

RESTRICTED USE PESTICIDE

DUE TO TOXICITY 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.

INSECTICIDE



LAMBDA-CYHALOTHRIN

GROUP

3A

INSECTICIDE

RAVAGE® II



ACTIVE INGREDIENT:

Lambda-cyhalothrin¹ :

[1a(S*),3a(Z)]-(±)-cyano-(3-phenoxyphenyl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate

% BY WT.

22.8%

OTHER INGREDIENTS*:

77.2%

TOTAL:

100%

Contains 2.19 lb of active ingredient per gallon and is a capsule suspension.

¹ Synthetic pyrethroid

KEEP OUT OF REACH OF CHILDREN WARNING

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.)

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE
INCLUDING STORAGE AND DISPOSAL

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Distributed By:
INNICTIS® CROP CARE, LLC
1880 Fall River Drive, Suite 100
Loveland, CO 80538

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FIRST AID	
IF SWALLOWED	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • DO NOT give any liquid to the person. • DO NOT induce vomiting unless told to do so by the poison control center or doctor. • DO NOT give anything by mouth to an unconscious person.
IF IN EYES	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for 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.
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 mouth to mouth, if possible. • Call a poison control center or doctor for treatment advice.
NOTE TO PHYSICIAN Contains petroleum distillate -vomiting may cause aspiration pneumonia.	
HOTLINE NUMBER Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact CHEMTREC at 1-800-424-9300 for emergency medical treatment information.	

**For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident,
 Call CHEMTREC Day or Night
 Within USA and Canada: 1-800-424-9300**

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS WARNING/AVISO

May be fatal if swallowed. Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin or clothing. Avoid breathing (vapor or spray mist). Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Skin exposure may also result in a sensation described as a tingling, itching, burning, or prickly feeling. Onset may occur immediately to 4 hrs after exposure and may last 2 – 30 hrs, without damage. Wash exposed areas once with soap and water. Relief from the skin sensation may be obtained by applying an oil-based cream. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and Other Handlers Must Wear:

- long-sleeved shirt & long pants
- chemical- resistant gloves, made of barrier laminate or Viton ≥ 14 mils
- shoes plus socks
- protective eyewear

Nurseries (ornamentals, vegetables, trees, container stock):

- Foliar broadcast spray treatment using a mechanically pressurized handgun on nurseries and
- Drench/soil ground directed liquid treatment using a mechanically pressurized handgun.

Mixers, loaders, and applicators must wear long-sleeved shirt, long pants, shoes and socks, gloves, and a respirator.

Wear a minimum of a NIOSH-approved elastomeric half mask respirator with organic vapor (OV) cartridges and combination N, R, or P filters; OR a NIOSH-approved gas mask with OV canisters; OR a NIOSH-approved powered air purifying respirator with OV cartridges and combination HE filters.

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.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirement listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Users should:	User Safety Recommendations
<ul style="list-style-type: none"> • Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. • Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. • Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. 	

ENVIRONMENTAL HAZARDS

This product is extremely toxic to fish and other aquatic organisms. **DO NOT** contaminate water when cleaning equipment or disposing of equipment wash water. **DO NOT** apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Apply this product only as specified on this label. When making applications, care should be used to avoid household pets, particularly fish and reptile pets.

This product is highly toxic to bees and other pollinating insects exposed to direct treatment or residues in/on blooming crops or weeds. Protect pollinating insects by following label directions intended to minimize drift and reduce pesticide risk to these organisms. **DO NOT** apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. **Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.**

Physical and Chemical Hazards

DO NOT use this product in or on electrical equipment due to the possibility of shock hazard. **DO NOT** use with or store near oxidizing agents.

DIRECTIONS FOR USE Restricted Use Pesticide

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

Shake well before using.

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170.

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

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours for all crops except the following specific activities associated with corn in which a 48 REI applies:

- Hand detasseling or mechanically assisted detasseling of field corn grown for seed.
- Hand detasseling or mechanically assisted detasseling of pop corn grown for seed.
- Hand detasseling or mechanically assisted detasseling of sweet corn grown for seed.
- Hard harvesting of sweet corn grown for grain.

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, including plants, soil, or water, is:

- coveralls
- chemical- resistant gloves, made of barrier laminate, nitrile rubber, neoprene rubber or Viton \geq 14 mils
- shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

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

Keep children and pets out of the treated area until sprays have dried. AVOID working in spray mist.

Keep all unprotected persons out of operating areas or vicinity where there may be danger of drift. Certain states may require more restrictive reentry intervals; consult your State Department of Agriculture for further information.

PRODUCT INFORMATION

RAVAGE II is a unique formulation which is a proprietary blend of ingredients for use with the active ingredient Lambda-cyhalothrin.

Failure to follow the directions for use and precautions on this label may result in poor insect control, crop injury, or illegal residues.

Initial and residual control are contingent upon thorough crop coverage. Apply with ground or aerial equipment using sufficient water to obtain full coverage of foliage. Apply in a minimum of 2 gal per acre by air or 10 gal per acre by ground unless otherwise specified in this label. When foliage is dense or pest pressure is high (heavier insect or egg pressure, larger larval stages), use of higher application volumes and/or higher labeled rates may improve initial and residual control.

For cutworm control, **RAVAGE II** may be applied before, during, or after planting. For soil-incorporated applications, use higher labeled rates for improved control.

RESISTANCE MANAGEMENT

For resistance management this product contains a Group 3A insecticide. Any insect population may contain individuals naturally resistant to this product and other Group 3A insecticide. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps:

- Rotate the use of this product or other Group 3A insecticides within a growing season, or among growing seasons, with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. **DO NOT** rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues between the individual components of a mixture. In addition, consider the following recommendation provided by Insecticide Resistance Action Committee (IRAC).
 - Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
 - Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
 - When using mixtures, consider any known cross-resistance issues between the individual components for the target pest(s).
 - Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
 - The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance management and/or IPM recommendations for the specific sit and pest problems in your area.
- For further information or to report suspected resistance, contact Innvictis Crop Care at 855-466-8428 You can also contact your pesticide distributor or university extension specialist to report resistance

SPRAY DRIFT PRECAUTIONS

OBSERVE THE FOLLOWING PRECAUTIONS 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:

MANDATORY SPRAY DRIFT MANAGEMENT

Aerial Applications:

- **DO NOT** release spray at a height greater than 10 ft above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to select nozzle and pressure that deliver medium or coarser droplets (ASABE S641).
- **DO NOT** apply when wind speeds exceed 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- If the windspeed is 10 miles per hour or less, applicators must use ½ swath displacement upwind at the downwind edge of the field. When the windspeed is between 11-15 miles per hour, applicators must use ¾ swath displacement upwind at the downwind edge of the field
- **DO NOT** apply during temperature inversions.

Airblast Applications:

- Sprays must be directed into the canopy.
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- User must turn off outward pointing nozzles at row ends and when spraying outer rows.
- **DO NOT** apply during temperature inversions.

Ground Boom Applications:

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (ASABE S572).
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Boomless Ground Application

- Applicators are required to select nozzle and pressure that deliver a Medium or coarser droplet size (ASABE S572) for all applications.
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.
BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground Boom

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size – Aircraft

- Adjust Nozzles - Follow nozzle manufacturers' recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

BOOM HEIGHT - Ground Boom

For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

HANDHELD TECHNOLOGY APPLICATIONS

Take precautions to minimize spray drift.

VEGETATIVE FILTER STRIPS

Construct and maintain a vegetative filter strip, according to the width specified below, of grass or other permanent vegetation between the field edge and nearby down gradient aquatic habitat (including, but not limited to, lakes; reservoirs; rivers; streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing Lambda-Cyhalothrin onto fields where a maintained vegetative filter strip of at least 25 feet exists between the field edge and where a down gradient aquatic habitat exists. This minimum required width of 25 feet may be reduced or removed under the following conditions:

- For Western irrigated agriculture, a maintained vegetative filter strip of at least 10 feet wide is required. Western irrigated agriculture is defined as irrigated farmland in the following states: WA, OR, CA, ID, NV, UT, AZ, MT, WY, CO, NM, and TX (west of I-35).
 - For Western irrigated agriculture, if a sediment control basin is present, a vegetative filter strip is not required.
- In all other areas, a vegetative filter strip with a minimum width of 25 feet is required, unless the following conditions are met. The vegetative filter strip requirement may be reduced from 25 feet to 15 feet if at least one of the following applies:
 - The area of application is considered prime farmland (as defined in 7 CFR § 657.5).
 - Conservation tillage is being implemented on the area of application. Conservation tillage is defined as any system that leaves at least 30% of the soil surface covered by residue after planting. Conservation tillage practices can include mulch-till, no-till, or strip-till.
 - A functional terrace system is maintained on the area of application.

Water and sediment control basins for the area of application are functional and maintained.

- The area of application is less than or equal to 10 acres.

For further guidance on vegetated filter strips, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. <https://www.regulations.gov/document?D=EPA-HQ-OPP-2008-0331-0175>

Ground Application

- **DO NOT** apply within 25 feet of aquatic habitats (including, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

Ultra Low Volume (ULV) Aerial Application

- **DO NOT** apply within 450 feet of aquatic habitats (including, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds). Applications made by mosquito control districts and other public health officials are exempt from this requirement.

Non-ULV Aerial Application

- **DO NOT** apply within 150 feet of aquatic habitats (including, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

TANK MIX APPLICATION

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

When tank mixing with any other agricultural products, always add **RAVAGE II** last. Fill the tank with $\frac{1}{2}$ to $\frac{2}{3}$ volume of the mixing diluent. Make sure other products are fully dispersed in the mixing diluent before adding the labeled rate of **RAVAGE II** to the tank. Add the remainder of the mixing diluent volume. It is recommended that mixing and spray equipment have continuous agitation for best results.

Follow the precautions and limitations of the most restricted product in the tank mixture.

While **RAVAGE II** has good flexibility for tank mixing with other agricultural products, a jar test for physical compatibility is recommended for untried mixtures, using proper ratios and mixing sequences of all ingredients to be included in the mixture.

RAVAGE II is an aqueous based formulation. It is recommended that no type of non-emulsifiable oils be used in combination with **RAVAGE II**. If adjuvants are used, use only:

- Nonionic Surfactant (NIS) containing at least 75% surface agent, or
- Nonphytotoxic Crop Oil Concentrate (COC), including once-refined Vegetable Oil Concentrate (VOC), or,
- Methylated Sunflower Oils (MSO) containing a minimum of 17% emulsifier.

Adjuvants other than NIS or COC may be used providing the product meets the following criteria:

- Contains only EPA exempt ingredients.
- Is nonphytotoxic to the target crop.
- Is compatible in mixture. (May be established through a jar test.)
- Is supported locally for use with **RAVAGE II** on the target crop through proven field trials and through university and extension recommendations.

In addition, the following may be used as diluents:

- Crop Oil Concentrate
- Methylated Sunflower Oils
- Urea-Ammonium Nitrate

It is recommended that the following not be used in combination with **RAVAGE II** as diluents or adjuvants:

- Nonemulsifiable oils,
- Diesel Fuel
- Straight Mineral Oil

CHEMIGATION

Sprinkler Irrigation Application

Apply **RAVAGE II** at rates and timing described elsewhere in this label. As local recommendations differ, consult your local State Extension Service or other local experts for recommendations on adjuvant or diluent types, (see **TANK MIX APPLICATION**) rates and mixing instructions. These recommendations should be proven, through university and extension field trials, to be effective with **RAVAGE II** applied by chemigation.

Check the irrigation system to insure uniform application of water to all areas. Thorough coverage of foliage is required for good control. Good agitation in the pesticide supply tank should be maintained prior to and during the entire application period.

Apply by injecting the recommended rate of **RAVAGE II** into the irrigation system using a metering device that will introduce a constant flow and by distributing the product to the target area in 0.1-0.2 acre-inch of water. In general, use the least amount of water required for proper distribution and coverage. It is recommended that the product be injected into the main irrigation line ahead of a right angle turn in the line to insure adequate dispersion or mixing in the irrigation water. Once the application is completed, flush the entire irrigation and injection system with clean water before stopping the system.

In addition to the above recommendations, if application is being made during a normal irrigation set of a stationary sprinkler, the recommended rate of **RAVAGE II** for the area covered should be injected into the system only during the end of the irrigation set for sufficient time to provide adequate coverage and product distribution.

It is not recommended that **RAVAGE II** be applied through an irrigation system connected to a public water system. Public water system means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Use Precautions - Sprinkler Irrigation Applications

- Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move. **DO NOT** apply this product through any other type of irrigation system.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have any questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers, or other experts.
- DO NOT** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label prescribed safety devices for public water systems are in place.
- A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
- 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 back-flow.
- 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.

- J. 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.
- K. Systems must use a metering pump, including a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and are capable of being fitted with a system interlock.
- L. Any alternatives to the above required safety devices must conform to the list of EPA-approved alternative devices.
- M. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment or non-uniform distribution of treated water.
- N. **DO NOT** apply through chemigation systems connected to public water systems.

DO NOT apply as foliar broadcast application using a mechanically pressurized handgun on Brassica (head and stem), Cucurbit Vegetables, Fruiting Vegetables, Garlic, Legume Vegetables, Lettuce (head and leaf), Onion (dry bulb), Tobacco, Tuberous and Corn Vegetables.

Removable chemical extraction probes (also known as "stingers") used in suction/extraction systems must be rinsed within the pesticide container prior to removal.

Following best management practices can help reduce risk to terrestrial pollinators. Examples of best management practices include applying pesticides in the evening and at night when pollinators are not foraging and checking to confirm hive locations before spraying. For additional resources on pollinator best management practices, visit <https://www.epa.gov/pollinator-protection/find-best-management-practices-protect-pollinators>.

Managed pollinator protection plans are developed by states/tribes to promote communication between growers, landowners, farmers, beekeepers, pesticide users, and other pest management professionals to reduce exposure of bees to pesticides. If available, visit state plans for additional information on how to protect pollinators.

How to Report Bee Kills

It is recommended that users contact both the state lead agency and the U.S. Environmental Protection Agency to report bee kills due to pesticide application. Bee kills can be reported to EPA at beekill@epa.gov. To contact your state lead agency, see the current listing of state pesticide regulatory agencies at the National Pesticide Information Center's website: http://npic.orst.edu/reg/state_agencies.html

SPECIFIC USE DIRECTIONS AGRICULTURAL USES

ALFALFA AND ALFALFA GROWN FOR SEED

Target Pests	Rate	
	lb a.i./A	fl oz/A
Alfalfa Caterpillar Army Cutworm Cutworm species Green Cloverworm Leafhopper species	Looper species Three-cornered Alfalfa Hopper Velvetbean Caterpillar Webworm species	0.015-0.025 0.96-1.60
Alfalfa Seed Chalcid (Adult) Alfalfa Weevil Armyworm Bean Leaf Beetle (Adult) Blister Beetle species Blue Alfalfa Aphid Clover Leaf Weevil species Clover Root Borer (Adult) Clover Root Curculio species (Adult) Clover Stem Borer (Adult) Corn Earworm Cowpea Aphid Cowpea Curculio (Adult) Cowpea Weevil (Adult) Cucumber Beetle species (Adult) Egyptian Alfalfa Weevil Fall Armyworm ¹	Grape Colaspis (Adult) Grasshopper species Green June Beetle (Adult) Green Peach Aphid Japanese Beetle (Adult) Meadow Spittlebug Mexican Bean Beetle Pea Aphid Pea Weevil (Adult) Plant Bug species including Lygus species ³ Spotted Alfalfa Aphid Stink Bug species Sweet Clover Weevil (Adult) Thrips species ⁴ Western Yellow-striped Armyworm Whitefringed Beetle species (Adult) Yellow-striped Armyworm	0.02-0.03 1.28-1.92
Beet Armyworm ^{1,3} Blotch Leafminer ³	Spider Mites ²	0.03 1.92
USE DIRECTIONS <ul style="list-style-type: none"> Apply as required by scouting. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds. Avoid application when bees are actively foraging by applying during the early morning or during the evening hours. Be aware of bee hazard resulting from a cool evening and/or morning dew. It may be advisable to remove bee shelters during and for 2-3 days following application. Avoid direct application to bee shelters. 		

ALFALFA AND ALFALFA GROWN FOR SEED Cont.

RESTRICTIONS

- Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. Apply in a minimum of 2 gal per acre by air or 10 gal per acre by ground. When foliage is dense and/or pest populations are high 5-10 gal per acre by air or 20 gal per acre by ground and higher label rates are recommended. Use higher label rates for increased residual control.
- **DO NOT** apply more than 0.03 lb a.i. (1.92 fl oz or 0.12 pt of product) per acre per cutting.
- **DO NOT** apply more than 0.12 lb a.i. (7.68 fl oz or 0.48 pt of product) per acre per season.
- **DO NOT** apply within 1 day of harvest for forage (1-day PHI) or within 7 days of harvest for hay (7-day PHI).

¹ Use higher labeled rates for large larvae.

² Suppression only.

³ See Resistance statement under Directions for Use.

⁴ Does not include Western Flower Thrips.

CANOLA

Target Pests		Rate	
		lb a.i./A	fl oz/A
Armyworm species	Flea Beetle	0.015-0.03	0.96-1.92
Cabbage Seedpod Weevil	Grasshoppers		
Cutworm species	Looper species		
Diamondback Moth	Lygus Bug		
Cabbage Aphid		0.03	1.92

USE DIRECTIONS

- Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic threshold.
- Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply a minimum of 2 gal of water per acre.

RESTRICTIONS

- **DO NOT** apply more than 0.09 lb a.i. (5.76 fl oz or 0.36 pt of product) per acre per year.
- **DO NOT** apply within 7 days of harvest (7-day PHI).

CEREAL GRAINS: Corn (at Plant): Field Corn, Popcorn, Seed Corn, Sweet Corn

Target Pests		Rate	
		lb a.i./A	fl oz/A
Corn Rootworm Larvae:	Lesser Cornstalk Borer	0.002 lb a.i. per 1000 ft of row ²	0.12 fl oz per 1000 ft of row ²
Mexican	Red Imported Fire Ant ¹		
Northern	Seedcorn Beetle		
Southern	Seedcorn Maggot		
Western	White Grub species		
Cutworm species	Wireworm species		

USE DIRECTIONS

- Banded Applications- Apply at planting as a 5-7 inch T-band sprayed across the open seed furrow between the furrow openers and the press wheels or as a band application behind the press wheel.
- In-Furrow Applications- Apply into the seed furrow through spray nozzles or microtubes, behind the planter furrow openers and in front of the press wheel.

RESTRICTIONS

- Apply a minimum of 3 gal finished spray per acre.
- **DO NOT** harvest or graze livestock or cut treated crops for feed within 21 days of at plant application.
- **DO NOT** apply more than 0.032 lb a.i. (2.05 fl oz or 0.13 pt of product) per acre per crop at plant.
- For field corn, popcorn, and seed corn
 - **DO NOT** apply more than 0.12 lb a.i. (7.68 fl oz or 0.48 pt of product) per acre per crop from at plant and foliar applications.
- For sweet corn
 - **DO NOT** apply more than 0.48 lb a.i. (30.72 fl oz or 1.92 pt of product) per acre per crop from at plant and foliar applications.
- REI is 48 hours for the following activities:
 - Hand detasseling or mechanically assisted detasseling of field corn grown for seed.
 - Hand detasseling or mechanically assisted detasseling of popcorn grown for seed.
 - Hand detasseling or mechanically assisted detasseling of sweet corn grown for seed.
 - Hand harvesting of sweet corn grown for grain.

¹ Suppression only.

² lb a.i. and fl oz/A of RAVAGE II Applied at 0.12 fl oz/1000 ft of Row for Various Row Spacings						
Row Spacing	40"	38"	36"	34"	32"	30"
Linear Ft./A	13,068	13,756	14,520	15,374	16,335	17,424
Lb a.i./A	0.024	0.023	0.025	0.026	0.028	0.030
Fl oz/A	1.4	1.5	1.6	1.7	1.8	1.9

CEREAL GRAINS: Corn (Foliar), Field Corn, Popcorn, Seed Corn

Target Pests		Rate	
		lb a.i./A	fl oz/A
Corn Earworm ¹ Cutworm species Green Cloverworm	Meadow pittlebug Western Bean Cutworm ¹	0.015-0.025	0.96-1.60
Armyworm ² Bean Leaf Beetle Bird Cherry-Oat Aphid ³ Cereal Leaf Beetle Corn Leaf Aphid ³ Corn Rootworm Beetle (Adult): Mexican Northern Southern Western English Grain Aphid ³ European Corn Borer ¹ Fall Armyworm ²	Flea Beetle species Grasshopper species Hop Vine Borer ¹ Japanese Beetle (Adult) Lesser Cornstalk Borer Sap Beetle (Adult) Seedcorn Beetle Southwestern Corn Borer ¹ Stalk Borer ¹ Stink Bug species Tobacco Budworm ^{1,4} Webworm species Yellowstriped Armyworm ²	0.02-0.03	1.28-1.92
Beet Armyworm ⁴ Chinch Bug Greenbug ⁴ Mexican Rice Borer ¹	Rice Stalk Borer ¹ Southern Corn Leaf Beetle ³ Sugarcane Borer ¹	0.03	1.92

USE DIRECTIONS

- Apply as required by scouting, or locally prescribed corn growth stages, usually at intervals of 7 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds or other locally recommended methods.
- Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of target location. When applying by air, apply in a minimum of 2 gal of water per acre.
- For chinch bug control, begin applications when bugs migrate from small grains or grass weeds to small corn. Direct spray to the base of corn plants. Repeat applications at 3-5-day intervals if needed. **RAVAGE II** may only suppress heavy infestations and/or subsequent migrations.

RESTRICTIONS

- **DO NOT** allow livestock to graze in treated areas or harvest treated corn forage as feed for meat or dairy animals within 1 day after last treatment.
- **DO NOT** feed treated corn fodder or silage to meat or dairy animals within 21 days after last treatment.
- **DO NOT** apply more than 0.12 lb a.i. (7.68 fl oz or 0.48 pt of product) per acre per crop from at plant and foliar applications.
- **DO NOT** apply more than 0.06 lb a.i. (3.84 fl oz or 0.24 pt of product) per acre after silk initiation.
- **DO NOT** apply more than 0.03 lb a.i. (1.92 fl oz or 0.12 pt of product) per acre after corn has reached the milk stage (yellow kernels with milky fluid).
- **DO NOT** apply within 21 days of harvest (21-day PHI).

¹ For control before the larva bores into the plant stalk or ear.

² Use higher labeled rates for large larvae.

³ Suppression only.

⁴ See Resistance statement under Directions for Use.

CEREAL GRAINS: Sweet Corn (Foliar)

Target Pests		Rate	
		lb a.i./A	fl oz/A
Aphid species ^{2,3} Armyworm ¹ Aster Leafhopper Beet Armyworm ^{1,3} Chinch Bug Common Cornstalk Borer Corn Earworm Corn Rootworm Beetle (Adult): Mexican Northern Southern Western Cutworm species European Corn Borer	Fall Armyworm ¹ Flea Beetle species Grasshopper species Japanese Beetle (Adult) Sap Beetle (Adult) Southern Armyworm ¹ Southwestern Corn Borer Spider Mite species ² Stink Bug species Tarnished Plant Bug Webworm species Western Bean Cutworm Yellowstriped Armyworm ¹	0.02-0.03	1.28-1.92
Corn Silktly (Adult) ²		0.03	1.92
USE DIRECTIONS <ul style="list-style-type: none"> • Apply as required by scouting, or locally prescribed corn growth stages, usually at intervals of 4 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds or other target locally recommended methods for control before insects enter the stalk or ear. • Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of foliage and ears (if present). When applying by air, apply in a minimum of 2 gal of water per acre. • For control of adult corn rootworm beetles (Diabrotica species) as part of an aerial applied corn rootworm control program use a minimum of 0.025 lb a.i. (1.60 fl oz of product) per acre 			
RESTRICTIONS <ul style="list-style-type: none"> • DO NOT allow livestock to graze in treated areas or harvest treated corn forage as feed for meat or dairy animals within 1 day after last treatment. • DO NOT feed treated corn fodder or silage to meat or dairy animals within 21 days after last treatment. • DO NOT apply more than 0.48 lb a.i. (30.72 fl oz or 1.92 pt of product) per acre per crop from at plant and foliar applications. • DO NOT apply within 1 day of harvest (1-day PHI). 			

¹ Use higher labeled rates for large larvae.

² Suppression only.

³ See Resistance statement under Directions for Use.

CEREAL GRAIN: Rice, Wild Rice

Target Pests	Rate	
	lb a.i./A	fl oz/A
Bird Cherry-Oat Aphid Chinch Bug Fall Armyworm Grasshopper species Greenbug Leafhopper species Rice Stink Bug	Rice Water Weevil (Adult) Riceworm Sharpshooter species True Armyworm Yellow Sugarcane Aphid Yellowstriped Armyworm	0.025-0.04 1.6-2.56
European Corn Borer ¹ Mexican Rice Borer ¹ Rice Seed Midge ¹	Rice Stalk Borer ¹ Sugarcane Borer ¹	0.03-0.04 1.92-2.56

USE DIRECTIONS

- Apply as required by scouting. Base timing and frequency of application upon insect populations reaching locally determined economic thresholds. Determine the need for repeat applications, usually at intervals of 5 - 7 days, by scouting.
- **RAVAGE II** can be safely used when propanil products are being used for weed control.
- Apply by air or by ground equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gal of water (or total carrier volume) per acre, but ensure sufficient volume is used to provide adequate coverage. In addition, adding an emulsified crop oil (e.g., 1 pt. per acre) when lower aerial application volumes are used is recommended to help improve coverage, reduce evaporation and improve efficacy.
- For control of rice water weevil in dry-seeded rice, make a foliar application as indicated by scouting for the presence of adults and/or feeding scars, usually within a time-frame of 0-5 days after permanent flood establishment. **DO NOT** exceed 10 days from starting permanent flood until insecticide application unless scouting indicates weevils have not been previously present. Adults may also be treated at later stages of rice development to reduce overwintering populations.
- For control of rice water weevil in water-seeded rice, make the first foliar application after pinpoint flood as indicated by scouting for the presence of adults and/or feeding scars, usually when rice has emerged 0.5 inch above the waterline. Under conditions of prolonged migration into the field, start field scouting for rice water weevil adults and/or feeding scars 3-5 days after the initial treatment and, if needed, apply a second application within 7-10 days of the first application. Adults may also be treated at later stages of rice development to reduce overwintering populations.
- California: In addition to above directions for control of rice water weevil in water seeded rice, **RAVAGE II** may be applied at the 1-3 leaf growth stage, with the majority at the 2 leaf growth stage. Adults are vulnerable on levees and in the water. Larvae are vulnerable while feeding on the leaf prior to entering the soil. Monitor for adults, based upon field history and density of population. Monitor field edges and levee areas for adults. Treat in the following manner: a) spray the inside perimeter of the field, or b) spray the entire field.
- Greenbug is known to have many biotypes. **RAVAGE II** may only provide suppression. If satisfactory control is not achieved with the first application of RAVAGE II, a resistant biotype may be present. Use alternate chemistry for control.
- For control of stem borers, scout fields, when rice growth is near panicle differentiation, for early symptoms of damaging populations exhibited as discoloration (orange-tan) around the junction of the leaf sheath and leaf blade which is caused by feeding of young larvae within the sheath. Applications must be made before larvae bore into rice stems. Make the first application at panicle differentiation to 2 inch panicle for partial control. Make the second application at boot to heading for maximum control. All rice varieties are susceptible to stem borer damage, but Coccidre and Priscilla are particularly susceptible.
- Mixers/loaders supporting aerial applications to wild rice at a rate of 0.04 lb ai. per acre, and treating 1200 acres (or more) per day must wear dust-mist respirator.

RESTRICTIONS

- **DO NOT** release flood water within 7 days of an application.
- **DO NOT** apply more than 0.12 lb a.i. (7.68 fl oz or 0.48 pt. of product) per acre per season.
- **DO NOT** apply more than 0.04 lb a.i. (2.56 fl oz or 0.16 pt. of product) per acre within 21 to 27 days of harvest.
- **DO NOT** use treated rice fields for the aquaculture of edible fish and crustacea.
- **DO NOT** apply as an ultra-low volume (ULV) spray.
- **DO NOT** apply within 21 days of harvest (21-day PHI).

¹ For control before the larvae bores into the plant stalk.

CEREAL GRAINS: Sorghum (Grain)

Target Pests		Rate	
		lb a.i./A	fl oz/A
Cutworm species	Sorghum Midge	0.015-0.02	0.96-1.28
Armyworm Beet Armyworm ³ Corn Earworm European Corn Borer ² Fall Armyworm ¹ Flea Beetle species	Grasshopper species Lesser Cornstalk Borer ² Southwestern Corn Borer ² Stink Bug species Webworm species Yellowstriped Armyworm ¹	0.02-0.03	1.28-1.92
Chinch Bug Mexican Rice Borer ²	Rice Stalk Borer ² Sugarcane Borer ²	0.03	1.92
USE DIRECTIONS <ul style="list-style-type: none"> • Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. • Apply with ground or aerial equipment using sufficient water and application methods to obtain full coverage of target location. When applying by air, apply in a minimum of 2 gal of water per acre. • For sorghum midge control, begin applications when 25% of the sorghum heads have emerged and are in tip bloom. Repeat applications at 5-day intervals if needed. • For chinch bug control, begin applications when bugs migrate from small grains or grass weeds to small sorghum. Direct spray to the base of sorghum plants. Repeat applications at 3 - 5-day intervals if needed. RAVAGE II may only suppress heavy infestations and/or subsequent migrations. RESTRICTIONS <ul style="list-style-type: none"> • DO NOT apply more than 0.08 lb.a.i. (5.12 fl oz or 0.32 pt. of product) per acre per season. • DO NOT apply more than 0.06 lb a.i. (3.84 fl oz or 0.24 pt. of product) per acre per season after crop emergence. • DO NOT apply more than 0.02 lb a.i. (1.28 fl oz or 0.08 pt. of product) per acre per season once crop is in soft-dough stage. • DO NOT apply within 30 days of harvest (30-day PHI). 			
¹ Use higher labeled rates for large larvae. ² For control before the larva bores into the plant stalk. ³ See Resistance statement under Direction for Use.			

CEREAL GRAINS : Barley, Buckwheat, Oats, Rye, Triticale, Wheat, Wheat Hay

Target Pests		Rate	
		lb a.i./A	fl oz/A
Army Cutworm Cutworm species		0.015-0.025	0.96-1.60
Armyworm Bird Cherry-Oat Aphid ¹ Cereal Leaf Beetle English Grain Aphid ¹ Fall Armyworm Flea Beetle species	Grasshopper species Hessian Fly ⁴ Orange Blossom Wheat Midge Russian Wheat Aphid ¹ Stink Bug species Yellowstriped Armyworm	0.02-0.03	1.28-1.92
Grass Sawfly		0.025-0.03	1.60-1.92
Chinch Bug Corn Leaf Aphid ²	Greenbug ^{1,3} Mite species ²	0.03	1.92

CEREAL GRAINS con't

USE DIRECTIONS

- Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.
- Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gal of water per acre.
- For chinch bug control, repeat applications at 3-5-day intervals if needed. **RAVAGE II** may only suppress heavy infestations and/or migrations.
- Greenbug is known to have many biotypes. **RAVAGE II** may provide suppression only. In this situation, a second application using an alternative chemistry may be needed.

RESTRICTIONS

- **DO NOT** allow livestock to graze in treated areas or harvest treated wheat forage as feed for meat or dairy animals within 7 days after treatment.
- **DO NOT** feed treated straw to meat or dairy animals within 30 days after the last treatment.
- **DO NOT** apply more than 0.06 lb a.i. (3.84 fl oz or 0.24 pt of product) per acre per season.
- **DO NOT** apply within 30 days of harvest (30-day PHI).

¹ Best control is obtained before insects begin to roll leaves. Once crop has started to boot, **RAVAGE II** may provide suppression only. Higher labeled rates and increased coverage will be necessary.

² Suppression only.

³ See Resistance statement under Directions for Use.

⁴ Make applications when adults emerge.

COLE CROPS (HEAD AND STEM BRASSICA): Broccoli, Brussels Sprouts, Cabbage, Cavalo Broccolo, Cauliflower, Chinese Broccoli (gai ion), Chinese Cabbage (napa), Chinese Mustard Cabbage (gai choy), Kohlrabi

Target Pests		Rate	
		lb a.i./A	fl oz/A
Alfalfa Looper	Cutworm species	0.015- 0.025	0.96-1.60
Cabbage Looper	Imported Cabbageworm		
Cabbage Webworm	Southern Cabbageworm		
Aphid species ^{2,3}	Meadow Spittlebug	0.02-0.03	1.28-1.92
Armyworm	Plant Bug species including Lygus species ³		
Beet Armyworm ^{1,3}	Spider Mite species ¹		
Corn Earworm	Stink Bug species		
Diamondback Moth ³	Thrips species ²		
Fall Armyworm ¹	Vegetable Weevil (Adult)		
Flea Beetle species	Whitefly species ^{2,3}		
Grasshopper species	Yellowstriped Armyworm		
Japanese Beetle (Adult)			
Leafhopper species			

USE DIRECTIONS

- Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.
- Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gal of water/A.

RESTRICTIONS

- **DO NOT** apply more than 0.24 lb a.i. (15.36 fl oz or 0.96 pt of product) per acre per season.
- **DO NOT** apply within 1 day of harvest (1-day PHI).

¹ For control of first and second instar only.

² Suppression only.

³ See Resistance statement under Directions for Use.

COTTON

Target Pests		Rate	
		lb a.i./A	fl oz/A
Cutworm species Soybean Thrips Tobacco Thrips		0.015-0.02	0.96-1.28
Cabbage Looper Cotton Fleahopper Cotton Leafperforator Cotton Leafworm	Lygus Bug species ¹ Pink Bollworm Saltmarsh Caterpillar	0.02-0.03	1.28-1.92
Bandedwing Whitefly ^{2,3} Beet Armyworm ^{1,3} Boll Weevil Brown Stink Bug Cotton Aphid ^{2,3} Cotton Bollworm European Corn Borer	Fall Armyworm Green Stink Bug Southern Green Stink Bug Sweet Potato Whitefly ^{2,3} Tobacco Budworm ³ Twospotted Spider Mite ²	0.025-0.04	1.60-2.56
USE DIRECTIONS <ul style="list-style-type: none"> • Apply as required by scouting, usually at intervals of 5-7 days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds. • Apply with ground or aerial equipment using sufficient water to obtain full coverage of foliage. • Applications may also be made with equipment adapted and calibrated for ULV sprays. RAVAGE II may be mixed with once-refined vegetable oil and applied in a minimum of at least one qt of finished spray per acre. • Under light bollworm/budworm infestation levels, 0.02 lb a.i. (1.28 fl oz of product) per acre may be applied in conjunction with intense field monitoring. For boll weevil control, spray on a 3-5 day schedule. • When applied according to label directions for control of cotton bollworm and tobacco budworm, RAVAGE II also provides ovicidal control of unhatched Heliiothine species eggs. 			
RESTRICTIONS <ul style="list-style-type: none"> • DO NOT graze livestock in treated areas. • DO NOT apply more than 0.2 lb a.i. (12.8 fl oz or 0.8 pt. of product) per acre per season. • DO NOT make more than a total of 10 synthetic pyrethroid applications. (of one product or combination of products) to a cotton crop in one growing season. • DO NOT apply within 21 days of harvest (21-day PHI). 			

¹ For control of the first and second instar only.

² Suppression only.

³ See Resistance statement under Directions for Use.

CUCURBIT VEGETABLES: Chayote (fruit), Chinese Waxgourd (Chinese preserving melon), Citron Melon, Cucumber, Gherkin, Gourd (edible) *Lagenaria* species - includes: hyotan, cucuzza *Luffa acutangula*, *L. cylindrical*- includes: hechima, Chinese okra; *Momordica* species - includes: balsam apple, balsam pear, bitter melon, Chinese cucumber; Muskmelon (hybrids and/or cultivars of *Cucumis melo*) -includes: true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon; Pumpkin, Squash, summer (*Cucurbita pepo* var. *melopepo*)- includes: crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini; Squash, winter (*Cucurbita maxima*; *C. moschata*)-includes butternut squash, calabaza, hubbard squash (*C. mixta*; *C. pepo*)- includes: acorn squash, spaghetti squash; Watermelon –includes: hybrids and/or varieties of *Citrullus lanatus*

Target Pests		Rate	
		lb a.i./A	fl oz/A
Armyworm species ¹ Blister Beetle species Cabbage Looper Corn Earworm Cricket species Cucumber Beetle species (adults) Cutworm species Flea Beetle species Grasshopper species June Beetle species Leaffooted Bug Leafhopper species	Lygus Bug species ¹ Melonworm Pickleworm Plant Bug species Rindworm species complex Saltmarsh Caterpillar Squash Beetle Squash Bug species Squash Vine Borer species Stink Bug species Thrips species ^{1,2} Tobacco Budworm ¹ Webworm species	0.02-0.03	1.28-1.92
Aphid species ¹ Leafminer species ^{1,3}	Whitefly species ^{1,3} Spider Mite species ³	0.03	1.92
USE DIRECTIONS <ul style="list-style-type: none">• Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.• Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of all plant parts. When applying by air, apply in a minimum of 2 gal. total solution per acre. When applying by ground, a minimum of 10 gal total solution per acre is recommended.• Use higher application volumes and/or rates when foliage is dense, pest populations are high, larvae are large, weather conditions are adverse and/or as plant size increases. Use higher labeled rates for longer residual.• Insects that bore or tunnel into leaves, vines, stems or fruit must be controlled before penetration. Only exposed insects (larvae and/or adults) can be controlled with foliar applications of RAVAGE II.			
RESTRICTIONS <ul style="list-style-type: none">• DO NOT apply more than 0.18 lb a.i. (11.5 fl oz or 0.72 pt of product) per acre per season.• DO NOT apply within 1 day of harvest (1-day PHI).			

¹ See Resistance statement under Directions for Use.
² Does not include Western Flower Thrips.
³ Suppression only.

¹ See Resistance statement under Directions for Use.

² Does not include Western Flower Thrips.

³Suppression only.

Target Pests	Rate	
	lb a.i./A	fl oz/A
Cabbage Looper Cutworm species Hornworm species	0.015-0.025	0.96-1.60
Aphid species ^{2,3} Beet Armyworm ^{1,3} Blister Beetle species Colorado Potato Beetle ³ Cucumber Beetle species (Adult) European Corn Borer ⁴ Fall Armyworm ¹ Flea Beetle species Grasshopper species Japanese Beetle (Adult) Leafhopper species Leafminer species ² Meadow Spittlebug Pepper Weevil (Adult) ²	Plant Bug species Southern Armyworm ¹ Spider Mite species ² Stalk Borer ⁴ Stink Bug species Thrips ⁵ Tobacco Budworm ³ Tomato Fruitworm Tomato Pinworm Tomato Psyllid ^{2,3} Vegetable Weevil (Adult) Whitefly species ^{2,3} Yellowstriped Armyworm ¹	0.02-0.03 1.28-1.92
USE DIRECTIONS <ul style="list-style-type: none"> • Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds. • Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gal of water per acre. RESTRICTIONS <ul style="list-style-type: none"> • DO NOT apply more than 0.36 lb a.i. (23.04 fl oz or 1.44 pt of product) per acre per season. • DO NOT apply within 5 days of harvest (5-day PHI). <p>¹ For control of first and second instar only. ² Suppression only. ³ See Resistance statement under Directions for Use. ⁴ For control before the larva bores into the plant stalk or fruit. ⁵ Does not include Western Flower Thrips.</p>		

GRASS FORAGE, FODDER AND HAY: Pasture and Rangeland, Grass, Grass Grown for Hay or Silage, and Grass Grown for Seed

Target Pests		Rate	
		lb a.i./A	fl oz/A
Army Cutworm Cutworm species Essex Skipper	Range Caterpillar Striped Grass Looper	0.015-0.025	0.96-1.6
Beet Armyworm Billbug species ¹ Bird Cherry-Oat Aphid ¹ Black Grass Bug Black Turfgrass Beetle (Adult) Blue Stem Midge Cereal Leaf Beetle Chinch Bug Crane Fly species Cricket species English Grain Aphid ¹ Fall Armyworm Flea Beetle species Grass Mealybug Grass Sawfly (Adult) Grasshopper species	Green June Beetle (Adult) Greenbug ^{1,2} Japanese Beetle (Adult) Katydid species Leafhopper species Mite species ³ Russian Wheat Aphid ¹ Southern Armyworm Spittlebug species Stink Bug species Sugarcane Aphid Thrips species Tick species True Armyworm Webworm species Yellowstriped Armyworm	0.02-0.03	1.28-1.92
<p>USE DIRECTIONS</p> <ul style="list-style-type: none"> • Apply as required by scouting. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds. • Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gal total solution per acre. When applying by ground, a minimum of 7 gal total solution per acre is recommended. • Use higher application volumes and rates when foliage is dense, pest populations are high, larvae are large and/or weather conditions are adverse. Use higher labeled rates for longer residual. • For chinch bug control, RAVAGE II may only suppress heavy infestations and/or migrations. In this situation, a second application using an alternative chemistry may be needed. • Greenbug is known to have many biotypes. RAVAGE II may provide suppression only. In this situation, a second application using an alternative chemistry may be needed. <p>RESTRICTIONS</p> <ul style="list-style-type: none"> • DO NOT cut grass to be dried and harvested for hay until 7 days after the last application. • Grass grown for seed: <ul style="list-style-type: none"> ◦ Straw, hay and mature seed (seed screenings) may be used as feed 7 days after the last application. Regrowth of grass grown for seed may be used for grazing, cut for forage or cut to be dried and harvested for hay. • DO NOT apply more than 0.03 lb a.i. (1.92 fl oz or 0.12 pt of product) per acre per cutting for pastures, rangeland and grasses grown for seed. A minimum re-treatment interval (RTI) of 30 days is required for pastures and rangeland receiving 0.03 lb ai. per acre which have not been cut between applications. • DO NOT apply more than 0.09 lb a.i. (5.76 fl oz or 0.36 pt of product) per acre per season. • Pasture and rangeland grass may be used for grazing or cut for forage 0 days after application. <p>¹ Best control is obtained before insects begin to roll leaves. ² See Resistance statement under Directions for Use. ³ Suppression only.</p>			

LEGUME VEGETABLES:**Edible Poddled (Only)** *Canavalia ensiformis* -jackbean, *Canavalia gladiata* -sword bean, *Glycine max*-soybean (immature seed)**Edible Poddled, Succulent Shelled or Dried Shelled** *Cajanus cajan* – Pigeon pea, *Phaseolus* species -includes: field, kidney, lima, navy, pinto, runner, snap, tepary and wax beans; *Pisum* species - includes: dwarf, ediblepod, English, field, garden, green, snow and sugar snap peas; *Vigna* species - includes: adzuki, asparagus, moth, mung, rice, urd and yardlong beans, black-eye pea, caljang, Chinese longbean, cowpea, Crowder pea, and Southern Pea**Succulent Shelled or Dried Shelled** *Vicia faba*.-broadbean (favabean)**Dried Shelled (Only)** *Cicer arietinum* -chickpea (garbanzo bean), *Cyamopsis tetragonoloba* – guar, Lablab pupureus - *Lablab bean* (hyacinth bean), *Lupinus* species - includes: grain, sweet, white and sweet white lupines; *Lens esculata* - Lentils

Target Pests		Rate	
		lb a.i./A	fl oz/A
Cutworm species Green Cloverworm Imported Cabbageworm	Mexican Bean Beetle Saltmarsh Caterpillar Velvetleaf Caterpillar	0.015- 0.025	0.96-1.60
Alfalfa Caterpillar Aphid species ⁴ Armyworm ² Bean Leaf Beetle Bean Leafskeltonizer Blister Beetle species Corn Earworm Corn Rootworm Beetle species (Adult) Cucumber Beetle species (Adult) Curculio and Weevil species ¹ (foliage and pod feeding adults and larvae) European Corn Borer Fall Armyworm ² Flea Beetle species (Adult) Flea Hopper species Grasshopper species	Japanese Beetle (Adult) Leafhopper species Leaf-tier species Looper Species Meadow Spittlebug Painted Lady Butterfly (Larva) Plant Bug species including Lygus species ⁴ Stalk Borer Stink Bug species Three-cornered Alfalfa Hopper Thrips species ^{4,5} Tobacco Budworm ⁴ Webworm species Western Bean Cutworm Western Yellowstriped Armyworm ² Yellowstriped Armyworm ²	0.02-0.03	1.28 - 1.92
Beet Armyworm ^{3,4} Leafminer species ^{3,4} Lesser Cornstalk Borer ³	Soybean Looper ^{3,4} Spider Mite species ³ Whitefly species ^{3,4}	0.03	1.92

USE DIRECTIONS

- Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.
- Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gal of water per acre.

RESTRICTIONS

- **DO NOT** apply more than 0.12 lb a.i. (7.68 fl oz or 0.48 pt of product) per acre per season.
- For succulent and dried shelled peas and beans, **DO NOT** graze livestock in treated areas or harvest vines for forage or hay.
- For edible podded and succulent shelled legume vegetables, **DO NOT** apply within 7 days of harvest (7-day PHI).
- For dried shelled legume vegetables, **DO NOT** apply within 21 days of harvest (21-day PHI).

¹ For control before the larva bores into the plant stalk or pods.
² Use higher labeled rates for large larvae.
³ For suppression only.
⁴ See Resistance statement under Directions for Use.
⁵ Does not include Western Flower Thrips.

LEGUME VEGETABLES (SOYBEANS)

Target Pests		Rate	
		lb a.i./A	fl oz/A
Bean Leaf Beetle Cabbage Looper Corn Earworm Corn Rootworm Beetle (Adult): Mexican Northern Southern Western Cutworm species Green Cloverworm	Mexican Bean Beetle Painted Lady (Thistle) Caterpillar Potato Leafhopper Saltmarsh Caterpillar Soybean Aphids ⁴ Threecornered Alfalfa Hopper Thrips species ⁵ Velvetbean Caterpillar Woollybear Caterpillar	0.015- 0.025	0.96-1.60
Armyworm ¹ Blister Beetle species European Corn Borer Fall Armyworm ¹ Grasshopper species Japanese Beetle (Adult) Plant Bug species	Silverspotted Skipper Stink Bug species including Kudzu bug Tobacco Budworm ³ Webworm species Yellowstriped Armyworm ¹	0.025-0.03	1.60-1.92
Beet Armyworm ^{2,3} Lesser Cornstalk Borer ²	Soybean Looper ^{2,3} Spider Mite species ²	0.03	1.92
USE DIRECTIONS <ul style="list-style-type: none"> • Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds. • Apply with ground or aerial equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gal of water per acre. 			
RESTRICTIONS <ul style="list-style-type: none"> • DO NOT graze or harvest treated soybean forage, straw, or hay for livestock feed. • For control of adult corn rootworm beetles (Diabrotica species) as part of an aerial-applied corn rootworm control program use a minimum of 0.02 lb a.i. (1.28 fl oz of product) per acre. • DO NOT apply more than 0.06 lb a.i. (3.84 fl oz or 0.24 pt. of product) per acre per season. • DO NOT apply within 30 days of harvest (30-day PHI). 			

¹ Use higher labeled rates for large larvae.

² Suppression only.

³ See Resistance statement under Directions for Use.

⁴ Use lower rates for early season applications and/or lighter populations.

⁵ Does not include Western Flower Thrips.

LETTUCE (HEAD AND LEAF)

Target Pests		Rate	
		lb a.i./A	fl oz/A
Alfalfa Looper Cabbage Looper Cutworm species	Green Cloverworm Imported Cabbageworm Saltmarsh Caterpillar	0.015-0.025	0.96-1.60
Aphid species ^{2,3} Armyworm Beet Armyworm ^{1,3} Corn Earworm Diamondback Moth ³ European Corn Borer Fall Armyworm ¹ Flea Beetle species Grasshopper species Japanese Beetle (Adult)	Leafhopper species Meadow Spittlebug Plant Bug species including Lygus species ³ Southern Armyworm Spider Mite species ² Stink Bug species Tobacco Budworm ³ Vegetable Weevil (Adult) Whitefly species ^{2,3}	0.02-0.03	1.28-1.92
USE DIRECTIONS <ul style="list-style-type: none"> • Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds. • Apply with ground or air equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gal of water per acre. RESTRICTIONS <ul style="list-style-type: none"> • DO NOT apply more than 0.3 lb a.i. (19.2 fl oz or 1.2 pt of product) per acre per season. • DO NOT apply within 1 day of harvest (1-day PHI). <p>¹ For control of first and second instar only. ² Suppression only. ³ See Resistance statement under Directions for Use.</p>			

ONION (BULB) AND GARLIC

Target Pests		Rate	
		lb a.i./A	fl oz/A
Cutworm species Leafminer species (Adult)	Onion Maggot (Adult) Seedcorn Maggot (Adult)	0.015-0.025	0.96-1.60
Aphid species ³ Armyworm species ¹ Flower Thrips ^{2,3} Onion Thrips ³	Plant Bug species Stink Bug species Tobacco Thrips ³ Western Flower Thrips ^{2,3}	0.02-0.03	1.28-1.92
USE DIRECTIONS <ul style="list-style-type: none"> • Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds. • Use the higher label rates as thrips population increases and avoid rescue situations. • Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gal of water per acre. • For thrips control by aerial application, the addition of 1% COC v/v, 0.25% NIS v/v or a silicone adjuvant (follow manufacturers use directions) may enhance the deposition of the spray and increase plant coverage. RESTRICTIONS <ul style="list-style-type: none"> • DO NOT apply more than 0.24 lb a.i. (15.36 fl oz or 0.96 pt of product) per acre per season. • DO NOT apply within 14 days of harvest (14-day PHI). <p>¹ For control of the first and second instar only. ² Suppression only. ³ See Resistance statement under Directions for Use.</p>			

PEANUTS

Target Pests	Rate	
	lb a.i./A	fl oz/A
Cutworm species Green Cloverworm Potato Leafhopper	Rednecked Peanutworm Threecornered Alfalfa Hopper Velvetbean Caterpillar	0.015-0.025 0.96-1.60
Bean Leaf Beetle Corn Earworm Fall Armyworm ¹ Grasshopper species Southern Corn Rootworm (Adult)	Stink Bug species Tobacco Thrips Vegetable Weevil Whitefringed Beetle (Adult)	0.02-0.03 1.28-1.92
Aphid species ² Beet Armyworm ^{2,3} Lesser Cornstalk Borer ²	Soybean Looper ^{2,3} Spider Mite species ²	0.03 1.92

USE DIRECTIONS

- Apply as required by scouting, usually at intervals of 7 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.
- Apply with ground or aerial equipment using sufficient water to obtain full coverage of foliage. When applying by air, apply in a minimum of 2 gal of water per acre.

RESTRICTIONS

- **DO NOT** apply more than 0.12 lb a.i. (7.68 fl oz or 0.48 pt. of product) per acre per season.
- **DO NOT** apply within 14 days of harvest (14-day PHI).

¹Use higher labeled rates for large larvae.

²Suppression only.

³See Resistance statement under Directions for Use.

POME FRUITS: Apple, Crabapple, Loquat, Mayhaw, Oriental Pear, Pear, Quince

Target Pests	Rate	
	lb a.i./A	fl oz/A
Apple Aphid Apple Maggot (Adult) Cherry Fruit Fly species (Adult) Codling Moth Green Fruitworm Japanese Beetle Leafhopper species Leafroller species Lesser Appleworm Omnivorous Leafroller Orange Tortrix Oriental Fruit Moth Pear Psylla ¹ Pear Sawfly	Periodical Cicada Plant Bug species Plum Curculio Rosy Apple Aphid San Jose Scale (fruit infestations only) Spirea Aphid ¹ Stink Bug species Tent Caterpillar species Tentiform Leaf Miner species Tree Borer species Tufted Apple Budworm Webworm species	0.02-0.04 1.28-2.56

USE DIRECTIONS

- Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds and IPM recommendations.
- Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage or target area.
- When applying by air, apply in a minimum of 5 gal of water per acre, but use higher volumes as appropriate for thorough coverage.

RESTRICTIONS

- **DO NOT** apply more than 0.2 lb a.i. (12.8 fl oz or 0.80 pt of product) per acre per year.
- **DO NOT** apply more than 0.16 lb a.i. (10.24 fl oz or 0.64 pt of product) per acre per year post bloom.
- **DO NOT** apply within 21 days of harvest (21-day PHI).

¹Suppression only

STONE FRUITS: Apricot, Chickasaw Plum, Damson Plum, Japanese Plum, Nectarine, Peach, Plum, Plumcot Prune, Sweet and Tart Cherry

Target Pests		Rate	
		lb a.i./A	fl oz/A
American Plum Borer	Peach Twig Borer	0.02-0.04	1.28-2.56
Apple Maggot (Adult)	Peachtree Borer species		
Black Cherry Aphid	Pear Sawfly		
Cherry Fruit Fly species (Adult)	Periodical Cicada		
Codling Moth Green	Plant Bug species		
Fruitworm Japanese Beetle	Plum Curculio		
June Beetle	Rose Chafer		
Leafhopper species	Stink Bug species		
Leafroller species	Tent Caterpillar species		
Oriental Fruit Moth	Thrips species		
USE DIRECTIONS			
<ul style="list-style-type: none">• Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic threshold and IPM recommendations.• Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage or target area. When applying by air, apply a minimum of 5 gal of water/per acre, but use higher volumes as appropriate for thorough coverage.			
RESTRICTIONS			
<ul style="list-style-type: none">• DO NOT apply more than 0.2 lb a.i. (12.8 fl oz or 0.80 pt of product) per acre per year.• DO NOT apply more than 0.16 lb a.i. (10.24 fl oz or 0.64 pt of product) per acre per year post bloom.• DO NOT apply within 14 days of harvest (14-day PHI).			

SUGARCANE

Target Pests		Rate	
		lb a.i./A	fl oz/A
Mexican Rice Borer ¹ Pygmy Mole Cricket Rice Stalk Borer ¹ Sugarcane Aphid ³	Sugarcane Beetle (Adult) ² Sugarcane Borer ¹ West Indian Cranefly Yellow Sugarcane Aphid ³	0.025-0.04	1.60-2.56
USE DIRECTIONS <ul style="list-style-type: none">• Apply as required by scouting, usually at intervals of 7 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic threshold.• Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage or target area. When applying by air, apply a minimum of 2 gal of water per acre.			
RESTRICTIONS <ul style="list-style-type: none">• DO NOT apply more than 0.16 lb a.i. (10.24 fl oz or 0.64 pt. of product) per acre per season.• DO NOT apply within 21 days of harvest (21-day PHI).			

¹For control before the larva bores into the plant stalk.

²Suppression only of beetles active above ground.

³See Resistance statement under Directions for Use.

¹For control before the larva bores into the plant stalk.

²Suppression only of beetles active above ground.

³See Resistance statement under Directions for Use.

SUNFLOWER

Target Pests		Rate	
		lb a.i./A	fl oz/A
Cutworm species	Sunflower Beetle	0.015-0.025	0.96-1.60
Banded Sunflower Moth	Caterpillar Seed Weevil (Adult)	0.02-0.03	1.28-1.92
Fall Armyworm ¹	Spotted Cabbage Looper		
Grasshopper species	Stem Weevil (Adult)		
Head-Clipper Weevil (Adult)	Stink Bug species		
Japanese Beetle (Adult)	Sunflower Maggot (Adult)		
Leafhopper species	Sunflower Moth		
Meadow Spittlebug	Woollybear Caterpillar		
Painted Lady (Thistle)			
Beet Armyworm ^{2,3}	Spider Mite species ²	0.03	1.92
USE DIRECTIONS <ul style="list-style-type: none"> • Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds. • Apply with ground or air equipment using sufficient water to obtain full coverage of sunflower heads and/or foliage. When applying by air, apply in a minimum of 2 gal of water per acre. 			
RESTRICTIONS <ul style="list-style-type: none"> • DO NOT apply more than 0.12 lb a.i. (7.68 fl oz or 0.48 pt of product) per acre per season. • DO NOT apply more than 0.09 lb a.i. (5.76 fl oz or 0.36 pt of product) per acre per season after bloom initiation. • DO NOT apply as an ultra-low volume (ULV) spray. • DO NOT apply within 45 days of harvest (45-day PHI). 			

¹ Use higher labeled rates for large larvae.

² Suppression only.

³ See Resistance statement under Directions for Use.

TOBACCO

Target Pests		Rate	
		lb a.i./A	fl oz/A
Armyworm species ¹	Salt Marsh Caterpillar	0.015-0.03	0.96-1.92
Blister Beetle species	Stinkbug species		
Cabbage Looper	Tobacco Aphid species ^{2,3}		
Corn Earworm	Tobacco Budworm ³		
Cucumber Beetle species (Adult)	Tobacco Flea Beetle (Adult)		
Cutworm species	Tobacco Hornworm		
Grasshopper species	Tobacco Thrips species ²		
Japanese Beetle (Adult)	Tree Cricket species		
Katydid species	Vegetable Weevil (Adult)		
Plant Bug species ³	Webworm species		
Potato Tuberworm			
USE DIRECTIONS			
<ul style="list-style-type: none">• Apply as required by scouting, usually at intervals of 7 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds.• Apply with ground or air equipment using sufficient water to obtain full coverage of sunflower heads and/or foliage. When applying by air, apply in a minimum of 2 gal of water per acre.			
RESTRICTIONS			
<ul style="list-style-type: none">• DO NOT apply more than 0.09 lb a.i. (5.76 fl oz or 0.36 pt of product) per acre per year.• DO NOT apply within 40 days of harvest (40-day PHI).			
¹ For control of first and second instars only.			
² Suppression only.			
³ See Resistance statement under Directions for Use.			

¹ For control of first and second instars only.

² Suppression only.

³ See Resistance statement under Directions for Use.

TREE NUTS (except Pecan): Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (Hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pistachio, Black Walnut, English (Persian) Walnut

Target Pests	Rate	
	lb a.i./A	fl oz/A
Ants Chinch Bug Codling Moth Filbertworm Leaffooted Bug Leafroller species	Navel Orangeworm Peach Twig Borer Plant Bug species Stink Bug species Walnut Aphid Walnut Husk Fly species (Adult)	0.02-0.04 1.28-2.56
USE DIRECTIONS <ul style="list-style-type: none"> • Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic threshold. • Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage or target area. • When applying by air, apply in a minimum of 5 gal of water/per acre, but use higher labeled rates as appropriate for thorough coverage. 		
RESTRICTIONS <ul style="list-style-type: none"> • DO NOT apply more than 0.16 lb a.i. (10.24 fl oz or 0.64 pt of product) per acre per year. • DO NOT apply more than 0.12 lb a.i. (7.68 fl oz or 0.48 pt of product) per acre per year post bloom. • DO NOT apply within 14 days of harvest (14-day PHI). 		

TREE NUT: Pecan

Target Pests	Rate	
	lb a.i./A	fl oz/A
Hickory Shuckworm Pecan Aphid species Pecan Casebearer species Pecan Phylloxera species	Pecan Spittlebug Pecan Weevil Stink Bug species	0.02-0.04 1.28-2.56
USE DIRECTIONS <ul style="list-style-type: none"> • Apply as required by scouting, usually at intervals of 5 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic threshold. • Apply with ground or air equipment using sufficient water to obtain full coverage of the foliage or target area. • When applying by air, apply in a minimum of 5 gal of water/per acre, but use higher labeled rates as appropriate for thorough coverage. 		
RESTRICTIONS <ul style="list-style-type: none"> • DO NOT apply more than 0.16 lb a.i. (10.24 fl oz or 0.64 pt of product) per acre per year. • DO NOT apply more than 0.12 lb a.i. (7.68 fl oz or 0.48 pt of product) per acre per year post bloom. • DO NOT apply within 14 days of harvest (14-day PHI). 		

TUBEROUS AND CORM VEGETABLES (Potato, Sweet Potato, Yams and Related): Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem only), Canna (edible), Cassava (bitter and sweet), Chayote (root), Chufa, Dasheen, Ginger, Leren, Potato, Sweet Potato, Tanier, Turmeric, Yam (bean and true)

Target Pests		Rate	
		lb a.i./A	fl oz/A
Cutworm species Leafhopper species Saltmarsh Caterpillar	Sweet Potato Homworm Woollybear Caterpillar species	0.015-0.025	0.96-1.60
Aphid species ¹ Armyworm species ¹ Blister Beetle species Colorado Potato Beetle ¹ Corn Earworm Cricket species Cucumber Beetle species (Adults) European Corn Borer Flea Beetle species (Adults) Grasshopper species Looper species ¹	Lygus Bug species ¹ Plant Bug species Potato Psyllid Potato Tubenworm Stink Bug species Sweet Potato Leaf Beetle (Adults) Sweet Potato Vine Borer Thrips species ^{1,2} Tortoise Beetle species Webworm species Weevil species (Adults)	0.02-0.03	1.28-1.92
Leafminer species ^{1,3} Spider Mite species ³	Whitefly species ^{1,3}	0.03	1.92
USE DIRECTIONS <ul style="list-style-type: none"> • Apply as required by scouting, usually at intervals of 7 or more days. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds. • Apply with ground or air equipment using sufficient water and application methods to obtain full coverage of all above ground plant parts. When applying by air, apply in a minimum of 2 gal total solution per acre. When applying by ground, a minimum of 10 gal total solution per acre is recommended. • Use higher application volumes and/or rates when foliage is dense, pest populations are high, larvae are large, weather conditions are adverse and/or as plant size increases. Use higher labeled rates for longer residual. • Insects that bore or tunnel into leaves, vines, stems, tubers or corms must be controlled before penetration. Only exposed insects (larvae and/or adults) can be controlled with foliar applications of RAVAGE II. 			
RESTRICTIONS <ul style="list-style-type: none"> • DO NOT apply more than 0.12 lb a.i. (7.68 fl oz or 0.48 pt of product) per acre per season. • DO NOT apply within 7 days of harvest (7-day PHI). 			
¹ See Resistance statement under Directions for Use. ² Does not include Western Flower Thrips. ³ Suppression only.			

CONIFER AND DECIDUOUS TREES: Plantations and Nurseries

Target Pests	Rate	
	lb a.i./A	fl oz/A
Bagworm Balsam Twig Aphid Balsam Woolly Aphid Birch Leafminer Black Pine Weevil Elm Leaf Beetle European Elm Bark Beetle Gypsy Moth Japanese Beetle June Beetle species Leaf Beetle species Leafroller species May Beetle species Mealybug species ¹ Pales Weevil Pine Chafer	0.02 - 0.04	1.28-2.56
USE DIRECTIONS <ul style="list-style-type: none"> • To control exposed foliage, flower, cone, seed and bark feeding insects, apply as required by scouting. Base timing and frequency of applications upon insect populations reaching locally determined economic thresholds. • Apply with ground equipment using sufficient water to obtain full coverage of target site. When applying by air, apply a minimum of 2 gal of water per acre. RESTRICTIONS <ul style="list-style-type: none"> • DO NOT apply more than 0.24 lb a.i. (15.36 fl oz or 0.96 pt of product) per acre per year. ¹ Suppression only.		

CONIFER AND DECIDUOUS TREES: Seed Orchards

Target Pests	Rate	
	lb a.i./A	fl oz/A
Coneworm species Seed Bug species Thrips species	Refer to Use Directions	Refer to Use Directions
USE DIRECTIONS <ul style="list-style-type: none"> • For high volume sprayers, dilute 2.56 fl oz per 100 gal of water and apply 5-10 gal of finished spray per tree. • For low volume sprayers, dilute 10 fl oz per 100 gal of water and apply 100 gal of finished spray per acre. • For aerial applications, apply 7.5 fl oz per acre in a minimum of 10 gal finish spray per acre. RESTRICTIONS <ul style="list-style-type: none"> • DO NOT apply more than 0.5 lb a.i. (32 fl oz or 2 pt of product) per acre per year. 		

NON-AGRICULTURAL USES: Non-Cropland (Excluding Public Land)

Target Pests	Rate	
	lb a.i./A	fl oz/A
See crop instructions in sections prior for specific pest and rate information.	0.015-0.21	0.96-12.8
USE DIRECTIONS <ul style="list-style-type: none"> • Spray non-cropland adjacent to agricultural areas to control migratory insects, which may threaten crops. • Follow Use Directions, rates and spray recommendations found elsewhere in this label for the adjacent crop outlet and target pests. • Use highest labeled rates for dense/large foliage, high insect populations and larger larval stages. Repeat as necessary to maintain control. RESTRICTIONS <ul style="list-style-type: none"> • DO NOT exceed 0.21 lb a.i. (12.8 fl oz or 0.8 pt. of product) per acre per year. • DO NOT graze livestock in treated areas. 		

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

Storage and Spill Procedures: Store upright at room temperature. **DO NOT** allow product to freeze. Keep container closed when not in use. **DO NOT** store near food or feed. Avoid exposure to extreme temperatures. In case of spillage or leakages, soak up with an absorbent material including sand, sawdust, earth, Fuller's earth, etc. Dispose of with chemical waste.

Pesticide Disposal: Pesticide, spray mixture or rinse water that cannot be used according to label instructions must be disposed of at or by an approved waste disposal facility.

Container Handling:

For Containers equal to or less than 5 gallons: 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 and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available.

For Containers greater than 5 gallons: Nonrefillable container. **DO NOT** reuse or refill this container. Clean equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer recycling if available.

For Bulk containers: (Refillable Container) Refill this container with pesticides only. **DO NOT** reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person refilling. To clean the container before final disposal, empty the remaining contents from this container into application equipment or tank mix. Fill the container about 10 percent full of water. Agitate vigorously or re-circulate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of INNICTIS CROP CARE, LLC or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold INNICTIS CROP CARE, LLC and Seller harmless for any claims relating to such factors.

INNICTIS CROP CARE, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or INNICTIS CROP CARE, LLC, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, INNICTIS CROP CARE, LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

To the extent consistent with applicable law, neither INNICTIS CROP CARE, LLC nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF INNICTIS CROP CARE, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF INNICTIS CROP CARE, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

INNICTIS CROP CARE, LLC and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of INNICTIS CROP CARE, LLC.

RESTRICTED USE PESTICIDE

DUE TO TOXICITY 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.

RAVAGE II

LAMBDA-CYHALOTHRIN

GROUP

3A

INSECTICIDE

ACTIVE INGREDIENT:

Lambda-cyhalothrin:

[1a(S*),3a(Z)]-(+)-cyano-(3-phenoxyphenyl)methyl-3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate

22.8%

Other Ingredients:

77.2%

Total:

100.0%

Contains 2.19 lb of active ingredient per gallon and is a capsule suspension.

*Synthetic pyrethroid

% BY WT.

KEEP OUT OF REACH OF CHILDREN WARNING

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.)

SEE INSIDE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE

FIRST AID

If swallowed

- Call a poison control center or doctor immediately for treatment advice.
- **DO NOT** give any liquid to the person.
- **DO NOT** induce vomiting unless told to do so by the poison control center or doctor.
- **DO NOT** give anything by mouth to an unconscious person.

If in eyes

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

If on skin or clothing

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

If inhaled

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
- Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: Contains petroleum distillate-vomiting may cause aspiration pneumonia.

HOTLINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact **CHEMTREC at 1-800-424-9300** for emergency medical treatment information.

For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300

PRECAUTIONARY STATEMENTS Hazards To Humans and Domestic Animals WARNING/AVISO

May be fatal if swallowed. Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin or clothing. Avoid breathing (vapor or spray mist). Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Skin

exposure may also result in a sensation described as a tingling, itching, burning, or prickly feeling. Onset may occur immediately to 4 hrs after exposure and may last 2 - 30 hrs, without damage. Wash exposed areas once with soap and water. Relief from the skin sensation may be obtained by applying an oil-based cream. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This product is extremely toxic to fish and other aquatic organisms. **DO NOT** contaminate water when cleaning equipment or disposing of equipment wash water. **DO NOT** apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Apply this product only as specified on this label. When making applications, care should be used to avoid household pets, particularly fish and reptile pets.

This product is highly toxic to bees and other pollinating insects exposed to direct treatment or residues in/on blooming crops or weeds. Protect pollinating insects by following label directions intended to minimize drift and reduce pesticide risk to these organisms. **DO NOT** apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. **Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.**

Physical and Chemical Hazards

DO NOT use this product in or on electrical equipment due to the possibility of shock hazard. **DO NOT** use with or store near oxidizing agents.

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal.

Storage and Spill Procedures: Store upright at room temperature. **DO NOT** allow product to freeze. Keep container closed when not in use. **DO NOT** store near food or feed. Avoid exposure to extreme temperatures. In case of spillage or leakages, soak up with an absorbent material including sand, sawdust, earth, Fuller's earth, etc. Dispose of with chemical waste.

Pesticide Disposal: Pesticide, spray mixture or rinse water that cannot be used according to label instructions must be disposed of at or by an approved waste disposal facility.

Container Handling:

For Containers equal to or less than 5 gallons: 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 and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available.



Distributed By:
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NET CONTENTS: 2.5 Gal (9.46 L)