

#### U.S. ENVIRONMENTAL PROTECTION AGENCY

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

Date of Issuance:

6/13/16

NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance:
Conditional

EPA Reg. Number:

Name of Pesticide Product:

Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC

Name and Address of Registrant (include ZIP Code):

Sharda USA, LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640 7217 Lancaster Pike, Suite A Hockessin, DE 19707

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

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

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

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

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

Signature of Approving Official:	Date:
Ve	6/13/16
Venus Eagle, Product Manager 01	
Invertebrate-Vertebrate Branch 3, Registration Division (7505P)	

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- 2. You are required to comply with the data requirements described in the DCIs and EDSP Orders identified below:
  - a. Imidacloprid GDCI-129099-951
  - b. Bifenthrin GDCI-128825-902
  - c. Imidacloprid EDSP-129099
  - d. Bifenthrin EDSP-128825

You must comply with all of the data requirements within the established deadlines. If you have questions about the GDCI or EDSP Orders listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division:

http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1

- 3. Make the following label changes before you release the product for shipment:
  - Revise the EPA Registration Number to read, "EPA Reg. No. 83529-61."
- 4. Submit one copy of the final printed label for the record before you release the product for shipment.

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

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

• Basic CSF dated 04/06/2016

If you have any questions, please contact Dee Colby by phone at 703-347-8657, or via email at Colby.deanna@epa.gov.

Enclosure: Stamped label

#### RESTRICTED USE PESTICIDE

Toxic to fish and aquatic organisms. For retail sale to and use only by certified applicators, or persons under their direct supervision and only for those uses covered by the certified applicator's certification.

> 3 4A INSECTICIDE GROUP

# Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC **ABN: IMAX Plus**

ACTIVE INGREDIENT:	WT. BY %
Bifenthrin	
Imidacloprid	
OTHER INGREDIENTS:	
TOTAL	100.00%

<sup>\*\*</sup>Cis isomers 97% minimum, trans isomers 3% maximum. This product contains 2 lbs. active ingredient per gallon.

# KEEP OUT OF REACH OF CHILDREN **WARNING/AVISO**

ACCEPTED

Jun 13, 2016

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 83529-61

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

FIRST AID	
IF SWALLOWED:	Call a poison control center or doctor immediately for treatment advice.
	Have person sip a glass of water if able to swallow.
	Do not induce vomiting unless told to by a poison control center or doctor.
	Do not give anything to an unconscious person.
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.
<ul> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>	
IF ON SKIN OR	Take off contaminated clothing.
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.
IF INHALED:	Move person to fresh air.
	• If person is not breathing, call 911 or ambulance, then give artificial respiration,
	preferably mouth-to-mouth, if possible.
	Call a poison control center or doctor for further treatment advice.

# NOTE TO PHYSICIAN

This product contains a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.

#### **HOTLINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor or going for treatment. In case of an emergency involving this product, call CHEMTREC at 1-800-424-9300.

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



Net Contents:
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# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING

May be fatal if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Causes moderate eye irritation. Avoid contact with eyes or clothing. Avoid breathing spray mist or vapor.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

# Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, PVC, ≥14 mils or viton ≥14 mils.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

## **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 extremely toxic to fish and aquatic invertebrates. Use with care when applying in areas adjacent to any body of water. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not make applications when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are foraging in the treatment area.

The use of bifenthrin is prohibited in areas that may result in exposure of endangered species to bifenthrin. Prior to use in a particular county contact the local extension service for procedures and precautions to use to protect endangered species.

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

#### PHYSICAL AND CHEMICAL HAZARDS

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

# PROTECTION OF POLLINATORS



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

# This product can kill bees and other insect pollinators.

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

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

When Using This Product Take Steps To:

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

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at:

http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: www.npic.orst.edu or directly to EPA at: beekill@epa.gov

#### **DIRECTIONS FOR USE**

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

#### Restricted Use Pesticide

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

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



## 1. FOR CROPS UNDER CONTRACTED POLLINATION SERVICES

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless the following condition has been met. If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.



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

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

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

#### **AGRICULTURAL USE REQUIREMENTS**

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

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

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

- Coveralls
- Chemical-resistant gloves such as barrier laminate, butyl rubber ≥14 mils, nitrile rubber ≥14 mils, neoprene rubber ≥14 mils, natural rubber ≥14 mils, polyethylene, PVC ≥14 mils, or viton ≥14 mils
- Shoes plus socks

#### **RESISTANCE MANAGEMENT**

Some insects are known to develop resistance to products with the same chemical class used repeatedly for control. Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC contains Group 3 and Group 4A insecticides. Although pest resistance cannot be predicted, a general rule to reduce the onset of resistance pest species to Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC is to not consecutively and repeatedly apply Group 3 and/or Group 4A insecticides during a growing season for control of a particular target pest. Consult your local or state agricultural authorities or your Sharda representative for more specific details on insect resistance management strategies.

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

#### **APPLICATION INSTRUCTIONS**

Product rate of application is variable according to pest pressure, timing of sprays, and field scouting. Use lower listed rates under light to moderate infestations; higher listed rates under heavy insect pressure and for mite control. Arid climates generally require using higher listed rates.

Cultivation within 10 feet of a water body is prohibited to allow for the growth of a vegetated filter strip.

#### **Restriction:**

• New York State this product may not be applied within 100 feet (using ground equipment) or 300 feet (using aerial equipment) of coastal marshes or streams that drain into coastal marshes.

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.

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

Do not apply by ground equipment within 25 feet, or by air within 150 feet of lakes; reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds. Increase the buffer zone to 450 feet when ultralow volume (ULV) application is made in cotton.

For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wingtip or rotor vortices. The minimum practical boom length should be used and must not exceed 75% of wing span or rotor diameter.

Use the largest droplet size consistent with good pest control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.

Spray should be released at the lowest height consistent with pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided.

Make aerial or ground applications when the wind velocity favors on target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid applications when wind gusts approach 15 mph.

Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature.

Do not make aerial or ground applications during temperature inversions. Temperature inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

#### **CHEMIGATION USE DIRECTIONS**

Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move; furrow; border or drip (trickle) irrigation& system(s). Do not apply this product through any other type of irrigation system. Do not connect an irrigation system (including greenhouse system) used for pesticide application to a public water system.

For Low Energy Pressure Application (LEPA) irrigation a minimum of 0.75 inch of water per acre is recommended. Where non-emulsified oils are used as the diluent, 1 to 2 pints per acre is recommended.

Results from utilizing chemigation have been variable and depend upon the set up and calibration of equipment. Crop injury, lack of effectiveness, or illegal residues in the crop can result from nonuniform distribution of treated water. Contact your State Agricultural Extension Service specialists, equipment manufacturers or other experts for consultation on the suitability of the equipment set up to obtain effective control of the target insect pests.

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. Failure to cease application during a mechanical stoppage may result in undesirable residues to adjacent areas.

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 back flow.

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

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment. **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** should be applied continuously for the duration of the water application. **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** should be diluted in sufficient volume to ensure accurate application over the area to be treated. When using chemigation, a minimum of 0.5 inch per acre of irrigation water is recommended. Agitation generally is not required when a suitable diluent is used. A diluent test should be conducted to ensure that phase separation will not occur during dilution and application. Failure to achieve a uniform dilution throughout the time of application may result in undesirable residues or less than desirable control.

#### **TANK-MIXTURE**

**Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** may be applied in tank mixtures with other products approved for use on registered crops. Observe all restrictions and precautions which appear on the labels of these products. Test for compatibility of products before mixing.

It is the pesticide user's responsibility to ensure that <u>all products</u> in tank mixtures are registered for the intended use. Users must follow the most restrictive directions and precautionary language of the products in the mixture (for example, first aid from one product, spray drift management from another).

#### **Adjuvants**

The use of a spray adjuvant that meets or exceeds CPDA Adjuvant Certification is recommended for optimum performance. Refer to the individual crop specifications on this label for specific adjuvant type and use rates.

#### **BUFFER ZONES**

#### **Vegetative Buffer Zones**

Construct and maintain a minimum 10-foot-wide vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

For guidance, refer to the following publication for information on constructing and maintaining effective buffers: *Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services.* USDA, NRCS. 2000. Fort Worth, Texas. 21pp.

http://www.nrcs.usda.gov/Internet/FSE DOCUMENTS/nrcs143 023819.pdf

#### Buffer Zone for Ground Application (groundboom, overhead chemigation, or airblast)

Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

#### **Buffer Zone for Non-ULV Aerial Application**

Do not apply within 150 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

**Buffer Zones in New York State:** In New York State this product may not be applied within 100 feet (using ground equipment) or 300 feet (using aerial equipment) of coastal marshes or streams that drain into coastal marshes.

#### **SPRAY DRIFT REQUIREMENTS**

#### **Wind Direction and Speed**

Only apply this product if the wind direction favors on-target deposition. Do not apply when the wind velocity exceeds 15 mph.

#### **Temperature Inversion**

Do not make aerial or ground applications into temperature inversions. Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

# **Droplet Size**

Use only Medium or coarser spray nozzles (for ground and non-ULV aerial application) according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

# **Additional Requirements for Ground Applications**

Wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

For ground boom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

#### **Additional Requirements for Aerial Applications**

The spray boom should be mounted on the aircraft as to minimize drift caused by wingtip or rotor vortices. A minimum practical boom length should be used and must not exceed 75% of the wing span or 80% rotor diameter.

Flight speed and nozzle orientation must be considered in determining droplet size.

Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.

When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

#### **ROTATIONAL CROPS**

Plant back restrictions are determined by the crop. Crops that have tolerances for both bifenthrin and imidacloprid may be rotated at any time. Crops with tolerances for bifenthrin and not imidacloprid can be rotated 12 months following the final application of **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** except as listed below. Crops that have tolerances for imidacloprid and not bifenthrin may be rotated 30 days following the final application of **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC**.

Стор	Rotation Interval
Corn (all), tobacco, tomatoes, eggplant, peppers, bell and non-bell, okra, caneberries, citrus, artichoke, lettuce (head), grapes, spinach, pears, hops, legume vegetables, (edible podded), root tuberous and corm vegetables (except sugar beets), cilantro and coriander, soybeans, strawberries	Immediate Plant-Back
Cereals (Barley, Buckwheat, Millet – pearl and proso, oats, popcorn, rice, rye, sorghum, teosinte, triticale, wheat, and wild rice), Cucurbits, and Safflower	30 Days
Onion and bulb vegetables	10 Months
All other crops that are not on this label.	12 Months

#### **Maximum Allowable Use**

Refer to the individual crop sections for maximum allowable **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** usage per acre per year or per season. The maximum allowable use must include all registered use patterns including at-plant, soil applied and/or foliar applications for the 12 months period. The 12 month period is to begin upon the initial application to the acre.

Do not apply more than 0.5 lb. a.i. of imidacloprid per acre, per year, regardless of formulation or method of application, unless specified within a crop specific applications section for a given crop.

#### **FIELD CROPS**

# **Cotton - Foliar Application**

Pests Controlled	Rates of Application
Armyworm spp.*	5.1 - 7.7 fl. oz./A
Bollworm	(0.08 - 0.12 lb. a.i./A)
Cabbage Looper	
Cotton Leafperforator	
Cutworm spp.	
European Corn Borer	
Pink Bollworm	
Saltmarsh Caterpillar	
Tobacco Budworm**	
Thrips (Adult)	
Whitefly	
Cotton Aphid	3.8 - 7.7 fl. oz./A
Cotton Fleahopper	(0.06 - 0.12 lb. a.i./A)
Lygus spp.	
Southern Garden Leafhopper	
Stink Bug spp.	

- Pre-harvest interval (PHI): Do not apply within 14 days of harvest.
- Application interval: Do not make applications less than 7 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 7.7 fl. oz./A (0.06 lb. a.i./A of imidacloprid, 0.06 lb. a.i./A of Bifenthrin).
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per year: Do not apply more than 39.68 fl. oz./A (0.31 lb. a.i./A of Imidacloprid, 0.31 lb. a.i./A of bifenthrin) as a foliar application in all states but California.
- In California, do not apply more than 38.4 fl. oz./A (0.30 lb. a.i./A of imidacloprid, 0.30 lb. a.i./A of bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per year: 0.31 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.50 lb. a.i./A, except in California. In California, 0.30 lb. a.i./A of bifenthrin per season.
- Do not graze livestock in treated areas or cut treated crops for feed.

#### **Application Instructions:**

Apply in a minimum of 5 gallons per acre with ground equipment or 1 gallon per acre by aircraft. When applying by air, 1 quart of emulsified oil may be substituted for one quart of water in the finished spray. Thorough coverage is essential to achieve control.

#### **Peanut - Foliar Application**

Pests Controlled	Rates of Application
Armyworm spp.*	5.6 fl. oz./A
Corn Earworm	(0.0875 lb. a.i./A)
Cutworm spp.	
Grasshopper	
Green Cloverworm	
Lesser Cornstalk Borer	
Looper spp.	
Rednecked Peanut Worm	
Southern Corn Rootworm	
Threecornered Alfalfa Hopper	
Velvetbean Caterpillar	
Aphid spp.	3.8 - 5.6 fl. oz./A
Leafhopper spp.	(0.06 - 0.0875 lb. a.i./A)

#### **Restrictions:**

- Pre-harvest interval (PHI): Do not apply within 14 days of harvest.
- Application interval: Do not make applications less than 14 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 5.6 fl. oz./A (0.044 lb. a.i./A of imidacloprid, 0.044 lb. a.i./A bifenthrin).
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per year: Do not apply more than 16.64 fl. oz./A (0.13 lb. a.i./A of imidacloprid, 0.13 lb. a.i./A of bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per year: 0.13 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.50 lb. a.i./A
- Do not feed green immature plants and peanut hay to livestock.

#### **Application Instructions:**

Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

<sup>\*</sup>Including all armyworm pests except Beet armyworm.

<sup>\*\*</sup>Pyrethroid resistance is common for this pest. Please consult your local or state agricultural authority to determine if resistance pest populations are in your area. If so refer the resistance management statement in the **DIRECTION FOR USE** section of this label.

#### Potato - At-Plant and Foliar Uses

Pests Controlled	Rates of Application
At-Pl	ant Application
Aphid spp.	16 - 25.6 fl. oz./A
Colorado Potato Beetle	(0.25 - 0.4 lb. a.i./A)
Flea Beetle spp. (Adult)	, , , , , , , , , , , , , , , , , , ,
Flea Beetle spp. (Larvae)	
Japanese Beetle (Larvae)	
Leaf Hopper spp.	
Potato Psyllid	
Rootworm spp.	
White Grub spp.	
Wireworm spp.	
Foli	ar Application
Banded Cucumber Beetle	4.8 - 6.14 fl. oz./A
Colorado Potato Beetle	(0.075 - 0.096 lb. a.i./A)
Cucumber Beetle	
European Corn Borer	
Grasshopper spp.	
Looper spp.	
Flea Beetle spp.	
June Beetle	
Potato Psyllid	
Sugarcane Beetle	
Sweet Potato Flea Beetle	
Sweet Potato Weevil	
Tuberworm	
Whitefringed Beetle	
Whitefly	
Aphid spp.	3.8 - 6.14 fl. oz./A
Leafhopper spp.	(0.06 - 0.096 lb. a.i./A)

#### **Restrictions:**

- Pre-harvest interval (PHI): Do not apply within 21 days of harvest.
- Application interval: Do not make applications less than 7 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application:

**At-Plant Application:** Do not apply more than 25.6 fl. oz./A (0.2 lb. a.i./A of imidacloprid, 0.2 lb. a.i./A bifenthrin).

**Foliar Application:** Do not apply more than 6.14 fl. oz./A (0.048 lb. a.i./A of imidacloprid, 0.048 lb. a.i./A of bifenthrin).

- Maximum amount of **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per year: 25.6 fl. oz./A (0.2 lb. a.i./A of imidacloprid, 0.2 lb. a.i./A bifenthrin). Two applications are permitted per season. It is permitted to make one atplant application followed by a foliar application later in the same growing season.
- Maximum amount of imidacloprid per year: 0.20 lb. a.i./A
- Maximum amount of bifenthrin per season: 0.30 lb. a.i./A as an at-plant application. A total 0.50 lb. a.i./A of bifenthrin per season.
- Do not apply more than 2 foliar applications per season of Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC.

#### **Application Instructions:**

At Plant Applications: In-Furrow Applications: Apply Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC as an in-furrow spray on to the seed pieces or seed potatoes.

**Foliar Application:** Apply in a minimum of 10 gallons per acre with ground equipment or 2 gallon per acre by aircraft. When applying by air, 1 quart of emulsified oil may be substituted for one quart of water in the finished spray.

Thorough coverage is essential to achieve control.

#### **Soybeans - Foliar Application**

Pests Controlled	Rates of Application
Alfalfa Caterpillar	5.1 - 6.1 fl. oz./A
Bean Leaf Beetle	(0.08 - 0.095 lb. a.i./A)
Cloverworm	
Corn Earworm	
Corn Rootworm (Adult)	
Cucumber Beetle	
Cutworm spp.	
European Corn Borer	
Fall Armyworm	
Flea Beetle spp.	
Japanese Beetle (Adult)	
June Beetle (Adult)	
Looper spp.	
Mexican Bean Beetle	
Pea Leaf Weevil	
Pea Weevil	
Sap Beetle (Adult)	
Saltmarsh Caterpillar	
Silverspotted Skipper	
Southern Armyworm	
Threecornered Alfalfa Hopper	
Webworm	
Whitefly	
Yellowstriped Armyworm	
Aphid spp.	3.8 - 6.1 fl. oz./A
Grasshopper	(0.06 - 0.095 lb. a.i./A)
Leafhopper spp.	
Lygus spp.	
Thrips (Adult)(Foliage Feeding)	
Postrictions:	

#### Restrictions:

- Pre-harvest interval (PHI): Do not apply within 21 days of harvest.
- PHI 45 days for feeding of dry vines.
- PHI 18 days for feeding of green vines.
- Application interval: Do not make applications less than 30 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 6.1 fl. oz./A (0.048 lb. a.i./A of imidacloprid, 0.048 lb. a.i./A of bifenthrin).
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per year: Do not apply more than 17.92 fl. oz./A (0.14 lb. a.i./A of imidacloprid, 0.14 lb. a.i./A of bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per year: 0.14 lb. a.i/A as a foliar application.
- Maximum amount of bifenthrin per season: 0.30 lb. a.i./A

# **Application Instructions:**

**Foliar Application:** Apply in a minimum of 5 gallons per acre with ground equipment or 1 gallon per acre by aircraft. When applying by air, 1 quart of emulsified oil may be substituted for one quart of water in the finished spray. Thorough coverage is essential to achieve control.

\*Pyrethroid resistance is common for this pest. Please consult your local or state agricultural authority to determine if resistance pest populations are in your area. If so refer the resistance management statement in the **DIRECTION FOR USE** section of this label.

#### Tobacco - At-Transplant/Pre-Transplant and Foliar Applications (Do not apply after layby.)

Introduction spp.*  Sutworm spp. 1.7 - 2 fl. Sutworm spp. 0.34  Idea Beetle spp. (Adult) Idea Beetle spp. (Larvae)  Mole Cricket Vhite Grub Vireworm spp.  Foliar Application  Impyworm spp.*  5.1	- 25.5 fl. oz./A oz./1,000 linear ft. - 0.40 lb. a.i./A - 6.4 fl. oz./A
Introduction spp. * 1.7 - 2 fl. 1.7 - 2 fl	oz./1,000 linear ft. - 0.40 lb. a.i./A
Sutworm spp.  lea Beetle spp. (Adult) lea Beetle spp. (Larvae)  Mole Cricket  White Grub  Vireworm spp.  Foliar Application  Armyworm spp.*  Shinch Bug Sutworm spp.  lea Beetle spp. (Adult) Sirasshopper spp.  Jornworm spp.  Jornwor	- 0.40 lb. a.i./A
lea Beetle spp. (Adult) lea Beetle spp. (Larvae)  Mole Cricket  White Grub  Vireworm spp.  Foliar Application  Armyworm spp.*  Shinch Bug Cutworm spp.  lea Beetle spp. (Adult) Grasshopper spp.  Jornworm spp.  Jornwor	
lea Beetle spp. (Larvae)  Mole Cricket  White Grub  Vireworm spp.  Foliar Application  Implication  Implication  In thinch Bug  In thin thin thin thin thin	- 6.4 fl. oz./A
Mole Cricket White Grub Wireworm spp.  Foliar Application  rmyworm spp.*  Shinch Bug Utworm spp.  lea Beetle spp. (Adult) Grasshopper spp.  Jornworm spp.  Jornworm spp.  Jornworm spp.  Japanese Beetle  talk Borer	- 6.4 fl. oz./A
White Grub Vireworm spp.  Foliar Application  Armyworm spp.*  Shinch Bug (0.08 Sutworm spp.  lea Beetle spp. (Adult) Grasshopper spp.  Jornworm spp.  Jornworm spp.  Japanese Beetle  talk Borer	- 6.4 fl. oz./A
Foliar Application  srmyworm spp.*  Shinch Bug Sutworm spp.  lea Beetle spp. (Adult) Srasshopper spp.  lornworm spp. apanese Beetle talk Borer	- 6.4 fl. oz /A
Foliar Application  Armyworm spp.* Shinch Bug (0.08 cutworm spp. lea Beetle spp. (Adult) Grasshopper spp. lornworm spp. apanese Beetle talk Borer	- 6.4 fl. oz /A
srmyworm spp.*  Shinch Bug (0.08 Sutworm spp.  lea Beetle spp. (Adult)  Grasshopper spp.  lornworm spp.  apanese Beetle talk Borer	- 6.4 fl. oz /A
Chinch Bug (0.08 Cutworm spp.  Ilea Beetle spp. (Adult)  Grasshopper spp.  Ilornworm spp.  Iapanese Beetle  talk Borer	- 6.4 fl. oz./A
futworm spp. lea Beetle spp. (Adult) Grasshopper spp. lornworm spp. apanese Beetle talk Borer	0
lea Beetle spp. (Adult) Grasshopper spp. Jornworm spp. Japanese Beetle talk Borer	- 0.1 lb. a.i./A)
Grasshopper spp.  Jornworm spp.  Japanese Beetle  talk Borer	
lornworm spp. apanese Beetle talk Borer	
apanese Beetle talk Borer	
talk Borer	
hrips (Adult)	
obacco Budworm**	
Vhitefly	
lant Bug spp. 3.8	
	- 6.4 fl. oz./A
tink Bug spp.	- 6.4 fl. oz./A - 0.1 lb. a.i./A)

#### **Restrictions:**

- Pre-harvest interval (PHI): Do not apply after layby.
- Application interval: Do not make applications less than 7 days apart.
- Maximum amount Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC per application:

**At-Transplant/Pre-Transplant Application:** Do not apply more than 25.5 fl. oz./A (0.2 lb. a.i./A of imidacloprid, 0.2 lb. a.i./A of bifenthrin).

**Foliar Application:** Do not apply more than 6.4 fl. oz./A (0.05 lb. a.i./A of imidacloprid, 0.05 lb. a.i./A of bifenthrin).

- Apply maximum of 2 applications per season.
- Maximum amount Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC per year:

**At-Transplant/Pre-Transplant Application:** Do not apply more than 25.6 fl. oz./A (0.2 lb. a.i./A of imidacloprid, 0.2 lb. a.i./A of bifenthrin).

**Foliar Applications:** Do not apply more than 12.8 fl. oz./A (0.1 lb. a.i./A of imidacloprid, 0.1 lb. a.i./A of bifenthrin).

Maximum amount of imidacloprid per year:

At-Transplant/Pre-Transplant Application: 0.28 lb. a.i./A

Foliar Application: 0.28 lb. a.i./A

Maximum amount of bifenthrin per season: 0.20 lb. a.i./A

# **Application Instructions:**

#### **At-Transplant Water Treatment Application:**

Apply 0.34 - 0.4 lb. a.i./A in a water treatment application of 10-200 gals./A. Ensure product is mixed thoroughly before application.

Foliar Application: Apply a minimum of 10 gallons per acre with ground equipment.

<sup>\*</sup>Including all armyworm pests except Beet armyworm.

<sup>\*\*</sup>Pyrethroid resistance is common for this pest. Please consult your local or state agricultural authority to determine if resistance pest populations are in your area. If so refer the resistance management statement in the **DIRECTION FOR USE** section of this label.

#### **VEGETABLES AND SMALL FRUIT CROPS**

#### Artichoke (Globe) - Foliar Application

Pests Controlled	Rates of Application
Aphid spp.	6.4 - 12.8 fl. oz./A
Artichoke Plume Moth	(0.1 - 0.2 lb. a.i./A)
Cribrate Weevil	
Leafhopper spp.	

#### **Restrictions:**

- Pre-harvest interval (PHI): Do not apply within 7 days of harvest.
- Application interval: Do not make applications less than 15 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 12.8 fl. oz./A (0.1 lb. a.i./A of imidacloprid, 0.1 lb. a.i./A of bifenthrin) per application.
- Maximum amount Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC per year: Do not apply more than 25.6 fl. oz./A (0.50 lb. a.i./A of imidacloprid, 0.50 lb. a.i./A of bifenthrin).
- Maximum amount of imidacloprid per year: 0.50 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.50 lb. a.i./A

#### **Application Instructions:**

Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

## **Brassica Vegetables**

#### **Head and Stem Brassica - Foliar Application**

Head and Stem Brassica Vegetables: Broccoli, Chinese, Broccoli (gai ion, white flowering broccoli), Brussels Sprouts, Cauliflower, Cavalo broccoli, Kohlrabi, Cabbage, Chinese Cabbage (napa), and Chinese Mustard Cabbage (gai choy)

<u> </u>	
Pests Controlled	Rates of Application
Whitefly	6.1 fl. oz./A
	(0.095 lb. a.i./A)
Aphid spp.	3.8 - 6.1 fl. oz./A
Armyworm spp.*	(0.06 - 0.095 lb. a.i./A)
Corn Earworm	
Cricket	
Cucumber Beetle	
Cutworm spp.	
Diamondback Moth**	
Flea Beetle spp.	
Ground Beetle	
Imported Cabbageworm	
Leafhopper spp.	
Looper spp.	
Plant Bug spp.	
Saltmarsh Caterpillar	
Stink Bug spp.	
Thrips (Adult)	
Tobacco Budworm**	
Click Beetle (Wireworm Adults)	

- Pre-harvest interval (PHI): Do not apply within 7 days of harvest.
- Application interval: Do not make applications less than 7 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 6.1 fl. oz./A (0.048 lb. a.i./A of imidacloprid, 0.048 lb. a.i./A of bifenthrin).
- Maximum amount Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC per season: Do not apply more than 30.72 fl. oz./A (0.24 lb. a.i./A of imidacloprid, 0.24 lb. a.i./A of bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per season: 0.24 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.50 lb. a.i./A
- Apply **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** up to 5 applications after bloom.

#### **Application Instructions:**

Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

# **Leafy Brassica - Foliar Application**

Broccoli Raab, Bok Choy, Collards, Kale, Mizuna, Mustard Greens, Mustard Spinach, and Rape Greens

Pests Controlled	Rates of Application
Whitefly	6.1 fl. oz./A (0.095 lb. a.i./A)
Aphid spp.	3.8 - 6.1 fl. oz./A
Armyworm spp.*	(0.06 - 0.095 lb. a.i./A)
Corn Earworm	
Cricket	
Cucumber Beetle	
Cutworm spp.	
Diamondback Moth**	
Flea Beetle spp.	
Ground Beetle	
Imported Cabbageworm	
Leafhopper spp.	
Looper spp.	
Plant Bug spp.	
Saltmarsh Caterpillar	
Stink Bug spp.	
Thrips (Adult)	
Tobacco Budworm**	
Click Beetle (Wireworm Adults)	

#### **Restrictions:**

- Pre-harvest interval (PHI): Do not apply within 7 days of harvest.
- Application interval: Do not make applications less than 7 days apart. Apply Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC up to 5 applications after bloom.
- Maximum Amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 6.1 fl. oz./A (0.048 lb. a.i./A imidacloprid, 0.048 lb. a.i./A bifenthrin) per application.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per season: Do not apply more than 30.72 fl. oz./A (0.24 lb. a.i./A imidacloprid, 0.24 lb. a.i./A bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per season: 0.24 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.50 lb. a.i./A

<sup>\*</sup>Including all armyworm pests except Beet armyworm.

<sup>\*\*</sup>Pyrethroid resistance is common for this pest. Please consult your local or state agricultural authority to determine if resistance pest populations are in your area. If so refer the resistance management statement in the **DIRECTION FOR USE** section of this label.

#### **Application Instructions:**

Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

\*Including all armyworm pests except Beet armyworm.

**Cilantro and Coriander - Foliar Application** 

Pests Controlled	Rates of Application
Aphid spp.	4.24 - 5.5 fl. oz./A
Cabbage Looper	(0.066 - 0.086 lb. a.i./A)
Cutworm spp.	
Flea Beetle spp.	
Grasshopper	
Leafhopper spp.	
Saltmarsh Caterpillar	
Spotted Cucumber Beetle	
Thrips (Adult)	

#### **Restrictions:**

- Pre-harvest interval (PHI): Do not apply within 7 days of harvest.
- Application interval: Do not make applications less than 7 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 5.5 fl. oz./A (0.043 lb. a.i./A of imidacloprid, 0.043 lb. a.i./A of bifenthrin) per application.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per season: Do not apply more than 16.64 fl. oz./A (0.13 lb. a.i./A of imidacloprid, 0.13 lb. a.i./A of bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per season: 0.13 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.50 lb. a.i./A

#### **Application Instructions:**

Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

## **Fruiting Vegetables**

# **Eggplant - Foliar Application**

Pests Controlled	Rates of Application
Armyworm spp.*	5.1 – 9.85 fl. oz./A
Colorado Potato Beetle	(0.08 – 0.15 lb. a.i./A)
Corn Earworm	
Cucumber Beetle	
Cutworm spp.	
European Corn Borer	
Flea Beetle spp.	
Leafminer spp. (Adult)	
Looper spp.	
Thrips (Adult)	
Whitefly	
Aphid spp.	3.8 - 9.85 fl. oz./A
Leafhopper spp.	(0.06 - 0.15 lb. a.i./A)
Lygus spp.	

<sup>\*\*</sup>Pyrethroid resistance is known for this pest. Please consult your local or state agricultural authority to determine if resistance pest populations are in your area. If so refer the resistance management statement in the **DIRECTION FOR USE** section of this label.

- Pre-harvest interval (PHI): Do not apply within 7 days of harvest.
- Application interval: Do not make applications less than 7 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 9.85 fl. oz./A (0.075 lb. a.i./A of imidacloprid, 0.075 lb. a.i./A of bifenthrin).
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per season: Do not apply more than 25.6 fl. oz./A (0.2 lb. a.i./A of imidacloprid, 0.2 lb. a.i./A of bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per season: 0.24 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.20 lb. a.i./A

# **Application Instructions:**

Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

\*Including all armyworm pests except Beet armyworm.

# **Okra - Foliar Application**

Pests Controlled	Rates of Application
Armyworm spp.*	5.1 - 9.85 fl. oz./A
Corn Earworm	(0.08 - 0.15 lb. a.i./A)
Cucumber Beetle	
Cutworms	
European Corn Borer	
Flea Beetle spp.	
Leafminer (Adult)	
Looper spp.	
Japanese Beetle (Adult)	
Stink Bug spp.	
Thrips (Adult)	
Whitefly	
Aphid spp.	3.8 - 9.85 fl. oz./A
Lygus spp.	(0.06 - 0.15 lb. a.i./A)

#### **Restrictions:**

- Pre-harvest interval (PHI): Do not apply within 7 days of harvest.
- Application interval: Do not make applications less than 7 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 9.85 fl. oz./A (0.075 lb. a.i./A of imidacloprid, 0.075 lb. a.i./A of bifenthrin).
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per season: Do not apply more than 25.6 fl. oz./A (0.20 lb. a.i./A of imidacloprid, 0.20 lb. a.i./A of bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per season: 0.24 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.20 lb. a.i./A

#### **Application Instructions:**

Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

# Peppers - Bell and Non-Bell - Foliar Application

Pests Controlled	Rates of Application
Armyworm spp.*	5.1 - 9.85 fl. oz./A
European Corn Borer	(0.08 - 0.15 lb. a.i./A)
Flea Beetle spp.	
Garden Webworm	
Grasshopper spp.	
Hornworm spp.	
Leafhopper spp.	
Meadow Spittlebug	
Pepper Maggot (Adult)	
Pepper Weevil	
Psyllid spp.	
Southwestern Corn Borer	
Stinkbug spp.	
Vegetable Leafminer (Adult)	
Whitefly	
Aphid spp.	3.8 - 9.85 fl. oz./A
Leafhopper spp.	(0.06 - 0.15 lb. a.i./A)

#### **Restrictions:**

- Pre-harvest interval (PHI): Do not apply within 7 days of harvest.
- Application interval: Do not make applications less than 7 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 9.85 fl. oz./A (0.075 lb. a.i./A of imidacloprid, 0.075 lb. a.i./A of bifenthrin).
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per season: Do not apply more than 25.6 fl. oz./A (0.2 lb. a.i./A of imidacloprid, 0.2 lb. a.i./A of bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per season: 0.24 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.20 lb. a.i./A
- Do not graze livestock in treated areas or cut treated crops for feed.

#### **Application Instructions:**

Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

#### **Tomato - Foliar Application**

Tomato - Tomat Application	
Pests Controlled	Rates of Application
Aphid spp.	5.1 - 9.85 fl. oz./A
Flea Hopper	(0.08 - 0.15 lb. a.i./A)
Leafhopper spp.	
Lygus spp.	
Squash Bug	
Stink Bug spp.	
Thrips (Adult)	
Whitefly	

<sup>\*</sup>Including all armyworm pests except Beet armyworm.

<sup>\*\*</sup>Pyrethroid resistance is known for this pest. Please consult your local or state agricultural authority to determine if resistance pest populations are in your area. If so refer the resistance management statement in the **DIRECTION FOR USE** section of this label.

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Armyworm spp.*	3.8 - 9.85 fl. oz./A
Bean Leaf Beetle	(0.06 - 0.15 lb. a.i./A)
Cabbageworm	
Cloverworm	
Colorado Potato Beetle	
Corn Earworm	
Corn Rootworm	
Cucumber Beetle	
Cutworm spp.	
European Corn Borer	
Flea Beetle spp.	
Grasshopper	
Japanese Beetle (Adult)	
Looper spp.	
Saltmarsh Caterpillar	

- Pre-harvest interval (PHI): Do not apply within 1 days of harvest.
- Application interval: Do not make applications less than 10 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 9.85 fl. oz./A (0.075 lb. a.i./A of imidacloprid, 0.075 lb. a.i./A of bifenthrin).
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per season: Do not apply more than 30.2 fl. oz./A (0.24 lb. a.i./A of imidacloprid, 0.24 lb. a.i./A of bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per season: 0.24 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.40 lb. a.i./A
- Do not graze livestock in treated areas or cut treated crops for feed.
- Not for crops grown for seed unless allowed by a state specific 24(c) labeling.

## **Application Instructions:**

Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 15 gallons per acre with ground equipment. When applying by air, 1 quart of emulsified oil may be substituted for 1 quart of water in the finished spray. Thorough coverage is essential to achieve control.

\*Including all armyworm pests except Beet armyworm.

#### **Head Lettuce - Foliar Application**

Pests Controlled	Rates of Application
Armyworm spp.*	5.1 - 6.1 fl. oz./A
Corn Earworm	(0.08 - 0.095 lb. a.i./A)
Cucumber Beetle	
Cutworm spp.	
Flea Beetle spp.	
Imported Cabbageworm	
Looper spp.	
Saltmarsh Caterpillar	
Stink Bug spp.	
Whitefly	
Aphid spp.	3.8 - 6.1 fl. oz./A
Leafhopper spp.	(0.06 - 0.095 lb. a.i./A)
Lygus spp.	•

- Pre-harvest interval (PHI): Do not apply within 7 days of harvest.
- Application interval: Do not make applications less than 7 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 6.1 fl. oz./A (0.048 lb. a.i./A of imidacloprid, 0.048 lb. a.i./A of bifenthrin).
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per season: Do not apply more than 30.72 fl. oz./A (0.24 lb. a.i./A of imidacloprid, 0.24 lb. a.i./A of bifenthrin) as a foliar application
- Maximum amount of imidacloprid per season: 0.24 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.50 lb. a.i./A

## **Application Instructions:**

Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

\*Including all armyworm pests except Beet armyworm.

# **Spinach - Foliar Application**

Pests Controlled	Rates of Application
Armyworm*	5.1 - 6.14 fl. oz./A
Colorado Potato Beetle	(0.08 - 0.096 lb. a.i./A)
Corn Earworm	
Cucumber Beetle	
Cutworm spp.	
European Corn Borer	
Fire Ant spp.	
Flea Beetle spp.	
Leafminer	
Looper spp.	
Thrips (Adult)	
Whitefly	
Aphid spp.	3.8 - 6.14 fl. oz./A
Lygus spp.	(0.06 - 0.096 lb. a.i./A)

#### **Restrictions:**

- Pre-harvest interval (PHI): Do not apply within 40 days of harvest.
- Application interval: Do not make applications less than 7 days apart.
- Maximum amount Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC per application: Do not apply more than 6.14 fl. oz./A (0.048 lb. a.i./a of imidacloprid, 0.048 lb. a.i./a of bifenthrin) per application of Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per season: Do not apply more than 30.72 fl. oz./A (0.24 lb. a.i./A of imidacloprid, 0.24 lb. a.i./A of bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per season: 0.24 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.40 lb. a.i./A

# **Application Instructions:**

Apply in a minimum of 2.5 gallons of finished spray per acre by air or in a minimum of 5 gallons per acre with ground equipment. When applying by air, 1 quart of emulsified oil may be substituted for 1 quart of water in the finished spray. Thorough coverage is essential to achieve control.

#### **Legume Vegetables**

**Dried Beans and Peas - Foliar Application** 

Bean (Lupinus spp.) - includes grain lupin, sweet lupin, white lupin, and white sweet lupin

Bean (Phaseolus spp.) - includes field bean, kidney bean, lima bean (dry), navy bean, pinto bean, tepary bean

**Bean (Vigna spp.)** - includes adzuki bean, blackeyed pea, catjang, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean

Pea (Pisum spp.) - includes field pea, pigeon pea

Other Beans and Peas - broad bean (dry), chickpea, guar, lablab bean, lentil

(See Soybean section for Soybean use directions.)

Pests Controlled	Rates of Application
Alfalfa Caterpillar	5.6 fl. oz./A
Armyworm spp.*	(0.0875 lb. a.i./A)
Bean Leaf Beetle	
Cloverworm	
Corn Earworm	
Corn Rootworm (Adult)	
Cucumber Beetle	
Cutworm spp.	
European Corn Borer	
Flea Beetle spp.	
Japanese Beetle (Adult)	
June Beetle (Adult)	
Looper spp.	
Mexican Bean Beetle	
Pea Leaf Weevil	
Pea Weevil	
Sap Beetle (Adult)	
Saltmarsh Caterpillar	
Silverspotted Skipper	
Southern Armyworm	
Threecornered Alfalfa Hopper	
Webworm	
Whitefly	
Aphid spp.	3.8 - 5.6 fl. oz./A
Grasshopper	(0.06 - 0.0875 lb. a.i./A)
Leafhopper spp.	
Lygus spp.	
Thrips (Adult)(Foliage Feeding)	

#### Restrictions:

- Pre-harvest interval (PHI): Do not apply within 14 days of harvest.
- Application interval: Do not make applications less than 7 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 5.6 fl. oz./A (0.044 lb. a.i./A of imidacloprid, 0.044 lb. a.i./A of bifenthrin)
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per season: Do not apply more than 16.64 fl. oz./A (0.13 lb. a.i./A of imidacloprid, 0.13 lb. a.i./A of bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per season: 0.13 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.20 lb. a.i./A to peas and 0.30 lb. a.i./A to beans.

#### **Application Instructions:**

Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

#### **Succulent Beans and Peas - Foliar Application**

Bean (Phaseolus spp.) - includes runner edible-podded bean, lima bean, snap bean, wax bean

**Bean (Vigna spp.)** - includes asparagus bean, blackeyed pea, cultivar of edible-podded pea Chinese longbean, cowpea, moth bean, southern pea, yardlong

**Pea (***Pisum* **spp.)** - includes dwarf pea, edible-pod pea, English pea, garden pea, green pea, snow pea, sugar snap pea **Other Beans and Peas** - broad bean, jackbean, pigeon pea, soybean (immature seed), sword bean

Other beans and Peas - broad bean, jackbean, pigeon	
Pests Controlled	Rates of Application
Alfalfa Caterpillar	5.6 fl. oz./A
Armyworm spp.*	(0.0875 lb. a.i./A)
Bean Leaf Beetle	
Cloverworm	
Corn Earworm	
Corn Rootworm (Adult)	
Cucumber Beetle	
Cutworm spp.	
European Corn Borer	
Flea Beetle spp.	
Japanese Beetle (Adult)	
June Beetle (Adult)	
Looper spp.	
Mexican Bean Beetle	
Pea Leaf Weevil	
Pea Weevil	
Sap Beetle (Adult)	
Saltmarsh Caterpillar	
Silverspotted Skipper	
Southern Armyworm	
Threecornered Alfalfa Hopper	
Webworm	
Whitefly	2.2.5.6.11
Aphid spp.	3.8 - 5.6 fl. oz./A
Grasshopper	(0.06 - 0.0875 lb. a.i./A)
Leafhopper spp.	
Lygus spp.	
Thrips (Adult)(Foliage Feeding)	

#### **Restrictions:**

- Pre-harvest interval (PHI): Do not apply within 7 days of harvest.
- Application interval: Do not make applications less than 7 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 5.5 fl. oz./A (0.044 lb. a.i./A of imidacloprid, 0.044 lb. a.i./A of bifenthrin).
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per season: Do not apply more than 16.64 fl. oz./A (0.13 lb. a.i./A of imidacloprid, 0.13 lb. a.i./A of bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per season: 0.13 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.20 lb. a.i./A

## **Application Instructions:**

Apply in a minimum of 1 gallons of finished spray per acre by air or in a minimum of 5 gallons per acre with ground equipment. When applying by air, 1 quart of emulsified oil may be substituted for 1 quart of water in the finished spray. Thorough coverage is essential to achieve control.

#### **Strawberry - Foliar Application**

Pests Controlled	Rates of Application
Aphid spp.	5.1 - 6.14 fl. oz./A
Armyworm spp.*	(0.08 - 0.096 lb. a.i./A)
Corn Earworm	
Flea Beetle spp.	
Leafhopper spp.	
Lygus spp.	
Spittlebug	
Whitefly	

#### **Restrictions:**

- Pre-harvest interval (PHI): Do not apply within 7 days of harvest.
- Application interval: Do not make applications less than 5 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 6.14 fl. oz./A (0.048 lb. a.i./A of imidacloprid, 0.048 lb. a.i./A of bifenthrin).
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per season: Do not apply more than 17.92 fl. oz./A (0.14 lb. a.i./A of imidacloprid, 0.14 lb. a.i./A of bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per season: 0.14 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.50 lb. a.i./A
- Do not apply during or within 10 days after bloom or when bees are foraging.
- Aerial applications in Florida are prohibited.

# **Application Instructions:**

Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. Thorough coverage is essential to achieve control.

\*Including all armyworm pests except Beet armyworm.

# **Tuberous and Corm Vegetables - Foliar Application**

Tuberous and Corm vegetables (except Radish and Sugarbeet) Sweet potato, Arracacha, Arrowroot, Chinese artichoke, Jerusalem artichoke, Edible canna, Cassava (bitter and sweet), Chayote (root), Chufa, Dasheen (taro), Ginger, Leren, Tanier, Turmer, Yam bean, True yam

(See Potato section for Potato use directions.)

Pests Controlled	Rates of Application
Banded Cucumber Beetle	5.1 - 7.7 fl. oz./A
Flea Beetle spp.	(0.08 - 0.12 lb. a.i./A)
Colorado Potato Beetle	
Cucumber Beetle	
European Corn Borer	
Flea Beetle spp.	
Grasshopper spp.	
Looper spp.	
June Beetle	
Psyllid spp.	
Sugarcane Beetle	
Sweet Potato Flea Beetle	
Sweet Potato Weevil	
Whitefly	
Whitefringed Beetle	
Aphid spp.	3.8 - 7.7 fl. oz./A
Leafhopper spp.	(0.06 - 0.12 lb. a.i./A)

- Pre-harvest interval (PHI): Do not apply within 21 days of harvest.
- Application interval: Do not make applications less than 7 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 7.7 fl. oz./A (0.06 lb. a.i./A of imidacloprid, 0.06 lb. a.i./A of bifenthrin)
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per season: Do not apply more than 16.64 fl. oz./A (0.13 lb. a.i./A of imidacloprid, 0.13 lb. a.i./A of bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per season: 0.13 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.50 lb. a.i./A
- Do not graze livestock in treated areas or cut treated crops for feed.

#### **Application Instructions:**

Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

# TREE, BUSH, and VINE CROPS

# Citrus (Soil application) (PHI 1 day)

(Australian desert lime, Australian finger lime, Australian round live, Brown River finger lime, Calamondin, Citron, Citrus hybrids, Grapefruit, Japanese summer grapefruit, Kumquat, Lemon, Lime, Mediterranean mandarin, Mount White lime, New Guinea wild lime, Sour orange, Sweet orange, Pummelo, Russell River lime, Satsuma mandarin, Sweet lime, Tachibana orange, Tahiti lime, Tangelo, Tangerine, Tangor, Trifoliate Orange, Uniq Fruit, Cultivars)

Pests Controlled	Rates of Application
Fire Ants (Solenopsis spp.)	12.8 - 32 fl. oz./A
Asian Cockroach (Blattella asahinae)	(0.2 - 0.5 lb. a.i./A)
Diaprepes Root Weevil (Diaprepes abbreviatus)	32 - 64 fl. oz./A
Southern Blue Green Citrus Root Weevil (Pachnaeus litus)	(0.5 - 1.0 lb. a.i./A)
Blue Green Citrus Root Weevil (Pachnaeus opalus)	
Brown Leaf Notcher (Epicaerus mexicanus)	
Little Leaf Notcher (Artipus floridanus)	

- PHI Do not apply within 1 days of harvest
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more 64 fl. oz./A (0.5 lb. a.i./A of imidacloprid, 0.5 lb. a.i./A of bifenthrin).
- Maximum Amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per year: Do not apply more than 64 fl. oz./A (0.5 lb. a.i./A of imidacloprid, 0.5 lb. a.i./A of bifenthrin) per acre per season.
- Maximum amount of imidacloprid per year: 0.50 lb. a.i./A
- Maximum amount of bifenthrin per season: 0.50 lb. a.i./A
- Apply by ground application only. Do not apply by air or through irrigation systems.
- Do not apply during bloom or within 10 days prior to bloom or when bees are foraging.
- Do not allow any application of **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** to contact fruit or foliage.
- Apply the specified dosage in a minimum of 40 gallons of finished spray per acre.

# **Application Instructions:**

Apply **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** by ground equipment to bare soil beneath citrus trees. **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** must be uniformly applied from the trunk to the drip line of tree; apply in a minimum of 40 gallons of dilute spray per acre.

Greater spray volume should insure greater uniformity of coverage. A pre- and post-application irrigation may aid in the uniformity of coverage as well. Apply to individual citrus resets, when not in solid planted rows, using hand-gun or shielded sprayer.

**Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** protects citrus tree roots from Diaprepes and other citrus root weevil feeding by forming a barrier which provides contact activity on newly hatched larvae (neonates). As citrus root weevil eggs hatch in new foliage, neonates fall to the soil surface beneath the tree and come in contact with **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** as they attempt to burrow into the root zone. Disturbance of the soil beneath trees should be minimized.

Timing of **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** applications is critical. Current information suggests that peak emergence of adult Diaprepes Weevil varies by citrus growing region and these emergence peaks can be dramatically affected by environmental factors, such as soil moisture. Typically, two peaks are observed for Diaprepes, first in spring then late summer or early fall. Southern Blue- Green and Blue-Green Citrus Weevils and Fuller Rose Beetle typically exhibit a single emergence peak in the spring. Brown and Little Leaf Notchers typically exhibit three emergence peaks, spring, summer and fall. Since emergence varies seasonally and by location, timing of **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** application can be accurately forecast by observing adults. Adults are most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence from the soil; larval invasion of the soil will begin 2-3 weeks following adult emergence. It is critical to have the **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** soil barrier in place prior to drop of the neonates.

**Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** is one of several effective tools in an integrated pest management program for Citrus Root Weevils. Application of **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** should be used in conjunction with good cultural practices, biological control of larvae and foliar control of adults. Consult local university extension personnel for current information to protect citrus trees from Citrus Root Weevils and other pests.

Peak emergence of Diaprepes root weevil generally occurs in the spring. Depending on weather conditions, a minor emergence of Diaprepes root weevil may also occur in the fall.

If the citrus grove to be treated is in an area where weather conditions are conducive to primary emergence occurring in the spring, 32 fl. oz. formulated product should be used to obtain the longest residual management of Diaprepes root weevil. If the citrus grove to be treated is in an area where weather conditions will promote more than one peak of pest emergence, 16 fl. oz. formulated product can be applied early season and 16 fl. oz. formulated product can be applied later in the season.

# **Grapes - Foliar Application**

Pests Controlled	Rates of Application
Black Vine Weevil	5.1 - 6.4 fl. oz./A
Cutworm spp.	(0.08 - 0.1 lb. a.i./A)
Grape Berry Moth	
Grape Bud Beetle	
Grape Leaffolder	
Grape Leafroller	
Grapeleaf Skeletonizer	
Japanese Beetles (Adult)	
Mealybug (Crawlers)	
Omnivorous Leafroller	
Orange Tortrix	
Thrips (Adult)	
Eastern Grape Leafhopper	3.8 - 6.4 fl. oz./A
Flea Beetle spp.	(0.06 - 0.1 lb. a.i./A)
Sharpshooter spp.	
Variegated Leafhopper	
Western Grape Leafhopper	

#### **Restrictions:**

- Pre-harvest interval (PHI): Do not apply within 30 days of harvest.
- Application interval: Do not make applications less than 14 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 6.4 fl. oz./A (0.05 lb. a.i./A of imidacloprid, 0.05 lb. a.i./A of bifenthrin).
- Maximum amount Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC per year: Do not apply more than 12.8 fl. oz./A (0.10 lb. a.i./A of imidacloprid, 0.10 lb. a.i./A of bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per year: 0.10 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.10 lb. a.i./A

## **Application Instructions:**

Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

## **Hops - Foliar Application**

Pests Controlled	Rates of Application
Armyworm spp.*	12.8 fl. oz./A
Cutworm spp.	(0.2 lb. a.i./A)
Leafrollers	
Looper spp.	
Root Weevil	
Twospotted Spider Mite	
Aphid spp.	3.8 - 12.8 fl. oz./A
Leafhopper spp.	(0.06 - 0.2 lb. a.i./A)

- Pre-harvest interval (PHI): Do not apply within 28 days of harvest.
- Application interval: Do not make applications less than 21 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 12.8 fl. oz./A (0.1 lb. a.i./A of imidacloprid, 0.1 lb. a.i./A of bifenthrin).
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per year: Do not apply more than 38.4 fl. oz./A (0.3 lb. a.i./A of imidacloprid, 0.3 lb. a.i./A of bifenthrin) as a foliar application.
- Maximum amount of imidacloprid per year: 0.30 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.30 lb. a.i./A

## **Application Instructions:**

Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

**For Root weevil control:** Make a direct spray to the base of the plant. Spray up to 3 ft. on the vine and 1.5 to 2 ft. on sides of the plant.

\*Including all armyworm pests except Beet armyworm.

#### **Pears - Foliar Application**

Pests Controlled	Rates of Application
Codling Moth	5.1 - 12.8 fl. oz./A
Cutworm spp.	(0.08 - 0.2 lb. a.i./A)
Green Fruitworm	
Leafminer	
Leafroller	
Plum Curculio	
San Jose Scale	
Aphid spp.	3.8 - 12.8 fl. oz./A
Leafhopper spp.	(0.06 - 0.2 lb. a.i./A)
Lygus spp.	
Stink Bug spp.	

#### **Restrictions:**

- Pre-harvest interval (PHI): Do not apply within 14 days of harvest.
- Application interval: Do not make applications less than 30 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 12.8 fl. oz./A (0.1 lb. a.i./A of imidacloprid, 0.1 lb. a.i./A of bifenthrin).
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per year: Do not apply more than 64 fl. oz./A (0.5 lb. a.i./A of imidacloprid, 0.5 lb. a.i./A of bifenthrin) total. Do not apply more than 57.6 fl. oz. (0.45 lb. a.i./A of imidacloprid and 0.45 lb. a.i./A of bifenthrin) after petal fall.
- Maximum amount of imidacloprid per year: 0.50 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.50 lb. a.i./A total and 0.45 lb. a.i./A after petal fall.
- Do not graze livestock in treated areas or cut treated crops for feed.

## **Application Instructions:**

Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray. Thorough coverage is essential to achieve control.

# Tree Nuts Group, Except Almonds - Foliar Application

includes: beech nut; Brazil nut; butternut; cashew; chestnut; chinquapin; filbert (hazelnut); hickory nut; macadamia nut; pecan, pistachios and walnut (black and English)

Pests Controlled	Rates of Application
European Mite	10.24 - 12.8 fl. oz./A
Spider Mite	(0.16 - 0.2 lb. a.i./A)
Mealy Bug	
San Jose Scale (Crawlers)	
Aphid spp. (Including Black Pecan Aphid)	6.4 - 12.8 fl. oz./A
Codling Moth	(0.1 - 0.2 lb. a.i./A)
Filbert Worm	
Hickory Shuckworm	
Leaffooted Bug	
Navel Orangeworm	
Oblique Banded Leafroller	
Peach Twig Borer	
Pecan Leaf Casebearer	
Pecan Nut Casebearer	
Pecan Phylloxera	
Plant Bug spp.	
Stink Bug spp.	

#### **Restrictions:**

- Pre-harvest interval (PHI): Do not apply within 7 days of harvest for all Tree Nut crops, except Pecan.
- PHI (Pecan): Do not apply within 21 days of harvest.
- Do not apply to Almonds.
- Application interval: Do not make applications less than 15 days apart.
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per application: Do not apply more than 12.8 fl. oz./A (0.1 lb. a.i./A of imidacloprid, 0.1 lb. a.i./A of Bifenthrin).
- Maximum amount **Sharda Imidacloprid 11.3% + Bifenthrin 11.3% SC** per year: Do not apply more than 46.08 fl. oz./A (0.36 lb. a.i./A of imidacloprid, 0.36 lb. a.i./A of Bifenthrin).
- Maximum amount of imidacloprid per year: 0.36 lb. a.i./A as a foliar application.
- Maximum amount of bifenthrin per season: 0.50 lb. a.i./A
- Do not apply pre-bloom or during bloom or when bees are foraging.

# **Application Instructions:**

Apply by ground as a dilute (minimum of 100 gallons of finished spray per acre) or concentrate (50 gallons of finished spray per acre) spray in sufficient water to provide through coverage.

Apply by air with a minimum of 10 gallons of finished spray.

#### STORAGE AND DISPOSAL

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

Pesticide Storage: Keep from freezing: DO NOT store below 32°F.

**Pesticide Disposal**: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA region office for guidance.

#### **Container Handling:**

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NONREFILLABLE CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS): Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available.

**NONREFILLABLE CONTAINER (GREATER THAN 5 GALLONS):** 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 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 the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available.

**REFILLABLE CONTAINER:** Refill this container with pesticide only. Do not reuse 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 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.

Bottom Discharge IBC (e.g., Schuetz Caged IBC or Snyder Square Stackable). Pressure rinsing 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 pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

#### Top Discharge IBC, Drums, Kegs (e.g. Snyder 120 Next Gen, Bonar B120, Drums and Kegs).

Triple rinsing 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 triple rinse the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Rinse all interior surfaces. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Sharda USA LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Sharda USA LLC and Seller harmless for any claims relating to such factors.

Sharda USA LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or Sharda USA LLC and Buyer and User assume the risk of any such use. To the extent consistent with applicable law, Sharda USA LLC, MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, neither Sharda USA LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SHARDA USA LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SHARDA USA LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT. Sharda USA LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of