

U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460

53883-405

Date of Issuance:

EPA Reg. Number:

3/3/17

NOTICE	OF	PEST	CIDE:
TOTICE	\sim	ILDI	LUDE.

X Registration Reregistration (under FIFRA, as amended) Term of Issuance: Unconditional

Name of Pesticide Product: CSI Lambda 1EC

Name and Address of Registrant (include ZIP Code):

Control Solutions, Inc. 5903 Genoa-Red Bluff Rd. Pasadena, TX 77507-1041

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

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

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

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

- 1. Submit and/or cite all data required for registration/registration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
- 2. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 53883-405."

Signature of Approving Official:	Date:	
18 D	3/3/17	
Kable Bo Davis, Product Manager 03		
Invertebrate & Vertebrate Branch 1, Registration Division (7505P)		

EPA Form 8570-6

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3. Submit one copy of the revised final printed label for the record before you release the product for shipment.

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.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSF:

• Basic CSF dated 11/01/2016

If you have any questions, please contact Matthew Aubuchon by phone at 703 347-0477, or via email at Aubuchon.Matthew@epa.gov

Enclosure

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.

CSI Lambda 1EC

For Agricultural and Turf and Ornamental Use

ACTIVE INGREDIENT:	
Lambda-cyhalothrin	13.0%
OTHER INGREDIENTS:	87.0%
TOTAL:	100.00%

Contains 1 lb. of active ingredient per gallon. Contains petroleum distillates.



Manufactured for:

Control Solutions, Inc. 5903 Genoa Red Bluff Pasadena, TX 77507

ACCEPTED

03/03/2017

53883-405

EPA Reg. No: 53883-XXX
EPA Est. No: _____
Net Contents: _____

Consumer & Professional Solutions

information.

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.)

[Alternate text – all or in part: See side panel(s) for First Aid, Precautionary Statements, Directions for Use and Storage and Disposal.]

	FIRST AID			
IF SWALLOWED:	 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.			
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.			
	Remove contact lenses, if present, after the first 5 minutes then continue rinsing eye.			
	Call a poison control center or doctor for treatment advice.			
IF ON SKIN OR	Take off contaminated clothing.			
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.			
	Call a poison control center or doctor for treatment advice.			
IF INHALED:	Move person to fresh air.			
If person is not breathing, call 911 or an ambulance, give artificial				
	respiration immediately, preferably by mouth-to-mouth.			
	Call a poison control center or doctor for treatment advice.			
HOT LINE NUMBER				
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact SafetyCall® (866) 897-8050 for emergency medical treatment				

NOTE TO PHYSICIAN: Contains petroleum distillates. Vomiting may cause aspiration pneumonia.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING: 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, or using tobacco. Remove contaminated clothing and wash 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/clothing 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 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 wash waters.

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.

PHYSICAL AND CHEMICAL HAZARDS

Combustible. 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. Do not mix or allow coming in contact with oxidizing agents. Hazardous chemical reaction may occur.

DIRECTIONS FOR USE RESTRICTED USE PESTICIDE

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

READ ALL DIRECTIONS COMPLETELY BEFORE USE.

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.

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

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
- Shoes plus socks
- Chemical resistant gloves made of any waterproof material such as Barrier Laminate, or Viton > 14
 mils

NON-AGRICULTURAL USE REQUIREMENTS

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

Keep adults, children, and pets off treated areas until spray has dried following the application.

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. www.in.nrcs.usda.gov/technical/agronomy/newconbuf.pdf

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, streams, marshes, 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 mph.

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 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 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 downwind.
 The applicator must compensate for this displacement at the downward 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 noncropped 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 CSI LAMBDA 1EC using rates and timing described on this label. Consultation with your local State Extension Service or other local experts may be useful for recommendations on which adjuvants or diluent types to use, (see **Tank Mix Applications** section) as well as for rates and mixing instructions. Ascertain that the recommendations have been proven, through university and extension field trials, to be effective with this product applied by chemigation.

Be sure the irrigation system is providing uniform application of water to all areas, because good control requires thorough coverage of foliage. Maintain continuous agitation in the pesticide supply tank before and during the entire application period.

Inject the recommended rate of CSI LAMBDA 1EC into the irrigation system by means of a metering device that will provide a constant flow and distribute the product to the desired area in 0.1-0.2 inch of water. It is recommended that the minimum amount of water be used that will provide proper distribution and coverage. Inject the product into the main irrigation line ahead of a right angle turn in the line to insure adequate dispersion or mixing in the irrigation water. Following application, flush the entire irrigation and injection system with clean water before stopping it.

If application is being made during a normal irrigation set of a stationary sprinkler, inject the recommended rate of CSI LAMBDA 1EC for the area covered into the system only during the end of the irrigation set for a sufficient time to provide adequate coverage and product distribution.

It is not recommended that CSI LAMBDA 1EC 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 nonuniform 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-resource contamination from backflow.
- G. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid 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. Do not apply when wind speed favors drift beyond the area intended for treatment.
- M. Do not apply through chemigation systems connected to public water systems.

USE INSTRUCTIONS

Thorough crop coverage is necessary for both initial and residual control. Apply by ground in at least 10 gals./A or by air in at least 2 gals./A using sufficient water to obtain full coverage of foliage unless this label specifies otherwise. In situations where foliage is dense or pest pressure is high (heavier insect or egg pressure, larger larval stages), control can be improved by use of higher application volumes and/or higher use rates.

For cutworm control, CSI LAMBDA 1EC may be applied before, during, or after planting. When making soil incorporated applications, use higher rates for better control.

Resistance Management

CSI LAMBDA 1EC 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.

Tank Mix Applications

CSI LAMBDA 1EC may be tank mixed with other currently registered pesticides unless expressly prohibited by the product label. Adjuvants such as spreader stickers, wetting agents, and penetrants 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, CSI LAMBDA 1EC 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 products in the tank mix.

CROP USES AND SPRAY INSTRUCTIONS

ALFALFA, ALFALFA GROWN FOR SEED

Pests	Rate of CSI LAMBDA 1EC per Acre	Remarks
Alfalfa Caterpillar Army Cutworm	0.015 - 0.025 lb. a.i. (1.92 - 3.20 fl. oz.)	See additional instructions below.
Cutworm spp.	(1.92 - 3.20 11. 02.)	¹ Use higher rates for large larvae.
Green Cloverworm		² Suppression only.
Leafhopper spp.		³ See resistance statement under General
Looper spp.		Directions for Use.
Threecornered Alfalfa Hopper		⁴ Does not include Western Flower Thrips.
Velvetbean Caterpillar		De not apply more than 0.02 lb a i /0.24 pt or
Webworm spp. Alfalfa Seed Chalcid (Adult)	0.02 - 0.03 lb. a.i.	Do not apply more than 0.03 lb. a.i. (0.24 pt. or 3.84 fl. oz. of product)/A per cutting.
Alfalfa Weevil	(2.56 - 3.84 fl. oz.)	3.84 II. 02. Of product//A per cutting.
Armyworm	(2.00 0.01 02.)	Do not apply more than 0.12 lb. a.i. (0.96 pt. or
Bean Leaf Beetle (Adult)		15.36 fl. oz. of product)/A per season.
Blister Beetle spp.		
Blue Alfalfa Aphid		Do not apply within 1 day of harvest for forage
Clover Leaf Weevil spp.		or within 7 days of harvest for hay.
Clover Root Borer (Adult)		
Clover Root Curculio spp. (Adult)		
Clover Stern Borer (Adult)		
Corn Earworm		
Cowpea Aphid		
Cowpea Curculio (Adult)		
Cowpea Weevil (Adult)		
Cucumber Beetle spp. (Adult)		
Egyptian Alfalfa Weevil Fall Armyworm ¹		

Grape Colaspis (Adult) Grasshopper spp.		
Green June Beetle (Adult)		
Green Peach Aphid ³		
Japanese Beetle (Adult)		
Meadow Spittlebug		
Mexican Bean Beetle		
Pea Aphid		
Pea Weevil (Adult)		
Plant Bug spp. Including		
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1 .		
` '		
• • • •		
·	0.00 lb - :	
•		
	(3.84 II. 02.)	
Lygus spp. 3 Spotted Alfalfa Aphid Stink Bug spp. Sweet Clover Weevil (Adult) Thrips spp. 4 Western Yellowstriped Armyworm Whitefringed Beetle spp. (Adult) Yellow Striped Armyworm Beet Armyworm ^{1,3} Blotch Leafminer ³ Spider Mites ²	0.03 lb. a.i. (3.84 fl. oz.)	

Use scouting to determine need for applications. Base the timing and frequency of applications on the timing when insect populations reach local economic thresholds.

Apply by ground or air using enough water to obtain full coverage of foliage. Apply in at least 2 gals./A by air or 10 gals./A by ground. In situations of dense foliage and/or high pest populations, use 5-10 gals./A by air or 20 gals./A by ground and higher use rates. Also use higher rates for improved 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. Do not apply directly to bee shelters.

CANOLA

Pests	Rate of CSI LAMBDA 1EC per Acre	Remarks
Armyworm spp. Cabbage Seedpod Weevil	0.015 - 0.03 lb. a.i. (1.92 - 3.84 fl. oz.)	See additional instructions below.
Cutworm spp. Diamondback Moth		Do not apply within 7 days of harvest.
Flea Beetle Grasshoppers Looper spp. Lygus Bug		Do not apply more than 0.09 lb. a.i. (0.72 pt. or 11.52 fl. oz. of product)/A per year.
Cabbage Aphid	0.03 lb. a.i. (3.84 fl. oz.)	

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

Apply by air or ground with enough water to obtain full coverage of foliage. For air applications, apply a minimum of 2 gals. of water/A.

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

Pests	(AT PLANT): FIELD CORN, POPCORN, SEED CORN, SWEET CORN Rate of CSI Remarks				551(1)	
1 0010	LAMBDA 1E			rtoma	NO.	
	1,000 ft of F	•				
Corn Rootworm Larvae	0.005 lb. a		Do not harve	est or graze	ivestock or	cut
(Western, Northern,	(0.66 fl. oz		reated crops			
Southern, Mexican)	(010011101		lant applicat			
Cutworm spp.		'				
Lesser Cornstalk Borer		0	o not apply	more than (0.09 lb. a.i.	(0.72 pt.
Red Imported Fire Ant ¹		C	or 11.52 fl. oz	z. of product)/A per crop	at plant.
Seedcorn Beetle						
Seedcorn Maggot			or field cor			
White Grub spp.			ot apply mo			
Wireworm spp.			5.36 fl. oz. o			om at
		þ	lant and foli	ar applicatio	ns.	
		F	or sweet co	orn . do not a	npply more	than 0.48
			o. a.i. (3.84 p			
		p	er crop from	n at plant and	d foliar appl	ications.
		F	or Banded	Application	s— Make	
		a	application at	t planting as	a 5-7 inch	T-band
			prayed acro			
			etween the			
			vheels or as		ication beh	ind the
		þ	ress wheel.			
			or In-Furro			
			application in			
			nozzles or m			
			urrow opene vheel.	ers and in iro	nt or the pro	ess
		l v	vileei.			
		A	Apply a minir	mum of 3 ga	ls. finished	spray/A.
		1	Suppression	only.		
² lbs. a.i. and fl. oz./A of CSI LA	MBDA 1EC ap				w for vario	us row
spacings.	1011					
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

CEREAL GRAINS — CORN (FOLIAR): FIELD CORN, POPCORN, SEED CORN

CEREAL GRAINS — CORN (I CEIAR). I IEED CORN, I OI CORN, CEED CORN				
Pests	Rate of CSI	Remarks		
	LAMBDA 1EC per			
	Acre			
Corn Earworm ¹	0.015 - 0.025 lb. a.i.	See additional instructions below.		
Cutworm spp.	(1.92 - 3.20 fl. oz.)			
Green Cloverworm		¹ For control before the larva bores into the		
Meadow Spittlebug		plant stalk or ear.		
Western Bean Cutworm ¹		² Use higher rates for large larvae.		
Armyworm ²	0.02 - 0.03 lb. a.i.	³ Suppression only.		
Bean Leaf Beetle	(2.56 - 3.84 fl. oz.)	⁴ See resistance statement under General		
Bird Cherry-Oat Aphid ³		Directions for Use.		

	I	
Cereal Leaf Beetle		
Corn Leaf Aphid ³		Do not apply within 21 days of harvest.
Corn Rootworm Beetle		
(Adult beetles including		Do not allow livestock to graze in treated
Mexican, Northern,		areas or harvest treated corn forage as feed
Southern, Western)		for meat or dairy animals within 21 days after
English Grain Aphid ³		last treatment.
European Corn Borer ¹		
Fall Armyworm ²		Do not apply more than 0.12 lb. a.i. (0.96 pt.
Flea Beetle spp.		or 15.36 fl. oz. of product)/A per crop from at
Grasshopper spp.		plant and foliar applications.
Hop vine Borer ¹		
Japanese Beetle (Adult)		Do not apply more than 0.06 lb. a.i. (0.48 pt.
Lesser Cornstalk Borer		or 3.84 fl. oz. of product)/A after silk initiation.
Sap Beetle (Adult)		
Seedcorn Beetle		Do not apply more than 0.03 lb. a.i. (0.24 pt.
Southwestern Corn Borer ¹		or 3.84 fl. oz. of product)/A after corn has
Stalk Borer ¹		reached the milk stage (yellow kernels
Stink Bug spp.		with milky fluid).
Tobacco Budworm ^{1,4}		,,,,,,
Webworm spp.		
Yellowstriped Armyworm ²		
Beet Armyworm ⁴	0.03 lb. a.i.	1
Chinch Bug	(3.84 fl. oz.)	
Green Bug ^{3,4}	(0.0 : 0)	
Mexican Rice Borer ¹		
Rice Stalk Borer ¹		
Southern Corn Leaf Beetle ³		
Sugarcane Borer ¹		
		The state of the s

Use scouting or locally prescribed corn growth stages to determine need for application, usually at intervals of 7 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds or other locally recommended methods.

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

For chinch bug control, begin application when bugs migrate from small grains or grass weeds to small corn and direct the spray to the base of corn plants. Make additional applications at 3-5 day intervals if needed. CSI LAMBDA 1EC may only suppress heavy infestations and/or subsequent migrations.

For control of adult corn rootworm beetles (*Diabrotica* spp.) as part of an aerial applied corn rootworm control program use at least 3.84 fl. oz./A (0.03 lb. a.i./A).

CEREAL GRAINS — SWEET CORN (FOLIAR)

Pests	Rate of CSI LAMBDA 1EC per Acre	Remarks
Aphid spp. ^{2,3} Armyworm ¹	0.02 - 0.03 lb. a.i. (2.56 - 3.84 fl. oz.)	See additional instructions below.
Aster Leafhopper Beet Armyworm ^{1,3} Cereal Leaf Beetle		¹ Use higher rates for large larvae. ² Suppression only. ³ See resistance statement under General Directions for Use.
Chinch Bug Common Cornstalk Borer Corn Rootworm Beetle		Do not apply within 1 day of harvest.

		·
(Adult beetles including		
Mexican, Northern,		Do not allow livestock to graze in treated
Southern, Western)		areas or harvest treated corn forage as feed
Corn Earworm		for meat or dairy animals within 1 day after
Cutworm spp.		last treatment.
European Corn Borer		
Fall Armyworm ¹		Do not feed treated corn fodder or silage to
Flea Beetle spp.		meat or dairy animals within 21 days after last
Grasshopper spp.		treatment.
Japanese Beetle (Adult)		
Sap Beetle (Adult)		Do not apply more than 0.48 lb. a.i. (3.84 pts.
Southern Armyworm ¹		or 61.44 fl. oz. of product)/A per crop from at
Southwestern Corn Borer		plant and foliar applications.
Spider Mite spp. ²		
Stink Bug spp.		
Tarnished Plant Bug		
Webworm spp.		
Western Bean Cutworm		
Yellowstriped Armyworm ¹		
Corn Silkfly (Adult) ²	0.03 lb. a.i.	
Green Bug ^{2,3}	(3.84 fl. oz.)	

Use scouting or locally prescribed corn growth stages to determine need for application, usually at intervals of 4 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds. For best results target control before insects enter the stalk or ear.

Apply by ground or air using enough water and application methods to obtain full coverage of foliage and ears (if present). When applying by air, apply in at least 2 gals. of water/A.

For control of adult corn rootworm beetles (*Diabrotica* spp.) as part of an aerial applied corn rootworm control program, use a minimum of 0.025 lb. a.i. (3.2 fl. oz.)/A.

CEREAL GRAINS— RICE AND WILD RICE

Pests	Rate of CSI	Remarks
	LAMBDA 1EC per	
	Acre	
Bird Cherry-Oat Aphid	0.025 - 0.04 lb. a.i.	See additional instructions below.
Chinch Bug	(3.20 - 5.12 fl. oz.)	
Fall Armyworm		¹ For control before the larvae bore into the
Grasshopper spp.		plant stalk.
Green Bug		
Leafhopper spp.		Do not release flood water within 7 days of an
Rice Stink Bug		application.
Riceworm		
Rice Water Weevil (Adult)		Do not apply more than 0.12 lb. a.i. (0.96 pt.
Sharpshooter spp.		or 15.36 fl. oz. of product)/A per season.
True Armyworm		, , ,
Yellowstriped Armyworm		Do not apply more than 0.08 lb. a.i. (0.64
Yellow Sugarcane Aphid		pt.)/A within 28 days of harvest or more than
European Corn Borer ¹	0.03 - 0.04	0.04 lb. a.i. (0.32 pt.)/A within 21 days of
Mexican Rice Borer ¹	(3.84 - 5.12 fl. oz.)	harvest.
Rice Seed Midge ¹	,	
Rice Stalk Borer ¹		Do not apply within 21 days of harvest.
Sugarcane Borer ¹		
		Do not use treated rice fields for the
		aquaculture of edible fish and crustacea.

Do not apply as an ultra-low volume (ULV) spray.

Mixers/loaders supporting aerial applications to wild rice at a rate of 0.04 lb. a.i./A, and treating 1,200 acres (or more) per day must wear a dust-mist respirator.

Use scouting to determine timing of need for application and the need for repeat applications, usually at 5-7 day intervals. Base the timing and frequency of applications on when insect populations reach local economic thresholds.

CSI LAMBDA 1EC can be safely used when propanil products are being used for weed control. Apply by air or ground using enough water to obtain full coverage of foliage. When applying by air, apply in at least 2 gals. of water (or a total carrier volume)/A, but ensure that application is made in sufficient volume to provide adequate coverage. When applying at lower volumes by air, the addition of an emulsifiable crop oil (e.g., 1 pt./A) 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 0-5 days after permanent flood establishment. Do not allow more than 10 days to elapse from starting permanent flood until insecticide application unless scouting indicates weevils have not been previously present. Treatment of adults may also be made 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 1/2 inch above the waterline. When there is prolonged migration into the field, begin field scouting for adults and/or feeding scars 3-5 days after the first treatment and, if needed, make a second application within 7-10 days of the first application. Treatment of adults may also be made at later stages of rice development to reduce overwintering populations.

California: In addition to the directions above for control of rice water weevil in water seeded rice, CSI LAMBDA 1EC may be applied at the 1-3 leaf growth stage, with the majority at the 2-leaf growth stage. Adults are vulnerable both on levees and in the water. Larvae are vulnerable while feeding on the leaves before they enter the soil. Monitor for adults, based upon field history and density of population. Monitor field edges and levee areas for adults, then treat in one of the following ways: 1) spray the inside perimeter of the field, or 2) spray the entire field.

Because Green bug is known to have many biotypes, it is possible that CSI LAMBDA 1EC may only provide suppression. If the first application of CSI LAMBDA 1EC does not give satisfactory control, a resistant biotype may be present and use of an alternate chemistry may be necessary.

For control of stem borers, scout fields when rice growth is near panicle differentiation for early symptoms of damaging populations. This damage will be 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.

CEREAL GRAINS — SORGHUM (GRAIN)

Pests	Rate of CSI	Remarks
	LAMBDA 1EC per	
	Acre	
Cutworm spp.	0.015 - 0.02 lb. a.i.	See additional instructions below.
Sorghum Midge	(1.92 - 2.56 fl. oz.)	
Armyworm	0.02 - 0.03 lb. a.i.	¹ Use higher rates for large larvae.
Beet Armyworm ³	(2.56 - 3.84 fl. oz.)	² For control before the larvae bores into the
Corn Earworm		plant stalk.
European Corn Borer ²		³ See resistance statement under General
Fall Armyworm ¹		Directions for Use.
Flea Beetle spp.		
Grasshopper spp.		Do not apply more than 0.08 lb. a.i. (0.64 pt.
Lesser Cornstalk Borer ²		or 10.24 fl. oz. of product)/A per season.
Southwestern Corn Borer ²		
Stink Bug spp.		Do not apply more than 0.06 lb. a.i. (0.48 pt.
Webworm spp.		or 7.68 fl. oz. of product)/A per season after
Yellowstriped Armyworm ¹		crop emergence.
Chinch Bug	0.03 lb. a.i.	
Mexican Rice Borer ²	(3.84 fl. oz.)	Do not apply more than 0.02 lb. a.i. (0.16 pt.
Sugarcane Borer ²		or 2.56 fl. oz. of product)/A per season once
		crop is in soft dough stage.
		Do not apply within 30 days of harvest.

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

Apply by ground or air using enough water and application methods to obtain full coverage of target location. For air applications, apply a minimum of 2 gals. of water/A.

For sorghum midge control, make first application when one quarter of the sorghum heads have emerged and are in tip bloom. If needed, repeat applications at 5-day intervals.

For chinch bug control, start applications when bugs migrate from small grains or grass weeds to small sorghum, directing spray to the base of sorghum plants. If needed, repeat applications at 3-5 day intervals.

CSI LAMBDA 1EC may only suppress heavy infestations and/or subsequent migrations.

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

Pests	Rate of CSI LAMBDA 1EC per	Remarks
	Acre	
Army Cutworm	0.015 - 0.025 lb. a.i.	See additional instructions below.
Cutworm spp.	(1.92 - 3.20 fl. oz.)	
Armyworm	0.02 - 0.03 lb. a.i.	¹ Best control is obtained before insects begin
Bird Cherry-Oat Aphid ¹	(2.56 - 3.84 fl. oz.)	to roll leaves. Once crop has started to boot,
Cereal Leaf Beetle		CSI LAMBDA 1EC may provide suppression
English Grain Aphid ¹		only. Higher rates and increased coverage will
Fall Armyworm		be necessary.
Flea Beetle spp.		² Suppression only.
Grasshopper spp.		³ See resistance statement under General
Hessian Fly ⁴		Directions for Use.
Orange Blossom Wheat		⁴ Make application when adults emerge.
Midge		

Russian Wheat Aphid ¹		Do not apply within 30 days of harvest.
Stink Bug spp.		
Yellowstriped Armyworm		Do not apply more than 0.06 lb. a.i. (0.48 pt.
Grass Sawfly	0.025 - 0.03 lb. a.i.	or 7.68 fl. oz. of product)/A per season.
	(3.20 - 3.84 fl. oz.)	
Chinch Bug	0.03 lb. a.i.	Do not allow livestock to graze in treated
Corn Leaf Aphid ²	(3.84 fl. oz.)	areas or harvest treated wheat forage as feed
Greenbug ^{1,3}	,	for meat or dairy animals within 7 days after
Mite spp. ²		treatment.
		Do not feed treated straw to meat or dairy
		animals within 30 days after last treatment.

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

Apply by ground or air using enough water and application methods to obtain full coverage of foliage. For air applications, apply a minimum of 2 gals. of water/A.

For chinch bug control, repeat applications at 3-5 day intervals if needed. CSI LAMBDA 1EC may only suppress heavy infestations and/or migrations.

Because Greenbug is known to have many biotypes, it is possible that CSI LAMBDA 1EC may only provide suppression. If this occurs, a second application using an alternative chemistry may be needed.

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

Pests	Rate of CSI	Remarks
	LAMBDA 1EC per	
Alfalfa I a a a a a	Acre	On an I I'm and in the officer balls
Alfalfa Looper	0.015 - 0.025 lb. a.i.	See additional instructions below.
Cabbage Looper	(1.92 - 3.20 fl. oz.)	4
Cabbage Webworm		¹ For control of first and second instars only.
Cutworm spp.		² Suppression only
Imported Cabbageworm		³ See resistance statement under General
Southern Cabbageworm		Directions for Use.
Aphid spp. ^{2,3}	0.02 - 0.03 lb. a.i.	
Armyworm	(2.56 - 3.84 fl. oz.)	Do not apply within 1 day of harvest.
Beet Armyworm ^{1,3}		
Corn Earworm		Do not apply more than 0.24 lb. a.i. (1.92 pts.
Diamondback Moth ³		or 30.72 fl. oz. of product)/A per season.
Fall Armyworm ¹		
Flea Beetle spp.		
Grasshopper spp.		
Japanese Beetle (Adult)		
Leafhopper spp.		
Meadow Spittlebug		
Plant Bug spp including		
Lygus spp. ³		
Spider Mite spp. ²		
Stink Bug spp.		
Thrips spp. ²		
Vegetable Weevil (Adult)		
Whitefly spp. ^{2,3}		
Yellowstriped Armyworm		

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

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

COTTON

Pests	Rate of CSI LAMBDA 1EC per	Remarks
Cutworm on	Acre 0.015 - 0.02 lb. a.i.	See additional instructions below.
Cutworm spp. Soybean Thrips	(1.92 - 2.56 fl. oz.)	See additional instructions below.
Tobacco Thrips	(1.92 - 2.30 11. 02.)	¹ For control of first and second instars only.
Cabbage Looper	0.02 - 0.03 lb. a.i.	² Suppression only
Cotton Fleahopper	(2.56 - 3.84 fl. oz.)	³ See resistance statement under General
Cotton Leafperforator	(2.30 - 3.04 11. 02.)	Directions for Use.
Cotton Leafworm		Directions for esc.
Lygus Bug spp. ³		Do not apply within 21 days of harvest.
Pink Bollworm		20 not apply maint 21 days of harroon
Saltmarsh Caterpillar		Do not graze livestock in treated areas.
Bandedwing Whitefly ^{2,3}	0.025 - 0.04 lb. a.i.	
Beet Armyworm ^{1,3}	(3.20 - 5.12 fl. oz.)	Do not apply more than 0.2 lb. a.i. (1.6 pts.
Boll Weevil		Or 25.6 fl. oz.of product)/A per season.
Brown Stink Bug		
Cotton Aphid ^{2,3}		Do not make more than a total of 10 synthetic
Cotton Bollworm		pyrethroid applications (of one product or
European Corn Borer		combination of products) to a cotton crop in
Fall Armyworm		one growing season.
Green Stink Bug		
Southern Green Stink Bug		
Sweet potato Whitefly ^{2,3}		
Tobacco Budworm ³		
Twospotted Spider Mite ²	I for a Profession and	Latitude of 5.7 has Base the Calculation

Use scouting to determine need for application, usually at intervals of 5-7 days. Base the timing and frequency of applications on when insect populations reach local economic thresholds.

Apply ground or air using enough water to obtain full coverage of foliage.

Applications may also be made with equipment adapted and calibrated for ULV sprays. CSI LAMBDA 1EC may be mixed with once-refined vegetable oil and applied in a minimum of at least one qt. of finished spray/A.

When bollworm/budworm infestation levels are light, 0.02 lb. a.i. (2.56 fl. oz. of product)/A may be applied in conjunction with intense field monitoring.

For boll weevil, spray on a 3-5 day schedule.

When applied according to the directions above for control of cotton bollworm and tobacco budworm, CSI LAMBDA 1EC also provides ovicidal control of unhatched *Heliothis* species eggs.

CUCURBIT VEGETABLES — CHAYOTE (fruit), CHINESE WAX GOURD, CITRON MELON, CUCUMBER, GHERKIN, GOURD (edible), MOMORDICA spp., MUSKMELON, PUMPKIN, SQUASH (summer and winter). WATERMELON

Pests	Rate of CSI	Remarks
	LAMBDA 1EC per	
	Acre	
Armyworm spp. ¹	0.02 - 0.03 lb. a.i.	See additional instructions below.
Blister Beetle spp.	(2.56 - 3.84 fl. oz.)	
Cabbage Looper		¹ See resistance statement under General
Corn Earworm		Directions for Use.
Cricket spp.		² Western Flower Thrips are not included.
Cucumber Beetle species		³ Suppression only.
(Adults)		
Cutworm spp.		Do not apply within 1 day of harvest.
Flea Beetle spp.		
Grasshopper spp.		Do not apply more than 0.18 lb. a.i. (1.44 pts.
June Beetle spp.		or 23 fl. oz.)/A per season.
Leaffooted Bug		
Leafhopper spp.		
Lygus Bug spp. ¹		
Melonworm		
Pickleworm		
Plant Bug spp.		
Rindworm species complex		
Saltmarsh Caterpillar		
Squash Beetle		
Squash Bug spp.		
Squash Vine Borer spp.		
Stink Bug spp.		
Thrips spp. ^{1,2}		
Tobacco Budworm ¹		
Webworm spp.		
Aphid spp. ¹	0.03 lb. a.i.	
Leafminer spp. ^{1,3}	(3.84 fl. oz.)	
Spider Mite spp. ³		
Whitefly spp. ^{1,3}		

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

Apply by ground or air using enough water to obtain full coverage of foliage. When applying by air, apply in at least 2 gals. of solution/A. When applying by ground, apply in a minimum of 10 gals. of solution/A.

Use higher application volumes and/or application rates when foliage is dense, larvae are large, pest populations are high, size of plants increases, or weather conditions are adverse. Use higher rates for longer residual.

Insects that tunnel or bore into leaves, stems, vines, or fruit must be controlled before penetration. Only insects (larvae and adults) exposed to the product can be controlled with foliar applications of CSI LAMBDA 1EC.

FRUITING VEGETABLES — TOMATO, TOMATILLO, PEPPERS (BELL AND NON-BELL), EGGPLANT. GROUND CHERRY. PEPINO

Pests	Rate of CSI LAMBDA 1EC per	Remarks
	Acre	
Cabbage Looper	0.015 - 0.025 lb. a.i.	See additional instructions below.
Cutworm spp.	(1.92 - 3.20 fl. oz.)	
Hornworm spp.		¹ For control of first and second instars only.
Aphid spp. ^{2,3}	0.02 - 0.03 lb. a.i.	² Suppression only
Beet Armyworm ^{1,3}	(2.56 - 3.84 fl. oz.)	³ See resistance statement under General
Blister Beetle spp.		Directions for Use.
Colorado Potato Beetle ³		⁴ For control before the larva bores into the
Cucumber Beetle spp.		plant stalk or fruit.
(Adult)		⁵ Does not include Western Flower thrips.
European Corn Borer ⁴		
Fall Armyworm ¹		Do not apply within 5 days of harvest.
Flea Beetle spp.		
Grasshopper spp.		Do not apply more than 0.36 lb. a.i. (2.88 pts.
Japanese Beetle (Adult)		or 46.08 fl. oz. of product)/A per season.
Leafhopper spp.		
Leafminer spp. ²		
Meadow Spittlebug		
Pepper Weevil (Adult) ²		
Plant Bug spp.		
Southern Armyworm ¹		
Spider Mite spp. ²		
Stalk Borer ⁴		
Stink Bug spp.		
Thrips ⁵		
Tobacco Budworm ³		
Tomato Fruitworm		
Tomato Pinworm		
Tomato Psyllid ^{2,3}		
Vegetable Weevil (Adult)		
Whitefly spp. ^{2,3}		
Yellowstriped Armyworm ¹		

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

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

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

Pests	Rate of CSI LAMBDA 1EC per Acre	Remarks
Army Cutworm	0.015 - 0.025 lb. a.i.	See additional instructions below.
Cutworm spp.	(1.92 - 3.20 fl. oz.)	
Essex Skipper		¹ Best control is obtained before insects begin
Range Caterpillar		to roll leaves.
Striped Grass Looper		

0.02 - 0.03 lb. a.i. ²See resistance statement under General Beet Armyworm Billbug spp.3 (2.56 - 3.84 fl. oz.) Directions for Use. Bird Cherry-Oat Aphid.1 ³Suppression only Black Grass Bug ⁴Greenbug is known to have many biotypes. Black Turfgrass Beetle (Adult) CSI LAMBDA 1EC may provide suppression Blue Stem Midge only. A second application using alternative Cereal Leaf Beetle chemistry may be needed. Chinch Bug Crane Fly spp. Pasture and rangeland grass may be used for grazing or cut for forage 0 days after Cricket spp. English Grain Aphid1 application. Do not cut grass to be dried and Fall Armyworm harvested for hay until 7 days after the last Flea Beetle spp. application. Grass Mealybug Grass Sawfly (Adult) Grass grown for seed: Straw and mature seed Grasshopper spp. (seed screenings) may be used as feed 7 Green June Beetle (Adult) days after the last application. Regrowth of Greenbug^{1,2,4} grass grown for seed may be used for Japanese Beetle (Adult) grazing, cut for forage or cut to be dried and Katydid spp. harvested for hay. Leafhopper spp. Mites³ **Do not** apply more than 0.03 lb. a.i. (0.24 pt. Russian Wheat Aphid¹ or 3.84 fl. oz.)/A per cutting for pastures, Southern Armyworm rangeland, and grasses grown for seed. A Spittlebug spp. minimum re-treatment interval (RTI) of 30 days is required for pastures and rangeland Stink Bug spp. Sugarcane Aphid receiving 0.03 lb. a.i./A which have not been cut between applications. Thrips spp. Tick spp. True Armyworm **Do not** apply more than 0.09 lb. a.i. (0.72 pt. or 11.52 fl. oz. of product)/A per season. Webworm spp. Yellowstriped Armyworm

Use scouting to determine application requirements. Base the timing and frequency of applications on when insect populations reach local economic thresholds.

Apply by ground or air using enough water to obtain full coverage of foliage. When applying by air, apply in at least 2 gals. of water/A. When applying by ground, apply in a minimum of 7 gals. of water/A.

Use higher application volumes and/or application rates when foliage is dense, larvae are large, pest populations are high, or weather conditions are adverse. Use higher rates for longer residual.

For chinch bug control, CSI LAMBDA 1EC may only suppress heavy infestations and/or migrations. In these situations, a second application using alternative chemistry may be needed.

LEGUME VEGETABLES (BEANS AND PEAS):

EDIBLE PODDED (ONLY): Canavalia gladiata - sword bean; Canavalia ensiformis - Jackbean; Glycine max - soybean (immature seed).

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

SUCCULENT SHELLED OR DRIED SHELLED: Vica faba - broad bean (fava bean).

DRIED SHELLED (ONLY): Lupinus spp. - includes grain, sweet, white and sweet white lupines; Cicer arietinum - chickpea (garbanzo bean), Cyamopsis tetragonoloba - guar, Lablab pupureus - Lablab bean (hyacinth bean), Lens esculata - lentils.

(hyacinth bean), Lens esculata -		
Pests	Rate of CSI	Remarks
	LAMBDA 1EC per	
	Acre	
Cutworm spp.	0.015 - 0.025 lb. a.i.	See additional instructions below.
Green Cloverworm	(1.92 - 3.20 fl. oz.)	
Imported Cabbageworm		¹ For control before the larva bores into the
Mexican Bean Beetle		plant stalk or pods.
Saltmarsh Caterpillar		² Use higher rates for large larvae.
Velvetleaf Caterpillar		³ For suppression only
Alfalfa Caterpillar	0.02 - 0.03 lb. a.i.	⁴ See resistance statement under General
Aphid spp.4	(2.56 - 3.84 fl. oz.)	Directions for Use.
Armyworm ²	,	⁵ Does not include Western Flower Thrips.
Bean Leaf Beetle		
Bean Leaf Skeletonizer		For edible podded and succulent shelled
Blister Beetle spp.		legume vegetables, do not apply within 7
Corn Earworm		days of harvest.
Corn Rootworm Beetle spp.		aayo or riarvoot.
(Adult)		For dried shelled legume vegetables, do
		not apply within 21 days of harvest.
Cucumber Beetle spp. (Adult)		not apply within 21 days of harvest.
Curculio and Weevil spp. ¹		Do not apply mare than 0.40 lb a i /0.00 nt
(foliage and pod feeding		Do not apply more than 0.12 lb. a.i. (0.96 pt.
adults and larvae)		or 15.36 fl. oz. of product)/A per season.
European Corn Borer		English and an I let al all all all and a smill
Fall Armyworm ²		For succulent and dried shelled peas and
Flea Beetle spp. (Adult)		beans, do not graze livestock in treated areas
Flea Hopper spp.		or harvest vines for forage or hay.
Grasshopper spp.		
Japanese Beetle (Adult)		
Leafhopper spp.		
Leafier spp.		
Looper spp.		
Meadow Spittlebug		
Painted Lady Butterfly (Larva)		
Plant Bug spp. including		
Lygus spp.4		
Stalk Borer ¹		
Stink Bug spp.		
Threecornered Alfalfa Hopper		
Thrips spp. ^{4,5}		
Tobacco Budworm ⁴		
Webworm spp.		
Western Bean Cutworm		
Western Yellowstriped		
Armyworm ²		
Yellowstriped Armyworm ²		
Beet Armyworm ^{3,4}	0.03 lb. a.i.	
Leafminer spp. 3,4	(3.84 fl. oz.)	
Lesser Cornstalk Borer ³		
Soybean Looper ^{3,4}		
Spider Mite spp. ³		
Whitefly spp. ^{3,4}		

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

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

LEGUME VEGETABLES: SOYBEANS

Pests	Rate of CSI	Remarks
	LAMBDA 1EC per	
	Acre	
Bean Leaf Beetle	0.015 - 0.025 lb. a.i.	See additional instructions below.
Cabbage Looper	(1.92 - 3.20 fl. oz.)	
Corn Earworm		¹ Use higher rates for large larvae.
Corn Rootworm Beetle (Adult		² Suppression only.
beetles including Mexican,		³ See resistance statement under General
Northern, Southern, Western)		Directions for Use.
Cutworm spp.		⁴ Use lower rates for early season applications
Green Cloverworm		and/or lighter populations.
Mexican Bean Beetle		⁵ Does not include Western Flower Thrips.
Painted Lady (Thistle) Caterpillar		Do not apply within 30 days of harvest.
Potato Leafhopper		υ ποι αρριγ within 30 days of harvest.
Saltmarsh Caterpillar		Do not apply more than 0.06 lb. a.i. (0.48
Soybean Aphid4		pt.)/A per season.
Threecornered Alfalfa Hopper		pa.jir (por oddoorii.
Thrips spp. ⁵		
Velvetbean Caterpillar		
Woolybear Caterpillar		
Armyworm ¹	0.025 - 0.03 lb. a.i.	
Blister Beetle spp.	(3.20 - 3.84 fl. oz.)	
European Corn Borer		
Fall Armyworm ¹		
Grasshopper spp.		
Japanese Beetle (Adult)		
Plant Bug spp.		
Silverspotted Skipper		
Stink Bug spp.		
Tobacco Budworm ³ Webworm spp.		
Yellowstriped Armyworm ¹		
Beet Armyworm ^{2,3}	0.03 lb. a.i.	
Lesser Cornstalk Borer ³	(3.84 fl. oz.)	
Soybean Looper ^{2,3}	(0.0111.02.)	
Spider Mite spp. ²		

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

Do not graze or harvest treated soybean forage, straw or hay for livestock feed.

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

For control of adult corn rootworm beetles (*Diabrotica* spp.) as part of an aerial applied to corn rootworm control program use at least 2.56 fl. oz./A of product (0.02 lb. a.i./A).

LETTUCE (HEAD AND LEAF)

Pests	Rate of CSI	Remarks
1 6313	LAMBDA 1EC per	ivelliai va
	· ·	
A If a If a	Acre	See additional instructions below.
Alfalfa	0.015 - 0.025 lb. a.i.	See additional instructions below.
Cabbage Looper	(1.92 - 3.20 fl. oz.)	45
Cutworm spp.		¹ For control of first and second instars only.
Green Cloverworm		² Suppression only.
Imported Cabbageworm		³ See resistance statement under General
Saltmarsh Caterpillar		Directions for Use.
Aphid spp. ^{2,3}	0.025 - 0.03 lb. a.i.	
Armyworm	(3.20 - 3.84 fl. oz.)	Do not apply within 1 day of harvest.
Beet Armyworm ^{1,3}		
Corn Earworm		Do not apply more than 0.3 lb. a.i. (2.4 pts. or
Diamondback Moth ³		38.4 fl. oz. of product)/A per season.
European Corn Borer		
Fall Armyworm ¹		
Flea Beetle spp.		
Grasshopper spp.		
Japanese Beetle (Adult)		
Leafhopper spp.		
Meadow Spittlebug		
Plant Bug spp. including		
Lygus spp. ³		
Southern Armyworm		
Spider Mite spp. ²		
Stink Bug spp.		
Tobacco Budworm ³		
Vegetable Weevil (Adult)		
Whitefly spp. ^{2,3}		
		

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

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

ONION (BULB) AND GARLIC

Pests	Rate of CSI LAMBDA 1EC per Acre	Remarks
Cutworm spp.	0.015 - 0.025 lb. a.i.	See additional instructions below.
Leafminer spp. (Adult)	(1.92 - 3.20 fl. oz.)	
Onion Maggot (Adult)		¹ Use higher rates for large larvae.
Seedcorn Maggot (Adult)		² Suppression only.

Aphid spp. ²	0.02 - 0.03 lb. a.i.	³ See resistance statement under General
Armyworm spp. ¹	(2.56 - 3.84 fl. oz.)	Directions for Use.
Flower Thrips ^{2,3}		
Onion Thrips ³		Do not apply within 14 days of harvest.
Plant Bugs		
Stink Bug spp.		Do not apply more than 0.24 lb. a.i. (1.92 pts.
Tobacco Thrips ³		Or 30.72 fl. oz. of product)/A per season.
Western Flower Thrips ^{2,3}		

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

Use the higher label rates as thrips population increases and avoid rescue situations.

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

To control thrips by aerial application, the addition of 1% COC v/v, 1% NIS v/v or a silicone adjuvant (follow manufacturer's use directions) may improve the deposition of the spray and increase plant coverage.

PEANUT

Pests	Rate of CSI LAMBDA 1EC per Acre	Remarks
Cutworm spp. Green Cloverworm Potato Leafhopper Red-necked Peanut Worm Threecornered Alfalfa Leafhopper Velvetbean Caterpillar Bean Leaf Beetle Corn Earworm Fall Armyworm ¹ Grasshopper spp. Southern Corn Rootworm (Adult) Stink Bug spp. Tobacco Thrips Vegetable Weevil	Acre 0.015 - 0.025 lb. a.i. (1.92 - 3.20 fl. oz.) 0.02 - 0.03 lb. a.i. (2.56 - 3.84 fl. oz.)	See additional instructions below. 1 Use higher rates for large larvae. 2 Suppression only. 3 See resistance statement under General Directions for Use. 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.
Whitefringed Beetle (Adult) Aphid spp. ¹ Beet Armyworm ^{2,3} Lesser Cornstalk Borer ² Soybean Looper ^{2,3} Spider Mites spp. ²	0.03 lb. a.i. (3.84 fl. oz.)	

Use scouting to determine need for application, usually at intervals of 7 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds.

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

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

Pests	Rate of CSI	Remarks
	LAMBDA 1EC per Acre	
Apple Apple		See additional instructions below.
Apple Aphid	0.02 - 0.04 lb. a.i.	See additional instructions below.
Apple Maggot (Adult)	(2.56 - 5.12 fl. oz.)	1Cuppropoion only
Cherry Fruit Fly spp. (Adult)		¹ Suppression only.
Coding Moth		Do not apply within 24 days of harvest
Green Fruitworm		Do not apply within 21 days of harvest.
Japanese Beetle		Do not apply more than 0.2 lb a : /4 C nto ar
Leafhopper spp.		Do not apply more than 0.2 lb. a.i. (1.6 pts. or
Leafroller spp.		25.6 fl. oz. of product)/A per year.
Lesser Appleworm		Do not apply mare than 0.40 lb a i /4.00 pts
Omnivorous Leafroller		Do not apply more than 0.16 lb. a.i. (1.28 pts.
Orange Tortrix		Or 20.48 fl. oz. of product)/A per year post- bloom.
Oriental Fruit Moth		bloom.
Pear Psylla1		
Pear Sawfly Periodical Cicada		
Plant Bug spp. Plum Curculio		
Rosy Apple Aphid		
San Jose Scale (fruit infestations only)		
Spirea Aphid ¹		
Stink Bug spp.		
Tent Caterpillar spp.		
Tentiform Leaf Miner spp.		
Tree Borer spp.		
Tufted Apple Budworm		
Webworm spp.		
TTODTTOTTT OPP.	<u> </u>	<u> </u>

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

Apply by ground or air using enough water to obtain full coverage of the foliage or target area. When applying by air, apply in at least 5 gals. of water/A, but use higher volumes as appropriate for thorough coverage.

STONE FRUITS — APRICOT, SWEET CHERRY, TART CHERRY, NECTARINE, PEACH, PLUM, CHICKASAW PLUM, DAMSON PLUM, JAPANESE PLUM, PLUMCOT, PRUNE

Pests	Rate of CSI LAMBDA 1EC per	Remarks
	Acre	
American Plum Borer	0.02 - 0.04 lb. a.i.	See additional instructions below.
Apple Maggot (Adult)	(2.56 - 5.12 fl. oz.)	
Black Cherry Aphid		Do not apply within 14 days of harvest.
Cherry Fruit Fly spp. (Adult)		
Codling Moth		Do not apply more than 0.2 lb. a.i. (1.6 pts. or
Green Fruitworm		25.6 fl. oz. of product)/A per year.
Japanese Beetle		
June Beetle		Do not apply more than 0.16 lb. a.i. (1.28 pts.
Leafhopper spp.		or 20.48 fl. oz. of product)/A per year post-
Leafroller spp.		bloom.
Oriental Fruit Moth		
Peachtree Borer spp.		

Peach Twig Borer		
Pear Sawfly		
Periodical Cicada		
Plant Bug spp.		
Plum Curculio		
Rose Chafer		
Stink Bug spp.		
Tent Caterpillar spp.		
Thrips spp.		

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

Apply by ground or air using enough water to obtain full coverage of the foliage or target area. When applying by air, apply in at least 5 gals. of water/A, but use higher volumes as appropriate for thorough coverage.

SUGARCANE

Pests	Rate of CSI LAMBDA 1EC per Acre	Remarks
Mexican Rice Borer ¹ Pygmy Mole Cricket	0.025 - 0.04 lb. a.i. (3.20 - 5.12 fl. oz.)	See additional instructions below.
Rice Stalk Borer ¹ Sugarcane Aphid ³ Sugarcane Beetle (Adult) ² Sugarcane Borer ¹ West Indian Crane Fly Yellow Sugarcane Aphid ³		¹ For control before the larva bores into the plant stalk. ² Suppression only of beetles active above ground. ³ See resistance statement under General Directions for Use.
		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.

Use scouting to determine need for application, usually at intervals of 7 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds.

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

SUNFLOWER

Pests	Rate of CSI LAMBDA 1EC per Acre	Remarks
Cutworm spp.	0.015 - 0.025 lb. a.i.	See additional instructions below.
Sunflower Beetle	(1.92 - 3.20 fl. oz.)	
Banded Sunflower Moth	0.02 - 0.03 lb. a.i.	¹ Use higher rate for large larvae.
Fall Armyworm ¹	(2.56 - 3.84 fl. oz.)	² Suppression only.
Grasshopper spp.		³ See resistance statement under General
Head-Clipper Weevil (Adult)		Directions for Use.
Japanese Beetle (Adult)		
Leafhopper spp.		Do not apply within 45 days of harvest.
Meadow Spittlebug		
Painted Lady (Thistle)		

Caterpillar		Do not apply more than 0.12 lb. a.i. (0.96 pt.
Seed Weevil (Adult)		or 15.36 fl. oz. of product)/A per season.
Spotted Cabbage Looper		
Stem Weevil (Adult)		Do not apply more than 0.09 lb. a.i. (0.72 pt.
Stink Bug spp.		or 11.52 fl. oz. of product)/A per season after
Sunflower Maggot (Adult)		bloom initiation.
Sunflower Moth		
Woolybear Caterpillar		Do not apply as an Ultra Low Volume (ULV)
Beet Armyworm ^{2,3}	0.03 lb. a.i.	spray.
Spider Mites spp. ²	(3.84 fl. oz.)	

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

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

TOBACCO

Pests	Rate of CSI	Remarks
	LAMBDA 1EC per	
	Acre	
Armyworm spp. ¹	0.015 - 0.03 lb. a.i.	See additional instructions below.
Blister Beetle spp.	(1.92 - 3.84 fl. oz.)	
Cabbage Looper		¹ For control of first and second instars only
Corn Earworm		² Suppression only.
Cucumber Beetle spp. (Adult)		³ See resistance statement under General
Cutworm spp.		Directions for Use.
Grasshopper spp.		
Japanese Beetle (Adult)		Do not apply within 40 days of harvest.
Katydid spp.		
Plant Bug spp.3		Do not apply more than 0.09 lb. a.i. (0.72 pt.
Potato Tuberworm		or 11.52 fl. oz. of product)/A per year.
Saltmarsh Caterpillar		
Stinkbug spp.		
Tobacco Aphid spp. ^{2,3}		
Tobacco Budworm ³		
Tobacco Flea Beetle (Adult)		
Tobacco Hornworm		
Tobacco Thrips spp. ²		
Tomato Hornworm		
Tree Cricket spp.		
Vegetable Weevil (Adult)		
Webworm spp.		

Use scouting to determine need for application, usually at intervals of 7 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds.

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

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), PECAN

Pests	Rate of CSI LAMBDA 1EC per	Remarks
	Acre	
Ants	0.02 - 0.04 lb. a.i.	See additional instructions below.
Chinch Bug	(2.56 - 5.12 fl. oz.)	
Coddling Moth		Do not apply within 14 days of harvest.
Filbertworm		
Leaffooted Bug		Do not apply more than 0.16 lb. a.i. (1.28 pts.
Leafroller spp.		or 20.48 fl. oz. of product)/A per year.
Navel Orangeworm		
Peach Twig Borer		Do not apply more than 0.12 lb. a.i. (0.96 pts.
Plant Bug spp.		or 15.36 fl. oz. of product)/A per year post
Stink Bug spp.		bloom.
Walnut Aphid		
Walnut Husk Fly spp. (Adult)		
Hickory Shuckworm		
Pecan Aphid spp.		
Pecan Casebearer spp.		
Pecan Phylloxera spp.		
Pecan Spittlebug		
Pecan Weevil		
Stink Bug spp.		

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

Apply by ground or air using enough water to obtain full coverage of the foliage or target area. When applying by air, apply in at least 5 gals. of water/A, but use higher rates as appropriate for thorough coverage.

TUBEROUS AND CORM VEGETABLES— ARRACACHA, 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)

Pests	Rate of CSI	Remarks
	LAMBDA 1EC per Acre	
Cutworm spp. Leafhopper spp. Saltmarsh Caterpillar Sweet Potato Hornworm Woolybear Caterpillar spp. Aphid spp.¹ 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	0.015 - 0.025 lb. a.i. (1.92 - 3.20 fl. oz.) 0.02 - 0.03 lb. a.i. (2.56 - 3.84 fl. oz.)	See additional instructions below. 1 See resistance statement under General Directions for Use. Use higher rates for large larvae. 2Does not include Western Flower Thrips. 3 Suppression only. Do not apply within 7 days of harvest. Do not apply more than 0.12 lb. a.i. (0.96 pt. or 15.36 fl. oz. of product)/A per season.

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. ^{1,2} Tortoise Beetle spp. Webworm spp. Weevils spp. (Adults) Leafminer spp. ^{1,3}	0.03 lb. a.i.	
Whitefly spp. ^{1,3}	(3.84 fl. oz.)	
Spider Mite spp. ³	(0.04 11. 02.)	

Use scouting to determine need for application, usually at intervals of 7 or more days. Base the timing and frequency of applications on when insect populations reach local economic thresholds.

Apply by ground or air using enough water to obtain full coverage of foliage. When applying by air, apply in at least 2 gals. of water/A. When applying by ground, apply in a minimum of 10 gals. of water/A.

Use higher application volumes and/or application rates when foliage is dense, larvae are large, pest populations are high, plant size increases, or weather conditions are adverse. Use higher rates for longer residual.

Insects that tunnel or bore into leaves, vines, stems, tubers, or corms must be controlled before penetration. Only exposed insects (larvae and/or adults) can be controlled with foliar applications of CSI LAMBDA 1EC.

CONIFER AND DECIDUOUS TREES - PLANTATIONS AND NURSERIES

Pests	Rate of CSI	Remarks
	LAMBDA 1EC per	
	Acre	
Bagworm	0.02 - 0.04 lb. a.i.	See additional instructions below.
Balsam Twig Aphid	(2.56 - 5.12 fl. oz.)	
Balsam Wooly Aphid		¹ Suppression only.
Birch Leafminer		
Black Pine Weevil		Do not apply more than 0.24 lb. a.i. (1.92 pts.
Elm Leaf Beetle		or 30.72 fl. oz. of product)/A per year.
European Elm Leaf Beetle		
Gypsy Moth		
Japanese Beetle		
June Beetle spp.		
Leaf Beetle spp.		
Leafroller spp.		
May Beetle spp.		
Mealybug spp. ¹		
Pales Weevil		
Pine Chafer		
Pine Colaspis Beetle		
Pine Conelet Bug		
Pine Leaf Chermid		
Pine Needle Scale		
Pine Sawfly spp.		

Pine Tip Moth spp.		
Pine Tortoise Scale		
Pine Weevil spp.		
Poplar Aphid spp.		
Sawfly spp.		
Spittlebug spp.		
Spruce Budworm		
Tent Caterpillar spp.		
Tussock Moth spp.		
Webworm spp		

Use scouting to determine timing for control of exposed foliage, flower, cone, seed, and bark feeding insects. Base the timing and frequency of applications on when insect populations reach local economic thresholds.

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

CONIFER AND DECIDUOUS TREES — SEED ORCHARDS

Pests	Rate of CSI LAMBDA 1EC per Acre	Remarks
Coneworm spp. Seed Bug spp. Thrips spp.	See Remarks.	For high volume sprayers, dilute 5.12 fl. oz. of product per 100 gals. Of water and apply 5-10 gals. of finished spray per tree. For low volume sprayers, dilute 20 fl. oz. of product per 100 gals. of water and apply 100 gals. of finished spray per acre.
		For aerial applications, apply 15 fl. oz. of product per acre in a minimum of 10 gals. of finished spray per acre. Do not apply more than 0.5 lb. a.i. (4 pts. or 64 fl. oz. of product)/A per year.

NON-CROPLAND (EXCLUDING PUBLIC LAND)

Pests	Instructions
See crop instructions in sections above for specific pest and rate information.	Spray non-cropland adjacent to agricultural areas to control insects which may migrate to and threaten crops. Follow the General Directions for Use instructions, application rates, and spray recommendations found elsewhere on this label for the adjacent crop outlet and target pests. When foliage is dense/large, insect populations are high or larval
	stages are large, use the highest labeled rate for that crop-pest combination. Repeat as necessary to maintain control.
	Do not apply more than 0.2 lb. a.i. (1.6 pts. or 25.6 fl. oz. of product)/A per year.

Do not graze livestock in treated areas.

Rate Conversion Chart

Treated Acres/Gal.	66	50	40	33	25
pt./A	0.12	0.16	0.20	0.24	0.32
fl. oz./A	1.92	2.56	3.20	3.84	5.12
lb. a.i./A	0.015	0.02	0.025	0.03	0.04

TURF AND ORNAMENTALS

CSI LAMBDA 1EC may be used for applications to ornamentals grown in commercial greenhouses, shade houses, and nurseries, and turf grown on sod farms or for commercial seed production.

CSI LAMBDA 1EC may be used for applications to maintain indoor or outdoor areas where turf and ornamentals are grown, such as residential landscape areas and non-residential landscapes around institutional, public, commercial, and industrial buildings, parks, recreational areas, golf courses, and athletic fields.

CSI LAMBDA 1EC may also be used for applications to golf course fairways, greens, greens aprons, and tee areas.

IMPORTANT: Time application to flowering plants during periods when pollinating insects are not present, such as early morning or late evening.

Do not apply this product through any type of irrigation system for turf and ornamental uses.

Do not apply this product to edible crops or crops grown for food/feed when applied to turf or ornamentals.

Do not apply this product by aerial application for turf and ornamental uses.

SPRAY DRIFT PRECAUTIONS

Observe restrictions found elsewhere on this label. Do not make applications when wind speed is 15 miles per hour or greater. Low humidity and high temperatures increase the likelihood of spray drift to sensitive areas. Avoid spraying during conditions of low humidity and/or high temperature.

Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when the wind direction is toward the aquatic area. Do not make outdoor applications during temperature inversions. Inversions are characterized by stable air and increasing temperature with height above 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.

APPLICATION

CSI LAMBDA 1EC mixes easily with water and may be used in all types of application equipment. Mix product with the required amount of water and apply as a dilute application to the point of runoff. Apply product using spray nozzles which produce a coarse droplet size. Formation of very small droplets may be minimized by appropriate nozzle selection and by avoiding excessive spray pressure. For application to plants like holly, pine, or ivy which have hard-to-wet foliage, add a spreader-sticker to enhance knockdown and increase residual activity. If application is made as a concentrate or mist-type application, use the same amount of product as would be used in a dilute application.

MIXING

CSI LAMBDA 1EC is to be diluted with water for spray application and may be used in all types of application equipment. First fill application tank with 1/2 - 3/4 volume of water. It is suggested that the pH of the water be between 5 and 7; use a buffering agent if necessary to adjust the pH. Next slowly add CSI LAMBDA 1EC to the applicator tank water with maximum agitation. Finally, fill tank to desired volume and continue

to agitate while making applications. If application is interrupted, agitate or re-suspend spray solution before resuming sprays. Always add CSI LAMBDA 1EC last if other chemicals are to be added to the applicator tank. If mixed with EC formulations or oils, use within 24 hours. Make up only amount of application volume as required. See mixing charts below.

CSI LAMBDA 1EC Mixing Chart for Ornamental Insect Pest Control (CSI LAMBDA 1EC to add per

spray tank)

Desired Rate of CSI LAMBDA 1EC per 100 gals.	25 gallon spray tank	50 gallon spray tank	100 gallon spray tank	200 gallon spray tank	300 gallon spray tank
1.3 oz.	0.33 oz.	0.65 oz.	1.3 oz.	2.6 oz.	4.0 oz.
2.6 oz.	0.65 oz.	1.3 oz.	2.6 oz.	5.2 oz.	7.9 oz.
4.4 oz.	1.1 oz.	2.2 oz.	4.4 oz.	8.8 oz.	13.3 oz.

CSI LAMBDA 1EC Mixing Chart for Turf Insect Pest Control (CSI LAMBDA 1EC to add per 100 gallon

spray tank)

Rate of CSI LAMBDA 1EC	2 gallons	4 gallons	6 gallons	8 gallons	10 gallons
4.4 oz./A	5.0 oz.	2.5 oz.	1.7 oz.	1.2 oz.	1.0 oz.
8.8 oz./A	10.0 oz.	5.0 oz.	3.3 oz.	2.5 oz.	2.0 oz.
17.6 oz./A	20.0 oz.	10.0 oz.	6.7 oz.	5.0 oz.	4.0 oz.

Conversion Rate: 1 Fluid ounce (fl. oz.) equals 29 milliliters (mL).

COMPATIBILITY

CSI LAMBDA 1EC has been found to be compatible with most commonly used fungicides, miticides, liquid fertilizers, and other insecticides. Use a jar test to check physical compatibility using the correct proportion of products if local experience is unavailable.

Note: While phytotoxicity testing has been carried out on a wide range of ornamental plants under various environmental conditions, and no phytotoxicity has been observed, certain cultivars may be sensitive to the final spray solution. It is advised to prespray a selection of ornamental plants and observe them for 7-10 days prior to treating large areas if local use experience is unavailable.

USE INSTRUCTIONS

ORNAMENTALS

Ornamentals in Greenhouses, Shadehouses, and Nurseries

Ornamentals (including Trees, Shrubs, Flowers, Evergreens, Foliage Plants, and Ground Covers) in Residential Landscaped Areas and Landscaped Areas Around Institutional, Public, Commercial, and

Industrial Buildings, Parks, Recreational Areas, Golf Courses, and Athletic Fields

Pests	Rate of CSI LAMBDA 1EC per Acre	Remarks
Ants (Including Imported fire ants) Aphids Armyworms Azalea caterpillars Bagworms ¹	1.3 - 4.4 fl. oz. (38 - 128 mL)	Begin application to ornamentals before high insect pest populations become established. Reapply as necessary to keep pest populations under control, using higher rates as pest pressure increases.
Black Vine Weevils (Adult) Boxelder bugs Budworms California Oakworms Cankerworms		Good spray coverage is necessary to provide the most effective level of control. For ornamentals with waxy, hard-to-wet foliage, add a spreader-sticker at recommended rates to enhance the control of insects.

Cockroaches		
Crickets		For spot treatments, use 0.44 fl. oz. CSI
Cutworms		LAMBDA 1EC per 1-2.5 gallons of water.
Eastern Tent Caterpillars		
Elm Leaf Beetles		Apply at 7-day intervals if retreatment is
European Sawflies		necessary.
Fall Webworms		,
Flea Beetles		Do not apply more than 0.36 lb. a.i. (46 fl. oz.
Forest Tent Caterpillars		of product)/A per year.
Gypsy Moth Larvae		of product///t por your.
Japanese Beetles (Adult)		Consult your state university or local
June Beetles (Adult)		Cooperative Extension Service office for
` ,		
Lace Bugs		specific pest control application timing in
Leaf-feeding Caterpillars		your area.
Leafhoppers		45 4 4 6044 4455 4
Leafminers (Adult)		¹ Bagworm: Apply CSI LAMBDA 1EC when
Leaf Rollers		bagworm larvae begin to hatch and spray
Leaf Skeletonizers		directly on the larvae. Control will be best if
Midges		the larvae are young.
Mosquitoes		
Oleander Moth Larvae		² Scale: Cover the plant thoroughly with CSI
Pillbugs		LAMBDA 1EC spray, including trunks, stems,
Pine Sawflies		twigs, and foliage.
Pine Shoot Beetles		
Pine Tip Moths		
Plant Bugs		
Root Weevils		
Sawflies		
Scale Insects (Crawlers) ²		
Spiders		
Spittlebugs		
Striped Beetles		
Striped Oakworms		
Thrips		
Tip Moths		
Tussock Moth Larvae		
Wasps	0.0 4.4.51	
Broad Mites	2.6 - 4.4 fl. oz.	
Brown Soft Scales	(75 - 128 mL)	
California Red Scales		
(Crawler)		
Clover Mites		
Mealybugs		
Pine Needle Scales (Crawler)		
Spider Mites		
Whiteflies		

TURFGRASS

Sod Farms

Lawns around Residential, Institutional, Public, Commercial, and Industrial Buildings, Parks, Recreational Areas, Golf Courses, and Athletic Fields. Golf Course and Athletic Field Turf

Pests	Rate of CSI LAMBDA	Remarks
	1EC per Acre	
Ants (Including Imported fire ants) Armyworms Centipedes Crickets Cutworms Earwig Fleas (Adult) Grasshoppers Japanese Beetles (Adult) Millipedes Mites Pillbugs Sod Webworms Sow Bugs Ticks (Including species which transmit Lyme	2.9 - 6 mL/1,000 sq. ft. (4.4 - 8.8 fl. oz./A)	Begin application to turf before the establishment of high insect pest populations and before significant turf damage has occurred. Reapply as necessary to keep pest populations under control, using higher rates as pest pressure increases. Apply at 7-day intervals if retreatment is necessary. Do not apply more than 0.36 lb. a.i. (46 fl. oz. of product)/A per year. For spot treatments, use 0.44 fl. oz. of CSI LAMBDA 1EC per 1-2.5 gals. of water. Do not apply when turfgrass is waterlogged
disease) Bluegrass Billbugs (Adult) Black Turfgrass Ataenius (Adult) Chiggers Fleas (Adult) Grub (Suppression) Hyperodes Weevils (Adult) Mole Crickets (Nymphs and Young Adults) Chinch bugs Mole crickets (Mature Adults) (Not for use on mature adult mole crickets and chinch bugs in New York State.)	6 mL/1,000 sq. ft. (8.8 fl. oz./A) 12 mL/1,000 sq. ft. (17.6 fl. oz./A)	or when soils are saturated with water (i.e., will not accept irrigation). Keep children and pets off treated areas until spray has dried following the application. See additional instructions below for specific pests.

Armyworms, cutworms, fleas, and other Surface Insects: For best results, apply CSI LAMBDA 1EC at labeled rates in 2-5 gals. of water per 1,000 sq. ft. If high rainfall amounts are forecast, a spreader-sticker may be useful; otherwise the addition of adjuvants is not necessary under normal conditions for surface insect control in turf. Delay watering or mowing for 12-24 hours for optimum control of surface-feeding insect pests.

Chinch bugs, billbugs, and other Thatch Inhabiting Insects: For best results apply CSI LAMBDA 1EC at recommended rates in 2-10 gals. of water per 1,000 sq. ft. The use of a nonionic wetting agent, penetrant, or similar adjuvant is recommended at label rates. Irrigate lightly after application with up to 1/2 inch of water to move the CSI LAMBDA 1EC into the thatch layer. If irrigation is not available, then use high water application rates for optimum results.

Mole crickets, grubs, and other Subsurface Insects: For best results apply CSI LAMBDA 1EC at recommended rates in 4-10 gals. of water per 1,000 sq. ft. The use of a nonionic wetting agent, penetrant, or similar adjuvant is strongly recommended following label rates. Use the highest water application rates possible with your sprayer. Apply CSI LAMBDA 1EC to turf which is wet with dew, rain, or irrigation. Water-in immediately after application with 1/4 -1/2 inch of water for optimum results.

Fire Ants: Treat individual mounds with a drench application by means of a watering can. Use 0.32 fl. oz. of CSI LAMBDA 1EC per 2.5 gals. of water. Thoroughly soak each mound as well as a 3 ft. diameter circle around each mound. Apply the mixture gently to avoid disturbing the mound; disturbing the mound may cause the ants to migrate and reduce the effectiveness of the treatment. For best results, apply in early morning or late evening hours. Make additional treatments if necessary, but not more than every 7 days.

Mosquitoes: Apply as a general spray around landscape plantings, turf, and building foundations to control mosquitoes. For best results, apply CSI LAMBDA 1EC at labeled rates in 2-5 gals. of water per 1,000 sq. ft.

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 guidance.

Container Handling:

(Nonrefillable container equal to or less than 5 gallons) Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(Nonrefillable container greater than 5 gallons) Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

NOTICE: Read the entire Directions for Use and Warranty Statement 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.

WARRANTY STATEMENT

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. Ineffectiveness or other unintended consequences may

result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Control Solutions, Inc. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Control Solutions, Inc. and Seller harmless for any claims relating to such factors.

To the extent consistent with applicable law, Control Solutions, Inc. 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 this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Control Solutions, Inc., and Buyer and User assume the risk of any such use. CONTROL SOLUTIONS, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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