



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

September 24, 2020

Ian Murphy  
Federal Registrations Manager  
Bayer U.S. LLC  
Crop Science Division/Environmental Science Business  
5000 CentreGreen Way, Suite 400  
Cary, NC 27513

Subject: PRIA Label Amendment – Adding Stalk and stem vegetable subgroup 22A (except prickly pear, pads and prickly pear, Texas pads); Sesame, seed; Sunflower subgroup 20B; Coffee, green bean; Tropical and subtropical, palm fruit, edible peel, subgroup 23C; Sorghum, sweet; Pineapple; Grass, forage, fodder and hay, group 17; Tropical and subtropical, inedible peel, cactus, subgroup 24D; Rapeseed subgroup 20A, foliar  
Product Name: Sivanto 200 SL  
EPA Registration Number: 264-1141  
Application Dates: 6/12/19, 6/24/19  
Decision Number: 552016, 552017, 553665

Dear Mr. Murphy:

The application referred to above, submitted under the Federal Insecticide, Fungicide and Rodenticide Act, as amended is acceptable under FIFRA sec 3 (c)(5). You must submit and/or cite all data required for registration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

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

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements 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 Agency 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.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Marianne Lewis by phone at (703) 308-8043, or via email at [lewis.marianne@epa.gov](mailto:lewis.marianne@epa.gov).

Sincerely,

A handwritten signature in blue ink that reads "Meredith F. Laws". The signature is written in a cursive, flowing style.

Meredith F. Laws, Chief  
Invertebrate & Vertebrate Branch 3  
Registration Division (7505P)  
Office of Pesticide Programs

Enclosure

FLUPYRADIFURONE	GROUP 4D	INSECTICIDE
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# SIVANTO™ 200 SL

[ ABN: SIVANTO™ prime]

For use in pest management, suppression of listed insects which vector diseases and maintenance of plant health.

**ACTIVE INGREDIENT(S):**

FLUPYRADIFURONE:	17.09%
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OTHER INGREDIENTS:	82.91%
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TOTAL:	100.00%
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Contains 1.67 pounds of flupyradifurone per U.S. gallon (200 grams AI/liter)

CAS No: 951659-40-8

EPA Reg. No. 264-1141

EPA Est.No.

## KEEP OUT OF REACH OF CHILDREN CAUTION

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577  
For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

See Back[Side] Panel for First Aid Instructions and Leaflet[Booklet] for Complete Precautionary Statements and Directions for Use. (Note to reviewer: Location of additional precautionary statements, directions for use will vary between those listed, depending on container type/size.)

Net Contents:

Batch No.:

### PRODUCED FOR



Bayer CropScience LP  
800 N. Lindbergh Blvd.  
St. Louis, MO 63167  
1-866-99BAYER (1-866-992-2937)

**ACCEPTED**

09/24/2020

Under the Federal Insecticide, Fungicide  
and Rodenticide Act as amended, for the  
pesticide registered under  
EPA Reg. No. 264-1141

## FIRST AID

**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 by a 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 to 20 minutes.
- Call a poison control center or doctor for treatment advice.

**If in Eyes:**

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

**In case of emergency, call the toll-free Bayer CropScience Emergency Response telephone number: 1--800-334-7577.  
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.**

Note to Physician: No specific antidote. Treat the patient symptomatically.

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## PRECAUTIONARY STATEMENTS

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### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

- Harmful if swallowed.
- Harmful if absorbed through skin.
- Causes moderate eye irritation.
- Avoid contact with eyes, skin, and clothing.
- Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### Applicators and other handlers must wear:

- Long sleeved shirt and long pants.
- Chemical resistant gloves made out of: barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, neoprene rubber  $\geq$  14 mils, natural rubber  $\geq$  14 mils, polyethylene, polyvinyl chloride  $\geq$  14 mils, or viton  $\geq$  14 mils.
- Shoes and socks.

### USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

USER SAFETY RECOMMENDATIONS
<ul style="list-style-type: none"><li>• Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet</li><li>• Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.</li><li>• Users should remove PPE immediately after handling this product.</li></ul>



### ENVIRONMENTAL HAZARDS

#### Terrestrial Use

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

#### Non-Target Organisms

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

Highly toxic to adult *Megachile rotundata* (alfalfa leafcutting bee) via direct contact exposure. Do not apply to foliage when managed alfalfa leafcutting bees are foraging in the treatment area.

Toxic to adult bees in laboratory studies via oral exposure. Not toxic to honey bees or bumble bees through contact exposure. Field studies conducted with this product have shown no effects on honeybee colony development.

#### Surface Water Advisory

**Flupyradifurone** and its degradate difluoroacetic acid may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. **Flupyradifurone** and its degradate difluoroacetic acid are classified as having medium and high potential, respectively, for reaching surface water via run-off for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of flupyradifurone and its degradate difluoroacetic acid from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

### **Ground Water Advisory**

This chemical has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

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## **CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY**

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Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

**LIMITATIONS OF LIABILITY:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE'S ELECTION, THE REPLACEMENT OF PRODUCT.

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## DIRECTIONS FOR USE

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**It is a violation of Federal law to use this product in a manner inconsistent with its labeling.  
Read the entire label before using this product.**

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 agency responsible for pesticide regulation.

**Not for sale, distribution or use in Nassau and Suffolk Counties New York except as permitted under FIFRA Section 24(c),  
Special Local Need Registration.  
No aerial application in New York State.**

### POLLINATOR BEST MANAGEMENT PRACTICE

In order to minimize exposure to pollinators, it is recommended that foliar insecticides are applied late in the afternoon, evening, or at night outside of daily peak foraging periods.

### AGRICULTURE 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, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, 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 Hour(s), with the exception of California and New York. In the state of California the REI is 12 hours. In the state of New York the REI is 4 hours for all listed crops except for grapes for which the REI is 12 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 without restrictions 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
- Chemical resistant gloves
- Chemical resistant footwear plus socks

### PRODUCT INFORMATION

SIVANTO™ 200 SL:

- is a broad-spectrum insecticide, formulated in a 1.67 lb AI/gallon (200 grams AI/liter) SL (soluble liquid);
- belongs to a new class of chemicals known as the Butenolides;
- is acropetally systemic, moving from roots to the leaves in the case of soil applications;
- is translaminar through the leaf tissue and acropetally systemic, moving from points of contact to leaf tips in the case of foliar applications;
- can provide control of labeled pests on the underside of leaves; and
- is readily absorbed into leaf tissue and is considered "rainfast" within 1 hour after spray dries.

### USE RESTRICTIONS

- Do not tank mix with azole fungicides (FRAC group 3) during bloom period.
- Refer to the specific use directions and restrictions in each Crop, Crop Group or Crop Subgroup table.
- Not for use on greenhouse or planthouse crops except where permitted in crop use specific directions or allowed by state specific 24(c) labeling.
- Not for use on crops intended to be grown for seed unless specified otherwise in the crop specific sections of this label or allowed by state specific 24(c) labeling.
- No aerial application in New York State.
- Do not apply to crop foliage during foraging by alfalfa leafcutting bees used for pollination services.

## APPLICATION INSTRUCTIONS

SIVANTO 200 SL may be:

- applied as a foliar application using properly calibrated ground sprayers, fixed or rotary winged aircraft, or through properly designed, sprinkler-type overhead chemigation equipment (See Chemigation – Directions for Use section below); or
- applied as a soil application using low-pressure drip, trickle or micro-sprinkler chemigation, in-furrow, soil shank injection, plant drench, or a planthouse tray drench where permitted in crop use specific directions. For seedling flats or trays, only apply with broadcast, foliar applications or where product is intended to be washed from foliage to soil prior to drying on foliage.

## CHEMIGATION

### Types of Irrigation Systems

SIVANTO 200 SL may be applied by chemigation:

- for foliar applications, through overhead sprinkler-type irrigation systems, including center pivot, lateral move, side roll, or overhead solid-set systems or equivalent equipment; and
- for soil applications, through low-pressure drip, trickle or micro-sprinkler systems or equivalent equipment.

### Uniform Water Distribution and System Calibration

The chemigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. The chemigation system must be calibrated to uniformly apply the rates specified in crop-specific label sections. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

### Chemigation Monitoring

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.

### Required System Safety Devices

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. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. 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. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. 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. 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.

### Using Water from Public Water Systems

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.

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. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow 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 outlet end of the fill pipe and to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional automatic quick-closing check valve to prevent the flow of fluid back toward the injection pump. 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. 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. Do not apply when wind speed favors drift beyond the area intended for treatment.

### Injection for Chemigation

Inject the specified dosage of SIVANTO 200 SL into the irrigation main water stream: (1) through a constant flow, metering device; (2) into the center of the main line flow via a pitot tube or equivalent; (3) at a point ahead of at least one, right-angle turn in the main stream flow such that thorough mixing with the irrigation water is ensured.



## **Center-Pivot and Automatic-Move Linear Systems**

Inject the specified dosage per acre continuously for one complete revolution (center pivot) or move of the system. The system should be run at maximum speed. It is recommended that nozzles in the immediate area of control panels, chemical supply tanks, pumps, and system safety devices be plugged to prevent chemical contamination of these areas. The use of END GUNS is NOT RECOMMENDED. End guns that provide uneven distribution of treated water can result in lack of effectiveness or illegal pesticide residues in or on the crop.

## **Solid Set and Manually Controlled Linear Systems**

For foliar application, injection should be applied at the end of the irrigation cycle and followed by sufficient water to flush the product out of the irrigation system.

## **Flushing and Cleaning the Chemical Injection System**

At the end of the application period, allow time for all lines to flush the pesticide through all nozzles or emitters before turning off irrigation water. To ensure the lines are flushed and free of pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

In order to apply pesticides accurately, the chemical injection system must be kept clean, free of chemical or fertilizer residues and sediments. Refer to your owner's manual or ask your equipment supplier for the cleaning procedure for your injection system.

## **SPRAY DRIFT MANAGEMENT**

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Consult the local Cooperative Extension for additional information. Avoiding spray drift is the responsibility of the applicator.

### **Droplet Size**

Use nozzles and pressure that generate droplet sizes which provide sufficient control and coverage. Higher flow nozzles and lower pressures will produce larger droplets and minimize drift. Use larger droplet size when applying in hot, dry conditions (droplet evaporation is higher under these conditions, thus reducing the effective droplet size and increasing drift potential). Nozzles that deliver coarse spray droplets may be used to reduce spray drift provided spray volume per acre (GPA) is increased to maintain crop coverage. Applications with very coarse, extremely coarse, or ultra-coarse droplets will not provide adequate coverage.

### **Wind Speed**

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. Applications during gusty or calm wind conditions should be avoided. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. For applications made in-furrow or below soil-level, wind speed restrictions are not applicable.

### **Temperature Inversions**

Drift potential is high during temperature inversions and applications should be avoided under these conditions. Temperature inversions 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. If fog is not present, inversions can also be identified by the movement of smoke or dust from a ground source -- smoke or dust that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion.

### **Sensitive Areas**

When applying adjacent to residential areas, water bodies, habitats known to have threatened or endangered species, or non-target crops, drift can be minimized to these areas by making application when the wind direction is away from these areas.

Where states or local authorities have more stringent regulations, they should be observed.

## **Aerial Applications**

- Mount the spray boom on the aircraft so as to minimize drift caused by wing tip vortices.
- The minimum practical boom length should be used, and should not exceed 75% of the wing span or rotor diameter.
- Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety.
- No aerial application in New York State.

## COMPATIBILITY TESTING AND TANK MIX PARTNERS

- If SIVANTO 200 SL is to be tank mixed with other pesticides, compatibility should be tested prior to mixing.
- It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

### Compatibility

SIVANTO 200 SL is physically and biologically compatible with many registered pesticides and fertilizers or micronutrients. However, it is known that many components, including crop protection products, fertilizers, micronutrients, and spray adjuvants, may be present in a tank mix combination. There is potential for adverse chemical reactions. It is impossible to determine physical, biological, and plant compatibility for all scenarios that may be encountered; therefore, it is recommended that users determine the chemical, physical, biological, and plant compatibility of such mixes prior to application on a broad commercial scale.

### Order of Mixing

SIVANTO 200 SL may be used with other recommended pesticides, fertilizers, and micronutrients. The proper mixing procedure for SIVANTO 200 SL alone or in tank mix combinations with other pesticides is the following:

1. Fill the spray tank 1/4 to 1/3 full with clean water.
2. While recirculating and with the agitator running, add any products in PVA bags (See Note). Allow time for thorough mixing.
3. Continue to fill spray tank with water until 1/2 full.
4. Add any wettable powder (WP), water dispersible granule (WG/WDG) products, or "flowable" (FL/SC) type products.
5. Allow enough time for thorough mixing of each product added to tank.
6. Add required amount of SIVANTO 200 SL.
7. If applicable, add any remaining tank mix components: emulsifiable concentrates (EC), fertilizers and micronutrients.
8. Fill spray tank to desired level and maintain constant agitation to ensure uniformity of spray mixture.

Important: Do not use PVA packets in a tank mix with products that contain boron or release free chlorine. The resultant reaction of PVA and boron or free chlorine is a plastic that is not soluble in water or solvents.

## INSECTICIDE RESISTANCE MANAGEMENT (IRAC) RECOMMENDATIONS

For resistance management, SIVANTO 200 SL contains a Group 4D insecticide. Any insect population may contain individuals naturally resistant to SIVANTO 200 SL and other Group 4D insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take one or more of the following steps:

- Rotate the use of SIVANTO 200 SL or other Group 4D insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - o Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - o Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - o When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
  - o Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
  - o The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact Bayer CropScience at 1-866-99BAYER (1-866-992-2937).

## ROTATIONAL CROPS<sup>1</sup>

Treated areas may be replanted in accordance with the following schedule:

### **IMMEDIATE PLANT-BACK:**

Alfalfa; LOW GROWING BERRY - Crops of Crop Subgroup 13-07G (except Cranberry); BRASSICA HEAD and STEM VEGETABLES - Crops of Group 5-16; BULB VEGETABLES - Crops of Crop Group 3-07; BUSHBERRY - Crops of Crop Subgroup 13-07B; CANEBERRY - Crops of Crop Subgroup 13-07A; CEREAL GRAINS - Crops of Crop Group 15 (except Rice; Wild rice); Christmas Tree; Cilantro; CITRUS FRUITS - Crop Group 10-10; Clover; Coffee; COTTONSEED - Crops of Crop Subgroup 20C; CUCURBIT VEGETABLES - Crops of Crop Group 9; FOLIAGE of LEGUME VEGETABLES - Crops of Crop Group 7; FORAGE, FODDER and STRAW OF CEREAL GRAINS - Crops of Crop Group 16 (except Rice; Wild rice); FRUITING VEGETABLES - Crops of Crop Group 8-10; GRASS FORAGE, FODDER and HAY - Crops of Crop Group 17; Hops; Kava Leaves; Kava Root; LEAF PETIOLE VEGETABLES - Crops of Crop Subgroup 22B; LEAFY VEGETABLE - Crops of Crop Group 4-16; LEGUME VEGETABLES (SUCCULENT OR DRIED) - Crops of Crop Group 6; Peanut; Pineapple; POME FRUITS - Crops of Crop Group 11-10; Prickly pear; Cactus Pear;; Quinoa; RAPESEED - Crops of Crop Subgroup 20A; ROOT VEGETABLES (except sugar beet) - Crops of Crop Subgroup 1B; Sesame; SMALL FRUIT VINE CLIMBING (except fuzzy kiwifruit) - Crops of Crop Subgroup 13-07F; STALK and STEM VEGETABLES - Crops of Crop Subgroup 22A (except Prickly pear, pads); STONE FRUITS - Crops of Crop Group 12-12; SUNFLOWER - Crops of Crop Subgroup 20B; Taro leaf; Tobacco; TREE NUTS - Crops of Crop Group 14-12 (except Almond); Tropical and Subtropical, Cactus, inedible peel subgroup 24D; Tropical and Subtropical, Medium to large fruit, smooth, inedible peel-Crop Subgroup 24B; Tropical and Subtropical, Palm fruit, edible peel subgroup 23C; TUBEROUS and CORM VEGETABLES - Crops of Crop Subgroup 1C;

### **14-DAY PLANT-BACK:**

Sugarcane<sup>3</sup>

### **12-MONTH PLANT-BACK:**

For crops not listed on this label, or for crops for which no tolerances for the active ingredients have been established, the plant-back interval must be observed.

<sup>1</sup>Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed.

<sup>2</sup>For Idaho, Oregon and Washington Only.

<sup>3</sup>Sugarcane: 12-month plant back in all registered states except for Florida (14-Day).

## CROP USE DIRECTIONS

Choose the lower rate for light infestations and the higher rate for heavy infestations.

<b>ALFALFA FOLIAR - Grown For Forage, Fodder, Straw, and Hay</b>	
<b>Pest Controlled</b>	<b>Product Rate (fl oz/A)</b>
Aphids	7.0 – 14.0
Leafhoppers	
Three-cornered alfalfa hopper	10.5 – 14.0
Whiteflies	
<b>Pest Suppressed</b>	<b>Product Rate (fl oz/A)</b>
Tarnished plant bug ( <i>Lygus lineolaris</i> )	14.0

Western plant bug ( <i>Lygus hesperus</i> )	
<b>Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>7 Day(s)</b> Minimum interval between applications: <b>10 Day(s)</b> Minimum Application Volume: <b>10 Gallons/Acre</b>   Ground ; <b>3 Gallons/Acre</b>   Aerial Do not apply more than <b>28 fl oz</b> of SIVANTO 200 SL ( <b>0.365 Pound Flupyradifurone</b> ) per <b>Acre Per Calendar Year</b> on alfalfa, regardless of product or formulation. Do not use on Alfalfa Grown for Seed.	

<b>BRASSICA HEAD AND STEM VEGETABLE AND KOHLRABI FOLIAR</b>  <b>Crops of Group 5-16</b> - Broccoli; Brussels sprouts; Cabbage; Cabbage, Chinese, napa; Cauliflower; cultivars, varieties, and/or hybrids of these	
Pest Controlled	Product Rate (fl oz/A)
Aphids (except green peach aphid)	7.0 – 14.0
Leafhoppers	
Green peach aphid	10.5 – 14.0
Whiteflies	
<b>Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>1 Day(s)</b> Minimum interval between applications: <b>7 Day(s)</b> Minimum Application Volume: <b>10 Gallons/Acre</b>   Ground ; <b>3 Gallons/Acre</b>   Aerial Do not apply more than <b>28 fl oz</b> of SIVANTO 200 SL ( <b>0.365 Pound Flupyradifurone</b> ) per <b>Acre Per Crop Season</b> on brassica (cole) leafy vegetables, regardless of method of application, product or formulation. Maximum number of crop seasons per year: <b>3</b>	

<b>BRASSICA HEAD AND STEM VEGETABLE AND KOHLRABI SOIL</b>  <b>Crops of Group 5-16</b> - Broccoli; Brussels sprouts; Cabbage; Cabbage, Chinese, napa ; Cauliflower; cultivars, varieties, and/or hybrids of these	
Pest Controlled	Product Rate (fl oz/A)
Aphids	21.0 – 28.0
Leafhoppers	
Whiteflies	
<b>Application Information:</b> SIVANTO 200 SL may be applied at the specified dosage by the following methods: <ul style="list-style-type: none"> <li>• Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment</li> <li>• Injection below the eventual seed line prior to planting. Place SIVANTO 200 SL 3 - 4 inches below seed line</li> <li>• Potting hole drench at transplanting</li> <li>• Post-transplant drench following setting and covering</li> </ul>	

**Application Restrictions:**Pre-Harvest Interval (PHI): **21 Day(s)**Do not apply more than **28 fl oz** of SIVANTO 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Crop Season** on brassica (cole) leafy vegetables, regardless of method of application, product or formulation.Maximum number of crop seasons per year: **3****BUSHBERRY (Subgroup 13-07B)****FOLIAR**

Aronia berry; Blueberry (*Vaccinium* spp. - highbush, lowbush, and cultivars and/or hybrids of these); Chilean guava; Currant (black, buffalo, native and red); Elderberry; European barberry; Gooseberry; Highbush cranberry; Honeysuckle, edible; Huckleberry; Jostaberry; Juneberry (Saskatoon Serviceberry); Lingonberry; Salal; Sea buckthorn; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 14.0
Blueberry thrips-feeding damage reduction ( <i>Frankliniella vaccinii</i> )	10.5 – 14.0
Blueberry maggot	12.0 – 14.0
Pest Suppressed	Product Rate (fl oz/A)
Blueberry thrips ( <i>Scirtothrips citri</i> )	10.5 – 14.0
Chilli thrips ( <i>Scirtothrips dorsalis</i> )	14.0

**Application Restrictions:**Pre-Harvest Interval (PHI): **3 Day(s)**Minimum interval between applications: **7 Day(s)**Minimum Application Volume: **25 Gallons/Acre** | Ground ; **3 Gallons/Acre** | AerialDo not apply more than **28 fl oz** of SIVANTO 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on bushberry, regardless of product or formulation.**CANEBERRY (Subgroup 13-07A)****FOLIAR**

Blackberry; Loganberry; Raspberry (black and red); Wild raspberry; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 14.0
Whiteflies	10.5 – 14.0

**Application Restrictions:**Pre-Harvest Interval (PHI): **0 Day(s)**Minimum interval between applications: **7 Day(s)**Minimum Application Volume: **30 Gallons/Acre** | Ground ; **3 Gallons/Acre** | AerialDo not apply more than **28 fl oz** of SIVANTO 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Year** on caneberry, regardless of product or formulation.

**CEREAL GRAINS (Group 15), FORAGE, FODDER AND STRAW OF CEREAL GRAINS (Group 16) AND QUINOA FOLIAR - Including production for seed**

**Crops of Crop Group 15 (excluding Rice; Wild rice)** - Barley; Buckwheat; Corn (field corn, seed corn, sweet corn and popcorn); Millet, pearl; Millet, proso; Oat; Rye; Sorghum, milo (including sorghum grown for syrup)<sup>1</sup>; Teosinte; Triticale; Wheat.

**Crops of Crop Group 16 (excluding Rice; Wild rice)** - Barley; Buckwheat; Corn (field corn, seed corn, sweet corn and popcorn); Millet, pearl; Millet, proso; Oat; Rye; Sorghum, milo (including sorghum grown for syrup); Teosinte; Triticale; Wheat

<sup>1</sup>See separate Use Table for Sorghum - Soil application instructions

Pest Controlled	Product Rate (fl oz/A)
Aphids Leafhoppers	7.0 – 14.0
Whiteflies	10.5 – 14.0

**Application Restrictions:**

Pre-Harvest Interval (PHI): **7 Day(s)** - hay, forage, sorghum grown for syrup, or sweet corn

Pre-Harvest Interval (PHI): **21 Day(s)** - dried grain, stover or straw

Minimum interval between applications: **7 Day(s)**

Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on cereal grains, regardless of method of application, product or formulation.

**CHRISTMAS TREES FOLIAR**

Pest Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 14.0

**Application Information:**

Start treatments when pests are first detected.

Use the higher rate for higher pest infestation levels.

**Application Restrictions:**

Minimum Application Volume: **25 Gallons/Acre** | Ground ; **10 Gallons/Acre** | Aerial

Minimum interval between applications: **7 Day(s)**

**CITRUS FRUITS (Group 10-10)**  
**FOLIAR**

Calamondin; Citron; Citrus hybrids; Grapefruit; Japanese summer grapefruit; Kumquat; Lemon; Lime; Lime (Sweet, Australian desert, Australian finger, Australian round, Brown River finger, Mount White, New Guinea wild, Russell River, Tahiti); Mediterranean mandarin; Orange (sour, sweet, Tachibana, Trifoliata); Pummelo; Satsuma mandarin; Tangelo; Tangerine (Mandarin); Orange, sweet; Orange, sour; Mediterranean mandarin; Satsuma mandarin; Tangor; Uniq fruit; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Aphids Citrus mealybug	7.0 – 14.0
Asian citrus psyllid Citricola scale Whiteflies	10.5 – 14.0
Pest Suppressed	Product Rate (fl oz/A)
Barnacle scale <sup>1</sup> Citrus thrips ( <i>Scirtothrips citri</i> ) Katydid nymphs	10.5 – 14.0
Citrus leafminer	14.0

**Application Information:**

<sup>1</sup>Time SIVANTO 200 SL applications for control of barnacle scale according to crawler stage. Two applications may be required to achieve best efficacy.

**Application Restrictions:**

Pre-Harvest Interval (PHI): **1 Day(s)**

Minimum interval between applications: **10 Day(s)**

Minimum Application Volume: **50 Gallons/Acre** | Ground ; **10 Gallons/Acre** | Aerial

For Florida only- minimum application volumes: 2.5 gallons/Acre (Ground); For Florida and Texas only: 3 gallons/Acre (Aerial) for control of Asian citrus psyllid. For control or suppression of other pests, application volumes should be increased to provide thorough and complete coverage to obtain adequate control.

Do not apply more than **28 fl oz** of SIVANTO 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on citrus fruit, regardless of method of application, product or formulation.

**CITRUS FRUITS (Group 10-10)**  
**SOIL**

Calamondin; Citron; Citrus hybrids; Grapefruit; Japanese summer grapefruit; Kumquat; Lemon; Lime; Lime (Sweet, Australian desert, Australian finger, Australian round, Brown River finger, Mount White, New Guinea wild, Russell River, Tahiti); Mediterranean mandarin; Orange (sour, sweet, Tachibana, Trifoliolate); Pummelo; Satsuma mandarin; Tangelo; Tangerine (Mandarin); Orange, sweet; Orange, sour; Mediterranean mandarin; Satsuma mandarin; Tangor; Uniq fruit; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Aphids Asian citrus psyllid Whiteflies	21.0 – 28.0
Pest Suppressed	Product Rate (fl oz/A)
Citrus canker ( <i>Xanthomonas citri</i> subsp. <i>Citri</i> )	28.0

**Application Information:**

SIVANTO 200 SL may be applied at the specified dosage by the following methods:

- Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment
- Basal drench in sufficient water to move SIVANTO 200 SL into root zone

**Application Restrictions:**

Pre-Harvest Interval (PHI): **30 Day(s)**

Do not apply more than **28 fl oz** of SIVANTO 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on citrus fruit, regardless of method of application, product or formulation.

**CLOVER<sup>1</sup>**

**FOLIAR - Grown For Forage, Fodder, Seed, Straw and Hay**

Pest Controlled	Product Rate (fl oz/A)
Aphids Leafhoppers	7.0 – 14.0

**Application Restrictions:**

Pre-Harvest Interval (PHI): **14 Day(s)**

Minimum interval between applications: **10 Day(s)**

Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on clover, regardless of product or formulation.

<sup>1</sup>Only For Use in: Idaho, Oregon, and Washington



<b>COFFEE FOLIAR</b>	
<b>Pest Controlled</b>	<b>Product Rate (fl oz/A)</b>
Green Scale	7.0 – 14.0
<b>Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>0 Day(s)</b> Minimum interval between applications: <b>7 Day(s)</b> Minimum Application Volume: <b>10 Gallons/Acre</b>   Ground ; <b>3 Gallons/Acre</b>   Aerial Do not apply more than <b>28 fl oz</b> of SIVANTO™ 200 SL ( <b>0.365 Pound Flupyradifurone</b> ) per <b>Acre Per Calendar Year</b> on coffee, regardless of product or formulation.	

<b>COTTONSEED (Subgroup 20C) FOLIAR - Including Production for Seed</b>	
<b>Pest Controlled</b>	<b>Product Rate (fl oz/A)</b>
Aphids	7.0 – 14.0
Fleahoppers	
Whiteflies	10.5 – 14.0
<b>Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>14 Day(s)</b> Minimum interval between applications: <b>10 Day(s)</b> Minimum Application Volume: <b>10 Gallons/Acre</b>   Ground ; <b>3 Gallons/Acre</b>   Aerial Do not apply more than <b>28 fl oz</b> of SIVANTO 200 SL ( <b>0.365 Pound Flupyradifurone</b> ) per <b>Acre Per Calendar Year</b> on cotton, regardless of product or formulation.	

<b>CUCURBIT VEGETABLES (Group 9) PLANTHOUSE</b>	
Chayote (fruit); Chinese waxgourd (Chinese preserving melon); Citron melon; Cucumber; Gherkin; Gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); Momordica spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber); Muskmelon (hybrids and/or cultivars of Cucumis melo including true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon) ; Pumpkin; Squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); Squash, winter (includes acorn squash, butternut squash, calabaza, hubbard squash, spaghetti squash) ; Watermelon (includes hybrids and/or varieties of Citrullus lanatus)	
<b>Pest Controlled</b>	<b>Product Rate (fl oz/10,000 Plants)</b>
Aphids	0.34
Leafhoppers	
Whiteflies	
<b>Disease Suppressed</b>	<b>Product Rate (fl oz/10,000 Plants)</b>

CYSDV - Cucurbit yellow stunting disorder virus	0.34
<b>Application Information:</b> Apply specified dosage to seedlings in trays in the planthouse, targeting potting media (tray drench) between 24 hours and 7 days prior to transplanting, in one of the following methods: • Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash SIVANTO 200 SL from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash SIVANTO 200 SL from foliage may result in reduced pest control • Injection into overhead irrigation system, using adequate volume to thoroughly saturate potting media without loss of gravitational solution from the bottom of the tray The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Transplants must be handled carefully during setting to avoid dislodging treated potting media from roots. Not all varieties of cucurbit vegetables have been tested for adverse crop response to SIVANTO 200 SL applied to seedling flats. It is therefore recommended to treat a small number of plants and confirm crop tolerance for 7 days prior to treating entire planthouse.	
<b>Application Restrictions:</b> Only for use on seedlings intended as transplants. Not for use in Greenhouses. Pre-Harvest Interval (PHI): <b>21 Day(s)</b> Maximum SIVANTO 200 SL applied in the planthouse: <b>0.34</b> fluid ounces/10,000 plants ( <b>0.011</b> lb AI) Maximum number of SIVANTO 200 SL applications in planthouse per crop: <b>1</b> Do not apply more than <b>28 fl oz</b> of SIVANTO 200 SL ( <b>0.365 Flupyradifurone</b> ) per <b>Acre Per Crop Season</b> on cucurbit vegetables, regardless of method of application, product or formulation.	

<b>CUCURBIT VEGETABLES (Group 9)</b> <b>FOLIAR</b> Chayote (fruit); Chinese waxgourd (Chinese preserving melon); Citron melon; Cucumber; Gherkin; Gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); Momordica spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber); Pumpkin; Squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); Squash, winter (includes acorn squash, butternut squash, calabaza, hubbard squash, spaghetti squash) ; Watermelon (includes hybrids and/or varieties of Citrullus lanatus)	
<b>Pest Controlled</b>	<b>Product Rate (fl oz/A)</b>
Aphids (except green peach aphid)	7.0 – 14.0
Leafhoppers	
Green peach aphid	10.5 – 14.0
Squash bug	
Whiteflies	
<b>Disease Suppressed</b>	<b>Product Rate (fl oz/A)</b>
CYSDV - Cucurbit yellow stunting disorder virus	14.0
<b>Application Information:</b> A mild yellowing on leaf margins is sometimes seen following application of SIVANTO 200 SL in cucurbits.	
<b>Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>1 Day(s)</b> Minimum interval between applications: <b>7 Day(s)</b> Minimum Application Volume: <b>10 Gallons/Acre</b>   Ground ; <b>3 Gallons/Acre</b>   Aerial Do not apply more than <b>28 fl oz</b> of SIVANTO 200 SL ( <b>0.365 Pound Flupyradifurone</b> ) per <b>Acre Per Calendar Year</b> on cucurbit	

vegetables, regardless of product or formulation.

Do not apply SIVANTO 200 SL as a foliar application to muskmelon (hybrids and/or cultivars of Cucumis melo including true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon).

## CUCURBIT VEGETABLES (Group 9)

### SOIL

Chayote (fruit); Chinese waxgourd (Chinese preserving melon); Citron melon; Cucumber; Gherkin; Gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); Momordica spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber); Muskmelon (hybrids and/or cultivars of Cucumis melo including true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon) ; Pumpkin; Squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); Squash, winter (includes acorn squash, butternut squash, calabaza, hubbard squash, spaghetti squash) ; Watermelon (includes hybrids and/or varieties of Citrullus lanatus)

Pest Controlled	Product Rate (fl oz/A)
Aphids Leafhoppers	21.0 – 28.0
Disease Suppressed	Product Rate (fl oz/A)
CYSDV - Cucurbit yellow stunting disorder virus	28.0

#### Application Information:

SIVANTO 200 SL may be applied at the specified dosage by the following methods:

- Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment
- Injection below the eventual seed line prior to planting. Place SIVANTO 200 SL 3-4 inches below seed line
- Potting hole drench at transplanting
- Post-transplant drench following setting and covering

A mild yellowing on leaf margins is sometimes seen following application of SIVANTO 200 SL in cucurbits.

#### Application Restrictions:

Pre-Harvest Interval (PHI): **21 Day(s)**

Do not apply more than **28 fl oz** of SIVANTO 200 SL ( **0.365 Pound Flupyradifurone**) per **Acre Per Crop Season** on cucurbit vegetables, regardless of method of application, product or formulation.

Maximum number of crop seasons per year: **3**

## FRUITING VEGETABLES (Group 8-10)

### PLANTHOUSE

African eggplant; Bush tomato; Cocona; Currant tomato; Eggplant; Garden huckleberry; Goji berry; Groundcherry; Martynia; Naranjilla; Okra; Pea eggplant; Pepino; Pepper, bell; Pepper, nonbell; Roselle; Scarlet eggplant; Sunberry; Tomatillo; Tomato; Tree tomato; cultivars, varieties and/or hybrids of these

Pest Controlled	Product Rate (fl oz/10,000 Plants)
Aphids Leafhoppers Psyllids	0.34

Whiteflies	
Disease Suppressed	Product Rate (fl oz/10,000 Plants)
TYLCV - Tomato yellow leaf curl virus	0.34
<b>Application Information:</b> Apply specified dosage to seedlings in trays in the planthouse, targeting potting media (tray drench) between 24 hours and 7 days prior to transplanting, in one of the following methods: <ul style="list-style-type: none"> <li>• Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash SIVANTO 200 SL from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash SIVANTO 200 SL from foliage may result in reduced pest control</li> <li>• Injection into overhead irrigation system, using adequate volume to thoroughly saturate potting media without loss of gravitational solution from the bottom of the tray</li> </ul> The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Transplants must be handled carefully during setting to avoid dislodging treated potting media from roots. Not all varieties of fruiting vegetables have been tested for adverse crop response to SIVANTO 200 SL applied to seedling flats. It is therefore recommended to treat a small number of plants and confirm crop tolerance for 7 days prior to treating entire planthouse.	
<b>Application Restrictions:</b> Only for use on seedlings intended as transplants. Not for use in Greenhouses. Pre-Harvest Interval (PHI): <b>45 Day(s)</b> Maximum SIVANTO 200 SL applied in the planthouse: <b>0.34 fl oz /10,000 plants (0.011 Pound AI)</b> Maximum number of SIVANTO 200 SL applications in planthouse per crop: <b>1</b> Do not apply more than <b>28 fl oz</b> of SIVANTO 200 SL ( <b>0.365 Pound Flupyradifurone</b> ) per <b>Acre Per Crop Season</b> on fruiting vegetables, regardless of method of application, product or formulation.	

<b>FRUITING VEGETABLES (Group 8-10)</b> <b>SOIL</b>  African eggplant; Bush tomato; Cocona; Currant tomato; Eggplant; Garden huckleberry; Goji berry; Groundcherry; Martynia; Naranjilla; Okra; Pea eggplant; Pepino; Pepper, bell; Pepper, nonbell; Roselle; Scarlet eggplant; Sunberry; Tomatillo; Tomato; Tree tomato; cultivars, varieties and/or hybrids of these	
Disease Controlled	Product Rate (fl oz/A)
TYLCV - Tomato yellow leaf curl virus	28.0
Pest Controlled	Product Rate (fl oz/A)
Aphids  Leafhoppers  Psyllids  Whiteflies	21.0 – 28.0
<b>Application Information:</b> SIVANTO 200 SL may be applied at the specified dosage by the following methods: <ul style="list-style-type: none"> <li>• Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment</li> <li>• Injection below the eventual seed line prior to planting. Place SIVANTO 200 SL 3-4 inches below seed line</li> <li>• Potting hole drench at transplanting</li> <li>• Post-transplant drench following setting and covering</li> </ul>	
<b>Application Restrictions:</b>	

Pre-Harvest Interval (PHI): **45 Day(s)**

Do not apply more than **28 fl oz** of SIVANTO 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Crop Season** on fruiting vegetables, regardless of method of application, product or formulation.

Maximum number of crop seasons per year: **3**

## FRUITING VEGETABLES (Group 8-10)

### FOLIAR

African eggplant; Bush tomato; Cocona; Currant tomato; Eggplant; Garden huckleberry; Goji berry; Groundcherry; Martynia; Naranjilla; Okra; Pea eggplant; Pepino; Pepper, bell; Pepper, nonbell; Roselle; Scarlet eggplant; Sunberry; Tomatillo; Tomato; Tree tomato; cultivars, varieties and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Aphids (except green peach aphid) Leafhoppers	7.0 – 14.0
Colorado potato beetle Green peach aphid Psyllids Whiteflies	10.5 – 14.0
Disease Suppressed	Product Rate (fl oz/A)
TYLCV - Tomato yellow leaf curl virus	14.0
Pest Suppressed	Product Rate (fl oz/A)
Chilli thrips ( <i>Scirtothrips dorsalis</i> )	12.0 – 14.0

### Application Restrictions:

Pre-Harvest Interval (PHI): **1 Day(s)**

Minimum interval between applications: **7 Day(s)**

Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on fruiting vegetables, regardless of product or formulation.

**GRASS FORAGE, FODDER AND HAY (Group 17)<sup>1</sup>**  
**FOLIAR**

All pasture and range grasses and grasses grown for hay or silage; Any grass, Gramineae family (either green or cured) except sugarcane and those included in the cereal grains group (barley; buckwheat; Corn; Millet, pearl; Millet, proso; Oat; Popcorn; Rice; Rye; Sorghum (milo); Teosinte; Triticale; Wheat; Wild rice)

Pest Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 14.0

**Application Restrictions:**

Pre-Harvest Interval (PHI): **7 Day(s)**

Minimum interval between applications: **7 Day(s)**

Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO™ 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on grasses, regardless of product or formulation.

<sup>1</sup>Only For Use in: Idaho and Oregon.

**HOP**  
**FOLIAR**

Pest Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 10.7

**Application Restrictions:**

Pre-Harvest Interval (PHI): **21 Day(s)**

Minimum Application Volume: **25 Gallons/Acre** | Ground ; **10 Gallons/Acre** | Aerial

Do not apply more than **10.7 fl oz** of SIVANTO™ 200 SL (**0.14 Pound Flupyradifurone**) per **Acre Per Calendar Year** on hop, regardless of product or formulation.

**KAVA**  
**FOLIAR**

Kava Leaves; Kava Root

Pest Controlled	Product Rate (fl oz/A)
Aphids (except green peach aphid)	7.0 – 14.0
Leafhoppers	
Green peach aphid	10.5 – 14.0
Whiteflies	

**Application Restrictions:**

Pre-Harvest Interval (PHI): **7 Day(s)**

Minimum interval between applications: **10 Day(s)**

Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO™ 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Crop Season** on kava, regardless of method of application, product or formulation.

Maximum number of crop seasons per year: 3

**LEAF PETIOLE VEGETABLE  
FOLIAR**

**Crops of Crop Subgroup 22B** - Cardoon; Celery; Celery, Chinese; Fuki ; Rhubarb; Udo ; Zuiki; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Aphids (except green peach aphid) Leafhoppers	7.0 – 14.0
Green peach aphid Whiteflies	10.5 – 14.0

**Application Restrictions:**

Pre-Harvest Interval (PHI): **1 Day(s)**

Minimum interval between applications: **7 Day(s)**

Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO™ 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Crop Season** on stalk and stem vegetables, regardless of method of application, product or formulation.

Maximum number of crop seasons per year: 3

**CELTUCE; FENNEL, FLORENCE, FRESH LEAVES AND STALK  
FOLIAR**

Pest Controlled	Product Rate (fl oz/A)
Aphids (except green peach aphid) Leafhoppers	7.0 – 14.0
Green peach aphid Whiteflies	10.5 – 14.0

**Application Restrictions:**

Pre-Harvest Interval (PHI): **1 Day(s)**

Minimum interval between applications: **7 Day(s)**

Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO™ 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Crop Season** on stalk and stem vegetables, regardless of method of application, product or formulation.

Maximum number of crop seasons per year: 3

**LEAFY VEGETABLE (Group 4-16)<sup>1</sup>**  
**FOLIAR**

Amaranth, Chinese; Amaranth, leafy; Arugula; Aster, Indian ; Blackjack ; Broccoli raab ; Broccoli, Chinese ; Cabbage, abyssinian; Cabbage, Chinese, bok choy; Cabbage, seakale; Cat's whiskers; Cham-chwi ; Cham-na-mul; Chervil, fresh leaves ; Chipilin ; Chrysanthemum, garland; Cilantro, fresh leaves; Collards; Corn salad; Cosmos ; Cress, garden; Cress, upland; Dandelion, leaves ; Dang-gwi, leaves ; Dillweed ; Dock ; Dol-nam-mul ; Ebolo ; Endive ; Escarole; Fameflower ; Feather cockscomb ; Good King Henry ; Hanover salad ; Huauzontle ; Jute, leaves ; Kale; Lettuce, bitter ; Lettuce, head; Lettuce, leaf ; Maca, leaves ; Mizuna; Mustard greens; Orach; Parsley, fresh leaves ; Plantain, buckthorn ; Primrose, English ; Purslane, garden; Purslane, winter; Radicchio ; Radish, leaves ; Rape greens; Rocket, wild ; Shepherd's purse ; Spinach; Spinach, Malabar ; Spinach, New Zealand; Spinach, tanier ; Swiss chard; Turnip greens; Violet, Chinese, leaves ; Watercress<sup>2</sup>; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Aphids (except green peach aphid)  Leafhoppers	7.0 – 14.0
Green peach aphid  Whiteflies	10.5 – 14.0

**Application Restrictions:**

Pre-Harvest Interval (PHI): **1 Day(s)**

Minimum interval between applications: **7 Day(s)**

Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO 200 SL ( **0.365 Pound Flupyradifurone**) per **Acre Per Crop Season** on leafy vegetables, regardless of method of application, product or formulation.

Maximum number of crop seasons per year: **3**

<sup>1</sup>See separate table for taro leaves use directions.

<sup>2</sup>For applications made to watercress, production fields must be drained of water at least 24 hours prior to application and water must not be reapplied to the field for a minimum of 24 hours following the application.

**LEAFY VEGETABLE (Group 4-16)<sup>1</sup>**  
**SOIL**

Amaranth, Chinese; Amaranth, leafy; Arugula; Aster, Indian ; Blackjack ; Broccoli raab ; Broccoli, Chinese ; Cabbage, abyssinian; Cabbage, Chinese, bok choy; Cabbage, seakale; Cat's whiskers; Cham-chwi ; Cham-na-mul; Chervil, fresh leaves ; Chipilin ; Chrysanthemum, garland; Cilantro, fresh leaves; Collards; Corn salad; Cosmos ; Cress, garden; Cress, upland; Dandelion, leaves ; Dang-gwi, leaves ; Dillweed ; Dock ; Dol-nam-mul ; Ebolo ; Endive ; Escarole; Fameflower ; Feather cockscomb ; Good King Henry ; Hanover salad ; Huauzontle ; Jute, leaves ; Kale; Lettuce, bitter ; Lettuce, head; Lettuce, leaf ; Maca, leaves ; Mizuna; Mustard greens; Orach; Parsley, fresh leaves ; Plantain, buckthorn ; Primrose, English ; Purslane, garden; Purslane, winter; Radicchio ; Radish, leaves ; Rape greens; Rocket, wild ; Shepherd's purse ; Spinach; Spinach, Malabar ; Spinach, New Zealand; Spinach, tanier ; Swiss chard; Turnip greens; Violet, Chinese, leaves ; Watercress<sup>2</sup>; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Aphids  Leafhoppers  Whiteflies	21.0 – 28.0

**Application Information:**

SIVANTO 200 SL may be applied at the specified dosage by the following methods:



- Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment
- Injection below the eventual seed line prior to planting. Place SIVANTO 200 SL 3-4 inches below seed line
- Potting hole drench at transplanting
- Post-transplant drench following setting and covering

#### Application Restrictions:

Pre-Harvest Interval (PHI): **21 Day(s)**

Do not apply more than **28 fl oz** of SIVANTO 200 SL ( **0.365 Pound Flupyradifurone**) per **Acre Per Crop Season** on leafy vegetables, regardless of method of application, product or formulation.

Maximum number of crop seasons per year: 3

<sup>1</sup>See separate table for taro leaves use directions.

<sup>2</sup>For applications made to watercress, production fields must be drained of water at least 24 hours prior to application and water must not be reapplied to the field for a minimum of 24 hours following the application.

#### LEGUME VEGETABLES (SUCCULENT OR DRIED) (Group 6) and FOLIAGE OF LEGUME VEGETABLES (Group 7) FOLIAR

**Crops of Crop Group 6** - Bean (Lupinus spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); Bean (Phaseolus spp.) (includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean); Bean (Vigna spp.) (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean); Broad bean (fava bean); Chickpea (garbanzo bean); Guar; Jackbean; Lablab bean (hyacinth bean); Lentil; Pea (Pisum spp.) (includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea); Pigeon pea; Soybean; Soybean (immature seed); Sword bean.

**Crops of Crop Group 7** - Bean; Field pea

Pest Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 14.0
Leafhoppers	
Whiteflies	10.5 – 14.0

#### Application Restrictions:

Pre-Harvest Interval (PHI): **7 Day(s)** – Forage, Leaves, Vines, Pods, Cutting for Hay, or Seed (fresh or dry, except dry soybean seed); **21 Day(s)** – dry soybean seed

Minimum interval between applications: **10 Day(s)**

Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on legume vegetables (succulent or dried), regardless of product or formulation.

**LOW GROWING BERRY****(Subgroup 13-07G)****FOLIAR - excluding Cranberry and Blueberry, lowbush;**Bearberry; Bilberry; Cloudberry; Lingonberry; Muntries; Partridgeberry; Strawberry; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 14.0
Blueberry thrips-feeding damage reduction ( <i>Frankliniella vaccinii</i> )  Whiteflies	10.5 – 14.0
Blueberry maggot	12.0 – 14.0
Pest Suppressed	Product Rate (fl oz/A)
Blueberry thrips ( <i>Scirtothrips citri</i> )	10.5 – 14.0
Chilli thrips ( <i>Scirtothrips dorsalis</i> )	14.0

**Application Restrictions:**Pre-Harvest Interval (PHI): **0 Day(s)**Minimum interval between applications: **10 Day(s)**Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | AerialDo not apply more than **28 fl oz** of SIVANTO 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on low growing berry, regardless of product or formulation.**PEANUT  
FOLIAR**

Pest Controlled	Product Rate (fl oz/A)
Aphids  Leafhoppers	7.0 – 14.0
Three-cornered alfalfa hopper  Whiteflies	10.5 – 14.0

**Application Restrictions:**Pre-Harvest Interval (PHI): **7 Day(s)**Minimum interval between applications: **10 Day(s)**Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | AerialDo not apply more than **28 fl oz** of SIVANTO 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on peanut, regardless of product or formulation.

<b>PINEAPPLE FOLIAR</b>	
<b>Pest Controlled</b>	<b>Product Rate (fl oz/A)</b>
Mealybugs	7.0 – 14.0
<b>Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>0 Day(s)</b> Minimum interval between applications: <b>7 Day(s)</b> Minimum Application Volume: <b>10 Gallons/Acre</b>   Ground ; <b>3 Gallons/Acre</b>   Aerial Do not apply more than <b>28 fl oz</b> of SIVANTO™ 200 SL ( <b>0.365 Pound Flupyradifurone</b> ) per <b>Acre Per Calendar Year</b> on pineapple, regardless of product or formulation.	

<b>POME FRUIT (Group 11-10) FOLIAR</b>	
Apple; Azarole; Crabapple; Loquat; Mayhaw; Medlar; Pear; Pear, Asian; Pseudocystodonia sinensis (Thouin) C.K. Schneid.; Quince; Quince, Chinese; Quince, Japanese; Tejocote; cultivars, varieties, and/or hybrids of these	
<b>Pest Controlled</b>	<b>Product Rate (fl oz/A)</b>
Aphids (except woolly apple aphid)	7.0 – 14.0
Leafhoppers	
Oystershell scale	10.5 – 14.0
Pear psylla	
San Jose scale <sup>1</sup>	
<b>Pest Suppressed</b>	<b>Product Rate (fl oz/A)</b>
Woolly apple aphids	12.0 – 14.0
<b>Application Information:</b> For best results, combine SIVANTO 200 SL with a horticultural oil for pre-bloom applications targeting San Jose scale. <sup>1</sup> Suppression in Idaho, Oregon, and Washington.	
<b>Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>14 Day(s)</b> Minimum interval between applications: <b>10 Day(s)</b> Minimum Application Volume: <b>25 Gallons/Acre</b>   Ground ; <b>10 Gallons/Acre</b>   Aerial Do not apply more than <b>28 fl oz</b> of SIVANTO 200 SL ( <b>0.365 Pound Flupyradifurone</b> ) per <b>Acre Per Calendar Year</b> on pome fruit, regardless of product or formulation. Do not apply SIVANTO 200 SL with horticultural oils to pear in late-season or during periods of above average temperatures.	

**RAPESEED (SUBGROUP 20A)**  
**FOLIAR**

Borage; Crambe; Cuphea; Echium; Flax seed; Gold of pleasure; Hare's ear mustard; Lesquerella; Lunaria; Meadowfoam; Milkweed; Mustard seed; Oil radish; Poppy seed; Rapeseed; Sesame; Sweet rocket; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Flea beetle	7.0 – 14.0

**Application Restrictions:**

Do not apply after bolting (BBCH30: the plant stage when stem elongation starts).

Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | Aerial

Do not apply more than **21 fl oz** of SIVANTO™ 200 SL (**0.276 Pound Flupyradifurone**) per **Acre Per Crop Season** on rapeseed, regardless of product or formulation.

**ROOT VEGETABLES - EXCEPT SUGARBEET (Subgroup 1B)**  
**FOLIAR**

Beet, garden; Burdock, edible; Carrot; Celeriac (celery root); Chervil, turnip-rooted; Chicory; Ginseng; Horseradish; Parsley, turnip-rooted; Parsnip; Radish; Radish, oriental (daikon); Rutabaga; Salsify (oyster plant); Salsify, black; Salsify, Spanish; Skirret; Turnip

Pest Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 14.0
Leafhoppers	
Whiteflies	10.5 – 14.0

**Application Restrictions:**

Pre-Harvest Interval (PHI): **7 Day(s)**

Minimum interval between applications: **10 Day(s)**

Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO 200 SL ( **0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on root vegetables, regardless of product or formulation.

Do not harvest the tops (leaves) from any crop listed under Crop Subgroup 1B, except turnip greens and kava leaves, for human or livestock consumption.

**SESAME**  
**FOLIAR**

Pest Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 14.0
Lygus spp.	
Whiteflies	

**Application Restrictions:**

Pre-Harvest Interval (PHI): **14 Day(s)**

Minimum interval between applications: **10 Day(s)**

Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | Aerial  
Do not apply more than **28 fl oz** of SIVANTO™ 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on sesame, regardless of product or formulation.

**SMALL FRUIT VINE CLIMBING - EXCEPT FUZZY KIWIFRUIT (Subgroup 13-07F)  
FOLIAR**

Amur river grape; Gooseberry; Grape; Kiwifruit (hardy only); Maypop; Schisandra berry; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Leafhoppers Sharpshooters	7.0 – 14.0
Vine mealybug	12.0 – 14.0

**Application Restrictions:**

Pre-Harvest Interval (PHI): **0 Day(s)**

Minimum interval between applications: **10 Day(s)**

Minimum Application Volume: **25 Gallons/Acre** | Ground ; **10 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO 200 SL ( **0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on small fruit vine climbing, regardless of method of application, product or formulation.

**SMALL FRUIT VINE CLIMBING - EXCEPT FUZZY KIWIFRUIT (Subgroup 13-07F)SOIL**

Amur river grape; Gooseberry; Grape; Kiwifruit (hardy only); Maypop; Schisandra berry; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Leafhoppers Sharpshooters Vine mealybug	21.0 – 28.0

**Application Information:**

SIVANTO 200 SL may be applied at the specified dosage by the following methods:

- Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment
- Basal drench in sufficient water to move SIVANTO 200 SL into root zone

**Application Restrictions:**

Pre-Harvest Interval (PHI): **30 Day(s)**

Do not apply more than **28 fl oz** of SIVANTO 200 SL ( **0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on small fruit vine climbing, regardless of method of application, product or formulation.

**SORGHUM****SOIL - Including sorghum grown for syrup**

Pest Controlled	Product Rate (fl oz/A)
Aphids	10.0 – 28.0
<b>Application Information:</b> SIVANTO 200 SL may be applied at the specified dosage by the following methods: <ul style="list-style-type: none"><li>• Injection below the eventual seed row prior to planting. Place SIVANTO 200 SL 3 - 4 inches below seed-line</li><li>• In-furrow spray during planting</li><li>• Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment</li><li>• Subsurface side-dress shanked into the root zone on both sides of the plants</li><li>• Surface side-dress followed by irrigation, a rain event or mechanically incorporated</li></ul>	
<b>Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>45 Day(s)</b> Do not apply more than <b>28 fl oz</b> of SIVANTO™ 200 SL ( <b>0.365 Pound Flupyradifurone</b> ) per <b>Acre Per Calendar Year</b> on Sorghum, regardless of method of application, product or formulation. Maximum number of crop seasons per year: <b>1</b>	

**STALK AND STEM VEGETABLE<sup>1</sup>**  
**FOLIAR**

**Crops of Crop Subgroup 22A (excluding Prickly pear, pads ; Prickly pear, Texas, pads ) (see other section for Celtuce; Fennel, Florence, fresh leaves and stalk ; Kohlrabi) - Agave ; Aloe vera ; Asparagus; Bamboo, shoots ; Fern, edible, fiddlehead; Kale, sea ; Palm hearts (various species); cultivars, varieties, and/or hybrids of these**

Pest Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 14.0
<b>Application Restrictions:</b> Minimum interval between applications: <b>30 Day(s)</b> Minimum Application Volume: <b>10 Gallons/Acre</b>   Ground ; <b>3 Gallons/Acre</b>   Aerial Do not apply more than <b>28 fl oz</b> of SIVANTO™ 200 SL ( <b>0.365 Pound Flupyradifurone</b> ) per <b>Acre Per Calendar Year</b> on asparagus, regardless of product or formulation. <sup>1</sup> Only for Post-Harvest and Fern Stage use	

**STONE FRUIT (Group 12-12)**  
**FOLIAR**

Apricot; Apricot, Japanese; capulin; cherry, black; cherry, nanking; cherry, sweet; cherry, tart; jujube, chinese; nectarine; peach; plum; plum, american; plum, beach; plum, canada; plum, cherry; plum, Chickasaw; plum, damson; plum, Japanese; plum, Klamath; plum, prune; Plumcot; Sloe; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 14.0
San Jose scale <sup>1</sup>	10.5 – 14.0

**Application Information:**

For best results, combine SIVANTO 200 SL with a horticultural oil for pre-bloom applications targeting San Jose scale.

<sup>1</sup>Suppression in Idaho, Oregon, and Washington.

**Application Restrictions:**

Pre-Harvest Interval (PHI): **14 Day(s)**

Minimum interval between applications: **10 Day(s)**

Minimum Application Volume: **25 Gallons/Acre** | Ground ; **10 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on stone fruit, regardless of method of application, product or formulation.

**SUNFLOWER (Subgroup 20B)**  
**FOLIAR**

Calendula; Castor oil plant; Chinese tallowtree; Euphorbia; Evening primrose; Jojoba; Niger seed; Rose hip; Safflower; Stokes aster; Sunflower; Tallowwood; Tea oil plant; Vernonia; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 14.0
Leafhoppers	
Lygus spp.	
Whiteflies	

**Application Restrictions:**

Pre-Harvest Interval (PHI): **14 Day(s)**

Minimum interval between applications: **10 Day(s)**

Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO™ 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on sunflower, regardless of product or formulation.

TARO LEAVES FOLIAR	
Pest Controlled	Product Rate (fl oz/A)
Leafhoppers	7.0 – 14.0
Aphids	10.5 – 14.0
Whiteflies	
<b>Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>1 Day(s)</b> Minimum interval between applications: <b>7 Day(s)</b> Minimum Application Volume: <b>10 Gallons/Acre</b>   Ground ; <b>3 Gallons/Acre</b>   Aerial Do not apply more than <b>28 fl oz</b> of SIVANTO 200 SL ( <b>0.365 Pound Flupyradifurone</b> ) per <b>Acre Per Crop Season</b> on taro leaves, regardless of method of application, product or formulation. Maximum number of crop seasons per year: <b>3</b>	

TARO LEAVES SOIL	
Pest Controlled	Product Rate (fl oz/A)
Aphids	21.0 – 28.0
Leafhoppers	
Whiteflies	
<b>Application Information:</b> SIVANTO 200 SL may be applied at the specified dosage by the following methods: <ul style="list-style-type: none"> <li>• Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment</li> <li>• Injection below the eventual seed line prior to planting. Place SIVANTO 200 SL 3-4 inches below seed line</li> <li>• Potting hole drench at transplanting</li> <li>• Post-transplant drench following setting and covering</li> </ul>	
<b>Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>21 Day(s)</b> Do not apply more than <b>28 fl oz</b> of SIVANTO 200 SL ( <b>0.365 Pound Flupyradifurone</b> ) per <b>Acre Per Crop Season</b> on taro leaves, regardless of method of application, product or formulation. Maximum number of crop seasons per year: <b>3</b>	



TOBACCO FOLIAR	
Pest Controlled	Product Rate (fl oz/A)
Aphids	7.0
Leafhoppers	
Psyllids	
Whiteflies	
<b>Application Restrictions:</b> Pre-Harvest Interval (PHI): <b>7 Day(s)</b> Minimum interval between applications: <b>7 Day(s)</b> Minimum Application Volume: <b>10 Gallons/Acre</b>   Ground ; <b>3 Gallons/Acre</b>   Aerial Do not apply more than <b>28 fl oz</b> of SIVANTO™ 200 SL ( <b>0.365 Pound Flupyradifurone</b> )per <b>Acre Per Calendar Year</b> on tobacco, regardless of method of application, product or formulation.	

TOBACCO PLANTHOUSE	
Pest Controlled	Product Rate (fl oz/10,000 Plants)
Aphids	0.34
Leafhoppers	
Psyllids	
Whiteflies	
<b>Application Instructions</b>  Apply specified dosage to seedlings in trays in the planthouse, targeting potting media (tray drench) between 24 hours and 7 days prior to transplanting, in one of the following methods: <ul style="list-style-type: none"><li>• Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash SIVANTO 200 SL from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash SIVANTO 200 SL from foliage may result in reduced pest control</li><li>• Injection into overhead irrigation system, using adequate volume to thoroughly saturate potting media without loss of gravitational solution from the bottom of the tray</li></ul> The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Transplants must be handled carefully during setting to avoid dislodging treated potting media from roots.	
<b>Application Information:</b> Not all varieties of tobacco have been tested for adverse crop response to SIVANTO 200 SL applied to seedling flats. It is therefore recommended to treat a small number of plants and confirm crop tolerance for 7 days prior to treating entire planthouse.	
<b>Application Restrictions:</b> Only for use on tobacco seedlings intended as transplants Pre-Harvest Interval (PHI): <b>7 Day(s)</b> Maximum SIVANTO 200 SL applied in the planthouse: <b>0.34fl oz/10,000 plants (0.0386 lb AI)</b>	

Maximum number of SIVANTO 200 SL applications in planthouse per crop: **1**  
Do not apply more than **28 fl oz** of SIVANTO™ 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Crop Season** on tobacco, regardless of method of application, product or formulation.

## TOBACCO SOIL

Pest Controlled	Product Rate (fl oz/A)
Aphids	21.0
Leafhoppers	
Psyllids	
Whiteflies	

**Application Information:** SIVANTO 200 SL may be applied at the specified dosage by the following methods:

- Post-transplant drench following setting and covering

### Application Restrictions:

Soil drench application to be made no more than 30 days after transplanting.

Do not apply more than **28 fl oz** of SIVANTO™ 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Crop Season** on Tobacco, regardless of method of application, product or formulation.

## TREE NUTS (Group 14-12) FOLIAR - excluding Almond

African nut-tree; Beech nut; Brazil nut; Brazilian pine; Bunya; Bur oak; Butternut; Cajou nut; Candlenut; Cashew; Chestnut; Chinquapin; Coconut; Coquito nut; Dika nut; Ginkgo; Guiana chestnut; Hazelnut (Filbert); Heartnut; Hickory nut; Japanese horse-chestnut; Macadamia nut; Mongongo nut; Monkey puzzle nut; Monkey-pot; Okari nut; Pachira nut; Peach palm nut; Pecan; Pequi; Pili nut; Pine nut; Pistachio; Sapucaia nut; Tropical almond; Walnut, black; Walnut, English; Yellowhorn; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 14.0
Whiteflies	10.5 – 14.0

### Application Restrictions:

Pre-Harvest Interval (PHI): **7 Day(s)**

Minimum interval between applications: **14 Day(s)**

Minimum Application Volume: **25 Gallons/Acre** | Ground ; **10 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on tree nut, regardless of product or formulation.

**TROPICAL AND SUBTROPICAL, CACTUS, INEDIBLE PEEL (Subgroup 24D)  
FOLIAR**

Dragon fruit ; Pitahaya; Pitaya ; Pitaya, amarilla; Pitaya, roja; Pitaya, yellow; Prickly pear, fruit; Prickly pear, Texas, fruit ; Saguaro; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Aphids	7.0 – 14.0
Pest Suppressed	Product Rate (fl oz/A)
Cochineal scale	14.0

**Application Restrictions:**

Pre-Harvest Interval (PHI): **21 Day(s)**

Minimum interval between applications: **7 Day(s)**

Minimum Application Volume: **75 Gallons/Acre**

**Do not apply by Aerial Application**

Do not apply more than **28 fl oz** of SIVANTO 200 SL ( **0.365 Pound Flupyradifurone**)per **Acre Per Calendar Year** on prickly pear/cactus pear (*Opuntia* spp.) and pitaya, regardless of product or formulation.

**TROPICAL AND SUBTROPICAL, MEDIUM TO LARGE FRUIT, SMOOTH , INEDIBLE PEEL (Subgroup 24B)  
FOLIAR**

Abiu ; Akee apple; Avocado; Avocado, Guatemalan; Avocado, Mexican ; Avocado, West Indian; Bacury ; Banana; banana, dwarf; Binjai ; Canistel; Cupuacú ; Etambe; Jatobá; Kei apple; Langsat; Lanjut; Lucuma ; Mabolo; Mango; Mango, horse; Mango, Saipan; Mangosteen; Paho; Papaya; Pawpaw, common ; Pelipisan ; Pequi; Persimmon, American; Piquia; Plantain; Pomegranate; Poshte; Quandong; Sapote, black; Sapote, green; Sapote, white; Sataw; Screw-pine; Star apple ; Tamarind-of-the-Indies ; Wild loquat; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Aphids	10.5 – 14.0
Whiteflies	
Pest Suppressed	Product Rate (fl oz/A)
Avocado thrips ( <i>Scirtothrips perseae</i> )	10.5 – 14.0

**Application Restrictions:**

Pre-Harvest Interval (PHI): **0 Day(s)** (Pomegranate)

Pre-Harvest Interval (PHI): **1 Day(s)** (Other listed crops)

Minimum interval between applications: **7 Day(s)** (Pomegranate)

Minimum interval between applications: **14 Day(s)** (Other listed crops)

Minimum Application Volume: **25 Gallons/Acre** | Ground ; **10 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on tropical and subtropical, medium to large fruit, smooth, inedible peel, regardless of product or formulation.

**TROPICAL AND SUBTROPICAL. PALM FRUIT, EDIBLE PEEL (Subgroup 23C)  
FOLIAR**

Açaí ; Apak palm; Bacaba palm; Bacaba-de-leque ; Date; Doum palm coconut; Jelly palm; Patauá; Peach palm, fruit; cultivars, varieties, and/or hybrids of these

Pest Controlled	Product Rate (fl oz/A)
Pink hibiscus mealybug	7.0 – 14.0

**Application Restrictions:**

Pre-Harvest Interval (PHI): **15 Day(s)**

Minimum interval between applications: **10 Day(s)**

Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO™ 200 SL ( **0.365 Pound Flupyradifurone** )per **Acre Per Calendar Year** on date, regardless of product or formulation.

**TUBEROUS AND CORM VEGETABLES (Subgroup 1C)  
FOLIAR**

Arracacha; Arrowroot; artichoke, Chinese; artichoke, Jerusalem; canna, edible (Queensland arrowroot); cassava, bitter and sweet; Chayote (root)<sup>1</sup>; Chufa; Dasheen (taro); Ginger; Leren; Potato<sup>2</sup>; Sweet potato; Tanier (cocoyam); Turmeric; Yam bean (jicama, manoic pea); Yam, true

Pest Controlled	Product Rate (fl oz/A)
Aphids (except green peach aphid) Leafhoppers	7.0 – 14.0
Colorado potato beetle Green peach aphid Potato psyllid Whiteflies	10.5 – 14.0

**Application Information:**

<sup>1</sup>See cucurbit vegetables Crop Group 9 for Chayote (fruit).

<sup>2</sup>For optimum control of potato psyllid, use of MSO adjuvant or similar is recommended.

**Application Restrictions:**

Pre-Harvest Interval (PHI): **7 Day(s)**

Minimum interval between applications: **7 Day(s)**

Minimum Application Volume: **10 Gallons/Acre** | Ground ; **3 Gallons/Acre** | Aerial

Do not apply more than **28 fl oz** of SIVANTO 200 SL (**0.365 Pound Flupyradifurone**) per **Acre Per Calendar Year** on tuberous and corm vegetables, regardless of product or formulation.

## STORAGE AND DISPOSAL

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

### PESTICIDE STORAGE

Store in original container away from feed and food. Store in cool, dry area. Do not store in direct sunlight. Do not allow prolonged storage in temperatures that exceed 105°F (40°C) or in temperatures that fall below 14°F (-10°C).

### PESTICIDE DISPOSAL

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

### CONTAINER HANDLING

#### [Non-Refillable Containers]

#### **Rigid, Non-refillable containers (equal to or less than 5 gallons)**

Non-refillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

#### **Rigid Non-refillable Containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 lbs)**

Non-refillable container. Do not reuse or refill this container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows.

#### **Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)**

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal.

Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs)

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

#### **Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, and Kegs)**

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. To triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

#### **Non-Refillable Fiber Drums with Liners**

Non-refillable container. Do not reuse or refill this container. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment, then offer for recycling if available or dispose of in a sanitary landfill or by incineration. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner.

**Non-Rigid, Non-refillable Containers**

Nonrefillable container. Do not reuse or refill this container. Completely empty container into application equipment. Then offer for recycling if available or dispose of in a sanitary landfill or by other procedures approved by state and local authorities."

**[Refillable Containers]**

Refillable container. Refer to Bottom Discharge IBC or Top Discharge IBC, Drums, Kegs information as follows. Refill this container with pesticide only. Do not reuse this container for any other purpose. Contact your Ag retailer or Bayer CropScience for container return, disposal and recycling information.

**Bottom Discharge IBC (e.g. – Schuetz Caged IBC or Snyder Square Stackable)**

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

**Top Discharge IBC, Drums, Kegs (e.g.– Snyder 120 Next Gen, Bonar B120, Drums, Kegs)**

Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To triple rinse the containers before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container at least 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Once container is rinsed, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

End users are authorized to remove tamper-evident cables as required to remove the product from the container unless the container is equipped with one-way valves and refilling or returning is planned. If this is the case, end-users are not authorized to remove tamper-evident cables, remove one-way valves, or clean container.

**SIVANTO™ 200 SL 08.04. 01/23/2020, 08/17/2020, 08/24/2020, 08/31/2020, 09/25/2020**