Active Ingredient:
Heat-killed Burkholderia spp. strain A396 cells 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. Note: The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

EPA Reg. No.: 84059-14

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
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.

2121 Second St., Ste. B-107, Davis, CA 95618 USA
info@marronebio.com

NET CONTENTS: 1 gallon
2.5 gallons
PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear goggles or safety glasses. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before use.

PERSONAL PROTECTIVE EQUIPMENT (PPE)
Applicators and other handlers must wear: long-sleeved shirt and long pants, waterproof gloves, shoes plus socks. Mixers/loaders and applicators must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization. Follow manufacturer's instructions for cleaning and maintaining PPE. If there are 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 rinseate. 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. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation. 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.

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:
- Coveralls
- Waterproof gloves
- 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.
PRODUCT INFORMATION

VENERATE™ XC is a biological insecticide containing killed cells and fermentation solids of Burkholderia spp. strain A396 for use on agricultural crops against the pests listed in the Directions for Use section. VENERATE™ XC controls insect pests by enzymatic degradation of exoskeletal structures and interference with the molting process leading to mortality through contact and/or ingestion. VENERATE™ XC controls or suppresses many foliar feeding pests including caterpillars and foliage feeding coleopteran and against many soft-bodied insects such as, aphids, whiteflies and plant sucking mites infesting labeled crops and plants. For insect control, the concentrate of VENERATE™ XC must be mixed with water and applied as a foliar spray with ground or aerial equipment equipped for conventional insecticide spraying.

VENERATE™ XC can be used in either the field or greenhouse for the control of any labeled pest.

GENERAL USE INSTRUCTIONS – FOR INSECT CONTROL

VENERATE™ XC is an insecticide for use against listed insects. 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.

Thorough coverage of infested plant parts is necessary for effective control. VENERATE™ XC does not have systemic activity. For some crops, directed drop nozzles by ground machine are required.

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.

Repeat applications at an interval sufficient to maintain control, usually 3–10 days depending upon plant growth rate, insect and mite activity, and other factors. If attempting to control an insect population with a single application, make the treatment when egg hatch is essentially complete but before economic damage occurs.

Adjuvants may be used 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.

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.

VENERATE™ XC 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.

VENERATE™ XC 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.

GROUND AND AERIAL APPLICATION

Apply VENERATE™ XC 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.

Mixing directions

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

Tank mixing

Do not combine VENERATE™ XC 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.

**Row Crop Application**

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 by ground or 5 gallons 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 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.

Do not spray when wind speed favors drift beyond the area intended for use.

Avoiding spray drift is the responsibility of the applicator.

**AERIAL APPLICATION AND DRIFT REDUCTION ADVISORY 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. Pressure – 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. Number of nozzles – Use the minimum number of nozzles that provide uniform coverage. Nozzle Orientation – 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. Nozzle Type – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**FOR USE**

- **Pre-harvest**
  - Asparagus
  - 1–8 quart
- **Armyworn**
  - 1–8 quart
- **Aphids, st**
  - Bananas
  - 1–4 quart
  - 1–8 quart
- **Stink bug**
**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 of 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.

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**FOR USE ON THE FOLLOWING CROPS FOR CONTROL OR SUPPRESSION OF INSECTS AND MITES:**

**Pre-harvest Interval (PHI) = 0 days**

**Asparagus**

1–8 quarts VENERATE™ XC per acre

Armyworms

1–8 quarts VENERATE™ XC per acre (suppression)

Aphids, stink bugs

**Bananas**

1–4 quarts VENERATE™ XC per acre

Banana skipper

1–8 quarts VENERATE™ XC per acre (suppression)

Stink bugs

**Bulb Vegetables**

Garlic, Leek

1–8 quarts VENERATE™ XC per acre

Armyworm, imported cabbageworms

1–8 quarts VENERATE™ XC per acre

Aphids, thrips

**Bushberries**

Blackberry

1–8 quarts VENERATE™ XC per acre

Armyworms

1–8 quarts VENERATE™ XC per acre

Aphids, stink bugs

**Caneberries**

Cranberry

1–8 quarts VENERATE™ XC per acre

Armyworms

1–8 quarts VENERATE™ XC per acre

Aphids, thrips

**Cereal Grains**

Barley, Bux

1–8 quarts VENERATE™ XC per acre

Armyworms

1–8 quarts VENERATE™ XC per acre

Aphids, thrips

**Citrus**

Asian citrus psyllid

1–8 quarts VENERATE™ XC per acre

Armyworms

1–8 quarts VENERATE™ XC per acre

Aphids, thrips

**Grapefruit**

1–8 quarts VENERATE™ XC per acre

Armyworms

1–8 quarts VENERATE™ XC per acre

Aphids, thrips

**Ground Vegetables**

Tomato

1–8 quarts VENERATE™ XC per acre

Armyworms

1–8 quarts VENERATE™ XC per acre

Aphids, thrips

**Garlic, Leek**

1–8 quarts VENERATE™ XC per acre

Armyworm, imported cabbageworms

1–8 quarts VENERATE™ XC per acre

Aphids, thrips

**Cranberry**

1–8 quarts VENERATE™ XC per acre

Armyworms

1–8 quarts VENERATE™ XC per acre

Aphids, thrips

**Blueberry**

1–8 quarts VENERATE™ XC per acre

Armyworms

1–8 quarts VENERATE™ XC per acre

Aphids, thrips

**Asian citrus psyllid**

1–8 quarts VENERATE™ XC per acre

Armyworms

1–8 quarts VENERATE™ XC per acre

Aphids, thrips

**Banana**

1–4 quarts VENERATE™ XC per acre

Aphids, thrips

1–8 quarts VENERATE™ XC per acre (suppression)

Stink bugs

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**SHAKE WELL BEFORE USE**
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1–8 quarts VENERATE™ XC per acre
Armyworm, cross-striped cabbageworm, cutworm, diamondback moth, green cloverworm, Heliothis, hornworm, imported cabbageworm, loopers, omnivorous leafrollers, saltmarsh caterpillar, webworm

1–8 quarts VENERATE™ XC per acre (suppression)
Aphids, thrips

Blueberries

1–8 quarts VENERATE™ XC per acre
Armyworms, cherry fruitworm, cranberry fruitworm, fireworms, leafrollers, loopers

1–8 quarts VENERATE™ XC per acre (suppression)
Aphids, blueberry blossom weevil, stink bugs, thrips

Blackberry, Loganberry, Red and Black Raspberry, and Cultivars and/or Hybrids of these

1–8 quarts VENERATE™ XC per acre
Armyworms, green fruitworm, leafrollers, loopers, western raspberry fruitworm

1–8 quarts VENERATE™ XC per acre (suppression)
Aphids, stink bugs, thrips

Barley, Buckwheat, Grain Amaranth, Milo, Oats, Pearl Millet, Proso Millet, Rye, Sorghum, Triticale, Wheat

1–8 quarts VENERATE™ XC per acre
Armyworms, corn earworm (headworm), southwestern corn borer, web worms

1–8 quarts VENERATE™ XC per acre (suppression)
Aphids (including greenbug), chinch bugs, mites, thrips

Grapefruit, Lemons, Limes, Oranges, Tangerines

1–8 quarts VENERATE™ XC per acre
Asian citrus psyllid, citrus cutworm, citrus leafminer, citrus rust mite, fruittree leafroller, orange
dog

1–8 quarts VENERATE™ XC per acre (suppression)
Aphids, citrus red mite, citrus thrips, Florida red scale, mealybugs, stink bugs, six-spotted mite, Texas citrus mite, twoe
ded spider mite

Cranberry

1–8 quarts VENERATE™ XC per acre
Armyworms, fireworms, leafrollers, loopers, sparganothis fruitworm

1–8 quarts VENERATE™ XC per acre (suppression)
Aphids, cranberry blossom weevil, mites, thrips

Cole Crop

1–8 quarts VENERATE™ XC per acre
Armyworm

1–8 quarts VENERATE™ XC per acre (suppression)
Aphids, bil

Corn (Field)

1–8 quarts VENERATE™ XC per acre
Armyworm

1–8 quarts VENERATE™ XC per acre (suppression)
Corn leaf e

Cucumber

1–8 quarts VENERATE™ XC per acre
Armyworm

1–8 quarts VENERATE™ XC per acre (suppression)
Aphids, mi

Fig

1–8 quarts VENERATE™ XC per acre
Armyworm

1–8 quarts VENERATE™ XC per acre (suppression)
Aphids, sti

Fruiting Vegetables

Tomato, T

1–8 quarts VENERATE™ XC per acre
Armyworm variegated

1–8 quarts VENERATE™ XC per acre (suppression)
Aphids, Ly
Cole Crops
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
1–8 quarts VENERATE™ XC per acre
Armyworm, cabbage looper, cabbage webworm, diamondback moth, imported cabbageworm
1–8 quarts VENERATE™ XC per acre (suppression)
Aphids, billbugs, leafhoppers, mites, plant bugs, stink bugs, Swede midge, thrips, whiteflies

Corn (Field Corn, Sweet Corn, Popcorn and Corn Grown for Seed)
1–8 quarts VENERATE™ XC per acre
Armyworm, corn earworm, European corn borer, southwestern corn borer, western bean cutworm
1–8 quarts VENERATE™ XC per acre (suppression)
Corn leaf aphid, leafhoppers, mites, stink bugs

Cotton
1–8 quarts VENERATE™ XC per acre
Armyworm, cotton bollworm, European corn borer, loopers (soybean and cabbage), saltmarsh caterpillar, tobacco budworm
1–8 quarts VENERATE™ XC per acre (suppression)
Cotton aphid, leafhoppers, Lygus, mites, stink bugs, thrips

Cucurbit Vegetables
Cucumber, edible gourds, muskmelon (cantaloupe, muskmelon, etc.), pumpkin, watermelon, winter and summer squash
1–8 quarts VENERATE™ XC per acre
Armyworm, cabbage looper, melonworm, pickleworm, rindworm complex
1–8 quarts VENERATE™ XC per acre (suppression)
Aphids, mites, silverleaf whitefly, stink bugs, thrips, whiteflies

Fig
1–8 quarts VENERATE™ XC per acre
Navel orangeworm
1–8 quarts VENERATE™ XC per acre (suppression)
Aphids, stink bugs, thrips

Fruiting Vegetables
Tomato, Tomatillo, Pepper, Ground Cherry, Pepino, Okra and Eggplant
1–8 quarts VENERATE™ XC per acre
Armyworm, European corn borer, hornworm, loopers, saltmarsh caterpillar, tomato fruitworm, tomato pinworm, variegated cutworm
1–8 quarts VENERATE™ XC per acre (suppression)
Aphids, Lygus, mites, pepper weevil, plant bugs, psyllids, stink bugs, thrips, whiteflies
Grape
1–8 quarts VENERATE™ XC per acre
Grape berry moth, grape leafroller, grape leaf skeletonizer, oblique banded leafroller, orange tortrix, omnivorous leafroller
1–8 quarts VENERATE™ XC per acre (suppression)
Mealybugs, Pacific spider mite, stink bugs, thrips, twospotted spider mite, whiteflies, Willamette Spider Mite

Herbs, Spices and Mints
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
1–8 quarts VENERATE™ XC per acre
Armyworm, loopers, saltmarsh caterpillar
1–8 quarts VENERATE™ XC per acre (suppression)
Aphids, mites, thrips, whiteflies

Hops and Dried Cones
1–8 quarts VENERATE™ XC per acre
Armyworms, loopers
1–8 quarts VENERATE™ XC per acre (suppression)
Hops aphid, mites, thrips, whiteflies

Leafy Vegetables and Leaves of Root and Tuber and Legume Vegetables
Arugula, Beets, Celery, Chervil, Cilantro, Corn Salad, Cress, Dandelion, Dock, Edible Chrysanthemum, Endive, Fennel, Garden Peas, Head Lettuce, Leaf Lettuce, Parsley, Purslane, Radicchio, Rhubarb, Spinach, Swiss Chard, Turnip Greens and Watercress
1–8 quarts VENERATE™ XC per acre
Armyworms, cabbage looper, diamondback moth
1–8 quarts VENERATE™ XC per acre (suppression)
Aphids, mites, psyllids, stink bugs, thrips, whiteflies

Oil Crops
Canola, Safflower, Sunflower (including sunflower grown for seed)
1–8 quarts VENERATE™ XC per acre
Armyworm, diamondback moth, headworm, Heliothis, looper, saltmarsh caterpillar
1–8 quarts VENERATE™ XC per acre (suppression)
Aphids, mites, thrips, whiteflies

Pineapple
1–8 quarts VENERATE™ XC per acre
Gummosos-Batracheda Comosae (Hodges), Thecla-Thecla Basilides (Geyr)

Pome Fruit
Apples, Crabapple, Loquat, Mayhaw, Pears and Quince
1–8 quarts VENERATE™ XC per acre
Pear psyllid, plum curculio
1–8 quarts VENERATE™ XC per acre (suppression)
Stink bugs

Pomegranate
1–8 quarts
Armyworm leafroller, c
European

Potatoes

Artichoke

Sugar Beet
1–8 quarts
Armyworm
1–8 quarts
Aphids, ps

Root Vegetables

Black Salt

Rutabaga
1–8 quarts
Armyworm
1–8 quarts
Aphids, ps

Stone Fruits

Apricots
1–8 quarts
Green fruits, peach twigs

Applicatory locations.
re-treatment

1–8 quarts
Aphids, m

Strawberries
1–8 quarts
Armyworm
1–8 quarts
Aphids, Ly

Tobacco
1–8 quarts
Hornworm
1–8 quarts
Aphids, m
<table>
<thead>
<tr>
<th><strong>Leaf rollers</strong></th>
<th><strong>Fruit</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Armyworm, cankerworm, codling moth, cutworm, filbert leafroller, fruit tree leafroller, gypsy moth, oblique banded leafroller, oriental fruit moth, redbanded leafroller, tufted apple bud moth, twig borer, variegated leafroller, walnut caterpillar</td>
<td>Acerola, Jaboticaba, Soursop, Sapote</td>
</tr>
<tr>
<td>1–8 quarts VENERATE™ XC per acre</td>
<td>1–8 quarts VENERATE™ XC per acre</td>
</tr>
<tr>
<td>European red mite, McDaniel spider mite, Pacific spider mite, two spotted red mite</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
</tr>
<tr>
<td><strong>Potatoes and Tuberous and Corm Vegetables</strong></td>
<td><strong>Tree Fruits</strong></td>
</tr>
<tr>
<td>Artichoke, Cassava, Chayote Root, Chinese Artichoke, Garden Beet, Ginger, Jerusalem Artichoke, Potatoes, Sugar Beet, Sweet Potatoes, Turmeric and Yams</td>
<td>Acerola, Jaboticaba, Soursop, Sapote</td>
</tr>
<tr>
<td>1–8 quarts VENERATE™ XC per acre</td>
<td>1–8 quarts VENERATE™ XC per acre</td>
</tr>
<tr>
<td>Armyworms, artichoke plume moth, European corn borer, loopers, psyllids</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
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<tr>
<td>Aphids, potato aphid, potato leaf hopper, stink bugs, whiteflies</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
</tr>
<tr>
<td><strong>Root Vegetables</strong></td>
<td><strong>Tree Nuts</strong></td>
</tr>
<tr>
<td>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</td>
<td>Almond,</td>
</tr>
<tr>
<td>1–8 quarts VENERATE™ XC per acre</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
</tr>
<tr>
<td>Armyworms, European corn borer, loopers</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
</tr>
<tr>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
</tr>
<tr>
<td>Aphids, thrips, mites, whiteflies</td>
<td>Aphids, mites, whiteflies</td>
</tr>
<tr>
<td><strong>Stone Fruits</strong></td>
<td><strong>Fall webworms</strong></td>
</tr>
<tr>
<td>Apricots, Cherry, Nectarine, Peach, Plum, Prune</td>
<td>Almond,</td>
</tr>
<tr>
<td>1–8 quarts VENERATE™ XC per acre</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
</tr>
<tr>
<td>Green fruitworm, leaf rollers (including fruit tree, oblique banded, pandemic, redbanded, variegated), oriental fruit moth, peach twig borer, plum curculio, red humped caterpillar, tent caterpillar</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
</tr>
<tr>
<td>Application timing: optimal timing for leafroller and 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.</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
</tr>
<tr>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
</tr>
<tr>
<td>Aphids, mealybugs, mites, stink bugs, thrips, whiteflies</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
</tr>
<tr>
<td><strong>Strawberry</strong></td>
<td><strong>Fall webworms</strong></td>
</tr>
<tr>
<td>1–8 quarts VENERATE™ XC per acre</td>
<td>Almond,</td>
</tr>
<tr>
<td>Armyworms and leaf rollers</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
</tr>
<tr>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
</tr>
<tr>
<td>Aphids, mites, thrips, whiteflies</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
</tr>
<tr>
<td><strong>Tobacco</strong></td>
<td><strong>Fall webworms</strong></td>
</tr>
<tr>
<td>1–8 quarts VENERATE™ XC per acre</td>
<td>Almond,</td>
</tr>
<tr>
<td>Hornworm, looper tobacco budworm</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
</tr>
<tr>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
</tr>
<tr>
<td>Aphids, mites, thrips, whiteflies</td>
<td>1–8 quarts VENERATE™ XC per acre (suppression)</td>
</tr>
</tbody>
</table>
**Tree Fruits**

Acerola, Atemoya, Avocado, Biriba, Black Sapote, Canistel, Cherimoya, Custard Apple, Feijoa, Guava, Ilama, Jaboticaba, Kiwi, Longan, Lychee, Mamey Sapote, Mango, Papaya, Passionfruit, Pulasan, Rambutan, Sapodilla, Soursop, Spanish Lime, Star Apple, Starfruit, Sugar Apple, Ti Palm Leaves, Wax Jambu (Wax Apple), White Sapote

1–8 quarts VENERATE™ XC per acre

Avocado leafroller, citrus peelminer, cutworms, fruit tree leafroller, omnivorous leafroller, orange tortrix, western tussock moth

1–8 quarts VENERATE™ XC per acre (suppression)

Aphids, mites, thrips, whiteflies

**Potatoes**

1–8 quarts VENERATE™ XC per acre (suppression)

Aphids, mealybugs, mites, pecan weevil, whiteflies

**Tree Nuts and Pistachios**

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

1–8 quarts VENERATE™ XC per acre

Fall webworm, filbert worm, hickory shuckworm, navel orange worm, oblique banded leafroller, peach twig borer, pecan nut casebearer, redhumped caterpillar

1–8 quarts VENERATE™ XC per acre (suppression)

Aphids, mealybugs, mites, pecan weevil, whiteflies

Do not use banded caterpillar.
STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Use up product within 6 months of purchase.

Pesticide Storage: Store in a cool dry place. Avoid freezing.

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: Non-refillable 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 ¼ 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. Do not burn unless allowed by state and local ordinances.

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

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 strict accordance with the accompanying directions.

Label date: March 3, 2014
Patent pending
VENERATE™ is a registered trademark of Marrone Bio Innovations, Inc.
Marrone Bio Innovations name and logo are registered trademarks of Marrone Bio Innovations, Inc.
© Marrone Bio Innovations, Inc.
2121 Second St., Suite B-107, Davis, CA 95618
1-877-664-4476
www.marronebio.com
info@marronebio.com
Active Ingr
Other Ingr
Total:

Heat-Kil

*Contains r
does not ir EPA Reg. N

IF IN EYE:
Have the f
You may a.

*Contains r
does not ir EPA Reg. N

IF IN EYE:
Have the f
You may a.

*Contains r
does not ir EPA Reg. N

IF IN EYE:
Have the f
You may a.
**Active Ingredient:**
Heat-killed *Burkholderia* spp. strain A396 cells 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. **Note:** The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

EPA Reg. No.: 84059-14

**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**
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.
**PROOF**

THIS PROOF IS TO BE CHECKED FOR ACCURACY

Please review and approve Text, Spelling, Copy Placement, Size, Shape, Colors and Dieline.

Authorized signature accepts responsibility for accuracy of all copy, color break and artwork. Cimarron Label is not liable for any discrepancies subsequently identified.

PLEASE NOTE: Due to color variance between printers/monitors, the colors represented by this proof cannot be deemed accurate. Please refer to a color matching system such as the Pantone Matching System for a truer representation of spot colors.

THIS PROOF IS NOT ACCURATE FOR COLOR-MATCH. Dieline does not print.

<table>
<thead>
<tr>
<th>DATE</th>
<th>JOB NUMBER</th>
<th>CUSTOMER</th>
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<tbody>
<tr>
<td>3/11/14</td>
<td>74098</td>
<td>Marrone Bio Innovations</td>
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<table>
<thead>
<tr>
<th>LABEL SIZE</th>
<th>BOOKLET SIZE</th>
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<tbody>
<tr>
<td>6.25&quot; x 5.5&quot;</td>
<td>5.5&quot; x 4.75&quot;</td>
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<table>
<thead>
<tr>
<th>LABEL COLORS</th>
<th>BOOKLET COVER COLORS</th>
<th>BOOKLET INSIDE COLORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLK 1807 370</td>
<td>BLK 1807 370</td>
<td>BLK</td>
</tr>
</tbody>
</table>

**Cimarron Label**

Experts in Extended Text Labeling

4201 North Westport Ave. • Sioux Falls, SD 57107
Phone: (605) 978-0451 • Fax: (605) 978-0463

Form: CS 006B - 11/8/2011

☐ ARTWORK IS APPROVED  ☐ REVISED PROOF NEEDED

WE CANNOT PROCESS THIS ORDER WITHOUT AN AUTHORIZED SIGNATURE

Signed ____________________________ Date __________