PLEASE NOTE

This image contains more than one label approved for this product on this date.





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

October 9, 2008

Rebecca A. Clemmer United Phosphorus, Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406

Subject:

Amendment – Revision to use directions (Tomatoes)

Bifenture EC Agricultural Insecticide

EPA Reg. No. 70506-57

Your submission dated July 10, 2008

Dear Ms. Clemmer:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable subject to the comments listed below. Two (2) copies of the finished labeling must be submitted prior to releasing the product for shipment. A stamped copy of the label is enclosed for your records.

- 1. Move all statements from the *Spray Drift Requirements* section starting from "Maintain and calibrate all aerial and ground application equipment using appropriate carriers" thru "Do not apply the spray at heights greater than 10 feet above the crop canopy, ... etc" to the *Instruction for Application* section.
- 2. Delete "Do not make aerial or ground application to corn if heavy rainfall is imminent" from the *Droplet Size* section.
- 3. Add "natural" to ponds in the Buffer Zone statements ... i.e. "marshes, natural ponds, estuaries".
- 4. As stated in the Agency's August 26, 2008 letter, update the container disposal statements in accordance with PR Notice 2007-4. Remembering to retain the "... puncture and dispose of in sanitary ... etc" for non-refillable non-reuseable containers.

Incorporate the supplemental labeling for aerial application on tomatoes into the master label at the next printing or within 18 months from the date of this notice, whichever is earlier.

If you have any questions regarding this action, please contact BeWanda Alexander at (703) 305-7460.

Sincerely, Be Danda Alexandor 200

Richard Gebken

Interim Product Manager 13

Insecticide Branch

Registration Division (7505P)

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.

BIFENTURE™ EC AGRICULTURAL INSECTICIDE

BIFENTURE EC AGRICULTURAL INSECTICIDE IS NOT FOR SALE OR USE IN CALIFORNIA.

Active Ingredient:	By Wt.
Bifenthrin* (2 methyl[1,1'-biphenyl]-3-yl) methyl 3-(2-chloro-3,3,3-triff	uoro-
1-propenyl)-2,2-dimethylcyclopropanecarboxylate	25.1%
Inert Ingredients**:	<u>74.9</u> %
TOTAL	100.0%

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

**Contain xylene range aromatic solvents

This product contains 2 pounds active ingredient per gallon.

ACCEPTED
with COMMENTS
In EPA Letter Dated
007 9 2008

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.

WARNING AVISO

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

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.)

	FIRST AID
If swallowed	Call a poison control center or doctor immediately for treatment advice.
	Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give any liquid to the person.
	 Do not give any liquid to the person. 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 inhaled	Move person to fresh air.
	 If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
	Call a poison control center or doctor for further treatment advice.
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.

NOTE TO PHYSICIAN

This product is a pyrethroid. If large amounts have been ingested, the stomach and intestine should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided. Contains petroleum distillates. Vomiting may cause aspiration pneumonia.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. FOR EMERGENCY MEDICAL ASSISTANCE, CALL THE ROCKY MOUNTAIN POISON CONTROL CENTER 1-866-767-5089.

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



Manufactured for:
United Phosphorus, Inc.
630 Freedom Business Center, Suite 402
King of Prussia, PA 19406 1-800-438-6071 • www.upi-usa.com

EPA Reg. No. 70506-57 EPA Est. No. Net Contents:

PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals Warning

WARNING. May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield or safety glasses). Harmful if absorbed through skin or inhaled. Avoid breathing spray mist. Avoid contact with skin. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

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 E on an EPA chemical resistance category selection chart.

Handlers who may be exposed to the dilute through application or other tasks must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate, Nitrile rubber, neoprene rubber or Viton
- Shoes plus socks

Handlers who may be exposed to the concentrate through mixing, loading, application or other tasks must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate, Nitrile rubber, neoprene rubber, or Viton
- · 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.

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.

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 run-off 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.

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.

Physical/Chemical Hazards

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

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

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

Resistance;

BIFENTURE is an insecticide. Any insect/mite population may contain individual insects that may develop resistance to a specific pesticide product used in consecutive generations to control these pests. Prediction of resistance development is uncertain. Appropriate resistance management strategies should be followed. Contact your local extension specialist or certified crop advisors for any additional pesticide resistance management and/or Integrated Pest Management recommendations for the specific site and pest problems in your area.

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 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 or neoprene rubber or Viton.
- · Shoes plus socks.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store above 40°F.

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 Disposal: Metal or Plastic Container: Triple rinse (or equivalent), then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Do not cut or weld metal containers.

Returnable, Refillable Containers: Refillable/re-usable containers should be returned to the point of purchase for cleaning and refilling because the container must be thoroughly cleaned before refilling.

Chemigation Use Directions

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 systems. Do not apply this product through any other type of irrigation system. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system.

Use a minimum of 0.75 inch of water per acre for LEPA irrigation. Use 1 to 2 pints per acre of non-emulsified oils when used as the diluent.

The set up and calibration of chemigation equipment are important to achieve control of target insect pests. Crop injury, lack of effectiveness, or illegal residues in the crop can result from non-uniform distribution of treated water. Contact your State Agricultural Extension Service specialists, equipment manufacturers or other experts for advice on the suitability of the equipment set up for optimum control of the target insect pests.

A person knowledgeable of the chemigation system and responsible for its operations, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Failure to cease application during a mechanical stoppage may result in undesirable residues to adjacent areas.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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.

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.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Apply Bifenture EC Agricultural Insecticide continuously for the duration of the water application. Dilute Bifenture EC Agricultural Insecticide in sufficient volume to ensure accurate application over the area to be treated. Use a minimum of 0.5 inch per acre of irrigation water for application by chemigation. No agitation is required if a suitable diluent is used. Conduct a diluent test to check that phase separation will not occur during dilution and application. If uniform dilution is not achieved during the entire period of application, undesirable residues or less than desirable control may occur.

Rotation Crop 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 EC Agricultural Insecticide with other products registered for the same crops. Observe all applicable directions, restrictions, and precautions on the EPA-registered labels for other tank mix partners.

Spray Drift Requirements

Maintain and calibrate all aerial and ground application equipment using appropriate carriers. Do not use ultra low volume (ULV) applications to corn and hops.

Select the appropriate nozzle sizes to form the largest spray droplets that provide sufficient coverage and control. Minimize the formation of very small droplets by pointing the nozzles away from the air stream, and by avoiding excessive spray boom pressure.

Do not apply the spray at heights greater than 10 feet above the crop canopy, but at the lowest height to ensure pest control and flight safety.

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 Inversions

Do not make aerial or ground applications into temperature inversions.

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

Droplet Size

Use only medium or 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. Do not make aerial or ground application to corn if heavy rainfall is imminent.

Buffer Zones

Vegetative Buffer Strip

Construct and maintain a minimum 10-fout 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 bifenthrin onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA, NRCS. 2000. Fort Worth, Texas. 21 pp. http://www.in.csusda/v/technical/agronom/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, streams, marshes, 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, streams, marshes, ponds, estuaries, and commercial fish ponds).

Additional Requirements for Ground Applications

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

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

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

Additional Requirements for Aerial Applications

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

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

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

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

Instructions for Application

The following Directions for Use tables provide, in some cases, rate ranges. Use the lower application rates when insect pressure is light to moderate. Use the higher application rates when insect populations are high, when treating mites and when climate is arid.

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

In New York State this product may not be applied within 100 feet (using ground equipment) to 300 feet (using aerial equipment) of coastal marshes or streams that drain into coastal marshes.

INDEX TO CROPS LISTED ON THIS LABEL

Artichokes

Brassicas

Caneberries

Canola, Crambe, Rapeseed

Cilantro, Coriander

Citrus

Cotton

Field Corn (Grain and Silage), Popcorn, Field Corn Grown for Seed (At Plant Use)

Field Corn (Grain and Silage), Popcorn, Field Corn Grown for Seed (PRE & PPI)

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

Sweet Com (Grain and Silage), Sweet Corn Grown for Seed (At Plant Use)

Sweet Corn (Grain and Silage), Sweet Corn Grown for Seed (Foliar Use)

Cucurbits

Eggplant

Grapes

Hops

Leafy Brassica Greens (Crop Subgroup 5-B)

Lettuce, Head

Okra

Pears

Peppers, Bell and Non-Bell

Spinach

Succulent Peas and Beans

Tomatoes

Tuberous and Corm Vegetables (Crop Subgroup 1-C)

ARTICHOKES

PESTS CONTROLLED	RATE BIFENTURE EC/ACRE	APPLICATION INSTRUCTIONS	PHI (days)
Artichoke Plume Moth Cribrate Weevil	0.10 lb. ai (6.4 fl. oz. product)	Begin applications when pest population reaches damaging levels and repeat as necessary to maintain control. Apply in water in a minimum of 75 gallons of spray/A by ground or in a minimum of 10 gallons/A by air. Do not make applications less than 15 days apart. Do not apply more than 0.5 lb. a.i. /A (one quart product) per season.	

BRASSICAS

CONTROLLED.	RATE BIFENTURE EC/ACRE	APPLICATION INSTRUCTIONS	PHI (days)
Aphids	0.033-0.10 lb. ai	Apply in water in a minimum of 10 gallons spray/A by	7
Armyworms	(2.1-6.4 fl. oz.	ground or in a minimum of 2 gallons/A by air. Substitute	
Com Earworm	product)	1-2 quarts of emulsified oil for 1-2 quarts water if desired	
Crickets		when applying by air.	
Cucumber Beetles		For best control thorough coverage is necessary.	
Cutworms		·	
Diamondback Moth		Do not exceed 0.5 lb a.i. (1 quart product) per acre per	
Flea Beetles		season.	
Ground Beetles		·	
Imported		Do not make more than 5 applications after bloom.	
· -		Do not make applications less than 7 days apart.	
Loopers		, ,	
Saltmarsh Caterpillar			•
1	·		
_			
Tobacco			
Budworm			
Whitefly			
Wireworm			
(Adults)			,
(
Banks Grass	0.08-0.10 lb. ai		
Mite		·	•
1	,		
	F,		
	•	•	
	ļ		
	Aphids Armyworms Com Earworm Crickets Cucumber Beetles Cutworms Diamondback Moth Flea Beetles Ground Beetles Imported Cabbageworm Leafhoppers Loopers Saltmarsh Caterpillar Stink Bugs Thrips Tobacco Budworm Whitefly Wireworm (Adults) Banks Grass	Aphids Armyworms Corn Earworm Crickets Cucumber Beetles Cutworms Diamondback Moth Flea Beetles Ground Beetles Imported Cabbageworm Leafhoppers Loopers Saltmarsh Caterpillar Stink Bugs Thrips Tobacco Budworm Whitefly Wireworm (Adults) Banks Grass Mite Carmine Mite Lygus spp. Pacific Spider Mite Twospotted 0.033-0.10 lb. ai (2.1-6.4 fl. oz. product)	Aphids Armyworms Com Earworm Crickets Cucumber Beetles Cutworms Diamondback Moth Flea Beetles Ground Beetles Imported Cabbageworm Leafhoppers Loopers Saltmarsh Caterpillar Stink Bugs Thrips Tobacco Budworm Whitefly Wireworm (Adults) Banks Grass Mite Carmine Mite Lygus spp. Pacific Spider Mite Twospotted Apply in water in a minimum of 10 gallons spray/A by ground or in a minimum of 2 gallons/A by air. Substitute 1-2 quarts of emulsified oil for 1-2 quarts water if desired when applying by air. For best control thorough coverage is necessary. Do not exceed 0.5 lb a.i. (1 quart product) per acre per season. Do not make more than 5 applications after bloom. Do not make applications less than 7 days apart.

CANEBERRIES

CROP	PESTS CONTROLLED	RATE BIFENTURE EC/ACRE	APPLICATION INSTRUCTIONS	PHI (days)
Caneberries including: Bingleberries Blackberries Dewberries Loganberries Lowberries Marionberries Olallieberries Raspberries Youngberries	Leafrollers Orange Tortrix Root Weevils	0.05-0.10 lb. ai (3.2-6.4 fl. oz. product)	Apply in water in a minimum of 50 gallons/A by ground or in a minimum of 10 gallons/A by air. For best control thorough coverage of foliage is necessary. Make one prebloom application and if necessary one postbloom application. Do not apply more than 0.2 lb. a.i. /A per season.	3
	Spider Mites	0.10 lb. ai (6.4 fl. oz. product)		

CANOLA, CRAMBE, RAPESEED

PESTS CONTROLLED	RATE BIFENTURE EC/ACRE	APPLICATION INSTRUCTIONS	PHI (days)
Aphids	0.033-0.04 lb. ai	Apply in water in a minimum of 10 gallons/A by ground or in a	35
Armyworms	(2.1-2.6 fl. oz. product)	minimum of 2 gallons/A by air. Substitute 1-2 quarts of emulsified	
Cutworms		oil for 1-2 quarts water if desired when applying by air.	
Diamondback Moth		For best control thorough coverage is necessary.	
Flea Beetle			
Flea Hopper		Do not apply more than 0.08 lb. a.i. (5.12 fl. oz. product) per acre per	
Grasshopper		season.	
Loopers	·	Do not make applications less than 14 days apart.	
Other			
Lepidopterous			
Larvae		·	
Plant Bug			
Seedpod Weevil			
Stink Bugs			
Thrips	•	·	
Whitefly			

CITRUS

Diaprepes Root Weevil (Diaprepes abbreviatus) Asian Cockroach Fire Ants O.1-0.25 lb. ai (6.4-16 fl. oz. product) Diaprepes Root Weevil: If peak emergence is expected in the spring, use 32 fl. oz. formulated product to obtain the longest residual control. If more than one peak of emergence is anticipated, apply 16 fl. oz. formulated product in the spring and 16 fl. oz. formulated product in the fall. Do not apply using any type of chemigation. Do not allow application to contact fruit or foliage. Direct the spray to the base of tree to prevent contact with fruit or foliage. Do not apply more than a total of 0.5 lb ai (32 fl. oz. product) per acre per year.	PESTS CONTROLLED	RATE BIFENTURE EC/ACRE	APPLICATION INSTRUCTIONS	PHI (days)
Asian Cockroach Fire Ants O.1-0.25 lb. ai '(6.4-16 fl. oz. product) Expected in the spring, use 32 fl. oz. formulated product to obtain the longest residual control. If more than one peak of emergence is anticipated, apply 16 fl. oz. formulated product in the spring and 16 fl. oz. formulated product in the fall. Do not apply using any type of chemigation. Do not allow application to contact fruit or foliage. Direct the spray to the base of tree to prevent contact with fruit or foliage. Do not apply more than a total of 0.5 lb ai (32 fl. oz.	Weevil (Diaprepes		individual citrus resets, when not in solid planted rows.	1
Apply by ground only in a minimum of 40 gallons/acre of finished spray.	i i	į –	expected in the spring, use 32 fl. oz. formulated product to obtain the longest residual control. If more than one peak of emergence is anticipated, apply 16 fl. oz. formulated product in the spring and 16 fl. oz. formulated product in the fall. Do not apply using any type of chemigation. Do not allow application to contact fruit or foliage. Direct the spray to the base of tree to prevent contact with fruit or foliage. Do not apply more than a total of 0.5 lb ai (32 fl. oz. product) per acre per year. Apply by ground only in a minimum of 40	

COTTON

PESTS CONTROLLED	RATE BIFENTURE EC/ACRE	APPLICATION INSTRUCTIONS	PHI (days)
European Corn Borer	0.02-0.10 lb. ai	Apply Bifenture EC in water or refined	14
Soybean (Banded) Thrips	(1.3-6.4 fl. oz.	soybean/cottonseed oil.	
Tobacco Thrips	product)		
		Apply in water in a minimum of 5 gallons/A by	1
		ground or a minimum of 1 gallon/A by air.	
		Substitute 1 quart of emulsified oil for 1 quart	
		water if desired when applying by air.	
Boll Weevil	0.04-0.10 lb. ai	ULV Application: Apply in refined vegetable	
Bollworm	(2.6-6.4 fl. oz:	oil in a minimum of I quart/A with aircraft	
Cabbage Looper	product)	calibrated to give adequate coverage.	
Cotton Aphid			
Cotton Fleahopper		Boll Weevil: Apply Bifenture EC every 3 to 4	1
Cotton Leafperforator		days until control is acceptable.	
Cutworms		Mites and Aphids: Apply when pests first	
Fail Armyworm		appear.	
Plant Bugs		Repeat as necessary to maintain control.	
Saltmarsh Caterpillar		Use the higher rates once a damaging threshold	
Southern Garden Leafhopper		is established.	
Stink Bugs	,		
Tobacco Budworm		Apply no more than 0.5 lb. a.i. per acre per	
Whitefly		season.	
Yellow Striped Armyworm			
Beet Armyworm	0.06-0.10 lb. ai	No more than 10 synthetic pyrethroid	
Carmine Spider Mite	(3.8-6.4 fl. oz.	applications (of one product or combination of	
Lygus spp.	product)	products, including Ambush®, Ammo®, Asana®	
Pink Bollworm		XL, Baythroid [®] , Capture [®] , Danitol [®] , Karate [®] ,	
Twospotted Spider Mite		Mustang®, and Scout X-TRA®) may be made to	}
•		a cotton crop in one growing season.	
		Do not graze livestock in treated areas or cut	
		treated crops for feed.	

FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED (AT PLANT USE)

PESTS CONTROLLED	RATE BIFENTURE EC	APPLICATION INSTRUCTIONS	PHI (days)
Corn Rootworm, Larvae Northern Southern Western	0.0046 lb ai (0.30 fl. oz. product) per 1,000 linear feet of row	Apply as a 5 to 7 inch T-band at planting over the open seed furrow. The table below describes the amount of Bifenture EC needed per acre. Apply in water in a minimum of 3 gallons/A. When using Bifenture EC with fertilizers, check to be sure all components are compatible. For mixture with water or fertilizer, use the following procedure. Fill the spray tank approximately one-half full with water or liquid fertilizer; add the proper amount of Bifenture EC; then add the rest of the water or fertilizer. Sufficient agitation during mixing and application is required to ensure a uniform mixture.	30
Army Cutworm Cutworm Species Grubs Seed Corn Beetle Seed Corn Maggot True Armyworm or Armyworm Species Wireworm	0.0023 – 0.0046 lb ai (0.15 - 0.30 fl. oz. product) per 1,000 linear feet of row	Only apply to soil when there is less than 30% cover of crop residue remaining. Do not graze livestock in treated area or cut treated crops for feed within 30 days of treatment. Do not apply more than 0.1 lb. active per acre per season at planting.	

Row spacings	. 40 in.	38 in.	36 in.	30 in.
Bifenture EC (lb. a.i. per acre)	0.060	0.064	0.069	0.080
Bifenture EC (formulated product, ounces per acre)	3.9	4.1	4.4	5.12

FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED Pre-Plant Incorporated (PPI) and Pre-Emergence (PRE)

PESTS		APPLICATION INSTRUCTIONS		
CONTROLLED				
Armyworm spp.	0.047 to 0.062	Incorporate Bifenture EC close to the expected depth of the seed, but no		
Black Cutworm	lb. a.i./A (3-4	deeper than 3 inches.		
Seedcom Maggot	fl. oz/A	PPI: Use the 3-4 oz./A rate only. Apply alone or with PPI herbicides as a		
Stalkborer	product) Pre-	tank mix.		
White Grub	Plant			
Wireworm	Incorporated	PRE: Use the 2.56 oz/A rate when tankmixing and applying with PRE		
	(PPI)	herbicides.		
'Armyworm spp.	0.040 lb.	,		
Black Cutworm	a.i./A (2.56	·		
Stalkborer	fl. oz./A	` .		
	product) Pre-			
	emergence			
	(PRE)	-		

FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED (FOLIAR USE)

PESTS CONTROLLED	RATE BIFENTURE	APPLICATION INSTRUCTIONS	PHI (days)
Aphids Army Cutworm Beet Armyworm Cereal Leaf Beetle Chinch Bug Common Stalk Borer Corn Earworm Corn Rootworm Adults Cucumber Beetle Adult Cutworm Species European Corn Borer	EC/ACRE 0.033-0.10 lb ai (2.1-6.4 fl. oz. product)	Apply in water in a minimum of 10 gallons/A by ground or in a minimum of 2-5 gallons/A by air. For heavy infestations, use 5 gallons of finished spray per acre by aircraft. Substitute 1-2 quarts of emulsified oil for 1-2 quarts water if desired. For best control thorough coverage is necessary. Ear-Attacking Pests: Apply Bifenture EC just before silking. Southwestern Corn Borer, European Corn Borer: Apply at or shortly before egg hatch.	30
Fall Armyworm Flea Beetle Grasshoppers Greenbug Japanese Beetle Adult Sap Beetle Southern Armyworm Southern Corn Leaf Beetle Southwestern Corn Borer Stinkbugs Tarnished Plant Bug True Armyworm or Armyworm Species Webworms Western Bean Cutworm Yellowstriped Armyworm		Other Insect Pests: Apply when insects first appear. Repeat as needed. Banks Grass Mites: Apply when colonies first form before leaf damage or discoloration and prior to movement above the bottom third of the plant Twospotted Spider Mite and Carmine Mite: Apply when colonies first form before leaf damage or discoloration and before wide-spread mite movement throughout the canopy. Use the higher rates if heavier insect pressure is noted and corn is under heat or drought stress. Tank mixtures with dimethoate at 0.5 lb. a.i. per acre are effective under these conditions. Mite Control in Texas, New Mexico, Oklahoma, and Arizona: Apply in water in a minimum of 10 gallons/A ground or in a minimum of 5 gallons/A by air.	
Banks Grass Mite Carmine Mite Twospotted Spider Mite	0.08-0.10 lb. ai (5.12-6.4 fl. oz. product)	Repeat applications as necessary to maintain control, but do not apply more than 0.3 lb. active ingredient per acre per season including PRE & PPI, at plant plus foliar applications. Do not graze livestock in treated areas or cut treated crops for feed within 30 days of the last application. Do not apply by ultra low volume (ULV) application on corn.	
		If heavy rainfall is imminent, do not make aerial or ground applications to corn. Use of Bifenture EC Agricultural Insecticide on corn is prohibited in all coastal counties.	

SWEET CORN (GRAIN AND SILAGE) SWEET CORN GROWN FOR SEED (AT PLANT USE)

PESTS CONTROLLED	RATE BIFENTURE EC	APPLICATION INSTRUCTIONS	PHI (days)
Corn Rootworm, Larvae Northern Southern Western	0.0046 lb. ai (0.30 fl.oz. product) per 1,000 linear feet of row	Apply at planting over the open seed furrow. The table below describes the amount of Bifenture EC needed per acre. Apply in a minimum of 3 gallons of finished spray per acre. When using Bifenthrin EC with fertilizers, check to be sure all components are compatible. For mixture with water or fertilizer, use the following procedure. Fill the spray tank approximately one-half full with water or liquid fertilizer; add the proper amount of Bifenture EC; then add the rest of	30
		the water or fertilizer. Sufficient agitation during mixing and application is required to ensure a uniform mixture.	
Army Cutworm	0.0023 -		
Cutworm Species	0.0046 lb. ai	Only apply to soil where there is less than 30% cover of crop residue	
Grubs	(0.15 - 0.30	remaining.	
Seed Com Beetle	fl.oz. product)		
Seed Corn Maggot	per 1,000	Do not graze livestock in treated area or cut treated crops for feed within 30	
True Armyworm or	linear feet of	days of treatment.	
Armyworm Species	row	'	
Wireworm	1	Do not apply more than 0.1 lb. active per acre per season at planting.	•

Row Spacings	40 in.	38 in.	36 in.	30 in.
Bifenture EC (lb. a.i. per-acre)	0.060	0.064	0.069	0.080
Bifenture EC (formulated product, ounces per acre)	3.9	4.1	4.4	5.12

SWEET CORN (GRAIN AND SILAGE) SWEET CORN GROWN FOR SEED (FOLIAR USE)

PESTS CONTROLLED	RATE BIFENTURE	APPLICATION INSTRUCTIONS	PHI (days)
	EC/ACRE		
Aphids	0.033-0.10 lb.	Apply in water in a minimum of 10 gallons/A by ground	
Army Cutworm	ai	or in a minimum of 2-5 gallons/A by air. For heavy	1
Beet Armyworm	(2.1-6.4 fl. oz.	infestations by aircraft, use 5 gallons of finished spray	
Cereal Leaf Beetle	product)	per acre. Substitute 1-2 quarts of emulsified oil for 1-2	
Chinch Bug		quarts water if desired.	
Common Stalk Borer		For best control, thorough coverage is necessary.	
Com Earworm			
Corn Rootworm Adults		Ear-Attacking Pests: Apply Bifenture EC just before	
Cucumber Beetle Adult		silking.	
Cutworm Species			
European Corn Borer		Southwestern Corn Borer, European Corn Borer:	
Fall Armyworm		Apply twice, with the first application at or shortly	
Flea Beetle		before egg hatch.	
Grasshoppers			4
Greenbug		Other Insect Pests: Apply when insects first appear.	
Japanese Beetle Adult		Repeat as needed.	
Sap Beetle			
Southern Armyworm		Banks Grass Mite: Apply when colonies first form	
Southern Corn Leaf Beetle		before leaf damage or discoloration and prior to	
Southwestern Corn Borer		movement above the bottom third of the plant.	
Stinkbugs	-	mo volutati aco vo ine contoni tima ov the plant.	
Tarnished Plant Bug		Twospotted Spider Mite and Carmine Mite: Apply	
True Armyworm or Armyworm Species		when colonies first form before leaf damage or	
Webworms		discoloration and prior to widespread mite movement	
Western Bean Cutworm		throughout the canopy.	
Yellowstriped Armyworm		throughout the canopy.	
renowshiped Army worm			
Banks Grass Mite	0.08-0.10 lb.	I loo the higher rates if heavier insect processes is noted	
Carmine Mite	0.08-0.10 fb.	Use the higher rates if heavier insect pressure is noted	
	l .	and corn is under heat or drought stress.	
Twospotted Spider Mite	(5.12-6.4 fl.	Panest applications as passesses but do not seed	
	oz. product)	Repeat applications as necessary, but do not apply more	
·		than 0.2 lb. a.i. (12.8 fl. oz. product) per acre per season.	•
		Do not organ livertook in tweets a server of the server of	
		Do not graze livestock in treated areas or cut treated	
·		crops for feed within 1 day of the last application.	
		Daniela III karba a a a a a a a a a a a a	
		Do not apply by ultra low volume (ULV) on com.	
	· ·	If heavy rainfall is imminent, do not make aerial or	•
		ground applications to corn.	•
		Use of Bifenture EC on corn is prohibited in all coastal	
•	<u> </u>	counties.	

CUCURBITS

CROP	PESTS CONTROLLED	RATE BIFENTUR E EC/ACRE	APPLICATION INSTRUCTIONS	PHI (days)
Chayote (fruit)	Aphids	0.04-0.10 lb.	Apply in water in a minimum of 20 gallons/A	3
Chinese waxgourd	Armyworms	ai	by ground or in a minimum of 5 gallons/A by	
(Chinese preserving	Cabbage Looper	(2.6-6.4 fl. oz.	air. Substitute 1-2 quarts of emulsified oil for	
melon)	Corn Earworm	product)	1-2 quarts water if desired.	
Citron melon	Cucumber Beetles		For best control thorough coverage is	,
Cucumber	Cutworm		necessary.	
Gherkin	Grasshopper			
Gourd, edible	Leafhoppers		Do not apply more than 0.3 lb. a.i. (19.2 fl. oz.	
(includes hyloan,	Melonworm		product) per acre per season.	
cucuzza), (Luffa	Pickleworm			
spp.) (includes	Plant Bug		Do not apply more than twice after bloom.	
hechima, Chinese	Rindworm			
okra), (Momordica	Squash Bugs		Do not make applications less than 7 days	
spp.) (includes	Squash Vine Borer		apart.	
balsam apple,	Stink Bugs			
balsam pear, bitter	Tobacco Budworm			
melon, Chinese				
cucumber)				
Muskmelon (hybrids				
and/or cultivars of				

Cucumis melo)	Carmine Mite	0.08-0.10 lb.		
(includes	Banks Grass Mite	ai		
true cantaloupe,	Lygus spp	(5.12-6.4 fl.		
Cantaloupe,	Twospotted Spider	oz. product)		
casaba, crenshaw	Mite			
melon, golden,	Whitefly			
pershaw melon,				
honeydew melon,				
honey balls, mango	-			
melon, Persian				
melon, pineapple	,			
melon, Santa				
Claus melon, and				
snake melon)				
Pumpkin (Cucurbita spp.)				
Squash, summer				
(includes crookneck				
squash, scallop				
squash, straightneck			•	
squash, vegetable				
marrow, zucchini)				
Squash, winter				
(includes butternut		·		
squash, calabaza,				
hubbard squash				
· (C. mixte; C. pepo),				
includes acom				
squash, spaghetti				
squash)	,			
Watermelon,			•	
(includes hybrids and		İ		
or varieties of Citrullis				
spp.)				

EGGPLANT

PESTS CONTROLLED	RATE BIFENTURE EC/ACRE	APPLICATION INSTRUCTIONS	PHI (days)
Armyworms Colorado Potato Beetle Corn Earworm Cucumber Beetle European Corn Borer Flea Beetle Cabbage Looper Plant Bug Stink Bug Thrips Tomato Pinworm Tomato Hornworm Vegetable Leafminer Whitefly	0.033-0.10 lb. ai (2.1-6.4 fl. oz. product)	Apply in water in a minimum of 10 gallons/A by ground or in a minimum of 2 gallons/A by air. Substitute 1-2 quarts of emulsified oil for 1-2 quarts water if desired. For best control thorough coverage is necessary. Do not make applications less than 7 days apart. Do not apply more than 0.2 lb. a.i. (12.8 fl. oz. product) per acre per season.	7
Banks Grass Mite Carmine Mite Lygus spp. Pacific Spider Mite Twospotted Spider Mite	0.08-0.10 lb. ai (5.12-6.4 fl. oz. product)		

GRAPES

RATE BIFENTURE ECACRE	APPLICATION INSTRUCTIONS	PHI (days)
0.05-0.10 lb. ai (3.2 to 6.4 fl. oz. product)	Apply in a minimum of 25 gallons/A by ground or in a minimum of 10 gallons/A by air.	30
0.10 lb. ai (6.4 fl. oz. product)	Substitute 1-2 quarts of emulsified oil for 1-2 quarts water if desired. For best control thorough coverage is necessary. Use the higher rate when insect pressure is moderate to severe. Do not apply more than 0.10 lb. a.i. per acre per season.	
	BIFENTURE ECACRE 0.05-0.10 lb. ai (3.2 to 6.4 fl. oz. product) 0.10 lb. ai (6.4 fl. oz.	BIFENTURE ECACRE 0.05-0.10 lb. ai (3.2 to 6.4 fl. oz. product) Apply in a minimum of 25 gallons/A by ground or in a minimum of 10 gallons/A by air. Substitute 1-2 quarts of emulsified oil for 1-2 quarts water if desired. For best control thorough coverage is necessary. Use the higher rate when insect pressure is moderate to severe.

HOPS

PESTS CONTROLLED	RATE BIFENTURE EC/ACRE	APPLICATION INSTRUCTIONS	PHI (days)
Aphids	0.06-0.1 lb. ai	Do not apply more than 0.1 lb. a.i. per acre per application.	14
Armyworms Cutworms	(3.8-6.4 fl. oz. product)	Do not apply more than 0.3 lb. a.i. per acre per season.	
Leafrollers	producty	Do not make applications less than 21 days apart.	
Loopers		By ground: Full coverage is necessary for best results. For early season,	
Root Weevils	0.05-0.1 lb. ai (3.2-6.4 fl. oz. product)	use 100-150 gallons of spray per acre. For late season, use 200-250 gallons of spray per acre.	

Twospotted spider mite	0.1 lb. ai (6.4 fl. oz.	Root Weevil: direct the spray to the base of the plant. Spray 3 feet up the vine and the soil surface 1.5 to 2 feet around the plant.
	product)	Twospotted spider mites, for late season control: Apply at least 6.4 fl. oz. (0.1 lb. a.i.) per application in a minimum of 10 gallons per acre by air.
		Do not apply by ultra low volume (ULV) application to hops.
·		

LETTUCE, HEAD

		LETTUCE, HEAD	
PESTS	RATE	APPLICATION INSTRUCTIONS	PHI
CONTROLLED	BIFENTURE		(days)
	EC/ACRE		
Aphids	0.033-0.10 lb. ai	Apply in water in a minimum of 15 gallons/A by ground equipment or in	7 .
Armyworms	(2.1-6.4 fl. oz.	5 gallons/A by air. For air application, substitute 1-2 quarts of emulsified	
Corn Earworm	product)	oil for 1-2 quarts water if desired.	
Cucumber Beetles		For best control thorough coverage is necessary.	
Cutworms			
Diamondback Moth		Do not make applications less than 7 days apart.	
Flea Beetles		·	
Imported		Do not apply more than 0.5 lb. a.i. per acre per season.	
Cabbageworm			
Leafhoppers			
Loopers		·	
Salt Marsh Caterpillar			
Stink Bug spp.			
Tobacco Budworm			,
Whitefly			
Carmine Mite	0.08-0.10 lb. ai		
Lygus, spp.	(5.12-6.4 fl. oz.	·	
Twospotted Spider	product)		
Mite			

PEARS

PESTS	RATE	APPLICATION INSTRUCTIONS	PHI
CONTROLLED	BIFENTURE	·	(days)
•	EC/ACRE		
Aphids	0.04-0.2 lb. ai	By ground: Apply as a dilute (minimum of 200 gallons of finished spray	14
Codling Moth	(2.6 to 12.8 fl.	per acre) or concentrate (minimum of 50 gallons of finished spray per	
Cutworms	oz. product)	acre) spray. For best control thorough coverage is necessary.	
Green	•	·	,
Fruitworm		By air: Apply in a minimum of 10 gallons per acre.	
Leafhoppers	•		
Leafminers		Do not apply more than 0.5 lb. active per acre per season with no more	
Leafrollers .		than 0.45 lb. active per acre applied after petal fall.	
Lýgus spp.			
Plant Bugs		Apply as necessary to maintain control and repeat applications at 30 day	
Plum Curculio		intervals	
San Jose		Do not graze livestock in treated orchards or cut treated cover crops for	
Scale (Crawlers)		feed.	
Stink Bugs			

Tarnished Plant Bugs			
Twospotted Spider	0.06-0.2 lb. ai	•	ĺ
Mite	(3.8 to 12.8 fl.		ĺ
Yellow Mite	oz. product)		ĺ
European Red Mite	0.08-0.2 lb. ai	_ ·	
•	(5.12 to 12.8 fl.		1
	oz. product)	·	l

PEPPERS, BELL AND NON-BELL

PESTS CONTROLLED	RATE BIFENTURE EC/ACRE	APPLICATION INSTRUCTIONS	PHI (days)
Armyworms Corn Earworm Cucumber Beetles Cutworms European Corn Borer Flea Beetles Leafminers Loopers Pepper Weevil Thrips Whitefly	0.033-0.1 lb. ai (2.1-6.4 fl. oz. product)	Apply in water in a minimum of 10 gallons/A by ground or a minimum of 2 gallons/A by air. Do not make applications less than 7 days apart. Apply as needed, but do not apply more than 0.20 lb. a.i. per acre per season.	7
Broad Mite Carmine Mite Lygus spp. Twospotted Spider Mite	0.08-0.1 lb. ai (5.12-6.4 fl. oz. product)		

SPINACH

PESTSS	RATE	APPLICATION INSTRUCTIONS	PHI
CONTROLLED	BIFENTURE		(days)
	EC/ACRE	· · ·	
Armyworms	0.033 to 0.10 lb. ai	Whiteflies: make up to 4 foliar treatments of Bifenture EC by	40
Colorado Potato Beetle		ground or air at rates of up to 0.4 pt. (0.1 lb. active) per acre	
Corn Earworm	(2.1-6.4 fl. oz.	Repeat applications at 7 day intervals.	
Cucumber Beetles	product)	Fire ants: make up to 4 applications of Bifenture EC to the soil at	·
Cutworms	'	planting or as a foliar treatment by ground or air at rates of up to	
European Corn Borer		0.4 pt. (0.1 lb. active) per acre.	ŀ
Flea Beetles		Repeat application at 7 day intervals.	
Leafminers		•	-
Loopers		Apply in water at 10-50 gallons/A by ground or 5-50 gallons /A	
Pepper Weevil		by air.	
Tomato Pinworm	,		
Tomato Hornworm		Do not make applications less than 7 days apart.	
Thrips	,		
Whitefly			
Broad Mite	0.08-0.10 lb. ai	Do not exceed 0.4 lb. a.i. per acre per season.	
Banks Grass Mite	(5.12 to 6.4 fl. oz.		}
Carmine Mite	product)		*
Fire Ants	•	·	
Lygus spp.			
Twospotted Spider Mite			
Pacific Spider Mite			

SUCCULENT PEAS AND BEANS

CROP	PESTS CONTROLLED		APPLICATION INSTRUCTIONS	PHI (days)
Pea (Pisum spp.) Dwarf pea Edible-pod pea English pea Garden pea	Flea Beetle Grasshoppers Aster Leafhopper Leafhoppers	0.025-0.10 lb. ai (1.6-6.4 fl. oz. product)	Apply in a minimum of 10 gallons/A by ground or in a minimum of 2 gallons/A by air. When applying by air, substitute 1-2 quarts of emulsified oil for 1-2 quarts water if desired. For best control thorough coverage is necessary.	3
Green pea Snow pea	Alfalfa Caterpillar	0.033-0.10 lb. ai (2.1-6.4 fl. oz.	Do not apply more than 0.2 lb. a.i. (12.8 fl. oz. product) per acre per season.	
Sugar snap pea Pigeon pea	Aphids	product)	,	
Bean (Phaseolus	Bean Leaf Beetle			
spp.):	Beet Armyworm			
Broadbean	Cloverworm			
(succulent)	Corn Earworm		·	
Lima bean	Corn Rootworm			
(green)	(Adult)			
Runner bean	Cucumber			
Snap bean	Beetles			
Wax bean	Cutworms			
Bean (Vigna spp.):	European Corn		·	
Asparagus bean Blackeyed pea	Borer		,	•
Chinese longbean	Fall Armyworm	,		
Cowpeas	Japanese Beetle			
Moth bean	(Adult)			
Southern pea	Loopers Pea Leaf Weevil			
Yardlong bean	Pea Weevil		·	
Jackbean	Plant Bug			
Soybean	Sap Beetle			4
(immature seed)	Southern			
Sword bean	Armyworm			
	Stink Bugs			
	Tamished Plant		,	
	Bug		,	
	Thrips			
	Webworms	•		•
	Western Bean			
	Cutworm			
	Yellowstriped			
	Armyworm Whitefly			
	Banks Grass	0.08-0.10 lb. ai		
	Mite	(5.12-6.4 fl. oz.		
	Carmine Mite	product)		
	Lygus spp.	F		
	Twospotted			
	Spider Mite			

TOMATOES

PESTS CONTROLLED	RATE BIFENTURE EC/ACRE	APPLICATION INSTRUCTIONS	PHI
Aphids	0.033-0.08 lb. ai	Ground: Apply in water as necessary for	(days)
Armyworms – Including:	(2.1-5.2 fl. oz.	insect control using a minimum of 15	. 1
Beat Armyworm, Fall	product)	_	
Armyworm, Southern	producty	gallons of finished spray per acre.	
		Air: Apply in water as necessary for insect	
Yellowstriped Armyworm	,	control using a minimum of 3 gallons of	
Bean Leaf Beetle		finished spray per acre.	
Cabbageworm			
Carmine Mite		For best control, thorough coverage is	
Cloverworm		necessary.	}
Corn Earworm		·	
Com Rootworm		Repeat applications at 10 day intervals.	
Cucumber Beetles	,	•	
Cutworms		Apply as needed but do not make more	
Diamondback Moth		than 4 applications per season.	
European Com Borer			
Flea Beetles			
Flea Hopper			
Grasshopper		,	
Japanese Beetle (Adult)		·	ı
Leafhoppers			
Loopers			-
Lygus spp.		•	·
Melonworm	,	·	
Pea Weevil		•	
Pea Leaf Weevil			
Pickleworm			•
Plant Bug		•	
Rindworm			•
Salt Marsh Caterpillar			
Sap Beetle			
Seedpod Weevil			
Squash Bugs		,	
Stink Bug spp.		•	
Tobacco Budworm			
Tarnished Plant Bug			
Thrips	,		
Two Spotted Spider Mite			
Whitefly		· • I	

OKRA

PESTS CONTROLLED	RATE BIFENTURE EC/ACRE	APPLICATION INSTRUCTIONS	PHI (days)
Aphids	0.033 - 0.10 lb.	For best control, thorough coverage is necessary. Apply as needed.	. 7
Armyworms	ai		·
Corn Earworm	(2.1 - 6.4 fl. oz.		
Cucumber Beetles	product)	Apply in water in a minimum of 10 gallons of spray/A by ground or in a	
Cutworms		minimum of 2 gallons/A by air.	
European Com		Do not make applications less than 7 days apart.	
Borer .		Do not apply more than 0.20 lb. a.i. /A per season.	
Flea Beetles		·	
Japanese Beetles			
(adult)			
Leafminers			
Loopers			
Stink Bugs			
Thrips	,		
Whitefly			1
Broad Mite	0.08 - 0.10 lb. ai	,	
Carmine Mite	(5.12 – 6.4 fl.		
Lygus spp.	oz. product)	·	
Two Spotted			
Spider Mite			

CILANTRO, CORIANDER

PESTS CONTROLLED	RATE BIFENTURE EC/ACRE	APPLICATION INSTRUCTIONS	PHI (days)
Aphids Beet Armyworm Cabbage Looper Cutworms Flea Beetles Grasshoppers Leafminers Saltmarsh Caterpillar Spotted Cucumber Beetle Thrips Whitefly	0.033 - 0.10 lb. ai (2.1 - 6.4 fl. oz. product)	For best control, thorough coverage is necessary. Apply as needed. Apply in water in a minimum of 10 gallons of spray/A by ground or in a minimum of 2 gallons/A by air. Do not make applications less than 7 days apart. Do not apply more than 0.50 lb. a.i. /A per season.	3
Two Spotted Spider Mite	0.08 – 0.10 lb. ai (5.12 – 6.4 fl. oz. product)		

LEAFY BRASSICAS Crop Group

CROP	PESTS CONTROLLED	RATE BIFENTURE EC/ACRE	APPLICATION INSTRUCTIONS	PHI (days)
Broccoli raab	Aphids	0.033-0.10 lb. ai	Apply in water in a minimum of 10 gallons/A by ground or	
Chinese cabbage	Armyworms	(2.1-6.4 fl. oz.	in a minimum of 2 gallons/A by air.	,
(bok choy)	Corn Earworm	product)	For best control thorough coverage of foliage is necessary.	
Collards	Crickets	, ,	When applied by air, 1 to 2 quarts of emulsified oil may be	
Kale	Cucumber Beetles		substituted for 1 to 2 quarts of water in the finished spray.	
Mizuna	Cutworms		,	
Mustard Greens	Diamondback		Do not make applications less than 7 days apart.	
Mustard Spinach	Moth		Do not apply more than 0.4 lb. a.i. /A per season.	
Rape Greens	Flea Beetles			
,	Grasshoppers			
	Ground Beetles	*	·	
	Imported			
	Cabbageworm			
	Japanese Beetles			
	(adults)		·	
	Leafhoppers		•	•
	Loopers			
	Saltmarsh			
	Caterpillar ·			
	Stink Bugs			
	Thrips			
	Tobacco Budworm		·	
	Whitefly			
	Wireworm (adults)	!		

Banks Grass Mite	0.08 - 0.10 lb. ai
Carmine Mite	(5.12 - 6.4 fl. oz.
Lygus spp.	product)
Pacific Spider Mite	
Twospotted Spider	
Mite	

TUBEROUS AND CORM VEGETABLES Crop Subgroup 1C

CROP	PESTS	RATE	APPLICATION INSTRUCTIONS	PHI
	CONTROLLED	BIFENTURE	,	(days)
		EC/ACRE		
Potato	Banded Cucumber	At-Plant	Bifenture EC may be applied as an in-furrow planting time	21
Sweet Potato	Beetle .	0.30 lb. ai	treatment for the control of wireworms, rootworms and	
Arracacha	Black Flea Beetle	(19.2 fl. oz.	white grubs. Apply at the rate of 0.3 lb a.i./A as an in-	•
Arrowroot	Corn Wireworm	product)	furrow spray or T-band spray at planting.	
Artichoke	Cucumber Beetle			
(Chinese and	Japanese Beetle		Bifenture EC may be applied as a lay-by treatment for the	
Jerusalem)	Grubs	Lay-By	control of wireworms, rootworms, and white grubs. Apply	
Edible Canna	June Beetle	0.05 - 0.15 lb. ai	to the drill area and cover with soil utilizing cultivation	
Cassava (bitter	Rootworms	(3.2 – 9.6 fl. oz.	equipment set to throw soil to the drill area. Apply as a	
and sweet)	Southern Potato	product)	banded spray over the row at a rate of 0.05 to 0.15 lb a.i./A	
Chayote (root)	Wireworm		(3.2 to 9.5 fluid ounces product) in 10 gallons of spray per	
Chufa	Sugarcane Beetle		acre.	_
Dasheen	Sweetpotato Flea	Foliar		
Ginger	Beetle	0.033 – 0.10 lb. ai	Bifenture EC may be applied as a foliar spray for the	
Leren	Sweetpotato	(2.1 – 6.4 fl. oz.	control of the adult life stages of flea beetles, click beetles	
Tanier	Weevil	product)	(wireworms), cucumber beetles (rootworms), white fringed	
Tumeric	Tobacco		beetles, and May/June beetles (white grubs). Apply at a	
Yam Bean	Wireworm		rate of 0.033 to 0.1 lb a.i./A (2.1 to 6.4 fluid ounces	
True Yam	Whitefringed		product) in 10 gallons of spray by ground or 3 gallons of	
	Beetle		spray by air.	
	White Grub			
			Do not make more than 2 foliar applications per season.	
			Do not make applications less than 21 days apart.	•
			Do not apply more than 0.5 lb. a.i. /A per season, including	
			soil application.	

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, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of United Phosphorus, Inc. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of United Phosphorus, Inc. and Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold United Phosphorus, Inc. and Seller harmless for any claims relating to such factors.

To the extent consistent with applicable law, United Phosphorus, 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 United Phosphorus, Inc., and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, UNITED PHOSPHORUS, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, United Phosphorus, 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 UNITED PHOSPHORUS, 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 UNITED PHOSPHORUS, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.

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Rev. 7/10/08

NEXT

LABEL



Supplemental Label

BIFENTURE® EC Agricultural Insecticide

(EPA Reg. No. 70506-57)

with COMMENTS In EPA Letter Dated OCT 9 2008

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No.

DIRECTIONS FOR USE

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

This supplemental label must be in the possession of the user at the time of application. The use of BIFENTURE EC INSECTICIDE according to this label is subject to the use precautions and limitations found on the EPA-registered label affixed to BIFENTURE EC INSECTICIDE container.

To allow application by air to tomatoes

·	DOSA	AGE	
PEST	LB A.I./A	FL .OZ./A	REMARKS AND RESTRICTIONS
Aphids; Armyworms	0.033 - 0.08	2.1 - 5.2	Ground: Apply in water as necessary for insect
Including: Beet Armyworm, Fall			control using a minimum of 15 gallons of finished
Armyworm, Southern Yellow-			spray per acre.
Striped Armyworm; Bean Leaf	•		Air: Apply in water as necessary for insect
Beetle; Cabbageworm; Carmine			control using a minimum of 3 gallons of finished
Mite; Cloverworm; Corn Earworm;			spray per acre.
Corn Rootworm; Cucumber			·
Beetles; Cutworms; Diamondback			Thorough coverage is essential to achieve
Moth; European Corn Borer; Flea			control.
Beetles; Grasshopper; Japanese	•		·
Beetle (adult); Leafhoppers;			Do not make applications less than 10 days
Loopers; Lygus spp.; Melonworm;			apart.
Pea Weevil; Pea Leaf Weevil;			
Pickleworm; Plant Bug; Rindworm;			A maximum of 0.32 lb a.i. may be applied per
Salt Marsh Caterpillar; Sap Beetle;			acre per season.
Seedpod Weevil; Squash Bugs;			
Stink Bug spp.; Tobacco Budworm;			Do not apply within 1 day of harvest.
Tarnished Plant Bug; Thrips; Two			
Spotted Spider Mite; Whitefly			

United Phosphorus, Inc. 630 Freedom Business Center King of Prussia, PA 19406 1-800-438-6071 • www.upi-usa.com

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