UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

July 27, 2023

Tim Formella
Senior Product Registration Manager
Regulatory Affairs
FMC Corporation
2929 Walnut Street
Philadelphia, PA 19104

Subject: Label Amendment – Clarify Crop Subgroup 1C list, update Note to Physician, add Resistance Management language, incorporating Bifenthrin and Abamectin Interim Registration Review Decision changes, and other minor changes
Product Name: Athena Insecticide
EPA Registration Number: 279-3356
Application Date: 5/31/2018, 9/19/2019, 2/16/2021
Decision Number: 542449, 555471, 570867

Dear Mr. Formella:

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

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Bifenthrin and Abamectin Interim Registration Review Decisions, and has concluded that your submission is acceptable.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. “To distribute or sell” is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If

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

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

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

Sincerely,

Paul Di Salvo, MPS, CWB®
Senior Regulatory Specialist
Registration Division (7505M)
Office of Pesticide Programs

Enclosure: Stamped Label

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 certificate.

BIFENTHRIN	**GROUP**	**3A**	**INSECTICIDE**
ABAMECTIN	**GROUP**	**6**	**INSECTICIDE**

ATHENA Insecticide

[ABN: ATHENA Insecticide/Miticide]

EPA Reg. No. 279-3356 **EPA Est. No.**

Ingredients

Active Ingredients:

Bifenthrin *	8.84%
Abamectin**	1.33%
Other Ingredients	89.83%
	100.00%

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

**CAS No. 65195-56-4 and No. 65195-55-3

This product contains 0.76 lb of the active ingredient bifenthrin and 0.11 lb of the active ingredient abamectin per gallon.

Contains petroleum distillate.

KEEP OUT OF REACH OF CHILDREN

CAUTION

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.)

See other panels for additional precautionary information.

FIRST AID	
If Swallowed:	• Call a poison control center or doctor immediately for treatment advice. • Do not give **any** liquid to the person. • Do not induce vomiting unless told to do so by 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.
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 contains a pyrethroid, avermectins, and petroleum distillate. Vomiting may cause aspiration pneumonia. Treatment is symptomatic. If toxicity from exposure has progressed to severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Since avermectins are believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, and volproic acid).	

Sold By

FMC Corporation
2929 Walnut Street,
Philadelphia, PA 19104

ACCEPTED
07/27/2023
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 279-3356

Net Contents:

D-4556 072523

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

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

Personal Protective Equipment:

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, or viton ≥ 14 mils
- Shoes plus socks

Mixers and Loaders supporting aerial applications to cotton must wear at a minimum:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves
- Shoes plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, 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/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove clothing/PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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

IMPORTANT: When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for “applicators and other handlers” and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

Environmental Hazards
This pesticide is extremely toxic to fish, aquatic invertebrates, oysters and shrimp, and terrestrial wildlife. 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 apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

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

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 risk to these organisms.**

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a medium potential for reaching both surface water and aquatic sediment via runoff for several weeks to months after application. A level, well maintained vegetative buffer between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of abamectin from runoff and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours.

Use of this product may pose a risk to threatened and endangered species of fish, amphibians, crustaceans (including fresh water shrimp), and insects. All use of this product in the state of California should comply with the recommendations of the California Endangered Species Project. Before using this product in California, consult with your county agriculture commissioner to determine use limitations that apply in your area.

Directions For Use
RESTRICTED USE PESTICIDE

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

Athena Insecticide is an emulsifiable concentrate in water formulation with two modes of action. Athena Insecticide will control or suppress insect and mite pests on the crops listed within this label when applied according to the **Directions of Use** unless otherwise directed by registered supplemental labeling. Thorough coverage is essential for good insect and mite control.

Rate of application is variable according to pest. Use lower labeled rates under light to moderate

infestations; higher labeled rates under heavy insect pressure. Arid climates generally require higher labeled rates.

Chemigation

Do not apply through any type of irrigation system.

Adjuvants

The use of a spray adjuvant that meets or exceeds CPDA Adjuvant Certification is recommended for optimum performance. Refer to the individual crop recommendation sections of this label for specific adjuvant type and use rates. Do not use binder or sticker type adjuvants.

Maximum Allowable Use Per Year

Refer to the individual crop sections for maximum allowable Athena Insecticide usage per acre per year. Do not tank mix Athena Insecticide with any **other** product containing either abamectin or bifenthrin as active ingredients.

Resistance Management

For resistance management, please note that ATHENA Insecticide contains both a Group 3A and a Group 6 insecticide. Any insect population may contain individuals naturally resistant to ATHENA Insecticide and other Group 3A or Group 6 insecticides. The resistant individuals may dominate the insect population if this group of insecticides is used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of ATHENA Insecticide or other Group 3A and Group 6 insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
    - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
    - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
    - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted 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 management program for insecticides that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological, and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.

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

alternate method of control for your area. For additional information on insect resistance monitoring, visit the Insecticide Resistance Action Committee (IRAC) on the web at https://irac-online.org.

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: For grape girdling, cane turning, and tying in grapes, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 4-days.

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 over short pants and short-sleeved shirt, Chemical-resistant gloves, such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils or viton ≥ 14 mils, and shoes plus socks.

Rotational Crops

For crops that have both bifenthrin and abamectin tolerances, the plant back is immediate. All other crops may be rotated 30 days following the final application.

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).

In New York State do not apply this product within 100 feet (using ground equipment) of coastal marshes or streams that drain into coastal marshes. Do not apply using aerial equipment in New York State.

Runoff Prevention

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid runoff to water bodies or drainage systems.

MANDATORY SPRAY DRIFT MANAGEMENT

Aerial Applications:

- Do not release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to select nozzle and pressure that deliver medium or coarser droplets (ASABE S641).
- Do not apply when wind speeds exceed 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed wing aircraft and 90% or less of the rotor diameter for helicopters.
- If the windspeed is 10 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 the row end and when spraying the 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) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

WIND

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

Observe the following additional precautions when using ground application to spray tree crops or hops in the vicinity of aquatic areas such as lakes, reservoirs, permanent streams, marshes, potholes, natural ponds, estuaries, or commercial ponds:

- Do not apply when weather conditions favor drift to aquatic areas
- Do not apply within 110 ft. upwind of aquatic areas or when speed is above 8 mph
- Spray last 3 rows windward of aquatic areas using nozzles on one side only, with spray detected away from aquatic area
- Avoid spray going over tops of trees by adjusting or turning off top nozzles. Shut off nozzles on the side away from the grove/orchard when spraying the outside row. Shut off nozzles when turning at ends of row and passing tree gaps in rows

Do not apply using aerial equipment in New York State.

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

Tank Mixtures
Athena Insecticide 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. Test for compatibility of products before mixing. Do not tank mix with any other products containing abamectin or bifenthrin.

Cotton

Pest	Rate of Application	
Lygus spp. Pink Bollworm Soybean (banded) thrips Tobacco thrips Whitefly (adults)	13.5 fl oz/A to 17 fl oz/A	(0.08 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Carmine spider mite Pacific spider mite Twospotted spider mite	10 fl oz/A to 17 fl oz/A	(0.06 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Armyworm spp.* Boll weevil Bollworm Cabbagelooper Cotton aphid** Cotton fleahopper Cotton leaf perforator Cutworm spp.** European corn borer Saltmarsh caterpillar Southern garden leafhopper Stink bug spp. Tobacco budworm**	7 fl oz/A to 17 fl oz/A	(0.04 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre

Restrictions:

- **PHI:** Do not apply within 20 days of harvest.
- **Application Interval:** 21 days.
- **Application Method:** Ground or aerial application is permitted.
- **Resistance Management:** Do not make more than 2 consecutive applications or a maximum of 3 applications per year.
- **Maximum amount per application:** Do not apply more than 17 fl oz/A per application
- **Maximum amount per year:** Do not apply more than 42 fl oz/A (0.25 lb bifenthrin ai/A + 0.04 lb abamectin ai/A) of ATHENA Insecticide per year.
  - Do not apply more than a total of 0.038 lb ai/A per year of abamectin from ATHENA Insecticide and any other product containing abamectin.
  - Do not apply more than a total of 0.5 lb ai/A per year of bifenthrin from ATHENA Insecticide and any other product containing bifenthrin.
- **Grazing:** Do not allow livestock to graze or feed treated foliage to livestock.

Remarks:

Spreading and penetrating surfactants can improve mite control. When necessary to improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant is recommended. Do not use binder or sticker type surfactants for mite control.

Apply in a minimum of 20 gal/A of finished spray with ground equipment or 5 gal/A of finished spray with aerial equipment.

When pest pressure is moderate to severe, use higher rates.

*Includes all armyworm species except beet armyworm.

** Pyrethroid resistance is common for this pest. 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.

Vegetables and small fruits

Celeriac

Pest	Rate of Application	
Twospotted spider mite Fire ant spp. Whitefly (adult)	13.5 fl oz/A to 17 fl oz/A	(0.08 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Aphid spp. Armyworm spp.* Celery leaf tier Corn earworm Cross-striped cabbageworm Cutworm spp.** Diamondback moth** European corn borer Flea beetle spp. Green cloverworm Hornworm spp. Imported cabbageworm Looper spp. Tobacco budworm** Velvetbean caterpillar	7 fl oz/A to 17 fl oz/A	(0.04 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1lb bifenthrin + 0.02 lb abamectin) per acre

Restrictions:

- **PHI:** Do not apply within 21 days of harvest.
- **Application Interval:** Do not make applications less than 7 days apart.
- **Application Method:** Apply with ground equipment only.
- **Resistance Management:** Do not make more than 2 consecutive applications.
- **Maximum amount per application:** Do not apply more than 17 fl oz/A per application.
- **Maximum amount per year:** Do not apply more than 63 fl oz/A (0.37 lb bifenthrin ai/A + 0.06 lb abamectin ai/A) of ATHENA Insecticide per year.
  - Do not apply more than a total of 0.056 lb ai/A per year of abamectin from ATHENA Insecticide and any other product containing abamectin.
  - Do not apply more than a total of 0.5 lb ai/A per year of bifenthrin from ATHENA Insecticide and any other product containing bifenthrin.
- **Grazing:** Do not allow livestock to graze or feed treated foliage to livestock.

Remarks:

ATHENA Insecticide may be used without a wetting agent. When necessary to improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant is recommended for mite control.

Apply in a minimum of 25 gallons of finished spray per acre with ground equipment.

Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

*Includes all armyworm species except beet armyworm.

** Pyrethroid resistance is common for this pest. 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.

Potato/Tuberous & Corm Vegetables (Crop Subgroup 1C)

Including: arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; canna, edible; cassava, bitter and sweet; chayote (root); chufa; dashen (taro); ginger; leren; potato; sweet potato; tanier; turmeric; yam bean; yam, true

Pest	**Rate of Application**	
Twospotted spider mite Leafminer spp. *Lygus* spp. Psyllid spp. Thrips (adults)	10 fl oz/A to 17 fl oz/A	(0.06 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Aphid spp. Armyworm spp.* Banded cucumber beetle Chinch bug Colorado potato beetle Cucumber beetle (adult) Cutworm spp.** European corn borer False chinch bug Flea beetle spp. Grasshopper spp. Looper spp. Potato leafhopper Sugarcane beetle Sweetpotato flea beetle Sweetpotato weevil (adult) Potato tuberworm	7 fl oz/A to 17 fl oz/A	(0.04 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre

Restrictions:

- **PHI:** Do not apply within 21 days of harvest.
- **Application Interval:** 21 days.
- **Application Method:** Ground or aerial application is permitted in all states except New York. Aerial applications are prohibited in New York.
- **Resistance Management:** Do not make more than 2 consecutive applications.
- **Maximum amount per application:** Do not apply more than 17 fl oz/A per application.
- **Maximum amount per year:** Do not apply more than 42 fl oz/A (0.25 lb bifenthrin ai/A + 0.04 lb abamectin ai/A) of ATHENA Insecticide per year.
  - Do not apply more than a total of 0.056 lb ai/A per year of abamectin from ATHENA Insecticide and any other product containing abamectin.
  - Do not apply more than a total of 0.5 lb ai/A per year of bifenthrin from ATHENA Insecticide and any other product containing bifenthrin.
- **Grazing:** Do not allow livestock to graze or feed treated foliage to livestock.

Remarks:
ATHENA insecticide may be used without a wetting agent. When necessary to improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant is recommended, or organosilicone-based surfactant is recommended for mite control.

Apply in a minimum of 20 gal/A of finish spray with ground equipment or 5 gal/A of finish spray with aerial equipment. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures) increase the water volume to ensure adequate coverage.

Leafminers spp.: Begin ATHENA Insecticide applications when adult flies are first observed. Repeat applications as needed to maintain control (see use Restrictions). Combining ATHENA Insecticide with a sticker or binder type product may reduce leafminer control.

Spider mites: Repeat ATHENA Insecticide application as needed to maintain control (see use Restrictions). Aerial application may not provide adequate spray coverage which could result in poor mite control. Combinations with products containing sticker or binder type adjuvants may reduce mite control.

Tuberworm control: Apply prior to harvest or senescence to adults and larval tuberworms when economic thresholds are met.

Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

*Includes all armyworm species except beet armyworm.

** Pyrethroid resistance is common for this pest. Please consult your local or state agricultural authority to determine if resistant pest populations are in your area. If so, refer the resistance management statement in the "DIRECTIONS FOR USE" section of this label.

Cucurbit Group
Including: Chayote (fruit) (Sechium edule); Chinese waxgourd (Chinese preserving melon) (Benincasa hispida); Citron melon (Citrullus lanatus var. citroides); Cucumber (Cucumis sativus); Gherkin (Cucumis anguria); Gourd, edible (Lagenaria spp.) (includes hyotan, cucuzza); (Luffa acutangula, L. cylindrica) (includes hechima, Chinese okra); Momordica spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber); Muskmelon (hybrids and/or cultivars of Cucumis melo) (includes true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon); Pumpkin (Cucurbita spp.); Squash, summer (Cucurbita pepo var. melopepo) (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); Squash, winter (Cucurbita maxima; C. moschata) (includes butternut squash, calabaza, hubbard squash); (C. mixta; C. pepo) (includes acorn squash, spaghetti squash); Watermelon (includes hybrids and/or varieties of Citrullus lanatus).

Pest	**Rate of Application**	
At-Plant Application		
Grubs Maggots Wireworm	8.5 fl oz/A to 17 fl oz/A	(0.05 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Foliar Application		
Carmine spider mite Pacific spider mite Strawberry spider mite Twospotted spider mite Leafminer spp. *Lygus* spp. Thrips (adult) Whitefly (adult)	13.5 fl oz/A to 17 fl oz/A	(0.08 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre

Aphid spp. Armyworm spp.* Cabbage looper Corn earworm Cucumber beetle Cutworm spp.** Grasshoppers Leafhoppers *Lygus* spp. Melonworm Pickleworm Rindworm Squash bug Squash vine borer Stink bug spp. Tobacco budworm**	7 fl oz/A to 17 fl oz/A	(0.04 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre

Restrictions:

- **PHI:** Do not apply within 7 days of harvest.
- **Application Interval:** 7 days.
- **Application Method:** Ground or aerial application is permitted in all states except New York. Aerial applications are prohibited in New York.
- **Resistance Management:** Do not make more than 2 consecutive applications. Do not apply more than 2 applications after bloom.
- **Maximum amount per application:** Do not apply more than 17 fl oz/A per application.
- **Maximum amount per year:** Do not apply more than 51 fl oz/A (0.3 lb bifenthrin ai/A + 0.04 lb abamectin ai/A) of ATHENA Insecticide per year.
    - Do not apply more than a total of 0.056 lb ai/A per year of abamectin from ATHENA Insecticide and any other product containing abamectin. Do not apply more than a total of 0.3 lb ai/A per year of bifenthrin from Athena and any other product containing bifenthrin.

Remarks:
At-plant application:
Apply ATHENA Insecticide by one of the following methods.

1) Broadcast incorporated over the entire soil surface or banded over row.
2) In-furrow spray or banded in-furrow spray directed on or below seed. For transplants, direct the application to the root zone of the transplant.
3) Post-seeding drench, transplant water drench or hill drench.

Foliar Application:
Apply in a minimum of 20 gal/A of finished spray by ground or in a minimum of 5 gal/A of finished spray by air. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures) use a greater volume of water to ensure adequate coverage.

Leafminer / Spider mite control: Apply when adult leafminer flies or spider mites are first observed and repeat application, as needed to maintain good control using a good resistance management program (see use Restrictions).

Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

*Includes all armyworm species except beet armyworm.

** Pyrethroid resistance is common for this pest. 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.

Fruiting Vegetable Group
Including: Eggplant (Solanum melongena); Groundcherry (Physalis spp.); Pepino (Solanum muricatum); Pepper (Capsicum spp.) (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper); Tomatillo (Physalis ixocarpa); Tomato (Lycopersicon esculentum)

Pest	**Rate of Application**	
At-Plant Application		
Grubs Maggots Wireworm	17 fl oz/A	(0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Foliar Application		
Tomato pinworm	17 fl oz/A	(0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Broad mite Carmine spider mite Tomato russet mite Twospotted spider mite Leafminer spp. (adult) Leafminer, (*Liriomyza* spp.) *Lygus* spp. Psyllid spp. Thrips (adult) Whitefly (adult)	13.5 fl oz/A to 17 fl oz/A	(0.08 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Aphid spp. Armyworm spp.* Bean leaf beetle Cabbageworm Cloverworm Corn earworm Corn rootworm (adult) Colorado potato beetle Cucumber beetle (adult) Cutworm spp.** European corn borer Flea beetle spp. Fleahopper Grasshopper Hornworm spp. Japanese beetle (adult) Leafhopper spp. Looper spp. Melonworm Pea leaf weevil Pea weevil Pepper weevil Pickleworm Rindworm Saltmarsh caterpillar Sap beetle Seedpod weevil Squash bug	7 fl oz/A to 17 fl oz/A	(0.04 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre

Stink bug spp. Tobacco budworm**		

Restrictions:

- **PHI:** Do not apply within 7 days of harvest.
- **Application Interval:** 10 days.
- **Application Method:** Ground application is permitted in all states. Aerial applications are allowed in all states except New York.
- **Resistance Management:** Do not make more than 2 consecutive applications.
- **Maximum amount per application:** Do not apply more than 17 fl oz/A per application.
- **Maximum amount per year:** Do not apply more than 33.5 fl oz/A (0.2 lb bifenthrin ai/A + 0.03 lb abamectin ai/A) of ATHENA Insecticide per year.
  - Do not apply more than a total of 0.056 lb ai/A per year of abamectin from ATHENA Insecticide and any other product containing abamectin. Do not apply more than a total of 0.4 lb ai/A per year of bifenthrin from ATHENA Insecticide and any other product containing bifenthrin.
- **Grazing:** Do not allow livestock to graze or feed treated foliage to livestock
- Do not apply to plants being grown for transplants (see "RESISTANCE MANAGEMENT" section of this label).

Remarks:
Foliar Application:
Apply in a minimum of 5 gal/A of finished spray by air or in a minimum of 20 gal/A of finished spray with ground equipment. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures) use a greater volume of water to ensure adequate coverage.

Do not use a binder or sticker surfactant.

Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

*Includes all armyworm species except beet armyworm.

** Pyrethroid resistance is common for this pest. 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.

Head Lettuce

Pest	**Rate of Application**	
Carmine spider mite Twospotted spider mite Diamondback moth** Leafminer spp. (adult) Leafminer, *(Liriomyza* spp.) *Lygus* spp. Thrips (adults) Whitefly (adult)	13.5 fl oz/A to 17 fl oz/A	(0.08 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre

Aphid spp. Armyworm spp.* Corn earworm Cucumber beetle	7 fl oz/A to 17 fl oz/A	(0.04 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Cutworm spp.**Flea beetle spp. Imported cabbageworm Leafhopper spp. Looper spp. Saltmarsh caterpillar Stink bug spp. Tobacco budworm**		

Restrictions:

- **PHI:** Do not apply within 7 days of harvest.
- **Application Interval:** 7 days
- **Application Method:** Ground or aerial applications are permitted in all states except New York. Aerial applications are prohibited in New York.
- **Resistance Management:** Do not make more than 2 consecutive applications.
- **Maximum amount per application:** Do not apply more than 17 fl oz/A per application.
- **Maximum amount per year:** Do not apply more than 50 fl oz/A (0.3 lb bifenthrin ai/A + 0.04 lb abamection ai/A) of ATHENA Insecticide per year.
  - Do not apply more than a total of 0.056 lb ai/A per year of abamectin from ATHENA Insecticide and any other product containing abamectin. Do not apply more than a total of 0.5 lb ai/A per year of bifenthrin from ATHENA Insecticide and any other product containing bifenthrin.
- **Grazing:** Do not allow livestock to graze or feed treated foliage to livestock.
- Do not use for vegetables being grown for transplants (see “RESISTANCE MANAGEMENT” section of this label).

Remarks:

Apply in a minimum of 5 gal/A of finished spray by air or in a minimum of 20 gal/A of finished spray with ground equipment. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures) use a greater volume of water to ensure adequate coverage.

Use of a nonionic surfactant is recommended for control of mites and leafminers.

Do not use a binder or sticker surfactant.

Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

*Includes all armyworm species except beet armyworm.

** Pyrethroid resistance is common for this pest. 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.

Spinach

Pest	Rate of Application	
At-Plant Application		
Grubs Maggots Wireworm	8.5 fl oz/A to 17 fl oz/A	(0.05 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Foliar Application		
Broad mite Carmine spider mite Twospotted spider mite Diamondback moth** Leafminer spp. (adult) Leafminer, (*Liriomyza* spp.) *Lygus* spp. Fire ant spp. Thrips (adults) Whitefly (adult)	13.5 fl oz/A to 17 fl oz/A	(0.08 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Aphid spp. Armyworm spp.* Corn earworm Colorado potato beetle** Cucumber beetle Cutworm spp.** European corn borer Flea beetle spp. Imported cabbageworm Leafhopper spp. Looper spp. Saltmarsh caterpillar Stink bug spp. Tobacco budworm**	7 fl oz/A to 17 fl oz/A	(0.04 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre

Restrictions:

- **PHI:** Do not apply within 40 days of harvest.
- **Application Interval:** 7 days
- **Application Method:** Ground applications are permitted in all states. Aerial applications are allowed in all states except New York.
- **Resistance Management:** Do not make more than 2 consecutive applications.
- **Maximum amount per application:** Do not apply more than 17 fl oz/A per application.
- **Maximum amount per year:** Do not apply more than 62 fl oz/A (**0.37** lb **bifenthrin** ai/A **+ 0.05 lb abamectin ai/A**) of ATHENA Insecticide per year.
  - Do not apply more than a total of 0.056 lb ai/A per year of abamectin from ATHENA Insecticide and any other product containing abamectin. Do not apply more than a total of 0.4 lb ai/A per year of bifenthrin from ATHENA Insecticide and any other product containing bifenthrin.

Remarks:
Foliar Application:
Apply in a minimum of 5 gal/A of finished spray by air or in a minimum of 20 gal/A of finished spray

by ground. Under conditions such as high pest populations, dense foliage, and adverse application conditions (such as high temperatures), increase the spray volume to ensure adequate coverage.

Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control. To improve coverage, use of a nonionic surfactant is recommended. Do not use a binder or sticker surfactant.

Do not apply to plants that are going to be used for transplants (see RESISTANCE MANAGEMENT section of this label).

*Includes all armyworm species except beet armyworm.

** Pyrethroid resistance is common for this pest. 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.

Strawberry

Pest	**Rate of Application**	
At-Plant Application		
Grubs Maggots Wireworm	8.5 fl oz/A to 17 fl oz/A	(0.05 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Foliar Application		
Carmine spider mite Cyclamen mite Strawberry mite Twospotted spider mite *Lygus* spp. Whitefly (adult)	13.5 fl oz/A to 17 fl oz/A	(0.08 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Aphid spp. Armyworm spp.* Black vine beetle Corn earworm Cutworm spp.** European corn borer Flea beetle spp. Leafroller spp. Leafhopper spp. Looper spp. Orange tortrix Spittlebug spp. Stink bug spp. Strawberry clipper Strawberry sap beetle Strawberry root weevil	7 fl oz/A to 17 fl oz/A	(0.04 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre

Restrictions:

- **PHI:** Do not apply within 3 days of harvest.
- **Application Method**: For ground use only. Do not apply with aircraft.
- **Prohibited use:** For resistance management purposes, do not use in strawberry nurseries.
- **Application Interval:** Make two applications 7 to 10 days apart; if further applications are needed wait 21 days after the second application before repeating sequence of two applications.
- **Amount of water:** Do not apply in less than 50 gallons of water/A with conventional ground application equipment. When using electro-static sprayers**,** do not apply in less than 10 gallons of water/A.
- **Resistance Management:** Do not make more than 2 consecutive applications and 4 applications per year.
- **Maximum amount per year:** Do not apply more than 68 fl oz/A (0.4 lb bifenthrin ai/A + 0.06 lb abamectin ai/A) of Athena Insecticide per year.
- Do not apply more than a total of 0.075 lb ai/A per season of abamectin from ATHENA Insecticide and any other product containing abamectin. Do not apply more than a total of 0.5 lb ai/A per season of bifenthrin from ATHENA Insecticide and any other product containing bifenthrin.

Remarks:
At-plant Application
Apply a plant material or a plant hole treatment just prior to, or at transplant. For transplants, direct the application to the root zone of the transplant.

*Includes all armyworm species except beet armyworm.

** Pyrethroid resistance is common for this pest. Please consult your local or state agricultural authority to determine if resistant pest populations are in your area. If so, refer the resistance management statement in the “DIRECTIONS FOR USE” section of this label.

CALIFORNIA SPECIFIC REQUIREMENTS FOR STRAWBERRY HARVESTERS: Harvesters and other personnel performing tasks with all-day foliage contact in treated fields within five (5) days of application must wear a long-sleeved shirt, long pants, and shoes plus socks.

Tree, Bush, and Vine Crops

Almonds and Walnuts

Pest	Rate of Application	
Brown mite European red mite Pacific spider mite Strawberry spider mite Twospotted spider mite Fire ant spp. San Jose scale (crawlers) Walnut husk fly	13.5 fl oz/A to 20 fl oz/A	(0.08 lb bifenthrin + 0.01 lb abamectin) per acre to (0.12 lb bifenthrin + 0.02 lb abamectin) per acre
Aphid spp. Codling moth Fall webworm Filbert worm Hickory shuckworm Leaffooted bug *Lygus* spp. Navel orangeworm Leafroller spp. Peach twig borer Pecan leaf casebearer Pecan nut casebearer Pecan phylloxera Redhumped caterpillar Stink bug spp.	7.5 fl oz/A to 20 fl oz/A	(0.04 lb bifenthrin + 0.01 lb abamectin) per acre to (0.12 lb bifenthrin + 0.02 lb abamectin) per acre
Restrictions: • **PHI:** Do not apply within 21 days of harvest. • **Application Interval:** 21 days • **Application Method:** Ground application only. Do not apply with aircraft. • **Resistance Management:** Do not make more than 2 applications per year.		

- **Maximum amount per application:** Do not apply more than 20 fl oz/A per application.
- **Maximum amount per year:** Do not apply more than 42 fl oz/A (0.25 lb bifenthrin ai/A + 0.04 lb abamectin ai/A) of ATHENA Insecticide in a growing season.
  - Do not apply more than a total of 0.047 lb ai/A per year of abamectin from ATHENA Insecticide and any other product containing abamectin. Do not apply more than a total of 0.25 lb ai/A per year of bifenthrin from ATHENA Insecticide and any other product containing bifenthrin.
- **Grazing:** Do not allow livestock to graze or feed treated foliage to livestock.

Remarks:
Always use Athena Insecticide in combination with a summer spray oil (not a dormant oil) approved for use on almonds/walnuts.
Apply as a dilute (minimum of 200 gallons of finished spray per acre) or a concentrate (minimum of 40 gallons of finished spray per acre). Apply in sufficient spray volume to provide good coverage.

Grapes

Pest	**Rate of Application**	
Sharpshooter spp.	13.5 fl oz/A to 17 fl oz/A	(0.08 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Pacific spider mite Twospotted spider mite Willamette spider mite	10 fl oz/A to 17 fl oz/A	(0.06 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Aphid spp. Clickbeetle (wireworm adult) Cutworm spp.* Eastern grape leafhopper False chinch bug Grape leaffolder Japanese beetle Lady beetle (*Scymnus*) Orange tortrix Omnivorous leafroller Variegated leafhopper Western grape leafhopper Western grapeleaf skeletonizer	8.5 fl oz/A to 17 fl oz/A	(0.05 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Restrictions: • **PHI:** Do not apply within 28 days of harvest. • **Application Method:** Ground applications only. Do not apply with aircraft. • **Resistance Management:** Do not make more than 1 application per year. • **Maximum amount per application:** Do not apply more than 17 fl oz/A per application.		

- **Maximum amount per year:** Do not apply more than 17 fl oz/A (0.1 lb bifenthrin ai/A + 0.02 lb abamectin ai/A) of ATHENA Insecticide per year.
  - Do not apply more than a total of 0.038 lb ai/A per year of abamectin from ATHENA Insecticide and any other product containing abamectin. Do not apply more than a total of 0.1 lb ai/A per year of bifenthrin from ATHENA Insecticide and any other product containing bifenthrin.
- **Grazing:** Do not allow livestock to graze in treated vineyards.

Remarks:
Apply in a minimum of 50 gal/A of finished spray with ground equipment.

Insect control with ATHENA Insecticide may be improved by applying it in combination with a nonionic surfactant to improve wetting of foliage and to smooth out spray deposits. **Do not use a binder or sticker-type surfactant.**

ATHENA Insecticide has been tested in combination with nonionic surfactants for safety to grapes. However, it is impossible to test on all grape varieties under all conditions, therefore follow the Directions for Use and Precautions on the nonionic surfactant labels and in official spray guides.

Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

* Pyrethroid resistance is common for this pest. Please consult your local or state agricultural authority to determine if resistant pest populations are in your area. If so, refer the resistance management statement in the “DIRECTIONS FOR USE” section of this label.

Hops - Not for this use in California

Pest	**Rate of Application**	
Twospotted spider mite Aphid spp. Armyworm spp.* Cutworm spp.** Leafroller spp. Looper spp.	10 fl oz/A to 17 fl oz/A	(0.06 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre
Root weevil	8.5 fl oz/A to 17 fl oz/A	(0.05 lb bifenthrin + 0.01 lb abamectin) per acre to (0.1 lb bifenthrin + 0.02 lb abamectin) per acre

Restrictions:

- **PHI:** Do not apply within 28 days of harvest.
- **Application Interval:** 21 days
- **Application Method:** Ground applications only. Do not apply with aircraft.
- **Resistance Management:** Do not make more than 2 applications per year.
- **Maximum amount per application:** Do not apply more than 17 fl oz/A per application.
- Maximum amount per year: Do not apply more than 34 fl oz/A (0.2 lb bifenthrin ai/A + 0.03 lb abamectin ai/A) of Athena Insecticide per year.
  - Do not apply more than a total of 0.019 lb ai/A per year of abamectin from ATHENA Insecticide and any other product containing abamectin.
  - Do not apply more than a total of 0.3 lb ai/A per year of bifenthrin from ATHENA Insecticide and any other product containing bifenthrin.
- **Grazing:** Do not allow livestock to graze or feed treated foliage to livestock.

Remarks:
Early season (before ½ trellis growth) applications: Recommend spray volumes from 100 to 150 gallons of finished spray per acre with ground equipment.
Late season (beyond ½ trellis growth) applications: Recommend spray volumes from 200 to 250 gallons of finished spray per acre with ground equipment.

ATHENA Insecticide may be used without a wetting agent. To improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant is recommended.

Twospotted spider mite control: Apply ATHENA Insecticide when Twospotted spider mites reach treatment thresholds. Apply maximum rate of 17 fl oz/A for late season control (beyond 1/2 trellis growth). Good coverage is essential for control.

Root weevil control: Make a directed spray to the base of the plant. Spraying up the vine 3 feet and the soil surface 1.5 to 2 feet on either side of the plant.

Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

*Includes all armyworm species except beet armyworm.

** Pyrethroid resistance is common for this pest. Please consult your local or state agricultural authority to determine if resistant pest populations are in your area. If so, refer the resistance management statement in the “DIRECTIONS FOR USE” section of this label.

Pears

Pest	Rate of Application	
Brown mite European red mite McDaniel spider mite Pear rust mite Twospotted spider mite Yellow spider mite Codling moth Pear psyllid San Jose scale (crawler) Thrips spp.	13.5 fl oz/A to 25 fl oz/A	(0.08 lb bifenthrin + 0.01 lb abamectin) per acre to (0.15 lb bifenthrin + 0.02 lb abamectin) per acre
Aphid spp. Cutworm spp.* Green fruitworm Katydid Leafhopper spp. Leafminer spp. Leafroller spp. *Lygus* spp. Orange tortrix Plum curculio Stink bug spp.	7.0 fl oz/A to 25 fl oz/A	(0.04 lb bifenthrin + 0.01 lb abamectin) per acre to (0.15 lb bifenthrin + 0.02 lb abamectin) per acre

Restrictions:

- **PHI:** Do not apply within 28 days of harvest.
- **Application Interval:** 30 days
- **Application Method:** Ground applications only. Do not apply with aircraft.
- **Resistance Management:** Do not make more than 2 applications per year.
- **Maximum amount per application:** Do not apply more than 25 fl oz/A per application.
- **Maximum amount per year:** Do not apply more than 50 fl oz/A (0.3 lb bifenthrin ai/A + 0.04 lb abamectin ai/A) of ATHENA Insecticide per year.
  - Do not apply more than a total of 0.047 lb ai/A per year of abamectin from ATHENA Insecticide and any other product containing abamectin.
  - Do not apply more than a total of 0.5 lb ai/A per year of bifenthrin from ATHENA Insecticide and any other product containing bifenthrin.
- **Grazing:** Do not allow livestock to graze in treated orchards or feed treated foliage to livestock.

Remarks:

Apply as a dilute (minimum of 200 gallons of finished spray per acre) or concentrate (minimum of 40 gallons of finished spray per acre) spray to provide thorough coverage.
Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

* Pyrethroid resistance is common for this pest. Please consult your local or state agricultural authority to determine if resistant pest populations are in your area. If so, refer the resistance management statement in the “DIRECTIONS FOR USE” section of this label.

Storage and Disposal

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

Pesticide Storage

If storing this product below freezing, user should shake or roll the container to ensure proper product consistency. Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal. In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call CHEMTREC (transportation and spills) at (800) 424-9300. To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

Container Handling

Plastic Container: Non-refillable container. Do not reuse or refill this container. Triple rinse as follows: Empty the contents into application equipment or a mix tank and drain for 10 seconds after flow begins to drip. Fill container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling, if available or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill.

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 or FMC or Seller. 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.

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