U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Biopesticides and Pollution Prevention Division (7511P)
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:**
91234-306	07/20/2022

Term of Issuance:
Unconditional

Name of Pesticide Product:
A1117.02

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 Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA Registration Number.

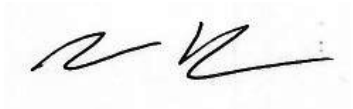
On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA or the Act).

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency (EPA). In order to protect health and the environment, the Administrator, on his or her 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 the 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 or registration review of your product when the EPA requires all registrants of similar products to submit such data.

Signature of Approving Official:



Gina Burnett, Senior Regulatory Advisor
Biochemical Pesticides Branch
Biopesticides and Pollution Prevention Division (7511P)
Office of Pesticide Programs

Date:
07/20/2022

EPA Form 8570-6

2. Make the following labeling change before you release this product for shipment:

    - Revise the EPA Registration Number to read, "EPA Reg. No. 91234-306"

3. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the 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 EPA find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA-approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statement of Formula (CSF):

- Basic CSF dated 01/27/2022

Any CSFs other than those listed above are superseded.

If you have any questions, please contact Susannah Powell of my team via email at powell.susannah@epa.gov.

Sincerely,

Gina Burnett, Senior Regulatory Advisor
Biochemical Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)
Office of Pesticide Programs

ACCEPTED
07/20/2022
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 91234-306

{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}

[Sublabel A: Agricultural and Commercial Use]
{BOOKLET FRONT PANEL LANGUAGE}

OMRI LISTED
For Organic Use · OMRI.org

A1117.02 [™]

[*Alternate Brand Name:* **Atrevia 1.2% SL**]

[FOR USE ON GREENHOUSE AND OUTDOOR FOOD CROPS, ORNAMENTAL FLOWERS, GOLF COURSES, TURF, PARKS & ORNAMENTALS]
[INSECTICIDE / MITICIDE / NEMATICIDE]
[FOR ORGANIC GARDENING]

ACTIVE INGREDIENT:	**(% by weight)**
Azadirachtin	1.2%
OTHER INGREDIENTS:	98.8%
TOTAL	100.0%

Contains 0.0929 lb. (42.2 grams) of azadirachtin 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.)

Read entire label. Use strictly in accordance with precautionary statements and directions for use, and with applicable state and federal regulations.

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

EPA Reg. No.: 91234-XX

EPA Est. No.:

Net Contents:

Manufactured for:
Atticus, LLC
5000 CentreGreen Way, Suite 100
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.
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.	

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 or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before use.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

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

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/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 fish and aquatic invertebrates. For terrestrial uses: Do not apply directly to water, or 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 washwater or rinsate. Do not apply when weather conditions favor drift from treated areas. Runoff from treated area may be hazardous to aquatic organisms in neighboring areas.

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 through any irrigation system unless the chemigation instructions on this label are followed. 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 State or Tribal agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow 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:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Socks and shoes

For field sprays:
Keep unprotected persons out of treated areas until sprays have dried.

NON-AGRICULTURAL USE REQUIREMENTS

These requirements apply to uses of this product that are NOT within the WPS for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. For other uses including golf courses and other non-agricultural uses, do not enter treated areas without protective clothing until sprays have dried.

PRODUCT MODE OF ACTION

A1117.02 controls target pests on contact or by ingestion. The product acts on pests by way of repellence, anti-feedance and interference with the molting process. The buyer or user is reminded that the degree of efficacy of the product is largely dependent on weather conditions, intensity of pest population, area of application, type of pest, and physical stages of pests and crops.

GENERAL INFORMATION

Read all directions before using this product.

Apply **A1117.02** as directed to any food or non-food crop up to and including the day of harvest at a rate not exceeding 3½ pints per acre. Refer to the Use Site section for a complete listing of crops.

MIXING

Shake well before using. Add required amount of **A1117.02** to a clean spray tank with at least one-half of the water to be sprayed. Constant agitation is required, particularly with tank mixes. Agitate the mixture thoroughly and then fill the tank with remaining water and continue agitation. Thorough mixing is necessary for uniform coverage. Non-uniform mixing can cause crop injury or can result in lowered effectiveness. For tank mixes, add other components to the tank containing the **A1117.02** spray mixture and agitate thoroughly. If tank mixture is allowed to sit, agitation is necessary prior to application. Adjusting the spray mixture pH between 5.5 and 7 will provide optimal performance. Always use this product promptly after mixing with water and do not let tank mix sit for any extended period.

COMPATIBILITY: A1117.02 has been found to be compatible with most commonly used pesticides and fertilizers. To avoid problems, conduct a compatibility test before using this product in a tank mix with other pesticides or with fertilizers. To test for compatibility, mix a small amount of each product, in the appropriate proportions, in a small jar test.

A jar test can quickly determine physical compatibility. The process of conducting jar test is given below:

1. Add one pint of water to a glass jar with a lid. (Use the same water source that will go in the tank.)
2. Check spray water pH and adjust if necessary. Often, the pesticide label will give the optimal pH range for best results.
3. Add the pesticides to the jar you plan to use one at a time and shake vigorously after each addition.
4. After all products have been added, shake again, let the solution stand for 15 minutes and then shake one last time and observe the results.
   Results: Jar is cool to the touch, and mixture is smooth. Then it is compatible mixture.

PHYTOTOXICITY: A1117.02 has been evaluated for phytotoxicity on a wide range of crops and ornamentals. However, since testing on all varieties of all crops and ornamentals is not feasible, test a small portion of the area to be treated for phytotoxicity before treating the entire area. Further, all possible combinations or sequences of pesticide sprays, including other fertilizers, surfactants, adjuvants and other pesticides, have not been tested, thus test for phytotoxicity of spray mixtures. Clean spray equipment used to apply **A1117.02** thoroughly before use. The addition of spray adjuvants enhances control in some crops under ideal conditions. Addition of certain adjuvants may cause phytotoxicity therefore, test the addition of crop oils and other adjuvants thoroughly tested before using. Do not add crop oils to spray mixtures on ornamental crops. Captan, Bordeaux mixtures, and highly alkaline products cause unacceptable phytotoxicity and/or reduced effectiveness on target pests. Avoid tank mix combinations of **A1117.02** plus compounds known to be incompatible with oil-based formulations to prevent phytotoxicity. "Waxy bloom" on certain crops and ornamental plants is reduced after a **A1117.02** application.

APPLICATION INSTRUCTIONS

For optimal performance spray product as soon as possible when pests are expected or when pests first appear. For foliar applications, apply **A1117.02** in sufficient spray volume and with adequate spray pressure to ensure complete and thorough coverage of all plant surfaces including both the top and bottom of leaves. Avoid excessive runoff. Best results are obtained following 2-3 applications made at 7 – 10 day intervals. When pest pressure is heavy or plant canopy is dense, use higher rates and increase spray frequency. Spraying in the morning or evening hours will provide the best results. Repeat application if rain occurs within two to three hours of spraying.

SPRAY DIRECTIONS

Apply **A1117.02** as a foliar spray or a drench to soil or non-soil media to control insects. When needed, soil drenches can also be used to control soil-borne pests, including soil-borne larvae of foliar insect pests. When applying as a drench, avoid excessive leaching. **A1117.02** can also be applied through sub-surface soil treatment equipment. Always follow equipment manufacturers use directions. **A1117.02** may be applied using any powered or manual pesticide application equipment which includes, but is not restricted to, high volume, low volume, ultra-low volume, electrostatic, fogging and chemigation. Follow the original manufacturer's instructions when using these types of equipment.

DRENCH AND ORNAMENTAL SPRAY DIRECTIONS FOR LABELED PLANTS GROWN IN GREENHOUSES, SHADECLOTHS AND NURSERIES

When used as a soil drench, apply one pint of finished spray for each gallon of soil in the pot. For most pests apply 18-21 oz. **A1117.02** per 100 gallons of water. For treatment of harder to control pests, such as Dipteran leafminers, use up to 27 ounces per 100 gallons of water. Do not exceed 57 oz of **A1117.02** per acre per application.

RATES

Use **A1117.02** at 1-2 pints per acre for most pest and crop conditions. Under extremely heavy pest pressure up to 3½ pints may be used. Do not use less than 5 oz. per acre of **A1117.02** alone. When tank mixed with other insecticidal products, the rate of **A1117.02** may be reduced by ½, but not less than 4 oz per acre. Use up to 2.6 oz per 1000 square feet for manure and compost treatments.

CHEMIGATION

General Information

Apply this product through low pressure, drip (trickle) or sprinkler (center pivot, lateral move, end tow, side roll, traveler, big gun, solid set, or hand move) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, contact State Extension Service Specialists, equipment manufacturers or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Dilute A1117.02 with water before introduction into the system; use the diluted mixture within 8 hours. Do not apply in irrigation water if the pH exceeds 7.0. The optimum pH for application is a range of 5.5 to 6.5. If needed, the pH of the irrigation water can be adjusted by use of a suitable buffering agent. Agitation is necessary. Apply at the rate indicated in the Application Instructions using sufficient water to achieve an even distribution.

Specific Requirements for Chemigation Systems Connected to Public Water Systems -

1. 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.
2. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. 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.
5. 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.

6. 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.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

Specific Requirements for Sprinkler Chemigation -

1. 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.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. 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.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. 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.
6. 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 filled with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

Specific Requirements for Drip (Trickle) Chemigation -

1. 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.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. 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.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. 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.
6. 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 filled with a system interlock.

Center pivot, motorized lateral move, or traveling gun types of equipment:

Inject into the system for one revolution or run. Shut off injection equipment after one revolution or run but continue to operate irrigation system until **A1117.02** has been cleared from the last sprinkler head. Do not use end guns. The system should be run at maximum speed for a foliar application.

Wheel move, side roll, end tow, solid set, or hand move types of equipment:

Adjust equipment to inject **A1117.02** over a 30–60-minute period. Shut off injection equipment. Continue to operate irrigation system until **A1117.02** has been cleared from the last sprinkler head. **A1117.02** can be injected at the end of the irrigation cycle or as a separate application. Do not use end guns. **A1117.02** must be premixed in a supply tank with water and other appropriate tank-mix chemicals. Agitation is necessary at all times.

Attention must be exercised in irrigation waters with a pH greater than 7. If the irrigation cycle will last longer than 8 hours and the A1117.02 is premixed in the supply tank, the tank mix must be buffered to a pH of 6 or lower. Please contact your Company sales representative should this situation apply. Application is to be made in sufficient water and of sufficient duration to apply the appropriate rate evenly over the entire treated area.

No field runoff can be permitted during chemigation.

{NOTE TO REVIEWER: Registrant may add or remove the following state restriction statement as required throughout. (e.g., NOT FOR USE IN CALIFORNIA)**}**

[NOT FOR USE IN _____]

USE SITES:

AGRICULTURAL USE SITES – Use **A1117.02** on agricultural use sites including, but not limited to, the following:

BERRIES GROUP, such as: Blackberries, Blueberries, Currants, Elderberries, Gooseberries, Huckleberries, Loganberries, Raspberries (red and black). For Strawberries – see miscellaneous.

BULB VEGETABLES, such as: Garlic, Leeks, Onions (dry bulb, green, and Welch), Shallots.

CEREAL GRAINS and GRAINS GROUP, such as: Barley, Buckwheat, Corn, Millet (pearl and Proso), Oats, Popcorn, Rice, Rye, Sorghum (milo), Teosinte, Triticale, Wheat, Wild Rice.

CITRUS FRUITS, such as: Calamondins, Citrus Citrons, Citrus Hybrids, Grapefruits, Kumquats, Lemons, Limes, Mandarins (tangerine), Oranges (sour and sweet), Pummelos, Satsuma Mandarins, White Sapote, Uniq Fruit.

COTTON and TOBACCO

CUCURBIT VEGETABLES, such as: Chayotes, Chinese Waxgourds, Citron Melons, Cucumbers, Gherkins, Gourds (edible), Muskmelons, Pumpkins, Squash (summer and winter), and Watermelons.

FORAGE CROPS, including but not limited to: Alfalfa, Alfalfa Seed, Clover, Trefoil, Vetch.

FRUITING VEGETABLES, such as: Eggplants, Groundcherries, Pepinos, Peppers (including bell pepper, chili pepper, cooking pepper pimento, sweet pepper), Tomatillos, Tomatoes.

GREENHOUSE FOOD CROPS: Brassica (Cole) Crops, Cucurbits, Eggplants, Herbs and Spices, Hops, Legumes, Peppers, Tobacco, Tomatoes, and other miscellaneous crops grown in greenhouses.

HERBS AND SPICES, such as: Allspice, Angelica, Anise (anise seed and star), Annatto (seed), Balm (lemon balm), Basil, Borage, Burnet, Chamomile, Caper Buds, Caraway (black), Cardamom , Cassia bark, Cassia buds, Catnip, Celery Seeds, Chervil (dried), Chives, Chinese Chives, Cinnamon, Clary, Clove buds, Coriander (cilantro or Chinese parsley - leaf), Coriander (cilantro-seed), Costmary, Culantro (leaf and seed), Cumin, Curry (leaf), Dill (dillweed and seed), Fennel (common, Florence), Fenugreek, Grains of Paradise, Horehound, Hyssop, Juniper Berry, Lavender, Lemongrass, Lovage (leaf and seed), Mace, Marigolds, Marjoram, Mustard (seed), Nasturtium, Nutmeg, Parsley (dried), Pennyroyal, Pepper (black and white), Poppy (seed), Rosemary, Rue, Saffron, Sage, Savory (summer and winter), Sweet Bay (bay leaf), Tansy, Tarragon, Thyme, Vanilla, Wintergreen, Woodruff, Wormwood.

LEGUME VEGETABLES (Succulent or Dried), such as: Beans, Broad Bean, Chickpeas, Guar, Jackbeans, Lablab Beans, Lentils, Peas, Pigeon Peas, Soybeans, Sword Beans.

LEAFY AND BRASSICA (COLE), such as: Amaranth, Arugula, Broccoli, Broccoli Raab (rapini), Brussels Sprouts, Cabbage, Cauliflower, Cardoon, Cavalo Broccoli (gai lon), Chinese Cabbage (Bok Choy, Napa), Chinese Mustard Cabbage (gai choy), Chinese Celery, Celery, Celtuce, Chervil, Chrysanthemum (edible-leaved, Garland), Collards, Corn Salad, Cress (garden, upland), Dandelion, Dock (sorrel), Endive (escarole), Fennel (Florence), Kale, Kohlrabi, Lettuce (head and leaf), Mizuna, Mustard Greens, Mustard Spinach, Orach, Parsley, Purslane (garden, winter), Radicchio, Rape Greens, Rhubarb, Spinach, Spinach (New Zealand, vine), Swiss Chard, Turnip Greens.

MISCELLANEOUS, such as: Asparagus, Avocado, Banana, Coffee, Cocoa, Cranberry, Figs, Globe Artichokes, Grapes, Hops, Kiwifruit, Mango, Mushroom, Okra, Olives, Papaya, Pawpaw, Peanut, Persimmon, Pineapple, Pomegranate, Strawberry, Tea, Water Chestnut, Watercress, and all other food crops.

POME FRUITS GROUP, such as: Apples, Crabapples, Loquats, Mayhaws, Oriental Pears, Pears, Quinces. (Comice varieties such as Concorde, Seckel, Forelle and Gem): DO NOT apply more than 24 fl oz/A. DO NOT apply after pink stage of flowering; test small areas of other varieties of pears for plant safety prior to full scale usage.)

ROOT AND TUBER VEGETABLES GROUP, such as: Arracacha, Arrowroot, Artichokes (Jerusalem, Chinese), Beets (garden, sugar), Burdock, Canna (edible), Carrots, Cassava (bitter and sweet), Celeriac (celery root). Chayote (root), Chervil (turnip-rooted), Chicory, Chufa, Dasheen (taro), Ginger, Ginseng, Horseradish, Leren, Oriental Radish (dailon), Parsley (turnip-rooted), Parsnip, Potatoes, Radishes, Rutabagas, Salsify (oyster plant, black, Spanish), Skirret, Sweet Potatoes, Tanier, Turmeric, Turnips, Yam Bean (jicama, manioc pea), Yams (true).

OTHER CROPS: Hemp.

STONE FRUITS GROUP, such as: Apricots, Cherries (sweet and tart), Nectarines, Peaches, Plums (Chickasaw, Damson, Japanese), Plumcot, Prunes.

TREE AND NUTS GROUP, such as: Almonds, Beechnuts, Brazil Nuts, Butternuts, Cashews, Chestnuts, Chinquapin, Filberts (hazelnut), Hickory Nuts, Macadamias (bush nut), Pecans, Pistachios, Walnuts (black and English).

TROPICAL FRUITS, such as: Acerola, Atemoya, Banana, Biriba, Breadfruit, Canistel, Cherimoya, Custard Apple, Durian, Feijoa, Guava, Jaboticaba, Ilima, Lychee, Longan, Malanga, Mango, Papaya, Passionfruit, Pulasan, Rambutan, Sapote (black, mamey), Sapodilla, Soursop, Spanish Lime, Star Apple, Starfruit, Sugar Apple, Wax Jambu.

ORNAMENTAL USE SITES – Use **A1117.02** on ornamental use sites including, but not limited to, the following:

BEDDING PLANTS, FLOWERS, ORNAMENTAL PLANTS, POTTED PLANTS AND FOLIAGE: Actinopteris, African Violets, Ageratum, Aglaonema, Allamanda, Algerian Ivy, Alocasia, Anthurium, Aphelandra, Artemisia, Aster, Aucuba Azalea, Baby's Breath, Begonia, Bougainvillea, Boston Fern, Boxwood, Brachycome, Cacti, Calabrese, Caladium, Calla, Calathea, Calendula, Carnation, Chrysanthemum, Cineraria, Coleus, Columbine, Cotoneaster, Cyclamen, Daffodil, Dahlia, Daisy, Daylily, Delphinium, Dianthus, Dieffenbachia, Dusty Miller, Easter Lily, English Ivy, Euphorbia, Fern, Ficus, Foxglove, Freesia, Fuchsia, Gaillardia, Gardenia, Geranium, Gerbera, Gladioli, Gloxinia Gypsophilla, Hedera, Hibiscus, Hyacinth, Hydrangea, Impatiens, Iris, Ivy, Lily, Maidenhair Fern, Mandevilla, Marigold, Narcissus, Nasturtium, Orchid, Pansy, Pelargonium, Peony, Peperomia, Petunia, Philodendron, Phlox, Photinia, Pittosporum, Pinks, Poinsettia, Pothos, Portulaca, Pyracantha, Rosemary, Rose, Rubberplant, Salvia, Schefflera, Sedum, Sempervivum, Snapdragon, Spathiphyllum, Stock, Syngonium, Tulip, Verbena, Vinca, Wandering Jew, Yew, Yucca, Zinnia.

ORNAMENTAL SHRUBS AND PLANTS, such as: Amaranthus, Aster, Azalea, Ferns, Fuchsia, Caladium, Carnation, Chrysanthemum, Dahlia, Daisy, Lilies, Ivy, Ficus, Gardenia, Impatiens, Iris, Jasmine, Lilac, Marigold, Philodendron, Poinsettia, Rose, Zinnia.

ORNAMENTAL TREES, such as: Ash, Birch, Cedar, Cyprus, Dogwood, Fir, Elm, Juniper, Maple, Oak, Pine, Spruce.

CHRISTMAS TREES AND CHRISTMAS TREE PLANTATIONS

NON-CROP USE SITES – Use **A1117.02** on non-crop use sites including, but not limited to, the following: UNCULTIVATED AGRICULTURAL AREAS, such as: farmyards, fuel storage areas, fence rows, rights-of-way, fallow land; soil bank land, barrier strips.

GENERAL SOIL TREATMENTS, such as: Manure, Composts, Cull piles, Mulches, soil application with no mention of crops to be grown (potting soil, tops soil)

NON-FOOD USES: such as athletic fields, campsites, cemeteries, grasslands, pastures, sheds, soil banks, and areas surrounding agricultural farms or other buildings.

TURF AND TURFGRASS (including golf courses and athletic fields): Bentgrass, Bermuda Grass, Bluegrass, Centipede Grass, Fescue, Ryegrass, St. Augustine, Wheatgrass, Zoysia Grass.

PESTS

A1117.02 may be used against the following pests:

Aphids (such as pea aphid, Rosy Apple Aphid), Beetles (such as Japanese beetle), Borers, (such as peachtree borers, peach twig borers), True Bugs, (such as Lygus bugs, stink bugs), Caterpillars, (such as leafrollers, cutworms, loopers, armyworms), Flies (such as walnut husk fly, leafminers and fungus gnats), Leafhoppers, Leafminers, Whiteflies, Mealy Bugs,, Mites, Psyllids (such as pear psylla), Weevils, Scales (such as San Jose scale), Thrips, (such as Western flower thrips).

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.

[**A1117.02** is a trademark of Atticus, LLC]

{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}

[Sublabel B: Turf and Ornamental Use]

{BOOKLET FRONT PANEL LANGUAGE}

A1117.02 [™]

[*Alternate Brand Name:* Atrevia 1.2% SL]

[INSECTICIDE / NEMATICIDE / MITICIDE]
[FOR USE ON TURF & ORNAMENTALS]
[BOTANICAL PRODUCT FOR CONTROL OF INSECTS ON INDOOR AND OUTDOOR TREES, SHRUBS, FLOWERS, HEMP, FRUIT AND NUT TREES, VEGETABLES AND PLANTS]
[INDOOR AND OUTDOOR VEGETABLES, ORNAMENTAL FLOWERS, HEMP, TREES, TURFGRASS, SHRUBS AND PLANTS, INCLUDING PLANTS GROWN IN CONTAINERS, AND INTERIORSCAPES]
[FOR ORGANIC GARDENING]

ACTIVE INGREDIENT:	**(% by weight)**
Azadirachtin	1.2%
OTHER INGREDIENTS:	98.8%
TOTAL	100.0%

Contains 0.0929 lb. (42.2 grams) of azadirachtin 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.)

Read entire label. Use strictly in accordance with precautionary statements and directions for use, and with applicable state and federal regulations.
[See inside label booklet for First Aid, [additional] Precautionary Statements, and Directions for Use.]
[See below additional Precautionary Statements]

EPA Reg. No.: 91234-XX

EPA Est. No.:

Net Contents:

Manufactured for:
Atticus, LLC
5000 CentreGreen Way, Suite 100

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.
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.	

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 or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before use.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

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

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/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 fish and aquatic invertebrates. For terrestrial uses: Do not apply directly to water, or 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 washwater or rinsate. Do not apply when weather conditions favor drift from treated areas. Runoff from treated area may be hazardous to aquatic organisms in neighboring areas.

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 through any irrigation system unless the chemigation instructions on this label are followed. 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 State or Tribal agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow 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:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Socks and shoes

For field sprays:

Keep unprotected persons out of treated areas until sprays have dried.

NON-AGRICULTURAL USE REQUIREMENTS

These requirements apply to uses of this product that are NOT within the WPS for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. For other uses including golf courses and other non-agricultural uses, do not enter treated areas without protective clothing until sprays have dried.

PRODUCT DESCRIPTION

A1117.02 is a botanical product for control of insects on indoor and outdoor plants including ornamental trees, shrubs, flowers, vegetables, turfgrass, fruit trees and nut trees.

When used as a component of an Integrated Pest Management (IPM) program, **A1117.02** provides an effective resistance management tool.

MODE OF ACTION

A1117.02 controls target pests on contact or by ingestion. The product acts on pests by way of repellence, anti-feedance, and interference with the molting process.

Azadirachtin, an insect growth regulator (IGR), mimics the pests' hormones and disrupts distinct stages of growth and development of insects and mites. The primary mode of action of azadirachtin is an interference with synthesis and metabolism of ecdysone and the juvenile hormone. Ecdysone is the molting hormone of insects, and azadirachtin can regulate growth leading to death before or during molting.

INDOOR AND OUTDOOR ORNAMENTAL TREES, SHRUBS, FLOWERS, AND PLANTS ESTABLISHED IN RESIDENTIAL, LANDSCAPE PLANTINGS AROUND INSTITUTIONAL, PUBLIC, COMMERCIAL AND INDUSTRIAL BUILDINGS, PARKS, RECREATIONAL AREAS, GREENHOUSES, SHADECLOTHS, NURSERIES, AND ATHLETIC FIELDS.

A1117.02 has been evaluated for phytotoxicity on a wide range of ornamentals and crops. However, since testing on all plant varieties is not feasible, test a small portion of the area to be treated for phytotoxicity before treating the entire area. All possible combinations or sequences of pesticide sprays, including other fertilizers, surfactants, adjuvants and other pesticides have not been tested. Thus, test for phytotoxicity of spray mixtures.

The professional user assumes the responsibility for determining the level of tolerance of treated plants to **A1117.02** when applied alone or in tank-mix combinations under commercial growing conditions.

Waxy bloom on certain ornamental plants is reduced after an **A1117.02** application.

Applications of **A1117.02** will remove the glaucus “blue” coloring from evergreens such as Colorado blue spruce and Koster spruce.

Use A1117.02 on the following plants:

Ornamental Plants and Flowers including but not limited to:	Actinopteris, African violets*, ageratum, aglaonema, Algerian ivy, allamanda, alocasia, amaranthus, anthurium, aphelandra, arborvitae, Artemisia, aster, aucuba ilex, azalea, baby's breath, begonia, Boston fern, bougainvillea, boxwood, brachycome, cacti, calabrese, caladium, calathea, calendula, calla, camellia, carnation, ceanothus, chrysanthemum, cineraria, coleus, columbine, cotoneaster, cyclamen, daffodil, dahlia, daisy, daylily, delphinium, dianthus, dieffenbachia, dogwood, dusty miller, Easter lily, English ivy, euphorbia, fern, ficus, foliage plants, foxglove, freesia, fuschia, gaillardia, gardenia, geranium, gerbera, gladiola, gloxinia, gypsophilla, hedera, hibiscus, hyacinth, hydrangea, ilex, impatiens, iris, ivy, jasmine, lilac, lily, maidenhair fern, mandevilla, marigold, narcissus, nasturtium, orchid*, pansy, pelargonium, peony, peperomia, petunia, philodendron, phlox, photinia, pinks, pittosporum, poinsettia*, pothos, portulaca, primrose, pyracantha, rhododendron, rose*, rosemary, rubber plant, salvia, schefflera, sedum, sempervivum, snapdragon, spathiphyllum, stock, syngonium, tulip, verbena, vinca, wandering jew, yucca, zinnia ***Please note that when making applications to these species, spotting of plant foliage is possible.**
Ornamental Trees and Shrubs including but not limited to:	Andromeda, arborvitae, ash, Austrian pine, azalea, beech, birch, birds nest spruce, blue spruce, bougainvillea, boxwood, butternut, cedar, charmaecyparis, cherry, cotoneaster, crabapple, cyprus, dogwood, Douglas fir, elm, euonymus, firethorn, forsythia, hackberry, hawthorn, hemlock, hickory, holly, honey locust, horse chestnut, juniper, larch, laurel, lilac, linden, London planetree, magnolia, mandevilla, maple, mimosa, mountain ash, myrtle, oak, pachysandra, peach, photinia, pine, planetree, poplar, privet, purpleleaf wintercreeper, quince, sage, spruce, sycamore, white cedar, white pine, yew
Other Crops	Hemp

PESTS CONTROLLED OR SUPPRESSED

Use **A1117.02** against the following pests presented in **Table 1**.

Table 1. TARGET PEST SPECIES OF A1117.02

HEMIPTERA AND *HOMOPTERA* including but not limited to: **true bugs** including boxelder bugs, chinch bugs, lygus bugs and stink bugs; **lacebugs; leafhoppers** including grape leafhopper, spittlebug, potato leafhopper and variegated leafhopper; **mealy bugs** including apple mealy bugs, citrus mealy bugs, grape mealy bugs; **whiteflies** including greenhouse whitefly, silverleaf whitefly and sweet potato whitefly and woolly whitefly; **aphids** including apple aphid, green peach aphid, melon aphid, pea aphid, potato aphid and rose aphid; **psyllids** including pear psyllids and **scales** including black scale, brown soft scale, California red scale, coffee scale, olive scale, San Jose scale, and cottony cushion scale.	*LEPIDOPTERA* Including but not limited to: **Moths** including European pine shoot moth, pine tip moth and Tussock moth; **leafrollers** including blueberry leafroller, filbert leafroller, fruitree leafroller, citrus leafminers, grape leafroller, oblique banded leafroller, omnivorous leafroller; **Cutworms** including black cutworm and citrus cutworm; **Caterpillars and loopers** including bagworms, budworms, cabbage looper, canker worms, case bearers, caseworms, corn earworm, diamondback moth, fruit worms, grapeleaf skeletonizer, gypsy moth, hornworms, imported cabbageworm, navel orangeworm, soybean looper, spruce budworm, tent caterpillar, tip moths, tobacco budworm, tobacco hornworm, tomato pinworm and tussock moth; **Armyworms** including beet armyworm, fall armyworm, lawn armyworm, southern armyworm and yellow striped armyworm; **webworms** and **leaf perforators.**
COLEOPTERA including but not limited to: **beetles, grubs and weevils** including Asian long-horned beetle, bark beetles, black vine weevil, Colorado potato beetle, elm bark beetle, European chafer, flea beetles, Japanese beetle, June beetle, leaf beetles, Mexican bean beetle, Northern masked chafer, rose chafer and Southern masked chafer and twig girdlers.	*DIPTERA* Including but not limited to: * **Flies** including Caribbean fruit fly, cherry maggots, crane fly, fungus gnat, Hessian fly, oriental fruit fly, Mediterranean fruit fly, marsh crane flies, melon fly, shore fly and walnut husk fly; **leafminers** including citrus leafminers and serpentine leafminers. *Not intended for use on public health pests
THYSANOPTERA including but not limited to: **thrips** including citrus thrips, flower thrips, gladiolus thrips, onion thrips, thrips palmi and Western flower thrips.	*ACARINA* Including but not limited to: * **mites** including, red spider mites, brown mite, clover mite, conifer spider mite, European red mite, spruce spider mite, and two-spotted spider mite. *Not intended for use on public health pests
ORTHOPTERA including but not limited to: **crickets; grasshoppers; locusts**	*HYMENOPTERA* including but not limited to: * **sawflies** including European sawflies, pear sawflies, red-headed pine sawflies, yellow-headed pin sawflies. *Not intended for use on public health pests
NEMATODA **nematodes** (suppression)	

SPRAY PREPARATION

A1117.02 is an emulsifiable concentrate to be diluted with water.

Water as diluent:

Add one-half the required amount of water to the spray tank, then add **A1117.02** slowly with agitation, and complete filling the tank with water. To prevent separation of the emulsion, mix thoroughly and continue agitation while spraying.

This product forms an emulsion and can separate upon extended or prolonged standing. Re-agitate to assure uniformity of the spray mixture.

Adjusting the mixture pH to between 5 and 7 will provide optimal performance. Do not use tank additives that alter the pH of the spray solution above pH 7. Buffer the spray solution to alter the pH range as appropriate.

Prepare only the volume needed for the intended application and use the spray mixture within 24 hours of preparation.

TANK MIXTURES

A1117.02 is an emulsifiable concentrate and is compatible with commonly used pesticides and fertilizers. Always check the physical compatibility using a jar test in the correct proportions if needed.

A jar test can quickly determine physical compatibility. The process of conducting jar test is given below:

1. Add one pint of water to a glass jar with a lid. (Use the same water source that will go in the tank.).
2. Check spray water pH and adjust if necessary. Often, the pesticide label will give the optimal pH range for best results.
3. Add the pesticides to the jar you plan to use one at a time and shake vigorously after each addition.
4. After all products have been added, shake again, let the solution stand for 15 minutes and then shake one last time and observe the results.
   Results: Jar is cool to the touch, and mixture is smooth. Then it is compatible mixture.

If a broader spectrum of control is required tank-mix **A1117.02** with insecticides or miticides. If a rapid knockdown of heavy populations is necessary, then include an effective contact insecticide/miticide in combination with **A1117.02**.

Tank mixtures are for use only in states where the companion product(s) and the application site are registered.

Always read and follow the directions for use, precautions and limitations for use on all product labels used in combination. Applications must follow the precautions and limitations of the most restrictive product label in the mixture. Do not exceed the dosage rates of any product.

Select the right companion products:

IPM uses a variety of control options including biological, chemical, and cultural practices. Azadirachtin is botanical with growth regulator effect on insects and mites. Companion products include pyrethroids, spinosyns, microbial toxins, and chloronicotinyls that can complement azadirachtin. Formulations of bifenthrin, spinosad, abamectins, and imidacloprid are effective for different pests. Select the product that has been proven to provide adequate performance for the pests you are trying to control.

Physical Incompatibility

Do not use **A1117.02** with Captan, Bordeaux mixture, triphenyltin hydroxide, lime sulfur, Rayplex iron or other highly alkaline materials as they can cause phytotoxicity and/or reduced efficacy on some target pests. Tank-mix combinations with compounds known to be incompatible with oil-based formulations are not to be used or phytotoxicity will occur.

ADJUVANTS

The addition of adjuvants may enhance control under certain conditions; test the use of adjuvants or oils prior to use as they may cause phytotoxicity. Do not add crop oils to spray mixtures intended for use on ornamental plants, flowers, trees, and shrubs.

APPLICATION EQUIPMENT

Ground Equipment

Apply **A1117.02** with hand-operated (manual) or power spray equipment suitable for low volume and/or high volume applications. Follow the directions of the equipment manufacturer when using backpack sprayers, hose-end sprayers, compression (pump-up) sprayers, and other sprayers suitable for foliar applications of insecticides.

Chemigation and Subsurface Equipment

A1117.02 may also be applied through chemigation systems and sub-soil treatment equipment; always follow equipment manufacturer's directions.

APPLICATION SCHEDULE

For the most effective control, apply the product when pests are expected to appear or as soon as possible after pests appear and are in immature stages. Spray at an interval of seven (7) to ten (10) days or as the situation warrants.

During high pest infestation levels or when canopy is dense use higher dosage (use) rates and increase the spray frequency. Spray in the morning or evening hours. Repeat spraying if rain occurs within two to three hours of spraying. For additional guidance, consult with the state agricultural experiment station or local extension horticulturalist/arborist for information on tactics and windows of application.

{NOTE TO REVIEWER: Registrant may add or remove the following state restriction statement as required throughout. (e.g., NOT FOR USE IN CALIFORNIA)**}**

[NOT FOR USE IN _____]

APPLICATION RATES

Use **A1117.02** on ornamental pests as a spray concentration of 0.25 - 1.70% vol/vol per treatment with high volume applications in **Table 2**.

The application rates are specified as rate ranges depending upon the pest infestations:

Lower rate ranges with a spray concentration of 0.25-0.75% vol/vol: Use lower rate ranges for light infestations of lepidopterous insects, at the first sign or at the first observation of the early and uniform growth stages of the pest(s), and/or tank mixtures with contact insecticides.

Medium rate ranges with a spray concentration of 0.75-1.25% vol/vol: Use medium rate ranges for moderate infestations, when multiple growth stages of the pests are present, and/or heterogeneous pesticide populations are present.

Upper rate ranges with a spray concentration of 1.25-1.70% vol/vol: Use upper rate ranges for moderate to heavy pest populations of difficult-to- control pest species, for the late stages of larva/worms, for dense foliage, and/or when re-infestations occur.

High Volume Applications:
Apply **A1117.02** at spray concentration of 0.25 - 1.70% v/v in sufficient amounts of water to achieve complete coverage. Use an adequate spray volume to wet the leaves (foliage) and stems. Spray volumes will vary with the plant size. Attempt to penetrate dense foliage. Thorough coverage of the upper and lower leaf surfaces is critical for effective levels of control.

Refer to **Table 3** for the amounts of **A1117.02** required to prepare spray concentrations of 0.25% to 1.70% for spray volumes of 1 gallon to 200 gallons.

Specialized Low Volume Applications:
Select a spray volume to achieve sufficient coverage. Uniform coverage of both upper and lower leaf surfaces is critical for effective insect control.

Apply **A1117.02** in a minimum spray volume of 5 gallons per acre. Larger plants will require the higher spray volumes (20 - 25 gallons per acre) to obtain sufficient coverage. Do not exceed 20 grams active ingredient per acre per application or 57 fl. oz. of product per acre per application. Refer to **Table 4** for the amounts of **A1117.02** required to prepare spray concentrations of 0.25% to 1.70% for spray volumes of 5 - 25 gallons per acre.

Table 2. APPLICATION RATES FOR ORNAMENTALS ESTABLISHED IN RESIDENTIAL, LANDSCAPE PLANTINGS AROUND INSTITUTIONAL, PUBLIC, COMMERCIAL AND INDUSTRIAL BUILDINGS, PARKS, RECREATIONAL AREAS, GREENHOUSES, SHADECLOTHS, NURSERIES, AND ATHLETIC FIELDS

USE	PESTS	SPRAY CONCENTRATION %	AMOUNTS OF A1117.02		
			FL. OZ. / GAL.	FL. OZ. / 100 GAL.	QT / 100 GAL.
Including trees, shrubs, flowers, conifers, evergreens, herbaceous ornamentals, foliage plants, container-grown ornamentals, plants, Hemp, and groundcovers	Armyworms Azalea caterpillars Aphids Bagworms Black vine weevils Boxelder bugs Budworms Cankerworms Cutworms Eastern tent caterpillars Elm leaf beetles European sawflies Fall webworms Flea beetles Forest tent caterpillars Gypsy moth larvae Japanese beetles June beetles Lace bugs Leaf-feeding caterpillars Leafhoppers Leafminers Leaf rollers Leaf skeletonizers	Lower rate ranges of 0.25-0.75% vol/vol: Medium rate ranges of 0.75-1.25% vol/vol: Upper rate ranges of 1.25-1.70% vol/vol:	0.32 - 1.0 fl. oz 1.00 - 1.60 fl. oz 1.60 - 2.18 fl. oz.	32 - 96 fl. oz. 96 - 160 fl. oz. 160 - 218 fl. oz.	1.0 - 3.0 qts. 3.0 - 5.0 qts. 5.0 - 6.8 qts.

	Oleander moth larvae Pine sawflies Pine shoot beetles Pinetip moths Plant bugs Sawflies (larva) Scale insects (crawlers) Spruce budworm Striped beetles Striped oakworms Thrips Tussock moth larvae Brown softscale California redscale (crawler) Clover mites Mealybugs Pineneedlescale (crawler) Spider mites Whiteflies and other species identified in **Table 1.**				

Table 3. SPRAY PREPARATION FOR HIGH VOLUME APPLICATIONS FOR SPRAY CONCENTRATIONS OF 0.25% TO 1.70%

Gallons of Water	Amounts of A1117.02 for:						
	0.25%	**0.50%**	**0.75%**	**1.00%**	**1.25%**	**1.50%**	**1.70%**
1 gallon	0.32 fl. oz.	0.64 fl. oz.	0.96 fl. oz.	1.28 fl. oz.	1.60 fl. oz.	1.94 fl. oz.	2.18 fl. oz.
5 gallons	1.60 fl. oz.	3.2 fl. oz.	4.8 fl. oz.	6.4 fl. oz.	8.0 fl. oz.	9.70 fl. oz.	10.9 fl. oz.
10 gallons	3.2 fl. oz.	6.4 fl. oz.	9.6 fl. oz.	12.8 fl. oz.	16.0 fl. oz.	19.4 fl. oz.	21.8 fl. oz.
25 gallons	8.0 fl. oz.	16.0 fl. oz.	24.0 fl. oz.	32 fl. oz.	1.25 qts.	1.50 qts.	1.70 qt.
50 gallons	16.0 fl. oz.	32.0 fl. oz.	1.50 qts.	2.0 qts.	2.5 qts.	3.0 qts.	3.4 qts.
100 gallons	1.0 qt.	2.0 qts.	3.0 qts.	4.0 qts.	5.0 qts.	6.0 qts.	6.8 qts.
150 gallons	1.5 qts.	3.0 qts.	4.5 qts.	6.0 qts.	7.5 qts.	9.0 qts.	10.2 qts.
200 gallons	2.0 qts.	4.0 qts.	6.0 qts.	8.0 qts.	10.0 qts.	12.0 qts.	13.6 qts.

Table 4. SPECIALIZED SPRAY PREPARATION FOR LOW VOLUME APPLICATIONS OF 5-25 GALLONS PER ACRE WITH SPRAY CONCENTRATIONS OF 0.25% to 1.70%

Spray Concentration Desired, % vol/vol	Spray Volume, Gallons Per Acre				
	5 gpa	**10 gpa**	**15 gpa**	**20 gpa**	**25 gpa**
0.25% v/v	1.6 fl. oz/acre	3.2 fl. oz/acre	4.9 fl. oz/acre	6.5 fl. oz/acre	8.0 fl. oz/acre
0.50% v/v	3.2 fl. oz/acre	6.4 fl. oz/acre	9.6 fl. oz/acre	12.8 fl. oz/acre	16.0 fl. oz/acre
0.75% v/v	4.8 fl. oz/acre	9.6 fl. oz/acre	14.4 fl. oz/acre	19.2 fl. oz/acre	24.0 fl. oz/acre
1.00% v/v	6.4 fl. oz/acre	12.8 fl. oz/acre	19.2 fl. oz/acre	25.5 fl. oz/acre	32.0 fl. oz/acre
1.25% v/v	8.0 fl. oz/acre	16.0 fl. oz/acre	24.0 fl. oz/acre	32.0 fl. oz/acre	40.0 fl. oz/acre
1.50% v/v	9.6 fl. oz/acre	19.2 fl. oz/acre	28.9 fl. oz/acre	38.5 fl. oz/acre	48.0 fl. oz/acre
1.70% v/v	10.8 fl. oz/acre	21.6 fl. oz/acre	32.5 fl. oz/acre	43.3 fl. oz/acre	54.0 fl. oz/acre

SPECIFIC USE INSTRUCTIONS:

Decision making for IPM:
Scouting, monitoring, sampling, record-keeping, and predictive models are techniques to determine if and when insecticide/miticide applications are needed. Coincide the application schedule with the most vulnerable stage of the pest. For azadirachtin, target the most vulnerable stages of young larvae and young nymphs. The early larval stages and the early instar stages are more susceptible to this IGR than the later stages of the same pests.

For *Lepidoptera*:

- Armyworms: Apply when larvae are small.
- Bagworms: Apply when bags are small, and larvae are actively feeding.
- Gypsy moth larvae: Apply when larvae are small, and all eggs have hatched.
- Spruce budworms: Apply when larvae are exposed and actively feeding.

For *Acarina*:

- Spider mites: Apply when nymphs are first observed and before mite populations have become severe. Use multiple applications with 7 – 10 day intervals until infestation is controlled. Thorough coverage of both upper and lower leaf surfaces is needed.

For *Thysanoptera*:

- Thrips: Apply early at first signs of infestation and repeat until infestation is controlled.

For *Hymenoptera*:

- Sawfly: Apply when larvae are small. Refer to tree injection method of this label.

For *Hemiptera* and *Homoptera*:

- Leafhoppers: Apply when first observed and repeat applications at 5 - 7 day intervals.
- Mealybugs: Obtain thorough coverage of leaves and twigs.
- Scale: Obtain thorough coverage of leaves and twigs.

For *Coleoptera*:

- Beetles: Apply early at first signs of infestation and repeat applications at 7 - 10 day intervals.
- Japanese beetle (adults): Use foliar applications to repel adult feeding and treat at 5 – 7 day intervals.

For *Diptera*:

- Leafminers: Apply early to larvae when stippling or mining of leaves is first observed. Repeat applications at 7 – 10 day intervals until infestation is controlled.

TURFGRASS ESTABLISHED IN RESIDENTIAL (LAWNS), INSTITUTIONAL, PUBLIC, COMMERCIAL AND INDUSTRIAL SITES, PARKS, RECREATIONAL AREAS, GOLF COURSES, SOD FARMS, AND ATHLETIC FIELDS

Use **A1117.02** to control the pests presented in **Table 5**. Dilute **A1117.02** in water.

The most vulnerable stage to this product is young larvae and nymphs. Schedule treatments for the early larval stages and early instars when populations are established, but before turf damage becomes noticeable.

The maximum rate on turfgrass of **A1117.02** is 57.0 fl. oz of product per acre per application or 1.3 fl. oz product per 1,000 sq. ft. per application. Apply at a rate up to 57 fl. oz of product per acre. Use the higher rate specified on this label for moderate to heavy infestations.

Irrigation:

Avoid (delay or postpone) irrigation for 12 - 24 hours after application of this product.

Mowing:

Avoid (delay or postpone) mowing of the treated area for 12 - 24 hours after treatment.

Degree day and plant phenology models can assist in developing the appropriate application schedule for the target pests. Consult your state university or local Cooperative Extension Service office for specific pest control application timing in your area.

A1117.02 can be tank mixed with other insecticide/miticides if a broader spectrum of pest control is required. Observe all precautionary statements and follow all label directions of companion product(s).

SPECIFIC USE INSTRUCTIONS:

1. Armyworms: Apply during the early morning or late afternoon to maximize control.
2. Sod webworm larvae: Applications in the late afternoon or early evening can maximize control.

Table 5. APPLICATION RATES FOR TURFGRASS ESTABLISHED IN RESIDENTIAL (LAWNS), INSTITUTIONAL, PUBLIC, COMMERCIAL AND INDUSTRIAL SITES, PARKS, RECREATIONAL AREAS, GOLF COURSES, SOD FARMS, AND ATHLETIC FIELDS

USE	PESTS	Amount of A1117.02		Spray Volumes		Number of Application Interval Days
		FL. OZ./ ACRE	FL. OZ / 1,000 sq. ft.	GALS. / ACRE	GALS/1,000 sq. ft.	
Cool-Season and Warm-Season Turfgrass	*Larvae and nymphs of these pests including but not limited to:* Armyworms Bermudagrass mite Cutworms Grasshopper Sod webworm	Up to 57.0 fl. oz.	Up to 1.3 fl. oz.	40 – 100 gpa	1 – 2 gal. / 1,000 sq. ft	As needed, 7 days

DRENCH APPLICATION FOR GREENHOUSES, NURSERIES, INTERIORSCAPES AND FOR PLANTS GROWN IN CONTAINERS:

Use **A1117.02** as a soil drench for effective control of soil-borne insect larvae, including soil-borne larvae of foliar pests, such as fungus gnats, nematodes, or soil borne thrips. When applying as a drench, avoid excessive leaching.

Preventive applications as a soil drench may be warranted for certain pests. Soil drench applications of azadirachtin will have a slower rate of activity because of soil absorption when compared to foliar applications of azadirachtin. Target the initial application of a soil drench treatment to coincide with the early stages of young larvae and young nymphs.

Dilute **A1117.02** with water for concentrations of 0.4 to 0.8% vol/vol. Drench the soil in the pot with one (1) pint of finished spray per 1.0 gallon of soil. For fungus gnats, use the 0.4% spray concentration. For mushroom fly maggot

control, use the 0.6% vol/vol spray concentration. For leafminers and other difficult to control pests, use the 0.8% vol/vol spray concentration. Apply two to three (2-3) applications scheduled at 10-14 day intervals until the pest pressure has ended.

DILUTION TABLE FOR DRENCH APPLICATIONS

Gallons of Water	Amounts of A1117.02			Application Interval	Number of Applications
	0.4%	0.6%	0.8%		
1 gallon	1 Tbs.	1.5 Tbs.	2.0 Tbs.	10 - 14 days	2 – 3
5 gallons	2.7 fl. oz	4.0 fl. oz	5.5 fl. oz	10 - 14 days	2 – 3
10 gallons	5.4 fl. oz	8.0 fl. oz	11.0 fl. oz	10 - 14 days	2 – 3
100 gallons	1.7 qts.	2.5 qts.	3.4 qts.	10 - 14 days	2 – 3

A1117.02 can also be applied through sub-surface treatment equipment. Always follow manufacturer's use directions.

TREE INJECTION [*]

Inject **A1117.02** into mature trees established in landscapes, residential settings, nurseries, and forestry sites. Use appropriate tree injection equipment and follow the instructions provided by the equipment manufacturer.
[*Not for use California]

Application Schedule for Tree Injections

Consult with your state agricultural experiment station, extension specialist, or your local U.S. Forest Service authority for information on the application schedule for specific pests in your area.

Pests Controlled and Hosts:

PESTS	HOSTS
Spruce budworm larva	White Spruce Black Spruce Balsam Fir
Pine false webworm	Eastern White Pine Red Pine
Pine sawfly larvae	White Pine
Cedar leafminer	White Cedar

Dosage Rate for Tree Injections

Use appropriate injection equipment. Inject at the rate of 0.37 - 0. 74 fl. oz (11 - 22 ml) of product per inch tree trunk diameter at breast height. Or inject at the rate of 0.127 - 0.25 grams azadirachtin per inch tree trunk diameter at breast height.

INSTRUCTIONS FOR VEGETABLES, HERBS AND SPICES, FRUITS, AND BERRIES

- For the most effective control, spray the product as soon as possible after pests appear and are in immature stages.
- Spray at an interval of seven (7) to ten (10) days or as the situation warrants. During high pest infestation levels use higher label rates and increase the spray frequency.
- For best results spray in the morning or evening hours.
- Repeat spraying if rain occurs within two to three hours of spraying.

SPRAY EQUIPMENT

Use any suitable application equipment to ensure uniform coverage.

USE RATES

Apply **A1117.02** as directed to any food or non-food crop up to and including the day of harvest, at a maximum rate of 57 fl. oz. (20 grams active ingredient) per acre (1.33 fl. oz. per 1,000 sq. ft.) per application. Rates in **Table 6** pertain to typical pest infestations.

Apply **A1117.02** alone to food crops on the day of harvest.

Dilute **A1117.02** with water at 0.5 - 4.0 tablespoons (Tbs) per gallon of water. For hose end sprayers, set the RATE PER GALLON at the dial setting of 1 to 4 Tbs. depending on the crop and pests. Use the lower RATE PER GALLON for low to moderate infestations and use the higher specified RATE PER GALLON for severe infestations.

Table 6. USE RATES FOR VEGETABLES, HERBS AND SPICES, BERRIES AND FRUIT

CROP	PESTS such as:	Dilution Rate for Sprayers	
		Fl. oz. of product per 1,000 sq. ft.	**Tbs. of product per 1.0 gallon of water**
Leafy Vegetables including but not limited to: **Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Collards, Endive, Kale, Lettuce, Spinach**	Leafrollers, Cutworms, Loopers, Armyworms	0.19 - 0.96 fl. oz.	3/4 Tbs. - 4 Tbs./gal
	True Bugs, Leafhoppers, Whiteflies, Aphids, Beetles, Weevils, Flies, Thrips, Mites	0.24 - 0.96 fl. oz.	1 Tbs. - 4 Tbs./gal
Root Vegetables, including but not limited to: **Beet, Carrot, Horseradish, Parsnip, Potato, Radish, Sweet potato, Turnip, Yams**	Beetles, Weevils	0.11 - 0.25 fl. oz.	1/2 Tbs. – 1 ½ Tbs./gal
	True Bugs, Leafhoppers, Whiteflies, Aphids, Leafrollers, Cutworms, Loopers, Armyworms, Flies, Thrips, Mites	0.24 - 0.96 fl. oz.	1 Tbs. - 4 Tbs./gal
Fruiting Vegetables including but not limited to: **Eggplant, Pepper, Tomatillo, Tomato**	Beetles, Weevils	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	Thrips	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	True Bugs, Leafhoppers, Whiteflies, Aphids, Leafrollers, Cutworms, Loopers, Armyworms, Flies, Mites	0.24 - 0.96 fl. oz.	1 Tbs. - 4 Tbs./gal
Cucurbit Vegetables including but not limited to: **Cucumber, Gourd (edible), Muskmelon, Pumpkin, Squash, Watermelon, including Cantaloupe, Casaba, Gherkins, Melons (including hybrids), Zucchini**	Beetles, Weevils	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	Thrips	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	True Bugs, Leafhoppers, Whiteflies, Aphids, Leafrollers, Cutworms, Loopers, Armyworms, Flies, Mites	0.24 - 0.96 fl. oz.	1 Tbs. - 4 Tbs./gal
Legume Vegetables including but not limited	Beetles, Weevils	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal

to: **Bean, Chickpea, Lentil, Pea**	Thrips	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	True Bugs, Leafhoppers, Whiteflies, Aphids, Leafrollers, Cutworms, Loopers, Armyworms, Flies, Mites	0.24 - 0.96 fl. oz.	1 Tbs. - 4 Tbs./gal
Bulb Vegetables including but not limited to: **Garlic, Onion, Shallot**	Beetles, Weevils	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	Thrips	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	True Bugs, Leafhoppers, Whiteflies, Aphids, Leafrollers, Cutworms, Loopers, Armyworms, Flies, Mites	0.24 - 0.96 fl. oz.	1 Tbs. - 4 Tbs./gal
Berries including but not limited to: **Blackberry, Blueberry, Raspberry, Strawberry,** others include: **Boysenberry, Currants, Dewberry, Elderberry, Gooseberry, Loganberry**	Beetles, Weevils	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	Thrips	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	True Bugs, Leafhoppers, Whiteflies, Aphids, Leafrollers, Cutworms, Loopers, Armyworms, Flies, Mites	0.24 - 0.96 fl. oz.	1 Tbs. - 4 Tbs./gal
Herbs and Spices including but not limited to: **Chive, Dill, Fennel, Mustard, Sage, Sweet Bay, others include: Anise, Balm, Basil, Black pepper, Borage, Caraway, Catnip, Chamomile, Coriander, Cumin, Curry leaf, Dandelion, Fenugreek, Horehound, Hyssop, Marjoram, Marigold, Mint, Nasturtium, Pennyroyal, Peppermint, Rosemary, Savory, Spearmint, Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood**	Beetles, Weevils	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	Thrips	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	True Bugs, Leafhoppers, Whiteflies, Aphids, Leafrollers, Cutworms, Loopers, Armyworms, Flies, Mites	0.24 - 0.96 fl. oz.	1 Tbs. - 4 Tbs./gal
Nut Trees including but not limited to: **Almond, Brazil nut, Filbert, Hickory nut, Pecan, Pistachios, Walnut**	Beetles, Weevils	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	Thrips	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	True Bugs, Leafhoppers, Whiteflies, Aphids, Leafrollers, Cutworms, Loopers, Armyworms, Flies, Mites	0.24 - 0.96 fl. oz.	1 Tbs. - 4 Tbs./gal

Pome Fruits including but not limited to: **Apple, Quince, or** Pear *(Comice varieties: DO NOT apply more than 24 fl oz/A. DO NOT apply after pink stage of flowering; test small areas of other varieties of pears for plant safety prior to full scale usage.)*	Beetles, Weevils	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	Thrips	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	True Bugs, Leafhoppers, Whiteflies, Aphids, Leafrollers, Cutworms, Loopers, Armyworms, Flies, Mites	0.24 - 0.96 fl. oz.	1 Tbs. - 4 Tbs./gal
Stone Fruits including but not limited to: **Apricot, Cherry, Nectarine, Peach, Plum**	Beetles, Weevils	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	Thrips	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	True Bugs, Leafhoppers, Whiteflies, Aphids, Leafrollers, Cutworms, Loopers, Armyworms, Flies, Mites	0.24 - 0.96 fl. oz.	1 Tbs. - 4 Tbs./gal
Citrus Fruits including but not limited to: **Grapefruit, Lemon, Lime, Orange** others include: **Citrus Citron, Mandarin (tangerine), Nectarine, Satsuma (orange mandarin), Tangerine**	Beetles, Weevils	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	Thrips	0.29 - 0.96 fl. oz.	2 Tbs. - 4 Tbs./gal
	True Bugs, Leafhoppers, Whiteflies, Aphids, Leafrollers, Cutworms, Loopers, Armyworms, Flies, Mites	0.24 - 0.96 fl. oz.	1 Tbs. - 4 Tbs.gal

CHEMIGATION GENERAL INFORMATION

Apply this product only through drip (trickle) or sprinkler irrigation systems. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues can result from non-uniform distribution of treated water.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. Direct your questions concerning calibration to your State Extension Service Specialist, the equipment manufacturer, or other expert. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of a responsible person, shall shut the system down and make necessary adjustments should the need arise.

Dilute **A1117.02** with water before introduction into the system. Use the diluted solution within 8 hours. Do not apply in irrigation water if the pH exceeds 7.0. The optimum pH range for application is 5.5 to 6.5. The pH of the irrigation water can be adjusted by use of a suitable buffering agent. Agitation is necessary. Apply at the specified rate using sufficient water to achieve an even distribution within an 8-hour period. Do not apply **A1117.02** at a rate that exceeds 3.5 pints active ingredient per acre (57 fl. oz).

If the irrigation cycle will last longer than 8 hours and the **A1117.02** is premixed in the supply tank, the tank mix must be buffered to a pH of 8 or lower.

For Chemigation Systems Connected to A Public Water System: 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 a year.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone (RPZ), backflow preventer 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 of 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 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, 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 apply when wind speeds favor drift beyond the area intended for treatment.

Operation Of Sprinkler Chemigation or Drip (Trickle) Utilizing A Pressurized Water and Pesticide Injection System: 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 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 that 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.

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

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:

[Nonrefillable container. Do not reuse or refill this container. If empty: Offer for recycling if available or discard in a sanitary landfill. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.]

[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.

[**A1117.02** is a trademark of Atticus, LLC]

{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}

[Sublabel C: For Home Gardens]

{BOOKLET FRONT PANEL LANGUAGE}

A1117.02 [™]

[*Alternate Brand Name:* Atrevia 1.2% SL]

[INSECTICIDE / NEMATICIDE / MITICIDE]
[BOTANICAL PRODUCT FOR CONTROL OF INSECTS ON INDOOR AND OUTDOOR ORNAMENTAL FLOWERS, HEMP, TREES, SHRUBS, VEGETABLES, FRUIT AND NUT TREES, AND PLANTS, INCLUDING PLANTS FROWN IN CONTAINERS, RESIDENTIAL RECIRCULATORY, AEROPONIC, AND HYDROPONIC SYSTESMS, INTERIORSCAPES, HOME AND GARDEN USE]
[FOR ORGANIC GARDENING]

ACTIVE INGREDIENT:	**(% by weight)**
Azadirachtin	1.2%
OTHER INGREDIENTS:	98.8%
TOTAL	100.0%

Contains 0.0929 lb. (42.2 grams) of azadirachtin 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.)

Read entire label. Use strictly in accordance with precautionary statements and directions for use, and with applicable state and federal regulations.

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

EPA Reg. No.: 91234-XX

EPA Est. No.:

Net Contents:

Manufactured for:
Atticus, LLC
5000 CentreGreen Way, Suite 100

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.
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.	

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 or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before use.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. For terrestrial uses: Do not apply directly to water, or 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 washwater or rinsate. Do not apply when weather conditions favor drift from treated areas. Runoff from treated area may be hazardous to aquatic organisms in neighboring areas.

DIRECTIONS FOR USE

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

MODE OF ACTION

A1117.02 controls target pests on contact or by ingestion. The product acts on pests by way of repellence, anti-feedance, and interference with the molting process.

Azadirachtin, an insect growth regulator (IGR), mimics the pests' hormones and disrupts distinct stages of growth and development of insects and mites. The primary mode of action of azadirachtin is an interference with

synthesis and metabolism of ecdysone and the juvenile hormone. Ecdysone is the molting hormone of insects, and azadirachtin can regulate growth leading to death before or during molting.

A1117.02 will provide control results comparable to the synthetic insecticide standards. **A1117.02** provides broad spectrum control with very low environmental impact. **A1117.02** provides all the benefits of azadirachtin, a proven anti-feedant, insect growth regulator (IGR), anti-ovipository, and repellant, as well as a toxin to soft bodied insect larvae.

The active ingredient in **A1117.02** - Azadirachtin - is a unique insecticide, miticide and nematicide.

Mode of Action: Control of different orders of insects or insects in different phases of their life cycle is due to the complexity of the azadirachtin molecule and the many modes of action inherent in azadirachtin.	Anti-Feedant	Insects feed less or not at all on treated plants. Foliage is not damaged, and insects ultimately starve to death.
	Insect Growth Regulator (IGR)	Insects fail to mature and reproduce, eliminating populations over time.
	Anti-ovipository	Insects do not lay eggs on treated plants. The likelihood of insect infestation is greatly decreased in treated plants. This adds a preventive aspect to your insect control.
	Repellant	Insects do not prefer treated plants.

PESTS CONTROLLED OR SUPPRESSED

Use **A1117.02** against the following pests.

TARGET PEST SPECIES OF A1117.02

HEMIPTERA AND *HOMOPTERA*	*LEPIDOPTERA*
including but not limited to: **true bugs** including boxelder bugs, chinch bugs, lygus bugs and stink bugs; **lacebugs; leafhoppers** including grape leafhopper, spittlebug, potato leafhopper and variegated leafhopper; **mealy bugs** including apple mealy bugs, citrus mealy bugs, grape mealy bugs; **whiteflies** including greenhouse whitefly, silverleaf whitefly and sweet potato whitefly and woolly whitefly; **aphids** including apple aphid, green peach aphid, melon aphid, pea aphid, potato aphid and rose aphid; **psyllids** including pear psyllids and **scales** including black scale, brown soft scale, California red scale, coffee scale, olive scale, San Jose scale, and cottony cushion scale.	Including but not limited to: **Moths** including European pine shoot moth, pine tip moth and Tussock moth; **leafrollers** including blueberry leafroller, filbert leafroller, fruitree leafroller, citrus leafminers, grape leafroller, oblique banded leafroller, omnivorous leafroller; **Cutworms** including black cutworm and citrus cutworm; **Caterpillars and loopers** including bagworms, budworms, cabbage looper, canker worms, case bearers, caseworms, corn earworm, diamondback moth, fruit worms, grapeleaf skeletonizer, gypsy moth, hornworms, imported cabbageworm, navel orangeworm, soybean looper, spruce budworm, tent caterpillar, tip moths, tobacco budworm, tobacco hornworm, tomato pinworm and tussock moth; **Armyworms** including beet armyworm, fall armyworm, lawn armyworm, Southern armyworm and yellow striped armyworm; **webworms** and **leaf perforators**.
COLEOPTERA	*DIPTERA*
including but not limited to: **beetles, grubs and weevils** including Asian long-horned beetle, bark beetles, black vine weevil, Colorado potato beetle, elm bark beetle, European chafer, flea beetles, Japanese beetle, June beetle, leaf beetles, Mexican	Including but not limited to: * **Flies** including Caribbean fruit fly, cherry maggots, crane fly, fungus gnat, Hessian fly, oriental fruit fly, Mediterranean fruit fly, marsh crane flies, melon fly,

bean beetle, Northern masked chafer, rose chafer and Southern masked chafer and twig girdlers.	shore fly and walnut husk fly; **leafminers** including citrus leafminers and serpentine leafminers. *Not intended for use on public health pests
THYSANOPTERA including but not limited to: **thrips** including citrus thrips, flower thrips, gladiolus thrips, onion thrips, thrips palmi and Western flower thrips.	*ACARINA* Including but not limited to: * **mites** including red spider mites, brown mite, clover mite, conifer spider mite, European red mite, spruce spider mite, and two-spotted spider mite. *Not intended for use on public health pests
ORTHOPTERA including but not limited to: **crickets; grasshoppers; locusts**	*HYMENOPTERA* including but not limited to: * **sawflies** including European sawflies, pear sawflies, red-headed pine sawflies, yellow-headed pin sawflies. *Not intended for use on public health pests
NEMATODA **nematodes** (suppression)	

FOR USE ON ORNAMENTALS AND LANDSCAPE PLANTINGS

Ornamental Plants and Flowers including but not limited to:	Actinopteris, African violets*, ageratum, aglaonema, Algerian ivy, allamanda, alocasia, amaranthus, anthurium, aphelandra, arborvitae, Artemisia, aster, aucuba, ilex, azalea, baby's breath, begonia, Boston fern, bougainvillea, boxwood, brachycome, cacti, calabrese, caladium, calathea, calendula, calla, camellia, carnation, ceanothus, chrysanthemum, cineraria, coleus, columbine, cotoneaster, cyclamen, daffodil, dahlia, daisy, daylily, delphinium, dianthus, dieffenbachia, dogwood, dusty miller, Easter lily, English ivy, euphorbia, fern, ficus, foliage plants, foxglove, freesia, fuchsia, gaillardia, gardenia, geranium, gerbera, gladiola, gloxinia, gypsophilla, hedera, hibiscus, hyacinth, hydrangea, ilex, impatiens, iris, ivy, jasmine, lilac, lily, maidenhair fern, mandevilla, marigold, narcissus, nasturtium, orchid*, pansy, pelargonium, peony, peperomia, petunia, philodendron, phlox, photinia, pinks, pittosporum, poinsettia*, pothos, portulaca, primrose, pyracantha, rhododendron, rose*, rosemary, rubber plant, salvia, schefflera, sedum, sempervivum, snapdragon, spathiphyllum, stock, syngonium, tulip, verbena, vinca, wandering jew, yucca, zinnia ***Please note that when making applications to these species, spotting of plant foliage is possible.**
Ornamental Trees and Shrubs including but not limited to:	Andromeda, arborvitae, ash, Austrian pine, azalea, beech, birch, birds nest spruce, blue spruce, bougainvillea, boxwood, butternut, cedar, charmaecyparis, cherry, cotoneaster, crabapple, cyprus, dogwood, Douglas fir, elm, euonymus, firethorn, forsythia, hackberry, hawthorn, hemlock, hickory, holly, honey locust, horse chestnut, juniper, larch, laurel, lilac, linden, London planetree, magnolia, mandevilla, maple, mimosa, mountain ash, myrtle, oak, pachysandra, peach, photinia, pine, planetree, poplar, privet, purpleleaf wintercreeper, quince, sage, spruce, sycamore, white cedar, white pine, yew

Waxy bloom on certain ornamental plants will be reduced after an **A1117.02** application.

Applications of **A1117.02** will remove the glaucus 'blue' coloring from evergreens such as Colorado blue spruce and Koster spruce.

FOR USE ON GARDEN VEGETABLES, HERBS, SPICES, FRUITS AND BERRIES

Leafy Vegetables including but not limited to:	Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Collards, Endive, Kale, Lettuce, Spinach
Root Vegetables, including but not limited to:	Beet, Carrot, Horseradish, Parsnip, Potato, Radish, Sweet potato, Turnip, Yams
Fruiting Vegetables including but not limited to:	Eggplant, Pepper, Tomatillo, Tomato
Cucurbit Vegetables including but not limited to:	Cucumber, Gourd (edible), Muskmelon, Pumpkin, Squash, Watermelon, including Cantaloupe, Casaba, Gherkins, Melons (including hybrids), Zucchini
Legume Vegetables including but not limited to:	Bean, Chickpea, Lentil, Pea
Bulb Vegetables including but not limited to:	Garlic, Onion, Shallot
Berries including but not limited to:	Blackberry, Blueberry, Raspberry, Strawberry, others include: Boysenberry, Currants, Dewberry, Elderberry, Gooseberry, Loganberry
Herbs and Spices including but not limited to:	Chive, Dill, Fennel, Mustard, Sage, Sweet Bay, others include: Anise, Balm, Basil, Black pepper, Borage, Caraway, Catnip, Chamomile, Coriander, Cumin, Curry leaf, Dandelion, Fenugreek, Horehound, Hyssop, Marjoram, Marigold, Mint, Nasturtium, Pennyroyal, Peppermint, Rosemary, Savory, Spearmint, Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood
Nut Trees including but not limited to:	Almond, Brazil nut, Filbert, Hickory nut, Pecan, Pistachios, Walnut
Pome Fruits including but not limited to:	Apple, Quince, or Pear *(Comice varieties: DO NOT apply more than 24 fl oz/A. DO NOT apply after pink stage of flowering; test small areas of other varieties of pears for plant safety prior to full scale usage.)*
Stone Fruits including but not limited to:	Apricot, Cherry, Nectarine, Peach, Plum
Citrus Fruits including but not limited to:	Grapefruit, Lemon, Lime, Orange others include: Citrus Citron, Mandarin (tangerine), Nectarine, Satsuma (orange mandarin), Tangerine
Other Crops	Hemp

A1117.02 has been evaluated for phytotoxicity on a wide range of ornamentals and garden plants. However, since testing on all plant varieties is not feasible, test a small portion of the area to be treated for phytotoxicity before treating the entire area.

There are no restrictions on applying **A1117.02** up to the time of harvest.

SPRAY PREPARATION

A1117.02 is an emulsifiable concentrate to be diluted with water.

This product forms an emulsion which separates upon extended or prolonged standing. Re-agitate to assure uniformity of the spray mixture.

Prepare only the volume needed for the intended application and use the spray mixture within 24 hours of preparation.

TANK MIXTURES

A1117.02 is an emulsifiable concentrate and is compatible with commonly used pesticides and fertilizers. Always check the physical compatibility using a jar test in the correct proportions if needed.

A jar test can quickly determine physical compatibility. The process of conducting jar tests is given below:

1. Add one pint of water to a glass jar with a lid. (Use the same water source that will go in the tank.).
2. Check spray water pH and adjust if necessary. Often, the pesticide label will give the optimal pH range for best results.
3. Add the pesticides to the jar you plan to use one at a time and shake vigorously after each addition.
4. After all products have been added, shake again, let the solution stand for 15 minutes and then shake one last time and observe the results.
   Results: Jar is cool to the touch, and mixture is smooth. Then it is compatible mixture.

If a broader spectrum of control is required tank-mix **A1117.02** with insecticides or miticides. If a rapid knockdown of heavy populations is necessary, then include an effective contact insecticide/miticide in combination with **A1117.02**.

Always read and follow the directions for use, precautions and limitations for use on all product labels used in combination. Applications must follow the precautions and limitations of the most restrictive product label in the mixture. Do not exceed the dosage rates of any product.

Select the right companion products:

IPM uses a variety of control options including biological, chemical, and cultural practices. **A1117.02** is a botanical product with growth regulator effect on insects and mites. Companion products include pyrethroids, spinosyns, microbial toxins, and chloronicotinyls that complement azadirachtin. Formulations of bifenthrin, spinosad, abamectins, and imidacloprid are effective for different pests. Select the product that has been proven to provide adequate performance for the pests you are trying to control.

Physical Incompatibility

Do not use **A1117.02** with Captain, Bordeaux mixture, triphenyltin hydroxide, lime sulfur, Rayplex iron or other highly alkaline materials as they can cause phytotoxicity and/or reduced efficacy on some target pests. Phytotoxicity will occur if tank-mix combinations with compounds known to be incompatible with oil-based formulations are used.

APPLICATION EQUIPMENT

Apply **A1117.02** with hand-operated (manual) or power spray equipment suitable for low volume and/or high volume applications. Follow the directions of the equipment manufacturer when using backpack sprayers, hose-end sprayers, compression (pump-up) sprayers, and other sprayers suitable for foliar applications of insecticides.

APPLICATION SCHEDULE

For the most effective control, apply the product when pests are expected to appear or as soon as possible after pests appear and are in immature stages. Spray at an interval of seven (7) to ten (10) days or as the situation warrants.

During high pest infestation levels or when canopy is dense use higher dosage (use) rates and increase the spray frequency. For best results, spray in the morning or evening hours. Repeat spraying if rain occurs within two to three hours of spraying. For additional guidance, consult with your state agricultural experiment station or local extension horticulturist/arborist for information on tactics and windows of application.

APPLICATION METHODS

- For the most effective control, spray the product as soon as possible after pests appear and are in immature stages.
- Spray at an interval of seven to ten days or as the situation warrants. During high pest infestation levels use higher label rates and increase the spray frequency.
- For best results, spray in the morning or evening hours.
- Repeat spraying if rain occurs within two to three hours of spraying.

Apply **A1117.02** as directed to any food or non-food crop up to and including the day of harvest, at a maximum rate of 1.33 fl. oz. per 1,000 sq. ft. per application.

Apply **A1117.02** alone to food/garden crops on the day of harvest.

Dilute **A1117.02** with water at a rate of 0.5 – 4.0 tablespoons (Tbs) per gallon of water. For hose end sprayers, set the RATE PER GALLON at the dial setting of 1 to 4 Tbs. depending on the crop and pests. Use the lower RATE PER GALLON for low to moderate infestations and use the higher specified RATE PER GALLON for severe infestations.

{NOTE TO REVIEWER: Registrant may add or remove the following state restriction statement as required throughout. (e.g., NOT FOR USE IN CALIFORNIA)**}**

[NOT FOR USE IN _____]

FOLIAR APPLICATION

USE	SPRAY CONCENTRATIONS	Amounts of A1117.02	
		FL. OZ. (TBS.) PER QUART	FL. OZ. (TBS.) PER GALLON
Including trees, shrubs, flowers, conifers, evergreens, herbaceous ornamentals, foliage plants, container-grown ornamentals & garden plants, Hemp, and groundcovers	Lower rate ranges of 0.25 - 0.75% vol/vol:	0.08 - 0.25 fl. oz. (1/6 – 1/2 Tbs.)	0.32 - 1.0 fl. oz. (2/3 - 2.0 Tbs.)
	Medium rate ranges of 0.75 - 1.25% vol/vol:	0.25 - 0.40 fl. oz. (1/2 – 5/6 Tbs.)	1.0 - 1.6 fl. oz. (2.0 Tbs. – 1 2/3 Tbs.)
	Upper rate ranges of 1.25 - 1.70% vol/vol:	0.40 - 0.50 fl. oz. (5/6 - 1.0 Tbs.)	1.6 - 2.0 fl. oz. (1 2/3 - 4 Tbs.)

DRENCH APPLICATION

Use **A1117.02** as a soil drench for effective control of soil-borne insect larvae, including soil-borne larvae of foliar pests, such as fungus gnats, nematodes, or soil borne thrips. When applying as a drench, avoid excessive leaching.

Preventive applications as a soil drench may be warranted for certain pests. Soil drench applications of azadirachtin will have a slower rate of activity because of soil absorption when compared to foliar applications of **A1117.02**. Target the initial application of a soil drench treatment to coincide with the early stages of young larvae and young nymphs.

Dilute **A1117.02** with water for concentrations of 0.4 to 0.8% vol/vol. See use rate table below. Add the required amount of **A1117.02** to a clean bucket with at least one-half of the water to be drenched. Agitate the mixture thoroughly and then fill with the remaining water and continue agitation until the product is thoroughly dispersed.

Drench the soil in the pot with one (1) pint of finished product dilution per 1.0 gallon of soil. For fungus gnats, use the 0.4% spray concentration. For mushroom fly maggot control, use the 0.6% vol/vol spray concentration. For leafminers and other difficult to control pests, use the 0.8% vol/vol spray concentration. Make two to three (2-3) applications at 10-14 day intervals until the pest pressure has ended. With high insect pressure make applications every 5 to 6 days. Additional applications of **A1117.02** may be required with increased and prolonged pest infestation.

DILUTION TABLE FOR DRENCH APPLICATIONS

Gallons of Water	Amounts of A1117.02			Application Interval
	0.4%	0.6%	0.8%	
1 gallon	1 Tbs.	1.5 Tbs.	2.0 Tbs	10 – 14 days
1 gallon	0.5 fl. oz.	0.8 fl. oz.	1.0 fl. oz.	10 – 14 days
5 gallons	2.5 fl. oz.	4.0 fl. oz.	5.0 fl. oz.	10 – 14 days
10 gallons	5.0 fl. oz.	8.0 fl. oz.	10.0 fl. oz.	10 – 14 days
100 gallons	1.6 qts.	2.5 qts.	3.1 qts.	10 – 14 days

RESIDENTIAL RECIRCULATORY, AEROPONIC, AND HYDROPONIC APPLICATION

Use **A1117.02** in recirculatory, aeroponic, or hydroponic systems for the control of foliar pests, soil borne insect larvae, including soil borne larvae of foliar pests such as fungus gnats, nematodes or soil borne thrips for interiorscapes, hydroponic, aeroponic and container plants.

Dilute **A1117.02** with water for concentrations of 0.1% to 0.8% vol/vol in a recirculatory or in a hydroponic liquid system. See use rate table below. Agitate the mixture thoroughly until the product is thoroughly dispersed.

For fungus gnats, use the 0.6% vol/vol concentration. For mushroom fly maggot control, use the 0.6% vol/vol concentration. For leafminers and other difficult to control pests, use the 0.8% vol/vol concentration. Make two to three (2-3) applications at 10-14 day intervals until the pest pressure has ended. With high insect pressure make applications every 5 to 7 days. Additional applications of **A1117.02** may be required with increased and prolonged pest infestation.

DILUTION TABLE FOR RECIRCULATORY, AEROPONIC, AND HYDROPONIC APPLICATIONS

Gallons of Water	Amounts of A1117.02					Application Interval
	0.1%	0.2%	0.4%	0.6%	0.8%	
1 gallon	¼ Tbs.	½ Tbs.	1 Tbs.	1.5 Tbs.	2.0 Tbs	7 – 14 days
1 gallon	0.14 fl. oz.	0.25 fl. oz.	0.5 fl. oz.	0.8 fl. oz.	1.0 fl. oz.	7 – 14 days
5 gallons	0.7 fl. oz.	1.3 fl. oz.	2.5 fl. oz.	4.0 fl. oz.	5.0 fl. oz.	7 – 14 days
10 gallons	1.4 fl. oz.	2.6 fl. oz.	5.0 fl. oz.	8.0 fl. oz.	10.0 fl. oz.	7 – 14 days

Preventive applications as a recirculatory system application may be warranted for certain pests.

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:

[Nonrefillable container. Do not reuse or refill this container. If empty: Offer for recycling if available or discard in a sanitary landfill. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.]

[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.

[**A1117.02** is a trademark of Atticus, LLC.]

{LANGUAGE ON LABEL AFFIXED TO CONTAINER}

A1117.02[™]

[*Alternate Brand Name: Atrevia 3.0% SL*]

[INSECTICIDE/NEMATICIDE/MITICIDE]
[FOR ORGANIC GARDENING]

ACTIVE INGREDIENT:	**(% by weight)**
Azadirachtin	1.2%
OTHER INGREDIENTS:	98.8%
TOTAL	100.0%

Contains 0.0929 lb. (42.2 grams) of azadirachtin 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.
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.	

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 or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before use.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic invertebrates. For terrestrial uses: Do not apply directly to water, or 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 washwater or rinsate. Do not apply when weather conditions favor drift from treated areas. Runoff from treated area may be hazardous to aquatic organisms in the neighboring areas.

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:
[**Nonrefillable container**. Do not reuse or refill this container. If empty: Offer for recycling if available or discard in a sanitary landfill. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.]
[**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.]
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See inside label booklet for additional Precautionary Statements and Directions for Use.

Manufactured for:
Atticus, LLC
5000 CentreGreen Way, Suite 100
Cary, NC 27513

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

[Optional Label Claims (may appear throughout the label):

- Insecticide
- Nematicide
- Larvicide
- Antifeedant
- Ovicide
- Miticide
- Reproduction Inhibitor
- Insect Growth Regulator
- Multiple Modes of Action
- Controls insects as listed on the label
- Botanical based active ingredient
- Plant-based Insecticide
- Azadirachtin - Made from seeds of the Neem Tree
- From the Neem Tree “Azadirachta Indica”
- Reduces crop damage
- Spray right up to the time of harvest
- Compliments IPM programs
- Alternative to conventional insecticides
- Only a 4-hour Re-Entry Interval
- For Indoor and Outdoor Use
- For use on turf grass, outdoor shrubs, trees and ornamentals
- For ornamental greenhouse, shade house, interiorscape and nursery use
- For mushroom house use
- For use on food crops
- To control the following insects: aphids, armyworms, beetles, budworms, cutworms, fungus gnats, leafhoppers, leafminers, leafrollers, lepidopterous larvae, loopers, mushroom flies, sawflies, thrips, webworms, and whiteflies; and plant parasitic nematodes such as dagger, golden, and root knot nematodes
- For residential and commercial lawn, flowers and vegetable gardens, farms, forests, sod farms, nurseries, greenhouse food and ornamental plants, mushroom houses, nursery plants, interiorscapes, landscapes, turfgrasses and golf courses
- Use as a spray, drench, fog, or chemigation
- Plant-Based Active Ingredient
- Concentrate
- Zero-day pre-harvest interval
- Effective against soil-borne and foliar pests as listed on the label
- For use in packinghouses
- Easy to Use
- Mix and Spray
- Home and Garden Insecticide
- For residential greenhouses, gardens, flowers, shrubs, plants, trees, houseplants and vegetables
- For indoor and outdoor use
- Control on many insects as listed on this label
- Controls insects without harming plants
- Just Add Water
- Dissolves Completely

- Use on vegetable crops, flowers, and grasses
- Works on tomatoes, peppers, lettuce, squash, pumpkins, and cucumbers
- Works on strawberries, apples, blueberries, citrus fruit, pears
- Works on African violets, begonias, geraniums, peony, phlox, tulip, azaleas, lilacs, rhododendrons, roses, hydrangeas, boxwoods, and more.
- Works on birch trees, oak, spruce/pine, crabapples, dogwood, cherry, magnolia, cypress, and more
- Use on vegetable crops, flowers, & outdoor shrubs
- For controlling the following insects: aphids, armyworms, beetles, borers, caterpillars, chafers, cutworms, grasshoppers, grubs, lace bugs, leafminers, loopers, mealy bugs, mites, mole crickets, nematodes, scales, thrips, weevils, whiteflies
- Use on flowers, outdoor shrubs, trees, vegetable crops, and turf grasses.
- Beetles, stinkbugs, budworms, and more.
- Systemic Insecticide
- For use in hydroponic systems
- For use with tree injection equipment
- For home and garden use.
- For indoor and outdoor vegetables, ornamentals, flowers, trees, shrubs, container grown plants, and interiorscapes.
- Controls aphids, armyworms, beetles, budworms, cutworms, fungus gnats, houseflies, leafhoppers, leafminers, loopers, leafrollers, and other caterpillars, mealybugs, mushroom flies (or sciarid flies), sawflies, scales, thrips, webworms, weevils, whiteflies; and plant parasitic nematodes such as burrowing, dagger, golden and root knot nematodes.
- For use on food crops, ornamentals, shrubs, trees, turfgrass (including golf courses and athletic fields), and non-food uses.
- For greenhouses, shadehouses, interiorscapes, mushroom houses, and nursery uses.
- For commercial and industrial areas.
- For use on [flowering] [and] [green] plants.
- The Power of Neem
- Derived from Neem
- Insect Repellent
- Broad Spectrum [Insecticide][control] [action]
- [For] Use as part of an Integrated Pest Management [program] [strategy]
- Alternative within conventional programs
- For sustainable programs
- Peel Here for Directions & Precautions
- Quadruple action insect control
- Single Product, Multiple Action
- [For Organic Gardening]
- 4in1 – Insecticide, Miticide, Nematicide, Insect Growth Regulator
- 3in1 – Insecticide, Miticide, Nematicide
- Repellent]

{Optional Marketing graphics}