



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

February 13, 2020

Crystal Layton  
Regulatory Manager  
UPL NA Inc.  
630 Freedom Business Center, Ste. 402  
King of Prussia, PA 19406

Subject: Notification per PRN 98-10 – Add optional referral statements, and reformat crop tables  
Product Name: BIFENTURE 10DF INSECTICIDE/MITICIDE  
EPA Registration Number: 70506-227  
Application Date: 08/01/2019  
Decision Number: 554064

Dear Ms. Layton:

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 Jamey Shuler at 703-347-8036 or by email at [Shuler.Jamey@epa.gov](mailto:Shuler.Jamey@epa.gov).

Sincerely,

A handwritten signature in cursive script that reads "J. Herrick".

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

**NOTIFICATION**

70506-227

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:

02/13/2020

Bifenture 10DF

~~Label amendment~~ — clean copy

March 27, 2018

**RESTRICTED USE PESTICIDE**

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

GROUP	3A	INSECTICIDE
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**BIFENTURE® 10DF Insecticide/Miticide**  
**(primary name)**

**BIFENTURE® 10WSB Insecticide/Miticide**  
**(alternate name)**

**ACTIVE INGREDIENT:**

Bifenthrin\* (2 methyl[1,1'-biphenyl]-3-yl) methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate..... 10.0%

**OTHER INGREDIENTS:** ..... 90.0%

**TOTAL** ..... 100.0%

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

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION PRECAUCIÓN**

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.)

[Optional reference statements:

Outer box/carton: See containers inside for additional Precautionary Statements and complete Directions For Use.

Outer Booklet: See inside for First Aid Statements, additional Precautionary Statements and complete Directions For Use.

Base of Booklet: See attached booklet for additional Precautionary Statements and complete Directions For Use.

**PEEL DOWN FOR DIRECTIONS]**

**FIRST AID**

<b>If Swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If in Eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on Skin:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency medical treatment information, contact the Rocky Mountain Poison and Drug ~~Center~~ Safety at 1-866-673-6671.

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

For chemical emergency: spill, leak, fire, exposure, or accident, call CHEMTREC at 1-800-424-9300.

**United Phosphorus, Inc. UPL NA Inc.**  
**630 Freedom Business Center Suite 402**  
**King of Prussia, PA 19406**

**1-800-438-6071**  
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**EPA Reg. No. 70506-227**  
**EPA Est. No.**  
**Net Contents**

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

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

**Personal Protective Equipment (PPE):**

Applicators and other handlers (other than mixers and loaders) must wear:

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

**Mixers and Loaders must wear:**

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

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

**USER SAFETY RECOMMENDATIONS**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

[Please note the following language is ONLY to be printed when this product is formulated for WSB packaging:

**ENGINEERING CONTROLS STATEMENT**

Water soluble packets, when used correctly, qualify as a closed mixing/loading system under the Worker Protection Standard [40 CFR 170.607 (d)]. Mixers and loaders handling this product while it is enclosed in intact water soluble packets may elect to wear reduced PPE of long-sleeved shirt, long pants, shoes, socks. When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.]

**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 wash waters.

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

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

### DIRECTIONS FOR USE

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

Do not apply this product through any type of irrigation system.

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.

**Resistance.** 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 or universities 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 pest may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area.

### 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 intervals. 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; waterproof gloves; and shoes plus socks.

### PRODUCT INSTRUCTIONS

Unless otherwise directed by registered supplemental labeling, follow the Directions for Use in each crop group section.

*[Optional text for water soluble packaging: The product in this outer package is a wettable powder formulation of the insecticide bifenthrin packaged in a translucent water soluble bag. Do not allow the inner bag to become wet before adding it to the spray or nurse tank. Do not handle the inner bag with wet hands or wet gloves. Avoid rough handling which may cause breakage. Do not store at temperatures below 32°F (0°C). Allow to warm above 50°F (10°C) before use. Cooler water temperatures increase the time needed for the inner bag to dissolve completely.]*

Bifenture WSB/DF insecticide must be diluted with water before spray application. Do not use nozzle screens (e.g. strainers) greater than 50 mesh size. *[Optional text for water soluble packaging: Determine the number of water soluble bag(s) to make up necessary spray suspension.*

*Calculate the number of bags needed for the recommended rate and number of acres to be treated by using the following equation:*

$$\frac{\text{Rate for Pest (Active/Acre)}}{0.05 \text{ (amt. ai in each bag)}} \times \text{Number of Acres to be Treated} = \text{Number of Bifenture Water Soluble Bags to use for acres to be treated}$$

**Do not break bags.** *When the equation equals less than a whole number of bags, use the next higher whole number of bags.]*

Fill the spray tank 1/2 full with water. Add required amount of Bifenture 10 WSB/DF. *[Optional text for water soluble packaging: Open the outer wrapper of this product and immediately dump required number of water soluble bags into the spray tank. Allow the bag(s) to dissolve completely.]* Start agitation in the tank. Air agitation is not recommended. Mix thoroughly to fully disperse and suspend the wettable powder. Fill the spray tank with the required amount of water. Maintain agitation during storage in nurse or supply tank and during application.

Mix as needed; do not store diluted material.

#### 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 bifenthrin.

*[Please note the following language in italics is ONLY to be printed when this product is formulated for WSB packaging:]*

**WATER SOLUBLE PACKAGING**

**Multiple Packaging:** *This bag contains multiple water soluble packets of this product. Do not handle the packets with wet gloves or allow the packets to become wet prior to addition to spray tank. Do not break open packets. Refer to the Tables of Equivalents to calculate the number of packets to use. If all are not used, close and reseal outer container to protect remaining packet(s).*

**Single Packaging:** *This bag contains one water soluble packet of this product. Do not handle the packet with wet gloves or allow the packet to become wet prior to addition to spray tank. Do not break open packet. Refer to the Tables of Equivalents to calculate the number of packets to use. Open outer bag and drop the unopened inner packet of this product into spray tank.*

**Preparation of Spray Solution:** *Do not add any liquid fertilizers, micronutrients or adjuvants to the spray solution until after the packet and its contents have completely dissolved. Water soluble packet(s) should completely dissolve in approximately five minutes. Dissolution rate may be slowed by cold water, lack of agitation or water containing high concentrations of boron or sulfur.*

**INSTRUCTIONS FOR USING WATER SOLUBLE PACKAGES DIRECTLY INTO SPRAY TANKS**

*Water Soluble Packages (WSPs) are designed to dissolve in water. Agitation may be used, if necessary, to help dissolve the WSP. Failure to follow handling and mixing instructions can increase your exposure to the pesticide products in WSPs. WSPs, when used properly, qualify as a closed mixing/loading system under the Agricultural Worker Protection Standard [40 CFR 170.607 (d)].*

**Handling Instructions:**

*Follow these steps when handling pesticide products in WSPs.*

- 1. Mix in spray tank only.*
- 2. Handle WSP(s) in a manner that protects package from breakage and/or unintended release of contents. If package is broken, put on PPE required for clean-up and then continue with mixing instructions.*
- 3. Keep the WSP(s) in outer packaging until just before use.*
- 4. Keep the WSP dry prior to adding to the spray tank.*
- 5. Handle with dry gloves and according to the label instructions for PPE.*
- 6. Keep WSP intact. Do not cut or puncture WSP.*
- 7. Reseal the WSP outer packaging to protect any unused WSP(s).*

**Mixing Instructions:**

*Follow the steps below when mixing this product, including if tank mixed with other pesticide products. If being tank mixed, the mixing directions 1 through 9 below take precedence over the mixing directions of the other tank mix products. WSPs may, in some cases, be mixed with other pesticide product so long as the directions for use of all mixed products do not conflict. Do not tank mix this product with products that prohibit tank mixing or have conflicting mixing directions.*

- 1. If a basket or strainer is present in the tank hatch, remove prior to adding the WSP to the tank.*
- 2. Fill tank with water to approximately one-third to one-half of the desired final volume of spray.*
- 3. Stop adding water and stop any agitation.*
- 4. Place intact/unopened WSP(s) into the tank.*
- 5. Do not spray water from a hose or fill pipe to break or dissolve the WSP(s).*
- 6. Start mechanical and recirculation agitation from the bottom of tank without using any overhead recirculation, if possible. If overhead recirculation cannot be turned off, close the hatch before starting agitation.*
- 7. Dissolving the WSP(s) may take up to 5 minutes or longer, depending on water temperature, water hardness and intensity of agitation.*

8. *Stop agitation before tank lid is opened.*
  9. *Open the lid to the tank, exercising caution to avoid contact with dusts or spray mix, to verify that the WSPs have fully dissolved and the contents have been thoroughly mixed into the solution.*
  10. *Do not add other allowed products or complete filling the tank until the bags have fully dissolved and pesticide is thoroughly mixed.*
  11. *Once the WSP have fully dissolved and any other products have been added to the tank, resume filling the tank with water to the desired level, close the tank lid, and resume agitation.*
  12. *Use the spray solution when mixing is complete.*
  13. *Maintain agitation of the diluted pesticide mix during transport and application.*
- It is unlawful to use any registered pesticide, including WSPs, in a manner inconsistent with its label.]*

### **Tank-Mixture**

Bifenture 10 WSB/DF Insecticide/Miticide may be applied in tank mixtures with other products approved for use on registered crops. Observe all restrictions and precautions which appear on the labels of these products. Test for compatibility of products before mixing using a standard jar test or other similar method.

### **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.csusda/v/technical/agronom/newconbuf.pdf>.

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

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

#### **Additional Requirements for Ground Applications**

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

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.

### **Spray Drift Requirements**

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

Only apply this product if the wind direction favors on-target deposition.

Do not apply when the wind velocity exceeds 15 mph.

#### **Temperature Inversions**

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

near the ground surface.

**Droplet Size**

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

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



**Additional Requirements for Aerial Applications**

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

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

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

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

**Application Instructions**

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

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.

**Artichoke**

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI (days)</u>
Artichoke Plume Moth Cribrate Weevil	16.0 (0.10)	Apply when pest populations reach damaging thresholds and repeat as necessary to maintain control, but not more often than 15-day intervals.  <b>Ground Application:</b> Apply in a minimum of 75 gallons per acre.  <b>Air Application:</b> Apply in a minimum of 10 gallons per acre. <del>Preharvest interval: 5 days.</del> <i>[1 bag = 0.05 lb ai = 8 oz formulated product]</i>	Do not apply more than 16 oz product (0.10 lb ai)/A between bud formation and harvest of an individual fruit.  Do not apply more than 80 oz product (0.5 lb ai) per acre per season.	<u>5</u>

## Brassicas

Broccoli, Chinese Broccoli, (gailon, white flowering broccoli), Brussels Sprouts, Cauliflower, Cavalo broccoli, Kohlrabi, Cabbage, Chinese Cabbage (napa), Chinese Mustard Cabbage (gai choy)

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI</u> (days)
Grubs Maggots Wireworms	8.0 to 16.0 (0.05 – 0.10)	<b>Planting Time Use:</b> For Wireworms, maggots or grubs, apply in-furrow with the seed or transplant.	Do not apply more than 32 oz product (0.2 lb ai) per acre per season, including at-plant applications.  Do not make applications less than 7 days apart.  Do not make more than 5 applications after bloom.	<u>7</u>
Aphids Armyworms Crickets Corn Earworm Cucumber Beetles Cutworms Diamondback Moth Flea Beetles Ground Beetles Imported Cabbageworm Leafhoppers Loopers Tobacco Budworm Saltmarsh Caterpillar Stink Bugs Thrips Wireworm (Adults)	5.3 to 16.0 (0.033 - 0.10)	<b>Foliar Use:</b> Apply in a minimum of 5 gallons per acre by air or in a minimum of 20 gallons per acre with ground equipment. Thorough coverage is essential to achieve control.  <del>Preharvest interval: 7 days.</del>  [1 bag = 0.05 lb ai = 8 oz formulated product]		
Banks Grass Mite Carmine Mite <i>Lygus</i> Spp. Pacific Spider Mite Twospotted Spider Mite Whiteflies	12.8 to 16.0 (0.08 - 0.10)			

## Bushberries

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

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	PHI (days)
Aphids Blueberry Maggot Fruitworms Leafhoppers Lecanium Scale (crawlers) Obliquebanded Leafroller Plum Curculio Redbanded Leafroller Spanworm Thrips Drosophila spp. (adults & larvae, including Spotted Winged Drosophila) Variegated Leafroller	5.3 to 16.0 (0.033 to 0.10)	Apply in at least 2 gallons per acre by air or in at least 10 gallons per acre with ground equipment. Thorough coverage is essential to achieve control.  <i>[1 bag = 0.05 lb ai = 8 oz formulated product]</i>	Do not apply more than 80 oz product (0.5 lb ai) per acre per season. Do not make applications less than 7 days apart. <del>Preharvest interval: 1 day.</del>	<u>1</u>
Banks Grass Mite Carmine Mite <i>Lygus</i> spp. Pacific Spider Mite Twospotted Spider Mite	12.8 to 16.0 (0.08 to 0.10)			

## Caneberries

Including: Blackberries, Bingleberries, Dewberries, Lowberries, Marionberries, Olallieberries, Youngberries, Loganberries, Raspberries

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI</u> (days)
Black Vine Weevil Leafrollers Orange Tortrix Root Weevils Thrips Vinegar Flies (adults) Drosophila spp. (Including Spotted Winged Drosophila) Lygus spp.	8.0 to 16.0 (0.05 to 0.1)	Apply by air or ground equipment using sufficient water to obtain full coverage of the canopy. Use a 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.  For Crown Borer: apply 16 oz product (0.1 lb ai) per acre, post-harvest (fall) or pre-bloom (spring), as a drench application directed at the crown of plants in a minimum of 200 gallons water/acre. Greater efficacy is observed at higher water gallonages (up to 400 gallons/A) or in an application prior to a significant rainfall event. Do not make both pre-bloom foliar and pre-bloom drench applications.	Do not apply more than 32 oz product (0.2 lb ai) per acre per season.  <del>Preharvest interval: 3 days.</del>	<u>3</u>
Carmine Mite Raspberry Crown Borer Twospotted Spider Mite	16.0 (0.1)	<del>[1 bag = 0.05 lb ai = 8 oz formulated product]</del>		

### Canola, Crambe, Rapeseed

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI (days)</u>
Aphids Armyworms Cutworms Diamondback Moth Flea Beetle Flea Hopper Grasshopper Loopers Other Lepidopterous Larvae Plant Bug Stink Bugs Seedpod Weevil Thrips	5.3 to 6.4 (0.033 - 0.04)	Apply in a minimum of 2 gallons per acre by air or in a minimum of 10 gallons per acre with ground equipment.  Thorough coverage is essential to achieve control.  <del>Preharvest interval: 35 days.</del>  <i>[1 bag = 0.05 lb ai = 8 oz formulated product]</i>	Do not apply more than 12.8 oz product (0.08 lb ai) per acre per season.  Do not make applications less than 14 days apart.	<u>35</u>

## Citrus

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI (days)</u>
BlueGreen Citrus Root Weevil Brown Leaf Notcher Diaprepes Root Weevil Fuller Rose Beetle Green Citrus Root Weevil Little Leaf Notcher Southern Blue- Green Citrus Weevil	40.0 to 80.0 (0.25 to 0.50)	<p>Apply Bifenture 10 WSB/DF by ground equipment to bare soil beneath citrus trees. Bifenture 10 WSB/DF must be uniformly applied from the trunk to the drip line of tree; apply in a minimum of 40 gallons of dilute spray per acre. Greater spray volume will insure greater uniformity of coverage. A pre- and post-application irrigation may aid in the uniformity of coverage as well.</p> <p>Bifenture 10 WSB/DF protects citrus tree roots from Diaprepes and other citrus root weevils feeding by forming a barrier which provides contact activity on newly hatched larvae (neonates). As eggs hatch in new foliage, neonates fall to the soil surface BELOW the tree and come in contact with Bifenture 10 WSB/DF as they attempt to burrow into the root zone.</p> <p>Minimize disturbance of the soil beneath trees.</p> <p>Timing of Bifenture 10 WSB/DF applications is critical. Current information suggests that peak emergence of adult Diaprepes Weevil varies by citrus growing region and these emergence peaks can be dramatically affected by environmental factors, such as soil moisture. Typically, two peaks are observed for Diaprepes, first in spring then late summer or early fall. Southern Blue-Green and Blue-Green Citrus Weevils and Fuller Rose Beetle typically exhibit a single emergence peak in the spring. Brown and Little Leaf Notchers typically exhibit three emergence peaks, spring, summer and fall. Since emergence varies seasonally and by location, timing of Bifenture 10 WSB/DF application can be accurately forecast by observing adults. Adults are most active early morning and late afternoon; numbers can be estimated by trapping throughout spring and summer (emergence periods). Egg laying will occur for 8 to 10 weeks following adult emergence from the soil; larval invasion of the soil will begin 2-3 weeks following adult emergence. It is critical to have the Bifenture 10 WSB/DF soil barrier in place prior to drop of the neonates.</p> <p>Bifenture 10 WSB/DF is one of several effective tools in an integrated pest management program for Citrus Root Weevils. Apply in conjunction with good cultural practices, biological control of larvae and foliar control of adults. Consult local university extension personnel for current information to protect citrus trees from Citrus Root Weevils and other pests.</p>	<p>Do not apply through irrigation systems.</p> <p>Do not allow any application of Bifenture 10 WSB/DF to contact fruit or foliage.</p> <p>Do not apply more than a total of 80 oz product (0.5 lb ai) per acre per year.</p> <p>Ground application only. Do not apply by air.</p>	<u>1</u>
Asian Cockroach Fire Ants	16.0 to 40.0 (0.1 to 0.25)	<p><b>Additional Instructions:</b></p> <p>Apply to individual citrus resets, when not in solid planted rows, using handgun or shielded sprayer.</p> <p>Peak emergence of Diaprepes root weevil generally occurs in the spring. Depending on weather conditions, a minor emergence of Diaprepes root weevil may also occur in the fall.</p> <p>If the citrus grove to be treated is in an area where weather conditions are conducive to primary emergence occurring in the spring, use 80 oz product (0.50 lb ai) to obtain the longest residual management of Diaprepes root weevil.</p> <p>If the citrus grove to be treated is in an area where weather conditions will promote more than one peak of pest emergence, 40 oz product (0.25 lb ai) can be applied early season and 0.25 pound active can be applied later in the season.</p> <p><del>Preharvest interval: 1 day.</del></p> <p>Apply in a minimum of 40 gallons of finished spray per acre.</p>		

## Cotton

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI</u> (days)
European Corn Borer Soybean (Banded) Thrips Tobacco Thrips	3.2 to 16.0 (0.02 to 0.10)	This product may be applied in water. Apply in a minimum of 10 gallons per acre with ground equipment or 2 gallons per acre by air.	Do not apply more than 80 oz product (0.5 lb ai) 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.	<u>14</u>
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	6.4 to 16.0 (0.04 to 0.10)	To control Boll Weevil: apply at an interval of 3 to 4 days until pest numbers are reduced to acceptable levels. To control Mites and Aphids: apply when pests first appear. Repeat as necessary to maintain control. Higher rates will be required once a damaging threshold is established. <del>Preharvest interval: 14 days.</del>  <i>[1 bag = 0.05 lb ai = 8 oz formulated product]</i>		
Beet Armyworm Carmine Spider Mite <i>Lygus</i> spp. Pink Bollworm Twospotted Spider Mite Whiteflies	9.6 to 16.0 (0.06 to 0.10)			

## Cucurbits

Chayote (fruit); Chinese waxgourd (Chinese preserving melon); Citron melon; Cucumber; Gherkin; Gourd, edible (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, creshaw 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 oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI</u> (days)
Wireworms Maggots Grubs	8.0 to 16.0 (0.05 – 0.10)	<b>Planting Time Use:</b> For Wireworms, maggots or grubs, apply in-furrow with the seed or transplant.	Do not apply more than 48 oz product (0.3 lb ai) per acre per season.	<u>3</u>
Aphids Armyworms Cabbage Looper Corn Earworm Cucumber Beetles Cutworms Grasshopper Leafhoppers Plant Bug Pickleworm Melonworm Rindworm Squash Bugs Squash Vine Borer Stink Bugs Tobacco Budworm	8.0 to 16.0 (0.05 – 0.10)	<b>Foliar Use:</b> Apply in a minimum of 5 gallons per acre by air or in a minimum of 20 gallons per acre with ground equipment.  Thorough coverage is essential to achieve control. <del>Preharvest interval: 3 days.</del>	Do not make more than two applications after bloom.  Do not make applications less than 7 days apart.	
Banks Grass Mite Carmine Mite <i>Lygus</i> Spp. Twospotted Spider Mite Whiteflies	12.8 to 16.0 (0.08 - 0.10)	[1 bag = 0.05 lb ai = 8 oz formulated product]		



## Fruiting Vegetables

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

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI (days)</u>
Armyworms Cabbage Looper Colorado Potato Beetle Corn Earworm Cucumber Beetle Cutworms European Corn Borer Flea Beetle Leafminers Loopers Pepper Weevil Plant Bug Stink Bug Thrips Tomato Pinworm Tomato Hornworm Vegetable Leafminer Whiteflies	5.3 to 12.8 (0.033 to 0.08)	Apply in a minimum of 2 gallons per acre by air or in a minimum of 10 gallons per acre with ground equipment. When applying by air, 1-2 quarts of emulsified oil may be substituted for 1-2 quarts of water in the finished spray. Thorough coverage is essential to achieve control. <del>Preharvest</del> <del>interval: 7 days.</del>  <i>[1 bag = 0.05 lb ai = 8 oz formulated            product]</i>	Do not make applications less than 7 days apart.  Do not apply more than 32 oz product (0.2 lb ai ) per acre per season.	<u>7</u>
Banks Grass Mite Broad Mite Carmine Mite <i>Lygus</i> Spp. Pacific Spider Mite Two Spotted Spider Mite	12.8 (0.08)			

**Fruiting Vegetables**

Tomato, Tomatillo

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI (days)</u>
Grubs Maggots Wireworms	8.0 to 12.8 (0.05 to 0.08)	Apply in-furrow with the seed or transplant.	Do not make applications less than 10 days apart.	<u>1</u>
Aphids Armyworms Including: Beet Armyworm, Fall Armyworm, Southern Yellowstriped Armyworm Bean Leaf Beetle Cabbageworm Carmine Mite Cloverworm Corn Earworm Corn Rootworm Cucumber Beetles Cutworms Diamondback Moth European Corn Borer Flea Beetles Flea Hopper Grasshopper Japanese Beetle (Adult) Leafhoppers Loopers <i>Lygus</i> Spp. Melonworm Pea Weevil Pea Leaf Weevil Pickleworm Plant Bug Rindworm Saltmarsh Caterpillar Sap Beetle Seedpod Weevil Squash Bugs Stink Bug Spp. Tobacco Budworm Tarnished Plant Bug Thrips Tomato Hornworms Two Spotted Spider Mite Whiteflies	5.3 to 12.8 (0.033 to 0.08)	Apply as necessary for insect control using a minimum of 15 gallons per acre with ground. Thorough coverage is essential to achieve control.  A maximum of 4 applications may be applied per season. <del>Preharvest interval: 1 day.</del>  <i>[1 bag = 0.05 lb ai = 8 oz formulated product]</i>	Do not apply more than 32 oz. product (0.2 lb ai) per acre per season.	

**GRASS FORAGE, FODDER, AND HAY GROUP AND GRASS GROWN FOR SEED,  
 PASTURE AND RANGELAND**

(including: bahiagrass, barnyardgrass, bentgrass, Bermudagrass, Kentucky bluegrass, big bluestem, smooth brome grass, buffalograss, reed canarygrass, centipedegrass, crabgrass, cupgrass, dallisgrass, sand dropseed, Kentucky fescue, meadow foxtail, eastern gramagrass, side-oats grama, guinea grass, Indian grass, Johnsongrass, lovegrass, napiergrass, oatgrass, orchardgrass, pangolagrass, paspalum, redtop, Italian ryegrass, St. Augustine grass, sprangletop, squirreltailgrass, stargrass, switchgrass, timothy, crested wheatgrass, wild ryegrass and zoysis grass. Also included are sudangrass and sorghum forages and their hybrids).

**NOTE: Use on grasses is limited to the States of Idaho, Oregon, and Washington.**

Pest	Rate oz/A (lbs ai/A)	Instructions	Restrictions
Alfalfa Caterpillar Alfalfa Looper Alfalfa Weevil Blue Alfalfa Aphid <sup>1</sup> Cutworms Egyptian Alfalfa Weevil (larvae & adult) Flea Beetles Green Cloverworm Green Peach Aphid <sup>1</sup> Hornworms Meadow Spittlebug Pea Aphid <sup>1</sup> Potato Leafhopper Spotted Alfalfa Aphid <sup>1</sup> Threecornered Alfalfa Hopper Velvetbean Caterpillar Webworms	5.3 to 16.0 <del>ozs/A</del> (0.033 to 0.1 <del>lbs ai/A</del> )	Apply as insects appear in sufficient volume of water to ensure thorough coverage of foliage.  Use higher specified rates for increased pest pressure or for increased residual pest control. Do not exceed maximum allowable rate.  Apply in a minimum of 2 gallons of finished spray per acre by aerial equipment or 10 gallons per acre by ground equipment.  Higher volumes of finished spray may improve insect control under higher temperatures, when foliage is dense and/or when insect pressure is high.	Do not apply more than 0.2 lbs. active ingredient per acre per season.  Do not make applications less than 14 days <b>apart</b> .
Armyworm, southern Armyworm, true Armyworm, yellowstriped Ant Cereal Leaf Beetle Chinch Bug Cricket Grass Mealybug	8.0 to 16.0 <del>ozs/A</del> (0.05 to 0.1 <del>lbs ai/A</del> )	Applications may be made up to 30 days prior to harvest for forage and hay.  <sup>1</sup> Aphid control may be	

Pest	Rate oz/A (lbs ai/A)	Instructions	Restrictions
Grasshoppers Range Caterpillar Stink Bugs Armyworm, fall Black Grass Bug		variable depending on species present and host-plant relationships.	
Hunting Bill Bug Plant Bug spp.	16.0 <del>ozs/A</del> (0.1 <del>lbs ai/A</del> )		

### Grapes

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI (days)</u>
Cutworms Eastern Grape Leafhopper Grape Berry Moth Japanese Beetles Adults Variegated Leafhopper Western Grape Leafhopper	8.0 to 16.0 (0.05 - 0.10)	Apply in a minimum of 10 gallons by air or in a minimum of 25 gallons with ground equipment. Thorough coverage is essential to achieve control. When pest pressure is moderate to severe, use higher rate. <del>Preharvest interval: 30 days.</del>  <i>[1 bag = 0.05 lb ai = 8 oz formulated product]</i>	Do not apply more than 16 oz product (0.10 lb ai) per acre per season.	<u>30</u>
Black Vine Weevil Glassywinged Sharpshooter Twospotted Spider Mite	16.0 (0.10)			

## Hops

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI</u> (days)
Aphids Armyworms Cutworms Leafrollers Loopers	9.6 to 16.0 (0.06 to 0.10)	<del>Preharvest interval: 14 days.</del> <b>Ground Application:</b> For best results, full coverage is essential. For early season applications use 100-150 gallons per acre. For late season applications use 200- 250 gallons per acre.	Do not apply more than 16 oz product (0.10 lb ai) per acre per application.	<u>14</u>
Root Weevils	8.0 to 16.0 (0.05 to 0.10)	For Root Weevil control, make a directed spray to the base of the plant. Spray up the bine 3 feet and the soil surface 1.5 to 2 feet on either side of the plant.	Do not apply more than 48 oz product (0.3 lb ai) per acre per season.	
Twospotted Spider Mite	16.0 (0.10)	<b>Air Application (for late season control of Twospotted Spider Mites):</b> Apply a minimum of 16 oz product (0.10 lb ai) per application in a minimum of 10 gallons per acre. <i>[1 bag = 0.05 lb ai = 8 oz formulated product]</i>	A spray interval of 21 days between applications must be maintained.	

## Leafy Petiole Vegetables

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

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	PHI (days)
Aphids Armyworms Crickets Corn Earworm Cucumber Beetles Cutworms Diamondback Moth Flea Beetles Ground Beetles Imported Cabbageworm Leafhoppers Loopers Saltmarsh Caterpillar Stink Bugs Thrips Tobacco Budworm Whiteflies Wireworm (Adults)	5.3 to 16.0 (0.033 to 0.10)	Apply in at least 2 gallons per acre by air or at least 10 gallons per acre with ground equipment. Thorough coverage is essential to achieve control. <del>Preharvest</del> <del>interval: 7 days.</del>  <i>[1 bag = 0.05 lb ai = 8 oz formulated product]</i>	Do not apply more than 80 oz product (0.5 lb ai) per acre per season. Do not make applications less than 7 days apart.	<u>7</u>
Banks Grass Mite Carmin Mite <i>Lygus</i> spp. Pacific Spider Mite Twospotted Spider Mite	12.8 to 16.0 (0.08 to 0.10)			

## Lettuce, Head

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI</u> (days)
Aphids Armyworms Corn Earworm Cucumber Beetles Cutworms Diamondback Moth Flea Beetles Imported Cabbageworm Leafhoppers Loopers Saltmarsh Caterpillar Stink Bug Spp. Tobacco Budworm	5.3 to 16.0 (0.033 - 0.10)	Apply as necessary for insect control using a minimum of 20 gallons per acre with ground equipment and 5 gallons per acre by air.  Thorough coverage is essential to achieve control. <del>Preharvest interval: 7 days.</del>  <i>[1 bag = 0.05 lb ai = 8 oz formulated product]</i>	Do not make applications less than 7 days apart.  Do not apply more than 80 oz product (0.5 lb ai) per acre per season.	<u>7</u>
Carmine Mite <i>Lygus</i> Spp. Two Spotted Spider Mite Whiteflies	12.8 to 16.0 (0.08 - 0.10)			

## Mayhaw

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	PHI (days)
Plum Curculio	12.8 to 16.0  (0.08 to 0.10)	Make foliar applications in at least 28 gallons per acre. <del>Preharvest interval: 30 days.</del>  <i>[1 bag = 0.05 lb ai = 8 oz formulated product]</i>	Do not apply more than once every 7 days.  Do not apply more than 32 oz product (0.2 lb ai) per acre per season.	<u>30</u>

## Peanut

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	PHI (days)
Beet Armyworm Corn Earworm Cutworm Spp. Fall Armyworm Grasshoppers Green Cloverworm Leafhoppers Lesser Cornstalk Borer Loopers Redneck Peanut Worm Southern Armyworm Southern Corn Rootworm Stink Bugs Threecornered Alfalfa Hopper Velvetbean Caterpillar Yellowstriped Armyworm	5.3 to 16.0  (0.033 to 0.10)	Make foliar applications in at least 10 gallons per acre at the rate of 16.0 oz product (0.10 lb ai) per acre at a minimum of 14 day intervals. <del>Preharvest interval: 14 days.</del>  <i>[1 bag = 0.05 lb ai = 8 oz formulated product]</i>	Do not apply more than 80 oz product (0.5 lb ai) per acre per season.	<u>14</u>
Aphids Spider Mites Thrips Whiteflies	5.12 to 16.0  (0.08 to 0.10)			



## Pears

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI</u> (days)
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 Bugs	6.4 to 32.0 (0.04 to 0.2)	<p><b>Ground Application:</b> Apply as a dilute (minimum of 200 gallons per acre) or concentrate (minimum of 50 gallons per acre) spray in sufficient water to provide thorough coverage.</p> <p><b>Air Application:</b> Apply in a minimum of 10 gallons per acre by air.</p> <p>Apply as needed to maintain control using a minimum of 30-day spray interval.</p> <p><del>Preharvest interval: 14 days.</del></p> <p><i>[1 bag = 0.05 lb ai = 8 oz formulated product]</i></p>	<p>Do not apply more than 80 oz product (0.5 pound ai) per acre per season with no more than 0.45 pound ai per acre applied after petal fall.</p> <p>Do not graze livestock in treated orchards or cut treated cover crops for feed.</p>	<u>14</u>
Yellow Spider Mite	9.6 to 32.0 (0.06 to 0.2)			
European Red Mite Twospotted Spider Mite	12.8 to 32.0 (0.08 to 0.2)			

### Root Crops (except sugarbeets)

Crops	Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	PHI (days)
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	Aphids Beet Armyworm Celery Leaf-tier Corn Earworm Cross-striped Cabbageworm Cutworms Diamondback Moth European Corn Borer Fall Armyworm Fire Ants Green Cloverworm Hornworms Imported Cabbageworm Loopers Southern Armyworm Tobacco Budworm Velvetbean Caterpillar Yellowstriped Armyworm Spider Mites Whiteflies	12.8 to 16.0 (0.08 to 0.10)	Make foliar applications in at least 25 gallons per acre. <del>Preharvest interval: 21 days.</del>  <i>[1 bag = 0.05 lb ai = 8 oz formulated product]</i>	Apply no more than once every 7 days. Do not apply more than 80 oz product (0.5 lb ai) per acre per season.	<u>21</u>
Garden Beet	Aphids Fire Ants Flea Beetles Lepidopterous Larvae Spider Mites Whitefly	12.8 to 16.0 (0.08 to 0.10)	Make foliar applications in at least 25 gallons per acre. <del>Preharvest interval: 1 day.</del>	Apply no more than once every 7 days. Do not apply more than 64 oz product (0.4 lb ai) per acre per season.	<u>1</u>

## Soybean

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI (days)</u>
Soybean Aphid	5.3 to 16.0 (0.033 to 0.10)	Make foliar applications in at least 10 gallons per acre at the rate of 16 oz product (0.10 lb ai) per acre at a minimum of 30 day intervals.	Do not apply more than 48 oz product (0.3 lb ai) per acre per season.  Apply no more than once every 7 days.	<u>18</u>
Spider Mites	12.8 to 16.0 (0.08 to 0.10)	<del>Preharvest interval: 18 days.</del>  <i>[1 bag = 0.05 lb ai = 8 oz formulated product]</i>		

## Spinach

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI (days)</u>
Armyworms Colorado Potato Beetle Corn Earworm Cucumber Beetles Cutworms European Corn Borer Flea Beetles Leafminers Loopers Pepper Weevil Thrips Tomato Pinworm Tomato Hornworm	5.3 to 16.0 (0.033 to 0.10)	For control of fire ants apply Bifenture 10 WSB/DF to the soil (at planting) or as a foliar treatment by ground or air at rates of up to 16 oz product (0.10 lb ai) per acre at minimum 7-day intervals up to a maximum of 4 applications. <del>Preharvest interval: 40 days.</del> Apply in 5-50 gallons per acre by air or 10-50 gallons finished spray per acre by ground. For control of Whiteflies apply foliar treatments of Bifenture 10 WSB/DF by ground or air at rates up to 16 oz product (0.10 lb ai) per acre at minimum 7-day intervals up to a maximum of 4 applications.  <i>[1 bag = 0.05 lb ai = 8 oz formulated            product]</i>	Do not make applications less than 7 days apart. Do not apply more than 64 oz product (0.4 lb ai) per acre per season.	<u>40</u>
Broad Mite Banks Grass Mite Carmine Mite Fire Ants <i>Lygus</i> Spp. Pacific Spider Mite Twospotted Spider Mite Whiteflies	12.8 to 16.0 (0.08 to 0.10)			

## Strawberries

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI (days)</u>
Aphids Armyworms Fleabeetles <i>Heliothis</i> Spp. Leafrollers <i>Lygus</i> Spp. Plant Bugs Spittlebugs Stink Bugs Strawberry Clipper Strawberry Sap Beetle	6.4 to 32.0 (0.04 to 0.2)	Apply when pest populations reach damaging thresholds. Repeat as necessary at 7-14 day intervals. <del>Preharvest interval: 0 days.</del> <b>Ground Application:</b> Apply in a minimum of 50 gallons per acre. <b>Air Application (prohibited in Florida):</b> Apply in a minimum of 5 gallons per acre.	Do not apply more than 80 oz product (0.5 lb ai) per acre per season.	<u>0</u>
Black Vine Weevil Strawberry Root Weevil Thrips Vinegar Flies (adults) <i>Drosophila</i> spp. (including spotted winged drosophila)	8.0 to 32.0 (0.05 to 0.2)	<i>[1 bag = 0.05 lb ai = 8 oz formulated product]</i>		
Spider Mites	16.0 to 32.0 (0.10 to 0.2)			

**CALIFORNIA SPECIFIC REQUIREMENTS FOR STRAWBERRY HARVESTERS:** Harvesters and other personnel performing tasks with all-day foliage contact in treated fields within five (5) days of application must wear a long-sleeved shirt, long pants, and shoes plus socks.

Following treatment of strawberry fields at rates of Bifenture 10WSB/DF greater than 0.10 lb ai/acre, harvesters must wear gloves for five (5) days following application.

## 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 oz/A (lb ai/A)	Instructions	Restrictions	PHI (days)
Grubs Maggots Wireworms	8.0 to 16.0 (0.05 – 0.10)	<b>Planting Time Use:</b> For Wireworms, maggots or grubs, apply in-furrow with the seed or transplant. <b>Foliar Use:</b> Apply in a minimum of 2 gallons per acre by air or in a minimum of 10 gallons per acre with ground equipment.	Do not apply more than 32 oz product (0.2 lb ai) per acre per season including at plant applications.	<u>3</u>
Aster Leafhopper Flea Beetle Grasshoppers Leafhoppers	4.0 to 16.0 (0.025 - 0.10)	Thorough coverage is essential to achieve control. <del>Preharvest interval: 3 days.</del>		
Adult Sap Beetle Alfalfa Caterpillar Aphids Bean Leaf Beetle Beet Armyworm Cloverworm Corn Earworm Corn Rootworm Adult Cucumber Beetles Cutworms European Corn Borer Fall Armyworm Japanese beetle Loopers Pea Leaf Weevil Pea Weevil Plant Bug Southern Armyworm Stink Bugs Tarnished Plant Bug Thrips Yellowstriped Armyworm Webworms Western Bean Cutworm	5.3 to 16.0 (0.033 - 0.10)	[1 bag = 0.05 lb ai = 8 oz formulated product]		

Banks Grass Mite	12.8 to		
Carmin Mite	16.0		
<i>Lygus</i> Spp.	(0.08 -		
Twospotted	0.10)		
Spider Mite			
Whiteflies			

## Tree Nut Crops

Almond, Beech nut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia nut (bush nut), Pecan, Pistachio, Walnut (black and English)

Pest	Rate oz/A (lb ai/A)	Instructions	Restrictions	<u>PHI (days)</u>
Black Pecan Aphid Codling Moth Filbert Worm Hickory Shuckworm Leaffooted Bugs Navel Orangeworm Obliquebanded Leafroller Peach Twig Borer Pecan Leaf Casebearer Pecan Nut Casebearer Pecan Phylloxera Plant Bugs Stink Bugs Walnut Aphid Yellow Pecan Aphid	8.0 to 32.0 (0.05 to 0.20)	<p><b>Ground Application:</b> Apply as a dilute (minimum of 200 gallons per acre) or concentrate (minimum of 50 gallons per acre) spray in sufficient water to provide thorough coverage.</p> <p><b>Air Application:</b> Apply in a minimum of 10 gallons of finished spray per acre.</p> <p>Minimum Spray Intervals: Apply Bifenture 10WSB/DF as needed to maintain control, but do not apply at intervals sooner than 15 days.</p> <p><del>Observe a 21 day PHI for pecans and a 7 day PHI for all other registered tree nut crops.</del></p> <p><i>[1 bag = 0.05 lb ai = 8 oz formulated product]</i></p>	<p>Do not apply more than 32 oz product (0.2 lb ai) per acre per application; do not apply more than 80 oz product (0.50 lb ai) per acre per season.</p> <p>Do not graze livestock in treated orchards or cut treated cover crops for feed.</p>	<p><u>Pecans: 21</u> <u>Others: 7</u></p>
European Red Mite Pecan Weevil Spider Mites	12.8 to 32.0 (0.08 to 0.20)			
Fire Ants Walnut Husk Fly	16.0 to 32.0 (0.10 to 0.20)			



## STORAGE AND DISPOSAL

**Pesticide Storage:** 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 store at temperatures below 32°F (0°C). Rough handling may cause breakage, especially at low temperatures. Allow to warm above 50°F (10°C) before use. [Do not allow inner bags to become wet during storage. Do not handle inner bag with wet hands or wet gloves.] Do not put concentrate or diluted material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

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

To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

### Container Handling:

[non-WSB packaging in bags] Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment, then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

[non-WSB packaging in plastic jugs] Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for ~~alter-later~~ use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

*[WSB packaging] Nonrefillable container. Do not reuse or refill this container. When all water soluble bags are used, the outer package should be clean and may be disposed of in a sanitary landfill, by incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke. If the outer container contacts formulated product in any way, it must be triple rinsed with clean water. Triple rinse as follows: empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and close tightly. 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.*

## Dealers Must Sell in Original Packages Only.

IMPORTANT INFORMATION  
READ BEFORE USING PRODUCT

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

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

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of ~~United Phosphorus, Inc. UPL NA Inc.~~ or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of ~~United Phosphorus, Inc. UPL NA Inc.~~ and Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold ~~United Phosphorus, Inc. UPL NA Inc.~~ and Seller harmless for any claims relating to such factors.

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[Optional text:



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