



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

November 5, 2016

Solito Sumulong
Manager of Registrations
Loveland Products Inc.
P.O. Box 1286
Greeley, CO 80636-1286

Subject: Label Amendment – Addition of buffer zone language, various non-public health target pests, Directions for Use in non-bearing citrus orchards, and updated Storage and Disposal language.
Product Name: LPI Lambda-Cyhalothrin
EPA Registration Number: 34704-1000
Application Date: August 5, 2016
Decision Number: 520279

Dear Mr. Sumulong:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, 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.

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 the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Page 2 of 2
EPA Reg. No. 34704-1000
Decision No. 520279

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 Tim Ciarlo by phone at 703-347-8082, or via email at Ciarlo.Timothy@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kable Bo Davis', enclosed within a large, hand-drawn oval.

Kable Bo Davis, Product Manager 3
Invertebrate and Vertebrate Branch 1
Registration Division (7505P)
Office of Pesticide Programs

**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 3 INSECTICIDE

LPI LAMBDA-CYHALOTHRIN

ACTIVE INGREDIENT:	% BY WT.
Lambda-cyhalothrin ¹	
[1 (S*),3 (Z)]-(±)-cyano-(3-phenoxyphenyl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-Dimethylcyclopropanecarboxylate	11.40%
OTHER INGREDIENTS	88.60%
	TOTAL 100.00%

LPI Lambda-Cyhalothrin contains 1.0 pound of active ingredient per gallon and is a capsule suspension.

¹*Synthetic pyrethoid*

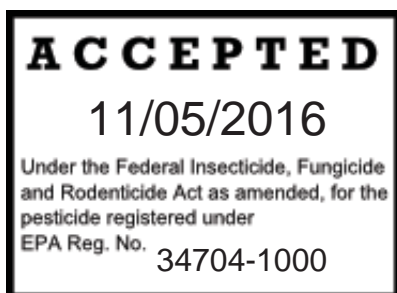
**KEEP OUT OF REACH OF CHILDREN
WARNING—AVISO**

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 Precautionary Statements, Complete First Aid, Directions for Use, Storage and Disposal and Other Use Information, See Inside This Label Booklet.

FIRST AID	
If swallowed:	<ul style="list-style-type: none"> • 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 a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> • 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 a medical emergency involving this product call: 1-866-944-8565.**



**EPA REG. NO. 34704-1000
EPA EST. NO. 34704-MS-001
NET CONTENTS 2.5 GALS. (9.46 L)
Formulated in USA**

EXP 0716

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
WARNING—AVISO**

May be fatal if swallowed. Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

Skin exposure may also result in a sensation described as a tingling, itching, burning, or prickly feeling. Onset may occur immediately to 4 hours after exposure and may last 2 to 30 hours, without damage. Wash exposed areas once with soap and water. Relief from the skin sensation may be obtained by applying an oil-based cream.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber \geq 14 mils, nitrile rubber, or Viton \geq 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.

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.

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 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 foraging the treatment area.

**DIRECTIONS FOR USE
RESTRICTED USE PESTICIDE**

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

SHAKE WELL BEFORE USING.

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

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 (REI). 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 REI of 24 hrs.

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

- Coveralls
- Chemical-resistant gloves made of barrier laminate, butyl rubber \geq 14 mils, nitrile rubber, or Viton \geq 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.

Initial and residual control are contingent upon thorough crop coverage. Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. Apply a minimum of 2.0 gallons per acre by air or 10.0 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, LPI Lambda-Cyhalothrin may be applied before, during, or after planting. For soil incorporated applications, use higher rates for improved control.

RESISTANCE MANAGEMENT

LPI Lambda-Cyhalothrin is a Group 3 Insecticide (contains the active ingredient lambda-cyhalothrin). Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product or other products with a similar mode of action may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area.

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

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 LPI 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.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs143_023819.pdf

In the State of New York, a 25 foot 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 foot vegetated non-cropped buffer strip for runoff protection would be part of the larger 150 foot buffer strip (or 450 foot buffer strip for ULV application) required for spray drift.

Buffer Zone for Ground Application (groundboom, 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 the wind velocity exceeds 15 miles per hour.

Temperature Inversion

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

Additional Requirements 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 Applications

The spray boom should be mounted on the aircraft as to minimize drift caused by wingtip or rotor vortices. The minimum practical boom length should be used and must not exceed 75% of the 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 cross-wind, the swath will be displaced downward. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

TANK MIX APPLICATION

When tank mixing with any other agricultural products, **always add LPI Lambda-Cyhalothrin last**. Fill the tank with 1/2 to 2/3 volume of the mixing diluent. Make sure all other products are fully dispersed in the mixing diluent before adding the recommended rate of LPI Lambda-Cyhalothrin 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. Follow the precautions and limitations of the most restricted product in the tank mixture.

While LPI Lambda-Cyhalothrin 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.

LPI Lambda-Cyhalothrin is an aqueous based formulation. It is recommended that no type of non-emulsifiable oils be used in combination with LPI Lambda-Cyhalothrin. If adjuvants are used, use only:

- Nonionic Surfactant (NIS) containing at least 75% surface agent, or
- Non-phytotoxic Crop Oil Concentrate (COC), including once refined Vegetable Oil Concentrate (VOC),
- Methylated Seed 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 non-phytotoxic to the target crop.
- Is compatible in mixture. (May be established through a jar test).
- Is supported locally for use with LPI Lambda-Cyhalothrin 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

It is recommended that the following not be used in combination with LPI Lambda-Cyhalothrin as diluents or adjuvants:

- Non-emulsifiable oils
- Diesel fuel
- Straight mineral oil

CHEMIGATION

Sprinkler Irrigation Application

Apply LPI Lambda-Cyhalothrin 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 APPLICATION) rates and mixing instructions. These recommendations should be proven, through university and extension field trials, to be effective with LPI Lambda-Cyhalothrin by chemigation.

Check the irrigation system to ensure 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 recommended rate of LPI Lambda-Cyhalothrin 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 to 0.2 acre-inch of water. 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 stopping the system.

LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000

In addition to the above recommendations, if application is being made during a normal irrigation set of a stationary sprinkler, the recommended rate of LPI Lambda-Cyhalothrin 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 LPI Lambda-Cyhalothrin 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.
- I. 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.

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

SPECIFIC USE DIRECTIONS

AGRICULTURAL USES		
Crop	Target Pests	Rate (fl oz/A)
ALFALFA AND ALFALFA GROWN FOR SEED	Alfalfa Caterpillar	1.92 to 3.20
	Army Cutworm	
	Cutworm species	
	Green Cloverworm	
	Leafhopper species	
	Looper species	
	Threecornered Alfalfa Hopper	
	Velvetbean Caterpillar	
	Webworm species	
	Alfalfa Seed Chalcid (adult)	2.56 to 3.84
	Alfalfa Weevil	
	Armyworm	
	Bean Leaf Beetle (adult)	
	Blister Beetle species	
	Blue Alfalfa Aphid	
	Clover Leaf Weevil species	
	Clover Root Borer (adult)	
	Clover Root Curculio species (adult)	
	Clover Stem Borer (adult)	
	Corn Earworm	
	Cowpea Aphid	
	Cowpea Curculio (adult)	
	Cowpea Weevil (adult)	
	Cucumber Beetle species (adult)	
	Egyptian Alfalfa Weevil	
	Fall Armyworm ¹	
	Grape Colaspis (adult)	
	Grasshopper species	
	Green June Beetle (adult)	
	Green Peach Aphid ³	
	Japanese Beetle (adult)	
	Meadow Spittlebug	
	Mexican Bean Beetle	
Pea Aphid		
Pea Weevil (adult)		
Plant Bug species including Lygus species ³		
Spotted Alfalfa Aphid		
Sink Bug species		
Sweet Clover Weevil (adult)		
Thrips species ⁴		
Western Yellowstriped Armyworm		
Whitefringed Beetle species (adult)		
Yellowstriped Armyworm		
Beet Armyworm ^{1,3}	3.84	
Blotch Leafminer ³		
Spider Mites ²		

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

ALFALFA AND ALFALFA GROWN FOR SEED CONT'D

Remarks

- 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 2.0 gallons per acre by air or 10.0 gallons per acre by ground. When foliage is dense and/or pest populations are high 5.0 to 10.0 gallons per acre by air or 20.0 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 to 3 days following application. Avoid direct application to bee shelters.
- **Do not** apply more than 0.03 pound active ingredient (3.84 fluid ounces or 0.24 pints of product) per acre per cutting.
- **Do not** apply more than 0.12 pound active ingredient (15.36 fluid ounces or 0.96 pints of product) per acre per season.
- **Do not** apply within 1 day of harvest for forage or within 7 days of harvest for hay.

¹ Use higher rates for large larvae.

² Suppression only.

³ See RESISTANCE statement under DIRECTIONS FOR USE.

⁴ Does not include Western Flower Thrips.

Crop	Target Pests	Rate (fl oz/A)
CANOLA	Armyworm species	1.92 to 3.84
	Cabbage Seedpod Weevil	
	Cutworm species	
	Diamondback Moth	
	Flea Beetle	
	Grasshoppers	
	Lygus Bug	
Cabbage Aphid	3.84	

Remarks

- 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 of 2.0 gallons of water per acre.
- **Do not** apply within 7 days of harvest.
- **Do not** apply more than 0.09 pound active ingredient (11.52 fluid ounces or 0.72 pints of product) per acre per year.

Crop	Target Pests	fl oz/1000 ft of row ²
CEREAL GRAINS Corn (at plant): Field Corn Popcorn Seed Corn Sweet Corn	Corn Rootworm Larvae:	0.66
	Mexican	
	Northern	
	Southern	
	Western	
	Cutworm species	
	Lesser Cornstalk Borer	
	Red Imported Fire Ant ¹	
	Seedcorn Beetle	
	Seedcorn Maggot	
	White Grub species	
Wireworm species		

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

CEREAL GRAINS (CORN (AT PLANT)) CONT'D

Remarks

- Banded applications – Apply at planting as a 5 to 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.
- 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 3.0 gallons finished spray per acre.
- **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 pound active ingredient (11.52 fluid ounces or 0.72 pints of product) per acre per crop at plant.
- For field corn, popcorn, and seed corn, do not apply more than 0.12 pound active ingredient (15.36 fluid ounces or 0.96 pints of product) per acre per crop from at plant and foliar applications. For sweet corn do not apply more than 0.48 pound active ingredient (61.44 fluid ounces or 3.84 pints of product) per acre per crop from at plant and foliar applications.

¹Suppression only.

²See figure below.

Lbs a.i. and Fl oz/A of LPI 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 (fl oz/A)
CEREAL GRAINS		
Corn (foliar):	Corn Earworm ¹	1.92 to 3.20
Field Corn	Cutworm species	
Popcorn	Green Cloverworm	
Seed Corn	Meadow Spittlebug	
	Western Bean Cutworm ¹	

Cont'd next page

LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000

Crop	Target Pests	Rate (fl oz/A)
CEREAL GRAINS <i>Corn (foliar):</i> <i>Field Corn</i> <i>Popcorn</i> <i>Seed Corn</i>	Armyworm ² Bean Leaf Beetle Bird Cherry-Oat Aphid ³ Cereal Leaf Beetle Corn Leaf Aphid ³ Corn Rootworm Beetle (adult): Mexican Northern Southern Western English Grain Aphid ³ European Corn Borer ¹ Fall Armyworm ² Flea Beetle species Grasshopper species Hop Vine Borer ¹ Japanese Beetle (adult) Lesser Cornstalk Borer Sap Beetle (adult) Seedcorn Beetle Southwestern Corn Borer ¹ Stalk Borer ¹ Stink Bug species Tobacco Budworm ^{1,4} Webworm species Yellowstriped Armyworm ²	2.56 to 3.84
	Beef Armyworm ⁴ Chinch Bug Greenbug ^{3,4} Mexican Rice Borer ¹ Rice Stalk Borer ¹ Southern Corn Leaf Beetle ³ Sugarcane Borer	3.84

Remarks

- 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.
- 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 2.0 gallons of water per acre.
- 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. LPI Lambda-Cyhalothrin may only suppress heavy infestations and/or subsequent migrations.
- For control of adult corn rootworm beetles (*Diabrotica* species) as part of an aerial applied corn rootworm control program use a minimum of 0.03 pound active ingredient (3.84 fluid ounces of product) per acre.
- **Do not** apply within 21 days of harvest.
- **Do not** allow livestock to graze in treated areas of 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 pound active ingredient (15.36 fluid ounces or 0.96 pints of product) per acre per crop from at plant and foliar applications.

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

CEREAL GRAINS (CORN (FOLIAR)) CONT'D

- **Do not** apply more than 0.06 pound active ingredient (7.68 fluid ounces or 0.48 pints of product) per acre after silk initiation. **Do not** apply more than 0.03 pound active ingredient (3.84 fluid ounces or 0.24 pints of product) per acre after corn has reached the milk stage (yellow kernels with milky fluid).

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

² Use higher rates for large larvae.

³ Suppression only.

⁴ See RESISTANCE statement under DIRECTIONS FOR USE.

Crop	Target Pests	Rate (fl oz/A)
CEREAL GRAINS Sweet Corn (foliar)	Aphid species ^{2,3} Armyworm ¹ Aster Leafhopper Beet Armyworm ^{1,3} Chich Bug Common Cornstalk Borer Corn Earworm Corn Rootworm Beetle (adult): Mexican Northern Southern Western Cutworm species European Corn Borer Fall Armyworm ¹ Flea Beetle species Grasshopper species Japanese Beetle (adult) Sap Beetle (adult) Southern Armyworm ¹ Southwestern Corn Borer Spider Mite species ² Stink Bug species Tarnished Plant bug Webworm species Western Bean Cutworm Yellowstriped Armyworm ¹	2.56 to 3.84
	Corn Silkworm (adult) ²	3.84

Remarks

- 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 2.0 gallons of water per acre.
- For control of adult corn rootworm beetles (*Diabrotica* species) as part of an aerial applied corn rootworm control program use a minimum of 0.025 pound active ingredient (3.2 fluid ounces of product) per acre.
- **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.

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

CEREAL GRAINS (SWEET CORN (FOLIAR)) CONT'D

- **Do not** apply more than 0.48 pound active ingredient (61.44 fluid ounces or 3.84 pints of product) per acre per crop from at plant and foliar applications.

¹ Use higher rates for large larvae.

² Suppression only.

³ See RESISTANCE statement under DIRECTIONS FOR USE.

Crop	Target Pests	Rate (fl oz/A)
CEREAL GRAINS Rice Wild Rice	Bird Cherry-Oat Aphid	3.20 to 5.12
	Chinch Bug	
	Fall Armyworm	
	Grasshopper species	
	Green Bug	
	Leafhopper species	
	Rice Stink Bug	
	Riceworm	
	Rice Water Weevil (adult)	
	Sharpshooter species	
	True Armyworm	
	Yellow Sugarcane Aphid	
	Yellowstriped Armyworm	
European Corn Borer ¹ Mexican Rice Borer ¹ Rice Seed Midge ¹ Rice Stalk Borer ¹ Sugarcane Borer ¹		3.84 to 5.12

Remarks

- 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 to 7 days, by scouting.
- LPI Lambda-Cyhalothrin 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 a minimum of 2.0 gallons of water (or a total carrier volume) per acre but ensure sufficient volume is used to provide adequate coverage. In addition, adding an emulsifiable crop oil (e.g., 1.0 pt per acre) when lower aerial application volumes are used is recommended to help improve coverage, reduce evaporation, and improve efficacy.
- 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 to 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 weevil 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 to 5 days after the initial treatment and, if needed, apply a second application within 7 to 10 days of the first application. Adults may also be treated at later stages of rice development to reduce over wintering populations.
- California: In addition to above directions for control of rice water weevil in water seeded rice, LPI Lambda-Cyhalothrin may be applied at the 1 to 3 leaf growth stage, with the majority at the 2 leaf growth stage. 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) spray the inside perimeter of the field, or b) spray the entire field.

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

CEREAL GRAINS (RICE) CONT'D

- Greenbug is known to have many biotypes. LPI Lambda-Cyhalothrin may only provide suppression. If satisfactory control is not achieved with the first application of LPI Lambda-Cyhalothrin, 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 susceptible.
- Mixers/loaders supporting aerial applications to wild rice at a rate of 0.04 pound active ingredient per acre, and treating 1200 acres (or more) per day must wear dust-mist respirator.
- **Do not** release flood water within 7 days of an application.
- **Do not** apply more than 0.12 pound active ingredient (15.36 fluid ounces or 0.96 pints of product) per acre per season.
- **Do not** apply more than 0.04 pound active ingredient (5.12 fluid ounces or 0.32 pints of product) per acre 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.

¹For control before the larvae bores into the plant stalk.

Crop	Target Pests	Rate (fl oz/A)
CEREAL GRAINS Sorghum (grain)	Cutworm species	1.92 to 2.56
	Sorghum Midge	
	Armyworm	2.56 to 3.84
	Beet Armyworm ³	
	Corn Earworm	
	European Corn Borer ²	
	Fall Armyworm ¹	
	Flea Beetle species	
	Grasshopper species	
	Lesser Cornstalk Borer ²	
Southwestern Corn Borer ²		
Stink Bug species		
Webworm species	3.84	
Yellowstriped Armyworm ¹		
Chinch Bug		
Mexican Rice Borer ²		
Rice Stalk Borer ²		
Sugarcane Borer ²		

Remarks

- 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 and application methods to obtain full coverage of target location. When applying by air, apply in a minimum of 2.0 gallons of water per acre.
- 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.
- 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. LPI Lambda-Cyhalothrin may only suppress heavy infestations and/or subsequent migrations.

LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000

CEREAL GRAINS (SORGHUM (GRAIN)) CONT'D

- **Do not** apply more than 0.08 pound active ingredient (10.24 fluid ounces or 0.64 pints of product) per acre per season.
 - **Do not** apply more than 0.06 pound active ingredient (7.68 fluid ounces or 0.48 pints of product) per acre per season after crop emergence.
 - **Do not** apply more than 0.02 pound active ingredient (2.56 fluid ounces or 0.16 pints of product) per acre per season once crop is in soft dough stage.
 - **Do not** apply within 30 days of harvest.
- ¹ Use higher rates for large larvae.
² For control before the larva bores into the plant stalk.
³ See RESISTANCE statement under DIRECTIONS FOR USE.

Crop	Target Pests	Rate (fl oz/A)
CEREAL GRAINS	Cutworm species	1.92 to 3.20
Barley	Sorghum Midge	
Buckwheat	Armyworm	2.56 to 3.84
Oats	Bird Cherry-Oat Aphid ¹	
Rye	Cereal Leaf Beetle	
Triticale	English Grain Aphid ¹	
Wheat	Fall Armyworm	
Wheat Hay	Flea Beetle species	
	Grasshopper species	
	Hessian Fly ⁴	
	Orange Blossom Wheat Midge	
	Russian Wheat Aphid ¹	
	Stink Bug species	3.20 to 3.84
	Yellowstriped Armyworm	
	Grass Sawfly	3.84
	Chinch Bug	3.84
	Corn Leaf Aphid ²	
	Greenbug ^{1,3}	
	Mite species ²	

Remarks

- 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 and application methods to obtain full coverage of foliage. When applying by air, apply in a minimum of 2.0 gallons of water per acre.
 - For chinch bug control, repeat applications at 3 to 5-day intervals if needed. LPI Lambda-Cyhalothrin may only suppress heavy infestations and/or migrations.
 - Greenbug is known to have many biotypes, LPI Lambda-Cyhalothrin 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 treatment. **Do not** feed treated straw to meat or dairy animals within 30 days after the last treatment.
 - **Do not** apply more than 0.06 pound active ingredient (7.68 fluid ounces or 0.48 pints of product) per acre per season.
- ¹ Best control is obtained before insects begin to roll leaves. Once crop has started to boot, LPI Lambda-Cyhalothrin may provide suppression only. Higher rates and increased coverage will be necessary.
² Suppression only.
³ See RESISTANCE statement under DIRECTIONS FOR USE.
⁴ Make applications when adults emerge.

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

Crop	Target Pests	Rate (fl oz/A)
COLE CROPS (HEAD AND STEM BRASSICA) Broccoli Brussels Sprouts Cabbage Cauliflower Cavalo Broccolo Chinese Broccoli (gai lon) Chinese Cabbage Chinese Mustard Cabbage (gai choy) Kohlrabi	Alfalfa Looper Cabbage Looper Cabbage Webworm Cutworm species Imported Cabbageworm Southern Cabbageworm	1.92 to 3.20
	Aphid species ^{2,3} Armyworm Beet Armyworm ^{1,3} Corn Earworm Diamondback Moth ³ Fall Armyworm ¹ Flea Beetle species Grasshopper species Japanese Beetle (adult) Leafhopper species Meadow Spittlebug Plant Bug species including Lygus species ³ Spider Mite species ² Stink Bug species Thrips species ² Vegetable Weevil (adult) Whitefly species ^{2,3} Yellowstriped Armyworm	2.56 to 3.84

Remarks

- 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 a minimum of 2.0 gallons of water per acre.
- **Do not** apply within 1 day of harvest.
- **Do not** apply more than 0.24 pound active ingredient (30.72 fluid ounces or 1.92 pints of product) per acre per season.

¹ For control of first and second instar only.

² Suppression only.

³ See RESISTANCE statement under DIRECTIONS FOR USE.

Crop	Target Pests	Rate (fl oz/A)
COTTON	Cutworm species Soybean Thrips Tobacco Thrips	1.92 to 2.56
	Cabbage Looper Cotton Fleahopper Cotton Leafperforator Cotton Leafworm Lygus Bug species ³ Pink Bollworm Saltmarsh Caterpillar	2.56 to 3.84

Cont'd next page

LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000

Crop	Target Pests	Rate (fl oz/A)
COTTON	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	3.20 to 5.12

Remarks

- Apply as required by scouting, usually at intervals of 5 to 7 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.
- Applications may also be made with equipment adapted and calibrated for ULV sprays. LPI Lambda-Cyhalothrin may be mixed with once-refined vegetable oil and applied in a minimum of at least 1.0 quart of finished spray per acre.
- Under light bollworm/budworm infestation levels, 0.02 pound active ingredient (2.56 fluid ounces of product) per acre 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, LPI Lambda-Cyhalothrin also provides ovicidal control of unhatched Heliiothine species eggs.
- **Do not** apply within 21 days of harvest.
- **Do not** graze livestock in treated areas.
- **Do not** apply more than 0.2 pound active ingredient (25.6 fluid ounces or 1.6 pints of product) per acre 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.

¹ For control of first and second instar only.

² Suppression only.

³ See RESISTANCE statement under DIRECTIONS FOR USE.

LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000

Crop	Target Pests	Rate (fl oz/A)		
CUCURBIT VEGETABLES Chayote (fruit) Chinese Waxgourd (Chinese preserving melon) Citron Melon Cucumber Gherkin Gourd (edible) <i>Lagenaria</i> species – includes: hyotan, cucuzza <i>Luffa acuttangula</i> , <i>L.</i> <i>cylindrical</i> – includes: hechima, Chinese okra <i>Momordica</i> species – includes: balsam apple, balsam pear, bitter melon, Chinese cucumber Muskmelon (hybrids and/or cultivars of <i>Cucumis melo</i>)– includes: true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon Pumpkin Squash, summer (<i>Cucurbita</i> <i>pepo</i> var. <i>melopepo</i>) – includes: crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini Squash, winter (<i>Cucurbita</i> <i>maxima</i> ; <i>C. moschata</i>) – includes butternut squash, calabaza, hubbard squash (<i>C.</i> <i>mixta</i> ; <i>C. pepo</i>) – includes; acorn squash, spaghetti squash Watermelon – includes: hybrids and/or varieties of <i>Citrullus lanatus</i>	Armyworm species ¹ Blister Beetle species Cabbage Looper Corn Earworm Cricket species Cucumber Beetle species (adults) Cutworm species Flea Beetle species Grasshopper species June Beetle species Leaffooted Bug Leafhopper species Lygus Bug species ¹ Melonworm Pickleworm Plant Bug species Rindworm species complex Saltmarsh Caterpillar Squash Beetle Squash Bug species Squash Vine Borer species Stink Bug species Thrips species ^{1,2} Tobacco Budworm ¹ Webworm species	2.56 to 3.84		
			Aphid species ¹ Leafminer species ^{1,3} Spider Mite species ³ Whitefly species ^{1,3}	3.84

Remarks

- 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 and application methods to obtain full coverage of all plant parts. When applying by air, apply in a minimum of 2.0 gallons total solution per acre. When applying by ground, a minimum of 10.0 gallons total solution per acre is recommended.

LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000

CUCURBIT VEGETABLES CONT'D

- Use higher application volumes and/or rates when foliage is dense, pest populations are high, larvae are large, weather conditions are adverse and/or as plant size increases. Use higher rates for longer residual.
- 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 LPI Lambda-Cyhalothrin.
- **Do not** apply more than 0.18 pound active ingredient (23.0 fluid ounces or 1.44 pints of product) per acre per season. **Do not** apply within 1 day of harvest.

¹ See RESISTANCE statement under DIRECTIONS FOR USE.

² Does not include Western Flower Thrips.

³ Suppression only.

Crop	Target Pests	Rate (fl oz/A)
FRUITING VEGETABLES Eggplant Ground cherry Pepino Peppers (bell and nonbell) Tomato and Tomatillo	Cabbage Looper Cutworm species Hornworm species	1.92 to 3.20
	Aphid species ^{2,3} Beet Armyworm ^{1,3} Blister Beetle species Colorado Potato Beetle ³ Cucumber Beetle species (adult) European Corn Borer ⁴ Fall Armyworm ¹ Flea Beetle species Grasshopper species Japanese Beetle (adult) Leafhopper species Leafminer species ² Meadow Spittlebug Pepper Weevil (adult) ² Plant Bug species Southern Armyworm ¹ Spider Mite species ² Stalk Borer ⁴ Stink Bug species Thrips ⁵ Tobacco Budworm ³ Tomato Fruitworm Tomato Pinworm Tomato Psyllid ^{2,3} Vegetable Weevil (adult) Whitefly species ^{2,3} Yellowstriped Armyworm ¹	2.56 to 3.84

Remarks

- 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 a minimum of 2.0 gallons of water per acre.
- **Do not** apply within 5 days of harvest.
- **Do not** apply more than 0.36 pound active ingredient (46.08 fluid ounces or 2.88 pints of product) per acre per season.

¹ For control of first and second instar only.

² Suppression only.

LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000

FRUITING VEGETABLES CONT'D

³ See RESISTANCE statement under DIRECTIONS FOR USE.

⁴ For control before the larva bores into the plant stalk or fruit.

⁵ Does not include Western Flower Thrips.

Crop	Target Pests	Rate (fl oz/A)
GRASS FORAGE, FODDER AND HAY Pasture and rangeland grass Grass grown for hay or silage Grass grown for seed	Army Cutworm Cutworm species Essex Skipper Range Caterpillar Striped Grass Looper	1.92 to 3.20
	Beet Armyworm Billbug species ³ Bird Cherry-Oat Aphid ¹ Black Grass Bug Black Turfgrass Beetle (adult) Blue Stem Midge Cereal Leaf Beetle Chinch Bug Crane Fly species Cricket species English Grain Aphid ¹ Fall Armyworm Flea Beetle species Grass Mealybug Grass Sawfly (adult) Grasshopper species Green June Beetle (adult) Greenbug ^{1,2} Japanese Beetle (adult) Katydid species Leafhopper species Mite species ³ Russian Wheat Aphid ¹ Southern Armyworm Spittlebug species Stink Bug species Sugarcane Aphid Thrips species Tick species True Armyworm Webworm species Yellowstriped Armyworm	2.56 to 3.84

Remarks

- 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 and application methods to obtain full coverage of foliage. When applying by air, apply a minimum of 2.0 gallons total solution per acre. When applying by ground, a minimum of 7.0 gallons total solution per acre is recommended.
- Use higher application volumes and rates when foliage is dense, pest populations are high, larvae are large and/or weather conditions are adverse. Use higher rates for longer residual.
- For chinch bug control, LPI Lambda-Cyhalothrin may only suppress heavy infestations and/or migrations. In this situation, a second application using an alternative chemistry may be needed.

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

GRASS FORAGE, FODDER AND HAY CONT'D

- Greenbug is known to have many biotypes. LPI Lambda-Cyhalothrin 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.
- **Do not** apply more than 0.03 pound active ingredient (3.84 fluid ounces or 0.24 pints of product) per acre 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 pound active ingredient per acre which have not been cut between applications.
- **Do not** apply more than 0.09 pound active ingredient (11.52 fluid ounces or 0.72 pints of product) per acre per season.

¹ Best control is obtained before insects begin to roll leaves.

² See RESISTANCE statement under DIRECTIONS FOR USE.

³ Suppression only.

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

Crop	Target Pests	Rate (fl oz/A)
LEGUME VEGETABLES Edible Podded (Only) <i>Canavalia ensiformis</i> - jackbean <i>Canavalia gladiata</i> - sword bean	Cutworm species Green Cloverworm Imported Cabbageworm Mexican Bean Beetle Saltmarsh Caterpillar Velvetleaf Caterpillar	1.92 to 3.20
- soybean (immature seed) Edible Podded, Succulent Shelled or Dried Shelled Cajanus cajan – Pigeon pea <i>Phaseolus</i> species – includes: field, kidney, lima, navy, pinto, runner, snap, tepary and wax beans <i>Pisum</i> species – includes: dwarf, edible-pod, English, field, garden, green, snow and sugar snap peas <i>Vigna</i> species – includes: adzuki, asparagus, moth, mung, rice, urd and yardlong beans, black-eye pea, catjang, Chinese long-bean, cowpea, Crowder pea, and Southern pea Succulent Shelled or Dried Shelled <i>Vicia faba.</i> – broabean (favabean) Dried Shelled (Only) <i>Cicer arietinum</i> – chickpea (garbonzo bean) <i>Cyamopsis tetragonoloba</i> – guar <i>Lablab purpureus</i> – Lablab bean (hyacinth bean) <i>Lens esculata</i> – Lentils <i>Lupinus</i> species – includes: grain, sweet, white and sweet white lupines	Alfalfa Caterpillar Aphid species ⁴ Armyworm ² Bean Leaf Beetle Bean Leafskeletonizer Blister Beetle species Corn Earworm Corn Rootworm Beetle species (adult) Cucumber Beetle species (adult) Curculio and Weevil species ¹ (foliage and pod feeding adults and larvae) European Corn Borer Fall Armyworm ² Flea Beetle species (adult) Flea Hopper species Grasshopper species Japanese Beetle (adult) Leafhopper species Leaf-tier species Looper species Meadow Spittlebug Painted Lady Butterfly (larva) Plant Bug species including Lygus species ⁴ Stalk Borer ¹ Stink Bug species Three-Cornered Alfalfa Hopper Thrips species ^{4,5} Tobacco Budworm ⁴ Webworm species Western Bean Cutworm Western Yellow-Striped Armyworm ² Yellow-Striped Armyworm ²	2.56 to 3.84

Cont'd next page

LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000

Crop	Target Pests	Rate (fl oz/A)
LEGUME VEGETABLES	Beet Armyworm ^{2,3,4} Leafminer species ^{3,4} Lesser Cornstalk Borer ³ Soybean Looper ^{3,4} Spider Mite species ³ Whitefly species ^{3,4}	3.84

Remarks

- 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 a minimum of 2.0 gallons of water per acre.
- 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 pound active ingredient (15.36 fluid ounces or 0.96 pints of product) per acre per season.
- For succulent and dried shelled peas and beans, do not graze livestock in treated areas or harvest vines for forage or hay.

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

² Use higher rates for large larvae.

³ For suppression only.

⁴ See RESISTANCE statement under DIRECTIONS FOR USE.

⁵ Does not include Western Flower Thrips.

Crop	Target Pests	Rate (fl oz/A)
LEGUME VEGETABLES (SOYBEANS) Soybean	Bean Leaf Beetle Cabbage Looper Corn Earworm Corn Rootworm Beetle (adult): Mexican Northern Southern Western Cutworm species Green Cloverworm Mexican Bean Beetle Painted Lady (Thistle) Caterpillar Potato Leafhopper Saltmarsh Caterpillar Soybean Aphid ⁴ Threecornered Alfalfa Hopper Thrips species ⁵ Velvetbean Caterpillar Woollybear Caterpillar	1.92 to 3.20

Cont'd next page

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

Crop	Target Pests	Rate (fl oz/A)
LEGUME VEGETABLES (SOYBEANS) <i>Soybean</i>	Armyworm ¹	3.20 to 3.84
	Blister Beetle species	
	European Corn Borer	
	Fall Armyworm ¹	
	Grasshopper species	
	Japanese Beetle (adult)	
	Plant Bug species	
	Silverspotted Skipper	
	Stink Bug species	
	Tobacco Budworm ³	
	Webworm species	
	Yellowstriped Armyworm ¹	
	Beet Armyworm ^{2,3}	3.84
	Lesser Cornstalk Borer ²	
Soybean Looper ^{2,3}		
Spider Mite species ²		

Remarks

- 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 a minimum of 2.0 gallons of water per acre.
- For control of adult corn rootworm beetles (*Diabrotica* species) as part of an aerial applied corn rootworm control program use a minimum of 0.02 pound active ingredient (2.56 fluid ounces of product) per acre.
- **Do not** apply within 30 days of harvest.
- **Do not** apply more than 0.06 pound active ingredient (7.68 fluid ounces or 0.48 pints of product) per acre per season.

¹ Use higher rates for large larvae.

² Suppression only.

³ See RESISTANCE statement under DIRECTIONS FOR USE.

⁴ Use lower rates for early season applications and/or lighter populations.

⁵ Does not include Western Flower Thrips.

Crop	Target Pests	Rate (fl oz/A)
LETTUCE (HEAD AND LEAF)	Alfalfa Looper Cabbage Looper Cutworm species Green Cloverworm Imported Cabbageworm Saltmarsh Caterpillar	1.92 to 3.20

Cont'd next page

LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000

Crop	Target Pests	Rate (fl oz/A)
LETTUCE (HEAD AND LEAF)	Aphid species ^{2,3} Armyworm Beet Armyworm ^{1,3} Corn Earworm Diamondback Moth ³ European Corn Borer Fall Armyworm ¹ Flea Beetle species Grasshopper species Japanese Beetle (adult) Leafhopper species Meadow Spittlebug Plant Bug species including Lygus species ³ Southern Armyworm Spider Mite species ² Stink Bug species Tobacco Budworm ³ Vegetable Weevil (adult) Whitefly species ^{2,3}	2.56 to 3.84

Remarks

- 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 a minimum of 2.0 gallons of water per acre.
- **Do not** apply within 1 day of harvest.
- **Do not** apply more than 0.3 pound active ingredient (38.4 fluid ounces or 2.4 pints of product) per acre per season.

¹ For control of first and second instar only.

² Suppression only.

³ See RESISTANCE statement under DIRECTIONS FOR USE.

Crop	Target Pests	Rate (fl oz/A)
ONION (BULB) AND GARLIC	Cutworm species Leaf miner species (adult) Onion Maggot (adult) Seedcorn Maggot (adult)	1.92 to 3.20
	Aphid species ² Armyworm species ¹ Flower Thrips ^{2,3} Onion Thrips ³ Plant Bug species Stink Bug species Tobacco Thrips ³ Western Flower Thrips ^{2,3}	2.56 to 3.84

Remarks

- 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 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 a minimum of 2.0 gallons of water per acre.
- For thrips control by aerial application, the addition of 1% COC v/v, 0.25% NIS v/v or a silicone adjuvant (follow manufacturers use directions) may enhance the deposition of the spray and increase plant coverage.

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

ONION (BULB) AND GARLIC CONT'D

- **Do not** apply within 14 days of harvest.
- **Do not** apply more than 0.24 pound active ingredient (30.72 fluid ounces or 1.92 pints of product) per acre per season.

¹ For control of the first and second instar only.

² Suppression only.

³ See RESISTANCE statement under DIRECTIONS FOR USE.

Crop	Target Pests	Rate (fluid ounce/A)
PEANUT	Cutworm species Green Cloverworm Potato Leafhopper Rednecked Peanut Worm Threecornered Alfalfa Hopper Velvetbean Caterpillar	1.92 to 3.20
	Bean Leaf Beetle Corn Earworm Fall Armyworm ¹ Grasshopper species Southern Corn Rootworm (adult) Stink Bug species Tobacco Thrips Vegetable Weevil Whitefringed Beetle (adult)	2.56 to 3.84
	Aphid species ² Beet Armyworm ^{2,3} Lesser Cornstalk Borer ² Soybean Looper ^{2,3} Spder Mite species ²	3.84

Remarks

- 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.
- Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2.0 gallons of water per acre.
- **Do not** apply within 14 days of harvest.
- **Do not** apply more than 0.12 pound active ingredient (15.36 fluid ounces or 0.96 pints of product) per acre per season.

¹ Use higher rates for large larvae.

² Suppression only.

³ See RESISTANCE statement under DIRECTIONS FOR USE.

LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000

Crop	Target Pests	Rate (fl oz/A)
POME FRUITS Apple Crabapple Loquat Mayhaw Oriental Pear Pear Quince	Apple Aphid Apple Maggot (adult) Cherry Fruit Fly species (adult) Codling Moth Green Fruitworm Japanese Beetle Leafhopper species Leafroller species Lesser Appleworm Omnivorous Leafroller Orange Tortrix Oriental Fruit Moth Pear Psylla ¹ Pear Sawfly Periodical Cicada Plant Bug species Plum Curculio Rosy Apple Aphid San Jose Scale (fruit infestations only) Spirea Aphid Stink Bug species Tent Caterpillar species Tentiform Leaf Miner species Tree Borer species Tufted Apple Budworm Webworm species	2.56 to 5.12

Remarks

- 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 recommendations.
- 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 5.0 gallons of water per acre, but use higher volumes as appropriate for thorough coverage.
- **Do not** apply within 21 days of harvest.
- **Do not** apply more than 0.2 pound active ingredient (25.6 fluid ounces or 1.6 pints of product) per acre per year. **Do not** apply more than 0.16 pound active ingredient (20.48 fluid ounces or 1.28 pints of product) per acre per year post bloom.

¹ Suppression only.

LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000

Crop	Target Pests	Rate (fl oz/A)
STONE FRUITS Apricot Chickasaw Plum Damson Plum Japanese Plum Nectarine Peach Plum Plumcot Prune Sweet and Tart Cherry	American Plum Borer Apple Maggot (Adult) Black Cherry Aphid Cherry Fruit Fly species (adult) Codling Moth Green Fruitworm Japanese Beetle June Beetle Leafhopper species Leafroller species Oriental Fruit Moth Peach Twig Borer Peachtree Borer species Pear Sawfly Periodical Cicada Plant Bug species Plum Curculio Rose Chafer Stink Bug species Tent Caterpillar species Thrips species	2.56 to 5.12

Remarks

- 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, and IPM recommendations.
- 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 5.0 gallons of water per 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 pound active ingredient (25.6 fluid ounces or 1.6 pints of product) per acre per year. **Do not** apply more than 0.16 pound active ingredient (20.48 fluid ounces or 1.28 pints of product) per acre per year post bloom.

Crop	Target Pests	Rate (fl oz/A)
SUGARCANE	Mexican Rice Borer ¹ Pygmy Mole Cricket Rice Stalk Borer ¹ Sugarcane Aphid ³ Sugarcane Beetle (adult) ² Sugarcane Borer ¹ West Indian Crane fly Yellow Sugarcane Aphid ³	3.20 to 5.12

Remarks

- 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 2.0 gallons of water per acre.
- **Do not** apply within 21 days of harvest.
- **Do not** apply more than 0.16 pound active ingredient (20.48 fluid ounces or 1.28 pints of product) per acre per season.

¹ For control before the larva bores into the plant stalk.

² Suppression only of beetles active above ground.

³ See RESISTANCE statement under DIRECTIONS FOR USE.

LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000

Crop	Target Pests	Rate (fl oz/A)
SUNFLOWER	Cutworm species Sunflower Beetle	1.92 to 3.20
	Banded Sunflower Moth Fall Armyworm ¹ Grasshopper species Head-Clipper Weevil (adult) Japanese Beetle (adult) Leafhopper species Meadow Spittlebug Painted Lady (Thistle) Caterpillar Seed Weevil (adult) Spotted Cabbage Looper Stem Weevil (adult) Stink Bug species Sunflower Maggot (adult) Sunflower Moth Woollybear Caterpillar	2.56 to 3.84
	Beet Armyworm ^{2,3} Spider Mite species ²	3.84

Remarks

- 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 sunflower heads and/or foliage. When applying by air, apply a minimum of 2.0 gallons of water per acre.
- **Do not** apply within 45 days of harvest.
- **Do not** apply more than 0.12 pound active ingredient (15.36 fluid ounces or 0.96 pints of product) per acre per season. **Do not** apply more than 0.09 pound active ingredient (11.52 fluid ounces or 0.72 pints of product) per acre per season after bloom initiation.
- **Do not** apply as an ultra-low volume (ULV) spray.

¹ Use higher rates for large larvae.

² Suppression only.

³ See RESISTANCE statement under DIRECTIONS FOR USE.

LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000

Crop	Target Pests	Rate (fl oz/A)
TOBACCO	Armyworm species ¹ Blister Beetle species Cabbage Looper Corn Earworm Cucumber Beetle species (adult) Cutworm species Grasshopper species Japanese Beetle (adult) Katydid species Plant Bug species ³ Potato Tuberworm Salt Marsh Caterpillar Stinkbug species Tobacco Aphid species ^{2,3} Tobacco Budworm ³ Tobacco Flea Beetle (adult) Tobacco Hornworm Tobacco Thrips species ² Tomato Hornworm Tree Cricket species Vegetable Weevil (adult) Webworm species	1.92 to 3.84

Remarks

- 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 a minimum of 2.0 gallons of water per acre.
- **Do not** apply within 40 days of harvest.
- **Do not** apply more than 0.09 pound active ingredient (11.52 fluid ounces or 0.72 pints) per acre per year.

¹ For control of first and second instars only.

² Suppression only.

³ See RESISTANCE statement under DIRECTIONS FOR USE.

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

Crop	Target Pests	Rate (fl oz/A)
TREE NUTS Almond Beech Nut Brazil Nut Butternut Cashew Chestnut Chinquapin Filbert (Hazlenut) Hickory Nut Macadamia Nut (Bush Nut) Walnut, Black Walnut, English (Persian)	Ants Chinch Bug Codling Moth Filbertworm Leaffooted Bug Leafroller species Navel Orangeworm Peach Twig Borer Plant Bug species Stink Bug species Walnut Aphid Walnut Husk Fly species (adult)	2.56 to 5.12
Pecan	Hickory Shuckworm Pecan Aphid species Pecan Casebearer species Pecan Phylloxera species Pecan Spittlebug Pecan Weevil Stink Bug species	2.56 to 5.12

Remarks

- 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 a minimum of 5.0 gallons of water per acre, but use higher rates as appropriate for thorough coverage.
- **Do not** apply within 14 days of harvest.
- **Do not** apply more than 0.16 pound active ingredient (20.48 fluid ounces or 1.28 pints of product) per acre per year. **Do not** apply more than 0.12 pound active ingredient (15.36 fluid ounces or 0.96 pints of product) per acre per year post bloom.

LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000

Crop	Target Pests	Rate (fl oz/A)
TUBEROUS AND CORM VEGETABLES (POTATO, SWEET POTATO, YAMS AND RELATED) Arracacha Arrowroot	Cutworm species	1.92 to 3.20
	Leafhopper species	
	Saltmarsh Caterpillar	
	Sweet Potato Hornworm	
Artichoke (Chinese and Jerusalem only)	Woollybear Caterpillar species	2.56 to 3.84
Canna (edible)	Aphid species ¹	
Cassava (bitter and sweet)	Armyworm species ¹	
Chayote (root)	Blister Beetle species	
Chufa	Colorado Potato Beetle ¹	
Dasheen	Corn Earworm	
Ginger	Cricket species	
Leren	Cucumber Beetle species (adults)	
Potato	European Corn Borer	
Sweet Potato	Flea Beetle species (adults)	
Tanier	Grasshopper species	
Turmeric	Looper species ¹	
Yam (bean and true)	Lygus Bug species ¹	
	Plant Bug species	
	Potato Psyllid	
	Potato Tuberworm	
	Stink Bug species	
	Sweet Potato Leaf Beetle (adults)	
	Sweet Potato Vine Borer	
	Thrips species ^{1,2}	
	Tortoise Beetle species	
	Webworm species	
	Weevil species (adults)	
	Leafminer species ^{1,3}	3.84
	Whitefly species ^{1,3}	
	Spider Mite species ³	

Remarks

- 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.
- Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of all above ground plant parts. When applying by air, apply a minimum of 2.0 gallons total solution per acre. When applying by ground, a minimum of 10.0 gallons total solution per acre is recommended.
- Use higher application volumes and/or rates when foliage is dense, pest populations are high, larvae are large, weather conditions are adverse and/or as plant size increases. Use higher rates for longer residual.
- 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 LPI Lambda-Cyhalothrin.
- **Do not** apply more than 0.12 pound active ingredient (15.36 fluid ounces or 0.96 pints of product) per acre per season. **Do not** apply within 7 days of harvest.

¹ See RESISTANCE statement under DIRECTIONS FOR USE.

² Does not include Western Flower Thrips.

³ Suppression only.

LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000

NON-AGRICULTURAL USES

Crop	Target Pests	Rate (fl oz/A)
CONIFER AND DECIDUOUS TREES Plantations and Nurseries	Bagworm Balsam Twig Aphid Balsam Woolly Aphid Birch Leafminer Black Pine Weevil Elm Leaf Beetle European Elm Bark Beetle Gypsy Moth Japanese Beetle June Beetle species Leaf Beetle species Leafroller species May Beetle species Mealybug species ¹ Pales Weevil Pine Chafer Pine Colaspis Beetle Pine Conelet Bug Pine Leaf Chermid Pine Needle Scale Pine Sawfly species Pine Tip Moth species Pine Weevil species Poplar Aphid species Sawfly species Spittlebug species Spruce Budworm Tent Caterpillar species Tussock Moth species Webworm species	2.56 to 5.12

Remarks

- 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 2.0 gallons of water per acre.
- **Do not** apply more than 0.24 pound active ingredient (30.72 fluid ounces or 1.92 pints of product) per acre per year.

¹ Suppression only.

Crop	Target Pests	Rate (fl oz/A)
SEED ORCHARDS	Coneworm species Seed Bug species Thrips species	See Remarks

Remarks

- For high volume sprayers, dilute 5.12 fluid ounces per 100 gallons of water and apply 5.0 to 10.0 gallons of finished spray per tree.
- For low volume sprayers, dilute 20.0 fluid ounces per 100 gallons of water and apply 100 gallons of finished spray per acre.
- For aerial applications, apply 15.0 fluid ounces per acre in a minimum of 10.0 gallons finish spray per acre.
- **Do not** apply more than 0.5 pound active ingredient (64.0 fluid ounces or 0.4 pints of product) per acre per year.

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

Crop	Target Pests	Rate (fl oz/A)
NON-CROPLAND (EXCLUDING PUBLIC LAND)	See CROP OUTLETS on this LPI Lambda-Cyhalothrin label for target pest and rates.	See Crop Outlets

Remarks

- 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 pound active ingredient (25.6 fluid ounces or 1.6 pints of product) per acre per year.
- **Do not** graze livestock in treated areas.

Crop	Target Pests	Rate (fl oz/A)
NON-BEARING CITRUS ORCHARDS Calamondin Citron Citrus Hybrids Grapefruit Kumquat Lemon Lime Mandarin Orange (sweet & sour) Pummelo Satsuma Mandarin Tangerine Uniq Fruit Including all cultivars and/or hybrids of these	Asian citrus Psyllid	3.84 to 5.12

Remarks

- Apply as required by scouting. Timing and frequency of applications should be based upon insects reaching locally determined economic thresholds and IPM recommendations.
- 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 2.0 gallons of water per acre, but use higher volumes as appropriate for thorough coverage.
- 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 foraging the treatment area.

Specific Use Restrictions

- Apply to non-bearing citrus trees only to within 1 year of harvest.
- Note: To avoid possible illegal residues, do not apply to citrus that will bear harvestable fruit within 12 months.
- Do not apply more than 0.24 pound active ingredient (30.72 fluid ounces or 1.92 pints of product) per acre per year.
- Not for use in citrus nurseries.

Rate Conversion Chart

lb a.i./A	fl oz/A	pts/A	Treated A/gal
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

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING: Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org. If not recycled, then 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 or pressure rinse container (or equivalent) promptly after emptying.

For packages up to 5 gallons: 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. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. **For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

For packages greater than 56 gallons: 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.

For refillable containers: 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.

For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC – 1-800-424-9300.

**LPI LAMBDA-CYHALOTHRIN
EPA REG. NO. 34704-1000**

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this products label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

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