Restricted Use Pesticide

Due to Toxicity 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.

GROUP

ЗА

INSECTICIDE

Lambda-Cy Ag

INSECTICIDE

For the Control of a Variety of Insect Pests on Selected Crops Contains the same active ingredient as Karate® Insecticide.

ACTIVE INGREDIENT:

Lambda-cyhalothrin	1.4%
OTHER INGREDIENTS:	8.6%
TOTAL:	0.0%

Contains petroleum distillates.

Contains 1 lb. of active ingredient per gallon.

WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.) For additional First Aid, precautionary, handling, and use statements, see inside of this booklet.

EPA Reg. No. 83222-42



Manufactured For: Direct Ag Source, LLC 30473 260th Street • Eldora, IA 50627



EPA 062212/Rev B

FIRST AID
Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
 Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes; then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
 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.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call the National Pesticide Information Center (NPIC) at 1-800-858-7378 seven days a week, 6:30 am to 4:30 pm Pacific Time.

Note to Physician - Contains petroleum distillate - vomiting may cause aspiration pneumonia.

PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals WARNING-AVISO

May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as barrier laminate or Viton ≥14 mils
- · Shoes plus socks
- Protective eyewear

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.

ENGINEERING CONTROLS STATEMENT

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

USER SAFETY RECOMMENDATIONS

Users should:

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

ENVIRONMENTAL HAZARDS

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

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters, or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind and rain do not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid runoff to water bodies or drainage systems.

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

PHYSICAL AND CHEMICAL HAZARDS

Combustible liquid. Do not use or store near heat or open flame. Do not use this product in or on electrical equipment due to the possibility of shock hazard.

DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the 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:

- · Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as barrier laminate or Viton >14 mils
- · Shoes plus socks

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

SPRAY DRIFT PRECAUTIONS BUFFER ZONES

Vegetative Buffer Strip

Construct and maintain a minimum 10-foot-wide vegetative filter strip of grass or other permanent vegetation between the field edge and 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 10 feet exists between the field and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers:

 Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA, NRCS. 2000. Fort Worth, Texas. 21 pp. http://www.in.nrcs.usda.gov/technical/agronomy/newconbuf.pdf.

Buffer Zone for Ground Application (ground boom, overhead chemigation, or airblast)

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).

Buffer Zone for 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).

Buffer Zone for 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).

SPRAY DRIFT REQUIREMENTS

Wind Direction and Speed

Only apply this product if the wind direction favors on-target deposition.

Do not apply when wind velocity exceeds 15 mph.

Temperature Inversions

Do not make aerial or ground applications into temperature inversions.

Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

Droplet size

Use only medium or coarse spray nozzles (for ground and non-ULV aerial application) according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperature, applicators should use a coarser droplet size.

Additional Requirements for Ground Application

For ground applications, wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

For ground boom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

For airblast applications, turn off outward-pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

Additional Requirements for Aerial Application

The spray boom should be mounted on the aircraft so as to minimize drift caused by wingtip or rotor vortices. The minimum practical boom length should be used and must not exceed 75% of wing span or 80% rotor diameter.

Flight speed and nozzle orientation must be considered in determining droplet size.

Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.

When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

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 and 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.

CHEMIGATION

Sprinkler Irrigation Application

Apply Lambda-Cy Ag 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 (see Tank Mix Applications), rates, and mixing instructions. These recommendations should be proven through university and extension field trials to be effective with Lambda-Cy Ag 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 specified rate of Lambda-Cy Ag 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 insure adequate dispersion or mixing in the irrigation water. Once the application is completed, flush the entire irrigation and injection system with clean water before stooping the system.

In addition to the above recommendations, if application is being made during a normal irrigation set of a stationary sprinkler, the specified rate of Lambda-Cy Ag 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.

It is not recommended that Lambda-Cy Ag be applied through an irrigation system connected to a public water system. 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.

Use Precautions - Sprinkler Irrigation Application

- A. Apply this product only through sprinkler (including center pivot, lateral move, end tow, side [wheel] roll, traveler, big gun, solid set, or hand move) irrigation system(s). Do not apply this product through any other type of irrigation system.
- B. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- C. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.
- D. 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.
- E. 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.
- F. 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.
- G. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- H. 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.
- J. 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.
- K. 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.
- L. Any alternatives to the above required safety devices must conform to the list of EPA-approved alternative devices.
- M. Do not apply when wind speed favors drift beyond the area intended for treatment or non-uniform distribution of treated water.
- N. Do not apply through chemigation systems connected to public water systems.

PRODUCT INFORMATION

Initial and residual control is contingent upon thorough crop coverage. Apply with ground or air 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 application volumes and/or higher use rates may improve initial and residual control.

For cutworm control, Lambda-Cy Ag may be applied before, during, or after planting. For soil-incorporated applications, use higher rates for improved control.

Resistance Management

Lambda-Cy Ag contains a Group 3A insecticide. Insect/mite biotypes with acquired resistance to Group 3A may eventually dominate the insect/mite population if Group 3A insecticides/acaricides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Lambda-Cy Ag or other Group 3A insecticides/acaricides. To delay insecticide resistance, consider:

- Avoiding the consecutive use of Lambda-Cy Ag or other group 3A insecticides/acaricides that have a similar target site of action on the same insect/mite species.
- Using tank mixtures or premixes with insecticides/acaricides from a different target site of action Group as long as the involved products are all registered for the same use and have different sites of action.
- Basing insecticide/acaricide use on a comprehensive IPM program.
- Monitoring treated insect/mite populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for insecticide/acaricide resistance management and/ or IPM recommendations for the specific site and resistant pest problems.

Tank Mix Applications

Lambda-Cy Âg may be tank mixed with other currently registered pesticides unless expressly prohibited by the product label. Adjuvants such as spreader stickers, wetting agents, and penetrates may also be added. Use a small volume mixing test with the other products to confirm compatibility. If other chemicals are added to the applicator tank, Lambda-Cy Ag should be added last. Fill tank to desired volume and continue to agitate while making applications. If mixed with EC formulations, use within 24 hours. Observe all restrictions and precautions found on labels of any products in the tank mix.

SPECIFIC USE DIRECTIONS - AGRICULTURAL USES

Crop	Target Pests	Ra	ite	Remarks
		lb. a.i./A	fl. oz./A	
ALFALFA AND ALFALFA GROWN FOR SEED	Alfalfa Caterpillar Army cutworm Cutworm spp. Green Cloverworm Leafhopper species Looper spp. Three-cornered Alfalfa Hopper Velvetbean Caterpillar Webworm spp. Alfalfa Seed Chalcid (Adult) Alfalfa Weevil Armyworm Bean Leaf Beetle (Adult) Blister Beetle spp. Blue Alfalfa Aphid Clover Leaf Weevil spp. Clover Root Boerr (Adult) Clover Root Curculio spp. (Adult) Clover Root Curculio (Spp. (Adult) Clover Beetle spp. Cowpea Curculio (Adult) Clover Beetle spp. Clover Root Beetle spp. Clover Beetle spp. Clover Root Beetle spp. (Adult) Clover Beetle spp. (Adult) Cowpea Curculio (Adult) Cowpea Weevil (Adult) Cournbear Seetle spp. (Adult) Egyptian Alfalfa Weevil Fall Armyworm Grape Colaspis (Adult) Grasshopper spp.	0.015-0.025	1.92 – 3.20 2.56 – 3.84	Apply only to fields planted to pure stands of alfalfa. Apply as required by scouting. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Apply with ground or air 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 air or 20 gallons per acre by air or 20 gallons per acre by ground. When foliage is dense and/or pest populations are high, 5-10 gallons per acre by ground and higher use rates are recommended. Use higher rates for increased residual control. Avoid application 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. It may be advisable to remove bee shelters during and for 2-3 days following application. Avoid direct application to bee shelters. • Do not apply more than 0.03 lb. a.i. (0.24 pt. or 3.84 fl. 0z. of product)/A per cutting.
	Green June Beetle (Adult) Green Peach Aphid³ Japanese Beetle (Adult) Meadow Spittlebug Mexican Bean Beetle Pea Aphid Pea Weevil (Adult) Plant Bug spp. including Lygus spp.³ Spotted Affalfa Aphid Stink Bug spp. Sweet Clover Weevil (Adult) Thrips spp.⁴ Western Yellow-striped Armyworm Whitefringed Beetle spp. (Adult) Yellow-striped Armyworm Beet Armyworm¹³ Blotch Leafminer³ Spider Mites¹	0.03	3.84	Do not apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 ft. oz. of product)/A per season. Do not apply within 1 day of harvest for forage or within 7 days of harvest for hay. Use higher rates for large larvae. Suppression only. See resistance statement under PRODUCT INFORMATION. Does not include Western Flower Thrips.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
CANOLA	Cutworm spp. Armyworm spp. Diamondback Moth Flea Beetle Cabbage Seedpod Weevil Lygus Bug Grasshoppers	0.015-0.03	1.92-3.84	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic threshold. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply a minimum
	Cabbage Aphid	0.03	3.84	of 2 gals. of water/A. Do not apply within 7 days of harvest. Do not apply more than 0.09 lb. a.i. (0.72 pt. or 11.52 fl. oz. of product)/A per year.
CEREAL GRAINS: Corn (At-Plant): Field Corn Popcorn Seed Corn Sweet Corn	Corn Rootworm Larvae (Western, Northern, Southern, Mexican) Cutworm spp. Seedcorn Maggot Seedcorn Beetle Lesser Cornstalk Borer White Grub spp. Wireworm spp. Red Imported Fire Ant¹	0.005 lb. a.i. per 1000 ft. of row ²	0.66 fl. oz. per 1000 ft. of row ²	Banded Applications: Apply at planting as a 5-to 7-inch 1-band sprayed across the open seed furrow between the furrow openers and the press wheels or as a band application behind the press wheel. In-Furrow Applications: Apply 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. of finished spray/A. • Do not harvest or graze livestock or cut treated crops for feed within 21 days of atplant application. • Do not apply more than 0.09 lb. a.i. (0.72 pt. or 11.52 lf. 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. (0.96 pt. or 15.36 lf. oz. of product)/A per crop from atplant and foliar applications. • For sweet corn, do not apply more than 0.48 lb. a.i. (3.84 pts. of 61.44 lf. oz. of product)/A per crop from atplant and foliar applications.

² Lbs. a.i. and fl. oz./A of Lambda-Cyhalothrin applied at 0.66 fl. oz./1000 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	8.6	9.1	9.6	10.1	10.8	11.5		

Crop	Target Pests	Rate		Remarks	
		lb. a.i./A	fl. oz./A		
CEREAL GRAINS: Corn (Foliar): Field Corn Popcorn	Cutworm spp. Western Bean Cutworm¹ Corn Earworm¹ Green Cloverworm Meadow Spittlebug	0.015-0.025	1.92-3.20	Apply as required by scouting or locally prescribed corn growth stages, usually at intervals of 7 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds or other locally recommended methods.	
Seed Corn	Tobacco Budworm ^{1, 4} European Corn Borer ¹ Southwestern Corn Borer Stalk Borer ¹	0.02-0.03	2.56-3.84	Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of target location. When applying by air, apply in a minimum of 2 gals. of water/A.	
	Hop Vine Borer¹ Armyworm² Fall Armyworm² Yellow-striped Armyworm² Webworm spp.			For chinch bug control, begin applications when bugs migrate from small grains or grass weeds to small corn. Direct spray to the base of corn plants. Repeat applications at 3- to 5-day intervals if needed. Lambda-Cy Ag may only suppress heavy infestations and/or subsequent migrations.	
	Flea Beetle spp. Western Com Rootworm Beetle (Adult) Northern Corn Rootworm Beetle (Adult) Southern Corn Rootworm Beetle (Adult) Mexican Corn Rootworm Beetle (Adult) Mexican Corn Rootworm Beetle (Adult) Bean Leaf Beetle Cereal Leaf Beetle Japanese Beetle (Adult) Sap Beetle (Adult) Sap Beetle (Adult) Stink Bug spp. Grasshopper spp. Corn Leaf Aphid³ English Grain Aphid³ English Grain Aphid³			For control of adult corn rootworm beetles (Diabrotica species) as part of an aerial-applied corn rootworm control program, use a minimum of 3.84 fl. oz./A (0.03 lb. a.i./A). 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 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 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per crop from at-plant and foliar applications. Do not apply more than 0.06 lb. a.i. (0.48 pt. or 7.68 fl. oz. of product) after silk initiation. Do not apply more than 0.03 lb. a.i. (0.24 pt. or 3.84 fl. oz. of product) after corn has reached the milk stage (yellow kernels with milky fluid).	
	Beet Armyworm ^{2, 4} Chinch Bug Green Bug ^{3, 4} Southern Corn Leaf Beetle Mexican Rice Borer ¹ Rice Stalk Borer ¹ Sugarcane Borer ¹	0.03	3.84	"Use higher rates for large larvae. Suppression only. 4See resistance statement under PRODUCT INFORMATION.	

Crop	Target Pests	Ra	te	Remarks
		lb. a.i./A	fl. oz./A	
CEREAL GRAINS: Corn (Foliar): Sweet Corn	Corn Earworm Fall Armyworm¹ Southern Armyworm¹ Beet Armyworm¹ Beet Armyworm¹ Set Armyworm¹ Yellow-striped Armyworm¹ Cutworm spp. Western Bean Cutworm Webworm spp. European Corn Borer Southwestern Corn Borer Common Cornstalk Borer Western Corn Rootworm Beetle (Adult) Northern Corn Rootworm Beetle (Adult) Mexican Corn Rootworm Beetle (Adult) Japaness Beetle (Adult) Sap Beetle (Adult) Flea Beetle spp. Tamished Plant Bug Stink Bug spp. Chinch Bug Aster Leathopper Grasshopper spp. Aphid spp.²³ Spider Milte spp.² Spider Milte spp.²	0.02-0.03	2.56-3.84	Apply as required by scouting or locally prescribed corn growth stages, usually at intervals of 4 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds or other locally recommended methods and should be targeted for control before insects enter the stalk or ear. Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of foliage and ears (if present). When applying by air, apply in a minimum of 2 gals, of water/A. For control of adult corn rootworm beetles (Diabrotica species) as part of an aerial-applied corn rootworm control program, use a minimum of 3.2 fl. oz. of product/A (0.025 lb. a.i./A). Do not apply within 1 day of harvest. Do not apply within 1 day of harvest. Do not apply within 1 day of harvest treated corn forage as feed for meat or dairy animals within 21 days 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. (3.84 pts. or 61.44 fl. oz. of product)/A per season. 'Use higher rates for large larvae. Suppression only. See resistance statement under PRODUCT INFORMATION.
	Corn Silkfly (Adult) ²	0.03	3.84	

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
CEREAL GRAINS: Rice Wild Rice	True Armyworm Fall Armyworm Yellow-striped Armyworm Rice Water Weevil (Adult) Rice Stink Bug Chinch Bug Grasshopper spp. Leafhopper spp. Bird Cherry-Oat Aphid Greenhug Sharpshooter spp. Yellow Sugarcane Aphid Riceworm	0.025-0.04	3.20-5.12	See additional instructions below. Do not release floodwater within 7 days of an application. Do not apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per season. Do not apply more than 0.04 lb. a.i. (0.32 pt.)/A within 21 to 27 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. For control before the larvae bores into the plant stalk.
	European Corn Borer¹ Mexican Rice Borer¹ Rice Seed Midge¹ Rice Stalk Borer¹ Sugarcane Borer¹	0.03-0.04	3.84-5.12	

REMARKS:

- Mixers/loaders supporting aerial applications to wild rice at a rate of 0.04 lb. a.i. per acre and treating 1200 acres (or more) per day must
 wear dust-mist respirator
- Apply as required by scouting. Timing and frequency of application should be based upon insect populations reaching locally determined
 economic thresholds. Determine the need for repeat applications, usually at intervals of 5-7 days, by scouting.

Lambda-Cv Ag can be safely used when propanil products are being used for weed control.

- Apply by air or by ground equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum
 of 2 gals, of water (or a total carrier volume)/A, but ensure sufficient volume is used to provide adequate coverage. In addition, adding an
 emulsifiable crop oil (e.g., 1 pt./A) when lower aerial application volumes are used is recommended to help improve coverage, reduce
 evaporation, and improve efficacy. Apply a minimum of 10 gallons/A by ground.
- For control of rice water weevil in dry-seeded rice, make a foliar application as indicated by scouting for the presence of adults and/or
 feeding scars, usually within a time frame of 0-5 days after permanent flood establishment. Do not exceed 10 days from starting permanent
 flood until insecticide application unless scouting indicates weevils have not been previously present. Adults may also be treated at later
 stages of rice development to reduce overwintering populations.
- For control of rice water weewil in water-seeded rice, make the first foliar application after pinpoint flood as indicated by scouting for the
 presence of adults and/or feeding scars, usually when rice has emerged 0.5 inch above the waterline. Under conditions of prolonged
 migration into the field, start field scouting for rice water weevil adults and/or feeding scars 3-5 days after the initial treatment, and if
 needed, apply a second application within 7-10 days of the first application. Adults may also be treated at later stages of rice development
 to reduce overwintering populations.
- California: In addition to above directions for control of rice water weevil in water-seeded rice, Lambda-Cy Ag may be applied at the 1- to 3-leaf growth stage with the majority at the 2- leaf growth stage.

(continued)

REMARKS: (continued)

Adults are vulnerable on levees and in the water. Larvae are vulnerable while feeding on the leaf prior to entering the soil. Monitor for adults based upon field history and density of population. Monitor field edges and levee areas for adults. Treat in the following manner: (a) snraw the inside perimeter of the field. or (b) snraw the entire field.

Greenbug is known to have many biotypes. Lambda-Cy Ag may only provide suppression. If satisfactory control is not achieved with the
first application of Lambda-Cv Ag. a resistant biotype may be present. Use alternate chemistry for control.

For control of stem borers, scout fields when rice growth is near panicle differentiation for early symptoms of damaging populations
exhibited as discoloration (orange-tan) around the junction of the leaf sheath and leaf blade which is caused by feeding of young larvae
within the sheath. Applications must be made before larvae bore into rice stems. Make the first application at panicle differentiation to
2-inch panicle for partial control. Make the second application at boot to heading for maximum control. All rice varieties are susceptible
to stem borer damage. but Cocodrie and Priscilla are particularly usscentible.

Crop	Target Pests	R	ate	Remarks
		lb. a.i./A	fl. oz./A	
CEREAL GRAINS: Sorghum (Grain)	Cutworm spp. Sorghum Midge	0.015-0.02	1.92-2.56	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect
	Armyworm Beet Armyworm ^{1,3} Fall Armyworm ¹ Yellow-striped	0.02-0.03	2.56-3.84	populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of target location. When applying by air, apply in a minimum of 2 gals. of water/A.
	Armyworm ¹ Corn Earworm Webworm spp. European Corn Borer ²			For sorghum midge control, begin applications when 25% of the sorghum heads have emerged and are in tip bloom. Repeat applications at 5-day intervals if needed.
	Southwestern Corn Borer ² Lesser Cornstalk Borer ² Flea Beetle spp. Stink Bug spp. Grasshopper spp.			For chinch bug control, begin applications when bugs migrate from small grains or grass weeds to small sorghum. Direct spray to the base of sorghum plants. Repeat applications at 3 - to 5-day intervals if needed. Lambda-Cy Ag may only suppress heavy infestations and/ or subsequent migrations. • Do not apply within 30 days of harvest.
	Chinch Bug Mexican Rice Borer ² Rice Stalk Borer ² Sugarcane Borer ²	0.03	3.84	 Do not apply more than 0.08 lb. a.i. (0.64 pt. or 10.24 fl. oz. of product)/A per season. Do not apply more than 0.06 lb. a.i. (0.48 pt. or 7.68 fl. oz. of product)/A per season after crop emergence. Do not apply more than 0.02 lb. a.i. (0.16 pt. or 2.56 fl. oz. of product)/A per season once crop is in soft dough stage.
				Use higher rates for large larvae only. For control before the larva bores into the plant stalk. See resistance statement under PRODUCT INFORMATION .

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
CEREAL GRAINS: Barley	Cutworm spp. Army Cutworm	0.015- 0.025	1.92-3.20	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect
Buckwheat Oats Rye Wheat Wheat Hay	Armyworm Fall Armyworm Yellow-striped Armyworm	0.02-0.03	2.56-3.84	populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A.
Triticale	Flea Beetle spp. Cereal Leaf Beetle Stink Bug spp. English Grain Aphid ¹			For chinch bug control, repeat applications at 3- to 5-day intervals if needed. Lambda-Cy Ag may only suppress heavy infestations and/ or migrations.
	Engisi Grain Aphid¹ Bussian Wheat Aphid¹ Bird Cherry-Oat Aphid¹ Grasshopper spp. Orange Blossom Wheat Midge Hessian Fly⁴			Greenbug is known to have many biotypes. Lambda-Cy Ag may provide suppression only. In this situation, a second application using an alternative chemistry may be needed. • Do not apply within 30 days of harvest. • Do not allow livestock to graze in treated areas or harvest treated wheat forage as feed for meat or dairy animals within 7 days after last treatment. Do not feed treated straw to meat or dairy animals within 30 days after last treatment.
	Grass Sawfly	0.025-0.03	3.20-3.84	Do not apply more than 0.06 lb. a.i. (0.48 pt. or 7.68 fl. oz. of product)/A per season.
	Chinch Bug Greenbug ^{1,2} Corn Leaf Aphid ² Mite spp. ²	0.03	3.84	1 Best control is obtained before insects begin to roll leaves. Once wheat has started to boot, Lambda-Cy Ag may provide suppression only, Higher rates and increased coverage will be necessary. 2 Suppression only. 3 See resistance statement under PRODUCT INFORMATION. 4 Make applications when adults emerge.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
COLE CROPS: Broccoli Brussels Sprouts Cabbage Cavalo Broccolo Cauliflower	Alfalfa Looper Cabbage Looper Imported Cabbageworm Southern Cabbageworm Cutworm spp. Cabbage Webworm	0.015-0.025	1.92-3.20	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in
Chinese Broccoli (gai lon) Chinese Cabbage (napa) Chinese Mustard Cabbage (gai choy) Kohlrabi	Diamondback Moth³ Armyworm Beet Armyworm³ Fall Armyworm¹ Yellow-striped Armyworm Corn Earworm Flea Beetle spp. Japanese Beetle (Adult) Vegetable Weevil (Adult) Grasshopper spp. Leafhopper spp. Leafhopper spp. Leafhopper spp. Neadow Spittlebug Aphid spp.²³ Whitefly spp.²³ Thrips spp.² Spider Mite spp.²	0.02-0.03	2.56-3.84	a minimum of 2 gals. of water/A. Do not apply within 1 day of harvest. Do not apply more than 0.24 lb. a.i. (1.92 pts. or 30.72 fl. oz. of product)/A per season. Ter control of first and second instar only. Suppression only. See resistance statement under PRODUCT INFORMATION.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
COTTON	Cutworm spp. Tobacco Thrips Soybean Thrips	0.015- 0.02	1.92-2.56	Apply as required by scouting, usually at intervals of 5-7 days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic
	Lygus Bug spp. ³ Pink Bollworm Cabbage Looper Cotton Leafperforator Saltmarsh Caterpillar Cotton Leafworm	0.02-0.03	2.56-3.84	thresholds. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. Applications may also be made with equipment adapted and calibrated for ULV sprays. Lambda-Cy Ag may be mixed with once-refined vegetable oil and applied in a minimum of at least 1 qt. of finished spray/A.
	Cotton Fleahopper Cotton Bollworm Tobacco Budworm³ Boll Weevil Fall Armyworm¹ Beet Armyworm¹³ European Corn Borer Brown Stink Bug Green Stink Bug Southern Green Stink Bug Two-spotted Spider Mite² Cotton Aphide³³ Bandedwing Whitefly²³ Sweetpotato Whitefly²³	0.025- 0.04	3.20-5.12	Under light bollworm/budworm infestation levels, 0.02 lb. a.i./A may be applied in conjunction with intense field monitoring. For boll weevil control, spray on a 3 - to 5-day schedule. When applied according to label directions for control of cotton bollworm and tobacco budworm, Lambda-Cy Ag also provides ovicidal control of unhatched <i>Heliothis</i> spp. eggs. • Do not apply within 21 days of harvest. • Do not apply more than 0.2 lb. a.i. (1.6 pts. or 25.6 fl. oz. of product)/A per season. • 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. 1For control of first and second instar only. *Suppression only. See resistance statement under PRODUCT INFORMATION .

CROP	TARGET PESTS	TARGET PESTS RATE		REMARKS
		lb. a.i./A	fl. oz./A	
CUCURBIT VEGETALES CROP GROUP Including: Chayote (ritt) Chinese Waxgourd (Chinese preserving melon) Citron Melon Cucumber Gherkin Gourd (edible) Lagenaria spp. – Includes: hyotan, cucuzza Lutifa acutanquia – Includes: balsam apple, balsam pear, bitter melon, Chinese cucumber Muskmelon (hybrids and/or cultivars of Cucumis melo) – Includes: true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, pineapple melon, boney balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon Pumpkin Squash, summer (Cucurbita nepe var. melopepo) – Includes: crookneck squash, straightneck squash, vegetable marrow, zucchini Squash, winter (Cucurbita maxima. C. moschata) – Includes: Butternut squash, calabara, hubbard squash (C. mixta: C. pepo) – Includes: acom squash, spaghetti squash Watermelon – Includes: Hybrids and/or varieties of Citrulius lanatus	Armyworm spp.¹ Blister Beetle spp. Cabbage Looper Corn Earworm Cricket spp. Cucumber Beetle spp. (Adults) Cutworm spp. Flea Beetle spp. Grasshopper spp. June Beetle spp. Laaffooted Bug Leafhopper spp. Lygus Bug spp.¹ Melonworm Pickleworm Pickleworm Pickleworm Pickleworm Squash Bug spp. Rindworm spp. Caterpillar Squash Bug spp. Squash Vine Borer spp. Stink Bug spp. Thrips spp.¹² Tobacco Budworm¹ Webworm spp. Aphid spp.¹ Leafminer spp. ¹³ Spider Mite spp.³ Aphid spp.¹ Leafminer spp. ¹³ Spider Mite spp.³ Aphid spp.¹ Leafminer spp. ¹³ Spider Mite spp.³ Whiteffly sop.¹³ Whitefly sop.¹³	0.02-0.03	3.84	Ground application: Apply in sufficient spray volume to obtain full coverage of the foliage or target area. When applied by ground, a minimum of 10 gal. solution per acre is recommended. Air application: Apply in a minimum of 2 gals. per acre or sufficient spray volume to obtain full coverage of the foliage or target area. Monitoring of insect populations should be used to determine timing and frequency of applications. Scout fields at a minimum of 5-day intervals. Apply in sufficient volume to ensure sufficient coverage of foliage. Insects that bore or tunnel into leaves, vines, stems, or fruit must be controlled before penetration. Only exposed insects (larvae and/or adults) can be controlled with foliar applications of Lambda-Cy Ag. Do not apply more than 0.18 lb. a.i. (1.44 pts. or 23 fl. oz. of product)/A per season. Do not apply within 1 day of harvest. See resistance statement under PRODUCT INFORMATION. Does not include Western Flower Thrips. "Suppression only."

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
FRUITING VEGETABLES: Tomato and Tomatillo	Cabbage Looper Cutworm spp. Hornworm spp.	0.015-0.025	1.92-3.20	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally
Peppers (bell and non-bell) Eggplant Ground Cherry Pepino	Tomato Fruitworm Tobacco Budworm³ Tomato Pinworm Beet Armyworm¹ Beet Armyworm¹ Southern Armyworm¹ Fellow-striped Armyworm¹ Fall Armyworm¹ European Com Borer⁴ Leafminer spp.² Colorado Potato Beetle³ Flea Beetle spp. Grasshopper spp. Leafmopper spp. Leafmopper spp. Aphid spp.²³ Whitefly spp.²³ Whitefly spp.²³ Meadow Spittlebug Stink Bug spp. Plant Bug spp. Stalk Borer⁴ Blister Beetle spp. Japanese Beetle (Adult) Pepper Weevi (Adult)² Vegetable Weevil (Adult)² Tomato Psyllid²³ Spider Mite spp.² Thrips² Cucumber Beetle spp. (Adult)	0.02-0.03	2.56-3.84	determined economic thresholds. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. • Do not apply more than 0.36 lb. a.i. (2.88 pts. or 46.08 fl. 0.2 of product/A per season. 1For control of first and second instar only. Suppression only. See resistance statement under PRODUCT INFORMATION. 4For control before the larva bores into the plant stalk or fruit. 5Does not include Western Flower Thrips.

CROP	TARGET PESTS	RATE		REMARKS		
		lb. a.i./A	fl. oz./A			
GRASS FORAGE, FODDER, AND HAY Pasture and Rangeland Grass, Grass Grown for	Army Cutworm Cutworm spp. Essex Skipper Range Caterpillar Striped Grass Looper	0.015-0.025	1.92-3.20	Ground application: Apply in sufficient spray volume to obtain full coverage of the foliage or target area. Air application: Apply in a minimum of 2 gals. per acre or sufficient spray volume to obtain full coverage of target area.		
Grass Grown for Seed	Beet Armyworm Billbug spp.³ Bird Cherry-Oat Aphid¹ Black Grass Bug Black Turfgrass Beetle (Adult) Black Grass Bug Black Turfgrass Beetle (Adult) Blue Stern Midge Cereal Leaf Beetle Chinch Bug Crane Fly spp. Cricket spp. English Grain Aphid¹ Fall Armyworm Flea Beetle spp. Grass Mealybug Grass Sawfly (Adult) Grasshopper spp. Grens June Beetle (Adult) Green June Beetle (Adult) Katydid spp. Leafhopper spp. Mite spp. Russian Wheat Aphid¹ Southern Armyworm Spittlebug spp. Stink Bug spp. Stink Bug spp. Stink Bug spp. Stink Bug spp. Tick spp.	0.02-0.03	2.56-3.84	area. Monitoring of insect populations should be used to determine timing and frequency of applications. Scout fields at a minimum of 5-day intervals. Apply in sufficient volume to ensure sufficient coverage of foliage. Chinch bugs: Lambda-Cy Ag may only suppress heavy infestations and/or migrations. In this situation, a second application using an alternative chemistry may be needed. Greenbug: Greenbug is known to have many biotypes. Lambda-Cy Ag may provide suppression only. In this situation, a second application using an 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. "Best control is obtained before insects begin to roll leaves." 2 See resistance statement under PRODUCT INFORMATION. 3 Suppression only.		
	True Armyworm Webworm spp. Yellow-striped Armyworm					
	 Do not apply more than 0.03 lb. a.i. (0.24 pts. or 3.84 fl. oz. of product)/A per cutting for pasture, rangeland, an grasses grown for seed. A minimum re-treatment interval (RTI) of 30 days is required for pastures and rangelan receiving 0.03 lb. a.i./A which have not been cut between applications. 					

• Do not apply more than 0.09 lb. a.i. (0.72 pts. or 11.52 fl. oz. of product)/A per season.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
LEGUME VEGETABLES (BEANS AND PEAS): Edible Podded (only) Canavalia gladiata- sword bean Canavalia ensiformis – jackbean Cherina may Soubaga	Cutworm spp. Green Cloverworm Imported Cabbageworm Saltmarsh Caterpillar Velvetleaf Caterpillar Mexican Bean Beetle	0.015-0.025	1.92-3.20	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds.
Cipricine 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 yard long beans, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, and Southern pea Pisum spp includes: dwarf, edible-pod, English, field, garden, green, snow, and sugar snap peas Cajanus cajan - Pigeon pea Succulent Shelled, or Dried Shelled Vicia faba - broadbean (fava bean) Dried Shelled (only) Lupinus spp includes: grain, sweet, white, and sweet white lupines Cicer arietimum - Chickpea (garbanzo bean) Cyamopsis tetragonoloba - guar	Flea Hopper spp. Three-connered Affalfa Hopper Meadow Spittlebug Stink Bug spp. Plant Bug spp. including Lygus spp. 4 Grasshopper spp. Thrips spp. 45 Aphid spp. 4	0.02-0.03	2.56-3.84	Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. • 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. (0.96 pt. or 15.36 fl. oz. of product)/A per season. • For succulent and dried shelled peas and beans, do not graze livestock in treated areas or harvest vines for forage or hay. 1For control before the larva bores into the plant stalk or pods. 2Use higher rates for large larvae. *For suppression only. See resistance statement under PRODUCT INFORMATION. *Does not include Western Flower
Lablab pupureus - Lablab bean (hyacinth bean) Lens esculata - Lentils	Beet Armyworm ^{3,4} Soybean Looper ^{3,4} Lesser Cornstalk Borer ³ Leafminer spp. ^{3,4} Whitefly spp. ^{3,4} Spider Mite spp. ³	0.03	3.84	Thrips.

Crop	Target Pests	Rate		Remarks	
		lb. a.i./A	fl. oz./A		
LEGUME VEGETABLES: Soybean	Corn Earworm Velvetbean Caterpillar Green Cloverworm Cabbage Looper Painted Lady (Thistle) Caterpillar Saltmarsh Caterpillar Woollybear Caterpillar Cutworm spp. Bean Leaf Beetle Mexican Bean Beetle Western Corn Rootworm Beetle (Adult) Northern Corn Rootworm Beetle (Adult) Southern Corn Rootworm Beetle (Adult) Mexican Corn Rootworm Beetle (Adult) Three-cornered Alfalfa Hopper Potato Leafhopper Thrips spp. 5 Soybean Aphid ⁴	0.015-0.025	1.92-3.20	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Do not graze or harvest treated soybean forage, straw, or hay for livestock feed. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. For control of adult corn rootworm beetles (<i>Diabrotica</i> species) as part of an aerial-applied corn rootworm control program, use a minimum of 2.56 fl. oz./A (0.02 lb. a.i./A). Do not apply within 30 days of harvest. Do not apply within 30 days of harvest. Do not apply more than 0.06 lb. a.i. (0.48 pt.)/A per season. * *Use higher rates for large larvae. *Suppression only. *See resistance statement under PRODUCT INFORMATION . *Use lower rates for early season applications and/or lighter populations. *Does not include Western Flower Thrips.	
	Armyworm ¹ Fall Armyworm¹ Yellow-striped Armyworm¹ Tobacco Budworm³ Webworm spp. European Corn Borer Silverspotted Skipper Japanese Beetle (Adult) Bilister Beetle spp. Stink Bug spp. Plant Bug spp. Grasshopper spp. Beet Armyworm²³	0.025-0.03	3.20-3.84		
	Soybean Looper ^{2,3} Lesser Cornstalk Borer ² Spider Mite spp. ²				

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
LETTUCE (HEAD AND LEAF)	Alfalfa Looper Cabbage Looper Imported Cabbageworm Cutworm spp. Saltmarsh Caterpillar Green Cloverworm	0.015-0.025	1.92-3.20	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water to obtain full coverage of foliace, When applying by air, apply in a
	Diamondback Moth³ Armyworm Beet Armyworm¹ Fall Armyworm¹ Southern Armyworm Corn Earworm Tobacco Budworm³ European Corn Borer Flea Beetle spp Japanese Beetle (Adult) Vegetable Weevil (Adult) Grasshopper spp. Leafhopper spp. Leafhopper spp. Plant Bug spp. including Lygus spp.³ Stink Bug spp. Meadow Spittlebug Aphid spp.²³ Whitefly spp.²³ Spider Mite spp.²	0.02-0.03	2.56-3.84	minimum of 2 gals. of water/A. • Do not apply within 1 day of harvest. • Do not apply more than 0.3 lb. a.i. (2.4 pts. or 38.4 fl. oz. of product)/A per season. ¹For control of first and second instar only. ²Suppression only. ³See resistance statement under PRODUCT INFORMATION.
ONION (BULB) AND GARLIC	Cutworm spp. Seedcorn Maggot (Adult) Onion Maggot (Adult) Leafminer spp. (Adult)	0.015-0.025	1.92-3.20	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Use the higher label rates as thrips - loculation increases and avoid rescue situations.
	Armyworm spp.¹ Onion Thrips¹ Tobacco Thrips² Western Flower Thrips²³ Flower Thrips²³ Aphid spp.² Plant Bug spp. Stink Bug spp.	0.02-0.03	2.56-3.84	population increases and avoid rescue situations. Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. For thrips control 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 enhance the deposition of the spray and increase plant coverage. • Do not apply within 14 days of harvest. • Do not apply without 14 days of harvest. • Do not apply without 14 days of harvest. *For control of the first and second instars only. *Suppression only. *See resistance statement under PRODUCT INFORMATION .

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
PEANUT	Cutworm spp. Green Cloverworm Velvetbean Caterpillar Red-necked Peanut Worm Potato Leafhopper	0.015-0.025	1.92-3.20	Apply as required by scouting, usually at intervals of 7 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds.
	Corn Earworm Fall Armyworm¹ Bean Leaf Beetle Southern Corn Rootworm (Adult) Vegetable Weevil Whitefringed Beetle (Adult) Stink Bug spp. Tobacco Thrips Grasshopper spp.	0.02-0.03	2.56-3.84	Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gals. of water/A. Do not apply within 14 days of harvest. Do not apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per season. Do not graze livestock in treated areas. Do not use treated vines or hay for animal feed.
	Beet Armyworm ^{2,3} Soybean Looper ^{2,3} Lesser Cornstalk Borer ² Spider Mite spp. ² Aphid spp. ²	0.03	3.84	1Use higher rates for large larvae. *Suppression only. *See resistance statement under PRODUCT INFORMATION .
POME FRUITS: Apple Crabapple Loquat Mayhaw Oriental Pear Pear Quince	Leafroller spp. Codling Moth Tuffed Apple Budworm Oriental Fruit Moth Lesser Appleworm Green Fruitworm Tent Caterpillar spp. Tentiform Leafminer spp. Apple Maggot (Adult) Cherry Fruit Fly spp. (Adult) Pear Sawfly Plum Curculio Japanese Beetle Plant Bug spp. Stink Bug spp. Leafhopper spp. Periodical Cicada Apple Aphid Rosy Apple Aphid Pear Psylla' San Jose Scale (fruit infestations only) Orange Tortrix Omnivorous Leafroller Spirea Aphid' Tree Borer spp. Webworm spp.	0.02-0.04	2.56-5.12	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage or target area. When applying by air, apply in a minimum of 5 gals. of water/A, but use higher volumes as appropriate for thorough coverage. • Do not apply within 21 days of harvest. • Do not apply more than 0.2 lb. a.i. (1.6 pts. or 25.6 fl. oz. of product)/A per year. • Do not apply more than 0.16 lb. a.i. (1.28 pts. or 20.48 fl. oz. of product)/A per year post bloom. ¹Suppression only.

Crop	Target Pests	Ra	ite	Remarks
		lb. a.i./A	fl. oz./A	
STONE FRUITS: Apricot Sweet and Tart Cherry Nectarine Peach Plum Chickasaw Plum Damson Plum Japanese Plum Plumcot Prune	Leafroller spp. Peach Twig Borer Oriental Fruit Moth Peachtree Borer spp. Green Fruitworm Tent Caterpillar spp. American Plum Borer Cherry Fruit Fly spp. (Adult) Plum Curculio Rose Chafer Japanese Beetle Plant Bug spp. Stink Bug spp. Leafhopper spp. Periodical Cicada Black Cherry Aphid Apple Maggot (Adult) Codling Moth June Beetle Pear Sawfly Thrips spp.	0.02-0.04	2.56-5.12	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds and IPM. Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage or target area. When applying by air, apply in a minimum of 5 gals. of water/A, 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. (1.6 pts. or 25.6 fl. oz. of product)/A per year. • Do not apply more than 0.16 lb. a.i. (1.28 pts. or 20.48 fl. oz. of product)/A per year post bloom.
SUGARCANE	Sugarcane Borer¹ Rice Stalk Borer¹ Sugarcane Beetle (Adult)² Yellow Sugarcane Aphid³ Mexican Rice Borer¹ Pygmy Mole Cricket Sugarcane Aphid³ West Indian Cranefly	0.025-0.04	3.20-5.12	Apply as required by scouting, usually at intervals of 7 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic threshold. Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage or target area. When applying by air, apply a minimum of 2 gals. of water/A. • Do not apply within 21 days of harvest. • Do not apply more than 0.16 lb. a.i. (1.28 pts. or 20.48 fl. oz. of product)/A per season. *For control before the larva bores into the plant stalk. *Suppression only of beetles active above ground. *See resistance statement under PRODUCT INFORMATION .

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
SUNFLOWER	Sunflower Beetle Cutworm spp.	0.015-0.025	1.92-3.20	Apply as required by scouting, usually at intervals 5 or more days. Timing and frequency of application
	Sunflower Moth Banded Sunflower Moth Fall Armyworm' Woollybear Caterpillar Spotted Cabbage Looper Painted Lady (Thistle) Caterpillar Seed Weevil (Adult) Stem Weevil (Adult) Head-Clipper Weevil (Adult) Japanese Beetle (Adult) Sunflower Maggot (Adult) Leafhopper spp. Meadow Spittlebug Stink Bug Spp. Grasshopper spp.	0.02-0.03	2.56-3.84	should be based upon insect populations reaching locally determined economic thresholds. Apply with ground or air equipment using sufficient water to obtain full coverage of sunflower heads and/ or foliage. When applying by air, apply in a minimum of 2 gals. of water/A. • Do not apply within 45 days of harvest. • Do not apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per season. • Do not apply more than 0.09 lb. a.i. (0.72 pt. or 11.52 fl. oz. of product)/A per season after bloom initiation. • Do not apply as an ultra-low volume (ULV) spray. **Use higher rates for large larvae. **Suppression only.
	Beet Armyworm ^{2,3} Spider Mite spp. ²	0.03	3.84	³ See resistance statement under PRODUCT INFORMATION .
TOBACCO	Tobacco Budworm² Tobacco Hornworm Cabbage Looper Corn Earworm Salt Marsh Caterpillar Armyworm spp.¹ Cutworm spp. Tobacco Flea Beetle (Adult) Cucumber Beetle spp. (Adult) Blister Beetle spp. (Adult) Blister Beetle spp. Vegetable Weevil (Adult) Japanese Beetle (Adult) Grasshopper spp. Tree Cricket spp. Katydid spp. Plant Bug spp.³ Stinkbug spp. Tobacco Thrips spp.² Tobacco Thrips spp.² Tobacco Thrips rpp.² Tobacco Tornworm Potato Tuberworm	0.015-0.03	1.92-3.84	Apply as required by scouting, usually at intervals of 7 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic threshold. Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage. When applying by air, apply in a minimum of 2 gals. of water/A. • Do not apply within 40 days of harvest. • Do not apply more than 0.09 lb. a.i. (0.72 pt. or 11.52 fl. oz. of product)/A per year. 1For control of first and second instar only. **Suppression only.** **See resistance statement under PRODUCT INFORMATION .

Crop	Target Pests	Rat	е	Remarks
		lb. a.i./A	fl. oz./A	
TREE NUTS: Almond Beech Nut Brazil Nut Butternut Cashew Chestnut Chinquapin Filbert (Hazelnut) Hickory Nut Macadamia Nut (Bush Nut) Pistachio Walnut, Black Walnut, English (Persian)	Leafroller spp. Navel Orangeworm Codling Moth Filbertworm Peach Twig Borer Walnut Husk Fly spp. (Adult) Ants Plant Bug spp. Stink Bug spp. Chinch Bug Leaffooted Bug Walnut Aphid	0.02-0.04	2.56-5.12	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic threshold. Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage or target area. When applying by air, apply in a minimum of 5 gals. of water/A, but use higher rates as appropriate for thorough coverage. • Do not apply within 14 days of harvest. • Do not apply more than 0.16 lb. a.i. (1.28 pts. or 20.48 fl. oz. of product)/A per year. • Do not apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per year post bloom.
Pecan	Hickory Shuckworm Pecan Casebearer spp. Pecan Wee'ill Pecan Aphid spp. Pecan Spittlebug Pecan Phylloxera spp. Stink Bug spp.	0.02-0.04	2.56-5.12	

CROP	TARGET PESTS	RA	TE	REMARKS
		lb. a.i./A	fl. oz./A	
TUBEROUS AND CORM VEGETABLES CROP GROUP Including: Arracacha	Cutworm spp. Leafhopper spp. Saltmarsh Caterpillar Sweet Potato Hornworm Woollybear Caterpillar spp.	0.015-0.025	1.92-3.20	Ground application: Apply in sufficient spray volume to obtain full coverage of the foliage or target area. Air application: Apply in a minimum of 2 gals. per acre or sufficient spray volume to obtain
Arrowroot Artichoke (Chinese and Jerusalem only) Canna (edible) Cassava (bitter and sweet) Chayote (root) Chufa Dasheen Ginger Leren Potato Sweet Potato Tanier Turmeric Yam (bean and true)	Aphid species¹ Armyworm spp.¹ Blister Beetle spp. Colorado Potato Beetle¹ Corn Earworm Cricket spp. Cucumber Beetle spp. (Adults) European Corn Borer Flea Beetle spp. (Adults) Grasshopper spp. Looper spp.¹ Lygus Bug spp.¹ Plant Bug spp. Potato Psyllid Potato Tuberworm Stink Bug spp. Sweet Potato Leaf Beetle (Adults) Sweet Potato Vine Borer Thrips spp.¹² Tortoise Beetle spp. Webworm spp. Weevil spp. (Adults) Leafminer spp.¹³ Whitefly spp.¹³ Solder Mitel sop.³	0.02-0.03	3.84	full coverage of the foliage or target area. Make applications when pests appear and repeat applications as necessary, usually at intervals of 7 or more days. Apply in sufficient volume to ensure sufficient coverage of foliage. Insects that bore or tunnel 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 Lambda-Cy Ag. Do not apply more than 0.12 lb. a.i. (0.96 pt or 15.36 fl. oz. of product)/A per season. Do not apply within 7 days of harvest. "See resistance statement under PRODUCT INFORMATION." 2 Does not include Western Flower Thrips. 3 Suppression only.

NON-AGRICULTURAL USES

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
CONIFER AND DECIDIOUS TREES: Plantations Nurseries	Pine Tip Moth spp. Spruce Budworm Bagworm Tent Caterpillar spp. Leafroller spp. Gypsy Moth Webworm spp. Tussock Moth spp. Pine Sawfly spp. Sawfly spp. Sawfly spp. Sawfly spp. June Beetle spp. Pine Chafer Japanese Beetle May Beetle spp. June Beetle spp. Pine Colaspis Beetle Leaf Beetle spp. Pine Colaspis Beetle Leaf Beetle spp. Pine Conelet Bug Spittlebug spp. Pine Leaf Chermid Balsam Woolly Aphid Balsam Twig Aphid Birch Leafminer Black Pine Weevil Elm Leaf Beetle Luropean Elm Bark Beetle Mealybug spp.¹ Pine Needle Scale Pine Tortolse Scale Poplar Aphid spp.	0.02-0.04	2.56-5.12	To control exposed foliage, flower, cone, seed, and bark feeding insects, apply as required by scouting. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. Apply with ground equipment using sufficient water to obtain full coverage of target site. When applying by air, apply a minimum of 2 gals. of water/A. Do not apply more than 0.24 lb. a.i. (1.92 pts. or 30.72 fl. oz. of product)/A per year. Suppression only.
CONIFER AND DECIDUOUS TREES: Seed Orchards	Coneworm spp. Seed Bug spp. Thrips spp.	See Remarks	See Remarks	For high-volume sprayers, dilute 5.12 fl. oz. per 100 gals. of water and apply 5-10 gals. of finished spray per tree. For low-volume sprayers, dilute 20 fl. oz. per 100 gals. of water and apply 100 gals. of finished spray/A. For aerial applications, apply 15 fl. oz./A in a minimum of 10 gals. finished spray/A. On ont apply more than 0.5 lb. a.i. (4 pts. or 64 fl. oz. of product)/A per year.

Crop	Target Pests	Rate		Remarks
		lb. a.i./A	fl. oz./A	
NON-CROPLAND (Excluding Public Land)	See Crop Outlets on this label for target pest and rates.	See Crop Outlets	See Crop Outlets	Spray non-cropland adjacent to agricultural areas to control migratory insects which may threaten crops.
				Follow use directions, rates, and spray recommendations found elsewhere in this label for the adjacent crop outlet and target pests.
				Use highest labeled rates for dense/large foliage, high insect populations, and larger larval stages. Repeat as necessary to maintain control. • Do not exceed 0.2 lb. a.i. (1.6 pts. or 25.6 fl. oz. of product)/A per year. • Do not graze livestock in treated areas.

Rate Conversion Chart

Lb. A.I. Per Acre	Fl. Oz. Per Acre	Pints Per Acre	Treated Acres Per Gallon
0.015	1.92	0.12	66
0.02	2.56	0.16	50
0.025	3.20	0.20	40
0.03	3.84	0.24	33
0.04	5.12	0.32	25

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth, or synthetic absorbent. Remove to chemical waste area.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for quidance.

CONTAINER HANDLING: Nonrefillable Container — Do not reuse or refill container. Triple rinse container (or equivalent) promptly after emptying. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. Triple rinse as follows:

Containers 5 gallons or less: 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. Once cleaned, offer for recycling or reconditioning if appropriate.

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 the product, which are beyond the control of DIRECT AG SOURCE, LLC, Inc. 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 DIRECT AG SOURCE. LLC and Seller harmless for any claims relation to such factors.

DIRECT AG SOURCE, 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. 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 DIRECT AG SOURCE, LLC, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, DIRECT AG SOURCE, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICIII AR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, in no event shall DIRECT AG SOURCE, 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 LABILITY OF DIRECT AG SOURCE, 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 DIRECT AG SOURCE, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

DIRECT AG SOURCE, LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of DIRECT AG SOURCE. LLC.

NOTES

Restricted Use Pesticide

Due to Toxicity 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.

GROUP

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INSECTICIDE

Lambda-Cy Ag

INSECTICIDE

For the Control of a Variety of Insect Pests on Selected Crops Contains the same active ingredient as Karate[®] Insecticide.

ACTIVE INGREDIENT:

 Lambda-cyhalothrin
 11.4%

 OTHER INGREDIENTS:
 88.6%

 TOTAL:
 100.0%

 Contains petroleum distillates.
 100.0%

Contains 1 lb. of active ingredient per gallon.

WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.) For additional First Aid, precautionary, handling, and use statements, see inside of this booklet.

EPA Reg. No. 83222-42



Manufactured For:
Direct Ag Source, LLC
30473 260th Street • Eldora, IA 50627

EPA 062212/Rev B

Net Contents: 1 Gallon (3.79 L) 2.5 Gallons (9.46 L)