



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

September 22, 2020

Prime Source, LLC
c/o Rachel Hardy
Agent
Wagner Regulatory Associates, Inc.
P.O. Box 640
7217 Lancaster Pike, Suite A
Hockessin, DE 19707

Subject: Notification per PRN 98-10 – Label notification- new marketing graphics
Product Name: Bifen 2EC Select
EPA Registration Number: 89442-30
Application Date: 08 June 2020
Decision Number: 564616

Dear Ms. Hardy,

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

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

If you have any questions, you may contact please contact Andrés Garzón at (703) 347-8547 or by email at GarzonMoreno.Andres@epa.gov.

Sincerely,

A handwritten signature in black ink, which appears to read "J. Herrick", is positioned above the typed name.

Jacquelyn Herrick, Product Manager 03
Invertebrate & Vertebrate Branch 1
Registration Division (7505P)
Office of Pesticide Programs

NOTIFICATION

89442-30

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

09/22/2020

89442-30.20200608.V

Prime Source, LLC
Label Amendment – Optional Marketing Logos
Page 1 of 25

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.

GROUP

3

INSECTICIDE

Bifen 2EC Select

ACTIVE INGREDIENT:

Bifenthrin: (2 methyl[1,1'-biphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl-cyclopropanecarboxylate*

WT. BY %

25.1%

OTHER INGREDIENTS:**

74.9%

TOTAL:

100.0%

*Cis isomers 97% minimum, trans isomers 3% maximum.

**Contains petroleum distillates.

This product contains 2 lbs. active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

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

FIRST AID

IF SWALLOWED:	• 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. • Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF INHALED:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment. In case of an emergency involving this product, call CHEMTREC at 1-800-424-9300 .	
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.	

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

EPA Reg. No. 89442-30

EPA Est. No. XXXXX-XX-XXX

Manufactured For:

Prime Source, LLC
P.O. Box 250
10025 Hwy. 264 Alternate
Middlesex, NC 27557

Net Contents: _____ [1, 2.5, 5 gallons]

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS & DOMESTIC ANIMALS**WARNING**

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 absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. 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, such as barrier laminate, nitrile rubber, neoprene rubber, or Viton
- Shoes plus socks

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, such as barrier laminate, nitrile rubber, neoprene rubber, or Viton
- 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/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

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

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

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

PHYSICAL/CHEMICAL HAZARDS

COMBUSTIBLE. Do not use or store near heat or open flame. Do not mix or allow coming into contact with oxidizing agent. Hazardous Chemical reaction may occur.

DIRECTIONS FOR USE
RESTRICTED USE PESTICIDE

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

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

AGRICULTURAL USE REQUIREMENTS

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

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

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

- Coveralls
- Chemical-resistant gloves, such as barrier laminate, nitrile rubber, neoprene rubber, or Viton
- Shoes plus socks

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 set up to obtain effective control of the target insect pests.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise. Failure to cease application during a mechanical stoppage may result in undesirable residues to adjacent areas.

The system must contain a functional check valve, vacuum-relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from 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 **Bifen 2EC Select** 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.

RESISTANCE MANAGEMENT

Bifen 2EC Select contains a Group 3 insecticide. With repeated use of Group 3 insecticides 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 **Bifen 2EC Select** 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 **Bifen 2EC Select** 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 Prime Source, LLC.
- 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 of insect may be present. Immediately consult your local Prime Source, LLC representative or agricultural advisor for the best alternative method of control for your area.
- Do not treat seedling plants grown for transplant in greenhouse, 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.

ROTATIONAL CROPS

Crops for which bifenthrin tolerances exist may be rotated at any time. All other crops may be rotated 30 days following the final application of **Bifen 2EC Select**.

MIXING INSTRUCTIONS

The spray tank must be clean, thoroughly rinsed, and decontaminated before adding either **Bifen 2EC Select** alone or with tank mix combinations (see “**Bifen 2EC Select 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.

Bifen 2EC Select Used Alone: When **Bifen 2EC Select** 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.

Bifen 2EC Select with Fertilizer: Fill the spray tank approximately one-half full with water and/or liquid fertilizer, add the proper amount of **Bifen 2EC Select**, 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 **Bifen 2EC Select** and fertilizer to ensure the mixture will stay in solution. Maintain constant agitation during mixing and application.

Bifen 2EC Select 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. **Bifen 2EC Select** may be applied in tank mixtures with other products approved for use on registered crops. Observe all restrictions and precautions which appear on the labels of these products.

APPLICATION INSTRUCTIONS

The rate of **Bifen 2EC Select** 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 “**Applications**” 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.

SPRAY DRIFT REQUIREMENTS

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

Temperature Inversion

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

Droplet Size

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

Additional Requirements for Ground Applications

Wind speed must be measured adjacent to the application site on the upwind side immediately prior to application. For ground boom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy. For airblast applications, turn off outward-pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

Additional Requirements for Aerial Applications

Mount the spray boom on the aircraft as to minimize drift caused by wingtip or rotor vortices. Use the minimum practical boom length which must not exceed 75% of the wing span or 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.

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.ces.usda/v/technical/agronom/newconbuf.pdf>

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.

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).

CROPS

ARTICHOKE

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Artichoke Plume Moth Cribrate Weevil	0.10	6.4
Restrictions: - Do not apply more than 0.5 lb. active ingredient (32.0 ounces formulated) per acre per season. - Repeat applications if needed to maintain control, but do not make applications less than 15 days apart. - Pre-Harvest Interval: 5 days Applications: 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.		

BRASSICAS

Head and Stem Brassica Vegetables including Broccoli, Chinese Broccoli (gai lan, white flowering broccoli), Brussels sprouts, Cauliflower, Cavalo broccolo, Kohlrabi, Cabbage, Chinese Cabbage (napa), Chinese Mustard Cabbage (gai choy)

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Aphids Armyworms Corn Earworm Crickets Cucumber Beetle Cutworms Diamondback Moth Flea Beetle Ground Beetles Imported Cabbageworm Leafhoppers Loopers Salt Marsh Caterpillar Stink Bugs Thrips Tobacco Budworm Whitefly Wireworm (Adult)	0.033 - 0.10	2.1 - 6.4
Banks Grass Mite Carmine Mite <i>Lygus</i> 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 (32.0 ounces formulated) per acre per season. - Do not make more than 5 applications after bloom. - Repeat applications if needed to maintain control, but do not make applications less than 7 days apart. - Pre-Harvest Interval: 7 days Applications: 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.		

BUSHBERRIES

Blueberry (highbush and lowbush), Currant, Elderberry, Gooseberry, Huckleberry

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Aphids	0.033 - 0.10	2.1 - 6.4

Blueberry Maggot Fruitworms Japanese Beetle Leaf Rollers Leafhoppers Plum Curculio Spanworm		
Carmin Mite <i>Lygus</i> 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 (32.0 ounces formulated) per acre per season. - Do not make applications less than 7 days apart. - Pre-Harvest Interval: 1 day Applications: 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.		

CANE BERRIES

Caneberries including Blackberries, Bingleberries, Dewberries, Loganberries, Lowberries, Marionberries, Olallieberries, Raspberries, Youngberries

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Leafrollers Orange Tortrix Root Weevils	0.05 - 0.10	3.2 - 6.4
Raspberry Crown Borer Spider Mites	0.10	6.4
Restrictions: - Do not apply more than 0.2 lb. active ingredient (12.8 ounces formulated) per acre per season. - Pre-Harvest Interval: 3 days Applications: Ground Application - Apply in water in a minimum of 50 gallons per acre. Air Application - Apply in water in a minimum of 10 gallons per acre. A total of two applications may be made. Make the first pre-bloom and the second post-bloom.		

CANOLA, CRAMBE, RAPESEED

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Aphids Armyworms Cutworms Diamondback Moth Flea Beetles Flea Hoppers Grasshoppers Loopers Lygus Bugs Other Lepidopterous Larvae Plant Bugs Seedpod Weevil Stink Bugs Thrips Whitefly	0.033 - 0.04	2.1 - 2.6
Restrictions: - Do not apply more than 0.08 lb. active ingredient (5.12 ounces formulated) per acre per season. - Repeat applications if needed to maintain control, but do not make applications less than 14 days apart. - Pre-Harvest Interval: 35 days Applications: 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.		

CHRISTMAS TREES

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Balsam Twig Aphid Balsam Woolly Adelgid Cinara Aphid Elongated Hemlock Scale Root Weevil Spruce Spider Mite	0.06 - 0.10	3.9 - 12.8
Restrictions: - Do not apply more than 0.2 lb. active ingredient (12.8 ounces formulated) per acre per treatment. - Do not make more than 3 applications in a crop year. - Do not make aerial application outside CA and WA. - Do not make applications through irrigation systems. - Maintain a minimum of 21 days between applications. Applications: 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. Bifen 2EC Select is generally 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 Bifen 2EC Select .		

CILANTRO, CORIANDER

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Aphids Beet Armyworm Cabbage Looper Cutworm Flea Beetle Grasshoppers Leafminer Salt Marsh Caterpillar Spotted Cucumber Beetle Thrips Whitefly	0.033 - 0.10	2.1 - 6.4
Twospotted Spider Mite	0.08 - 0.10	5.12 - 6.4
Restrictions: - Do not apply more than 0.5 lb. active ingredient (32.0 ounces formulated) per acre per season. - Do not make applications less than 7 days apart. - Pre-Harvest Interval: 3 days Applications: 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.		

CITRUS (Except Florida)*

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Asian Cockroach Diaprepes Root Weevil (<i>Diaprepes abbreviatus</i>)	0.25 - 0.50	16.0 - 32.0
Restrictions: - Do not apply more than 0.5 lb. active ingredient (32.0 ounces formulated) per acre per season. - Do not apply through irrigation systems. - Do not allow any application of Bifen 2EC Select to contact fruit or foliage. - Do not apply by air. - Pre-Harvest Interval: 1 day Applications: Ground Application - Apply in water in a minimum of 30 gallons per acre. 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 32.0 ounces of Bifen 2EC Select .		

In areas where a second emergence is expected, use 16.0 ounces of **Bifen 2EC Select** in the early season and 16.0 ounces of **Bifen 2EC Select** later in the season.

If the length of control of **Bifen 2EC Select** 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.

*Use in California not permitted unless accompanied by a supplemental label.

CITRUS (Florida only)

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Blue Green Citrus Root Weevil (<i>Pachnaeus opalus</i>) Brown Leaf Notcher (<i>Epicaerus mexicanus</i>) Diaprepes Root Weevil (<i>Diaprepes abbreviatus</i>) Little Leaf Notcher (<i>Artipus flordanus</i>) Southern Blue Green Citrus Root Weevil (<i>Pachnaeus litus</i>)	0.25 - 0.50	16.0 - 32.0
Asian Cockroach	0.10 - 0.25	6.4 - 16.0

Restrictions:

- Do not apply more than 0.5 lb. active ingredient (32.0 ounces formulated) per acre per season.
- Do not apply through irrigation systems.
- Do not allow any application of **Bifen 2EC Select** to contact fruit or foliage.
- Do not apply by air.
- Pre-Harvest Interval: 1 day

Applications:

Ground Application - Apply in water in a minimum of 40 gallons per acre.

Greater spray volumes increase uniformity of coverage.

Also coverage uniformity may be aided by using a pre- and post-irrigation application.

Use a handgun or shielded sprayer to apply to individual citrus trees if they are not planted in solid rows.

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 **Bifen 2EC Select** 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 **Bifen 2EC Select** to the soil beneath the citrus trees from the trunk to the drip line of the tree.

Bifen 2EC Select 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 32.0 ounces of **Bifen 2EC Select**. In areas where a second emergence is expected, use 16.0 ounces of **Bifen 2EC Select** in the early season and 16.0 ounces of **Bifen 2EC Select** later in the season.

If the length of control of **Bifen 2EC Select** is not sufficient to cover the emergence of the root weevil, use other pest control measures from State Agricultural Extension.

CONIFER SEED ORCHARDS

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

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Cone Worms Seed Bugs Seed Worms	0.10 - 0.20	6.4 - 12.8
Restrictions: - Do not apply more than 0.6 lb. active ingredient (38.4 ounces formulated) per acre per season. - Do not make more than 6 applications per season.		

- 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.

Applications:

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.

CORN

Field Corn (Grain and Silage), Popcorn, Field Corn Grown For Seed (At-Planting)

PEST	RATE	
	Lb. AI	Fl. Oz.
Corn Rootworm Larvae (Northern, Southern, Western)	0.0046 lb. a.i./1,000 linear ft. of row	0.30 fl. oz. a.i./1,000 linear ft. of row
Army Cutworm Cutworm Species Grubs Seedcorn Beetle Seedcorn Maggot True Armyworm or Armyworm Species Wireworms	0.0023 - 0.0046 lb. a.i./1,000 linear ft. of row	0.15 - 0.30 fl. oz. a.i./1,000 linear ft. of row

Restrictions:

- Do not apply more than 0.1 lb. active ingredient (6.4 ounces formulated) per acre per season as an at-planting application.
- 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.
- Pre-Harvest Interval: 30 days

Applications:

Ground Application - Apply in water in a minimum of 3 gallons per acre.

For use on corn at-planting, apply in a 5-inch to 7-inch T-band over the open seed furrow. Center the spray nozzle over the row behind the planter shoe in front of the press wheel.

In-furrow pop-up fertilizers may be used alone or in tank mixtures with **Bifen 2EC Select**. See the section entitled **MIXING INSTRUCTIONS, Bifen 2EC Select with Fertilizer** for additional instructions and precautions when mixing with fertilizers.

Row Spacings (inches) ¹	40"	38"	36"	30"
Bifen 2EC Select (pounds a.i. per acre)	0.060	0.064	0.069	0.080
Bifen 2EC Select (formulated oz. per acre)	3.9	4.1	4.4	5.12

¹Use this table to determine the **Bifen 2EC Select** needs per acre.

CORN

Field Corn (Grain and Silage), Popcorn, Field Corn Grown For Seed (PRE & PPI)

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Armyworm spp. Black Cutworm Seedcorn Maggot Stalk Borer White Grub Wireworm	0.047 - 0.062 Pre-Plant Incorporated (PPI)	3.0 - 4.0 Pre-Plant Incorporated (PPI)
Armyworm spp. Black Cutworm Stalk Borer	0.040 Pre-Emergence (PRE)	2.56 Pre-Emergence (PRE)

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.
- **Use of Bifen 2EC Select on corn is prohibited in all coastal counties.**
- Pre-Harvest Interval: 30 days

Applications:

Ground Application - Apply in water in a minimum of 3 gallons per acre.

Use the labeled dosage as a pre-plant incorporated treatment either alone or in tank mix combination with registered pre-plant incorporated herbicides. Incorporate **Bifen 2EC Select** to the intended planting depth, but no deeper than 3 inches.

The 3.0 to 4.0 fl. oz. rate must be applied as PPI and can be tank mixed and applied with PPI herbicides.

The 2.56 fl. 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	RATE	
	Lb. A.I./A	Fl. Oz./A
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 Fall Armyworm 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	0.033 - 0.10	2.1 - 6.4
Banks Grass Mite Carmine Mite Twospotted Spider Mite	0.08 - 0.10	5.12 - 6.4

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.
- Use of Bifen 2EC Select on corn is prohibited in all coastal counties.**
- Pre-Harvest Interval: 30 days

Applications:

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.

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 **Bifen 2EC Select** as necessary to maintain control being careful not exceed reapplication intervals or maximum dosage rates specified in this section.

For pests which attack the ear, apply just before silking.

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 **Bifen 2EC Select** 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.

CORN

Sweet Corn, Sweet Corn Grown For Seed (At-Planting)

PEST	RATE	
	Lb. AI	Fl. Oz.
Corn Rootworm Larvae (Northern, Southern, Western)	0.0046 lb. a.i./1,000 linear ft. of row	0.30 fl. oz./1,00 linear ft. of row

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 **Bifen 2EC Select** as necessary to maintain control being careful not to exceed reapplication intervals or maximum dosage rates specified in this section.

For pests which attack the ear, apply just before silking.

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 **Bifen 2EC Select** 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 acceptable control.

COTTON

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
European Corn Borer Soybean (Banded) Thrips Tobacco Thrips	0.02 - 0.10	1.3 - 6.4
Boll Weevil Bollworm Cabbage Looper Cotton Aphid Cotton Fleahopper Cotton Leafperforator Cutworms Fall Armyworm Plant Bugs Salt Marsh Caterpillar Southern Garden Leafhopper Stink Bugs Tobacco Budworm Whitefly Yellow Striped Armyworm	0.04 - 0.10	2.6 - 6.4
Beet Armyworm Carmine Spider Mite <i>Lygus</i> spp. Pink Bollworm Twospotted Spider Mite	0.06 - 0.10	3.8 - 6.4

Restrictions:

- Do not apply more than 0.5 lb. active ingredient (32.0 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 include Ambush®, Ammo®, Asana® XL, Baythroid®, Capture®, Danitol®, Karate®, Mustang®, and Scout X-TRA®.
- Pre-Harvest Interval: 14 days

Applications:

Ground Application - Apply in water in a minimum of 5 gallons per acre.

Air Application - Apply in water in a minimum of 1 gallon 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.

ULV Application: Apply in a minimum of 1 quart per acre using refined vegetable oil with aircraft calibrated to give adequate coverage.

Make applications of **Bifen 2EC Select** as necessary to maintain control being careful not to exceed reapplication intervals or maximum dosage rates specified in this section.

To Control Boll Weevil: Apply **Bifen 2EC Select** at 3- to 4-day intervals until pest populations are reduced below economic 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.

CUCURBITS

Chayote (fruit), Chinese waxgourd (Chinese preserving melon), Citron melon, Cucumber, Gherkin, Edible Gourd [(includes hyotan, cucuzza), *Luffa* spp. (includes hechima, Chinese okra), *Momordica* spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber)], Muskmelon (hybrids and/or cultivars of *Cucumis melo*) (includes true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake

melon), Pumpkin (*Cucurbita* spp.), Squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini), Squash, winter (includes butternut squash, calabaza, hubbard squash (*C. mixta*; *C. pepo*))(includes acorn squash, spaghetti squash)), Watermelon (includes hybrids and/or varieties of *Citrullus* spp.)

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Aphids Armyworms Cabbage Looper Corn Earworm Cucumber Beetles Cutworms Grasshoppers Leafhoppers Melonworms Pickleworms Plant Bugs Rindworms Squash Bugs Squash Vine Borer Stink Bugs Tobacco Budworm	0.04 - 0.10	2.6 - 6.4
Banks Grass Mite Carmine Mite <i>Lygus</i> spp. Twospotted Spider Mite Whitefly	0.08 - 0.10	5.12 - 6.4
Restrictions: - Do not apply more than 0.3 lb. active ingredient (19.2 ounces formulated) per acre per season. - Do not make more than 2 applications after bloom. - Repeat applications if needed to maintain control, but do not make applications less than 7 days apart. - Pre-Harvest Interval: 3 days Applications: 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. 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.		

DRIED BEANS AND PEAS

Dried cultivars of:

Bean (*Lupinus* spp.): Grain Lupin, Sweet Lupin, White Lupin, White Sweet Lupin

Bean (*Phaseolus* spp.): Field bean, Kidney Bean, Lima Bean (dry), Navy Bean, Pinto Bean, Tepary Bean

Bean (*Vigna* spp.): Adzuki Bean, Blackeyed Pea, Catjang, Cowpea, Crowder Pea, Moth Bean, Mung Bean, Rice Bean, Southern Pea, Urd Bean; Broad Bean (dry); Chickpea; Guar; Lablab Bean; Lentil; Pea (*Pisum* spp.), Field Pea; Pigeon Pea

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Banks Grass Mite Carmine Mite <i>Lygus</i> spp. Twospotted Spider Mite	0.08 - 0.10	5.12 - 6.4
Aster Leafhopper Flea Beetle Grasshoppers Leafhoppers	0.025 - 0.10	1.6 - 6.4
Alfalfa Caterpillar Aphids Bean Leaf Beetle Beet Armyworm Cloverworm Corn Earworm Corn Rootworm (Adult) Cucumber Beetles Cutworms European Corn Borer Fall Armyworm Grasshoppers Imported Cabbageworm Japanese Beetle Loopers Mexican Bean Beetle	0.033 - 0.10	2.1 - 6.4

Pea Leaf Weevil Pea Weevil Plant Bug Salt Marsh Caterpillar Sap Beetle (Adult) Southern Armyworm Stink Bugs Tarnished Plant Bug Thrips Tobacco Budworm Leafminer Webworms Western Bean Cutworm Whitefly Yellowstriped Armyworm		
Restrictions: - Do not apply more than 0.2 lb. active ingredient (12.8 ounces formulated) per acre per season. - Do not make applications less than 7 days apart. - Pre-Harvest Interval: 14 days Applications: 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. Thorough coverage is essential to achieve control.		

FRUITING VEGETABLES

Eggplant, Groundcherry, Pepino, Pepper (Bell and Non-Bell)

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Armyworms (including Beet Armyworm, Fall Armyworm, Southern Yellowstriped Armyworm) Cabbage Loopers Colorado Potato Beetle Corn Earworm Cucumber Beetles Cutworms European Corn Borer Flea Beetles Leafminers Loopers Pepper Weevil Plant Bugs Stink Bugs Thrips Tomato Hornworm Tomato Pinworm Vegetable Leafminer Whitefly	0.033 - 0.10	2.1 - 6.4
Banks Grass Mite Broad Mite Carmine Mite <i>Lygus</i> spp. Pacific Spider Mite Twospotted Spider Mite	0.08 - 0.10	5.12 - 6.4
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. - Pre-Harvest Interval: 7 days Applications: 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.		

Tomatoes, Tomatillo

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Aphids Armyworms (including Beet Armyworm, Fall Armyworm, Southern Yellowstriped Armyworm) Bean Leaf Beetle Cabbageworms Carmines Mite Cloverworm Corn Earworm Corn Rootworm Cucumber Beetle Cutworms Diamondback Moth European Corn Borer Flea Beetles Flea Hoppers Grasshoppers Japanese Beetle (Adult) Leafhoppers Loopers <i>Lygus</i> spp. Melonworms Pea Weevil Pea Leaf Weevil Pickworms Plant Bugs Rindworms Salt Marsh Caterpillar Sap Beetle Seedpod Weevil Squash Bugs Stink Bug spp. Tobacco Budworm Tarnished Plant Bug Thrips Whitefly	0.033 - 0.08	2.1 - 5.2
Twospotted Spider Mite	0.08 - 0.10	5.12 - 6.4
Restrictions: - To maintain a proper spray interval, do not make applications less than 10 days apart. - Do not make more than 4 applications per season. - Pre-Harvest Interval: 1 day Applications: Ground Application - Apply in water in a minimum of 15 gallons per acre. Air Application - Apply in water in a minimum of 3 gallons per acre.		

GRAPES

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Eastern Grape Leafhopper Variegated Leafhopper Western Grape Leafhopper	0.05 - 0.10	3.2 - 6.4
Black Vine Weevil Glassy Winged Sharpshooter Twospotted Spider Mite	0.10	6.4
Restrictions: - Do not apply more than 0.1 lb. active ingredient (6.4 ounces formulated) per acre per season. - Pre-Harvest Interval: 30 days Applications: Ground Application - Apply in water in a minimum of 25 gallons per acre. Air Application - Apply in water in a minimum of 10 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. When pest pressure is moderate to severe, use the higher rate.		

HOPS

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Aphids Armyworms Cutworms Leafrollers Loopers	0.06 - 0.10	3.8 - 6.4
Root Weevils	0.05 - 0.10	3.2 - 6.4
Twospotted Spider Mite	0.10	6.4
Restrictions: - 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. - The use of ultra-low volume (ULV) application on hops is prohibited. - Pre-Harvest Interval: 14 days Applications: 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 10 gallons per acre. 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.		

LEAFY BRASSICAS AND TURNIP GREENS*

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

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Aphids Armyworms Corn Earworm Crickets Cucumber Beetles Cutworms Diamondback Moth Flea Beetles Grasshoppers Ground Beetles Imported Cabbageworm Japanese Beetle (Adult) Leafhoppers Loopers Salt Marsh Caterpillar Stink Bugs Thrips Tobacco Budworm Whitefly Wireworm (Adult)	0.033 - 0.10	2.1 - 6.4
Banks Grass Mite Carmin Mite <i>Lygus</i> spp. Pacific Spider Mite Twospotted Spider Mite	0.08 - 0.10	5.12 - 6.4
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. - Pre-Harvest Interval: 7 days Applications: 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. Thorough coverage is essential to achieve control. *This use not permitted in California unless allowed by an approved supplemental label.		

LEAFY PETIOLE VEGETABLES

Celery, Cardoon, Chinese Celery, Celtuce, Florence Fennel, Rhubarb, Swiss Chard

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Aphids Armyworms Corn Earworm Crickets Cucumber Beetles Cutworms Diamondback Moth Flea Beetles Ground Beetles Imported Cabbageworm Leafhoppers Loopers Stink Bugs Thrips Wireworm (Adult)	0.033 - 0.10	2.1 - 6.4
Carmine Mite <i>Lygus</i> 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 (32.0 ounces formulated) per acre per season. - Repeat applications if needed to maintain control, but do not make applications less than 7 days apart. - Pre-Harvest Interval: 7 days Applications: 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.		

LETTUCE, HEAD

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Aphids Armyworms Cabbage Maggot Corn Earworm Cucumber Beetles Cutworms Diamondback Moth Flea Beetle Grasshopper Imported Cabbageworm Leafhoppers Loopers Salt Marsh Caterpillar Stink Bug spp. Thrips Tobacco Budworm Whitefly	0.033 - 0.10	2.1 - 6.4
Carmine Mite <i>Lygus</i> spp. Twospotted Spider Mite	0.08 - 0.10	5.12 - 6.4
Restrictions: - Do not apply more than 0.5 lb. active ingredient (32.0 ounces formulated) per acre per season. - To maintain a proper spray interval, do not make applications less than 7 days apart. - Pre-Harvest Interval: 7 days Applications: Ground Application - Apply in water in a minimum of 15 gallons per acre. Air Application - Apply in water in a minimum of 5 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.		

MAYHAW*

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Plum Curculio	0.08 - 0.10	5.12 - 6.4
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. - Pre-Harvest Interval: 7 days Applications: 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. *Not registered for use in California unless accompanied by a supplemental label.		

OKRA

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Aphids Armyworms Corn Earworm Cucumber Beetles Cutworms European Corn Borer Flea Beetles Japanese Beetle (Adult) Leafminers Loopers Stink Bugs Thrips Whitefly	0.033 - 0.10	2.1 - 6.4
Broad Mite Carmine Mite Lygus spp. Twospotted Spider Mite	0.08 - 0.10	5.12 - 6.4
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. - Pre-Harvest Interval: 7 days Applications: 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 uniform coverage as needed.		

PEANUT

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Beet Armyworm Corn Earworm Cutworm Species Fall Armyworm Grasshoppers Green Cloverworm Leafhoppers Lesser Cornstalk Borer Loopers Rednecked Peanut Worm Southern Armyworm Southern Corn Rootworm Stink Bugs Threecornered Alfalfa Hopper Velvetbean Caterpillar Yellowstriped Armyworm	0.033 - 0.10	2.1 - 6.4
Aphids Spider Mites Thrips Whitefly	0.06 - 0.10	5.12 - 6.4

Restrictions:

- Do not apply more than 0.5 lb. active ingredient (32.0 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.
- Pre-Harvest Interval: 14 days

Applications:

Ground Application - Apply in water in a minimum of 10 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.

PEARS

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Aphids Codling Moth Cutworms Green Fruitworm Leafhoppers Leafminers Leafrollers <i>Lygus</i> spp. Plant Bugs Plum Curculio San Jose Scale (Crawlers) Stink Bugs Tarnished Plant Bug	0.04 - 0.2	2.6 - 12.8
Twospotted Spider Mite Yellow Mite	0.06 - 0.2	3.8 - 12.8
European Red Mite	0.08 - 0.2	5.12 - 12.8

Restrictions:

- Do not apply more than 0.5 lb. active ingredient (32.0 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.
- Pre-Harvest Interval: 14 days

Applications:

Ground Application - Apply in water in a minimum of 200 gallons per acre (dilute) and 50 gallons per acre (concentrate).

Air Application - Apply in water in a minimum of 10 gallons per acre.

ROOT CROPS (except Sugar Beets)

Burdock, edible; Carrot; Celeriac; Chervil, turnip rooted; Chicory; Ginseng; Horseradish; Parsley, turnip rooted; Parsnip; Radish; Radish, Oriental; Rutabaga; Salsify; Salsify, Black; Salsify, Spanish; Skirret; Turnip

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Aphids Beet Armyworm Celery Leaf-tier Corn Earworm Cross-Striped Cabbageworm Cutworm Species Diamondback Moth European Corn Borer Fall Armyworm Fire Ants Flea Beetles Green Cloverworm Hornworms Imported Cabbageworm Loopers Southern Armyworm Spider Mites Tobacco Budworm Velvetbean Caterpillar Whitefly Yellowstriped Armyworm	0.08 - 0.10	5.12 - 6.4
Restrictions: • Do not apply more than 0.5 lb. active ingredient (32.0 ounces formulated) per acre per season.		

- To maintain a proper spray interval, do not make applications less than 7 days apart.
- Pre-Harvest Interval: 21 days

Applications:**Ground Application** - Apply in water in a minimum of 25 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.

Garden Beet

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Aphids Flea Beetles Lepidopterous Larvae Spider Mites Whitefly	0.08 - 0.10	5.12 - 6.4
Restrictions: • Do not apply more than 0.4 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. • Pre-Harvest Interval: 1 day Applications: Ground Application - Apply in water in a minimum of 25 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.		

SOYBEANS

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Alfalfa Caterpillar Aphids Aster Leafhopper Bean Leaf Beetle Blister Beetle Species Beet Armyworm* Cloverworm Corn Earworm Corn Rootworm (Adult) Cucumber Beetles Cutworms Cowpea Curculio Cucumber Beetle (Adult) Dectes Stem Borer European Corn Borer False Chinch Bug Fall Armyworm Flea Beetle Grasshoppers Green Cloverworm Hornworm Imported Cabbageworm Japanese Beetle (Adult) Leafhoppers Leafminers Loopers Leaf Skeletonizer Species Lesser Cornstalk Borer Mexican Bean Beetle (Adult) Painted Lady (Thistle) Caterpillar Pea Leaf Weevil Pea Weevil Plant Bug Salt Marsh Caterpillar Silverspotted Skipper Seedcorn Maggot (Adult) Spittlebug Sap Beetle Southern Armyworm	0.033 - 0.10	2.1 - 6.4

Soybean Aphid Stink Bugs Tarnished Plant Bug Three-Cornered Alfalfa Hopper Thrips Tobacco Budworm* Velvetbean Caterpillar Webworms Western Bean Cutworm Whitefly Woollybear Caterpillar Yellowstriped Armyworm		
<i>Lygus</i> spp. Whitefly Twospotted Spider Mite	0.08 - 0.10	5.12 - 6.4
Restrictions: - Do not apply more than 0.3 lb. active ingredient (12.8 ounces formulated) per acre per season. - To maintain a proper spray interval, do not make applications less than 30 days apart. - Pre-Harvest Interval: 18 days Applications: 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.		
*Pyrethroid resistance is common for Beet Armyworm and Tobacco Budworm. 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.		

SPINACH

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Armyworms Colorado Potato Beetle Corn Earworm Cucumber Beetles Cutworms European Corn Borer Flea Beetles Leafminers Loopers Pepper Weevil Thrips Tomato Hornworm Tomato Pinworm Whitefly	0.033 - 0.10	2.1 - 6.4
Banks Grass Mite Broad Mite Carmine Mite Fire Ants <i>Lygus</i> spp. Pacific Spider Mite Twospotted Spider Mite	0.08 - 0.10	5.12 - 6.4
Restrictions: - Do not apply more than 0.4 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. - Pre-Harvest Interval: 40 days Applications: Ground Application - Apply in water in a minimum of 10 gallons per acre. Air Application - Apply in water in a minimum of 5 gallons per acre.		
For whitefly and fire ant control either at-planting or as a foliar treatment, apply up to 6.4 oz. (0.1 lb. active) per acre being careful not to exceed reapplication intervals or maximum dosage rates specified in this section.		

STRAWBERRIES

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Aphids Armyworms Flea Beetles	0.04 - 0.20	2.56 - 12.8

<i>Heliothis</i> spp. Leafrollers <i>Lygus</i> spp. Plant Bugs Spittlebugs Stink Bugs Strawberry Clipper Strawberry Sap Beetle		
Strawberry Root Weevil Black Vine Weevil	0.05 - 0.20	3.2 - 12.8
Spider Mites	0.10 - 0.20	6.4 - 12.8
Restrictions: - Do not apply more than 0.5 lb. active ingredient (32.0 ounces formulated) per acre per season. - Aerial application is prohibited in Florida. - Apply when pest populations reach damaging thresholds and repeat as necessary at 7 - 14 day intervals. - No pre-harvest interval required. - CALIFORNIA SPECIFIC REQUIREMENTS FOR STRAWBERRY HARVESTERS - Harvesters and other personnel performing tasks with all day foliage contact in treated fields within 5 days of application must wear a long-sleeved shirt, long pants, and shoes plus socks. Following treatment of strawberry fields at rates of Bifen 2EC Select greater than 0.1 lb. a.i./acre, harvesters must wear gloves for 5 days following application.		
Applications: Ground Application - Apply a full cover spray in a minimum of 50 gallons of finished spray per acre. Air Application - Apply in water in a minimum of 5 gallons per acre.		

SUCCULENT PEAS AND BEANS

Pea (*Pisum* spp.): Dwarf pea, Edible-pod pea, English pea, Garden pea, Green pea, Snow pea, Sugar snap pea, Pigeon pea

Bean (*Phaseolus* spp.): Broadbean (succulent), Lima bean (green), Runner bean, Snap bean, Wax bean

Bean (*Vigna* spp.): Asparagus bean, Blackeyed pea, Chinese longbean, Cowpea, Moth bean, Southern pea, Yardlong bean, Jackbean, Soybean (immature seed), Sword bean

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Aster Leafhopper Flea Beetle Grasshoppers Leafhoppers	0.025 - 0.10	1.6 - 6.4
Alfalfa Caterpillar Aphids Bean Leaf Beetle Beet Armyworm Cloverworm Corn Earworm Corn Rootworm (Adult) Cucumber Beetle Cutworms European Corn Borer Fall Armyworm Imported Cabbageworm Japanese Beetle (Adult) Loopers Leafminers Mexican Bean Beetle Pea Leaf Weevil Pea Weevil Plant Bugs Salt Marsh Caterpillar Sap Beetle Southern Armyworm Stink Bugs Tarnished Plant Bug Thrips Tobacco Budworm Webworms Western Bean Cutworm Whitefly Yellowstriped Armyworm	0.033 - 0.10	2.1 - 6.4
Banks Grass Mite Carmine Mite <i>Lygus</i> spp. Twospotted Spider Mite	0.08 - 0.10	5.12 - 6.4

Restrictions:

- Do not apply more than 0.2 lb. active ingredient (12.8 ounces formulated) per acre per season.
- Pre-Harvest Interval: 3 days

Applications:

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.

TOBACCO

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Armyworm spp. Cutworm spp. Mole Crickets Stalk Borers Tobacco Flea Beetle (Larvae) White Grubs Wireworms	0.0625 - 0.10	4.0 - 6.4
Aphid spp. Armyworm spp. Chinch Bugs Cutworm spp. Flea Beetle (Adult) Grasshoppers Green Bugs Japanese Beetles Stink Bugs Tarnished Plant Bugs Thrips Whiteflies Tobacco Budworm Tobacco Hornworm Salt Marsh Caterpillar Cucumber Beetle	0.04 - 0.10	2.56 - 6.4
<i>Lygus</i> spp. Spider Mites	0.10	6.4

Restrictions:

- For all applications, do not apply more than 0.2 lb. active ingredient (12.8 ounces formulated) per acre per season.
- For foliar applications, do not make more than 2 applications per season.
- Do not apply later than lay-by.

Applications:

Pre-Transplant Soil Applications - Apply 0.0625 - 0.10 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.

At-Transplant Water Treatment Applications - Apply 0.0625 - 0.10 lb. active ingredient per acre in a water treatment application volume of the 10 - 200 gallons per acre. May be tank mixed with Command®, Spartan®, and other herbicides approved for tobacco use.

Foliar Applications - Apply 0.04 - 0.10 lb. active ingredient per acre foliar application up to and including lay-by in a minimum of 10 gallons per acre. May be tank mixed with Command, Spartan, and other herbicides approved for tobacco use.

TREE NUTS CROPS

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

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Black Pecan Aphid Codling Moth Filbert Worm Hickory Shuckworm Leaffooted Bugs Navel Orangeworm Oblique Banded Leafroller Peach Twig Borer Pecan Leaf Casebearer Pecan Nut Casebearer	0.05 - 0.20	3.2 - 12.8

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
Restrictions: - Do not apply more than 0.2 lb. active ingredient (12.8 ounces formulated) per application; do not exceed 0.5 lb. active ingredient (32.0 ounces formulated) per season. - Do not graze livestock in treated orchards or cut treated cover crops for feed. - Minimum Spray Intervals: Apply Bifen 2EC Select as needed to maintain control, but not apply at intervals sooner than 15 days. - Pre-Harvest Interval: 21 days for Pecans; 7 days for all other registered tree nut crops.		
Applications: 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 the specified dosage in a minimum of 10 gallons of finished spray per acre.		

TUBEROUS AND CORM VEGETABLES

Arracacha; Arrowroot; Chinese Artichoke; Jerusalem Artichoke; Edible Canna; Cassava (bitter and sweet); Chayote (root); Chufa; Dasheen (taro); Ginger; Leren; Potato; Sweet Potato; Tanier; Turmeric; Yam Bean; True Yam

PEST	RATE	
	Lb. A.I./A	Fl. Oz./A
Corn Wireworm	0.30	19.2
Tobacco Wireworm	(At-Plant)	(At-Plant)
Japanese Beetle Grubs	0.05 - 0.15	3.2 - 9.6
June Beetle	(Lay-By)	(Lay-By)
Southern Potato Wireworm		
Banded Cucumber Beetle	0.033 - 0.10 (Foliar)	2.1 - 6.4 (Foliar)
Black Flea Beetle		
Cucumber Beetle		
Rootworms		
Sugarcane Beetle		
Sweet Potato Flea Beetle		
Sweet Potato Weevil		
White Grub		
Whitefringed Beetle		
Restrictions: - Do not apply more than 0.5 lb. active ingredient (32.0 ounces formulated) per acre per season, including soil applications. - For foliar applications, do not make more than 2 foliar applications per season and do not make application less than 21 days apart. - Pre-Harvest Interval: 21 days		
Applications: In-Furrow Planting Time Treatment - Bifen 2EC Select may be applied as an in-furrow planting time treatment for the control of wireworms, rootworms, and white grubs. Apply Bifen 2EC Select at the rate of 0.3 lb. active ingredient per acre as an in-furrow spray or T-band spray at-planting time. Lay-By Treatment - Bifen 2EC Select may be applied as a lay-by treatment for the control of wireworms, rootworms, and white grubs. Apply Bifen 2EC Select to the drill area and cover with soil utilizing cultivation equipment set to throw soil to the drill area. Apply Bifen 2EC Select 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 - Bifen 2EC Select 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). Apply Bifen 2EC Select at the rate of 0.033 - 0.10 lb. active ingredient per acre (2.1 - 6.4 ounces formulated) in 10 gallons of spray by ground and 3 gallons of spray by air.		

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

Pesticide Storage: DO NOT ALLOW PRODUCT TO FREEZE. Do not store below 40°F. If crystals are observed, warm material to above 60°F by placing container in warm location. Shake or roll container periodically to redissolve solids. Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

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

Container Handling:

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

Nonrefillable Container (Greater than 5 Gallons): Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available. 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 Container (Greater than 55 Gallons): Refill this container with bifenthrin only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. For final disposal, 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.

LIMITATION OF WARRANTY AND LIABILITY

Read the entire direction for use, conditions of warranties and limitations of liability before using this product. If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following **CONDITIONS, DISCLAIMER OF WARRANTIES, and LIMITATIONS OF LIABILITY.**

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Prime Source, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, Prime Source, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. No agent of Prime Source, LLC is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. To the extent consistent with applicable law, Prime Source, LLC disclaims any liability whatsoever for special, incidental or consequential damages resulting from the use or handling of this product.

LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use or handling of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid or at Prime Source, LLC's election, the replacement of product.

OPTIONAL MARKETING GRAPHICS:



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