



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

OCT 18 2004

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Jamin Huang, Ph.D  
Bayer CropScience  
2 T.W. Alexander Drive  
Research Triangle Park, NC 27709

**SUBJECT:** Amendment - Additional Uses - Bulb Vegetables, Cucurbit Vegetables, Fruiting Vegetables, Root Vegetables (except Sugarbeets), Tuberous and Corn Vegetables, Pome Fruits, Tree Nuts, Canola and Rapeseed, Field Corn, Popcorn, Sweet Corn, Soybeans, Sorghum and Sunflowers

**PRODUCTS:** EPA Registration No. 34147-8 (Decis 0.2EC Insecticide)  
EPA Registration No. 34147-12 (Decis 1.5EC Insecticide)

Your E-mail dated October 5<sup>th</sup> and October 15<sup>th</sup> ,and submission dated July 13, 2004

Dear Dr. Huang:

The Agency accepts your application for amended registration to add the subject crops to the subject labeling since you have agreed in writing to the following terms for conditional registration in accordance with FIFRA section 3(c)(7)(b)(c):

1. You will submit and /or cite all data required for registration/reregistration of your product under FIFRA sec.3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit responses required for reregistration of your product under FIFRA section 4.
2. The subject amendment is conditioned under the same terms and condition for data generation as stipulated in our November 15, 1993 letter for use of this product on cotton.
3. Bayer CropScience agreed that the current synthetic pyrethroid mitigation measures are interim in nature and may be reconsidered or modified after review and evaluation of the Spray Drift Task Force.
4. You understand that this registration will expire on November 15, 2004. You further understand that it is EPA's stated intent to, by November 15, 2004,

complete its review of all relevant data and other information that are available to the Agency, and to make FIFRA section 3(c)(5) or other appropriate regulatory decisions for cotton-use synthetic pyrethroids and other crops conditionally registered based on the Agency's review of such data/information and considering statutory and regulatory criteria for such decisions.

- 5. You will submit product information (pounds or gallons produced) for this product for the fiscal year in which the added uses are conditionally registered, in accordance with FIFRA section 29. The fiscal year begins October 1 and ends September 30. The production information will be submitted to the Agency no later than November 15 following the end of the preceding fiscal year.

The information should be submitted to:

U.S. Environmental Protection Agency  
 Office of Pesticide Program (7504C)  
 Document Processing Desk  
 Ariel Rios Building  
 1200 Pennsylvania Avenue, NW  
 Washington, DC 20460

- 6. You have agreed to submit the data listed below, conducted in accordance with the 40CFR Part 158 Test Guidelines:

Title of Study	Guideline Reference No.	Study Due Date
Developmental Neurotoxicity Study	870.6300	October 31, 2006

You should note if you fail to satisfy any of the conditions imposed on this registration, e.g., you fail to submit the required data by the specified deadlines or the data submitted were not generated in accordance with the applicable test guidelines, EPA may issue a notice to cancel this use under FIFRA 6(e).

- 7. Make the following label changes:
  - a. Globe artichoke is not in the tuberous and corm vegetable group. Therefore add separate directions for use of this product on page 13 of labeling.
  - b. For uses on root and tuber vegetable (which are combined on the same page of the label under the headings "ROOT VEGETABLES (EXCEPT SUGARBEET)" and TUBEROUS and CORM VEGETABLES"), the label should state "Other than radishes, applications may not be made to

root and tuber vegetables whose tops or leaves are to be harvested for human or livestock consumption.”

- c. Under the directions for sweet corn, a statement is needed to instruct “Do not feed stover to livestock within 21 days of application .” The 1-day intervals on the present label for harvest, grazing, and cutting for feed need to be clarified that they apply to the fresh corn (cobs) and silage/forage.
- d. Revise third bullet to “Do not give any liquid to the person”, under First Aid section.
- e. Delete “Apply as needed according to local economic thresholds” under Application. The remarks section of the label provides appropriate reapplication intervals or restrictions.

Finally, once the required data have been submitted and evaluated, EPA will entertain an application to amend the registration of the subject product to allow the unconditional use on cotton and other crops without any special restrictions on the duration of the registration.

Two copies of the finished labeling must be submitted prior to releasing the product for shipment. A stamped copy of the labels are enclosed for your records.

Sincerely yours,

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

Enclosure

# RESTRICTED USE PESTICIDE

DUE TO ACUTE TOXICITY AND TOXICITY TO FISH AND AQUATIC ORGANISMS

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

Group **3** Insecticide

## DECIS® 0.2EC Insecticide

For Insect Control on Bulb Vegetables, Cucurbit Vegetables, Fruiting Vegetables, Root Vegetables (except Sugarbeets), Tuberos and Corn Vegetables, Pome Fruits, Tree Nuts, Canola and Rapeseed, Cotton, Field Corn, Popcorn, Sweet Corn, Soybeans, Sorghum and Sunflowers.

ACTIVE INGREDIENT:	Percent by Weight
(1R,3R)-3(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylic acid (S)- alpha-cyano-3-phenoxy-benzyl ester	2.86%*
INERT INGREDIENTS**	97.14%
<b>TOTAL 100.0%</b>	

\*Equivalent to 0.2 lb. active ingredient per U.S. gallon.

\*\*Contains petroleum distillates

ACCEPTED with COMMENTS in EPA Letter dated

E.P.A. Reg. No. 34147-8

E.P.A. Est. No.

OCT 18 2004

### KEEP OUT OF REACH OF CHILDREN

### DANGER PELIGRO

Under the Federal Insecticide, Fungicide, and Rodenticide Act, this pesticide is registered under EPA Reg. No. 34147-8

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.)

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

#### FIRST AID

<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor for treatment advice.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF INHALED:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>

For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

# PRECAUTIONARY STATEMENTS

5/23

## HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)

### DANGER - POISON

Fatal if swallowed. Corrosive. Causes irreversible eye damage and skin burns. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes, on skin, or on clothing. Wear face shield or goggles. Wear protective clothing and chemical resistant gloves. Harmful if absorbed through the skin or inhaled. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash before reuse.

Skin exposure may result in a sensation described as a tingling, itching, burning, or prickly feeling. Onset may occur immediately to 4 hours after exposure and may last 2 to 30 hours, without damage. Wash exposed areas once with soap and water. Relief from the skin sensation may be obtained by applying an oil-based cream.

### 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 G on an EPA chemical resistance category selection chart.

**Handlers who may be exposed to the dilute through application or other tasks must wear:**

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves such as barrier laminate or Viton<sup>®</sup>
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when mixing or loading, or cleaning equipment

**Handlers who may be exposed to the concentrate through mixing, loading, application, or other tasks must wear:**

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or Viton
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when mixing or loading, or cleaning equipment

### ENGINEERING CONTROLS STATEMENT

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.

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.

### ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic invertebrates. 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 may be hazardous to aquatic organisms in areas near the application site. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.

This pesticide is highly toxic to bees exposed to direct treatment. Do not apply it or allow it to drift to crops or weeds on which bees are actively foraging.

Notify State and/or Federal authorities and Bayer CropScience immediately if you observe any adverse environmental effects due to the use of DECIS<sup>®</sup> Insecticide.

NOTICE: It is a Federal offense to use any pesticide in a manner that results in the death of a member of an endangered species.

### PHYSICAL AND CHEMICAL HAZARDS

Do not use or store near heat or open flame.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**Pesticide Storage:** Do not store over 100°F or below 50°F.

**Pesticide Disposal:** Pesticide wastes are acutely hazardous. 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.

### WHEN PACKAGED IN PLASTIC CONTAINERS:

**Container Disposal:** Empty containers should be triple rinsed into the spray tank during the spray operation. 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.

### WHEN PACKAGED IN SVR CONTAINERS:

**Returnable Container Return Procedure:** Return the container clean (outside only) to the place of business from which the DECIS® Insecticide was purchased. This returnable container is the sole property of Bayer CropScience and must not be opened or discarded.

## 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.

Shake well before using.

## AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

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

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves such as barrier laminate or Viton
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

## APPLICATION

Dilute DECIS® 0.2EC in water according to the directions shown below and apply to the target crops at the rates listed. Uniform coverage is essential. Apply as needed according to local economic thresholds. Consult your local or state agricultural authorities regarding economic thresholds and timing of application for specific pests. Under heavy pest populations use of the highest labeled rate is recommended.

DECIS® 0.2EC may be applied before, during, or after planting. Use the higher labeled rate for soil incorporated applications.

## 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.

## TANK MIX RECOMMENDATIONS

DECIS® 0.2EC Insecticide may be applied in tank mixtures with other pesticides approved for use on the crops specified. Observe all restrictions and precautions which appear on the labels of those products. If compatibility with another product is not known perform a small-scale test to determine compatibility. When testing combination sprays for compatibility, first add DECIS® 0.2EC Insecticide to at least an equal amount of water in a clear container, mix thoroughly, and then add combination products to the mixture. Curdling, precipitation, greasing, layer formation or increased viscosity are symptoms of incompatibility. If any of these symptoms appear do not use the combination.

DECIS® 0.2EC Insecticide may also be applied in combination with additive products such as adjuvants, spreader stickers, penetrating agents, and drift control agents. Observe all restrictions and precautions which appear on the labels of those products. If compatibility with such a product is not known, a small scale test as described above should be performed.

# COTTON

8/23

Target Pests	Rate		Remarks
	Pounds A/A	Fl. Oz./A	
Cotton fleahoppers	0.013	8.3	<b>Minimum gallonage requirements:</b> For aerial application use a minimum of 2 gallons of water per acre (3 gallons in Arizona). For ground applications, use a minimum of 5 gallons of water per acre for thorough coverage of the foliage.
Cotton leafperforator	to	to	
Cotton leafworm	0.019	12.2	
Cutworm			
Leafhoppers			
Threecornered alfalfa hopper			
Thrips			
Armyworm (all species) <sup>2, 3</sup>	0.019	12.2	<b>Optimum gallonage requirements:</b> For aerial applications under hot, dry environmental conditions or when the crop canopy is dense, gallonage requirements may need to be increased to 3 to 5 gallons of water plus crop oil concentrate at 1 pint to 1 quart per acre. Ground application gallonage should be increased to a minimum of 10 gallons per acre obtain thorough coverage.
Aphids <sup>1</sup>	to	to	
Boll weevil	0.030	19.2	
Cabbage looper <sup>3</sup>			
Cotton bollworm			
European Corn borer			
Grasshoppers			
Mites <sup>1</sup>			
Pink bollworm			
Saltmarsh caterpillar			
Soybean looper <sup>3</sup>			
Stink bugs			
Tarnished plant bug <sup>2</sup>			
Tobacco budworm <sup>2</sup>			
Whitefly (adult) <sup>1</sup>			
Western plant Bug <sup>2</sup>			
			<b>NOTES for Use on Cotton:</b> <ol style="list-style-type: none"> <li>1. DO NOT apply more than 192 fluid ounces of DECIS® 0.2EC per acre (0.3 lb ai/A) per growing season.</li> <li>2. DO NOT make more than 10 applications of DECIS® 0.2EC.</li> <li>3. Allow 5 days between successive applications of DECIS® 0.2EC.</li> <li>4. DO NOT apply DECIS® 0.2EC within 21 days of harvest.</li> <li>5. DO NOT apply this product as a ULV application. Dilute the desired amount of DECIS® 0.2EC so that at least 2 gallons of spray solution per acre is applied.</li> </ol>

<sup>1</sup> Suppression only.

<sup>2</sup> See resistance statement under the "Directions For Use" section.

<sup>3</sup> For best control apply to 1<sup>st</sup> and 2<sup>nd</sup> instar larvae.



CORN, FIELD AND POP

9/23

Target Pests	Rate		Remarks
	Pounds AI/A	Fl. Oz./A	
Cutworms	0.012	7.7	<b>Minimum gallonage requirements:</b> For aerial applications, use a minimum of 2 gallons of water per acre. For ground applications, use a minimum of 5 gallons of water per acre for thorough coverage of the foliage.
Flea beetles	to	to	
Grasshoppers	0.018	11.5	
Aphids <sup>1</sup>	0.018	11.5	<b>NOTES for Use on Corn:</b> 1. DO NOT apply more than 60.8 fluid ounces of DECIS® 0.2EC per acre (0.095 lb ai/A) on field corn in one growing season. 2. DO NOT make more than 5 applications of DECIS® 0.2EC per acre per season. 3. Allow 21 days between successive applications of DECIS® 0.2EC 4. DO NOT apply DECIS® 0.2EC within 21 days of harvest of field corn for grain or fodder, or within 12 days of cutting or grazing field corn for forage.
Armyworm (all species) <sup>2,3</sup>	to	to	
Chinch bugs	0.022	14.1	
Click beetle			
Corn earworm <sup>2,3</sup>			
Corn rootworm (adult)			
European corn borer <sup>3</sup>			
Japanese beetle (adult)			
June beetle (adult)			
Masked chafer (adult)			
Southern corn borer <sup>3</sup>			
Southwestern corn borer <sup>3</sup>			
Stalk borer <sup>3</sup>			
Stink bugs			
Webworm			

<sup>1</sup> Suppression only.

<sup>2</sup> See resistance statement under the "Directions For Use" section.

<sup>3</sup> Apply to early instar larvae prior to bring into the ear or stalk.

**CORN, SWEET**

Target Pests	Rate		Remarks
	Pounds AI/A	Fl. Oz./A	
Cutworms	0.012	7.7	<b>Application interval:</b> To protect the tassel, silk and ear, a 1 day interval may be used from tassel emergence to silk dry-down. Once silks have dried and egg laying has stopped, spray intervals may be extended as indicated by scouting.
Flea beetles	to	to	
Grasshoppers	0.018	11.5	
Aphids <sup>1</sup>	0.018	11.5	<b>Minimum gallonage requirements:</b> For aerial applications, use a minimum of 2 gallons of water per acre. For ground applications, use a minimum of 5 gallons of water per acre for thorough coverage of the foliage. As the crop canopy closes water volume should be increased to a minimum of 5 gallons per acre for aerial applications and a minimum of 10 gallons of water per acre for ground applications to insure thorough coverage.  <b>NOTES for Use on Sweet Corn:</b> 1. DO NOT apply more than 288 fluid ounces of DECIS® 0.2EC per acre (0.45 lb ai/A) on sweet corn in one growing season. 2. DO NOT apply DECIS® 0.2EC within 24 hours of harvest. 3. DO NOT graze livestock in treated areas or cut treated crops for feed within 24 hours of the last application.
Armyworm (all species) <sup>2,3</sup>	to	to	
Chinch bugs	0.028	17.9	
Click beetle			
Corn earworm <sup>2,3</sup>			
Corn rootworm (adult)			
European corn borer <sup>3</sup>			
Japanese beetle (adult)			
June beetle (adult)			
Masked chafer (adult)			
Southern corn borer <sup>3</sup>			
Southwestern corn borer <sup>3</sup>			
Stalk borer <sup>3</sup>			
Stink bugs			
Webworm			

<sup>1</sup> Suppression only.

<sup>2</sup> See resistance statement under the "Directions For Use" section.

<sup>3</sup> Apply to early instar larvae prior to boring into ear or stalk.

# SORGHUM

11/23

Target Pests	Rate		Remarks
	Pounds A/A	Fl. Oz./A	
Corn earworm (also known as sorghum headworm)	0.012	7.7	<b>Minimum gallonage requirements:</b> For aerial applications, use a minimum of 2 gallons of water per acre. For ground applications, use a minimum of 5 gallons of water per acre for thorough coverage of the foliage.
Cutworms	to	to	
Flea beetles	0.018	11.5	
Grasshoppers			
Sorghum webworm			
Aphids <sup>1</sup>	0.015	9.6	<b>NOTES for Use on Sorghum:</b> 1. DO NOT apply more than 28.8 fluid ounces of DECIS® 0.2EC per acre (0.045 lb. ai/A) on sorghum in one growing season. 2. DO NOT apply DECIS® 0.2EC within 14 days of harvest of sorghum grain. 3. DO NOT cut or graze sorghum forage within 14 days after application of DECIS® 0.2EC.
Amyworm (all species) <sup>2,3</sup>	to	to	
Chinch bug	0.022	14.1	
Corn rootworm beetles (adult)			
European corn borer <sup>3</sup>			
Lesser corn stalk borer <sup>3</sup>			
Mexican rice borer <sup>3</sup>			
Southern corn borer <sup>3</sup>			
Stalk borer <sup>3</sup>			
Sugarcane borer <sup>3</sup>			
Sorghum midge			
Stink bugs	0.018	11.5	
	to	to	
	0.022	14.1	

<sup>1</sup> Suppression only.

<sup>2</sup> See resistance statement under the "Directions For Use" section.

<sup>3</sup> Apply to early instar larvae prior to boring into the stalk.

## SOYBEANS

Target Pests	Rate		Remarks
	Pounds A/A	Fl. Oz./A	
Corn earworm <sup>3</sup>	0.012	7.7	<b>Minimum gallonage requirements:</b> For aerial applications, use a minimum of 2 gallons of water per acre. For ground applications, use a minimum of 5 gallons of water per acre for thorough coverage of the foliage.
Cutworms	to	to	
Green cloverworm	0.018	11.5	
Leafhoppers			
Three-cornered alfalfa hopper			
Velvetbean caterpillar			
Armyworm (all species) <sup>2,3</sup>	0.018	11.5	<b>Optimum gallonage requirements:</b> For aerial applications under hot, dry environmental conditions or when the crop canopy is dense, gallonage requirements may need to be increased to 3 – 5 gallons of water plus crop oil concentrate at 1 pint to 1 quart per acre. Ground application gallonage should be increased to a minimum of 10 gallons per acre to obtain thorough coverage. <b>NOTES for use on Soybeans:</b> 1. DO NOT apply more than 64.0 fluid ounces of DECIS® 0.2EC per acre (0.1 lb ai/A) on soybeans in one growing season. 2. DO NOT apply DECIS® 0.2EC within 21 days of harvest. 3. DO NOT allow livestock to graze treated forage, or feed treated hay to livestock.
Bean leaf beetle	to	to	
Cabbage looper <sup>3</sup>	0.022	14.1	
Click beetle			
Corn rootworm beetles (adult)			
European corn borer			
Grape colaspis (adult)			
Grasshoppers			
Japanese beetle (adult)			
Masked chafer			
Mexican bean beetle			
Saltmarsh caterpillar			
Soybean aphid			
Soybean looper <sup>3</sup>			
Stink bugs			
Tarnished plant bug <sup>2</sup>			
Tobacco budworm <sup>2,3</sup>			
Webworm			
Yellow Woollybear			

<sup>2</sup> See resistance statement under the "Directions For Use" section.

<sup>3</sup> For best control apply to 1<sup>st</sup> and 2<sup>nd</sup> instar larvae.

13/23

**SUNFLOWERS**  
(Except in California)

Target Pests	Rate		Remarks
	Pounds AI/A	Fl. Oz./A	
Banded sunflower moth	0.012	7.7	<p><b>Minimum Gallonage Requirements:</b></p> <p>For aerial applications use a minimum of 2 gallons of water per acre. For ground applications use a minimum of 5 gallons of water per acre for thorough coverage of the foliage.</p> <p><b>NOTES for Use on Sunflowers:</b></p> <ol style="list-style-type: none"> <li>1. DO NOT apply more than 28.8 fluid ounces of DECIS® 0.2EC per acre (0.045 lb ai/acre) on sunflowers in one growing season.</li> <li>2. DO NOT apply within 21 days of harvest for sunflowers.</li> <li>3. DO NOT graze or feed treated sunflower foliage to livestock.</li> <li>4. DO NOT apply this product to sunflowers as an Ultra Low Volume (ULV) spray.</li> </ol>
Cabbage looper <sup>3</sup>	to	to	
Corn earworm <sup>3</sup>	0.018	11.5	
Cutworms			
Grasshoppers (except lubber grasshoppers)			
Leafhoppers			
Potato flea beetle			
Sunflower beetle			
Sunflower seed weevil			
Sunflower stem weevil (moth)			
Sunflower maggot			
Sunflower moth			

<sup>3</sup> For best control apply to 1<sup>st</sup> and 2<sup>nd</sup> instar larvae.

14/23

### BULB VEGETABLES

Includes all members of Crop Group 3 such as:  
(garlic, leeks, onions, shallots)

Target Pests	Rate		Remarks
	Pounds A/A	Fl. Oz./A	
Cutworms	0.012	7.7	<b>Minimum Gallonage Requirements:</b> For aerial applications use a minimum of 2 gallons of water per acre. For ground applications use sufficient water to obtain full coverage of foliage.
	to 0.018	to 11.5	
Stink bugs Thrips	0.018	11.5	<b>NOTES for Use on Bulb Vegetables:</b> 1. DO NOT apply more than 71.7 fluid ounces of DECIS® 0.2EC per acre (0.112 lb ai/A) on bulb vegetables in one growing season. 2. Allow 5 days between applications of DECIS® 0.2EC. 3. Do not apply within 1 day of harvest.
	to 0.028	to 17.9	

## CUCURBIT VEGETABLES

Includes all members of Crop Group 9 such as:

(cantaloupes, chayote, Chinese waxgourd, citron melon, cucumber, gherkin, gourds, *Momordica* species, muskmelon, pumpkin, squash, watermelon)

Target Pests	Rate		Remarks
	Pounds AI/A	Fl. Oz./A	
Cabbage looper	0.012	7.7	<b>Minimum Gallonage Requirements:</b> For aerial applications use a minimum of 2 gallons of water per acre. For ground applications use sufficient water to obtain full coverage of foliage.
Cutworms	to	to	
Leafhoppers	0.028	17.9	
Armyworm (all species) <sup>2,3</sup>	0.018	11.5	<b>NOTES for Use on Cucurbit Vegetables:</b> 1. DO NOT apply more than 107.5 fluid ounces of DECIS® 0.2EC per acre (0.168 lb ai/A) on cucurbit vegetables in one growing season. 2. Allow 3 days between applications of DECIS® 0.2EC. 3. Do not apply within 3 days of harvest.
Colorado potato beetle <sup>2</sup>	to	to	
Corn earworm	0.028	17.9	
Cucumber beetles			
Diamondback moth (larvae) <sup>2</sup>			
Flea beetles			
Grasshoppers			
Green peach aphid <sup>1</sup>			
Leafminers <sup>2</sup>			
Melonworm			
Pickleworm			
Stink bugs			
Tarnished plant bug <sup>2</sup>			
Tobacco budworm <sup>2,3</sup>			
Tomato pinworm			
Vegetable weevil (adult) <sup>1</sup>			
Western plant bug <sup>2</sup>			
Whitefly (adult) <sup>1</sup>			

<sup>1</sup> Suppression only.<sup>2</sup> See resistance statement under the "Directions For Use" section.<sup>3</sup> For best control apply to 1<sup>st</sup> and 2<sup>nd</sup> instar larvae.

### FRUITING VEGETABLES

Includes all members of Crop Group 8 such as:  
(eggplant, groundcherry, pepinos, peppers, tomatillo, tomato)

Target Pests	Rate		Remarks
	Pounds A/A	Fl. Oz./A	
Cabbage looper	0.012	7.7	<b>Minimum Gallonage Requirements:</b> For aerial applications use a minimum of 2 gallons of water per acre. For ground applications use sufficient water to obtain full coverage of foliage.
Leafhoppers	to	to	
Tomato hornworm	0.028	17.9	
Aphids <sup>1</sup>	0.018	11.5	<b>NOTES for Use on Fruiting Vegetables:</b> 1. DO NOT apply more than 107.5 fluid ounces of DECIS® 0.2EC per acre (0.168 lb ai/A) on fruiting vegetables in one growing season. 2. Allow 5 days between applications of DECIS® 0.2EC. 3. Do not apply within 1 day of harvest.
Armyworm (all species) <sup>2,3</sup>	to	to	
Colorado potato beetle <sup>2</sup>	0.028	17.9	
Cucumber beetle			
Cutworms			
Diamondback moth <sup>2</sup>			
European corn borer			
Flea beetles			
Imported cabbageworm			
Leafminers <sup>1</sup>			
Pepper weevil			
Stink bugs			
Tarnished plant bug <sup>2</sup>			
Thrips			
Tomato fruitworm (corn earworm)			
Tomato pinworm			
Variegated cutworm			
Whitefly <sup>1</sup>			

<sup>1</sup> Suppression only.

<sup>2</sup> See resistance statement under the "Directions For Use" section.

<sup>3</sup> For best control apply to 1<sup>st</sup> and 2<sup>nd</sup> instar larvae.



**ROOT VEGETABLES (EXCEPT SUGARBEET)**

Includes all members of Crop Subgroup 1B such as:

(carrot, celeriac, chervil (turnip-rooted), chicory, edible burdock, garden beet, ginseng, horseradish, parsley (turnip-rooted), parsnip, radish, oriental radish, rutabaga, salsify, black salsify, spanish salsify, skirret, turnip)

**TUBEROUS and CORM VEGETABLES**

Includes all members of Crop Subgroup 1C such as:

(potato, sweet potato, arracacha, arrowroot, chinese artichoke, jerusalem artichoke, edible canna, bitter and sweet cassava, chayote (root), chufa, dasheen, ginger, leren, tanier, tumeric, yam bean, true yam)

Target Pests	Rate		Remarks
	Pounds A/A	Fl. Oz./A	
Cabbage looper <sup>3</sup>	0.012	7.7	<b>Minimum Gallonage Requirements:</b> For aerial applications use a minimum of 2 gallons of water per acre. For ground applications use sufficient water to obtain full coverage of foliage.
Cutworms	to	to	
Pea aphid	0.028	17.9	
Armyworm (all species) <sup>2,3</sup>	0.018	11.5	<b>NOTES for Use on Root, Tuberous, and Corm Vegetables:</b> 1. DO NOT apply more than 89.6 fluid ounces of DECIS <sup>®</sup> 0.2EC per acre (0.14 lb ai/A) on root, tuberous and corm vegetables in one growing season. 2. Allow 3 days between applications of DECIS <sup>®</sup> 0.2EC. 3. Do not apply within 3 days of harvest.
Colorado potato beetle <sup>2</sup>	to	to	
European corn borer	0.028	17.9	
Flea beetles			
Green peach aphid <sup>1</sup>			
Leafhoppers			
Lygus bug (plant bug) <sup>2</sup>			
Tarnished plant bug <sup>2</sup>			

<sup>1</sup> Suppression only.<sup>2</sup> See resistance statement under the "Directions For Use" section.<sup>3</sup> For best control apply to 1<sup>st</sup> and 2<sup>nd</sup> instar larvae.

**CANOLA, CRAMBE, RAPESEED**

18/23

Target Pests	Rate		Remarks
	Pounds A/A	Fl. Oz./A	
Beet Armyworm <sup>2,3</sup> Bertha Armyworm Cabbage seed pod weevil Clover Cutworm Flea Beetle Grasshopper Lygus bug (plant bug) <sup>2</sup>	.009	5.8	<b>Minimum Gallonage Requirements:</b> For aerial applications use a minimum of 2 gallons of water per acre. For ground applications use a minimum of 5 gallons of water per acre for thorough coverage of the foliage.  <b>NOTES for Use on Canola, Crambe and Rapeseed:</b> 1. DO NOT apply more than 11.6 fluid ounces of DECIS® 0.2EC per acre (0.018 lb ai/A) on Canola, Crambe, or Rapeseed in one growing season. 2. Allow 7 days between applications of DECIS® 0.2EC. 3. Do not apply DECIS®0.2EC within 7 days of harvest.

<sup>2</sup> See resistance statement under the "Directions For Use" section.

<sup>3</sup> For best control apply to 1<sup>st</sup> and 2<sup>nd</sup> instar larvae.

### TREE NUTS

Includes all members of Crop Group 14 such as:

(almonds, beech nut, Brazil nut, butternut, cashew, chestnut, chinquapin, filbert, hickory nut, macadamia nut, pecan, pistachio, walnut)

Target Pests	Rate		Remarks
	Pounds AI/A	Fl. Oz./A	
Aphids <sup>1</sup>	0.02	12.8	<p>For best results against over-wintering peach twig borer, apply as a dormant spray or delayed dormant spray. Decis may be applied in combination with dormant oil. Refer to the dormant oil product label for additional use directions and restrictions.</p> <p><b>Minimum Gallonage Requirements:</b></p> <p>For aerial applications use a minimum of 10 gallons of water per acre. For ground applications, use a minimum of 25 gallons of water per acre for thorough coverage of the foliage.</p> <p><b>NOTES for Use on Tree Nuts:</b></p> <ol style="list-style-type: none"> <li>DO NOT apply more than 105.6 fluid ounces of DECIS® 0.2EC per acre (0.165 lb ai/A) on tree nuts in one growing season.</li> <li>Allow 7 days between applications of DECIS® 0.2EC.</li> <li>Do not apply within 21 days of harvest.</li> </ol>
Codling moth	to	to	
Filbertworm	0.033	21.1	
Hickory shuckworm			
Leafhoppers			
Navel orangeworm			
Obliquebanded leafroller			
Peach twig borer			
Pecan nut casebearer			
Pecan weevil			
Stink bugs			
Tarnished plant bug <sup>2</sup>			
Walnut husk fly			
Western peach borer			

<sup>1</sup> Suppression only.

<sup>2</sup> See resistance statement under the "Directions For Use" section.

## POME FRUITS

Includes all members of Crop Group 11 such as:  
(apple, crabapple, loquat, mayhaw, pear, oriental pear, quince)

Target Pests	Rate		Remarks
	Pounds A/A	Fl. Oz./A	
Apple leafroller	0.011	7.0	<p>For applications to boring insects, apply prior to the insects entering the wood or fruit. Insects contained within plant tissue may not be controlled.</p> <p><b>Minimum Gallonage Requirements:</b></p> <p>For aerial applications use a minimum of 10 gallons of water per acre. For ground applications, use a minimum of 25 gallons of water per acre for thorough coverage of the foliage.</p> <p><b>NOTES for Use on Pome Fruits:</b></p> <ol style="list-style-type: none"> <li>DO NOT apply more than 26.9 fluid ounces of DECIS® 0.2EC per acre (0.042 lb ai/A) on pome fruits in one growing season.</li> <li>Allow 7 days between applications of DECIS® 0.2EC.</li> <li>Do not apply within 21 days of harvest.</li> </ol>
Apple leaf miner	to	to	
Apple maggot	0.022	14.1	
Codling moth			
Green fruitworm			
Obliquebanded leafroller			
Oriental fruit moth			
Plum curculio			
Potato leafhopper			
Redbanded leafroller			
San Jose scale (crawlers)			
Spotted tentiform leafminer			
Tarnished plant bug <sup>2</sup>			
Western plant bug <sup>2</sup>			
White apple leafhopper			
Aphids <sup>1</sup>	0.022	14.1	
European apple sawfly			
Lesser appleworm			
Pear psylla <sup>1</sup>			
Pear sawfly			
Periodic cicada			
Stink bugs			

<sup>1</sup> Suppression only.

## RATE CONVERSION CHART

FLUID OUNCES PER ACRE	LBS AI PER ACRE	ACRES PER GALLON
5.8	0.009	22
8	0.013	16
9	0.014	14
10	0.016	13
12	0.019	10.5
14	0.022	9
16	0.025	8
18	0.028	7
20	0.031	6.4
21.1	0.033	6.1

## CHEMIGATION USE DIRECTIONS AND PRECAUTIONS

### SPRINKLER IRRIGATION APPLICATION

Apply DECIS® 0.2EC Insecticide 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, rates, and mixing instructions. These recommendations should be proven, through university and extension field trials, to be effective with DECIS® 0.2EC Insecticide applied by chemigation.

Check the irrigation system to ensure 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 DECIS® 0.2EC Insecticide 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 to 0.2 inches per acre of irrigation 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 ensure 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 DECIS® 0.2EC Insecticide 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.

**NOTE:** Bayer CropScience does not recommend connecting chemigation systems 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 APPLICATION

- 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.
- Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.
- If you have 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 backflow.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

- Do not apply when wind speed favors drift beyond the area intended for treatment.
- Do not apply through chemigation systems connected to public water systems.

## **SUPPLEMENTAL SPRAY RECOMMENDATIONS AND PRECAUTIONS**

- All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.
- **For cotton**, do not make more than a total of 10 synthetic pyrethroid applications (of one product or combination of products) to a crop in one growing season. Synthetic pyrethroid products include AMBUSH<sup>®</sup>, AMMO<sup>®</sup> 2.5EC, ASANA<sup>®</sup> XL, BAYTHROID 2, CAPTURE<sup>®</sup> 2EC, CYMBUSH, DANITOL 2.4EC, DECIS<sup>®</sup>, FURY<sup>™</sup> 0.2EC, KARATE<sup>®</sup>, MUSTANG, POUNCE<sup>®</sup> 3.2EC, SCOUT X-TRA<sup>®</sup>, and SynerGin<sup>™</sup> 2.

### **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.**

- Do not apply by ground within 25 feet or by air within 150 feet of lakes; reservoirs, rivers; permanent streams, marshes, or natural ponds; estuaries and commercial fish farm ponds.
- For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of wing span or rotor diameter.
- Use the largest droplet size consistent with pest control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.
- Spray should be released at the lowest height consistent with good pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided.
- 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. Avoid applications when wind gusts approach 15 mph.
- Risk of exposure to aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.
- Do not cultivate within 10 feet of the aquatic area so as to allow growth of vegetative filter strip.
- Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift to aquatic areas.
- Do not make aerial or ground applications during temperature inversions. Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

**IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

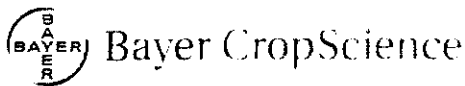
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