



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

March 18, 2020

Mike Kellogg  
Pyxis Regulatory Consulting, Inc.  
4110 136<sup>th</sup> St. Ct. NW  
Gig Harbor, WA 98332

Subject: Label Amendment – Adding Golf Courses and Abamectin Registration Review  
Label Mitigation Language  
Product Name: Willowood Abamectin 0.15EC  
EPA Registration Number: 87290-58  
Application Date: 3/31/17, 9/30/19  
Decision Number: 528016, 555729

Dear Mr. Kellogg:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This label approval is contingent on the sublabels being used separately as presented. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them. In addition, the Agency has completed reviewing all of the information submitted with your application to support the Registration Review of the above referenced product in connection with the Abamectin Final and/or Interim Decision, and has concluded that your submission is acceptable

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

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under 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.

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Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Marianne Lewis by phone at (703) 308-8043 or via email at [lewis.marianne@epa.gov](mailto:lewis.marianne@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Gene Benbow".

Gene Benbow, Product Manager 7  
Invertebrate & Vertebrate Branch 3  
Registration Division (7505P)  
Office of Pesticide Programs

# 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
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## Sublabel A

[Note to reviewer: [Text] in brackets denotes optional text].

[Note to reviewer: {Text} in braces denotes where in the final label text will appear.]

### {BOOKLET FRONT PANEL LANGUAGE}

## Willowood Abamectin 0.15EC

Miticide/Insecticide

### ACTIVE INGREDIENT:

Abamectin\* ..... 2.0%

OTHER INGREDIENTS: ..... 98.0%

TOTAL: ..... 100.0%

\*CAS No. 71751-41-2; 1 gallon contains 0.15 lb. Abamectin

## 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 [inside] label booklet for [First Aid,] [additional] Precautionary Statements and Directions for Use.

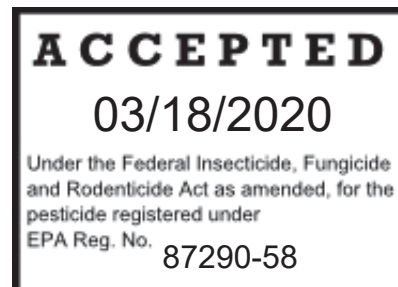
EPA Reg. No. 87290-58

EPA Est. No.

### Manufactured for:

Willowood, LLC  
1887 Whitney Messa Drive #9740  
Henderson, NV 89014

Net Contents:  
Batch [Lot] No.



## {LANGUAGE INSIDE BOOKLET}

<b>FIRST AID</b>	
<b>IF IN EYES:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 seven days a week, 6:30 am to 4:30 pm Pacific Time or your poison control center at 1-800-222-1222.	
<b>NOTE TO PHYSICIAN</b>	
<p>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 absorbents (e.g., activated charcoal).</p> <p>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.</p> <p>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.</p>	

### **PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING/AVISO**

Causes substantial but temporary eye injury. Harmful if swallowed. Do not get in eyes or on clothing.

#### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Socks and shoes
- Chemical-resistant gloves made out of barrier laminate or butyl rubber  $\geq$  14 mils
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, 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 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.

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a medium potential for reaching both surface water and aquatic sediment via runoff for several weeks to months after application. A level, well-maintained vegetative buffer strip 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 water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours.

**Attention: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.**

### **DIRECTIONS FOR USE RESTRICTED USE PESTICIDE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It

also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. Exception: 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 out of barrier laminate or butyl rubber  $\geq$  14 mils
- Chemical-resistant footwear plus socks
- Protective eyewear

**INJURY TO CROPS, INSUFFICIENT CONTROL OF PESTS AND/OR ILLEGAL RESIDUES CAN RESULT IF THIS LABEL IS NOT FOLLOWED CAREFULLY.**

#### **PRODUCT INFORMATION**

Apply Willowood Abamectin 0.15EC in accordance with these label directions to control listed pest species on specified crops. Willowood Abamectin 0.15EC is an emulsifiable concentrate. Foliage must be covered thoroughly with application solution for effective pest control.

#### **Phytotoxicity**

Phytotoxicity to Willowood Abamectin 0.15EC has been tested on listed crops. Not all combinations of this product with various mix partners (such as other pesticides, crop oils, nutritional sprays, etc.) have been tested for phytotoxicity, so any solutions should be pre-tested prior to making a broader application, to ensure physical compatibility and to assess the potential for damage to crops.

#### **Restrictions:**

- **New York State Restriction:** Do not apply Willowood Abamectin 0.15EC with aircraft in New York State.
- 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.

#### **Resistance Management**

For resistance management, Willowood Abamectin 0.15EC contains a Group 6 insecticide/acaracide. Any insect/mite population may contain individuals naturally resistant to Willowood Abamectin 0.15EC and other Group 6 insecticides/acaracides. The resistant individuals may dominate the insect/mite population if this group of insecticides/acaracides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide/acaricide resistance, take the following steps:

- Rotate the use of Willowood Abamectin 0.15EC or other Group 6 insecticides/acaricides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides/acaricides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
  - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
  - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticides/acaricides 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 that the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact Willowood, LLC at 866-396-0465.

## SPRAY DRIFT

### **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 use a medium or coarser droplet size (ASABE S572.1).
- 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 use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

### **Boomless Ground Applications:**

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.



## **SPRAY DRIFT ADVISORIES**

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.  
BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

### **IMPORTANCE OF DROPLET SIZE**

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### **Controlling Droplet Size – Ground Boom**

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

#### **Controlling Droplet Size – Aircraft**

- Adjust Nozzles - Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

#### **BOOM HEIGHT – Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### **RELEASE HEIGHT - Aircraft**

Higher release heights increase the potential for spray drift.

#### **SHIELDED SPRAYERS**

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

## **WIND**

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

### **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.

## **CROP USE DIRECTIONS**

### **APPLES**

Apply Willowood Abamectin 0.15EC to apple trees by ground application (either conventional dilute or concentrate sprayers) to control listed pests.

#### **Pests controlled:**

European red mite	McDaniel spider mite	Twospotted spider mite
Tentiform leafminer	White apple leafhopper*	

\*Not for use West of Rocky Mountains against White apple leafhopper

#### **Application Rate**

For use against listed species:

- Dilute spray: 2.5 – 5.0 fl. oz. (0.003-0.006 lb. ai) / 100 gal – based on a volume of 400 gallons spray per acre
- Concentrate spray: 10 – 20 fl. oz. (0.012-0.023 lb. ai) / A - or concentrate spray rate can also be determined by establishing the amount of product that would be used for a dilute spray. The same amount of product can be used in a concentrate spray to cover an equivalent apple orchard. A rate less than 10 fl. oz. (0.012 lb. ai)/A could be determined for use on small trees.

#### **Application Instructions**

Apply Willowood Abamectin 0.15EC to apple orchards via ground application in a dilute or concentrate spray, using listed application rate, with sprayers calculated to deliver a sufficient volume of water to thoroughly cover foliage. Application should begin when pest thresholds are reached. If needed for control of pests, a second application of Willowood Abamectin 0.15EC can be made. Complete coverage of foliage is necessary for adequate pest control. Note that the size of trees per acre, number of trees per acre and foliage density will affect the amount of spray volume that is used.

#### **Mites:**

- Application before 5 red mites or spider mites per leaf is observed will give best results
- Apply Willowood Abamectin 0.15EC from petal fall to 6 weeks after petal fall

#### Tentiform Leafminer:

- Observe locally established pest thresholds, for best results
- To control new hatch, apply to eggs. Also apply to early sap feeder stages of first and second generation tentiform leafminers
- Do not apply during bloom

#### White Apple Leafhopper (Not for use west of Rocky Mountains)

- Apply to first generation white apple leafhopper only
- Apply after petal fall, mixed with a horticultural spray oil (not a dormant oil)

#### Horticultural Spray Oil

Applying Willowood Abamectin 0.15EC with horticultural spray oil (not a dormant oil) gives optimum results. Without horticultural spray oil (not a dormant oil), user could experience decreased effectiveness and/or reduced residual activity.

- For dilute applications, apply 0.25% or 1 gal / A horticultural spray oil to spray mixture.
- For concentrate applications apply a minimum of 1 gal / A.

#### **Precautions:**

- When mixing with a horticultural spray oil, carefully follow precautions and directions on the spray oil's label, as well as precautions and directions on Willowood Abamectin 0.15EC label, to avoid injury to crops [as an example, apply Willowood Abamectin 0.15EC plus horticultural oil more than 14 days before or after application of a product containing Captan® to avoid injury and possible loss of crops]
- Some apple varieties may be injured by applications of Willowood Abamectin 0.15EC plus horticultural spray oil, either alone or in sequence with other products. Light skinned varieties, such as Golden Delicious can be particularly susceptible to russetting.
- Note that residual spider mite control obtained when mixing Willowood Abamectin 0.15EC with a horticultural spray oil will be better on newer foliage vs. older

#### **Restrictions:**

- Willowood Abamectin 0.15EC must be applied in a minimum of 40 gallons of water per acre.
- Do not allow grazing in treated orchards/groves.
- A second application may be made, if needed to maintain control, but observe a minimum treatment interval of 21 days between applications
- Do not make more than 2 applications of this product or any other foliarly applied abamectin-containing product per calendar year.
- Do not apply more than 20 fl. oz. per acre of Willowood Abamectin 0.15EC (0.023 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per application.
- Do not apply more than 40 fl. oz. per acre of Willowood Abamectin 0.15EC (or 0.047 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Apply via ground application only. Do not apply with aircraft.
- Preharvest interval is 28 days.

## AVOCADOS

Apply Willowood Abamectin 0.15EC to avocados by ground application or aerial application in order to control avocado thrips.

### Application Rate

10 – 20 fl. oz. (0.012-0.023 lb. ai) per acre

- Low to Moderate Infestations: 10 – 15 fl. oz. (0.012-0.018 lb. ai) / A
- Severe Infestations: 15 - 20 fl. oz. (0.018-0.023 lb. ai) / A

Low infestation is defined as 1-2 immature thrips per leaf or fruit.

Moderate infestation is defined as 3-4 immature thrips per leaf or fruit.

Sever infestation is defined as 5 or more immature thrips per leaf or fruit.

Do not use less than 10 fl. oz. (0.012 lb. ai) per acre of Willowood Abamectin 0.15EC.

For ground application – if spray volume is greater than 400 gallons/A, apply this product at a rate of 2.5 fl. oz. (0.003 lb. ai) per 100 gallons of water plus 1.0% to 4.0% of a horticultural spray oil (not a dormant oil) approved for use on avocados.

### Application Instructions

Apply Willowood Abamectin 0.15EC to avocados via ground application or aerial application, using listed application rate, with sprayers calculated to deliver a sufficient volume of water to thoroughly cover foliage. For best results, apply when immature thrips are first observed but before numbers exceed 5 immature thrips per leaf/fruit. If needed for control of avocado thrips, a second application of Willowood Abamectin 0.15EC can be made. Complete coverage of foliage is necessary for adequate pest control. Note that the size of trees per acre, number of trees per acre and foliage density will affect the amount of spray volume that is used.

IMPORTANT – Aerial application is less effective than ground application in controlling thrips. If Willowood Abamectin 0.15EC is applied by air, the user is solely responsible for any reduced control of thrips or any reduction in the duration of control of thrips.

### Precautions:

- When mixing with a horticultural spray oil, carefully follow precautions and directions on the spray oil's label, as well as precautions and directions on Willowood Abamectin 0.15EC label.
- When applying horticultural spray oil in a concentration exceeding 2%, apply the combination in a small test area prior to full application.

### Restrictions:

- Ground application: Willowood Abamectin 0.15EC must be applied in a minimum of 100 gallons of water per acre.
- Aerial application: Willowood Abamectin 0.15EC must be applied in a minimum of 50 gal of water per acre.
- Do not allow grazing in treated orchards.
- A second application may be made, if needed to maintain control, but observe a minimum treatment interval of 30 days between applications
- Do not make more than 2 applications of this product or any other foliarly applied abamectin-containing product per calendar year.

- Do not apply more than 20 fl. oz. per acre of Willowood Abamectin 0.15EC (0.023 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per application.
- Do not apply more than 40 fl. oz. per acre of Willowood Abamectin 0.15EC (or 0.047 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Preharvest interval is 14 days.

## **CELERIAC (*APIUM GRAVEOLLENS*)**

Apply Willowood Abamectin 0.15EC to celeriac by ground application (either conventional dilute or concentrate sprayers) to control two spotted spider mite.

### **Application Rate**

16 fl. oz. (0.019 lb. ai) Willowood Abamectin 0.15EC per acre

### **Application Instructions**

Apply Willowood Abamectin 0.15EC to celeriac via ground application in a dilute or concentrate spray, using listed application rate, with sprayers calculated to deliver an adequate volume of water to thoroughly cover crop canopy. Reduced control may result if coverage is insufficient. If needed for control of pests, a second application of Willowood Abamectin 0.15EC can be made.

#### Two-spotted spider mites:

- Apply Willowood Abamectin 0.15EC when mites are first seen.
- For optimal effectiveness, combine Willowood Abamectin 0.15EC with a non-ionic surfactant.

### **Restrictions:**

- Willowood Abamectin 0.15EC must be applied in a minimum of 20 gallons of water per acre.
- A repeat application may be made, if needed to maintain control, but observe a minimum treatment interval of 7 days between applications.
- Do not make more than 2 sequential applications of this product or any other foliarly applied abamectin-containing product.
- Do not apply more than 16 fl. oz. per acre of Willowood Abamectin 0.15EC (0.019 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per application.
- Do not exceed a maximum of 48 fl. oz. per acre of Willowood Abamectin 0.15EC (or 0.056 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Apply Willowood Abamectin 0.15EC to celeriac with ground application only.
- Preharvest interval is 7 days.

## CITRUS FRUIT CROP GROUP (CROP GROUP 10)

(Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Sour orange, Sweet orange, Pummelo, and Satsuma mandarin)

Apply Willowood Abamectin 0.15EC to citrus by ground application (either conventional dilute or concentrate sprayers) or aerial application\* to control listed pests.

\*Aerial application can only be used for control of citrus leafminer.

**Do not apply Willowood Abamectin 0.15EC to citrus by air in California.**

Pests controlled:

Broad mite	Citrus bud mite	Citrus rust mite
Twospotted spider mite	Citrus thrips	Asian citrus psyllid
Citrus leafminer*		

### Application Rate

For use against listed species:

- Dilute spray (based on a spray volume of 1000 gallons per acre)
  - 1.0 – 2.0 fl. oz. (0.001-0.002 lb. ai) / 100 gal - broad mite, citrus bud mite, twospotted spider mite
  - 0.5 to 2.0 fl. oz. (0.0006-0.002 lb. ai) / 100 gal – citrus rust mite
- Concentrate spray:
  - 10 – 20 fl. oz. (0.012-0.023 lb. ai) / A - Asian citrus psyllid, broad mite, citrus bud mite, citrus thrips or two spotted spider mite
  - 5 – 20 fl. oz. (0.006-0.023 lb. ai) / A – citrus leafminer or citrus rust miteor concentrate spray rate can also be determined by establishing the amount of product that would be used for a dilute spray.

### Application Instructions

Apply Willowood Abamectin 0.15EC to citrus groves via ground application (or aerial application to control citrus leafminer) in a dilute or concentrate spray, using listed application rate, with sprayers calculated to deliver a sufficient volume of water to completely cover foliage, or, for Asian citrus psyllid, citrus leafminer or citrus thrips, to give thorough outside coverage. If needed for control of pests, subsequent applications of Willowood Abamectin 0.15EC can be made. Coverage of foliage is necessary for adequate pest control. Note that the size of trees per acre, number of trees per acre and foliage density will affect the amount of spray volume that is used.

#### Broad Mite, Citrus bud mite, Citrus Rust Mite, Twospotted Spider Mite:

- Apply in the fall, spring or summer when mites first appear.
- For optimal control of citrus bud mites, apply at bud swell.
- For optimal concentrate spray application to broad mite and citrus rust mite, apply 3 gallons per acre of horticultural oil (not a dormant oil) in 150 – 300 gallons per acre spray mixture at a ground speed of 1 – 1.5 mph.
- For optimal concentrate spray application to citrus bud mite, apply 0.5% minimum horticultural oil (not a dormant oil) in at least 500 gallons per acre spray mixture.

#### Citrus Thrips:

- Apply this product for control of citrus thrips once economic thresholds have been attained (i.e., after egg hatch has begun – preferably early to mid-hatch).
- Treatment must be timed correctly, as application will only control the current generation of citrus thrips.
- For best results, apply 100 – 250 gallons per acre of spray mixture to achieve outside coverage.

#### Citrus Leafminer:

- Apply this product to safeguard new growth in the fall, spring or summer.
- When treating by air apply a minimum of 10 gallons of spray mixture.
- For optimal concentrate spray application to citrus leafminer, apply 3 gallons per acre of horticultural oil (not a dormant oil) in 150 – 300 gallons per acre spray mixture at a ground speed of 1 – 1.5 mph.
- When there are extreme conditions (e.g., high temperatures, high pest populations or dense foliage), apply this product in a greater volume of water to make certain that plants receive sufficient coverage of spray solution.

#### Asian citrus psyllid

- Application with this product will only control nymphs and adults that are on the plant at the time of treatment.
- Apply this product to safeguard newly growing foliage flush in the fall, spring or summer.
- For optimal concentrate spray application to Asian citrus psyllid, apply 3 gallons per acre of horticultural oil (not a dormant oil) in 150 – 300 gallons per acre spray mixture at a ground speed of 1 – 1.5 mph.

#### Horticultural Spray Oil

Applying Willowood Abamectin 0.15EC with horticultural spray oil (not a dormant oil) can give enhanced efficacy and residual control. See section above for rates of horticultural spray oil, or:

- For dilute applications, apply 0.20% or 1 gal / A horticultural spray oil to spray mixture.
- For concentrate applications, apply a minimum of 1 gal / A.

#### **Restrictions:**

- Do not allow livestock to graze in treated orchards.
- Do not apply Willowood Abamectin 0.15EC in citrus nurseries.
- A subsequent application may be made if needed to maintain control, but observe a minimum treatment interval of 30 days between applications.
- Do not make more than three applications of Willowood Abamectin 0.15EC or any other foliarly applied abamectin product per calendar year.
- Do not apply more than 20 fl. oz. per acre of Willowood Abamectin 0.15EC (0.023 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per application.
- Do not exceed a maximum of 40 fl. oz. per acre of Willowood Abamectin 0.15EC (or 0.047 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Do not apply Willowood Abamectin 0.15EC via aerial application to citrus groves (except citrus leafminer).
- Citrus leafminer may be treated via ground or air application.



- Do not apply this product to citrus by air in California.
- Preharvest interval is 7 days.

## COTTON

Apply Willowood Abamectin 0.15EC to cotton via aerial application or via ground application to control listed pests.

### Pests controlled:

Carmine Spider mite	Pacific Spider Mite
Strawberry Spider Mite	Twospotted Spider Mite

### Application Rate

For use against listed species:

- Early Season cotton: 4 – 6 fl. oz. (0.005-0.007 lb. ai) per acre
- All other cotton: 8-16 fl. oz. (0.009-0.019 lb. ai) per acre

### Application Instructions

Apply Willowood Abamectin 0.15EC to cotton via aerial or ground application using listed application rate, when mites are first seen. For best control, complete coverage is essential. Apply this product with ground application equipment for best coverage. Reduced control may result if coverage is insufficient.

Use the lower use rate for early season cotton that is less than 10 inches tall. When applying the lower use rate to early season cotton **West of the Rocky Mountains**, only apply with ground application to cotton that is less than 10 inches tall. Do not apply Willowood Abamectin 0.15EC at a use rate of less than 4 fl. oz. (0.005 lb. ai) per acre. Application should begin when mites are first seen. If needed for control, a subsequent application of Willowood Abamectin 0.15EC can be made.

### Surfactants and Wetting Agents

A wetting agent is not required. Where it is necessary to smooth out spray deposits and/or to improve foliage wetting, use a nonionic surfactant. Combining this product with surfactants that facilitate penetration and spreading may enhance control of mites. Do not combine this product with sticker-type / binder surfactants

### Restrictions:

- Willowood Abamectin 0.15EC must be applied in a minimum of 5 gallons of water per acre. Ensure there is sufficient application spray volume for thorough coverage.
- Do not feed or allow livestock to graze treated cotton.
- Observe a minimum treatment interval of 21 days between applications of this product.
- Do not exceed a maximum of 16 fl. oz. per acre of Willowood Abamectin 0.15EC (0.019 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per application.
- Do not exceed a maximum of 32 fl. oz. per acre of Willowood Abamectin 0.15EC (0.038 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Do not make more than 2 applications of this product or any other foliarly applied abamectin-containing product per calendar year.
- Preharvest interval is 20 days.

## CUCURBIT VEGETABLES CROP GROUP (CROP GROUP 9)

Chayote, Chinese waxgourd, Citron Melon, Cucumber, Gherkin, Edible Gourd, (includes hyotan, cucuzza, hechima, Chinese okra); *Momordica* spp., (includes balsam apple, balsam pear, bittermelon, 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, Summer Squash (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini), Winter Squash (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash), Watermelon (includes hybrids and/or varieties of *Citrullus lanatus*)

Apply Willowood Abamectin 0.15EC to cucurbit vegetables using ground application equipment or via aerial application to control listed pests.

### Pests controlled:

Leafminers

Spider Mites

### Application Rate

For use against listed species:

- Low to Moderate infestations: 8 – 12 fl. oz. (0.009-0.014 lb. ai) per acre
- Severe Infestations: 16 fl. oz. (0.019 lb. ai) per acre

### Application Instructions

Apply Willowood Abamectin 0.15EC to cucurbits, using listed application rate. Treat with Willowood Abamectin 0.15EC when leafminer flies or spider mites first appear. Application may be repeated to maintain control as required. For optimal control, complete coverage of the crop canopy is necessary. Reduced control may result if coverage is insufficient.

IMPORTANT – Aerial application results in reduced spray coverage pest control when compared to ground application. The user accepts sole responsibility for the length and effectiveness of treatment when this product is applied by air.

### Restrictions:

- Ground application: Willowood Abamectin 0.15EC must be applied in a minimum of 20 gallons of water per acre.
- Aerial application: Willowood Abamectin 0.15EC must be applied in a minimum of 5 gallons of water per acre.
- Where there are extreme conditions, e.g. high temperatures, high pest populations or where foliage is dense, apply this product in enough water to make certain that plants receive sufficient coverage.
- Where subsequent application is necessary, observe a minimum treatment interval of 7 days between applications.
- Do not make more than 2 sequential applications of this product or any other foliarly applied abamectin-containing product.
- Do not exceed a maximum of 16 fl. oz. per acre of Willowood Abamectin 0.15EC (0.019 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product in a single application.

- Do not exceed a maximum of 48 fl. oz. per acre of Willowood Abamectin 0.15EC ( 0.056 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Preharvest interval is 7 days.

### DRY BEANS

Including: *Cicer arietinum* (chickpea, garbanzo bean); *Lupinus* spp. (including sweet lupine, white sweet lupine, white lupine, and grain lupine), *Phaseolus* spp. (including kidney bean, lima bean, mung bean, navy bean, pinto bean, snap bean, and waxbean); *Vicia faba* (broad bead, fava bean); *Vigna* spp. (including adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea (grown for dry seed only), crowder pea, moth bean, mung bean rice bean, southern pea, urd bean, and yardlong bean)

Apply Willowood Abamectin 0.15EC to dry beans via aerial application or via ground application equipment to control listed pests.

#### Pests controlled:

*Liriomyza* Leafminers

Spider Mites

#### Application Rate

For use against listed species:

- Low to Moderate infestations: 8 – 12 fl. oz. (0.009-0.014 lb. ai) per acre
- Severe Infestations: 13 - 16 fl. oz. (0.015-0.019 lb. ai) per acre

#### Application Instructions

Apply Willowood Abamectin 0.15EC to dry beans, using listed application rate. Treat with Willowood Abamectin 0.15EC when leafminers or spider mites first appear. Application may be repeated to maintain control as required. It is necessary to achieve complete coverage of the crop canopy for best control of insects / mites. Reduced control may result if coverage is insufficient.

IMPORTANT – Apply this product with ground application equipment for best coverage. Aerial application may result in reduced control of listed pests when compared with ground application.

#### Restrictions:

- For use on cowpeas that are grown for dry seed only.
- Treated cowpea forage must not be used for grazing and cowpea hay and forage must not be harvested for use as a livestock feed.
- Ground application: Willowood Abamectin 0.15EC must be applied in a minimum of 10 gallons of water per acre. Ensure there is sufficient application spray volume for thorough coverage.
- Aerial application: Willowood Abamectin 0.15EC must be applied in a minimum of 5 gallons of water per acre. Ensure there is sufficient application spray volume for thorough coverage.
- Where there are extreme conditions, e.g. high temperatures, high pest populations or where foliage is dense, apply this product in a greater volume of water to ensure adequate coverage.
- Observe a minimum treatment interval of 6 days between applications of this product

- Do not make more than 2 sequential applications of this product or any other foliarly applied abamectin-containing product.
- Do not exceed a maximum of 16 fl. oz. per acre of Willowood Abamectin 0.15EC (0.019 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product in a single application.
- Do not exceed a maximum of 48 fl. oz. per acre of Willowood Abamectin 0.15EC ( 0.056 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Preharvest interval is 7 days.

**FRUITING VEGETABLES (EXCEPT CUCURBITS) CROP GROUP (CROP GROUP 8)  
(Eggplant, Groundcherry, Pepino, Peppers (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper), Tomatillo, and Tomato)**

Apply Willowood Abamectin 0.15EC to fruiting vegetables via aerial application or via ground application equipment to control listed pests.

**Pests controlled:**

Broad mite	Spider mite	Tomato russet mite
<i>Liriomyza</i> leafminer	<i>Thrips palmi</i>	Tomato psyllid
Colorado potato beetle	Tomato pinworm	

**Application Rate**

8 – 16 fl. oz. (0.009-0.019 lb. ai) per acre

- Low to Moderate infestations: 8 fl. oz. (0.009 lb. ai) per acre
- Severe Infestations, and against Tomato pinworm: 16 fl. oz. (0.019 lb. ai) per acre

**Application Instructions**

Apply Willowood Abamectin 0.15EC to fruiting vegetables, using listed application rate. Application may be repeated to maintain control as required. It is necessary to achieve complete coverage of the crop canopy for best control of pests. Reduced control may result if coverage is insufficient.

IMPORTANT – Apply this product with ground application equipment for best coverage. Aerial application may result in reduced control of listed pests when compared with ground application. The user accepts sole responsibility for the length and effectiveness of treatment when this product is applied by air.

Thrips and Mites

- Apply Willowood Abamectin 0.15EC when mites or thrips are first seen.

Tomato pinworm

- Apply this product during the period from when moth activity is first observed to when newly emerged larvae are present (but no later than this time).

### Surfactants and Wetting Agents

A wetting agent is not required. Where it is necessary to smooth out spray deposits and/or to improve foliage wetting, use a nonionic surfactant. Combining this product with surfactants that facilitate penetration and spreading may enhance control of mites. Do not combine this product with sticker-type / binder surfactants.

### **Restrictions:**

- Willowood Abamectin 0.15EC must not be applied to fruiting vegetables that are grown for transplanting.
- Ground application: Willowood Abamectin 0.15EC must be applied in a minimum of 20 gallons of water per acre. Ensure there is sufficient application spray volume for thorough coverage.
- Aerial application: Willowood Abamectin 0.15EC must be applied in a minimum of 5 gallons of water per acre. Ensure there is sufficient application spray volume for thorough coverage.
- Where there are extreme conditions, e.g. high temperatures, high pest populations or where foliage is dense, apply this product in a greater volume of water to ensure adequate coverage.
- Observe a minimum treatment interval of 7 days between applications of this product.
- Do not make more than 2 sequential applications of this product or any other foliarly applied abamectin-containing product.
- Do not exceed a maximum of 16 fl. oz. per acre of Willowood Abamectin 0.15EC (0.019 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product in a single application.
- Do not exceed a maximum of 48 fl. oz. per acre of Willowood Abamectin 0.15EC (0.056 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Preharvest interval is 7 days.

## **GRAPES**

Apply Willowood Abamectin 0.15EC to grapes with conventional ground spray equipment to control listed pests.

### **Pests controlled:**

Pacific spider mite	Twospotted spider mite	Williamette spider mite
Variegated leafhopper	Western grape leafhopper	
Western grapeleaf skeletonizer		

### **Application Rate**

8 – 16 fl. oz. (0.009-0.019 lb. ai) per acre

- Low to Moderate infestations: 8 - 12 fl. oz. (0.009-0.014 lb. ai) per acre
- Severe Infestations: 16 fl. oz. (0.019 lb. ai) per acre

### **Application Instructions**

Apply Willowood Abamectin 0.15EC to grapes, using listed application rate.

Application may be repeated to maintain control as required.

Complete coverage must be achieved in order to gain control of listed pests. For optimum coverage, apply this product each side of the row, making sure to treat every row (i.e., do not spray every other row). Ensure spray equipment is calibrated so that an adequate amount of water is dispensed for complete coverage.

Pacific, Twospotted and Williamette spider mite:

- Apply Willowood Abamectin 0.15EC when mites are first observed but prior to exceeding 5 mites per leaf.

Variegated and Western grape leafhopper:

- Apply this product with nonionic surfactant.
- Ensure spray coverage is complete for contact knock-down only.

Western grapeleaf skeletonizer:

- Apply this product combined with a nonionic surfactant when larvae first appear.
- For best effectiveness, treat soon after egg hatch.

Surfactants and Wetting Agents

Apply Willowood Abamectin 0.15EC with a nonionic surfactant to smooth out spray deposits and/or to improve foliage wetting. Combining this product with surfactants that facilitate penetration and spreading may enhance insect control. Do not combine this product with sticker-type / binder surfactants.

This product has been tested for use in grapes in combination with a non-ionic surfactant. However, it is impossible to test all varieties of grape and in all conditions that may cause crop injury. Read and follow all directions and restrictions in this label and in the non-ionic surfactant label.

**Restrictions:**

- Ground application: Willowood Abamectin 0.15EC must be applied in a minimum of 50 gallons of water per acre, unless application is with an electro-static sprayer, where a minimum of 5 gallons of water per acre must be used. Ensure there is sufficient application spray volume for thorough coverage.
- Treated vineyards must not be used for grazing.
- Observe a minimum treatment interval of 21 days between applications of this product
- Do not make more than 2 applications of this product or any other foliarly applied abamectin-containing product per calendar year.
- Do not exceed a maximum of 16 fl. oz. per acre of Willowood Abamectin 0.15EC (0.019 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product in a single application.
- Do not exceed a maximum of 32 fl. oz. per acre of Willowood Abamectin 0.15EC (0.038 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Do not apply this product via aerial application to grapes. Apply via ground application only.
- Preharvest interval is 28 days.

### HERB CROP SUBGROUP (CROP SUBGROUP 19A)

(Angelica, Balm, Basil, Borage, Burnet, Camomile, Catnip, Chervil (dried), Chives, Chives (Chinese), Clary, Coriander (leaf), Cilantro (leaf), Costmary, Culantro (leaf), Curry (leaf), Dill weed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram (*Origanum* species), Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Summer and Winter savory, Sweet bay, Tansy, Tarragon, Thyme, Wintergreen, Woodruff, and Wormwood)

Apply Willowood Abamectin 0.15EC to herbs with ground application equipment to control listed pests.

Pests controlled:

*Liriomyza* leafminer                      Spider mite

#### Application Rate

- Low to Moderate infestations: 8 fl. oz. (0.009 lb. ai) per acre
- Severe Infestations: 16 fl. oz. (0.019 lb. ai) per acre

#### Application Instructions

Apply Willowood Abamectin 0.15EC when leafminers and mites first appear. Treat as a foliar spray and thoroughly cover both upper and lower leaves with Willowood Abamectin 0.15EC spray solution.

Application may be repeated to maintain control as required. For optimal control, thorough coverage of the crop canopy is essential. Reduced coverage may result if coverage is insufficient.

#### Surfactants and Wetting Agents

A wetting agent is not required. Where it is necessary to smooth out spray deposits and/or to improve foliage wetting, use a nonionic surfactant. Combining this product with surfactants that facilitate penetration and spreading may enhance control of mites. Do not combine this product with sticker-type / binder surfactants.

This product has been tested for use in herbs in combination with a non-ionic surfactant. However, it is impossible to test all varieties of herbs and in all conditions that may cause crop injury. Read and follow all directions and restrictions in this label and in the non-ionic surfactant label.

#### Restrictions:

- Do not use a surfactant on chives.
- Ground application: Willowood Abamectin 0.15EC must be applied in at least 20 gallons of water per acre.
- Observe a minimum treatment interval of 7 days between applications of this product.
- Do not make more than 2 applications of this product or any other foliarly applied abamectin-containing product per single cutting (harvest).



- Do not exceed a maximum of 16 fl. oz. per acre of Willowood Abamectin 0.15EC (0.019 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product in a single application.
- Do not exceed a maximum of 48 fl. oz. per acre of Willowood Abamectin 0.15EC (0.056 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Do not apply this product via aerial application. Apply via ground application only.
- Preharvest interval is 14 days, except for chives. Preharvest interval for chives is 7 days.

### **HOPS (Not for use in California)**

Apply Willowood Abamectin 0.15EC to hops with ground application equipment to control Twospotted spider mite.

#### **Application Rate**

8 – 16 fl. oz. (0.009-0.019 lb. ai) per acre

Apply to hops when they are 6-8 feet tall (1/2 trellis growth) at a rate of 8 – 16 fl. oz. (0.009-0.019 lb. ai) in at least 40 gallons of water per acre.

When hops are taller than 6 – 8 feet (have exceeded 1/2 trellis growth), use 16 fl. oz. (0.019 lb. ai) in at least 100 gallons of water per acre.

#### **Application Instructions**

Apply Willowood Abamectin 0.15EC using listed application rate. Treat as a foliar spray and thoroughly cover both upper and lower leaves with Willowood Abamectin 0.15EC spray solution. Spray volume will depend on the number and size of plants in the treatment area and foliage density. For optimal control, complete coverage is essential. When applying this product as a concentrate spray, the volume in water in the application solution is reduced, but use the same amount of Willowood Abamectin 0.15EC per acre as a dilute spray application.

#### Surfactants and Wetting Agents

A wetting agent is not required. This product may be combined with a non-ionic surfactant to smooth out spray deposits and to improve foliage wetting.

#### **Restrictions:**

- Treated hops yards must not be used for grazing.
- Do not use on hops in California.
- Observe a minimum treatment interval of 21 days between applications of this product.
- Only make a repeat application of Willowood Abamectin 0.15EC after applying another miticide with an alternative mode of action.
- Do not make more than 2 applications of this product or any other foliarly applied abamectin-containing product per calendar year.
- Do not exceed a maximum of 16 fl. oz. per acre of Willowood Abamectin 0.15EC (0.019 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product in a single application.

- Do not exceed a maximum of 32 fl. oz. per acre of Willowood Abamectin 0.15EC (0.038 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Do not apply this product via aerial application. Apply via ground application only.
- Preharvest interval is 28 days.

**LEAFY VEGETABLES (EXCEPT BRASSICA) CROP GROUP (CROP GROUP 4)**  
**(Amaranth (leafy Amaranth, Chinese spinach, tampala); Arugula (Roquette); Cardoon;**  
**Celery; Celtuce; Chervil; Chinese celery; Chrysanthemum, edible leaved and garland;**  
**Corn salad; Cress, garden and upland (yellow rocket and winter cress); Dandelion; Dock**  
**(Sorrel); Endive (escarole); Florence fennel; Lettuce, head and leaf; New Zealand**  
**Spinach; Orach; Parsley; Purslane, garden and winter; Radicchio (red chicory); Rhubarb;**  
**Spinach; Vine spinach; and Swiss chard)**

Apply Willowood Abamectin 0.15EC to leafy vegetables via aerial application or via ground application equipment to control listed pests.

**Pests controlled:**

Carmine spider mite

Twospotted spider mite

*Liriomyza* leafminer

**Application Rate**

- Low to Moderate infestations: 8 - 12 fl. oz. (0.009-0.014 lb. ai) per acre
- Severe Infestations: 16 fl. oz. (0.019 lb. ai) per acre

**Application Instructions**

Apply Willowood Abamectin 0.15EC using listed application rate, when mites or leafminer adult flies are first seen.

Application may be repeated to maintain control as required.

For best effectiveness, ensure the crop canopy is completely covered with the treatment solution. Reduced control may result if coverage is insufficient.

**IMPORTANT:** Apply this product with ground application equipment for optimal pest control. Aerial application may result in reduced control of mites when compared with ground application. The user accepts sole responsibility for the length and effectiveness of treatment when this product is applied by air.

Surfactants and Wetting Agents

A wetting agent is not required. This product may be combined with a non-ionic surfactant to smooth out spray deposits and to improve foliage wetting. Do not combine this product with sticker-type/binder surfactants.

**Restrictions:**

- Willowood Abamectin 0.15EC must not be applied to leafy vegetables that are grown for transplanting.

- Ground application: Willowood Abamectin 0.15EC must be applied in a minimum of 20 gallons of water per acre. Ensure there is sufficient application spray volume for thorough coverage.
- Aerial application: This product must be applied in a minimum of 5 gallons of water per acre. Ensure there is sufficient application spray volume for thorough coverage.
- When there are extreme conditions, e.g. high temperatures, high pest populations or where foliage is dense, apply this product in a greater volume of water to ensure adequate coverage.
- Observe a minimum treatment interval of 7 days between applications of this product.
- Do not make more than 2 applications of this product or any other foliarly applied abamectin-containing product per calendar year.
- Do not exceed a maximum of 16 fl. oz. per acre of Willowood Abamectin 0.15EC (0.019 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product in a single application.
- Do not exceed a maximum of 32 fl. oz. per acre of Willowood Abamectin 0.15EC (0.056 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year. This maximum applies to any other product containing abamectin that is applied foliarly.
- Preharvest interval is 7 days.

**MINT**  
**(peppermint and spearmint)**

Apply Willowood Abamectin 0.15EC to mint as a ground or air application to control Twospotted spider mite.

**Application Rate**

8 – 12 fl. oz. (0.009-0.014 lb. ai) per acre

**Application Instructions**

Apply Willowood Abamectin 0.15EC when mites are first observed. For optimal control, complete coverage of the crop canopy is necessary. Reduced control may result if coverage is insufficient.

Application may be repeated to maintain control as required.

Surfactants and Wetting Agents

For best control of listed pests, combine Willowood Abamectin 0.15EC with an organosilicone-based or non-ionic surfactant at the rate directed by the manufacturer.

**Restrictions:**

- Ground application: Willowood Abamectin 0.15EC must be applied in a minimum of 20 gallons of water per acre.
- Air application: Willowood Abamectin 0.15EC must be applied in a minimum of 5 gallons of water per acre. Ensure there is sufficient application spray volume for thorough coverage.

- When there are extreme conditions, e.g. high temperatures, high pest populations or where foliage is dense, apply this product in a greater volume of water to ensure adequate coverage.
- Treated foliage must not be used for grazing or feed.
- Observe a minimum treatment interval of 7 days between applications of this product.
- Do not make more than 2 sequential applications of this product or any other foliarly applied abamectin-containing product and do not make more than 3 applications of this product or any other foliarly applied abamectin-containing product per calendar year.
- Do not exceed a maximum of 12 fl. oz. per acre of Willowood Abamectin 0.15EC (0.014 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product in a single application.
- Do not exceed a maximum of 36 fl. oz. per acre of Willowood Abamectin 0.15EC (0.042 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Preharvest interval is 28 days.

### **ONIONS, BULB (CROP SUBGROUP 3-07A)**

**(Onion, bulb including daylily, bulb; fritillaria, bulb; garlic, bulb; garlic, great-headed, bulb; garlic, serpent, bulb; lily, bulb; onion, Chinese, bulb; onion, pearl; onion, potato, bulb; shallot, bulb; cultivars, varieties, and/or hybrids of these)**

Apply Willowood Abamectin 0.15EC to bulb onions via aerial application or via ground application equipment to control *Liriomyza* leafminers and thrips.

#### **Application Rate**

- Low to Moderate infestations: 8 - 12 fl. oz. (0.009-0.014 lb. ai) per acre
- Severe Infestations: 13 - 16 fl. oz. (0.015-0.019 lb. ai) per acre

#### **Application Instructions**

Apply Willowood Abamectin 0.15EC using listed application rate, when mites or leafminer adult flies first appear or thrips reach the economic threshold (as part of a thrips management program).

Application may be repeated to maintain control as required. For optimal control, complete coverage of the crop canopy is necessary. Reduced control may result if coverage is insufficient.

**IMPORTANT:** Apply this product with ground application equipment for optimal pest control. Aerial application may result in reduced control of listed pests when compared with ground application.

#### Surfactants and Wetting Agents

Combine this product with a non-ionic activator type wetting, penetrating and/or spreading adjuvant that is labeled for use in bulb onions. Combining this product with binder/sticker type adjuvants or products that contain them may decrease the effectiveness of treatment with Willowood Abamectin 0.15EC, so do not mix this product with binder/sticker type adjuvants or products containing binder sticker type adjuvants.

**Restrictions:**

- Do not apply Willowood Abamectin 0.15EC as a rescue treatment for control of thrips.
- Ground application: Willowood Abamectin 0.15EC must be applied in a minimum of 20 gallons of water per acre.
- Aerial application: This product must be applied in a minimum of 5 gallons of water per acre. Ensure there is sufficient application spray volume for thorough coverage.
- Where there are extreme conditions, e.g. high temperatures, high pest populations or where foliage is dense, apply this product in a greater volume of water to ensure adequate coverage.
- Observe a minimum treatment interval of 7 days between applications of this product.
- Make 2 consecutive applications of this product then rotate to a chemistry with a different mode of action. Make at least 2 applications of a chemistry with a different mode of action before making additional applications of this product. Do not make more than 2 sequential applications of this product or any other foliarly applied abamectin-containing product.
- Do not exceed a maximum of 16 fl. oz. per acre of Willowood Abamectin 0.15EC (0.019 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product in a single application.
- Do not exceed a maximum of 48 fl. oz. per acre of Willowood Abamectin 0.15EC (0.056 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Preharvest interval is 30 days.

**PEARS (INCLUDING ORIENTAL PEAR TREES)**

Apply Willowood Abamectin 0.15EC to pear trees by ground application (either conventional dilute or concentrate sprayers) to control listed pests.

**Pests controlled:**

European red mite	McDaniel spider mite	Twospotted spider mite
Pear rust mite	Yellow mite	Pear psylla

**Application Rate**

For use against listed species:

- Dilute spray: 2.5 – 5.0 fl. oz. (0.003-0.006 lb. ai) / 100 gal – based on a volume of 400 gallons spray per acre
- Concentrate spray: 10 – 20 fl. oz. (0.012-0.023 lb. ai) / A - or concentrate spray rate can also be determined by establishing the amount of product that would be used for a dilute spray. The same amount of product can be used in a concentrate spray to cover an equivalent pear orchard. A rate less than 10 fl. oz. (0.012 lb. ai /A could be determined for use on small trees.

**Application Instructions**

Apply Willowood Abamectin 0.15EC to pear orchards via ground application in a dilute or concentrate spray, using listed application rate, with sprayers calculated to deliver an adequate volume of water to completely cover foliage. Commence application when mite or insect thresholds are attained. If needed for control of pests, a second application of Willowood Abamectin 0.15EC can be made. Complete coverage of foliage is necessary for adequate pest

control. Note that the size of trees per acre, number of trees per acre and foliage density will affect the amount of spray volume that is used.

#### Horticultural Spray Oil

Applying Willowood Abamectin 0.15EC with horticultural spray oil (not a dormant oil) gives optimum results. Without horticultural spray oil (not a dormant oil), user could experience decreased effectiveness and/or reduced residual activity.

- For dilute applications, apply 0.25% or 1 gal / A horticultural spray oil to spray mixture.
- For concentrate applications, apply a minimum of 1 gal / A.

#### **Precaution:**

- When mixing with a horticultural spray oil, closely follow precautions and directions on the spray oil's label, as well as precautions and directions on Willowood Abamectin 0.15EC label, to avoid injury to crops [as an example, apply Willowood Abamectin 0.15EC plus horticultural oil more than 14 days before or after application of a product containing Captan to avoid injury and possible loss of crops].

#### **Restrictions:**

- Willowood Abamectin 0.15EC must be applied in a minimum of 40 gallons of water per acre.
- Do not allow livestock to graze in treated orchards.
- A second application may be made, if needed to maintain control, but observe a minimum treatment interval of 21 days between applications.
- Do not make more than 2 applications of this product or any other foliarly applied abamectin-containing product per calendar year.
- Do not exceed a maximum of 20 fl. oz. per acre of Willowood Abamectin 0.15EC (0.023 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product in a single application.
- Do not exceed a maximum of 40 fl. oz. per acre of Willowood Abamectin 0.15EC (0.047 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Do not apply Willowood Abamectin 0.15EC via aerial application. Apply via ground application only.
- Preharvest interval is 28 days.

### **STONE FRUIT CROP GROUP (CROP GROUP 12)**

**Apricot; cherry (sweet and tart); nectarine; peach; plum; plum (chickasaw, damson, and Japanese); plumcot, and prune (fresh)**

Apply Willowood Abamectin 0.15EC to stone fruits by ground application (either conventional dilute or concentrate sprayers) to control listed pests.

#### **Pests controlled:**

European red mite

Pacific spider mite

Twospotted spider mite

#### **Application Rate**

For use against listed species:

- Dilute spray: 2.5 – 5.0 fl. oz. (0.003-0.006 lb. ai) / 100 gal – based on a volume of 400 gallons spray per acre
- Concentrate spray: 10 – 20 fl. oz. (0.012-0.023 lb. ai) / A - or concentrate spray rate can also be determined by establishing the amount of product that would be used for a dilute spray . The same amount of product can be used in a concentrate spray to cover an equivalent stone fruit orchard. A rate less than 10 fl. oz. (0.012 lb. ai)/A could be determined for use on small trees.

### **Application Instructions**

Apply Willowood Abamectin 0.15EC to stone fruit orchards via ground application in a dilute or concentrate spray, using listed application rate, with sprayers calculated to deliver an adequate volume of water to completely cover foliage. Application should begin when mites are first observed. If needed for control of pests, a second application of Willowood Abamectin 0.15EC can be made. For optimal control, thorough coverage is essential for adequate pest control. Note that the size of trees per acre, number of trees per acre and foliage density will affect the amount of spray volume that is used.

Always apply this product with a non-ionic surfactant to spread the application and facilitate penetration of the leaf cuticle, or apply this product in combination with a horticultural oil (not a dormant oil).

### Horticultural Spray Oil

Applying Willowood Abamectin 0.15EC with horticultural spray oil (not a dormant oil) may enhance performance, however, it may also raise the possibility of a phytotoxic reaction in fruit and/or foliage.

- For dilute applications, apply 0.25% or 1 gal / A horticultural spray oil to spray mixture.
- For Concentrate applications, apply a minimum of 1 gal / A.

### Surfactants

Combining this product with surfactant that facilitates penetration of the leaf cuticle and spreading may enhance control of listed pests.

This product has been tested for use in stone fruits in combination with a non-ionic surfactant. Be advised, though, that testing all crop varieties under all conditions that could cause crop injury is not possible. Read and follow all directions and restrictions in this label and in the non-ionic surfactant label.

### **Restrictions:**

- Willowood Abamectin 0.15EC must be applied in a minimum of 40 gallons of water per acre.
- Do not allow livestock to graze in treated orchards.
- A second application may be made, if needed to maintain control, but observe a minimum treatment interval of 21 days between applications.
- Do not make more than 2 applications of this product or any other foliarly applied abamectin-containing product per calendar year.
- Do not exceed a maximum of 20 fl. oz. per acre of Willowood Abamectin 0.15EC (0.023 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product in a single application.
- Do not exceed a maximum of 40 fl. oz. per acre of Willowood Abamectin 0.15EC (0.047 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.



- Do not apply Willowood Abamectin 0.15EC via aerial application. Apply via ground application only.
- Preharvest interval is 21 days.

## **STRAWBERRIES**

Apply Willowood Abamectin 0.15EC to strawberries as a ground application to control Strawberry or Twospotted spider mite.

### **Application Rate**

16 fl. oz. (0.019 lb. ai) per acre

### **Application Instructions**

Apply Willowood Abamectin 0.15EC as a foliar spray. For an effective application, calibrate spray nozzle and volume to thoroughly cover both upper and lower leaves with Willowood Abamectin 0.15EC spray solution.

Make two applications as follows

1. First treatment when listed pests are first observed.
2. Second treatment 7-10 days later.

This application sequence may be repeated to maintain control as necessary.

### Surfactants and Wetting Agents

A wetting agent is not required. Where it is necessary to smooth out spray deposits and/or to improve foliage wetting, use a non-ionic surfactant.

### **Restrictions:**

- Do not apply Willowood Abamectin 0.15EC in strawberry nurseries.
- Ground application: Willowood Abamectin 0.15EC must be applied in a minimum of 50 gallons of water per acre, unless application is with an electro-static sprayer, where a minimum of 10 gallons of water per acre must be used.
- Observe a minimum interval of 21 days after second application before repeating application.
- Do not exceed a maximum of 16 fl. oz. per acre of Willowood Abamectin 0.15EC (0.019 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product in a single application.
- Do not exceed a maximum of 64 fl. oz. per acre of Willowood Abamectin 0.15EC (or 0.075 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Do not make more than 4 applications of this product or any other foliarly applied abamectin-containing product per calendar year.
- Do not apply Willowood Abamectin 0.15EC via aerial application. Apply via ground application only.
- Preharvest interval is 3 days.



**TREE NUTS CROP GROUP (CROP GROUP 14) AND PISTACHIO**  
**Almond, beech nut, Brazil nut, butternut, cashew, chestnut, chinquapin, filbert (hazelnut),  
hickory nut, macadamia nut, pecan, and walnuts (black and English)**

Apply Willowood Abamectin 0.15EC by ground application (either conventional dilute or concentrate sprayers) to control listed pests.

**Pests controlled:**

European red mite	Pacific spider mite	Strawberry spider mite
Twospotted spider mite		

**Application Rate**

For use against listed species:

- Dilute spray: 2.5 – 5.0 fl. oz. (0.003-0.006 lb. ai) / 100 gal – based on a volume of 400 gallons spray per acre
- Concentrate spray: 10 – 20 fl. oz. (0.012-0.023 lb. ai) / A - or concentrate spray rate can also be determined by establishing the amount of product that would be used for a dilute spray. The same amount of product can be used in a concentrate spray to cover an equivalent tree nut orchard. A rate less than 10 fl. oz. (0.012 lb. ai)/A could be determined for use on small trees.

**Application Instructions**

Apply Willowood Abamectin 0.15EC to tree nuts via ground application in a dilute or concentrate spray, using listed application rate, with sprayers calculated to deliver an adequate volume of water to completely cover foliage. Application should begin when mites are first observed. If needed for control of pests, a second application of Willowood Abamectin 0.15EC can be made. For optimal results, thorough coverage is essential for adequate pest control. Note that the size of trees per acre, number of trees per acre and foliage density will affect the amount of spray volume that is used.

Residual mite control is more effective with spray deposits on new leaves vs. old leaves.

Horticultural Spray Oil

Apply Willowood Abamectin 0.15EC with horticultural spray oil (not a dormant oil) labeled for use on tree nuts.

- For dilute applications, apply 0.25% or 1 gal / A horticultural spray oil to spray mixture.
- For concentrate applications, apply a minimum of 1 gal / A.

**Restrictions:**

- Willowood Abamectin 0.15EC must be applied in a minimum of 40 gallons of water per acre.
- Do not allow livestock to graze in treated groves/orchards.
- If a second application is necessary, wait at least 21 days before repeating application.
- Do not make more than 2 applications of this product or any other foliarly applied abamectin-containing product per calendar year.
- Do not exceed a maximum of 20 fl. oz. per acre of Willowood Abamectin 0.15EC (0.023 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product in a single application.
- Do not exceed a maximum of 40 fl. oz. per acre of Willowood Abamectin 0.15EC (or 0.047 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.

- Do not apply Willowood Abamectin 0.15EC via aerial application to tree nuts.
- Preharvest interval is 21 days.

**TUBEROUS AND CORM VEGETABLES CROP SUBGROUP  
(CROP SUBGROUP 1C)**

**Arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; canna, edible; cassava (bitter and sweet); chayote (root); chufa; dasheen; ginger; leren; potato; sweet potato; tanier; turmeric; yam bean; and yam (true)**

Apply Willowood Abamectin 0.15EC to tuberous and corm vegetables via aerial application or via ground application equipment to control listed pests.

**Pests controlled:**

Colorado potato beetle	<i>Liriomyza</i> leafminer	Spider mite
Potato psyllid		

**Application Rate**

- Low to Moderate infestations: 8 - 12 fl. oz. (0.009-0.014 lb. ai) per acre
- Severe Infestations: 16 fl. oz. (0.019 lb. ai) per acre

**Application Instructions**

Apply Willowood Abamectin 0.15EC using listed application rate. For best effectiveness, calibrate sprayers to ensure sufficient water is dispensed and the crop canopy is completely covered with the treatment solution. Reduced control may result if coverage is insufficient.

**IMPORTANT:** For optimal effectiveness, apply Willowood Abamectin 0.15EC as a ground application. Aerial application is less effective than ground application in controlling mites. If Willowood Abamectin 0.15EC is applied by air, the user is solely responsible for any reduced control of mites or any reduction in the length of control of mites.

Colorado potato beetle:

- Apply Willowood Abamectin 0.15EC when larvae are present after 50% of eggs have hatched.
- If a further application is required, limit treatment to a single generation of Colorado potato beetles per crop.
- Do not exceed a maximum of 2 applications per crop. See Restrictions below.

*Liriomyza* leafminers, Spider mites

- Apply Willowood Abamectin 0.15EC when mites or leafminer adult flies are first seen.
- Repeat treatment may be carried out as required to maintain control.

Potato psyllid

- Repeat treatment may be carried out as required to maintain control.

### Surfactants and Wetting Agents

For best control of listed insects and spider mites, combine Willowood Abamectin 0.15EC with an organosilicone-based or non-ionic surfactant at the rate directed by the manufacturer. Do not combine this product with sticker-type/binder surfactants as control of spider mite and insects may be reduced.

### **Restrictions:**

- Ground application: Willowood Abamectin 0.15EC must be applied in a minimum of 20 gallons of water per acre.
- Aerial application: This product must be applied in a minimum of 5 gallons of water per acre.
- When there are extreme conditions, e.g. high temperatures, high pest populations or where foliage is dense, apply this product in a greater volume of water to ensure adequate coverage.
- Do not allow livestock to graze or feed treated foliage to livestock.
- Observe a minimum treatment interval of 7 days between applications of this product.
- Do not make more than 2 sequential applications of this product or any other foliarly applied abamectin-containing product.
- Do not exceed a maximum of 16 fl. oz. per acre of Willowood Abamectin 0.15EC (0.019 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product in a single application.
- Spider mite and Colorado potato beetle: Do not exceed a maximum of 32 fl. oz. per acre of Willowood Abamectin 0.15EC (or 0.038 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Leafminer: Do not exceed a maximum of 48 fl. oz. per acre of Willowood Abamectin 0.15EC (0.056 lb. of active ingredient per acre) or any other foliarly applied abamectin-containing product per calendar year.
- Preharvest interval is 14 days.

## STORAGE AND DISPOSAL

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

### **PESTICIDE STORAGE:**

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

### **PESTICIDE DISPOSAL:**

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

### **CONTAINER HANDLING:**

**Nonrefillable Container (five gallons or less):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) 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 reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

**Nonrefillable Container (greater than five gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

## CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Willowood, LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Willowood, LLC and Seller harmless for any claims relating to such factors.

Willowood, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Willowood, LLC, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, WILLOWOOD, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, neither Willowood, LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF WILLOWOOD, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF WILLOWOOD, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Willowood, LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of Willowood, LLC.

[EPA approval date]

# 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
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## Sublabel B

*[Note to reviewer: [Text] in brackets denotes optional text].*

*[Note to reviewer: {Text} in braces denotes where in the final label text will appear.]*

### {BOOKLET FRONT PANEL LANGUAGE}

## Willowood Abamectin 0.15EC

Nematicide

Use for control of turf-parasitic nematodes on golf course fairways, tees and greens

#### ACTIVE INGREDIENT:

Abamectin\* ..... 2.0%

OTHER INGREDIENTS: ..... 98.0%

TOTAL: ..... 100.0%

\*CAS No. 71751-41-2; 1 gallon contains 0.15 lb. Abamectin

### 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 [inside] label booklet for [First Aid,] [additional] Precautionary Statements and Directions for  
Use.

EPA Reg. No. 87290-58

EPA Est. No.

#### Manufactured for:

Willowood, LLC  
1887 Whitney Messa Drive #9740  
Henderson, NV 89014

Net Contents:  
Batch [Lot] No.

## {LANGUAGE INSIDE BOOKLET}

<b>FIRST AID</b>	
<b>IF IN EYES:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 seven days a week, 6:30 am to 4:30 pm Pacific Time or your poison control center at 1-800-222-1222.	
<b>NOTE TO PHYSICIAN</b>	
<p>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 absorbents (e.g., activated charcoal).</p> <p>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.</p> <p>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.</p>	

### **PRECAUTIONARY STATEMENTS** **HAZARDS TO HUMANS AND DOMESTIC ANIMALS** **WARNING/AVISO**

Causes substantial but temporary eye injury. Harmful if swallowed. Do not get in eyes or on clothing.

#### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Socks and shoes
- Chemical-resistant gloves made out of barrier laminate or butyl rubber  $\geq$  14 mils
- Protective eyewear

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

instructions for cleaning/maintaining PPE. If no such instructions for washables exist, 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 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.

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a medium potential for reaching both surface water and aquatic sediment via runoff for several weeks to months after application. A level, well-maintained vegetative buffer strip 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 water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours.

**Attention: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.**

#### **DIRECTIONS FOR USE RESTRICTED USE PESTICIDE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.



## **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

**Do not re-enter treated areas until sprays have dried.**

**INJURY TO TURF, INSUFFICIENT CONTROL OF PESTS AND/OR ILLEGAL RESIDUES CAN RESULT IF THIS LABEL IS NOT FOLLOWED CAREFULLY.**

### **Phytotoxicity**

Not all combinations of this product with various mix partners (such as other pesticides, crop oils, nutritional sprays, etc.) have been tested for phytotoxicity, so any solutions should be pre-tested prior to making a broader application, to ensure physical compatibility and to assess the potential for damage to turf.

### **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.

### **Resistance Management**

For resistance management, Willowood Abamectin 0.15EC contains a Group 6 insecticide/acaracide. Any pest population may contain individuals naturally resistant to Willowood Abamectin 0.15EC and other Group 6 insecticides/acaracides. The resistant individuals may dominate the population if this group of insecticides/acaracides are used repeatedly on the same use site. Appropriate resistance-management strategies should be followed.

To delay resistance, take the following steps:

- Rotate the use of Willowood Abamectin 0.15EC or other Group 6 insecticides/acaracides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides/acaracides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
  - When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).

- Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
- The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticides/acaricides 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 that the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact Willowood, LLC at 866-396-0465.

## **SPRAY DRIFT**

### **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 use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

### **Boomless Ground Applications:**

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1) for all applications.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

## **SPRAY DRIFT ADVISORIES**

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.  
BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

### **IMPORTANCE OF DROPLET SIZE**

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

### **Controlling Droplet Size – Ground Boom**

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

### **BOOM HEIGHT – Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

### **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.

### **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.

## **FOR NEMATODE CONTROL ON GOLF COURSE FAIRWAYS, TEES AND GREENS**

### **USE INFORMATION**

This product will control nematodes in golf course turf (fairways, tees and greens) when used as instructed below. This product should be applied as part of a seasonal turf-maintenance program, and noticeable improvements in turf health may require more than one application.

Apply this product as an early treatment (after appropriate nematode extraction, identification, and counts).

### **APPLICATION INSTRUCTIONS**

Apply product in the early morning while grass is wet with dew or irrigate the area prior to application with 0.1 inches of water. Spray onto wet turf. Irrigate with 0.1 to 0.5 inches of water beginning within 1 hours of application to move the product through the thatch. For best results, irrigate before the spray droplets have dried on the turf.

Apply this product at a rate of 16-24 fl. oz. (0.019-0.028 lb. ai) Willowood Abamectin 0.15EC per acre on a 14-21 day interval, or 24-57 fl. oz. (0.028-0.067 lb. ai) per acre on a 22-28 day interval. Application rate is dependent upon pest pressure and/or nematode assay counts. Use the higher rate for more severe pest conditions or difficult soil types.

Apply labeled rate of product in 2 gallons of water per 1,000 square feet of turf. Begin irrigation as soon as possible after irrigation when lower application volumes are used. For best results, use spray nozzles that produce extremely coarse droplets [such as Turbo Floodjet (TF5) or TurfJet (TTJ10)].

Combine with a soil surfactant or soil wetting agent. Follow all manufacturer use rates, directions and restrictions.

Tank Mixing: It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

### **USE RESTRICTIONS**

- Do NOT apply more than 228 fl. oz. of this product (0.27 lb. ai) per acre per year.
- Do NOT apply to turf that is stressed by heat or moisture issues.
- Do NOT apply to commercial or residential turf or to sports fields.
- Do NOT apply to golf course roughs.
- Do NOT apply using an ultra-low volume spray system.
- Do NOT apply this product through any type of irrigation system.
- Do NOT apply by aerial application.
- Do NOT allow poultry or livestock to graze turf that has been treated, or to feed on turf clippings from treated areas.

### **STORAGE AND DISPOSAL**

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

#### **PESTICIDE STORAGE:**

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

#### **PESTICIDE DISPOSAL:**

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

#### **CONTAINER HANDLING:**

**Nonrefillable Container (five gallons or less):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) 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 reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

**Nonrefillable Container (greater than five gallons):** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

#### **CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Willowood, LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Willowood, LLC and Seller harmless for any claims relating to such factors.

Willowood, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Willowood, LLC, and Buyer and User assume the risk of any such use. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, WILLOWOOD, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.**

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[EPA approval date]