

# OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

WASHINGTON, D.C. 20460

September 25, 2025

Lisa Mathias Registration Specialist Winfield Solutions LLC P.O. Box 64589, MS 5705 St. Paul, MN 55164-0589

Subject: Label Amendment - Registration Review Mitigation for Abamectin

Product Name: Abamectin .15EC EPA Registration Number: 1381-237

Case Number: 481497

Application Date: October 7, 2019

### Dear Lisa Mathias:

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 Abamectin Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

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 the Federal Insecticide, Fungicide, and Rodenticide Act 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) list 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 Assurance.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling and must be used at your next label printing. 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

Page 2 of 2 EPA Reg. No. 1381-237 Case No. 481497

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.

If you have any questions about this letter, please contact Concepción Rodríguez by phone at 202-566-0820, or via email at <a href="mailto:rodriguez.concepcion@epa.gov">rodriguez.concepcion@epa.gov</a>.

Sincerely,

Maryam K. Muhammad-Perch, Team Lead

Risk Management and Implementation Branch 4

Pesticide Re-Evaluation Division

Office of Pesticide Programs

**ENCLOSURE:** Stamped label

# RESTRICTED USE PESTICIDE

# TOXIC TO FISH, MAMMALS, AND AQUATIC ORGANISMS

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION, AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

ABAMECTIN GROUP 6 INSECTICIDE

# Abamectin .15EC Miticide/Insecticide

Active Ingredient:

 Abamectin¹
 2.0%\*

 Other Ingredients:
 98.0%

 Total:
 100.0%

# KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

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 additional precautionary statements and directions.

# ACCEPTED

09/25/2025

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

EPA Reg. No. 1381-237

EPA Reg. No.	1381-237
EPA Est. No.:	

Net Contents: \_\_\_\_\_

Manufactured for: Winfield Solutions LLC P.O. Box 64589 St. Paul, MN 55164-0589

2/0915/5

<sup>&</sup>lt;sup>1</sup>CAS No. 65195-56-4 and No. 65195-55-3 \*1 gal. contains 0.15 lb. abamectin

	FIRST AID
If swallowed	Call poison control center or doctor immediately for treatment advice.
	Do not give <b>any</b> liquid to the person.
	Do not induce vomiting unless told to do so by the poison control center or doctor.
	Do not give anything by mouth to an unconscious person.
If in eyes	Hold eye open and rinse slowly and gently with water for 15-20 minutes.
	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
	Call a poison control center or doctor for treatment advice.
If on skin or	Take off contaminated clothing.
clothing	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
If inhaled	Move person to fresh air.
	• If person is not breathing, call 911 or an ambulance, then give artificial respiration,
	preferably by mouth-to-mouth, if possible.
	Call a poison control center or doctor for further treatment advice.

# **NOTE TO PHYSICIAN**

Early signs of intoxication include dilation of pupils, muscular incoordination, and muscular tremors. Toxicity following accidental ingestion of this product can be minimized by early administration of chemical adsorbents (e.g., activated charcoal).

If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral fluid replacement therapy should be given, along with other required supportive measures (such as maintenance of blood pressure levels and proper respiratory functionality) as indicated by clinical signs, symptoms, and measurements.

In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since abamectin is believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic abamectin exposure.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

For Emergency Assistance Call 1-877-424-7452.

# PRECAUTIONARY STATEMENTS

**Hazards to Humans and Domestic Animals** 

# WARNING/AVISO

May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if inhaled or absorbed through the skin. Avoid breathing spray mist or contact with skin. Prolonged or frequently repeated exposure may cause allergic skin reactions in some individuals. 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:

- Coveralls worn over short-sleeved shirt and short pants
- Chemical-resistant gloves made of barrier laminate or butyl rubber ≥ 14 mils
- Chemical-resistant footwear plus socks
- Protective evewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing or loading

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

# **USER SAFETY RECOMMENDATIONS**

### **Users Should:**

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

# **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and wildlife.

For terrestrial uses: 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 target areas. Do not contaminate water when disposing of equipment wash water or rinsate. 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.

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.

# **Physical or Chemical Hazards**

Do not use or store near heat or open flame.

### **ATTENTION**

This product contains a chemical (N-methyl pyrrolidone) known to the state of California to cause birth defects or other reproductive harm.

# DIRECTIONS FOR USE RESTRICTED USE PRODUCT

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

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

# AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. Exception: 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-sleeved shirt and short pants
- Chemical-resistant gloves made of barrier laminate or butyl rubber ≥ 14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR PEST CONTROL, AND/OR ILLEGAL RESIDUES.

# PRODUCT INFORMATION

Abamectin .15EC is an emulsifiable concentrate that will control certain pests on the crops listed on this label when the product is applied according to the **Directions for Use**. Thorough coverage of foliage is essential for good mite and insect control.

### NOTE:

- Phytotoxicity: Abamectin .15EC has been tested for phytotoxicity and has a wide margin of safety on a
  variety of crops. Abamectin .15EC has also been shown to be compatible with many commonly used
  pesticides, crop oils, and nutritional sprays. However, since it is not possible to test a large number of
  possible mixtures, the user should pre-test any proposed mixtures with Abamectin .15EC to ensure the
  physical compatibility and lack of phytotoxic effects.
- New York State Restriction: Do not apply Abamectin .15EC with aircraft in New York State.

### **CHEMIGATION**

Do not apply this product through any type of irrigation system.

### **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 run off to water bodies or drainage systems.

# **BUFFER RESTRICTIONS AND VEGETATIVE STRIP REQUIREMENTS**

- Do not apply with ground application equipment within 25 ft., or with aircraft within 150 ft. of lakes, reservoirs, rivers, permanent streams, marshes, potholes, natural ponds, estuaries, or commercial fish farm ponds.
- Do not cultivate within 25 ft of the aquatic area to allow growth of a vegetative filter strip.

### 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 the nozzle and pressure that deliver <u>medium</u> or <u>coarser</u> droplets in accordance with the most current version of the American Society of Agricultural & Biological Engineers Standard 641 (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 not exceed 65% of the wingspan for fixed wing aircraft or 75% of the rotor diameter for helicopters. Otherwise, the boom length must not exceed 75% of the wingspan for fixed wing aircraft or 90% of the rotor diameter for helicopters.
- Applicators must use ½ 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 miles per hour 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 release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to select the nozzles and pressure that deliver <u>medium</u> or <u>coarser</u> droplets in accordance with the most current version of the American Society of Agricultural & Biological Engineers Standard 572 (ASAE S572).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

# **Boom-less Ground Applications:**

- Applicators are required to select the nozzles and pressure that deliver <u>medium</u> or <u>coarser</u> droplets in accordance with the most current version of the American Society of Agricultural & Biological Engineers Standard 572 (ASAE S572).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

**For Ground Applications to Tree Crops and Hops** - Observe the following additional measures when spraying in the vicinity of aquatic areas such as lakes, reservoirs, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.

- Spray the last 3 rows windward of aquatic areas using nozzles on one side only, with spray directed away from aquatic areas.
- 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 outside row. Shut off nozzles when turning at ends of row
  and passing tree gaps in rows.
- Do not apply within 110 ft. upwind of the downwind edge of aquatic areas or when wind speed is above 8 mph.

### **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-less Ground Applications**

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

### **Handheld Technology Applications**

Take precautions to minimize spray drift.

### **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.

### RESISTANCE MANAGEMENT

For resistance management, Abamectin .15EC is a Group 6 insecticide/miticide (contains the active ingredient abamectin). Any insect/mite population may contain individuals naturally resistant to Abamectin .15EC and other Group 6 insecticides. The resistant individuals may dominate the insect/mite 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 Abamectin .15EC or other Group 6 insecticide within a growing season, or among growing seasons, with different groups that control the same pests.
- Avoid treatment of successive generations with Abamectin .15EC.
- 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 know cross-resistance issues for the targeted pests between the individual components of a mixture.
- Use labeled rates at the specified spray intervals.
- Adopt an integrated pest management program for insecticide use that includes scouting, uses historical
  information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological
  and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local extension specialist, certified pest control advisor and/or Winfield Solutions, LLC representative.
- Contact your local extension specialist, certified crop advisors, and/or Winfield Solutions, LLC representative
  for additional pesticide resistance management and/or integrated pest management recommendations for
  the specific site and pest problems in your area.

# **CROP USE DIRECTIONS**

### **ALMONDS AND WALNUTS**

For control of European red mite, Pacific spider mite, Strawberry spider mite, and Two-spotted spider mite

Abamectin .15EC may be applied using conventional dilute or concentrate sprayers calibrated to deliver sufficient water for thorough coverage. Gallons of spray will vary with size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good spider mite and insect control.

### **Almonds and Walnuts**

Pest	For Dilute Sprays <sup>a</sup> fl. oz./100 gals.	For Concentrate Sprays <sup>b</sup> fl. oz./A	Instructions
European red mite Pacific spider mite Strawberry spider mite Two-spotted spider mite	2.5-5.0	10-20	Always use Abamectin .15EC in combination with a horticultural spray oil (not a dormant oil) approved for use on

Horticultural Spray Oil	0.25% or 1	Minimum of	almonds/walnuts.
(not a dormant oil)	gal./A	1 gal./A	<ul> <li>Apply Abamectin .15EC when spider mites first appear. Residual spider mite control is greater from spray deposits on newer leaves compared to older leaves.</li> <li>A second application may be made, if needed, to maintain control. (See Use Restrictions)</li> </ul>

<sup>&</sup>lt;sup>a</sup> The rate of Abamectin .15EC per 100 gals. is based on a volume of 400 gals./A dilute spray.

### Use Restrictions - Almonds and Walnuts

- PHI: Do not apply within 21 days of harvest.
- Application Method: Ground application only. Do not apply with aircraft.
- Amount of Water: Do not apply in less than 40 gals. of water/A.
- Application Interval: If a second application is necessary, wait at least 21 days before repeating application.
- **Maximum Amount per Application:** Do not apply more than 20 fl. oz./A (0.023 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per application.
- **Number of Applications:** Do not make more than 2 applications of Abamectin .15EC or any other foliar applied abamectin-containing product per year.
- **Maximum Amount per Year:** Do not apply more than 40 fl. oz./A (0.047 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per year.
- **Grazing:** Do not allow livestock to graze in treated orchards.

#### APPLES

# For control of European red mite, McDaniel spider mite, Tentiform leafminer, Two-spotted spider mite, and White apple leafhopper

Abamectin .15EC may be applied using conventional dilute or concentrate ground application sprayers calibrated to deliver sufficient water for thorough coverage. Gallons of spray will vary with size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good spider mite and insect control.

### NOTE:

- For best results, apply in combination with horticultural spray oil (not a dormant oil) as directed. Applications
  without horticultural spray oil may result in reduced efficacy and/or residual control.
- When used alone or when other products are applied sequentially, Abamectin .15EC in combination with horticultural spray oil may injure the fruit of certain apple varieties (e.g., russetting on light-skinned varieties such as Golden Delicious).
- When using Abamectin .15EC plus horticultural spray oil, carefully follow the **Directions for Use** and **Precautions** on the horticultural spray oil label as well as the precautions in official spray guides or on product labels. For example, applying Abamectin .15EC plus horticultural spray oil in less than 14 days before or after applying Captan® can result in phytotoxicity and crop loss.

# **Apples**

Pest	For Dilute Sprays <sup>a</sup> fl. oz./100 gals.	For Concentrate Sprays <sup>b</sup> fl. oz./A		Instructions
European red mite McDaniel spider mite Tentiform leafminer Two-spotted spider mite White apple leafhopper	2.5-5.0	10-20	•	Apply Abamectin .15EC when spider mite or insect thresholds are reached. A second application may be made if needed to maintain control. (See Use Restrictions)
Horticultural Spray Oil	0.25% or 1	Minimum of	7	Spider Mites: For best results, apply
(not a dormant oil)	gal./A	1 gal./A		

<sup>&</sup>lt;sup>b</sup> To determine the amount of product per acre for concentrate sprays, first determine the amount that would be required in a full cover dilute spray. Use the same amount of product per acre in concentrate sprays that would be required for the dilute sprays to the same orchard/grove. This may result in use of less than 10 fl. oz./A on small trees.

	before a threshold of 5 spider mites per leaf is reached. Residual spider mite control with Abamectin .15EC in combination with
	horticultural spray oil (not a dormant oil) is greater from spray deposits on newer
	leaves compared to older. Applications of
	Abamectin .15EC for spider mite control should be limited to a period extending from petal fall through 6 weeks following petal fall.
	Tentiform Leafminer: For best results, apply against egg (to control new hatch) and early sap feeder stages of first and second-generation tentiform leafminers when locally established thresholds have been reached. Do not apply during bloom.
	<ul> <li>White Apple Leafhopper (Not for use west of the Rocky Mountains):</li> </ul>
	Application of Abamectin .15EC is limited only to first generation white apple
	leafhoppers. Apply soon after petal fall in combination with horticultural spray oil (not
	a dormant oil).

<sup>&</sup>lt;sup>a</sup> The rate of Abamectin .15EC per 100 gals. is based on a volume of 400 gals./A dilute spray.

# **Use Restrictions - Apples**

- PHI: Do not apply within 28 days of harvest.
- Application Method: Ground application only. Do not apply with aircraft.
- Amount of Water: Do not apply in less than 40 gals. of water/A.
- **Maximum Amount per Application:** Do not apply more than 20 fl. oz./A (0.023 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per application.
- Application Interval: If a second application is necessary, wait at least 21 days before repeating application.
- **Number of Applications:** Do not make more than 2 applications of Abamectin .15EC or any other foliar applied abamectin-containing product per year.
- **Maximum Amount per Year:** Do not apply more than 40 fl. oz./A (0.047 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per year.
- **Grazing:** Do not allow livestock to graze in treated orchards.

# **AVOCADOS**

# For control of Avocado thrips

**NOTE:** Abamectin .15EC may be applied using ground application equipment or aircraft. Aerial application is permitted because of its importance to the avocado growing industry. However, aerial application is not the preferred method of application for the best control of thrips. With aerial application, spray coverage and the resulting control of thrips is less than with ground application. For this reason, the user accepts all liability for the level and duration of control of thrips when Abamectin .15EC is aerially applied.

Gallons of spray will vary with size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good mite and insect control.

# **Avocados**

Pest	fl. oz./A	Instructions
Avocado Thrips (Scirtothrips	10.0 – 20.0	For best results, apply when immature thrips are first observed but

<sup>&</sup>lt;sup>b</sup> To determine the amount of product per acre for concentrate sprays, first determine the amount that would be required in a full cover dilute spray. Use the same amount of product per acre in concentrate sprays that would be required for the dilute sprays to the same orchard/grove. This may result in use of less than 10 fl. oz./A on small trees.

perseae)	Do not use less than 10 fl. oz. of product/A	<ul> <li>before numbers exceed 5 immature thrips per leaf/fruit.</li> <li>Use 10-15 fl. oz. of product/A for low* to moderate* infestations and 15-20 fl. oz. of product/A for severe* infestations. Add a 1.0%-</li> </ul>
Horticultural Oil (not a dormant oil)	Minimum 1 to 4% v/v	<ul> <li>4.0% NR (narrow range) 415 oil in combination with a horticultural spray oil (not a dormant oil) approved for use on avocados.</li> <li>Make a second application, if needed, to maintain control, but wait at least 30 days after the first application to retreat. (See Use Restrictions)</li> <li>For Ground Application: If spray volume is greater than 400 gals./A, apply Abamectin .15EC at a rate of 2.5 fl. oz. per 100 gals. of water plus 1.0%-4.0% of an NR 415 oil.</li> <li>Note: To prevent crop injury, observe all precautions and restrictions on the oil label. When using oil concentrations above 2.0% treat a small test area before making a large-scale application.</li> </ul>

*Thrips Infestation Level	Number of immature thrips per leaf/fruit
Low	1-2
Moderate	3-4
Severe	More than 5

# **Use Restrictions - Avocados**

- PHI: Do not apply within 14 days of harvest.
- Application Method: Ground and aerial application permitted.
- Amount of Water: Do not apply in less than 100 gals. of water with ground equipment or 50 gals. of water with aircraft.
- Maximum Amount per Application: Do not apply more than 20 fl. oz./A (0.023 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per application.
- Application Interval: Wait at least 30 days before repeating application.
- **Number of Applications:** Do not make more than 2 applications of Abamectin .15EC or any other foliar applied abamectin-containing product per year.
- Maximum Amount per Year: Do not apply more than 40 fl. oz./A (0.047 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per year.
- Grazing: Do not allow livestock to graze in treated orchards.

# CELERIAC (Apium graveollens) For control of Twospotted spider mite

Abamectin .15EC may be applied using conventional dilute or concentrate sprayers. Thorough coverage of the crop canopy is essential for optimum results. Inadequate crop coverage may result in reduced control. Calibrate sprayer to deliver sufficient water for thorough coverage of the foliage.

# Celeriac

Pest	fl. oz./A	Instructions
Two-spotted spider mite	16.0	<ul> <li>For best results, use in combination with a non-ionic surfactant</li> <li>Apply when mites first appear and repeat as necessary to maintain</li> </ul>
		control. (See Use Restrictions)

# Use Restrictions - Celeriac

- PHI: Do not apply within 7 days of harvest.
- Application Method: Apply with ground application equipment.
- Amount of Water: Do not apply in less than 20 gals. of water/A.
- Application Interval: Wait at least 7 days before repeating application.
- **Number of Applications:** Do not make more than 2 sequential applications of Abamectin .15EC or any other foliar applied abamectin-containing product per year.

• **Maximum Amount per Year:** After transplanting the celeriac, do not apply more than 48 fl. oz./A (0.056 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per year.

# **CITRUS FRUIT CROP GROUP**

Some of the crops in this group are: Citrus citron, Citrus hybrids, *Citrus species* (includes chironja, tangelo, tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Sour orange, and Sweet orange.

For control of Asian citrus psyllid, Broad mite, Citrus bud mite, Citrus leafminer, Citrus rust mite, Citrus thrips, and Two-spotted spider mite

Apply using conventional dilute or concentrate ground application sprayers calibrated to deliver sufficient water for thorough coverage (or outside coverage for Asian citrus psyllid, citrus leafminer, or citrus thrips). Spray gallonage may vary depending on size and number of trees per acre as well as density of foliage. Thorough spray coverage is essential for good mite and insect control.

**Citrus Fruit Crop Group** 

Citrus Fruit Crop Group			
	For Dilute	For	
	Sprays <sup>a</sup>	Concentrate	
Pest	fl. oz./100 gals.	Sprays <sup>b</sup> fl.	Instructions
		oz./A	
Asian citrus psyllid		10-20°	Applications should be made with a
Broad mite	1.0-2.0	10-20°	minimum of 0.20% horticultural spray oil
Citrus bud mite	1.0-2.0	10-20 <sup>d</sup>	(not a dormant oil) in the spray mixture or
Citrus rust mite	0.5-2.0	5-20°	not less than 1.0 gal. of oil/A (except when
Two-spotted spider mite	1.0-2.0	10-20	specified differently below).
Citrus leafminer		5-20°	Asian Citrus Psyllid: Apply to protect
Citrus thrips		10-20°	newly expanding foliage flush during the spring, summer or fall. Abamectin .15EC will only control adults and nymphs present at the time of application.  • Mites: Apply when mites first appear during spring, summer, and/or fall.  • Citrus Bud Mite: For best results, time the spray at "bud swell."  • Citrus Leafminer: Apply to protect new growth during spring, summer, or fall.  • Citrus Thrips: Application targeted for citrus thrips will only control the current generation and must be correctly timed. Apply when economic thresholds have been reached (after egg hatch has begun — preferably early to mid-hatch).

- <sup>a</sup> The rate of Abamectin .15EC per 100 gals. is based on a volume of 1,000 gals./A dilute spray.
- <sup>b</sup> For concentrate sprays, adjust the dosage to apply an amount/A equal to that used in full cover dilute sprays.
- <sup>c</sup> For best results, use 150-300 gals./A of spray mix with a minimum of 3 gals./A of horticultural oil (not a dormant oil) and apply at a ground speed of 1 to 1.5 MPH.
- <sup>d</sup> For best results, use a minimum of 500 gals./A of spray mix with a minimum of 0.5% horticultural spray oil (not a dormant oil).
- <sup>e</sup> For best results, use 100-250 gals./A of spray mix applied to achieve outside coverage.

# **Use Restrictions - Citrus Fruit Crop Group**

- PHI: Do not apply within 7 days of harvest.
- Application Method: Ground application only. Do not apply with aircraft.
- Prohibited Use: To manage resistance, do not use in citrus nurseries.
- **Application Interval:** Do not apply Abamectin .15EC, or any other abamectin containing product, within 30 days of the last treatment.

- Maximum Amount per Year: Do not apply more than 40 fl. oz./A (0.047 lb. ai/A) of Abamectin .15EC, or any other foliar applied abamectin containing-product per year.
- **Number of Applications:** Do not make more than 3 applications of Abamectin .15EC, or any other foliar applied abamectin-containing product per year.
- Grazing: Do not allow livestock to graze in treated orchards.

### **CUCURBITS CROP GROUP**

Some of the crops in this group are: Citron Melon, Cucumbers, Gherkin, Edible Gourds (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica* spp. (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); Muskmelon, Cantaloupe, Pumpkin, Summer Squash, Winter Squash (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); Watermelon.

# For Control of Spider Mites and Leafminers

Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

**NOTE:** Abamectin .15EC may be applied with ground application equipment or aircraft. For best control of mites, apply Abamectin .15EC with ground application equipment. With aerial application, spray coverage and the resulting control of mites is less than with ground application. For this reason, the user accepts all liability for the level and duration of control of mites when Abamectin .15EC is aerially applied.

**Cucurbits Crop Group** 

Pest	fl. oz./A	Instructions
Leafminers Spider mites	8.0-16.0	<ul> <li>Use 8-12 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations.</li> <li>Apply when adult leafminer flies or spider mites are first observed and repeat application, as needed, to maintain control within constraints of a sound resistance management program. (See Use Restrictions)</li> </ul>

### **Use Restrictions – Cucurbit Crop Group**

- PHI: Do not apply within 7 days of harvest.
- **Application Method:** Ground or aerial application is permitted; however, do not apply with aircraft in New York State.
- Amount of Water: Do not apply in less than 20 gals. of water/A with ground application equipment. Do not apply in less than 5 gals. of water/A with aircraft. 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.
- Maximum Amount per Application: Do not apply more than 16 fl. oz./A (0.019 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per application.
- Application Interval: Wait at least 7 days before repeating application.
- **Number of Applications:** Do not make more than 2 sequential applications of Abamectin .15EC or any other foliar applied abamectin-containing product.
- **Maximum Amount per Year:** Do not apply more than 48 fl. oz./A (0.056 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per year.

### FRUITING VEGETABLE CROP GROUP

Some of the crops in this group are: Tomato; eggplant; peppers (includes bell pepper, chili pepper; cooking pepper, pimento, sweet pepper); Tomatillo

For control of Broad mite, Colorado potato beetle, *Liriomyza* leafminers, Spider mites, *Thrips palmi*, Tomato pinworm, and Tomato russet mite

Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

**NOTE:** Abamectin .15EC may be applied with ground application equipment or aircraft. For best control of mites, apply Abamectin .15EC with ground application equipment. With aerial application, spray coverage and the resulting control of mites is less than with ground application. For this reason, the user accepts all liability for the level and duration of control of mites when Abamectin .15EC is aerially applied.

**Fruiting Vegetables Crop Group** 

Pest	fl. oz./A	Instructions
Broad mite	8.0-16.0	Broad, russet, and spider mites: Apply when mites first
Colorado potato beetle		appear.
Liriomyza leafminers		Thrips palmi: Apply when thrips are first observed.
Spider mites		Tomato pinworm: Application may be made from the time moth
Thrips palmi		activity is detected up to, but no later than, the time when newly
Tomato Russet mite		emerged larvae are present.
Tomato pinworm	16.0	<ul> <li>Mites, leafminers, <i>Thrips palmi</i>, and Colorado potato beetle:         Use 8 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations.</li> <li>Repeat application as necessary to maintain control. (See Use Restrictions)</li> <li>Note: Abamectin .15EC may be used without a wetting agent.</li> </ul>
		Spreading and penetrating surfactants can improve insect 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.

# **Use Restrictions – Fruiting Vegetables Crop Group**

- **PHI:** Do not apply within **7** days of harvest.
- Application Method: Ground or aerial application permitted; however, do not apply with aircraft in New York State.
- Prohibited Use: For resistance management, do not use on fruiting vegetables grown for transplanting.
- Amount of Water: Do not apply in less than 20 gals. of water/A with ground application equipment. Do not
  apply in less than 5 gals. of water/A with aircraft. 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.
- **Maximum Amount per Application:** Do not apply more than 16 fl. oz./A (0.019 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per application.
- Application Interval: Wait at least 7 days before repeating application.
- **Number of Applications:** Do not make more than 2 sequential applications of Abamectin .15EC or any other foliar applied abamectin-containing product.
- **Maximum Amount per Year:** Do not apply more than 48 fl. oz./A (0.056 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per year.

### **GRAPES**

For control of Pacific spider mite, Two-spotted spider mite, Western grapeleaf skeletonizer, and Willamette spider mite

Abamectin .15EC may be applied using conventional ground sprayers calibrated to deliver sufficient water for thorough coverage. Thorough coverage is essential for good spider mite and insect control. Do not spray alternate rows. Abamectin .15EC must be applied to both sides of each row for maximum coverage.

**Grapes** 

Pest	fl. oz./A	Instructions
Pacific spider mite Two-spotted spider mite Willamette spider mite Western grapeleaf skeletonizer	8.0-16.0  Plus a  nonionic  surfactant	<ul> <li>Use 8-12 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations.</li> <li>Repeat application, if needed. (See Use Restrictions)</li> <li>Note: Abamectin .15EC must be applied in combination with a nonionic surfactant to improve wetting of foliage and to smooth out spray deposits. Spreading and penetrating</li> </ul>

Pest	fl. oz./A	Instructions
		surfactants can improve insect control. Do not use binder or sticker-type surfactants. Although Abamectin .15EC has been tested in combination with a nonionic surfactant for safety to grapes, it is impossible to test on all grape varieties under the variety of conditions that may cause crop injury. Therefore, when using Abamectin .15EC in combination with a nonionic surfactant, carefully follow the <b>Directions for Use</b> and <b>Precautions</b> on the nonionic surfactant label and in official spray guides.  • <b>Spider mites:</b> Apply when mites first appear but before motiles exceed 5 per leaf.
		Western grapeleaf skeletonizer: Apply Abamectin .15EC plus a nonionic surfactant when larvae are first observed. For optimum control, apply shortly after egg hatch.

# **Use Restrictions – Grapes**

- PHI: Do not apply within 28 days of harvest.
- **Application Method:** Ground application only
- **Amount of Water:** Do not apply in less than 50 gals. of water/A with conventional ground application equipment.
- When using an electro-static sprayer, less than 50 gals. of water/A may be used; however, do not use less than 5 gals. of water/A.
- **Maximum Amount per Application:** Do not apply more than 16 fl. oz./A (0.019 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per application.
- Application Interval: If a second application is necessary, wait at least 21 days before repeating application.
- **Number of Applications:** Do not make more than 2 applications of Abamectin .15EC or any other foliar applied abamectin-containing product per year.
- **Maximum Amount per Year:** Do not apply more than 32 fl. oz./A (0.038 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per year.
- Grazing: Do not allow livestock to graze in treated vineyards.

# **HERB CROP SUBGROUP (Except Chives)**

Some of the crops in this subgroup are: basil; camomile; catnip; coriander (leaf); dill weed; lavender; marigold; marjoram (*Oiganum* species); nasturtium; parsley (dried); rosemary; sage; summer and winter savory; tarragon; thyme; and wintergreen.

# For control of *Liriomyza* leafminers

Mix with water as indicated below. Apply thoroughly with ground application equipment as a foliar spray and ensure good upper and lower leaf coverage.

**Herb Crop Subgroup (Except Chives)** 

Pest	fl. oz./A	Instructions
Liriomyza Leafminers	8.0-16.0	Use 8 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations.
		Apply when adult flies are first observed and repeat application as necessary to maintain control. (See Use Restrictions)
		Abamectin .15EC 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.
		Note: Although Abamectin .15EC has been tested in combination with a nonionic surfactant for safety to herbs, it is impossible to test on all herb types and varieties under the variety of conditions that may cause crop injury. Therefore, when using Abamectin
		.15EC in combination with a nonionic surfactant, carefully follow the <b>Directions for Use</b> and <b>Precautions</b> on the nonionic

surfactant label and in official spray guides.

# **Use Restrictions – Herb Crop Subgroup (Except Chives)**

- PHI: Do not apply within 14 days of harvest.
- **Application Method:** Apply with ground application equipment.
- Amount of Water: Use a minimum of 20 gals. of water/A.
- Maximum Amount per Application: Do not apply more than 16 fl. oz./A (0.019 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per application.
- **Application Interval:** Wait at least 7 days before repeating application.
- **Number of Applications:** Do not make more than 2 applications of Abamectin .15EC or any other foliar applied abamectin-containing product per single cutting (harvest).
- **Maximum Amount per Year:** Do not apply more than 48 fl. oz./A (0.056 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per year.

# HOPS (Not approved for use in California) For control of Two-spotted spider mite

Mix with water as indicated below. Apply with ground application equipment as a foliar spray and ensure good upper and lower leaf coverage. Gallons of spray may vary with the size of plants and density of foliage. In any case, thorough coverage is essential for good control of Twospotted spider mite. When using concentrate sprays, the amount of water is reduced, but the amount of Abamectin .15EC/A should remain the same as for dilute sprays.

### Hops

Pest	fl. oz./A	Instructions
Two-spotted spider mite	8.0-16.0	Apply Abamectin .15EC when Two-spotted spider mites reach treatment thresholds.
		• For applications at ½ trellis growth (6-8 ft. height) apply 8-16 fl. oz./A in a minimum of 40 gals. of water/A.
		• For applications beyond ½ trellis growth, do not use less than 16 fl. oz./A in a minimum of 100 gals. of water/A.
		Note: Abamectin .15EC 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.

# **Use Restrictions - Hops**

- PHI: Do not apply within 28 days of harvest.
- **Application Method:** Ground application only. Do not apply with aircraft.
- Maximum Amount per Application: Do not apply more than 16 fl. oz./A (0.019 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per application.
- **Application Interval:** If a second application is necessary to maintain control, wait at least 21 days before repeating application and repeat application only after an alternative miticide with a different mode of action has been used.
- **Number of Applications:** Do not make more than 2 applications of Abamectin .15EC or any other foliar applied abamectin-containing product per year.
- **Maximum Amount per Year:** Do not apply more than 32 fl. oz./A (0.038 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per year.
- **Grazing:** Do not allow livestock to graze in treated hops yards.

# LEAFY VEGETABLE CROP GROUP

Some of the crops in this group are: Celery, Lettuce (head and leaf), Amaranth (Chinese spinach), Garden cress, Upland cress, Dandelion, Endive, Fennel, Parsley, Radicchio, Rhubarb, Spinach, and Swiss chard.

### For Control of Carmine spider mite, Liriomyza leafminers, and Two-spotted spider mite

Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

**Note:** Abamectin .15EC may be applied with ground application equipment or aircraft. For best control of mites, apply Abamectin .15EC with ground application equipment. With aerial application, spray coverage and the resulting control of mites is less than with ground application. For this reason, the user accepts all liability for the level and duration of control of mites when Abamectin .15EC is aerially applied.

**Leafy Vegetable Crop Group** 

Pest	fl. oz./A	Instructions
Carmine spider mite  Liriomyza leafminers	8.0-16.0	Use 8-12 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations.
Two-spotted spider mite	Plus a nonionic surfactant	<ul> <li>Spider mites: Apply when mites first appear and repeat as needed to maintain control. (See Use Restrictions)</li> <li>Leafminers: Apply when adult flies are first observed and repeat applications as needed to maintain control. (See Use Restrictions)</li> <li>Note: Abamectin .15EC may be used without a wetting agent. Spreading and penetrating surfactants can improve insect control. When necessary to improve the wetting of foliage and to smooth out spray deposits, a nonionic surfactant is recommended. Do not</li> </ul>

# **Use Restrictions – Leafy Vegetable Crop Group**

- PHI: Do not apply within 7 days of harvest.
- Application Method: Ground or aerial application permitted; however, do not apply with aircraft in New York State.
- **Prohibited Use:** For resistance management, do not use on leafy vegetables grown for transplanting.
- Amount of Water: Do not apply in less than 20 gals. of water/A, with ground application equipment. Do not apply in less than 5 gals. of water per acre with aircraft. 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.
- **Maximum Amount per Application:** Do not apply more than 16 fl. oz./A (0.019 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per application.
- **Application Interval:** Wait at least 7 days before repeating application.
- **Number of Applications:** Do not make more than 2 sequential applications of Abamectin .15EC or any other foliar applied abamectin-containing product.
- **Maximum Amount per Year:** Do not apply more than 48 fl. oz./A (0.056 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per year.

# MINT (Peppermint and Spearmint) For control of Two-spotted spider mite

Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

#### Mint

Pest	fl. oz./A	Instructions
Two-spotted spider mite	8.0-12.0	<ul> <li>Treat when mites first appear.</li> <li>For optimum control, a nonionic surfactant or organosilicone-based surfactant should be used at the manufacturer's recommended rate.</li> </ul>

### **Use Restrictions - Mint**

- PHI: Do not apply within 28 days of harvest.
- **Application Method:** Ground or aerial application permitted; however, do not apply with aircraft in New York State.
- Amount of Water: Do not apply in less than 20 gals. of water/A with ground application equipment. Do not apply in less than 5 gals. of water/A with aircraft. 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.
- **Maximum Amount per Application:** Do not apply more than 12 fl. oz./A (0.014 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per application.
- Application Interval: Wait at least 7 days before repeating application.
- **Number of Applications:** Do not make more than 2 sequential applications of Abamectin .15EC or any other foliar applied abamectin-containing product and do not apply more than 3 application of Abamectin .15EC or any other foliar applied abamectin-containing product per year.
- **Maximum Amount per Year:** Do not apply more than 36 fl. oz./A (0.042 lb. ai/A) of Abamectin .15 EC or any other foliar applied abamectin-containing product per year.
- **Grazing:** Do not allow livestock to graze or feed treated foliage to livestock.

# **PEARS** (including Oriental Pear Trees)

# For control of European red mite, McDaniel spider mite, Pear psyllid, Pear rust mite, Two-spotted spider mite, and Yellow Mite

Abamectin .15EC may be applied using conventional dilute or concentrate ground application sprayers calibrated to deliver sufficient water for thorough coverage. Gallons of spray will vary with size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good spider mite and insect control.

#### NOTE:

- For best results, apply in combination with horticultural spray oil (not a dormant oil) as directed. Applications without horticultural spray oil may result in reduced efficacy and/or residual control.
- When using Abamectin .15EC plus horticultural spray oil, carefully follow the **Directions for Use** and **Precautions** on the horticultural spray oil label as well as the precautions in official spray guides or on product labels. For example, applying Abamectin .15EC plus horticultural spray oil in less than 14 days before or after applying Captan<sup>®</sup> can result in phytotoxicity and crop loss.

### **Pears**

Pest	For Dilute Sprays <sup>a</sup> fl. oz./100 gals.	For Concentrate Sprays <sup>b</sup> fl. oz./A	Instructions
European red mite McDaniel spider mite Pear psyllid Pear rust mite Two-spotted spider mite Yellow mite	2.5-5.0	10-20	<ul> <li>Apply Abamectin .15EC when spider mite or insect thresholds are reached.</li> <li>A second application may be made, if needed, to maintain control. (See Use Restrictions)</li> </ul>
Horticultural Spray Oil (not a dormant oil)	0.25% or 1 gal./A	Minimum of 1 gal./A	

<sup>&</sup>lt;sup>a</sup> The rate of Abamectin .15EC per 100 gals. is based on a volume of 400 gals./A dilute spray.

### **Use Restrictions – Pears**

- PHI: Do not apply within 28 days of harvest.
- Application Method: Ground application only. Do not apply with aircraft.
- Amount of Water: Do not apply in less than 40 gals. of water/A.
- **Maximum Amount per Application:** Do not apply more than 20 fl. oz./A (0.023 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per application.
- **Application Interval:** If a second application is necessary, wait at least 21 days before repeating application.
- **Number of Applications:** Do not make more than 2 applications of Abamectin .15EC or any other foliar applied abamectin-containing product per year.

<sup>&</sup>lt;sup>b</sup> To determine the amount of product per acre for concentrate sprays, first determine the amount that would be required in a full cover dilute spray. Use the same amount of product/A in concentrate sprays as would be required for the dilute sprays to the same orchard/grove. This may result in use of less than 10 fl. oz./A on small trees.

- Maximum Amount per Year: Do not apply more than 40 fl. oz./A (0.047 lb. ai/A) of Abamectin .15EC or any
  other foliar applied abamectin-containing product per year.
- **Grazing:** Do not allow livestock to graze in treated orchards.

### **PLUMS AND PRUNES**

# For control of European spider mite, Pacific spider mite, and Two-spotted spider mite

Abamectin .15EC may be applied using conventional dilute or concentrate sprayers calibrated to deliver sufficient water for thorough coverage. Gallons of spray will vary with size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good spider mite control.

# **Plums and Prunes**

Pest	For Dilute Sprays <sup>a</sup> fl. oz./100 gals.	For Concentrate Sprays <sup>b</sup> fl. oz./A	Instructions
European red mite Pacific spider mite Two-spotted spider mite	2.5-5.0	10-20	<ul> <li>Apply when mites first appear.</li> <li>A second application may be made, if needed, to maintain control. (See Use Restrictions)</li> <li>Always apply Abamectin .15EC in combination with a nonionic surfactant that</li> </ul>
Horticultural Spray Oil (not a dormant oil)	0.25% or 1 gal./A	Minimum of 1 gal./A	spreads on and/or penetrates the leaf cuticle or apply with horticultural spray oil (not a dormant oil).  NOTE:  1) A nonionic surfactant that spreads on
Nonionic Surfactant	Labeled Rate		and/or penetrates the leaf cuticle can improve insect control. Although Abamectin .15EC has been tested in combination with nonionic surfactants for safety to stone fruit, it is impossible to test on all plum/prune fruit varieties under the variety of conditions that may cause crop injury. Therefore, when using Abamectin .15EC in combination with a nonionic surfactant, carefully follow the Directions for Use and Precautions on the surfactant label and in official spray guides.  2) A horticultural oil (not a dormant oil) may improve efficacy and can be used but it may increase the possibility of phytotoxicity to foliage and fruit.  • Use nonionic surfactants at the manufacturer's recommended rate.  • Use a minimum of 0.25% horticultural spray oil (not a dormant oil) in the dilute spray mixture and not less than 1.0 gal. of horticultural spray oil per acre in the final finished spray.

<sup>&</sup>lt;sup>a</sup> The rate of Abamectin .15EC per 100 gals. is based on a volume of 400 gals./A dilute spray.

<sup>&</sup>lt;sup>b</sup> To determine the amount of product per acre for concentrate sprays, first determine the amount that would be required in a full cover dilute spray. Use the same amount of product per acre in concentrate sprays as would be required for the dilute sprays to the same orchard/grove. This may result in use of less than 10 fl. oz./A on small trees.

# **Use Restrictions - Plums and Prunes**

- PHI: Do not apply within 21 days of harvest.
- Application Method: Ground application only. Do not apply with aircraft.
- Amount of Water: Do not apply in less than 40 gals. of water/A.
- Maximum Amount per Application: Do not apply more than 20 fl. oz./A (0.023 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per application.
- Application Interval: If a second application is needed, wait at least 21 days before repeating application.
- **Number of Applications:** Do not make more than 2 applications of Abamectin .15EC or any other foliar applied abamectin-containing product per year.
- **Maximum Amount per Year:** Do not apply more than 40 fl. oz./A (0.047 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per year.
- Grazing: Do not allow livestock to graze in treated orchards.

#### **POTATOES**

# For control of Colorado potato beetle, Liriomyza leafminers, and Spider mites

Mix with water as indicated below. Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage may result in reduced control.

**Note:** Abamectin .15EC may be applied using ground application equipment or aircraft. For best control of mites, apply Abamectin .15EC with ground application equipment. With aerial application, spray coverage and the resulting control of mites is less than with ground application. For this reason, the user accepts all liability for the level and duration of control of mites when Abamectin .15EC is aerially applied.

### **Potatoes**

Pest	fl. oz./A	Instructions
Colorado potato beetle Spider mites <i>Liriomyza</i> leafminers	8.0-16.0	<ul> <li>Use 8-12 fl. oz./A for low to moderate infestations and 16 fl. oz./A for severe infestations.</li> <li>The addition of a nonionic surfactant or organosilicone-based surfactant, at the manufacturer's recommended rate, is suggested for optimum spider mite and insect control.</li> <li>Insect and spider mite control may be reduced if Abamectin .15EC is used in combination with a sticker or binder type product such as Bravo® Weather Stik®.</li> <li>Colorado potato beetle: Make the first application after approximately 50% of the egg masses have hatched and larvae are present. If 2 applications are needed, limit them to a single Colorado potato beetle generation per crop. Do not make more than 2 applications per crop. (See Use Restrictions)</li> <li>Liriomyza leafminers: Make the first application when adult flies are first observed. Repeat applications as needed to maintain control. (See Use Restrictions)</li> <li>Spider mites: Make the first application when mites first appear. Repeat application as needed to maintain control. (See Use Restrictions)</li> </ul>

# **Use Restrictions - Potatoes**

- PHI: Do not apply within 14 days of harvest.
- Application Method: Ground or aerial application permitted; however, do not apply with aircraft in New York State.
- Amount of Water: Do not apply in less than 20 gals. of water/A with ground application equipment. Do not apply in less than 5 gals. of water/A with aircraft. 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.
- **Maximum Amount per Application:** Do not apply more than 16 fl. oz./A (0.019 lb. ai/A) of Abamectin .15EC or any other abamectin-containing product per application.
- Application Interval: Wait at least 7 days before repeating application.

- Number of Applications: Do not make more than 2 sequential applications of Abamectin .15EC or any other foliar applied abamectin-containing product.
- Maximum Amount per Year:
  - For spider mite or Colorado potato beetle control, do not apply more than 32 fl. oz./A (0.038 lb. ai/A) of Abamectin .15EC or any other foliar applied abamectin-containing product per year.
  - For leafminer control, do not apply more than 48 fl. oz./A (0.056 lb. ai/A) of Abamectin .15 EC or any other foliar applied abamectin-containing product per year.
- Grazing: Do not allow livestock to graze or feed treated foliage to livestock.

### **STRAWBERRIES**

### For control of Strawberry spider mite and Two-spotted spider mite

Mix with water as indicated below. Apply with ground application equipment as a foliar spray and insure thorough coverage on upper and lower leaf surfaces. Adjust spray volume and nozzle placement to insure maximum coverage of tops and undersides of leaves.

### **Strawberries**

Pest	fl. oz./A	Instructions
Strawberry spider mite Two-spotted spider	16.0	Make 2 applications 7-10 days apart when mites first appear.  Repeat this application sequence, if needed, to maintain control.
mite		(See Use Restrictions)
		Note: Abamectin .15EC 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.

# **Use Restrictions - Strawberries**

- PHI: Do not apply within 3 days of harvest.
- Application Method: Ground application only. Do not apply with aircraft.
- Prohibited Use: For resistance management purposes, do not use in strawberry nurseries.
- **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 Application:** Do not apply more than 16 fl. oz./A (0.019 lb. ai/A) of Abamectin .15 EC or any other foliar applied abamectin-containing production per application.
- Application Interval: Wait at least 21 days after the second application before repeating application.
- Maximum Amount per Year: Do not apply more than 64 fl. oz./A (0.075 lb. ai/A) of Abamectin .15EC or any
  other foliar applied abamectin-containing product per year.

# STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

# Storage

Store in a tightly closed container in a cool, dry place.

# **Pesticide Disposal**

Waste resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

# **Container Handling**

Non-refillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a 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 puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

FOR CHEMICAL EMERGENCY: Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC 1-800-424-9300

### WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

### LIMITATION OF LIABLITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THE NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR RISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

All trademarks are the property of their respective owners.