

U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs

Biopesticides and Pollution Prevention Division (7511P) 1200 Pennsylvania Ave., N.W.

Washington, D.C. 20460

NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

EPA Reg. Number:	Date of Issuance:
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92629-4

6/28/2017

Term of Issuance:

Unconditional

Name of Pesticide Product:

VIOLA CS

Name and Address of Registrant (include ZIP Code):

Cann-Care Company 417 Mace Blvd. J236 Davis, CA 95618

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA Registration Number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA or the Act).

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency (EPA). In order to protect health and the environment, the Administrator, on his or her motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under the Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration or registration review of your product when the EPA requires all registrants of similar products to submit such data.

Signature of Approving Official:

Date:

6/28/2017

Jeannine Kausch, Product Manager 92

Microbial Pesticides Branch

Biopesticides and Pollution Prevention Division (7511P)

Office of Pesticide Programs

EPA Form 8570-6

- 2. Provide the EPA with the following information prior to labeling or repackaging this product in your EPA establishment:
 - The EPA Registration Number and EPA Establishment Number of the parent EPAregistered product from which your product is derived.
 - The name and address of each entity from which you purchased the parent EPA-registered product.
 - For each entity that you purchase the parent EPA-registered product from, a copy of the bill of sale between you and that entity.
- 3. With regard to term #2 (above), provide this information to the EPA every 6 months for two years beginning on the date of registration.
- 4. Make the following labeling changes before you release this product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 92629-4."
 - Add an appropriate EPA Establishment Number.
- 5. Submit one (1) copy of the final printed label for the record before you release this product for shipment.

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 EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

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. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statement of Formula (CSF):

• Basic CSF dated 04/26/2017

Page 3 of 3 EPA Reg. No. 92629-4 OPP Decision No. 525715

If you have any questions, please contact Elyse Bilardo by phone at (703) 347-0182 or via email at bilardo.elyse@epa.gov.

Sincerely,

Jeannine Kausch, Product Manager 92

Microbial Pesticides Branch Biopesticides and Pollution

Prevention Division (7511P)

Office of Pesticide Programs

VIOLA CS®

Alternate Brand Names: CANN-CARE VIOLA CS®, VIOLA CS® BIOINSECTICIDE

Sublabel A: Agricultural Crops

Sublabel B: Turf & Professional Landscape Use

Sublabel C: Home & Garden Use

ACTIVE INGREDIENT:

Chromobacterium subtsugae strain PRAA4	-1 [⊤] and
spent fermentation media*	
OTHER INGREDIENTS	70.0%
TOTAL	100.0%

*Contains not less than 1000 Cabbage Looper Killing Units (CLKU)/mg. Note: The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

KEEP OUT OF REACH OF CHILDREN **CAUTION**

EPA Registration No. 92629-

Cann-Care Company 417 Mace Blvd J236 Davis, CA 95618

ACCEPTED

06/28/2017

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 92629-4

Sublabel A: Agricultural Crops

VIOLA CS®

Alternate Brand Names: CANN-CARE VIOLA CS®, VIOLA CS® BIOINSECTICIDE

For Organic Production

ACTIVE INGREDIENT:

Chromobacterium subtsugae strain PRAA4-1	[⊤] and
spent fermentation media*	30.0%
OTHER INGREDIENTS	70.0%
TOTAL	.100.0%

*Contains not less than 1000 Cabbage Looper Killing Units (CLKU)/mg.

<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

See attached label booklet for First Aid, Precautionary Statements, Warranty, Storage & Disposal Instructions, and Directions for Use.

OR

Peel back tab for First Aid, Precautionary Statements, Warranty, Storage & Disposal Instructions, and Directions for Use.

USE OF PRODUCT INDICATES ACCEPTANCE OF THE "WARRANTY".

EPA Registration No. 92629-EPA Est. No.: Batch Code: Net Weight:

> Cann-Care Company 417 Mace Blvd J236 Davis, CA 95618

FIRST AID			
	Hold eye open and rinse slowly and gently with water for 15-20 minutes.		
IF IN EYES:	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.		
	 Call a poison control center or doctor for treatment advice. 		
	Move person to fresh air.		
	If person is not breathing, call 911 or		
IF INHALED:	an ambulance, then give artificial		
	respiration, preferably by mouth-to- mouth if possible.		
	 Call a poison control center or 		
	doctor for further treatment advice.		
	 Call a poison control center or 		
	doctor immediately for treatment		
	advice.		
. .	Have person sip a glass of water if		
IF OWALL OWER	able to swallow.		
SWALLOWED:	Do not induce vomiting unless told to		
	do so by the poison control center or doctor.		
	 Do not give anything by mouth 		
	to an unconscious person.		
	 Take off contaminated clothing. 		
	Rinse skin immediately with plenty		
IF ON SKIN	of water for 15-20 minutes.		
OR	 Call a poison control center or 		
CLOTHING:	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.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Causes moderate eye irritation. Harmful if inhaled, swallowed or absorbed through the skin. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. 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 reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators & other handlers must wear:

- Shoes plus socks
- Long pants and long-sleeved shirt
- Waterproof gloves
- Protective eyewear

Mixer/loaders and applicators must wear a NIOSH-approved particulate respirator with any R or P filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

Follow 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 PPE/clothing 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

This product is toxic to aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

This product is toxic to certain non-target terrestrial arthropods. Minimize spray drift away from target area to reduce effects to non-target insects.

This product is toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product if bees are visiting the treatment area.

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 washwaters or rinsate.

DIRECTIONS FOR USE

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

AGRICULTURAL USE REQUIREMENTS

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

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

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

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

- Coveralls
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

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

Keep unprotected persons out of treated areas until sprays have dried.

PRODUCT INFORMATION

VIOLA CS® is a biological insecticide/miticide/nematicide containing fermentation solids of *Chromobacterium subtsugae* strain PRAA4-1^T for use on ornamental plants, turf, edible crops, and poultry houses against the pests listed in the Directions for Use section. VIOLA CS® functions primarily as a stomach poison for use in the control or suppression of many foliar feeding pests, including caterpillars, and certain Coleoptera. VIOLA CS® has multiple effects, including reducing fecundity and oviposition, deterring feeding and acting as a stomach poison on Homoptera and Hemiptera, such as aphids, psyllids, whiteflies, *Lygus* and mealybugs, and on thrips and phytophagous mites infesting labeled crops or use sites. VIOLA CS® must be mixed with water and applied as a foliar spray with ground or aerial equipment equipped for conventional insecticide spraying, by chemigation, by soil treatment, by seed treatment or by direct spray to surfaces in poultry houses.

VIOLA CS® can be used in the field, greenhouses, or poultry houses for the control of any labeled pest.

USE INSTRUCTIONS

VIOLA CS® is a biological insecticide/miticide/nematicide for use against listed insects, mites and nematodes. Close scouting and early attention to infestations is highly recommended. For insects and mites, proper timing of application targeting new populations or recently hatched larvae and nymphs is important for optimal results. Applying VIOLA CS® when pest populations are low is recommended.

For insects and mites, thorough coverage of infested plant parts is necessary for effective control. VIOLA CS® does not have systemic activity. For some crops, directed drop nozzles by ground machine are required.

Under heavy pest populations, apply a knockdown insecticide prior to or in a tank mix with VIOLA CS[®], use the higher label rates, shorten the spray interval, and/or increase the spray volume to improve coverage.

Repeat applications at an interval sufficient to maintain control, 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 when larvae or nymphs are young and before economic damage occurs.

To enhance control, consider tank mixing with contact insecticides/miticides/nematicides. Use the lower label rates of VIOLA CS® when populations are low and when tank mixing with other insecticides/miticides/nematicides. Use the higher rates of VIOLA CS® when applied standalone, when populations are high or when egg numbers are high.

For hard-to-wet crops, consider using a spreader/sticker or adjuvant, which has been approved for targeted crop use, to enhance coverage and adhesion of VIOLA CS[®] to the crop.

VIOLA CS[®] 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 the entire crop, test a small portion of the crop for sensitivity.

GROUND AND AERIAL APPLICATIONS

Apply VIOLA CS[®] in ground and aerial equipment with quantities of water sufficient to provide thorough coverage of infested plant parts. The amount of water needed per acre will depend upon crop development, weather, application equipment, and local experience.

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

Avoiding spray drift is the responsibility of the applicator.

MIXING DIRECTIONS

Important - Do not add VIOLA CS^{\otimes} to the tank mix before introducing $\frac{3}{4}$ of the desired amount of water. Add water to the mix tank. Start the mechanical or hydraulic agitation to provide moderate circulation before adding VIOLA CS^{\otimes} . Add the desired volume of VIOLA CS^{\otimes} to the mix tank and

VIOLA CS; EPA Reg. No. (pending as File Symbol 92629-) MASTER LABEL – Version (3) dated June 28, 2017 continue circulation while adding the remainder of the water.

Maintain circulation while loading and spraying. Do not mix more VIOLA CS[®] than can be used in 24 hours. Use a strainer no finer than 50 mesh in conventional spray systems.

<u>SPRAY VOLUME</u>: For conventional air and ground applications, use at least 10 gallons of total volume per acre in water-based sprays.

<u>TANK MIXING</u>: Do not combine VIOLA CS[®] 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, and non-injurious under your use conditions. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.

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, and then emulsifiable concentrates last. After thoroughly mixing, let this mixture stand for 5 minutes. If the combination remains mixed or can be readily remixed, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

AERIAL DRIFT REDUCTION INFORMATION

<u>GENERAL</u>: Avoiding spray drift at the application site is the responsibility of the applicator (specifically, see **SENSITIVE AREAS** section for the requirement regarding spray drift and honey bees). The interaction of many equipment-related 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.

Do not apply directly to aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

<u>INFORMATION ON DROPLET SIZE</u>: Use only medium or coarser spray nozzles according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser 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).

<u>CONTROLLING DROPLET SIZE</u>: Volume - 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 specified 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.

<u>BOOM WIDTH</u>: For aerial applications, the boom width must not exceed 75% of the wingspan or 90% of the rotary blade.

<u>APPLICATION HEIGHT</u>: Do not make applications 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 of droplets to evaporation and wind. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or crop canopy.

<u>SWATH ADJUSTMENT</u>: When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the upwind 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.).

<u>WIND</u>: Only apply this product if the wind direction favors on-target deposition. Do not apply when the wind velocity exceeds 15 mph. 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.

<u>NOTE</u>: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

<u>TEMPERATURE AND HUMIDITY</u>: 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, blooming crops or weeds that bees are visiting, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

CHEMIGATION USE DIRECTIONS

SPRAY PREPARATION: First, prepare a suspension of VIOLA CS® in a mix tank. Fill tank with ¾ of the amount of water for the area to be treated. Start mechanical or hydraulic agitation. Add the required amount of VIOLA CS®, 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 VIOLA CS® into the irrigation water line so as to deliver the desired rate of VIOLA CS® per acre. Inject the suspension of VIOLA CS® with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing. VIOLA CS® is to be metered continuously for the duration of the water application. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not combine VIOLA CS[®] with other pesticides, surfactants, adjuvants, or fertilizers for application through chemigation equipment unless prior experience has shown the combination to be physically compatible, effective and non-injurious under your conditions of use.

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, or drip (trickle) 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 resultfrom 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.

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.
- 3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

Specific Requirements for 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.
- 3. The pesticide injection pipeline must also 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.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. 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.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

Specific Requirements for Drip (Trickle) 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.
- 3. The pesticide injection pipeline must also 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.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. 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.

VIOLA CS; EPA Reg. No. (pending as File Symbol 92629-) MASTER LABEL – Version (3) dated June 28, 2017

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.

Application Instructions for Drip Chemigation -

- 1. Check to be sure that the system provides a uniform waterflow.
- 2. 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 VIOLA CS® mixture and let the system continue to run only as necessary to purge the line with fresh water. Let the VIOLA CS® solution remain in the root zone of the crop.

SEED TREATMENT USE DIRECTIONS

VIOLA CS® can be applied as a seed dressing at plant or in commercial seed treatments for suppression of insect damage to corn, cotton and legumes at rates specified in the DIRECTIONS FOR USE section. VIOLA CS® may be applied as a water-based slurry with other registered seed treatment insecticides and fungicides through standard slurry- or mist-type commercial seed treatment equipment.

<u>MIXING INSTRUCTIONS</u>: Prepare no more mixture than is required for the immediate operation. Agitate the solution continuously during mixing and application. Mechanical mixing is recommended for proper mixing of VIOLA CS® mixtures.

<u>VIOLA CS® ALONE</u>: Add ½ of the required amount of water to the mix tank. With the agitator running, add VIOLA CS® to the mix tank. Continue agitation while adding the remainder of the water. Begin application of the solution after VIOLA CS® has completely dispersed into the mix water. Maintain agitation until all the mixture has been applied.

<u>VIOLA CS® + TANK-MIXTURES</u>: 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.

<u>Note</u>: When using VIOLA CS[®] in tank mixtures, all products in water-soluble packaging should be added to the tank before any other tank mix partner, including VIOLA CS[®]. 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 VIOLA CS® 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.

<u>FOR PRE-PLANT SEED TREATMENT</u>: Do not use treated seed for food or feed purposes or process for oil. Treat only those seeds needed for immediate use, minimizing the interval between treatment(s) and planting. Do not store excess treated seeds beyond planting time.

<u>FOR COMMERCIAL SEED TREATMENT</u>: This product does not contain dye and is not covered by an appropriate tolerance, tolerance exemption, or other clearance under the Federal Food, Drug and Cosmetic Act. To comply with 40 CFR 153.155, therefore, all seeds 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 man 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 *Chromobacterium subtsugae* strain PRAA4-1^T. Do not use for food, feed or oil purposes."

SOIL TREATMENT USE DIRECTIONS

VIOLA CS® can be applied by soil drench, in-furrow spray, or soil injection to protect against certain soil-borne insects or nematodes.

In general, VIOLA CS® can be applied by the following methods, unless specified differently in the SELECTED CROPS section:

<u>SOIL DRENCH APPLICATIONS</u>: Apply VIOLA CS[®] at a concentration of 1-3 pounds per 50 to 75 gallons of water (2-6 pounds per 100 to 150 gallons of water), and at a sufficient rate to thoroughly soak the growing media and root zone. Multiple drench applications can be made on a 10-14 day interval for insect control treatments. Nematode control treatments are limited to pre-plant or atplant soil drench applications.

SHANKED-IN AND INJECTED APPLICATIONS: VIOLA CS®, at a concentration of 1-3 pounds per 50 to 75 gallons of water (2-6 pounds per 100 to 150 gallons of water), can be shanked-in or injected into the soil alone, or with most types of liquid nutrients.

IN-FURROW APPLICATIONS: At planting, apply VIOLA CS® as an in-furrow spray or as a 5-7 inch band (T-band) over an open furrow at the rate of 1-3 pounds per ½ acre (2 - 6 pounds per acre or 1.8 -7.35 ounces per 1000 feet of row), according to the chart below. Apply VIOLA CS® in 20 to 50 gallons of water so the spray is directed over the seed furrow just before the seeds are covered.

Rate	In-Furrow & T-band Application Rates Product per 1000 row feet (in oz.)					
Ounces per	30" Rows					
1000 row feet	1.8 – 5.5	2.0 - 6.0	2.1 – 6.25	2.2 – 6.6	2.3 – 7.0	2.45 – 7.35

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.

APPLICATION RATES FOR SELECTED CROPS

For greenhouse applications on the crops and pests listed, use 1-3 pounds of VIOLA CS[®] in 100 gallons of water sprayed until just before point of runoff.

See specific application rates for each crop for additional details on greenhouse applications and for all other application types.

Pre-harvest Interval (PHI) = 0 days

FOR USE ON THE FOLLOWING CROPS FOR CONTROL OF SPECIFIED INSECTS AND MITES

Crop	Pest	Rate (pounds of VIOLA CS [®] /acre, unless indicated otherwise) & Notes
	Alfalfa Webworm Alfalfa Caterpillar Armyworms Cutworms European Skipper Sod Webworm	1 – 3
Alfalfa (Hay & Seed), Hay & Other Forage Crops	Plant Bugs Spittle Bugs Aphids Billbugs Chinch Bug Mites (such as Clover, Bermuda Grass Stunt, Two-spotted, Winter Grain) Leafhoppers Lygus (such as Tarnished Plant Bug)	2 – 3
Artichoke	Armyworms Artichoke Plume Moth Loopers	1 – 3
(Globe)	Aphids Whiteflies	2 – 3

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
Asparagus	Aphids Armyworms *Asparagus Beetle Cutworms *Spotted Asparagus Beetle Stink Bugs	2 – 3 *Notes: Asparagus beetle and spotted asparagus beetle - Apply when adults or larvae are seen feeding on new spears and during the fern stage when field counts or crop injury indicates damaging populations.
Bananas	Banana Skipper Stink Bugs	2 – 3

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
	Diamondback Moth Cabbage Looper Imported Cabbageworm Cabbage Webworm Cross-striped Cabbageworm Beet Armyworm Armyworms Light Brown Apple Moth	1 – 3
Brassica (Cole)	Cutworms Root & Seed Maggots Symphylans Wireworms	1 – 3 pounds of VIOLA CS® per ½ acre (2 – 6 pounds of VIOLA CS® per acre)
Leafy Vegetables Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage, Chinese Broccoli, Chinese Cabbage (Bok Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Cavalo, Broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, & Rape Greens		Notes: For control of low to medium infestation levels of soil insects, use a pre-plant or at- plant in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary. Supplemental control with drip applications, where available, may be necessary on a 10 – 14 day schedule for soil insect control. Please refer to drip chemigation instructions.
а паре Отеело	Whiteflies Thrips Aphids Leafhoppers Stink Bugs Plant Bugs Mites Billbugs *Yellow-margined Leaf Beetle Larvae Bagrada Bug	2 – 3 *Notes: Yellow-margined leaf beetle larvae - Apply to newly hatched to 2 nd instar. If adult beetles are also present, tank mix with a knockdown insecticide.

Crop	Pest	Rate (pounds of VIOLA CS [®] /acre, unless indicated otherwise) & Notes
	Loopers Omnivorous Leafroller Hornworm Imported Cabbageworm Diamondback Moth Green Cloverworm Webworms Saltmarsh Caterpillar Armyworms Cutworms Cross-striped Cabbageworm Heliothis European Corn Borer Leek Moth	1 – 3
Bulb Vegetables Leek, Garlic, Onion (Bulb & Green), & Shallot	Cutworms Root & Seed Maggots Symphylans Wireworms	1 – 3 pounds of VIOLA CS® per ½ acre (2 – 6 pounds of VIOLA CS® per acre)
α Snanot		Notes: For control of low to medium infestation levels of soil insects, use a pre-plant or at-plant in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.
	Aphids Thrips	2-3

Crop	Pest	Rate (pounds of VIOLA CS [®] /acre, unless indicated otherwise) & Notes
Bushberries Blueberry, Currant,	Armyworms Cherry Fruitworm Cranberry Fruitworm Fireworms Leafrollers Loopers	1 – 3
Gooseberry, Huckleberry, Elderberry, Juneberry, Lingonberry, & Salal	Aphids Blueberry Maggot Thrips Stink Bugs Spotted Wing Drosophila Fruit Flies Flea Beetles Adult Japanese Beetles	2 – 3
Caneberries Blackberry,	Beet Armyworm Bertha Armyworm Green Fruitworm Leafrollers Loopers Western Raspberry Fruitworm Armyworms	1 – 3
Loganberry, Red & Black Raspberry, & Cultivars, Varieties &/or Hybrids of These	Aphids Thrips Stink Bugs Spotted Wing Drosophila Fruit Flies Flea Beetles Adult Japanese Beetles	2 – 3
Cereal Grains Barley, Buckwheat, Oats,	Armyworms Corn Earworms (Headworm) Southwestern Corn Borer Webworms	1 – 3
Pearl Millet, Proso Millet, Rye, Sorghum (Milo), Triticale, & Wheat	Aphids (including Greenbug) Thrips Cereal Leaf Beetle Adults & Larvae Chinch Bugs Mites	2 – 3
Citrus Fruit Grapefruit, Lemons, Limes, Oranges, & Tangerines	Fruittree Leafroller Orangedog Citrus Cutworm Citrus Leafminer	1 – 3

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
Citrus Fruit Grapefruit, Lemons, Limes, Oranges, & Tangerines	Aphids California Red Scale Florida Red Scale Two-spotted Spider Mite Texas Citrus Mite Citrus Red Mite Citrus Rust Mite Six-spotted Spider Mite Asian Citrus Psyllid Citrus Whitefly Cloudy-winged Whitefly Citrus Blackfly Citrus Thrips Mealybugs Stink Bugs Spotted Wing Drosophila Fruit Flies Flea Beetles Adult Japanese Beetles Glassy-winged Sharpshooter	2 – 3
Corn Field Corn, Sweet Corn, Popcorn, & Corn Grown for Seed	Armyworms European Corn Borer Southwestern Corn Borer Western Bean Cutworm Corn Earworm Webworms Common Stalk Borer Lesser Cornstalk Borer Cutworms Root & Seed Maggots Seed Corn Beetle Symphylans Wireworms	1 – 3 pounds of VIOLA CS® per ½ acre (2 – 6 pounds of VIOLA CS® per acre) Notes: For control of low to medium infestation levels of soil insects, use a pre-plant or at-plant in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
Corn Field Corn, Sweet Corn, Popcorn, & Corn Grown for Seed	Corn Leaf Aphid Stink Bugs Thrips Mites Chinch Bugs Corn Rootworm Beetles	2 – 3
Corn Seed Treatment	Root & Seed Maggots Corn Rootworm Larvae Wireworms	5 lbs of VIOLA CS® for every 100 lbs seed Follow instructions presented in the SEED TREATMENT USE DIRECTIONS

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
	European Corn Borer Cotton Bollworm Tobacco Budworm Loopers (Soybean & Cabbage) Saltmarsh Caterpillar Fall Armyworm Yellow-striped Armyworm	1 – 3
Cotton	Cutworms Root & Seed Maggots Wireworms	1 – 3 pounds of VIOLA CS® per ½ acre (2 – 6 pounds of VIOLA CS® per acre) *Notes: For control of low to medium infestation levels of soil insects, use a pre-plant or at-plant in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.
	Cotton Aphid Lygus Leafhoppers Thrips Cotton Fleahopper Silverleaf Whitefly Stink Bugs Mites	2-3
Cotton Seed Treatment	Root & Seed Maggots Wireworms	5 lbs of VIOLA CS® for every 50 lbs seed Follow instructions presented in the SEED TREATMENT USE DIRECTIONS

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
Cranberry	Armyworms Brown Spanworm Cranberry Fruitworm Cutworms Leafrollers Fireworms Loopers Sparganothis Fruitworm Aphids Thrips Mites Spotted Wing Drosophila Stink Bugs Fruit Flies Flea Beetles Adult Japanese Beetles Cranberry Blossom Weevil	2 – 3 Notes: DO NOT APPLY TO FLOODED FIELDS.
Cucurbit Vegetables Cucumber, Edible Gourds, Muskmelon, Cantaloupe, Pumpkin, Watermelon, & Winter and Summer Squash	Armyworms Cabbage Looper Melonworm Pickleworm Rindworm Complex Corn Earworm Cutworms Cucumber Beetle	1 – 3

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
Cucurbit Vegetables Cucumber,	Whiteflies Aphids Thrips Mites Stink Bugs Spotted Wing Drosophila Fruit Flies Flea Beetles Adult Japanese Beetles	2-3
Edible Gourds, Muskmelon, Cantaloupe, Pumpkin, Watermelon, & Winter and Summer Squash	Cutworms Root & Seed Maggots Symphylans Wireworms	3 lbs of VIOLA CS® per ½ acre (6 lbs of VIOLA CS® per acre) Notes: For control of low to medium infestation levels of soil insects, use a pre-plant or at-plant in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.
	Navel Orangeworm	1 – 3
Fig	Aphids Thrips Stink Bugs Spotted Wing Drosophila Fruit Flies Flea Beetles Adult Japanese Beetles	2 – 3

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
Flowers, Bedding Plants, & Ornamentals (Ground Application	Tobacco Budworm Loopers Omnivorous Looper Omnivorous Leafroller Diamondback Moth Armyworms Ello Moth Lo Moth Oleander Moth Azalea Caterpillar	1 – 3 Or 1 – 3 lbs of VIOLA CS® per 100 gallons of water
Only to Non-blooming Plants)	Whiteflies Aphids Thrips Azalea Lace Bug Lygus Mites	2 – 3 Or 2 – 3 lbs of VIOLA CS® per 100 gallons of water
Fruiting Vegetables Tomato,	Loopers Hornworms Tomato Fruitworm Variegated Cutworm Saltmarsh Caterpillar Armyworms (including Beet & Yellow-striped) Tomato Pinworm European Corn Borer	1 – 3
Tomatillo, Pepper, Groundcherry, Pepino, Okra, & Eggplant	Aphids Mites Stink Bugs Lygus Pepper Weevil Whiteflies Plant Bugs Psyllids Thrips Spotted Wing Drosophila Fruit Flies Flea Beetles Adult Japanese Beetles *Colorado Potato Beetle Larvae	2 – 3 *Notes: For Colorado potato beetle larvae, apply to newly hatched to 2 nd instar larvae. If adult beetles are also present, tank mix with a knockdown insecticide.

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
Fruiting Vegetables Tomato, Tomatillo, Pepper, Groundcherry, Pepino, Okra, & Eggplant	Cutworms Root & Seed Maggots Symphylans Wireworms	3 lbs of VIOLA CS® per ½ acre (6 lbs of VIOLA CS® per acre) Notes: For control of low to medium infestation levels of soil insects, use a pre-plant or at-plant in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary. Supplemental control with drip applications, where available, may be necessary on a 10 – 14 day schedule for soil insect control. Please refer to drip chemigation instructions.
	Grape Leaf Skeletonizer Grape Leafroller Omnivorous Leafroller Orange Tortrix Obliquebanded Leafroller Grape Berry Moth Light Brown Apple Moth	1 – 3
Grape, Amur River Grape, Gooseberry, Kiwifruit, Maypop, & Schisandra Berry	Pacific Spider Mite Willamette Spider Mite Two-spotted Spider Mite Leafhoppers Mites Mealybugs Stink Bugs Glassy-winged Sharpshooter Whiteflies Thrips Spotted Wing Drosophila Fruit Flies Flea Beetles Adult Japanese Beetles	2-3

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
Herbs & Spices Angelica, Balm, Basil, Borage, Burnet, Chamomile, Catnip, Chervil, Chive, Clary, Coriander (Cilantro), Costmary, Curry, Dillweed, Horehound,	Loopers Saltmarsh Caterpillar Armyworms	1 – 3
Hyssop, Lavender, Lemongrass, Lovage, Marjoram, Nasturtium, Parsley (Dried), Rosemary, Sage, Savory (Summer & Winter), Sweet Bay, Tansy, Tarragon, Thyme, Wintergreen, Woodruff, & Wormwood	Aphids Thrips Whiteflies Mites	2-3
	Armyworms Loopers	1 – 3
Hops & Dried Cones	Hops Aphid Thrips Whiteflies Mites	2 – 3

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
Leafy Vegetables Arugula, Celery, Corn Salad, Cress,	Cabbage Looper Diamondback Moth Armyworms Loopers Cutworm Species Green Cloverworm Tobacco Budworm Aphids	1 – 3
Dandelion, Dock, Edible-leaved Chrysanthemum, Endive,	Whiteflies Thrips Psyllids Stink Bugs Mites	2-3
Fennel, Head Lettuce, Leaf Lettuce, Parsley, Purslane, Radicchio, Rhubarb, Spinach, & Swiss Chard	Cutworms Root & Seed Maggots Symphylans Wireworms	3 lbs of VIOLA CS® per ½ acre (6 lbs of VIOLA CS® per acre) Notes: For control of low to medium infestation levels of soil insects, use a pre-plant or at-plant in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.
Leaves of Root &	Cabbage Looper Diamondback Moth Armyworms	1 – 3
Tuber Vegetables Beets & Turnips	Aphids Whiteflies Psyllids Stink Bugs	2-3

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
Legume Vegetables (Succulent or Dried) & Grain Crops Adzuki Bean, Black- eyed Pea, Beans, Chickpea, Cowpea, Crowder Pea, Edible- pod Pea, English Pea,	Armyworms Corn Earworm Green Cloverworm Loopers Podworms Cabbage Looper Soybean Looper Velvetbean Caterpillar	1 – 3
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, Soybean, Sugar Snap Pea, Tepary Bean, Wax Bean, & Yardlong Bean	Aphids Stink Bugs Mites Leafhoppers Whiteflies Thrips Bean Leaf Beetle Mexican Bean Beetle Spotted Wing Drosophila Fruit Flies Flea Beetles Adult Japanese Beetles Kudzu Bugs	2-3
Legume Vegetables (Succulent or Dried) & Grain Crops Seed Treatment Adzuki Bean, Blackeyed Pea, Beans, Chickpea, Cowpea, Crowder Pea, Ediblepod Pea, English Pea, Fava Bean, Field Bean, Field Pea, Garbanzo Bean, Garden Pea, Green Pea, Kidney	Cutworms Root & Seed Maggots Symphylans Wireworms	2 lbs of VIOLA CS® for every 100 lbs seed
Bean, Lentils, Lima Bean, Lupins, Mung Bean, Navy Bean, Peas, Pigeon Pea, Pinto Bean, Runner Bean, Snap Bean, Snow Pea, Soybean, Sugar Snap Pea, Tepary Bean, Wax Bean, & Yardlong Bean		Follow instructions presented in the SEED TREATMENT USE DIRECTIONS

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
Oilseed Crops Canola, Safflower,	Armyworms Diamondback Moth Loopers Saltmarsh Caterpillar Heliothis Headworms	1 – 3
& Sunflower (Including Sunflower Grown for Seed)	Aphids Thrips Whiteflies Mites Kudzu Bugs	2-3
	Armyworms Cabbage Looper Corn Earworm Soybean Looper Green Cloverworm European Corn Borer Podworms Red-necked Peanut Worm Saltmarsh Caterpillar Velvetbean Caterpillar	1 – 3
Peanut	Aphids Thrips Whiteflies Mites Burrowing Bug Cutworms Root & Seed Maggots Wireworms	3 lbs of VIOLA CS® per ½ acre (6 lbs of VIOLA CS® per acre) Notes: For control of low to medium infestation levels of soil insects, use a pre-plant or at-plant in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.
Peppermint	Loopers Saltmarsh Caterpillar Armyworms	1 – 3

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
Pineapple	Batrachedra comosae (Hodges) Thecla basilides (Geyr)(Fruitborer)	1 – 3
Pome Fruit Apples,	*Leafrollers (including Fruittree, Obliquebanded, Red-banded, Variegated) *Codling Moth *Oriental Fruit Moth Tufted Apple Budmoth Light Brown Apple Moth	*Notes: Application timing - Optimal timing for leafrollers, codling moth and oriental fruit moth can vary between species and geographic locations. Monitor moth flights with pheromone traps and scout regularly to determine larval populations. VIOLA CS® can be used to supplement mating disruption programs.
Crabapples, Loquat, Mayhaw, Pears, & Quince	Aphids Apple Maggot Mealybugs Pear Psylla San Jose Scale Stink Bugs Thrips Whiteflies Mites Plum Curculio Spotted Wing Drosophila Fruit Flies Flea Beetles Adult Japanese Beetles	2 – 3

Crop	Pest	Rate (pounds of VIOLA CS [®] /acre, unless indicated otherwise) & Notes
Pomegranate	Armyworms Cankerworms Codling Moth Cutworms Filbert Leafroller Fruittree Leafroller Gypsy Moth Obliquebanded Leafroller Oriental Fruit Moth Red-banded Leafroller Tufted Apple Budmoth Twig Borer Variegated Leafroller Walnut Caterpillar European Red Mite McDaniel Spider Mite Pacific Spider Mite Two-spotted Red Mite Stink Bugs Spotted Wing Drosophila Fruit Flies Flea Beetles Adult Japanese Beetles Leaf-footed Plant Bugs	1 – 3

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
Root & Tuber Vegetables Black Salsify, Carrot, Cassava,	Armyworms Artichoke Plume Moth European Corn Borer Loopers *Colorado Potato Beetle Larvae	1 – 3 *Notes: Apply to newly hatched to 2 nd instar larvae. If adult beetles are also present, tank mix with a knockdown insecticide. Heavy infestations require repeat application.
Celeriac, Chayote Root, Chicory, Chinese Artichoke, Edible Burdock, Garden Beet, Ginger, Ginseng, Horseradish, Jerusalem	Aphids Potato Aphid Potato Leafhopper Stink Bugs Psyllids Whiteflies	2-3
Artichoke, Oriental Radish, Parsnip, Potatoes, Radish,	Cutworms Root & Seed Maggots Symphylans	3 lbs of VIOLA CS® per ½ acre (6 lbs of VIOLA CS® per acre)
Rutabaga, Salsify, Skirret, Spanish Salsify, Sugar Beet, Sweet Potatoes, Turmeric, Turnip, Turnip Rooted Chervil, Turnip Rooted Parsley, & Yams	Wireworms	Notes: For control of low to medium infestation levels of soil insects, use a preplant or at-plant in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
Shade & Ornamental Trees	Blackheaded Budworm California Oakworm Douglas Fir Tussock Moth Elm Spanworm Fruittree Leafroller Greenstriped Mapleworm Hemlock Looper Jack Pine Budworm Mimosa Webworm Pine Butterfly Saddleback Caterpillar Saddle Prominent Caterpillar Spruce Budworm Tent Caterpillar Western Tussock Moth Gypsy Moth	1 – 3 Or 1 – 3 lbs of VIOLA CS® per 100 gallons of water
	Aphids Lace Bugs Mites Whiteflies Wooly Adelgid *Elm Leaf Beetle *Imported Willow Leaf Beetle *Viburnum Beetle	2 – 3 Or 2 – 3 lbs of VIOLA CS® per 100 gallons of water *Notes: Apply to newly hatched to 2 nd instar larvae. If adult beetles are also present, tank mix with a knockdown insecticide. Heavy infestations require repeat application.

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
Stone Fruits Apricots, Cherry, Nectarine, Peach, Plum, & Prune	Green Fruitworm Oriental Fruit Moth Redhumped Caterpillar Tent Caterpillar *Peach Twig Borer *Leafrollers (including Obliquebanded, Fruittree, Pandemic, Red-banded, and Variegated)	*Notes: Application Timing - Optimal timing for peach twig borer and leafrollers can vary between species and geographic locations. Monitor moth flights with pheromone traps and scout regularly to determine larval populations. VIOLA CS® can be used to supplement mating disruption programs.
	Aphids Cherry Fruit Fly Mealybugs San Jose Scale Stink Bugs White Peach Scale Thrips Whiteflies Mites Spotted Wing Drosophila Fruit Flies Flea Beetles Adult Japanese Beetles	2-3
	Armyworms Leafrollers Cutworms Aphids	1 – 3
Strawberry	Lygus Mites Thrips Whiteflies Stink Bugs Spotted Wing Drosophila Fruit Flies Flea Beetles Adult Japanese Beetles	2 – 3

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
	Cutworms Root & Seed Maggots Symphylans	3 lbs of VIOLA CS® per ½ acre (6 lbs of VIOLA CS® per acre)
Strawberry	Wireworms	Notes: For control of low to medium infestation levels of soil insects, use a pre-plant or at-plant in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.
	Wireworms *White Grubs	1 – 3 lbs of VIOLA CS® per ½ acre (2 – 6 lbs of VIOLA CS® per acre)
Sugar Cane		Notes: Apply 1 – 3 pounds of VIOLA CS® (2 – 6 pounds of VIOLA CS® per acre) or 1.8 – 7.35 ounces per 1000 row feet in a 5 – 7 inch band (T- band) directly on the seed pieces and surrounding soil in the open furrows immediately before covering with soil.
		*For grubs, applications should be timed to occur shortly after egg hatch when grubs are 1st or 2nd instar.
	Hornworms Tobacco Budworm Loopers	1 – 3
Tobacco	Aphids Thrips Whiteflies Mites	2-3

Crop	Pest	Rate (pounds of VIOLA CS [®] /acre, unless indicated otherwise) & Notes
	Cutworms Root & Seed Maggots Symphylans Wireworms	3 lbs of VIOLA CS® per ½ acre (6 lbs of VIOLA CS® per acre)
Tobacco	Wireworms	Notes: For control of low to medium infestation levels of soil insects, use a pre-plant or at-plant in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
Tree Farms &	Bagworm Fall Webworm Gypsy Moth Hemlock Looper Jack Pine Budworm Pine Tip Moth Redhumped Caterpillar Spruce Budworm Tent Caterpillar Tussock Moths	1 – 3 Or 1 – 3 lbs of VIOLA CS® per 100 gallons of water
Plantations Conifers, Including Christmas Trees & Deciduous Trees	Cottonwood Leaf Beetle	2 – 3 Or 2 – 3 lbs of VIOLA CS® per 100 gallons of water Notes: Apply to newly
		hatched to 2 nd instar larvae. If adult beetles are also present, tank mix with a knockdown insecticide. Heavy infestations may require repeat application.
Tree Nuts & Pistachios	Fall Webworm Filbert Worm Hickory Shuckworm Navel Orange Worm Obliquebanded Leafroller Peach Twig Borer Pecan Nut Casebearer Redhumped Caterpillar	1 – 3
Almonds, Cashew, Chestnut, Filbert (Hazelnut), Macadamia Nut, Pecan, Pistachios, & Walnut	Aphids Mealybugs San Jose Scale Walnut Scale Whiteflies Pecan Weevil Mites	2 – 3

Crop	Pest	Rate (pounds of VIOLA CS [®] /acre, unless indicated otherwise) & Notes
Tropical & Subtropical Fruit 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,	Avocado Leafroller Citrus Peelminer Cutworms Fruittree Leafroller Omnivorous Leafroller Orange Tortrix Western Tussock Moth Aphids Thrips Whiteflies Stink Bugs Spotted Wing Drosophila Fruit Flies Flea Beetles Adult Japanese Beetles	
Apple, Starfruit, Sugar Apple, Ti Palm Leaves, Wax Jambu (Wax Apple), & White Sapote		

Crop	Pest	Rate (pounds of VIOLA CS®/acre, unless indicated otherwise) & Notes
	Armyworms Cutworms Sod Webworms	2 – 4 pounds of VIOLA CS® per acre or 0.75 – 1.5 ounces of VIOLA CS® per 1000 sq. ft.
		Notes: Mix specified dosage of VIOLA CS® in sufficient water to provide thorough coverage of turf. For control of armyworms, cutworms, or webworms, do not irrigate following application.
	Chinch Bugs Leafhoppers	3 pounds of VIOLA CS® per ½ acre (6 pounds of VIOLA CS® per acre) or 2.25 ounces of VIOLA CS® per 1000 sq. ft.
Turf, Including Turf		Notes: Mix specified dosage of VIOLA CS® in sufficient water to provide thorough coverage of turf. For control of chinch bugs or leafhoppers, do not irrigate following application.
Grown for Seed, Lawns, and Recreational Turf	White Grubs (such as Larvae of Asiatic Garden Beetle, Black Turfgrass Ataenius, European Chafer, Green June Beetle, <i>Aphodius</i> spp., May or June Beetles (<i>Phyllophaga</i> spp.), Northern and Southern Masked Chafers (<i>Cyclocephala</i> spp.), Sugarcane Grub (<i>Tomarus</i> spp.), & Oriental Beetle) Annual Bluegrass Weevils	2 – 4 pounds of VIOLA CS® per 1/5 acre (10 – 20 pounds of VIOLA CS® per acre) or 4 – 8 ounces of VIOLA CS® per 1000 sq. ft. Notes: Apply VIOLA CS® soon after egg hatch when grubs are 1st or 2nd instar. Mix specified dosage of VIOLA CS® in sufficient water to provide thorough coverage of turf. For control of white grubs and annual bluegrass weevils, a minimum of 100 gallons of water per acre or 300 fluid ounces of water per 1000 square feet is recommended. For best control, thoroughly irrigate following application to moisten the top inch of soil. There should be no more than ½ inch of thatch present at the time of application. Under dry conditions where thatch is present, pre-watering is recommended prior to application for grub or weevil control.
	Flies Poultry Littler Beetle	1 pound of VIOLA CS® per 12 gallons of water
Poultry Houses		Notes: Treat when litter is totally replaced. Apply to walls, ceiling, & floors of the poultry house. Replace little only after the surfaces are totally dry.

FOR USE ON THE FOLLOWING CROPS FOR CONTROL OF SPECIFIED NEMATODES:

Pre-harvest Interval (PHI) = 0 days

Crop	Pest	Rate (pounds of VIOLA CS®/ ½ acre, unless indicated otherwise) & Notes
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 Broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach,	Root Knot Nematode Lesion Nematode Ring Nematode Sting & Stunt Nematodes	1 − 3 Or 2 − 6 pounds of VIOLA CS® per acre Notes: For control of low to medium infestation levels of nematodes, use a pre-plant or at-plant only in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.
& Rape Greens Bulb Vegetables Leek, Garlic, Onion (Bulb & Green), & Shallot	Root Knot Nematode Lesion Nematode Ring Nematode Sting & Stunt Nematodes	1 – 3 Or 2 – 6 pounds of VIOLA CS® per acre Notes: For control of low to medium infestation levels of nematodes, use a pre-plant or at-plant only in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.

Crop	Pest	Rate (pounds of VIOLA CS®/ ½ acre,
	1 303	unless indicated otherwise) & Notes
Corn Field Corn, Sweet Corn, Popcorn, & Corn Grown for Seed	Root Knot Nematode Lesion Nematode Ring Nematode Sting & Stunt Nematodes	1 – 3 Or 2 – 6 pounds of VIOLA CS® per acre Notes: For control of low to medium infestation levels of nematodes, use a pre-plant or at-plant only in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.
Corn Seed Treatment	Plant-parasitic Nematodes	5 lbs of VIOLA CS® for every 100 lbs seed Follow instructions presented in the SEED TREATMENT USE DIRECTIONS
Cotton	Root Knot Nematode	1 – 3 Or 2 – 6 pounds of VIOLA CS® per acre Notes: For control of low to medium infestation levels of nematodes, use a pre-plant or at-plant only in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.
Cotton Seed Treatment	Plant-parasitic Nematodes	5 lbs of VIOLA CS® for every 50 lbs seed Follow instructions presented in the SEED TREATMENT USE DIRECTIONS

Crop	Pest	Rate (pounds of VIOLA CS®/ ½ acre, unless indicated otherwise) & Notes
Cucurbit Vegetables Cucumber, Edible Gourds, Muskmelon, Cantaloupe, Pumpkin, Watermelon, & Winter and Summer Squash	Root Knot Nematode Lesion Nematode Ring Nematode Sting & Stunt Nematodes	3 Or 6 pounds of VIOLA CS® per acre Notes: For control of low to medium infestation levels of nematodes, use a pre-plant or at-plant only in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.
Fruiting Vegetables Tomato, Tomatillo, Pepper, Groundcherry, Pepino, Okra, & Eggplant	Root Knot Nematode Lesion Nematode Ring Nematode Sting & Stunt Nematodes	3 Or 6 pounds of VIOLA CS® per acre Notes: For control of low to medium infestation levels of nematodes, use a pre-plant or at-plant only in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.
Leafy Vegetables Arugula, Celery, Corn Salad, Cress, Dandelion, Dock, Edible-leaved Chrysanthemum, Endive, Fennel, Head Lettuce, Leaf Lettuce, Parsley, Purslane, Radicchio, Rhubarb, Spinach, & Swiss Chard	Root Knot Nematode Lesion Nematode Ring Nematode Sting & Stunt Nematodes	Or 6 pounds of VIOLA CS® per acre Notes: For control of low to medium infestation levels of nematodes, use a pre-plant or at-plant only in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.

Crop	Pest	Rate (pounds of VIOLA CS®/ ½ acre, unless indicated otherwise) & Notes
Legume Vegetables (Succulent or Dried) & Grain Crops Seed Treatment	Plant-Parasitic Nematodes	
Adzuki Bean, Blackeyed Pea, Beans, Chickpea, Cowpea, Crowder Pea, Ediblepod 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, Soybean, Sugar Snap Pea, Tepary Bean, Wax Bean, & Yardlong Bean		2 lbs of VIOLA CS® for every 100 lbs seed Follow instructions presented in the SEED TREATMENT USE DIRECTIONS
Peanut	Root Knot Nematode Lesion Nematode Ring Nematode Sting & Stunt Nematodes	Or 6 pounds of VIOLA CS® per acre Notes: For control of low to medium infestation levels of nematodes, use a pre-plant or at-plant only in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary. Supplemental control with a layby application at pegging stage may be necessary for additional suppression of nematodes.

Crop	Pest	Rate (pounds of VIOLA CS®/ ½ acre, unless indicated otherwise) & Notes
Root & Tuber Vegetables Black Salsify, Carrot, Cassava, Celeriac, Chayote Root, Chicory, Chinese Artichoke, Edible Burdock, Garden Beet, Ginger, Ginseng, Horseradish, Jerusalem Artichoke, Oriental Radish, Parsnip, Potatoes, Radish, Rutabaga, Salsify, Skirret, Spanish Salsify, Sugar Beet, Sweet Potatoes, Turmeric, Turnip, Turnip Rooted Chervil, Turnip Rooted Parsley, & Yams	Root Knot Nematode Lesion Nematode Ring Nematode Sting & Stunt Nematodes	Or 6 pounds of VIOLA CS® per acre Notes: For control of low to medium infestation levels of nematodes, use a pre-plant or at-plant only in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.

Crop	Pest	Rate (pounds of VIOLA CS®/ ½ acre, unless indicated otherwise) & Notes
Strawberry	Root Knot Nematode Lesion Nematode Ring Nematode Sting & Stunt Nematodes	3 Or 6 pounds of VIOLA CS® per acre Notes: For control of low to medium infestation levels of nematodes, use a preplant or at-plant only in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.
Tobacco	Root Knot Nematode Lesion Nematode Ring Nematode Sting & Stunt Nematodes	Or 6 pounds of VIOLA CS® per acre Notes: For control of low to medium infestation levels of nematodes, use a preplant or at-plant only in furrow drench application in 50 to 75 gallons of water per ½ acre (100 to 150 gallons of water per acre) or as an in furrow spray in 20 to 50 gallons of water per acre. When very high pest infestation levels are anticipated or encountered, other effective soil treatments may be necessary.

STORAGE AND DISPOSAL

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

<u>PESTICIDE STORAGE</u>: Store in original container in a cool, dry place.

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

For plastic containers with capacities equal to or less 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 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 or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For plastic containers with capacities 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 ¼ 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 or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

WARRANTY

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

Label date:

Made in the USA

VIOLA CS[®] is a registered trademark of Cann-Care Company ©Copyright Cann-Care Company, 2017

OPTIONAL LABEL CLAIMS:

- Biological Insecticide
- Dry flowableNOP logo

Sublabel B: Turf & Professional Landscape Use

VIOLA CS®

Alternate Brand Names: CANN-CARE VIOLA CS®, VIOLA CS® BIOINSECTICIDE

For Organic Gardening

ACTIVE INGREDIENT:

Chromobacterium subtsugae strain PRAA4-	1 [⊤] and
spent fermentation media*	
OTHER INGREDIENTS	70.0%
TOTAL	100.0%

*Contains not less than 1000 Cabbage Looper Killing Units (CLKU)/mg.

Note: The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.

KEEP OUT OF REACH OF CHILDREN CAUTION

See attached label booklet for First Aid, Precautionary Statements, Warranty, Storage & Disposal Instructions, and Directions for Use.

OF

Peel back tab for First Aid, Precautionary Statements, Warranty, Storage & Disposal Instructions, and Directions for Use.

USE OF PRODUCT INDICATES ACCEPTANCE OF THE "WARRANTY".

EPA Registration No. 92629-EPA Est. No.: Batch Code: Net Weight:

> Cann-Care Company 417 Mace Blvd. J236 Davis, CA 95618

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. 			
IF INHALED:	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice. 			
IF SWALLOWED:	 Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. 			
IF ON SKIN OR CLOTHING:	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. 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.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Causes moderate eye irritation. Harmful if inhaled, swallowed or absorbed through the skin. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. 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 reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators & other handlers must wear:

- Shoes plus socks
- Long pants and long-sleeved shirt
- Waterproof gloves
- Protective eyewear

VIOLA CS; EPA Reg. No. (pending as File Symbol 92629-) MASTER LABEL – Version (3) dated June 28, 2017 Mixer/loaders and applicators must wear a NIOSH-approved particulate respirator with any R or P filter with NIOSH approval number prefix TC-84A; or a NIOSH-approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

Follow 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 PPE/clothing 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

This product is toxic to aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

This product is toxic to certain non-target terrestrial arthropods. Minimize spray drift away from target area to reduce effects to non-target insects.

This product is toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product if bees are visiting the treatment area.

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 washwaters or rinsate.

DIRECTIONS FOR USE

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

AGRICULTURAL USE REQUIREMENTS

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

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

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

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

- Coveralls
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

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

Keep unprotected persons out of treated areas until sprays have dried.

PRODUCT INFORMATION

VIOLA CS® is a biological insecticide/miticide containing fermentation solids of *Chromobacterium subtsugae* strain PRAA4-1^T for use on ornamental plants, turf, and edible crops, against the pests listed in the Directions for Use section. VIOLA CS® functions primarily as a stomach poison for use in the control or suppression of many foliar-feeding pests, including caterpillars, and certain Coleoptera. VIOLA CS® has multiple effects, including reducing fecundity and oviposition, deterring feeding and acting as a stomach poison on Homoptera and Hemiptera, such as aphids, psyllids, whiteflies, *Lygus* and mealybugs, and on thrips and phytophagous mites infesting labeled crops or use sites. VIOLA CS® must be mixed with water and applied as a foliar spray with ground or aerial equipment equipped for conventional insecticide spraying or by chemigation.

VIOLA CS[®] can be used in either the field or greenhouse for the control of any labeled pest.

USE INSTRUCTIONS

VIOLA CS® is a biological insecticide/miticide for use against listed insects and mites. Close scouting and early attention to infestations is highly recommended. For insects and mites, proper timing of application targeting new populations or recently hatched larvae and nymphs is important for optimal results. Applying VIOLA CS® when pest populations are low is recommended.

For insects and mites, thorough coverage of infested plant parts is necessary for effective control. VIOLA CS[®] does not have systemic activity. For some crops, directed drop nozzles by ground

VIOLA CS; EPA Reg. No. (pending as File Symbol 92629-) MASTER LABEL – Version (3) dated June 28, 2017 machine are required.

Under heavy pest populations, apply a knockdown insecticide prior to or in a tank mix with VIOLA CS[®], use the higher label rates, shorten the spray interval, and/or increase the spray volume to improve coverage.

Repeat applications at an interval sufficient to maintain control, 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.

To enhance control, consider tank mixing with contact insecticides/miticides. Use the lower label rates of VIOLA CS® when populations are low and when tank mixing with other insecticides/miticides. Use the higher rates of VIOLA CS® when applied standalone, when populations are high or when egg numbers are high.

For hard-to-wet crops, consider using a spreader/sticker or adjuvant, which has been approved for targeted crop use, to enhance coverage and adhesion of VIOLA CS[®] to the crop.

VIOLA CS® 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 the entire crop, test a small portion of the crop for sensitivity.

AERIAL & GROUND APPLICATIONS

Apply VIOLA CS® in ground and aerial equipment with quantities of water sufficient to provide thorough coverage of infested plant parts. The amount of water needed per acre will depend upon crop development, weather, application equipment, and local experience.

For hand-held or backpack sprayer applicators, mix VIOLA CS® at the rate of 1-3 tablespoons per 1 gallon of water to approximate 1-3 pounds of VIOLA CS® per 100 gallons of water.

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

MIXING DIRECTIONS

Important - Do not add VIOLA CS® to the tank mix before introducing ¾ of the desired amount of water. Add water to the mix tank. Start the mechanical or hydraulic agitation to provide moderate circulation before adding VIOLA CS®. Add the desired volume of VIOLA CS® to the mix tank and continue circulation while adding the remainder of the water. Maintain circulation while loading and spraying. Do not mix more VIOLA CS® than can be used in 24 hours. Use a strainer no finer than 50 mesh in conventional spray systems.

<u>SPRAY VOLUME</u>: For conventional air and ground applications, use at least 10 gallons of total volume per acre in water-based sprays.

<u>TANK MIXING</u>: Do not combine VIOLA CS® 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, and non-injurious under your use conditions. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.

VIOLA CS; EPA Reg. No. (pending as File Symbol 92629-) MASTER LABEL – Version (3) dated June 28, 2017 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, and then emulsifiable concentrates last. After thoroughly mixing, let this mixture stand for 5 minutes. If the combination remains mixed or can be readily remixed, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

AERIAL DRIFT REDUCTION INFORMATION

<u>GENERAL</u>: Avoiding spray drift at the application site is the responsibility of the applicator (specifically, see **SENSITIVE AREAS** section for the requirement regarding spray drift and honey bees). The interaction of many equipment-related 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. Do not apply directly to aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

INFORMATION ON DROPLET SIZE: Use only medium or coarser spray nozzles according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser 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: Volume - 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 specified 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.

<u>BOOM WIDTH</u>: For aerial applications, the boom width must not exceed 75% of the wingspan or 90% of the rotary blade.

<u>APPLICATION HEIGHT</u>: Do not make applications 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 of droplets to evaporation and wind. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or crop canopy.

<u>SWATH ADJUSTMENT</u>: When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the upwind 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.).

<u>WIND</u>: Only apply this product if the wind direction favors on-target deposition. Do not apply when the wind velocity exceeds 15 mph. 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. <u>NOTE</u>: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

<u>TEMPERATURE AND HUMIDITY</u>: 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, blooming crops or weeds that bees are visiting, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

CHEMIGATION USE DIRECTIONS

SPRAY PREPARATION: First, prepare a suspension of VIOLA CS® in a mix tank. Fill tank with ¾ of the amount of water for the area to be treated. Start mechanical or hydraulic agitation. Add the required amount of VIOLA CS®, 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 VIOLA CS® into the irrigation water line so as to deliver the desired rate of VIOLA CS® per acre. Inject the suspension of VIOLA CS® with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing. VIOLA CS® is to be metered continuously for the duration of the water application. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not combine VIOLA CS® with other pesticides, surfactants, adjuvants, or fertilizers for application through chemigation equipment unless prior experience has shown the combination to be physically compatible, effective and non-injurious under your conditions of use.

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, or drip (trickle) 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 resultfrom 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.

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.
- 3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. 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.
- 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.
- 6. 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.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

Specific Requirements for 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.
- 3. The pesticide injection pipeline must also 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.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. 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.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

Specific Requirements for Drip (Trickle) 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.
- 3. The pesticide injection pipeline must also 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.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch, which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. 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.

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.

Application Instructions for Drip Chemigation -

- 1. Check to be sure that the system provides a uniform waterflow.
- 2. 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 VIOLA CS® mixture and let the system continue to run only as necessary to purge the line with fresh water. Let the VIOLA CS® solution remain in the root zone of the crop.

Crop	Target Pest	Application Method	Product Use Rate per Application	Application Instructions
Ornamentals Herbaceous Ornamentals Flowering Plants Foliage Plants Woody Ornamentals Broadleaves, Conifers, Shrubs and Trees, and Citrus Fruit, Nut, Pome Fruit, & Stone Fruit Trees	Loopers Tobacco Budworm Omnivorous Looper Omnivorous Leafroller Diamondback Moth Armyworms Ello Moth Lo Moth Oleander Moth Azalea Caterpillar Codling Moth Obliquebanded Leafroller Cankerworms Webworms Whiteflies Aphids Asian Citrus Psyllids Pear Psylla Thrips Mites Mealybugs Scales Blackheaded Budworm California Oakworm Douglas Fir Tussock Moth Elm Spanworm Fruittree Leafroller Greenstriped Mapleworm Hemlock Looper Jack Pine Budworm Mimosa Webworm Pine Butterfly Saddleback Caterpillar Saddle Prominent Caterpillar Spruce Budworm Tent Caterpillar Western Tussock Moth Gypsy Moth	Foliar	1 – 3 pounds of VIOLA CS® per acre or 1 – 3 pounds of VIOLA CS® per 100 gallons of water	Apply in sufficient water to provide complete coverage but not excessive to the point of run-off.

Crop	Target Pest	Application Method	Product Use Rate per Application (Ounces per 1000 sq. ft.)	Product Use Rate per Application (Pounds per Acre)	Application Instructions
Turfgrass Bluegrass, Bentgrass, Bermudagrass, Dichondra, Fescue, Orchardgrass, Poa annua, Ryegrass, St. Augustine, Zoysia, Mixtures, and Other Grasses, Including Grasses Grown for Seed Ornamental Grasses	Armyworms Cutworms Sod Webworm Chinch Bugs Leafhoppers	Foliar	0.75 – 1.5	2-4	Mix specified dosage of VIOLA CS® in sufficient water to provide thorough coverage of turf. For control of armyworms, cutworms, webworms, chinch bugs, or leafhoppers, do not irrigate following application.

Crop	Target Pest	Application Method	Product Use Rate per Application (Ounces per 1000 sq. ft.)	Product Use Rate per Application (Pounds per 1/5 Acre)	Application Instructions
Turfgrass Bluegrass, Bentgrass, Bermudagrass, Dichondra, Fescue, Orchardgrass, Poa annua, Ryegrass, St. Augustine, Zoysia, Mixtures, and Other Grasses, Including Grasses Grown for Seed Ornamental Grasses	White Grubs (such as Larvae of Asiatic Garden Beetles, Black Turfgrass Ataenius, European Chafer, Green June Beetle, Aphodius spp., May or June Beetles (Phyllophaga spp.), Northern & Southern Masked Chafers (Cyclocephala spp.), Sugarcane Grub (Tomarus spp.), Sugarcane Grub (Tomarus spp.), & Oriental Beetle) Annual Bluegrass Weevil (larvae & adults)	Foliar followed by irrigation	4 – 8	2-4	Mix specified dosage of VIOLA CS® in sufficient water to provide thorough coverage of turf. For control of white grubs and annual bluegrass weevils, use a minimum of 100 gallons of water per acre or 300 fluid ounces of water per 1000 square feet. For control of grubs, thoroughly irrigate to moisten the top inch of soil. There should be no more than ½ inch of thatch present at the time of application. Applications should be timed to occur shortly after egg hatch when grubs are 1st or 2nd instar. Under dry conditions where thatch is present, pre-watering is recommended prior to application for grub or weevil control.

STORAGE AND DISPOSAL

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

<u>PESTICIDE STORAGE</u>: Store in original container in a cool, dry place.

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

For plastic containers with capacities equal to or less 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 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 or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For plastic containers with capacities 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 ¼ 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 or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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.

Label date:

Made in the U.S.A.

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Sublabel C: Home & Garden Use

VIOLA CS®

Alternate Brand Names: CANN-CARE VIOLA CS®, VIOLA CS® BIOINSECTICIDE



ACTIVE INGREDIENT:

Chromobacterium subtsugae strain PRAA4-1 ^T	and
Spent fermentation media *	
OTHER INGREDIENTS	70.0%
TOTAL	100.0%

*Contains not less than 1000 Cabbage Looper Killing Units (CLKU)/mg.

<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

See attached label booklet for First Aid, Precautionary Statements, Warranty, Storage & Disposal Instructions, and Directions for Use.

OR

Peel back tab for First Aid, Precautionary Statements, Warranty, Storage & Disposal Instructions, and Directions for Use.

USE OF PRODUCT INDICATES ACCEPTANCE OF THE "WARRANTY".

EPA Registration No. 92629-

EPA Est. No.: Batch Code: Net Weight:

> Cann-Care Company 417 Mace Blvd. J236 Davis, CA 95618

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. 		
IF INHALED:	 Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice. 		
IF SWALLOWED:	 Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. 		
IF ON SKIN OR CLOTHING:	 Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. 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.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Causes moderate eye irritation. Harmful if inhaled, swallowed or absorbed through the skin. Avoid contact with skin, eyes or clothing. Avoid breathing dust or spray mist. 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 reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

This product is toxic to certain non-target terrestrial arthropods. Minimize spray drift away from target area to reduce effects to non-target insects.

This product is toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product if bees are visiting the treatment area.

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.

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

VIOLA CS® is a biological insecticide/miticide/nematicide containing fermentation solids of *Chromobacterium subtsugae* strain PRAA4-1^T for use on ornamental plants, turf and edible plants against the pests listed in the Directions for Use section. VIOLA CS® functions primarily as a stomach poison for use in the control or suppression of many foliar-feeding pests, including caterpillars, and certain Coleoptera. VIOLA CS® has multiple effects, including reducing fecundity and oviposition, deterring feeding and acting as a stomach poison on Homoptera and Hemiptera, such as aphids, psyllids, whiteflies, *Lygus* and mealybugs, and on thrips and phytophagous mites infesting labeled plants or use sites. VIOLA CS® must be mixed with water and applied as a foliar spray for control of above-ground pests or applied as a soil drench for control of below-ground pests.

DIRECTIONS FOR CONTROL OF FOLIAR PESTS

WHEN TO USE

For best results, apply VIOLA CS® before populations reach damaging levels or when egg deposition is observed.

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 or spray trigger bottles.

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

VIOLA CS® 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 VIOLA CS[®].

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 APPLICATIONS

2 tablespoons of VIOLA CS® 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, & TROPICAL PLANTS

Adult Japanese Beetles

Alfalfa Caterpillar

Alfalfa Webworm

Adelgids

Aphids

Apple Maggot

Armyworms

Cabbage Looper

Chinch Bugs

Codling Moth

Corn Earworm

Diamondback Moth

Fruit Flies

Hornworms

Imported Cabbageworm

Kudzu Bugs

Lace Bugs

Leaf-footed Plant Bugs

Leaf Rollers

Leafhoppers

Light Brown Apple Moth

Loopers

Lygus

Mealybugs

Mites

Plant Bugs

Psyllids

Scales

Sharpshooters

Spittle Bugs

Stink Bugs

Tent Caterpillars

Thrips
Tufted Apple Budworm
Webworms
Whiteflies

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

For suppression of soil-borne pests, including root and seed maggots, wireworms, symphylans, cutworms, white grubs and plant-parasitic nematodes, apply VIOLA CS® as a soil drench directly into the seed furrow. Mix VIOLA CS® at rate of 3 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 INSECT PESTS OF TURF

Webworms, cutworms, chinch bug, and leafhoppers

Mix VIOLA CS[®] at the rate of 6 tablespoons per gallon of water, and apply the mixture to turf with a pressurized sprayer at the rate of 1 gallon per 250 square feet of turf.

White grubs (including green June beetle, *Aphodius spp.*, May or June beetles (*Phyllophaga spp.*), northern and southern masked chafers (*Cyclocephala spp.*), sugarcane grub (*Tomarus spp.*), and Oriental beetle) and annual bluegrass weevil adult and larvae. For grub control, apply VIOLA CS® soon after egg hatch when grubs are 1st or 2nd instar.

Mix ½ pound (8 ounces) VIOLA CS® 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 ½ inch of thatch present at the time of application. Under dry conditions where thatch is present, pre-watering is recommended prior to application for grub or weevil control. For best results, target smaller 1st and 2nd instar grubs during late summer and early fall.

For control of armyworms, cutworms, webworms, chinch bugs or leafhoppers, do not irrigate following application.

CONTROL OF OUTDOOR HOUSEHOLD PESTS

1 pound of VIOLA CS[®] per 12 gallons of water.

Boxelder Beetle Brown Marmorated Stink Bug

Harmless insects become nuisances when searching indoors for hibernation sites in the fall. Treat outdoor areas where the insects congregate.

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.

Label date:

Made in the U.S.A.

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