

83222-1

11/29/2006

1122



U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (H7505C)
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

EPA Reg. Number:
83222-1

Date of Issuance:
NOV 29 2006

Term of Issuance:
Conditional

Name of Pesticide Product:
Bifen 2EC AG
Insecticide/Miticide

NOTICE OF PESTICIDE:

- Registration
- Reregistration

(Under FIFRA as amended)

Name and Address of Registrant (include ZIP Code):

J. Oliver Products, LLC
3187 Robertson Gin Road
Hernando, MS 38632

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

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

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

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A), provided that:

1. You will submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
2. You will make the following label changes before you release the product for shipment:
 - a) Revise the EPA Registration Number to read "EPA Reg. No. 83222-1."
 - b) Revise Precautionary Statements to read as follows:

"Maybe fatal if swallowed. Causes substantial but temporary eye injury. Harmful if absorbed through skin or inhaled. Do not get in eyes or on clothing. Avoid breathing spray mist. Avoid contact with skin. Wear protective eyewear (goggles, face shield or safety glasses). Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco."
 - c) Add "This product is not for sale or use in the State of California" to the label.
 - d) Replace "Inert Ingredients" with Other Ingredients" in the Ingredients statements.

Signature of Approving Official:

George T. LaRocca, Product Manager (13)
Insecticide Branch/Registration Division (7505C)

Date:

November 29, 2006

Enclosure

- e) Under Physical Chemical Hazards add the word "Combustible". To the beginning of the statement, "Do not use or store ... etc".
 - f) On pages 5 and 6 of the proposed label revise the spray drift precautions so they are consistent with the language appearing under Spray Drift precautions for EPA Reg. No. 66222-99. Delete the Aerial Drift Reduction Advisory since this section is advisory rather than mandatory.
 - g) Under the Remarks and Restrictions section of the Crop tables identify water as the diligent throughout the label i.e., "Apply as a full cover spray in water in a minimum of 75 gallons of finished spray per acre".
 - h) Add in parenthesis "(except Florida) next to the citrus crop heading to be consistent with the me-too product.
 - i) Under the warranty statement change "Except as expressly provided herein", with "Except as warranted by this label J. Oliver Products Etc". Also add to the beginning of the last sentence, "To the extent consistent with applicable law the exclusive remedy of any buyer ... etc".
 - j) Submit a revised data matrix listing companies sent offers of compensation since you have chosen the "cite all" method of data support.
3. Please submit an one year storage stability study for the proposed product along with a corrosion characteristics study. We recommend that observation be made at 0, 3, 6, 9 and 12 months intervals in the storage stability study.
4. Please submit three (3) copies of your final printed labeling before releasing the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing amended labeling constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

If you have any questions regarding this action, please contact BeWanda Alexander of my team at (703) 305-7460.

3/22

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.

**BIFEN 2EC AG
INSECTICIDE/MITICIDE**

Active Ingredient:	By Wt.
Bifenthrin*	
(2 methyl[1,1'-biphenyl]-3-yl) methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)- 2,2-dimethylcyclopropanecarboxylate	25.1%
Inert Ingredients**:	74.9%
TOTAL:	100.0%

*Cis isomers 97% minimum, trans isomers 3% maximum.
**Contain xylene range aromatic solvents
This product contains 2 pounds active ingredient per gallon.

**KEEP OUT OF REACH OF CHILDREN
WARNING – AVISO**

This label must be in the possession of the user at the time of application.
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.)

FIRST AID	
If swallowed	<ul style="list-style-type: none"> • Call poison control center or doctor immediately for treatment advice. • Do not induce vomiting unless told to do so by the 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	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • 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.
If on skin or clothing	<ul style="list-style-type: none"> • 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.
NOTE TO PHYSICIAN	
This product is a pyrethroid. If large amounts have been ingested, the stomach and intestine should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided. Contains petroleum distillates. Vomiting may cause aspiration pneumonia.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
EMERGENCY NUMBERS:	
• Transportation or spill, call CHEMTREC 800-424-9300.	

EPA Reg. No.: 83222-xx

EPA Est. No.

Net Contents

Manufactured for:
J OLIVER PRODUCTS
Hernando, MS

**ACCEPTED
with COMMENTS
In EPA Letter Dated
NOV 29 2006**
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
83222-1

4/22

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 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 or Nitrile Rubber or Neoprene Rubber or Viton.
- Shoes plus socks.

STORAGE AND DISPOSAL

Pesticide Storage: Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not store this product near fertilizers, seeds, or other pesticides. Do not freeze. Do not store below 40°F. If crystals are observed, warm material to above 60°F by placing 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. Carefully open containers. Damaged or leaking containers that contain product that cannot be used immediately should be transferred to suitable sound containers and properly marked. Reclose all partially used containers by thoroughly tightening screw cap. Do not put concentrate or dilute material into food or drink containers

Opened partially used pesticides should be stored in original containers when possible. When transfer to another container is necessary because of leakage or damage, carefully mark and identify contents of the new container. Keep containers closed when not in use.

For safety and prevention of unauthorized use, all pesticides should be stored in locked facilities. To prevent accidental misuse, different pesticides should be stored in separate areas with enough distance between to provide clear identification.

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 Disposal: Metal or Plastic Container: Triple rinse (or equivalent), then offer for recycling or reconditioning, 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.

Returnable, Refillable Containers: Do not rinse container. Do not empty remaining formulated product. Do not break seals. Return intact to point of purchase.

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.

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

Results from utilizing chemigation have been variable and depend upon the set up and calibration of equipment. Crop injury, lack of effectiveness, or illegal residues in the crop can result from 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 operations, 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.

Bifen AG 2EC should be applied continuously for the duration of the water application. To insure accurate application over the area to be treated, Bifen AG 2 EC should be diluted in sufficient. A minimum of 0.5 inch per acre of irrigation water is recommended when using chemigation. Agitation generally is not required when a suitable diluent is used. A diluent test should be conducted to ensure that phase separation would not occur during dilution and application. Failure to achieve a uniform dilution throughout the time of application may result in undesirable residues or less than desirable control.

Resistance Management

Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state agricultural authorities for details.

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

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 Bifenthrin.

Tank-Mixture

Bifen AG 2EC may be applied in tank mixtures with other products approved for use on registered crops. When tank mixing, observe all restrictions and limitations specified on the label of each product; always follow the most restrictive labeling. Test for compatibility of products before mixing.

Application Instructions

Application rates are variable according to pest pressure, timing of sprays, and field scouting. Under light to moderate infestation, use lower rates. Under heavy insect pressure and for mite control, use higher rates. Generally, arid climates require higher rates.

6/22

NOTE: Do not cultivate within 10 feet of the aquatic areas so as to allow growth of a vegetative filter strip
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.

Spray Drift Precautions

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

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

Do not make applications by ground equipment within 25 feet, or by air within 150 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds. The buffer zone should be increased to 450 feet when ultra low volume (ULV) application is made in cotton. Applications using ULV (ultra low volume) are prohibited on corn and hops

AERIAL DRIFT REDUCTION ADVISORY

This section is advisory in nature and does not supersede the mandatory label requirements.

INFORMATION ON DROPLET SIZE

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

CONTROLLING DROPLET SIZE

Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Number of nozzles - Use minimum number of nozzles that provide uniform coverage.

Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

BOOM LENGTH

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT

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

WIND

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

TEMPERATURE AND HUMIDITY

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

**PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals**

Warning

May be fatal if swallowed. Harmful if absorbed through skin or inhaled. Avoid breathing spray mist. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Avoid contact with skin, eyes or clothing.

Personal Protective Equipment:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions or category E on an EPA chemical resistance category selection chart.

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, or Nitrile rubber or 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, 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.

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 run-off from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters and rinsate.

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 actively visiting 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

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.

TEMPERATURE INVERSIONS

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

SENSITIVE AREAS

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

INDEX TO CROPS LISTED ON THIS LABEL

- Artichoke
- Brassicas
- Caneberries
- Canola, Crambe, Rapeseed
- Citrus
- Cotton
- Field Corn (Grain and Silage), Popcorn, Field Corn Grown for Seed (At Plant Use)
- Field Corn (Grain and Silage), Popcorn, Field Corn Grown for Seed (PRE & PPI)
- Field Corn (Grain and Silage), Popcorn, Field Corn Grown for Seed (Foliar Use)
- Sweet Corn (Grain and Silage), Sweet Corn Grown for Seed (At Plant Use)
- Sweet Corn (Grain and Silage), Sweet Corn Grown for Seed (Foliar Use)
- Cucurbits
- Eggplant
- Grapes
- Hops
- Lettuce, Head
- Pears
- Peppers, Bell and Non-Bell
- Spinach
- Succulent Peas and Beans
- Tomatoes

ARTICHOKE

PEST	DOSAGE		REMARKS AND RESTRICTIONS
	LB A/A	FL OZ/A	
Cribrate Weevil Artichoke Plume Moth	0.10	6.4	<p>Make application when pest infestations reach damaging threshold. Repeat application at 15-day intervals, if necessary to maintain control.</p> <p>Application by ground: Apply as a full cover spray in a minimum of 75 gallons of finished spray per acre.</p> <p>Application by air: Apply specified dosage in a minimum of 10 gallons per acre.</p> <p>Do not apply more than 0.5 lb. A/A per season.</p> <p>Bifen 2EC may be applied within 5 days of harvest (PHI).</p>

BRASSICAS

CROP	PEST	DOSAGE		REMARKS AND RESTRICTIONS
		LB A/A	FL OZ/A	

Head and Stem Brassica Vegetables including: Broccoli Chinese Broccoli (gailon, white flowering broccoli) Brussels Sprouts Cauliflower Cavalo Broccolo Kohlrabi Cabbage Chinese Cabbage (napa) Chinese Mustard Cabbage (gai choy)	Cutworms Corn Earworm Tobacco Budworm Saltmarsh Caterpillar Leafhoppers Flea Beetles Imported Cabbageworm Cucumber Beetles Aphids Whitefly Armyworms Loopers Stink Bugs Crickets Ground Beetles Thrips Wireworm (Adults) Diamondback Moth	0.033-0.10	2.1-6.4	By Air: Apply in a minimum of 2 gallons of finished spray per acre by air. When applying by air, 1-2 quarts of emulsified oil may be substituted for 1-2 quarts of water in the finished spray. By Ground: Apply in a minimum of 10 gallons per acre. Thorough coverage is essential to achieve control. Do not apply more than 0.5 lb active ingredient (1 quart) per acre per season. Do not make more than 5 applications after bloom. Do not make applications less than 7 days apart. Do not apply within 7 days of harvest (PHI).
	Banks Grass Mite Twospotted Spider Mite Pacific Spider Mite Carmine Mite Lygus spp.	0.08-0.10	5.12-6.4	

CANE BERRIES

CROP	PEST	DOSAGE		REMARKS AND RESTRICTIONS
		LB AI/A	FL OZ/A	
Caneberries including: Blackberries Bingleberries Dewberries Lowberries Marionberries Olallieberries Youngberries Loganberries Raspberries	Leafrollers Orange Tortrix Root Weevils	0.05-0.10	3.2-6.4	By air or ground equipment: Use sufficient water to obtain full coverage of foliage (minimum of 10 gallons per acre by air and 50 gallons per acre by ground). One application may be made pre-bloom and a second application may be made post bloom. Crown Borer: Make application of 0.1 lb ai/acre post-harvest (fall) or prebloom (spring). Apply as a drench application directed at the crown of plains in a minimum of 200 gallons water per acre. Greater efficacy is observed when higher water gallonages (up to 400 Gallons/acre) or when an application is made prior to a significant rainfall event. Do not make both pre-bloom foliar and pre-bloom drench applications. Do not apply more than 0.2 lb. AI/A per season. Do not apply within 3 days of harvest (PHI).
	Spider Mites	0.10	6.4	

10/22

CANOLA, CRAMBE, RAPESEED

PEST	DOSAGE		REMARKS AND RESTRICTIONS
	LB A/A	FL OZ/A	
Aphids Cutworms Diamondback Moth Loopers Other Lepidopterous Larvae Flea Beetle Flea Hopper Grasshopper Plant Bug Stink Bugs Seedpod Weevil Thrips Whitefly Armyworms	0.033-0.04	2.1-2.6	<p>By Air: Apply in a minimum of 2 gallons of finished spray per acre by air. When applying by air, 1-2 quarts of emulsified oil may be substituted for 1-2 quarts of water in the finished spray.</p> <p>By Ground: Apply in a minimum of 10 gallons per acre.</p> <p>Thorough coverage is essential to achieve control.</p> <p>A maximum of no more than 0.08 lb active ingredient (5.12 ounces formulated product) can be applied per acre per season. Do not apply within 14 days of last application.</p> <p>Do not apply within 35 days of harvest (PHI).</p>

CITRUS

PEST	DOSAGE	REMARKS AND RESTRICTIONS
<i>Diaprepes</i> Root Weevil (<i>Diaprepes abbreviatus</i>) Southern Blue Green Citrus Root Weevil (<i>Pachnaeus litus</i>) Blue Green Citrus Root Weevil (<i>Pachnaeus opalus</i>) Brown Leaf Notcher (<i>Epicaerus mexicanus</i>) Little Leaf Notcher (<i>Artipus floridanus</i>)	16-32 ounces (0.25-0.50 pound active) per acre	<p>Make application by ground equipment to bare soil beneath citrus trees; applying uniformly from the trunk to the drip line of the tree. Make application in a minimum of 40 gallons of dilute spray per acre.</p> <p>By forming a barrier which provides contact activity on newly hatched larvae (neonates), this product protects citrus tree roots from <i>Diaprepes</i> Weevil and other citrus root weevil feeding.</p> <p>Application timing is very critical. According to current information peak emergence of the adult <i>Diaprepes</i> Weevil varies by citrus growing region. These emergence peaks can be affected dramatically by environmental factors, such as soil moisture. Two peaks are typically observed – first in the spring and then later summer or early fall. Typically, Southern Blue Green and Blue Green Citrus Weevils and Fuller Rose Beetle exhibit a single emergence peak in the spring. The Brown and Little Leaf Notchers usually exhibit three emergence peaks – spring, summer and fall. Timing of application can be accurately forecast by observing adults, since emergence varies seasonally and by location. Adults are most active during early morning and late afternoon. An estimation of numbers can be made by trapping throughout spring and summer (emergence periods). Following adult emergence from the soil, egg laying will occur for 8 to 10 weeks. Laval invasion of the soil will begin 2 to 3 weeks following adult emergence. Prior to drop of the neonates, it is critical to have Bifen AG 2EC soil barrier in place.</p>
Fire Ants (<i>Solenopsis spp</i>) Asian Cockroach (<i>Blattella asahinae</i>)	6.4 – 16 fl. ounces (0.1- 0.25 lb a.i.) per acre	

11/22

		<p>Make application to individual citrus resets. When not in solid planted rows, using hand-gun or shielded sprayer.</p> <p>Generally the peak emergence of Diaprepes root weevil occurs during the spring. A minor emergence of Diaprepes root weevil may also occur in the fall, depending on weather conditions.</p> <p>Use 32 fluid ounces formulated product to obtain the longest residual management of Diaprepes root weevil, if the citrus grove to be treated is in an area where weather conditions are conducive to primary pest infestations occurring in the spring.</p> <p>Where the citrus grove to be treated is in an area where weather conditions will promote more than one peak of pest emergence, apply 16 fluid ounces formulated product and apply 16 fluid ounces formulated product later in the season.</p> <p>If infestation extends beyond the residual protection of Bifen AG 2EC, additional management strategies should be used (i.e. foliar adult control or soil larvae control such as nematodes). Contact your state agricultural Extension Specialist as to the recommendation suited for local conditions.</p> <p>Do not apply through irrigation systems.</p> <p>Do not allow any application of Bifen AG 2EC to contact fruit or foliage.</p> <p>Make application by ground equipment only. Air applications are prohibited.</p> <p>Do not apply more than a total of 32 fluid ounces of formulated product (0.5 lb. a.i.) per acre per year.</p> <p>Apply the specified dosage in a minimum of 30 gallons of finished spray per acre.</p> <p>The PHI (preharvest interval) is 1 day.</p>
--	--	---

COTTON

PEST	DOSAGE		REMARKS AND RESTRICTIONS
	LB AI/A	FL OZ/A	
European Corn Borer Soybean (Banded) Thrips Tobacco Thrips	0.02-0.10	1.3-6.4	Bifen AG 2EC may be applied in water or refined vegetable oil (soybean/cottonseed).

<p>Boll Weevil Bollworm Cabbage Looper Cotton Aphid Cotton Fleahopper Cotton Leafperforator Cutworms Fall Armyworm Plant Bugs Saltmarsh Caterpillar Southern Garden Leafhopper Stink Bugs Tobacco Budworm Whitefly Yellow Striped Armyworm</p>	<p>0.04-0.10</p>	<p>2.6-6.4</p>	<p>Application in Water: (Air Application) – 1 gallon per acre. When applying by air, 1 quart of emulsified oil may be substituted for one quart of water in the finished spray. (Ground Application) – Make application in a minimum of 5 gallons per acre.</p> <p>ULV Application: Apply the recommended rate of Bifen AG 2EC in refined vegetable oil in a minimum of 1 quart of finished spray per acre with aircraft calibrated to give adequate coverage.</p> <p>Boll Weevil Control: Make application at an interval of 3 to 4 days until pest numbers are reduced to acceptable levels.</p> <p>Mites and Aphids Control: Make application when pests first appear. Repeat as necessary to maintain control. Make application at higher rates once a damaging threshold is established.</p>
<p>Beet Armyworm Carmin Spider Mite Lygus spp. Pink Bollworm Twospotted Spider Mite</p>	<p>0.06-0.10</p>	<p>3.8-6.4</p>	<p>Do not apply more than 0.5 pound active ingredient per acre per season.</p> <p>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®.</p> <p>Do not graze livestock in treated areas or cut treated crops for feed.</p> <p>The preharvest interval (PHI) is 14 days.</p>

**FIELD CORN (GRAIN AND SILAGE), POPCORN, FIELD CORN GROWN FOR SEED
(AT PLANT USE)**

PEST	DOSAGE		REMARKS AND RESTRICTIONS
<p>Corn Rootworm, Larvae Northern Southern Western</p>	<p>0.0046 lb AI per 1,000 linear feet of row</p>	<p>0.30 fluid ounce s per 1,000 linear feet of row</p>	<p>Make application as a 5 to 7 inch T-band treatment over an open seed furrow. Position the spray nozzle behind the planter shoe, in front of the press wheel centered over the row. The table below should be used to determine the Bifen AG 2EC needs per acre. The application should be made in a minimum of 3 gallons of finished spray per acre.</p> <p>To ensure uniform mixing and application, mix Bifen AG 2EC with water or fertilizer in the following manner:</p>
<p>Army Cutworm Cutworm Species Grubs Seed Corn Beetle Seed Corn Maggot True Armyworm or Armyworm Species Wireworm</p>	<p>0.0023 to 0.0046 lb AI per 1,000 linear feet of row</p>	<p>0.15 to 0.30 fluid ounce s per 1,000 linear feet of row</p>	<p>(1) Fill the spray tank approximately one-half full with water or liquid fertilizer, (2) While agitating, add the proper amount of Bifen AG 2EC then (3) Add the rest of the water or fertilizer. Continue agitation. (4) To maintain a uniform spray mixture, a sufficient agitation during mixing and application should be provided.</p> <p>Applications of Bifen AG 2EC alone or in recommended tank mixtures, in conjunction with in furrow pop-up fertilizers may be used. Perform a jar compatibility test with the appropriate ratio of Bifen AG 2EC and fertilizer to ensure the mixture will stay in solution. Constant agitation should be</p>

13/22

			<p>maintained during mixing and application.</p> <p>Do not apply to soil where there is greater than 30% cover of crop residue remaining.</p> <p>Do not graze livestock in treated area or cut treated crops for feed within 30 days of treatment.</p> <p>Do not apply more than 0.1 pound active per acre per season as an at plant application.</p> <p>The Preharvest Interval (PHI) is 30 days.</p>	
Row Spacings (inches)	40	38	36	30
Bifen AG 2EC (pounds ai per acre)	0.060	0.064	0.069	0.080
Bifen AG 2EC (formulated product, ounces per acre)	3.9	4.1	4.4	5.12

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

PEST	DOSAGE		REMARKS AND RESTRICTIONS
Black Cutworm White Grub Wireworm Seedcorn Maggot Armyworm spp. Stalkborer	0.047 to 0.062 pound A/A Pre- Plant Incorporated (PPI)	3 to 4 fl. oz./A Pre- Plant Incorporated (PPI)	The 3-4 oz./A rate must be applied as Pre-Plant Incorporated (PPI) and can be tank mixed and applied with PPI herbicides. Do not incorporate any deeper than the intended planting depth and no deeper than 3 inches. Incorporation depth should be close to the intended seed planting depth.
Black Cutworm Armyworm spp. Stalkborer	0.040 LB A/A Pre- emergence (PRE)	2.56 FL. OZ./A Pre- emergence (PRE)	The 2.56 oz./A rate may be applied Pre-Emergence (PRE) and can be tank mixed and applied with PRE herbicides.

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

PEST	DOSAGE		REMARKS AND RESTRICTIONS
	LB A/A	FL OZ/A	
Aphids Army Cutworm Beet Armyworm Cereal Leaf Beetle Chinch Bug Common Stalk Borer Corn Earworm Corn Rootworm Adults 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 Stinkbugs Tarnished Plant Bug	0.033-0.10	2.1-6.4	<p>By Air: Make application in a minimum of 2-5 gallons of finished spray per acre by aircraft. Use 5 gallons of finished spray per acre particularly when initial populations are heavier than normal to improve control by aircraft. 1-2 quarts of emulsified oil may be substituted for 1-2 quarts of water in the finished spray when applying by air.</p> <p>By Ground: Make application in a minimum of 10 gallons per acre with ground equipment.</p> <p>Thorough coverage is essential to achieve control when applying by air or ground.</p> <p>Ear-Attacking Pests Control: Make application just before silking. Repeat as necessary to maintain control.</p> <p>Southwestern Corn Borer, European Corn Borer: Initial application for corn borer control should be made at or shortly before egg hatch.</p> <p>Other Insect Pests Control: Make application when infestation first appears. Repeat as necessary.</p> <p>Mite Control: Make application for Banks Grass Mite</p>

<p>True Armyworm or Armyworm Species Webworms Western Bean Cutworm Yellowstriped Armyworm</p>			<p>control when colonies first form prior to leaf damage or discoloration and before dispersal above the bottom third of the plant.</p> <p>Twospotted Spider Mite and Carmine Mite Control: Make application when colonies first form prior to leaf damage or discoloration and before wide-spread mite dispersal throughout the canopy.</p> <p>Higher rates will be necessary for heavier initial pest 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.</p>
<p>Banks Grass Mite Carmine Mite Twospotted Spider Mite</p>	<p>0.08-0.10</p>	<p>5.12-6.4</p>	<p>Mite Control in Texas, New Mexico, Oklahoma, and Arizona: By Air: Make application in a minimum of 5 gallons of finished spray per acre. By Ground: Apply in a minimum of 10 gallons per acre. Do not apply more than 0.3 pound active per acre per season including pre and ppi, at plant, plus foliar applications.</p> <p>Do not graze livestock in treated areas or cut treated crops for feed within 30 days of the last application.</p> <p>Use of ultra low volume (ULV) application on corn is prohibited.</p> <p>Do not make aerial or ground applications to corn if heavy rainfall is imminent.</p> <p>Use of this product on corn is prohibited in all coastal counties.</p> <p>The pre-harvest interval (PHI) is 30 days.</p>

**SWEET CORN (GRAIN AND SILAGE)
SWEET CORN GROWN FOR SEED
(AT PLANT USE)**

PEST	DOSAGE		REMARKS AND RESTRICTIONS
<p>Corn Rootworm, Larvae Northern Southern Western</p>	<p>0.0046 pound active per 1,000 linear feet of row</p>	<p>0.30 fluid ounce s per 1,000 linear feet of row</p>	<p>Make application as a 5 to 7 inch T-band treatment over an open seed furrow. The spray nozzle should be positioned behind the planter shoe, in front of the press wheel centered over the row. Use the table below to determine the Bifen AG 2EC needs per acre. Make application in a minimum of 3 gallons of finished spray per acre.</p> <p>To ensure uniform mixing and application, mix Bifen AG 2EC with water or fertilizer in the following manner:</p> <p>(5) Fill the spray tank approximately one-half full with water or liquid fertilizer,</p>
<p>Army Cutworm Cutworm Species Grubs Seed Corn Beetle Seed Corn Maggot True Armyworm or Armyworm Species Wireworm</p>	<p>0.0023 to 0.0046 pound active per 1,000 linear</p>	<p>0.15 to 0.30 fluid ounce s per 1,000 linear feet of</p>	<p>(6) While agitating, add the proper amount of Bifen AG 2EC then (7) Add the rest of the water or fertilizer. Continue agitation. (8) To maintain a uniform spray mixture, a sufficient agitation during mixing and application should be provided.</p> <p>Applications of Bifen AG 2EC alone or in recommended tank mixtures, in conjunction with in furrow pop-up fertilizers may be used. Perform a jar compatibility test with the appropriate ratio of Bifen AG 2EC and fertilizer</p>

15/22

	feet of row	row	<p>to ensure the mixture will stay in solution. Constant agitation should be maintained during mixing and application.</p> <p>Do not apply to soil where there is greater than 30% cover of crop residue remaining.</p> <p>The pre-harvest interval (PHI) is 30 days. Do not graze livestock in treated area or cut treated crops for feed within 30 days of treatment.</p> <p>Do not apply more than 0.1 pound active per acre per season as an at plant application.</p>			
Row Spacings (inches)			40	38	36	30
Bifen AG 2EC (pounds ai per acre)			0.060	0.064	0.069	0.080
Bifen AG 2EC (formulated ounces per acre)			3.9	4.1	4.4	5.12

**SWEET CORN (GRAIN AND SILAGE)
SWEET CORN GROWN FOR SEED
(FOLIAR USE)**

PEST	DOSAGE		REMARKS AND RESTRICTIONS
	LB A/A	FL OZ/A	
Aphids Army Cutworm Beet Armyworm Cereal Leaf Beetle Chinch Bug Common Stalk Borer Corn Earworm Corn Rootworm Adults 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 Stinkbugs Tarnished Plant Bug True Armyworm or Armyworm Species Webworms Western Bean Cutworm Yellowstriped Armyworm	0.033-0.10	2.1-6.4	<p>By Air: Make application in a minimum of 2 gallons of finished spray per acre. When applying by air, 1-2 quarts of emulsified oil may be substituted for 1-2 quarts of water in the finished spray.</p> <p>By Ground: Apply in a minimum of 10 gallons per acre.</p> <p>Thorough coverage is essential to achieve control.</p> <p>Ear-Attacking Pests Control: Make application when silking begins. Repeat as necessary to maintain control.</p> <p>Southwestern Corn Borer, European Corn Borer: Make 2 applications for corn borer control with the initial application at or shortly before egg hatch.</p> <p>Other Insect Pests Control: Make application when infestation first appear. Repeat as necessary.</p> <p>For Control of Mites: Make application for Banks Grass Mites control when colonies first form from prior to leaf damage or discoloration and before dispersal above the bottom third of the plant.</p> <p>Twospotted Spider Mite and Carmine Mite Control: Make application when colonies first form</p>

<p>Banks Grass Mite Carmine Mite Twospotted Spider Mite</p>	<p>0.08-0.10</p>	<p>5.12-6.4</p>	<p>prior to leaf damage or discoloration and before widespread mite dispersal throughout the canopy. Heavier initial populations and corn under heat or drought stress will require higher rates.</p> <p>Do not make more than 0.2 pounds active ingredient (12.8 ounces formulated product) per acre per season.</p> <p>Do not graze livestock in treated areas of cut treated crops for feed within 1 day of the last application.</p> <p>Use of ultra low volume (ULV) application on corn is prohibited.</p> <p>If heavy rainfall is imminent, do not make aerial or ground applications to corn.</p> <p>Use of Bifen AG 2EC on corn is prohibited in all coastal counties.</p> <p>The pre-harvest interval (PHI) is 1 day.</p>
---	------------------	-----------------	---

CUCURBITS

CROP	PEST	DOSAGE		REMARKS AND RESTRICTIONS
		LB A/A	FL OZ/A	
<p>Chayote (fruit) Chinese waxgourd (Chinese preserving melon) Citron melon Cucumber Gherkin Gourd, edible (includes hyloan, cucuzza), (<i>Luffa</i> spp.) (includes hechima, Chinese okra), (<i>Momordica</i> spp.) (includes balsam apple, balsam pear, bitter melon, Chinese cucumber) Muskmelon (hybrids and/or cultivars)</p>	<p>Aphids Cutworm Cabbage Looper Leafhoppers Cucumber Beetles Squash Bugs Melonworm Pickleworm Plant Bug Stink Bugs Rindworm Squash Vine Borer Armyworms Corn Earworm Tobacco Budworm Grasshopper</p>	<p>0.04-0.10</p>	<p>2.6-6.4</p>	<p>By Air: Make application in a minimum of 5 gallons of finished spray per acre. When applying by air, 1-2 quarts of emulsified oil may be substituted for 1-2 quarts of water in the finished spray.</p> <p>By Ground: Apply in a minimum of 20 gallons per acre.</p> <p>Thorough coverage is essential to achieve control.</p> <p>Do not apply more than 0.3 lb active ingredient (19.2 ounces formulated product) per acre per season.</p> <p>Do not make more than two applications after bloom.</p> <p>Do not make applications less than 7 days apart.</p>

<p>of <i>Cucumis melo</i>) (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 (<i>Cucurbita spp.</i>) Squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini) Squash, winter (includes butternut squash, calabaza, hubbard squash (<i>C. mixte</i>; <i>C. pepo</i>), includes acorn squash, spaghetti squash) Watermelon, (includes hybrids and or varieties of <i>Citrullis spp.</i>)</p>	<p>Whitefly Banks Grass Mite Twospotted Spider Mite Carmine Mite Lygus spp.</p>	<p>0.08-0.10</p>	<p>5.12-6.4</p>	<p>The pre-harvest interval (PHI) is 3 days.</p>
--	---	------------------	-----------------	--

EGGPLANT

PEST	DOSAGE		REMARKS AND RESTRICTIONS
	LB A/A	FL OZ/A	
Colorado Potato Beetle Corn Earworm European Corn Borer Flea Beetle Cabbage Looper Cucumber Beetle Tomato Pinworm Tomato Hornworm Vegetable Leafminer Whitefly Armyworms Plant Bug Stink Bug Thrips	0.033-0.10	2.1-6.4	<p>By Air: Make application in a minimum of 2 gallons of finished spray per acre. When applying by air, 1-2 quarts of emulsified oil may be substituted for 1-2 quarts of water in the finished spray.</p> <p>By Ground: Apply in a minimum of 10 gallons per acre.</p> <p>Thorough coverage is essential to achieve control.</p> <p>Do not make applications less than 7 days apart.</p> <p>Do not apply more than 0.2 lb active ingredient (12.8 ounces formulated product) per acre per season.</p> <p>The pre-harvest interval (PHI) is 7 days.</p>

18/22

Banks Grass Mite Twospotted Spider Mite Mite Carmine Mite Pacific Spider Mite Lygus spp.	0.08-0.10	5.12-6.4	
---	-----------	----------	--

GRAPES

PEST	DOSAGE		REMARKS AND RESTRICTIONS
	LB AI/A	FL OZ/A	
Cutworms Eastern Grape Leafhopper Grape berry moth Japanese Beetles (adult) Variegated Leafhopper Western Grape Leafhopper	0.05 to 0.10	3.2 to 6.4	By Air: Make application in a minimum of 10 gallons of finished spray. When applying by air, 1 to 2 quarts of emulsified oil may be substituted for 1 to 2 quarts of water in the finished spray. By Ground: Apply in a minimum of 25 gallons of finished spray. Thorough coverage is essential to achieve control.
Black Vine Weevil Glasywinged Sharpshooter Twospotted Spider Mite	0.10	6.4	When pest pressure is moderate to severe, use higher rate. Do not apply more than 0.10 lb ai per acre per season. The pre-harvest interval (PHI) is 30 days.

HOPS

PEST	DOSAGE		REMARKS AND RESTRICTIONS
	LB AI/A	FL OZ/A	
Aphids Armyworms Cutworms Leafrollers Loopers	0.06-0.1	3.8-6.4	Do not exceed 0.1 lb ai per acre per application. Do not exceed 0.3 lb ai per acre per season. A spray interval of 21 days between applications must be maintained.
Root Weevils	0.05-0.1	3.2-6.4	The pre-harvest interval (PHI) is 14 days.
Twospotted spider mite	0.1	6.4	Ground Application: Full coverage is essential for best results. Early Season Recommendations: 100 – 150 gallons per acre. Late Season Recommendations: 200 – 250 gallons per acre. Root Weevil Control: Direct spray to the base of the plant. Spray up the vine 3 feet and the soil surface 1.5 to 2 feet on either side of the plant. Air Application for late season control of twospotted spider mites: Apply no less than 6.4 oz (0.1 lb ai) per application in a minimum of 10 gallons per acre. Use of ultra low volume (ULV) application on hops is prohibited.

LETTUCE, HEAD

PEST	DOSAGE		REMARKS AND RESTRICTIONS
	LB AI/A	FL OZ/A	

19/22

Aphids Armyworms Corn Earworm Cucumber Beetles Cutworms Diamondback Moth Flea Beetles Imported Cabbageworm Leafhoppers Loopers Salt Marsh Caterpillar Stink Bug spp. Tobacco Budworm Whitefly	0.033-0.10	2.1-6.4	<p>By Air: Make application in 5 gallons per acre. When applying by air, 1-2 quarts of emulsified oil may be substituted for 1-2 quarts of water in the finished spray.</p> <p>By Ground: Apply in water as necessary for insect control using a minimum of 15 gallons of finished spray per acre.</p> <p>Thorough coverage is essential to achieve control.</p> <p>Do not make applications less than 7 days apart.</p> <p>A maximum of 0.5 lb active ingredient may be applied per acre per season.</p> <p>The pre-harvest interval (PHI) is 7 days.</p>
Lygus, spp. Carmin Mite Twospotted Spider Mite	0.08-0.10	5.12-6.4	

PEARS

PEST	DOSAGE		REMARKS AND RESTRICTIONS
	LB A/A	FL OZ/A	
Aphids Codling Moth Cutworms Green Fruitworm Leafhoppers Leafminers Leafrollers Lygus spp. Plant Bugs Plum Curculio San Jose Scale (Crawlers) Stink Bugs Tarnished Plant Bugs	0.04 to 0.2	2.6 to 12.8	<p>Ground Application: Make application 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.</p> <p>Air Application: Apply the specified dosage in a minimum of 10 gallons per acre by air.</p> <p>Do not apply more than 0.5 pound active per acre per season with no more than 0.45 pound active per acre applied after petal fall.</p> <p>Apply as necessary to maintain control using a minimum of 30-day spray interval.</p> <p>Do not graze livestock in treated orchards or cut treated cover crops for feed.</p>
Twospotted Spider Mite Yellow Mite	0.06 to 0.2	3.8 to 12.8	The pre-harvest interval (PHI) is 14 days.
European Red Mite	0.08 to 0.2	5.12 to 12.8	

PEPPERS, BELL AND NON-BELL

PEST	DOSAGE		REMARKS AND RESTRICTIONS
	LB A/A	FL OZ/A	

Armyworms Corn Earworm Cucumber Beetles Cutworms European Corn Borer Flea Beetles Leafminers Loopers Pepper Weevil Thrips Whitefly	0.033-0.1	2.1-6.4	Make application in sufficient water to obtain uniform coverage. Apply as needed. By Air: Make application using a minimum of 2 gallons per acre. By Ground: Apply with ground equipment using a minimum of 10 gallons of finished spray per acre. Do not make applications less than 7 days apart. Do not apply more than 0.20 pound active ingredient per acre per season. The pre-harvest interval (PHI) is 7 days.
Lygus spp. Broad Mite Carmine Mite Twospotted Spider Mite	0.08-0.10	5.12-6.4	

SPINACH

PESTS	DOSAGE	REMARKS AND RESTRICTIONS
Colorado Potato Beetle Tomato Pinworm Tomato Hornworm Armyworms Corn Earworm Cucumber Beetles Cutworms European Corn Borer Flea Beetles Leafminers Loopers Pepper Weevil Thrips Whitefly	2.1 to 6.4 ounces (0.033 to 0.10 pound active) per acre	Whitefly Control: Ground or Air Application: Apply foliar treatments of Bifen AG 2EC at rates of up to 0.4 pt. (0.1 lb active) per acre at minimum 7-day intervals up to a maximum of 4 applications. Fire Ant Control: Apply to the soil (at planting) or as a foliar treatment by ground or air at rates of up to 0.4 pt. (0.1 lb active) per acre at minimum 7-day intervals up to a maximum of 4 applications. Apply the specified dosage in 5-50 gallons of finished spray per acre by air or 10-50 gallons of finished spray per acre by ground. Do not make applications less than 7 days apart.
Broad Mite Banks Grass Mite Twospotted Spider Mite Carmine Mite Pacific Spider Mite Lygus spp. Fire Ants	5.12 to 6.4 ounces (0.08 to 0.10 pound active) per acre	Do not apply more than 0.4 pounds active ingredient per acre per season. The preharvest interval (PHI) is 40 days.

SUCCULENT PEAS AND BEANS

CROP	PEST	DOSAGE		REMARKS AND RESTRICTIONS
		LB AI/A	FL OZ/A	
Pea (Pisum spp.) Dwarf pea Edible-pod pea English pea Garden pea	Flea Beetle Grasshoppers Aster Leafhopper Leafhoppers	0.025-0.10	1.6-6.4	By Air: Make application in a minimum of 2 gallons of finished spray per acre. When applying by air, 1-2 quarts of emulsified oil may be substituted for 1-2 quarts of water in the finished spray. By Ground: Apply in a minimum of 10 gallons per acre.

21/22

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 Cowpeas Moth bean Southern pea Yardlong bean Jackbean Soybean (immature seed) Sword bean	Aphids Beet Armyworm Fall Armyworm Southern Armyworm Yellowstriped 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 (Adult) Thrips Webworms Pea Weevil Pea Leaf Weevil Whitefly	0.033-0.10	2.1-6.4	Thorough coverage is essential to achieve control. Do not apply more than 0.2 lb active ingredient (12.8 ounces formulated product) per acre per season. The pre-harvest interval (PHI) is 3 days.
	Banks Grass Mite Twospotted Spider Mite Carmine Mite Lygus spp.	0.08-0.10	5.12-6.4	

TOMATOES

PEST	DOSAGE	REMARKS AND RESTRICTIONS
Aphids Armyworms – Including: Beat Armyworm, Fall Armyworm, Southern Armyworm Bean Leaf Beetle Cabbageworm Carmine Mite Cloverworm Corn Earworm	2.1-5.2 fluid ounces (0.033-0.08 pound active) per acre	Make application in water as necessary for insect control. Use a minimum of 15 gallons of finished spray per acre with ground equipment. Thorough coverage is essential to achieve control. Do not make applications less than 10 days apart.

<p>Corn Rootworm Cucumber Beetles Cutworms Diamondback Moth European Corn Borer Flea Beetles Flea Hopper Grasshopper Japanese Beetle (Adult) Leafhoppers Loopers Lygus spp. Melonworm Pea Weevil Pea Leaf Weevil Pickleworm Plant Bug Rindworm Salt Marsh Caterpillar Sap Beetle Seedpod Weevil Squash Bugs Stink Bug spp. Tobacco Budworm Tarnished Plant Bug Thrips Two Spotted Spider Mite Whitefly</p>		<p>A maximum of 4 applications may be applied per season.</p> <p>The pre-harvest interval (PHI) is 1 day.</p>
---	--	---

WARRANTY

J. Oliver Products warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with 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 J. Oliver Products. To the fullest extent permitted by law, J. Oliver Products shall not be liable for consequential, special, or indirect damages resulting from the use or handling of this product. All such risk shall be assumed by the Buyer. In addition to the foregoing, no purchaser of this product (other than an end user) shall be entitled to any reimbursement for any loss suffered as a result of any suspension or cancellation of the registration for this product by the U.S. Environmental Protection Agency. Except as expressly provided herein, J. Oliver Products, makes no warranties, guarantees, or representations of any kind, either expressed or implied, or by usage of trade, statutory or otherwise, with regard to the product sold, including, but not limited to merchantability, fitness for a particular purpose, use or eligibility of the product for any particular trade usage. The exclusive remedy of any buyer or user of this product for any and all losses, injuries, or damages resulting from or in any way arising from the use, handling, or application of this product whether in contract, warranty, tort, negligence, strict liability, or otherwise, shall be damages not exceeding the purchase price paid for this product or, at J. Olive Products election, the replacement of this product.

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.