 40-100 gallons of water per acre followed immediately by light tillage into the top 2 inches of soil or surface spray MBI-206 EP in 20-40 gallons of water per acre immediately followed with sufficient overhead irrigation to wet the soil into the root zone. The amount of irrigation water should be sufficient to move the product into the root zone and will vary according to soil type.

Post-emergence;

Apply MBI-206 EP through chemigation (overhead) by injecting MBI-206 EP into the irrigation event to allow for incorporation of the product into the soil profile at a depth sufficient to protect the root zone. Make the first application in the spring as soil temperatures warm and plants comes out of dormancy. Additional in-season applications can be made to moist soils following the first cutting.

OILSEED

Canola, Castor, Cotton(seed), Flax, Jojoba, Rapeseed, Safflower, Sesame, Sunflower (including sunflower grown for seed)

STALK, STEM AND LEAF PETIOLE VEGETABLE

Asparagus

TROPICAL AND SUBTROPICAL FRUIT, EDIBLE PEEL

Fig, Acerola, Jaboticaba, Papaya, Starfruit, Wax Jambu (Wax Apple)

TROPICAL AND SUBTROPICAL FRUIT, INEDIBLE PEEL

Bananas, Plantains, Pineapple, Pomegranate, Atemoya, Avocado, Biriba, Black Sapote, Canistel, Cherimoya, Custard Apple, Ilama, Longan, Lychee, Mamey Sapote, Mango, Passionfruit, Pulasan, Rambutan, Sapodilla, Soursop, Spanish Lime, Star Apple, Sugar Apple, White Sapote

HOPS AND DRIED CONES

ARTICHOKE, GLOBE

PEANUTS

FLOWERING PLANTS, BEDDING PLANTS, ORNAMENTAL PLANTS, AND TI PALM LEAVES

SHADE AND ORNAMENTAL TREES AND FORESTS

CROTALARIA, SESSBANIA, KENAF

TOBACCO

1–8 quarts MBI-206 EP per acre Apply at the rate of 1-8 quarts per acre in transplant water, and in-season in layby and cultivation sprays.

TREE FARMS AND PLANTATIONS

Conifers, Including Christmas Trees and Deciduous Trees

4-16 quarts (1-4 gallons), MBI-206 per acre for New Planting

TURFGRASS AND ORNAMENTAL GRASSES, INCLUDING LAWNS AND RECREATIONAL TURF

New or established TURFGRASS, Including Bluegrass, Bentgrass, Bermudagrass, Dichondra, Fescue, Orchardgrass, Ryegrass, St. Augustine, Zoysia Mixtures and other grasses

Post-emergence to established turf or pre-emergence to newly seeded or sprigged ground.

MBI-206 EP requires moisture in the soil. When soil samples or turf symptoms indicate nematodes are present, apply MBI-206 EP to moist soil and follow with 1/8 - 1/4" or irrigation or natural rainfall within 24 hours of application. Including an adjuvant to promote soil penetration is recommended. Repeat applications every 2 to 4 weeks to maintain nematode control.

4-16 quarts (1-4 gallons), MBI-206 per acre for New Planting

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place. Do not freeze.

Pesticide Disposal: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, 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:**

For plastic containers less than or equal to 5 gallons: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. For plastic containers greater than 5 gallons: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

For plastic, refillable containers: Refillable container. Refill this container with MBI-206 EP only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or system. Repeat rinsing procedure two more times.



Marrone Bio Innovations is a member of the Ag Container Recycling Council. Visit <u>http://www.acrecycle.org/contact</u> for information on how to arrange pick-up of this empty pesticide container.

Marrone Bio Innovations WARRANTY

To the extent permitted by 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.

[Optional Warranty Statement for a seed treatment only product:]

CONDITIONS OF SALE AND LIMITED WARRANTY STATEMENT

Treatment of highly mechanically damaged seed, or seed of known low vigor and poor quality, may result in reduced germination and/or reduction of seed and seedling vigor. Treat and conduct germination tests on a small portion of seed before committing the total seed lot to a selected chemical treatment. Due to seed quality conditions beyond the control of (Company Name), no claims are made to guarantee germination of carry-over seed.

As its sole express warranty, (Company Name) warrants that this product conforms to the chemical description on the label and is reasonably fit for purposes stated on the label only when used in accordance with directions and instructions specified on the label, subject to the inherent risks set forth above. ONLY AS PERMITTED BY APPLICABLE LAW, IN THE EVENT OF A BREACH OF THIS LIMITED WARRANTY, (Company Name) SHALL NOT BE LIABLE FOR CONSEQUENTIAL DAMAGES. SUBJECT TO APPLICABLE LAW, (Company Name) NEITHER MAKES NOR AUTHORIZES ANY OF ITS AGENTS OR REPRESENTATIVES TO MAKE ANY WARRANTY OF FITNESS OR MERCHANTABILITY, GUARANTY OR REPRESENTATION, EXPRESS OR IMPLIED, CONCERNING THIS MATERIAL. Buyer assumes the responsibility to handle, use, and store this product in accordance with safety instructions and use directions contained on the label.

Buyer/User purchases this product subject to the foregoing Conditions of Sale and Limited Warranty which, subject to applicable law, may be varied only by a written agreement signed by a duly authorized representative of (Company Name). If these terms are not acceptable, return all products to the place of purchase, unopened for a full refund.)

Optional Label Claims- Sublabel A

- Bioinsecticide
- Bionematicide
- Biomiticide
- * and * = Not labeled for this use in CA [in locations throughout the label]
- Repackaging or relabeling of this product without express written permission from Marrone Bio Innovations, Inc. is prohibited.
- UPC code
- RF Code
- Bio with Bite
- For insects
- For mites
- For nematodes
- For organic production
- For maximum harvest
- Prevents (insect) (nematode) (soil borne insect) (soil dwelling insect) and (mite) build up
- Protection from mites, thrips, aphids, whiteflies
- MBI-206 EP can be applied by (any labeled use pattern) to protect against (certain) (soil borne insects) (insects) (nematodes) (mites) (any labeled pest).
- Product(s) thoroughly tested
- Proven results
- Trial tested
- (number)+ trials
- Read full label before use
- 2-10 tablespoons per 1,000 sq. ft. [must be consistent with rates to be listed on label]
- For turf
- For recreational turf and landscapes [when crop is listed]
- For professional lawn care [when crop listed]
- (Specify pest:) (Tank-mix) (or rotate) with a contact (insecticide, nematicide, miticide) for improved control.
- Refer to the table in the SOIL TREATMENT USE DIRECTIONS (In-Furrow Applications) section to determine the proper rate per 1000 foot of row.
- MBI-206 EP should be used as part of an Integrated Pest Management System.
- MBI-206 EP can be applied following a soil fumigant.
- Use the high(er) labeled rate when high(er) nematode pressure is expected.



Sublabel B: Home & Garden Use

MBI-206 EP (Alternate Names: VENERATE, VENERATE XC, VENERATE PTO, VENERATE H&G)

BIOLOGICAL INSECTICIDE

(Can Be Used in Organic Gardening)(For Organic Gardening)(For Organic Lawn Care) (OMRI Listed)

Active Ingredient: Heat-killed Burkholderia spp. strain A396 and spent	
fermentation media	94.46%
Other ingredients:	5.54%
Total:	100.00%

*Contains not less than 1,500 Beet Armyworm Killing Units (BAWKU)/mg of active ingredient. <u>Note</u>: The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

KEEP OUT OF REACH OF CHILDREN CAUTION

 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.			
t			

EPA Reg. No.: 84059-14 Net Contents: XX (Batch)(Lot) No: XXXX EPA Est. No.: XXXXX-XX-XXX

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

US Patents No. XXXXX

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PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION. 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. Rinsing application equipment over the treated area will help to avoid run off to water bodies or drainage systems. See the Directions for Use section of this label for application instructions that minimize risk to bees and other beneficial insects.

DIRECTIONS FOR USE

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

HOME AND GARDEN USE DIRECTIONS

MBI-206 EP is a biological insecticide containing killed cells of *Burkholderia spp.* strain A396 and spent fermentation media, for use on food and ornamental plants against the pests listed in the Directions for Use section. MBI-206 EP controls insect targets by enzymatic degradation of exoskeletal structures and interference with the molting process leading to mortality through contact and/or ingestion. MBI-206 EP controls or suppresses many foliar feeding pests including caterpillars and foliage feeding coleopteran and many soft-bodied insects such as aphids, whiteflies and plant sucking mites infesting labeled plants. For insect control, the concentrate of MBI-206 EP must be mixed with water and applied as a foliar spray.

To minimize potential exposure to bees and other pollinating insects, do not apply while bees are foraging.

MBI-206 EP has been evaluated for toxicity to non-target insects in a variety of bioassays and on a variety of plants under various normal growing conditions. However, testing all beneficial insects, in all situations, mixtures and combinations, is not feasible. If you plan to release beneficial insects into your garden, consult with an extension specialist or with the product manufacturer prior to treating entire garden.

DIRECTIONS FOR CONTROL OF FOLIAR PESTS

WHEN TO USE

For best results, apply MBI-206 EP if pest species are present but before populations are causing visible damage.

BEFORE YOU USE

Read and follow these directions when using:

Do not allow spray to drift from application site.

Use only with pressurized hand-held sprayers, hose-end sprayers or spray trigger bottles.

Do not allow spray mixture to stand overnight or for prolonged periods.

MBI-206 EP can be applied in commonly used pressurized hand-held sprayers, spray trigger bottles and hose-end sprayers.

HOW TO USE FOR HAND-HELD SPRAYERS AND SPRAY TRIGGER BOTTLES

Fill sprayer or bottle with appropriate amount of water and concentrate.

Mix the spray solution thoroughly.

Keep the spray solution agitated during application.

HOW TO USE FOR HOSE-END SPRAYERS

Follow hose-end sprayer instructions to determine how to fill, set dial, clean and disconnect from hose.

Set dial on sprayer to deliver rate as directed below.

HOW MUCH TO USE FOR ALL FOLIAR APPLICATIONS

2 tablespoons of MBI-206 EP per gallon of water

Some pesticides can cause phytotoxic effects ranging from slight burning or browning of leaves to distorted leaves, fruit, flowers or stems. Damage symptoms may vary with the type of plant that has been treated. It is impossible to test all plant species for phytotoxicity. To assure that the plants to be treated are not sensitive to the treatment, apply a small amount of the product to a few leaves or the above ground portion of the plant and check back in 2–4 days for signs of phytotoxicity. Use product according to label directions.

INSECTS CONTROLLED OR SUPPRESSED ON VEGETABLES, FRUITS, NUTS, ORNAMENTAL PLANTS, TREES, SHRUBS, FLOWERS, FOLIAGE AND TROPICAL PLANTS

Alfalfa caterpillar Alfalfa webworm Adelgids Aphids Armyworms Cabbage looper Chinch bugs Codling moth Corn earworm Diamondback moth Fruit flies Hornworms Imported cabbageworm Lace bugs Leaf rollers Leafhoppers Light brown apple moth Loopers Mealybugs Mites Plant bugs Plum curculio

Psyllids Scales Sharpshooters Spittle bugs Stink bugs Tent caterpillars Thrips Tufted apple budworm Webworms Whiteflies

DIRECTIONS FOR SUPPRESSION OF SOIL-DWELLING PESTS (EXCLUDING TURF)

For suppression of soil-dwelling pests, including seed maggots, wireworms, symphylans, cutworms, white grubs and plant-parasitic nematodes, apply MBI-206 EP as a soil drench directly into the seed furrow. Mix MBI-206 EP at rate of 5 tablespoons per gallon of water, and apply the mixture at the rate of 1 quart (32 fluid ounces) per 25 feet of row. For individual plants, such as tomatoes and peppers, apply the mixture as a soil drench at the rate of 4 fluid ounces per plant.

DIRECTIONS FOR SUPPRESSION OF PESTS OF TURF

Bluegrass billbug, annual bluegrass weevil, chinch bugs, armyworm, webworms, and cutworms

Mix MBI-206 EP at the rate of 5 tablespoons per gallon of water, and apply to turf with a pressurized sprayer at the rate of 1 gallon per 250 square feet of turf.

For control of bluegrass billbug, annual bluegrass weevil, chinch bugs, armyworm, webworms, and cutworms, it is not necessary to irrigate following application.

DIRECTIONS FOR SUPPRESSION OF PLANT-PARASITIC NEMATODES

Mix 5 tablespoons MBI-206 EP per gallon of water, and apply at the rate of 1 gallon per 250 square feet of turf. For best control, thoroughly irrigate following application to moisten the top inch of soil. There should be no more than $\frac{1}{2}$ inch of thatch present at the time of application. Under dry conditions where thatch is present, pre-watering is recommended prior to application.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place.

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: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

WARRANTY

To the extent permitted by 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.

Optional Label Claims Sublabel B

- Bioinsecticide
- Bionematicide
- Biomiticide
- * and * = Not labeled for this use in CA (in locations throughout the label)
- Repackaging or relabeling of this product without express written permission from Marrone Bio Innovations is prohibited.
- UPC code
- RF Code
- Bio with Bite
- For insects
- For Mites
- For Nematodes
- For organic gardening
- For maximum harvest
- Prevents insect and mite build up
- Protection from mites, thrips, aphids, whiteflies
- Products thoroughly tested
- Proven results
- Trial tested
- Read full label before use

