U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505T)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:
_X_ Registration
___ Reregistration
(under FIFRA, as amended)

EPA Reg. Number:	**Date of Issuance:**
91234-406	2/26/2025

Term of Issuance:
Unconditional

Name of Pesticide Product:
A171.216

Name and Address of Registrant (include ZIP Code):

Atticus, LLC
940 NW Cary Parkway, Suite 200
Cary, NC 27513

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.

2. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. You have 18 months from the date of registration to provide these data.

Continues page 2

Signature of Approving Official:

Loren LaPointe, PhD; Acting Product Manager 01
IVB3, Registration Division (7505T)

Date: 2/26/2025

EPA Form 8570-6

3. If, after formal consultation with the appropriate Service(s), additional modifications are identified in the Service's Biological Opinion(s) for imidacloprid, EPA will notify Atticus LLC in writing consistent with the terms in the Biological Opinion of any necessary required changes. Atticus LLC must submit an application for amendment incorporating any required changes, including amended labels, consistent with the timeline specified in EPA's notification. If Atticus LLC fails to comply with this term, Atticus LLC has agreed in prior written acceptance on February 25, 2025 of these terms that EPA may cancel the registration under an expedited process under FIFRA 6(e).

4. Make the following label changes before you release the product for shipment:

    - Revise the EPA Registration Number to read, "EPA Reg. No. 91234-406."

5. Submit one copy of the final printed label for the record before you release the product for shipment.

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

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

The record for this product currently contains the following CSF(s):

- Basic CSF dated 02/15/2024
- Alternate CSF 1 dated 02/15/2024

If you have any questions, please contact Elizabeth Danon at danon.elizabeth@epa.gov.

Enclosure

{Note to reviewer: [Text] in brackets denotes optional or explanatory language}
{Note to reviewer: {Text} in braces denotes where in the final label text will appear}

{BOOKLET FRONT PANEL LANGUAGE}

A171.216 [™]

[*Alternate Brand Name:* Acurio SC Insecticide]

[Contains imidacloprid, the active ingredient used in Credo® SC Insecticide.].

[Flowable Insecticide]

ACTIVE INGREDIENT:	**(% by weight)**
Imidacloprid; 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine	42.3%
OTHER INGREDIENTS:	57.7%
TOTAL	100.0%

Contains 4 lbs. of active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

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

[**A171.216** is not manufactured, or distributed by Elanco US Inc., seller of Credo® SC Insecticide.].

EPA Reg. No.: 91234-XXX

EPA Est. No.:

Net Contents:

Batch Code:

Manufactured for:
Atticus, LLC
940 NW Cary Parkway, Suite 200
Cary, NC 27513

{LANGUAGE INSIDE BOOKLET}

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 do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
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 INHALED:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further 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.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at **1-844-685-9173** for emergency medical treatment information.	
NOTE TO PHYSICIAN: No specific antidote is available. Treat the patient symptomatically.	

For Chemical Emergency:
Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed, absorbed through skin, or inhaled. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as barrier laminate ≥ 14 mils., 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.
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment, PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENT

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in 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.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

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 contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops/plants or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging in or adjacent to the treatment area. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

PROTECTION OF POLLINATORS

APPLICATION RESTRICTIONS EXIST FOR THIS PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.

Look for the bee hazard icon  in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

This product can kill bees and other insect pollinators.
Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.
Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications.
- Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat. Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at: http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx.
Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: www.npic.orst.edu or directly to EPA at: beekill@epa.gov.

PHYSICAL AND CHEMICAL HAZARDS

Do not mix or allow coming in contact with oxidizing agent. Hazardous chemical reaction may occur.

DIRECTIONS FOR USE

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

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

[No soil injection applications allowed in Nassau or Suffolk Counties, New York.]

See individual crops for specific pollinator application restrictions. If none exist under the specific crop, for foliar applications, follow these application directions for crops that are contracted to have pollinator services or for food/feed crops & commercially grown ornamentals that are attractive to pollinators.

1. FOR CROPS UNDER CONTRACTED POLLINATION SERVICES

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless the following condition has been met:

If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.

2. FOR FOOD/FEED CROPS AND COMMERCIALLY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless one of the following conditions is met:

- The application is made to the target site after sunset.
- The application is made to the target site when temperatures are below 55°F.
- The application is made in accordance with a government-initiated public health response.
- The application is made in accordance with an active state-administered apiary registry program where beekeepers are notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.
- The application is made due to an imminent threat of significant crop loss, and a documented determination consistent with an IPM plan or predetermined economic threshold is met. Every effort should be made to notify beekeepers no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.

AGRICULTURAL USE REQUIREMENTS

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

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

Exception: 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.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical resistant gloves made of any waterproof material such as barrier laminate ≥ 14 mils., butyl rubber ≥ 14 mils., nitrile rubber ≥ 14 mils., neoprene rubber ≥ 14 mils., natural rubber ≥ 14 mils., polyethylene ≥ 14 mils., polyvinylchloride (PVC) ≥ 14 mils., or Viton ≥ 14 mils.
- Shoes plus socks

OBSERVE THE FOLLOWING PRECAUTIONS WHEN MIXING AND APPLYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES OR NATURAL PONDS, ESTUARIES, AND COMMERCIAL FISH FARM PONDS.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

FOR AERIAL APPLICATIONS

For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of the wing spam or rotor diameter. Spray should be released at the lowest possible height consistent with good pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided.

IMPORTANCE OF DROPLET SIZE

An important factor influencing drift is droplet size. Small droplets (<150-200 microns) drift to a greater extent than large droplets. Within typical equipment specifications, applications should be made to deliver the largest droplet spectrum that provides sufficient control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection.

WIND SPEED RESTRICTIONS

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy, and equipment specifications determine drift potential at any given wind speed. Do not apply when winds are greater than 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

RESTRICTIONS DURING TEMPERATURE INVERSIONS

Do not make aerial or ground applications during temperature inversions. Drift potential is high during temperature

inversions. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source. 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 mixing.

MIXING AND LOADING REQUIREMENTS

To avoid potential contamination of groundwater, the use of a properly designed and maintained containment pad for mixing and loading of any pesticide into application equipment is recommended. If containment pad is not used, maintain a minimum distance of 25 feet between mixing and loading area and potential surface to groundwater conduits such as field sumps, uncased well heads, sinkholes, or field drains.

AIRBLAST (AIR-ASSIST) FOR TREE CROPS AND VINEYARDS

Airblast sprayers carry droplets into the canopy of trees/vines via a radially or laterally directed airstream. The following specific drift management practices should be followed:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy.
- Block off upward pointed nozzles when there is no overhanging canopy.
- Use only enough air volume to penetrate the canopy and provide good coverage.
- Do not allow the spray to go beyond the edge of the cultivated area (i.e., turn off sprayer when turning at end rows).
- Only spray inward, toward the orchard or vineyard, for application to the outside row.

NO-SPRAY ZONE REQUIREMENTS FOR SOIL AND FOLIAR APPLICATIONS

Do not apply by ground within 25 feet or by air within 150 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.

RUNOFF MANAGEMENT

Do not cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip. When using **A171.216** on erodible soils, Best Management Practice for minimizing runoff should be employed. Consult your local Natural Resources Conservation Service for recommendations in your use area.

ENDANGERED SPECIES NOTICE

Under the Endangered Species Act, it is a federal offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult your local county bulletin, County Extension Agent, or Pesticide State Lead Agency for information concerning endangered species in your area.

RESISTANCE MANAGEMENT

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area.

A171.216 contains a Group 4A insecticide. Insect biotypes with acquired or inherent tolerance to Group 4A insecticides may eventually dominate the insect population if Group 4A insecticides are used repeatedly as the predominant method of control for targeted species. This may eventually result in partial or total loss of control of those species by **A171.216** and to other Group 4A insecticides.

The active ingredient in **A171.216** is a member of the neonicotinoid chemical class. Insect pests resistant to other chemical classes have not shown cross-resistance to **A171.216**. In order to maintain susceptibility to this class of chemistry in insect species with high resistance development potential, it is recommended that for each crop season: 1) only a single, soil application of **A171.216** be made; 2) foliar applications of products from the same class not be made following a long residual, soil application of **A171.216**, or other neonicotinoid products.

If a soil application of **A171.216** has not been made during a crop season and foliar applications are to be made, avoid using a block of more than three consecutive applications of **A171.216** and/or other Group 4A products having the same or similar mode of action. Following a neonicotinoid block of treatments, Atticus, LLC strongly encourages the rotation to a block of applications with effective products with a different mode of action before using additional applications of neonicotinoid products. Using a block rotation or windowed approach, along with other IPM practices, is considered an effective use strategy for preventing or delaying an insect's ability to develop resistance to this class of chemistry.

Foliar applications of **A171.216** or other Group 4A products from the neonicotinoid chemical class should not be used on crops previously treated with a long-residual, soil-applied products from the neonicotinoid chemical class.

[Other Group 4A, neonicotinoid products used as foliar treatments include: Acronyx™ 2 Flowable, Actara®, ArVida® 70 WP Insecticide, ArVida® 30 SG Insecticide, Centric® 40 WG, Clutch® 50 WDG, Couraze® 2 F Inseticide, Impulse® 1.6 FL, Intruder® Brand Insecticide, Cryptonyx™ 360, Mineiro™ 2 F, Mineiro™ 2 F Flex, Mineiro™ 75 WSP, Notion™ 2 SC Flex, Trimax Pro®, and Venom®.]

[Other Group 4A, neonicotinoid products used as soil/seed treatments include: Acronyx™ 2 Flowable, Acronyx™ 4 F, Advise® 2 Flowable, Belay® 50 WDG, Couraze 2 F Insecticide, Mineiro™ 2 F, Mineiro™ 2 F Flex, Notion™ 2 SC Flex, Platinum® 75 SG Insecticide, and Venom.]

Contact your Cooperative Extension specialist, certified crop advisor, and/or product manufacturer for additional insect resistance management recommendations. Also, for more information on Insect Resistance Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at http://www.irac-online.org/.

APPLICATION INSTRUCTIONS

A171.216 is a flowable insecticide for the control and suppression of a variety of listed insect pests. **A171.216** may be applied as a soil treatment to cotton[*], tobacco[*], cucurbit vegetables[*], greenhouse vegetables[*], head, stem and brassica vegetables[*], leafy vegetables[*], legume vegetables[*], root and tuberous vegetables[*], strawberries[*], sugarbeets, bushberries[*], citrus[*], grapes[*], hops[*], pome fruit[*], stone fruit[*], tropical fruit[*], tree nuts[*], and other listed crops, **A171.216** may also be applied as a foliar treatment on cotton[*], soybeans[*], tobacco[*], leafy vegetables[*], fruiting vegetables[*], legume vegetables[*], root vegetables[*], tuberous and corm vegetables[*], strawberries[*], bushberries[*], bananas and plantains[*], pome fruits[*], citrus[*], grapes[*], stone fruits[*], tropical fruits[*], pomegranates[*], coffee[*], hops[*], Christmas trees[*], and tree nuts[*], and as a seed piece treatment for potatoes[*].
[*Not Registered for Use by California]

RESTRICTIONS:

- Do not apply **A171.216** in enclosed structures such as planthouses or greenhouses except as specifically instructed in the **TOBACCO[*]**, **CUCURBIT VEGETABLES[*]**, **FRUITING VEGETABLES[*]**, and **GREENHOUSE VEGETABLES Cucumber and Tomato only (Mature plants in production greenhouses)[*]** sections of this label.
- Do not apply more than 0.5 lb. active ingredient per acre, per year (365 days) regardless of formulation or method of application unless specified within the crop-specific, application section for a given crop.

[*Not Registered for Use by California]

APPLICATION DIRECTONS FOLIAR

Apply foliar applications of **A171.216** as a directed or a broadcast foliar spray. Thorough coverage of foliage is necessary without runoff for optimum insecticidal efficacy. Use adequate spray volumes, properly calibrated application equipment, and spray adjuvant if necessary to obtain thorough coverage. Failure to provide adequate coverage and retention of **A171.216** on leaves and fruit may result in loss of insect control or delay in onset of activity. Apply **A171.216** with properly calibrated ground or aerial application equipment. Minimum spray volumes, unless otherwise specified on crop-specific applications sections, are 10 gallons per acre by ground and 5 gallons per

acre by air. **A171.216** may also be applied by overhead chemigation (see additional information in **CHEMIGATION** section of this label below), if allowed in crop-specific application section.

APPLICATION DIRECTIONS SOIL

When applied as a soil application, optimum activity of **A171.216** results from applications to the root zone of plants to be protected. The earlier **A171.216** is available to a developing plant, the earlier the protection begins. **A171.216** is continuously taken into the roots over a long period of time, and the systemic nature of **A171.216** allows movement from roots through the xylem tissue to all vegetative parts of the plant. This results in extended residual activity of **A171.216**, the control of listed insects, and the prevention and/or reduction of plant virus transmission or symptom expression, and plant health benefits. The rate of **A171.216** applied affects the length of the plant protection period. Use higher listed rates when infestations occur later in crop development or where pest pressure is continuous. **A171.216** will generally not control insects infesting flowers, blooms, or fruit. Additional crop protection maybe required for insects feeding in or on these plant parts, and for insects not listed in the crop-specific, pests-controlled sections of this label. Additionally, specific **A171.216** application instructions are also provided in the crop-specific sections of this label.

Suppression, or less than complete control of certain insect pests that may carry diseases including reduced feeding, may also result from a **A171.216** application. Residual control of these pests may require supplemental control measures.

A171.216 is not allowed for use on crops grown for production of true seed unless intended for private or commercial planting unless allowed under 24(c) state-specific labeling. Additional information on **A171.216** uses for these crops and other questions may be obtained from the Cooperative Extension Service, PCA's, consultants, or Atticus, LLC representatives.

Apply only to plants grown in field-type soils, potting media, or mixtures thereof. Do not apply to plants grown in non-soil medias such as perlite, vermiculite, rock wool, or other soilless media, or plants growing hydroponically. Pre-mix **A171.216** with water or other appropriate diluent prior to application. Keep **A171.216** and water suspension agitated to avoid settling.

MIXING INSTRUCTIONS

To prepare the application mixture, add a portion of the required amount of water to the spray tank and with agitation, add **A171.216**. Complete filling tank with balance of water needed. Maintain sufficient agitation during both mixing and application. **A171.216** may also be used with other pesticides and/or fertilizer solutions. Please see "**Compatibility**" section of this label. When tank mixtures of **A171.216** and other pesticides are involved, prepare the tank mixture as recommended above and follow suggested "**Mixing Order**" below.

MIXING ORDER

When pesticide mixtures are needed, add wettable powders or wettable granules first, **A171.216** and other suspension concentrate (flowable) products second, and emulsifiable concentrates last. Ensure good agitation as each component is added. Do not add an additional component until the previous is thoroughly mixed. If a fertilizer solution is added, a fertilizer/pesticide compatibility agent may be needed. Maintain constant agitation during both mixing and application to ensure uniformity of spray mixture.

COMPATIBILITY

Test compatibility of the intended mixture before adding **A171.216** to the spray or mix tank. Add proportionate amounts of each ingredient in the appropriate order to a pint or quart jar, cap, shake for 5 minutes, and let set for 5 minutes. Do not use a mixture when poor mixing or formation of precipitates that do not readily redisperse indicates an incompatible mixture.

CHEMIGATION

TYPES OF IRRIGATION SYSTEMS

Make foliar chemigation applications of **A171.216** to crops through overhead sprinkler systems if specified in crop-specific application sections. Make soil chemigation applications of **A171.216** only to crops through chemigation as specified in crop-specific applications sections and only through low-pressure systems specifically listed for a given crop. Do not apply **A171.216** through any other type of irrigation system.

Make foliar chemigation applications of **A171.216** as concentrated as possible. Retention of **A171.216** on target site of insect infestation is necessary for optimum activity. Do not chemigate **A171.216** in water volumes exceeding 0.10 inches per acre. See crop-specific application sections of the label for more information.

UNIFORM WATER DISTRIBUTION AND SYSTEM CALIBRATION

The irrigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, you should contact Cooperative Extension Service specialists, equipment manufacturers, or other experts.

CHEMIGATION MONITORING

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.

DRIFT

Do not apply when wind speed favors drift beyond the area intended for treatment.

REQUIRED SYSTEM SAFETY DEVICES

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.

USING WATER FROM PUBLIC WATER SYSTEMS

Public water systems 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 regularly 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 to 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. The pesticide injection pipeline must 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 or in cases where there is no water pump, 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.

ROTATIONAL CROPS[1]

Treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exists for the active ingredient, as soon as practical following the last application. For crops not listed on an imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval must be observed.
IMMEDIATE PLANT-BACK: All crops on this label plus the following crops not on this label: barley[*], canola[*], corn (field, pop, and sweet)[*], rapeseed[*], sorghum[*], sugarbeet, and wheat[*].
30-DAY PLANT-BACK: Cereals (including buckwheat, millet, oats, rice, rye, and triticale) [*], soybeans[*], and safflower[*].
10-MONTH PLANT-BACK: Onion and bulb vegetables[*]
12-MONTH PLANT-BACK: All Other Crops
[1]Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed.

[*Not Registered for Use by California]

{NOTE TO REVIEWER: Registrant may add the following state-driven statements as required throughout.

[Not Registered for Use by (Insert State)] [Not Registered for Use on (Insert Commodity) by (Insert State)] [Not Registered for Sale, Sale Into, Distribution and/or Use in (Insert County Name(s)) Counties of (Insert State)]}

FIELD CROPS

COTTON – Soil Treatment[*]

Pests Controlled	Rate	
	Fl. Oz./1,000 Row-Feet	Fl. Oz./A
Cotton aphid Plant bugs Thrips Whiteflies	0.65	8.5 – 10.55 (Depending on row-spacing)
Applications: **Apply specified dosage in one of the following methods:** • In-furrow spray during planting directed on or below seed. • In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting. • Chemigation into root-zone through low-pressure drip or trickle irrigation.		
Restrictions: • **Pre-Harvest Interval (PHI):** 14 days • **Maximum Soil-Applied Product Allowed per Year:** 10.55 fl. oz. (0.33 lb. ai) per acre. • Do not graze treated fields after any application of **A171.216**. See **Resistance Management** section of this label. • Regardless of formulation or method of application, apply no more than 0.5 lb. active ingredient per acre, per year (365 days), including seed treatment, soil and foliar uses. [*Not Registered for Use by California]		

COTTON – Foliar Treatment[*]

Pests Controlled	Rate (Fl. Oz./Acre)
Cotton aphid Cotton fleahopper Bandedwinged whitefly Plant bugs (excludes *Lygus hesperus*) Green Stink bug Southern green stink bug Bollworm/Budworm (ovicidal effect)	1 - 2
Pests Suppressed	1.52 - 2
Lygus bug (*Lygus hesperus*) Whiteflies (other than bandedwinged whitefly)	

Applications:
Apply specified rate per acre as a broadcast or directed foliar spray to an infested area as pest populations begin to build. Apply **A171.216** through properly calibrated ground, aerial, or chemigation application equipment. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant to improve coverage. **A171.216** may not knock down established and heavy insect populations. Two applications may be required to achieve control. Scout fields and re-treat if needed. Tank mix **A171.216** with other insecticide for knockdown of pests or for improved control of other pests.

Restrictions:

- **Pre-Harvest Interval (PHI):** 14 days
- **Minimum Interval Between Applications**: 7 days
- **Maximum Foliar-Applied Product Allowed per Year:** 10 fl. oz. (0.31 lb. ai) per acre.
- Do not graze treated fields after application of **A171.216**.
- Do not apply more than a total of 6 applications of the active ingredient per year.
- Regardless of formulation or method of application, apply no more than 0.5 lb. active ingredient per acre, per year (365 days), including seed treatment, soil and foliar uses.

[*Not Registered for Use by California]

Tank Mix Instructions [*]

Pests Controlled (In Addition to Pests Listed Above)	A171.216 Rate (Fl. Oz./Acre)	Dicrotophos Product† [Bidrin® 8†]
Early Season Control: Thrips	1.0 – 1.52	See tank mix partner label(1)
Mid to Late Season Control: Plant bugs Stink bugs (including Brown stink bug) Grasshoppers Saltmarsh caterpillar Cotton leaf perforator		See tank mix partner label(2)

Restrictions: (in addition to Restrictions listed above):
†Refer to the Dicrotophos [([Bidrin® 8)] product label for specific use directions; observe all restrictions and precautions that appear on the label.

(1) Do not apply more than 0.2 lb. dicrotophos/acre during this growth period. Do not make more than one application during this growth period.

(2) Do not apply more than 1 lb. dicrotophos/acre during this growth period. Do not apply sooner than 14 days of first application or within 30 days of harvest. Do not graze livestock on treated fields or feed treated gin trash.

[*Not Registered for Use by California]

PEANUT – Soil Treatment [*]

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers Whiteflies	8.0 – 12.0
Pests Suppressed	
Thrips	

Applications:

Apply specified dosage in one of the following methods:

- In-furrow spray during planting directed on or below seed.
- Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Important Note: Increases in tomato spotted wilt virus (TSWV) incidence have been observed with applications of **A171.216** on multiple varieties of peanut. This may also be the case with other tospoviruses, or other viruses transmitted by various thrips species or perhaps, other pests. Prior to application of **A171.216** to peanuts, consult with the State Cooperative Extension Service or an Atticus, LLC. representative for recommendations. Growers are advised to weigh insect control benefits against potential increase in viral disease levels. In areas where TSWV or tospovirus are endemic, growers are encouraged to use virus resistant varieties and consult the University of Georgia Tomato Spotted Wilt Virus Index before applying **A171.216**.

Restrictions:

- **Pre-Harvest Interval (PHI):** 14 days
- **Maximum Soil-Applied Product Allowed per Year:** 12 fl. oz. (0.38 lb. ai) per acre.

[*Not Registered for use by California.]

PEANUT – Foliar Treatment [*]

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers Whiteflies	1.4

Restrictions:

- **Pre-Harvest Interval (PHI):** 14 days
- **Minimum Interval Between Applications:** 5 days
- **Maximum Foliar-Applied Product Allowed per Year:** 4.2 fl. oz. (0.13 lb. ai) per acre.

[*Not Registered for Use by California]

POTATO – Soil Treatment[*]

Pests Controlled	Rate	
	Fl. Oz./1,000 Row-Feet	Fl. Oz./Acre
Aphids Colorado potato beetle Flea beetles Leafhoppers Potato psyllid	0.45 - 0.65	6.5 - 10.0
Pests/Diseases Suppressed		
Symptoms of: Potato leaf roll virus (PLRV) Potato yellows Net necrosis Wireworms (with in-furrow spray at-planting)		

Applications:

Apply specified dosage in one of the following methods:

- In-furrow spray during planting directed on seed pieces or seed potatoes.
- Subsurface side-dress on both sides of the row covered with 3 or more inches of soil.
- Narrow band spray at ground cracking directly over the row during hilling covered with 3 or more inches of soil.
- Narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting. For effective pest control or suppression, **A171.216** applications must be placed below soil-surface and in contact with seed piece or within root-zone. For potatoes grown on highly permeable soils with shallow water table, at-plant applications of **A171.216** may be made in a 2-to-4-inch band (width of planter shoe opening) and completely covered.

Restrictions:

- **Maximum Soil-Applied Product Allowed per Year:** 10.0 fl. oz. (0.31 lb. ai) per acre.

[*Not Registered for Use by California]

POTATO - Seed Piece Treatment [*]

Pests Controlled	Rate	
	Fl. Oz./100 lbs. of Seed	Fl. Oz./Acre[1]
Aphids Colorado potato beetle Flea beetles Leafhoppers Potato psyllid Wireworms (seed-piece protection)	0.2 - 0.4	4.0 - 8.0
Pests/Diseases Suppressed		
Symptoms of: Potato leaf roll virus (PLRV) Potato yellows Net necrosis	0.4	8.0

Application: Apply specified dosage as a diluted spray onto seed-pieces using a shielded spray system. Dilute with 3 parts water, or less, to 1 part **A171.216**. Agitate or stir spray solution as needed. Fungicidal or inert absorbent dusts may be applied after **A171.216** application. Apply only in areas with adequate ventilation or in areas that are equipped to remove spray mist or dust. Plant seed pieces as soon as possible after treating avoiding prolonged exposure of **A171.216** treated seed-pieces to sunlight and in accordance with the recommendation of your local Extension service.

Restrictions:

- **Maximum A171.216 Allowed per Year, Including All Seed Piece and Soil Treatments:** 10.0 fl. oz. (0.31 lb. ai) per acre.
- Do not use treated seed-pieces for food, feed, or fodder.
- Do not apply any subsequent application of any other imidacloprid product following a **A171.216** seed-piece treatment.

[1]Based on a seeding rate of 2,000 lbs. per acre.

[*Not Registered for Use by California]

POTATO – Foliar Treatment[*]

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Colorado potato beetle Flea beetles Leafhoppers Psyllids	1.5
Applications: Apply specified rate per acre as a broadcast or directed foliar spray to an infested areas as insect population begins to build. Thorough uniform coverage is necessary for good control. Use of a spray adjuvant to improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing **A171.216** with other insecticides for knockdown of insects and for improved control of additional insects.	
Restrictions: • **Pre-Harvest Interval (PHI):** 7 days • **Minimum Interval between applications:** 7 days • **Maximum Foliar-Applied Product Allowed per Year:** 6.4 fl. oz. (0.2 lb. ai) per acre. [*Not Registered for Use by California]	

SOYBEAN [*] [**] – Foliar Treatment

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Bean leaf beetle Cucumber beetles/Rootworm adults Japanese beetle (adults) Leafhoppers Whiteflies	1.5
Restrictions: • **Pre-Harvest Interval (PHI):** 21 days • **Minimum Interval Between Applications:** 7 days • **Maximum Foliar-Applied Product Allowed per Year:** 4.5 fl. oz. (0.14 lb. ai) per acre [*Not Registered for Use by California] [**Not Registered for Use by New York]	

TOBACCO – Soil Treatment[*]

Pests Controlled	Rate (Fl. Oz./1,000 Plants)	
	As Seedling Tray Drench	In-Furrow or Transplant-Water
Aphids Flea beetles	0.5	0.7
Mole crickets Whiteflies Wireworms	0.7 - 1.4	0.9 - 1.4
Pests/Disease Suppressed		
Cutworms **Symptoms of:** Tomato spotted wilt virus (TSWV)		

Applications:

Apply specified dosage in one of the following methods:

- Uniform, broadcast foliar spray to seedlings in trays (tray drench) not more than 7 days prior to transplanting followed immediately by overhead irrigation to wash **A171.216** from foliage into potting media. Failure to wash **A171.216** from foliage may result in a reduction in pest control. Handle transplants carefully during setting to avoid dislodging treated potting media from roots.
- In-furrow spray or transplant-water drench during setting.
- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

Important Note: Proper tray drench applications of **A171.216** have been shown to be the most efficacious method of application. However, the specified rate of **A171.216** may be applied as combination of the tray drench in the planthouse and/or transplant-water drench in field. Adverse growing conditions may cause a delay in uptake of **A171.216** into the plant and a delay in control.

Restrictions:

- **Pre-Harvest Interval (PHI):** 14 days
- **Maximum Allowed per Year When Making Soil Applications or Foliar Sprays to Seedlings:** 16.0 fl. oz. (0.5 lb. ai) per acre.

[*Not Registered for Use by California]

TOBACCO – Foliar Treatment[*]

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids	0.8 - 1.6
Flea beetles Japanese beetles	1.6

Applications:

Apply specified rate per acre as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough uniform coverage is needed to achieve optimum control. Use of a spray adjuvant to improve coverage. **A171.216** alone may not provide knockdown for heavy insect or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mix **A171.216** with other insecticides labeled for this use may improve knockdown and control of additional insects.

Restrictions:

- **Pre-Harvest Interval (PHI):** 14 days
- **Minimum Interval Between Applications**: 7 days
- **Maximum Foliar-Applied Product Allowed per Year:** 8.9 fl. oz. (0.28 lb. ai) per acre

[*Not Registered for Use by California]

VEGETABLES AND SMALL FRUIT CROPS

CUCURBIT VEGETABLES[1] – Soil Treatment[*]

Crops of Group 9 Including: Chayote (fruit), Chinese waxgourd (Chinese preserving melon), Citron melon, Cuban pumpkin, Cucumber, Gherkin, Gourd (edible, includes hyotan, cucuzza, hechima, Chinese okra), *Momordica* spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (hybrids and/or cultivars of *Cucumis melo* including true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon, and Winter melon), Pumpkin, Squash (includes summer squash types such as: butternut squash, calabaza, crookneck squash, hubbard squash, scallop squash, straightneck squash, vegetable marrow and zucchini, and winter squash types such as acorn squash and spaghetti squash), Watermelon (includes hybrids and/or varieties of *Citrullus lanatus*)

Field Application Instructions[*]
See details below for additional planthouse applications instructions.

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Cucumber beetles Leafhoppers Thrips (foliage feeding thrips only) Whiteflies	8.0 - 12.0
Pests/ Diseases Suppressed	
Bacterial wilt (as vectored by various cucumber beetles) Leaf silvering resulting from whitefly feeding	

Applications:

Apply the specified dosage in one of the following methods:

- Chemigation into root-zone through low- pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray directed on or below seed.
- Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1 ½ inches with sufficient irrigation within 24 hours of application.
- Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting.
- Post-seeding drench, transplant-water drench, or hill drench.
- Subsurface side-dress on both sides of each row. **A171.216** must be incorporated into root-zone.

Restrictions:

- **Pre-Harvest Interval (PHI):** 21 days
- **Maximum Soil-Applied Product Allowed per Crop Season:** 12.0 fl. oz. (0.38 lb. ai) per acre

[*Not Registered for Use by California]

Planthouse Application Instructions [*]

Pest Controlled	Rate (Fl. Oz./1,000 Plants)
Aphids Whiteflies	0.05

Applications:

Apply specified dosage to seedlings in trays in the planthouse, targeting soil media (tray drench), not more than 7 days prior to transplanting, in one of the following methods:

- Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash **A171.216** from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash **A171.216** from foliage may result in reduced pest control.
- Injection into overhead irrigation system, using adequate volume to thoroughly saturate soil media without loss of gravitational solution from the bottom of the tray.

The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Applications of higher rates or increased number of applications in planthouse may result in significant plant injury. Transplants should be handled carefully during setting to avoid dislodging treated potting media from roots.

Important Note: Not all varieties of cucurbit vegetables have been tested for tolerance to **A171.216** applied to seedling flats. Treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.

Restrictions:

- **Maximum Amount of A171.216 Applied in the Planthouse:** 0.05 fl. oz. (0.00156 lb. ai) per 1,000 plants.
- **Maximum Number of A171.216 Applications in Planthouse:** 1

[1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.
[*Not Registered for use by California]

GREENHOUSE VEGETABLES[1] – Soil Treatment[*]
(Cucumber and Tomato only - mature plants in production greenhouses)

Pests Controlled	Rate (Fl. Oz./1,000 Plants)
Aphids Whiteflies	0.7

Applications:
Apply specified dosage in a minimum of 16 gallons of water for tomatoes and 21 gallons of water for cucumbers using soil drenches, micro-irrigation, drip irrigation, or hand-held or motorized calibrated irrigation equipment. Application should be made only to plants grown in field-type soils, potting media, or mixtures thereof. Do not apply to plants grown in non- soil medias such as perlite, vermiculite, rock wool or other soil-less media, or plants growing hydroponically. Do not apply to immature plants since phytotoxicity may occur.

Apply when infestation pressure surpasses threshold and beneficials are not able to maintain insect populations below damage thresholds. Repellency of bumble bee pollinators and negative effects on some beneficials (*Orius* spp.) can occur when **A171.216** is applied.

Many varieties of vegetables have been tested for tolerance to **A171.216** and show good safety. However, certain varieties may show more sensitivity to **A171.216**. Therefore, treat a few plants before treating the whole greenhouse.

Restrictions:

- **Pre-Harvest Interval (PHI):** 0 day
- **Maximum A171.216 Soil Applications per Crop Season:** 1
- **Maximum Product Allowed per Crop Season:** 0.7 fl. oz. (0.03 lb. ai) per 1,000 plants

[1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.
[*Not Registered for Use by California]

FRUITING VEGETABLES[1] – Soil Treatment[*]

Crops of Group 8 plus Okra including: Eggplant, Ground cherry, Okra, Pepper (including bell, chili, cooking, pimento, and sweet) Tomato, Pepinos, Tomatillo

<table>
<tr><th colspan="2">Field Application Instructions[*]
See details below for additional planthouse instructions.</th></tr>
<tr><th>Pests Controlled</th><th>Rate
(Fl. Oz./Acre)</th></tr>
<tr><td>Aphids
Colorado potato beetle
Flea beetles
Leafhoppers
Thrips (foliage feeding thrips, only)
Whiteflies</td><td rowspan="3">Okra and Pepper: 8.0 - 16.0
Other Crops: 8.0 - 12.0</td></tr>
<tr><th>Diseases Suppressed</th></tr>
<tr><td>Symptoms of:
Tomato mottle virus
Tomato spotted wilt virus
Tomato yellow leaf curl virus</td></tr>
<tr><td colspan="2">Applications:
Apply specified dosage in one of the following methods:
• Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
• In-furrow spray directed on or below seed.
• Narrow (2” or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1 ½ inches with sufficient irrigation within 24 hours of application.
• Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting.
• Post-seeding drench, transplant-water drench, or hill drench.
• Subsurface side-dress on both sides of each row. A171.216 must be incorporated into root-zone.</td></tr>
<tr><td colspan="2">Restrictions:
• Pre-Harvest Interval (PHI): 21 days
• Maximum A171.216 Allowed per Crop Season When Making Soil Application:
o Pepper and Okra Crops - 16.0 fl. oz. (0.5 lb. ai) per acre
o Other Fruiting Vegetable Crops - 12.0 fl. oz. (0.38 lb. ai) per acre
[*Not Registered for Use by California]</td></tr>
<tr><th colspan="2">Planthouse Application Instructions[*]</th></tr>
<tr><th>Pests Controlled</th><th>Rate
(Fl. Oz./1,000 Plants)</th></tr>
<tr><td>Aphids
Whiteflies</td><td>0.05</td></tr>
<tr><td colspan="2">Applications:
Apply specified dosage to seedlings in trays in the planthouse, targeting soil media (tray drench), not more than 7 days prior to transplanting, in one of the following manners:
• Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash A171.216 from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash A171.216 from foliage may result in reduced pest control.
• Injection into overhead irrigation system, using adequate volume to thoroughly saturate soil media without loss of gravitational solution from the bottom of the tray.

The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Handle transplants carefully during setting to avoid dislodging treated potting media from roots.</td></tr>
</table>

Important Note: Not all varieties of fruiting vegetables have been tested for tolerance to **A171.216** applied to seedling flats. To check for tolerance, treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.

Restrictions:

- **Maximum Amount of A171.216 Applied in the Planthouse:** 0.05 fl. oz. (0.00156 lb. ai) per 1,000 plants.
- **Maximum Number of A171.216 Applications in Planthouse:** 1

[1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.
[*Not Registered for Use by California]

FRUITING VEGETABLES[1] - Foliar Treatment[*]

Crops of Group 8 plus Okra including: Eggplant, Ground cherry, Okra, Pepper (including bell, chili, cooking, pimento, and sweet) Tomatoes, Pepinos, Tomatillo

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Colorado potato beetle Leafhoppers Whiteflies	1.5 - 2.4
Pepper weevil	2.4

Applications:

Apply specified rate per acre as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough uniform coverage is necessary to achieve optimum control. Use a spray adjuvant to improve coverage. **A171.216** alone may not provide knockdown for heavy insect or established populations. A second application may be required to achieve control, if indicated by scouting. Tank mixing **A171.216** with other insecticides for knockdown of insects and to improve control of additional insects.

For Pepper weevil, apply specified dosage of **A171.216** by ground equipment only before a damaging insect population becomes established. Good coverage of foliage and fruit is necessary for optimum control. Use **A171.216** in a full-season program that includes use of different classes of chemistry and modes of action are utilized in a blocked or windowed approach.

For additional information, please contact your Atticus, LLC representative, Extension Specialist, or crop advisor. When targeting adult whiteflies, use higher listed rates.

Restrictions:

- **Pre-Harvest Interval (PHI):** 0 days
- **Maximum Interval Between Applications:** 5 days
- **Maximum Foliar-Applied Product Allowed per Crop Season:** 7.6 fl. oz. (0.24 lb. ai) per acre

[1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.
[*Not Registered for Use by California]

GLOBE ARTICHOKES – Soil Treatment[*]

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers	8.0 - 16.0

Applications:

Apply specified rate in one of the following methods:

- Chemigation into root-zone through low-pressure drop, trickle, micro-sprinkler or equivalent equipment;
- In-furrow spray directed on or below seed.

Restrictions:

- **Pre-Harvest Interval (PHI):** 7 days
- **Maximum Foliar-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre

[*Not Registered for Use by California]

GLOBE ARTICHOKES – Foliar Treatment[*]

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers	1.6 - 4.0
Applications: Apply specified rate per acre as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough uniform coverage is necessary to achieve optimum control. Use of a spray adjuvant to improve coverage. **A171.216** alone may not provide knockdown for heavy insect or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing **A171.216** with other insecticides labeled for this use may improve knockdown and control of additional insects.	
Restrictions: • **Pre-Harvest Interval (PHI):** 7 days • **Minimum Interval Between Applications:** 14 days • **Maximum Foliar-Applied Product Allowed per Year**: 16 fl. oz. (0.5 lb. ai) per acre [*Not Registered for Use by California]	

HERBS – Soil Treatment[*]

Crops of Crop Subgroup 19A including: Lemon Balm, Basil (fresh and dried), Borage, Burnet, Chamomile, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander, (cilantro or Chinese parsley leaves), Costmary, Cilantro (leaf), Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Flea beetles Leafhoppers Whiteflies	8.0 – 12.0
Pests Suppressed	
Thrips (foliage-feeding thrips only)	
Applications: **Apply specified dosage in one of the following methods:** • In-furrow spray during planting directed on or below seed. • In-furrow spray or transplant-water drench during setting or transplanting. • Shanked-into or below eventual seed-line. • Chemigation into root zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment. **Note:** Not all crops and/or varieties listed above have been tested for phytotoxicity. Without specific knowledge about a particular crop and variety, treat only a small area or small number of plants of each listed above and evaluate prior to commercial use.	
Restrictions: • **Pre-Harvest Interval (PHI):** 14 days • **Maximum Soil-Applied Product Allowed per Crop Season:** 12.0 fl. oz. (0.38 lb. ai) per acre [*Not Registered for Use by California]	

HERBS – Foliar Treatment[*]

Crops of Subgroup 19A including: Angelica, Lemon Balm, Basil (fresh and dried), Borage, Burnet, Chamomile, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander, (cilantro or Chinese parsley leaves), Costmary, Cilantro (leaf), Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage, Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet bay leaf, Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood.

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Flea beetles Leafhoppers Whiteflies	1.4
Applications: Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of an organosilicone spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects. **Note:** Not all crops and/or varieties listed above have been tested for phytotoxicity. It is strongly recommended that only small numbers of plants be treated and evaluated before broad-scale application.	
Restrictions: • **Pre-Harvest Interval (PHI):** 7 days • **Minimum Interval Between Applications:** 5 days • **Maximum Foliar-Applied Product Allowed per Crop Season:** 4.2 fl. oz. (0.13 lb. ai) per acre [*Not Registered for Use by California]	

BRASSICA (COLE) LEAFY VEGETABLES[1] – Soil Treatment[*]

Crops of Group 5 including: Broccoli, Broccoli raab (rapini), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccoli, Chinese broccoli (gai lon), Chinese cabbage (bok choy and napa), Chinese mustard cabbage (gai choy), Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens.

Pests Controlled	Rate (Fl. Oz./Acre) (on 36-inch rows)
Aphids Leafhoppers Thrips (foliage feeding thrips only) Whiteflies	5.0 – 12.0
Applications: **Apply specified dosage in one of the following methods:** • Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment. • In-furrow spray directed at or below seed. • Narrow (2 inches or less) surface band spray over seed-line at planting incorporated to a depth of 1 to 1 ½ inches followed with sufficient irrigation within 24 hours after application. • Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting. • Post-seeding drench, transplant-water drench, or hill drench. • Subsurface side-dress on both sides of each row followed by incorporation into root-zone.	
Restrictions: • **Pre-Harvest Interval (PHI):** 21 days • M**aximum Soil-Applied Product Allowed per Crop Season:** 12.0 fl. oz. (0.38 lb. ai) per acre [1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling. [*Not Registered for Use by California]	

BRASSICA (COLE) LEAFY VEGETABLES[1] - Foliar Treatment[*]

Crops of Group 5 including: Broccoli, Broccoli raab (rapini), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccoli, Chinese broccoli (gai lon), Chinese cabbage (bok choy and napa), Chinese mustard (gai choy), Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens, Turnip tops (leaves).

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Flea Beetles Leafhoppers Whiteflies	1.5

Applications:

Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Restrictions:

- **Pre-Harvest Interval (PHI):** 7 days
- **Minimum Interval Between Applications:** 5 days
- **Maximum Foliar-Applied Product Allowed per Crop Season:** 7.68 fl. oz. (0.24 lb. ai) per acre

[1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

[*Not Registered for Use by California]

BULB VEGETABLES (*Allium* sp.) Group 3 – Soil Treatment[1][*]

Crops of Subgroup 3-07: Chive (fresh leaves), Chinese chive (fresh leaves), Daylily (bulb), Elegans hosta, Fritillaria (bulb and leaves), Garlic (common group, great-headed group, serpent group), Kurrat group, Leek group (including common, lady's and wild), Lily (bulb), Onion (bulb and green leaves including: common group, Beltsville bunching, Chinese bulb, fresh, green, macrostem, Pearl group, potato onion group, tree onion-tops, Welsh-tops), Shallot, plus cultivars, varieties, and/or hybrids of these.

Pests Controlled	Rate (Fl. Oz./Acre)
Thrips	16.0

Applications:

Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray directed at or below seed.
- Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting.
- Post-seeding drench, transplant-water drench, or hill drench.

Applications made to higher organic matter soils may result in reduced or shortened activity on pest.

Restrictions:

- **Pre-Harvest Interval (PHI):** 21 days
- **Maximum Soil-Applied Product Allowed per Crop Season**: 16.0 fl. oz. (0.5 lb. ai) per acre

[1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

[*Not Registered for Use by California]

LEAFY GREEN VEGETABLES[1] – Soil Treatment[*]

Crops of Subgroup 4A plus Watercress including: Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Chervil, Chrysanthemum (edible leaved and garland), Cilantro, Corn salad, Cress (garden), Cress (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chicory), Spinach (including New Zealand and vine (Malabar spinach, Indian spinach), Watercress (commercial production only, applications must not be made to native cress growing in streams or other bodies of water), Watercress (upland)

Pests Controlled	**Rate (Fl. Oz./Acre) (on 36-inch rows)**
Aphids Leafhoppers Thrips (foliage feeding thrips only) Whiteflies	5.0 - 12.0

Applications:

Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray directed at or below seed.
- Narrow (2 inches or less) surface band spray over seed-line at planting incorporated to a depth of 1 to 1 ½ inches followed with sufficient irrigation within 24 hours after application.
- Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting.
- Post-seeding drench, transplant-water drench, or hill drench.
- Subsurface side-dress on both sides of each row followed by incorporation into root-zone.

Restrictions:

- **Pre-Harvest Interval (PHI):** 21 days
- **Maximum Soil-Applied Product Allowed per Crop Season:** 12.0 fl. oz. (0.38 lb. ai) per acre

[1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

[*Not Registered for Use by California]

LEAFY GREEN VEGETABLES[1] – Foliar Treatment[*]

Crops of Subgroup 4A including: Amaranth (leafy amaranth, Chinese spinach), Arugula (Roquette), Chervil, Chrysanthemum (edible leaved and garland), Cilantro, Corn salad, Cress (garden, winter, upland, yellow rocket), Dandelion, Dock (sorrel), Endive (escarole), Lettuce (head and leaf), Orach, Parsley, Purslane (green, garden and winter), Radicchio (red chicory), Spinach (including New Zealand and vine (Malabar, Indian), Watercress (upland), Watercress (commercial production only – do not apply to native watercress in streams or other bodies of water)

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Flea beetles Leafhoppers Whiteflies	1.5

Applications:

Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Restrictions:

- **Pre-Harvest Interval (PHI):** 7 days
- **Minimum Interval Between Applications:** 5 days
- **Maximum Foliar-Applied Product Allowed Per Crop Season:** 7.6 fl. oz. (0.24 lb. ai) per acre
- For applications made to watercress, production fields must be drained of water at least 24 hours prior to application, and water must not be reapplied to the field for a minimum of 24 hours following the application. Apply only to fully leafed-up canopies.

[1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

[*Not Registered for Use by California]

LEAFY PETIOLE VEGETABLES[1] – Soil Treatment[*]

Crops of Subgroup 4B including: Cardoon, Celery, Celtuce, Chinese celery (fresh leaves and stalk only), Florence fennel (including sweet anise, sweet fennel, Finocchio), Rhubarb, Swiss chard

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers Thrips (foliage feeding thrips only) Whiteflies	5.0 - 12.0

Applications:

Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray directed at or below seed.
- Narrow (2 inches or less) surface band spray over seed-line at planting incorporated to a depth of 1 to 1 ½ inches followed with sufficient irrigation within 24 hours of application.
- Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting.
- Post-seeding drench, transplant-water drench, or hill drench.
- Subsurface side-dress on both sides of each row followed by incorporation into root-zone.

Restrictions:

- **Pre-Harvest Interval (PHI):** 45 days
- **Maximum Soil-Applied Product Allowed per Crop Season:** 12.0 fl. oz. (0.38 lb. AI) per acre

[1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

[*Not Registered for Use by California]

LEGUME VEGETABLES[1] except soybean, dry - Soil treatment[*]
Crops of Group 6 including: Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean
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, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean)
Pea (*Pisum* spp., includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea)
Other Beans and Peas [Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pigeon pea, Soybean (immature seed), Sword bean]

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers Thrips (foliage feeding thrips only) Whiteflies	8.0 - 12.0
Diseases Suppressed	
Symptoms of: Bean common mosaic virus (BCMV) Bean golden mosaic virus (BGMV) Beet curly top hybrigeminivirus (BCTV)	

Applications:
Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray at planting directed at or below seed.
- In a narrow (2 inches or less) surface band over seed-line at planting incorporated to a depth of 1 to 1 ½ inches followed with sufficient irrigation with 24 hours after application.
- In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting.
- As a post-seeding drench, transplant drench, or hill drench.

Restrictions:

- **Pre-Harvest Interval (PHI):** 21 days
- **Maximum Soil-Applied Product Allowed per Crop Season:** 12 fl. oz. (0.38 lb. ai) per acre.

[1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.
[*Not Registered for Use by California]

LEGUME VEGETABLES[1] except soybean, dry – Foliar Treatment[*]

Crops of Group 6 including: Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean (*Lupinus* spp., including grain lupin, sweet lupin, white lupin, and sweet white lupin); *Phaseolus* spp., including field beans, kidney beans, lima beans, navy beans, pinto beans, runner beans, snap beans, tepary beans, wax beans; (*Vigna* spp., including adzuki beans, asparagus beans, black-eyed peas, catjang, Chinese longbeans, cowpeas, Crowder peas, moth beans, mungbeans, rice beans, Southern peas, urd beans, and yardlong beans; Peas (*Pisum* spp.), including dwarf peas, edible-pod peas, English peas, field peas, garden peas, snow peas, sugar snap peas; Broad beans (fava), Chickpeas (garbanzo beans), Guar; Jackbean; Lablab beans (hyacinth), Lentils, Pigeon peas, Soybean (immature seed), Sword beans.

Pests Controlled	Rate (Fl. Oz,/Acre)
Aphids Leafhoppers Thrips [*] Whiteflies	1.4
Applications: Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.	
Restrictions: • **Pre-Harvest Interval (PHI):** 7 days • **Minimum Interval Between Applications:** 7 days • **Maximum Foliar-Applied Product Allowed per Crop Season:** 4.2 fl. oz. (0.13 lb. ai) per acre [1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling. [*Not Registered for use by California.]	

ROOT VEGETABLES[1] – Soil Treatment[*]

Crops of Subgroup 1B except Sugarbeet including: Beet (garden)[2], Burdock (edible)[2], Carrot[2], Celeriac[2], Chervil (turnip rooted)[2], Chicory[2], Gingseng, Horseradish, Kava[*], Parsley (turnip-rooted), Parsnip[2], Radish[2], Oriental radish (diakon)[2], Rutabaga[2], Salsify (oyster plant), Salsify (black)[2], Salsify (Spanish), Skirret, and Turnip[2]

Pests Controlled	Rate	
	Fl. Oz./1,000 Row-Feet	**Fl. Oz./Acre**
Aphids Flea beetles Leafhoppers Thrips (foliage feeding thrips only) Whiteflies	0.35 - 0.85	5.0 - 12.0 (Depending on row spacing)

Application:

Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- In-furrow spray (rate specified per 1,000 row-feet) or, shanked-in 1 to 2 inches below seed depth duringplanting.
- In a narrow (2 inches or less) band directly (1 to 2 inches) below the eventual seed row in a bedding operation 14 or fewer days before planting.

Important Note: The rate applied affects the length of control. Use higher listed rates where infestations occur later in crop development, or where pest pressure is continuous. **A171.216** rates less than 0.7 fluid ounces/1000 row-feet will not provide adequate residual pest control. **A171.216** treated crops grown on very high organic matter soils (muck) may also require additional pest management control.

Restrictions:

- **Pre-Harvest Interval (PHI):** 21 days
- **Maximum Soil-Applied Product Allowed per Crop Season**: 12 fl. oz. (0.38 lb. ai) per acre.
- **Maximum A171.216 Applications per Crop Season:** 1

[1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

[2]Tops or greens from these crops may be utilized for food or feed.

[*Not Registered for use by California]

ROOT VEGETABLES[1] – Foliar Treatment[*]

Crops of Subgroup 1B except Sugarbeet including: Garden Beets[2], Edible Burdock[2], Carrots[2], Celeriac[2], Chervil (turnip rooted)[2], Chicory[2], Gingseng, Horseradish, Parsley (turnip-rooted), Parsnip[2], Radish[2], Oriental radish (diakon)[2], Rutabaga[2], Salsify (oyster plant), Black Salsify[2], Spanish Salsify, Skirret, and Turnip[2]

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Flea beetles Leafhoppers Whiteflies	1.4

Applications:

Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Restrictions:

- **Pre-Harvest Interval (PHI):** 7 days
- **Minimum Interval Between Applications:** 5 days
- **Maximum Foliar-Applied Product Allowed per Crop Season:**
  - **Radish** – 1.4 fl. oz. (0.044 lb. ai) per acre
  - **Other crops** - 4.2 fl. oz. (0.13 lb. ai) per acre
- **Maximum A171.216 Applications per Crop Season**:
  - **Radish** - 1
  - **Other crops** - 3

[1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.

[2]Tops or greens from these crops may be utilized for food or feed.

[*Not Registered for Use by California]

TUBEROUS AND CORM VEGETABLES[1] – Soil Treatment[*]

Crops of Subgroup 1C including: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Canna (edible, Queensland arrowroot), Cassava (bitter and sweet)[2], Chayote (root), Chufa, Dasheen (taro)[2], Ginger, Leren, Sweet potato, Tanier (cocoyam)[2], Turmeric, Yam bean (jicama, manioc pea), Yam (true)[1] (For instructions on potato see **Field Crops** section)

Pests Controlled	Rate	
	Fl. Oz./1,000 Row-Feet	Fl. Oz./Acre
Aphids Flea beetles Leafhoppers Thrips (foliage feeding thrips only) Whiteflies	0.35 - 0.85	5.0 - 12.0 (Depending on row spacing)

Application:

Apply specified dosage in one of the following methods:

- In-furrow spray (rate specified per 1,000 row-feet) over planting materials (hulls) or shanked-in 1 to 2 inches below hulls depth at planting.
- Side-dress not more than 0.3 fluid ounces/1,000 row-feet no later than 45 days after planting. Observe the same PHI as above.

Important Note: The rate applied affects the length of control. Use higher listed rates where infestations occur late in crop development, or where pest pressure is continuous. **A171.216** rates less than 0.35 fluid ounces/1,000 row-feet may not

provide adequate residual pest control. **A171.216** treated crops grown on very high organic matter soils (muck) may also require additional pest management control.

Restrictions:

- **Pre-Harvest Interval (PHI) from Planting Application:** 3 days (leaves); 125 days (corms)
- **Maximum Soil-Applied Product Allowed per Crop Season:** 12 fl. oz.(0.38 lb. ai) per acre
- **Maximum A171.216 Applications per Crop Season:** 1

[1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.
[2]Tops or greens from these crops may be utilized for food or feed.
[*Not Registered for Use by California]

TUBEROUS AND CORM VEGETABLES[1] – Foliar Treatment[*]

Crops of Subgroup 1C including: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Canna (edible, Queensland arrowroot), Cassava (bitter and sweet)[2], Chayote (root), Chufa, Dasheen (taro)[2], Ginger, Leren, Sweet potato[2], Tanier (cocoyam)[2], Yam bean (jaicama, manioc pea), True Yams[2]

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Flea beetles Leafhoppers Whiteflies	1.4

Applications:

Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Restrictions:

- **Pre-Harvest Interval (PHI):** 7 days
- **Minimum Interval Between Applications:** 5 days
- **Maximum Foliar-Applied Product Allowed per Crop Season:** 4.2 fl. oz. (0.13 lb. ai) per acre
- **Maximum A171.216 Applications per Crop Season**: 3

[1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.
[2]Tops or greens from these crops may be utilized for food or feed.
[*Not Registered for Use by California]

STRAWBERRY[1] – Soil Treatment[*]

Annual And Perennial Crops	
Pests Controlled	**Rate (Fl. Oz./Acre)**
Aphids Whiteflies	12.0 - 16.0

Applications:

Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment after plants are established or on perennial crops in early spring prior to bud opening.
- As a plant material or plant hole treatment just prior to, or during transplanting.
- As a band spray over-the-row in a minimum of 20 gallons of water per acre, followed immediately by overhead irrigation to incorporate product into root-zone. Do not use plastic or other mulches that limit movement of **A171.216** into root zone.

The rate applied affects the length of control. Use higher listed rates where infestations may occur later in crop development or where pest pressure is continuous.

Restrictions:

- **Pre-Harvest Interval (PHI):** 14 days
- **Maximum Soil-Applied Product Allowed per Crop Season:** 16 fl. oz. (0.5 lb. ai) per acre.
- Do not apply during bloom or within 10 days prior to bloom or when bees are foraging.

[*Not Registered for Use by California]

Post-harvest Use on Perennial Crops[*]	
Pests Controlled	**Rate (Fl. Oz./Acre)**
White grub complex (grubs of Asiatic Garden beetle, European and Masked chafer, Japanese beetle, Oriental beetle)	8.0 - 12.0

Applications:

Apply a single application post-harvest to coincide with renovation of strawberry fields and during active egg- laying period of beetles.

Apply specified dosage of A171.216 in one of the following methods:

- As a ground spray via boom or backpack sprayer in a minimum of 20 gallons of water per acre.
- As a row-band spray using an adjusted amount of product based on the treated row band area in proportion to the amount required per full acre make the bandwidth equivalent to the width of the anticipated fruiting bed.
- As a chemigation application with 600 to 1000 gallons of water followed by 0.1 to 0.25 inches irrigation.

Important Note: All soil-surface applications must be followed by 0.25 inches of rainfall or overhead irrigation water per acre within 2 hours of application. Failure to adequately incorporate **A171.216** into egg-deposition zone may result in decreased activity.

Restrictions:

- **Pre-Harvest Interval (PHI):** 14 days
- **Maximum Soil-Applied Product Allowed per Year**: 12 fl. oz. (0.38 lb. ai) per acre.
- Do not apply during bloom or within 10 days prior to bloom or when bees are foraging.

[1]Do not use both soil application methods on the same crop in the same season.

[*Not Registered for Use by California]

STRAWBERRY – Foliar Treatment[*]

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Spittlebugs Whiteflies	1.5
Applications: Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.	
Restrictions: • **Pre-Harvest Interval (PHI):** 7 days • **Minimum Interval Between Applications:** 5 days • **Maximum Foliar-Applied Product Allowed per Crop Season:** 4.5 fl. oz. (0.14 lb. ai) per acre • Do not apply during bloom or within 10 days prior to bloom, or when bees are foraging. [*Not Registered for Use by California]	

SUGARBEET[1] – Soil Treatment [(For Use Only in CA)]

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers Whiteflies Flea beetles	3.0 - 6.0
Diseases Suppressed	
Symptoms of: Western yellows/Beet curly top hybrigeminivirus (BCTV)	
Applications: **Apply specified dosage in the following method:** • Apply specified dosage in sufficient carrier volume to insure uniform application. Apply directly below each seed furrow either during the bedding operation immediately prior to planting or at the time of planting. The low rate may be applied to aid establishment of stands in whitefly areas, or for early season control of the other pests listed.	
Restrictions: • **Maximum Soil-Applied Product Allowed per Year:** 6.0 fl. oz. (0.18 lb. ai) per acre. • Do not apply immediately prior to bud opening or during bloom or when bees are foraging. [1]Not for use on crops grown for seed unless allowed by state-specific 24(c) labeling.	

RATE (Fl. Oz./Acre)	RATE Based on *Average* Row Spacing (In Inches) (Fl. Oz./1,000 Row-Feet)							
	10	**15**	**20**	**25**	**30**	**35**	**40**	**45**
5	0.10	0.14	0.19	0.24	0.29	0.33	0.38	0.43
6	0.11	0.17	0.23	0.29	0.34	0.40	0.46	0.51
7	0.13	0.20	0.27	0.33	0.40	0.47	0.53	0.60
8	0.15	0.23	0.30	0.38	0.46	0.53	0.61	0.68
9	0.17	0.26	0.34	0.43	0.51	0.60	0.68	0.77
10	0.18	0.29	0.38	0.48	0.57	0.67	0.77	0.86
12	0.23	0.34	0.46	0.57	0.69	0.80	0.92	1.03
14	0.27	0.40	0.54	0.67	0.80	0.94	1.07	1.21
16	0.31	0.46	0.61	0.77	0.92	1.07	1.22	1.38

The rate applied of **A171.216** will affect the length of control as well as the degree and effect of control. Use higher labeled rates where infestations may occur later in crop development or where there is continuous pest pressure. Except as otherwise directed on this label, do not use at application rates lower than 0.35 fluid ounces/1,000 row-feet.

TREE, BUSH AND VINE CROPS

BANANAS AND PLANTAINS – Soil Treatment[*]

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers	8.0 - 16.0
Pests Suppressed	
Scales	

Applications:
Apply specified dosage in the following method:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Restrictions:

- **Pre-Harvest Interval (PHI):** 0 days
- **Maximum Soil-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre.

[*Not Registered for Use by California]

BANANAS AND PLANTAINS – Foliar Treatment[*]

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers Thrips	3.2

Applications:
Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Apply listed dosage as a broadcast or directed spray to infested area insuring thorough coverage. **A171.216** may be applied through properly calibrated ground or aerial application equipment. Aerial application may result in slower activity and reduce control relative to application using ground equipment. For tree and vine crops, application rates are based on full-size mature trees or vines.

Use of an organosilicone spray adjuvant as directed on the adjuvant label may improve coverage. Do not exceed 2.0 fl. oz. of adjuvant per 100 gallons of spray dilution.

Restrictions:

- **Pre-Harvest Interval (PHI):** 0 days
- **Minimum Interval Between Applications:** 14 days
- **Maximum Foliar-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre

[*Not Registered for Use by California]

BUSHBERRY – Soil Treatment [*]

Crops of Subgroup 13B Including: Blueberry, Currant, Elderberry, Gooseberry, Huckleberry, Juneberry, Lingonberry, Salal

Pests Controlled	Rate (Fl. Oz./Acre)
Japanese beetle (adults, feeding on foliage) White grub complex (grubs of Asiatic Garden beetle, European and Masked chafer, Japanese beetle and Oriental beetle)	8.0 - 16.0

Applications:

Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- 18-inch band on each side of the row followed by irrigation immediately after application.

For optimal grub control, apply **A171.216** to control 1st or 2nd instar larvae. Application may be made post-bloom up to 7 days prior to harvest, or post-harvest until October 1st. For optimum control of Japanese beetle larvae, make applications from June 1 to July 15.

Application to grass covered rows, row middles, drive lanes, headlands, and other grassy areas in and around the berry field will control resident grub populations. Applications directed to the root-zone will help protect berry plant roots from grub feeding.

Apply **A171.216** to moist soil. If necessary, apply one hour of irrigation water immediately before application of **A171.216**. To ensure maximum efficacy of soil surface spray, ½ to 1 inch of irrigation water or rainfall should be applied or received within 24 hours of application of **A171.216** to facilitate movement into the soil and into the root-zone.

Restrictions:

- **Pre-Harvest Interval (PHI):** 7 days
- **Maximum Soil-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre.
- Do not apply pre-bloom or during bloom or when bees are foraging.

[*Not Registered for Use by California]

BUSHBERRY – Foliar Treatment[*]

Crops of Subgroup 13B Including: Blueberries, Currants, Elderberries, Gooseberries, Huckleberries, Juneberries, Lingonberries, Salal

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers Sharpshooters	1.2 - 1.6
Blueberry maggot Japanese beetle (adults) Thrips (foliage feeding only)	2.4 - 3.2

Applications:

Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Restrictions:

- **Pre-Harvest Interval (PHI):** 3 days
- **Minimum Interval Between Applications:** 7 days
- **Maximum Foliar-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre
- **Maximum A171.216 Foliar Applications per Year**: 5
- **Minimum Application Volume:** 20 gallons per acre by ground, 5 gallons per acre by air.
- Do not apply pre-bloom or during bloom or when bees are foraging.

[*Not Registered for Use by California]

CANEBERRY – Soil Treatment[*]

Crops of Subgroup 13A including:

Blackberry (Rubus eubatus, including bingleberry, black satin berry, boysenberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, Himalayaberry, hullberry, Lavacaberry, Loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, nectarberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, youngberry, and varieties and/or hybrids of these)

Raspberry (black and red, Rubus occidentalis, Rubus strigosus, Rubus idaeus)

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers Whiteflies	8.0 - 16.0
Rednecked cane borer	12.0 - 16.0
Pests Suppressed	
Thrips (foliage feeding thrips only)	8.0 - 16.0

Soil Application:

Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.
- Basal, soil drench in a minimum of 500 gallons solution per acre.

Restrictions:

- **Pre-Harvest Interval (PHI):** 7 days
- **Maximum Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre.
- Do not apply pre-bloom or during bloom or when bees are foraging.

[*Not Registered for Use by California]

CANEBERRY – Foliar Application[*]

Crops of Subgroup 13A including:

Blackberry (Rubus spp. including Andean blackberry, Arctic blackberry, Bingleberry, Black satin berry, Boysenberry, Brombeere, California blackberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, Common blackberry, Coryberry, Darrowberry, Dewberry, Dirksen thornless berry, Evergreen blackberry, Himalayaberry, Hullberry, Lavacaberry, Loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, Moras, Mures deronce, nectarberry, Northern dewberry, Olallieberry, Oregon evergreen berry, Phenomenalberry, Rangeberry, Ravenberry, Rossberry, Shawnee blackberry, Southern dewberry, Tayberry, youngberry, Zarzamora, and varieties and/or hybrids of these)

Raspberry (Rubus spp. including Bababerry, Black raspberry, Thimbleberry, Tulameen, Yellow raspberry, and varieties and/or hybrids of these, and Wild raspberry)

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers Thrips	3.2

Restrictions:

- **Pre-Harvest Interval (PHI):** 3 days
- **Minimum Interval Between Applications:** 7 days
- **Maximum Product Allowed per Year:** 9.6 fl. oz. (0.3 lb. ai) per acre.
- Do not apply pre-bloom or during bloom when bees are foraging

[*Not Registered for Use by California]

CITRUS (Containerized) – Soil Treatment[*]

Crops of Group 10 Including: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Satsuma mandarin, Tangelo, and other cultivars and/or hybrids of these.

Pests Controlled	Rate (mL/0.1 Ft^3 Container Media)
Aphid Asian citrus psyllid Blackfly Citrus leafminer Leafhoppers /Sharpshooters Mealybugs Scales Whiteflies Citrus root weevil (larval complex)	0.38 – 0.58
Pests Suppressed	0.58
Citrus thrips (foliage feeding thrips only)	

Application:

Determine volume of container and calculate dosage necessary to treat container. Apply calculated dosage per container as a soil drench or through low-pressure drip or tickle irrigation water. Use sufficient carrier volume to ensure thorough uniform distribution throughout the media without loss of gravitational water from the container. For optimal results make treatment at planting prior to insect infestation. Retreat if necessary. For control of larvae of the citrus root weevil complex, application should be made prior to neonate larvae entering potting media. Utilize higher listed dosage for heavy infestations.

Phytotoxic Response Potential:

If you have no experience with **A171.216** on containerized citrus of a specific variety/hybrid, treat only a few plants and observe phytotoxic effects for up to 60 days prior to treating entire nursery. Not all varieties or hybrids of citrus have been tested for phytotoxic response following an **A171.216** application.

Restrictions:

- **Pre-Harvest Interval (PHI):** 0 day

- **Maximum A171.216 Allowed per Application:** 0.58 mLs / 0.1 ft^3 container media.
- **Maximum A171.216 Allowed per Year:** 3.5 mLs / plant.
- Do not apply pre-bloom or bloom period when bees are foraging.

[*Not Registered for Use by California]

CITRUS (Field) – Soil Treatment[*]

Crops of Group 10 Including: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Satsuma mandarin, Tangelo, and other cultivars and/or hybrids of these.

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Asian citrus psyllid Blackfly Citrus leafminer Leafhoppers /Sharpshooters Mealybugs Scales Termites (FL only) Whiteflies	8.0 - 16.0
Pests/Diseases Suppressed	
Citrus nematode, Symptoms of: Citrus tristeza virus (CTV) through vector control Citrus yellows Thrips (foliage feeding thrips only)	16.0

Applications:

Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment. For optimum results, apply to newly planted trees or those previously trained to drip, trickle or micro-sprinkler irrigation. Lightly pre-wet the soil to break soil surface tension prior to applications of **A171.216**. Chemigation application can be made separate to normal irrigation but followed by 10 to 20 minutes of additional watering to move **A171.216** into rootzone. Allow 24 hours before initiating subsequent irrigations.
- Soil surface band spray on both sides of the tree. Overlap bands at the tree base to create a continuous band within the drip-line area of the tree and follow immediately with light sprinkler irrigation sufficient to move the product into the upper portion of the root-zone. This method is suitable for very coarse soils with 0.75% organic matter or less.
- Drench to base of tree not exceeding one-quart total solution per tree immediately around trunk of tree and extending outward covering the entire fibrous root system of the tree.
- For control of existing termite infestations, apply specified dosage in 1 to 4 quarts of total solution volume, depending on size of tree, as a drench application to the basal portion of the tree trunk and surrounding soil in the immediate area of the tree trunk.
- For suppression of citrus nematode, apply specified dosage through low-pressure chemigation or soil surface band spray only, ensuring complete coverage of the root system and utilizing application directions stated above for the respective application method. Repeated and regular use of **A171.216** over several consecutive growing seasons provides the greatest degree of nematode suppression and yields the greatest plant response.

Restrictions:

- **Pre-Harvest Interval (PHI):** 0 day
- **Maximum Soil-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre.
- Do not apply during pre-bloom or bloom period when bees are foraging.

[*Not Registered for Use by California]

CITRUS (Field) - Foliar Treatment[*]

Crops of Group 10 Including: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin, Tangerine, Pummelo, Orange (sweet and sour), Satsuma mandarin, Tangelo, and other cultivars of these.

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Asian citrus psyllid Blackfly Citrus leafminer Leafhoppers/Sharpshooters Mealybugs Scales Whiteflies	4.0 - 8.0
Pests Suppressed	
Thrips (foliage feeding only)	

Applications:

Rates are based on fully-grown mature trees. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Aerial application may result in slower activity and reduce control relative to application using ground equipment.

Scales: Time applications to the crawler stage. Treat each generation.

Restrictions:

- **Pre-Harvest Interval (PHI):** 0 days
- **Minimum Interval Between Applications:** 10 days
- **Maximum Foliar-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre
- Do not apply pre-bloom or within 10 days prior to bloom or when bees are foraging.

[*Not Registered for Use by California]

COFFEE – Soil Treatment[*]

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers Leafminer	8.0 - 16.0
Pests Suppressed	
Scales	

Applications:

Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation.
- Basal soil drench in sufficient water to ensure incorporation into the root-zone followed by irrigation.

Restrictions:

- **Pre-Harvest Interval (PHI):** 7 days
- **Maximum Soil-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre.
- Do not apply pre-bloom or during bloom or when bees are foraging.

[*Not Registered for Use by California]

COFFEE – Foliar Treatment[*]

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers Leafminer	3.2
Pests Suppressed	
Scales	

Applications:

Rates are based on fully-grown mature trees. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Aerial application may result in slower activity and reduce control relative to application using ground equipment.

Restrictions:

- **Pre-Harvest Interval (PHI):** 7 days
- **Minimum Interval Between Applications:** 7 days
- **Maximum Foliar-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre
- Do not apply pre-bloom or during bloom or when bees are foraging.

[*Not Registered for Use by California]

CRANBERRY – Soil Treatment[*]

Pests Controlled	Rate (Fl. Oz./Acre)
Rootgrubs (*Scarabaeidae*) Rootworms (*Chrysomelidae*)	8.0 - 16.0

Applications:

Apply A171.216 to moist soil using one of the following methods:

- As a soil spray (ground application) directed to the root and crown area using a minimum of 20 gal. of water per acre.
- As a chemigation application with 600 to 1000 gal. of water.

After application, immediately incorporate the **A171.216** into the root-zone by 0.1 – 0.3 inches of water per acre, either with chemigation application, or through irrigation or rainfall. Inadequate incorporation within 24 hours of application may result in reduced control.

Rootgrubs and Rootworms: Make application post-bloom immediately after bees are removed. Applications should target early instar larvae.

A171.216 has not been tested for crop response in tank mixtures with other registered fungicides or insecticides. If tank mixing is desired, premix a sample of the **A171.216** and the fungicide or insecticide partner at labeled rates and apply to a small area. Evaluate the crop response within 48 hours and for at least two weeks prior to using the tank mix on a larger scale. If crop injury results for the premix test, do not apply the tank mix to larger acreage.

Restrictions:

- **Pre-Harvest Interval (PHI):** 30 days
- **Maximum Soil-Applied Product Allowed per Year**: 16 fl. oz. (0.5 lb. ai) per acre.
- Do not apply pre-bloom or during bloom or when bees are foraging.

[*Not Registered for Use by California]

GRAPES – Soil Treatment[*]

Including: American bunch grape, Muscadine grape and Vinifera grape

Pests Controlled	Rate (Fl. Oz./Acre)
European fruit lecanium Leafhoppers / Sharpshooters Mealybugs *Phylloxera*[1] spp.	8.0 - 16.0
Pest/Disease Suppressed	12.0 - 16.0
Grape leaf skeletonizer Nematodes Pierce's disease	

Applications:

Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation.
- Hill drench in sufficient water to ensure incorporation into the root-zone followed by irrigation.
- For suppression of nematodes, apply 16 fluid ounces in a single application or two 8 fluid ounce applications on a 30-to-45-day interval. Apply only by 1) chemigation into the root-zone through above ground low-pressure drip, trickle, micro-sprinkler or equivalent equipment; or 2) French plow technique, followed immediately by sufficient irrigation to move the product into the entire root-zone of the plant. Repeated and regular use of **A171.216** over several consecutive growing seasons provides the greatest degree of nematode suppression and plant response.

Make application(s) between bud-break and the pea-berry stage. A total of 16 fluid ounces/Acre is recommended under any of the following conditions:

1. Where vigorous vine growth is expected;
2. In warmer growing areas;
3. Where mealybug and European fruit lecanium populations are expected to be heavy;
4. Where vine populations exceed 600 per acre, or;
5. For suppression of nematodes.

Restrictions:

- **Pre-Harvest Interval (PHI):** 30 days
- **Maximum Soil-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre.

[1]Repeated and regular use of **A171.216** over several, consecutive growing seasons controls existing *Phylloxera* infestations over time or prevents *Phylloxera* from becoming established.

[*Not Registered for Use by California]

GRAPES – Foliar Treatment[*]

Including: American bunch grapes, muscadine and vinifera varieties

Pests Controlled	Rate (Fl. Oz./Acre)
Leafhoppers/sharpshooters Mealybugs	1.2 - 1.6
Grape leaf Skeletonizer	1.5 - 1.6

Applications:

Rates are based on mature vines. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Restrictions:

- **Pre-Harvest Interval (PHI):** 0 days
- **Minimum Interval Between Applications:** 14 days
- **Maximum Foliar-Applied Product Allowed per Year:** 3.2 fl. oz. (0.1 lb. ai) per acre
- Ground application only.

[*Not Registered for Use by California]

HOPS – Soil Treatment[*]

Pest Controlled	Rate (Fl. Oz./Acre)
Aphids	3.2 - 9.6

Applications:

Apply specified dosage in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation.
- Hill drench in sufficient water to ensure incorporation into the root-zone followed by irrigation.

Use the higher listed rate where extended residual control is desired or for treating larger vines or vines with dense foliage volume.

Restrictions:

- **Pre-Harvest Interval (PHI):** 60 days
- **Maximum Soil-Applied Product Allowed per Year:** 9.6 fl. oz. (0.3 lb. ai) per acre.

[*Not Registered for Use by California]

HOPS - Foliar Treatment[*]

Pest Controlled	Rate (Fl. Oz./Acre)
Aphids	3.2

Applications: Rates are based on mature vines. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Aerial application may result in slower activity and reduce control relative to application using ground equipment

Restrictions:

- **Pre-Harvest Interval (PHI):** 28 days
- **Minimum Interval Between Applications:** 21 days
- **Maximum Foliar-Applied Product Allowed per Year:** 9.6 fl. oz. (0.3 lb. ai) per acre.

[*Not Registered for Use by California]

POME FRUIT – Soil Treatment[*]
Crops of Group 11 Including: Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids (including Wooly apple aphid) Leafhoppers	8.0 - 12.0
Applications: **Apply specified dosage in the following method:** • Chemigation into the root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.	
Restrictions: • **Pre-Harvest Interval (PHI):** 21 days • **Maximum Soil-Applied Product Allowed per Year:** 12 fl. oz. (0.38 lb. ai) per acre. • Do not apply pre-bloom or during bloom or when bees are foraging. [*Not Registered for Use by California]	

POME FRUIT – Foliar Treatment[*]
Crops of Group 11 including: Apples, Crabapples, Loquat, Mayhaw, Pears (including Oriental pears), Quince

Pests Controlled	Rate (Fl. Oz./Acre)
Leafhoppers	1.6 - 3.2
Aphids (except wooly apple aphid) Apple maggot Leafminers San Jose Scale	3.2
Pears only – Mealybugs, Pear psylla	8
Applications: Rates are based on mature trees. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. For use in control of apple maggot, Atticus, LLC recommends the use of a labeled sticker. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects. Aerial application may result in slower activity and reduce control relative to application using ground equipment.	
Restrictions: • **Pre-Harvest Interval (PHI):** 7 days • **Minimum Interval Between Applications:** 10 days • **Maximum Foliar-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre • Do not apply pre-bloom or during bloom or when bees are foraging. [*Not Registered for Use by California]	

POMEGRANATE – Soil Treatment[*]

Pests Controlled	Rate (Fl. Oz./Acre)
Leafhoppers/Sharpshooters Whiteflies	8.0 - 16.0
Applications: **Apply specified dosage in the following method:** • Chemigation into the root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.	
Restrictions: • **Pre-Harvest Interval (PHI):** 0 days • **Maximum Soil-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre. • Do not apply pre-bloom or during bloom or when bees are foraging. [*Not Registered for Use by California]	

POMEGRANATE – Foliar Treatment[*]

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers/Sharpshooters Whiteflies	3.2
Pests Suppressed	
Scales	
Applications: Rates are based on fully-grown mature trees. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects. Aerial application may result in slower activity and reduce control relative to application using ground equipment.	
Restrictions: • **Pre-Harvest Interval (PHI):** 7 days • **Minimum Interval Between Applications:** 7 days • **Maximum Foliar-Applied Product Allowed per Year:** 9.6 fl. oz. (0.3 lb. ai) per acre. • Do not apply pre-bloom or during bloom or when bees are foraging. [*Not Registered for Use by California]	

STONE FRUIT – Soil Treatment[*]
Crops of Group 12 Including: Apricot, Cherry (including sweet and tart), Nectarine, Peach, Plum (including Chickasaw, Damson, and Japanese), Plumcot, Prune (fresh and dried)

In-Field, Soil Application[*]	
Pests Controlled	**Rate (Fl. Oz./Acre)**
Aphids (including Woolly apple aphid) Leafhoppers	8.0 - 12.0
Applications: **Apply specified dosage in the following method:** • Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.	
Restrictions: • **Pre-Harvest Interval (PHI):** 21 days • **Maximum Soil-Applied Product Allowed per Year:** 12 fl. oz. (0.38 lb. ai) per acre. • Do not apply pre-bloom or during bloom or when bees are foraging. [*Not Registered for Use by California]	
Pre-plant, Root Dip Application[*]	
Pest Controlled	**Rate (Fl. Oz./10 Gallons Root-Dip Solution)**
Black peach aphid (infesting roots)	1.0
Mix **A171.216** at 1.0 fluid ounces per 10 gallons of water. Thoroughly wet bare-root transplant to slightly above the graft union by soaking roots in the **A171.216** solution for up to 5 minutes. Allow solution to dry on roots and transplant trees as soon as possible following treatment. [*Not Registered for Use by California]	

STONE FRUIT – Foliar Treatment[*]

Crops of Group 12 Including: Apricot, Cherry (including sweet and tart), Nectarine, Peach, Plum (including Chickasaw, Damson, and Japanese), Plumcot, Prune (fresh and dried)

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Green June Beetle Japanese Beetle Leafhopper / Sharpshooter Plant Bugs Rose Chafer San Jose Scale	1.6 - 3.2
Cherry Fruit Fly	2.4 - 3.2
Pests Suppressed	3.2
Plum Curculio Stink Bugs	

Applications: Rates are based on fully-grown mature trees. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Apply in a water volume of at least 50 gallons per acre by ground or 25 gallons per acre by air. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Aerial application may result in slower activity and reduce control relative to application using ground equipment.

Restrictions:

Apricots, nectarines, peaches:

- **Pre-Harvest Interval (PHI):** 0 days
- **Minimum Interval Between Applications:** 7 days
- **Maximum Foliar-Applied Product Allowed per Year:** 9.6 fl. oz. (0.3 lb. ai) per acre.
- **Minimum Water Volume:** 50 gallons per acre by ground, 25 gallons per acre by air.
- Do not apply pre-bloom or during bloom or when bees are foraging.

Cherries, plums, plumcots, prunes:

- **Pre-Harvest Interval (PHI):** 7 days
- **Minimum Interval Between Applications**: 10 days
- **Maximum Foliar-Applied Product Allowed per year**: 16 fl. oz. (0.5 lb. ai) per acre.
- **Minimum Water Volume:** 50 gallons per acre by ground, 25 gallons per acre by air.
- Do not apply pre-bloom or during bloom or when bees are foraging.

[*Not Registered for Use by California]

TREE NUTS (Except Almonds) – Soil Treatment[*][**]
Crops of Group 14 including: Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut (black and English)

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers/Sharpshooters Mealybugs Spittlebugs Termites[**] Whiteflies	8.0 - 16.0
Pests/Diseases Suppressed	
Pecan scab (from reduction in honeydew deposition)	
Thrips (foliage-feeding thrips only)	16.0

Applications:
Apply specified dosage prior to or at onset of pest infestation in one of the following methods:

- Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler, or equivalent irrigation equipment. Pre-wet soil prior to applications of **A171.216** and allow soil to dry following application and prior to subsequent irrigation;
- Emitter or spot application in a minimum of 4 fluid ounces of mixture per emitter site;
- Shank or subsurface side-dress injected to a depth just above or just within the root zone and between the trunk and drip line of the tree canopy. Apply in a minimum of 10 gallons per acre using multiple shanks on both sides of trees. Make sure that product placement is below sod or orchard floor debris. Irrigate the entire treated area unless sufficient rain falls within 48 hours to promote uptake by root system.
- For control of termites, apply specified dosage to slightly moist soil as a high-volume drench to the basal portion of the tree trunk and surrounding soil in the immediate vicinity of the tree trunk. Use sufficient carrier volume to penetrate the soil to a depth of 18 – 24 inches to obtain optimum control. Allow soil to dry following treatment and before applying any irrigation.

Remarks: Use the higher listed rates when

1. applied by shank or subsurface sidedress;
2. used on larger trees;
3. to soils with high clay content;
4. to high plant populations; and/or
5. where extended control is desired. Under some conditions, control may not occur for 14 or more days or until two (2) irrigations have been made. Applications made later in the season may result in reduced efficacy.

Restrictions:

- **Pre-Harvest Interval (PHI):** 7 days
- **Maximum Soil-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre.
- Do not apply pre-bloom or during bloom or when bees are foraging.

[*Not Registered for Use by California]
[**Not Registered for Use by New York]

TREE NUTS (except Almonds) – Foliar Treatment[*]
Crop of Group 14 including: Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut (black and English)

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids (except Black pecan aphid) Leafhoppers/Sharpshooters *Phylloxera* spp. (leaf infestations) Spittlebugs Whiteflies	1.4 - 2.8
Black pecan aphid Mealybugs San Jose scale	3.2

Applications:
Rates are based on fully-grown mature trees. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Apply in a water volume of at least 50 gallons per acre by ground or 25 gallons per acre by air. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application at a 10-to-14-day interval may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Aerial application may result in slower activity and reduce control relative to application using ground equipment.

Restrictions:
- **Pre-Harvest Interval (PHI):** 7 days
- **Minimum Interval Between Applications:** 6 days
- **Maximum Foliar-Applied Product Allowed per Year:** 11.5 fl. oz. (0.36 lb. ai) per acre.
- **Minimum Water Volume:** 50 gallons per acre by ground, 25 gallons per acre by air.
- Do not apply pre-bloom or during bloom or when bees are foraging.

[*Not Registered for Use by California]

TROPICAL FRUIT – Soil Treatment[*]
Including: Acerola, Atemoya, Avocado, Birida, Black sapote, Canistel, Cherimoya, Custard apple, Feijoa, Jaboticaba, Guava, Llama, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Soursop, Spanish lime, Star apple, Starfruit, Sugar apple, Wax jambu

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Avocado lacebug Leafhoppers Whiteflies	12.0 - 16.0
Pests Suppressed	16.0
Scales	

Applications:
Apply specified dosage in the following method:
- Chemigation through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.

Restrictions:
- **Pre-Harvest Interval (PHI):** 6 days
- **Maximum Soil-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre.
- Do not apply pre-bloom or during bloom or when bees are foraging.

[*Not Registered for Use by California]

TROPICAL FRUIT – Foliar Treatment[*]

Including: Acerola, Atemoya, Avocado, Birida, Black sapote, Canistel, Cherimoya, Custard apple, Feijoa, Jaboticaba, Guava, Llama, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Soursop, Spanish lime, Star apple, Starfruit (carambola), Sugar apple, Wax jambu

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Leafhoppers/Sharpshooters Mealybugs Thrips (foliage feeding only) Whiteflies	3.2
Pests Suppressed	
Scales	

Applications:

Rates are based on fully-grown mature trees. Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Aerial application may result in slower activity and reduce control relative to application using ground equipment.

Restrictions:

- **Pre-Harvest Interval (PHI):** 7 days
- **Minimum Interval Between Applications:** 10 days
- **Maximum Foliar-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre.
- Do not apply pre-bloom or during bloom or when bees are foraging.

[*Not Registered for Use by California]

OTHER SITES

CHRISTMAS TREE – Soil Treatment[*]

Pests Controlled	Rate (Fl. Oz./Acre)
White grub complex (damage from grubs of Asiatic garden beetle, European and Masked chafer, Japanese beetle and Oriental beetle)	8.0 - 16.0

Applications:

Soil incorporation and movement of **A171.216** to the root-zone is required for activity. **A171.216** can be incorporated easiest when applied to moist soil.

Apply specified dosage in one of the following methods:

- Chemigation through low-pressure drip, trickle, micro-sprinkler, or equivalent equipment.
- 18-inch band on each side of the row (small trees) to full broadcast application (large trees) followed by rainfall or 0.25 – 1 inch of irrigation within 12 hours of application.

For optimal grub control, apply **A171.216** during adult flight activity, or up to mid-July when 1st instar larvae are present.

Restrictions:

- **Maximum Soil-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre.

[*Not Registered for Use by California]

CHRISTMAS TREES - Foliar Treatment[*]

Pest Controlled	Rate (Fl. Oz./Acre)
Aphids Adelgids Sawflies	1.6 - 3.2

Applications:
Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

For gall-forming adelgids, time applications to coincide with a full bud-swell of the earliest bud-breaking trees. Treatment will be ineffective once galls are formed.

Restrictions:
- **Minimum Interval Between Applications:** 7 days
- **Maximum Foliar-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre.

[*Not Registered for Use by California]

POPLAR/COTTONWOOD – Soil Treatment[*]
(Includes members of the genus *Populus* grown for pulp or timber)

Field Application Instructions[*]
See below for Cutting/Whips Application Instructions.

Pests Controlled	Rate (Fl. Oz./Acre)
Aphids Cottonwood leaf beetle	8.0 - 16.0
Pest Suppressed	
Phylloxerina popularia	

Applications:
Apply specified dosage in the following method:
- Chemigation through low-pressure drip irrigation.
- For narrow-row, cutting orchards/nurseries used for plant propagation, shank into root-zone followed by adequate irrigation to promote uptake. (Adequate irrigation depends on soil moisture level at application. Under dry conditions, 0.25 inches/Acre is recommended).

For Cottonwood leaf beetle, protection against damage will occur when application is made early season, when the beetles first begin feeding. Larger trees may require earlier treatment as a result of slower uptake.
For *Phylloxerina*, apply early in the year from break of dormancy through May.

Restrictions:
- **Maximum A171.216 Allowed At-Plant per Year:** 16.0 fl. oz.(0.5 lb. AI) per acre
- Do not apply pre-bloom or during bloom or when bees are foraging.

[*Not Registered for Use by California]

Cutting/Whip Application Instructions[*]
See above for Field Application Instructions.

Pests Controlled	Cutting/Whip Soaking Solution (Fl. Oz. A171.216 /100 Gallons)
Cottonwood leaf beetle	6.65 – 13.3 (unhydrated cuttings/whips) 13.3 – 20 (partially hydrated cuttings/whips)
Pest Suppressed	
Aphids *Phylloxerina popularia*	

Applications:
Product absorption into the plant material is affected by 1) the moisture content of the cuttings/whips prior to application, 2) the solution concentration; and 3) the length of soaking intervals. For a constant soaking interval of 24 hours, drier cuttings/whips absorb a higher amount of solution and require a lower concentration. On the other hand, more hydrated cuttings/whips absorb less solution and require a higher concentration. Soaking of cuttings/whips should be done in a covered container without UV light.

Apply specified dosage in one of the following cuttings/whips soaking methods:

- For freshly cut (unhydrated) cuttings/whips, soak plant material in specific solution concentration for 24 hours prior to cold storage. After removal from cold storage, plant as needed.
- For previously hydrated cuttings/whips removed from cold storage, allow plant material to reach room temperature and soak in specified solution concentration for 24 hours prior to planting.
- Take proper care in disposal of any residual soaking solution. Solution may be applied to existing trees or other registered crops as long as all product label precautions and restrictions are observed.

Note: Not all *Populus* spp. (clones/varieties/hybrids) have been tested for crop safety. Treat a small number of cuttings /whips and evaluate before commercial use.

Restrictions:

- **Maximum A171.216 Allowed At-Plant per Year:** 16.0 fl. oz. (0.5 lb. AI) per acre

[*Not Registered for Use by California]

POPLAR /COTTONWOOD – Foliar Treatment[*]
(Includes members of the genus (*Populus*) grown for pulp or timber)

Pest Controlled	Rate (Fl. Oz./Acre)
Aphids Leaf Beetles	1.6 - 3.2

Applications:
Apply as a broadcast or directed foliar spray to infested areas as insect population begins to build. Thorough coverage is needed for good control. Use of a spray adjuvant as directed on the adjuvant label may improve coverage. **A171.216** alone may not provide knockdown for heavy or established populations. A second application may be required for adequate control, if indicated by scouting. Tank mixing with other insecticides labeled for this use may improve knockdown and control of additional insects.

Restrictions:

- **Minimum Interval Between Applications:** 10 days
- **Maximum Foliar-Applied Product Allowed per Year:** 16 fl. oz. (0.5 lb. ai) per acre.
- Do not apply pre-bloom or during bloom or when bees are foraging.

[*Not Registered for Use by California]

POULTRY HOUSING STRUCTURES

A171.216 may be used indoors as a spot, crack and crevice, or overall surface spray to control darkling beetles and hide beetles on floors, walls, and support beams of poultry or turkey housing structures, and within 25 feet of the perimeter of the poultry house.

Restrictions:

- Do not apply more than 7 days prior to bird placement.
- Do not apply when birds are present.
- Do not allow food or feed to be contacted by the spray.
- Remove feed and water from the treatment area before applying.
- Do not restock birds until spray has completely dried.
- For perimeter spray, do not allow this product to contact plants in bloom if bees are foraging the area.
- Do not apply this product, by any application method to linden, basswood, or other *Tilia* species.

Mixing and Application Rates
Calculate the surface area to be sprayed. Apply 3 fl. oz. of **A171.216** per 1000 square feet of surface in ½ to 2 gallons of final dilution per 1,000 square feet. To prepare the dilution, partly fill the spray tank with ½ the water to be used, then add the appropriate amount of **A171.216**, mix, then add the rest of the water while agitating or mixing. Maintain agitation while spraying. Prepare a fresh mixture for each application.

Apply **A171.216** to the entire footing including 1 foot up onto the wall above the footing, and to 3- to 4-foot-wide bands directly beneath all feed lines. These areas are where the vast majority of the adult and larval beetles reside when the birds are in the house, and therefore will have an increased likelihood of coming in contact with the insecticide. Measure these areas to determine the correct amount of **A171.216** needed for the application.

Apply between flocks after de-caking and sanitation procedures have been completed. If Beetle infestations are very high it may be necessary to treat the footings including 1 foot up onto the walls and the entire floor area of the house.

Also apply as a crack and crevice spray around wall insulation or other areas where beetle may be located. In structures having support beams it is necessary to treat the floor 1 foot around each post and 2 feet up onto the posts. In cases of extreme infestation, treat the entire facility. Apply 3 fl. oz. per 1000 square feet in 2 gallons of water per 1,000 square feet as described above. Apply as a broadcast spray to litter over the entire floor to litter under feed and water lines, and to lower sections of walls to one foot above the foundation.

Resistance Management
In order to avoid problems with developed resistance to insecticides it is important to rotate to an Insecticide of a different class each 2 - 3 flocks. It is best to attempt to use 3 different classes of insecticides during a calendar year.

ANTS IN AND AROUND ANIMAL HOUSING FACILITIES
Use only crack and crevice or wall void applications in building interiors.

Apply at a rate of ¾ teaspoon to 1 ½ teaspoons **A171.216** per gallon of water (2 ½ teaspoons to 2 ½ fl. ounces per 10 gallons). Spray into cracks, crevices, drilled holes, onto walls, and around potential entry points such as doors, windows, vents, eaves, soffits, and utility access holes. If nests are present in voids, spray into the void if possible, or apply as a foam. (See specific instructions of foam generator). Spray surfaces to provide complete coverage but do not spray to dripping or runoff.

Also apply as a drench to soil, turf, ornamental shrubs or plants, or non-flowering ground cover around the exterior of the building, and along driveways or other hard surfaces where ants may be tunneling. For above-ground nests, such as in wood posts, decks, or fences, or in trees, spray into the cavity and on the wood surface.

Restrictions:
- Do not use to control native or imported fire ants, harvester ants or pharaoh ants.
- Keep people and domestic animals out of the treated area until sprays have dried.
- Do not allow this product to contact plants in bloom if bees are foraging in the treatment area.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

[For plastic containers ≤ 5 gallons: Nonrefillable 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 ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

[For plastic containers > 5 gallons: Nonrefillable 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. Fill the container ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.]

LIMITATION OF WARRANTY AND LIABILITY

IMPORTANT: READ BEFORE USE. Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. **CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. **LIMITATIONS OF LIABILITY:** To the extent consistent with applicable law, neither ATTICUS, LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

{LANGUAGE ON LABEL AFFIXED TO CONTAINER}

A171.216[™]

[*Alternate Brand Name: Acurio SC Insecticide*]

[Contains imidacloprid, the active ingredient used in Credo® SC Insecticide.].
[Flowable Insecticide]

ACTIVE INGREDIENT:	**(% by weight)**
Imidacloprid; 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine	42.3%
OTHER INGREDIENTS:	57.7%
TOTAL	100.0%

Contains 4 lbs. of active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

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.)

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 do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
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 INHALED:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further 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.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at **1-844-685-9173** for emergency medical treatment information.	
NOTE TO PHYSICIAN: No specific antidote is available. Treat the patient symptomatically.	

For Chemical Emergency:
Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed, absorbed through skin, or inhaled. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS: 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 contaminate water when disposing of equipment washwaters. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops/plants or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging in or adjacent to the treatment area. This product is toxic to wildlife and highly toxic to aquatic invertebrates. This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

PHYSICAL AND CHEMICAL HAZARDS: Do not mix or allow coming in contact with oxidizing agent. Hazardous chemical reaction may occur.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

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See inside label booklet for additional Precautionary Statements and Directions for Use.

[A171.216 is not manufactured, or distributed by Elanco US Inc., seller of Credo® SC Insecticide.**].**

Manufactured for:
Atticus, LLC
940 NW Cary Parkway, Suite 200
Cary, NC 27513

EPA Reg. No.: 91234-XX
EPA Est. No.: _____
NET CONTENTS: _____

Batch Code: _____

{Optional Marketing Claims}

- **One Dose Formula**
- **Dust Free**
- **Rapid Mixing**
- **Quick Mixing and Spraying**
- **Mix and Spray Liquid Formula**
- **Quick to Mix and Apply**
- **Easy to Apply, Hard on Darkling Beetles**
- **Formulated for Control of Darkling Beetles**
- **Darkling Beetle Control Liquid Formulation**
- **Formulated for Use in the Poultry Industry**
- **Formulated for Effective Control of Darkling Beetles in the Poultry Industry**
- **Contains Imidacloprid [a Chloronicotinyl Insecticide] [Neonicotinoid Insecticide]**
- **Controls Darkling Beetles that May [Carry] [Spread] [Transmit] Poultry Disease-Causing Organisms**
- **Controls Darkling Beetles that Can Damage [Buildings] [Ceilings] [Walls] [Insulation]**
- **Controls Darkling Beetles that Can Feed on Grain**
- **Controls Both Larvae and Adults of [Darkling Beetle] [Lesser Mealworm[*]] [Hide Beetle] [*Not Registered for Use by California]**
- **Effective Against Both Larvae and Adults of [Darkling Beetle] [Lesser Mealworm[*]] [Hide Beetle] [*Not Registered for Use by California]**
- **Stops the Damage and Risks Caused by Darkling Beetles**
- **Stops Darkling Beetles from [Eating] [Taking] Your Profits**
- **Effective Control of [Specified Ants] [Darkling Beetles] [Lesser Mealworms[*]] [Hide Beetles] [*Not Registered for Use by California]**
- **[Targeted] [Banded] Application Provides Effective Control of [Darkling Beetles] [Lesser Mealworms[*]] [Hide Beetles] [*Not Registered for Use by California]**
- **One dose. Effective and Easy to Use**
- **[Focused] [Targeted] Band Treatment**
- **Allows Labor-Saving Band Treatment**
- **Less Time-Consuming Band Treatment**
- **Use Less Insecticide with [Banded] [Targeted] Application**
- **Use Less Insecticide per [House] [Building] [Barn] With [Banded] [Targeted] Application**
- **Time-Saving Band Treatment**
- **Easy and Flexible Treatment Options**
- **Easy and Targeted Control of [Darkling Beetles] [Lesser Mealworms[*]] [Hide Beetles] [*Not Registered for Use by California]**
- **Mix and Spray - Fast and Flexible Treatment Options**
- **Broadcast or Banded Treatment**
- **May be Applied as Either Band or Broadcast Spray**
- **Controls Even [Pyrethroid] [Spinosad] [Organophosphate] Resistant [Darkling Beetles] [Lesser Mealworms[*]] [Hide Beetles] [*Not Registered for Use by California]**
- **Control Exactly Where You Need It**

- **Flexible Application for Any Poultry Operation**
- **The Active Ingredient in A171.216 Has Been Shown to Provide Effective Control of [Specified Ants] [Darkling Beetles] [Lesser Mealworms[*]] [Hide Beetles] [*Not Registered for Use by California]**
- **Controls Darkling Beetle Adults and Larvae**
- **The Solution [to Control] [for Control of] [Darkling Beetles] [Lesser Mealworms[*]] [Hide Beetles] [*Not Registered for Use by California]**
- **Rotate With Pyrethroid Insecticides to Manage Resistance**
- **Manage Resistance With a Rotation of 171.216 and Pyrethroids**

{Optional Marketing graphics}