RESTRICTED USE PESTICIDE

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

BIFENTHRIN	**GROUP**	3A	**INSECTICIDE**
B. AMYLOLIQUEFACIENS	**GROUP**	BM 02	**FUNGICIDE**

ETHOS® XB

INSECTICIDE / FUNGICIDE

For mixing directly with liquid fertilizer to control listed soil pests.

EPA Reg. No. 279-3473 **EPA Est. 279-NY-1**

ACTIVE INGREDIENTS:	**By Wt.**
Bifenthrin *	15.67%
Bacillus amyloliquefaciens strain D747 **	5.00%
Other Ingredients	79.33%
Total:	100.00%

*Cis isomers 97% minimum, trans isomers 3% maximum
** Contains a minimum of 1x 10^{10} colony-forming units (cfu) per milliliter of product.
This product contains 1.5 lb bifenthrin per gallon.

LFR® Liquid Fertilizer Ready Technology

KEEP OUT OF REACH OF CHILDREN

CAUTION

This label must be in the possession of the user at the time of application.
See other panels for additional precautionary information.

FIRST AID

If Swallowed	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If in Eyes	• 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	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.

HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-331-3148 for emergency medical treatment information.

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.

Sold By

FMC

FMC Corporation
2929 Walnut Street
Philadelphia, PA 19104

Net Contents: 2.5 Gallons

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals

CAUTION
Harmful if swallowed. Causes moderate eye irritation. Harmful if absorbed through skin. 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. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE): Handlers who may be exposed to the concentrate through mixing, loading, application, or other tasks must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves or chemical-resistant gloves made of barrier laminate, butyl rubber (≥ 14 mils), nitrile rubber (≥ 14 mils), neoprene rubber (≥ 14 mils), natural rubber (≥ 14 mils), polyethylene, polyvinyl chloride (PVC) (≥ 14 mils), or viton (≥ 14 mils)
- Shoes plus socks

All mixers/loaders and applicators must wear a minimum of NIOSH-approved particulate filtering facepiece respirator with any R or P filter: OR a NIOSH-approved elastomeric particulate respirator with any R or P filter; OR a NIOSH-approved powered air purifying respirator with an HE filters .

Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

User Safety Recommendations:
Users should:
Remove PPE immediately after handling this product. Wash the outside of gloves before removing.

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove clothing/PPE 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 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 if bees are visiting the treatment area. **Protect pollinating insects by following label directions intended to minimize drift and to reduce the 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
Restricted Use Pesticide
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.

AGRICULTURAL USE REQUIREMENTS
Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Exception: If the product is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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, Waterproof gloves or chemical-resistant gloves such as barrier laminate, butyl rubber (≥ 14 mils), nitrile rubber (≥ 14 mils), neoprene rubber (≥ 14 mils), natural rubber (≥ 14 mils), polyethylene, polyvinyl chloride (PVC) (≥ 14 mils), or viton (≥ 14 mils), and Shoes plus socks.

Resistance Management

For resistance management, please note that ETHOS XB Insecticide/Fungicide contains both a Group 3A insecticide and Group BM 02 fungicide. Any insect population may contain individuals naturally resistant to ETHOS XB Insecticide/Fungicide and other Group 3A insecticides. Likewise, any fungal population may contain individuals naturally resistant to ETHOS XB Insecticide/Fungicide and other Group BM 02 fungicides. The resistant individuals may dominate the insect population if Group 3A insecticides are used repeatedly in the same fields. A gradual or total loss of pest control may occur over time if Group BM 02 fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide and fungicide resistance, take one or more of the following steps:

- Rotate the use of ETHOS XB Insecticide/Fungicide or other Group 3A insecticides and Group BM 02 fungicides within a growing season, or among growing seasons, with different groups that control the same insect pests or fungal pathogens.
- Use tank mixtures with insecticides and fungicides from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer. 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 pests.
    - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still 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 insecticidal activity may offer an insect resistance management benefit only for the period where both insecticides are active.

- Adopt an integrated pest and disease management program for insecticide and fungicide use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- 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.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.

To reduce the potential for pesticide resistance, use this product in a rotation program with other classes of chemistry and modes of action. Always apply this product at the labeled rates and in accordance with the use directions.

Chemigation Use Directions

Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, drip irrigation, 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.

For LEPA irrigation, use a minimum of 0.75 inch of water per acre. Where non-emulsified oils are used as the diluents, use 1 to 2 pints per acre.

Results from utilizing chemigation have been variable and depend upon the set up and calibration of equipment. 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 consultation on the suitability of the equipment set up to obtain effective control of the target insect pests.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. 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 distributions 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 Ethos XB Inseciticde/Fungicide continuously for the duration of the water application. Dilute Ethos XB Insecticide/Fungicide in sufficient volume to ensure accurate application over the area to be treated. When using chemigation, use a minimum of 0.5 inches per acre of irrigation water. Agitation generally is not required when a suitable diluent is used. Conduct a diluent test to ensure that phase separation will not occur during dilution and application. Failure to achieve a uniform dilution throughout the time of application may result in undesirable residues or less then desirable control.

Application and Mixing Instructions

Shake well before using.

Ethos XB Insecticide/Fungicide is an insecticide/fungicide that contains 1.5 pounds of bifenthrin per gallon along with Bacillus amyloliquefaciens strain D747 at a minimum of 1x 10^{10} colony-forming units (cfu) per milliliter. Bacillus amyloliquefaciens strain D747 is a beneficial bacterium used for control or suppression of fungal and bacterial plant diseases. Ethos XB Insecticide/Fungicide can be mixed directly with liquid fertilizer or with water. The rate of application is variable according to pest pressure, timing of treatments and field scouting. Use lower labeled rates under light to moderate pest infestations, and higher labeled rates under heavier pest pressure. In arid climates use higher labeled rates. Fill the tank one-half full with liquid fertilizer or water and begin spray tank agitation. Add the proper amount of Ethos XB Insecticide/Fungicide, and then add the rest of the fertilizer or water. Maintain agitation until the mixture has been applied.

Agitate the Ethos XB Insecticide/Fungicide spray solutions in nurse tanks prior to moving the solution to spray system.

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.

Ethos XB Insecticide/Fungicide can be applied in-furrow with the seed, as a T-band (band over the open furrow), as a broadcast application, as a band over the row or as a transplant-water drench during setting. Refer to the individual crop use directions for pest control or suppression instructions.

Ethos XB Insecticide/Fungicide can be mixed with commonly used liquid starter or pop-up fertilizers. Follow liquid fertilizer recommendations regarding seed safety and use guidelines. Conduct a preliminary jar test using the appropriate ratio of fertilizer and Ethos XB Insecticide/Fungicide. Do not allow a tank mixture to set overnight, but if this occurs agitate tank mixture prior to application.

Crop Rotation Restrictions

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

Tank-Mixtures

Ethos XB Insecticide/Fungicide may be applied in tank mixtures with other products approved for use on registered crops. Observe all restrictions and precautions which appear on the labels of these products. To ensure successful applications, conduct product compatibility tests.

Maximum Allowable Ethos Insecticide/ Fungicide Use Per Acre Per Season

Refer to the individual crop sections for maximum allowable Ethos XB Insecticide/Fungicide usage per acre per year. 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.

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 bifenthrin onto fields where a maintained vegetative filter strip of **at least 25** feet exists between the field 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-OPP-2008-0331-0175

BUFFER ZONES TO WATER BODIES

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).

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 wind speed is 10 mph or less, applicators must use ½ swath displacement upwind at the downwind edge of the field. When the windspeed is between 11-15 mph, applicators must use ¾ 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 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) indicate 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.

Pollinator Best Management Practices

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-best-management -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

CORN

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

At-Plant

PEST/ DISEASE	USE RATES			DIRECTIONS
	Fluid oz /acre*	Fluid oz/1000 Linear ft.	Pound bifenthrin /acre	
Corn rootworm larvae (Northern, Southern and Western)	8.5 – 17.0	0.49 - 0.98	0.1- 0.2	Apply as a 5 to 7 inch band (T-band) over an open furrow, or in-furrow with the seed. For Army cutworm, Stalkborer, Cutworm species, True armyworm or Armyworm species, apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch band over the open furrow (T-band), in-furrow with the seed, or broadcast to the soil surface. Heavy Corn Rootworm Pressure Management Program: In areas where large corn rootworm populations are present, a multi-approach system may be needed for optimal pest management. However, if the population level is not known and if a corn rootworm adult scouting program along with threshold adult control measures were not completed during the previous growing season, then utilize a maximum dosage seed treatment program or genetically modified corn rootworm resistant hybrid in addition to Ethos XB Insecticide/Fungicide.
Wireworm Grape colaspis Grubs Seedcorn maggot Root aphids Army cutworm Cutworm species True armyworm Armyworm species Stalkborer Seedcorn beetle Sugarcane beetle	3.4 – 17.0	0.2 - 0.98	0.04 - 0.2	
**Suppression of "Damping off," seedling blights , and root or crown diseases caused by *Pythium, Rhizoctonia, Fusarium,* or *Phytophthora*				

*Based on 30" row spacing

**Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Insecticide/Fungicide with other fungicides for improved performance.

At-plant Restrictions:

- Do not apply more than 0.2 pound bifenthrin active per acre per year as an at-plant application.

Ethos XB Insecticide/Fungicide Required Per Acre for Various Row Spacings					
Row Spacing	**36"**	**30"**	**20"**	**15"**	**Twin Row 30" centers**
Linear row ft/acre	14,520 ft	17,424 ft	26,136 ft	34,848 ft	34,848 ft
Conversion					
0.19 Fluid oz/1000 Linear ft =	2.8 fl oz/acre	3.3 fl oz/acre	5.0 fl oz/acre	6.6 fl oz/acre	6.6 fl oz/acre
0.23 Fluid oz/1000 Linear ft =	3.4 fl oz/acre	4.0 fl oz/acre	6.0 fl oz/acre	8.0 fl oz/acre	8.0 fl oz/acre
0.31 Fluid oz/1000 Linear ft =	4.5 fl oz/acre	5.4 fl oz/acre	8.1 fl oz/acre	10.8 fl oz/acre	10.8 fl oz/acre
0.46 Fluid oz/1000 Linear ft =	6.7 fl oz/acre	8.0 fl oz/acre	12.0 fl oz/acre	16.0 fl oz/acre	16.0 fl oz/acre
0.55 Fluid oz/1000 Linear ft =	8.0 fl oz/acre	9.6 fl oz/acre	14.4 fl oz/acre		
0.67 Fluid oz/1000 Linear ft =	9.7 fl oz/acre	11.7 fl oz/acre			
0.80 Fluid oz/1000 Linear ft =	11.6 fl oz/acre	13.9 fl oz/acre			
0.92 Fluid oz/1000 Linear ft =	13.4 fl oz/acre	16.0 fl oz/acre			
0.98 Fluid oz/1000 Linear ft =	14.3 fl oz/acre	17.0 fl oz/acre			

Rates less than the equivalent of 8.0 fl oz/A at 30" row spacing may not provide adequate control of corn rootworm.

PPI & PRE

PEST/ DISEASE	USE RATES		DIRECTIONS
	Fluid oz/acre	Pound bifenthrin/acre	
Black cutworm Grape colaspis White grub Wireworm Seedcorn maggot Armyworm species Seedcorn beetle	PPI 4 to 5.3	PPI 0.047 to 0.062	For PPI treatments, the 4 to 5.3 fluid oz/A rate must be used. Ethos XB Insecticide/ Fungicide can be tank mixed and applied with PPI herbicides. Do not incorporate Ethos XB Insecticide/Fungicide any deeper than the intended planting depth and no deeper than 3 inches. Incorporate to a depth close to the intended seed planting depth.
Black cutworm Armyworm species Stalkborer Seedcorn beetle	PRE 3.4	PRE 0.04	For PRE treatments, the 3.4 fluid oz/A rate may be applied and can be tank mixed and applied with PRE herbicides.
*Suppression of "Damping off," seedling blights, and root or crown diseases caused by *Pythium, Rhizoctonia, Fusarium, or Phytophthora*	3.4 to 5.3 (PPI and PRE)	0.04 to 0.062 (PPI and PRE)	
*Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Insecticide/Fungicide with other fungicides for improved performance.			

Foliar

PEST/ DISEASE	USE RATES		DIRECTIONS
	Fluid oz/acre	Pound bifenthrin/acre	
Aphids Army cutworm Beet armyworm Cereal leaf beetle Chinch bug Common stalk borer Corn earworm[1] Corn rootworm adults Cucumber beetle adults Cutworm species European corn borer[2] Fall armyworm Flea beetle Grasshoppers Greenbug Japanese beetle adults Sap beetle Southern armyworm Soutrhern corn leaf beetle Southwestern corn borer[2] Stinkbugs Tarnished plant bug True Armyworm or Armyworm species Webworms Western bean cutworm Yellowstriped armyworm	2.8 - 8.5	0.033 - 0.1	Apply in a minimum of 2-5 gallons of finished spray per acre by aircraft or in a minimum of 10 gallons of finished spray per acre with ground equipment. To improve control by aircraft, use 5 gallons of finished spray per acre particularly when initial populations are heavier than normal. When applying by air, 1 to 2 quarts of emulsified oil may be substituted for 1 to 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control. [1]**To Control Ear Attacking Pests:** Apply Ethos XB Insecticide/Fungicide just before silking and repeat as necessary to maintain control. [2]**Southwestern corn borer, European Corn Borer:** Make application for corn borer control with initial application at or shortly before egg hatch. **For Control of Other Insect Pests:** Apply when pests first appear and repeat as necessary. [3]**For Control of Mites:** Apply for Banks Grass Mite control when colonies first form prior to leaf damage or discoloration and before dispersal above the bottom third of the plant. **For Twospotted spider mite and Carmine mite Control,** apply when colonies first form prior to leaf damage or discoloration and before widespread mite dispersal throughout the canopy. Higher labeled rates will be necessary for heavier initial populations and corn under heat or drought stress. Field experience with dimethoate at 0.5 lb. active per acre in tank mixture has demonstrated good control under these conditions. **For Mite Control in Texas, New Mexico, Oklahoma, and Arizona:** Apply in a minimum of 5 gallons of finished spray per acre by aircraft or in a minimum of 10 gallons of finished spray per acre with ground equipment.
Banks grass mite[3] Carmine mite[3] Twospotted spider mite[3]	6.8 - 8.5	0.08 - 0.1	
*Suppression of Common Rust, Sothern Leaf Blight	2.8 - 8.5	0.033 - 0.1	
*Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Insecticide/Fungicide with other fungicides for improved performance.			

Foliar Restrictions

- For field corn
  - Do not make more than 3 foliar applications per year.
  - Do not apply within 30 days of harvest for field corn (grain and silage), popcorn, field corn grown for seed.
  - Do not graze livestock in treated areas or cut treated crops for feed within 30 days of the last application for field corn (grain and silage), popcorn, field corn grown for seed.
- For sweet corn
  - Do not make more than 2 foliar applications per year.
  - Do not apply within 1 day of harvest for sweet corn or sweet corn grown for seed.
  - Do not graze livestock in treated areas or cut treated crops for feed within 1 day of the last application for sweet corn or sweet corn grown for seed
- Use of ultra low volume (ULV) application on corn is prohibited.
- Do not make aerial or ground applications to corn if heavy rainfall is imminent.

Corn Restrictions:

For field corn: Do not apply more than 0.3 pound bifenthrin active ingredient per acre total per year including at-plant, PPI, PRE, and foliar applications of Ethos XB Insecticide/Fungicide and other bifenthrin containing products.

For sweet corn: Do not apply more than 0.2 pound bifenthrin active ingredient per acre total per year including at-plant, PPI, PRE, and foliar applications of Ethos XB Insecticide/Fungicide and other bifenthrin containing products.

DRIED BEANS AND PEAS

Dried cultivars of: Bean (*Lupinus*); Bean (*Phaseolus*), Field bean, Kidney bean, Lima bean (dry), Navy bean, Pinto bean, Tepary bean; Bean (*Vigna*), Adzuki bean, Blackeyed pea, Catjang, Cowpea, Crowder pea, Moth bean, Mung bean, Rice bean, Southern pea, Urd bean; Broad bean (dry), Chickpea, Guar, Lablab bean, Lentil; Pea (*Pisum*), Field pea, Pigeon pea.

At-Plant

PEST/ DISEASE	USE RATES			DIRECTIONS
	Fluid oz /acre	Fluid oz/1000 Linear ft.	Pound bifenthrin /acre	
Grape colaspis Wireworm Grubs Root maggot Army cutworm Cutworm species True Armyworm Armyworm species	3.4 - 8.5	0.2 - 0.49	0.04 - 0.1	Apply as a 5 to 7 inch band over the row on the soil surface, 5 to 7 inch band (T-band) over an open furrow, or in-furrow with the seed. Apply broadcast to the soil surface for control of Army Cutworm, Cutworm species, True Armyworm, or Armyworm species
*Suppression of "Damping off," seedling blights, and root or crown diseases caused by *Pythium, Rhizoctonia, Fusarium,* or *Phytophthora*				

*Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Inesecticide/Fungicide with other fungicides for improved performance.

At-plant Restrictions:

- Do not apply more than 0.1 pound bifenthrin active ingredient per acre per year as an at-plant application

PPI & PRE

PEST/ DISEASE	USE RATES		DIRECTIONS
	Fluid oz/acre	Pound bifenthrin/acre	
Army cutworm Armyworm species Cutworm species Grape colaspis Grubs Root maggot True armyworm Wireworm (PPI only)	PRE 6.8 - 8.5	PRE 0.08 - 0.1	Ethos XB Insecticide/Fungicide can be tank mixed and applied with PRE herbicides. Apply in a minimum of 10 gallons of finished spray per acre.
	PPI 6.8 - 8.5	PPI 0.08 - 0.1	Ethos XB Insecticide/Fungicide can be tank mixed and applied with PPI herbicides. Do not incorporate Ethos XB Insecticide/Fungicide any deeper than the intended planting depth and no deeper than 3 inches. Incorporate to a depth close to the intended seed planting depth. Apply in a minimum of 10 gallons of finished spray per acre.
*Suppression of "Damping off," seedling blights, and root or crown diseases caused by *Pythium, Rhizoctonia, Fusarium,* or *Phytophthora*	PPI & PRE 6.8 - 8.5	PPI & PRE 0.08 - 0.1	

*Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Insecticide/Fungicide with other fungicides for improved performance.

Foliar

PEST/ DISEASE	USE RATES		DIRECTIONS
	Fluid oz/acre	Pound bifenthrin/acre	
Aster leafhopper Flea beetle Grasshoppers Leafhoppers	2.1 - 8.5	0.025 - 0.1	Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons of finished spray per acre with ground equipment. Thorough coverage is essential to achieve control. When applying by air, 1 to 2 quarts of emulsified oil may be substituted for 1 to 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.
Alfalfa caterpillar Aphids Bean leaf beetle Beat armyworm Cloverworm Corn earworm Corn rootworm (adult) Cucumber beetles Cutworms European corn borer Fall armyworm Grasshoppers Imported cabbageworm Japanese beetle (adult) Leafminer Loopers Mexican bean beetle Pea leaf weevil Pea weevil Plant bug Saltmarsh caterpillar Sap beetle Southern armyworm Stink bugs Tarnished plant bug Thrips Twospotted spider mite Tobacco budworm Webworms Western bean cutworm Whitefly Yellowstriped armyworm	2.8 - 8.5	0.033 - 0.1	
Banks grass mite Carmine mite *Lygus* species	6.8 - 8.5	0.08 - 0.1	
*Suppression of white mold, gray mold, powdery mildew, rusts including *Uromyces appendiculatus*, *Puccinia* spp. , and Asian soybean rust	2.1- 8.5	0.025 - 0.1	
*Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Insecticide/Fungicide with other fungicides for improved performance.			
Foliar Restrictions • Do not make more than 2 foliar applications per year. • Do not apply within 14 days of harvest • Do not make applications less than 7 days apart			

Dried Beans and Peas Restrictions:
Do not apply more than 0.2 pound bifenthrin active ingredient per acre per year to peas and 0.3 pound bifenthrin active ingredient per acre per year to beans including at-plant, PPI, PRE and foliar applications of Ethos XB Insecticide/Fungicide and other bifenthrin containing products.

SOYBEANS**

At-Plant

PEST/ DISEASE	USE RATES			DIRECTIONS
	Fluid oz /acre	Fluid oz/1000 Linear ft.	Pound bifenthrin /acre	
Rootworm larvae	6.8 - 8.5	0.39 - 0.49	0.08 - 0.1	Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch band over the open furrow (T-band), or in-furrow with the seed. Apply broadcast over the soil surface for control of Army cutworm, Cutworm species, True armyworm, or Armyworm species.
Wireworm Grape colaspis Grubs Root maggot Seedcorn maggot Army cutworm Cutworm species True armyworm Armyworm species Seedcorn beetle	3.4 – 8.5	0.2 - 0.49	0.04 - 0.1	
*Suppression of "Damping off," seedling blights , and root or crown diseases caused by *Pythium, Rhizoctonia, Fusarium,* or *Phytophthora*				
*Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Insecticide/Fungicide with other fungicides for improved performance.				
At-plant Restrictions: • Do not apply more than 0.1 pound bifenthrin active ingredient per acre per year as an at-plant application.				

PPI & PRE

PEST/ DISEASE	USE RATES		DIRECTIONS
	Fluid oz/acre	Pound bifenthrin/acre	
Black cutworm White grub Wireworm Seedcorn maggot Armyworm species Seedcorn beetle	PPI 4 - 5.3	PPI 0.047 - 0.062	For PPI treatments, the 4 - 5.3 fluid oz/A rate must be used. Ethos XB Insecticide/Fungicide can be tank mixed and applied with PPI herbicides. Do not incorporate Ethos XB Insecticide/Fungicide any deeper than the intended planting depth and no deeper than 3 inches. Incorporate to a depth close to the intended seed planting depth.
Black cutworm Armyworm species Stalkborer Seedcorn beetle	PRE 3.4	PRE 0.04	For PRE treatments, the 3.4 fluid oz/A rate may be applied and can be tank mixed and applied with PRE herbicides.
*Suppression of "Damping off," seedling blights , and root or crown diseases caused by *Pythium, Rhizoctonia, Fusarium, or Phytophthora*	3.4 - 5.3 (PPI and PRE)	0.04 -0.062 (PPI and PRE)	
*Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Insecticide/Fungicide with other fungicides for improved performance.			
PPI/PRE Restrictions • Do not apply more than 0.1 pound bifenthrin active ingredient per acre per year as PPI or PRE application.			

Foliar

PEST/ DISEASE	USE RATES		DIRECTIONS
	Fluid oz/acre	Pound bifenthrin/acre	
Alfalfa caterpillar Aphids Armyworms Bean leaf beetle Blister beetle species Corn earworm Corn rootworm adult Cowpea curculio Cucumber beetle adult Cutworms Dectes stem borer European corn borer False cinch bug Flea beetle Grasshoppers Green cloverworm Hornworms Imported cabbageworm Japanese beetle adult Leaf skeletonizer species Leafhoppers Leafminers adults Lesser cornstalk borer Loopers Kudzu bug Mexican bean beetle Painted lady (Thistle) caterpillar Pea leaf weevil Saltmarsh caterpillar Seedcorn maggot adult Silverspotted skipper Spittlebug Stink bug Three Cornered Alfalfa hooper Thrips Tobacco budworm Velvetbean caterpillar Webworm Woollybear caterpillar	2.8 - 8.5	0.033 - 0.1	Apply in a minimum of 10 gallons of finished spray per acre with ground equipment or 2 gallons of finished spray per acre by aircraft. Pyrethroid resistance is common for Beet armyworm and Tobacco budworm. Please consult your local or state agricultural authority to determine if resistant pest populations are in your area. If so, refer to the resistance management statement in the DIRECTIONS FOR USE section of this label.
Lygus species Whitefly Twospotted spider - mite	6.8 - 8.5	0.08 - 0.1	
*Suppression of white mold, gray mold, powdery mildew, rusts including *Uromyces appendiculatus*, *Puccinia* spp., and Asian soybean rust	2.8 - 8.5	0.003 - 0.1	
*Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Insecticide/Fungicide with other fungicides for improved performance.			
Foliar Restrictions • Do not make more than 2 foliar applications per year. • Do not make applications less than 30 days apart. • Do not apply within 18 days of harvest.			

Soybeans Restrictions:

• Do not apply more than 0.2 pound bifenthrin active ingredient per acre per year including at-plant, PPI, PRE and foliar applications of Ethos XB Insecticide/Fungicide and other bifenthrin containing products.

** **Not for use on Soybeans in California**

SUCCULENT PEAS AND BEANS

Pea (*Pisum* species): Dwarf pea, Edible-pod pea, English pea, Garden pea, Green pea, Snow pea, Sugar snap pea, Pigeon pea; Bean (*Phaseolus* species): Broadbean (succulent), Lima bean (green), Runner bean, Snap bean, Wax bean; Bean, (*Vigna* species): Asparagus bean, Blackeyed pea, Chinese longbean, Cowpea, Moth bean, Southern pea, Yardlong bean, Jackbean, Soybean (immature seed), Sword bean

At-Plant

PEST/ DISEASE	USE RATES			DIRECTIONS
	Fluid oz /acre	Fluid oz/1000 Linear ft.	Pound bifenthrin /acre	
Wireworm Grape colaspis Grubs Root maggot Seedcorn maggot Army cutworm Cutworm species True armyworm Armyworm species	3.4 - 8.5	0.2 - 0.49	0.04 - 0.1	Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch band over the open furrow (T-band), or in-furrow with the seed. Apply broadcast over the soil surface for control of Army cutworm, Cutworm species, True armyworm, or Armyworm species.
*Suppression of "Damping off," seedling blights , and root or crown diseases caused by *Pythium, Rhizoctonia, Fusarium,* or *Phytophthora*				
*Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Insecticide/Fungicide with other fungicides for improved performance.				

At-plant Restrictions:

- Do not apply more than 0.1 pound bifenthrin active ingredient per acre per year as an at-plant application.

PPI & PRE

PEST/ DISEASE	USE RATES		DIRECTIONS
	Fluid oz/acre	Pound bifenthrin/acre	
Army cutworm Armyworm species Cutworm species Grape colaspis Grubs Root maggot True armyworm Wireworm (PPI only)	PRE 6.8 - 8.5	PRE 0.08 - 0.1	Ethos XB Insecticide/Fungicide can be tank mixed and applied with PRE herbicides. Post Plant Soil Applied: Apply through drip or Drip Tape. Apply when soil is moist towards the end of the irrigation run.
	PPI 6.8 - 8.5	PPI 0.08 - 0.1	Ethos XB Insecticide/Fungicide can be tank mixed and applied with PPI herbicides. Do not incorporate Ethos XB Insecticide/Fungicide any deeper than the intended planting depth and no deeper than 3 inches. Incorporate to a depth close to the intended seed planting depth. Apply in a minimum of 10 gallons of finished spray per acre. Post Plant Soil Applied: Apply through drip or Drip tape. Apply when soil is moist towards the end of the irrigation run.
*Suppression of "Damping off," seedling blights , and root or crown diseases caused by *Pythium, Rhizoctonia, Fusarium,* or *Phytophthora*	PPI & PRE 6.8 - 8.5	PPI & PRE 0.08 - 0.1	
*Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Insecticide/Fungicide with other fungicides for improved performance.			

Foliar

PEST/ DISEASE	USE RATES		DIRECTIONS
	Fluid oz/acre	Pound bifenthrin/acre	
Aster Flea beetle Leafhopper	2.1 - 8.5	0.025 - 0.1	Apply in a minimum of 2 gallons finished spray per acre by air or in a minimum of 10 gallons of finished spray per acre with ground equipment. When applying by air, 1 to 2 quarts of emulsified oil may be substituted for 1 to 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control. Make application at the onset of infestation reaching locally determined economic threshold.
Adult sap beetle Alfalfa caterpillar Aphids Armyworm, beet Armyworm, fall Armyworm, southern Armyworm, yellowstriped Bean leaf beetle Cloverworm Corn earworm Corn rootworm (adult) Cucumber beetle Cutworms European corn borer Grasshoppers Japanese beetle Loopers Pea leaf weevil Pea weevil Plant bug Stink bugs Tarnished plant bug Thrips Webworms Western bean cutworm Whitefly	2.8 - 8.5	0.033 - 0.1	
Banks grass mite Carmine mite *Lygus* species Twospotted spider mite	6.8 - 8.5	0.08 - 0.1	
*Suppression of white mold, gray mold, powdery mildew, rusts including *Uromyces appendiculatus*, *Puccinia* spp. , and Asian soybean rust	2.1- 8.5	0.025 - 0.1	

*Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Insecticide/Fungicide with other fungicides for improved performance.

Foliar Restrictions

- Do not make more than 2 foliar applications per year.
- Do not apply within 3 days of harvest
- Do not make applications less than 3 days apart

Succulent Peas and Beans Restrictions:
Do not apply more than 0.2 pound bifenthrin active ingredient per acre per year including at-plant, PPI, PRE and foliar applications of Ethos XB Insecticide/Fungicide and other bifenthrin containing products.

SUNFLOWER (Crop Subgroup 20B)

Calendula, Castor Oil Plant, Chinese Tallowtree, Euphorbia, Evening Primrose, Jojoba, Niger Seed, Rose Hip, Safflower, Stokes Aster, Tallowwood, Tea Oil Plant, Vernonia, cultivars, varieties, and/or hybrids of these

At-Plant

PEST/DISEASE	USE RATES			DIRECTIONS
	Fluid oz/acre*	Fluid oz/1000 Linear ft.[1]	Pound bifenthrin/acre	
Wireworm Grape colaspis White grub spp. Seedcorn maggot Root aphids Army cutworm Cutworm spp.	3.4 - 17.0	0.02 - 0/98	0.04 - 0.2	Apply as a 5 to 7-inch band (T-band) over an open furrow, or in-furrow with the seed. For Army cutworm or Cutworm species, apply as a 5 to 7-inch band over the row on the soil surface, a 5 to 7-inch band over the open furrow (T-band), in-furrow with the seed, or broadcast to the soil surface.
¨Suppression of "Damping off," seedling blights, and root or crown diseases caused by Pythium, Rhizoctonia, Fusarium, or Phytophthora				

*Based on 30" row spacing
**Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Insecticide/Fungicide with other fungicides for improved performance.

At-Plant Restrictions

- Do not apply more than 0.2 pound bifenthrin active per acre per year.
- Do not make more than 1 application per year.

POTATO

At-Plant

PEST/ DISEASE	USE RATES		DIRECTIONS
	Fluid oz/acre	Pound bifenthrin/acre	
Wireworms Grape colaspis White grub Sweet potato flea beetle Rootworms	12.75 - 25.5	0.15 - 0.3	Ethos XB Insecticide/Fungicide may be applied as a soil incorporated broadcast, directed bed spray or a T-band spray into the planting furrow for the control of Wireworms, Rootworms, Sweet potato flea beetle and White grubs. Apply Ethos XB Insecticide/Fungicide at the rate of 0.15 to 0.3 pounds bifenthrin active ingredient (12.75 to 25.5 fluid ounces formulated) per acre in a minimum of 10 gallons of finished spray per acre.
*Suppression of "Damping off," seedling blights , and root or crown diseases caused by *Pythium, Rhizoctonia, Fusarium,* or *Phytophthora*			
*Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Insecticide/Fungicide with other fungicides for improved performance.			
At-plant Restrictions: • Do not apply more than 0.3 pound bifenthrin active ingredient per acre per year as an at-plant application.			

LAY-BY

PEST/ DISEASE	USE RATES		DIRECTIONS
	Fluid oz/acre	Pound bifenthrin/acre	
Wireworms Grape colaspis White grub Rootworms	12.75 - 25.5	0.15 - 0.3	Ethos XB Insecticide/Fungicide may be applied as one or more soil directed and incorporated treatments at cultivation or lay-by for the control of wireworms, rootworms and white grubs. Apply Ethos XB Insecticide/Fungicide to the drill area and incorporate by cultivation equipment set to throw soil towards the drill area. Apply Ethos XB Insecticide/Fungicide at a rate of 0.15 to 0.3 pound bifenthrin active ingredient (12.75 to 25.5 fluid ounces formulated) per acre in a minimum of 10 gallons of finished spray per acre.
*Suppression of "Damping off," seedling blights , and root or crown diseases caused by *Pythium, Rhizoctonia, Fusarium,* or *Phytophthora*			
*Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Insecticide/Fungicide with other fungicides for improved performance			

PPI

PEST/ DISEASE	USE RATES		DIRECTIONS
	Fluid oz/acre	Pound bifenthrin/acre	
Grape colaspis Rootworms Wireworms White grub	12.75 - 25.5	0.15 - 0.3	Apply Ethos XB Insecticide/Fungicide to the transplant area and incorporate to planting depth. Apply Ethos XB Insecticide/Fungicide in a minimum of 10 gallons of finished spray per acre. May be applied as a broadcast application or an incorporated band application
*Suppression of "Damping off," seedling blights , and root or crown diseases caused by *Pythium, Rhizoctonia, Fusarium,* or *Phytophthora*			
*Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Insecticide/Fungicide with other fungicides for improved performance.			

Foliar

PEST/ DISEASE	USE RATES		DIRECTIONS
	Fluid oz/acre	Pound bifenthrin/acre	
Banded cucmber beetle Black flea beetle Corn wireworm Cucumber beetle Japanese beetle grubs June beetle Rootworms Southern potato wireworm Sugarcane beetle Sweetpotato flea beetle Sweetpotato weevil Tobacco wireworm Whitefringed beetle White grub	2.8 - 8.5	0.033 - 0.1	Apply in a minimum of 3 gallons of finished spray per acre by air or in a minimum of 10 gallons of finished spray per acre with ground equipment. Ethos XB Insecticide/Fungicide may be applied as a foliar spray for the control of the adult life stages of Flea beetles, Click beetles (Wireworms), Cucumber beetles (Rootworms), White fringed beetles and May/June beetles (white grubs).
*Suppression of black root/crown rot, bacterial leaf blight,downy mildew, powdery mildew, gray mold, white mold, black leg/bacterial soft rot, early blight, late blight			
*Under moderate to severe disease pressure, or when environmental conditions and plant stage are conducive to rapid disease development, mix Ethos XB Insecticide/Fungicide with other fungicides for improved performance.			
Foliar Restrictions • Do not make more than 2 foliar applications per year. • Do not make applications less than 21 days apart. • Do not apply within 21 days of harvest.			

Potato Restrictions:
Do not apply more than 0.5 pound bifenthrin active ingredient per acre per year including at-plant, lay-by, PPI and foliar applications of Ethos XB Insecticide/Fungicide and other bifenthrin containing products.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and 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. Store at less than 95°F. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. 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, dike surrounding area or absorb with sand, cat litter or commercial clay. 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

U-Turn® Container: Do not rinse container. Do not empty remaining formulated product. Do not break seals. Return intact to point of purchase.

Metal or Plastic Container: 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 ¼ 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. Do not cut or weld metal containers.

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 ¼ 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. 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. Do not cut or weld metal containers. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or 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 (if other than U-Turn 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 into application equipment or mix tank. Fill the container about 10% 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.

Conditions of Sale and Limitation of Warranty and Liability:

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions beyond the control of FMC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold FMC and Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the Directions for Use when used in accordance with the directions under normal conditions of use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FMC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE SELECTION, PURCHASE, OR USE OF THIS PRODUCT. Any warranties, express or implied, having been made are inapplicable if this product has been used contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to (or beyond the control of) Seller or FMC, and Buyer assumes the risk of any such use.

To the extent consistent with applicable law, FMC or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF FMC 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 FMC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

This Conditions of Sale and Limitation of Warranty and Liability may not be amended by any oral or written agreement.

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Escanee el código de instrucciones de salud y seguridad en español