

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

February 28, 2025

Zack Chesser
Regional Regulatory Manager
UPL NA Inc.
P.O. Box 12219
Research Triangle Park, NC 27709

Subject: Registration Review Label Amendment – Incorporating Mitigation Measures

from the Registration Review Interim Decision and Remove Irrigation System

Restriction.

Product Name: Bifenture LFC Insecticide EPA Registration Number: 70506-305

Application Date(s): 03/21/2021 & 11/22/2024

Case Number: 482117 & 638232

Dear Mr. Chesser:

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

The Agency, in accordance with FIFRA, as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Bifenthrin Interim Decision. The Agency has concluded that your submission is acceptable.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. The next label printing of this product must use this labeling unless subsequent changes have been approved. 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 12 months from the date of this letter. After 12 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.

Page 2 of 2 EPA Reg. No. 70506-305 Case No. 482117 & 638232

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Jamey Shuler by phone at (202) 566-2898, or via email at Shuler.Jamey@epa.gov.

Sincerely,

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

Enclosure



RESTRICTED USE PESTICIDE

Toxic to fish and aquatic organisms.

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

Bifenthrin GROUP 3A Insecticide

[Information in [] are optional text or reviewer notes]

[Primary Brand Name: Bifenture 17 Insecticide] [Alternate Brand Name: Bifenture LFC Insecticide]

BIFENTURELFC

ACCEPTED

02/28/2025

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 7050

70506-305





*Cis isomers 97% minimum, trans isomers 3% maximum.

This product contains 1.5 lbs ai per gallon.

EPA Reg. No. 70506-305

EPA EST No

KEEP OUT OF REACH OF CHILDREN CAUTION

[See [front][back][side][inside][attached booklet][containers inside][inside booklet][inside leaflet] [booklet] [panel] for [First Aid] [and][additional] [Precautionary Statements] [and] [complete] [Directions for Use] [See [front][back][side][inside][attached booklet][containers inside][inside booklet][inside leaflet] [booklet] [panel]

inside for complete Directions For Use, including Conditions of Sale and Warranty.

[PEEL HERE TO OPEN [PRESS TO RESEAL] ▶]

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC at 1-800-424-9300.

Bifenture LFC may be comparable to another product used previously, however it is essential to read, and follow all label directions for use as there may be some differences. It is the responsibility of the user to ensure this product is labeled for use on the specific crop and geographical location in which it is intended. It is the responsibility of the user to follow all precautions and restrictions according to local and State authorities and is approved for sale. The user should read the Condition of Sale and Limitation of Warranty and Liability before purchasing this product.

NET CONTENTS:



UPL NA Inc. . • PO Box 12219 • Research Triangle Park, NC 27709-2119 U.S.A. • 1-800-438-6071





	FIRST AID			
IF SWALLOWED	Call 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.			
IFONSKINORCLOTHING	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center for treatment advise.			

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergency, call the Rocky Mountain Poison and Drug Safety at 1-866-673-6671.

NOTETO PHYSICIAN: This product is a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.

PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals CAUTION

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

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers (other than mixers and loaders) must wear:

- · Long-sleeved shirt and longpants
- • Chemical-resistant gloves, such as Barrier Laminate or Nitrile Rubber (≥ 14 mils) or Neoprene Rubber (≥ 14 mils) or Viton (≥ 14 mils)Shoes plus socks

Mixers and loaders must wear:

- · Long-sleeved shirt and longpants
- Chemical-resistant gloves, such as Barrier Laminate or Nitrile Rubber (≥ 14 mils) or Neoprene Rubber (≥ 14 mils) or Viton (≥ 14 mils)
- · Shoes plus socks
- Protective eyewear

Mixers, loaders and applicators using mechanically pressurized handguns for applications to tuberous and corm vegetables must wear at a minimum:

- · Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as Barrier Laminate or Nitrile Rubber (≥ 14 mils) or Neoprene Rubber (≥ 14 mils) or Viton (≥ 14 mils)
- · Shoes plus socks

Mixers, loaders and applicators using mechanically pressurized handguns for applications to tobacco must wear at a minimum:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as Barrier Laminate or Nitrile Rubber (≥ 14 mils) or Neoprene Rubber (≥ 14 mils) or Viton (≥ 14 mils)

Shoes plus socks

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 exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

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.

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.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 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 12 hours.

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

- Coveralls,
- Chemical-resistant gloves, such as Barrier Laminate or Nitrile Rubber (≥ 14 mils) or Neoprene Rubber (≥ 14 mils) or Viton (≥ 14 mils), and
- Shoes plus socks.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic invertebrates. Use with care when applying in areas adjacent to any body of water. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not make applications 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 washwaters.

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 while bees are actively visiting the treatment area. **Protect pollinating insects by following label directions intended to minimize**







drift and to reduce risk to these organisms.

The use of bifenthrin is prohibited in areas that may result in exposure of endangered species to bifenthrin. Prior to use in a particular county contact the local extension service for procedures and precautions to use to protect endangered species.

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

Bifenture LFC is an insecticide formulated as a suspension concentrate containing 1.5 lbs active ingredient per gallon of bifenthrin. Bifenture LFC can be mixed with liquid fertilizers or water. Shake well prior to mixing or measuring Bifenture LFC for use.

RESISTANCE

For resistance management, BifentureLFC contains a Group 3A insecticide. Any insect/mitepopulationmay containindividuals naturally resistant to BifentureLFC and other Group 3A insecticides/acaracides. The resistant individuals may dominate the insect/mite population if this group of insecticides/acaracides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide/acaricide resistance, take the following steps:

- Rotate the use of Bifenture LFC or other Group 3A insecticides/acaracides within a growing season, or among growing seasons, with different groups that control the same pest.
- Use tank mixtures with insecticides/acaracides from a different group
 that are equally effective on the target pest when such use is
 permitted. Do not rely on the same mixture repeatedly for the same
 pest population. Consider any known cross-resistance issues (for the
 targeted pests) between the individual components of a mixture. In
 addition, consider the following recommendations provided by the
 Insecticide Resistance Action Committee (IRAC):
 - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
 - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
 - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
 - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they still may provide pest management benefits.
 - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for that specific site and pest problems in your area
- For further information or to report suspected resistance, contact UPL at 1-800-438-6071.

INSTRUCTIONS FOR APPLICATION

The rate at which Bifenture LFC is applied may vary due to insect pressure, timing of treatments and field scouting. Use the lower labeled rate when pest infestation is con- sidered light to moderate. Use the higher labeled rate when there is heavy pest pressure. Application rates are higher when the climate is drier. The spray tank should be filled 1/2 full with liquid fertilizer or water and then agitated continuously. Next add the appropriate amount of Bifenture LFC, and then add the remaining amount of the fertilizer or water to the tank. Agitation should be maintained until the mixture has been applied.

SHAKE WELL BEFORE USING.

Bifenture LFC spray solutions in nurse tanks must be agitated before transferring to the spray system.

This product can be applied in-furrow with the seed, either as a broadcast application, a band over the open furrow (T-Band), over the row, or as a transplant-water drench during setting. For more instruction on suppression or pest control, refer to the information contained in the tables on this label. Bifenture LFC can be mixed with a number of frequently used liquid starter or popup fertilizers. Follow liquid fertilizer recommendations regarding seed safety and use guidelines. A jar test should be used prior to application of any fertilizer with Bifenture LFC. Ensure the applicable amount of Bifenture LFC and fertilizer are used in this compatibility test. The tank mixture should not be allowed to sit overnight. If the tank mixture does sit overnight, the tank mixture should be agitated to ensure proper mixing before application.

USE RESTRICTIONS

New York State: Do not apply Bifenture LFC using ground equipment within 100 feet of coastal marshes or streams that drain into coastal marshes. Do not apply Bifenture LFC using aerial equipment within 300 feet of coastal marshes or streams that drain into coastal marshes.

Cultivation within 10 feet of a water body is prohibited to allow for the growth of a vegetated filter strip.

Do not mix or allow any contact with oxidizing agents since hazardous chemical reaction may occur.

CROP ROTATION RESTRICTIONS

Crops for which bifenthrin tolerances exist may be rotated at any time. All other crops may be rotated 30 days after the last application.

TANK-MIXES

Apply Bifenture LFC with other EPA Registered products that are registered for the same crops. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Test for compatibility to ensure application success.

MAXIMUM ALLOWABLE BIFENTURE LFC USE PER ACRE PER SEASON

For the maximum allowable usage per acre per season, refer to the tables below for each crop. The maximum allowable use must include all registered use patterns including at-plant, soil applied and/or foliar applications for the 12 months period. The 12 month period is to begin upon the initial application to the acre.

BUFFER ZONES

VEGETATIVE FILTER STRIPS

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

Only apply products containing (name of pyrethroid) onto fields where a maintained vegetative filter strip of at least 25 feet exists between the field





[Booklet Page 4]



edge and where a down gradient aquatic habitat exists. This minimum required width of 25 feet may be reduced or removed under the following conditions:

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

For further guidance on vegetated filter strips, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services.

https://www.regulations.gov/document?D=EPA-HQ-OPP2008-0331-0175.

Ground Application

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

Ultra Low Volume (ULV) Aerial Application

 Do not apply within 450 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds). Applications made by mosquito control districts and other public health officials are exempt from this requirement.

Non-ULV Aerial Application

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

Mandatory Spray Drift Management

Aerial Applications:

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

When the windspeed is between 11-15 miles per hour, applicators must use $\frac{3}{4}$ swath displacement upwind at the downwind edge of the field.

Do not apply during temperature inversions.

Airblast Applications:

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

Ground Boom Applications:

- User must only apply with the nozzle height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to select nozzle and pressure that deliver medium or coarser droplets (ASABE S572).
- Do not apply when wind speeds exceed 15 mph at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

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

IMPORTANCE OF DROPLET SIZE

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

Controlling Droplet Size - Ground Boom

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

Controlling Droplet Size - Aircraft

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

BOOM HEIGHT - Ground Boom

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

RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift.

SHIELDED SPRAYERS

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

TEMPERATURE AND HUMIDITY

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

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the



[Booklet Page 5]



movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

WIND

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

NON-TARGET ORGANISM ADVISORY STATEMENT (Environmental Hazards):

This product is highly toxic to bees and other pollinating insects exposed
to direct treatment or to residues in/on blooming crops or weeds. Protect
pollinating insects by following label directions intended to minimize drift
and reduce pesticide risk to these organisms.

Handheld Technology Applications:

Take precautions to minimize spray drift.

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

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

How to Report Bee Kills

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

http://npic.orst.edu/reg/state_agencies.html





BRASSICAS

CROP	PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	RATE BIFENTURE LFC PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Head and Stem Brassica	Rootworm larvae	6.8 - 8.5 fl oz	0.39 - 0.49 fl oz	Apply as a 5 - 7 inch band (T-band) over open seed furrow or in-furrow with the seed.
Vegetables including: Broccoli		0.08 - 0).1 lb ai/A	
Brussels Sprout Cabbage	Grubs	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	
Cauliflower Cavalo Broccoli Chinese Broccoli (gailon, white flowering broccoli) Chinese Cabbage (napa)	Cabbage maggot Root maggots Root aphids Seedcorn maggot Wireworm	0.04 - 0.08 lb ai/A		
Chinese Mustard Cabbage (gai choy)	Mustard Cabbage Army cutworm	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	Applybroadcasttreatment overthe soil surface for con-
(gai crioy) Kohlrabi	Armyworm spp. Cutworm spp.	0.04 - 0	.08 lb ai/A	trol of Armyworm and Cutworm spp.
	RESTRICTIONS Do not apply more than 0.1 lb a Do not apply more than 0.5 lb ai per			ner products containing bifenthrin.

BUSHBERRIES (FOLIAR)

CROP	PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	APPLICATION INSTRUCTIONS
Blueberry, highbush and low bush	Blueberry maggot	3.4 - 8.5 fl oz	Apply Bifenture LFC in a minimum of 2 gallons of finished
Currant Elderberry Gooseberry Huckleberry	Fruitworms Lecanium scale (crawlers) Plum curcuho Obliquebandedleafroller Red banded leafroller Variegated leafroller Spanworm Leafhoppers Aphids	0.04 - 0.10 lb ai/A	spray per acre or in a minimum of 10 gallons of finished spray per acre. Thorough coverage is required for control of listed pests.
	Banks Grass Mite	6.8 - 8.5 fl oz	
	Twospotted Spider Mite Carmine Mite Pacific Spider Mite Lygus spp.	0.08 - 0.10 lb ai/A	
	RESTRICTIONS Do not apply more than 0.5 lb a Do not make applications less the control of the co	han 7 days apart.	









CILANTRO, CORIANDER

PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	RATE BIFENTURE LFC PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Armyworm spp.	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	Apply as a 5 - 7 inch band over the row on the soil surface, a 5 -
Cutworm spp. Flea beetle larvae Wireworm	0.04 - 0.	08 lb ai/A	7 inch band over the open furrow (T-band) in-furrow with the seed, or broadcast to the soil surface.

RESTRICTIONS

Do not apply more than 0.1 lb ai per acre per season as an at-plant application.

Do not apply more than 0.5 lb ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.

CITRUS

(BARE SOIL SURFACE UNDER DRIP LINE)

PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	APPLICATION INSTRUCTIONS
Asian cockroach (Blattélla asahinae) Fire ants (Solenopsis spp.)	8.5 - 21.25 fl oz 0.1 - 0.25 lb ai/A	Apply by ground in a minimum of 40 gallons of dilute spray per acre. Make uniform application to bare soil beneath the tree from the trunk to the drip line of the tree. Use a higher spray volume to ensure uniformity of coverage. Pre- and post-application irrigation may also aid in uniform coverage.
Blue Green Citrus Root Weevil (Pachnaeus opalus)	21.25-42.5 fl oz 0.25-0.50 lb ai/A	Bifenture protects tree roots from root weevils by forming a barrier of pesticide through which they must bur- rowwhen the newly hatched neonates fall from the tree. After application minimize disturbance of the soil beneath the trees to maintain this barrier.
Brown Leaf Notcher (Epicaerus mexicanus) Diaprepes Root Weevil (Diaprepes abbreviatus) Little Leaf Notcher		It is important to time applications correctly. Peak emergence of adult Diaprepes Weevil varies by citrus growing region and is also dramatically affected by environmental factors such as soil moisture. Typically, two peaks are observed for Diaprepes, first in spring and then in late summer or early fall. For Southern Blue Green and Blue Green Citrus Weevils and Fuller Rose Beetle, a single emergence peak in the spring is typical. Brown and Little Leaf Notchers typically have three emergence peaks in spring, summer, and fall.
(Artipus floridanus) Southern Blue Green Citrus Root Weevil (Pachnaeus litus)		Since emergence varies seasonally and by location, observation of adults is the most accurate way to forecast timing of applications. Numbers of adults can be estimated by trapping during spring and summer during the active early morning and later afternoon periods. Egg laying occurs for 8 - 10 weeks following emergence from the soil, and larval invasion of the soil begins 2 - 3 weeks following adult emergence. It is critical to have the Bifenture LFC soil barrier in place before the neonates drop.
		Use Bifenture LFC in conjunction with other tools in an integrated pest management program for Citrus Root Weevils. Good cultural practices, biological control of larvae and foliar control of adults are all important. Local university extension personnel can provide the most current information to protect citrus trees.
		Additional information:
		Apply to individual citrus resets, when not in solid planted rows, using hand-gun or shielded sprayer.
		Note that although peak emergence of Diaprepes occurs in the spring, weather conditions can lead to emergence of this pest in the fall.
		Use the highest labeled rate (42.5 floz) to obtain the longest residual management of Diaprepes root weevil. If the cit- rus grove to be treated is in an area where weather conditions will promote more than one peak of pest emer- gence, make an initial application of 21.25 floz early season and second application of 21.25 floz later in the season.

RESTRICTIONS

Do not apply Bifenture LFC through irrigation systems.

 $Do \, not \, allow \, Bifenture \, LFC \, to \, contact \, fruit \, or \, foliage.$

Do not apply more than a total of $42.5\,\mathrm{fl}$ oz of formulated product $(0.5\,\mathrm{lb}$ ai) per acre per year.

Do not apply by air.







Field Corn (Grain and Silage), Popcorn, Field Corn Grown for Seed, Sweet Corn, Sweet Corn Grown for Seed

(At Planting Use)

PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	RATE BIFENTURE LFC PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Corn Rootworm, larvae (Northern, Southern and	6.8 - 17.0 fl oz	0.39 - 0.98 fl oz	Apply as a 5 - 7 inch T-band at planting over the open seed farrow, or in-furrow with the seed.
Western)	0.08 - 0	.2 lb ai/A	To control Army Cutworm, Stalkborer, Cutworm spp., True Armyworm
Army cutworm	3.4 - 13.6 fl oz	0.2 - 0.78 fl oz	or Armyworm spp.: apply as a 5 - 7 inch over open furrow (T-band), in-furrow with the seed, or broadcast to the soil surface.
Cutworm spp. True armyworm Armyworm spp. Grape colapsis Grubs Seedcorn maggot Stalkborer Rootaphids Wireworm	0.04 - 0.	.16 lb ai/A	
Asiatic Garden Beetle	8.5 - 17.0 fl oz	0.49 - 0.98 fl oz	
	0.1 - 0.2 lb ai/A		

RESTRICTIONS

Do not apply more than 0.2 lb ai per acre per season.

Do not apply to soil where there is greater than 30% cover of crop residue remaining.

For field corn - Do not apply more than 0.3 lb ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin. For sweet corn - Do not apply more than 0.2 lb ai per acre total per season including PRE, PPI, at-plant and foliar applications of other products containing bifenthrin.



(Pre-Plant Incorporated (PPI) and Pre-Emergence (PRE)

PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	APPLICATION INSTRUCTIONS
Armyworm spp. Black Cutworm Grape colapsis Seedcorn Maggot White Grub Wireworm	4 - 5.3 fl oz 0.047 -0.062 lb ai/A (PPI)	Incorporate Bifenture LFC close to the anticipated depth of the seed, but do not exceed 3 inches in depth. PPI: Use the 4-5.3 floz/A (0.047-0.062 lb ai/A) rate only. Apply alone or with PPI herbicides as a tank mix. PRE: Use the 3.4 floz/A (0.04 lb ai/A) rate when tank mixing and applying with PRE herbicides.
Armyworm spp. Black Cutworm Stalkborer	3.4 fl oz 0.04 lb ai/A (PRE)	

RESTRICTIONS

For field corn - Do not apply more than 0.3 lb ai per acre total per season including PRE, PPI, at-plant and foliar applications of other products containing bifenthrin. For sweet corn - Do not apply more than 0.2 lb ai per acre total per season including PRE, PPI, at-plant and foliar applications of other products containing bifenthrin.







CUCURBITS

CROP	PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	RATE BIFENTURE LFC PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Chayote (fruit)	Cucumber beetle larvae	6.8 - 8.5 fl oz	0.39 - 0.49 fl oz	For control of rootworm larvae: apply as
Chinese waxgourd (Chinese preserving melon)		0.08 - 0).1 lb ai/A	a 5 - 7 inch band over an open furrow (T-band), or in-furrow with the seed.
Citron melon Cucumber	Flea beetle larvae	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	For control of wireworm, grubs, and fleabeetle larvae; apply as a 5-7 inch
Gherkin Gourd, edible	Grubs Wireworm	0.04 - 0.	.08 lb ai/A	band over an open furrow (T-band), or in-furrow with the seed or transplant.
Lagenaria spp. (includes hyotan, cucuzza), Luffa spp. (includes hechima, Chinese	Army cutworm	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	For control of army cutworm,
okra) Momordica spp. (includes neclinita, crimiese okra) Momordica spp. (includes balsam apple, balsampear, bittermelon, Chinese cucumber) Muskmelon (hybrids and/or cultivars of Cucumismelo) (includes true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew	Armyworm spp. Cutworm spp. True armyworm	0.04 - 0.	.08 lb ai/A	cutworm spp., true armyworm and armyworm spp.: apply as a 5 - 7 inch band over the row on the soil surface, a 5 - 7 inch band over the open furrow (T-band), in-furrow with the seed, broadcast to the soil surface or banded over the row.
melon, honey balls, mango melon, Persian melon, pineapple melon, SantaClaus melon, and snake melon)	RESTRICTIONS Do not apply more than 0.1 lb ai per acre per season as an at-plant application.			
Pumpkin (Cucurbita spp.)	Do not apply more than 0.3 ing bifenthrin.	lb ai per acre per season i	ncluding at-plant plus folia	ar applications of other products contain-







BEANS AND PEAS, DRIED

CROP	PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	RATE BIFENTURE LFC PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Dried cultivars of:	Corn rootworm larvae	6.8 - 8.5 fl oz	0.39 - 0.49 fl oz	Apply as a 5 - 7 inch band over the
Bean (Lupinus) Bean (Phaseolus)		0.08 - 0	.1 lb ai/A	row on the soil surface, 5 - 7 inch band (T-band) over an open furrow, or
Field bean Kidney bean	Grape colapsis Wireworm	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	in-furrow with the seed.
Lima bean(dry) Navy bean Pinto bean	Grubs Root maggot	0.04 - 0.	08 lb ai/A	
Tepary bean Bean (Vigna)	Army cutworm	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	Apply broadcast to the soil surface for
Adzuki bean Blackeyed pea Catjang	Cutworm spp. True armyworm Armyworm spp.	0.04 - 0.	08 lb ai/A	control of Army cutworm, Cutworm spp., True armyworm, or Armyworm spp.
Cowpea Crowder pea Moth bean Mung bean Rice bean Southern pea Urd bean Broad bean (dry) Chickpea Guar Lablab bean Lentil Pea (Piscum) Field pea Pigeon pea	RESTRICTIONS Do not apply more than 0.2 of other bifenthrin produced	2 lb ai to peas, or 0.3 lb to be		ication. including at-plant plus foliar applications









BEANS AND PEAS, SUCCULENT

CROP	PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	RATE BIFENTURE LFC PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS		
Pea (Pisum spp.)	Rootworm larvae	6.8 - 8.5 fl oz	0.39 - 0.49 fl oz	Apply as a 5 - 7 inch band over the		
Dwarf pea Edible-pod pea		0.08 - 0	.1 lb ai/A	row on the soil surface, a 5 - 7 inch band over the open furrow (T-band),		
English pea Garden pea	Grape colapsis	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	or in-furrow with the seed.		
Green pea Snow pea Sugar snap pea Pigeon pea	Grubs Root maggot Seedcorn maggot Wireworm	0.04 - 0.	08 lb ai/A			
Bean (Phaseolus spp.) Broadbean (succulent)	Army cutworm	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	Apply broadcast over the soil surface		
Lima bean (green) Runner bean Snap bean	Armyworm spp. Cutworm spp. True armyworm	0.04 - 0.	08 lb ai/A	for control of Army cutworm, Cutworm spp., True armyworm, or Armyworm spp.		
Wax bean Bean (<i>Vigna</i> spp.) Asparagus bean	RESTRICTIONS Do not apply more than	RESTRICTIONS Do not apply more than 0.1 lb ai per acre per season as an at-plant application.				
Blackeyed pea Chinese longbean Cowpea Moth bean Southern pea Yardlong bean Jackbean Soybean (immature seed) Sword bean	Do not apply more than 0.2 bifenthrin.	lbai per acre per season ind	cluding at-plant plus foliar	applications of other products containing		

EGGPLANT

PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	RATE BIFENTURE LFC PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Rootworm larvae	6.8 - 8.5 fl oz	0.39 - 0.49 fl oz	Apply as a 5 - 7 inch band over the row on the soil surface, a 5 -
	0.08 - 0).1 lb ai/A	7 inch band over the open furrow (T-band), or in-furrow with the see
Grubs	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	
Root maggot Wireworm	0.04 - 0	.08 lb ai/A	
Army cutworm	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	Apply broadcast to the soil surface for control of Army Cutworm,
Armyworm spp. Cutworm spp. True armyworm	0.04 - 0	.08 lb ai/A	Cutworm Species, True Armyworm or Armyworm species.

RESTRICTIONS

Do not apply more than 0.1 lb ai per acre per season as an at-plant application.

Do not apply more than 0.2 lb ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.





LETTUCE, HEAD

PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	RATE BIFENTURE LFC PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Rootworm larvae			Apply as a 5 - 7 inch band over the row on the soil surface, a 5 -
	0.08 - 0.1 lb ai/A		$\label{thm:condition} 7 inch band over the open furrow (T-band), or in-furrow with the seed.$
Grubs	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	
Lettuce root aphid Root maggot Wireworm	0.04 - 0.08 lb ai/A		
Army cutworm	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	Apply broadcast to the soil surface for control of Army cutworm,
Armyworm spp. Bulb mites Cutworm spp. True armyworm	0.04 - 0	.08 lb ai/A	Cutworm spp., True armyworm, Armyworm spp. or Bulb mites.

RESTRICTIONS

Do not apply more than 0.1 lb ai per acre per season as an at-plant application.

Do not apply more than 0.5 lb ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.

LEAFY BRASSICAS, TURNIP GREENS

CROP	PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	RATE BIFENTURE LFC PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS	
Broccoli Raab	Rootworm larvae	6.8 - 8.5 fl oz	0.39 - 0.49 fl oz	Apply as a 5 - 7 inch band over the	
Bok Choy Collards		0.08 - 0).1 lb ai/A	row on the soil surface, a 5 - 7 inch band over the open furrow (T-band),	
Kale Mizuna	Grubs	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	or in-furrow with the seed.	
Mustard Greens Mustard Spinach Rape Greens	Lettuce root aphid Root maggot Wireworm	0.04 - 0.	.08 lb ai/A		
Turnip Greens	Army cutworm		3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	Apply broadcast over the soil surface
	Armyworm spp. Bulb mites Cutworm spp. True armyworm	0.04 - 0.	.08 lb ai/A	for control of Army cutworm, Cutworm spp., True armyworm or Armyworm spp.	
	RESTRICTIONS Do not apply more than 0.4 ing bifenthrin.			cation. Ir applications of other products contain-	







LEAFY PETIOLE VEGETABLES (FOLIAR)

PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	APPLICATION INSTRUCTIONS
Cutworms	3.4 - 8.5 fl oz	Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of
Corn Earworm Tobacco Budworm Saltmarsh Caterpillar Leafhoppers Flea Beetles Imported Cabbageworm Cucumber Beetles Aphids Whitefly Armyworms Loopers Stink Bugs Crickets Ground Beetles Thrips Wireworm (adults) Diamondback Moth	0.04 - 0.1 lb ai/A	10gallons offinished sprayper acrewith ground equipment. When applying by air, 1-2 quarts of emulsified oil may be used instead of water in the finished spray. To ensure effective control, thorough coverage is required.
Banks Grass Mite Twospotted Spider Mite	6.8 - 8.5 fl oz	
Carmine Mite Pacific Spider Mite Lygus spp.	0.08 - 0.10 lb ai/A	

RESTRICTIONS

Do not apply more than 0.5 lbai per acre per season.

 $Do\,not\,make\,applications\,less\,than\,7\,days\,apart.$

Do not apply within 7 days of harvest.

OKRA

PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	RATE BIFENTURE LFC PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Armyworm	3.4 - 6.8 fl oz	0.2-0.39 fl oz	Apply as a 5 - 7 inch band over the row on the soil surface, a 5 -
Cutworm Flea beetle larvae Wireworm	0.04 - 0	.08 lb ai/A	7 inch band over the open furrow (T-band), in-furrow with the seed, or broadcast to the soil surface.

RESTRICTIONS

Do not apply more than 0.1 lb per acre per season as an at-plant application.

Do not apply more than 0.2 lb ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.







PEPPERS (BELL and NON-BELL)

PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	RATE BIFENTURE LFC PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Rootworm larvae	6.8 - 8.5 fl oz	0.39 - 0.49 fl oz	Apply as a 5 - 7 inch band over the row on the soil surface, a 5 -
	0.08 - 0.1 lb ai/A		7 inch band over the open furrow (T-band), or in-furrow with the seed.
Grubs	3.4 - 6.8 fl oz 0.2 - 0.39 fl oz		
Flea beetlelarvae Pepper maggot Root aphid Root maggot Wireworm	0.04 - 0.08 lb ai/A		
Army cutworm	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	Apply broadcast over the soil surface for control of Army cutworm,
Armyworm spp. Cutworm spp. Stalk borer True armyworm	0.04 - 0.08 lb ai/A		Cutwormspp., True armyworm, Armywormspp. or Stalk borer.

RESTRICTIONS

Do not apply more than 0.1 lb ai per acre per season as an at-plant application.

Do not apply more than 0.2 lb ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.







SOD FARMS (FOLIAR)

PEGE	2475	RATE	
PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	BIFENTURE LFC PER 1,000 SQUARE FOOT	APPLICATION INSTRUCTIONS
Armyworms ¹	2.8 - 4.35 fl oz	0.066 - 0.1 fl oz	Apply as a broadcast treatment.
Cutworms ¹ Sod Webworm ¹	0.0014 -	0.05 lb ai/A	Use higher volumes up to 10 gallons of carrier per 1,000 sq. ft. to get uniform coverage when treating dense grass foliage.
Annual Bluegrass Weevil (Hyperodes) (Adult) ²	4.35 - 8.7 fl oz	0.1 - 0.2 fl oz	Irrigation to treated area within a few hours following application can improve efficacy to sub-surface pests including mole crickets.
Banks Grass Mite ⁶ Billbugs (Adult) ³ Black Turfgrass Ataenius (Adult) ⁴ Crickets Earwigs Fleas (Adult) Grasshoppers Mealybugs Mites ⁶	0.05 - 0.10 lb ai/A		The application rate ranges will provide excellent control of the named pests under typical conditions. However if maximum residual control is desired or heavy pest populations occur. Bifenture LFC may be applied at up to 0.4 fl oz/1,000 sq. ft rate.
Ants Chinch Bugs ⁵	8.7 - 17.42 fl oz	0.2 - 0.4 fl oz	
Child Bugs ¹ Fleas (Larvae) ⁷ Imported Fire Ants ⁸ Japanese Beetle (Adult) Mole Cricket (Adult) ⁹ Mole Cricket (Nymph) ¹⁰ Ticks ¹¹	0.10 - 0.21 lb ai/A		

RESTRICTIONS

In New York State, this product may NOT be applied to any grass or turf area within 100 feet of a water body (lake, pond, river, stream, wetland, or drainage ditch). In New York State, make a single repeat application of this product if there are signs of renewed insect activity, but not sooner than two weeks after the first application.

- 1 Armyworms, Cutworms and Sod Webworms: For best control, delay watering (irrigation) or mowing for 24 hours after application. Higher labeled application rates (up to 0.4 fl oz per 1,000 sq ft) may be required. If the grass area is being maintained at a mowing height of greater than 1" in periods of high pest pressure.
- 2 Annual Bluegrass Weevil (Hyperodes) adults: Time applications to control adult weevils as they leave their overwintering sites and move into grass areas. Generally, this movement begins when Forsythia is in full bloom and finish when flowering dogwood is in full bloom. Your State Cooperative Extension Service can give more specific information regarding the timing of applications.
- 3 Billbug adults: Apply when adult billbugs are first seen during April and May. Consult degree day models to optimize application timing, and consult your State Cooperative Extension Service for information specific to your region. In temperate regions, apply in spring to also provide control of overwintered chinch bugs.
- 4 Black Turfgrass Ataenius adults: Apply during May and July to control the first and second generations, respectively. Time the May application to coincide with the full bloom stage of Vanhoutte spiraea (Spirea vanhouttei) and horse chestnut (Aesculus hippocastanum). Time the July application to coincide with the blooming of Rose of Sharon (Hibiscus syriacus).
- 5 Chinch Bugs: Chinch Bugs infest the base of grass plants and are often found in the thatch layer. Irrigation of the grass area before treatment will optimize the penetration of the insecticide to the area where the chinch bugs are located. Use higher volume applications if the thatch layer is excessive or if a relatively long mowing height is being maintained. Chinch Bugs can be one of the most difficult pests to control in grasses and the higher labeled application rates (up to 0.4 fl oz per 1,000 square feet) may be required to control populations that contain both nymphs and adults during the middle of the summer.
- 6 Mites: For best control of eriophyid mites, apply in combination with the labeled application rate of a surfactant. A second application timed five to seven days after the first may be necessary for acceptable control.
- 7 Flea larvae: These pests develop in the soil of shaded areas accessible to pets and other animals. When treating these areas, use a higher volume application to ensure the insecticide penetrates the soil. Note: if the lawn area is being treated with this product at 0.1 fl oz/1,000 square feet for adult flea control, then the larval application rate may be achieved by increasing the application volume two- to four-fold.
- 8 Imported Fire Ants: For best control, combine broadcast applications (to control foraging workers and newly mated fly-in queens) with mound drenches (to control existing colonies). If the soil is not moist, irrigate before application or use a high volume application. For broadcast treatments use 0.4 fl oz/1,000 sq ft. Treat mounds by diluting 0.05 fl oz of Bifenture LFC per gallon of water and applying 1 to 2 gallons of finished spray per mound. Treat mounds with sufficient force to break their apex and allow the insecticide solution to flow into the ant tunnels. A four-foot diameter circle around the mound should also be treated. For best results, apply in cool weather (65 80°F) or in early morning or late evening hours.
- 9 Mole Cricket adults: Adult mole crickets are difficult to control because preferred grass areas are continuously invaded during the early spring. Apply as late in the day as possible, and water in with up to 0.5 inches of water immediately after treatment. If the soil is not moist, irrigate before application to bring the mole crickets closer to the soil surface and maximize exposure to the insecticide. Treat grass areas that receive pressure from adult mole crickets at peak egg hatch to ensure optimum control of subsequent nymph populations (see below).





[Booklet Page 15]



- 10 Mole Cricket nymphs: In grass areas that receive intense pressure from adult mole crickets, treat immediately before peak egg hatch. Best control is achieved at that time because young nymphs are more susceptible to insecticides and they are located near the soil surface. To control larger, more damaging, nymphs later in the year a higher labeled application rate and more frequent applications may be necessary. Apply as late in the day as possible and water in with up to 0.5 inches of water immediately following treatment. If the soil is not moist, irrigate before application to bring the crickets closer to the soil surface and maximize exposure to the insecticide.
- 11 Ticks (Including ticks that may transmit Lyme Disease and Rocky Mountain Spotted fever): Do not make spot applications, but treat the entire area where exposure to ticks may occur. When treating areas with dense ground cover or heavy leaf litter, use higher spray volumes. Note that ticks may be reintroduced from surrounding areas on host animals and retreatment may be necessary to achieve and/or maintain control during periods of high pest pressure. Limit repeat application to no more than once per seven days, and only if there are signs of renewed activity.

Deer ticks (Ixodes sp.) This pest has a complex life cycle that ranges over a two year period and involves four life stages. Apply in the late fall and/or early spring to control adult ticks (usually located on brush or grass above the soil surface) and in mid to late spring to control larvae and nymphs (found in the soil and leaf litter).

American dog ticks. These ticks commonly congregate along paths or roadways where humans are likely to be encountered. Apply as necessary from mid-spring to early fall to control larvae, nymphs and adults.







SOYBEANS

PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	RATE BIFENTURE LFC PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Rootworm larvae	6.8 - 8.5 fl oz	0.39 - 0.49 fl oz	Apply as a 5 - 7 inch band over the row on the soil surface, a 5 -
	0.08 - 0.1 lb ai/A		7 inch band over the open furrow (T-band), or in-furrow with the seed.
Grape colapsis	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	
Grubs Root maggot Seedcorn maggot Wireworm	0.04 - 0.08 lb ai/A		
Army cutworm	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	Apply broadcast over the soil surface for control of Army cutworm,
Armyworm spp. Cutworm spp. True armyworm	0.04 - 0	.08 lb ai/A	Cutworm spp., True armyworm, or Armyworm spp.

RESTRICTIONS

Do not apply more than 0.1 lb ai per acre per season as an at-plant application.

Do not apply more than 0.2 lb ai per acre per season including at-plant plus foliar applications of other bifenthrin products.

SOYBEANS

(Pre-Plant Incorporated (PPI) and Pre-Emergence (PRE))

PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	APPLICATION INSTRUCTIONS
Armyworm spp. Black Cutworm Seedcorn maggot White Grub Wireworm	4 - 5.3 fl oz 0.047 - 0.062 lb ai/A (PPI)	Incorporate Bifenture LFC incorporated close to the anticipated depth of the seed, but do not exceed 3 inches in depth. PPI: Use the 4 - 5.3 fl oz/A (0.047 - 0.062 lb ai/A) rate only. Bifenture LFC can be tank mixed and applied with PPI herbicides.
Armyworm spp. Black Cutworm Stalkborer	3.4 fl oz 0.04 lb ai/A (PRE)	PRE: Use the 3.4 fl oz/A (0.04 lb ai/A) rate when mixing and apply with PRE herbicides.

RESTRICTIONS

Do not apply more than 0.1 lb ai (8.5 fl oz) per acre per season as PPI or PRE application.

Do not apply more than 0.2 lb ai (17.0 fl oz) per acre per season including at-plant plus foliar applications of other bifenthrin products.







SPINACH

PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	RATE BIFENTURE LFC PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Rootworm larvae	6.8 - 8.5 fl oz	0.39 - 0.49 fl oz	Apply as a 5 - 7 inch band over the row on the soil surface, a 5 - 7 inch band over the open furrow (T-band), or in-furrow with the seed.
	0.08 - 0.1 lb ai/A		7 / incriband over the open furrow (1-band), or in-lurrow with the seed.
Grubs	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	
Root maggot Seedcorn maggot Wireworm	0.04 - 0.08 lb ai/A		
Army cutworm	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	Apply broadcast to the soil surface for control of Army cutworm,
Armyworm spp. Cutworm spp. True armyworm	0.04 - 0	.08 lb ai/A	Cutworm spp., True armyworm, or Armyworm spp.

RESTRICTIONS

Do not apply more than 0.1 lb ai per acre per season as an at-plant application.

Do not apply more than 0.4 lb ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.

TOBACCO (PRE-TRANSPLANT and AT-TRANSPLANT)

PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	RATE BIFENTURE LFC PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Armywormspp.	3.4 - 8.5 fl oz	0.2 - 0.49 fl oz	Pre-transplant soil applications:
Cutworm spp. Flea beetlelarvae Mole cricket	0.04 - 0	.1 lb ai/A	To control below ground pests, use equipment which will incorporate the application into top 4" of the soil.
Stalkborer			At-transplant water treatment application:
White grubs Wireworm			Apply 0.0625 - 0.1 lb ai/A in a water treatment application volume of 10 - 200 gal/A.
			May be tank mixed with herbicides registered for tobacco use. Always check for compatibility before applying tank-mixes with Bifenture LFC. Always check the labels when mixing with herbicides to avoid crop damage issues.

RESTRICTIONS

Do not apply more than 0.2 lb ai per acre per season.

Do not apply later than layby.







TOBACCO (FOLIAR)

PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	APPLICATION INSTRUCTIONS
Aphid spp.* Armyworm spp. Chinch Bugs Cutworm spp. Flea Beetle (Adults) Grasshoppers Green Bugs Japanese Beetles Stink Bugs Tarnished plant bugs Thrips Whiteflies	3.4 - 8.5 fl oz 0.04 - 0.1 lb ai/A	Apply 0.04-0.10 bai/A perfoliar application up to, and including, layby in a minimum of 10 gal/A. *Aphids - See Resistance Management section of this label.
Budworm Hornworm Tobacco	6.8 - 8.5 fl oz 0.08 - 0.1 lb ai/A	
Lygus spp. Spider mites	8.5 fl oz 0.1 lb ai/A	

RESTRICTIONS

Do not make more than 2 foliar applications per season.

Do not apply more than 0.2 lbai per acre (17.0 floz/A) per season.

Do not apply later than layby.

May be tank mixed with herbicides registered for tobacco use. Always check for compatibility before applying tank-mixes with Bifenture LFC. Always check the labels when mixing with herbicides to avoid crop damage issues.



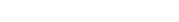
TOMATOES

PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	RATE BIFENTURE LFC PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Rootworm larvae	6.8 - 8.5 fl oz	0.39 - 0.49 fl oz	Apply as a 5 - 7 inch band over the row on the soil surface, a 5 -
	0.08 - 0	0.1 lb ai/A	7 inch band over the open furrow (T-band), or in-furrow with the seed.
Flea beetle larvae	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	
Grubs Root maggot Wireworm	0.04 - 0	.08 lb ai/A	
Army cutworm	3.4 - 6.8 fl oz	0.2 - 0.39 fl oz	Apply broadcast to the soil surface for control of Army cutworm,
Armyworm spp. Cutworm spp. True armyworm Stalkborer	0.04 - 0	.08 lb ai/A	Cutworm spp., True armyworm, Armyworm spp. or Stalkborer.

RESTRICTIONS

Do not apply more than 0.1 lb ai per acre per season as an at-plant application.

Do not apply more than 0.32 lb ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.







TUBEROUS AND CORM VEGETABLES (AT-PLANT)

CROP	PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	APPLICATION INSTRUCTIONS
Potato Sweet potato Arracacha Arrowroot Chinese artichoke Jerusalem artichoke	Grape colapsis Rootworms Sweet potato fleabeetle White grub Wireworms	12.75-25.5floz 0.15-0.3lbai/A	Apply as a soil incorporated broadcast, directed bed spray or a T-ban spray into the planting furrow for the control of wireworms, rootworms, sweet potato flea beetle and white grubs. Apply in a minimum of 10 gallons per acre of spray at the rate of 0.15 - 0.3 lb ai (12.75 - 25.5 fl oz of product) per acre.
Edible canna Cassava (bitter and sweet) Chayote (root) Chufa Dasheen (taro) Ginger Leren Tanier Turmer Yam bean True yam		.5 lb ai (42.5 fl oz/A) per a	per acre per season as an at-plant application. cre per season including at-plant plus foliar applications of other

TUBEROUS AND CORM VEGETABLES (LAY-BY)

CROP	PESTS CONTROLLED	RATE BIFENTURE LFC/ACRE	APPLICATION INSTRUCTIONS
Potato Sweet potato Arracacha	Grape colapsis Rootworms White grub Wireworms	12.75-25.5fl oz 0.15-0.3 lb ai/A	Apply Bifenture LFC as one or more soil directed and incorporated treatments at cultivation or lay-by for the control of wireworms, rootworms and white grubs.
Arrowroot Chinese artichoke			Apply to the drill area and incorporate by cultivation equipment set to throw soil towards the drill area.
Jerusalem artichoke Edible canna Cassava (bitter and sweet)			Apply Bifenture LFC in a minimum of 10 gallons per acre of spray at a rate of 0.15 - 0.3 lb ai (12.75 - 25.5 fl oz of product) per acre.
Chayote (root) Chufa Dasheen (taro) Ginger Leren Tanier Turmer Yam bean True yam	RESTRICTIONS Donot apply more than 0 ucts containing bifenthi		creperseason including soil plus foliar applications of other prod-







STORAGE AND DISPOSAL

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

Pesticide Storage: If storing this product below freezing, user should shake or roll the container to ensure proper product consistency. Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call CHEMTREC (Transportation and Spills): (800) 424-9300.

To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

Pesticide Disposal: Pesticide wastes are toxic. 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 of the nearest EPA Regional Office for guidance.

Container Handling: [One of the following will be used:]

Non-refillable container (in sizes 5 gallons or less). Do not reuse or refill this container. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds, pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

Non-refillable container (in sizes greater than 5 gallons). Do not reuse or refill this container. Triple rinse or pressure rinse. 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 back and forth several times. Turn the container over onto its other end and tip 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.

Refiliable container: Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.





IMPORTANT INFORMATION READ BEFORE USING PRODUCT

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, in effectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of UPL NA Inc. .or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of UPL NA Inc. .and Seller. To the extent consistent with applicable law all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold UPL NA Inc. .and Seller harmless for any claims relating to such factors.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, UPL NA INC. . AND SELLER MAKE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ON THIS LABEL.

To the extent consistent with applicable law, UPL NA Inc. . or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product and THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF UPL NA INC. .AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF UPL NA INC. . OR SELLER, THE REPLACEMENT OF THE PRODUCT.

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

Bifenture is a registered trademark of UPL NA Inc.

Rev: 03/12/2021







RESTRICTED USE PESTICIDE

Toxic to fish and aquatic organisms.

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

Bifenthrin

GROUP

Insecticida



ACTIVE INGREDIENT:	BY WT.
Bifenthrin* (2 methyl [1,1-biphenyl] 3-yl), methyl 3 (2-chloro, 3,3,3-	
trifluoro-1-propenyl) 2,2-dimethyl, cyclopropanecarboxylate	17.15%
OTHER INGREDIENTS:	82.85%
TOTAL:	. 100.00%
*Cis isomers 97% minimum, trans isomers 3% maximum.	
This product contains 1.5 lbs ai per gallon	

KEEP OUT OF REACH OF CHILDREN CAUTION

[See attached booklet for additional Precautionary Statements and complete Directions For Use.]

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC at 1-800-424-9300.

Bifenture LFC may be comparable to another product used previously, however it is essential to read, and follow all label directions for use as there may be some differences. It is the responsibility of the user to ensure this product is labeled for use on the specific crop and geographical location in which it is intended. It is the responsibility of the user to follow all precautions and restrictions according to local and State authorities and is approved for sale. The user should read the Condition of Sale and Limitation of Warranty and Liability before purchasing this product.

UPL NA Inc. . PO Box 12219 Research Triangle Park, NC 27709-2119 U.S.A. 1-800-438-6071

NET CONTENTS: _____

FIRST AID - IF SWALLOWED • Call poison control center or doctor immediately for treatment advice. • Do not give any liquid to the person. • Do not induce womiting 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 CLOTHING • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center for treatment advise. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergency, call the Rocky Mountain Poison Control Center at 1-866-673-6671. NOTE TO PHYSICIAN: This product is a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.

PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals

CAUTION

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

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic invertebrates. Use withcare when applying in areas adjacent to any body of water. Do not apply directly to water, to areaswhere surface water is present or to intertidal areas below the mean high water mark. Do not make applications 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 washwaters. 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 while bees are actively visiting the treatment area. Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms. The use of bifenthrin is prohibited in areas that may result in exposure of endangered species to bifenthrin. Prior to use in a particular county contact the local extension service for procedures and precautions to use to protect endangered species.

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING. Do not apply this product through any type of irrigation system. Bifenture LFC is an insecticide formulated as a suspension concentrate containing 1.5 lbs active ingredient per gallon of bifenthrin. Bifenture LFC can be mixed with liquid fertilizers or water. Shake well prior to mixing or measuring Bifenture LFC for use.

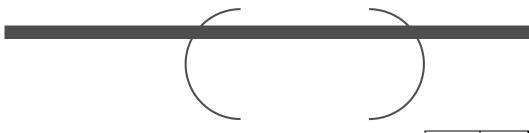
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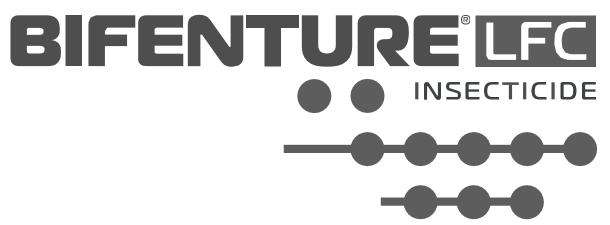


RESTRICTED USE PESTICIDE

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



Bifenthrin GROUP 3A Insecticide



ACTIVE INGREDIENT:	BY WT.
Bifenthrin* (2 methyl [1,1-biphenyl] 3-yl), methyl 3 (2-chloro, 3,3,3-	
trifluoro-1-propenyl) 2,2-dimethyl, cyclopropanecarboxylate	17.15%
OTHER INGREDIENTS:	<u>82.85%</u>
TOTAL:	.100.00%
*Cis isomers 97% minimum, trans isomers 3% maximum.	
This product contains 1.5 lbs ai per gallon.	
EPA Reg. No. 70506-305 EPA EST. NO	
VEED OUT OF DEACH OF CHILDREN	

KEEP OUT OF REACH OF CHILDREN **CAUTION**

[See containers inside for additional Precautionary Statements and complete Directions For Use.]

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC at 1-800-424-9300.

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