OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

April 18, 2025

Blake Coven
Product Registration Manager
Albaugh, LLC
1525 NE 36th Street
Ankeny, IA 50021

Subject: Label Amendment – Update label with Lambda-cyhalothrin ID language and update label with restrictions and use rates
Product Name: Crusader 2ME
EPA Registration Number: 42750-385
Application Dates: 12/17/2024, 02/18/2022
Case Numbers: 645731, 483101

Dear Blake Coven:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the Registration Review of the above referenced product in connection with the Lambda-Cyhalothrin Final and/or Interim Decision, and has concluded that your submission is acceptable.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one 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 FIFRA 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) lists 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 Hester Dingle at 202-566-2596 or at dingle.hester@epa.gov.

Sincerely,

J. d Herrick

Jacquelyn Herrick, Product Manager 03
Invertebrate & Vertebrate Branch 1
Registration Division (7505T)
Office of Pesticide Programs

Enclosure

RESTRICTED USE PESTICIDE

Toxic to fish and aquatic organisms. For retail sale to and use only by certified applicators or persons under their direct supervision and only for those uses covered by the certified applicator's certification.

Lambda Cyhalothrin	GROUP	3A	INSECTICIDE

Crusader 2ME

Insecticide

ACTIVE INGREDIENT:

Lambda-cyhalothrin: 22.88%
Other Ingredients: 77.12%
Total: 100.0%

This product contains 2.08 pounds of active ingredient per gallon and is a capsule suspension.
Contains petroleum distillates.

KEEP OUT OF REACH OF CHILDREN

CAUTION/PRECAUCIÓN

Si usted no entiende la etiquette, busque a alguien para que se la explique a usted detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID	
If in eyes:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing the eye. • Call a poison control center or doctor for treatment advice.
If swallowed:	• Immediately call a poison control center or doctor. • **DO NOT** induce vomiting unless told to do so by a poison control center. • **DO NOT** give any liquid to the person. • **DO NOT** give anything by mouth to an unconscious person.
If on skin or clothing:	• Take of contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.

HOTLINE NUMBER

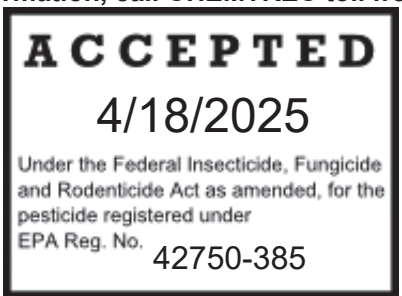
For non-emergency questions regarding exposure to this product, call 1-888-347-6732 (7 days/week, 24-hr/day). For medical emergencies, call the poison control center at 1-800-222-1222. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

NOTE TO PHYSICIAN

Contains petroleum distillates. Vomiting may cause aspiration pneumonia.

For 24-hour chemical spill, leak, fire, or accident response information, call CHEMTREC toll free at 1-800-424-9300.

042750-00385.20250414.DRAFT



EPA Reg. No. 42750-385
EPA Est. No. _____
Net Contents: _____ gallons

MANUFACTURED FOR
Albaugh, LLC
1525 NE 36th Street
Ankeny, IA 50021

[OPTIONAL MARKETING GRAPHICS]

[ ]

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION/PRECAUCIÓN

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber, ≥ 14 mils polyvinyl chloride ≥ 14 mils or viton ≥ 14 mils.
- Protective eyewear

Mixers, loaders, and applicators treating nurseries as a foliar broadcast spray treatment or drench/soil/ground directed liquid treatment using a mechanically pressurized handgun must wear: longsleeve shirt, long pants, shoes and socks, gloves and a respirator. Wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any R or P filter; OR a NIOSH approved elastometric particulate respirator with any R, or P filter; OR a NIOSH approved powered air-purifying respirator with a HE filter.

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

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

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic organisms and toxic to wildlife.

For terrestrial uses: **DO NOT** apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. **DO NOT** apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. **DO NOT** contaminate water when disposing of equipment washwater.

This product is highly toxic to bees and other pollinating insects exposed to direct treatment or to residues on blooming crops or weeds. **DO NOT** apply this product or allow it to drift to blooming crops or weeds if bees or other pollinating insects are foraging the treatment area. **Protect pollinating insects by following label directions intended to minimize drift and reduce pesticide risk to these organisms.**

PHYSICAL AND CHEMICAL HAZARDS

DO NOT mix or allow contact with oxidizing agents or reducing agents. Hazardous chemical reaction may occur.

DIRECTIONS FOR USE

RESTRICED USE PESTICIDE

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

SHAKE WELL BEFORE USING.

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.

This labeling must be in the possession of the user at the time of application.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal

protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

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

- Coveralls
- Shoes plus socks
- Chemical resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber, ≥ 14 mils polyvinyl chloride ≥ 14 mils or viton ≥ 14 mils.
- Protective eyewear

DO NOT apply this product in a way that it will contact workers or other persons either directly or through drift. Only protected handlers may be in the area during application. For any requirement specific to your State or Tribe, consult State/Tribal agency responsible for pesticide regulation.

NON-AGRICULTURAL USE REQUIREMENTS

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

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR INSECT CONTROL, CROP INJURY, OR ILLEGAL RESIDUES.

INFORMATION ON USE OF THIS PRODUCT

Initial and residual control are contingent upon thorough crop coverage. Apply with ground or aerial equipment using sufficient water to obtain full coverage of foliage. Apply in a minimum of 2 gallons per acre by air or 10 gallons per acre by ground unless otherwise specified in this label. When foliage is dense or pest pressure is high (heavier insect or egg pressure, larger larval stages), use of higher listed application volumes and/or higher listed use rates may improve initial and residual control.

For cutworm control, this product may be applied before, during, or after planting. For soil-incorporated applications, use higher listed rates for improved control.

HOW TO REPORT BEE KILLS

It is recommended that users contact both the state lead agency and the U.S. Environmental Protection Agency to report bee kills due to pesticide application. Bee kills can be reported to EPA at beekill@epa.gov. To contact your state lead agency, see the current listing of state pesticide regulatory agencies at the National Pesticide Information Center's website: http://npic.orst.edu/reg/state_agencies.html.

RESISTANCE MANAGEMENT

For resistance management, this product contains a Group 3 insecticide. Any insect population may contain individuals naturally resistant to this product and other Group 3 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. -Rotate the use of this product or other Group 3 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):

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.

Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.

When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).

Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.

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 Albaugh, LLC at 1-800-247-8013.

MANDATORY SPRAY DRIFT MANAGEMENT

Aerial Applications:

- Do not release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to select nozzle and pressure that deliver medium or coarser droplets (ASABE S641).
- Do not apply when wind speeds exceed 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed wing aircraft and 90% or less of the rotor diameter for helicopters.
- If the windspeed is 10 mph or less, applicators must use ½ swath displacement upwind at the downwind edge of the field. When the windspeed is between 11-15 mph, applicators must use ¾ swath displacement upwind at the downwind edge of the field.
- Do not apply during temperature inversions.

Airblast Applications:

- Sprays must be directed into the canopy.
- Do not apply when wind speeds exceed 15 mph at the application site.
- User must turn off outward pointing nozzles at row ends and when spraying outer row.
- Do not apply during temperature inversions.

Ground Boom Applications:

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a Medium or coarser droplet size (ASABE S572).
- Do not apply when wind speeds exceed 15 mph at the application site.
- Do not apply during temperature inversions.

Boomless Ground Applications:

- Applicators are required to select nozzle and pressure that deliver a medium or coarser droplet size (ASABE S572) for all applications.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground Boom

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size – Aircraft

- Adjust Nozzles - Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

BOOM HEIGHT – Ground Boom

For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud

(under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

WIND
Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

Handheld Technology Applications:
- Take precautions to minimize spray drift.

VEGETATIVE FILTER STRIPS

Construct and maintain a vegetative filter strip, according to the width specified below, of grass or other permanent vegetation between the field edge and nearby down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing lambda-cyhalothrin onto fields where a maintained vegetative buffer strip of **at least 25 feet** exists between the field edge and where a down gradient aquatic habitat exists. The minimum required width of 25 feet may be reduced or removed under the following conditions:

- For Western irrigated agriculture, a maintained vegetative filter strip of at least 10 feet wide is required. Western irrigated agriculture is defined as irrigated farmland in the following states: WA, OR, CA, ID, NV, UT, AZ, MT, WY, CO, NM, and TX (west of I-35).
  - For Western irrigated agriculture, if a sediment control basin is present, a vegetative filter strip is not required.
- In all other areas, a vegetative filter strip with a minimum width of 25 feet is required, unless the following conditions are met. The vegetative filter strip requirement may be reduced from 25 feet to 15 feet if at least one of the following applies:
  - The area of application is considered prime farmland (as defined in 7 CFR § 657.5).
  - Conservation tillage is being implemented on the area of application. Conservation tillage is defined as any system that leaves at least 30% of the soil surface covered by residue after planting. Conservation tillage practices can include mulch-till, no-till, or strip-till.
  - A functional terrace system is maintained on the area of application.
  - Water and sediment control basins for the area of application are functional and maintained.
  - The area of application is less than or equal to 10 acres.

For further guidance on vegetated filter strips, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. https://www.regulations.gov/document?D=EPA-HQ-OPP-2008-0331-0175

In the State of New York, a 25 ft. vegetated, non-cropped buffer strip untraversed by drainage tiles must be maintained between a treated field and a coastal salt marsh or stream that drains into a coastal salt marsh, for both aerial or ground application. For aerial applications, the 25 ft. vegetated non-cropped buffer strip for runoff protection would be part of the larger 150 ft. buffer strip (or 450 ft. buffer strip for ULV application) required for spray drift.

Ground Application

DO NOT apply within 25 feet of aquatic habitats (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes; natural ponds; estuaries; and commercial fish ponds).

Ultra-Low Volume (ULV) Aerial Application

DO NOT apply within 450 feet of aquatic habitats (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes; natural ponds; estuaries; and commercial fish ponds).

Non-ULV Aerial Application

DO NOT apply within 150 feet of aquatic habitats (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes; natural ponds; estuaries; and commercial fish ponds).

TANK MIX APPLICATION

When tank mixing with any other agricultural products, this product may be added last to avoid nozzle plugging. Fill the tank with 1/2 - 2/3 volume of the mixing diluent. All other products should be fully dispersed in the mixing diluent before adding the recommended rate of this product to the tank. Add the remainder of the mixing diluent volume. It is recommended that mixing and spray equipment have continuous agitation for best results. 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.

While this product has good flexibility for tank mixing with other agricultural products, a jar test for physical compatibility is recommended for untried mixtures, using proper ratios and mixing sequences of all ingredients to be included in the mixture.

This product is an aqueous based formulation. **DO NOT** use non-emulsifiable oils in combination with this product. If adjuvants are used, use only:

- Nonionic Surfactant (NIS) containing at least 75% surface agent, or
- Nonphytotoxic Crop Oil Concentrate (COC), including once-refined Vegetable Oil Concentrate (VOC), or,
- Methylated Sunflower Oils (MSO) containing a minimum of 17% emulsifier.

Adjuvants other than NIS or COC may be used providing the product meets the following criteria:

- Contains only EPA exempt ingredients.
- Is nonphytotoxic to the target crop.
- Is compatible in mixture. (May be established through a jar test.)
- Is supported locally for use with this product on the target crop through proven field trials and through university and extension recommendations.

In addition, the following may be used as diluents:

- Crop Oil Concentrate
- Methylated Sunflower Oils
- Urea-Ammonium Nitrate

DO NOT use the following in combination with this product as diluents or adjuvants:

- Non-emulsifiable oils
- Diesel Fuel
- Straight Mineral Oil

CHEMIGATION

Sprinkler Irrigation Application

Apply this product at rates and timing described elsewhere in this label. As local recommendations differ, consult your local State Extension Service or other local experts for recommendations on adjuvant or diluent types, tank mixes, and mixing instructions. These recommendations should be proven, through university and extension field trials, to be effective with this product applied by chemigation.

Check the irrigation system to insure uniform application of water to all areas. Thorough coverage of foliage is required for good control. Good agitation in the pesticide supply tank should be maintained prior to and during the entire application period.

Apply by injecting the labeled rate of this product into the irrigation system using a metering device that will introduce a constant flow and by distributing the product to the target area in 0.1-0.2 acre-inch of water. In general, use the least amount of water required for proper distribution and coverage. It is recommended that the product be injected into the main irrigation line ahead of a right angle turn in the line to ensure adequate dispersion or mixing in the irrigation water. Once the application is completed, flush the entire irrigation and injection system with clean water before stopping the system.

In addition to the above instructions, if application is being made during a normal irrigation set of a stationary sprinkler, the labeled rate of this product for the area covered should be injected into the system only during the end of the irrigation set for sufficient time to provide adequate coverage and product distribution.

Use Precautions – Sprinkler Irrigation Applications

1. Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move. **DO NOT** apply this product through any other type of irrigation system.
2. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
3. If you have any questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers, or other experts.
4. **DO NOT** connect an irritation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label prescribed safety devices for public water systems are in place.
5. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
6. 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 form back-flow.
7. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
8. 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.
9. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

10. 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.

11. 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 are capable of being fitted with a system interlock.

12. Any alternatives to the above required safety devices must conform to the list of EPA-approved alternative devices.

13. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment or non-uniform distribution of treated water.

14. **DO NOT** apply through chemigation systems connected to public water systems.

Removable chemical extraction probes (also known as "stingers") used in suction/extraction systems must be rinsed within the pesticide container prior to removal.

Following best management practices can help reduce risk to terrestrial pollinators. Examples of best management practices include applying pesticides in the evening and at night when pollinators are not foraging and checking to confirm hive locations before spraying. For additional resources on pollinator best management practices, visit https://www.epa.gov/pollinator-protection/find-best-management-practices-protect-pollinators.

Managed pollinator protection plans are developed by states/tribes to promote communication between growers, landowners, farmers, beekeepers, pesticide users, and other pest management professionals to reduce exposure of bees to pesticides. If available, visit state plans for additional information on how to protect pollinators.

CROP SPECIFIC USE INSTRUCTIONS

[Note to reviewer: The following statement may be added to Crop Specific Use Directions as per CDPR requirement]

[Not Registered for Use by California]

ALFALFA, ALFALFA GROWN FOR SEED

Pests	Product Rate Per Acre	USE DIRECTIONS
Alfalfa Caterpillar Army Cutworm Cutworm spp. Green Cloverworm Leafhopper spp. Looper spp. Three-cornered Alfalfa Hopper Velvetbean Caterpillar Webworm spp.	0.92-1.54 fl. oz. (0.015-0.025 lb.a.i)	Use scouting to determine need for applications. Base the timing and frequency of applications on the timing when insect populations reach local economic thresholds. Apply by ground or air using enough water to obtain full coverage of foliage. Apply in at least 2 gals./A by air or 10 gals./A by ground. In situations of dense foliage and/or high pest populations, use 5-10 gals./A by air or 20 gals./A by ground and higher listed use rates. Also
Alfalfa Seed Chalcid (Adult) Alfalfa Weevil Armyworm Bean Leaf Beetle (Adult) Blister Beetle spp. Blue Alfalfa Aphid Clover Leaf Weevil spp.	1.23-1.84 fl. oz. (0.02-0.03 lb. a.i.)	

Clover Root Borer (Adult) Clover Root Curculio spp. (Adult) Clover Stem Borer (Adult) Corn Earworm Cowpea Aphid Cowpea Curculio (Adult) Cowpea Weevil (Adult) Cucumber Beetle spp. (Adult) Egyptian Alfalfa Weevil Fall Armyworm[1] Grape Colaspis (Adult) Grasshopper spp. Green June Beetle (Adult) Green Peach Aphid[3] Japanese Beetle (Adult) Meadow Spittlebug Mexican Bean Beetle Pea Aphid Pea Weevil (Adult) Plant Bug spp. Including Lygus spp.[3] Spotted Alfalfa Aphid Stink Bug spp. Thrips spp.[4] Sweet Clover Weevil (Adult) Western Yellowstriped Armyworm Whitefringed Beetle spp. (Adult) Yellowstriped Armyworm		use higher listed rates for improved residual control. **DO NOT** APPLY when bees are actively foraging by applying during the early morning or during the evening hours. Be aware of bee hazard resulting from a cool evening and/or morning dew. Remove bee shelters during and for 2-3 days following application. **DO NOT** directly apply to bee shelters. [1]Use higher labeled rates for large larvae. [2]Suppression only. [3]See resistance statement under Product Information. [4]Does not include Western Flower Thrips. **DO NOT** apply more than 0.03 lb. a.i. (0.12 pt. or 1.84 fl. oz. of product)/A per cutting.
Beet Armyworm[1,3] Blotch Leafminer[3] Spider Mites[2]	1.84 fl. oz. (0.03 lb. a.i.)	**DO NOT** apply more than 0.12 lb. a.i. (0.46 pt. or 7.37 fl. oz. of product)/A per year. **DO NOT** apply within 1 day of harvest for forage or within 7 days of harvest for hay.

CANOLA

Pests	Product Rate Per Acre	USE DIRECTIONS
Armyworm spp. Cabbage Seedpod Weevil Cutworm spp. Diamondback Moth Flea Beetle Grasshoppers Looper spp. Lygus Bug	0.92-1.84 fl. oz. (0.015-0.03 lb.a.i)	Use scouting to determine need for applications, usually at intervals of 5 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds. Apply by air or ground with enough water to obtain full coverage of foliage. For air applications, apply a minimum of 2 gals. of water/A. **DO NOT** apply more than 0.09 lb. a.i. (0.35 pt. or 5.53 fl. oz. of product)/A per year. **DO NOT** apply within 7 days of harvest.
Cabbage Aphid	1.84 fl. oz. (0.03 lb. a.i.)	

CEREAL GRAINS – CORN (AT PLANT): FIELD CORN, POPCORN, SEED CORN, SWEET CORN

Pests	Product RatePer 1,000 ft of Row[2]	USE DIRECTIONS
Corn Rootworm Larvae (Western, Northern, Southern, Mexican) Cutworm spp. Lesser Cornstalk Borer Red Imported Fire Ant[1] Seedcorn Beetle Seedcorn Maggot Wireworm spp.[1] White Grub spp.	0.31 fl. oz. (0.005 lb.a.i)	**DO NOT** harvest or graze livestock or cut treated crops for feed within 21 days of at plant application. **DO NOT** apply more than 0.09 lb. a.i. (0.35 pt. or 5.53 fl. oz. of product)/A per crop at plant. **For field corn, popcorn, and seed corn DO NOT** apply more than 0.12 lb. a.i. (0.46 pt. or 7.37 fl. oz. of product)/A per crop from at plant and foliar applications. For sweet corn **DO NOT** apply more than 0.48 lb. a.i. (1.84 pts. or 29.49 fl. oz. of product)/A per crop from at plant and foliar applications. **For Banded Applications** – Make application at planting as a 5-7 inch T-band sprayed across the open seed furrow between the furrow openers and the press wheels or as a band application behind the press wheel. **For In-Furrow Applications** – Make application into the seed furrow through spray nozzles or microtubes, behind the planter furrow openers and in front of the press wheel. Apply a minimum of 3 gals. finished spray/A. [1]Suppression only.

[2]lbs. a.i. and fl. oz./A of this product applied at 0.31fl. oz./1,000 ft. of row for various row spacings.

Row Spacing	40”	38”	36”	34”	32”	30”
Linear ft./A	13,068	13,756	14,520	15,374	16,335	17,424
lbs. a.i./A	0.067	0.07	0.075	0.079	0.084	0.09
fl. oz./A	4.12	4.30	4.61	4.85	5.16	5.53

CEREAL GRAINS – CORN (FOLIAR): FIELD CORN, POPCORN, SEED CORN, SWEET CORN

<table>
<tr><th>Pests</th><th>Product Rate Per Acre</th><th>USE DIRECTIONS</th></tr>
<tr><td>Corn Earworm[1]
Cutworm spp.
Green Cloverworm
Meadow Spittlebug
Western Bean Cutworm[1]</td><td>0.92-1.54 fl. oz.
(0.015-0.025 lb.a.i)</td><td rowspan="3">Use scouting or locally prescribed corn growth stages to determine need for application, usually at intervals of 7 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds or other locally recommended methods.

Apply by ground or air using sufficient water and application methods to obtain full coverage of target location. When applying by air, apply in at least 2 gals. of water/A.

For chinch bug control, begin application when bugs migrate from small grains or grass weeds to small corn and direct the spray to the base of corn plants. Make additional applications at 3-5 day intervals if needed. This product may only suppress heavy infestations and/or subsequent migrations.

For control of adult corn rootworm beetles (Diabrotica spp.) as part of an aerial applied corn rootworm control program use at least 1.84 fl. oz./A (0.03 lb. a.i./A).

[1]For control before the larva bores into the plant stalk or ear.

[2]Use higher listed rates for large larvae.

[3]Suppression only.

[4]See resistance statement under Product Information.

DO NOT apply within 21 days of harvest.

DO NOT allow livestock to graze in treated areas or harvest treated corn forage as feed for meat or dairy animals within 1 day after treatment. **DO NOT** feed treated corn fodder or silage to meat or dairy animals within 21 days after last treatment.</td></tr>
<tr><td>Armyworm[2]
Bean Leaf Beetle
Bird Cherry-Oat Aphid[3]
Cereal Leaf Beetle
Corn Leaf Aphid[3]
Corn Rootworm Beetle
(Adult beetles including Mexican, Northern, Southern, Western)
English Grain Aphid[3]
European Corn Borer[1]
Fall Armyworm[2]
Flea Beetle spp.
Grasshopper spp.
Hop vine Borer[1]
Japanese Beetle (Adult)
Lesser Cornstalk Borer
Sap Beetle (Adult)
Seedcorn Beetle
Southwestern Corn Borer[1]
Stalk Borer[1]
Stink Bug spp.
Tobacco Budworm[1,4]
Webworm spp.
Yellowstriped Armyworm[2]</td><td>1.23-1.84 fl. oz.
(0.02-0.03 lb. a.i.)</td></tr>
<tr><td>Beet Armyworm[4]
Chinch Bug
Green Bug[3,4]
Mexican Rice Borer[1]
Rice Stalk Borer[1]
Southern Corn Leaf Beetle[3]
Sugarcane Borer</td><td>1.84 fl. oz.
(0.03 lb. a.i.)</td></tr>
</table>

		DO NOT apply more than 0.12 lb. a.i. (0.46 pt. or 7.37 fl. oz. of product)/A per crop from at plant and foliar applications. **DO NOT** apply more than 0.06 lb. a.i. (0.23 pt. or 3.69 fl. oz. of product) after silk initiation. **DO NOT** apply more than 0.03 lb. a.i. (0.12 pt. or 1.84 fl. oz. of product)/A after corn has reached the milk stage (yellow kernels with milky fluid).

CEREAL GRAINS – SWEET CORN (FOLIAR)

Pests	Product Rate Per Acre	USE DIRECTIONS
Aphid spp.[2,3] Armyworm[1] Aster Leafhopper Beet Armyworm[1,3] Cereal Leaf Beetle Chinch Bug Common Cornstalk Borer Corn Rootworm Beetle (Adult beetles including Mexican, Northern, Southern, Western) Corn Earworm Cutworm spp. European Corn Borer Fall Armyworm[1] Flea Beetle spp. Grasshopper spp. Japanese Beetle (Adult) Sap Beetle (Adult) Southern Armyworm[1] Southwestern Corn Borer Spider Mite spp.[2] Stink Bug spp. Tarnished Plant Bug Yellowstriped Armyworm[1] Western Bean Cutworm Webworm spp	1.23-1.84 fl. oz. (0.02-0.03 lb. a.i.)	[1]Use higher labeled rates for large larvae. [2]Suppression only. [3]See resistance statement under Product Information. **DO NOT** apply within 1 day of harvest. **DO NOT** allow livestock to graze in treated areas or harvest treated corn forage as feed for meat or dairy animals within 1 day after last treatment. **DO NOT** feed treated corn fodder or silage to meat or dairy animals within 21 days after last treatment. **DO NOT** apply more than 0.48 lb. a.i. (1.84 pts. Or 29.49 fl. oz. of product)/A per crop from at plant and foliar applications. Use scouting or locally prescribed corn growth stages to determine need for application, usually at intervals of 4 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds. For best results target control before insects enter the stalk or ear. Apply ground or air using enough water and application methods to obtain full coverage of foliage and ears (if present). When applying by air, apply in at least 2 gals. of water per acre.
Corn Silkfly (Adult)[4] Green Bug[2,3]	1.84 fl. oz. (0.03 lb. a.i.)	

		For control of adult corn rootworm beetles (Diabrotica spp.) as part of an aerial applied corn rootworm control program use a minimum of 0.025 lb. a.i. (1.54 fl. oz.)/A.

CEREAL GRAINS – RICE AND WILD RICE

Pests	Product Rate Per Acre	USE DIRECTIONS
Bird Cherry-Oat Aphid Chinch Bug Fall Armyworm Grasshopper spp. Green Bug Leafhopper spp. Rice Stink Bug Rice Water Weevil (Adult) Riceworm Sharpshooter spp. True Armyworm Yellowstriped Armyworm Yellow Sugarcane Aphid	1.54-2.46 fl. oz. (0.025-0.04 lb. a.i.)	[1]For control before the larvae bore into the plant stalk. **DO NOT** release flood water within 7 days of application. **DO NOT** apply more than 0.12 lb. a.i. (0.46 pt. or 7.37 fl. oz. of product)/A per year. **DO NOT** apply more than 0.08 lb. a.i. (0.31 pt.)/A within 28 days of harvest or more than 0.04 lb. a.i. (0.15 pt.)/A within 21 days of harvest. **DO NOT** apply within 21 days of harvest. **DO NOT** use treated rice fields for the aquaculture of edible fish and crustacea. **DO NOT** apply as an ultra-low volume (ULV) spray.
European Corn Borer[1] Mexican Rice Borer[1] Rice Seed Midge[1] Sugarcane Borer[1]	1.84-2.46 fl. oz. (0.03-0.04 lb. a.i.)	

CEREAL GRAINS – SORGHUM (GRAIN)

Pests	Product Rate Per Acre	USE DIRECTIONS
Cutworm spp. Sorghum Midge	0.92-1.23 fl. oz. (0.015-0.02 lb. a.i.)	[1]Use higher labeled rates for large larvae. [2]For control before the larva bores into the plant stalk. [3]See resistance statement under Product Information. **DO NOT** apply more than 0.08 lb. a.i. (0.31 pt. or 4.91 fl. oz. of product)/A per year. **DO NOT** apply more than 0.06 lb. a.i. (0.23 pt. or 3.69 fl. oz. of product)/A per year after crop emergence.
Armyworm Beet Armyworm[3] Corn Earworm European Corn Borer[2] Fall Armyworm[1] Flea Beetle spp. Grasshopper spp. Lesser Cornstalk Borer[2] Southwestern Corn Borer[2] Stink Bug spp. Webworm spp. Yellowstriped Armyworm[1]	1.23-1.84 fl. oz. (0.02-0.03 lb. a.i.)	

		DO NOT apply more than 0.02 lb. a.i. (0.08 pt. or 1.23 fl. oz. of product)/A per year once crop is in soft dough stage. **DO NOT** apply within 30 days of harvest. Use scouting to determine need for treatment, usually at intervals of 5 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds. Apply by ground or air using enough water and application methods to obtain full coverage of target location. When applying by air, apply in at least 2 gals. of water/A. For sorghum midge control, make first application when one quarter of the sorghum heads have emerged and are in tip bloom. If needed, repeat applications at 5-day intervals.
Chinch Bug Mexican Rice Borer[2] Sugarcane Borer[2]	1.84 fl. oz. (0.03 lb. a.i.)	For chinch bug control, start applications when bugs migrate from small grains or grass weeds to small sorghum, directing spray to the base of sorghum plants. If needed, repeat applications at 3-5 day intervals. This product may only suppress heavy infestations and/or subsequent migrations.

CEREAL GRAINS – WHEAT, WHEAT HAY, TRITICALE, BARLEY, BUCKWHEAT, OATS AND RYE

Pests	Product Rate Per Acre	USE DIRECTIONS
Army Cutworm Cutworm spp.	0.92-1.54 fl. oz. (0.015-0.025 lb. a.i.)	[1]Best control is obtained before insects begin to roll leaves. Once crop has started to boot, this product may provide suppression only. Higher labeled rates and increased coverage will be necessary. [2]Suppression only. [3]See resistance statement under Product Information. [4]Make application when adults emerge.
Armyworm Bird Cherry-Oat Aphid[1] Cereal Leaf Beetle English Grain Aphid[1] Fall Armyworm Flea Beetle spp. Grasshopper spp. Hessian Fly[4] Orange Blossom Wheat Midge Russian Wheat Aphid[1]	1.23-1.84 fl. oz. (0.02-0.03 lb. a.i.)	

Stink Bug spp. Yellowstriped Armyworm		**DO NOT** apply within 30 days of harvest. **DO NOT** apply more than 0.06 lb. a.i. (0.23 pt. or 3.69 fl. oz. of product)/A per year. **DO NOT** allow livestock to graze in treated areas or harvest treated wheat forage as feed for meat or dairy animals with- in 7 days after treatment. **DO NOT** feed treated straw to meat or dairy animals within 30 days after last treatment. Use scouting to determine need for treatment, usually at intervals of 5 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds. Apply by ground or air using enough water and application methods to obtain full coverage of foliage. When applying by air, apply in at least 2 gals. of water/A. For chinch bug control, repeat applications at 3-5 day intervals if needed. This product may only suppress heavy infestations and/or migrations. Because Greenbug is known to have many biotypes, it is possible that this product may only provide suppression. If this occurs, a second application using an alternative chemistry may be needed.
Grass Sawfly	1.54-1.84 fl. oz. (0.025-0.03 lb. a.i.)	
Chinch Bug Corn Leaf Aphid[2] Greenbug[1,3] Mite spp.[2]	1.84 fl. oz. (0.03 lb. a.i.)	

COLE CROPS – BROCCOLI, BRUSSELS SPROUTS, CABBAGE, CAVALO BROCCOLO, CAULIFLOWER, CHINESE BROCCOLI (GAI LON), CHINESE CABBAGE (NAPA), CHINES MUSTARD CABBAGE (GAI CHOY), KOHLRABI

Pests	Product Rate Per Acre	USE DIRECTIONS
Alfalfa Looper Cabbage Looper Cabbage Webworm Cutworm spp. Imported Cabbageworm Southern Cabbageworm	0.92-1.54 fl. oz. (0.015-0.025 lb. a.i.)	[1]For control of first and second instars only. [2]Suppression only.
Aphid spp.[2,3] Armyworm	1.23-1.84 fl. oz.	

Beet Armyworm[1,3] Corn Earworm Diamondback Moth[3] Fall Armyworm[1] Flea Beetle spp. Grasshopper spp. Japanese Beetle (Adult) Leafhopper spp. Meadow Spittlebug Plant Bug spp. – including Lygus spp.[3] Spider Mite spp.[2] Stink Bug spp. Thrips spp.[2] Vegetable Weevil (Adult) Whitefly spp.[2,3] Yellowstriped Armyworm	(0.02-0.03 lb. a.i.)	[3]See resistance statement under Product Information. **DO NOT** apply within 1 day of harvest. **DO NOT** apply more than 0.24 lb. a.i. (0.92 pts. or 14.74 fl. oz. of product.)/A per year. Use scouting to determine need for application, usually at intervals of 5 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds. Apply by ground or air using enough water to obtain full coverage of foliage. When applying by air, apply in at least 2 gals. of water/A. **DO NOT** apply as a foliar broadcast application using a mechanically pressurized handgun.

COTTON

Pests	Product Rate Per Acre	USE DIRECTIONS
Cutworm spp. Soybean Thrips Tobacco Thrips	0.92-1.23 fl. oz. (0.015-0.02 lb. a.i.)	[1]For control of first and second instars only. [2]Suppression only. [3]See resistance statement under Product Information. **DO NOT** apply within 21 days of harvest. **DO NOT** graze livestock in treated areas. **DO NOT** apply more than 0.2 lb. a.i. (0.77 pts. or 12.29 fl. oz. of product)/A per year. **DO NOT** make more than a total of 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one growing season. Use scouting to determine need for application, usually at intervals of 5-7 days. Base the timing and frequency of
Cabbage Looper Cotton Fleahopper Cotton Leafperforator Cotton Leafworm Lygus Bug spp.[3] Pink Bollworm Saltmarsh Caterpillar	1.23-1.84 fl. oz. (0.02-0.03 lb. a.i.)	
Bandedwing Whitefly[2,3] Beet Armyworm[1,3] Boll Weevil Brown Stink Bug Cotton Aphid[2,3] Cotton Bollworm European Corn Borer Fall Armyworm Green Stink Bug Southern Green Stink Bug Sweetpotato Whitefly[2,3] Tobacco Budworm[3] Twospotted Spider Mite[2]	1.54-2.46 fl. oz. (0.025-0.04 lb. a.i.)	

		applications on when insect populations reach local economic thresholds. Apply ground or air using enough water to obtain full coverage of foliage. Applications may also be made with equipment adapted and calibrated for ULV sprays. This product may be mixed with once-refined vegetable oil and applied in a minimum of at least one qt. of finished spray/A. When bollworm/budworm infestation levels are light, 0.02 lb. a.i. (1.23 fl. oz. of product)/A may be applied in conjunction with intense field monitoring. For boll weevil, spray on a 3-5 day schedule. When applied according to the directions above for control of cotton bollworm and tobacco budworm, this product also provides ovicidal control of unhatched *Heliothis* species eggs.

CURCURBITS – CHAYOTE (FRUIT), CHINESE WAXGOURD, CITRON MELON, CUCUMBER, GHERKIN, GOURD (edible) MOMORDICA spp., MUSKMELON, PUMPKIN, SQUASH (summer and winter), WATERMELON

Pests	Product Rate Per Acre	USE DIRECTIONS
Armyworm spp.[1] Blister Beetle spp. Cabbage Looper Corn Earworm Cricket spp. Cucumber Beetle spp. (Adult) Cutworm spp. Flea Beetle spp. Grasshopper spp. June Beetle spp. Leaffooted Bug Leafhopper spp. Lygus Bug spp.[1] Melonworm Pickleworm Plant Bug spp. Rindworm species complex Saltmarsh Caterpillar Squash Beetle Squash Bug spp. Squash Vine Borer spp. Stink Bug spp.	1.23-1.84 fl. oz. (0.02-0.03 lb. a.i.)	Use scouting to determine need for application, usually at intervals of 5 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds. Apply by ground or air using enough water to obtain full coverage of foliage. When applying by air, apply in at least 2 gals. of solution per acre. When applying by ground, apply in a minimum of 10 gals. of solution per acre. Use higher application volumes and/or labeled application rates when foliage is dense, larvae are large, pest populations are high, size of plants increases, or weather conditions are

Thrips spp.[1,2] Tobacco Budworm[1] Webworm spp.		adverse. Use higher listed rates for longer residual. Insects that tunnel or bore into leaves, stems, vines, or fruit must be controlled before penetration. Only insects (larvae and adults) exposed to the product can be controlled with foliar applications of this product. [1]See resistance statement under Product Information. [2]Western Flower Thrips are not included. [3]Suppression only. **DO NOT** apply within 1 day of harvest. **DO NOT** apply more than 0.18 lb. a.i. (0.69 pts. or 11.06 fl. oz.)/A per year. **DO NOT** apply as a foliar broadcast application using a mechanically pressurized handgun.
Aphid spp.[1] Leafminer spp.[1,3] Spider Mite spp.[3] Whitefly spp.[1,3]	1.84 fl. oz. (0.03 lb. a.i.)	

FRUITING VEGETABLE – TOMATO, TOMATILLO, PEPPERS (BELL AND NON BELL), EGGPLANT, GROUND CHERRY, PEPINO

Pests	Product Rate Per Acre	USE DIRECTIONS
Cabbage Looper Cutworm spp. Hornworm spp.	0.92-1.23 fl. oz. (0.015-0.02 lb. a.i.)	[1]For control of first and second instars only. [2]Suppression only. [3]See resistance statement under Product Information. [4]For control before the larva bores into the plant stalk or fruit. [5]Does not include Western Flower thrips. **DO NOT** apply within 5 days of harvest. **DO NOT** apply more than 0.36 lb. a.i. (1.38 pts. or 22.12 fl. oz. of product)/A per year. Use scouting to determine need for application, usually at intervals of 5 or more days. Base the timing and
Aphid spp.[2,3] Beet Armyworm[1,3] Blister Beetle spp. Colorado Potato Beetle[3] Cucumber Beetle spp. (Adult) European Corn Borer[4] Fall Armyworm[1] Flea Beetle spp. Grasshopper spp. Japanese Beetle (Adult) Leafhopper spp. Leafminer spp.[2] Meadow Spittlebug Pepper Weevil (Adult)[2] Plant Bug spp. Southern Armyworm[1] Spider Mite spp.[2] Stalk Borer[4]	1.23-1.84 fl. oz. (0.02-0.03 lb. a.i.)	

Stink Bug spp. Thrips[5] Tobacco Budworm[3] Tomato Fruitworm Tomato Pinworm Tomato Psyllid[2,3] Vegetable Weevil (Adult) Whitefly spp.[2,3] Yellowstriped Armyworm[1]		frequency of applications on the timing when insect populations reach local economic thresholds. Apply by ground or air using enough water to obtain full coverage of foliage. When applying by air, apply in at least 2 gals. of water/A. **DO NOT** apply as a foliar broadcast application using a mechanically pressurized handgun.

GRASS FOR FORAGE, FODDER AND HAY – PASTURE AND RANGELAND GRASS, GRASS GROWN FOR HAY OR SILAGE AND GRASS GROWN FOR SEED

Pests	Product Rate Per Acre	USE DIRECTIONS
Army Cutworm Cutworm spp. Essex Skipper Range Caterpillar Striped Grass Looper	0.92-1.54 fl. oz. (0.015-0.025 lb. a.i.)	See additional instructions below. [1]Best control is obtained before insects begin to roll leaves. [2]See resistance statement under Product Information. [3]Suppression only. [4]Greenbug is known to have many biotypes. This product may provide suppression only. A second application using alternative chemistry may be needed. Pasture and rangeland grass may be used for grazing or cut for forage 0 days after application. **DO NOT** cut grass to be dried and harvested for hay until 7 days after the last application. Grass grown for seed: Straw and mature seed (seed screenings) may be used as feed 7 days after the last application. Regrowth of grass grown for seed may be used for grazing, cut for forage or cut to be dried and harvested for hay. **DO NOT** apply more than 0.03 lb. a.i. (0.12 pt. or 1.84 fl. oz.)/A per cutting for pastures, rangeland, and grasses grown for seed. A minimum re-treatment interval (RTI) of 30 days is required for pastures and rangeland receiving 0.03
Beet Armyworm Billbug spp.[3] Bird Cherry-Oat Aphid[1] Black Grass Bug Black Turfgrass Beetle (Adult) Blue Stem Midge Cereal Leaf Beetle Chinch Bug Crane Fly spp. Cricket spp. English Grain Aphid[1] Fall Armyworm Flea Beetle spp. Grass Mealybug Grass Sawfly (Adult) Grasshopper spp. Green June Beetle (Adult) Greenbug[1,2,4] Japanese Beetle (Adult) Katydid spp. Leafhopper spp. Mite spp.[3] Russian Wheat Aphid[1] Southern Armyworm Spittlebug spp. Stink Bug spp. Sugarcane Aphid Thrips spp. Tick spp. True Armyworm Webworm spp.	1.23-1.84 fl. oz. (0.02-0.03 lb. a.i.)	

Yellowstriped Armyworm		lb. a.i./A which have not been cut between applications. **DO NOT** apply more than 0.09 lb. a.i. (0.35 pt. or 5.53 fl. oz. of product) per acre per year. Use scouting to determine application requirements. Base the timing and frequency of applications on when insect populations reach local economic thresholds. Apply by ground or air using enough water to obtain full coverage of foliage. When applying by air, apply in at least 2 gals. of water per acre. When applying by ground, apply in a minimum of 7 gals. of water per acre. Use higher application volumes and/or labeled application rates when foliage is dense, larvae are large, pest populations are high, or weather conditions are adverse. Use higher listed rates for longer residual. For chinch bug control, this product may only suppress heavy infestations and/or migrations. In these situations, a second application using alternative chemistry may be needed.

LEGUME VEGETABLES (BEANS AND PEAS)

EDIBLE PODDED (ONLY): *Canavalia gladiate* – sward bean; *Canavalia ensiformis* – jackbean; *Glycine max* – soybean (immature seed).

EDIBLE PODDED, SUCCULENT SHELLED OR DRIED SHELLED: *Phaseolus* spp. – includes field, kidney, lima, navy, pinto, runner, snap, tepary, and wax beans; *Vigna* spp. – includes adzuki, asparagus, moth, mung, rice, urd and yardlong beans, black-eyed pea, catjang, Chinese longbean, cowpea, Crowder pea, and Southern pea; *Pisum* spp. – includes dwarf, edible-pod, English, field, garden, green, snow, and sugar peas; *Cajanus cajan* – Pigeon pea.

SUCCULENT SHELLED OR DRIED SHELLED: Vica faba – broadbean (fava bean).

DRIED SHELLED (ONLY): *Lupinus* spp. – includes grain, sweet, white and sweet white lupines; *Cicer arietimum* – chickpea (garbanzo bean), *Cyamopsis tetraganoloba* – guar, *Lablab purpureus* – lablab bean (hyacinth bean), *Lens esculata* – lentils.

Pests	Product Rate Per Acre	USE DIRECTIONS
Cutworm spp. Green Cloverworm Imported Cabbageworm	0.92-1.54 fl. oz. (0.015-0.025 lb. a.i.)	

<table>
<tr><td>Mexican Bean Beetle
Saltmarsh Caterpillar
Velvetleaf Caterpillar</td><td></td><td rowspan="3">For edible podded and succulent shelled legume vegetables, DO NOT apply within 7 days of harvest.

For dried shelled legume vegetables, DO NOT apply within 21 days of harvest.

DO NOT apply more than 0.12 lb. a.i. (0.46 pt. or 7.37 fl. oz. of product)/A per year.

For succulent and dried shelled peas and beans, DO NOT graze livestock in treated areas or harvest vines for forage or hay.

Use scouting to determine need for application, usually at intervals of 5 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds.

Apply by ground or air using enough water to obtain full coverage of foliage. When applying by air, apply in at least 2 gals. of water/A.

[1]For control before the larva bores into the plant stalk or pods.

[2]Use higher listed rates for large larvae.

[3]For suppression only.

[4]See resistance statement under Product Information.

[5]Does not include Western Flower Thrips.

DO NOT apply as a foliar broadcast application using a mechanically pressurized handgun.</td></tr>
<tr><td>Alfalfa Caterpillar
Aphid spp.[4]
Armyworm[2]
Bean Leaf Beetle
Bean Leafskeletonizer
Blister Beetle spp.
Corn Earworm
Corn Rootworm Beetle spp. (Adult)
Cucumber Beetle spp. (Adult)
Curculio and Weevil spp.[1] (Foliage and pod feeding adults and larvae)
European Corn Borer
Fall Armyworm[2]
Flea Beetle spp. (Adult)
Flea Hopper spp.
Grasshopper spp.
Japanese Beetle (Adult)
Leafhopper spp.
Leaftier spp.
Looper spp.
Meadow Spittlebug
Painted Lady Butterfly (Larva)
Plant Bug spp. including Lygus spp.[4]
Stalk Borer[1]
Stink Bug spp.
Threecornered Alfalfa Hopper
Thrips spp.[4,5]
Tobacco Budworm[4]
Webworm spp.
Western Bean Cutworm
Western Yellowstriped Armyworm[2]
Yellowstriped Armyworm[2]</td><td>1.23-1.84 fl. oz.
(0.02-0.03 lb. a.i.)</td></tr>
<tr><td>Beet Armyworm[3,4]
Leafminer spp.[3,4]
Lesser Cornstalk Borer[3]
Soybean Looper[3,4]
Spider Mite spp.[3]
Whitefly spp.[3,4]</td><td>1.84 fl. oz.
(0.03 lb. a.i.)</td></tr>
</table>

LEGUME VEGETABLES (SOYBEANS)

Pests	Product Rate Per Acre	USE DIRECTIONS
Bean Leaf Beetle Cabbage Looper Corn Earworm Corn Rootworm Beetle (Adult beetles including Mexican, Northern, Southern, Western) Cutworm spp. Green Cloverworm Mexican Bean Beetle Painted Lady (Thistle) Caterpillar Potato Leafhopper Saltmarsh Caterpillar Soybean Aphid[4] Threecornered Alfalfa Hopper Thrips spp.[5] Velvetbean Caterpillar Woolybear Caterpillar	0.92-1.54 fl. oz. (0.015-0.025 lb. a.i.)	Use scouting to determine need for application, usually at intervals of 5 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds. **DO NOT** graze or harvest treated soybean forage, straw or hay for livestock feed. Apply by ground or air using enough water to obtain full coverage of foliage. When applying by air, apply in at least 2 gals. of water/A. For control of adult corn rootworm beetles (*Diabrotica* spp.) as part of an aerial applied to corn rootworm control program use at least 1.23 fl. oz./A of product (0.02 lb. a.i./A). [1]Use higher labeled rates for large larvae. [2]Suppression only. [3]See resistance statement under Product Information. [4]Use lower labeled rates for early season applications and/or lighter populations. [5]Does not include Western Flower Thrips. **DO NOT** apply within 30 days of harvest. **DO NOT** apply more than 0.06 lb. a.i. (0.23 pt. or 3.69 fl. oz of product)/A per year. **DO NOT** apply as a foliar broadcast application using a mechanically pressurized handgun.
Armyworm[1] Blister Beetle spp. European Corn Borer Fall Armyworm[1] Grasshopper spp. Japanese Beetle (Adult) Plant Bug spp. Silverspotted Skipper Stink Bug spp. Tobacco Budworm[3] Webworm spp. Yellowstriped Armyworm[1]	1.54-1.84 fl. oz. (0.025-0.03 lb. a.i.)	
Beet Armyworm[2,3] Lesser Cornstalk Borer[2] Soybean Looper[2,3] Spider Mite spp.[2]	1.84 fl. oz. (0.03 lb. a.i.)	

LETTUCE (HEAD AND LEAF)

Pests	Product Rate Per Acre	USE DIRECTIONS
Alfalfa Looper Cabbage Looper Cutworm spp. Green Cloverworm Imported Cabbageworm Saltmarsh Caterpillar	0.92-1.54 fl. oz. (0.015-0.025 lb. a.i.)	Use scouting to determine need for application, usually at intervals of 5 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds. Apply by ground or air using enough water to obtain full coverage of foliage. When applying by air, apply in at least 2 gals. of water/A. [1]For control of first and second instars only. [2]Suppression only. [3]See resistance statement under Product Information. **DO NOT** apply within 1 day of harvest. **DO NOT** apply more than 0.3 lb. a.i. (1.15 pts. or 18.43 fl. oz. of product)/A per year. **DO NOT** apply as a foliar broadcast application using a mechanically pressurized handgun.
Aphid spp.[2,3] Armyworm Beet Armyworm[1,3] Corn Earworm Diamondback Moth[3] European Corn Borer Fall Armyworm[1] Flea Beetle spp. Grasshopper spp. Japanese Beetle (Adult) Leafhopper spp. Meadow Spittlebug Plant Bug spp. including Lygus spp.[3] Southern Armyworm Spider Mite spp.[2] Stink Bug spp. Tobacco Budworm[3] Vegetable Weevil (Adult) Whitefly spp.[2,3]	1.23-1.84 fl. oz. (0.02-0.03 lb. a.i.)	

ONION (BULB) AND GARLIC

Pests	Product Rate Per Acre	USE DIRECTIONS
Cutworm spp. Leafminer spp. (Adult) Onion Maggot (Adult) Seedcorn Maggot (Adult)	0.92-1.54 fl. oz. (0.015-0.025 lb. a.i.)	See additional instructions below. Use scouting to determine need for application, usually at intervals of 5 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds. Use the higher listed label rates as thrips population increases and avoid rescue situations. Apply by ground or air using enough water and application methods to obtain full coverage of foliage. When applying by air, apply in at least 2 gals. of water/A.
Aphid spp.[2] Armyworm spp.[1] Flower Thrips[2,3] Onion Thrips[3] Plant Bug spp. Stink Bug spp. Tobacco Thrips[3] Western Flower Thrips[2,3]	1.23-1.84 fl. oz. (0.02-0.03 lb. a.i.)	

		To control thrips by aerial application, the addition of 1% COC v/v, 1/4% NIS v/v or a silicone adjuvant (follow manufacturer's use directions) may improve the deposition of the spray and increase plant coverage. [1]For control of first and second instars only. [2]Suppression only. [3]See resistance statement under Product Information. **DO NOT** apply within 14 days of harvest. **DO NOT** apply more than 0.24 lb. a.i. (0.92 pts. or 14.74 fl. oz. of product)/A per year. **DO NOT** apply as a foliar broadcast application using a mechanically pressurized handgun.

PEANUTS

Pests	Product Rate Per Acre	USE DIRECTIONS
Cutworm spp. Green Cloverworm Potato Leafhopper Rednecked Peanut Worm Threecornered Alfalfa Leafhopper Velvetbean Caterpillar	0.92-1.54 fl. oz. (0.015-0.025 lb. a.i.)	Use scouting to determine need for application, usually at intervals of 7 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds.
Bean Leaf Beetle Corn Earworm Fall Armyworm[1] Grasshopper spp. Southern Corn Rootworm (Adult) Stink Bug spp. Tobacco Thrips Vegetable Weevil Whitefringed Beetle (Adult)	1.23-1.84 fl. oz. (0.02-0.03 lb. a.i.)	Apply by ground or air using enough water to obtain full coverage of foliage. When applying by air, apply in at least 2 gals. of water/A. [1]Use higher listed rates for large larvae. [2]Suppression only. [3]See resistance statement under Product Information **DO NOT** apply within 14 days of harvest.
Aphid spp.[2] Beet Armyworm[2,3] Lesser Cornstalk Borer[2] Soybean Looper[2,3] Spider Mite spp.[2]	1.84 fl. oz. (0.03 lb. a.i.)	

		DO NOT apply more than 0.12 lb. a.i. (0.46 pt. or 7.37 fl. oz. of product)/A per year.

POME FRUITS – APPLE, CRABAPPLE, LOQUAT, MAYHAW, ORIENTAL PEAR, PEAR, QUINCE

Pests	Product Rate Per Acre	USE DIRECTIONS
Apple Aphid Apple Maggot (Adult) Cherry Fruit Fly spp. (Adult) Codling Moth Green Fruitworm Japanese Beetle Leafhopper spp. Leafroller spp. Lesser Appleworm Omnivorous Leafroller Orange Tortrix Oriental Fruit Moth Pear Psylla[1] Pear Sawfly Periodical Cicada Plant Bug spp. Plum Curculio Rosy Apple Aphid San Jose Scale (Fruit infestations only) Spirea Aphid[1] Stink Bug spp. Tent Caterpillar spp. Tentiform Leaf Miner spp. Tree Borer spp. Tufted Apple Budworm Webworm spp.	1.23-2.46 fl. oz. (0.02-0.04 lb. a.i.)	See additional instructions below. Use scouting to determine need for application, usually at intervals of 5 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds and IPM recommendations. Apply by ground or air using enough water to obtain full coverage of the foliage or target area. When applying by air, apply in at least 5 gals. of water per acre, but use higher volumes as appropriate for thorough coverage. [1]Suppression only. **DO NOT** apply within 21 days of harvest. **DO NOT** apply more than 0.2 lb. a.i. (0.77 pts. or 12.29 fl. oz. of product)/A per year. **DO NOT** apply more than 0.16 lb. a.i. (0.61 pts. or 9.83 fl. oz. of product)/A per year post bloom.

STONE FRUITS – APRICOT, SWEET CHERRY, TART CHERRY, NECTARINE, PEACH, PLUM, CHICASAW PLUM, DAMSON PLUM, JAPANESE PLUM, PLUMCOT, PRUNE

Pests	Product Rate Per Acre	USE DIRECTIONS
American Plum Borer Apple Maggot (Adult) Black Cherry Aphid Cherry Fruit Fly spp. (Adult) Codling Moth Green Fruitworm Japanese Beetle June Beetle Leafhopper spp. Leafroller spp. Oriental Fruit Moth Peachtree Borer spp. Peach Twig Borer	1.23-2.46 fl. oz. (0.02-0.04 lb. a.i.)	Use scouting to determine need for application, usually at intervals of 5 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds and IPM recommendations. Apply by ground or air using enough water to obtain full coverage of the foliage or target area. When applying by air, apply at least 5 gals. of water per

Pear Sawfly Periodical Cicada Plant Bug spp. Plum Curculio Rose Chafer Stink Bug spp. Tent Caterpillar spp. Thrips spp.		acre but use higher volumes as appropriate for thorough coverage. **DO NOT** apply within 14 days of harvest. **DO NOT** apply more than 0.2 lb. a.i. (0.77 pts. or 12.29 fl. oz. of product)/A per year. **DO NOT** apply more than 0.16 lb. a.i. (0.61 pts. or 9.83 fl. oz. of product)/A per year post bloom.

SUGARCANE

Pests	Product Rate Per Acre	USE DIRECTIONS
Mexican Rice Borer[1] Pygmy Mole Cricket Rice Stalk Borer[1] Sugarcane Aphid[3] Sugarcane Beetle (Adult)[2] Sugarcane Borer[1] West Indian Cranefly Yellow Sugarcane Aphid[3]	1.54-2.46 fl. oz. (0.025-0.04 lb. a.i.)	Use scouting to determine need for application, usually at intervals of 7 or more days. Base the timing and frequency of applications on when insect populations reach local economic threshold. Apply by ground or air using enough water to obtain full coverage of the foliage or target area. When applying by air, apply at least 2 gals. of water/A. [1]For control before the larva bores into the plant stalk. [2]Suppression only of beetles active above ground. [3]See resistance statement under Product Information. **DO NOT** apply within 21 days of harvest. **DO NOT** apply more than 0.16 lb. a.i. (0.61 pts. or 9.83 fl. oz. of product)/A per year.

SUNFLOWER

Pests	Product Rate Per Acre	USE DIRECTIONS
Cutworm spp. Sunflower Beetle	0.92-1.54 fl. oz. (0.015-0.025 lb. a.i.)	Use scouting to determine need for application, usually at intervals of 5 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds. Apply by ground or air using enough water to obtain full coverage of sunflower heads and/or foliage. When applying by air, apply in at least 2 gals. of water/A. [1]Use higher listed rates for large larvae. [2]Suppression only. [3]See resistance statement under Product Information. **DO NOT** apply within 45 days of harvest. **DO NOT** apply more than 0.12 lb. a.i. (0.46 pt. or 7.37 fl. oz. of product)/A per year. **DO NOT** apply more than 0.09 lb. a.i. (0.35 pt. or 5.53 fl. oz. of product)/A per year after bloom initiation. **DO NOT** apply as an Ultra-Low Volume (ULV) spray.
Banded Sunflower Moth Fall Armyworm[1] Grasshopper spp. Head-Clipper Weevil (Adult) Japanese Beetle (Adult) Leafhopper spp. Meadow Spittlebug Painted Lady (Thistle) Caterpillar Seed Weevil (Adult) Spotted Cabbage Looper Stem Weevil (Adult) Stink Bug spp. Sunflower Maggot (Adult) Sunflower Moth Woolybear Caterpillar	1.23-1.84 fl. oz. (0.02-0.03 lb. a.i.)	
Beet Armyworm[2,3] Spider Mite spp.[2]	1.84 fl. oz. (0.03 lb. a.i.)	

TOBACCO

Pests	Product Rate Per Acre	USE DIRECTIONS
Armyworm spp.[1] Blister Beetle spp. Cabbage Looper Corn Earworm Cucumber Beetle spp. (Adult) Cutworm spp. Grasshopper spp. Japanese Beetle (Adult) Katydid spp. Plant Bug spp.[3] Potato Tuberworm Saltmarsh Caterpillar Stinkbug spp. Tobacco Aphid spp.[2,3] Tobacco Budworm[3]	0.92-1.84 fl. oz. (0.015-0.03 lb. a.i.)	Use scouting to determine need for application, usually at intervals of 7 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds. Apply by ground or air using enough water to obtain full coverage of the foliage. When applying by air, apply in at least 2 gals. of water/A. [1]For control of first and second instars only.

Tobacco Flea Beetle (Adult) Tobacco Hornworm Tobacco Thrips spp.[2] Tomato Hornworm Tree Cricket spp. Vegetable Weevil (Adult) Webworm spp.		[2]Suppression only. [3]See resistance statement under Product Information. **DO NOT** apply within 40 days of harvest. **DO NOT** apply more than 0.09 lb. a.i. (0.35 pt. or 5.53 fl. oz. of product)/A per year. **DO NOT** apply as a foliar broadcast application using a mechanically pressurized handgun.

TREE NUTS – ALMOND, BEECH NUT, BRAZIL NUT, BUTTERNUT, CASHEW, CHESTNUT, CHINQUAPIN, FILBER (HAZLENUT), HICKORY NUT, MACADAMIA NUT (BUSH NUT), PISTACHIO, WALNUT-BLACK, WALNUT-ENGLISH (PERSIAN), PECAN

Pests	Product Rate Per Acre	USE DIRECTIONS
Ants Chinch Bug Codling Moth Filbertworm Hickory Shuckworm Leaffooted Bug Leafroller spp. Navel Orangeworm Peach Twig Borer Pecan Aphid spp. Pecan Casebearer spp. Pecan Phylloxera spp. Pecan Spittlebug Pecan Weevil Plant Bug spp. Stink Bug spp. Walnut Aphid Walnut Husk Fly spp. (Adult)	1.23-2.46 fl. oz. (0.02-0.04 lb. a.i.)	Use scouting to determine need for application, usually at intervals of 5 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds. Apply by ground or air using enough water to obtain full coverage of the foliage or target area. When applying by air, apply in at least 5 gals. of water per acre, but use higher listed rates as appropriate for thorough coverage. **DO NOT** apply within 14 days of harvest. **DO NOT** apply more than 0.16 lb. a.i. (0.61 pts. or 9.83 fl. oz. of product)/A per year. **DO NOT** apply more than 0.12 lb. a.i. (0.48 pt. or 7.37 fl. oz. of product)/A per year post bloom.

TUBEROUS AND CORM VEGETABLES – ARRACACHA, ARROWROOT, ARTICHOKE (Chinese and Jerusalem only), CANNA (edible), CASSAVA (bitter and sweet), CHAYOUT (root), CHUFA, DASHEEN, GINGER, LEREN, POTATO, SWEET POTATO, TANIER, TURMERIC, YAM (bean and true)

Pests	Product Rate Per Acre	USE DIRECTIONS
Cutworm spp. Leafhopper spp. Saltmarsh Caterpillar Sweet Potato Hornworm Woolybear Caterpillarspp.	0.92-1.54 fl. oz. (0.015-0.025 lb. a.i.)	Use scouting to determine need for application, usually at intervals of 7 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds. Apply by ground or air using enough water to obtain full coverage of foliage. When applying by air, apply in at least 2 gals. of water per acre. When applying by ground, apply in a minimum of 10 gals. of water per acre. Use higher application volumes and/or listed application rates when foliage is dense, larvae are large, pest populations are high, plant size increases, or weather conditions are adverse. Use higher listed rates for longer residual. Insects that tunnel or bore into leaves, vines, stems, tubers, or corms must be controlled before penetration. Only exposed insects (larvae and/or adults) can be controlled with foliar applications of this product. [1]See resistance statement under Product Information. [2]Does not include Western Flower Thrips. [3]Suppression only. **DO NOT** apply within 7 days of harvest. **DO NOT** apply more than 0.12 lb. a.i. (0.46 pt. or 7.37 fl. oz. of product) per acre per year. **DO NOT** apply as a foliar broadcast application using a mechanically pressurized handgun.
Aphid spp.[1] Armyworm spp.[1] Blister Beetle spp. Colorado Potato Beetle[1] Corn Earworm Cricket spp. Cucumber Beetle spp. (Adult) European Corn Borer Flea Beetle spp. (Adult) Grasshopper spp. Looper spp.[1] Lygus Bug spp.[1] Plant Bug spp. Potato Psyllid Potato Tuberworm Stink Bug spp. Sweet Potato Leaf Beetle (Adult) Sweet Potato Vine Borer Thrips spp.[1,2] Tortoise Beetle spp. Webworm spp. Weevil spp. (Adult)	1.23-1.84 fl. oz. (0.02-0.03 lb. a.i.)	
Leafminer spp.[1,3] Whitefly spp.[1,3] Spider Mite spp.[3]	1.84 fl. oz. (0.03 lb. a.i.)	

CONIFER AND DECIDUOUS TREES – PLANTATIONS AND NURSERIES

Pests	Product Rate	USE DIRECTIONS

	Per Acre	
Bagworm Balsam Twig Aphid Balsam Wooly Aphid Birch Leafminer Black Pine Weevil Elm Leaf Beetle European Elm Leaf Beetle Gypsy Moth Japanese Beetle June Beetle spp. Leaf Beetle spp. Leafroller spp. May Beetle spp. Mealybug spp.[1] Pales Weevil Pine Chafer Pine Colaspis Beetle Pine Conelet Bug Pine Leaf Chermid Pine Needle Scale Pine Sawfly spp. Pine Tip Moth spp. Pine Tortoise Scale Pine Weevil spp. Poplar Aphid spp. Sawfly spp. Spittlebug spp. Spruce Budworm Tent Caterpillar spp. Tussock Moth spp. Webworm spp.	1.23-2.46 fl. oz. (0.02-0.04 lb. a.i.)	Use scouting to determine timing for control of exposed foliage, flower, cone, seed and bark feeding insects. Base the timing and frequency of applications on when insect populations reach local economic thresholds. Apply by ground or air using enough water to obtain full coverage of target site. When applying by air, apply in at least 2 gals. of water/A. [1]Suppression only. **DO NOT** apply more than 0.24 lb. a.i. (0.92 pts. or 14.74 fl. oz. of product)/A per year. **DO NOT** apply as a foliar broadcast application using a mechanically pressurized handgun. **DO NOT** apply as a soil, drench, or ground-directed application using a mechanically pressurized handgun on orchards and vineyards.

CONIFER AND DECIDUOUS TREES – SEED ORCHARDS

Pests	USE DIRECTIONS
Coneworm spp. Seed Bug spp. Thrips spp.	For high volume sprayers, dilute 2.46 fl. oz. of product per 100 gals. of water and apply 5-10 gals. of finished spray per tree. For low volume sprayers, dilute 10 fl. oz. of product per 100 gals. of water and apply 100 gals. of finished spray per acre. For aerial applications, apply 7.5 fl. oz. of product per acre in a minimum of 10 gals. of finished spray per acre. **DO NOT** apply more than 0.5 lb. a.i. (2 pts. or 30.72 fl. oz. of product)/A per year. **DO NOT** apply as a foliar broadcast application using a mechanically pressurized handgun on orchards." **DO NOT** apply as a soil, drench, or ground-directed application using a mechanically pressurized handgun on orchards.

NON-AGRICULTURAL USES

NON-CROPLAND ADJACENT TO AGRICULTURAL AREAS (EXCLUDING PUBLIC LAND)

Pests	USE DIRECTIONS
See crop instructions in sections above for specific pest and rate information.	Spray non-cropland adjacent to agricultural areas to control insects which may migrate to and threaten crops. Follow the Directions for Use instructions, application rates, and spray recommendations found elsewhere on this label for the adjacent crop outlet and target pests. When foliage is dense/large, insect populations are high or larval stages are large, use the highest labeled rate for that crop-pest combination. Repeat as necessary to maintain control. **DO NOT** apply more than 0.2 lb. a.i. (0.77 pts. or 12.29 fl. oz. of product)/A per year. **DO NOT** graze livestock in treated areas.

Rate Conversion Chart

Treated	60	50	40	33	25
pts./A	0.04	0.08	0.10	0.12	0.15
fl. oz./A	0.61	1.23	1.54	1.84	2.46
lbs. a.i./A	0.01	0.02	0.025	0.03	0.04

FOR USE ON PLANTS INTENDED FOR AESTHETIC PURPOSES OR CLIMATIC MODIFICATION AND BEING GROWN IN INTERIOR PLANSCAPES, ORNAMENTAL GARDENS OR PARKS,

- **DO NOT** apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment. During application, do nto allow pesticide to enter or runoff into storm drains, drainage ditches, gutters or surface waters.
- **DO NOT** use on residential lawns and turf in residential settings (e.g., homes, parks, schools, athletic fields or any other area frequented by the general public).
- All outdoor applications must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:

  1. Perimeter band treatments of 7 feet wide or less from the base of a man-made structure to pervious surfaces (e.g., soil, mulch, or lawn);
  2. Application to pervious surfaces such as soil, lawn, turf, and other vegetation;
  3. Applications to vertical surfaces (such as the side of a man-made structure) directly above impervious surfaces (e.g., driveways, sidewalks, etc.), up to 2 feet above ground level;
  4. Applications to underside of eaves, soffits, doors, or windows permanently protected from rainfall by a covering, overhang, awning, or other structure;

5. Applications around potential exterior pest entry points into man-made structures such as doorways and windows, when limited to a band not to exceed one inch; ;

6. Applications to vertical surfaces directly above pervious surfaces, such as soil, lawn, turf, mulch or other vegetation) only if the pervious surface does not drain into ditches, storm drains, gutters, or surface waters..

- **DO NOT** apply or irrigate to the point of runoff.
- **DO NOT** make applications during rain. Avoid making applications when rainfall is expected before the product has sufficient time to dry (minimum 4 hours).
- Rainfall within 24 hours after application may cause unintended runoff of pesticide application.
- **DO NOT** the product into fish pools, ponds, streams, or lakes. Do not apply directly to sewers or storm drains, or to any area like a drain or gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur..
- **DO NOT** allow the product to enter any drain during or after application.
- **DO NOT** apply directly to impervious horizontal surfaces such as sidewalks, driveways, and patios except as a spot or crack-and-crevice treatment.
- Spot treatments must not exceed two square feet in size (for example, 2 ft. by 1 ft. or 4 ft. by 0.5 ft.).
- For soil or foliar applications, do not apply by ground within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds.
- **DO NOT** apply when the wind speed is greater than 15 mph.
- Treat surfaces to ensure thorough coverage but avoid runoff.
- To treat insects harbored in voids and cracks-and-crevices, applications must be made in such a manner to limit dripping and avoid runoff onto untreated structural surfaces and plants.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

PESTICIDE STORAGE: Store in a cool, dry place. For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product are toxic. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

CONTAINER HANDLING:

Containers < 5 Gallons: Nonrefillable container. **DO NOT** reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Minibulk Containers: Nonrefillable container. **DO NOT** reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

Triple rinse as follow: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto it other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Bulk Containers: Refillable container. Refill this container with pesticide only. **DO NOT** reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes.

Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. When the container is empty, replace the cap and seal all openings that have been opened during use; and return to the point of purchase, or to a designated location named at the time of purchase of this product. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transporting. **DO NOT** transport if this container is damaged or leaking. If the container is damaged or leaking, call CHEMTREC. If the container is damaged and leaking or material has been spilled, follow these procedures:

- Cover spill with absorbent material.
- Sweep into disposal container.

- Wash area with detergent and water and follow with clean water rinse.
- **DO NOT** allow to contaminate water supplies.
- Dispose of according to instructions.

If not returned to the point of purchase or to a designated location, clean empty container as instructed above and offer for recycling. Disposal of this container must be in compliance with state and local regulations.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of this product, which are beyond the control of ALBAUGH, LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold ALBAUGH, LLC and Seller harmless for any claims relating to such factors.

ALBAUGH, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent consistent with applicable law, this warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or ALBAUGH, LLC and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ALBAUGH, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, in no event shall ALBAUGH, LLC or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ALBAUGH, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ALBAUGH, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

ALBAUGH, LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by a duly authorized representative of ALBAUGH, LLC.

041425

LABEL HISTORY

Not Part of Final printed Label

File Name	Revision Mark	Comment
042750-00XXX.20200324.Crusader2ME.DRAFT	032420	Initial application draft label
042750-00GIL.20210322.DRAFT	032221	Corrections requested by EPA
042750-00385.20210322.MASTER	**AD032221**	**Section 3 Approval**
042750-00385.20220218.DRAFT	021822	Lambda-Cyhalothrin PID Label Mitigation
042750-00385.20241125.DRAFT	112524	Update Label
042750-00385.20250414.DRAFT	041425	Update Label