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 the uses covered by the certified applicator's certification.

BIFENTHRIN GROUP 3A INSECTICIDE

Omni Brand **Bifenthrin**2EC

ACTIVE INGREDIENT:	%BY WT.
Bifenthrin: (2 methyl[1,1 -biphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propen	yl)-2,2-dimethyl-
cyclopropanecarboxylate*	
OTHER INGREDIENTS**:	
TOTAL	100.0%

^{*}Cis isomers 97% minimum, trans isomers 3% maximum.

This product contains 2 pounds active ingredient per gallon.

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 the label, find someone to explain it to you in detail).

EPA Reg. No. 5905-626

AD 020320HAE

E17(1)(g. 1)(0.0000 020

Net Contents:

EPA Est. No. First Letters of Product Batch Code Indicate Producing Establishment:

5905-GA-1=CG • 5905-AR-1=WA

MANUFACTURED FOR HELENA AGRI-ENTERPRISES, LLC 225 SCHILLING BOULEVARD, SUITE 300 COLLIERVILLE, TENNESSEE 38017

^{**}Contains xylene range aromatic solvents.

	FIRST AID
IF SWALLOWED:	Immediately call a poison control center or doctor.
	Do not induce vomiting unless told to do so by a poison control center or doctor.
	Do not give any liquid to the person.
	Do not give anything by mouth to an unconscious person.
IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.
	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
	Call a poison control center or doctor for treatment advice.
IF ON SKIN OR	Take off contaminated clothing.
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
IF INHALED:	Move person to fresh air.
	If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by
	mouth-to-mouth if possible.
	Call a poison control center or doctor for further treatment advice.
Have the product cor	stainer or label with you when calling a poison control center or doctor or going for treatment.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. Contact ChemTrec at 1-800-424-9300, collect day or night, for emergency treatment information.

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 should be avoided. This product contains a petroleum distillate. Vomiting may cause aspiration pneumonia.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING-AVISO

May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). Harmful if inhaled or absorbed through skin. Avoid breathing vapor or spray mist. Avoid contact with skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below.

Handlers who may be exposed to the dilute through application or other tasks must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves (barrier laminateor viton ≥ 14 mils)
- Shoes plus socks
- Protective eyewear

Handlers who may be exposed to the concentrate through mixing, loading, application, or other tasks must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves (barrier laminateor viton ≥ 14 mils)
- 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/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 immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash 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 and other pollinating insects 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 **Omni Brand Bifenthrin 2EC** 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.

PHYSICAL/CHEMICAL HAZARDS

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

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

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

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 (barrier laminate or Viton ≥ 14 mils)
- Shoes plus socks

NON-AGRICULTURAL USE REQUIREMENTS

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

Do not allow people or pets on treated areas until the spray has dried.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE AND SPILL PROCEDURES: Keep out of reach of children and animals. Store in original containers only, in a cool, dry place and avoid excess heat. Do not freeze. Do not store below 400 F. Carefully open containers. If crystals are observed, warm material to above 600F by placing container in warm location. Shake or roll container periodically to redissolve solids. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

In case of spill, avoid contact, isolate area, and keep out animals and unprotected persons. Confine spills. **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.

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. Do not reuse or refill container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows:

Containers 5 gallons or less: Empty the remaining contents into application equipment and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Once cleaned, offer for recycling or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by other procedures approved by State and local authorities. Do not cut or weld metal containers. Containers larger than 5 gallons: Empty the remaining contents into application equipment. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip 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. Once cleaned, offer for recycling or reconditioning if appropriate. If recycling is not available, puncture or dispose of in a sanitary landfill or incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Refillable Containers: Return container to point of purchase for reuse with seal intact and in salable condition. Refill this container with **Omni Brand Bifenthrin 2EC** only. Do not reuse this container for any other purpose. Before refilling, inspect thoroughly for damage such as cracks, punctures, bulges, dents, abrasions, and damaged or worn threads on closure devices.

After filling and before transporting, check for leaks. Do not refill or transport damaged or leaking container.

RESISTANCE MANAGEMENT

Omni Brand Bifenthrin 2EC contains a Group 3 Insecticide. With repeated use of Group 3 insecticide as the primary method of control in the same field or in successive years, insect/mite populations can develop resistant biotypes. If this occurs, insect/mite biotypes with acquired resistance to Group 3 insecticides may eventually dominate the insect/mite population. This may result in partial or total loss of control of those species by **Omni Brand Bifenthrin 2EC** or other Group 3 insecticides.

To delay development of insecticide resistance, the following practices are suggested:

- Base insecticide applications on comprehensive IPM programs. This program should include an insect management program that includes cultural and biological control where possible.
- Use good resistance management strategies established for the use area. This may include the use of insecticide rotations or tank mixes with other groups of insecticide and miticides in an IPM program.
- Always apply Omni Brand Bifenthrin 2EC at the labeled rates and according to label directions. Do not use less
 than label rates alone or in tank mixtures unless directed otherwise in supplemental labeling supplied by Helena
 Agri-Enterprises, LLC d/b/a Helena Chemical Company.
- Monitor treated populations in the field for loss of control. If poor performance cannot be attributed to improper
 application or extreme weather conditions, a resistant strain may be present. Immediately consult your local Helena
 Agri-Enterprises, LLC d/b/a Helena Chemical Company representative or agricultural advisor for the best alternative
 method of control for your area.
- Do not treat seedling plants grown for transplant in greenhouses, shade houses, or field plots.
- Consult your local extension specialist, certified crop advisor, and/or manufacturer for insecticide resistance management and /or IPM guidance for the specific site and resistant pest problems.

APPLICATIONS INSTRUCTIONS

The rate of **Omni Brand Bifenthrin 2EC** applied will vary according to pest pressure and timing of application. Use lower rates under light to moderate infestations and higher rates under heavy insect pressure and for mite control. Arid climates generally require higher rates.

Unless otherwise specified for a specific crop, apply when pest population reaches economic (damaging) threshold and repeat as necessary to maintain control. Thorough coverage is essential to achieve control.

In the COMMENTS section of the label for each crop, the application rate when applied by ground and/or air is listed as an amount of spray per acre. In all cases, this refers to finished spray per acre.

CHEMIGATION USE DIRECTIONS

Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply 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.

Crop injury, lack of effectiveness, or illegal residues in the crop can result from non-uniform distribution of treated water. Contact your State Agricultural Extension Service specialists, equipment manufacturers, or other experts for consultation on the suitability of the equipment setup 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 area.

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 distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

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

For sprinkler irrigation, meter **Omni Brand Bifenthrin 2EC** at a continuous uniform rate during the entire irrigation period. To ensure accurate application over the treated area, apply in sufficient volume of water or other diluent. If non-emulsified oil is used as the diluent, use 1 to 2 pints per acre. Maintain continuous agitation of the pesticide supply tank for the duration of the application period. When chemigation systems are used, 0.5 inch per acre of irrigation water is suggested except that for Low Energy Precision Application (LEPA) irrigation, a minimum of 0.75 inch of water per acre is suggested.

BUFFER ZONES Vegetative Buffer Strip

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

Only apply products containing bifenthrin onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.

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. 21 pp. http://www.in.nrcs.usda.gov/technical/agronomy/newconbuf.pdf.

Buffer Zone for Ground Application (ground boom, overhead chemigation, or airblast)

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

Buffer Zone for ULV Aerial Application

Do not apply within 450 feet of aquatic habitats (such as, 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 apply within 150 feet of aquatic habitats (such as, 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 wind velocity exceeds 15 mph.

Temperature Inversions

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 coarse 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, use a coarser droplet size.

Additional Requirements for Ground Application

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 Application

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 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 crosswind, 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.

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

ROTATIONAL CROPS

If applying to crops for which Bifenthrin tolerances exist, the crops may be rotated at any time. All other crops may be rotated 30 days following the final application of **Omni Brand Bifenthrin 2EC**.

MIXING INSTRUCTIONS

The spray tank must be clean, thoroughly rinsed, and decontaminated before adding either **Omni Brand Bifenthrin 2EC** alone or with tank mix combinations (see **Omni Brand Bifenthrin 2EC in Tank Mixtures** section below). If water is used as the carrier, use clean water.

For aerial applications made on brassicas (see **CROPS** section of the label below for full list of approved brassicas), canola, crambe, rapeseed, foliar applications on corn, cucurbits (see **CROPS** section of the label below for full list of approved cucurbits), eggplant, grapes, head lettuce, and succulent peas and beans (see **CROPS** section of the label below for full list of approved succulent peas and beans), 1 to 2 quarts of emulsified oil may be substituted for 1 to 2 quarts of water in the finished spray. For aerial applications made on cotton, 1 quart of emulsified oil may be substituted for one quart of water in the finished spray. Thorough coverage is essential to achieve control.

Omni Brand Bifenthrin 2EC Used Alone: When Omni Brand Bifenthrin 2EC is used alone, add the labeled amount to the spray tank when the tank is half filled with water or other carrier; then add the rest of the water or other carrier (as permitted on this label). Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

Omni Brand Bifenthrin 2EC with Fertilizer: Fill the spray tank approximately one-half full with water and/or liquid fertilizer, add the proper amount of **Omni Brand Bifenthrin 2EC**, and then add the rest of the water and/or fertilizer. Provide sufficient agitation during mixing and application to maintain a uniform spray mixture.

Perform a jar compatibility test with the appropriate ratio of **Omni Brand Bifenthrin 2EC** and fertilizer to ensure the mixture will stay in solution. Maintain constant agitation during mixing and application.

Omni Brand Bifenthrin 2EC in Tank Mixtures: If a tank mixture is used, perform a compatibility test before actual tank mixing. Test all untried mixtures using proper ratios and mixing sequences of all ingredients to be included in the mixture. Once compatibility is confirmed for the tank mix, fill the tank half full with water or other carrier. Start and continue agitation throughout mixing following conventional mixing order practices. Omni Brand Bifenthrin 2EC may be applied in tank mixtures with other products 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.

FOOD CROPS USE INSTRUCTIONS

ARTICHOKE

AKTIOHOKE			
PEST	DOSA	GE	ADDITICATION INSTRUCTIONS
PESI	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Artichoke Plume Moth Cribrate Weevil	0.10	6.4	Repeat as necessary to maintain control, but not apply more often than 15 day intervals.
			Ground Application: Apply in water in a minimum of 75 gallons per acre as a full cover spray.
			Air Application: Apply in water in a minimum of 10 gallons per acre.

RESTRICTIONS:

- Do not apply more than 0.5 lb. active ingredient (32 ounces formulated) per acre per season.
- Do not apply within 5 days of harvest (PHI).

BRASSICAS

CROP	PEST	DOSAGE		APPLICATION INSTRUCTIONS
CROP	PESI	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Head and Stem Brassica Vegetables	Aphids Armyworms Corn Earworm	0.033 - 0.10	2.1 - 6.4	Ground Application: Apply in water in a minimum of 10 gallons per acre.
Broccoli Chinese Broccoli (gai lon, white flowering broccoli) Brussels Sprouts Cauliflower Cavalo Broccolo Kohlrabi Cabbage Chinese Cabbage (napa) Chinese Mustard Cabbage (gai choy)	Crickets Cucumber Beetle Cutworms Diamondback Moth Flea Beetle Ground Beetles Imported Cabbageworm Leafhoppers Loopers Saltmarsh Caterpillar Stink Bugs Thrips Tobacco Budworm Whitefly Wireworm (Adults)			Air Application: Apply in water in a minimum of 2 gallons per acre. Emulsified oil may be substituted for water. See section entitled MIXING INSTRUCTIONS for details on the amount of oil to use in the spray tank in lieu of water. Repeat applications if needed to maintain control, but do not make applications less than 7 days apart.
	Banks Grass Mite Carmine Mite Lygus Spp. Pacific Spider Mite Twospotted Spider Mite	0.08 - 0.10	5.12 - 6.4	

RESTRICTIONS:

- Do not apply more than 0.5 lb active ingredient (32 ounces formulated) per acre per season. Do not make more than 5 applications after bloom.
- Do not apply within 7 days of harvest (PHI).

CANEBERRIES

CROP	PEST	DOSAGE		APPLICATION INSTRUCTIONS
CROP	PESI	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Caneberries	Leafrollers Orange Tortrix	0.05 - 0.10	3.2 - 6.4	Apply by air or ground equipment using sufficient water to obtain full coverage of
Blackberry	Root Weevils			foliage (minimum of 10 gallons per acre by
Bingleberry Black satin berry	Spider Mites	0.10	6.4	air and 50 gallons per acre by ground).
Boysenberry				Ground Application: Apply in water in a
Cherokee				minimum of 50 gallons per acre.
blackberry				
Chesterberry				Air Application: Apply in water in a
Cheyenne				minimum of 10 gallons per acre.
blackberry				
Coryberry				A total of two applications may be made.
Darrowberry				•

Dewberry	One application may be made pre-bloom	<u> </u>
Dirksen thornless		
	and a second application may be made	posi
berry	bloom.	
Himalayaberry		
Hullberry		
Lavacaberry		
Loganberry		
Lowberries		
Lucretiaberry		
Mammoth		
blackberry		
Marionberry		
Nectarberry		
Olallieberry		
Oregon evergreen		
berry		
Phenomenalberry		
Rangeberry		
Ravenberry		
Rossberry		
Shawnee blackberry		
Raspberry		
Youngberry		
Varieties and/or		
hybrids of these		
DESTRICTIONS:		

- Do not apply more than 0.2 lb. active ingredient (12.8 ounces formulated) per acre per season.
- Do not apply within 3 days of harvest (PHI).

CANOLA, CRAMBE, RAPESEED

PEST LB AI/A	DOSAGE		ADDI ICATION INCTDICTIONS
	FL OZ/A	APPLICATION INSTRUCTIONS	
Aphids Armyworms	0.033 - 0.04	2.1 - 2.6	Ground Application: Apply in water in a minimum of 10 gallons per acre.
Cutworms Diamondback Moth Flea Beetles Flea Hoppers Grasshoppers			Air Application: Apply in water in a minimum of 2 gallons per acre. Emulsified oil may be substituted for water.
Loopers Lygus Bugs Other Lepidopterous Larvae			See section entitled MIXING INSTRUCTIONS for details on the amount of oil to use in the spray tank in lieu of water.
Plant Bugs Seedpod Weevil Stink Bugs Thrips Whitefly			Repeat applications if needed to maintain control, but do not make applications less than 14 days apart.

Do not apply more than 0.08 lb. active ingredient (5.12 ounces formulated) per acre per season.

• Do not apply within 35 days of harvest (PHI).

CHRISTMAS TREES (For use only in Washington and Oregon)

PEST	DOS	AGE	APPLICATION INSTRUCTIONS
PESI	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Root Weevil Spruce Spider Mite	0.06 - 0.10	3.9 - 6.4	Ground Application: Apply in water in a minimum of 20 gallons per acre.
			Air Application: Apply in water in a minimum of 5 gallons per acre.
			Omni Brand Bifenthrin 2EC is usually not phytotoxic to Christmas trees. However, make applications to a small representative group of plants to ensure that a particular variety grown under current conditions is not unusually sensitive to Omni Brand Bifenthrin 2EC.
			Maintain a minimum of 21 days between applications.

RESTRICTIONS:

- Do not apply more than 0.1 lb. active ingredient (6.4 ounces formulated) per acre per season.
- Do not make more than 3 applications in a crop year.
- Do not make applications through irrigation systems.

CILANTRO, CORIANDER

PEST	DOSAGE		APPLICATION INSTRUCTIONS
PESI	LB Al/A	FL OZ/A	APPLICATION INSTRUCTIONS
Aphids Beet Armyworm Cabbage Looper Cutworm Flea Beetle Grasshoppers Leafminer Saltmarsh caterpillar Spotted Cucumber Beetle Thrips Whitefly	0.033 - 0.10	2.1 - 6.4	Ground Application: Apply in water in a minimum of 10 gallons per acre. Air Application: Apply in water in a minimum of 2 gallons per acre. Apply in sufficient water to obtain thorough coverage.
Two Spotted Spider Mite	0.08 - 0.10	5.12 - 6.4	

RESTRICTIONS:

- Do not apply more than 0.5 lb. active ingredient (32 ounces formulated) per acre per season.
- Do not make applications less than 7 days apart.
- Do not apply within 3 days of harvest (PHI).

CITRUS (Except Florida)*

PEST	DOSAGE		ADDITION INSTRUCTIONS
PESI	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Asian Cockroach Diaprepes Root Weevil (Diaprepes abbreviatus)	0.25 - 0.50	16 - 32	Ground Application: Apply in water in a minimum of 30 gallons per acre.
(Diapropos abbreviatas)			Use a handgun or shielded sprayer to apply to individual citrus trees if they are not planted in solid rows.
			Diaprepes root weevil emergence generally occurs in the spring, but weather conditions can prompt a second emergence in the fall. In areas where only a spring emergence is expected, use
			32 ounces of Omni Brand Bifenthrin 2EC . In areas where a second emergence is expected, use 16 ounces of Omni Brand Bifenthrin 2EC in
			the early season and 16 ounces of Omni Brand Bifenthrin 2EC later in the season. If the length of control of Omni Brand Bifenthrin 2EC is not
			sufficient to cover the emergence of the root weevil, use other pest control measures from State Agricultural Extension Specialists or other
			local experts.
			*This product must be used in accordance with the directions for use on this label, or exemptions under FIFRA (Special Local Need Registrations, FIFRA Section 18 exemptions).
PESTRICTIONS:			The state of the s

RESTRICTIONS:

- Do not apply through irrigation systems.
- Do not allow any application of Omni Brand Bifenthrin 2EC to contact fruit or foliage.
- Do not apply more than 0.5 lb. active ingredient (32 ounces formulated) per acre per year.
- Do not apply by air.
- Do not apply within 1 day of harvest (PHI).

CITRUS (Florida only)

PEST	DOSA	AGE	APPLICATION INSTRUCTIONS	
PESI	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS	
Blue Green Citrus Root	0.25 - 0.50	16 - 32	Ground Application: Apply in water in a	
Weevil (Pachnaeus opalus)			minimum of 40 gallons per acre.	
Brown Leaf Notcher				
(Epicaerus mexicanus)			Greater spray volumes increase uniformity of	
Diaprepes Root Weevil			coverage. Also coverage uniformity may be aided	
(Diaprepes abbreviatus)			by using a pre-and post-irrigation application.	
Little Leaf Notcher				
(Artipus floridanus)			Use a handgun or shielded sprayer to apply to	
Southern Blue Green Citrus			individual citrus trees if they are not planted in	
Root Weevil (Pachnaeus			solid rows.	

Litus)			
Asian Cockroach	0.1 - 0.25	6.4 - 16	All citrus root weevils have a similar life cycle. They have three immature stages: egg, larva, and pupa. Adult weevils emerge from the soil and lay eggs on host plants above ground, the larvae enter the soil to feed on roots, and the pupae and teneral adult stages are spent below ground. Adults emerge beneath citrus trees throughout the year; it is at this time that Omni Brand Bifenthrin 2EC applications should be timed. Peak adult emergence varies within and among species and by region. Peak emergence for the blue-green root weevil is normally April and May. Diaprepes adult emergence from the soil appears to be triggered by the onset of regular rainfall events and can have two emergence peaks, in mid-May to mid-July and/or late-August to mid-October. The second peak is variable and may relate to host plant availability. Little leaf notcher has three generations per year. Although there is considerable overlap of generations, adults appear most abundant in April/May, July/August, and October/November. For best control of emerging root weevils, apply Omni Brand Bifenthrin 2EC to the soil beneath the citrus trees from the trunk to the drip line of the tree. Omni Brand Bifenthrin 2EC protects citrus tree roots from citrus root weevils by forming a barrier which provides contact activity on neonate larvae when they fall to the ground shortly after hatching from eggs which were oviposited in the citrus tree foliage. Once application is made, be careful not to disturb the treated soil. In areas where only a spring emergence is expected, use 32 ounces of Omni Brand Bifenthrin 2EC. In areas where a second emergence is expected, use 16 ounces of Omni Brand Bifenthrin 2EC in the early season and 16 ounces of Omni Brand Bifenthrin 2EC in the emergence of

	the root weevil, use other pest control measures from State Agricultural Extension Specialists or
	other local experts.

- Do not apply through irrigation systems.
- Do not allow any application of **Omni Brand Bifenthrin 2EC** to contact fruit or foliage.
- Do not apply more than 0.5 lb. active ingredient (32 ounces formulated) per acre per year.
- Do not apply by air.
- Do not apply within 1 day of harvest (PHI).

CONIFER SEED ORCHARDS

(For Use Only in Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, Oklahoma, South Carolina, Tennessee, Texas, Virginia)

PEST	DOS	AGE	ADDITION INSTRUCTIONS
	LB Al/A	FL OZ/A	APPLICATION INSTRUCTIONS
Cone Worms Seed Bugs Seed Worms	0.1 - 0.2	6.4 - 12.8	Ground Application: Apply in water in a minimum of 100-500 gallons per acre.
			Air Application: Apply in water in a minimum of 10 gallons per acre or 0.5 gallon refined vegetable oil per acre.
			Apply in sufficient water to obtain thorough coverage.
			Begin applications 7 days after peak pollen flight and continue on 30-day intervals up to a maximum of 0.6 lb. active per acre per season.

RESTRICTIONS:

• Do not make more than six applications per season or apply more than 0.6 lb. active ingredient (38.4 ounces formulated) per acre per season.

CORN: FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED (AT PLANTING)

PEST	DOS	AGE	APPLICATION INSTRUCTIONS
Corn Rootworm Larvae	0.0046 pound	0.30 fluid ounces	Ground Application: Apply in water in a
Northern	active per 1000	per 1000 linear	minimum of 3 gallons per acre.
Southern	linear feet of row	feet of row	
Western	•		For use on corn at planting, apply a 5- inch to 7
Army Cutworm	0.0023 to 0.0046	0.15 to 0.30	inch T-band over the open seed furrow.
Cutworm Species	pound active per	fluid ounces per	
Grubs	1000 linear feet of	1000 linear feet of	Center the spray nozzle over the row behind the
Seedcorn Beetle	row	row	planter shoe in front of the press wheel.
Seedcorn Maggot			
True Armyworm or			In-furrow pop-up fertilizers may be used alone or
Armyworm Species			in tank mixtures with Omni Brand Bifenthrin
Wireworms			2EC . See the section entitled MIXING
			INSTRUCTIONS, Omni Brand Bifenthrin 2EC
			with Fertilizer for additional instructions and
			precautions when mixing with fertilizers.

- Do not apply to soil where there is greater than 30% cover of crop residue remaining.
- Do not graze livestock in treated area or cut treated crops for feed within 30 days of treatment.
- Do not apply more than 0.1 lb. active ingredient (6.4 ounces formulated) per acre per season as an at plant application.

Do not apply within 30 days of harvest (PHI).

Row Spacings (inches) ¹	40	38	36	30
Omni Brand Bifenthrin	0.060	0.064	0.069	0.080
2EC (pounds ai per acre)				
Omni Brand Bifenthrin	3.9	4.1	4.4	5.12
2EC (formulated ounces per				
acre)				

¹Use this table to determine the **Omni Brand Bifenthrin 2EC** needs per acre.

CORN: FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED (PRE & PPI)

PEST	DOS	AGE	APPLICATION INSTRUCTIONS
Armyworm spp.	0.047 to 0.062	3 to 4	Ground Application: Apply in water in a
Black Cutworm	Pre-Plant	Pre-Plant	minimum of 3 gallons per acre.
Seedcorn Maggot	Incorporated	Incorporated	
Stalkborer	(PPI)	(PPI)	Use the labeled dosage as a preplant
White Grub			incorporated treatment either alone or in tank mix
Wireworm			combination with registered preplant incorporated
Black Cutworm	0.040 lb/ai per	2.56 fl. oz.	herbicides.
Armyworm spp.	acre	per acre	
Stalkborer	Preemergence	Preemergence	Incorporate Omni Brand Bifenthrin 2EC to the
	(PRE)	(PRE)	intended planting depth, but no deeper than 3
			inches.
			The 3 to 4 oz. rate must be applied as PPI and
			can be tank mixed and applied with PPI
			herbicides.
			T. 0.50
			The 2.56 oz. rate may be applied PRE and can be
			tank mixed and applied with PRE herbicides.

CORN: FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED (FOLIAR)

PEST	DOSAGE		ADDITION INCEDITIONS
PESI	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Aphids Army Cutworm Beet Armyworm Cereal Leaf Beetle Chinch Bug Common Stalk Borer Corn Earworm Corn Rootworm Adult Cucumber Beetle Adult Cutworm Species European Corn Borer	0.033 - 0.10	2.1 - 6.4	Ground Application: Apply in water in a minimum of 10 gallons per acre except see specific comment below for TX, NM, OK, and AZ mite control. Air Application: Apply in water in a minimum of 2 to 5 gallons per acre except see specific comment below for TX, NM, OK, and AZ mite control. In all states, insect control will be improved by increasing the finished spray per acre to 5 gallons.
•			_

Flea Beetle Grasshoppers Greenbug Japanese Beetle Adult Sap Beetle Southern Armyworm Southern Corn Leaf Beetle Southwestern Corn Borer Stink Bugs Tarnished Plant Bug True Armyworm or Armyworm Species Webworms Western Bean Cutworm Yellowstriped Armyworm			In Texas, New Mexico, Oklahoma, and Arizona, use a minimum of 10 gallons of water per acre by ground and 5 gallons of water per acre by air when making applications to control mites. Emulsified oil may be substituted for water. See section entitled MIXING INSTRUCTIONS for details on the amount of oil to use in the spray tank in lieu of water. Make applications of Omni Brand Bifenthrin 2EC as necessary to maintain control being careful not to exceed reapplication intervals or maximum dosage rates specified in this section.
Banks Grass Mite	0.08 - 0.10	5.12 - 6.4	For pests which attack the ear, apply just before
Carmine Mite			silking.
Twospotted Spider Mite			For corn borer control, make application just before or at egg hatch.
			For mite control, apply when colonies first form prior to leaf damage and before they disperse into
			the canopy (for Banks Grass Mite-before dispersal into the upper 2/3 of the plant).
			Use higher rates of Omni Brand Bifenthrin 2EC when pest pressure is severe or crop is under stress from drought and/or heat. When these conditions exist, tank mixtures with dimethoate have shown good control.
			Apply for Banks Grass Mite control when colonies first form prior to leaf damage or discoloration and before dispersal above the bottom third of the plant.
			For Twospotted Spider Mite and Carmine Mite control, apply when colonies first form prior to leaf damage or discoloration and before widespread mite dispersal throughout the canopy. Higher rates will be necessary for heavier initial populations and corn under heat or drought stress. Field experience with dimethoate at 0.5 lb. active per acre in tank mixture has demonstrated good control under these conditions.
			For Mite Control In Texas, New Mexico, Oklahoma, and Arizona: Apply in a minimum of

	5 gallons of finished spray per acre by aircraft or in a minimum of 10 gallons per acre with ground
	equipment.

Restrictions:

- Do not apply more than 0.3 lb. active ingredient (19.2 ounces formulated) per acre per season including PRE and PPI, at planting, plus foliar applications.
- Do not graze livestock in treated areas or cut treated crops for feed within 30 days of the last application.
- Use of ultra low volume (ULV) application on corn is prohibited.
- Do not make aerial or ground applications to corn if heavy rainfall is imminent.
- Do not apply within 30 days of harvest (PHI).

CORN: SWEET CORN, SWEET CORN GROWN FOR SEED (AT PLANTING)

PEST	DOS	AGE	APPLICATION INSTRUCTIONS
Corn Rootworm Larvae	0.0046 pound	0.30 fluid ounces	Ground Application: Apply in water in a
Northern	active per 1,000	per 1,000 linear	minimum of 3 gallons per acre.
Southern	linear feet of row	feet of row	
Western			For use on corn at planting, apply in a 5- inch to 7-
Army Cutworm	0.0023 to 0.0046	0.15 to 0.30 fluid	inch T-band over the open seed furrow. Center
Cutworm Species	pound active per	ounces per 1,000	the spray nozzle over the row behind the planter
Grubs	1,000 linear feet of	linear feet of row	shoe in front of the press wheel.
Seedcorn Beetle	row		
Seedcorn Maggot			In-furrow pop-up fertilizers may be used alone or
True Armyworm or			in tank mixtures with Omni Brand Bifenthrin
Armyworm Species			2EC . See the section entitled MIXING
Wireworms			INSTRUCTIONS, Omni Brand Bifenthrin 2EC
			with Fertilizer for additional instructions and
			precautions when mixing with fertilizers.

RESTRICTIONS:

- Do not apply to soil where there is greater than 30% cover of crop residue remaining.
- Do not graze livestock in treated area or cut treated crops for feed within 30 days of treatment.
- Do not apply more than 0.1 lb. active ingredient (6.4 ounces formulated) per acre per season as an at plant application.

• Do not apply within 30 days of harvest (PHI).

	0 0			
Row Spacings (inches) ¹	40	38	36	30
Omni Brand Bifenthrin	0.060	0.064	0.069	0.080
2EC (pounds ai per acre)				
Omni Brand Bifenthrin	3.9	4.1	4.4	5.12
2EC (formulated ounces per				
acre)				

CORN: SWEET CORN, SWEET CORN GROWN FOR SEED (FOLIAR)

DEST	DOSA	AGE	ADDI ICATION INCTRICTIONS
PEST	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Aphids	0.033 - 0.10	2.1 - 6.4	Ground Application: Apply in water in a
Army Cutworm			minimum of 10 gallons per acre.
Beet Armyworm			
Cereal Leaf Beetle			Air Application: Apply in water in a minimum of 2
Chinch Bug			gallons per acre. Emulsified oil may be substituted
Common Stalk Borer			for water.

Corn Earworm			
Corn Rootworm Adult			See section entitled MIXING INSTRUCTIONS for
Cucumber Beetle Adult			details on the amount of oil to use in the spray
Cutworm Species			tank in lieu of water. Make applications of Omni
European Corn Borer			Brand Bifenthrin 2EC as necessary to maintain
Fall Armyworm			control being careful not to exceed reapplication
Flea Beetle			intervals or maximum dosage rates specified in
Grasshoppers			this section.
Greenbugs			
Japanese Beetle Adult			For pests which attack the ear, apply just before
Sap Beetle			silking.
Southern Armyworm			
Southern Corn Leaf Beetle			For corn borer control, make application just
Southwestern Corn Borer			before or at egg hatch.
Stink Bugs			
Tarnished Plant Bug			For mite control, apply when colonies first form
True Armyworm or			prior to leaf damage and before they disperse into
Armyworm Species			the canopy (for Banks Grass Mite - before
Webworms			dispersal into the upper 2/3 of the plant).
Western Bean Cutworm			Use higher rates of Omni Brand Bifenthrin 2EC
Yellowstriped Armyworm			when pest pressure is severe or crop is under
Banks Grass Mite	0.08 - 0.10	5.12 - 6.4	stress from drought and/or heat. When these
Carmine Mite			conditions exist, tank mixtures with dimethoate
Twospotted Spider Mite			have shown acceptable control.

- Do not apply more than 0.2 lb. active ingredient (12.8 ounces formulated) per acre per season.
- Do not graze livestock in treated areas or cut treated crops for feed within 1 day of the last application.
- Use of ultra low volume (ULV) application on corn is prohibited.
- Do not make aerial or ground applications to corn if heavy rainfall is imminent.
- Do not apply within 1 day of harvest (PHI).

COTTON

PEST	DOSAGE		APPLICATION INSTRUCTIONS
PESI	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
European Corn Borer	0.02 - 0.10	1.3 - 6.4	Ground Application: Apply in water in a
Soybean (Banded) Thrips			minimum of 5 gallons per acre.
Tobacco Thrips			
Boll Weevil	0.04 - 0.10	2.6 - 6.4	Air Application: Apply in water in a minimum of 1
Bollworm			gallon per acre. Emulsified oil may be substituted
Cabbage Looper			for water.
Cotton Aphid			
Cotton Fleahopper			See section entitled MIXING INSTRUCTIONS for
Cotton Leafperforator			details on the amount of oil to use in the spray
Cutworms			tank in lieu of water.
Fall Armyworm			
Plant Bugs			ULV Application: Apply in a minimum of 1 quart
Saltmarsh Caterpillar			per acre using refined vegetable oil with aircraft
Southern Garden			calibrated to give adequate coverage.
Leafhopper			

Stink Bugs			Make applications of Omni Brand Bifenthrin
Tobacco Budworm			2EC as necessary to maintain control being
Whitefly			careful not to exceed reapplication intervals or
Yellowstriped Armyworm			maximum dosage rates specified in this section.
Beet Armyworm	0.06 - 0.10	3.8 - 6.4	
Carmine Spider Mite			To Control Boll Weevil: Apply Omni Brand
Lygus spp.			Bifenthrin 2EC at 3- to 4- day intervals until pest
Pink Bollworm			populations are reduced below economic
Twospotted Spider Mite			threshold levels.
			To Control Mites and Aphids: Apply when pests
			first appear. Repeat as necessary to maintain
			control without exceeding maximum application
			rates and reapplication intervals. Use higher rates
			when an economic threshold has been
			established.

- Do not apply more than 0.5 lb. active ingredient (32 ounces formulated) per acre per season.
- Do not graze livestock in treated areas or cut treated crops for feed.
- Do not make more than 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop
 in one growing season. Synthetic pyrethroid products with active ingredients such as: permethrin, cypermethrin,
 esfenvalerate, cyfluthrin, bifenthrin, fenpropathrin, and lambda-cyhalothrin.
- Do not apply within 14 days of harvest (PHI).

CUCURBITS

CROP	PEST	DOS	AGE	APPLICATION INSTRUCTIONS
CROP	PESI	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Chayote (fruit)	Aphids	0.04 - 0.10	2.6 - 6.4	Ground Application: Apply in water in a
Chinese waxgourd	Armyworms			minimum of 20 gallons per acre.
(Chinese preserving	Cabbage Looper			
melon)	Corn Earworm			Air Application: Apply in water in a
Citron Melon	Cucumber Beetles	·		minimum of 5 gallons per acre. Emulsified
Cucumber	Cutworms			oil may be substituted for water.
Gherkin	Grasshoppers			
Edible Gourd,	Leafhoppers			See section entitled MIXING
[(hyotan, cucuzza),	Melonworms			INSTRUCTIONS for details on the amount
Luffa spp. (hechima,	Pickleworms			of oil to use in the spray tank in lieu of
Chinese okra),	Rindworms			water.
Momordica spp.	Squash Bugs			
(balsam apple,	Squash Vine Borer			
balsam pear, bitter	Stink Bugs			
melon, Chinese	Tobacco Budworm			
cucumber)]	Whitefly	0.08 - 0.10	5.12 - 6.4	
Muskmelon (hybrids	Banks Grass Mite			
and/or cultivars of	Twospotted Spider			
Cucumis melo) (true	Mite			
cantaloupe,	Carmine Mite			
cantaloupe, casaba,	Lygus spp.			
crenshaw melon,				

golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon) Pumpkin (Cucurbita spp.) Squash, summer (crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini), Squash, winter (butternut squash, calabaza, hubbard squash (C. mixta; C. pepo) includes acorn squash, spaghetti squash)	
Watermelon (hybrids	
and/ or varieties of	
Citrullus spp.)	
DESTRICTIONS:	

- Do not apply more than 0.3 lb. active ingredient (19.2 ounces formulated) per acre per season.
- Do not make more than two applications after bloom.
- Repeat applications if needed to maintain control, but do not make applications less than 7 days apart.
- Do not apply within 3 days of harvest (PHI).

DRIED BEANS AND PEAS

DIVIED DEFINO FIND I	BRIED BEARD ARD I EAC					
CROP	PEST DOSA		AGE	APPLICATION INSTRUCTIONS		
CROP	PESI	LB Al/A	FL OZ/A	APPLICATION INSTRUCTIONS		
Dried cultivars of	Banks Grass Mite	0.08 - 0.10	5.12 - 6.4	Ground Application: Apply in water in a		
Bean (Lupinus spp.)	Twospotted Spider			minimum of 10 gallons per acre.		
Grain Lupin	Mite					
Sweet Lupin	Carmine Mite			Air Application: Apply in water in a		
White Lupin	Lygus spp.			minimum of 2 gallons per acre. Emulsified		
White Sweet Lupin	Aster Leafhopper	0.025 - 0.10	1.6 - 6.4	oil may be substituted for water.		
Bean (Phaseolus	Flea Beetle					
spp.)	Grasshoppers			See section entitled MIXING		
Field Bean	Leafhoppers			INSTRUCTIONS for details on the amount		
Kidney Bean	Aphids	0.033 - 0.10	2.1 - 6.4	of oil to use in the spray tank in lieu of		
Lima Bean (dry)	Beet Armyworm			water.		
Navy Bean	Fall Armyworm					
Pinto Bean	Southern Armyworm			Thorough coverage is essential to achieve		
Tepary Bean	Yellowstriped			control.		

Bean (Vigna spp.) Adzuki Bean Blackeyed Pea Catjang Cowpea Crowder Pea Moth Bean Mung Bean Rice Bean Southern Pea Urd Bean Broad bean (dry) Chickpeas Guar Lablab Bean Lentils Pea (Piscum spp.) Field Pea Pigeon Pea	Armyworm Bean Leaf Beetle Cucumber Beetles Japanese Beetle Adult Sap Beetle Plant Bug Stink Bugs Tarnished Plant Bug Alfalfa Caterpillar Cloverworm European Corn Borer Cutworms Western Bean Cutworm Corn Earworm Loopers Corn Rootworm Adults Thrips Webworms Pea Weevil Pea Leaf Weevil Whitefly Imported Cabbageworm	
	Whitefly Imported	
	Cabbageworm	
	Saltmarsh Caterpillar Tobacco Budworm	
	Leafminer	
DESTRICTIONS	Loamino	

- Do not apply more than 0.2 lb. active ingredient (12.8 ounces formulated) to peas. Do not make applications less than 7 days apart.
- Do not apply within 14 days of harvest (PHI).

FRUITING VEGETABLES

CROP	PEST	DOSAGE		APPLICATION INSTRUCTIONS
CROP	PESI	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Eggplant Groundcherry Pepino Pepper (Bell & Non- Bell)	Armyworms (including Beet Armyworm, Fall Armyworm, Southern Yellowstriped Armyworm) Cabbage Loopers Colorado Potato Beetle Corn Earworm Cucumber Beetles European Corn Borer Flea Beetles Leafminers Loopers	0.033 - 0.10	2.1 - 6.4	Ground Application: Apply in water in a minimum of 10 gallons per acre. Air Application: Apply in water in a minimum of 2 gallons per acre. Emulsified oil may be substituted for water. See section entitled MIXING INSTRUCTIONS for details on the amount of oil to use in the spray tank in lieu of water.

Pepper weevil Plant Bugs Stink Bugs Thrips Tomato Hornworm Tomato Pinworm Vegetable Leafminer Whitefly Banks Grass Mite Broad Mite Carmine Mite Lygus spp. Pacific Spider Mite Twospotted Spider Mite	0.08 - 0.10	5.12 - 6.4	
---	-------------	------------	--

- To maintain a proper spray interval, do not make applications less than 7 days apart.
- Do not apply more than 0.2 lb. active ingredient (12.8 ounces formulated) per acre per season. Do not apply within 7 days of harvest (PHI).

	T days of harvest (PHI).	0.000 0.00	0.1 -0	
Tomatoes	Aphids	0.033 - 0.08	2.1 - 5.2	Ground Application: Apply in water in a
Tomatillo	Armyworms (including			minimum of 15 gallons per acre.
	Beet Armyworm, Fall			▼
	Armyworm, Southern			Air Application: Apply in water in a
	Yellowstriped			minimum of 3 gallons per acre.
	Armyworm)			
	Bean Leaf Beetle			
	Cabbageworms			
	Carmine Mite			
	Cloverworm			
	Corn Earworm			
	Corn Rootworm			
	Cucumber Beetle	•		
	Cutworms			
	Diamondback Moth			
	European Corn Borer			
	Flea Beetles			
	Flea Hoppers			
	Grasshoppers			
	Japanese Beetle			
	(Adult)			
	Leafhoppers			
	Loopers			
	Lygus spp.			
	Melonworms			
	Pea Weevil			
	Pea Leaf Weevil			
	Pickleworms			
	Plant Bugs			
	Rindworms			

Salt Marsh Caterpillar Sap Beetle Seedpod Weevil Squash Bugs Stink Bug spp. Tobacco Budworm Tarnished Plant Bug Thrips Whitefly			
Twospotted Spider Mite	0.08 – 0.10	5.12 – 6.4	

- To maintain a proper spray interval, do not make applications less than 10 days apart.
- Do not make more than 4 applications per season.
- Do not apply within 1 day of harvest (PHI).

GRAPES

PEST	DOS	AGE	APPLICATION INSTRUCTIONS
PESI	LB Al/A	FL OZ/A	APPLICATION INSTRUCTIONS
Eastern Grape Leafhopper	0.05 - 0.10	3.2 - 6.4	Ground Application: Apply in water in a minimum of 25 gallons per acre.
Variegated Leafhopper			
Western Grape Leafhopper			Air Application: Apply in water in a minimum of
Black Vine Weevil	0.10	6.4	10 gallons per acre. Emulsified oil may be
Glassywinged Sharpshooter			substituted for water.
Twospotted Spider Mite			
			See section entitled MIXING INSTRUCTIONS for details on the amount of oil to use in the spray
			tank in lieu of water.
			When pest pressure is moderate to severe, use
			the higher rate.

RESTRICTIONS:

- Do not apply more than 0.1 lb. active ingredient (6.4 ounces formulated) per acre per season.
- Do not apply within 30 days of harvest (PHI).

HOPS

DEST	DOSA	AGE	ADDI ICATION INSTRUCTIONS
PEST	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Aphids Armyworms Cutworms Leafrollers Loopers	0.06 - 0.10	3.8 - 6.4	Ground Application: Apply in water in a minimum of 100-150 gallons per acre in early season; 200-250 gallons per acre late season. Air Application: Apply in water in a minimum of
Root Weevils	0.05 - 0.10	3.2 - 6.4	10 gallons per acre.
Twospotted Spider Mite	0.10	6.4	Make a directed spray up the vine 3 feet and the soil surface 1.5 to 2 feet on either side of the plant to control root weevil.

- Do not apply more than 0.1 lb. active ingredient (6.4 ounces formulated) per acre per application.
- Do not apply more than 0.3 lb. active ingredient (19.2 ounces formulated) per acre per season.
- To maintain a proper spray interval, do not make applications less than 21 days apart.
- Use of ultra low volume (ULV) application on hops is prohibited.
- Do not apply within 14 days of harvest (PHI).

LEAFY BRASSICAS AND TURNIP GREENS

CDOD	DEST	DOS	AGE	ADDI ICATION INSTRUCTIONS
CROP	PEST	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Broccoli Raab	Aphids	0.033 - 0.10	2.1 - 6.4	Ground Application: Apply in water in a
Bok Choy	Armyworms			minimum of 10 gallons per acre.
Kale	Corn Earworm			
Mizuna	Crickets			Air Application: Apply in water in a
Mustard Greens	Cucumber Beetles			minimum of 2 gallons per acre. Emulsified
Mustard Spinach	Cutworms			oil may be substituted for water.
Rape Greens	Diamondback Moth			
Turnip Greens*	Flea Beetles			See section entitled MIXING
	Grasshoppers			INSTRUCTIONS for details on the amount
	Ground Beetles			of oil to use in the spray tank in lieu of
	Imported			water.
	Cabbageworm			
	Japanese Beetle			Thorough coverage is essential to achieve
	(adult)			control.
	Leafhoppers			
	Loopers			* Not for use in California.
	Saltmarsh Caterpillar			
	Stink Bugs			
	Thrips			
	Tobacco Budworm			
	Whitefly			
	Wireworm (adults)	0.00 0.40	5.40 .0.4	
	Banks Grass Mite	0.08 - 0.10	5.12 - 6.4	
	Twospotted Spider			
	Mite			
	Carmine Mite			
	Pacific Spider Mite			
	Lygus spp.			

RESTRICTIONS:

- Do not apply more than 0.4 lb. active ingredient (25.6 ounces formulated) per acre per season.
- Repeat applications if needed to maintain control, but do not make applications less than 7 days apart.
- Do not apply within 7 days of harvest (PHI).

LETTUCE, HEAD

DEST	DOS	AGE	ADDITION INSTRUCTIONS
PEST	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Aphids	0.033 - 0.10	2.1 - 6.4	Ground Application: Apply in water in a
Armyworms			minimum of 15 gallons per acre.
Corn Earworm			
Cucumber Beetles			Air Application: Apply in water in a minimum of 5
Cutworms			gallons per acre. Emulsified oil may be substituted
Diamondback Moth			for water.
Flea Beetle			
Imported			See section entitled MIXING INSTRUCTIONS for
Cabbageworm			details on the amount of oil to use in the spray
Leafhoppers			tank in lieu of water.
Loopers			
Salt Marsh			
Caterpillar			
Stink Bug spp.			
Tobacco Budworm			
Whitefly			
Carmine Mite	0.08 - 0.10	5.12 - 6.4	
Lygus spp.			
Twospotted Spider			
Mite			

RESTRICTIONS:

- To maintain a proper spray interval, do not make applications less than 7 days apart.
- Do not apply more than 0.5 lb. active ingredient (32 ounces formulated) per acre per season.
- Do not apply within 7 days of harvest (PHI).

MAYHAW*

PEST	DOSAGE		ADDI ICATION INSTRUCTIONS
PESI	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Plum Curculio	0.08 - 0.10	5.12 - 6.4	Ground Application: Apply in water in a minimum of 28 gallons of finished spray per acre. Air Application: Apply in water in a minimum of 2 gallons per acre.
			Apply in sufficient water to obtain uniform coverage as needed.
			coverage as necessar.

RESTRICTIONS:

- Do not apply more than 0.2 lb. active ingredient (12.8 ounces formulated) per acre per season.
- To maintain a proper spray interval, do not make applications less than 7 days apart.
- Do not apply within 30 days of harvest (PHI).

^{*}This product must be used in accordance with the directions for use on this label, or exemptions under FIFRA (Special Local Needs Registrations, FIFRA Section 18 exemptions).

OKRA

PEST	DOSAGE		ADDITION INCEDITATIONS
PEST	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Aphids	0.033 - 0.10	2.1 - 6.4	Ground Application: Apply in water in a
Armyworms			minimum of 10 gallons of finished spray per acre.
Corn Earworm			
Cucumber Beetles			Air Application: Apply in water in a minimum of 2
Cutworms			gallons per acre.
European Corn Borer			
Flea Beetles			Apply in sufficient water to obtain uniform
Japanese Beetle (Adult)			coverage as needed.
Leafminers			
Loopers			
Stink bugs			
Thrips			
Whitefly			
Broad Mite	0.08 - 0.10	5.12 - 6.4	
Carmine Mite			
Lygus spp.			
Two Spotted Spider Mite			
DECEDIATIONS.	1		

RESTRICTIONS:

- To maintain a proper spray interval, do not make applications less than 7 days apart. Do not apply more than 0.20 lb. active ingredient (12.8 ounces formulated) per acre per season.
- Do not apply within 7 days of harvest (PHI).

PEANUT *

PEST	DOS	AGE	APPLICATION INSTRUCTIONS
PESI	LB Al/A	FL OZ/A	APPLICATION INSTRUCTIONS
Beet Armyworm	0.033 - 0.1	2.1 - 6.4	Ground Application: Apply in water in a
Corn Earworm			minimum of 10 gallons of finished spray per acre.
Cutworm species			
Fall Armyworm			Air Application: Apply in water in a minimum of 2
Grasshoppers			gallons per acre.
Green Cloverworm			
Leafhoppers			Apply in sufficient water to obtain uniform
Lesser Cornstalk Borer			coverage as needed.
Loopers			
Rednecked Peanut Worm			
Southern Armyworm			
Southern Corn Rootworm			
Stink Bugs			
Threecornered Alfalfa			
Hopper			
Velvetbean Caterpillar			
Yellowstriped Armyworm			
Aphids	0.06 - 0.1	3.8 - 6.4	
Spider Mites			
Thrips			
Whitefly			

- Do not apply more than 0.5 lb. active ingredient (32 ounces formulated) per acre per season.
- To maintain a proper spray interval, do not make applications less than 14 days apart.
- Do not feed immature plants and peanut hay to livestock.
- Do not apply within 14 days of harvest (PHI).
- * Not For Use in California.

PEARS

DEST	DOS	AGE	ADDI ICATION INSTRUCTIONS
PEST	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Aphids	0.04 - 0.2	2.6 - 12.8	Ground Application: Apply in water in a
Codling Moth			minimum of 200 gallons per acre (dilute) and 50
Cutworms			gallons per acre (concentrate).
Green			
Fruitworm			Air Application: Apply in water in a minimum of
Leafhoppers			10 gallons per acre by air.
Leafminers			
Leafrollers			
Lygus spp.			
Plant Bugs			
Plum Curculio			
San Jose			
Scale (Crawlers)			
Stink Bugs			
Tarnished			
Plant Bugs			
Twospotted Spider Mite	0.06 - 0.2	3.8 - 12.8	
Yellow Mite			
European Red Mite	0.08 - 0.2	5.12 - 12.8	
DESTRICTIONS:			

RESTRICTIONS:

- Do not apply more than 0.5 lb. active ingredient (32 ounces formulated) per acre per season with no more than 0.45 (28.8 ounces formulated) pound active per acre applied after petal fall.
- To maintain a proper spray interval, do not make applications less than 30 days apart.
- Do not graze livestock in treated orchards or cut treated cover crops for feed.
- Do not apply within 14 days of harvest (PHI).

ROOT CROPS (except Sugar Beets)

CROP	PEST	DOS	AGE	APPLICATION INSTRUCTIONS
CROP	PESI	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Burdock, edible	Aphids	0.08 - 0.10	5.12 - 6.4	Ground Application: Apply in water in a
Carrot	Beet Armyworm			minimum of 25 gallons of finished spray per
Celeriac	Celery Leaftier			acre.
Chervil, Turnip rooted	Corn Earworm			
Chicory	Cross-Striped			Air Application: Apply in water in a
Ginseng	Cabbageworm			minimum of 2 gallons per acre.
Horseradish	Cutworm species			
Parsley, Turnip rooted	Diamondback moth			Apply in sufficient water to obtain uniform
Parsnip	European Corn Borer			coverage as needed.

Radish	Fall Armyworm		
Radish, Oriental	Flea Beetles		
Rutabaga	Green Cloverworm		
Salsify	Hornworms		
Salsify, Black	Imported		
Salsify, Spanish	Cabbageworm		
Skirret	Loopers		
Turnip	Southern Armyworm		
	Spider Mites		
	Tobacco Budworm		
	Velvetbean Caterpillar		
	Whitefly		
	Yellowstriped		
	Armyworm		

- Do not apply more than 0.5 lb. active ingredient (32 ounces formulated) per acre per season.
- To maintain a proper spray interval, do not make applications less than 7 days apart.

• Do not apply within 21 days of harvest (PHI).

Garden Beet	Aphids	0.08 - 0.10	5.12 - 6.4	Ground Application: Apply in water in a
	Flea Beetles			minimum of 25 gallons of finished spray per
	Lepidopterous Larvae			acre.
	Spider Mites			·
	Whitefly			Air Application: Apply in water in a
				minimum of 2 gallons per acre.
				Apply in sufficient water to obtain uniform
				coverage as needed.

RESTRICTIONS:

- Do not apply more than 0.40 lb. active ingredient (25.6 ounces formulated) per acre per season.
- To maintain a proper spray interval, do not make applications less than 7 days apart.
- Do not apply within 1 day of harvest (PHI).

SOYBEANS

DECT	DOSA	AGE	ADDI IOATION INICTRIIOTIONO
PEST	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Alfalfa Caterpillar Aphids Aster Leafhopper	0.033 - 0.10	2.1 - 6.4	Ground Application: Apply in water in a minimum of 10 gallons per acre.
Bean Leaf Beetle Beet Armyworm* Cloverworm			Air Application: Apply in water in a minimum of 2 gallon per acre.
Corn Earworm Corn Rootworm Adult Cucumber Beetles Cutworms			*Pyrethroid resistance is common for Beet Armyworm and Tobacco Budworm. Consult your local extension specialist, certified crop advisor, and/or manufacturer for insecticide resistance
European Corn Borer Fall Armyworm Flea Beetle Grasshoppers			management and/or IPM guidance for the specific site and resistant pest problems.

- To maintain a proper spray interval, do not make applications less than 30 days apart.

 Do not apply more than 0.3 lb. active ingredient (12.8 ounces formulated) per acre per season.

 Do not apply within 18 days of harvest (PHI).

SPINACH

PEST	DOSAGE		APPLICATION INSTRUCTIONS
PESI	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Armyworms	0.033 - 0.10	2.1 - 6.4	Ground Application: Apply in water in a
Colorado Potato Beetle			minimum of 10 gallons per acre.
Corn Earworm			
Cucumber Beetles			Air Application: Apply in water in a minimum of 5
Cutworms			gallons per acre.
European Corn Borer			
Flea Beetles			For whitefly control either at planting or as a foliar
Leafminers			treatment, apply up to 6.4 oz. (0.1 lb. active) per
Loopers			acre being careful not to exceed reapplication
Pepper Weevil			intervals or maximum dosage rates specified in
Thrips			this section.
Tomato Hornworm			
Tomato Pinworm			
Whitefly			
Banks Grass Mite	0.08 - 0.10	5.12 - 6.4	
Broad Mite			
Carmine Mite			

Pacific Spider Mite Twospotted Spider Mite	
--	--

- To maintain a proper spray interval, do not make applications less than 7 days apart.
- Do not apply more than 0.4 lb. active ingredient (25.6 ounces formulated) per acre per season.
- Do not apply within 40 days of harvest (PHI).

SUCCULENT PEAS AND BEANS

CDOD	DEST	DOSAGE		ADDITION INSTRUCTIONS	
CROP	PEST	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS	
Pea (Pisum spp.)	Aster Leafhopper	0.025 - 0.10	1.6 - 6.4	Ground Application: Apply in water in a	
Dwarf Pea	Flea Beetle			minimum of 10 gallons per acre.	
Edible-pod Pea	Grasshoppers				
English Pea	Leafhoppers			Air Application: Apply in water in a	
Garden Pea	Alfalfa Caterpillar	0.033 - 0.10	2.1 - 6.4	minimum of 2 gallons per acre. Emulsified	
Green Pea	Aphids			oil may be substituted for water.	
Snow Pea	Bean Leaf Beetle				
Sugar Snap Pea	Beet Armyworm			See section entitled MIXING	
Pigeon Pea	Cloverworm	•		INSTRUCTIONS for details on amount of oil	
Bean (Phaseolus	Corn Earworm			to use in the spray tank.	
spp.)	Corn Rootworm Adult			· ·	
Broadbean	Cucumber Beetle				
(succulent)	Cutworms				
Lima bean (green)	European Corn Borer				
Runner bean	Fall Armyworm				
Snap bean	Japanese Beetle Adult				
Wax bean	Loopers				
Bean (Vigna spp.)	Pea Leaf Weevil				
Asparagus Bean	Pea Weevil				
Blackeyed Pea	Plant Bugs				
Chinese Longbean	Sap Beetle	•			
Cowpea	Southern Armyworm				
Moth Bean	Stink Bugs				
Southern Pea	Tarnished Plant Bug				
Yardlong bean	Thrips				
Jackbean	Webworms				
Soybean	Western Bean				
(immature seed)	Cutworm				
Sword bean	Whitefly				
	Yellowstriped				
	Armyworm				
	Banks Grass Mite	0.08 - 0.10	5.12 - 6.4		
	Carmine Mite				
	Lygus spp.				
	Twospotted Spider				
	Mite				
DESTRICTIONS:			•		

RESTRICTIONS:

• Do not apply more than 0.2 lb. active ingredient (12.8 ounces formulated product) per acre per season.

• Do not apply within 3 days of harvest (PHI).

TOBACCO

DEST	DOS	AGE	APPLICATION INSTRUCTIONS		
PEST	LB Al/A	FL OZ/A	APPLICATION INSTRUCTIONS		
Armyworm spp. Cutworm spp. Mole Crickets Stalkborers Tobacco Flea Beetle (larvae) White Grubs	0.0625 - 0.10	4.0 - 6.4	Pre-Transplant Soil Applications: Apply 0.0625-0.1 lb. active ingredient per acre in a minimum of 10 gallons per acre to control soil pests. Use of suitable equipment to incorporate into top 4" of the soil is required to control below- ground pests.		
Wireworms			Transplant Water Treatment Application: Apply 0.0625-0.1 lb. active ingredient per acre in a water treatment application volume of 10-200 gallons per acre.		
Aphid spp. Armyworm spp. Flea Beetle (Adult) Chinch bugs Stink bugs Japanese Beetles Grasshoppers Cutworm spp. Tarnished Plant Bugs Green bugs Thrips Whiteflies	0.04 - 0.10	2.56 - 6.4	Foliar Applications: Apply 0.04-0.1 lb. active ingredient per acre foliar application up to and including layby in a minimum of 10 gallons per acre.		
Spider Mites	0.10	6.4			
Lygus spp.			<u> </u>		

RESTRICTIONS:

- For foliar applications, do not make more than 2 applications per season.
- May be tank mixed with clomazone, sulfentrazone, and other herbicides approved for tobacco use.
- For all applications do not apply more than 0.2 lb. active ingredient (12.8 ounces formulated) per acre per season.
- Do not apply later than layby.

TREE NUT CROPS

Tree Nut Crops including: Almond, Beech nut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia nut (bush nut), Pecan, pistachio, and Walnut (Black & English)

PEST	DOSA	\GE	APPLICATION INSTRUCTIONS
PESI	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Black Pecan Aphid Codling Moth Filbert Worm Hickory Shuckworm Leaffooted Bugs Navel Orangeworm Oblique Banded Leafroller Peach Twig Borer Pecan Leaf Casebearer	0.052 - 0.20	3.2 - 12.8	Ground Application: Apply as a dilute (minimum of 200 gallons of finished spray per acre) or concentrate (minimum of 50 gallons of finished spray per acre) spray in sufficient water to provide thorough coverage. Air Application: Apply in a minimum of 10 gallons of finished spray per acre.

Pecan Nut Casebearer Pecan Phylloxera Plant Bugs Stink Bugs Walnut Aphid Yellow Pecan Aphid			
European Red Mite Spider Mites	0.08 - 0.20	5.1 - 12.8	
Walnut Husk Fly	0.1 - 0.20	6.4 - 12.8	

- Minimum spray intervals: Apply Omni Brand Bifenthrin 2EC as needed to maintain control, but not apply at intervals sooner than 15 days.
- Observe a 21-day Pre-Harvest Interval (PHI) for Pecans and a 7-day Pre-Harvest Interval (PHI) for all other registered tree nut crops.
- Do not exceed 0.2 lb. active ingredient per acre per application; do not exceed 0.50 lb. active ingredient per acre per season.
- Do not graze livestock in treated orchards or cut treated cover crops for feed.
- Do not apply within 21 days of harvest (PHI) for Pecans.
- Do not apply within 7 days of harvest (PHI) for all other nut crops.

TUBEROUS AND CORM VEGETABLES

CROP	PEST	DOSAGE		APPLICATION INSTRUCTIONS
CROP	PESI	LB AI/A	FL OZ/A	APPLICATION INSTRUCTIONS
Arracacha Arrowroot Potato Chinese Artichoke Jerusalem Artichoke	Corn Wireworm Tobacco Wireworm Japanese Beetle Grubs June Beetle	0.30 (at-plant) 0.05 - 0.15 (layby)	19.2 (at-plant) 3.2 - 9.6 (layby)	In-Furrow planting time treatment Omni Brand Bifenthrin 2EC may be applied as an in-furrow planting time treatment for the control of wireworms, rootworms, and white grubs. Apply Omni Brand Bifenthrin 2EC
Edible Canna Cassava (bitter & sweet) Chayote (root)	Southern Potato Wireworm Banded Cucumber Beetle	0.033 - 0.10 (foliar)	2.1 - 6.4 (foliar)	at the rate of 0.3 lb. active ingredient per acre as an in-furrow spray or T-band spray at planting time.
Chufa Dasheen (taro) Ginger Leren Potato Sweet Potato Tanier Turmeric Yam bean True yam	Black Flea Beetle Cucumber Beetle Rootworms Sweetpotato Flea Beetle Sweetpotato Weevil Whitefringed Beetle White Grub Sugarcane Beetle	(istal)	(i.s.i.s.)	Lay-By treatment: Omni Brand Bifenthrin 2EC may be applied as a layby treatment for the control of wireworms, rootworms and white grubs. Apply Omni Brand Bifenthrin 2EC to the drill area and cover with soil utilizing cultivation equipment set to throw soil to the drill area. Apply Omni Brand Bifenthrin 2EC as a banded spray over the row at a rate of 0.05-0.15 lb. active ingredient per acre (3.2-9.6 ounces formulated) in 10 gallons per acre of spray.
				Foliar spray: Omni Brand Bifenthrin 2EC may be applied as a foliar spray for the control of the adult life stages of flea beetles, click beetles (wireworms),

cucumber beetles (rootworms), whitefringed beetles and May/June beetles (white grubs). Omni Brand Bifenthrin 2EC at the rate of 0.033 to 0.10 lb. active ingredient per acre (2.1 to 6.4 ounces formulated) in 10
gallons of spray by ground and 3 gallons of spray by air.

- For foliar applications, do not make more than 2 foliar applications per season and do not make application less than 21 days apart.
- Do not apply more than 0.5 lb. active ingredient (32 ounces formulated) per acre per season, including soil applications.
- Do not apply within 21 days of harvest (PHI).

ORNAMENTALS*

* NOT FOR USE IN CALIFORNIA TO CONTROL LISTED INSECT PESTS ON ORNAMENTALS AND TREES (INCLUDING FIELD AND CONTAINER GROWN NURSERY STOCK, CHRISTMAS TREES, INTERIORSCAPES AND PLANTSCAPES, LAWNS, TREES AND SHRUBS, AND ON GOLF COURSES AND SOD FARMS).

For use on plants intended for aesthetic purposes or climatic modifications and being grown in interior plantscapes and on outdoor ornamentals, Christmas trees, nurseries, lawns, sod farms and golf courses.

USE INSTRUCTIONS

Omni Brand Bifenthrin 2EC mixes with water and other aqueous carriers to control a broad assortment of insects and mites on trees, shrubs, foliage plants, non-bearing fruit and nut trees, and flowers in interiorscapes: hotels, shopping malls, office buildings and outdoor plantscapes: nurseries, residential dwellings, parks, institutional buildings, recreational areas, athletic fields, golf courses, sod farms, and home lawns. Non-bearing crops are perennial crops that will not produce a harvestable raw agricultural commodity within 365 days of application.

Omni Brand Bifenthrin 2EC may be tank-mixed with other products, including insect growth regulators. When tank mixing Omni Brand Bifenthrin 2EC with other products observe all precautions and limitations on each separate product label. The addition of spreader stickers is not necessary. The physical compatibility of Omni Brand Bifenthrin 2EC may vary with different sources of pesticide products, and local cultural practices. Prepare any tank mixture which has not been previously tested on a small scale (pint or quart jar), using the proper proportions of chemicals and water to ensure the physical compatibility of the mixture.

The following procedure is recommended for preparation of a new tank mix, unless specified otherwise in label directions:

- 1. Add wettable powders to tank water
- 2. Agitate
- 3. Add fluids and flowables
- 4. Agitate
- 5. Add emulsifiable concentrates
- 6. Agitate

If a mixture is found to be incompatible following the order of addition, try reversing the order of addition, or increase the volume of water. **Note**: If the tank mixture is found to be compatible after increasing the amount of water then the sprayer will need to be recalibrated for a higher volume application. Do not allow tank mix to stand overnight. When using tank mixes, observe all restrictions and precautions which appear on the labels of these products. Provide constant agitation to keep the mixture in solution.

Restrictions:

- Do not apply to pets, crops, or sources of electricity.
- Firewood is not to be treated.
- Do not allow spray to contact food, foodstuffs, food contacting surfaces, food utensils or water supplies.
- Do not apply this pesticide in livestock buildings (barns).
- Keep children and *pets off* treated areas following application until the spray has dried.
- Do not apply by air.
- Do not use in greenhouses.
- Do not apply this product through any type of irrigation system. Do not apply when a temperature inversion exists.
- Do not apply for surface feeding pests if rain is expected within 12 hours (or whatever time is necessary for the spray to dry).
- For turf treatment, apply with nozzles not more than 2 feet above the grass.
- Do not apply within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds.
- Do not apply when grass areas are water logged or the soil is saturated with water (i.e., will not accept irrigation).
- Vinyl and Aluminum Siding: Do not spray directly onto vinyl or aluminum siding. If Omni Brand Bifenthrin 2EC inadvertently contacts vinyl and aluminum siding (particularly lightly colored, aged, weathered or otherwise damaged), it may result in staining, bleaching or discoloration. Wash off thoroughly with detergent and water. Factors such as extreme heat and direct sunlight can promote damage when using emulsifiable concentrates. Avoid application to vinyl or aluminum siding while exposed to direct sunlight or during the heat of the day.

APPLICATION INSTRUCTIONS

TRUNK SPRAYS TO ORNAMENTAL TREES (including Christmas trees)

For Control of Bark Beetles and Boring Beetles

Refer to the table below. Application rates and timing differ according to the target pest and other factors specific to each local situation. Consult your local State Extension specialist or other qualified expert for recommendations. **Note:** Do not apply more than 12.8 fl. oz. (0.2 lbs. Al) per acre of this product to trees. Repeat application may be necessary if reinfestation is likely.

PEST	DOSAGE	SPRAY VOLUME	REMARKS AND RESTRICTIONS
Dandroctonus bark beetles	16 - 32 fl. oz.	Use 1 - 4 gallons of	Make applications to the trunk of the tree with
such as mountain pine	per 100 gallons	finished spray per	a hydraulic sprayer in the early spring or prior
beetle, southern pine beetle,	(0.25 - 0.5 lb. Al	tree.	to adult beetle flight and tree infestation.
western pine beetle, and	per 100 gallons)		
black turpentine beetle.			Apply spray directly to the main trunk from the
Engraver beetle (<i>lps</i> spp.)	16 - 32 fl. oz.	Use 10 - 14 gallons	base of the tree to at least half-way into the live
	per 100 gallons	of finished spray	crown. Spray until the bark is thoroughly wet.
	(0.25 - 0.5 lb. Al	per tree.	
	per 100 gallons)		
Other bark beetles such as	16 – 32 fl. oz.	Use 2 - 5 gallons of	Make applications of a spray mixture to the
ambrosia beetles, elm bark	per 100 gallons	finished spray per	trunk, scaffolding and limbs of the tree with a
beetles, and metallic wood	(0.25 – 0.5 lb. Al	tree.	hydraulic sprayer in the early spring or prior to
borers such as emerald ash	per 100 gallons)		adult beetle flight and tree infestations. Spray
borer.			until the bark is thoroughly wet.
Clearwing moth borers	6.4 - 12.8 fl. oz.	Use 1 - 4 gallons of	Apply to the branches and trunks prior to adult
such as ash borer, banded	per 100 gallons	finished spray per	emergence. Spray until the bark is thoroughly
ash clearwing, dogwood	(0.1 - 0.2 lb. Al	tree.	wet. For maximum residual control, use
borer, lesser peachtree	per 100 gallons)		highest recommended rate.

borer, lilac borer, oak borer, peachtree borer, rhododendron borer		
Coleopteran borers such as bronze birch borer, flatheaded apple tree borer		

Treatment of Infested Trees to Control Emerging Brood

Make applications of a spray mixture containing 2.0 pints of **Omni Brand Bifenthrin 2EC** per 100 gallons of water to trees that still have beetles in the bark. Apply spray directly to the main trunk from the base of the tree to at least half-way into the live crown. Spray until the bark is thoroughly wet (usually 1 to 4 gallons of spray per tree). Do not apply more than 0.2 lbs. Al (12.8 fl. oz.) of this product to trees per acre.

Do not spray trees on which all needles have turned brown unless an infestation is confirmed. To confirm an infestation, scrape off the outer bark to determine if trees are still infested. If live infestations remain in the trunks, fell the trees and cut into sections. Spray the trunk and large limbs and turn sections so that all of the surface area can be treated. Do not apply more than 0.2 lbs. Al (12.8 fl. oz.) of this product to trees per acre.

FOLIAR SPRAYS TO ORNAMENTALS AND TREES

(Field and Container Grown Nursery Stock, Christmas Trees, Interiorscapes and Plantscapes, Lawns, Trees and Shrubs, and on Golf Courses and Sod Farms)

For applications to ornamentals (trees, shrubs, ground covers, bedding plants and foliage plants, conifers (field and container grown), Christmas Trees and pine seed orchards) apply 0.04 to 0.32 fl. oz. **Omni Brand Bifenthrin 2EC** per 1,000 sq. ft. or 1.8 to 14.4 fl. oz. per 100 gallons. **Omni Brand Bifenthrin 2EC** may be diluted and applied in various volumes of water providing that the maximum label rate (0.32 fl. oz. per 1,000 sq. ft. or 14.4 fl. oz. per 100 gallons) is not exceeded. **Omni Brand Bifenthrin 2EC** may be applied through low volume application equipment by dilution with water or other carriers and providing that the maximum label rate (0.32 fl. oz. per 1,000 sq. ft. or 14.4 fl. oz. per 100 gallons) is not exceeded.

Calculating Dilution Rates Using the Ornamental Application Rates Table and the Omni Brand Bifenthrin 2EC Dilution Chart

Use the following steps to determine the appropriate dilution of this product required to control the specific pests:

- 1. Find the least susceptible target pest (the pest that requires the highest application rate for control).
- 2. Select an application rate in terms of fluid ounces of this product.
- 3. Find your application volume and how much spray you want to prepare.
- 4. Use the **Ornamental Dilution Chart** to determine the appropriate volume of this product that must be mixed in your desired volume of water.

For example, to control black vine weevil adults on rhododendron, the **Ornamental Application Rates** table shows that 0.08 to 0.16 fl. oz. of this product should be applied per 1,000 sq. ft. You select an application rate of 0.16 fl. oz. per 1,000 sq. ft. because maximum residual control is desired. Your application volume is approximately 300 gallons per acre which is equivalent to 6.9 gallons per 1,000 sq. ft. Consulting the **Ornamental Dilution Chart** shows that you should dilute 0.24 fl. oz. of this product in 10 gallons of water.

	OMNI BRAND BIFENTHRIN 2EC ORNAMENTAL DILUTION CHART						
Application	Application Fluid Ounces (mL) of Omni Brand Bifenthrin 2EC diluted to the Volumes of Finished Spray						ed Spray
Rate	1 Ga	allon	5 Ga	llons	10 Ga	allons	100 Gallons
Fl. oz./1,000	Fl. oz.	mL	Fl. oz.	mL	Fl. oz.	mL	Fl. oz.
sq. ft.							
0.04	0.018	0.5	0.09	2.6	0.18	5.3	1.8
0.08	0.036	1.1	0.18	5.3	0.36	10.6	3.6
0.16	0.072	2.1	0.36	10.6	0.72	21.3	7.2
0.32	0.144	4.3	0.72	21.3	1.44	42.6	14.4

(7.9)(Fl. Oz. of Omni Brand Bifenthrin 2EC added to tank = Percent Active Ingredient of Spray Mix (gallons of finished spray mix)(128)

ORNAMENTAL AND TREE FOLIAR APPLICATION RATES

The application rates listed in the following table will provide excellent control of the noted pests under typical conditions. However, at the discretion of the applicator, this product may be applied at up to 0.32 fl. oz. per 1,000 sq. ft (14.4 fl. oz. per 100 gallons) to control each of the pest listed in this table. To achieve maximum residual control, use the higher application rates.

PEST	DOSAGE	REMARKS AND RESTRICTIONS
Bagworms ¹	0.04 - 0.08 fl. oz. per 1,000 sq. ft.	Bagworms: For best results, apply
Cutworms	(1.8 - 3.8 fl. oz. per 100 gallons)	when larvae begin to hatch and spray
Elm Leaf Beetles	(1.0 0.0 ii. 02. per 100 galloris)	larvae directly. Applications when
Fall Webworms		larvae are young will be most
Gypsy Moth Caterpillars		effective.
Lace Bugs		Chodive.
Leaf Feeding Caterpillars		² Beetles, Scale Crawlers, Twig Borers,
Tent Caterpillars		and Weevils: May treat trunks, stems
Tussock moth		and twigs in addition to plant foliage.
Adelgids	0.08 - 0.16 fl. oz. per 1,000 sq. ft.	
Ants	(3.6 - 7.2 fl. oz. per 100 gallons)	³ Spider Mites: Omni Brand Bifenthrin
Aphids	(0.0 7.2 ii. 02. poi 100 gailorio)	2EC provides optimal twospotted
Bees	Y	spider mite control when applied
Beet Armyworm		during spring to mid-summer. Higher
Beetles ²		application rates and/or more frequent
Black Vine Weevil (Adults)		treatments may be required for
Scales, such as		acceptable twospotted spider mite
Brown Soft Scales		control during mid- to late-summer.
California Red Scale (Crawlers) ²		The addition of a surfactant or
Elongated Hemlock Scale Pine		horticultural oil may increase the
Needle Scales (crawlers) ²		effectiveness of this product.
San Jose Scales (Crawlers) ²		Combinations of this product with
Broad Mites		other registered miticides have also
Budworms		proven effective. Alternately, Omni
Cicadas		Brand Bifenthrin 2EC applications
Citrus Thrips		may be rotated with those of other
Clover Mites		products that have different modes of
Crickets		action in control programs that are
Earwigs		designed to manage resistance by

European Red Mite		twospotted spider mites. Consult your
Flea Beetles		local Cooperative Extension Service
Fungus Gnats (Adults)		for resistance management
Glassywinged Sharpshooter		recommendations in your region.
Grasshoppers		
Japanese Beetle (Adult)		
Leafhoppers		
Leafrollers		
Mealybugs		
Mites		
Nantucket Pine Tip Moth		
Pillbugs		
Pine sawflies		
Plant Bugs (including <i>Lygus</i> spp.)		
Psyllids		
Scorpions		
Spider Mites ³		
Spittlebugs		
Thrips		
Tip Moths		
Treehoppers		
Twig Borers ²		
Wasps		
Weevils ² such as		
White Pine Weevil		
Pales Weevil		
Diaprepes adults		
Orchid Weevil		
White flies		
Zimmerman pine moths		
Leafminers	0.16 - 0.32 fl. oz. per 1,000 sq. ft.	
Pecan Leaf Scorch Mite	(7.2 - 14.4 fl. oz. per 100 gallons)	
Pine Shoot Beetle (Adults)		
Spider Mites ³		

BROADCAST SPRAYS TO TURFGRASS (including lawns, golf courses, sod farms, parks, etc).

Apply Omni Brand Bifenthrin 2EC as a broadcast treatment. Use higher volumes up to 10 gallons of carrier per 1000 square feet to get uniform coverage when treating dense grass foliage.

For low water volume usage, less than 2 gallons/1000 square feet, addition of a non-ionic or silicone based surfactant (0.25% v/v) is recommended. Irrigation to treated area within a few hours following application can improve efficacy to subsurface pests such as, but not limited to, mole crickets.

Restrictions:

- In New York State, this product may NOT be applied to any grass or turf area within 100 feet of a water body (lake, pond, river, stream, wetland, or drainage ditch).
- In New York State, do make a single repeat application of this product if there are signs of renewed insect activity, but not sooner than two weeks after the first application.

Spray Drift Precautions (For Turf & Ornamental Uses)

Do not apply when wind conditions laver downwind drift to nearby water bodies.

Do not apply when wind velocity exceeds 10 miles per hour. Avoid application when wind gusts approach 10 mph. Apply using nozzles that provide the largest droplet size compatible with adequate coverage.

Turfgrass Application Rates

The application rates listed in the following table will provide excellent control of the respective pests under typical conditions. To achieve maximum residual control, use the higher application rates.

RATE
0.05 - 0.08 fl. oz. per 1,000 sq. ft.
A higher rate of up to 0.32 fl. oz. per 1,000 sq. ft. may be
applied at the discretion of the applicator.
0.08 - 0.16 fl. oz. per 1,000 sq. ft.
A higher rate of up to 0.32 fl. oz. per 1,000 sq. ft. may be
applied at the discretion of the applicator.
0.16 - 0.32 fl. oz. per 1,000 sq. ft.
A Y

- 1. **Armyworms, Cutworms and Sod Webworms:** To ensure optimum control, delay watering (irrigation) or mowing for 24 hours after application. If the grass area is being maintained at a mowing height of greater than 1 inch, then higher application rates (up to 0.32 fluid oz. per 1000 square feet) may be required during periods of high pest pressure.
- 2. **Annual Bluegrass Weevil (Hyperodes) adults:** Time applications to control adult weevils as they leave their overwintering sites and move into grass areas. This movement generally begins when Forsythia is in full bloom and concludes when flowering dogwood (Carnes florida) is in full bloom. Consult your State Cooperative Extension Service for more specific information regarding application timing.
- 3. Billbug adults: Make applications when adult billbugs are first observed during April and May. Degree day models have been developed to optimize application timing. Consult your State Cooperative Extension Service for information specific to your region. In temperate regions, spring applications targeting billbug adults will also provide control of overwintered chinch bugs.
- 4. **Black Turfgrass Ataenius adults:** Make applications 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 this blooming of Rose of Sharon (Hibiscus syriacus).

- 5. Chinch Bugs: Chinch Bugs infest the base of grass plants and are often found in the thatch layer. Irrigation of the grass area before treatment will optimize the penetration at the insecticide to the area where the chinch bugs are located. Use higher volume applications if the thatch layer is excessive or if a relatively long mowing height is being maintained. Chinch bugs can be one of the most difficult pests to control in grasses and the higher application rates (up to 0.32 fluid oz. per 1000 square feet) may be required to control populations that contain both nymphs and adults during the middle of the summer.
- 6. **Mites:** To ensure optimal control of eriophyid mites, apply in combination with the labeled application rate of a surfactant. A second application, five to seven days after the first, may be necessary to achieve acceptable control.
- 7. **Flea larvae:** Flea larvae develop in the soil of shaded areas that are accessible to pets or other animals. Use a higher volume application when treating these areas to ensure penetration of the insecticide into the soil. Note: if the lawn area is being treated with this product at 0.08 fluid ea, per 1000 square feet for adult flea control, then the larval application rate may be achieved by increasing the application volume two- to four-fold.
- 8. **Mole Cricket adults:** Achieving acceptable control of adult mole crickets is difficult because preferred grass areas are subject to continuous invasion during the early spring by this extremely active stage. Make applications as late in the day as possible and watere in with up to 0.5 inches of water immediately after treatment. If the soil is not moist, then it is important to irrigate before application to bring the mole crickets closer to the soil surface where contact with the insecticide will be maximized. Treat grass areas that receive pressure from adult mole crickets at peak egg hatch to ensure optimum control of subsequent nymph populations (see below).
- 9. Mole Cricket nymphs: Treat grass areas that received intense adult mole cricket pressure in the spring immediately prior to peak egg hatch. Optimal control is achieved at this time because young nymphs are more susceptible to insecticides and they are located near the soil surface where the insecticide is most concentrated. Control of larger, more damaging, nymphs later in the year may require both higher application rates and more frequent applications to maintain acceptable control. Make applications as late in the day as possible and watere in with up to 0.5 inches of water immediately after treatment. If the soil is not moist, then it is important to irrigate before application to bring the mole crickets closer to the soil surface where contact with the insecticide will be maximized.
- 10. Ticks (Including ticks that may transmit Lyme Disease and Rocky Mountain Spotted fever): Do not make spot applications. Treat the entire area where exposure to ticks may occur. Use higher spray volumes when treating areas with dense ground cover or heavy leaf liner. Ticks may be reintroduced from surrounding areas on host animals. Retreatment may be necessary to achieve and/or maintain control during periods of high past pressure. Repeat application is necessary only if there are signs of renewed activity. Repeat application must be limited to no more than once per seven days.

Deer ticks (*Ixodes* spp.) have a complicated life cycle that ranges over a two year period and involves four life stages. Make applications in the late fall and/or early spring to control adult ticks that are usually located on brush or grass above the soil surface and in mid to late spring to control larvae and nymphs that reside in the soil and leaf litter.

American dog ticks may be a considerable nuisance in suburban settings, particularly where homes are built on land that was previously field or forest. These ticks commonly congregate along paths or roadways where humans are likely to be encountered. Make applications as necessary from mid-spring to early fall to control American dog tick larvae, nymphs and adults.

Omni Brand Bifenthrin 2EC LAWN DILUTION CHART										
Application	Application	, ,								
Volume:	Rate:	Spray								
Gallons/	Fl. Oz./	1 Gallon		I. Oz./ 1 Gallon 5 Gallons		llons	10 Gallons		100 Gallons	
1000 sq. ft.	1000 sq. ft.	Fl. oz.	mL	Fl. oz.	mL	Fl. oz.	mL	Fl. oz.		
1	0.05	0.05	1.48	0.25	7.39	0.50	14.8	5.00		
1	0.08	0.08	2.37	0.40	11.83	0.80	23.7	8.00		
1	0.16	0.16	4.73	0.80	23.66	1.60	47.3	16.00		
1	0.32	0.32	9.46	1.60	47.32	3.20	94.6	32.00		
2	0.05	0.025	0.74	0.13	3.70	0.25	7.4	2.50		
2	0.08	0.040	1.18	0.20	5.91	0.40	11.8	4.00		
2	0.16	0.080	2.37	0.40	11.83	0.80	23.7	8.00		
2	0.32	0.160	4.73	0.80	23.66	1.60	47.3	16.00		
3	0.05	0.017	0.49	0.08	2.46	0.17	4.9	1.67		
3	0.08	0.027	0.79	0.13	3.94	0.27	7.9	2.67		
3	0.16	0.053	1.58	0.27	7.89	0.53	15.8	5.33		
3	0.32	0.107	3.15	0.53	15.77	1.07	31.5	10.67		
4	0.05	0.013	0.37	0.06	1.85	0.13	3.7	1.25		
4	0.08	0.020	0.59	0.10	2.96	0.20	5.9	2.00		
4	0.16	0.040	1.18	0.20	5.91	0.40	11.8	4.00		
4	0.32	0.080	2.37	0.40	11.83	0.80	23.7	8.00		
5	0.05	0.010	0.30	0.05	1.48	0.10	3.0	1.00		
5	0.08	0.016	0.47	0.08	2.37	0.16	4.7	1.60		
5	0.16	0.032	0.95	0.16	4.73	0.32	9.5	3.20		
5	0.32	0.064	1.89	0.32	9.46	0.64	18.9	6.40		
10	0.05	0.005	0.15	0.03	0.74	0.05	1.5	0.50		
10	0.08	0.008	0.24	0.04	1.18	0.08	2.4	0.80		
10	0.16	0.016	0.47	0.08	2.37	0.16	4.7	1.60		
10	0.32	0.032	0.95	0.16	4.73	0.32	9.5	3.20		

CONDITIONS OF SALE – LIMITED WARRANTY AND LIMITATIONS OF LIABILITIES AND REMEDIES

Read the Conditions of Sale – Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The directions on this label must be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of Helena Agri-Enterprises, LLC (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. To the extent consistent with applicable law, the company makes no other warranties or representations of any kind express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

To the extent consistent with applicable law, the exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Agri-Enterprises, LLC d/b/a Helena Chemical Company's election, one of the following:

- 1. Refund of the purchase price paid by buyer or user for product bought, or
- 2. Replacement of the product used

To the extent consistent with applicable law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and use accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

[Ammo, Capture, Mustang – trademarks of FMC Corporation]
[Ambush, Karate – trademarks of a Syngenta Group Company]
[Asana – trademark of E.I. duPont de Nemours & Company]
[Baythroid – trademark of Bayer]
[Danitol – trademark of Sumitomo Chemical Company, Ltd.]
[Scout Xtra – trademark of Hoechst Schering Agrevo S.A.]