

# RESTRICTED USE PESTICIDE

DUE TO TOXICITY TO NON-TARGET INVERTEBRATES, 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

# AVERLAND® FC



Insecticide • Miticide • Nematicide



Escanee QR  
para Español

Active Ingredient: ..... By Wt  
Abamectin (CAS No. 71751-41-2) ..... 8.0 %  
Other Ingredients: ..... 92.0 %  
TOTAL ..... 100.0 %

This product contains 0.7 pounds of active ingredient per gallon

## 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.)

This label must be in the possession of the user at the time of application.  
See inside booklet for additional precautionary information and directions for use.

EPA Reg. No. 89118-10  
EPA Est. No. 97524-GA-1

## Net Contents: 2.5 Gallons

Vive Crop Protection Inc.  
500 Westover Dr. #10198  
Sanford, NC 27330  
1-888-760-0187



6 28055 13051 2

### FIRST AID

<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 by a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If inhaled</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<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>

### Note to Physician:

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

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

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

### EMERGENCY INFORMATION

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

In the event of a medical or chemical emergency contact Chemtel Inc. in North America at 1-800-255-3924 or worldwide international at +1-813-248-0585.

# PRECAUTIONARY STATEMENTS

## HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**Warning.** May be fatal if swallowed. May be fatal if inhaled. Do not breathe spray mist. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing.

## Personal Protective Equipment (PPE)

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants;
- Shoes plus socks;
- Chemical resistant gloves made of: barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, neoprene rubber  $\geq$  14 mils, natural rubber  $\geq$  14 mils, polyethylene, polyvinylchloride (PVC)  $\geq$  14 mils or viton  $\geq$  14 mils;
- Wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any R or P filter OR a NIOSH-approved elastomeric particulate respirator with any R or P filter OR a NIOSH-approved powered air purifying respirator with HE filters.

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.

## Engineering Control Statements

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

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

### USER SAFETY RECOMMENDATIONS

#### Users should:

- Wash hands after handling and 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.
- Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife.

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from target areas. Do not contaminate water when disposing of equipment wash water or rinseate.

This product is highly toxic to bees exposed to direct treatment 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.

## SURFACE WATER ADVISORY

This product may impact surface water quality due to runoff of rainwater. 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.

## 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.

## PHYSICAL OR CHEMICAL HAZARDS

Do not mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

## DIRECTIONS FOR USE

### RESTRICTED USE PESTICIDE

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

## AGRICULTURAL USE REQUIREMENTS

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.

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR 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 in this labeling about personal protective equipment, restricted-entry intervals, and notification to works. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

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

Exception(s):

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

For early entry into 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, wear:

- Coveralls.
- Shoes plus socks.
- Chemical resistant gloves made of: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinylchloride (PVC) ≥ 14 mils or viton ≥ 14 mils.

**Failure to follow directions and precautions on this label may result in crop injury, poor pest control, and/or illegal residues.**

## PRODUCT RESTRICTIONS

### Use Restrictions

- Do not use to treat plants grown for transplanting. This product is not for use in nurseries, plant propagation houses, or greenhouses by commercial transplant producers on plants being grown for transplanting.
- Do not use to treat crops grown in greenhouse for harvest unless specified in the specific crop use section of this label.
- Do not use on residential landscapes or in residential areas.
- No Aerial Application in New York State.
- To avoid illegal residues while applying by broadcast spray, Averland FC MUST ALWAYS be applied with a non-phytotoxic, non-ionic activator type wetting, spreading, and/or penetrating spray adjuvant or horticultural oil (not a dormant oil). Refer to the Application and Mixing Instructions section for more details.

## Rotational Crop Restrictions

This product does not have any rotation (plant-back) restriction. Areas treated by Averland FC may be replanted with any crop as soon as practical following the last application.

## GENERAL INSTRUCTIONS

Averland FC contains the active ingredient abamectin in an optimized suspension concentrate formulation that is compatible with liquid fertilizers. Averland FC provides activity against many important crop parasitic nematodes as well as listed insects and mites. Averland FC mixes well with liquid fertilizer, hard water, micronutrients and other crop protection products. Averland FC can be applied by sprinkler chemigation to suppress thrips. Averland FC as an in-furrow treatment provides suppression of nematodes.

## Resistance Management

Averland FC contains the active ingredient abamectin which is a GROUP 6 INSECTICIDE/MITICIDE/NEMATOCIDE and is effective against a variety of nematodes, mites, and insects.

Some insect, mite, or nematode species are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state agricultural authorities or universities for details.

For resistance management, Averland FC contains a Group 6 insecticide/miticide/nematocide. Any insect, mite, or nematode population may contain individuals that are inherently resistant to Averland FC and other Group 6 insecticide/miticide/nematocides. The resistant individuals may eventually dominate the insect, mite, or nematode population if this group of insecticide/miticide/nematocides are used repeatedly in the same fields. Appropriate resistance management strategies should be followed.

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

To delay insecticide/miticide/nematocide resistance, take the following steps:

- Rotate the use of Averland FC or other Group 6 insecticide/miticide/nematocides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticide/miticide/nematocides 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 insecticidal activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/miticide/nematicides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local 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 Vive Crop Protection at 1-888-760-0187. You can also contact your pesticide distributor or university extension specialist to report resistance.

### **Maintaining Susceptibility to These Classes of Chemistry**

- Avoid using Group 6 insecticide/miticide/nematicides exclusively for season long control in insect or mite species with more than one generation per crop season.
- For insect, mite, or nematode species with successive or overlapping generations, apply Averland FC or other Group 6 insecticide/miticide/nematicides using a “treatment window” approach. A treatment window is a period of time as defined by the state of crop development and/or the biology of the pests of concern. Within the treatment window, depending on the length of residual activity, there may either be single or consecutive applications (seed treatment, soil, foliar, unless otherwise stated) of the Group 6 insecticide/miticide/nematicides. Do not exceed the maximum Averland FC allowed per year.
- Following a treatment window of Group 6 insecticide/miticide/nematicides, rotate to a treatment window of effective products with a different mode of action before making additional applications of Group 6 insecticide/miticide/nematicides.
- A treatment windows rotation, along with other IPM practices for the crop and use area, is considered an effective strategy for preventing or delaying a pest’s ability to develop resistance to these classes of chemistry.
- If resistance is suspected, do not reapply Averland FC or other Group 6 insecticide/miticide/nematicides.

### **Other Insect Resistance Management (IRM) Practices**

- Incorporating IPM techniques into your insect, mite, or nematode control program.
- Monitoring treated insect or mite populations for loss of field efficacy.
- Using tank-mixtures or premixes with insecticide/miticide/nematicides from a different target site of action group as long as the involved products are all registered for the same crop outlet and effective rates are applied.

### **APPLICATION AND MIXING INSTRUCTIONS**

Averland FC is a suspension concentrate formulation. Shake or agitate well prior to measuring or pouring. Like most suspension concentrate formulations, Averland FC will thicken upon standing for long periods of time. Averland FC will revert back to an easily flowable fluid after a brief shake.

Averland FC disperses finely in liquid fertilizer and micronutrient products without prior dilution with water. However, due to the wide variability in the composition and consistency of liquid fertilizers, it is recommended a jar-test be performed.

Averland FC insecticide is designed for at-plant, and foliar applications, and must be diluted with liquid fertilizer and/or water before application. Refer to Specific Use Directions for Crop Plants for pest control or suppression instructions.

Do not use strainer (nozzle screens) with a mesh designation greater than 50.

Make sure that application equipment is thoroughly cleaned and properly calibrated prior to application and thoroughly cleaned after application.

Averland FC can be mixed directly with water and/or liquid starter or pop-up fertilizer. Fill tank half full with water or liquid fertilizer and begin agitation. Add Averland FC according to crop use rate and fill up tank to intended final volume. While pouring, avoid direct contact of Averland FC with the container wall to achieve best dispersion. Mix thoroughly to disperse and suspend the Averland FC. Maintain agitation during application and in any nurse tank or storage tank.

Do not prepare more mixture than is required for the treatment. For best results, use immediately after mixing. If the mixtures settles, agitate the mixture and assess to ensure thorough re-mixing prior to application.

The rate of application should be chosen within the label ranges for the crop being treated based on expected pest pressure. This can be determined by history and scouting of the field and whether weather conditions are expected to be favorable. Use lower rates when pest pressure is expected to be light and use higher rates when pest pressure is expected to be heavy. Application rates are generally higher in arid climates.

Unless otherwise directed by registered supplemental labeling, follow the Directions for Use in each crop group section.

Application Rate Summary Table			
fl oz Product/A	lb abamectin/A	Treated Acres per Gallon Product	Treated Acres per 2.5 Gallon Jug of Product
1.00	0.005	128	320
1.25	0.007	102	256
1.75	0.010	73	183
2.25	0.012	57	142
2.5	0.014	51	128
3.5	0.019	37	91
4.0	0.022	32	80
4.25	0.023	30	75
5.5	0.030	23	58
6.0	0.033	21	53
10.0	0.055	13	32
15.0	0.082	9	21

## Adjuvant Requirements

To avoid illegal residues while applying by broadcast spray, Averland FC **MUST ALWAYS** be applied with a non-phytotoxic, non-ionic activator type wetting, spreading, and/or penetrating spray adjuvant or horticultural oil (not a dormant oil) when specified in the specific crop instructions. Non-ionic activator type wetting, spreading, and/or penetrating spray adjuvants include:

- non-ionic surfactants (NIS) with at least 75% surface active agent,
- crop oil concentrates (COC),
- vegetable oil concentrates (VOC),
- methylated seed/vegetable oils (MSO),
- organosilicones (OS) with at least 15% emulsifiers/surfactants,
- blends of these non-ionic activator type spray adjuvants.

Spray adjuvants must be compatible with Averland FC and must be used at concentrations specified on the spray adjuvant product label directions for use for the targeted crop unless more specific directions are provided in the Directions for Use for individual crops on this label. **Do not use binder or sticker type adjuvants because these types of adjuvants may reduce translaminar movement of the active ingredient into the plant.**

## Tank Mixture Application

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.

Averland FC may be applied in tank mixtures with adjuvants, micronutrients, and other products approved for use on registered crops. Jar tests (or other similar methods) to ensure compatibility between products should be conducted before use.

When an adjuvant is used, it is recommended to use an adjuvant that meets the standards of the Council of Producers and Distributors of Agrotechnology (CPDA) adjuvant certification.

## Tank Mixture Order of Addition Recommendation

This is the general recommendation for order of addition. Always follow any specific order of addition instructions on all the tank-mix partner labels. Jar tests (or other similar methods) to ensure order of addition compatibility between products should be conducted before use.

1. Fill tank  $\frac{1}{2}$  to  $\frac{3}{4}$  full with mixing diluent (water, liquid fertilizer, etc.).
2. Begin tank agitation before adding any tank-mix partners.
3. Add any water conditioner/anti-foam/compatibility agents.
4. Add any products packaged in water-soluble packaging and allow to completely dissolve/disperse.
5. Add any wettable powders/flowables (DC, DS, GR, SG, SP).
6. Add any microencapsulated suspensions (ME).
7. Add any liquids and solubles (SC, SU), including Averland FC.
8. Add any emulsifiable concentrates (EC).
9. Add any adjuvants.

## Jar Test Procedure

**Test potential mixing partners, including adjuvants, for mixing compatibility using a standard jar test or other similar method and for crop safety prior to use on a crop.**

*The following jar test procedure is recommended to evaluate compatibility: Following any product specific instructions for order of addition, pour the recommended proportions of the products into a suitable container, mix thoroughly and allow to stand at least twenty (20) minutes. If the combination remains mixed, or can be re-mixed readily, the mixture is considered physically compatible. If the combination does not remain mixed, or cannot be re-mixed readily, the products are not physically compatible and should not be tank-mixed together.*

Do not prepare more mixture than is required for the treatment. For best results, use immediately after mixing. If the mixtures settle, agitate the mixture and assess to ensure thorough re-mixing prior to application.

## INSTRUCTIONS FOR AT-PLANT APPLICATIONS

Averland FC can be mixed with liquid starter or pop-up fertilizer for use at-plant as an in-furrow spray or dribble. Refer to this label's specific use directions to determine if an at-plant application is labeled for a given crop and pest. Follow label recommendations in regards to liquid fertilizer use rate and seed safety.

As with any insecticide, care must be taken to minimize exposure of Averland FC to honey bees and other pollinators.

At Plant In-Furrow Application Rates (fl oz product per 1000 row ft)										
Fl oz product per acre	Average Row Spacing (inches)									
	15"	20"	22"	24"	30"	32"	34"	36"	38"	40"
3.5	0.10	0.13	0.15	0.16	0.20	0.21	0.23	0.24	0.25	0.27
4.0	0.11	0.15	0.17	0.18	0.23	0.24	0.26	0.28	0.29	0.31
4.5	0.13	0.17	0.19	0.21	0.26	0.28	0.29	0.31	0.33	0.34
5.0	0.14	0.19	0.21	0.23	0.29	0.31	0.33	0.34	0.36	0.38
5.5	0.16	0.21	0.23	0.25	0.32	0.34	0.36	0.38	0.40	0.42
6.0	0.17	0.23	0.25	0.28	0.34	0.37	0.39	0.41	0.44	0.46
10.0	0.29	0.38	0.42	0.46	0.57	0.61	0.65	0.69	0.73	0.77
15.0	0.43	0.57	0.53	0.69	0.86	0.92	0.98	1.03	1.09	1.15
<b>IMPORTANT:</b> The linear application rate applied affects the duration and degree of control to a large extent. Linear application rates in the shaded region in the above table may not provide early season protection to the seed and seedling. Follow all crop specific use instructions regarding maximum use rates.										
~ Linear Row Feet Calculation: $522,720 \div \text{row spacing (in inches)} = \text{Row feet per acre}$										

## INSTRUCTIONS FOR BROADCAST APPLICATIONS

Averland FC can be applied as a spray to foliage but must be applied with an adjuvant (see the **Mixing Instructions** section). Refer to the directions for specific crops to determine if such applications are labeled for a given crop and, if so, for which insect pests.

**Do not apply when conditions favor drift from the area intended for treatment;** read instructions under the **Spray Drift Management** section.

## INSTRUCTIONS FOR CHEMIGATION APPLICATIONS

- For application by sprinkler irrigation (chemigation) to onion, bulb; onion, green; and tuberous and corn for the suppression of thrips only.
- Sprinkler irrigation application only.
- Only apply Averland FC by chemigation instructions as specified in specific crop direction.
- Only apply Averland FC through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move. Do not apply Averland FC through any other type of irrigation system.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water or liquid fertilizer.
- If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- Follow rates and application timings given in the specific crop instructions. Consult your local State Extension Service or other local experts for recommendations on the use of adjuvants, diluents, rates, and mixing instructions. The efficacy of Averland FC (or other abamectin products) as a sprinkler irrigation application should be proved effective, through university and/or extension field trials.
- The chemical supply tank and injector system should be thoroughly cleaned and flushed with clean water.
- Do not apply when wind speed favors drift beyond the area intended for treatment or non-uniform distribution of the treatment solution.

## Instructions for Chemigation

- The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Any alternatives to the above mentioned required safety devices must conform to the list of EPA-approved alternative devices.
- Do not apply when wind speed favors drift beyond the area intended for treatment or non-uniform distribution of the treatment solution.

## Instructions for Public Water Systems

- Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regulatory serves an average of at least 25 individuals daily at least 60 days out of the year.
- Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve location on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Any alternatives to the above mentioned required safety devices must conform to the list of EPA-approved alternative devices.
- Do not apply when wind speed favors drift beyond the area intended for treatment or non-uniform distribution of the treatment solution.

## Instructions for Irrigation Systems

- Application by sprinkler irrigation (chemigation) may only be used for onion, bulb; onion, green; and tuberous and corn for the suppression of thrips only.

- Follow rates and application timings given in the specific crop instructions. Consult your local State Extension Service or other local experts for recommendations on the use of adjuvants, diluents, rates, and mixing instructions. The efficacy of Averland FC (or other abamectin products) as a sprinkler irrigation application should be proved effective, through university and/or extension field trials.
- Check the irrigation system to ensure uniform application of final spray to all areas. Thorough coverage of foliage is required for good control. Good agitation in the pesticide supply tank should be maintained prior to and during the entire application period.
- Apply by injecting the recommended rate of Averland FC into the irrigation system using a metering device that will introduce a constant flow and by distributing the product to the target area in 0.1 acre-inch of water. In general, use the least amount of water required for proper distribution and coverage. It is recommended that the product be injected into the main irrigation line ahead of a right angle turn in the line to ensure adequate dispersion or mixing in the irrigation water. Once the application is completed, flush the entire irrigation and injection system with clean water before stopping the system.
- In addition to the above recommendations, if application is being made during a normal irrigation set of a stationary sprinkler, the recommended rate of Averland FC for the area covered should be injected into the system only during the end of the irrigation set for sufficient time to provide adequate coverage and product distribution.

## 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.

### 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 spray during temperature inversions.

(continued)

## SPRAY DRIFT (continued)

### 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 spray during temperature inversion.

## SPRAY DRIFT ADVISORIES

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

Do not allow this product to drift onto non-target areas. Drift may result in illegal residues or injury to non-target species. Risk of exposure to sensitive areas can be reduced by applying this product when the wind is away from the sensitive area.

### Buffer Restrictions and Vegetative Strip Requirements

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

### Temperature and Humidity

- When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.
- Avoid application when the temperature is high and/or the humidity is low. These conditions increase the evaporation of spray droplets and the likelihood of drift to aquatic areas.

### 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.
- Do not apply when the weather conditions may cause drift.

### 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 spray drift.

## Controlling Droplet Size - Aircraft

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

## Aerial Application Spray Drift Advisories

The following drift management requirements must be followed to avoid off-target movement from aerial applications to agricultural field crops.

- Nozzle Direction - Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
- Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the air stream produces larger droplets than other orientations and is the recommended practice.
- Number of Nozzles - Use the minimum number of nozzles that provides uniform coverage.
- Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid-stream nozzles oriented straight back produce the largest droplets and the lowest drift.
- Boom Length - For some use patterns, reducing the effective boom length to less than 75% of the wingspan or rotor length may further reduce drift without reducing swath width.
- Swath Adjustment - When applications are made with a cross wind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind.
- Release Height - Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind. Higher release heights increase the potential for spray drift.

## Ground Application Spray Drift Advisories

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

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

## 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.

## Boom-less Ground Applications

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

## SPECIFIC USE DIRECTIONS FOR CROP PLANTS

### ARUGULA

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Carmine Spider Mite <i>Liriomyza</i> Leafminer Two-Spotted Spider Mite	1.75 - 3.5 (0.010 - 0.019)
<b>Application Timing:</b> <ul style="list-style-type: none"><li>• Apply when spider mites or adult leafminer flies are first observed and repeat application if needed to maintain control.</li></ul>	
<b>Use Directions:</b> <ul style="list-style-type: none"><li>• Apply this product diluted in a minimum volume of 20 gal/A by ground or 5 gal/A by air.</li><li>• With aerial application, the resulting level and duration of control could be less than with ground application.</li><li>• Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.</li><li>• When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the <b>Application and Mixing Instructions</b> section for more information.</li></ul>	
<b>Use Restrictions:</b> <ul style="list-style-type: none"><li>• <b>Maximum Single Application Rate:</b> 3.5 fl oz Averland FC/A (0.019 lb a.i./A).</li><li>• <b>Minimum Application Interval:</b> 7 days.</li><li>• <b>Maximum Annual Rate:</b> 10.25 fl oz Averland FC/A/calendar year.<ul style="list-style-type: none"><li>◦ <b>DO NOT</b> exceed 0.056 lb a.i./A/calendar year of abamectin-containing products including all application types (seed treatment, soil, foliar).</li><li>◦ <b>DO NOT</b> make more than 2 sequential applications of Averland FC or any other foliarly abamectin-containing product.</li></ul></li><li>• <b>Pre-Harvest Interval (PHI):</b> 7 days.</li></ul>	



# AVOCADO

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Avocado Thrips ( <i>Scirtothrips perseae</i> ) <sup>1</sup> Persea Mite ( <i>Oligonychus perseae</i> )	2.25 - 4.25 (0.012 - 0.023)
<b>Application Timing:</b> <ul style="list-style-type: none"><li>• Apply when immature thrips are first observed but before numbers exceed 5 immature thrips per leaf/fruit.</li><li>• Make a second application if needed to main control at a minimum of 30 days after the first application.</li></ul>	
<b>Use Directions:</b> <ul style="list-style-type: none"><li>• Do not use a rate less than 2.25 fl oz/A.</li><li>• Adjust gallons of spray per acre based on size and number of trees per acre and density of foliage. In any case, thorough coverage is essential for good mite and insect control.</li><li>• Apply this product diluted in a minimum volume of 100 gal/A by ground or 50 gal/A by air.</li><li>• With aerial application, the resulting level and duration of control of thrips could be less than with ground application.</li><li>• <b>For Ground Application:</b> If spray volume is greater than 400 gal/A, apply Averland FC at a rate of 0.5 fl oz per 100 gallons.</li><li>• When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the <b>Application and Mixing Instructions</b> section for more information.</li></ul>	
<b>Specific Pest Instructions:</b> <ul style="list-style-type: none"><li>• <b>Thrips:</b> Number of immature thrips per leaf/fruit: 1-2 = low infestation level, 3-4 = moderate infestation level, 5 or more = severe infestation level.</li></ul>	
<b>Precautions:</b> <ul style="list-style-type: none"><li>• When using a horticultural spray oil, or any tank mix adjuvant, follow all precautions and restrictions on the adjuvant label. Before using horticultural spray oil above 20%, treat a small test area before making a large-scale application.</li></ul>	
<b>Specific Use Restrictions:</b> <ul style="list-style-type: none"><li>• <b>Maximum Single Application Rate:</b> 4.25 fl oz Averland FC/A (0.023 lb a.i./A).</li><li>• <b>Minimum Application Interval:</b> 30 days.</li><li>• <b>Maximum Annual Rate:</b> 8.5 fl oz Averland FC/A/calendar year.<ul style="list-style-type: none"><li>◦ <b>DO NOT</b> exceed 0.046 lb a.i./A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).</li><li>◦ <b>DO NOT</b> apply more than 2 applications of Averland FC or any other foliar-applied abamectin-containing product per year.</li></ul></li><li>• <b>DO NOT</b> allow livestock to graze in treated orchards.</li><li>• <b>Pre-Harvest Interval (PHI):</b> 14 days.</li></ul>	

# BEAN, DRY AND SUCCULENT

Bean (*Lupinus* spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); bean (*Phaseolus* spp.) (includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean); bean (*Vigna* spp.) (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea (dry seed only), crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean); broad bean (fava bean); chickpea (garbanzo bean)

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
<i>Liriomyza</i> Leafminer Spider Mites	1.75 - 3.5 (0.010 - 0.019)
<b>Application Timing</b> <ul style="list-style-type: none"><li>• <b>Leafminers and Spider Mites:</b> Apply when adult leafminer flies or spider mites are first observed and repeat application, as needed, to maintain control within constraints of a sound resistance management program.</li></ul>	
<b>Use Directions:</b> <ul style="list-style-type: none"><li>• May be applied by ground or by aircraft.</li><li>• For best control, apply Averland FC with ground application equipment. With aerial application, the resulting control of leafminers and spider mites could be less than with ground application.</li><li>• Use 1.75 – 2.5 fl oz/A for low to moderate infestations and 3.5 fl oz/A for high infestations.</li><li>• When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the <b>Application and Mixing Instructions</b> section for more information.</li></ul>	
<b>Use Restrictions:</b> <ul style="list-style-type: none"><li>• <b>Maximum Single Application Rate:</b> 3.5 fl oz Averland FC/A (0.019 lb a.i./A).</li><li>• <b>Minimum Application Interval:</b> 6 days.</li><li>• <b>Maximum Annual Rate</b> 10.25 fl oz Averland FC/A/calendar year.<ul style="list-style-type: none"><li>◦ <b>DO NOT</b> exceed 0.056 lb a.i./A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).</li><li>◦ <b>DO NOT</b> make more than 2 sequential foliar applications of all abamectin containing products per year.</li></ul></li><li>• <b>DO NOT</b> graze livestock in cowpea treated areas or feed treated cowpea forage or hay to livestock.</li><li>• <b>Pre-Harvest Interval (PHI):</b> 7 days.</li></ul>	

## CANEBERRY, CROP SUBGROUP 13-07A

Blackberry; loganberry; raspberry, red and black; wild raspberry; cultivars, varieties, and/or hybrids of these.

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Spider mites	1.75 - 3.5 (0.010 - 0.019)
Broad mite	3.5 (0.019)

### Application Timing:

- Apply when spider mites are first observed and repeat application if needed to maintain control.

### Use Directions:

- Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage can result in reduced control.
- Apply this product diluted in a minimum volume of 10 gal/A by ground or 5 gal/A by air.
- Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

### Use Restrictions:

- **Maximum Single Application Rate:** 3.5 fl oz Averland FC/A (0.019 lb a.i./A).
- **Minimum Application Interval:** 7 days.
- **Maximum Annual Rate:** 10.25 fl oz Averland FC/A/calendar year.
  - **DO NOT** exceed 0.056 lb a.i./A/calendar year of abamectin-containing products including all application types (seed treatment, soil, foliar).
  - **DO NOT** make more than 2 sequential applications of Averland FC or any other foliarly abamectin-containing product.
  - **DO NOT** apply from onset of flowering until petal fall is complete.
- **Pre-Harvest Interval (PHI):** 7 days.

## CELERIAC (CELERY ROOT)

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Two-Spotted Spider Mite	3.5 (0.019)

### Application Timing

- Apply when mites first appear and repeat if necessary to maintain control.

### Use Directions:

- Thorough coverage of the crop canopy is essential for optimum results. Inadequate crop coverage can result in reduced control.
- Apply this product diluted in a minimum volume of 20 gal/A.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

## CELERIAC (CELERY ROOT) *(continued)*

### Use Restrictions:

- **Maximum Single Application Rate:** 3.5 fl oz Averland FC/A (0.019 lb a.i./A).
- **Minimum Application Interval:** 7 days.
- **Maximum Annual Rate (After Transplanting Celeriac):** 10.25 fl oz Averland FC/A/calendar year/
  - **DO NOT** exceed 0.056 lb a.i./A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).
  - **DO NOT** make more than 2 sequential applications of Averland FC or any other foliarly applied abamectin-containing product.
- **DO NOT** apply by air.
- **Pre-Harvest Interval (PHI):** 7 days.

## CELUTUCE

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Carmine Spider Mite <i>Liriomyza</i> Leafminer Two-Spotted Spider Mite	1.75 - 3.5 (0.010 - 0.019)

### Application Timing:

- Apply when spider mites or adult leafminer flies are first observed and repeat application if needed to maintain control.

### Use Directions:

- Apply this product diluted in a minimum volume of 20 gal/A by ground or 5 gal/A by air.
- With aerial application, the resulting level and duration of control could be less than with ground application.
- Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

### Use Restrictions:

- **Maximum Single Application Rate:** 3.5 fl oz Averland FC/A (0.019 lb a.i./A).
- **Minimum Application Interval:** 7 days.
- **Maximum Annual Rate:** 10.25 fl oz Averland FC/A/calendar year.
  - **DO NOT** exceed 0.056 lb a.i./A/calendar year of abamectin-containing products including all application types (seed treatment, soil, foliar).
  - **DO NOT** make more than 2 sequential applications of Averland FC or any other foliarly abamectin-containing product.
- **Pre-Harvest Interval (PHI):** 7 days.

*(continued)*

## CITRUS FRUIT CROP GROUP 10-10

Australian desert lime; Australian finger lime; Australian round lime; brown river finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russel River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti lime; tangelo; tangerine (Mandarin); tango; trifoliate orange; uni fruit; including all cultivars, varieties, and/or hybrids of these

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Citrus Leafminer Citrus Rust Mite	1.0 - 4.25 (0.005 - 0.023)
Asian Citrus Psyllid Broad Mite Citrus Bud Mite Citrus Thrips Two-Spotted Spider Mite	2.25 - 4.25 (0.012 - 0.023)

### Application Timing:

- For **Asian citrus psyllid** control, apply to protect newly expanding foliage flush during the spring, summer or fall.
- For **broad mite** control, apply when mites first appear during spring, summer, or fall.
- For **citrus bud mite** control, time the spray at "bud swell" for best results.
- For **citrus leafminer** control, apply to protect new growth during spring, summer, or fall.
- For **citrus thrips** control, application will only control the current generation and must be correctly timed. Apply when economic thresholds have been reached (after egg hatch has begun – preferably early to mid-hatch).

### Use Directions:

- Aerial application is permitted only for control of **citrus leafminer** and **Asian citrus psyllid**. For all other pests, apply only by ground application.
- Apply this product diluted in a minimum volume of 25 gal/A by ground or 10 gal/A by air.
- With aerial application, the resulting level and duration of control of Asian citrus psyllid and citrus leafminer could be reduced compared to ground application. When applying by air, use the higher end of the rate range (3.75 – 4.25 fl oz/A).
- Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

(continued)

## CITRUS FRUIT CROP GROUP 10-10 (continued)

### Use Restrictions:

- Maximum Single Application Rate:** 4.25 fl oz Averland FC/A (0.023 lb a.i./A).
- Minimum Application Interval:** 30 days.
- Maximum Annual Rate:** 8.5 fl oz Averland FC/A/calendar year.
  - DO NOT** exceed 0.046 lb a.i./A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).
- DO NOT** exceed more than 3 applications of Averland FC or any other foliar-applied abamectin-containing product per year.
- Application of this product is prohibited from the onset of flowering until the end of the flowering period. Observe defined flowering periods as established by local university extension offices, County Agricultural Commissioners, or other state/tribal lead agencies. In areas where these authorities do not provide a declaration or definition of flowering onset and end, applications are prohibited from onset of flowering until flowering is complete.
- DO NOT** apply by air except to control citrus leafminer and Asian citrus psyllid.
- DO NOT** allow livestock to graze in treated citrus groves.
- Pre-Harvest Interval (PHI):** 7 days.

## CORN\*

Field corn; popcorn; sweet corn; corn grown for seed

SOIL PESTS	USE RATES	
	fl oz product/A (lb a.i./A)	fl oz product/1000 row ft (oz a.i./1000 row ft) @ 30" rows
Suppression: Nematodes	4.0 – 6.0 (0.022 – 0.033)	0.23 - 0.34 (0.020 - 0.030)

### Application Timing:

- For early season **nematode** suppression, apply during planting.

### Use Directions:

- Apply in-furrow in a minimum of 5 gallons per acre of final volume as a spray or dribble directed on the seed during planting.
- Linear application rate is based on 30" rows. For different row spacing consult the Linear Application Rate Conversion Chart in the Instructions for At-Plant Applications section. In all cases do not exceed the maximum per acre use restriction.

### Use Restrictions:

- Maximum Single Application Rate:** 6.0 fl oz Averland FC/A (0.033 lb a.i./A) per application.
- Maximum Annual Rate:** 6.0 fl oz Averland FC/A/calendar year.
  - DO NOT** exceed 0.033 lb a.i./A/calendar year as a soil application including seed or soil applications.
- DO NOT** apply shallower than 1 inch depth.

\*Not Registered for Use in California

## COTTON\*

SOIL PESTS	USE RATES	
	fl oz product/A (lb a.i./A)	fl oz product/1000 row ft (oz a.i./1000 row ft) @ 36" rows
Nematodes	3.5 - 5.5 (0.019 - 0.03)	0.24 - 0.38 (0.021 - 0.033)
<b>Application Timing:</b> <ul style="list-style-type: none"><li>• For early season <b>nematode</b> control, apply during planting.</li></ul> <b>Use Directions:</b> <ul style="list-style-type: none"><li>• Apply in-furrow in a minimum of 5 gallons per acre of final volume as a spray or dribble directed on the seed during planting.</li><li>• Linear application rate is based on 36" rows. For different row spacing consult the Linear Application Rate Conversion Chart in the <b>Instructions for At-Plant Applications</b> section. In all cases do not exceed the maximum per acre use restriction.</li></ul>		
FOLIAR PESTS	USE RATES	
	fl oz product/A (lb a.i./A)	
Carmine Spider Mite	Early Season	
Pacific Spider Mite	1.0 - 1.25	
Strawberry Spider Mite	(0.005 - 0.007)	
Two-Spotted Spider Mite	Mid-Season / Lay-By	
	1.75 - 3.5	
	(0.010 - 0.019)	
<b>Application Timing:</b> <ul style="list-style-type: none"><li>• Apply when mites first appear. Repeat application, if needed, to maintain control.</li></ul> <b>Use Directions:</b> <ul style="list-style-type: none"><li>• Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage can result in reduced control.</li><li>• Apply this product diluted in a minimum volume of 5 gal/A by ground or air.</li><li>• With aerial application, spray coverage and the resulting level and duration of control of mites may be less than with ground application.</li><li>• <b>West of the Rocky Mountains</b> – the lower use rates may only be used on cotton less than 10 inches in height and applied only with ground equipment.</li><li>• When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the <b>Application and Mixing Instructions</b> section for more information.</li></ul>		

(continued)

## COTTON\* (continued)

<b>Use Restrictions:</b> <ul style="list-style-type: none"> <li><b>Maximum Single Application Rate:</b> <ul style="list-style-type: none"> <li><b>Soil Applications:</b> 5.5 fl oz Averland FC/A (0.03 lb a.i./A) per at-plant application.</li> <li><b>Foliar Applications:</b> 3.5 fl oz Averland FC/A (0.019 lb a.i./A) per foliar application.</li> </ul> </li> <li><b>Minimum Application Interval:</b> 21 days.</li> <li><b>Maximum Annual Rate:</b> 5.5 fl oz Averland FC/A/calendar year applied as soil applications and 7.0 fl oz Averland FC/A/calendar year as foliar applications. <ul style="list-style-type: none"> <li><b>DO NOT</b> exceed 0.03 lb a.i./A/calendar year from all abamectin-containing products applied as seed or soil applications and 0.038 lb a.i./A/calendar year from all abamectin-containing products applied as foliar applications.</li> <li><b>DO NOT</b> apply shallower than 1 inch depth.</li> <li><b>DO NOT</b> feed or allow livestock to graze treated cotton.</li> <li><b>Pre-Harvest Interval (PHI):</b> 20 days.</li> </ul> </li> </ul>	
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\*Not Registered for Use in California

## CRESS, GARDEN & UPLAND

FOLIAR PESTS	USE RATES fl oz product/A (lb a.i./A)
Carmine Spider Mite <i>Liriomyza</i> Leafminer Two-Spotted Spider Mite	1.75 - 3.5 (0.010 - 0.019)
<b>Application Timing:</b> <ul style="list-style-type: none"><li>Apply when spider mites or adult leafminer flies are first observed and repeat application if needed to maintain control.</li></ul> <b>Use Directions:</b> <ul style="list-style-type: none"><li>Apply this product diluted in a minimum volume of 20 gal/A by ground or 5 gal/A by air.</li><li>With aerial application, the resulting level and duration of control could be less than with ground application.</li><li>Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.</li><li>When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the <b>Application and Mixing Instructions</b> section for more information.</li></ul> <b>Use Restrictions:</b> <ul style="list-style-type: none"><li><b>Maximum Single Application Rate:</b> 3.5 fl oz Averland FC/A (0.019 lb a.i./A).</li><li><b>Minimum Application Interval:</b> 7 days.</li><li><b>Maximum Annual Rate:</b> 10.25 fl oz Averland FC/A/calendar year.<ul style="list-style-type: none"><li><b>DO NOT</b> exceed 0.056 lb a.i./A/calendar year of abamectin-containing products including all application types (seed treatment, soil, foliar).</li><li><b>DO NOT</b> make more than 2 sequential applications of Averland FC or any other foliarly abamectin-containing product.</li></ul></li><li><b>Pre-Harvest Interval (PHI):</b> 7 days.</li></ul>	

## CUCURBIT VEGETABLES CROP GROUP 9

Chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gerkin; gourd, edible (hyotan, cucuzza, hechima, Chinese okra); Momordica spp. (balsam apple, balsam pear, bitter melon, Chinese cucumber); muskmelon (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; squash, summer (crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); squash, winter (butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon; including all cultivars, varieties, and/or hybrids of these

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
<i>Liriomyza</i> Leafminer Spider Mites	1.75 - 3.5 (0.010 - 0.019)

### Application Timing:

- Apply when spider mites or adult leafminer flies are first observed and repeat application, if needed to maintain control.

### Use Directions:

- Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage can result in reduced control.
- Apply this product diluted in a minimum volume of 20 gal/A by ground or 5 gal/A by air.
- With aerial application, the resulting level and duration of control could be less than with ground application.
- Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

### Use Restrictions:

- **Maximum Single Application Rate:** 3.5 fl oz Averland FC/A (0.019 lb a.i./A) per application.
- **Minimum Application Interval:** 7 days.
- **Maximum Annual Rate:** 10.25 fl oz Averland FC/A/calendar year.
  - Do not exceed 0.056 lb a.i./A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).
  - Do not make more than 2 sequential applications of Averland FC or any other foliarly applied abamectin-containing product.
- **Pre-Harvest Interval (PHI):** 7 days.

## FENNEL, FLORENCE

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Carmine Spider Mite <i>Liriomyza</i> Leafminer Two-Spotted Spider Mite	1.75 - 3.5 (0.010 - 0.019)

### Application Timing:

- Apply when spider mites or adult leafminer flies are first observed and repeat application if needed to maintain control.

### Use Directions:

- Apply this product diluted in a minimum volume of 20 gal/A by ground or 5 gal/A by air.
- With aerial application, the resulting level and duration of control could be less than with ground application.
- Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

### Use Restrictions:

- **Maximum Single Application Rate:** 3.5 fl oz Averland FC/A (0.019 lb a.i./A).
- **Minimum Application Interval:** 7 days.
- **Maximum Annual Rate:** 10.25 fl oz Averland FC/A/calendar year.
  - **DO NOT** exceed 0.056 lb a.i./A/calendar year of abamectin-containing products including all application types (seed treatment, soil, foliar).
  - **DO NOT** make more than 2 sequential applications of Averland FC or any other foliarly abamectin-containing product.
- **Pre-Harvest Interval (PHI):** 7 days.

## FRUITING VEGETABLES CROP GROUP 8-10

African eggplant; bush tomato; bell pepper; cocona; currant tomato; eggplant; garden huckleberry; goji berry; groundcherry; martynia; naranjilla; okra; pea eggplant; pepino; non-bell pepper; roselle; scarlet eggplant; sunberry; tomatillo; tomato; tree tomato; including cultivars, varieties, and/or hybrids of these.

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
<i>Liriomyza</i> Leafminer Spider Mite <i>Thrips palmi</i> Tomato Psyllid Tomato Russet Mite	1.75 - 3.5 (0.010 - 0.019)
<b>All crops except commercially grown greenhouse tomato:</b> Broad Mite Colorado Potato Beetle	
Tomato Pinworm	3.5 (0.019)

(continued)

## FRUITING VEGETABLES CROP GROUP 8-10

(continued)

### Application Timing:

- For **broad, russet and spider mite control**, apply when mites first appear.
- For ***Thrips palmi*** control, apply when thrips first appear.
- For **tomato pinworm** control, application can be made from the time moth activity is detected up to, but no later than, the time when newly emerged larvae are present.
- For **thrips**, if populations are above threshold, use an effective thrips knockdown product before spraying Averland FC.

### Use Directions:

- **All crops except commercially grown greenhouse tomato:**
  - Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage can result in reduced control.
  - Apply this product diluted in a minimum volume of 20 gal/A by ground or 5 gal/A by air.
  - With aerial application, the resulting level and duration of control could be less than with ground application.
  - Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.
- **Commercially grown greenhouse tomato only:**
  - Apply by ground only.
  - Thorough coverage is essential for optimum results. Select a spray volume appropriate for the size of plants and density of foliage, but apply this product diluted in a minimum volume of 20 gal/A.
  - Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

### Use Restrictions:

- **Minimum Single Application Rate:** Do not apply more than 3.5 fl oz Averland FC/A (0.019 lb a.i./A) per application.
- **Minimum Application Interval:** 7 days.
- **Maximum Annual Rate:** 10.25 fl oz Averland FC/A/calendar year.
  - **DO NOT** exceed 0.056 lb abamectin/A/calendar year from all abamectin containing products including all application types (seed treatments, soil, foliar).
  - **DO NOT** make more than 2 sequential foliar applications of all abamectin containing products per year.
- Not for use on commercially grown greenhouse tomatoes in New York State.
- **Pre-Harvest Interval (PHI):**
  - **Commercially grown greenhouse tomatoes:** 1 day.
  - **All other crops:** 7 days.

## GRAPE AND SMALL CLIMBING FRUIT (EXCEPT FUZZY KIWIFRUIT) SUBGROUP 13-07F

Amur river grape; gooseberry; grape; kiwifruit, hardy; maypop; schisandra berry; including cultivars, varieties, and/or hybrids of these

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Pacific Spider Mite Two-Spotted Spider Mite Variegated Leafhopper Western Grape Leafhopper Western Grapeleaf Skeletonizer Willamette Spider Mite	1.75 - 3.5 (0.010 - 0.019)

### Application Timing:

- **Spider mites:** Apply when mites first appear but before motiles exceed 5 per leaf.
- **Western grapeleaf skeletonizer:** Apply when larvae are first observed. For optimum control, apply shortly after egg hatch.
- **Leafhoppers:** Averland FC provides contact knock-down only.

### Use Directions:

- Thorough coverage is essential for spider mite and insect control. Averland FC must be applied to both sides of each row for maximum coverage. Do not spray alternate rows.
- Apply this product diluted in a minimum volume of 50 gal/A with conventional ground application equipment. Less than 50 gal/A can be used with an electro-static sprayer; however do not use less than 5 gal/A.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

### Use Restrictions:

- **Maximum Single Application Rate:** 3.5 fl oz Averland FC/A (0.019 lb a.i./A).
- **Minimum Application Interval:** 21 days.
- **Maximum Annual Rate:** 7.0 fl oz Averland FC/A/calendar year
  - **DO NOT** exceed 0.038 lb a.i./A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).
  - **DO NOT** make more than 2 applications of Averland FC or any other foliar applied abamectin-containing product per year.
- **DO NOT** apply by air.
- **DO NOT** allow livestock to graze in treated vineyards.
- **DO NOT** apply from onset of flowering until after petal fall is complete.
- **Pre-Harvest Interval (PHI):** 28 days.

## GUAVA

Acerola; feijoa; guava; jaboticaba; passionfruit; starfruit; wax jambu; cultivars, varieties, and/or hybrids of these

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Two-Spotted Spider Mite	2.25 – 4.25 (0.012 – 0.023)

### Application Timing:

- Apply when mites first appear during spring, summer, and/or fall.

### Use Directions:

- Apply this product diluted in a minimum volume of 50 gal/A with conventional ground application equipment. Less than 50 gal/A can be used with an electro-static sprayer; however do not use less than 5 gal/A.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

### Use Restrictions:

- **Maximum Single Application Rate:** 4.25 fl oz Averland FC/A (0.023 lb a.i./A).
- **Minimum Application Interval:** 14 days.
- **Maximum Annual Rate:** 12.75 fl oz Averland FC/A/calendar year.
  - **DO NOT** exceed 0.07 lb a.i./A/calendar year of abamectin-containing products including all application types (seed treatment, soil, foliar).
  - **DO NOT** make more than 3 applications of Averland FC or any other foliarly abamectin-containing products per year.
- **DO NOT** apply by air.
- **Pre-Harvest Interval (PHI):** 7 days.

## HERB SUBGROUP 19A

Angelica; balm; basil; borage; burnet; camomile; catnip; chervil (dried); chive; chive, Chinese, clary; coriander (cilantro or Chinese parsley) (leaf); costmary; cilantro (leaf); curry (leaf); dillweed; horehound; hyssop; lavender; lemongrass; lovage (leaf); marigold; marjoram (sweet or annual marjoram, wild marjoram, oregano, pot marjoram); nasturtium; parsley (dried); pennyroyal; rosemary; rue; sage; savory, summer and winter; sweet bay (bay leaf); tansy; tarragon; thyme; wintergreen; woodruff; wormwood

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
<i>Liriomyza</i> Leafminer Spider Mite	1.75 – 3.5 (0.010 – 0.019)

### Application Timing:

- Apply when adult leafminer flies or spider mites are first observed and repeat application if necessary to maintain control.

### Use Directions:

- Apply this product diluted in a minimum volume of 20 gal/A with conventional ground application equipment.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

## HERB SUBGROUP 19A *(continued)*

### Use Restrictions:

- **Maximum Single Application Rate:** 3.5 fl oz Averland FC/A (0.019 lb a.i./A) per application.
- **Minimum Application Interval:** 7 days.
- **Maximum Annual Rate:** 10.25 fl oz Averland FC/A/calendar year.
  - **DO NOT** exceed 0.056 lb a.i./A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).
  - **DO NOT** make more than 2 applications of Averland FC or any other foliarly applied abamectin-containing product per single harvest and cutting.
- **DO NOT** apply by air.
- **DO NOT** apply from onset of flowering until after petal fall is complete.
- **Pre-Harvest Interval (PHI):**
  - **Chives:** 7 days.
  - **All other crops:** 14 days.

## HOPS

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Two-Spotted Spider Mite	1.75 – 3.5 (0.010 – 0.019)

### Application Timing:

- Apply Averland FC when two-spotted spider mites reach treatment thresholds.

### Use Directions:

- Thorough coverage of the upper and lower leaves is essential for optimum results. Inadequate coverage can result in reduced control.
- For applications at ½ trellis growth (6-8 ft height), apply 1.75-3.5 fl oz/A diluted in a minimum of 40 gal/A.
- For applications beyond ½ trellis growth, apply 3.5 fl oz/gal/A diluted in a minimum of 100 gal/A.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

### Use Restrictions:

- **Maximum Single Application Rate:** 3.5 fl oz Averland FC/A (0.019 lb a.i./A) per application.
- **Minimum Application Interval:** 21 days.
- **Maximum Annual Rate:** 7.0 fl oz Averland FC/A/calendar year.
  - **DO NOT** exceed 0.038 lb a.i./A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).
  - **DO NOT** make more than 2 applications of Averland FC or any other foliarly applied abamectin-containing product per year.
- **DO NOT** allow livestock to graze into treated hops yards.
- **DO NOT** apply by air.
- **DO NOT** apply to hops in California
- **Pre-Harvest Interval (PHI):** 28 days.

*(continued)*



LEAF PETIOLE VEGETABLES CROP SUBGROUP 22B

Cardoon; celery; Chinese, Chinese; fuki; rhubarb; udo; zuiki; including cultivars, varieties, and hybrids of these commodities.

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Carmine Spider Mite <i>Liriomyza</i> Leafminer Two-Spotted Spider Mite	1.75 - 3.5 (0.010 - 0.019)

Application Timing:

- Apply when spider mites or adult leafminer flies are first observed and repeat application if needed to maintain control.

Use Directions:

- Apply this product diluted in a minimum volume of 20 gal/A by ground or 5 gal/A by air.
- With aerial application, the resulting level and duration of control could be less than with ground application.
- Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

Use Restrictions:

- **Maximum Single Application Rate:** 3.5 fl oz Averland FC/A (0.019 lb a.i./A).
- **Minimum Application Interval:** 7 days.
- **Maximum Annual Rate:** 10.25 fl oz Averland FC/A/calendar year.
  - **DO NOT** exceed 0.056 lb a.i./A/calendar year from all abamectin containing products including all application types (seed treatments, soil, foliar).
  - **DO NOT** make more than 2 sequential foliar applications of Averland FC or any other foliarly applied abamectin containing products.
- **Pre-Harvest Interval (PHI):** 7 days.

LEAFY GREENS CROP SUBGROUP 4-16A

Amaranth, Chinese; amaranth, leafy; aster, Indian; blackjack; cat's whiskers; cham-chwi; cham-na-mul; chervil, fresh leaves; chipilin; chrysanthemum, garland; cilantro, fresh leaves; corn salad; cosmos; dandelion, leaves; dang-gwi, leaves; dillweed; dock; dol-nam-mul; ebolo; endive; escarole; flamedflower; feather cockscomb; Good King Henry; huauzontle; jute, leaves; lettuce, bitter; lettuce, head; lettuce, leaf; orach; parsley, fresh leaves; plantain, buckhorn; primrose, English; purslane, garden; purslane, winter; radicchio; spinach; spinach, Malabar; spinach, New Zealand; spinach, tanier; Swiss chard; violet, Chinese, leaves; including cultivars, varieties, and hybrids of these commodities.

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Carmine Spider Mite <i>Liriomyza</i> Leafminer Two-Spotted Spider Mite	1.75 - 3.5 (0.010 - 0.019)

(continued)

LEAFY GREENS CROP SUBGROUP 4-16A

Application Timing:

- Apply when spider mites or adult leafminer flies are first observed and repeat application if needed to maintain control.

Use Directions:

- Apply this product diluted in a minimum volume of 20 gal/A by ground or 5 gal/A by air.
- With aerial application, the resulting level and duration of control could be less than with ground application.
- Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

Use Restrictions:

- **Maximum Single Application Rate:** 3.5 fl oz Averland FC/A (0.019 lb a.i./A).
- **Minimum Application Interval:** 7 days.
- **Maximum Annual Rate:** 10.25 fl oz Averland FC/A/calendar year.
  - **DO NOT** exceed 0.056 lb a.i./A/calendar year from all abamectin containing products including all application types (seed treatments, soil, foliar).
  - **DO NOT** make more than 2 sequential foliar applications of Averland FC or any other foliarly applied abamectin containing products.
- **Pre-Harvest Interval (PHI):** 7 days.

LOW GROWING BERRY SUBGROUP 13-07G

Bearberry; bilberry; blueberry, lowbush; cloudberry; cranberry; lingonberry; muntries; partridgeberry; strawberry; cultivars, varieties, and/or hybrids of these.

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Carmine Spider Mite Strawberry Spider Mite Two-Spotted Spider Mite	3.5 (0.019)
Suppression: Cyclamen Mite	

(continued)

## LOW GROWING BERRY SUBGROUP 13-07G

(continued)

### Application Timing:

- Make 2 applications 7-10 days apart when mites first appear. Repeat this application sequence, if needed, to maintain control.

### Use Directions:

- Thorough coverage of the upper and lower leaves is essential for optimum results. Inadequate coverage can result in reduced control.
- Adjust spray volume and nozzle placement to ensure maximum coverage of tops and undersides of leaves.
- Apply this product diluted in a minimum volume of 50 gal/A with conventional ground application equipment. When using an electro-static sprayer do not use in less than 10 gal/A.
- **Cyclamen mite:** Apply in sufficient water to obtain good coverage into the crown of the plant.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

### Use Restrictions:

- **Maximum Single Application Rate:** 3.5 fl oz Averland FC/A (0.019 lb a.i./A).
- **Minimum Application Interval:** 21 days after the second application.
- **Maximum Annual Rate:** 14 fl oz Averland FC/A/calendar year
  - **DO NOT** exceed 0.076 lb a.i./A/calendar year from all abamectin containing products including all application types (seed treatments, soil, foliar).
- **DO NOT** apply by air.
- **DO NOT** use in strawberry nurseries.
- **Pre-Harvest Interval (PHI):** 3 days.

## MINT (PEPPERMINT, SPEARMINT)

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Two-Spotted Spider Mite	1.75 - 2.5 (0.010 - 0.014)

### Application Timing:

- Treat when spider mites first appear.

### Use Directions:

- Thorough coverage of the crop canopy is essential for optimum results. Inadequate coverage can result in reduced control.
- Apply this product diluted in a minimum volume of 20 gal/A by ground or 5 gal/A by air.
- With aerial application, the resulting level and duration of control of spider mites could be less than with ground application.
- Under conditions such as high pest populations, dense foliage, or adverse application conditions such as high temperatures, use a greater volume of water to ensure adequate coverage.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

(continued)

## MINT (PEPPERMINT, SPEARMINT) (continued)

### Use Restrictions:

- **Maximum Single Application Rate:** 2.5 fl oz Averland FC/A (0.014 lb a.i./A) per application.
- **Minimum Application Interval:** 7 days.
- **Maximum Annual Rate:** 7.75 fl oz Averland FC/A/calendar year.
  - **DO NOT** exceed 0.042 lb a.i./A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).
  - **DO NOT** make more than 2 sequential applications of Averland FC or any other foliar-applied abamectin-containing product.
  - **DO NOT** apply more than 3 applications of Averland FC or any other foliar-applied abamectin-containing product per year.
- **DO NOT** allow livestock to graze or feed treated foliar to livestock.
- **Pre-Harvest Interval (PHI):** 28 days.

## ONION, BULB SUBGROUP 3-07A

Daylily, bulb; fritillaria, bulb; garlic, bulb; garlic, great-headed, bulb; garlic, serpent, bulb; lily, bulb; onion, bulb; onion, Chinese, bulb; onion, pearl; onion, potato, bulb; shallot, bulb; cultivars, varieties, and/or hybrids of these.

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Liriomyza Leafminer	1.75 - 3.5
Thrips	(0.010 - 0.019)

### Application Timing:

- For **leafminer** control, apply when adult leafminer flies are first observed and repeat application as needed.
- For **thrips** control, apply when thrips are at economic threshold. Repeat application, if needed, to maintain control.

### Use Directions:

- Apply this product diluted in a minimum volume of 20 gal/A by ground or 5 gal/A by air.
- With aerial application and chemigation, the resulting level and duration of control could be less than with ground application.
- Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.
- Averland FC may be applied through overhead sprinkler chemigation for suppression of thrips.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

### Resistance Management:

- Make 2 consecutive applications of Averland FC, 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 Averland FC applications.

### Precaution:

- Insect control can be reduced if Averland FC is used in combination with a sticker or binder type product such as Bravo® Weather Stik®.

(continued)

## ONION, BULB SUBGROUP 3-07A *(continued)*

### Use Restrictions:

- **Maximum Single Application Rate:** 3.5 fl oz Averland FC/A (0.019 lb a.i./A) per application.
- **Minimum Application Interval:** 7 days.
- **Maximum Annual Rate:** 10.25 fl oz Averland FC/A/calendar year.
  - **DO NOT** exceed 0.056 lb a.i./A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).
  - **DO NOT** make more than 2 sequential applications of Averland FC or any other foliar-applied abamectin-containing product.
  - **DO NOT** use Averland FC as a rescue treatment for thrips control.
- **Pre-Harvest Interval (PHI):** 30 days.

## ONION, GREEN SUBGROUP 3-07B

Chive, fresh leaves; chive, Chinese, fresh leaves; elegans hosta; fritillaria, leaves; kurrat; lady's leek; leek; leek, wild; onion, Beltsville bunching; onion, fresh; onion, green; onion, macrostem; onion, tree, tops; onion, Welsh, tops; shallot, fresh leaves; cultivars, varieties, and/or hybrids of these

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
<i>Liriomyza</i> Leafminer Thrips	1.75 - 3.5 (0.010 - 0.019)

### Application Timing:

- For **leafminer** control, apply when adult leafminer flies are first observed and repeat application if needed.
- For **thrips** control, apply as part of a thrips management program. Begin making applications when populations are low (1-3 thrips/plant). Repeat application if needed. If populations are high, use an effective thrips knockdown product before spraying Averland FC.

### Use Directions:

- Apply this product diluted in a minimum volume of 20 gal/A by ground or 5 gal/A by air.
- With aerial application and chemigation, the resulting level and duration of control could be less than with ground application.
- Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.
- Averland FC may be applied through overhead sprinkler chemigation for suppression of thrips.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

### Resistance Management:

- Make 2 consecutive applications of Averland FC 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 Averland FC applications.

### Precaution:

- Insect control can be reduced if Averland FC is used in combination with a sticker or binder type product such as Bravo® Weather Stik®.

*(continued)*

## ONION, GREEN SUBGROUP 3-07B *(continued)*

### Specific Use Restrictions:

- **Maximum Single Application Rate:** 3.5 fl oz Averland FC/A (0.019 lb a.i./A).
- **Minimum Application Interval:** 7 days.
- **Maximum Annual Rate:** 14 fl oz Averland FC/A/calendar year.
  - **DO NOT** exceed 0.076 lb a.i./A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).
  - **DO NOT** make more than 2 sequential applications of Averland FC or any other foliarly applied abamectin-containing product.
- **DO NOT** apply by air in New York State and California.
- **DO NOT** use Averland FC as a rescue treatment for thrips control.
- **Pre-Harvest Interval (PHI):** 7 days.

## PAPAYA

Black sapote; canistel; mamey sapote; papaya; star apple; sapodilla; including cultivars, varieties, and/or hybrids of these

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Two-Spotted Spider Mite	2.25 - 4.25 (0.012 - 0.023)

### Application Timing:

- For mite control, apply when mites first appear during spring, summer, and/or fall.

### Use Directions:

- Apply this product diluted in a minimum volume of 50 gal/A with conventional ground application equipment. When using an electro-static sprayer, less than 50 gal/A may be used; however, do not use less than 5 gal/A.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

### Use Restrictions:

- **Maximum Single Application Rate:** 4.25 fl oz Averland FC/A (0.023 lb a.i./A).
- **Minimum Application Interval:** 14 days.
- **Maximum Annual Rate:** 12.75 fl oz Averland FC/A/calendar year.
  - **DO NOT** exceed 0.070 lb a.i./A/calendar year of abamectin-containing products including all application types (seed treatment, soil, foliar).
  - **DO NOT** make more than 3 sequential applications of Averland FC or any other foliarly abamectin-containing product.
- **DO NOT** apply to mango.
- **DO NOT** apply by air.
- **Pre-Harvest Interval (PHI):** 7 days.

## PINEAPPLE

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Two-Spotted Spider Mite	2.25 – 4.25 (0.012 - 0.023)
<b>Application Timing:</b> <ul style="list-style-type: none"> <li>Apply when spider mites are first observed.</li> </ul> <b>Use Directions:</b> <ul style="list-style-type: none"> <li>Apply this product diluted in a minimum volume of 50 gal/A with conventional ground application equipment. When using an electro-static sprayer, less than 50 gal/A may be used; however, do not use less than 5 gal/A.</li> <li>When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the <b>Application and Mixing Instructions</b> section for more information.</li> </ul>	
<b>Use Restrictions:</b> <ul style="list-style-type: none"> <li><b>Maximum Single Application Rate:</b> 4.25 fl oz Averaland FC/A (0.023 lb a.i./A).</li> <li><b>Minimum Application Interval:</b> 7 days.</li> <li><b>Maximum Annual Rate:</b> 8.5 fl oz Averaland FC/A/calendar year. <ul style="list-style-type: none"> <li><b>DO NOT</b> exceed 0.046 lb a.i./A/calendar year of abamectin-containing products including all application types (seed treatment, soil, foliar).</li> <li><b>DO NOT</b> make more than 2 sequential applications of Averaland FC or any other foliarly abamectin-containing product.</li> </ul> </li> <li><b>DO NOT</b> apply by air.</li> <li><b>Pre-Harvest Interval (PHI):</b> 16 weeks.</li> </ul>	

## POME FRUIT CROP GROUP 11-10

Apple; azarole; crabapple; loquat; mayhaw; medlar; pear; pear, Asian; quince; quince, Chinese; quince, Japanese; tejocote; including cultivars, varieties, and/or hybrids of these

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
European Red Mite McDaniel Spider Mite Pear psylla Pear rust mite Tentiform Leafminer Two-Spotted Spider Mite White Apple Leafhopper Yellow Mite	2.25 - 4.25 (0.012 - 0.023)
<b>Application Timing:</b> <ul style="list-style-type: none"> <li>Apply when spider mite or insect thresholds are reached. Make a second application, if needed, to maintain control.</li> </ul> <b>Use Directions:</b> <ul style="list-style-type: none"> <li>Thorough coverage is essential to obtain best results. Select a spray volume appropriate for the size of trees and density of foliage.</li> <li>Apply this product diluted in a minimum volume of 40 gal/A.</li> <li>When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the <b>Application and Mixing Instructions</b> section for more information.</li> </ul>	

(continued)

## POME FRUIT CROP GROUP 11-10 (continued)

<b>Precauton:</b> <ul style="list-style-type: none"> <li>Applying the combination of Averaland FC and horticultural spray oil fewer than 14 days before or after applying Captan or other sulfur-containing products can result in phytotoxicity and crop loss.</li> </ul>	
<b>Use Restrictions:</b> <ul style="list-style-type: none"> <li><b>Maximum Single Application Rate:</b> 4.25 fl oz Averaland FC/A (0.023 lb a.i./A).</li> <li><b>Minimum Application Interval:</b> 21 days.</li> <li><b>Maximum Annual Rate:</b> 8.5 fl oz Averaland FC/A/calendar year. <ul style="list-style-type: none"> <li><b>DO NOT</b> exceed 0.046 lb a.i./A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).</li> <li><b>DO NOT</b> make more than 2 applications of Averaland FC or any other foliarly applied abamectin-containing product per year.</li> </ul> </li> <li><b>DO NOT</b> apply by air.</li> <li><b>DO NOT</b> allow livestock to graze in treated orchards.</li> <li><b>DO NOT</b> apply from onset of flowering until after petal fall is complete.</li> <li><b>Pre-Harvest Interval (PHI):</b> 28 days.</li> </ul>	

## POTATO

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Colorado Potato Beetle <i>Liriomyza</i> Leafminer Potato Psyllid Spider Mite <sup>2</sup>	1.75 – 3.5 (0.010 – 0.019)
Suppression: Thrips	3.5 (0.019)

<b>Application Timing:</b> <ul style="list-style-type: none"> <li>For <b>Colorado potato beetle</b> control, make the first application after approximately 50% of the egg masses have hatched and early instar larvae are present. If two applications are needed, limit them to a single Colorado potato beetle generation per crop.</li> <li>For <b><i>Liriomyza</i> leafminer</b> control, make the first application when adult flies are first observed. Repeat applications as needed to maintain control.</li> <li>For <b>spider mite</b> control, make the first application when mites first appear. Repeat application as needed to maintain control.</li> <li>For <b>thrips</b> suppression, apply in a thrips management program and when thrips are at economic threshold. Repeat application as needed to maintain control.</li> </ul>	
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<b>Use Directions:</b> <ul style="list-style-type: none"> <li>Thorough coverage of the crop canopy is essential for optimum results. Apply this product diluted in a minimum volume of 20 gal/A by ground or 5 gal/A by air.</li> <li>With aerial application and chemigation, the resulting level and duration of control of insects and spider mites could be less than with ground application.</li> <li>Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.</li> <li>May be applied through overhead sprinkler chemigation for suppression of thrips.</li> <li>When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the <b>Application and Mixing Instructions</b> section for more information.</li> </ul>	
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(continued)

## POTATO (continued)

<b>Resistance Management:</b> <ul style="list-style-type: none"> <li>• <b>Colorado potato beetle:</b> Application(s) to the following generation of Colorado potato beetle must be with an effective product with a different mode of action.</li> </ul>
<b>Precaution:</b> <ul style="list-style-type: none"> <li>• Insect control can be reduced if Averland FC is used in combination with a sticker or binder type product such as Bravo® Weather Stik®.</li> </ul>
<b>Use Restrictions:</b> <ul style="list-style-type: none"> <li>• <b>Maximum Single Application Rate:</b> 3.5 fl oz Averland FC/A (0.019 lb a.i./A) per application.</li> <li>• <b>Minimum Application Interval:</b> 7 days.</li> <li>• <b>Maximum Annual Rate:</b> 10.25 fl oz Averland FC/A/calendar year. <ul style="list-style-type: none"> <li>◦ <b>DO NOT</b> exceed 0.056 lb a.i./A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).</li> <li>◦ <b>DO NOT</b> make more than 2 sequential applications of Averland FC or any other foliarly applied abamectin-containing product.</li> </ul> </li> <li>• <b>DO NOT</b> feed or allow livestock to graze treated foliage.</li> <li>• <b>DO NOT</b> apply Averland FC more than twice to a generation of Colorado potato beetle or within any 30-day period.</li> <li>• <b>DO NOT</b> use Averland FC as a rescue treatment for thrips control.</li> <li>• <b>Pre-Harvest Interval (PHI):</b> 14 days.</li> </ul>

## SOYBEAN\*

SOIL PESTS	USE RATES	
	fl oz product/A (lb a.i./A)	fl oz product/1000 row ft (oz a.i./1000 row ft) @ 15" rows
Nematodes including Soybean Cyst nematode	10.0 – 15.0 (0.055 - 0.082)	0.29 - 0.43 (0.025 - 0.038)
<b>Application Timing:</b> <ul style="list-style-type: none"> <li>• For early season nematode control, apply during planting.</li> </ul> <b>Use Directions:</b> <ul style="list-style-type: none"> <li>• Apply in-furrow in a minimum of 5 gallons per acre of final volume as a spray or drizzle directed on the seed during planting.</li> <li>• Linear application rate is based on 30" rows. For different row spacing consult the Linear Application Rate Conversion Chart in the Instructions for At-Plant Applications section. In all cases do not exceed the maximum per acre use restriction.</li> </ul>		
<b>Use Restrictions:</b> <ul style="list-style-type: none"> <li>• <b>Maximum Single Application Rate:</b> 15.0 fl oz Averland FC/A (0.082 lb a.i./A).</li> <li>• <b>Maximum Annual Rate</b> 15.0 fl oz Averland FC/A/calendar year. <ul style="list-style-type: none"> <li>◦ Do not exceed 0.082 lb a.i./A/calendar year from all abamectin containing products applied as a seed or soil applications.</li> </ul> </li> <li>• <b>DO NOT</b> apply shallower than 1 inch depth.</li> </ul>		

## STONE FRUIT CROP GROUP 12-12

Apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; Jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach, plum, Canada, plum, cherry, plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; including cultivars, varieties, and/or hybrids of these.

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
European Red Mite Pacific Spider Mite Two-Spotted Spider Mite	2.25 - 4.25 (0.012 - 0.023)
<b>Application Timing:</b> <ul style="list-style-type: none"> <li>• Apply when spider mites first appear. Make a second application, if needed, to maintain control.</li> </ul> <b>Use Directions:</b> <ul style="list-style-type: none"> <li>• Select a spray volume appropriate for the size and number of trees and density of foliage to ensure thorough coverage.</li> <li>• Apply this product diluted in a minimum volume of 40 gal of carrier/A.</li> <li>• When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the <b>Application and Mixing Instructions</b> section for more information.</li> </ul>	
<b>Use Restrictions:</b> <ul style="list-style-type: none"> <li>• <b>Maximum Single Application Rate:</b> 4.25 fl oz Averland FC/A (0.023 lb a.i./A).</li> <li>• <b>Minimum Application Interval:</b> 21 days.</li> <li>• <b>Maximum Annual Rate:</b> 8.5 fl oz Averland FC/A/calendar year. <ul style="list-style-type: none"> <li>◦ <b>DO NOT</b> exceed 0.046 lb abamectin/A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).</li> <li>◦ <b>DO NOT</b> make more than 2 applications of Averland FC or any other foliarly applied abamectin-containing product per year.</li> </ul> </li> <li>• <b>DO NOT</b> apply by air.</li> <li>• <b>DO NOT</b> allow livestock to graze in treated orchards.</li> <li>• <b>DO NOT</b> apply from onset of flowering until after petal fall is complete.</li> <li>• <b>Pre-Harvest Interval (PHI):</b> 21 days.</li> </ul>	

\*Not Registered for Use in California

## TREE NUTS CROP GROUP 14-12

African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; Cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut; mongongo nut; monkey-pot; monkey puzzle nut; Okari nut; Pachira nut; peach palm nut; pecan; pequi; Pili nut; pine nut; pistachio; Sapucaia nut; tropical almond; walnut, black; walnut English; yellowhorn; including cultivars, varieties, and/or hybrids of these.

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
European Red Mite Pacific Spider Mite Strawberry Spider Mite Two-Spotted Spider Mite	2.25 - 4.25 (0.012 - 0.023)

### Application Timing:

- For spider mite control, apply when spider mites first appear. Residual spider mite control is greater from spray deposits on newer leaves compared to older leaves. Make a second application, if needed, to maintain control.

### Use Directions:

- Adjust gallons of spray per acre based on size and number of trees per acre and density of foliage. Thorough coverage is essential for good spider mite and insect control.
- Apply this product diluted in a minimum volume of 40 gal/A.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

### Use Restrictions:

- Maximum Single Application Rate:** 4.25 fl oz Averland FC/A (0.023 lb a.i./A).
- Minimum Application Interval:** 21 days.
- Maximum Annual Rate:** 8.5 fl oz Averland FC/A/calendar year.
  - DO NOT** exceed 0.046 lb a.i./A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).
  - DO NOT** make more than 2 applications of Averland FC or any other foliarly applied abamectin-containing product per year.
- DO NOT** apply by air.
- DO NOT** allow livestock to graze in treated groves/orchards.
- DO NOT** apply from onset of flowering until after petal fall is complete.
- Pre-Harvest Interval (PHI):** 21 days.

## TROPICAL AND SUBTROPICAL, SMALL FRUIT, INEDIBLE PEEL SUBGROUP 24A

Aisen; bael fruit; Burmese grape; cat's-eyes; inga; longan; lychee; madras-thorn; manduro; matisia; mesquite; mongongo; fruit; pawpaw, small-flower; satinleaf; Sierra Leone-tamarind; Spanish lime; velvet tamarind; wampi; white star apple; including cultivars, varieties, and hybrids of these commodities

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
<i>Liriomyza</i> leafminers Thrips Two-Spotted Spider Mite	2.25 - 4.25 (0.012 - 0.023)

### Application Timing:

- Mites:** Apply when mites first appear during spring, summer, and/or fall.
- Leafminers:** Apply to protect new growth during spring, summer, or fall.
- Thrips:** Applications targeted for thrips will only control the current generation and must be correctly timed.
- Apply when economic thresholds have been reached (after egg hatch has begun – preferably early to mid-hatch).

### Use Directions:

- Apply this product diluted in a minimum volume of 50 gal/A with conventional ground application equipment. When using an electro-static sprayer, less than 50 gal/A may be used; however, do not use less than 5 gal/A.
- Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

### Use Restrictions:

- Maximum Single Application Rate:** 4.25 fl oz Averland FC/A (0.023 lb a.i./A).
- Minimum Application Interval:** 30 days.
- Maximum Annual Rate:** 8.5 fl oz Averland FC/A/calendar year.
  - DO NOT** exceed 0.046 lb a.i./A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).
  - DO NOT** make more than 2 applications of Averland FC or any other foliarly applied abamectin-containing product per year.
- DO NOT** apply by air.
- Pre-Harvest Interval (PHI):** 14 days.

## TUBEROUS AND CORM VEGETABLES SUBGROUP 1C

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

FOLIAR PESTS	USE RATES
	fl oz product/A (lb a.i./A)
Colorado Potato Beetle <i>Liriomyza</i> Leafminer Potato Psyllid Spider Mite	1.75 - 3.5 (0.010 - 0.019)
Suppression: Thrips	3.5 (0.019)

### Application Timing:

- For **Colorado potato beetle** control, make the first application after approximately 50% of the egg masses have hatched and early instar larvae are present. If two applications are needed, limit them to a single Colorado potato beetle generation per crop.
- For ***Liriomyza* leafminer** control, make the first application when adult flies are first observed. Repeat applications as needed to maintain control.
- For **spider mite** control, make the first application when mites first appear. Repeat application as needed to maintain control.
- For **thrips** suppression, apply in a thrips management program and when thrips are at economic threshold. Repeat application as needed to maintain control.

### Use Directions:

- Thorough coverage of the crop canopy is essential for optimum results. Apply this product diluted in a minimum volume of 20 gal/A by ground or 5 gal/A by air.
- With aerial application and chemigation, the resulting level and duration of control of insects and spider mites could be less than with ground application.
- Under conditions such as high pest populations, dense foliage, or adverse application conditions (such as high temperatures), use a greater volume of water to ensure adequate coverage.
- May be applied through overhead sprinkler chemigation for suppression of thrips.
- When applying foliarly, must be mixed with a non-ionic activator type wetting, spreading and/or penetrating spray adjuvant in order to avoid illegal residues. See the **Application and Mixing Instructions** section for more information.

(continued)

## TUBEROUS AND CORM VEGETABLES SUBGROUP 1C

(continued)

### Resistance Management:

- Colorado potato beetle:** Application(s) to the following generation of Colorado potato beetle must be with an effective product with a different mode of action.

### Precaution:

- Insect control can be reduced if Averland FC is used in combination with a sticker or binder type product such as Bravo® Weather Stik®.

### Specific Use Restrictions:

- Maximum Single Application Rate:** 3.5 fl oz Averland FC/A (0.019 lb a.i./A) per application.
- Minimum Application Interval:** 7 days.
- Maximum Annual Rate:** 10.25 fl oz Averland FC/A/calendar year.
  - DO NOT** exceed 0.056 lb a.i./A/calendar year from all abamectin-containing products including all application types (seed treatments, soil, foliar).
  - DO NOT** make more than 2 sequential applications of Averland FC or any other foliarly applied abamectin-containing product.
- DO NOT** feed or allow livestock to graze treated foliage.
- DO NOT** apply Averland FC more than twice to a generation of Colorado potato beetle or within any 30-day period.
- DO NOT** use Averland FC as a rescue treatment for thrips control.
- Pre-Harvest Interval (PHI):** 14 days.



# STORAGE AND DISPOSAL

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

## **Pesticide Storage**

Store in original containers only. Store in a cool and dry place, in such a manner as to avoid cross-contamination. Keep container closed when not in use. Do not store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to the label.

## **Pesticide Disposal**

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

## **Container Handling less than or equal to 5 gallons - Non-refillable container:**

Do not reuse or refill this container. 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 and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill.

**CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.**

## **IMPORTANT INFORMATION READ BEFORE USING PRODUCT**

## **Conditions of Sale and Limitation of Warranty and Liability:**

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

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

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the Directions for Use when used in accordance with the directions under normal conditions of use.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, VIVE CROP PROTECTION MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE SELECTION, PURCHASE, OR USE OF THIS PRODUCT.

Any warranties, express or implied, having been made are inapplicable if this product has been used contrary to label instructions, or under conditions not reasonably foreseeable to (or beyond the control of) seller or Vive Crop Protection, and buyer assumes the risk of any such use.

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

These Conditions of Sale and Limitation of Warranty and Liability may not be amended by any oral or written agreement except as signed by an authorized representative of Vive Crop Protection.

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Bravo® and Weather Stik® are trademarks of ADAMA Group Company.

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# RESTRICTED USE PESTICIDE

DUE TO TOXICITY TO NON-TARGET INVERTEBRATES, 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

## AVERLAND® FC

Insecticide • Miticide • Nematicide

Active Ingredient:.....	By Wt
Abamectin (CAS No. 71751-41-2) .....	8.0 %
Other Ingredients:.....	92.0 %
TOTAL .....	100.0 %

This product contains 0.7 pounds of active ingredient per gallon

### 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.)

This label must be in the possession of the user at the time of application.  
See inside booklet for additional precautionary information and directions for use.

EPA Reg. No. 89118-10

#### FIRST AID

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

#### Note to Physician:

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

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

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

(continued)

#### FIRST AID (continued)

##### EMERGENCY INFORMATION

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

In the event of a medical or chemical emergency contact Chemtel Inc. in North America at 1-800-255-3924 or worldwide international at +1-813-248-0585.

##### PRECAUTIONARY STATEMENTS

##### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**Warning. May be fatal if swallowed. May be fatal if inhaled. Do not breathe spray mist. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing.**

### STORAGE AND DISPOSAL

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

##### Pesticide Storage

Store in original containers only. Store in a cool and dry place, in such a manner as to avoid cross-contamination. Keep container closed when not in use. Do not store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to the label.

##### Pesticide Disposal

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

##### Container Handling less than or equal to 5 gallons - Non-refillable container:

Do not reuse or refill this container. 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 and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill.

**CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.**

Vive Crop Protection Inc.  
500 Westover Dr. #10198  
Sanford, NC 27330  
1-888-760-0187



Net Contents: 2.5 Gallons