



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 2 1993

Cheryl Bohenic
ZENECA INC.
ZENECA AG PRODUCTS
NEW MURPHY ROAD & CONCORD PIKE BOX 751
WILMINGTON, DE 19897

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 08/12/93 In Response to PR Notice 93-7
EPA Reg. No. 10182-18
AMBUSH INSECTICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.

BEST AVAILABLE COPY



Recycled/Recyclable
Printed with Soy/Canola Ink on paper that
contains at least 60% recycled fiber

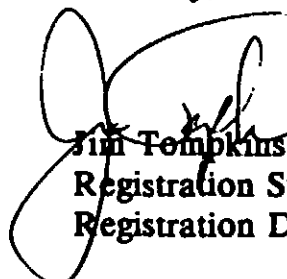
Submit the final printed labeling via the U.S. Postal Service to:

**Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (7505C)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460-0001**

Hand or courier deliveries of final printed labeling may be made to:

**Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202**

Sincerely,


**Jim Tompkins, Deputy Chief
Registration Support Branch
Registration Division (7505W)**

Attachment

(Front Cover)

RESTRICTED USE PESTICIDE.
Toxic to fish and aquatic organisms.

For retail sale to and use only by Certified Applicators, or persons under their direct supervision, and only for those uses covered by the certified Applicator's certification.

AMBUSH[®] Insecticide

Complete Directions For Use and Use Precautions

(Inside Front Cover)

**DIRECTIONS FOR USE AND
CONDITIONS OF SALE AND WARRANTY**

ACCEPTED
with COMMENTS
In EPA Letter Dated

DEC 2 1993

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.

10182-18

IMPORTANT: Read the Entire Directions for Use and the Conditions of Sale and Warranty before using this product.

CONDITIONS OF SALE AND LIMITED WARRANTY:

The Directions for Use of this product are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended or other influencing factors in the use of the product, all of which are beyond the control of the seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label, subject to the inherent risks referred to above, when used in accordance with directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller and Buyer and User assume the risk of any such use. SELLER DISCLAIMS ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY.

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KEEP OUT OF REACH OF CHILDREN

WARNING

AVISO:

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

ACTIVE INGREDIENT:

Permethrin

(3-Phenoxyphenyl)methyl(±)-cis, trans-3-

(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate* 25.6%

INERT INGREDIENTS 74.4%

TOTAL 100.0%

*Cis/trans ratio: Min. 35% (±) cis and max. 65% (±) trans. AMBUSH contains 2 pounds active ingredient per gallon and is an emulsifiable concentrate.

EPA Reg. No. 10182-18

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Do not induce vomiting. Call a physician. Vomiting should be supervised by a physician or the professional staff because of the possible pulmonary damages via aspiration of the solvent.

IF IN EYES: Flush eyes with plenty of water. Get medical attention if irritation persists.

IF ON SKIN: Wash with plenty of soap and water.

**FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL 1-800-F-A-S-T-M-E-D
(327-8633).**

**FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMTREC
1-800-424-9300.**

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PRECAUTIONARY STATEMENTS

WARNING

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN. MAY CAUSE EYE IRRITATION. Avoid contact with eyes, skin or clothing. Avoid breathing vapor or spray mist.
~~*Wash thoroughly after handling.~~

Personal Protective Equipment

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

Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants.
- Chemical-resistant gloves, such as Barrier Laminate or Butril Rubber \geq 14 mils or Nitrile Rubber \geq 14 mils or Viton \geq 14 mils.
- Chemical-resistant footwear plus socks.
- Chemical-resistant headgear for overhead exposure.

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 requirements 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.

User Safety Recommendations

Users should:

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

ENVIRONMENTAL HAZARDS

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

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

PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

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

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

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protection equipment (PPE), notification to workers, 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.

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

- Coveralls over short-sleeved shirt and short pants.
- Chemical-resistant gloves, such as Barrier Laminate or Butyl Rubber \geq 14 mils or Nitrile Rubber \geq 14 mils or Viton \geq 14 mils.
- Chemical-resistant footwear plus socks.
- Chemical-resistant headgear for overhead exposure.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

GENERAL INSTRUCTIONS

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Apply AMBUSH as shown in "Directions for Application". Use sufficient water to obtain full coverage of foliage. Timing and frequency of applications should be based upon insect populations reaching economic thresholds. The higher rates may be required under conditions of heavy infestation. Crops in this label may be planted immediately after last treatment. Do not plant other crops within 60 days after last application. Any other crop may be planted if it is not harvested or grazed.

Resistance: Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your Local or State Agricultural Authorities for details.

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

REENTRY STATEMENTS

~~Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.~~

~~Do not enter treated areas without protective clothing until sprays have dried.~~

~~Protective clothing means, at least, a hat or other suitable head covering, a long sleeved shirt and long legged trousers or a overall type garment (all of closely woven fabric covering the body, including the arms and legs), shoes and socks.~~

~~Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.~~

~~Written or oral warnings regarding use of protective clothing and accidental exposure must be given to workers who are expected to be in treated areas or in areas about to be treated. Inform workers of areas or fields that may not be entered without specific protective clothing, period of time field must be vacated and appropriate actions to take in case of accidental exposure. An example of such information is given under written warnings. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information.~~

~~**WARNING:** Area treated with AMBUSH Insecticide on (insert date). Do not enter without appropriate protective clothing until sprays have dried (if more restrictive, insert State Department of Agriculture reentry interval). In case of accidental exposure to pesticide spray, wash the skin thoroughly with soap and water. Remove contaminated clothing and wash before use. If in eyes, flush with plenty of water. Get medical attention if needed.~~

CHEMIGATION

SPRINKLER IRRIGATION APPLICATION

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Apply AMBUSH Insecticide at rates and timing described elsewhere in this label. Apply with center pivot or continuous-move equipment distributing 1/2 acre-inch or less during treatment. If stationary (solid sets, handlines or wheel lines other than continuous-move) are used, AMBUSH insecticide should be injected into no more than the last 20-30 minutes of the set. Do not apply when winds are greater than 10-15 mph to avoid drifts or wind skips. Thorough coverage of foliage is required for good control. Good agitation should be maintained during the entire application period.

USE PRECAUTIONS - SPRINKLER IRRIGATION APPLICATION

- A. Apply this product only through (sprinkler including center pivot, lateral move, end tow, side [wheel] roll, traveler, big gun, solid set, or hand move) irrigation system(s). Do not apply this product through any other type of irrigation system.
- B. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.
- C. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.
- D. 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.
- E. 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.
- F. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water-source contamination from backflow.
- G. The pesticide injection pipeline must also contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- H. 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.
- I. 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, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- L. Do not apply when wind speed favors drift beyond the area intended for treatment.
- M. Do not apply through chemigation systems connected to public water systems.

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DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS A/A (OZ/A)	REMARKS
Alfalfa, Alfalfa grown for seed	Alfalfa Caterpillar Armyworms Cutworms Loopers Webworms Potato Leafhopper Blue Alfalfa Aphid ¹ Green Peach Aphid Pea Aphid ¹ Green Cloverworm Spotted Alfalfa Aphid Velvetbean Caterpillar	0.05-0.2 (3.2-12.8)	Use higher recommended dosage for increased pest pressure or for increased residual pest control. Apply in a minimum of 1 gallon of finished spray per acre by aircraft or 10 gallons of finished spray per acre with ground equipment. Use higher gallonage, 5-10 gallons by air, or 20 by ground, finished spray per acre when foliage is dense and/or when pest populations are high. Do not apply more than 0.2 pound active per cutting. When rates 0.1 pound active per acre or less are used, application may be made on day of harvest. When rates greater than 0.1 pound active per acre are used, do not apply within 14 days of harvest. Avoid application when bees are actively foraging by applying during the early morning or during the evening hours.
	Alfalfa Weevil ¹ Egyptian Alfalfa Weevil ¹ Cucumber Beetle Meadow Spittlebug Plant Bugs including Lygus spp. ¹ Stink Bugs	0.1-0.2 (6.4-12.8)	
Almonds	Navel Orangeworm, Peach Twig Borer	0.2-0.4 (12.8-25.6)	Apply by ground equipment using sufficient water to obtain uniform coverage. Can be applied up to 7 days before harvest. Do not apply more than 2.0 lbs. a.i. per acre per season. Do not graze livestock in treated orchards.

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DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS AVA (OZ/A)	REMARKS
Apples	Apple Aphid, Redbanded Leafroller, Oblique banded Leafroller, Plum Curculio, White Apple Leafhopper, Spotted Tentiform Leafminer, Tarnished Plant Bug	0.1-0.4 (6.4-25.6)	Apply by ground equipment only, using 25-400 gallons of spray per acre. Spray to wet all foliage. Do not apply after petal fall.
Artichokes	Artichoke plume moth	0.1-0.3 (6.4-19.2)	Apply by ground equipment using sufficient water to obtain uniform coverage. Apply as needed. Do not apply more than 1.5 lbs. a.i. per acre per season. Buds may be harvested on the day of application.
Asparagus	Cutworm complex, Asparagus Beetle	0.05-0.1 (3.2-6.4)	Apply by ground equipment using sufficient water to obtain uniform coverage. Apply as needed. Do not apply more than 0.4 lbs. a.i. per acre per season. Do not apply within 1 day of harvest.
Asparagus Ferns	Japanese Beetle Asparagus Beetle, Lygus Bugs	0.1 (6.4)	Apply to the fern stage of the asparagus plant after spear harvest when larval and adult stage of the asparagus beetle, lygus bugs and the adult stage of the Japanese beetle are present.

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DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS A/A (OZ/A)	REMARKS
Avocados	Thrips, Leafhoppers, Mirid bugs, Lepidopterous larvae	0.2 (12.8) ¹ <u>fl.oz/100gal.</u> 12.8	Apply by ground equipment. Spray to wet all foliage. Apply when insects appear and repeat at 7-10 day intervals as needed to provide control. Do not make more than 6 applications per season. Do not apply within 7 days of harvest. Do not graze livestock in treated areas. Do not feed cover crops from treated areas to livestock.
Cantaloupes (Refer to Cucurbit Vegetables for application directions)			
Celery (Refer to Leafy Vegetables for application directions)			
Cherries	Lesser Peach Tree Borer, Rose Chafer, Green Fruitworm, Redbanded Leafroller, Plum Curculio, Tarnished Plant Bugs	Rate lbs ai/100 gal. 0.025-0.05 (1.6-3.2)	Do not exceed 400 gallons per acre. Apply when insects appear. In the East, do not exceed 6 applications per season, with no more than 4 applications after petal fall. In the West, do not apply more than 4 applications per season, with no more than 3 applications after petal fall. Do not apply within 3 days of harvest. Do not graze livestock if treated orchards. Do not feed forage to livestock.
Christmas Trees ^c (container and field grown)	Nantucket Pine Tip Moth	0.1-0.2 (6.4-12.8)	Apply first application when adults appear and repeat at 5-7 day intervals or as needed throughout the season. Use sufficient water to obtain full coverage of foliage.
Chrysanthemums (Florida only)	Vegetable Leafminer	0.1-0.2 (6.4-12.8)	Apply by ground.

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DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS A/A (OZ/A)	REMARKS
COLE CROPS			
Broccoli	Cabbage Looper Imported Cabbageworm, Diamondback Moth, Cabbage Aphid ^b	0.05-0.1 (3.2-6.4)	Apply every 5 days or as needed by air or ground. Use sufficient water to obtain full coverage of foliage. Do not apply more than 0.8 lbs. a.i. per acre per season. Do not apply within 1 day of harvest.
Brussels Sprouts	Cabbage Looper Imported Cabbageworm, Diamondback Moth, Cabbage Aphid ^b	0.05-0.1 (3.2-6.4)	Apply as needed by air or ground. Use sufficient water to obtain full coverage of foliage. Do not apply more than 0.8 lbs. a.i. per acre per season. Do not apply within 1 day of harvest.
Cabbage	Cabbage Looper Imported Cabbageworm, Diamondback Moth, Cabbage Aphid ^b	0.05-0.2 (3.2-12.8)	Apply every 5-10 days or as needed by air or ground. Use sufficient water to obtain full coverage of foliage. Do not apply more than 1.0 lb. a.i. per acre per season. Do not apply within 1 day of harvest.
Cauliflower	Cabbage Looper Imported Cabbageworm, Diamondback Moth, Cabbage Aphid ^b	0.05-0.1 (3.2-6.4)	Apply every 5 days or as needed by air or ground. Use sufficient water to obtain full coverage of foliage. Do not apply more than 0.8 lbs. a.i. per acre per season. Do not apply within 1 day of harvest.
Chinese Broccoli ^c (gai lan, white flowering)	Cabbage Looper Imported Cabbageworm, Diamondback Moth, Cabbage Aphid ^b	0.05-0.1 (3.2-6.4)	Apply every 5 days or as needed by air or ground. Use sufficient water to obtain full coverage of foliage. Do not apply more than 0.8 lbs. a.i. per acre per season. Do not apply within 1 day of harvest.
Chinese Cabbage (Tight-heading varieties only)	Cabbage Looper Imported Cabbageworm, Diamondback Moth, Cabbage Aphid ^b	0.05-0.2 (3.2-12.8)	Apply every 5-10 days or as needed by air or ground. Use sufficient water to obtain full coverage foliage. Do not apply more than 1.0 lb. a.i. per acre per season. Do not apply within 1 day of harvest.

FORM AVAILABLE 6697

DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS A/A (OZ/A)	REMARKS
Collards (NC, SC, GA, AZ, OK, TX, AR, IL only)	Cabbage Looper Imported Cabbageworm Diamondback Moth Cabbage Aphid	0.05-0.1 (3.2-6.4)	Apply by ground only. Spray using sufficient water to obtain uniform coverage. Apply as needed. Do not exceed 8 applications. Do not apply within 1 day of harvest. Do not graze treated areas or feed crop refuse to livestock.
Conifers (container and field grown)	Nantucket Pine Tip Moth	0.1-0.2 (6.4-12.8)	Apply first application when the adults appear and repeat at 5-7 day intervals or as needed throughout the season. AMBUSH may be diluted in a nonvolatile vegetable oil or in water in a minimum of one gallon of finished spray per acre using equipment calibrated to give adequate coverage.

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DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS A/A (OZ/A)	REMARKS
Cotton	Bollworm, Tobacco Budworm, Pink Bollworm, Lygus Bugs Cabbage Looper, Cotton Leafperforator, Boll Weevil, Cotton Fleahopper, Saltmarsh Caterpillar, Whitefly, ^b Cotton Aphid, ^b Cutworms	0.1-0.2 (6.4-12.8)	<p>Apply as required by scouting reports, usually at intervals of 5-7 days. Apply by air or ground. Do not apply by ground within 25 feet, or by air within 75 feet of lakes; reservoirs; rivers; permanent streams, marshes, or natural ponds; estuaries, and commercial fish farm ponds. Use sufficient water to obtain full coverage of foliage. AMBUSH may also be applied by air diluted with a vegetable oil such as cottonseed oil or soybean oil. Agricultural oils (crop oils) are not recommended. Apply using a minimum of 1 quart of finished spray per acre. For control of boll weevils spray on a 3 to 5 day schedule or as needed. Do not apply within 14 days of harvest. The higher rates of AMBUSH (0.15 to 0.2 lbs. a.i. per acre) may be required under conditions of heavy lepidopterous worm infestation. AMBUSH aids in the reduction of lepidopterous egg hatch by contact action. Do not graze livestock in treated areas. Do not apply more than 2.0 lbs. a.i. 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. Synthetic pyrethroid products include AMBUSH[®], Ammo[®], Asana[®] XL, Baythroid[®], Capture[®], CYMBUSH[®], KARATE[®], Pounce[®], and Scout[®] X-TRA.</p>

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DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS A/A (OZ/A)	REMARKS
Cotton (cont.)			<p>SPRAY DRIFT PRECAUTIONS All aerial equipment and ground application equipment must be properly maintained and calibrated using appropriate carriers. Do not make aerial or ground applications during temperature inversions. Make aerial or ground applications when the wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wingtip or rotor vortices. Boom length must not exceed 75% of wing span or rotor diameter.</p>
Cucurbit Vegetables+	<p>Leafminers and Squash Bugs</p> <p>Cabbage Looper, Cucumber Beetle, (adults), Cutworms, Melon Worm, Pickleworm, Plant Bugs, (including Lygus and Stink Bugs), Rindworms and Squash Vine Borer</p>	<p>0.2 (12.8)</p> <p>0.1-0.2 (6.4-12.8)</p>	<p>Apply a minimum of 4 gallons of finished spray per acre by air or 20 gallons of finished spray per acre with ground equipment. Do not apply more than 1.6 pounds active-ingredient per acre per season. AMBUSH may be applied up to harvest.</p>

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DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS A/A (OZ/A)	REMARKS
Eggplant	Colorado Potato Beetle	0.2 (12.8)	Apply by ground or air equipment using sufficient water to obtain uniform coverage. Apply as needed. Do not apply more than 3.0 lbs. a.i. per acre per season. Do not apply within 3 days of harvest.
	Vegetable Leafminer, Cabbage Looper Flea Beetle	0.1-0.2 (6.4-12.8)	
Field Corn/ Popcorn/ Field Corn Grown for Seed (Premergent Use)	Armyworm, Cutworms	0.1-0.2 (6.4-12.8)	Apply in the time period from 5 days prior to planting up to emergence of the crop. Apply as a broadcast spray in a minimum of 10 gallons of finished spray/acre with ground equipment or 1 gallon/acre by air.**
Field Corn/ Popcorn/ Field Corn Grown for Seed (Foliar Use)	Cutworms, European Corn Borer, Armyworm, Southwestern Corn Borer, Flea Beetle, Corn Earworm,*** Corn Rootworm Beetle,*** Tobacco Budworm*** Stalk Borer	0.1-0.2 (6.4-12.8)	<p>Apply prior to the brown silk stage. Apply a minimum of 1 gallon of finished spray/acre by air and 10 gallons/acres with ground equipment.**</p> <p style="text-align: center;">BEST AVAILABLE COPY</p> <p>When treating for stalk borer, AMBUSH must be applied when or shortly before the stalk borer larvae are moving into the corn from surrounding weeds and grasses. Mowing or burndown herbicide is suggested to initiate movement.**</p>

DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS A/A (OZ/A)	REMARKS
Filberts	Filbertworm, Oblique Banded Leafroller	0.2-0.4 (12.8-25.6)	Apply when insects appear. Do not apply more than 1.6 lbs a.i. per acre per season. Apply in a minimum of 15 gallons of finished spray per acre by aircraft or 20 gallons of finished spray per acre with ground equipment. Do not apply within 14 days of harvest. Do not graze livestock in treated orchards.
Horseradish	Imported Crucifer Weevil (<i>Baris lepidii</i>) control	0.1% a.i. solution ^d in a spring preplant dip and 0.2 lb ai/A (12.8) as a foliar spray.	Soak sets for 30 min. and air-dry before planting; make up to 3 foliar applications as needed to control weevil adults during oviposition. Apply by ground equipment in a minimum spray volume of 20 gallons per acre. Do not apply within 22 days of harvest.
Leafy Vegetables* (except Brassica)	Vegetable Leafminer, Cabbage Looper, Cutworm Complex, Fall Armyworm, Beet Armyworm, Corn Earworm, Green Cloverworm, Leafhoppers, European Corn Borer	0.1-0.2 (6.4-12.8)	Apply every 7-15 days or as needed by air or ground. Use sufficient water to obtain full coverage of foliage. Do not apply more than 2.0 lbs. a.i. per acre per season. Can be applied up to 1 day of harvest.
Lettuce (Refer to Leafy Vegetables for application directions)			

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DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS A/A (OZ/A)	REMARKS
<p>Mushrooms (Mushroom houses and adjacent premise areas)</p>	<p>Mushroom Flies (Sciariid and Phorid Adults)</p>	<p>Apply as a fogging or aerosol treatment at the rate of 3.2 to 4.0 ounces (0.05-0.0625 lb ai) per 30 ounces of water or suitable diluent. Use 1 quart of solution per standard double house (35,000 cu ft.: 8,000 sq. ft.)</p>	<p>Preparation of the building prior to fogging: (1) Close all doors, windows, and ventilators, (2) Lock or barricade all entrances, turn off pilot lights, post warning signs, and take precautions to prevent persons and animals from entering the area. Use prior to filling the house, during cool-down, during spawning, up to pinning and between breaks. Do not use when mushrooms are present. Treat once daily or as needed when flies appear. Do not make more than 20 applications prior to pinning of first break; apply no more than two applications between each break. Do not apply more than 30 applications total per crop of 5 breaks. Do not apply within 3 days of harvest. Length of exposure time should be limited to 1 hour, then ventilate the house. Use fans to ventilate in houses that do not have forced air circulation. Wear full-faced gas mask with canister type recommended for general insecticide protection.</p>
<p>Onions (Dry Bulb) and Garlic</p>	<p>Onion Thrips Armyworms</p> <p>Cutworms Leafminers Onion Maggots (adult) Stink bugs</p>	<p>0.15-0.3 (9.6-19.2)</p> <p>0.1-0.3 (6.4-19.2)</p>	<p>Apply in a minimum of 20 gallons of water per acre with ground equipment or in a minimum of 6 gallons per acre by air as foliar spray. Begin applications when pests appear and repeat as necessary to maintain control. Use the higher label rates as onion thrips population increases and avoid rescue situations. Do not apply more than 2.4 lbs. active per acre per season. Do not apply within 1 day of harvest. Do not graze livestock in treated areas or cut treated crops for feed.</p>

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DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS A/A (OZ/A)	REMARKS
Ornamentals Nursery Stock ^c (field-grown)	Beet Armyworm Cabbage Looper Citrus Thrip Heliothis Spp. Leafhoppers Leafminers Whiteflies Cutworms	0.1-0.2 (lbs ai/100 gal)	Marginal leaf burn may occur on Salvia, Dieffenbachia and Pteris Fern. Application to blooming plants may cause browning of petals. Not all species and varieties have been tested. Before treating large numbers of plants of a particular variety, treat a few plants and observe prior to full scale application. Apply to nonbearing plants of fruiting species.
Papaya (Florida only)	Fruit Fly	0.1 (12.8) ¹ <u>oz./100 gal.</u> 6.4	Apply by ground equipment. Spray to wet all foliage. Apply when insects appear and repeat at 7-10 day intervals as needed to provide control. Do not make more than 6 applications per season. Do not apply within 7 days of harvest. Do not graze livestock in treated areas. Do not feed cover crops from treated areas to livestock.
Peaches	Peach Twig Borer Oriental Fruit Moth, Green Fruitworm, Lesser Peachtree Borer, Plum Curculio, Tarnished Plantbug, Rose Chafer	0.1-0.4 (6.4-25.6)	Apply by ground equipment using 25-400 gallons of spray per acre. Spray to wet all foliage. Can be applied up to 7 days before harvest. Do not apply more than 3.0 lbs. a.i. per acre per season. Do not graze livestock in treated orchards.

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DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS A/A (OZ/A)	REMARKS
Pears (Dormant)	Pear Psylla	0.2-0.4 (12.8-25.6)	Apply at a rate of 0.8 to 1.6 pints (0.2 to 0.4 lbs. active) per acre. May be combined with 2 to 8 gallons of spray oil per acre. Apply during the dormant through delayed dormant growth periods only. Apply in 3 to 20 gallons of finished spray per acre by aircraft and 25 to 400 gallons per acre by ground equipment. Do not apply more than 0.8 lbs. a.i. per acre per season. Do not graze orchard floor.
Pears (Pre-bloom/ Seasonal)	Pear Psylla Codling Moth, Green Fruitworm	0.2-0.4 (12.8-25.6)	Apply two pre-bloom sprays followed by three seasonal sprays. Pre-bloom sprays can be applied from dormant through bud burst stages. Seasonal sprays can be applied from petal fall up to 14 days of harvest. Do not apply more than 2.0 lbs. a.i. per acre per season.
Peppers (Bell)	Vegetable Leafminer, Cabbage Louper, Flea Beetle, Pepper Weevil European Corn Borer	0.1-0.2 (6.4-12.8) 0.2 (12.8)	Apply by ground or air equipment using sufficient water to obtain uniform coverage. Apply as needed. Do not apply more than 1.6 lbs. a.i. per acre per season. Do not apply within 3 days of harvest.

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DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS A/A (OZ/A)	REMARKS
Pine Seed Orchard	Coneworms, Seed bugs	13 fl oz/ 100 gals water (0.025% dilution by wt) for high volume sprayers; 68 fl oz/ 100 gals water (0.125% dilution by wt) for low volume sprayers; 48 fl oz/A application is not less than 10 gals of water for aerial applications	Apply first application within 1 week of female flower closure or peak pollen flight for webbing coneworm control. For other coneworms and seed bugs, apply first application within 30 days following female flower closure. Repeat applications at intervals of 4 weeks, but do not apply more than 6 applications. Apply approximately 5-10 gals of the 0.025% dilution*per tree with high volume sprayers. With low volume sprayers, apply 100 gallons of the 0.125% dilution per acre. Do not graze or harvest cover crop. Avoid contact with open water.
Pistachios	Peach-Twig Borer, Naval Orangeworm, Chinch Bug	0.2-0.4 (12.8-25.6)	Apply at a rate of 0.8 to 1.6 pints (0.2-0.4 lb active) per acre. Use sufficient water to obtain full coverage of foliage. Do not apply more than 0.8 lbs a.i. per acre per season. Do not apply after 10 percent hull split. Nuts may be harvested on the day of application. Do not graze livestock in treated orchards.
Potatoes	Colorado Potato Beetle, Potato Leafhopper, Aster Leafhopper, Potato Flea Beetle, Potato Aphid, Potato Tuberworm, Potato Psyllid, Cabbage Looper	0.05-0.2 (3.2-12.8)	Apply as needed by air or ground. Use sufficient water to obtain full coverage of foliage. Do not apply more than 2.4 lbs. a.i. per acre per season. Can be applied up to 7 days prior to harvest.
Pumpkins (Refer to Cucurbit Vegetables for application directions)			

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DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS AVA (OZ/A)	REMARKS
Range Grass	Range Caterpillar	0.01 (0.64)	Apply by ground or air using sufficient volume to obtain uniform coverage. Do not apply more than once per year. Cattle may be present during application. Do not harvest or feed hay to livestock.
Roses ^c (field-grown)	Heliothis Spp.	0.1-0.2 (6.4-12.8)	Apply in 5 gallons of finished spray per acre with ground equipment and 1 gallon acre by air.
Roses ^c (greenhouse)	Beet Armyworm Cabbage Looper Omnivorous Leafroller	8 fl oz/100 gals water	AMBUSH is not phytotoxic to the following varieties of greenhouse roses: Ballena, Bettina, Cara Mia, Coquette, Excitement, Forever Yours, G. Wave, Jack Frost, Jr. Bridesmaid, Matador, Paul's Pink, Samantha, Seventeen, Town Crier, Tropicana and Visa. Other varieties may vary in their sensitivity to AMBUSH, and a small number of plants should be treated under local conditions to determine plant safety prior to commercial use.
Soybeans	Green Cloverworm Mexican Bean Beetle, Bean Leaf Beetle Cabbage Looper, Potato Leafhopper, Velvetbean Caterpillar, Saltmarsh Caterpillar	0.05-0.1 (3.2-6.4)	Apply by air or ground. Do not apply more than 0.4 lbs. a.i. per acre per season. Can be applied up to 60 days before harvest. Do not graze treated areas or harvest for forage or hay.
	Com Earworm, Beet Armyworm, Japanese Beetle*** Soybean Looper ^e ,	0.1-0.2 (6.4-12.8)	
Spinach (Refer to Leafy Vegetables for application directions)			

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DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS A/A (OZ/A)	REMARKS
Sweet Corn	Com Earworm, European Corn Borer, Fall Armyworm, Corn Rootworm Adults, Cutworms, Aster Leafhopper Flea Beetle ^c	0.1-0.2 (6.4-12.8)	Apply every 5 days or as needed by air or ground. Do not apply more than 1.2 lbs. a.i. per acre per season. Do not apply within 1 day of harvest of ears or forage or livestock grazing. AMBUSH may be mixed with LANNATE [®] (methomyl) in accordance with label limitations and precautions. Label dosage rates should not be exceeded.
Sweet Corn, (Florida only-corn grown for the fresh market)	Com Earworm, European Corn Borer, Fall Armyworm, Southern Armyworm Corn Rootworms Adults, Cutworms, Aster Leafhopper	0.1-0.25 (6.4-16.0)	Apply every 5 days or as needed by air or ground. Do not apply more than 3.25 lbs. a.i. per acre per crop season. Do not graze livestock in treated areas or harvest for forage. AMBUSH may be mixed with LANNATE [®] (methomyl) in accordance with label limitations and precautions. Label dosage rates should not be exceed.
Tomatoes (Only for application to tomatoes grown in Florida and Puerto Rico for final marketing as fresh tomatoes.)	Tomato Fruitworm, Cabbage Looper Tomato Pinworm, Vegetable Leafminer, Beet Armyworm, Southern Armyworm, Colorado Potato Beetle, Granulate Cutworm, Hornworm	0.05-0.2 (3.2-12.8)	Apply by air or ground in sufficient water to obtain uniform coverage. Do not apply more than 1.2 lbs. a.i./acre per crop season. Can be applied up to the day of harvest. Do not apply as a band. Do not use on tomato varieties in which the mature tomatoes will be less than 1 inch in diameter (such as cherry tomatoes).

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DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS AVA (OZ/A)	REMARKS
Turnips (FL, GA, IL, IN, OK, SC, TX, WA only) (TX, OK, IL & IN only) (SC, GA, FL, WA only)	Cabbage Looper Imported Cabbageworm Diamondback Moth Cabbage Aphid*	0.05-0.1 (3.2-6.4)	Apply by ground equipment only. Spray using sufficient water to obtain uniform coverage. Apply as needed. Do not apply within 1 day of harvest. Do not graze treated areas or feed crop refuse to livestock. Do not exceed 8 applications. Do not exceed 4 applications.
Walnuts	Navel Orangeworm, Codling Moth, Walnut Husk Fly	0.2-0.4 (12.8-25.6)	Apply when insects appear. Do not apply more than 1.6 lbs. a.i. per acre per season. Apply in a minimum of 20 gallons of finished spray per acre by aircraft or 100 gallons of finished spray per acre with ground equipment. Do not apply within 1 day of harvest. Do not graze livestock in treated orchards.

* Amaranth (leafy amaranth, Chinese spinach, tampala); arrugla (Roquette); celery, celtuce; chervil; corn salad; chrysanthemum, edible-leaved; chrysanthemum, garland; cress, garden; cress upland (yellow rocket, winter cress); dandelion; dock (sorrel); endive (escarole); fennel, Florence; lettuce (head and leaf); orach; parsley; purslane, garden; purslane, winter; rhubarb; spinach; spinach, fine; spinach, new Zealand; Swiss chard.

** AMBUSH may be applied in tank-mixtures with the following herbicides in accordance with label limitations and precautions. Label dosage rates should not be exceeded.
 GRAMOXONE® SUPER; GRAMOXONE® EXTRA, BICEP®, LASSO®/Atrazine Premix; LASSO® 4E & ME; DUAL® 8E; Atrazine 4L & 80W; BLADEx® 80W & 4L; PRINCEP®; PRINCEP® CALIBER 90®; 2,4-D; ROUNDUP®; BRONCO®; BANVEL®; EXTRAZINE®

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*** Not for control of this insect in California.

+ Balsam pear (Bitter Melon); Chinese Waxgourd (Chinese preserving melon); citron melon; cucumber, gherkin; gourds, edible; melons, including hybrids such as cantaloupe, casaba, crenshaw, honeydew melons, honey balls, mango melon, muskmelon, Persian melon; pumpkin; squash, summer and winter; watermelon, including hybrids.

- a Aids in suppression.
 - b Only suppression can be expected when utilized on a 5-7 day schedule.
 - c Currently not registered for use in California.
 - d 0.1% ai solution = 3 1/3 pt formulation per 100 gallons of water.
 - e Maximum use rate in California is 0.1 lbs. a.i./Acre.
 - f Under heavy insect pressure use 0.2 lbs a.i./Acre. A second application of alternate chemistry may be necessary to reduce populations below economic thresholds.
- 1 Do not use more than 12.8 oz. AMBUSH /A. The final spray should be no more concentrated than 12.8 oz./100 gallons for avocados and 6.4 oz./100 gallons for papayas. Since tree size and spacing will affect the amount of spray needed for dilute sprays, the applicator must know the number of gallons of water/A needed to spray the trees to the point of drip. If you do not know this gallonage, you should conduct a test to determine it. If you do not know how to conduct such a test with your equipment, you should ask for assistance from your equipment dealer. For dilute sprays (i.e., sprayed to the point of runoff) 12.8 oz. AMBUSH should be dilute with the gallonage determined by this test.

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STORAGE AND DISPOSAL

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

STORAGE: Keep container closed when not in use. Do not store near food or feed. Protect from freezing. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

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

CONTAINER DISPOSAL:

Metal Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Plastic Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Glass Containers: Triple rinse (or equivalent). Then dispose of in a sanitary landfill, or by other approved state and local procedures.

FOR BULK AND MINI-BULK CONTAINERS:

Container Disposal: Reseal container and offer for reconditioning or triple rinse (or equivalent), and offer for recycling or reconditioning, or clean in accordance with manufacturer's instructions.

Container Precautions: Before refilling, inspect thoroughly for damage such as cracks, punctures, bulges, dents, abrasions and damaged or worn threads on closure devices.

REFILL ONLY WITH AMBUSH. The contents of this container cannot be completely removed by cleaning. Refilling with materials other than AMBUSH will result in contamination and may weaken container. After filling and before transporting, check for leaks. Do not refill or transport damaged or leaking container.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

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RATE CONVERSION CHART			
POUNDS ACTIVE/ACRE	FLUID OUNCES/ACRE	PINTS/ACRE	ACRES TREATED/ GALLON
0.05	3.2	0.2	40.0
0.10	6.4	0.4	20.0
0.125	8.0	0.5	16.0
0.15	9.6	0.6	13.3
0.175	11.2	0.7	11.4
0.20	12.8	0.8	10.0

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