



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

May 11, 2022

Arianna Shorey  
Agent for Kriya Biosys Pvt. Ltd.  
c/o Pyxis Regulatory Consulting, Inc.  
4110 136<sup>th</sup> St. Ct. NW  
Gig Harbor, WA 98332

Subject: Non-PRIA (Pesticide Registration Improvement Act) Labeling Amendment – Correct Application Rates; Correct minor typographical errors  
Product Name: Ecoza Ace  
EPA Registration Number: 96019-3  
Application Date: 04/18/2022  
OPP Case Number: 00355737

Dear Ms. Shorey:

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. “To distribute or sell” is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

Should you wish to add/retain a reference to 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 U.S. Environmental Protection Agency (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

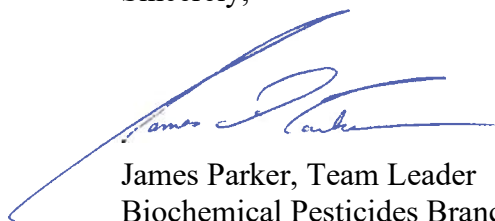
Page 2 of 2  
EPA Reg. No. 96019-3  
OPP Action Case No. 00355737

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.

If you have any questions, please contact Susannah Powell via email at [powell.susannah@epa.gov](mailto:powell.susannah@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "James Parker", is written over a light blue horizontal line.

James Parker, Team Leader  
Biochemical Pesticides Branch  
Biopesticides and Pollution  
Prevention Division (7511P)  
Office of Pesticide Programs

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

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

**Master Label includes:**

**Sublabel A: Agricultural and Commercial Use (p. 1-11)**

**Sublabel B: Turf and Ornamental Use (p. 12-29)**

**Sublabel C: For Home Gardens (p. 30-39)**

**Optional Label Claims and Logos (p. 40-42)**

**Container Base Label (p. 43)**

**Ecoza™ Ace**

**ACCEPTED**

May 11, 2022

Under the Federal Insecticide, Fungicide  
and Rodenticide Act as amended, for the  
pesticide registered under  
EPA Reg. No. 96019-3

**EPA Reg. No. 96019-3**

**EPA Est. No.:**

**Manufactured for:**

Kriya Biosys Private Limited  
No. 114, Orchid Block  
Keerthi Flora, Brookefield, Bangalore  
Karnataka, India 560 037

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



[Peel here to open →]

## Ecoza™ Ace

FOR USE ON GREENHOUSE AND OUTDOOR FOOD CROPS, ORNAMENTAL FLOWERS, GOLF COURSES, TURF, PARKS & ORNAMENTALS

[INSECTICIDE / MITICIDE / NEMATICIDE]

[  FOR ORGANIC GARDENING]

<b>Active Ingredient:</b>	<b>By Wt.</b>
Azadirachtin.....	1.2%
<b>Other Ingredients:</b> .....	<u>98.8%</u>
<b>Total:</b> .....	<b>100.0%</b>

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

### KEEP OUT OF REACH OF CHILDREN CAUTION

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 / side panel / back panel) for (additional / complete) (First Aid,) Precautionary Statements, Directions for Use, and Storage and Disposal.]

EPA Reg. No. 96019-3

EPA Est. No.:

**Manufactured for:**  
Kriya Biosys Private Limited  
No. 114, Orchid Block  
Keerthi Flora, Brookefield, Bangalore  
Karnataka, India 560 037

[Barcode]

Net Contents: \_\_\_\_ [fl. oz.]/[qt]/[gal] ( \_\_\_\_ [mL]/[L])

## {LANGUAGE INSIDE BOOKLET}

<b>FIRST AID</b>
<b>IF SWALLOWED:</b>
<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>IF ON SKIN OR CLOTHING:</b>
<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>HOTLINE NUMBER</b>
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency medical treatment information, contact the Poison Control Center at 1-800-222-1222.

### 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

Ecoza™ Ace 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 Ecoza™ Ace 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 Ecoza™ Ace 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 Ecoza™ Ace 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:** Ecoza™ Ace 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:** Ecoza™ Ace 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 Ecoza™ Ace 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 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 Ecoza™ Ace 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 Ecoza™ Ace 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 Ecoza™ Ace 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 Ecoza™ Ace 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. Ecoza™ Ace can also be applied through sub-surface soil treatment equipment. Always follow equipment manufacturer's use directions. Ecoza™ Ace 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. Ecoza™ Ace 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 Ecoza™ Ace per acre per application.

## **RATES**

Use Ecoza™ Ace 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 Ecoza™ Ace alone. When tank mixed with other insecticidal products, the rate of Ecoza™ Ace 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 Chemigation Instructions**

Apply this product through low pressure, drip (trickle) or sprinkler (center pivot, lateral move, end tow, side (wheel) 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 Ecoza™ Ace 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 Ecoza™ Ace 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 Ecoza™ Ace over a 30-60 minute period. Shut off injection equipment. Continue to operate irrigation system until Ecoza™ Ace has been cleared from the last sprinkler head. Ecoza™ Ace can be injected at the end of the irrigation cycle or as a separate application. Do not use end guns. Ecoza™ Ace 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 Ecoza™ Ace 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.**

#### **USE SITES:**

**AGRICULTURAL USE SITES** – Use Ecoza™ Ace 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), Teosintes, 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), 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 Broccolo, Chinese 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 (red chicory), 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 (edible), 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 (daikon), 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, Ilama, 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 Ecoza™ Ace 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,

Fuschia, 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 Ecoza™ Ace 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**

**Ecoza™ Ace 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 original containers in a cool, well-vented area, away from direct sunlight. Do not allow product to become overheated in storage. This may cause increased degradation of the product, which will decrease product effectiveness. In case of spill, flood area with large quantities of water.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Open dumping is prohibited. If wastes cannot be disposed of according to label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**Container Handling:** [Nonrefillable Containers ≤ 5 gal:] 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 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 incineration.

[Nonrefillable Containers > 5 gal:] 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. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand 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 incineration.

[Refillable Containers:] Refillable container. Refill this container with pesticide only. Do not use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

## **WARRANTY**

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

By using this product, the user accepts the following: LIMITED WARRANTY: To the extent consistent with applicable law, KRIYA BIOSYS PRIVATE LIMITED warrants that (a) this product conforms to the chemical description on its label, (b) this product is reasonably fit for the purposes stated on its label, subject to the inherent risks referred to herein, when used in accordance with its directions; and (c) that the directions, cautions and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and plants, and upon reports of field experience. Testing has not been performed on all varieties of food crops, and plants, in all states, or under all application, weather and crop conditions. There are no express warranties other than those set forth herein. KRIYA BIOSYS PRIVATE LIMITED neither makes nor intends, nor does it authorize any agent or representative to make, any other warranty, express or implied. KRIYA BIOSYS PRIVATE LIMITED expressly excludes and disclaims all implied warranties of merchantability, fitness for particular purpose, or any other warranty of quality of performance. This warranty does not extend to, and the user shall be solely responsible for, any loss or damage that results from the use of this product in any manner that is inconsistent with this label's directions, or cautions. To the extent consistent with applicable law, user's exclusive remedy and KRIYA BIOSYS PRIVATE LIMITED 's or seller's exclusive liability for any claim loss, damage, or injury resulting from the use or handling of this product, whether or not based in contract, negligence, strict liability in tort, or otherwise, shall be limited, at KRIYA BIOSYS PRIVATE LIMITED 's option, to replacement, or repayment of the purchase price for, the quantity of product with respect to which damages are claimed. To the extent consistent with applicable law, in no event shall KRIYA BIOSYS PRIVATE LIMITED or Seller be liable for special, indirect, or consequential damages resulting from the use or handling of this product.

[EPA APPROVAL DATE]

[Sublabel B: Turf and Ornamental Use]  
{BOOKLET FRONT PANEL LANGUAGE}



[Peel here to open →]



## Ecoza™ Ace

[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 Wt.
Azadirachtin.....	1.2%
Other Ingredients:.....	<u>98.8%</u>
<b>Total:</b> .....	<b>100.0%</b>

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

### KEEP OUT OF REACH OF CHILDREN CAUTION

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

[See (side panel / back panel / inside panel) for (additional / complete) (First Aid,) Precautionary Statements, Directions for Use, and Storage and Disposal.]

EPA Reg. No. 96019-3

EPA Est. No.:

**Manufactured for:**  
Kriya Biosys Private Limited  
No. 114, Orchid Block  
Keerthi Flora, Brookefield, Bangalore  
Karnataka, India 560 037

[Barcode]

Net Contents: \_\_\_\_ [fl. oz.]/[qt]/[gal] ( \_\_\_\_ [mL]/[L])

## {LANGUAGE INSIDE BOOKLET}

<b>FIRST AID</b>	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"><li>• Take of contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>HOTLINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency medical treatment information, contact the Poison Control Center at 1-800-222-1222.	

### **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

Ecoza™ Ace 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, Ecoza™ Ace provides an effective resistance management tool.

### MODE OF ACTION

Ecoza™ Ace 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.**

Ecoza™ Ace 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 Ecoza™ Ace when applied alone or in tank-mix combinations under commercial growing conditions.

Waxy bloom on certain ornamental plants is reduced after an Ecoza™ Ace application.

Applications of Ecoza™ Ace will remove the glaucous 'blue' coloring from evergreens such as Colorado blue spruce and Koster spruce.

Use **Ecoza™ Ace** on the following plants:

<p><b>Ornamental Plants and Flowers including but not limited to:</b></p>	<p>Actinopterus, 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, hедера, 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</p> <p><b>*Please note that when making applications to these species, spotting of plant foliage is possible.</b></p>
<p><b>Ornamental Trees and Shrubs including but not limited to:</b></p>	<p>Andromeda, arborvitae, ash, Austrian pine, azalea, beech, birch, birdsnest 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</p>

Other Crops	Hemp
-------------	------

### PESTS CONTROLLED OR SUPPRESSED

Use **Ecoza™ Ace** against the following pests presented in Table 1.

**Table 1. TARGET PEST SPECIES OF ECOZA™ ACE**

<p style="text-align: center;"><i>HEMIPTERA AND HOMOPTERA</i></p> <p>including but not limited to:  <b>true bugs</b> including boxelder bugs, chinch bugs, lygus bugs and stink bug;  <b>lacebugs</b>;  <b>leafhoppers</b> including grape leafhopper, spittlebug, potato leafhopper and variegated leafhopper;  <b>mealy bugs</b> including apple mealy bugs, citrus mealy bugs, grape mealy bugs;  <b>whiteflies</b> including greenhouse whitefly, silverleaf whitefly and sweet potato whitefly and woolly whitefly;  <b>aphids</b> including apple aphid, green peach aphid, melon aphid, pea aphid, potato aphid and rose aphid;  <b>psyllids</b> including pear psyllids; and  <b>scales</b> including black scale, brown soft scale, California red scale, coffee scale, olive scale, San Jose scale, and cottony cushion scale.</p>	<p style="text-align: center;"><i>LEPIDOPTERA</i></p> <p>Including but not limited to:  <b>moths</b> including European pine shoot moth, pine tip moth and Tussock moth;  <b>leafrollers</b> including blueberry leafroller, filbert leafroller, fruitree leafroller, citrus leafminers, grape leafroller, oblique banded leafroller, omnivorous leafroller;  <b>cutworms</b> including black cutworm and citrus cutworm;  <b>caterpillars and loopers</b> 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;  <b>armyworms</b> including beet armyworm, fall armyworm, lawn armyworm, southern armyworm and yellow striped armyworm;  <b>webworms</b>; and  <b>leaf perforators</b>.</p>
<p style="text-align: center;"><i>COLEOPTERA</i></p> <p>including but not limited to:  <b>beetles, grubs and weevils</b> 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, Southern masked chafer and twig girders.</p>	<p style="text-align: center;"><i>DIPTERA</i></p> <p>Including but not limited to:*  <b>Flies</b> including Caribbean fruit fly, cherry maggots, crane fly, <b>fungus gnat</b>, Hessian fly, oriental fruit fly, Mediterranean fruit fly, marsh crane flies, melon fly, shore fly and walnut husk fly;  <b>leafminers</b> including citrus leafminers and serpentine leafminers.</p> <p>*Not intended for use on public health pests</p>
<p style="text-align: center;"><i>THYSANOPTERA</i></p> <p>including but not limited to:  <b>thrips</b> including citrus thrips, flower thrips, gladiolus thrips, onion thrips, thrips palmi and Western flower thrips.</p>	<p style="text-align: center;"><i>ACARINA</i></p> <p>Including but not limited to:*  <b>mites</b> including, red spider mites, brown mite, clover mite, conifer spider mite, European red mite, spruce spider mite, and two-spotted spider mite.</p> <p>*Not intended for use on public health pests</p>

<i>ORTHOPTERA</i> including but not limited to: <b>crickets; grasshoppers; locusts.</b>	<i>HYMENOPTERA</i> including but not limited to: * <b>sawflies</b> including European sawflies, pear sawflies, red-headed pine sawflies, yellow-headed pin sawflies.  *Not intended for use on public health pests
<i>NEMATODA</i> <b>nematodes</b> (suppression).	

## SPRAY PREPARATION

Ecoza™ Ace 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 Ecoza™ Ace 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

Ecoza™ Ace 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 Ecoza™ Ace with insecticides or miticides. If a rapid knockdown of heavy populations is necessary, then include an effective contact insecticide/miticide in combination with Ecoza™ Ace.

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 chloronicotinylns 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 Ecoza™ Ace 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 Ecoza™ Ace 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**

Ecoza™ Ace 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.

## APPLICATION RATES

Use Ecoza™ Ace 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 Ecoza™ Ace 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 Ecoza™ Ace 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 Ecoza™ Ace 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 Ecoza™ Ace 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 ECOZA™ ACE		
			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	Lower rate ranges of 0.25-0.75% vol/vol:	0.32-1.0 fl. oz.	32-96 fl. oz.	1.0-3.0 qts.
	Azalea caterpillars				
	Aphids				
	Bagworms	Medium rate ranges of 0.75-1.25% vol/vol:	1.00-1.60 fl. oz.	96-160 fl. oz.	3.0-5.0 qts.
	Black vine weevils				
	Boxelder bugs				
	Budworms	Upper rate ranges of 1.25-1.70% vol/vol:	1.60-2.18 fl. oz.	160-218 fl. oz.	5.0-6.8 qts.
	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				
	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 Ecoza™ Ace 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.	9.7 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 qts.
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 Ecoza™ Ace Insecticide to control the pests presented in Table 5. Dilute Ecoza™ Ace Insecticide 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 Ecoza™ Ace Insecticide 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.

Ecoza™ Ace Insecticide 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 Ecoza™ Ace		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	<i>Larvae and nymphs of these pests including but not limited to:</i> Armyworms Bermudagrass mite Cutworms Grasshopper	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

Sod webworm					
-------------	--	--	--	--	--

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

Use Ecoza™ Ace Insecticide 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 Ecoza™ Ace Insecticide 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 Ecoza™ Ace			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	2.0 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

Ecoza™ Ace Insecticide can also be applied through sub-surface treatment equipment. Always follow manufacturer's use directions.

## TREE INJECTION

Inject Ecoza™ Ace Insecticide 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.

### 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 Ecoza™ Ace Insecticide 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 Ecoza™ Ace Insecticide alone to food crops on the day of harvest.

Dilute Ecoza™ Ace Insecticide 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
<i>Leafy Vegetables including but not limited to: Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Collards, Endive, Kale, Lettuce, Spinach</i>	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
<i>Root Vegetables, including but not limited to: Beet, Carrot, Horseradish, Parsnip, Potato, Radish, Sweet potato, Turnip, Yams</i>	Beetles, Weevils	0.11 - 0.25 fl. oz.	1/2 Tbs. – 1-1/2 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
<i>Fruiting Vegetables including but not limited to: Eggplant, Pepper, Tomatillo, Tomato</i>	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
<i>Cucurbit Vegetables including but not limited to: Cucumber, Gourd (edible), Muskmelon, Pumpkin, Squash, Watermelon, including Cantaloupe, Casaba, Gherkins, Melons (including hybrids), Zucchini</i>	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
<i>Legume Vegetables including but not limited to: Bean, Chickpea, Lentil, Pea</i>	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
<i>Bulb Vegetables including but not limited to: Garlic, Onion, Shallot</i>	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
<i>Berries including but not limited to: Blackberry, Blueberry, Raspberry, Strawberry, others include: Boysenberry, Currants, Dewberry, Elderberry, Gooseberry, Loganberry</i>	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

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
<i>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</i>	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
<i>Nut Trees including but not limited to: Almond, Brazil nut, Filbert, Hickory nut, Pecan, Pistachios, Walnut</i>	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
<i>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.)</i>	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
<i>Stone Fruits including but not limited to: Apricot, Cherry, Nectarine, Peach, Plum</i>	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
<i>Citrus Fruits including but not limited to: Grapefruit, Lemon, Lime, Orange others include: Citrus Citron, Mandarin (tangerine), Nectarine, Satsuma (orange mandarin), Tangerine</i>	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 Ecoza™ Ace Insecticide 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 Ecoza™ Ace Insecticide 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 Ecoza™ Ace Insecticide 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 original containers in a cool, well-vented area, away from direct sunlight. Do not allow product to become overheated in storage. This may cause increased degradation of the product, which will decrease product effectiveness. In case of spill, flood area with large quantities of water.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Open dumping is prohibited. If wastes cannot be disposed of according to label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**Container Handling:** [Nonrefillable Containers  $\leq$  5 gal:] Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water 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 incineration.

[Nonrefillable Containers > 5 gal:] Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand 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 incineration.

[Refillable Containers:] Refillable container. Refill this container with pesticide only. Do not use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

**WARRANTY**  
**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

By using this product, the user accepts the following: LIMITED WARRANTY: To the extent consistent with applicable law, KRIYA BIOSYS PRIVATE LIMITED warrants that (a) this product conforms to the chemical description on its label, (b) this product is reasonably fit for the purposes stated on its label, subject to the inherent risks referred to herein, when used in accordance with its directions; and (c) that the directions, cautions and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and plants, and upon reports of field experience. Testing has not been performed on all varieties of food crops, and plants, in all states, or under all application, weather and crop conditions. There are no express warranties other than those set forth herein. KRIYA BIOSYS PRIVATE LIMITED neither makes nor intends, nor does it authorize any agent or representative to make, any other warranty, express or implied. KRIYA BIOSYS PRIVATE LIMITED expressly excludes and disclaims all implied warranties of merchantability, fitness for particular purpose, or any other warranty of quality of performance. This warranty does not extend to, and the user shall be solely responsible for, any loss or damage that results from the use of this product in any manner that is inconsistent with this label's directions, or cautions. To the extent consistent with applicable law, user's exclusive remedy and KRIYA BIOSYS PRIVATE LIMITED 's or seller's exclusive liability for any claim loss, damage, or injury resulting from the use or handling of this product, whether or not based in contract, negligence, strict liability in tort, or otherwise, shall be limited, at KRIYA BIOSYS PRIVATE LIMITED 's option, to replacement, or repayment of the purchase price for, the quantity of product with respect to which damages are claimed. To the extent consistent with applicable law, in no event shall KRIYA BIOSYS PRIVATE LIMITED or Seller be liable for special, indirect, or consequential damages resulting from the use or handling of this product.

[EPA APPROVAL DATE]



[Sublabel C: For Home Gardens]  
{BOOKLET FRONT PANEL LANGUAGE}



[Peel here to open →]



# Ecoza™ Ace

[INSECTICIDE / NEMATOCIDE / 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, ANDHYDROPONIC SYSTESMS, INTERIORSCAPES, HOME AND GARDEN USE]

[  FOR ORGANIC GARDENING]

<b>Active Ingredient:</b>	<b>By Wt.</b>
Azadirachtin.....	1.2%
<b>Other Ingredients:</b> .....	<u>98.8%</u>
<b>Total:</b> .....	<b>100.0%</b>

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

## KEEP OUT OF REACH OF CHILDREN CAUTION

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

[See (side panel / back panel / inside panel) for (additional / complete) (First Aid,) Precautionary Statements, Directions for Use, and Storage and Disposal.]

EPA Reg. No. 96019-3

EPA Est. No.:

**Manufactured for:**  
Kriya Biosys Private Limited  
No. 114, Orchid Block  
Keerthi Flora, Brookefield, Bangalore  
Karnataka, India 560 037

[Barcode]

Net Contents: \_\_\_\_ [fl. oz.]/[qt]/[gal] (\_\_\_\_ [mL]/[L])

## {LANGUAGE INSIDE BOOKLET}

<b>FIRST AID</b>
<b>IF SWALLOWED:</b>
<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>IF ON SKIN OR CLOTHING:</b>
<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>HOTLINE NUMBER</b>
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency medical treatment information, contact the Poison Control Center at 1-800-222-1222.

### **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**

Ecoza™ Ace 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.

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

The active ingredient in Ecoza™ Ace - Azadirachtin - is a unique insecticide, miticide and nematicide.

<b>Mode of Action:</b> 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	Insect 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 Ecoza™ Ace against the following pests.

#### TARGET PEST SPECIES OF ECOZA™ ACE

<p style="text-align: center;"><i>HEMIPTERA AND HOMOPTERA</i></p> <p>including but not limited to:  <b>true bugs</b> including boxelder bugs, chinch bugs, lygus bugs and stink bug;  <b>lacebugs</b>;  <b>leafhoppers</b> including grape leafhopper, spittlebug, potato leafhopper and variegated leafhopper;  <b>mealy bugs</b> including apple mealy bugs, citrus mealy bugs, grape mealy bugs;  <b>whiteflies</b> including greenhouse whitefly, silverleaf whitefly and sweet potato whitefly and woolly whitefly;  <b>aphids</b> including apple aphid, green peach aphid, melon aphid, pea aphid, potato aphid and rose aphid;  <b>psyllids</b> including pear psyllids; and  <b>scales</b> including black scale, brown soft scale, California red scale, coffee scale, olive scale, San Jose scale, and cottony cushion scale.</p>	<p style="text-align: center;"><i>LEPIDOPTERA</i></p> <p>Including but not limited to:  <b>moths</b> including European pine shoot moth, pine tip moth and Tussock moth;  <b>leafrollers</b> including blueberry leafroller, filbert leafroller, fruitree leafroller, citrus leafminers, grape leafroller, oblique banded leafroller, omnivorous leafroller;  <b>cutworms</b> including black cutworm and citrus cutworm;  <b>caterpillars and loopers</b> 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, tent caterpillars, tobacco budworm, tobacco hornworm, tomato pinworm and tussock moth;  <b>armyworms</b> including beet armyworm, fall armyworm, lawn armyworm, southern armyworm and yellow striped armyworm;  <b>webworms</b> and;  <b>leaf perforators.</b></p>
<p style="text-align: center;"><i>COLEOPTERA</i></p> <p>including but not limited to:  <b>beetles, grubs and weevils</b> 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, Southern masked chafer and twig girders.</p>	<p style="text-align: center;"><i>DIPTERA</i></p> <p>Including but not limited to:*  <b>flies</b> including Caribbean fruit fly, cherry maggots, crane fly, <b>fungus gnat</b>, Hessian fly, oriental fruit fly, Mediterranean fruit fly, marsh crane flies, melon fly, shore fly and walnut husk fly;  <b>leafminers</b> including citrus leafminers and serpentine leafminers.</p> <p>*Not intended for use on public health pests</p>

<i>THYSANOPTERA</i>	<i>ACARINA</i>
including but not limited to: <b>thrips</b> including citrus thrips, flower thrips, gladiolus thrips, onion thrips, thrips palmi and Western flower thrips.	Including but not limited to: * <b>mites</b> 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
<i>ORTHOPTERA</i>	<i>HYMENOPTERA</i>
including but not limited to: <b>crickets; grasshoppers; locusts</b>	including but not limited to: * <b>sawflies</b> including European sawflies, pear sawflies, red-headed pine sawflies, yellow-headed pin sawflies.  *Not intended for use on public health pests
<i>NEMATODA</i>	
<b>nematodes</b> (suppression)	

### FOR USE ON ORNAMENTALS AND LANDSCAPE PLANTINGS

<b>Ornamental Plants and Flowers including but not limited to:</b>	Actinopterus, 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, hederia, 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  <b>*Please note that when making applications to these species, spotting of plant foliage is possible.</b>
<b>Ornamental Trees and Shrubs including but not limited to:</b>	Andromeda, arborvitae, ash, Austrian pine, azalea, beech, birch, birdsnest 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 Ecoza™ Ace application.

Applications of Ecoza™ Ace will remove the glaucous '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:	<b>Broccoli</b> , Brussels Sprouts, Cabbage, Cauliflower, Collards, Endive, Kale, <b>Lettuce</b> , Spinach
Root Vegetables, including but not limited to:	Beet, <b>Carrot</b> , Horseradish, Parsnip, Potato, Radish, Sweet potato, Turnip, Yams
Fruiting Vegetables including but not limited to:	Eggplant, Pepper, Tomatillo, <b>Tomato</b>
Cucurbit Vegetables including but not limited to:	<b>Cucumber</b> , Gourd (edible), Muskmelon, Pumpkin, Squash, Watermelon, including Cantaloupe, Casaba, Gherkins, <b>Melons</b> (including hybrids), Zucchini
Legume Vegetables including but not limited to:	Bean, Chickpea, Lentil, <b>Pea</b>
Bulb Vegetables including but not limited to:	Garlic, <b>Onion</b> , Shallot
Berries including but not limited to:	Blackberry, Blueberry, Raspberry, <b>Strawberry</b> , others include: Boysenberry, Currants, Dewberry, Elderberry, Gooseberry, Loganberry
Herbs and Spices including but not limited to:	Chive, Dill, Fennel, <b>Mustard</b> , Sage, Sweet bay, others include: Anise, Balm, <b>Basil</b> , Black pepper, Borage, Caraway, Catnip, Chamomile, Coriander, Cumin, Curry leaf, Dandelion, Fenugreek, Horehound, <b>Hyssop</b> , Marjoram, Marigold, Mint, Nasturtium, Pennyroyal, Peppermint, Rosemary, Savory, Spearmint, Tansy, Tarragon, <b>Thyme</b> , Wintergreen, Woodruff, Wormwood
Nut Trees including but not limited to:	<b>Almond</b> , Brazil nut, Filbert, Hickory nut, Pecan, Pistachios, <b>Walnut</b>
Pome Fruits including but not limited to:	<b>Apple</b> , Quince, or Pear ( <i>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.</i> )
Stone Fruits including but not limited to:	Apricot, <b>Cherry</b> , Nectarine, Peach, Plum
Citrus Fruits including but not limited to:	<b>Grapefruit</b> , Lemon, Lime, Orange others include: Citrus Citron, Mandarin (tangerine), <b>Nectarine</b> , Satsuma (orange mandarin), Tangerine
Other Crops	Hemp

Ecoza™ Ace 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 Ecoza™ Ace up to the time of harvest.

### SPRAY PREPARATION

Ecoza™ Ace is an emulsifiable concentrate to be diluted with water.

This product forms an emulsion and 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

Ecoza™ Ace 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 Ecoza™ Ace with insecticides or miticides. If a rapid knockdown of heavy populations is necessary, then include an effective contact insecticide/miticide in combination with Ecoza™ Ace.

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. Ecoza™ Ace is botanical 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 Ecoza™ Ace 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. Phytotoxicity will occur if tank-mix combinations with compounds known to be incompatible with oil-based formulations are used.

### **APPLICATION EQUIPMENT**

Apply Ecoza™ Ace 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 Ecoza™ Ace 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 Ecoza™ Ace alone to food/garden crops on the day of harvest.

Dilute Ecoza™ Ace 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.

### FOLIAR APPLICATION

USE	SPRAY CONCENTRATIONS %	Amounts of Ecoza™ Ace	
		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 Ecoza™ Ace 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 Ecoza™ Ace. Target the initial application of a soil drench treatment to coincide with the early stages of young larvae and young nymphs.

Dilute Ecoza™ Ace with water for concentrations of 0.4 to 0.8% vol/vol. See use rate table

below. Add the required amount of Ecoza™ Ace 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 Ecoza™ Ace may be required with increased and prolonged pest infestation.

### DILUTION TABLE FOR DRENCH APPLICATIONS

Gallons of Water	Amounts of Ecoza™ Ace			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. fl. oz.	4.0 fl. oz.	5.0 fl. oz.	10 - 14 days
10 gallons	5.4 fl. oz.	8.0 fl. oz.	10.0 fl. oz.	10 - 14 days
100 gallons	1 qts.	2.5 qts.	3.1 qts.	10 - 14 days

### RESIDENTIAL RECIRCULATORY, AEROPONIC, AND HYDROPONIC APPLICATION

Use Ecoza™ Ace 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 Ecoza™ Ace with water for concentrations of 0.1% to 0.8% volume/volume 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% volume/volume concentration. For mushroom fly maggot control, use the 0.6% volume/volume concentration. For leafminers and other difficult to control pests, use the 0.8% volume/volume concentration. Make two to three (2-3) applications at 10-14-day intervals until the pest pressure has ended. With high insect pressure applications make applications every 5 to 7 days. Additional applications of Ecoza™ Ace may be required with increased and prolonged pest infestation.

### DILUTION TABLE FOR RECIRCULATORY, AEROPONIC, AND HYDROPONIC APPLICATIONS

Gallons of Water	Amounts of Ecoza™ Ace					Application Interval
	0.1%	0.2%	0.4%	0.6%	0.8%	
1 gallon	1/4 Tbs.	1/2 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 original containers in a cool, well-vented area, away from direct sunlight. Do not allow product to become overheated in storage. This may cause increased degradation of the product, which will decrease product effectiveness. In case of spill, flood area with large quantities of water.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Open dumping is prohibited. If wastes cannot be disposed of according to label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**Container Handling:** [Nonrefillable Containers  $\leq$  5 gal:] Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water 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 incineration.

[Nonrefillable Containers > 5 gal:] Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand 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 incineration.

[Refillable Containers:] Refillable container. Refill this container with pesticide only. Do not use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

## WARRANTY CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

By using this product, the user accepts the following: LIMITED WARRANTY: To the extent consistent with applicable law, KRIYA BIOSYS PRIVATE LIMITED warrants that (a) this product conforms to the chemical description on its label, (b) this product is reasonably fit for the purposes stated on its label, subject to the inherent risks referred to herein, when used in accordance with its directions; and (c) that the directions, cautions and other statements on this label are based upon responsible experts'

evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and plants, and upon reports of field experience. Testing has not been performed on all varieties of food crops, and plants, in all states, or under all application, weather and crop conditions. There are no express warranties other than those set forth herein. KRIYA BIOSYS PRIVATE LIMITED neither makes nor intends, nor does it authorize any agent or representative to make, any other warranty, express or implied. KRIYA BIOSYS PRIVATE LIMITED expressly excludes and disclaims all implied warranties of merchantability, fitness for particular purpose, or any other warranty of quality of performance. This warranty does not extend to, and the user shall be solely responsible for, any loss or damage that results from the use of this product in any manner that is inconsistent with this label's directions, or cautions. To the extent consistent with applicable law, user's exclusive remedy and KRIYA BIOSYS PRIVATE LIMITED 's or seller's exclusive liability for any claim loss, damage, or injury resulting from the use or handling of this product, whether or not based in contract, negligence, strict liability in tort, or otherwise, shall be limited, at KRIYA BIOSYS PRIVATE LIMITED 's option, to replacement, or repayment of the purchase price for, the quantity of product with respect to which damages are claimed. To the extent consistent with applicable law, in no event shall KRIYA BIOSYS PRIVATE LIMITED or Seller be liable for special, indirect, or consequential damages resulting from the use or handling of this product.

[EPA APPROVAL DATE]

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

- Insecticide
- Nematicide
- Larvaecide
- 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 indoors 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 LOGOS (may appear throughout the label)



**{LANGUAGE ON LABEL PERMANENTLY  
AFFIXED TO CONTAINER WHEN BOOKLET  
IS USED}**



**Ecoza™ Ace**



[INSECTICIDE / NEMATOCIDE / MITICIDE]

[  FOR ORGANIC GARDENING ]

<b>Active Ingredient:</b>	<b>By Wt.</b>
Azadirachtin .....	1.2%
<b>Other Ingredients:</b> .....	<b>98.8%</b>
<b>Total:</b> .....	<b>100.0%</b>

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

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

<b>FIRST AID</b>
<b>IF SWALLOWED:</b>
<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>
<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOTLINE NUMBER</b>
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency medical treatment information, contact the Poison Control Center at 1-800-222-1222.

**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.

**STORAGE AND DISPOSAL**

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

**Pesticide Storage:** Store in original containers in a cool, well-ventilated area, away from direct sunlight. Do not allow product to become overheated in storage. This may cause increased degradation of the product, which will decrease product effectiveness. In case of spill, flood area with large quantities of water.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Open dumping is prohibited. If wastes cannot be disposed of according to label directions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**Container Handling:** [Nonrefillable Containers ≤ 5 gal:] 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 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 incineration. [Nonrefillable Containers > 5 gal:] 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. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand 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 incineration. [Refillable Containers:] Refillable container. Refill this container with pesticide only. Do not use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

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

**EPA Reg. No. 96019-3**

**EPA Est. No.:**

**Manufactured for:**  
Kriya Biosys Private Limited  
No. 114, Orchid Block  
Keerthi Flora, Brookefield, Bangalore  
Karnataka, India 560 037

[Barcode] Net Contents: \_\_\_\_ [fl. oz.]/[qt]/[gal] ( \_\_\_\_ [mL]/[L])