



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

EPA Reg. Number:

83529-79

Date of Issuance:

7/5/17

NOTICE OF PESTICIDE:

Registration
 Reregistration
 (under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

SHARDA BIFENTHRIN 17.15%
 LFR

Name and Address of Registrant (include ZIP Code):

Anna Armstrong
 c/o Sharda Wagner Regulatory Associates, Inc.
 P.O. Box 640
 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/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Elizabeth Fertich, Acting Product Manager 3
 Invertebrates & Vertebrates Branch I
 Registration Division (7505P)

Date:

7/5/17

1. You are required to comply with the data requirements described in the DCI identified below:

- a. Bifenthrin: GDCI-128825-902
GDCI -128825-1114
GDCI -128825-1158
GDCI -128825-1159

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: http://www.epa.gov/oppsrrd1/contacts_prd.htm

2. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, “EPA Reg. No. 83529-79.”
3. 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 CSF:

- Basic CSF dated 04/03/2017

If you have any questions, please contact Maggie Rudick by phone at 703-347-0257, or via email at rudick.maggie@epa.gov.

Enclosure

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.

GROUP 3A INSECTICIDE

Sharda Bifenthrin 17.15% LFR

A soil insecticide for the control of labeled soil insect pests for direct mixing with liquid fertilizer

ACTIVE INGREDIENT:	WT. BY %
Bifenthrin*	17.15%
OTHER INGREDIENTS:	82.85%
TOTAL:	100.00%

Contains 1.5 lbs. of active ingredient per gallon.

*Cis isomer 97% minimum and trans isomer 3% maximum

KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

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:	<ul style="list-style-type: none"> 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 by mouth to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for further treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call your poison control center at 1-800-222-1222 .	
Note to Physician: This product is 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.	

[Optional referral statements when booklets and container labels are used:

See Panel for First Aid Instructions and booklet for complete Precautionary Statements and Directions for Use.

See label booklet for complete Precautionary Statements, Directions For Use, and Storage and Disposal.

See label booklet for additional Precautionary Statements Directions For Use, and Storage and Disposal.

See label booklet for complete Directions For Use.]

EPA Reg. No. 83529-XX

EPA Est. No. XXXXX-XX-XXX

Manufactured for:

Sharda USA LLC 

7217 Lancaster Pike, Suite A
Hockessin, Delaware 19707

Net Contents: _____

ACCEPTED

07/05/2017

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 83529-79

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

May be fatal if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

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

Mixers and Loaders must wear:

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

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 and 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 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.

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

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

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

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 made of barrier laminate, butyl rubber >14 mils, nitrile rubber >14 mils, neoprene rubber >14 mils, natural rubber >14 mils, polyethylene, polyvinyl chloride (PVC) >14 mils or Viton >14 mils
- Shoes plus socks

RESISTANCE MANAGEMENT

Sharda Bifenthrin 17.15% LFR contains a chemical classified as a Group 3A insecticide. Some pest populations have been known to develop resistance. There is potential risk of resistance development in some insect population against the insecticides that have been used repeatedly. While the development of resistance is well understood, it is not easily predicted. Therefore, insecticides must be used in conjunction with resistance management strategies in your area. Consult your local or State agricultural advisors for details. If insect resistance develops in your area, this product used alone may not provide sufficient levels of insect control. If the reduction in control of insects cannot be associated to improper application timing, unfavorable weather conditions or abnormally high pest pressure, it is possible that a resistant strain may have developed.

To reduce the potential for the development of resistance, alternate the use of this product in a rotation program with other classes of chemistry and modes of action. Always make application of this product at the recommended use rates and in accordance with the use directions. Do not apply less than recommended label rates either when applied alone or in tank mixtures. For best performance, scout fields carefully and start applications when pests are smaller rather than larger. If resistance is suspected, contact a local or State agricultural advisor.

INTEGRATED PEST MANAGEMENT

Sharda Bifenthrin 17.15% LFR may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

CHEMIGATION USE DIRECTIONS

Make application of this product only through sprinkler irrigation systems: including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, drip irrigation, or hand move irrigation systems. For LEPA irrigation, application of a minimum of 0.75 inch of water per acre is recommended. If a non-emulsified oil is used as the diluent, 1 to 2 pints per acre is the recommended use rate.

RESTRICTIONS

- Do not make application of this product through any other type of irrigation system.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system.

Proper calibration of chemigation equipment prior to application is important. Improper calibration can lead to non-uniform spray and product distribution resulting in crop injury, lack of effectiveness or illegal residues in the crop. Contact your State Agricultural Extension Service specialists, equipment manufacturers or other experts for consultation on the equipment set up and capability 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 backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

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

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

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distributions 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 make application when wind speed favors drift beyond the treatment area. Application of **Sharda Bifenthrin 17.15% LFR** should be made continuously for the duration of the water application. Dilute **Sharda Bifenthrin 17.15% LFR** in sufficient volume to ensure accurate application over the treatment area. When making application using chemigation, a minimum of 0.5 inch per acre of irrigation water is recommended. Agitation is not typically required when a suitable diluent is used. Conduct a compatibility test to make sure that phase separation will not occur during dilution and treatment. Failure to achieve a uniform solution throughout the time of treatment may result in undesirable residues or less than desirable control.

APPLICATION AND MIXING INSTRUCTIONS

Sharda Bifenthrin 17.15% LFR is an insect control product that contains the active ingredient bifenthrin. **Sharda Bifenthrin 17.15% LFR** is formulated so that it can be mixed directly with water or liquid fertilizer. The rate of application is determined by pest pressure, timing of treatments and field scouting. Use a lower listed use rate when there is low to moderate pest pressure, and a higher listed use rate under heavier pest pressure. In areas where there is dry climate, application rates are typically higher.

Tank Mix Preparation

Shake well before use.

- Begin agitation in the spray tank.
- Fill the tank one-half full with liquid fertilizer or water.
- Add the specified amount of **Sharda Bifenthrin 17.15% LFR**
- Add the remaining fertilizer or water.

Maintain agitation until the application is complete.

If using nurse tanks, agitate the **Sharda Bifenthrin 17.15% LFR** spray solutions in the tank before moving the solution to spray system.

Restrictions

- Do not cultivate within 10 feet of water bodies to allow for the growth of a vegetative filter strip.
- Do not apply this product within 100 feet (using ground equipment) to 300 feet (using aerial equipment) of coastal marshes or streams that drain into coastal marshes in New York State.
- Do not exceed the maximum single or annual application use rate listed. The annual maximum use rate includes at-plant applications and foliar applications of **Sharda Bifenthrin 17.15% LFR** and applications made with other products containing bifenthrin.

Application of **Sharda Bifenthrin 17.15% LFR** may be made in-furrow with the seed, as a T-band (band over the open furrow), as a broadcast application, as a band over-the-row, as a pre-emergence (PRE) application, as a post-plant incorporated (PPI) application, as a foliar application (including chemigation), or as a transplant-water drench during setting.

The use rates listed in the individual crop sections for at-plant soil applications are listed as fluid ounce per 1,000 linear feet based on 30-inch row spacing. To convert application rates for other row spacing, refer to the table below.

Applications made at-plant with **Sharda Bifenthrin 17.15% LFR** may be mixed with commonly used liquid starter or 'pop-up' fertilizers. Follow the liquid fertilizer label recommendations regarding seed safety and use guidelines. Conduct a compatibility test using the specified ratio of fertilizer and **Sharda Bifenthrin 17.15% LFR**. Tank mixtures should not be allowed to sit overnight, but if this occurs the tank mixture must be thoroughly mixed before application.

Amount of Sharda Bifenthrin 17.15% LFR per Acre by Row Spacing					
Row Spacing	36"	30"	20"	15"	Twin Row 30" centers
Linear row ft./acre	14,520 ft.	17,424 ft.	26,136 ft.	34,848 ft.	34,848 ft.
Conversion					
0.2 fl. oz./1,000 Linear ft. =	2.9 fl. oz./acre	3.5 fl. oz./acre	5.2 fl. oz./acre	7.0 fl. oz./acre	7.0 fl. oz./acre
0.24 fl. oz./1,000 Linear ft. =	3.5 fl. oz./acre	4.2 fl. oz./acre	6.3 fl. oz./acre	8.4 fl. oz./acre	8.4 fl. oz./acre
0.3 fl. oz./1,000 Linear ft. =	4.4 fl. oz./acre	5.2 fl. oz./acre	7.8 fl. oz./acre	10.5 fl. oz./acre	10.5 fl. oz./acre
0.39 fl. oz./1,000 Linear ft. =	5.7 fl. oz./acre	6.8 fl. oz./acre	10.2 fl. oz./acre	13.6 fl. oz./acre	13.6 fl. oz./acre
0.49 fl. oz./1,000 Linear ft. =	7.1 fl. oz./acre	8.5 fl. oz./acre	12.8 fl. oz./acre		
0.73 fl. oz./1,000 Linear ft. =	10.6 fl. oz./acre	12.7 fl. oz./acre			
0.78 fl. oz./1,000 Linear ft. =	11.3 fl. oz./acre	13.6 fl. oz./acre			
0.98 fl. oz./1,000 Linear ft. =	14.2 fl. oz./acre	17.1 fl. oz./acre			
1.47 fl. oz./1,000 Linear ft. =	21.3 fl. oz./acre	25.6 fl. oz./acre			

Tank-Mixtures

Application of **Sharda Bifenthrin 17.15% LFR** may be made in tank mixtures with other products that are approved for use on registered crops. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Always conduct a compatibility test prior to any tank mixture.

Maximum Amount of Sharda Bifenthrin 17.15% LFR per Acre per Year

See the specific crop sections for information on annual maximum application amounts for **Sharda Bifenthrin 17.15% LFR**. The maximum allowable use includes all registered use patterns including at-plant, soil applied, and/or foliar applications for the 12-month period. The 12-month period begins at the initial application.

Buffer Zones

Maintain a minimum 10-foot-wide vegetative filter strip buffer zone constructed of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (including, 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 (airblast, ground boom, overhead, or chemigation)** – Do not make application within 25 feet of aquatic habitats (including, but not limited to, lakes, reservoirs, rivers, streams, marshes, natural ponds, estuaries, and commercial fish ponds).
- **Buffer Zone for ULV Aerial Application** – Do not make application within 450 feet of aquatic habitats (including, but not limited to, lakes, reservoirs, rivers, streams, marshes, natural ponds, estuaries, and commercial fish ponds).
- **Buffer Zone for Non-ULV Aerial Application** – Do not make application within 150 feet of aquatic habitats (including, but not limited to, lakes, reservoirs, rivers, streams, marshes, natural ponds, estuaries, and commercial fish ponds).

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. The 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.

AERIAL DRIFT REDUCTION ADVISORY INFORMATION

Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **Wind, Temperature and Humidity**, and **Temperature Inversion** section of this label).

Controlling Droplet Size

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows product larger droplets.
- **Pressure** - Use the lower spray pressures specified for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released backwards, parallel to the airstream will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.
- **Boom Length** - For some use patterns, reducing the effective boom length to less than $\frac{3}{4}$ of the wingspan or rotor length may further reduce drift without reducing swath width.
- **Application** - Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications should not occur during a temperature inversion, because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small-suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas). Avoid all direct or indirect contact (such as spray drift) of **Sharda Bifenthrin 17.15% LFR** with crops other than those specified for treatment on this label since injury may occur.

CROP USE DIRECTIONS**Crop Rotation Intervals**

Crops where tolerances have been established for bifenthrin may be rotated at any time. All other crops may be rotated 30 days after the last application of bifenthrin.

ARTICHOKE

At-Plant Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Cribrate Weevil Grubs	8.5	0.49	0.1
Use Directions: Make application as a 5- to 7-inch band (T-band) over an open furrow or in-furrow with the seed.			
Pre-Emergence & Post-Plant Incorporated Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre		Lb. a.i./Acre
Cribrate Weevil Grubs	Pre-Emergence: 8.5		Pre-Emergence: 8.5
	Post-Plant Incorporated: 0.1		Post-Plant Incorporated: 0.1
Use Directions: <ul style="list-style-type: none"> • Pre-Emergence - Sharda Bifenthrin 17.15% LFR may be tank mixed with pre-emergence herbicides. • Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR may be tank mixed with post-plant incorporated herbicides. When incorporating with Sharda Bifenthrin 17.15% LFR, depth should be close to and not any greater than the intended planting depth and no deeper than 3 inches. 			
Foliar Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre		Lb. a.i./Acre
Cribrate Weevil Artichoke Plume Moth	8.5		0.1
Use Directions: Make application when pest population reaches damaging threshold. Repeat as needed to maintain control on a 15-day interval. <ul style="list-style-type: none"> • Aerial Application: Make application at the listed use rate in a minimum of 10 gals. spray volume/acre. • Ground Application: Make application as a full cover spray in a minimum of 75 gals. spray volume/acre. 			
RESTRICTIONS - ARTICHOKE			
<ul style="list-style-type: none"> • Do not make application of more than 0.5 lb. a.i./acre/year including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. • Foliar: Do not make application within 5 days of harvest. 			

BRASSICAS, HEAD AND STEM (Crop Subgroup 5A)

Broccoli, Chinese, Broccoli (Gai Lon, White Flowering Broccoli), Brussels Sprouts, Cauliflower, Cavalo Broccoli, Kohlrabi, Cabbage, Chinese Cabbage (Napa), and Chinese Mustard Cabbage (Gai Choy)

At-Plant Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Army Cutworm Armyworm spp. Cabbage Maggots Cutworm spp. Grubs Root Aphids Root Maggots Seed Corn Maggots Wireworm	3.4 - 6.8	0.2 - 0.39	0.04 - 0.08
Use Directions: Make application as a 5- to 7-inch band (T-band) over the open seed or transplant furrow, or in-furrow with the seed or transplant. Cutworm and armyworm applications may be made as broadcast treatments to the soil surface. May be applied as a transplant water application at time of transplanting.			
Pre-Emergence and Post-Plant Incorporated Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre		Lb. a.i./Acre
Garden Symphylans Root Aphids Root Maggots Seed Corn Maggots Wireworms	Pre-Emergence: 3.4 - 6.8		Pre-Emergence: 0.04 - 0.08
	Post-Plant Incorporated: 3.4 - 6.8		Post-Plant Incorporated: 0.04 - 0.08
Use Directions:			
<ul style="list-style-type: none"> • Pre-Emergence - Application of Sharda Bifenthrin 17.15% LFR may be made as a tank mixture applied with pre-emergence herbicides and fungicides for pre-transplant treatments. • Post-Plant Incorporated - When incorporating with Sharda Bifenthrin 17.15% LFR, depth should be close to and not any greater than the intended planting depth and no deeper than 3 inches. 			
Foliar Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre		Lb. a.i./Acre
Aphids Armyworms Black Burrowing Bug Cutworms Corn Earworm Crickets Cucumber Beetles Diamondback Moth Flea Beetles Ground Beetles Imported Cabbageworm Leafhoppers Loopers Saltmarsh Caterpillar Stink Bugs Thrips Tobacco Budworm Whitefly Wireworm (Adults)	2.8 - 8.5		0.033 - 0.1
Banks Grass Mite Carmine Mite Lygus Species Pacific Spider Mite Two-Spotted Spider Mite	6.8 - 8.5		0.08 - 0.1
Use Directions: Thorough coverage is essential to achieve sufficient control. Apply when pest population reaches locally determined economic thresholds. Make application in a minimum of 2 gals. of finished spray/acre by air or in a minimum of 10 gals./acre with ground equipment. When making application by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray.			
RESTRICTIONS - BRASSICA, HEAD, AND STEM (CROP SUBGROUP 5A)			
<ul style="list-style-type: none"> • Do not make application of more than 0.5 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. • At-Plant: Do not make application of more than 0.1 lb. a.i./acre/year as an at-plant application. 			

- **Foliar:**

- Do not apply more than 5 applications after bloom.
- Do not apply applications less than 7 days apart.
- Do not make application within 7 days of harvest.

BUSHBERRIES (Crop Subgroup 13-07B)

Aronia Berry; Blueberry, Highbush; Blueberry, Lowbush; Buffalo Currant; Chilean Guava; Cranberry, Highbush; Currant, Black; Currant, Red; Elderberry; European Barberry; Gooseberry; Honeysuckle, Edible; Huckleberry; Jostaberry; Juneberry (Saskatoon Berry); Lingonberry; Native Currant; Salal; Sea Buckthorn; Cultivars, Varieties, and/or Hybrids of these

At-Plant Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
White Grubs Wireworm	8.5	0.1

Use Directions:

Make application as a (T-band) over an open furrow immediately before transplanting, or in-furrow with the transplant in sufficient water for planting. Application may also be made as a solid drench with transplant water at time of transplanting.

Post-Plant Incorporated (Site Preparation) & Pre-Emergence Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Blueberry Maggots (Larvae) White Grubs Wireworm	Pre-Emergence: 3.4 - 8.5	Pre-Emergence: 0.04 - 0.1
	Post-Plant Incorporated: 8.5	Post-Plant Incorporated: 0.1

Use Directions:

- **Pre-Emergence - Sharda Bifenthrin 17.15% LFR** may be tank mixed with pre-emergence herbicides.
- **Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR** may be tank mixed with post-plant incorporated herbicides, insecticides, and fungicides where allowed. When incorporating with **Sharda Bifenthrin 17.15% LFR**, depth should be close to and not any greater than the intended planting depth.

Foliar Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Aphids Blueberry Maggots Fruitworms Japanese Beetle Leafhoppers Leaf Rollers Lecanium Scale (Crawlers) Oblique-Banded Leaf Roller Plum Curculio Red Banded Leafroller Spanworm Spotted-Winged Drosophila Variegated Leafroller	3.4 - 8.5	0.04 - 0.1
Carmine Mite Lygus spp. Pacific Spider Mite Two-Spotted Spider Mite	6.8 - 8.5	0.08 - 0.1

Use Directions:

Make application in a minimum of 2 gals. spray volume/acre by air or in a minimum of 10 gals./acre with ground equipment. Thorough coverage is essential to achieve sufficient control. Apply when pest population reaches locally determined economic thresholds.

RESTRICTIONS - BUSHBERRIES (Crop Subgroup 13-07B)

- Do not make application of more than 0.5 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of **Sharda Bifenthrin 17.15% LFR** and other products that contain bifenthrin
- **Foliar:**
 - Do not apply applications less than 7 days apart.
 - Do not make applications within 1 day of harvest.

CANE BERRIES (Crop Subgroup 13-07A)

Bingleberries, Blackberries, Dewberries, Loganberries, Lowberries, Marionberries, Olallieberries, Raspberries, and Youngberries

At-Plant Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
White Grubs Wireworm	8.5	0.1

Use Directions: Make application as a 5- to 7-inch band (T-band) over an open furrow in sufficient water for planting, or in-furrow with the seed. Application may be made through transplant water at time of transplanting.		
Post-Plant Incorporated (Site Preparation) & Pre-Emergence Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
White Grubs Wireworm	Pre-Emergence: 8.5	Pre-Emergence: 0.1
	Post-Plant Incorporated: 8.5	Post-Plant Incorporated: 0.1
Use Directions: <ul style="list-style-type: none"> • Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR may be tank mixed with post-plant incorporated pesticides labeled for site preparation. When incorporating with Sharda Bifenthrin 17.15% LFR, depth should be close to and not any greater than the intended planting depth. 		
Foliar Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Leafrollers Orange Tortrix Root Weevils Spotted-Winged Drosophila	4.3 - 8.5	0.05 - 0.1
Raspberry Crown Borer Spider Mites	8.5	0.1
Use Directions: Make application by air or ground equipment using sufficient water to obtain full coverage of foliage (minimum of 10 gals./acre by air and 50 gals./acre by ground). Initial application may be made pre-bloom and a second application may be made post-bloom. For Crown Borer: Make application of 0.1 lb. a.i./acre post-harvest (fall) or pre-bloom (spring), as a drench treatment directed at the crown of plants in a minimum of 200 gals. water/acre. Greater efficacy is obtained at higher spray volumes (up to 400 gals./acre) or in an application before a significant rainfall event. Do not apply both pre-bloom foliar and pre-bloom drench applications.		
RESTRICTIONS - CANEBERRIES (CROP SUBGROUP 07A)		
<ul style="list-style-type: none"> • Do not make application of more than 0.2 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. • Foliar: <ul style="list-style-type: none"> • Initial application may be made pre-bloom and a second application may be made post-bloom. • Do not make application within 3 days of harvest. 		

CANOLA, CRAMBE, & RAPESEED

At-Plant Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Army Cutworm Armyworm spp. Cutworm spp. Grape Colaspis Grubs Root Aphids Seed Corn Beetle Seed Corn Maggots Stalk Borer Sugarcane Beetle True Armyworm Wireworm	6.83	0.08
Use Directions: Make application as a 5- to 7-inch band (T-band) over an open furrow, or in-furrow with the seed.		
Pre-Emergence & Post-Plant Incorporated Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Army cutworm Armyworm spp. Cutworm spp. Grape Colaspis Grubs Root Aphids Seed Corn Beetle Seed Corn Maggots Stalk Borer Sugarcane Beetle True Armyworm Wireworm (PPI Only)	Pre-Emergence: 6.83	Pre-Emergence: 0.08
	Post-Plant Incorporated: 6.83	Post-Plant Incorporated: 0.08

Use Directions:

- **Pre-Emergence - Sharda Bifenthrin 17.15% LFR** may be tank mixed with pre-emergence herbicides.
- **Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR** may be tank mixed with post-plant incorporated herbicides. When incorporating with **Sharda Bifenthrin 17.15% LFR**, depth should be close to and not any greater than the intended planting depth and no deeper than 3 inches.

Foliar Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Aphids Armyworms Cutworms Diamondback Moth Flea Beetle Flea Hopper Grasshopper Loopers Other Lepidopterous Larvae Plant Bug Seedpod Weevil Stink Bugs Thrips Whitefly	2.8 - 3.4	0.033 - 0.04

Use Directions:

Make application in a minimum of 2 gals. spray volume/acre by air or in a minimum of 10 gals./acre with ground equipment. When making application 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 obtain sufficient control.

RESTRICTIONS - CANOLA, CRAMBE, & RAPESEED

- Do not apply more than 0.08 lb. a.i./acre/year; Including at-plant, pre-emergence, post-plant incorporated, and foliar applications of **Sharda Bifenthrin 17.15% LFR** and other bifenthrin containing products.
- **Foliar:**
 - Do not apply treatments less than 14 days apart.
 - Do not make application within 35 days of harvest.

CILANTRO & CORIANDER**At-Plant Applications**

Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Armyworm spp. Cutworm spp. Flea Beetle (Larvae) Wireworm	3.4 - 6.8	0.2 - 0.39	0.04 - 0.08

Use Directions:

Make application as a 5- to 7-inch band over-the-row on the soil surface, a 5- to 7-inch band over the open furrow (T-band) in-furrow with the seed, or broadcast to the soil surface.

Pre-Emergence & Post-Plant Incorporated Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Army Cutworm Armyworm spp. Cutworm spp. Grape Colaspis Grubs	Pre-Emergence: 3.4 - 6.8	Pre-Emergence: 0.04 - 0.08
Root Aphids Seed Corn Beetle Seed Corn Maggots Wireworms (PPI Only)	Post-Plant Incorporated: 3.4 - 6.8	Post-Plant Incorporated: 0.04 - 0.08

Use Directions:

- **Pre-Emergence - Sharda Bifenthrin 17.15% LFR** may be tank mixed with pre-emergence herbicides.
- **Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR** may be tank mixed with post-plant incorporated herbicides. When incorporating with **Sharda Bifenthrin 17.15% LFR**, depth should not be any greater than the intended planting depth and no deeper than 3 inches.

Foliar Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Aphids Beet Armyworm Cabbage Looper	2.8 - 8.5	0.033 - 0.1

Cutworm Flea Beetle Grasshoppers Leafminer Saltmarsh Caterpillar Spotted Cucumber Beetle Thrips Whitefly		
Two-Spotted Spider Mite	6.8 - 8.5	0.08 - 0.1
Use Directions: Make application using sufficient water to obtain uniform coverage. Make application with ground equipment using a minimum of 10 gals. of spray volume/acre or a minimum of 2 gals./acre by aircraft.		
RESTRICTIONS - CILANTRO & CORIANDER		
<ul style="list-style-type: none"> Do not make application of more than 0.5 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar applications of Sharda Bifenthrin 17.15% LFR and other bifenthrin containing products. At-Plant: Do not make application of more than 0.1 lb. a.i./acre/year as an at-plant application. Foliar: <ul style="list-style-type: none"> Do not apply treatments less than 7 days apart. Do not make application within 3 days of harvest. 		

CITRUS (Crop Group 10-10)

Australian Desert Lime; Australian Finger-Lime; Australian Round Lime; Brown River Finger Lime; Calamondin; Citron; Citrus Hybrids; Grapefruit; Japanese Summer Grapefruit; Kumquat; Lemon; Lime; Mediterranean Mandarin; Mount White Lime; New Guinea Wild Lime; Orange, Sour; Orange, Sweet; Pummelo; Russell River Lime; Satsuma Mandarin; Sweet Lime; Tachibana Orange; Tahiti Lime; Tangelo; Tangerine (Mandarin); Tangor; Trifoliate Orange; Uniq Fruit; Cultivars, Varieties, and/or Hybrids of these

Bare Soil Surface Under Drip Line Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Asian Cockroach Fire Ants (<i>Solenopsis</i> spp.)	8.5 - 21.25	0.1 - 0.25
Blue-Green Citrus Root Weevil Brown Leaf Notcher Diaprepes Root Weevil Little Leaf Notcher Southern Blue-Green Citrus Root Weevil	21.25 - 42.5	0.25 - 0.5

Use Directions:

When used as directed, **Sharda Bifenthrin 17.15% LFR** will provide control of the listed pests. Make application of **Sharda Bifenthrin 17.15% LFR** by ground equipment to bare soil beneath citrus trees. Applications must be uniformly applied from the trunk to the drip line of tree. Make application in a minimum of 40 gals. of dilute spray volume/acre. Greater spray volume should insure greater uniformity of coverage. A pre- and post-application irrigation may also help in the uniformity of coverage.

Sharda Bifenthrin 17.15% LFR protects citrus tree roots from citrus root weevil feeding (including Diaprepes) by forming a barrier that 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 Bifenthrin 17.15% LFR** as they attempt to burrow into the root zone. Minimize disturbance of the soil beneath trees.

Application timing of **Sharda Bifenthrin 17.15% LFR** 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, initially in spring then late summer or early fall. Southern blue-green and blue-green citrus weevils and Fuller rose beetle generally exhibit a single emergence peak in the spring. Brown and little leaf notchers generally exhibit three emergence peaks, spring, summer, and fall. Since emergence varies annually and by location, timing of **Sharda Bifenthrin 17.15% LFR** treatment can be accurately forecasted by monitoring adults. Adults are most active in the early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (during emergence periods). Egg laying occurs for 8 to 10 weeks after adult emergence from the soil; larval invasion of the soil initiates 2 to 3 weeks after adult emergence. It is critical to have the **Sharda Bifenthrin 17.15% LFR** soil barrier established before drop of the neonates.

Sharda Bifenthrin 17.15% LFR is one of several effective tools in an integrated pest management program for citrus root weevils. Making applications with **Sharda Bifenthrin 17.15% LFR** should be used in conjunction with good integrated management practices, including cultural practices and biological control of larvae and foliar control of adults. Consult local university extension personnel for information to protect citrus trees from citrus root weevils and other pests.

Make application to individual citrus resets, when not in solid planted rows, using hand-gun or shielded sprayer. Peak emergence of Diaprepes root weevil typically occurs in the spring. A minor emergence of Diaprepes root weevil may also occur in the fall depending on weather conditions.

If the citrus grove to be treated is in an area where weather conditions are conducive to primary emergence occurring in the spring, apply 42.5 fl. oz. of product to optimize performance and the to provide the longest residual control 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, apply 21.25 fl. oz. of product early in the season followed by 21.25 fl. oz. of product applied later in the season.

RESTRICTIONS - CITRUS (Crop Group 10-10)

- Do not allow application of **Sharda Bifenthrin 17.15% LFR** to contact fruit or foliage.

- Do not make application of more than a total of 42.5 fl. oz. of formulated product (0.5 lb. a.i.)/acre per year.
- Do not make application by air.

CORN

Field Corn (Grain and Silage), Popcorn, Field Corn Grown for Seed, Sweet Corn, and Sweet Corn Grown for Seed

At-Plant Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Corn Rootworm Larvae (Northern, Southern and Western)	6.8 - 17.0	0.39 - 0.98	0.08 - 0.2
Army Cutworm Armyworm spp. Cutworm spp. Grape Colaspis Grubs Root Aphids Seed Corn Beetle Seed Corn Maggots Stalk Borer Sugarcane Beetle True Armyworm Wireworm	3.4 - 13.6	0.2 - 0.78	0.04 - 0.16

Use Directions:

Make application as a 5- to 7-inch band (T-band) over an open furrow, or in-furrow with the seed.

For Army Cutworm, Stalk Borer, Cutworm Species, True Armyworm, or Armyworm Species: Make application as a 5- to 7-inch band over-the-row on the soil surface, a 5- to 7-inch band over the open furrow (T-band), in-furrow with the seed, or broadcast to the soil surface.

Heavy Corn Rootworm Pressure Management Program: A multi-approach system may be required for optimal pest management, in areas where large corn rootworm populations are present. If the population level is not known, and if a corn rootworm adult scouting program along with threshold adult control measures were not completed the prior growing season, then use a maximum dosage seed treatment program or genetically modified corn rootworm resistant hybrid in addition to **Sharda Bifenthrin 17.15% LFR**.

Pre-Emergence & Post-Plant Incorporated Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Armyworm spp. Black Cutworm Seed Corn Beetle Stalk Borer	Pre-Emergence: 3.4	Pre-Emergence: 0.04
Armyworm spp. Black Cutworm Grape Colaspis Seed Corn Beetle Seed Corn Maggots White Grub Wireworm	Post-Plant Incorporated: 4.0 - 5.3	Post-Plant Incorporated: 0.047 - 0.062

Use Directions:

- **Pre-Emergence - Sharda Bifenthrin 17.15% LFR** may be tank mixed with pre-emergence herbicides.
- **Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR** may be tank mixed with post-plant incorporated herbicides. When incorporating with **Sharda Bifenthrin 17.15% LFR**, depth should be close to and not any greater than the intended planting depth and no deeper than 3 inches.

Foliar Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Aphids Army Cutworm Armyworm spp. Armyworm, Fall Armyworm, Southern Beet Armyworm Cereal Leaf Beetle Chinch Bug Common Stalk Borer Corn Earworm ¹ Corn Leaf Beetle, Southern Corn Rootworm (Adults) Cucumber Beetle (Adults) Cutworm spp.	2.8 - 8.5	0.033 - 0.1

European Corn Borer ² Flea Beetle Grasshoppers Greenbug Japanese Beetle (Adults) Sap Beetle Southwestern Corn Borer ² Stinkbugs Tarnished Plant Bug True Armyworm Webworms Western Bean Cutworm Yellowstriped Armyworm		
Banks Grass Mite ³ Carmine Mite ³ Two-Spotted Spider Mite ³	6.8 - 8.5	0.08 - 0.1
<p>¹To Control Ear Attacking Pests: Make application of Sharda Bifenthrin 17.15% LFR just before silking and repeat as needed to maintain control.</p> <p>²Southwestern Corn Borer and European Corn Borer: Make initial application for corn borer control at or shortly before egg hatch. For Control of Other Insect Pests: Make application when pests first appear and repeat as needed.</p> <p>³For Control of Mites: Make application for Banks Grass Mite control when colonies first form before leaf damage or discoloration and prior to dispersal above the bottom third of the plant. For Two-Spotted Spider Mite and Carmine Mite Control: Make application when colonies first form before leaf damage or discoloration and prior to widespread mite dispersal throughout the canopy. Higher use rates listed in the rate range will be needed for heavier initial populations and corn under heat or drought stress. Field experience with dimethoate at 0.5 lb. a.i./acre in tank mixture has demonstrated good control under these conditions. For Mite Control in Texas, New Mexico, Oklahoma, and Arizona: Make application in a minimum of 5 gals. of spray volume/acre by aircraft or in a minimum of 10 gals./acre with ground equipment.</p> <p>Use Directions: Make application in a minimum of 2 - 5 gals. of spray volume/acre by aircraft or in a minimum of 10 gals./acre with ground equipment. To improve control by aircraft, use 5 gals. of spray volume/acre particularly when initial populations are heavier than normal. If 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 sufficient control.</p> <p>Heavy Corn Rootworm Pressure Management Program: A multi-approach system may be necessary for optimal pest management in areas where large corn rootworm populations are present. If the population level is not known and if a corn rootworm adult scouting program along with threshold adult control measures were not completed during the previous growing season, then use a maximum dosage seed treatment program or genetically modified corn rootworm resistant hybrid in addition to Sharda Bifenthrin 17.15% LFR.</p>		
RESTRICTIONS - CORN		
<ul style="list-style-type: none"> • For Field Corn: Do not make application of more than 0.3 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. • Sweet Corn: Do not make applications of more than 0.2 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. • At-Plant: Do not make application of more than 0.2 lb. a.i./acre/year as an at-plant application. • Foliar: <ul style="list-style-type: none"> • Do not use ultra-low volume (ULV) application on corn. • Do not apply by aerial or ground applications to corn if heavy rainfall is imminent. • For Field Corn: <ul style="list-style-type: none"> • Do not make application within 30 days of harvest for field corn (grain and silage), popcorn, and field corn grown for seed. • Do not graze livestock in treated areas or cut treated crops for feed within 30 days of the last application for field corn (grain and silage), popcorn, and field corn grown for seed. • For Sweet Corn <ul style="list-style-type: none"> • Do not make application within 1 day of harvest for sweet corn or sweet corn grown for seed. • Do not graze livestock in treated areas or cut treated crops for feed within 1 day of the last application for sweet corn or sweet corn grown for seed. 		

COTTON

At-Plant Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Cutworm spp. Grape Colaspis Root Maggots Seed Corn Maggots White Grub Wireworm	1.7 - 8.5	0.1 - 0.5	0.02 - 0.1
Use Directions: Make application as a 5- to 7-inch band (T-band) over an open furrow, or in-furrow with the seed.			
Pre-Emergence & Post-Plant Incorporated Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Lb. a.i./Acre	

Cutworm spp.	Pre-Emergence: 3.4 - 8.5	Pre-Emergence: 0.04 - 0.1
Cutworm spp. Grape Colaspis Root Maggots Seed Corn Maggots White Grub Wireworm	Post-Plant Incorporated: 3.4 - 8.5	Post-Plant Incorporated: 0.04 - 0.1
Use Directions: Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR may be tank mixed with pre-emergence herbicides. When incorporating with Sharda Bifenthrin 17.15% LFR , depth should be close to and not any greater than the intended planting depth and no deeper than 3 inches.		
Foliar Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
European Corn Borer Soybean (Banded) Thrips Tobacco Thrips	1.7 - 8.5	0.02 - 0.1
Armyworm, Fall Boll Weevil ¹ Bollworm Cabbage Looper Cotton Aphid ² Cotton Fleahopper Cotton Leafperforator Cutworms Plant Bugs Saltmarsh Caterpillar Southern Garden Leafhopper Stink Bugs Tobacco Budworm Whitefly Yellow Striped Armyworm	3.4 - 8.5	0.04 - 0.1
Beet Armyworm Carmine Spider Mite ² Lygus spp. Pink Bollworm Two-Spotted Spider Mite ²	5.1 - 8.5	0.06 - 0.1
¹ Boll Weevil: Make application of Sharda Bifenthrin 17.15% LFR at an interval of 3 to 4 days until pest numbers are reduced to acceptable levels. ² Aphids and Mites: Make application when pests first appear. Repeat as needed to maintain control. Higher use rates within the listed rate range will be necessary once a damaging threshold has been reached.		
Use Directions: Make application as needed using sufficient water to obtain uniform coverage. Make application with ground equipment using a minimum of 5 gals. of spray volume/acre or a minimum of 1 gal./acre by aircraft. Sharda Bifenthrin 17.15% LFR can be applied in water or refined vegetable oil (soybean/cottonseed). Application in Water: Make application in a minimum of 5 gals./acre with ground equipment or 1 gal./acre by aircraft. If application is made by air, 1 quart of emulsified oil may be substituted for 1 quart of water in the finished spray. ULV Application: Make application of the recommended rate of Sharda Bifenthrin 17.15% LFR in refined vegetable oil in a minimum of 1 quart of finished spray/acre with aircraft calibrated to give adequate coverage.		
RESTRICTIONS - COTTON		
<ul style="list-style-type: none"> Do not make application of more than 0.5 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin in all states except in California. For California, do not make application of more than 0.3 lb. a.i./acre/year. Do not apply more than 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop per year (including, but not limited to Ambush®, Ammo®, Asana® XL, Baythroid®, Baythroid XL®, Brigade®, Capture®, Danitol®, Declare®, Discipline®, Fanfare®, Karate®, and Mustang®). Foliar: <ul style="list-style-type: none"> Do not make application within 14 days of harvest. Do not graze livestock in treated areas or cut treated crops for feed. 		

CUCURBITS (Crop Group 9)

Chayote (Fruit), Chinese Waxgourd (Chinese Preserving Melon), Citron Melon, Cucumber, Gherkin, Gourd, Edible *Lagenaria* species (includes Hyotan, Cucuzza), *Luffa* species (includes Hechima, Chinese Okra), *Momordica* species (includes Balsam Apple, Balsam Pear, Bitter Melon, Chinese Cucumber), Muskmelon (Hybrids and/or Cultivars of Cucumis Melo) (includes True Cantaloupe, Cantaloupe, Casaba, Crenshaw Melon, Golden Pershaw Melon, Honeydew Melon, Honey Balls, Mango Melon, Persian Melon, Pineapple Melon, Santa Claus Melon, and Snake Melon), Pumpkin (Cucurbita species), Squash, Summer (Includes Crookneck Squash, Scallop Squash, Straightneck Squash, Vegetable Marrow, Zucchini), Squash, Winter (includes Butternut Squash, Calabaza, Hubbard Squash (*C. mixta*; *C. pepo*) includes Acorn Squash, Spaghetti Squash), and Watermelon (includes Hybrids and/or Varieties of Citrullus species)

At-Plant Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Cucumber Beetle (Larvae)	6.8 - 8.5	0.39 - 0.49	0.08 - 0.1
Army Cutworm Armyworm spp. Cutworm spp. Flea Beetle (Larvae) Grubs True Armyworm Wireworm	3.4 - 6.8	0.2 - 0.39	0.04 - 0.08
<p>Use Directions: Make application as a 5- to 7-inch band (T-band) over an open furrow, or in-furrow with the seed. Treatment may be applied through transplant water at time of transplanting.</p> <p>For Cucumber Beetle (Larvae) Control: Make application as a 5- to 7-inch band over an open furrow (T-band), or in-furrow with the seed.</p> <p>For Army Cutworm, Cutworm Species, True Armyworm, and Armyworm Species Control: Make application as a 5- to 7-inch band over-the-row on the soil surface, a 5- to 7-inch band over the open furrow (T-band), in-furrow with the seed, broadcast to the soil surface or banded over-the-row.</p> <p>For Wireworm, Grubs, and Flea Beetle (Larvae) Control: Make application as a 5- to 7-inch band over an open furrow (T-band), or in-furrow with the seed or transplant.</p>			
Pre-Emergence & Post-Plant Incorporated Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Lb. a.i./Acre	
Army Cutworm Armyworm spp. Cutworm spp. Flea Beetle (Larvae) Grubs	Pre-Emergence: 6.8 - 8.5	Pre-Emergence: 0.08 - 0.1	
Seed Corn Maggots True Armyworm Wireworms	Post-Plant Incorporated: 6.8 - 8.5	Post-Plant Incorporated: 0.08 - 0.1	
<p>Use Directions:</p> <ul style="list-style-type: none"> • Pre-Emergence - Sharda Bifenthrin 17.15% LFR may be tank mixed with pre-emergence pesticides. Make application through drip or drip tape. Make application when soil is moist towards the end of the irrigation run. • Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR may be tank mixed with post-plant incorporated pesticides. When incorporating with Sharda Bifenthrin 17.15% LFR, depth should be close to and not any greater than the intended planting depth. Make application through drip or drip tape. Make application when soil is moist towards the end of the irrigation run. 			
Foliar Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Lb. a.i./Acre	
Aphids Armyworms Cabbage Looper Corn Earworm Cucumber Beetles Cutworms Grasshopper Leafhoppers Melonworm Pickleworm Plant Bug Rindworm Squash Bugs Squash Vine Borer Stink Bugs Tobacco Budworm	3.4 - 8.5	0.04 - 0.1	
Carmin Mite Lygus spp. Mite Two-Spotted Spider Mite Whitefly	6.8 - 8.5	0.08 - 0.1	
<p>Use Directions: Thorough coverage is essential to obtain sufficient control. Apply when infestation reaches locally determined economic thresholds. Make application in a minimum of 5 gals. of spray volume/acre by air or in a minimum of 20 gals./acre with ground equipment. If application is made by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray.</p>			
RESTRICTIONS - CUCURBITS (Crop Group 9)			

- Do not make application of more than 0.3 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of **Sharda Bifenthrin 17.15% LFR** and other products that contain bifenthrin.
- **At-Plant:**
 - Do not make application of more than 0.1 lb. a.i./acre/year as an at-plant application.
- **Foliar:**
 - Do not apply more than two applications after bloom.
 - Do not apply treatments less than 7 days apart.
 - Do not make application within 3 days of harvest.

DRIED BEANS & PEAS (Crop Subgroup 6C)

Including - Dried cultivars of:

Bean (*Lupinus* spp.)Bean (*Phaseolus* spp.) - Field Bean, Kidney Bean, Lima Bean (Dry), Navy Bean, Pinto Bean, and Tepary BeanBean (*Vigna* spp.) - Adzuki Bean, Blackeyed Pea, Catjang, Cowpea, Crowder Pea, Moth Bean, Mung Bean, Rice Bean, Southern Pea, and Urd Bean

Broad Bean (Dry) - Chickpea, Guar, Lablab Bean, and Lentil

Pea (*Pisum* spp.) - Field Pea, Pigeon Pea, and Purple Hulled Peas

At-Plant Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Corn Rootworm (Larvae)	6.8 - 8.5	0.39 - 0.49	0.08 - 0.1
Army Cutworm Armyworm spp. Cutworm spp. Grape Colaspis Grubs Root Maggots True Armyworm Wireworm	3.4 - 6.8	0.2 - 0.39	0.04 - 0.08

Use Directions:

Make application as a 5- to 7-inch band over-the-row on the soil surface, 5- to 7-inch band (T-band) over an open furrow, or in-furrow with the seed. Make a broadcast application to the soil surface for control of army cutworm, cutworm species, true armyworm, or armyworm species.

Pre-Emergence & Post-Plant Incorporated Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Army Cutworm Armyworm spp. Cutworm spp. Grape Colaspis Grubs	Pre-Emergence: 6.8 - 8.5	Pre-Emergence: 0.08 - 0.1
Root Maggots True Armyworm Wireworm (PPI Only)	Post-Plant Incorporated: 6.8 - 8.5	Post-Plant Incorporated: 0.08 - 0.1

Use Directions:

- **Pre-Emergence - Sharda Bifenthrin 17.15% LFR** may be tank mixed with pre-emergence herbicides. Make application in a minimum of 10 gals./acre.
- **Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR** may be tank mixed with post-plant incorporated herbicides. When incorporating with **Sharda Bifenthrin 17.15% LFR**, depth should not be any greater than the intended planting depth and no deeper than 3 inches. Make application in a minimum of 10 gals./acre.

Foliar Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Aster Leafhopper Flea Beetle Grasshoppers Leafhoppers	2.1 - 8.5	0.025 - 0.1
Alfalfa Caterpillar Aphids Armyworm, Fall Armyworm, Southern Bean Leaf Beetle Beet Armyworm Cloverworm Corn Earworm Corn Rootworm (Adults) Cucumber Beetles Cutworms	2.8 - 8.5	0.033 - 0.1

European Corn Borer Grasshoppers Imported Cabbageworm Japanese Beetle (Adults) Leafminer Loopers Mexican Bean Beetle Pea Leaf Weevil Pea Weevil Plant Bug Saltmarsh Caterpillar Sap Beetle Stink Bugs Tarnished Plant Bug Thrips Tobacco Budworm Two-Spotted Spider Mite Webworms Western Bean Cutworm Whitefly Yellowstriped Armyworm		
Banks Grass Mite Carmine Mite Lygus Spp.	6.8 - 8.5	0.08 - 0.1
Use Directions: Make application in a minimum of 2 gals. finished spray/acre by air or in a minimum of 10 gals./acre with ground equipment. Thorough coverage is essential to achieve sufficient control. When making application by air 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray.		
RESTRICTIONS - DRIED BEANS & PEAS (Crop Subgroup 6C)		
<ul style="list-style-type: none"> Do not make application of more than 0.2 lb. a.i./acre to peas, or 0.3 lb. a.i./acre to beans per year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. At-Plant: <ul style="list-style-type: none"> Do not make application of more than 0.1 lb. a.i./acre/year as an at-plant application. Foliar: <ul style="list-style-type: none"> Do not make treatments less than 7 days apart. Do not make application within 14 days of harvest. 		

EGGPLANT

At-Plant Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Army Cutworm Armyworm spp. Cutworm spp. Grubs Root Maggots True Armyworm Wireworm	3.4 - 6.8	0.2 - 0.39	0.04 - 0.08
Use Directions: Make application as a 5 to 7- inch band over-the-row on the soil surface, a 5- to 7-inch band over the open furrow (T-band), or in-furrow with the transplant or seed. Make a broadcast application to the soil surface for control of army cutworm, cutworm species, true armyworm, or armyworm species.			
Pre-Emergence & Post-Plant Incorporated Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Lb. a.i./Acre	
Army Cutworm Armyworm spp. Cutworm spp. Grubs Root Maggots True Armyworm Wireworm	Pre-Emergence: 8.5	Pre-Emergence: 0.1	
	Post-Plant Incorporated: 3.4 - 8.5	Post-Plant Incorporated: 0.04 - 0.1	
Use Directions: <ul style="list-style-type: none"> Pre-Emergence - Sharda Bifenthrin 17.15% LFR may be tank mixed with pre-emergence pesticides. Make application through drip or drip tape. Make application when soil is moist towards the end of the irrigation run. 			

- **Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR** may be tank mixed with post-plant incorporated pesticides. When incorporating with **Sharda Bifenthrin 17.15% LFR**, depth should be close to and not any greater than the intended planting depth. Make application through drip or drip tape. Make application when soil is moist towards the end of the irrigation run.

Foliar Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Armyworms (Including Beet) Armyworm, Fall Armyworm, Southern Cabbage Looper Colorado Potato Beetle Corn Earworm Cucumber Beetle Cutworms European Corn Borer Flea Beetle Leafminers Loopers Pepper weevil Plant Bug Stink Bug Thrips Tomato Hornworm Tomato Pinworm Vegetable Leafminer Whitefly Yellowstriped Armyworm	2.8 - 8.5	0.033 - 0.1
Banks Grass Mite Broad Mite Carmine Mite Lygus spp. Pacific Spider Mite Two-Spotted Spider Mite	6.8 - 8.5	0.08 - 0.1
Use Directions: Thorough coverage is essential to obtain sufficient control. Apply when infestation reaches locally determined economic thresholds. Make application in a minimum of 2 gals. of spray volume/acre by air or in a minimum of 10 gals./acre with ground equipment. When making application by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray.		
RESTRICTIONS - EGGPLANT		
<ul style="list-style-type: none"> • Do not make application of more than 0.2 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. • At-Plant: <ul style="list-style-type: none"> • Do not make application of more than 0.1 lb. a.i./acre/year as an at-plant application. • Foliar: <ul style="list-style-type: none"> • Do not make treatments less than 7 days apart. • Do not make application within 7 days of harvest. 		

GRAPES

At-Plant Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Grape Phylloxera (Suppression Only) White Grubs Wireworms	8.5	0.1
Use Directions: Make application at time of planting over an open furrow in sufficient water for planting. Application may be made through transplant water at time of transplanting.		
Pre-Emergence & Post-Plant Incorporated (Site Preparation) Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Grape Phylloxera (Suppression Only) Vine Mealybug	Pre-Emergence: 8.5	Pre-Emergence: 0.1
	Post-Plant Incorporated: 8.5	Post-Plant Incorporated: 0.1
Use Directions: <ul style="list-style-type: none"> • Pre-Emergence - Sharda Bifenthrin 17.15% LFR may be tank mixed with pre-emergence pesticides. Make application through drip or drip tape. Make application when soil is moist towards the end of the irrigation run. • Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR may be tank mixed with post-plant incorporated pesticides for site preparation. When incorporating with Sharda Bifenthrin 17.15% LFR, depth should be close to and not any greater than the 		

intended planting depth. Make application through drip or drip tape. Make application when soil is moist towards the end of the irrigation run.

Foliar Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Cutworms Eastern Grape Leafhopper Grape Berry Moth Grapevine Root Borer Japanese Beetles (Adults) Lady Beetle (<i>Scymnus</i> spp.) Variegated Leafhopper Western Grape Leafhopper	4.3 - 8.5	0.05 - 0.1
Black Vine Weevil Glassy-Winged Sharpshooter Two-Spotted Spider Mite	8.5	0.1

Use Directions:

Thorough coverage is essential to obtain sufficient control. Apply when infestation reaches locally determined economic thresholds. Make application in a minimum of 10 gals. of spray volume by air or in a minimum of 25 gals. of spray volume with ground equipment. When making application by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray. When pest pressure is moderate to severe, use the higher use rate listed in the range.

RESTRICTIONS - GRAPES

- Do not make application of more than 0.10 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of **Sharda Bifenthrin 17.15% LFR** and other products that contain bifenthrin.
- Foliar:**
 - Do not make application within 30 days of harvest.

HEAD LETTUCE

At-Plant Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Rootworm (Larvae)	6.8 - 8.5	0.39 - 0.49	0.08 - 0.1
Army Cutworm Armyworm spp. Bulb Mites Cutworm spp. Grubs Lettuce Root Aphid Root Maggot True Armyworm Wireworm	3.4 - 6.8	0.2 - 0.39	0.04 - 0.08

Use Directions:

Make application as a 5- to 7-inch band over-the-row on the soil surface, a 5- to 7-inch band over the open furrow (T-band), or in-furrow with the seed. Make a broadcast application to the soil surface for control of army cutworm, cutworm species, true armyworm, armyworm species, or bulb mites.

Post-Plant Incorporated Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Garden Symphylans Lettuce Root Aphids	6.8 - 8.5	0.08 - 0.1

Foliar Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Aphids Armyworms Corn earworm Cucumber Beetles Cutworms Diamondback Moth Flea Beetles Imported Cabbageworm Leafhoppers Loopers Saltmarsh Caterpillar Stink Bug spp. Tobacco Budworm Whitefly	2.8 - 8.5	0.033 - 0.1

Carmine Mite Lygus spp. Two-Spotted Spider Mite	6.8 - 8.5	0.08 - 0.1
Use Directions: Make application in water as needed for insect control using a minimum of 15 gals. of spray volume/acre with ground equipment and 5 gals./acre by air. When making application 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 sufficient control.		
RESTRICTIONS - HEAD LETTUCE		
<ul style="list-style-type: none"> Do not apply more than 0.5 lb. a.i./acre/year, including at-plant, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. At-Plant: <ul style="list-style-type: none"> Do not make application of more than 0.1 lb. a.i./acre/year as an at-plant application. Foliar: <ul style="list-style-type: none"> Do not make treatments less than 7 days apart. Do not make application within 7 days of harvest. 		

HOPS

At-Plant Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Grape Colaspis Rootworms Sweet Potato Flea Beetle White Grub Wireworms	5.1 - 8.5	0.06 - 0.1
Use Directions: Make application in a T-band that ensures coverage of the entire furrow, immediately prior to planting, or at planting. Application may also be made as a soil drench with transplant water at time of transplanting. Make application in a minimum of 10 gals./acre of spray.		
Lay-By Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Grape Colaspis Rootworms White Grub Wireworms	5.1 - 8.5	0.06 - 0.1
Use Directions: Make application of Sharda Bifenthrin 17.15% LFR to the transplant area and incorporate with cultivation equipment set to throw soil towards the hill. Make application in a minimum of 10 gals./acre of spray.		
Post-Plant Incorporated Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Grape Colaspis Rootworms White Grub Wireworm	Post-Plant Incorporated: 5.1 - 8.5	Post-Plant Incorporated: 0.06 - 0.1
Use Directions: Make application of Sharda Bifenthrin 17.15% LFR to the transplant area and incorporate to planting depth. Make application in a minimum of 10 gals./acre of spray. Application may be made as a broadcast application or an incorporated band application.		
Pre-Emergence & Post-Plant Soil Applied Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Grape Colaspis Rootworms White Grub Wireworms	Pre-Emergence: 5.1 - 8.5	Pre-Emergence: 0.06 - 0.1
Use Directions: Make application through drip or drip tape. Make application when soil is moist towards the end of the irrigation run.		
Foliar Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Aphids Armyworms Cutworms Leafrollers Loopers	5.1 - 8.5	0.06 - 0.1

Root Weevils	4.3 - 8.5	0.05 - 0.1
Two-Spotted Spider Mite	8.5	0.1

Use Directions:

Ground Applications: For optimum results, full coverage is essential. Early season use 100 - 150 gals. of spray volume/acre. Late season use 200 - 250 gals. of spray volume/acre.

For Root Weevil Control: Apply a directed spray at the base of the plant. Spray up the vine 3 ft. and the soil surface 1.5 - 2 ft. on either side of the plant.

Air Applications For Late Year Control of Two-Spotted Spider Mites: Make application of no less than 6.4 oz. (0.1 lb. a.i.) per application in a minimum of 10 gals./acre.

RESTRICTIONS - HOPS

- Do not make application of more than 0.3 lb. a.i./acre/year, including at-plant, lay-by, pre-emergence, post-plant incorporated, and foliar treatments of **Sharda Bifenthrin 17.15% LFR** and other products that contain bifenthrin.

- Do not use ultra-low volume (ULV) application on hops.

- Foliar:**

- Do not apply more than 0.1 lb. a.i./acre per foliar application.

- Do not make treatments less than 21 days apart.

- Do not make application within 14 days of harvest.

LEAFY BRASSICAS (Crop Subgroup 5B) & TURNIP GREENS

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

At-Plant Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Rootworm (Larvae)	6.8 - 8.5	0.39 - 0.49	0.08 - 0.1
Army Cutworm Armyworm spp. Cutworm spp. Grubs Lettuce Root Aphids Root Maggots True Armyworm Wireworm	3.4 - 6.8	0.2 - 0.39	0.04 - 0.08

Use Directions:

Make application as a 5- to 7-inch band over-the-row on the soil surface, a 5- to 7-inch band over the open furrow (T-band), or in-furrow with the seed or transplant. Application may be made through transplant water at time of transplanting. Make a broadcast application over the soil surface for control of army cutworm, cutworm species, true armyworm or armyworm species.

Pre-Emergence & Post-Plant Incorporated Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Army Cutworm Armyworm spp. Cutworm spp. Flea Beetle (Larvae) Grubs	Pre-Emergence: 3.4 - 6.8	Pre-Emergence: 0.04 - 0.08
Lettuce Root Aphids Root Maggots True Armyworm Wireworms	Post-Plant Incorporated: 3.4 - 6.8	Post-Plant Incorporated: 0.04 - 0.08

Use Directions:

- Pre-Emergence - Sharda Bifenthrin 17.15% LFR** may be tank mixed with pre-emergence pesticides. Make application through drip or drip tape. Make application when soil is moist towards the end of the irrigation run.

- Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR** may be tank mixed with post-plant incorporated pesticides. When incorporating with **Sharda Bifenthrin 17.15% LFR**, depth should be close to and not any greater than the intended planting depth. Make application through drip or drip tape. Make application when soil is moist towards the end of the irrigation run.

Foliar Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Aphids Armyworms Corn Earworm Crickets Cucumber Beetles Cutworms Diamondback Moth Flea Beetles	2.8 - 8.5	0.033 - 0.1

Grasshoppers Ground Beetles Imported Cabbageworm Japanese Beetle (Adults) Leafhoppers Loopers Saltmarsh Caterpillar Stink Bugs Thrips Tobacco Budworm Whitefly Wireworm (Adults)		
Banks Grass Mite Carmine Mite Lygus spp. Pacific Spider Mite Two-Spotted Spider Mite	6.8 - 8.5	0.08 - 0.1
Use Directions: Thorough coverage is essential to obtain sufficient control. Apply when infestation reaches locally determined economic thresholds. Make application in a minimum of 2 gals. of spray volume/acre by air or in a minimum of 10 gals./acre with ground equipment. When making application by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray.		
RESTRICTIONS - LEAFY BRASSICA (Crop Subgroup 5B) & TURNIP GREENS		
<ul style="list-style-type: none"> Do not make application of more than 0.4 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. At-Plant: <ul style="list-style-type: none"> Do not make application of more than 0.1 lb. a.i./acre/year as an at-plant application. Foliar: <ul style="list-style-type: none"> Do not make treatments less than 7 days apart. Do not make application within 7 days of harvest. 		

LEAFY PETIOLE VEGETABLES (Crop Subgroup 4B)

Celery, Cardoon, Chinese celery, Celtuce, Florence fennel, Rhubarb, and Swiss chard

At-Plant Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Cutworm spp. Garden Symphylans Lettuce Root Aphids	3.4 - 8.5	0.04 - 0.1
Use Directions: Make application as a 5- to 7-inch band (T-band) over an open furrow, or in-furrow with the seed. Application may be made through transplant water at time of transplanting.		
Pre-Emergence & Post-Plant Incorporated Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Army cutworm Armyworm spp. Cutworm spp. Flea Beetle (Larvae) Grubs True Armyworm Wireworm	Pre-Emergence: 3.4 - 8.5	Pre-Emergence: 0.04 - 0.1
	Post-Plant Incorporated: 8.5	Post-Plant Incorporated: 0.04 - 0.1
Use Directions: <ul style="list-style-type: none"> Pre-Emergence - Sharda Bifenthrin 17.15% LFR may be tank mixed with pre-emergence pesticides. Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR may be tank mixed with post-plant incorporated pesticides. When incorporating with Sharda Bifenthrin 17.15% LFR, depth should be close to and not any greater than the intended planting depth. 		
Foliar Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Aphids Armyworms Corn Earworm Crickets Cucumber Beetles Cutworms Diamondback Moth Flea Beetles Ground Beetles	3.4 - 8.5	0.04 - 0.1

Imported Cabbageworm Leafhoppers Loopers Saltmarsh Caterpillar Stink Bugs Thrips Tobacco Budworm Whitefly Wireworm (Adults)		
Banks Grass Mite Carmin Mite Lygus spp. Pacific Spider Mite Two-Spotted Spider Mite	6.8 - 8.5	0.08 - 0.1
Use Directions: Thorough coverage is essential to obtain sufficient control. Apply when infestation reaches locally determined economic thresholds. Make application in a minimum of 2 gals. of spray volume/acre by air or in a minimum of 10 gals. of spray volume/acre with ground equipment. When making application by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray		
RESTRICTIONS - LEAFY PETIOLE VEGETABLES (Crop Subgroup 4B)		
<ul style="list-style-type: none"> Do not make application of more than 0.5 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. Foliar: <ul style="list-style-type: none"> Do not make treatments less than 7 days apart. Do not make application within 7 days of harvest. 		

MAYHAW

Pre-Emergence & Post-Plant Incorporated Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
White Grub Wireworm	Pre-Emergence: 8.5	Pre-Emergence: 0.1
	Post-Plant Incorporated: 8.5	Post-Plant Incorporated: 0.1
Use Directions:		
<ul style="list-style-type: none"> Pre-Emergence - Sharda Bifenthrin 17.15% LFR may be tank mixed with pre-emergence pesticides. Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR may be tank mixed with post-plant incorporated pesticides labeled for site preparation. When incorporating with Sharda Bifenthrin 17.15% LFR, depth should be close to and not any greater than the intended planting depth. 		
Foliar Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Plum Curculio	6.8 - 8.5	0.08 - 0.1
Use Directions: Make a foliar application in at least 28 gals./acre.		
RESTRICTIONS - MAYHAW		
<ul style="list-style-type: none"> Do not make application of more than 0.2 lb. a.i./acre/year, including pre-emergence, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. Foliar: <ul style="list-style-type: none"> Do not make treatment more than once, every 7 days. Do not make application within 30 days of harvest. 		

OKRA

At-Plant Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Armyworm Cutworm spp. Flea Beetle (Larvae) Grape Colaspis Root Maggots White Grub Wireworm	3.4 - 6.8	0.2 - 0.39	0.04 - 0.08
Use Directions: Make application as a 5- to 7-inch band over-the-row on the soil surface, a 5- to 7-inch band over the open furrow (T-band), in-furrow with the seed, or broadcast to the soil surface.			
Pre-Emergence & Post-Plant Incorporated Applications			

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Cutworm spp.	Pre-Emergence: 3.4 - 8.5	Pre-Emergence: 0.04 - 0.1
Cutworm spp. Flea Beetle (Larvae) Grape Colaspis Root Maggots White Grub Wireworm	Post-Plant Incorporated: 3.4 - 8.5	Post-Plant Incorporated: 0.04 - 0.1
Use Directions:		
<ul style="list-style-type: none"> • Pre-Emergence - Sharda Bifenthrin 17.15% LFR may be tank mixed with pre-emergence herbicides. • Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR may be tank mixed with post-plant incorporated herbicides. When incorporating with Sharda Bifenthrin 17.15% LFR, depth should be close to and not any greater than the intended planting depth and no deeper than 3 inches. 		
Foliar Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Aphids Armyworms Corn Earworm Cucumber Beetles Cutworms European Corn Borer Flea Beetles Japanese Beetle (Adults) Leafminers Loopers Stink Bugs Thrips Whitefly	2.8 - 8.5	0.033 - 0.1
Broad Mite Carmine Mite Lygus spp. Two-Spotted Spider Mite	6.8 - 8.5	0.08 - 0.1
Use Directions:		
Apply as needed using sufficient water to obtain uniform coverage. Apply with ground equipment using a minimum of 10 gals. of finished spray/acre or a minimum of 2 gals./acre by aircraft.		
RESTRICTIONS - OKRA		
<ul style="list-style-type: none"> • Do not make application more than 0.2 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. • At-Plant: <ul style="list-style-type: none"> • Do not make application of more than 0.1 lb. a.i./acre/year as an at-plant application. • Foliar: <ul style="list-style-type: none"> • Do not make treatments less than 7 days apart. • Do not make application within 7 days of harvest. 		

PEANUT

At-Plant Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Aphids Leafhoppers Thrips Wireworms	6.8 - 8.5	0.36 - 0.49	0.08 - 0.1
Use Directions:			
Make application as a 5- to 7-inch band (T-band) over an open furrow, or in-furrow with the seed.			
Foliar Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Lb. a.i./Acre	
Armyworm, Fall Armyworm, Southern Beet Armyworm Corn Earworm Corn Rootworm, Southern Cutworm spp. Grasshoppers	2.8 - 8.5	0.033 - 0.1	

Green Cloverworm Leafhoppers Lesser Cornstalk Borer Loopers Rednecked Peanut Worm Stink Bugs Three-Cornered Alfalfa Hopper Velvetbean Caterpillar Yellowstriped Armyworm		
Aphids Spider Mites Thrips Whitefly	6.8 - 8.5	0.08 - 0.1
Use Directions: Make application in a minimum of 10 gals./acre with ground equipment or 2 gals./acre by air.		
RESTRICTIONS - PEANUT		
<ul style="list-style-type: none"> Do not apply more than 0.5 lb. a.i./acre/year, including at-plant and foliar applications of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin containing products. Foliar: <ul style="list-style-type: none"> Do not make treatments less than 14 days apart. Do not make application within 14 days of harvest. Do not feed green immature plants and peanut hay to livestock. 		

PEARS

Foliar Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Aphids Codling Moth Cutworms Green Fruitworm Leafhoppers Leafminers Leafrollers Lygus spp. Plant Bugs Plum Curculio San Jose Scale (Crawlers) Stink Bugs Tarnished Plant Bugs	3.4 - 17.1	0.04 - 0.2
European Red Mite	5.1 - 17.1	0.06 - 0.2
Two-Spotted Spider mite Yellow Mite	6.8 - 17.1	0.08 - 0.2
Use Directions: Ground Applications: Make application as a dilute (minimum of 200 gals. of spray volume/acre) or concentrate (minimum of 50 gals. of spray volume/acre) spray in sufficient water to provide thorough coverage. Air Applications: Make application of the specified use rate in a minimum of 10 gals./acre by air.		
RESTRICTIONS - PEARS		
<ul style="list-style-type: none"> Do not make application of more than 0.5 lb. a.i./acre/year for foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin with no more than 0.45 lb. a.i./acre applied after petal-fall. Foliar: <ul style="list-style-type: none"> Do not make treatments less than 30 days apart. Do not make application within 14 days of harvest. Do not graze livestock in treated orchards or cut treated cover crops for feed. 		

PEPPERS (BELL and NON-BELL) & PEPINO

At-Plant Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Army Cutworm Armyworm spp. Cutworm spp. Flea Beetle (Larvae) Grubs Pepper Maggots Root Aphids Root Maggots	3.4 - 6.8	0.2 - 0.39	0.04 - 0.08

Stalk Borer True Armyworm Wireworm			
Use Directions: Make application as a 5- to 7-inch band over-the-row on the soil surface, a 5- to 7-inch band over the open furrow (T-band), or in-furrow with the transplant or seed. Application may be made through transplant water at time of transplanting. Make a broadcast application over the soil surface for control of army cutworm, cutworm species, true armyworm, armyworm species, or stalk borer.			
Pre-Emergence & Post-Plant Incorporated Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre		Lb. a.i./Acre
Army cutworm Armyworm spp. Cutworm spp. Flea Beetle (Larvae) Grubs True Armyworm Wireworm	Pre-Emergence: 8.5		Pre-Emergence: 0.1
	Post-Plant Incorporated: 3.4 - 8.5		Post-Plant Incorporated: 0.04 - 0.1
Use Directions:			
<ul style="list-style-type: none"> • Pre-Emergence - Sharda Bifenthrin 17.15% LFR may be tank mixed with pre-emergence pesticides. Make application through drip or drip tape. Make application when soil is moist towards the end of the irrigation run. • Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR may be tank mixed with post-plant incorporated pesticides. When incorporating with Sharda Bifenthrin 17.15% LFR, depth should be close to and not any greater than the intended planting depth. Make application through drip or drip tape. Make application when soil is moist towards the end of the irrigation run. 			
Foliar Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre		Lb. a.i./Acre
Armyworms (Including Beet) Armyworm, Fall Armyworm, Southern Cabbage Looper Colorado Potato Beetle Corn Earworm Cucumber Beetle Cutworms European Corn Borer Flea Beetle Leafminers Loopers Pepper weevil Plant Bug Stink Bug Thrips Tomato Hornworm Tomato Pinworm Vegetable Leafminer Whitefly Yellowstriped Armyworm	2.8 - 8.5		0.033 - 0.1
Broad Mite Carmin Mite Lygus spp. Pacific Spider Mite Two-Spotted Spider Mite	6.8 - 8.5		0.08 - 0.1
Use Directions: Thorough coverage is essential to obtain sufficient control. Apply when the infestation reaches locally determined economic thresholds. Make application in a minimum of 2 gals. of spray volume/acre by air or in a minimum of 10 gals./acre with ground equipment. When making application by air, 1 - 2 quarts of emulsified oil may be substituted for 1 - 2 quarts of water in the finished spray.			
RESTRICTIONS - PEPPERS (BELL AND NON-BELL) & PEPINO			
<ul style="list-style-type: none"> • Do not make application of more than 0.2 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. • At-Plant: <ul style="list-style-type: none"> • Do not make application of more than 0.1 lb. a.i./acre/year as an at-plant application. • Foliar: <ul style="list-style-type: none"> • Do not make treatments less than 7 days apart. • Do not make application within 7 days of harvest. 			

ROOT CROPS (Except Sugar Beets and Garden Beets) (Crop Subgroup 1B)

Burdock Edible, Carrot, Celeriac, Chervil Turnip Rooted, Chicory, Garden Beet, Ginseng, Horseradish, Parsley Turnip Rooted, Parsnip, Radish, Radish Oriental, Rutabaga, Salsify, Salsify Black, Salsify Spanish, Skirret, and Turnip

At-Plant Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Crown Aphids Cutworms Flea Beetles Root Aphids Root Maggots Seed Corn Maggots Wireworms	8.5	0.1
Use Directions: Make application as a 5- to 7-inch band (T-band) over an open furrow, or in-furrow with the seed. Application may be made through transplant water at time of transplanting.		
Pre-Emergence & Post-Plant Incorporated Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Crown Aphids Cutworms Flea Beetles Root Aphids Root Maggots Seed Corn Maggots Wireworms	Pre-Emergence: 8.5	Pre-Emergence: 0.1
	Post-Plant Incorporated: 8.5	Post-Plant Incorporated: 0.1
Use Directions: <ul style="list-style-type: none"> • Pre-Emergence - Sharda Bifenthrin 17.15% LFR may be tank mixed with pre-emergence pesticides. • Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR may be tank mixed with post-plant incorporated herbicides. When incorporating with Sharda Bifenthrin 17.15% LFR, depth should be close to and not any greater than the intended planting depth. 		
Foliar Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Aphids Armyworm, Fall Armyworm, Southern Beet Armyworm Celery Leaf Tier Corn Earworm Cross Striped Cabbageworm Cutworms Diamondback Moth European Corn Borer Fire Ants Flea Beetles Green Cloverworm Hornworms Imported Cabbageworm Loopers Spider Mites Tobacco Budworm Velvetbean Caterpillar Whitefly Yellowstriped Armyworm	6.8 - 8.5	0.08 - 0.1
Use Directions: Thorough coverage is essential to obtain sufficient control. Apply when infestation reaches locally determined economic thresholds. Make a foliar application in at least 25 gals./acre.		
RESTRICTIONS - ROOT CROPS (EXCEPT SUGAR BEETS and GARDEN BEETS) (Crop Subgroup 1B)		
<ul style="list-style-type: none"> • Do not make application of more than 0.5 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. • Foliar: <ul style="list-style-type: none"> • Do not make treatments less than 7 days apart. • Do not make application within 21 days of harvest. 		

GARDEN BEETS

At-Plant Applications	
Pest	Sharda Bifenthrin 17.15% LFR Rates

	Fl. Oz./Acre	Lb. a.i./Acre
Crown Aphids Cutworms Flea Beetles Root Aphids Root Maggots Seed Corn Maggots Wireworms	8.5	0.1
Use Directions: Make application as a 5- to 7-inch band (T-band) over an open furrow, or in-furrow with the seed. Application may be made through transplant water at time of transplanting.		
Pre-Emergence & Post-Plant Incorporated Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Crown Aphids Cutworms Flea Beetles Root Aphids Root Maggots Seed Corn Maggots Wireworms	Pre-Emergence: 8.5	Pre-Emergence: 0.1
	Post-Plant Incorporated: 8.5	Post-Plant Incorporated: 0.1
Use Directions:		
<ul style="list-style-type: none"> • Pre-Emergence - Sharda Bifenthrin 17.15% LFR may be tank mixed with pre-emergence pesticides. • Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR may be tank mixed with post-plant incorporated herbicides. When incorporating with Sharda Bifenthrin 17.15% LFR, depth should be close to and not any greater than the intended planting depth. 		
Foliar Applications		
Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Garden Beet Pests Only Aphids Fire Ants Flea Beetles Lepidopterous (Larvae) Spider Mites Whitefly	6.8 - 8.5	0.08 - 0.1
Use Directions: Thorough coverage is essential to obtain sufficient control. Apply when infestation reaches locally determined economic thresholds. Make a foliar application in at least 25 gals./acre.		
RESTRICTIONS - GARDEN BEETS		
<ul style="list-style-type: none"> • Do not make application of more than 0.4 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. • Foliar: <ul style="list-style-type: none"> • Do not make treatments less than 7 days apart. • Do not make application within 1 day of harvest. 		

GRASS FORAGE, FODDER, and HAY GROUP & GRASS GROWN FOR SEED, PASTURE, and RANGELAND**Idaho, Oregon, and Washington Only**

Bahiagrass, Barnyardgrass, Bentgrass, Bermudagrass, Kentucky Bluegrass, Big Bluestem, Smooth Bromegrass, Buffalograss, Reed Canarygrass, Centipedegrass, Crabgrass, Cupgrass, Dallisgrass, Sand Dropseed, Kentucky Fescue, Meadow Foxtail, Eastern Gramagrass, Side-Oats Grama, Guinea Grass, Indian Grass, Johnsongrass, Lovegrass, Napiergrass, Oatgrass, Orchardgrass, Pangolagrass, Paspalum, Redtop, Italian Ryegrass, St. Augustine Grass, Sprangletop, Squirreltail Grass, Stargrass, Switchgrass, Timothy, Crested Wheatgrass, Wildrye Grass, and Zoysia Grass. Also included are Sudangrass and Sorghum Forages and their Hybrids

At-Plant Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Army Cutworm Armyworm spp. Cutworm spp. Grape Colaspis Grubs Root Maggots True Armyworm Wireworm	8.5	0.39	0.1
Use Directions: Make application as a 5- to 7-inch band over-the-row on the soil surface, a 5- to 7-inch band over the open furrow (T-band), or in-furrow with the seed. Make a broadcast application over the soil surface for control of army cutworm, cutworm species, true			

armyworm, or armyworm species. Make application in a minimum of 5 gals./acre when applied as in in-furrow or T-band application.

Pre-Emergence & Post-Plant Incorporated Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Army Cutworm Armyworm spp. Cutworm spp. Grape Colaspis Grubs	Pre-Emergence: 8.5	Pre-Emergence: 0.1
Root Maggots True Armyworm Wireworm (PPI only)	Post-Plant Incorporated: 8.5	Post-Plant Incorporated: 0.1

Use Directions:

- **Pre-Emergence - Sharda Bifenthrin 17.15% LFR** may be tank mixed with pre-emergence herbicides. Make application in a minimum of 10 gals./acre.
- **Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR** may be tank mixed with post-plant incorporated herbicides. When incorporating with **Sharda Bifenthrin 17.15% LFR**, depth should be close to and not any greater than the intended planting depth and no deeper than 3 inches. Make application in a minimum of 10 gals./acre.

Foliar Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Alfalfa Caterpillar Alfalfa Looper Alfalfa Weevil Ant spp. Armyworm, Fall Armyworm, Southern Armyworm, True Armyworm, Yellowstriped Banks Grass Mite Black Grass Bug Blue Alfalfa Aphid ¹ Carmine Mite Cereal Leaf Beetle Chinch Bug Cricket Cutworms Egyptian Alfalfa Weevil (Larvae & Adults) Flea Beetles Grass Mealybug Grasshoppers Green Cloverworm Green Peach Aphid ¹ Hornworms Hunting Bill Bug Lygus Spp. Meadow Spittlebug Pea Aphid ¹ Plant Bug spp. Potato Leafhopper Range Caterpillar Spotted Alfalfa Aphid ¹ Stink Bugs Three-Cornered Alfalfa Hopper Velvetbean Caterpillar Webworms	8.5	0.1

¹Aphid control may vary depending upon the species present and the host-plant relationships.

Use Directions:

Make application as insects appear in sufficient water volume to ensure thorough coverage of foliage. Use the higher use rate in the rate range for heavier pest pressure or for increased residual pest control. Do not exceed the maximum use rate. Make application in a minimum of 2 gals. spray volume/acre by air or in a minimum of 10 gals./acre with ground equipment. Higher volumes of spray volume may improve insect control when there are high temperatures, when foliage is dense and/or when pest pressure is high.

RESTRICTIONS - GRASS FORAGE, FODDER, and HAY GROUP & GRASS GROWN FOR SEED, PASTURE, and RANGELAND

- Do not make application of more than 0.2 lb. a.i. to grass forage, fodder, and hay group, and grass grown for seed, pasture and rangeland, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of **Sharda Bifenthrin 17.15% LFR** and other products that contain bifenthrin.
- **Foliar:**
 - Do not make treatments less than 14 days apart.
 - Do not make application within 30 days of harvest for forage and hay.

SOD FARMS

At-Plant Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Lb. a.i./Acre	
Ants Chinch Bugs ⁵ Crickets Cutworms ¹ Earwigs Imported Fire Ants ⁸ White Grub Wireworm	8.5	0.1	
Use Directions: Make application as a 5- to 7-inch band (T-band) over an open furrow, or in-furrow with the seed.			
Pre-Emergence & Post-Plant Incorporated Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Lb. a.i./Acre	
Ants Chinch Bugs ⁵ Crickets Cutworms ¹ Earwigs Imported Fire Ants ⁸ White Grub Wireworm	Pre-Emergence: 8.5	Pre-Emergence: 0.1	
	Post-Plant Incorporated: 8.5	Post-Plant Incorporated: 0.1	
Use Directions: <ul style="list-style-type: none"> • Pre-Emergence - Sharda Bifenthrin 17.15% LFR may be tank mixed with pre-emergence herbicides. • Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR may be tank mixed with post-plant incorporated herbicides. When incorporating with Sharda Bifenthrin 17.15% LFR, depth should be close to and not any greater than the intended planting depth and no deeper than 3 inches. 			
Foliar Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Armyworms ¹ Cutworms ¹ Sod Webworm ¹	2.8 - 4.35	0.066 - 0.1	0.033 - 0.05
Annual Bluegrass Weevil (Hyperodes) (Adults) ² Banks Grass Mite ⁶ Billbugs (Adults) ³ Black Turfgrass Ataenius (Adults) ⁴ Crickets Earwigs Fleas (Adults) Grasshoppers Mealybugs Mites ⁵	4.35 - 8.7	0.1 - 0.2	0.05 - 0.1
Ants Chinch Bugs ⁵ Fleas (Larvae) ⁷ Imported Fire Ants ⁸ Japanese Beetle (Adults) Mole Cricket (Adults) ⁹ Mole Cricket (Nymphs) ¹⁰ Ticks ¹¹	8.7 - 17.42	0.2 - 0.4	0.1 - 0.2
Use Directions: Make a broadcast application. When treating dense grass foliage use a higher spray volume of up to 10 gals. of carrier per 1,000 sq. ft. to obtain uniform spray coverage. Irrigation to treated area within a few hours after application may improve efficacy to mole crickets and other sub-surface pests. The application use rates listed in the table below will provide excellent control of the pests listed under normal conditions. At the discretion of the applicator, applications of Sharda Bifenthrin 17.15% LFR may be made at up to 0.4 fl. oz./1,000 sq. ft. to control each of the pests listed in the table. The higher listed application use rates should be used when maximum residual control is needed or heavy pest populations are present.			

¹Armyworms, Cutworms, and Sod Webworms: To obtain best control, delay watering (irrigation) or mowing for 24 hours following application. If the grass area is maintained at a mowing height of greater than 1 inch, the a higher application use rate listed in the range (up to 0.4 fl. oz./1,000 sq. ft.) may be necessary during periods of heavy pest pressure.

²Annual Bluegrass Weevil (*Hyperodes*) (Adults): Treatments should be timed to control adult weevils as they leave their overwintering sites and move into grass areas. This movement typically starts when *Forsythia* is in full bloom and concludes when flowering dogwood (*Cornus florida*) is in full bloom. Consult your local or State Cooperative Extension Service for more information about application timing.

³Billbug (Adults): Treatments should be made when adult billbugs are first seen during April and May. Degree day models have been developed to help determine application timing. Consult your local or State Cooperative Extension Service for information specific to your region. In temperate regions, spring treatments that target billbug adults will also provide control of over-wintered chinch bugs.

⁴Black Turfgrass Ataenius (Adults): Treatments should be made during May and July to control the first and second generation of black turfgrass ataenius adults, respectively. Time the May application to coincide with the full bloom stage of Vanhoutte Spiraea (*Spiraea vanhouttei*) and horse chestnut (*Aesculus hippocastanum*). Time the July application to coincide with the blooming of Rose of Sharon (*Hibiscus syriacus*).

⁵Chinch Bugs: Chinch Bugs infest the base of grass plants and are often located in the thatch layer. Irrigation of the grass area before treatment will help with penetration of the product to the area where the chinch bugs are located. Use higher spray volume treatments if the thatch layer is excessive or if a relatively long mowing height is being maintained. Chinch Bugs are difficult to control pests in grasses, and the higher listed application use rates (up to 0.4 fl. oz./1,000 sq. ft.) may be necessary to control populations that contain both nymphs and adults during the middle of the summer.

⁶Mites: To ensure best control of eriophyid mites, make application in combination with the labeled application rate of a surfactant. A second application, five to seven days following the first, may be needed to achieve sufficient control.

⁷Flea (Larvae): Flea larvae are found and develop in the soil of shaded areas that are accessible to pets or other animals. Use a higher spray volume treatment when applying to these areas to ensure penetration of the insecticide into the soil. **Note:** if the lawn area is being treated with this product at 0.1 fl. oz./1,000 sq. ft. for adult flea control, then the larval application use rate may be determined by increasing the treatment volume two- to four-fold.

⁸Imported Fire Ants: Optimum control will be obtained by combining broadcast treatments that control foraging workers and newly mated fly-in queens with mound drenches that control existing colonies. If the soil is not moist, then it is important to irrigate prior to application or use a high spray volume for the application. Broadcast applications should made at 0.4 fl. oz./1,000 sq. ft. Mounds should be treated by diluting 0.05 fl. oz. of **Sharda Bifenthrin 17.15% LFR** per gallon of water and making application of 1 - 2 gals. of spray volume per mound. The mounds should be treated with enough force to break the apex and allow the insecticide solution to flow into the ant tunnels. In addition, treat a four-foot diameter around the mound. For optimum performance, make application in cool weather (65 - 80°F) or in early morning or late evening hours.

⁹Mole Cricket (Adults): Achieving sufficient control of adult mole crickets is difficult because of continuous and high level of insect activity during early spring. Treatments should be made as late in the day as possible and should be followed by application of up to 0.5 inch of water immediately following treatment. If the soil is not moist, it is important to irrigate prior to treatment to influence movement of the mole crickets closer to the soil surface where contact with the insecticide will be optimum. Grass areas that receive pressure from adult mole crickets should be treated at peak egg hatch to ensure best control of subsequent nymph populations (see Mole Cricket nymph section below).

¹⁰Mole Cricket (Nymphs): Grass areas that received intense adult mole cricket pressure in the spring should be treated immediately before to peak egg hatch. Optimal control is achieved during this time because young nymphs are more susceptible to insecticides and are typically located near the soil surface where the insecticide is most concentrated. To control larger, more damaging, nymphs later in the year may require both a higher application use rate listed in the rate range in addition to more frequent treatments to maintain sufficient control. Treatments should be made as late in the day as possible and should be followed by application of up to 0.5 inch of water immediately following treatment. If the soil is not moist, it is important to irrigate prior to treatment to influence movement of the mole crickets closer to the soil surface where contact with the insecticide will be optimum.

¹¹Ticks (Includes species that vector Lyme Disease and Rocky Mountain Spotted fever): Do not apply spot treatments. The entire area should be treated where exposure to ticks might occur. Use higher spray volumes when treating areas that have dense ground cover or heavy leaf litter. Ticks can be reintroduced from surrounding areas on host animals. Retreatment may be required to achieve and/or maintain control during periods of high pest pressure. Repeat application is needed only if there are signs of renewed activity. Repeat application no more than once treatment every seven days.

- **Deer Ticks (*Ixodes* sp.)** have a complex life cycle that ranges over a two-year period and involves four life stages. Treatments should be made in the late fall and/or early spring for the control of adult ticks that are typically found on brush or grass above the soil surface, and in mid to late spring to control larvae and nymphs that are found in the soil and leaf litter.
- **American Dog Ticks** are typically found along paths where humans contact is likely. Treatments should be made as needed from mid-spring to early fall to control American dog tick larvae, nymphs and adults.

RESTRICTIONS - SOD FARMS

- **New York State:** Do not apply **Sharda Bifenthrin 17.15% LFR** to any grass or turf area within 100 ft. of a water body (lake, pond, river, stream, wetland, or drainage ditch).
- **New York State:** Make one repeat application of **Sharda Bifenthrin 17.15% LFR** if there are signs of renewed insect activity 14 days following the initial application.

SOYBEANS

Pest	At-Plant Applications		
	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Rootworm (Larvae)	6.8 - 8.5	0.39 - 0.49	0.08 - 0.1
Army Cutworm Armyworm spp. Bean Leaf Beetle (Larvae) Cutworm spp. Grape Colaspis Grubs	3.4 - 6.8	0.2 - 0.39	0.04 - 0.08

Root Maggot Seed Corn Beetle Seed Corn Maggots True Armyworm Wireworm			
Use Directions: Make application as a 5- to 7-inch band over-the-row on the soil surface, a 5- to 7-inch band over the open furrow (T-band), or in-furrow with the seed. Make a broadcast application over the soil surface for control of army cutworm, cutworm species, true armyworm, or armyworm species.			
Pre-Emergence & Post-Plant Incorporated Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre		Lb. a.i./Acre
Armyworm spp. Black Cutworm	Pre-Emergence: 3.4		Pre-Emergence: 0.04
Armyworm spp. Bean leaf Beetle (Larvae) Black Cutworm Seed Corn Beetle Seed Corn Maggots Stalk Borer White Grub Wireworm	Post-Plant Incorporated: 4.0 - 5.3		Post-Plant Incorporated: 0.047 - 0.062
Use Directions:			
<ul style="list-style-type: none"> • Pre-Emergence - Sharda Bifenthrin 17.15% LFR may be tank mixed with pre-emergence herbicides. • Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR may be tank mixed with post-plant incorporated herbicides. When incorporating with Sharda Bifenthrin 17.15% LFR, depth should be close to and not any greater than the intended planting depth and no deeper than 3 inches. 			
Foliar Applications			
Pest	Fl. Oz./Acre		Lb. a.i./Acre
	2.8 - 8.5		0.033 - 0.1
Alfalfa Caterpillar Aphids Armyworms Bean Leaf Beetle Blister Beetle spp. Corn Earworm Corn Rootworm (Adults) Cowpea Curculio Cucumber Beetle (Adults) Cutworms Dectes Stem Borer European Corn Borer False Cinch Bug Flea Beetle Grasshoppers Green Cloverworm Hornworms Imported Cabbageworm Japanese Beetle (Adults) Leaf Skeletonizer spp. Leafhoppers Leafminers (Adults) Lesser Cornstalk Borer Loopers Kudzu Bug Mexican Bean Beetle Painted Lady (Thistle) Caterpillar Pea Leaf Weevil Saltmarsh Caterpillar Seed Corn Maggots (Adults) Silver-Spotted Skipper Spittlebug Stink Bug Three-Cornered Alfalfa Hopper Thrips Tobacco Budworm Velvetbean Caterpillar Webworm Woollybear Caterpillar			

Lygus spp. Two-Spotted Spider Mite Whitefly	6.8 - 8.5	0.08 - 0.1
Use Directions: Make application in a minimum of 10 gals./acre with ground equipment or 2 gals./acre by aircraft. Pyrethroid resistance is known to be common for beet armyworm and tobacco budworm. Consult the RESISTANCE MANAGEMENT section of this label and your local or state agricultural authority for additional information and to determine if resistant pest populations are in your area.		
RESTRICTIONS - SOYBEANS		
<ul style="list-style-type: none"> Do not Make application of more than 0.3 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatment of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. At-Plant: <ul style="list-style-type: none"> Do not make application of more than 0.1 lb. a.i./acre/year as an at-plant application. Foliar: <ul style="list-style-type: none"> Do not make treatments less than 30 days apart. Do not make application within 18 days of harvest. 		

SPINACH

At-Plant Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Garden Symphylans Rootworm (Larvae)	6.8 - 8.5	0.39 - 0.49	0.08 - 0.1
Army Cutworm Armyworm spp. Cutworm spp. Grubs Root Maggots Seed Corn Maggots True Armyworm Wireworm	3.4 - 6.8	0.2 - 0.39	0.04 - 0.08
Use Directions: Make application as a 5- to 7-inch band over-the-row on the soil surface, a 5- to 7-inch band over the open furrow (T-band), or in-furrow with the seed. Make a broadcast application to the soil surface for control of army cutworm, cutworm species, true armyworm, or armyworm species.			
Post-Plant Incorporated Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Lb. a.i./Acre	
Garden Symphylans Seed Corn Maggots Wireworms	Post-Plant Incorporated: 3.4 - 6.8	Post-Plant Incorporated: 0.04 - 0.08	
Foliar Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Lb. a.i./Acre	
Armyworms Colorado Potato Beetle Corn Earworm Cucumber Beetles Cutworms European Corn Borer Flea Beetles Leafminers Loopers Pepper Weevil Tomato Hornworm Tomato Pinworm Thrips Whitefly	2.8 - 8.5	0.033 - 0.1	
Banks Grass Mite Broad Mite Carmine Mite Fire Ants Lygus spp. Pacific Spider Mite Two-Spotted Spider Mite	6.8 - 8.5	0.08 - 0.1	
Use Directions: For Whitefly Control: Make a foliar application of Sharda Bifenthrin 17.15% LFR by ground or air at rates of up to 0.1 lb. a.i./acre with a minimum 7-day retreatment interval, up to a maximum of 4 applications. Do not make application within 40 days of harvest.			

For Fire Ant Control: Make a soil (at planting) application of **Sharda Bifenthrin 17.15% LFR**) or a foliar treatment by ground or air at rates of up to 0.1 lb. a.i./acre with a minimum 7-day retreatment interval, up to a maximum of 4 applications. Make application at the specified dosage in 5 - 50 gals. of spray volume/acre by air or 10 - 50 gals. spray volume/acre by ground.

RESTRICTIONS - SPINACH

- Do not make application of more than 0.4 lb. a.i./acre/year, including at-plant, post-plant incorporated, and foliar treatments of **Sharda Bifenthrin 17.15% LFR** and other products that contain bifenthrin.
- At-Plant:**
 - Do not make application of more than 0.1 lb. a.i./acre/year as an at-plant application.
- Foliar:**
 - Do not make treatments less than 7 days apart.
 - Do not make application within 40 days of harvest.

SUCCULENT BEANS & PEAS (Crop Subgroups 6A and 6B) Bean (*Phaseolus* spp.) - Broadbean (Succulent), Lima Bean (Green), Runner Bean, Snap Bean, and Wax Bean

Bean (*Vigna* spp.) - Asparagus Bean, Blackeyed Pea, Chinese Longbean, Cowpea, Moth Bean, Southern Pea, Yardlong Bean, Jackbean, Soybean (Immature Seed), and Sword Bean

Pea (*Pisum* spp.) - Dwarf Pea, Edible-Pod Pea, English Pea, Garden Pea, Green Pea, Snow Pea, Sugar Snap Pea, Pigeon Pea, Purple Hulled Pea

At-Plant Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Rootworm (Larvae)	6.8 - 8.5	0.39 - 0.49	0.08 - 0.1
Army Cutworm Armyworm spp. Cutworm spp. Grape Colaspis Grubs Root Maggot Seed Corn Maggots True Armyworm Wireworm	3.4 - 6.8	0.2 - 0.39	0.04 - 0.08

Use Directions:

Make application as a 5- to 7-inch band over-the-row on the soil surface, a 5- to 7-inch band over the open furrow (T-band), or in-furrow with the seed. Make a broadcast application over the soil surface for control of army cutworm, cutworm species, true armyworm, or armyworm species.

Pre-Emergence & Post-Plant Incorporated Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Army Cutworm Armyworm spp. Cutworm spp. Grape Colaspis Grubs	Pre-Emergence: 6.8 - 8.5	Pre-Emergence: 0.08 - 0.1
Root Maggots True Armyworm Wireworm (PPI only)	Post-Plant Incorporated: 6.8 - 8.5	Post-Plant Incorporated: 0.08 - 0.1

Use Directions:

- Pre-Emergence - Sharda Bifenthrin 17.15% LFR** may be tank mixed with pre-emergence herbicides. Make application through drip or drip tape. Make application when soil is moist towards the end of the irrigation run.
- Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR** may be tank mixed with post-plant incorporated herbicides. When incorporating with **Sharda Bifenthrin 17.15% LFR**, depth should be close to and not any greater than the intended planting depth and no deeper than 3 inches. Make application in a minimum of 10 gals./acre. Make application through drip or drip tape. Make application when soil is moist towards the end of the irrigation run.

Foliar Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Aster Flea Beetle Leafhopper	2.1 - 8.5	0.025 - 0.1
Alfalfa Caterpillar Aphids Armyworm, Beet Armyworm, Fall Armyworm, Southern Armyworm, Yellowstriped Bean Leaf Beetle Cloverworm Corn earworm	2.8 - 8.5	0.033 - 0.1

Corn Rootworm (Adults) Cucumber Beetle Cutworms European Corn Borer Grasshoppers Japanese Beetle Loopers Pea Leaf Weevil Pea Weevil Plant Bug Sap Beetle (Adults) Stink Bugs Tarnished Plant Bug Thrips Webworms Western Bean Cutworm Whitefly		
Banks Grass Mite Carmin Mite Lygus spp. Two-Spotted Spider Mite	6.8 - 8.5	0.08 - 0.1
Use Directions: Make application in a minimum of 2 gals. spray volume/acre by air or in a minimum of 10 gals./acre with ground equipment. When making application 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 sufficient control. Apply when infestation reaches locally determined economic threshold.		
RESTRICTIONS - SUCCULENT BEANS & PEAS (Crop Subgroups 6A and 6B)		
<ul style="list-style-type: none"> Do not make application of more than 0.2 lb. a.i./acre/year, including at-plant, pre-emergence, post-plant incorporated, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that bifenthrin. At-Plant: <ul style="list-style-type: none"> Do not make application of more than 0.1 lb. a.i./acre/year as an at-plant application. Foliar: <ul style="list-style-type: none"> Do not make treatments less than 3 days apart. Do not make application within 3 days of harvest. 		

TOBACCO

Pre-Transplant & At-Transplant Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Armyworm spp. Cutworm spp. Flea Beetle (Larvae) Mole Cricket Stalk Borer White Grubs Wireworm	3.4 - 8.5	0.2 - 0.49	0.04 - 0.1
Use Directions: Pre-Transplant Soil Applications: Incorporation into top 4 inches of the soil using suitable equipment is necessary to control pests below ground. At-Transplant Water Treatment Applications: Make application of 0.0625 - 0.1 lb. a.i./acre in a water treatment application volume of 10 – 200 gals./acre. Sharda Bifenthrin 17.15% LFR may be tank mixed with Command, Spartan, and other herbicides approved for use in tobacco.			
Foliar Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Lb. a.i./Acre	
Aphid spp.* Armyworm spp. Chinch Bugs Cutworm spp. Flea Beetle (Adults) Grasshoppers Green Bugs Japanese Beetles Stink Bugs Tarnished Plant Bugs Thrips Whiteflies	3.4 - 8.5	0.04 - 0.1	
Hornworm Tobacco Budworm	6.8 - 8.5	0.08 - 0.1	

Lygus spp. Spider Mites	8.5	0.1
*See the RESISTANCE MANAGEMENT section for additional information.		
Use Directions: Make application of 0.04 - 0.10 lb. a.i./acre per foliar treatment up to, and including, lay-by in a minimum of 10 gals./acre. Sharda Bifenthrin 17.15% LFR may be tank mixed with Command, Spartan, and other herbicides approved for use in tobacco.		
RESTRICTIONS - TOBACCO		
<ul style="list-style-type: none"> Do not make application of more than 0.2 lb. a.i./acre/year, including pre-transplant, at transplant, and foliar treatments of Sharda Bifenthrin 17.15% LFR and other products that contain bifenthrin. Do not make application later than lay-by. Foliar: <ul style="list-style-type: none"> Do not apply more than 2 foliar applications per year. 		

TOMATOES, TOMATILLOS, & GROUND CHERRIES

At-Plant Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Fl. Oz./1,000 Linear Ft.	Lb. a.i./Acre
Army Cutworm Armyworm spp. Cutworm spp. Flea Beetle (Larvae) Grubs Root Maggot Stalk Borer True Armyworm Wireworm	3.4 - 6.8	0.2 - 0.39	0.04 - 0.08
Use Directions: Make application as a 5- to 7-inch band over-the-row on the soil surface, a 5- to 7-inch band over the open furrow (T-band), or in-furrow with the transport or seed. Application may be made through transplant water at time of transplanting. Make a broadcast application to the soil surface for control of army cutworm, cutworm species, true armyworm, armyworm species, or stalk borer.			
Pre-Emergence & Post-Plant Incorporated Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Lb. a.i./Acre	
Army Cutworm Armyworm spp. Cutworm spp. Flea Beetle (Larvae) Garden Symphylans Grubs True Armyworm Wireworm	Pre-Emergence: 6.8	Pre-Emergence: 0.08	
	Post-Plant Incorporated: 3.4 - 6.8	Post-Plant Incorporated: 0.04 - 0.08	
Use Directions: <ul style="list-style-type: none"> Pre-Emergence - Sharda Bifenthrin 17.15% LFR may be tank mixed with pre-emergence herbicides. Make application through drip or drip tape. Make application when soil is moist towards the end of the irrigation run. Post-Plant Incorporated - Sharda Bifenthrin 17.15% LFR may be tank mixed with post-plant incorporated herbicides. When incorporating with Sharda Bifenthrin 17.15% LFR, depth should be close to and not any greater than the intended planting depth. Make application through drip or drip tape. Make application when soil is moist towards the end of the irrigation run. 			
Foliar Applications			
Pest	Sharda Bifenthrin 17.15% LFR Rates		
	Fl. Oz./Acre	Lb. a.i./Acre	
Aphids Armyworms (including Beet) Armyworm, Fall Armyworm, Southern Bean Leaf Beetle Cabbageworm Carmine Mite Cloverworm Corn Earworm Corn Rootworm Cucumber Beetles Cutworms Diamondback Moth European Corn Borer Flea Beetles Flea Hopper Grasshopper	2.8 - 6.8	0.033 - 0.08	

Japanese Beetle (Adults) Leafhoppers Loopers Lygus spp. Melonworm Pea Leaf Weevil Pea Weevil Pickleworm Plant Bug Rindworm Saltmarsh Caterpillar Sap Beetle Seedpod Weevil Squash Bugs Stink Bug spp. Tarnished Plant Bug Thrips Tobacco Budworm Whitefly Yellowstriped Armyworm		
Two-Spotted Spider Mite	6.8 - 8.5	0.08 - 0.1
Use Directions: Thorough coverage is essential to obtain sufficient control. Apply when infestation reaches locally determined economic levels. Make application in water. Make application at the specified dosage in 5 - 50 gals. of spray volume/acre by air or 10 - 50 gals. of spray volume/acre by ground.		
RESTRICTIONS - TOMATOES, TOMATILLOS, & GROUND CHERRIES		
<ul style="list-style-type: none"> Do not apply more than 0.4 lb. a.i./acre/year; Including at-plant, pre-emergence, post-plant incorporated, and foliar applications of Sharda Bifenthrin 17.15% LFR and other bifenthrin containing products. At-Plant: <ul style="list-style-type: none"> Do not apply more than 0.1 lb. a.i./acre/year as an at-plant application. Foliar: <ul style="list-style-type: none"> Do not make applications less than 10 days apart. Do not apply within 1 day of harvest. 		

TREE NUTS

African Nut-Tree; Almond; Beechnut; Brazil Nut; Brazilian Pine; Bunya; Bur Oak; Butternut; Cajou Nut; Candlenut; Cashew; Chestnut; Chinquapin; Coconut; Coquito Nut; Dika Nut; Ginkgo; Guiana Chestnut; Hazelnut (Filbert); Heartnut; Hickory Nut; Japanese Horse-Chestnut; Macadamia Nut; Mongongo Nut; Monkey-Pot; Monkey Puzzle Nut; Okari Nut; Pachira Nut; Peach Palm Nut; Pecan; Pequi; Pili Nut; Pine Nut; Pistachio; Sapucaia Nut; Tropical Almond; Walnut, Black; Walnut, English; Yellowhorn; Cultivars, Varieties, and/or Hybrids of these

Pest	Foliar Applications	
	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Black Pecan Aphid Codling Moth Filbert Worm Hickory Shuckworm Leaffooted Bugs Navel Orangeworm Oblique Banded Leafroller Peach Twig Borer Pecan Leaf Casebearer Pecan Nut Casebearer Pecan Phylloxera Plant Bugs Stink Bugs Walnut Aphid Yellow Pecan Aphid	4.3 - 17.1	0.05 - 0.2
European Red Mite Pecan Weevil Spider Mite spp.	6.8 - 17.1	0.08 - 0.2
Fire Ants Walnut Husk Fly	8.5 - 17.1	0.1 - 0.2
Use Directions: Make application by ground or air equipment in sufficient water to obtain full coverage of foliage. Make application as a dilute (minimum of 200 gals. of spray volume/acre) or concentrate (minimum of 50 gals. of spray volume/acre) by ground or make application at the specified amount in a minimum of 10 gals. of spray volume/acre by air.		

RESTRICTIONS - TREE NUTS

- Do not make application of more than 0.5 lb. a.i./acre/year, including foliar applications of **Sharda Bifenthrin 17.15% LFR** and other products that contain bifenthrin.
- **Foliar:**
 - Do not make treatments less than 15 days apart.
 - Do not make application within 21 days of harvest for pecans and 7 days for all other registered tree nut crops.
 - Do not graze livestock in treated orchards or cut treated cover crops for feed.

TUBEROUS AND CORM VEGETABLES (Crop Subgroup 1C)

Potato, Sweet Potato, Arracacha, Arrowroot, Chinese Artichoke, Jerusalem Artichoke, Edible Canna, Cassava (Bitter and Sweet), Chayote (Root), Chufa, Dasheen (Taro), Ginger, Leren, Tanier, Tumeric, Yam Bean, and True Yam

At-Plant Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Grape Colaspis Rootworms Sweet Potato Flea Beetle White Grub Wireworms	12.75 - 25.5	0.15 - 0.3

Use Directions:

Sharda Bifenthrin 17.15% LFR application may be made as a soil incorporated broadcast, directed bed spray or a T-band spray into the planting furrow for the control of wireworms, sweet potato flea beetle, and white grubs. Make application of **Sharda Bifenthrin 17.15% LFR** at the rate of 0.15 - 0.3 lb. a.i. (12.75 - 25.5 fl. oz. formulated)/acre in a minimum of 10 gals./acre of spray.

Lay-By Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Grape Colaspis Rootworms White Grub Wireworms	12.75 - 25.5	0.15 - 0.3

Use Directions:

Sharda Bifenthrin 17.15% LFR application may be made as one or more soil directed and incorporated treatments at cultivation or lay-by for the control of wireworms and white grubs. Make application of **Sharda Bifenthrin 17.15% LFR** to the drill area and incorporate by cultivation equipment set to throw soil towards the drill area. Make application in a minimum of 10 gals./acre of spray.

Post-Plant Incorporated Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Grape Colaspis Rootworms White Grub Wireworms	12.75 - 25.5	0.15 - 0.3

Use Directions:

Make application of **Sharda Bifenthrin 17.15% LFR** to the transplant area and incorporate to planting depth. Make application of **Sharda Bifenthrin 17.15% LFR** in a minimum of 10 gals./acre of spray. Application may be made as a broadcast treatment or an incorporated band treatment.

Foliar Applications

Pest	Sharda Bifenthrin 17.15% LFR Rates	
	Fl. Oz./Acre	Lb. a.i./Acre
Banded Cucumber Beetle Black Flea Beetle Corn Wireworm Cucumber Beetle Japanese Beetle Grubs June Beetle Rootworms Southern Potato Wireworm Sugarcane Beetle Sweet Potato Flea Beetle Sweet Potato Weevil Tobacco Wireworm White Grub White-Fringed Beetle	2.8 - 8.5	0.033 - 0.1

Use Directions:

Make application in a minimum of 3 gals. spray volume/acre by air or in a minimum of 10 gals./acre with ground equipment. Application of **Sharda Bifenthrin 17.15% LFR** may be made as a foliar spray for the control of the adult life stages of flea beetles, click beetles (wireworms), cucumber beetles (rootworms), white fringed-beetles, and May/June beetles (white grubs).

Restrictions - Tuberous And Corm Vegetables (Crop Subgroup 1C)

- Do not make application of more than 0.5 lb. a.i./acre/year, including at-plant, lay-by, post-plant incorporated, and foliar applications of **Sharda Bifenthrin 17.15% LFR** and other products that contain bifenthrin.
- **At-Plant:**
 - Do not make application of more than 0.3 lb. a.i./acre/year as an at-plant application.
- **Foliar:**
 - Do not make treatment less than 21 days apart.
 - Do not make application within 21 days of harvest.
 - Do not make more than 2 foliar treatments per year.

STORAGE AND DISPOSAL

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

Pesticide Storage: If storing this product below freezing, user should shake or roll the container to ensure proper product consistency. Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers.

Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. 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 of the nearest EPA Regional Office for guidance.

Container Handling:

[Nonrefillable Container (five gallons or less):] Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. 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. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

[Nonrefillable Container (greater than five gallons):] Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. 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. Pressure rinse as follows: Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

[Refillable Container (greater than five gallons):] Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. 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. Triple rinse as follows: 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% 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. When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transport. DO NOT transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with state and local regulations.

In Case of Spill: avoid contact, isolate area and keep out animals and unprotected persons. To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents. Call CHEMTREC 1-800-424-9300.

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.**

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