

RESTRICTED USE PESTICIDE

Toxic to fish and aquatic organisms

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



STATE OF HAWAII
Department of Agriculture

ACCEPTED

LICENSE NO. **9329.236**



ATHENA™

INSECTICIDE/MITICIDE

EPA Reg. No. 279-3356

EPA Est. No. 279-NY-1

Active Ingredient:

Bifenthrin*	8.84%
Avermectin B1**	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 lbs. active ingredient bifenthrin and 0.11 lbs of active ingredient avermectin per gallon.

Contains petroleum distillate

KEEP OUT OF REACH OF CHILDREN CAUTION

See other panels for additional precautionary information.

FMC

FMC Corporation
Agricultural Products Group
1735 Market Street
Philadelphia PA 19103

Net Contents: 128 Fluid Ounces

FIRST AID

If swallowed	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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. Treatment is symptomatic. Have a person sip a glass of water if able to swallow. 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 vol-proic acid).

For Emergency Assistance Call 1-800-321-1FMC (1362).

Precautionary Statements

Hazards to Humans (and Domestic Animals)

CAUTION

Harmful if swallowed, inhaled or adsorbed through the skin. Causes moderate eye irritation. Avoid breathing vapor or spray mist. Avoid contact with skin, in eyes or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. 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 made of any waterproof material.
- 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.

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User Safety Requirements

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.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them

User Safety Recommendations

Wash thoroughly with soap and water after handling. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

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 or Viton, and shoes plus socks.

Storage and Disposal

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

Pesticide Storage

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

Pesticide Disposal

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

Container Disposal

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.**

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 if bees are visiting the treatment area.

This product may impact surface water quality due to runoff of rain water. This product is classified especially true for poor 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 aquatic 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.

Athena Insecticide/Miticide is an emulsifiable in water formulation with two modes of action. Athena Insecticide/Miticide 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.

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.

Rate of application is variable according to pest. Use lower rates under light to moderate infestations; higher rates under heavy insect pressure. Arid climates generally require higher 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 Season

Refer to the individual crop sections for maximum allowable Athena Insecticide/Miticide usage per acre per season. Do not tank mix Athena Insecticide/Miticide with any product containing either avermectin or bifenthrin as active ingredients.

Resistance Management

Athena Insecticide/Miticide contains Group 3 and Group 6 insecticides. Combining insecticides with different modes of action is a resistance management strategy. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state agricultural authorities for details.

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

Rotational Crops

Crops that have bifenthrin and avermectin tolerances the plant back is immediate. All other crops may be rotated 30 days following the final application.

Buffer Zones

Vegetative Buffer Zones

Construct and maintain a minimum 25-foot-wide vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing bifenthrin onto fields where a maintained vegetative buffer strip of at least 25 feet exists between the field and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA, NRCS. 2000. Fort Worth, Texas. 21pp. <http://www.in.nrcs.usda.gov/technical/agronomy/newconbuf.pdf>.

Buffer Zone for Ground Application (groundboom, or airblast) Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, natural ponds, estuaries, and commercial fish ponds).

Buffer Zone for ULV Aerial Application

Do not apply within 450 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, natural ponds, estuaries, and commercial fish ponds).

Buffer Zone for Non-ULV Aerial Application

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

In New York State this product may not be applied within 100 feet using ground equipment of coastal marshes or streams that drain into coastal marshes. Do not cultivate within 10 feet of the aquatic area so as to allow growth of vegetative buffer strip

Spray Drift Requirements

Wind Direction and Speed

Only apply this product if the wind direction favors on target deposition. Do not apply when the wind velocity exceeds 15 mph.

Temperature Inversion

Do not make aerial or ground applications into temperature inversions. Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

Droplet Size

Use only Medium or coarser spray nozzles (for ground and non-ULV aerial application) according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

Additional Requirements for Ground Applications

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

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

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

Additional Requirements for Aerial Applications

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

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

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

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

Observe the following 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 application in New York State.

Tank Mixtures

Athena Insecticide/Miticide 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 products containing avermectin or bifenthrin.

Field Crops
Cotton (PHI 20 Days)

Pests	Rates of Application
Lygus spp. Pink bollworm Soybean (banded) thrips Tobacco thrips Whitefly (adults)	13.5 – 17 fl oz/a
Carmine spider mite Pacific spider mite Twospotted spider mite	10 – 17 fl oz/a
Armyworm spp.* Boll weevil Bollworm Cabbage looper Cotton aphid** Cotton fleahopper Cotton leafperforator Cutworm spp. European cornborer Saltmarsh caterpillar Southern garden leafhopper Stink bug spp. Tobacco budworm**	7 – 17 fl oz/ a
<p>Restrictions</p> <ul style="list-style-type: none"> • 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 growing season. • Maximum Amount per Application: Do not apply more than 17 fl oz/a per application. • Maximum Amount per Season: Do not apply more than 42 fl oz/a) of Athena Insecticide/Miticide in a growing season. <p>Do not apply more than 0.038 lb ai/a/season of avermectin from Athena Insecticide/Miticide or any other product containing avermectin.</p> <p>Do not apply more than 0.5 lb ai/a/season (0.3 lb ai/a/season in California) bifenthrin from Athena Insecticide/Miticide or any other product containing bifenthrin.</p> <ul style="list-style-type: none"> • Grazing: Do not allow livestock to graze or feed treated foliage to livestock. <p>Remarks: Spreading and penetrating surfactants can improve mite control. When necessary to improve the wetting of foliage and to smooth out spray deposits, a non-ionic surfactant is recommended. Do not use binder or sticker type surfactants for mite control.</p> <p>Apply in a minimum of 20 gallons per acre with ground equipment or 5 gallon per acre with aerial equipment.</p> <p>When pest pressure is moderate to severe, use higher rates.</p> <p>*Includes all armyworm species except beet armyworm</p> <p>** 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 "DIRECTION FOR USE" section of this label.</p>	

Potatoes (PHI 21 Days)

Pests	Rates of Application
Twospotted spider mite Leafminer spp. Lygus spp. Psyllid spp. Thrips (adults)	10 – 17 fl oz/a
Aphid spp. Armyworm spp* Banded cucumber beetle Chinch bug Colorado potato beetle Cucumber beetle (adult) Cutworm spp. European cornborer False chinch bug Flea beetle spp. Grasshopper spp. Looper spp. Potato leafhopper Sugarcane beetle Sweetpotato flea beetle Sweetpotato weevil (adult) Potato tuberworm	7 – 17 fl oz/a
<p>Restrictions:</p> <ul style="list-style-type: none"> • PHI: Do not apply within 21 days of harvest • Application Interval: Do not make applications less than 21 days apart. • Application Method: Ground or aerial applications are allowed in all states except New York. Aerial applications are prohibited in New York. • Maximum Amount per Application: Do not apply more than 17 fl oz/a. • Resistance Management: Do not make more than 2 consecutive applications of Athena Insecticide/Miticide. • Maximum Amount per Season: Do not apply more than 42 fl oz/a of Athena Insecticide/Miticide in a growing season. <p>Do not apply more than 0.056 lb ai/a/season avermectin from Athena Insecticide/Miticide or any other product containing avermectin.</p> <p>Do not apply more than 0.5 ai/a/season bifenthrin from Athena Insecticide/Miticide or any other product containing bifenthrin.</p> <ul style="list-style-type: none"> • Grazing: Do not allow livestock to graze or feed treated foliage to livestock. <p>Remarks: Apply a minimum of 20 gallons per acre of finish spray with ground application equipment. Apply a minimum of 5 gallons per acre of finish spray with aircraft. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures) increase the water volume to insure adequate coverage.</p> <p>Athena Insecticide/Miticide may be used without a wetting agent. To improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant or organosilicone-based surfactant is recommended for mite control.</p> <p>Leafminers spp.: Begin Athena Insecticide/Miticide applications when adult flies are first observed. Repeat applications as needed to maintain control (See Use Restrictions). Combining Athena Insecticide/Miticide with a sticker or binder type product may reduce leafminer control.</p> <p>Spider mites: Repeat Athena Insecticide/Miticide 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.</p> <p>Tuberworm control: Apply prior to harvest or senesce to adults and larvae tuberworms when economic thresholds are met.</p> <p>Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.</p> <p>*Includes all armyworm species except beet armyworm.</p>	

Vegetables and small fruits

Celeriac (PHI 21 Days)

Pests	Rates of Application
Twospotted spider mite Fire ant spp. Whitefly(adult)	13.5 – 17 fl oz/a
Aphid spp. Armyworm spp.* Celery leaf tier Corn earworm Cross-striped cabbageworm Cutworm spp. Diamondback moth European cornborer Flea beetle spp. Green cloverworm Hornworm spp. Imported cabbageworm Looper spp. Tobacco budworm** Velvetbean caterpillar	7 – 17 fl oz/a
<p>Restrictions:</p> <ul style="list-style-type: none"> • 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 of Athena Insecticide/Miticide. • Maximum Amount per Application: Do not apply more than 17 fl oz/a. • Maximum Amount per Season: Do not apply more than 63 fl oz/a of Athena Insecticide/Miticide in a growing season after transplanting. <p>Do not apply more than 0.056 lb ai/a/season avermectin from Athena Insecticide/Miticide or any other product containing avermectin.</p> <p>Do not apply more than 0.5 lb ai/a/season bifenthrin Athena Insecticide/Miticide or any other product containing bifenthrin.</p> <p>Remarks: Apply a minimum of 25 gallons of finish spray per acre with ground application equipment.</p> <p>Athena Insecticide/Miticide may be used without a wetting agent. To improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant is recommended for mite control.</p> <p>Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.</p> <p>*Includes all armyworm species except beet armyworm.</p> <p>** 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 "DIRECTION FOR USE" section of this label.</p>	

Corm and Tuber Vegetables (PHI 21 Days)

Pests	Rates of Application
Twospotted spider mite Leafminer spp. Lygus spp. Psyllid spp. Thrips (adults)	10 – 17 fl oz/a
Aphid spp. Armyworm spp* Banded cucumber beetle Chinch bug Colorado potato beetle Cucumber beetle (adult) Cutworm spp. European cornborer False chinch bug Flea beetle spp. Grasshopper spp. Looper spp. Potato leafhopper Sugarcane beetle Sweetpotato flea beetle Sweetpotato weevil (adult) Potato tuberworm	7 – 17 fl oz/a
<p>Restrictions:</p> <ul style="list-style-type: none"> • PHI: Do not apply within 21 days of harvest • Application Interval: Do not make applications less than 21 days apart. • Application Method: Ground or aerial applications are allowed in all states except New York. Aerial applications are prohibited in New York. • Maximum Amount per Application: Do not apply more than 17 fl oz/a. • Resistance Management: Do not make more than 2 consecutive applications of Athena Insecticide/Miticide. • Maximum Amount per Season: Do not apply more than 42 fl oz/a of Athena Insecticide in a growing season. <p>Do not apply more than 0.056 lb ai/a/season avermectin from Athena or any other product containing avermectin.</p> <p>Do not apply more than 0.5 ai/a/season bifenthrin from Athena or any other product containing bifenthrin.</p> <ul style="list-style-type: none"> • Grazing: Do not allow livestock to graze or feed treated foliage to livestock. <p>Remarks: Apply a minimum of 20 gallons per acre of finish spray with ground application equipment. Apply a minimum of 5 gallons per acre of finish spray with aircraft. Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures) increase the water volume to insure adequate coverage.</p> <p>Athena Insecticide/Miticide may be used without a wetting agent. To improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant or organosilicone-based surfactant is recommended for mite control.</p> <p>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.</p> <p>Spider mites: Repeat Athena Insecticide/Miticide 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.</p> <p>Tuberworm control: Apply prior to harvest or senesce to adults and larvae tuberworms when economic thresholds are met.</p> <p>Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.</p> <p>*Includes all armyworm species except beet armyworm.</p>	

Cucurbit Group (PHI 7 Days)

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, straight-neck 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).

Pests	Rates of Application
At-Plant Application	
Grub Maggot Wireworm	8.5 – 17 fl oz/a
Foliar Application	
Carmine spider mite Pacific spider mite Strawberry spider mite Twospotted spider mite Leafminer spp. Lygus spp. Thrips (adult) Whitefly (adult)	13.5 – 17 fl oz/a
Aphid spp. Armyworm spp.* Cabbage looper Corn earworm Cucumber beetle Cutworm spp. Grasshopper Leafhoppers Lygus spp. Melonworm Pickleworm Rindworm Squash bug Squash vine borer Stink bug spp. Tobacco budworm**	7 – 17 fl oz/a

Restrictions:

- **PHI:** Do not apply within 7 days of harvest
- **Application Interval:** Do not make applications less than 7 days apart.
- **Application Method:** Ground applications are allowed in all states, Aerial applications are allowed in all states except New York.
- **Maximum Amount per Application:** Do not apply more than 17 fl oz/a.
- **Resistance Management:** Do not make more than 2 consecutive applications of Athena Insecticide/Miticide. Do not apply more than 2 applications after bloom.
- **Maximum Amount per Season:** Do not apply more than 51 fl oz/a of Athena Insecticide/Miticide in a growing season after transplanting.

Do not apply more than 0.056 lb ai/a/season avermectin from Athena Insecticide/Miticide or any other product containing avermectin.

Do not apply more than 0.3 lb ai/a/season bifenthrin Athena Insecticide/Miticide or any other product containing bifenthrin.

Remarks:

At-plant application:

- Apply Athena Insecticide/Miticide 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 gallons of finished spray per acre by ground or in a minimum of 5 gallons per acre 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 insure 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 "DIRECTION FOR USE" section of this label.

Fruiting Vegetable Group (PHI 7 Days)

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)

Pests	Rates of Application
At-Plant Application	
Grub Maggot Wireworm	8.5 – 17 fl oz/a
Foliar Application	
Tomato pinworm	17 fl oz/a
Broad mite Carmine spider mite Tomato russet mite Twospotted spider mite Leafminer spp. (adult) Leafminer, liriomyza Lygus spp. Psyllid spp. Thrips (adult) Whitefly (adult)	13.5 – 17 fl oz/a
Aphid spp. Armyworm spp.* Bean leaf beetle Cabbageworm Cloverworm Corn earworm Corn rootworm (adult) Colorado potato beetle Cucumber beetle (adult) Cutworm spp. European cornborer 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 Stink bug spp. Tobacco budworm**	7 – 17 fl oz/a

Restrictions:

- **PHI:** Do not apply within 7 days of harvest
- **Application Interval:** Do not make application less than 10 days apart.
- **Application Method:** Ground applications are allowed in all states, Aerial applications are allowed in all states except New York.
- **Resistance Management:** Do not make more than 2 consecutive applications of Athena Insecticide/Miticide.

• **Maximum Amount per Application:** Do not apply more than 17 fl oz/a.
• **Maximum Amount per Season:** Do not apply more than 33.5 fl oz/a of Athena Insecticide/Miticide in a growing season after transplanting.

Do not apply more than 0.056 lb ai/a/season avermectin from Athena Insecticide/Miticide or any other product containing avermectin.

Do not apply more than 0.2 lb ai/a/season bifenthrin Athena Insecticide/Miticide or 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 gallons of finished spray per acre by air or in a minimum of 20 gallons per acre 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 insure 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 "DIRECTION FOR USE" section of this label.

Head Lettuce (PHI 7 Days)

Pests	Rates of Application
Carmine spider mite Twospotted spider mite Diamondback moth* Leafminer spp. (adult) Leafminer, liriomyza Lygus spp. Thrips (adults) Whitefly (adult)	13.5 – 17 fl oz/a
Aphid spp. Armyworm spp.* Corn earworm Cucumber beetle Cutworm spp. Flea beetle spp. Imported cabbageworm Leafhopper spp. Looper spp. Saltmarsh caterpillar Stink bug spp. Tobacco budworm**	7 – 17 fl oz/a
<p>Restrictions:</p> <ul style="list-style-type: none"> • PHI: Do not apply within 7 days of harvest • Application Interval: Do not make application less than 7 days apart. • Application Method: Ground or aerial applications are allowed in all states except New York. Aerial applications are prohibited in New York. • Resistance Management: Do not make more than 2 consecutive applications of Athena Insecticide/Miticide. • Maximum Amount per Application: Do not apply more than 17 fl oz/a. • Maximum Amount per Season: Do not apply more than 50 fl oz/a of Athena Insecticide/Miticide in a growing season after transplanting. <p>Do not apply more than 0.056 lb ai/a/season avermectin from Athena Insecticide/Miticide or any other product containing avermectin.</p> <p>Do not apply more than 0.5 lb ai/a/season bifenthrin Athena Insecticide/Miticide or any other product containing bifenthrin.</p> <ul style="list-style-type: none"> • Grazing: Do not allow livestock to graze or feed treated foliage to livestock. • Do not use for vegetables grown for transplants (see RESISTANCE MANAGEMENT section of this label) <p>Remarks: Apply in a minimum of 5 gallons of finished spray per acre by air or in a minimum of 20 gallons per acre with ground equipment. When applying 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 insure adequate coverage.</p> <p>Use of a nonionic surfactant is recommended for control of mites and leafminers.</p> <p>Do not use a binder or sticker surfactant.</p> <p>Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.</p> <p>*Includes all armyworm species except beet armyworm</p> <p>** 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 "DIRECTION FOR USE" section of this label.</p>	

Spinach (PHI 40 Days)

Pests	Rates of Application
At-Plant Application	
Garden symphyala Grub Maggot Wireworm	8.5 – 17 fl oz/a
Foliar Application	
Broad mite Carmine spider mite Twospotted spider mite Diamondback moth* Leafminer spp. (adult) Leafminer, liriomyza Lygus spp. Fire ant spp. Thrips (adults) Whitefly (adult)	13.5 – 17 fl oz/a
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 – 17 fl oz/a
<p>Restrictions:</p> <ul style="list-style-type: none"> • PHI: Do not apply within 40 days of harvest • Application Method: Ground applications are allowed in all states, Aerial applications are allowed in all states except New York. • Maximum Amount per Application: Do not apply more than 17 fl oz/a. • Resistance Management: Do not make more than 2 consecutive applications of Athena Insecticide/Miticide. • Maximum Amount per Season: Do not apply more than 62 fl oz/a of Athena Insecticide/Miticide in a growing season after transplanting. <p>Application interval: Do not make applications less than 7 days apart. Do not apply more than 0.056 lb ai/a/season avermectin from Athena Insecticide/Miticide or any other product containing avermectin.</p> <p>Do not apply more than 0.4 lb ai/a/season bifenthrin Athena Insecticide/Miticide or any other product containing bifenthrin.</p> <p>Remarks: Foliar Application: Apply in a minimum of 5 gallons of finished spray per acre by air and in a minimum of 20 gallons per acre applied by ground. Under conditions such as high pest populations, dense foliage, and adverse application conditions (such as high temperatures), increase the spray volume to insure adequate coverage.</p> <p>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 surfactants are recommended. Do not use a binder or sticker surfactant.</p> <p>Do not apply to plants that are going to be used for transplants (see RESISTANCE MANAGEMENT section of this label)</p> <p>** 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 "DIRECTION FOR USE" section of this label.</p> <p>**Includes all armyworm species except beet armyworm.</p>	

Strawberry (PHI 3 Days)

Pests	Rates of Application
At-Plant Application	
Garden symphyala Grub Maggot Wireworm	8.5 – 17 fl oz/a
Foliar Application	
Carmine spider mite Cyclamen mite Strawberry mite Twospotted spider mite Lygus spp. Whitefly (adult)	13.5 – 17 fl oz/a
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 – 17 fl oz/a
<p>Restrictions:</p> <ul style="list-style-type: none"> • For ground use only, Do not apply with aircraft. • PHI: Do not apply within 3 days of harvest. • Prohibited Use: For resistance management purposes do not use in strawberry nurseries. • Application Interval: Make two applications 7-10 days apart; if further applications are needed wait 21 days after the second application before repeating sequence of two applications. • Maximum Applications per Season: Do not make more than 2 consecutive applications and 4 applications per growing season. • Amount of Water: Do not apply in less than 50 gals. Of water/A with conventional ground application equipment. When using electro-static sprayers do not apply in less than 10 gallons of water/A. • Maximum Amount per Season: Do not apply more than 68 fl oz/a of Athena Insecticide/Miticide in a growing season after transplanting. <p>Do not apply more than 0.075 lb ai/a/season avermectin from Athena Insecticide/Miticide or any other product containing avermectin.</p> <p>Do not apply more than 0.5 lb ai/a/season bifenthrin Athena Insecticide/Miticide or any other product containing bifenthrin.</p> <p>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.</p>	

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 (PHI 21 Days)

Pests	Rates 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 – 20 fl oz/A
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 – 20 fl oz/A
<p>Restrictions</p> <ul style="list-style-type: none"> • PHI: Do not apply within 21 days of harvest • Application Interval: If a second application is needed, apply on a minimum of a 21 day interval • Applications per Season: Do not make more than 2 applications per growing season. • Maximum Amount per Application: Do not apply more than 20 fl oz/a. • Maximum Amount per Season: Do not apply more than 42 fl oz/a of Athena Insecticide/Miticide in a growing season after transplanting. <p>Do not apply more than 0.047 lb ai/a/season avermectin from Athena Insecticide/Miticide or any other product containing avermectin.</p> <p>Do not apply more than 0.25 lb ai/a/season bifenthrin Athena Insecticide/Miticide or any other product containing bifenthrin.</p> <ul style="list-style-type: none"> • Application Method: Ground application only. Do not apply with aircraft. • Grazing: Do not allow livestock to graze or feed treated foliage to livestock. <p>Remarks Always use Athena Insecticide/Miticide 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.</p>	

Grapes (PHI 30 Days)

Pests	Rates of Application
Sharpshooter spp.	13.5 – 17 fl oz/a
Pacific spider mite Twospotted spider mite Willamette spider mite	10 – 17 fl oz/a
Aphid spp. Clickbeetle (wireworm adult) Cutworm spp. Eastern grape leafhopper False chinch bug Grape leaf folder Japanese beetle Lady beetle (scymnus) Orange tortrix Omnivorous leafroller Variegated leafhopper Western grape leafhopper Western grapeleaf skeletonizer	8.5 – 17 fl oz/a
<p>Restrictions:</p> <ul style="list-style-type: none"> • PHI: Do not apply within 30 days of harvest • Application Method: Apply with ground equipment only. • Maximum Amount per Application: Do not apply more than 17 fl oz/a. • Maximum Applications per Season: Do not make more than 1 application per growing season. • Maximum Amount per Season: Do not apply more than 17 fl oz/a of Athena Insecticide/Miticide in a growing season. <p>Do not apply more than 0.038 lb ai/a/season avermectin from Athena Insecticide/Miticide or any other product containing avermectin.</p> <p>Do not apply more than 0.1 lb ai/a/season bifenthrin Athena Insecticide/Miticide or any other product containing bifenthrin.</p> <p>Do not allow livestock to graze in treated vineyards.</p> <p>Remarks: Apply in a minimum of 50 gallons per acre of spray solution with ground equipment .</p> <p>Insect control with Athena Insecticide/Miticide 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/Miticide has been tested in combination with nonionic surfactants for safety to grapes. However, it is impossible to test on all grape varieties and under all conditions, therefore follow the Directions for Use and Precautions on the nonionic surfactant labels and in official spray guides.</p> <p>Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.</p> <p>* 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 "DIRECTION FOR USE" section of this label.</p>	

Hops (PHI 28 Days) Not registered for use in California

Pests	Rates of Application
Twospotted spider mite Aphid spp. Armyworm spp.* Cutworm spp. Leafroller spp. Looper spp.	10 – 17 fl oz/a
Root weevil	8.5 – 17 fl oz/a
<p>Restrictions:</p> <ul style="list-style-type: none"> • PHI: Do not apply within 28 days of harvest • Application Interval: Do not make applications less than 21 days apart • Application Method: Apply with ground equipment only. • Maximum Amount per Application: Do not apply more than 17 fl oz/a. • Do not make more than 2 applications per growing season of Athena Insecticide/Miticide or any other foliar applied products containing avermectin or bifenthrin. • Maximum Amount per Season: Do not apply more than 34 fl oz/a of Athena Insecticide/Miticide in a growing season <p>Do not apply more than 0.019 lb ai/a/season avermectin from Athena Insecticide/Miticide or any other product containing avermectin.</p> <p>Do not apply more than 0.3 lb ai/a/season bifenthrin Athena Insecticide/Miticide or any other product containing bifenthrin.</p> <p>Do not allow livestock to graze in treated hops yards or feed treated foliage to livestock.</p> <p>Remarks: Early season (before 1/2 trellis growth) applications: Recommend spray volumes from 100 to 150 gallons of spray per acre with ground equipment Late season (beyond 1/2 trellis growth) applications: Recommend spray volumes from 200 to 250 gallons of spray per acre with ground equipment.</p> <p>Athena Insecticide/Miticide may be used without a wetting agent. To improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant is recommended.</p> <p>Twospotted spider mite control: Apply Athena Insecticide/Miticide 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.</p> <p>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.</p> <p>Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.</p> <p>*Includes all armyworm species except beet armyworm</p>	

Pears (PHI 28 Days)

Pests	Rates 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 – 25 fl oz/a
Aphid spp. Cutworm spp. Green fruitworm Katydid Leafhopper spp. Leafminer spp. Leafroller spp. Lygus spp. Orange tortrix Plum curculio Stink bug spp.	7.0 – 25 fl oz /a
<p>Restrictions</p> <ul style="list-style-type: none"> • PHI: Do not apply within 28 days of harvest • Application Interval: Do not make applications less than 30 days apart. • Application Method: Ground application only. Do not apply with aircraft. • Applications per Season: Do not make more than 2 applications per growing season. • Maximum Amount per Application: Do not apply more than 25 fl oz/a per application. • Maximum Amount per Season: Do not apply more than 50 fl oz/a of Athena Insecticide/Miticide in a growing season. <p>Do not apply more than 0.047 lb ai/a/season avermectin from Athena Insecticide/Miticide or any other product containing avermectin.</p> <p>Do not apply more than 0.5 lb ai/a/season bifenthrin Athena Insecticide/Miticide or any other product containing bifenthrin.</p> <ul style="list-style-type: none"> • Grazing: Do not allow livestock to graze in treated orchards or cut treated cover crops for feed. <p>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 in sufficient water to provide thorough coverage. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.</p>	

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