

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

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

91234-281

EPA Reg. Number:

Date of Issuance:

5/30/25

NOTICE OF PESTICIDE:

X Registration

Reregistration

(under FIFRA, as amended)

Term of Issuance: Unconditional

Name of Pesticide Product:

A1101.03

Name and Address of Registrant (include ZIP Code):

Atticus, LLC 5000 CentreGreen Way, Suite 100 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:	
Digitally signed by Debra Rate Date: 2025.05.30 13:09:22	Date: 5/30/25
Debra Rate, Acting Product Manager 11	
Invertebrate & Vertebrate Branch 2, Registration Division (7505T)	

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- 3. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 91234-281."
- 4. 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 attached for your records.

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

Basic CSF dated 06/14/2023

If you have any questions, please contact Christopher Taylor at 202-566-2928 or at taylor.christopher.m@epa.gov.

Attachment

{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}** 

SPINOSAD GROUP 5 INSECTICIDE

# A1101.03 [TM]

[Alternate Brand Name: Contraxio SC]

Contains spinosad, the active ingredient used in Conserve® SC [Turf and Ornamental].

**A1101.03** is not manufactured, or distributed by Corteva Agriscience United States, seller of Conserve® SC [Turf and Ornamental].

## [INSECTICIDE] [INSECT CONTROL]

[For control of listed pests such as thrips, lepidopterous larvae, foliage feeding worms, fire ants and other listed pests infesting apple and other pome fruits, artichoke, asparagus, banana, *Brassica* (cole) leafy vegetables, bulb vegetables, bushberries, caneberries, citrus, commercial aquatic plants, cucurbits, dates, fruiting vegetables, grape, herbs, leafy vegetables, leaves of legume vegetables, leaves of root and tuber vegetables, okra, ornamentals (herbaceous and woody) growing outdoors, in nurseries or in greenhouses, peppermint, pistachio, plantain, pomegranate, popcorn, root and tuber vegetables, spearmint, spices, stone fruits, strawberry, sweet corn, tree nuts, tropical tree fruits, tree farms, or plantations and turfgrass.]

ACTIVE INGREDIENT:	(% by weight)
Spinosad (including Spinosyn A and Spinosyn D)	11.6%
OTHER INGREDIENTS:	<u>88.4%</u>
TOTAL	
Contains 1 lb. of active ingredient per gallon.	

## **KEEP OUT OF REACH OF CHILDREN**

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.)

## **Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. Refer to the label booklet under **Agricultural Use Requirements** in the **Directions for Use** section for information about this standard.

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

[See below additional Precautionary Statements]

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)

{Note to Reviewer: All optional language that appears on the final product packaging will be clear, understandable and grammatically correct.}

Shake Well Before Use - Avoid Freezing

EPA Reg. No.: 91234-XXX

EPA Est. No.: Net Contents:

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

**ACCEPTED** 05/30/2025

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 04.004, 004

91234-281

# **{LANGUAGE INSIDE BOOKLET}**

## PRECAUTIONARY STATEMENTS

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- · Shoes plus socks

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

## **USER SAFETY RECOMMENDATIONS**

#### **Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/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**

This pesticide is toxic to aquatic invertebrates. Applying this product when rain is not predicted for the next 24 hours will help reduce potential risk to aquatic invertebrates by reducing pesticide runoff from the treatment area into water bodies. 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 cleaning equipment or when disposing of equipment washwaters. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Apply this product only as specified on the label.

This product is highly toxic to bees and other pollinating insects exposed to direct treatment, or to residues in/on blooming crops or weeds. Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms. Do not apply this pesticide to blooming, pollen-shedding or nectar-producing parts of plants if bees may forage on the plants during this time period.

## **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. Read all Directions for Use carefully before applying.

## **AGRICULTURAL USE REQUIREMENTS**

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

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
- Shoes plus socks

## **NON-AGRICULTURAL USE REQUIREMENTS**

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

Adults, children, and pets should not contact treated surfaces until the spray has dried

#### PRODUCT INFORMATION

Use **A1101.03**, a fermentation derived insect control agent, for control of listed pests such as thrips, lepidopterous larvae, foliage feeding worms, and fire ants and other listed pests.

#### **PRODUCT USE RESTRICTIONS**

- Do not treat pets.
- Do not graze livestock in treated areas.
- Do not feed treated grass cuttings (hay) or seed screenings to livestock or use hay for livestock bedding.
- Do not apply directly to fish pools and other bodies of water that may contain fish.
- A1101.03 may be aerially applied to commercially grown ornamentals only.
- Do not apply to seedlings of edible crops for transplanting or to any other stage of edible crops growing in greenhouses.

## **INTEGRATED PEST MANAGEMENT (IPM) PROGRAMS**

**A1101.03** is recommended for IPM programs in labeled crops. Other than reducing the target pest species as a food source, **A1101.03** does not have a significant impact on certain parasitic insects or the natural predaceous arthropod complex in treated crops including ladybird beetles, lacewings, minute pirate bugs, and predatory mites. The feeding activities of these beneficials will aid in natural control of other insects and reduce the likelihood of secondary pest outbreaks. If **A1101.03** is tank mixed with any insecticide that reduces its selectivity in preserving beneficial insects, the full benefit of **A1101.03** in an IPM program may be reduced.

## **INSECTICIDE RESISTANCE MANAGEMENT (IRM)**

For resistance management, **A1101.03** contains spinosad a Group 5 insecticide. Any insect population may contain individuals naturally resistant to **A1101.03** and other Group 5 insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of **A1101.03** or other Group 5 insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture.
   In addition, consider the following recommendations provided by the Insecticide Resistance Action Committee (IRAC):
  - o Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
  - o Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.

- When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
- Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
- The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistancemanagement and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance, contact your local Atticus, LLC representative by calling 984-465-4800.

#### SPRAY DRIFT MANAGEMENT

## **Aerial Applications:**

- Do not release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- If the wind speed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- Do not apply during temperature inversions.

## **Ground Boom Applications:**

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- Do not apply during temperature inversions.

#### Airblast applications:

- Sprays must be directed into the canopy.
- Do not apply when wind speeds exceed 15 miles per hour at the application site.
- User must turn off outward pointing nozzles at row ends and when spraying outer row.
- Do not apply during temperature inversions.

#### **SPRAY DRIFT ADVISORIES**

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### **IMPORTANCE OF DROPLET SIZE**

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

## **Controlling Droplet Size - Ground Boom**

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

## **Controlling Droplet Size – Aircraft**

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

#### **BOOM HEIGHT - Ground Boom**

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

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

Higher release heights increase the potential for spray drift.

#### SHIELDED SPRAYERS

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

#### **TEMPERATURE AND HUMIDITY**

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

## **TEMPERATURE INVERSIONS**

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

#### WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

# REQUIREMENTS FOR USE OF A1101.03 IN GREENHOUSES<sup>1</sup> AND FOR COMMERCIAL PRODUCTION OF HERBACEOUS (NON-WOODY) ORNAMENTALS IN NURSERIES<sup>1</sup>

<sup>1</sup>A greenhouse is defined as a structure or space enclosed with a nonporous covering inside which plants are produced. A nursery is defined as a facility engaged in the outdoor production of plants.

- Regardless of the crop or pest being treated (excluding thrips, leafminers, spider mites and/or diamondback moths), do not apply A1101.03 more than 6 times in a 12-month period inside a greenhouse or a structure that can be altered to be closed or open. If A1101.03 is used for thrips, leafminer, spider mite and/or diamondback moth control, do not apply A1101.03 more than 4 times in a 12-month period inside a greenhouse or a structure that can be altered to be closed or open regardless if other insect pests are also being treated. It is a violation of federal law to use this product in a manner inconsistent with its labeling.
- For areas of commercial production of herbaceous (non-woody) ornamentals in nurseries (including plant
  propagation beds), do not apply A1101.03 more than 10 times in a 12-month period per crop regardless of
  the pest being treated (excluding thrips, leafminers, spider mites and/or diamondback moths). If A1101.03
  is used in areas of commercial production of herbaceous (non-woody) ornamentals in nurseries (including

plant propagation beds) for leafminer, spider mite and/or diamondback moth control, do not apply **A1101.03** more than 6 times in a 12-month period per crop regardless if other insect pests are also being treated

- Because generations of a specific pest may overlap, rotate insecticides and miticides and never apply more than 2 consecutive applications of **A1101.03** or products containing the same active ingredient or with the same mode of action (same insecticide group). Use only specified label rates.
- Make localized area treatments of ornamental plants where pest problems are anticipated or occur rather than general area-wide broadcast treatments.
- Do not apply to seedlings of edible crops for transplanting or to any other stage of edible crops growing in greenhouses.

#### MIXING DIRECTIONS

## Shake Well Before Use - Avoid Freezing

#### A1101.03 - ALONE

Fill the spray tank with water to about 1/2 of the required spray volume. Start agitation and add the required amount of **A1101.03**. Continue agitation while mixing and filling the spray tank to the required spray volume. Maintain sufficient agitation during application to ensure uniformity of the spray mix. Do not allow water or spray mixture to back-siphon into the water source.

#### **A1101.03 - TANK MIX**

When tank mixing **A1101.03** with other materials, conduct a compatibility test (jar test) using relative proportions of tank mix ingredients prior to mixing ingredients in the spray tank. Vigorous, continuous agitation during mixing, filling, and throughout application is required for all tank mixes. Sparger pipe or mechanical agitators generally provide the most effective agitation in spray tanks. To prevent foaming in the spray tank, avoid stirring or splashing air into the spray mixture.

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

#### **Mixing Order for Tank Mixes**

Fill the spray tank with water to 1/4 to 1/3 of the required spray volume. Start agitation. Add different formulation types in the order indicated below, allowing time for complete dispersion and mixing after addition of each product. Allow extra dispersion and mixing time for dry flowable products.

Add different formulation types in the following order:

- 1. Water dispersible granules and dry flowables
- 2. Wettable powders
- 3. **A1101.03** and other suspension concentrates

Maintain agitation and fill spray tank to 3/4 of total spray volume.

Then add:

- 4. Emulsifiable concentrates and water-based solutions
- 5. Spray adjuvants

Finish filling the spray tank. Maintain continuous agitation during mixing, final filling, and throughout application. If spraying and agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be resuspended before spraying is resumed. A sparger pipe agitator is particularly useful for this purpose.

## **Premixing**

Dry and flowable formulations may be premixed with water (slurried) and added to the spray tank through a 20 to 35 mesh screen. This procedure assures good initial dispersion of these formulation types.

#### Spray Tank pH

A spray tank pH between 6.0 and 9.0 is suggested to achieve maximum performance of **A1101.03**. If the water source is outside of this pH range, or tank mixing other pesticides, adjuvants, or foliar nutrients cause the pH to fall outside this range, consider adjusting the spray tank pH to be between 6.0 and 9.0 before adding **A1101.03**. To do this, add all other tank mix components first, then check the spray tank pH, adjust if desired, and then add **A1101.03**. If you require additional information on how to adjust spray tank pH, contact your Atticus, LLC representative.

## **APPLICATION DIRECTIONS**

Aerial or ground applications in production agriculture or directed ground applications to individual plants are permitted.

#### **AERIAL APPLICATION**

**A1101.03** may be aerially applied to commercially grown ornamentals only. Do not make aerial applications in immediate proximity of residential, commercial, government, institutional or other structures where people may be present including homes, apartments, offices, churches, schools, and businesses. In urban areas, however, use is limited to directed ground applications.

Apply in spray volume of 5 gallons or more per acre (10 gallons or more per acre for trees, vines or orchard crops). Use GPS equipment, swath markers or flagging to ensure proper application to the target area. Configure the boom nozzle used (e.g., at NAAA Fly-In) for both crosswind and near parallel winds. If application is made parallel to the wind direction, adjust swath width downward. Use swath adjustment (offset) to compensate for crosswinds. Do not apply under completely calm wind conditions. Insect control by aerial application may be less than control by ground application because of reduced coverage. Refer to **Spray Drift Management** section for more information.

#### **GROUND APPLICATION**

Apply in spray volume of 5 gallons or more per acre.

## **CHEMIGATION APPLICATION**

**A1101.03** may be applied through properly equipped sprinkler irrigation systems in the following crops: field grown gladiolus produced for cut flowers, field grown roses, field grown Dutch iris, and field grown delphinium. Do not apply to the above listed crop(s) through any other type of irrigation system.

## **Directions for Sprinkler Chemigation**

Apply **A1101.03** only through overhead sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set, micro sprinkler, or hand move.

Do not apply this product through any other type of irrigation system. Sprinkler systems that deliver a low coefficient of uniformity such as certain water drive units are not recommended.

For continuously moving systems, the mixture containing **A1101.03** must be injected continuously and uniformly into the irrigation water line as the sprinkler is moving. If continuously moving irrigation equipment is used, apply in no more than 0.25 inch of water. For irrigation systems that do not move during operation, apply in no more than 0.25 inch of irrigation immediately before the end of the irrigation cycle.

## **Chemigation Equipment Preparation**

Follow these use directions when this product is applied through sprinkler irrigation systems. Thoroughly clean the chemigation system and tank of any fertilizer or chemical residues, and dispose of the residues according to state and federal laws. Flush the injection system with soap or a cleaning agent and water. Determine the amount of

**A1101.03** needed to cover the desired acreage. Mix according to instructions in the **Mixing Directions** section. Continually agitate the mixture during mixing and application.

#### **Chemigation Equipment Calibration**

In order to calibrate the irrigation system and injector to apply the mixture containing **A1101.03**, determine the following: 1) Calculate the number of acres irrigated by the system; 2) Calculate the amount of product required and premix; 3) Determine the irrigation rate and determine the number of minutes for the system to cover the intended treatment area; 4) Calculate the total gallons of insecticide mixture needed to cover the desired acreage. Divide the total gallons of insecticide mixture needed by the number of minutes (minus time to flush out) to cover the treatment area. This value equals the gallons per minute output that the injector or eductor must deliver. Convert the gallons per minute to milliliters or ounces per minute, if needed. Calibrate the injector system with the system in operation at the desired irrigation rate. It is suggested that the injection pump/system be calibrated at least twice before operation, and the system should be monitored during operation.

## **Chemigation Equipment Requirements:**

- The system must contain an air gap, or approved backflow prevention device, a functional check valve, vacuum relief valve (including inspection port), and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow. Refer to the American Society of Agricultural Engineer's Engineering Practice 409 for more information or state specific regulations.
- 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 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.
- To insure uniform mixing of the insecticide in the water line, inject the mixture in the center of the pipe diameter or just ahead of an elbow or tee in the irrigation line so that the turbulence created at those points will assist in mixing. The injection point must be located after all back flow prevention devices on the water line.
- The tank holding the insecticide mixture should be free of rust, fertilizer, sediment, and foreign material and equipped with an in-line strainer situated between the tank and the injection point.

## **Chemigation Operation**

Start the water pump and irrigation system and let the system achieve the desired pressure and speed before starting the injector. Check for leaks and uniformity and make repairs before any chemigation takes place. Start the injection system and calibrate according to manufacturer's specifications. This procedure is necessary to deliver the desired rate per acre in a uniform manner. When the application is finished, allow the entire irrigation and injector system to be thoroughly flushed clean before stopping the system.

#### **Chemigation Precautions**

- Crop injury, lack of effectiveness or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have questions about calibration, contact state extension service specialists, equipment manufacturers or other experts.

- Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall operate the system and make necessary adjustments should the need arise and continuously monitor the injection.

#### **Chemigation Restrictions:**

- 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 flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection.
- 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.
- Do not connect an irrigation system used for pesticide application (including greenhouse systems) to a public water system unless the pesticide label prescribed safety devices for public water systems are in place with current certification. Specific local regulations may apply and must be followed.
- Do not apply when wind speed favors drift beyond the area intended for treatment. End guns must be turned off during the application if they irrigate nontarget areas.
- Do not allow irrigation water to collect or run off and pose a hazard to livestock, wells, or adjoining crops.
- Do not enter treated area during the reentry interval specified in the **Agricultural Use Requirements** section of this label unless required PPE is worn.
- Do not apply through sprinkler systems that deliver a low coefficient of uniformity such as certain water drive units.

#### **USES**

## **COMMERCIAL AQUATIC PLANT PRODUCTION**

Use **A1101.03** in commercial aquatic plant production for control of lepidopterous pests. This use is restricted to commercial facilities that utilize fully contained above or in-ground pools or containers for the purpose of commercial production of aquatic ornamental plants.

Pests	A1101.03 Dilution Rate (fl. oz./ 1 gallon)	Application Instructions	
Lepidopterous	0.12	Application Timing: Apply when lepidopterous larvae are	
pests such as:	(3.5 mL)	present. Applications at 2-week intervals, two to three times per	
China mark moth (Nymphuliella		year, have been shown to be effective when larvae are present.	
daeckealis)		Prepare spray mixture according to labeled rates. Apply the spray	
Light brown apple		mixture to aquatic foliage at a rate not to exceed 1 gallon of spray	
moth		mixture per 100 sq. ft. of water surface area using suitable hand	
		or power-operated application spray equipment.	

**Phytotoxicity: A1101.03** has been tested alone on a wide variety of herbaceous and woody ornamental plants without phytotoxic symptoms. However, because it is not possible to test all possible tank mix combinations (including adjuvants) and ornamental plant species, varieties, and cultivars, and because environmental factors and varietal and plant stage of growth may affect phytotoxic expression, it is recommended that a small group of test plants be treated at the anticipated use rate of **A1101.03** either alone or in tank mix combinations and observed for at least 5 to 7 days to determine phytotoxicity before treating large numbers of those plants.

**Note:** The user assumes responsibility for determining if **A1101.03** is safe to treated plants when applied either alone or in tank mixtures under commercial growing conditions.

## **Specific Use Restrictions:**

- Do not apply this product to aquatic environments (such as ponds; landscape pools or containers or ponds; lakes, rivers or streams) other than fully contained commercial production pools or containers.
- Minimum Treatment Interval: Do not make applications less than 7 days apart.
- If water treated with **A1101.03** needs to be discharged due to cleaning, repairing, or other reasons, discharge is allowed only onto land. Do not discharge water treated with **A1101.03** from commercial production pools or containers into surface water.

FIRE ANTS – MOUND APPLICATION IN TURFGRASS AND ORNAMENTALS, IN GREENHOUSES, AND IN OTHER OUTDOOR AREAS

	A1101.03 Dilution Rate		
Pests	fl. oz./1 gallon	fl. oz./ 10 gallons	Application Instructions
Fire ant Mounds	0.1 (2.96 mL)	1 (29.6 mL)	Apply diluted <b>A1101.03</b> to individual fire ant mounds as a drench application. Use 1 to 2 gallons per mound depending upon the mound size. For mounds less than 8 inches in diameter, use 1 gallon of dilution per mound. Use a higher volume, up to 2 gallons, on mounds 8 inches or larger in diameter. Apply approximately 10% of the dilution volume around the perimeter of the mound out to about 12 inches and pour the remaining volume directly on the mound. Do not disturb mounds prior to application. If possible, apply following a recent rainfall. For best results, apply in cool weather, 65 to 85°F, or in early morning or late evening hours. Treat new mounds as they appear. Do not use pressurized sprays as they may disturb the ants and cause migration, reducing control.

## **HOME GARDENS**

Add the required amount of **A1101.03** to the specified amount of water, mix thoroughly, and apply uniformly to plant foliage to point of runoff, but do not exceed 3 gallons of spray per 1,000 sq. ft. Uniform coverage of both upper and lower leaf surfaces is essential for effective insect control. Mix only as much spray as needed for a single treatment. Do not use kitchen utensils for measuring. Keep measuring utensils with product and away from children.

	Amount of A1101.03 to Use per 100	
Unit of Measure	Gallons of Spray	
Fluid Ounces (fl. oz.)	8 fl. oz.	
Milliliters (mL)	236.6 mL	
Tablespoons (Tbs)	16 Tbs	
Teaspoons (tsp)	48 tsp	

Apply when listed pests are present. Target applications against early insect developmental stages whenever possible. Repeat applications may be made as indicated in the table below, but follow resistance management guidelines.

Crops	Pests Controlled	Maximum Number of Applications per Season	Minimum Reapplication Interval (Days)	Preharvest Interval (Days)
Apple and Other Pome Fruits	Codling moth	5	10	7
(Crop Group 11)	European grapevine moth			
including crabapples, loquat,	Leafminers			
mayhaw, pears, and quince	Leafrollers			
	Light brown apple moth			
	Oriental fruit moth			
	Thrips			
	Tufted apple budmoth			
Asparagus	Asparagus beetles	3	7	60
(post-harvest to protect ferns)				
Banana and Plantain	Banana rust thrips	4	7	56
	Caterpillars			
	Hawaiian flower thrips			
Brassica (cole) Leafy	Armyworms	5	4	1
Vegetables (Crop Group 5)	Cabbage looper			
including broccoli, broccoli	Diamondback moth			
raab[*], Brussels sprouts,	Flea beetle (suppression)			
cabbage, cauliflower, cavalo	Imported cabbage worm			
broccolo, Chinese broccoli,	Leafminers			
Chinese cabbage (bok choy)[*],	Thrips			
Chinese cabbage (napa), Chinese	Worms (caterpillars)			
mustard cabbage (gai choy),				
collards[*], kale[*], kohlrabi,				
mizuna[*], mustard greens[*],				
mustard spinach[*], and rape				
greens[*]		_	_	_
Bulb Vegetables (Crop Group 3)	Armyworms	5	4	1
including dry bulb onion, garlic,	Dipteran leafminers			
great-headed (elephant) garlic,	European corn borer			
green onion, leek, shallot, and	Flea beetle			
welsh onion	Loopers			
	Thrips (suppression)			

Crops	Pests Controlled	Maximum Number of Applications per Season	Minimum Reapplication Interval (Days)	Preharvest Interval (Days)
Bushberries (Subgroup 13B) including blueberry, currant, elderberry, gooseberry, huckleberry, juneberry, lingonberry, and salal	Armyworms European grapevine moth Fireworms Fruitfly (suppression) Fruitworms Leafrollers Light brown apple moth Loopers Thrips	5	6	3
Caneberries (Subgroup 13A) including blackberry, black raspberry, loganberry, red raspberry, and cultivars and/or hybrids of these	Armyworms 5 European grapevine moth Fireworms Fruitworms Leafrollers Light brown apple moth Loopers Sawfly		5	1
Citrus (Crop Group 10) including grapefruit, lemons, limes, oranges, and tangerines	katydids leafminers thrips worms (caterpillars)	5	6	1
Cucurbits (Crop Group 9) including cucumber, edible gourds, muskmelons (cantaloupe, honeydew, etc.), pumpkin, summer and winter squash, and watermelon	Armyworm Leafminers Loopers Thrips Worms (caterpillars)	5	5	All listed cucrbits except cucumber: 3
Dates	Carob moth	3	7	7
Fruiting vegetables (Crop Group 8) and okra including eggplant, ground cherry, pepino, pepper, tomatillo, and tomato	Colorado potato beetle European corn borer Flea beetle Leafminers Loopers Thrips Worms (caterpillars)	5	4	1
Grape	European grapevine moth Leafrollers Light brown apple moth Thrips Worms (berry moth)	5	5	7
Herbs (Subgroup 19A) including angelica, balm, basil, borage, burnet, camomile, catnip, chervil (dried), chive, chive (Chinese), cilantro, cilantro (leaf), clary, coriander (leaf), costmary, curry (leaf), dillweed, horehound, hyssop,	Leafminers Loopers Thrips Worms (caterpillars)	5	5	1

Crops	Pests Controlled	Maximum Number of Applications per Season	Minimum Reapplication Interval (Days)	Preharvest Interval (Days)
lavender, lemongrass, lovage (leaf), marigold, marjoram, nasturtium, parsley (dried) pennyroyal, rosemary, rue, sage, savory (summer and winter), sweet bay, tansy, tarragon, thyme, wintergreen,				
woodruff, and wormwood		_	_	_
Leafy Vegetables (Crop Group 4) and Watercress including amaranth, arugula, cardoon, celery, celtuce, chervil, Chinese celery, Chinese spinach, corn salad, dandelion, dock, edible chrysanthemum, endive (escarole), Florence fennel, garden cress, garden purslane, garland chrysanthemum, head lettuce, leaf lettuce, leafy amaranth, New Zealand spinach, orach, parsley, radicchio (red chicory), rhubarb, spinach, Swiss chard, tampala, upland cress, vine spinach, winter cress, winter purslane, and yellow rocket	Diamondback moth Leafminers Loopers Thrips Worms (caterpillars)	5	4	1
Leaves of Legume Vegetables (Subgroup 7A) and Turnip Greens including any cultivar of bean and field pea (except soybean)	Diamondback moth Leafminers Loopers Thrips Worms (caterpillars)	5	4	3
Leaves of Root and Tuber Vegetables (Crop Group 2) including bitter cassava, black salsify, carrot, celeriac (celery root), chicory, dasheen (taro), edible burdock, garden beet, oriental radish (daikon), parsnip, radish, rutabaga, sugar beet, sweet cassava, sweet potato, tanier, true yam, turnip, turnip greens, and turnip-rooted chervil	Diamondback moth Leafminers Loopers Thrips Worms (caterpillars)	5	4	3
Legume Vegetables (Succulent and Dried Beans and Peas) (Crop Group 6) including blackeyed pea, chickpea, cowpea, crowder	Borers Leafminers Loopers Thrips Worms (caterpillars)	5	5	Succulent: 3  Dried: 28

Crops	Pests Controlled	Maximum Number of Applications per Season	Minimum Reapplication Interval (Days)	Preharvest Interval (Days)
pea, edible-pod pea, English pea, fava bean, field bean, field pea, garbanzo bean, garden pea, green pea, kidney bean, lentil, lima bean, lupins, mungbean, navy bean, pigeon pea, pinto bean, runner bean, snap bean, snow pea, sugar snap pea, tepary bean, wax				
bean, and yardlong bean				
Peppermint and Spearmint	Armyworms Cutworms Leafminers Loopers Thrips (suppression)	4	4	7
Pomegranate	Fruit Fly Leafrollers Moths Naval orangeworm Peach twig borer Thrips	3	10-14	7
Root and Tuber Vegetables	Armyworms	4	7	3
(Crop Group 1) and Artichoke including garden beet and sugar beet	European corn borer Flea beetle Leafminers			
black salsify, carrot, chicory, ginseng, horseradish, parsnip, salsify, skirret, Spanish salsify, turnip-rooted chervil, and turnip-rooted parsley	Loopers Thrips	4	5	3
celeriac, edible burdock, oriental radish, radish, rutabaga, turnip and other root vegetables not specifically listed		3	5	3
arracacha, arrowroot, bitter cassava, chayote root, Chinese artichoke, chufa, dasheen, edible canna, ginger, Jerusalem artichoke, leren, potato, sweet cassava, sweet potato, tanier, true yam, tumeric, and yam bean	Artichoke plume moth Colorado potato beetle Corn borers Leafminers Light brown apple moth Loopers Thrips Worms (caterpillars)	4	7	7
artichoke		4	7	2
Spices (Subgroup 19B) including allspice, anise (seed), annatto (seed), black caraway, caper (buds), caraway, cardamom, cassia (buds), celery	Flea beetle Leafminers Thrips	5	10	14

Crops	Pests Controlled	Maximum Number of Applications per Season	Minimum Reapplication Interval (Days)	Preharvest Interval (Days)
(seed), cinnamon, clove (buds), common fennel, coriander (seed), culantro (seed), cumin, dill (seed), Florence fennel (seed), fenugreek, grains of paradise, juniper (berry), lovage (seed), mace, mustard (seed), nutmeg, poppy (seed), saffron, star anise, vanilla, and white pepper				
Stone Fruits (Crop Group 12) including apricot, cherries, nectarine, peach, plum, and prune	Borers European grapevine moth Fruit flies Fruitworm Leafminers Leafrollers Light brown apple moth Oriental fruit moth Thrips Worms (caterpillars)	5	7	Apricot; All listed stone fruits except cherry, peach, plum, prune, nectarine: 14  Cherry, Plum, Prune: 7  Nectarine, Peach: 1
Strawberry	Armyworms European grapevine moth Leafrollers Light brown apple moth Thrips	5	5	1
Sweet Corn and Popcorn (for earworms, treat silk frequently as it grows)	Corn borers Earworm Worms (caterpillars)	5	3	1
Tree Nuts (Crop Group 14) and Pistachio including almonds, cashew, chestnut, filbert (hazelnut), macadamia, pecans, and walnuts	Codling moth Filbert worm Husk fly (suppression) Leafrollers Light brown apple moth Navel orangeworms Peach twig borer Pecan nut casebearer Redhumped caterpillar Shuckworms Webworms	3	7	1
Tropical Tree Fruits including, acerola, atemoya, avocado, biriba, black sapote, canistel, cherimoya, custard apple, feijoa, guava, ilama, jaboticaba, longan, lychee, mamey sapote, mango,	Suppression of European grapevine moth Katydids Leafrollers Light brown apple moth Thrips Worms (caterpillars)	2	7	1

Crops	Pests Controlled	Maximum Number of Applications per Season	Minimum Reapplication Interval (Days)	Preharvest Interval (Days)
papaya, passionfruit, pulasan, rambutan, sapodilla, soursop, Spanish lime, star apple, starfruit, sugar apple, ti leaves, wax jambu (wax apple), and white sapote				

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides. If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. For thrips, if additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least two applications. Consult your local Atticus, LLC representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

[\*Not Registered for Use by the state of Georgia]

ORNAMENTALS (HERBACEOUS AND WOODY) GROWING OUTDOORS, IN NURSERIES (INCLUDING CONIFER SEED ORCHARDS), OR IN GREENHOUSES [, LATH AND SHADEHOUSES]

OKCHAK	 			
Pests*	Fl. oz./ 1	ate of A1101.0 Fl. oz./100	<del>]</del>	Application Instructions
rests	gallon	gallons	Fl. oz./acre	Application instructions
Chrysomelid leaf feeding	0.06	6	24	Application Method: Dilute
beetles, such as:	(1.77 mL)	(177 mL)	(709.8 mL)	A1101.03 in water and apply using
Elm leaf (1)				suitable hand or power-operated
Viburnum leaf (larvae)				application equipment (such as
Willow leaf (1)				portable pump-up, backpack,
European grapevine moth				hydraulic, boom) in a manner to
Lepidopterous larvae, such as:				provide complete and uniform plant
azalea caterpillar				coverage. Use of A1101.03 in lath
bagworm				and shadehouses is permitted.
beet armyworm				·
cabbage looper				A1101.03 may be used up to a
California oakworm				maximum labeled rate of 0.2 fl. oz.
cankerworm				per gallon (22 fl. oz. per 100 gallons,
diamondback moth				88 fl. oz. per acre) per application on
Eastern tent caterpillar				trees and ornamentals as a general
fall webworm				treatment regardless of the target
Florida fern caterpillar				insect pest. Use pest specific rates
geranium budworm				when a single insect pest or group of
gypsy moth				insect pests within a rate category is
light brown apple moth				the only intended target.
oblique banded leafroller				
oleander caterpillar				Spray Volume: Attempt to
orange striped oakworm				penetrate dense foliage but avoid
spruce budworm				overspraying to the point of
tussock moths (hickory,				excessive runoff. Uniform coverage
whitemarked)				of both upper and lower leaf
Western tent caterpillar				surfaces is critical for effective
winter moth				insect control.
yellownecked caterpillar (2)				

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Sawfly larvae, such as:			
European pine			
pear			
redheaded pine			
Shore fly			
Thrips (exposed) in greenhouse			
settings, such as: (3)			
chilli			
Cuban laurel			
Western flower			
Dipterous gall midges	0.1	11	44
pinyon spindlegall	(2.96 mL)	(325.3 mL)	(1301 mL)
Thrips (exposed) in outdoor			
settings, such as: (3)			
chilli			
Cuban laurel			
Western flower			
Dipterous leafminers, such as:	0.2	22	88
serpentine (4)	(5.92 mL)	(650.6 mL)	(2602 mL)
Emerald ash borer (5)			
Lewis mites			
Nantucket pine tip moth			
Spider mites, such as:			
spruce			
two-spotted (6) (see 6 below			
for mite suppression/control			
expectations)			
Tank Min A1101 02 may be tank		Alexandra and a second	

**Tank Mix: A1101.03** may be tank mixed with other insect control products if broader spectrum insect control is required. When using tank mixtures, also follow all label directions of the mixing partner(s).

**Phytotoxicity: A1101.03** has been tested alone on a wide variety of herbaceous and woody ornamental plants without phytotoxic symptoms. However, because it is not possible to test all possible tank mix combinations (including adjuvants) and ornamental plant species, varieties, and cultivars, and because environmental factors and varietal and plant stage of growth may affect phytotoxic expression, it is recommended that a small group of test plants be treated at the specified use rate of **A1101.03** either alone or in tank mix combinations and observed for at least 5 to 7 days to determine phytotoxicity before treating large numbers of those plants. Note: The user assumes responsibility for determining if **A1101.03** is safe to treated plants when applied either alone or in tank mixtures under commercial growing conditions. Research has demonstrated that some spotting of African violet (*Saintpaulia*) flowers may occur.

**Resistance Management:** Do not make more than two consecutive applications of Group 5 insecticides. If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least one application. For thrips and diamondback moth, if additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least two applications. Consult your local Atticus, LLC representative, extension specialist, certified crop advisor, or state agricultural experiment station for information on alternative effective products to use in your area.

## **Specific Use Restrictions:**

• **Minimum Treatment Interval:** Except for greenhouses and structures that can be altered to be closed or open, do not make applications less than 7 days apart.

<sup>\*</sup>Numbers in parentheses (-) refer to **Pest-Specific Use Directions**.

#### Pest-Specific Use Directions\*\*

- (1) Elm leaf beetle and willow leaf beetle (adults and larvae): For effective control, apply in the spring or early summer when feeding is observed.
- (2) For effective control of the following lepidopterous larvae:
  - o **Bagworms:** Apply when bags are small and larvae are actively feeding.
  - Beet armyworms: Apply when larvae are small.
  - o **Diamondback moth:** If additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least two applications.
  - o **Gypsy moth larvae:** Apply when larvae are small and all eggs have hatched.
  - Spruce budworms: Apply when larvae are exposed and actively feeding.
  - Tent caterpillars and fall webworms: Apply early when webs are first observed and direct the spray into the web and surrounding foliage within at least 3 feet of the nest.
- (3) **Exposed thrips (chilli, Cuban laurel and Western flower):** For effective control, apply early at first signs of infestation and repeat until infestation is controlled, but follow resistance management guidelines. For thrips, if additional treatments are required after two consecutive applications of Group 5 insecticides, rotate to another class of effective insecticides for at least two applications.
- (4) **Serpentine leafminers:** For effective control, apply early when stippling or mining of leaves is first observed and repeat until infestation is controlled, but follow resistance management guidelines. Three sequential applications at 7-day intervals can maximize control. Addition of a nonionic spray adjuvant [such as DYNE-AMIC® spray adjuvant] at 0.1% v/v in greenhouse settings (see **Phytotoxicity**) has been shown to enhance control of leafminers (follow surfactant manufacturer's label directions).
- (5) Emerald Ash Borer: Apply to foliage and bark of tree when adult emerald ash borer are first observed emerging from the bark or when adult emerald ash borer are first noticed feeding on the leaves of the tree. Reapply every 7 to 10 days until no additional adult emerald ash borer activity is observed. Application to trees already heavily infested may not prevent the eventual loss of the tree due to existing pest damage and tree stress.
- (6) Spruce spider mites and two-spotted spider mites: Apply when spider mites are first observed prior to webbing and before mite populations have become severe. Reapply after 7 to 10 days (3 to 5 days in greenhouses and structures that can be altered to be closed or open) to contact newly hatched nymphs and repeat until infestation is managed. Uniform coverage of both upper and lower leaf surfaces is critical. Note: Control of spider mites with A1101.03 in certain research trials has been variable. The variability between these evaluations is not well understood but may be due to late application timing when mite populations and webbing were severe, poor spray coverage of both the upper and lower leaf surfaces, or interaction of the leaf surface with residues of A1101.03. Addition of a nonionic spray adjuvant [such as Activate Plus™, DYNE-AMIC, Joint Venture®, Phase®, and Thoroughbred®] at 0.1% v/v in greenhouse settings and at label rates in outdoor settings (see Phytotoxicity) has been shown to improve spray coverage and enhance control of spider mites (follow surfactant manufacturer's label directions).

<sup>\*\*</sup>For pest control in the greenhouse or nursery, also refer to Requirements For Use Of A1101.03 In Greenhouses And For Commercial Production Of Herbaceous (Non-Woody) Ornamentals In Nurseries section.

# TREE FARMS OR PLANTATIONS Conifers, Including Christmas Trees, and Deciduous Trees

Pests Rate of A1101.03 (fl. oz./acre)		Application Instructions	
Lepidopterous larvae, such as:	4-16	Application Timing: Time applications to reach	
bagworm	(118.3-473.2 mL)	larvae when small or just hatching. A 7-day re-	
cone moth		treatment schedule may be necessary to maintain	
coneworm		control. Consult with your Atticus, LLC	
fall webworm		representative, state agricultural experiment	
gypsy moth		station, certified pest control advisor, or extension	
hemlock looper		specialist for information on application timing for	
jackpine budworm		specific pests in your area.	
pine tip moth			
redhumped caterpillar		The rate of A1101.03 applied per acre will depend	
spruce budworm		upon tree size and severity of infestation. Use a	
tent caterpillar		higher rate in the rate range for large trees or heavy	
tussock moths		infestations. Apply in sufficient volume to ensure	
Light brown apple moth		thorough coverage.	
Sawfly larvae, such as:			
European pine			
pear			
redheaded pine			

## **Specific Use Restrictions:**

- Do not apply more than a total of 58 fl oz of A1101.03 (0.45 lb ai spinosad) per acre per year.
- Maximum Number of Applications: Do not make more than six applications per calendar year.

## **TURFGRASS**

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Pests*	Rate of A110	01.03	Application Instructions				
Pests	fl. oz./ 1000 sq. ft.	fl. oz./acre	Application Instructions				
Armyworms-small larvae such as:	0.25	10	Application Method: Dilute A1101.03 in				
fall armyworm (1)	(7.4 mL)	(296 mL)	water and apply using suitable hand or				
Sod webworms (including tropical)(2)			power-operated application equipment				
cutworms-small larvae such as:	0.8	35	(such as portable p ump-up, backpack,				
black cutworm	(23.7 mL)	(1035 mL)	hydraulic, boom, turf spray gun).				
variegated cutworm (1,2)							
Annual bluegrass weevil	1.2	52	A1101.03 may be used up to a maximum				
Armyworms-large larvae such as:	(35.5 mL)	(1538 mL)	labeled rate of 1.2 fl oz per 1000 sq ft (52				
fall armyworm (1)			fl oz per acre) per application on				
Black turfgrass ataenius (adults)			turfgrass as a general treatment				
Cutworms-large larvae such as:			regardless of the target insect pest. Use				
black cutworm			pest specific rates when a single insect				
variegated cutworm (1,2)			pest or group of insect pests within a				
Fleas, such as:			rate category is the only intended target.				
cat flea (3)							

**Tank Mix: A1101.03** may be tank mixed with other insect control products if broader spectrum insect control is required. When using tank mixtures, also follow all label directions of the mixing partner(s).

**Resistance Management:** Do not apply more than three times in any 21-day period. Whenever **A1101.03** is applied up to three times in succession, this should be followed by no use of **A1101.03** for a 21-day period or rotation to another insecticide class. Do not make more than six applications per season.

#### **Specific Use Restrictions:**

• Minimum Treatment Interval: Do not make applications less than 7 days apart.

<sup>\*</sup>Numbers in parentheses (-) refer to **Pest-Specific Use Directions**.

## **Pest-Specific Use Directions**

- (1) Fall Armyworm and Black Cutworm Larvae: Use the lower rate for control of light infestations of small larvae (less than 3/4 of an inch for armyworms, an inch or less for cutworms); use the higher rate for control of heavy infestations and large larvae (3/4 of an inch or larger for armyworms, larger than an inch for cutworms). Applications for fall armyworms during the early morning or late afternoon can maximize control. For best results, delay watering or mowing of the treated area for 12 to 24 hours after treatment.
- (2) Black cutworm, sod webworm, and tropical sod webworm larvae: Applications during the late afternoon or early evening can maximize control. For best results, delay watering or mowing of the treated area for 12 to 24 hours after treatment.
- (3) **Control of cat fleas:** Apply early or late in the day since effective control requires direct contact of adults and larvae with the dilute spray prior to drying. For best results, make a second application at 7 to 14 days to control adults that have emerged from pupae that may have been present during the initial treatment. Thorough spray coverage is necessary for outside areas frequented by pets. **Do not treat pets with A1101.03.**

#### 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. [Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after flow begins to drip.] 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.

#### [A1101.03 is a trademark of Atticus, LLC]

[Conserve® SC [Turf and Ornamental] is a registered trademark of Corteva Agriscience and its affiliated companies.] [ACTIVATE PLUS™ is a trademark of Winfield Solutions, LLC.]

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## **{LANGUAGE ON LABEL AFFIXED TO CONTAINER}**



## A1101.03[™]

[Alternate Brand Name: Contraxio SC]
[Contains Spinosad, the active ingredient used in Conserve® SC [Turf and Ornamental].]

[A1101.03 is not manufactured, or distributed by Corteva Agriscience United States, seller of Conserve® SC [Turf and Ornamental].]

#### [INSECTICIDE] [INSECT CONTROL]

[For control of listed pests such as thrips, lepidopterous larvae, foliage feeding worms, fire ants and other listed pests infesting apple and other pome fruits, artichoke, asparagus, banana, Brassica (cole) leafy vegetables, bulb vegetables, bushberries, caneberries, citrus, commercial aquatic plants, cucurbits, dates, fruiting vegetables, grape, herbs, leafy vegetables, leaves of legume vegetables, leaves of root and tuber vegetables, okra, ornamentals (herbaceous and woody) growing outdoors, in nurseries or in greenhouses, peppermint, pistachio, plantain, pomegranate, popcorn, root and tuber vegetables, spearmint, spices, stone fruits, strawberry, sweet corn, tree nuts, tropical tree fruits, tree farms or plantations and turfgrass]

#### **KEEP OUT OF REACH OF CHILDREN**

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.)

## 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

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

**ENVIRONMENTAL HAZARDS:** This pesticide is toxic to aquatic invertebrates. Applying this product when rain is not predicted for the next 24 hours will help reduce potential risk to aquatic invertebrates by reducing pesticide runoff from the treatment area into water bodies. 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 cleaning equipment or when disposing of equipment washwaters. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Apply this product only as specified on the label.

This product is highly toxic to bees and other pollinating insects exposed to direct treatment, or to residues in/on blooming crops or weeds. Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms. Do not apply this pesticide to blooming, pollen-shedding or nectar-producing parts of plants if bees may forage on the plants during this time period.

## 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  $\frac{1}{4}$  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. [Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after flow begins to drip.] 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.]

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

Manufactured for: **Atticus, LLC** 940 NW Cary Parkway, Suite 200 Cary, NC 27513 EPA Reg. No.: 91234-XX EPA Est. No.: \_\_\_\_\_ NET CONTENTS:

# {Optional Marketing graphics}





