

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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Mr. Ken Racke Dow AgroSciences LLC 9330 Zionsville Rd Indianapolis, IN 46268 MAR 3 2011

Subject:

Notification of additional use directions

EPA Registration Number: 62719-314 Date of Submission: January 21, 2011

Dear Mr. Racke:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration (PRN)98-10 dated January 21, 2011, for the abovementioned product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the actions requested fall within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions regarding this letter, please contact Hulkower at (703) 603-0683.

Sincerely,

Mark Suarez

Product Manager 13
Insecticide Branch

Registration Division (7505P)

Enclosures:

Copy of Label Stamped "Notification"

Please read instructions on r	everse before comple	ting form.			Form App	oroved	. OMB No	2070-008	O. Approval expires 2-28-9
<b>≎EPA</b>	Environmenta	Inited States	_	ency			Registra Amenda Other	ation	OPP Identifier Number
		Application	n for	Pestici	de - Sect	tion	1		
1. Company/Product Number Dow AgroSciences/627	•		****	T	Product Man		· , , , , , , , , , , , , , , , , , , ,	3. Pr	oposed Classification
4. Company/Product (Name) Dow AgroSciences/Spi				PM# 13					Nestricted
5. Name and Address of App	olicant <i>(include ZIP Co</i>	de)		6. Exp	edited Rev	eiw.	In accorda	ince with	FIFRA Section 3(c)(3)
Dow AgroSciences LI 9330 Zionsville Road Indianapolis, IN 4626				(b)(i), n to: EPA F	ny product i Reg. No	is sim	ilar or ident		mposition and labeling
Check in this	13 & 1184 & 8001633		Sa	Production -	ct Name _			·····	
Amendment - Explain  Resubmission in resp  Notification - Explain  Explanation: Use addition  This notification is consistent labeling or the confidential st EPA. I further understand the FIFRA and I may be subject	below.  below.  nel page(s) if necessar  with the provisions of latement of formula of that if this notification is r	PR Notice 98-10 in product. I unot consistent w	0 and EP nderstand ith the tel nder sect	A regulation of that it is a rms of PR N ions 12 and	Agency lett "Me Too" A Other - Expi  ns at 40 CFR violation of 18 lotice 98-10 a 14 of FIFRA.	ler dat Applica lain be 152.46 8 U.S.0	ation.  alow.  alow.  and no other  c. Sec. 1001	er changes	make any false statement to
1. Material This Product Will	Re Peckaged In:		260	tion - I	<u> </u>				
Child-Resistant Packaging Yes No * Certification must be submitted	Unit Packaging Yes No If "Yes" Unit Packaging wgt	No. per . container	If "Ye	r Soluble P Yes No es" age wgt	Ackeging  No. per	7	2. Type of	Metal Plastic Glass Paper	Specify)
3. Location of Net Contents	Information	4. Size(s) Ret	tail Cont	siner		5. Lo	cation of Lat	pel Directio	ons
6. Manner in Which Label is		Lithog Paper Stence	raph glued iled		Other	r			<del></del>
	<del></del>			tion - l'	v				
1. Contact Point /Complete	items directly below	for identificatio	n of indi	ividual to b	e contacted,	if nec	essary, to pi	rocess this	application.)
Name Title Kenneth D. Racke, Ph.D. Regu							e No. (Include Area Code) 7-4654 (fàx: 317-337-4649)		
I certify that the state I acknowledge that an both under applicable	y knowlinglly false or		all attac						6. Date Application Received (Stamped)
2. Signature	Soula		3. Title Regula	tory Manag	er				C.C.C.

5. Date

4. Typed Name
Kenneth D. Racke, Ph.D. (kracke@dow.com)

4. Typed Name

White EDA Eile Conv Intiginall

January 21, 2011

Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268-1054



308/2E January 12, 2011

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
U. S. Environmental Protection Agency
One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202

SPINOSAD 0.5% SC (A.I. SPINOSAD) EPA REGISTRATION NUMBER: 62719-314 NOTIFICATION OF MINOR LABEL CHANGE PER PR NOTICE 98-10

Enclosed please find labeling for the notification action of Spinosad 0.5% SC insect control product. The following changes have been made by notification:

- 1. Revised second sentence of #4 under Option 1 Hose-End Sprayer Directions to read "While holding the...valve clockwise to the upright OFF position and replace the side pin."
- 2. How to Apply: Added Options 2, 3, 4, 5, and 6.

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

#### **Contents of Submission**

- Transmittal document (this letter)
- Application for Pesticide, EPA Form 8570-1
- Label entitled Spinosad 0.5% SC (T6P/Spinosad 0.5% SC/Notif/01-21-11) (18 Pages plus Registration Notes) (1 Copy)

If you require further information, please contact Cindy Loy, Regulatory Specialist at (317) 337-4655.

Sincerely,

Kenneth D. Racke, Ph.D. Regulatory Leader (317) 337-4654 (317) 337-4649 (FAX)

Enclosures

T6P / Spinosad 0.5% SC / Notif / 01-21-11 file: Spinosad 0.5% SC-314 21Jan11N.doc

# Spinosad 0.5% SC

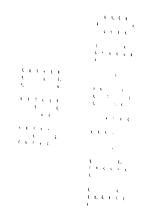
EPA Reg. No. 62719-314

# **Registration Notes:**

Source label text based on EPA accepted text dated November 10, 2010.

#### Changes by notification:

- 1. Revised second sentence of #4 under Option 1 Hose-End Sprayer Directions to read "While holding the...valve clockwise to the upright OFF position and replace the side pin."
- 2. How to Apply: Added Options 2, 3, 4, 5, and 6.



(Base label):

# NOTIFICATION MAR - 3 2011

# Spinosad 0.5% SC

#### **Insect Control Product**

FOR RESIDENTIAL USE IN HOME GARDENS, LAWNS AND ORNAMENTALS. For control of foliage feeding worms (caterpillars), thrips and other listed pests in:

- Apple and other pome fruits, such as crabapples, mayhaw, pears, and quince
- Asparagus
- · Bulb vegetables, such as dry bulb onion and garlic
- Bushberries and caneberries, such as blackberry, blueberry, and raspberry
- Citrus trees, such as grapefruit, lemons, limes, oranges, and tangerines
- Cole crops (Brassica), such as broccoli, cabbage and cauliflower
- · Cucurbits, such as cantaloupe and honeydew
- Dates
- Fruiting vegetables, such as eggplant, okra, pepper, and tomato
- Grape
- Lawns
- Leafy and dried herbs
- Leafy vegetables, such as celery, lettuce, and spinach
- Leaves of root and tuber vegetables, such as carrot, garden beet, and sweet potato
- Peppermint and spearmint
- Pomegranate
- Outdoor herbaceous and woody ornamentals
- Root vegetables, such as carrot, garden beet, radish, and rutabaga
- Spices, such as culantro seed, dill seed, mustard seed, and poppy seed
- Stone fruits, such as apricots, cherries, nectarines, peaches, plums, and prunes
- Strawberry
- Succulent and dried beans and peas, such as blackeyed pea, lima bean, and snap bean
- Sweet corn and popcorn
- Tree nuts, such as almonds, cashew, pecans, and walnuts
- Tropical tree fruits, such as avocado, mango, papaya, and star apple
- Tuberous vegetables, such as cassava, Chinese artichoke, Jerusalem artichoke, potatoes, sweet potatoes, and yams
- Fire ant control in lawns, ornamentals, home gardens, and other outdoor areas

See Home Gardens and Lawns and Ornamentals sections for a complete listing ഗ് യുops and use sites.

and/or

Liquid concentrate



and/or

#### Easy to use

and/or

#### User friendly

and/or

#### No guesswork

and/or

#### **CONCENTRATE**

and/or

#### For vegetables, apples, and citrus trees

and/or

#### Controls worms [caterpillars]

and/or

#### Kills worms [caterpillars]

and/or

## Controls citrus leafminers

and/or

#### Controls Colorado potato beetle

and/or

#### Kills Colorado potato beetle

and/or

#### Controls certain insects in vegetable gardens

and/or

#### Controls certain insects in the garden

and/or

#### Controls certain insects in vegetable gardens

and/or

#### For vegetables

and/or

#### No odor water-based formula

and/or

#### Water-based formula

and/or

#### **Contains spinosad**

and/or

#### Do-it-yourself home garden insect control

and/or

#### Leaves no oily residue

and/or

#### Kills certain home garden insect pests

and/or

#### Short post-harvest interval

and/or

## Pick apples 7 days after spraying

and/or

# Contains [trademark] Naturalyte® insect control

and/or

# A [trademark] Naturalyte<sup>®</sup> insect control product

and/or

#### Provides [excellent] control of [worms] [Colorado potato beetle] [fire ants] [thrips]

and/or

# Provides control of [spider mites] [worms] [Colorado potato beetle] [fire ants] [thrips]

and/or

# Can be used in [home lawns] [ornamentals] [gardens] [fruit trees] [nuts] [grapes] [home orchards]

# Not intended to imply environmental safety either alone or compared to other products

Active Ingredient:

spinosad (a mixture of spinosyn A

Contains 0.04 lb of active ingredient per gallon.



For Use in Organic Gardening



# Keep Out of Reach of Children

# **Precautionary Statements**

#### **Environmental Hazards**

This product is toxic to bees exposed to treatment for 3 hours following treatment. Do not apply this pesticide to blooming, pollen-shedding or nectar-producing parts of plants if bees may forage on the plants during this time period. This product is toxic to aquatic invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

#### Storage and Disposal

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

**Pesticide Storage:** Store in original container only in secure or locked storage area. **Container Handling:** Nonrefillable container. Do not reuse or refill this container.

If empty: Place in trash or offer for recycling if available.

If partly filled: Call your local solid waste agency or 1-800-992-5994 for disposal instructions. Never

place unused product down any indoor or outdoor drain.

#### Refer to label booklet for Directions for Use.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

# Shake Well Before Use -- Avoid Freezing

Agricultural Chemical: Do not ship or store with food, feeds, drugs, or clothing.

EPA Reg. No. 62719-314

EPA Est. \_\_\_\_\_

<sup>&</sup>lt;sup>®</sup>Trademark of Dow AgroSciences LLC **Produced for Dow AgroSciences LLC** 

Page 4

9330 Zionsville Road Indianapolis, IN 46268

Net Contents \_\_\_\_

(Cover, shipping container):

# Spinosad 0.5% SC

#### **Insect Control Product**

FOR RESIDENTIAL USE IN HOME GARDENS, LAWNS AND ORNAMENTALS For control of foliage feeding worms (caterpillars), thrips and other listed pests in:

- Apple and other pome fruits, such as crabapples, mayhaw, pears, and quince
- Asparagus
- Bulb vegetables, such as dry bulb onion and garlic
- Bushberries and caneberries, such as blackberry, blueberry, and raspberry
- Citrus trees, such as grapefruit, lemons, limes, oranges, and tangerines
- Cole crops (Brassica), such as broccoli, cabbage and cauliflower
- · Cucurbits, such as cantaloupe and honeydew
- Dates
- Fruiting vegetables, such as eggplant, okra, pepper, and tomato
- Grape
- Lawns
- · Leafy and dried herbs
- Leafy vegetables, such as celery, lettuce, and spinach
- Leaves of root and tuber vegetables, such as carrot, garden beet, and sweet potato
- Peppermint and spearmint
- Pomegranate
- Outdoor herbaceous and woody ornamentals
- Root vegetables, such as carrot, garden beet, radish, and rutabaga
- Spices, such as culantro seed, dill seed, mustard seed, and poppy seed
- Stone fruits, such as apricots, cherries, nectarines, peaches, plums, and prunes
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See Home Gardens and Lawns and Ornamentals sections for a complete listing of crops and use sites.

and/or

Liquid concentrate

7

and/or

#### Easy to use

and/or

#### **User friendly**

and/or

#### No guesswork

and/or

#### CONCENTRATE

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#### For vegetables, apples, and citrus trees

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and/or

# Can be used in [home lawns] [ornamentals] [gardens] [fruit trees] [nuts] [grapes] [home orchards]

Not intended to imply environmental safety either alone or compa Active Ingredient: spinosad (a mixture of spinosyn A	ared to other products
and spinosyn D) 0.5%	
Other Ingredients99.5%	
Total 100.0%	
Contains 0.04 lb of active ingredient per gallon.	
For Use in Organic Gardening	
Keep Out of Reach of Children	
Refer to inside of label booklet for additional precautionary informuse.	mation including Directions for
Notice: Read the entire label. Use only according to label directions. Warranty Disclaimer, Inherent Risks of Use and Limitation of Rerterms are unacceptable, return at once unopened.	• •
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EPA Reg. No. 62719-314	EPA Est.
®Trademark of Dow AgroSciences LLC	

Produced for Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268

Net Contents \_\_\_\_

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(Page 1 through end):

# **Precautionary Statements**

#### **Environmental Hazards**

This product is toxic to bees exposed to treatment for 3 hours following treatment. Do not apply this pesticide to blooming, pollen-shedding or nectar-producing parts of plants if bees may forage on the plants during this time period. This product is toxic to aquatic invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

#### **Directions for Use**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

For residential use in home gardens, lawns and ornamentals. Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.

#### Storage and Disposal

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

**Pesticide Storage:** Store in original container only in secure or locked storage area. **Container Handling:** Nonrefillable container. Do not reuse or refill this container.

If empty: Place in trash or offer for recycling if available.

If partly filled: Call your local solid waste agency or 1-800-992-5994 for disposal instructions. Never place unused product down any indoor or outdoor drain.

Spinosad 0.5% SC insect control product is intended for control of worms (caterpillars) and other listed insects. Spinosad 0.5% SC does not significantly impact predatory beneficial insects, predatory mites, and spiders while controlling target pests. Susceptible insect pests may be observed on plants up to several hours after treatment, but will have ceased active feeding before being killed.

#### How to Mix

Add the required amount of Spinosad 0.5% SC to the specified amount of water, mix thoroughly, and apply uniformly to both upper and lower surfaces of plant foliage. Mix only as much spray as needed for a single treatment. In vegetable gardens, for best results, do not use more than 3 gallons of spray for 1000 sq ft of area. Do not use kitchen utensils for measuring. Keep measuring utensils with product and away from children.

Amount of Spinosad 0.5% SC to Pint, Quart or Gallon of Spr						
Unit of Measure <sup>1</sup>	Per Pint Per Quart Per Gal (16 fl oz) (32 fl oz) (128 fl of Spray of Spray of Spr					
Fluid Ounces (fl oz)	0.25 fl oz	0.5 fl oz	2 fl oz			
Milliliters (mL)	7.5 mL	15 mL	60 mL			
Tablespoons (Tbs)	1/2 Tbs	_1 Tbs	4 Tbs			
Teaspoons (tsp)	1 1/2 tsp	3 tsp	12 tsp			

Conversion factors: 1 fl oz = 30 mL = 2 tablespoons (Tbs) = 6 teaspoons (tsp) (1 teaspoon = 1/3 tablespoon)

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# How to Apply

#### Shake Well Before Use

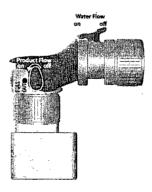
Spinosad 0.5% SC may be applied with trigger sprayer, hand-held, backpack, or hose-end sprayers. Use a hose-end sprayer that can be adjusted to provide a dilution ratio of about 2 fl oz of Spinosad 0.5% SC (4 Tbs) per gallon of spray. [Editor's Note: The following statement should be included in the label if product is packaged to be applied with a hose-end sprayer.] See Hose-End Sprayer Directions below if this product is packaged in a hose-end sprayer.

[Editors note: Formulator label may include directions and graphic(s) for a hose-end sprayer application. Some states may require specific hose-end sprayer directions to be on the basic registrant's label before the formulator may add hose-end sprayer directions to its label.]

#### [Option 1]

#### **Hose-End Sprayer Directions**

- 1. Before beginning, make sure the top blue water flow valve is in the OFF position and the side red product flow valve is up in the OFF position.
- 2. Shake container well and attach it to the garden hose.
- 3. Turn on the water faucet.
- 4. To apply, remove the side pin labeled "PULL OUT" and rotate the side red product flow valve counterclockwise to the ON position. While holding the sprayer at waist height, point the sprayer away from your face and body, and put the top blue water flow valve clockwise to the upright OFF position and replace the side pin.
- 5. When spraying is complete, or if spraying stops at any time, press the top blue water flow valve with thumb to the rear to shut off the water. Turn the side red product flow valve clockwise to the upright OFF position and replace the side pin.
- 6. Turn off the water at the faucet.
- 7. Remove the container from the garden hose, rinse thoroughly, and follow the directions in the Storage and Disposal section for storing or disposing of the container.



# [Option 2] How to Use the Ready to Spray System

#### Connect

- 1. Shake well before using.
- 2. Connect sprayer to hose.
- 3. Turn on water.

#### Spray

- 1. To begin spraying, point nozzle in the direction you want to spray.
- 2. Bend small plastic tab back and turn knob clockwise to ON position.
- 3. Begin spraying.

13 21

# 14

#### **Finish**

- 1. To stop spraying, turn knob counterclockwise to OFF position.
- 2. Turn off water.
- 3. Relieve water pressure by bending plastic tab back and turning knob to ON position until water slows to a drip. Then, turn knob back to OFF position.
- 4. Disconnect sprayer from hose.

#### [Option 3]

#### **Twist & Shoot Ready to Spray Instructions**

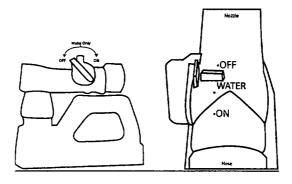
- 1. Make sure control knob level is in OFF position, then connect to garden hose.
- 2. Turn water on at faucet. When spraying low growing plants and small shrubs, twist the control knob lever to the right to the FAN position. When spraying taller trees, shrubs and other plants, twist the control knob lever to the left to the STREAM position for extended reach and more uniform coverage. The product mixes automatically with the water as you spray.
- 3. To stop spraying, turn the control knob lever to the OFF position. Turn off water at the faucet and disconnect sprayer from the garden hose.

#### [Option 4]

#### How to Use This Sprayer

Shake container well before getting started.

- 1. Attach to garden hose
- 2. Turn on the water faucet.
- 3. Activate the sprayer by pushing the vertical tab towards the horizontal tab. The vertical tab on the sprayer cannot be removed because of the horizontal tab, which allows for resealing of the partially used bottles when in the OFF position. The product channel is not opened until the control knob passes the vertical tab and is placed in the ON position.
- 4. When spraying is complete, or if you stop spraying at any time, move the horizontal tab back to the OFF position.
- 5. Rinse any residual product from the sprayer by passing through the WATER position on the sprayer.
- 6. Turn off the water at the faucet.
- 7. Remove the container from the garden hose, then rinse thoroughly and follow the directions in the Storage and Disposal section for storing or disposing of the container.



## [Option 5] How to Use the Ready to Spray System

#### Connect

- 1. Shake well before using.
- 2. Connect sprayer to hose.
- 3. Turn on water.

#### **Spray**

- 1. To begin spraying, point nozzle in the direction you want to spray.
- 2. Bend small plastic tab back and turn knob clockwise to ON position.
- 3. Spray evenly over measured area. See Area to Cover.

#### **Finish**

- 1. To stop spraying, turn knob counterclockwise to OFF position.
- 2. Turn off water.
- 3. Relieve water pressure by bending plastic tab back and turning knob to ON position until water slows to a drip. Then, turn knob back to OFF position.
- 4. Disconnect sprayer from hose.

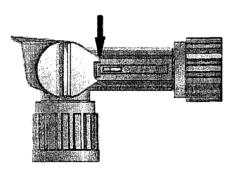
Area to Cover: One quart treats up to 5,300 sq ft.

#### [Option 6]

#### **Hose-End Sprayer Directions**

The sprayer attached to the container is ready-to-use. Refer to fill level markings on side panel of the container to determine the amount of product used. Simply attach to the garden hose and follow these simple instructions:

- 1. Turn on water.
- 2. Hold sprayer and container level and point towards area to be sprayed.
- 3. Bend tab back and turn knob to ON.
- 4. Begin spraying product evenly over the area you wish to treat.
- 5. To stop spraying, turn knob to OFF.
- 6. Turn off water.
- 7. Refer to Storage and Disposal statement on label for additional information.



# When to Apply

Apply when listed pests are present. Repeat applications may be made as indicated in the Home Gardens section. See your state extension service recommendations for treatment guidelines in your area.

#### Uses

# **Home Gardens**

In the state of Georgia, do not apply Spinosad 0.5% SC to: broccoli raab, Chinese cabbage (bok choy), collards, kale, mizuna, mustard greens, mustard spinach, rape greens.

		Maximum Number of Applications	Minimum Days to	Minimum Days to Wait from Last
Crops	Pests Controlled	per Calendar Year	Wait Before Reapplying	Application to Harvest
Clobs	r ests controlled	i cai	neapplying	Tidi vest

		Maximum Number of Applications per Calendar	Minimum Days to Wait Before	Minimum Days to Wait from Last Application to
Crops	Pests Controlled	Year	Reapplying	Harvest
apple and other pome fruits including crabapples, loquat, mayhaw, pears, and quince	codling moth European grapevine moth leafminers leafrollers light brown apple moth oriental fruit moth thrips tufted apple budmoth	6	10	7
asparagus (post-harvest to protect ferns)	asparagus beetles	3	7	60
bulb vegetables including dry bulb onion, garlic, great-headed (elephant) garlic, green onion, leek, shallot, and welch onion	armyworms dipteran leafminers European corn borer flea beetle loopers thrips (suppression)	5	4	1
bushberries including blueberry, currant, elderberry, gooseberry, huckleberry, juneberry, lingonberry, and salal	armyworms European grapevine moth fireworms fruitfly (suppression) fruitworms leafrollers light brown apple moth loopers thrips	6	6	3
caneberries including blackberry, black raspberry, loganberry, red raspberry, and cultivars and/or hybrids of these	armyworms European grapevine moth fireworms fruitworms leafrollers light brown apple moth loopers sawfly	6	5	1
citrus trees including grapefruit, lemons, limes, oranges, and tangerines (to prevent fruit scaring from thrips, treat when fruit is marble size)	katydids leafminers thrips worms (caterpillars)	6	6	1
cole crops (Brassica vegetables) including broccoli, broccoli raab, Brussels sprouts, cabbage, cauliflower, cavalo, Chinese broccoli, Chinese cabbage (bok choy), Chinese cabbage (napa), Chinese mustard cabbage (gai choy), collards, kale, kohlrabi, mizuna, mustard greens,	armyworms cabbage looper diamondback moth flea beetle (suppression) imported cabbage worm leafminers thrips	6	4	

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Creno	Pests Controlled	Maximum Number of Applications per Calendar Year	Minimum Days to Wait Before Reapplying	Minimum Days to Wait from Last Application to Harvest
Crops	worms (caterpillars)	Tear	neapplying	narvest
mustard spinach, and rape greens cucurbits including cucumber, edible gourds, muskmelons (cantaloupe, honeydew, etc.), pumpkin, summer and winter squash, and watermelon	armyworm leafminers loopers thrips worms (caterpillars)	6	5	all except cucumber, 3 cucumber, 1
dates	carob moth	3	7	7
fruiting vegetables including eggplant, groundcherry, okra, pepino, pepper, tomatillo, and tomato	Colorado potato beetle European corn borer flea beetle leafminers loopers thrips worms (caterpillars)	6	4	1
grape	European grapevine moth leafrollers light brown apple moth thrips worms (berry moth)	6	5	7
leafy and dried herbs including angelica, balm, basil, borage, burnet, camomile, catnip, chervil (dried), chive, chive (Chinese), cilantro, cilantro (leaf), clary, coriander (leaf), costmary, curry (leaf), dillweed, horehound, hyssop, lavender, lemongrass, lovage (leaf), marigold, marjoram, nasturtium, parsley (dried) pennyroyal, rosemary, rue, sage, savory (summer and winter), sweet bay, tansy, tarragon, thyme, wintergreen, woodruff, and wormwood	leafminers loopers thrips worms (caterpillars)	5	5	1
leafy vegetables including amaranth, arugula, cardoon, celery, celtuce, chervil, Chinese celery, Chinese spinach, corn salad, dandelion, dock, edible-leaved chrysanthemum, endive (escarole), Florence fennel, garden cress, garden purslane, garland chrysanthemum, head lettuce, leaf lettuce, leafy amaranth, New Zealand spinach, orach, parsley, radicchio (red chicory), rhubarb, spinach, Swiss chard, tampala, upland cress, vine spinach, watercress, winter cress,	diamondback moth leafminers loopers thrips worms (caterpillars)	6	4	1

Crons	Posto Controlled	Maximum Number of Applications per Calendar	Minimum Days to Wait Before	Minimum Days to Wait from Last Application to
Crops	Pests Controlled	Year	Reapplying	Harvest
winter purslane, and yellow rocket leaves of root and tuber vegetables including bitter cassava, black salsify, carrot, celeriac (celery root), chicory, dasheen (taro), edible burdock, garden beet, oriental radish (daikon), parsnip, radish, rutabaga, sugar beet, sweet cassava, sweet potato, tanier, true yam, turnip, turnip greens, and turnip-rooted chervil	diamondback moth leafminers loopers thrips worms (caterpillars)	6	4	1
peppermint and spearmint	armyworms cutworms leafminers loopers thrips (suppression)	4	4	7
pomegranate	fruit fly leafrollers moths naval orangeworm peach twig borer thrips	3	10 - 14	7
potatoes, tuberous and corm vegetables including arracacha, arrowroot, artichoke, bitter cassava, chayote root, Chinese artichoke, chufa, dasheen, edible canna, ginger, Jerusalem artichoke, leren, potato, sweet cassava, sweet potato, tanier, true yam, turmeric, and yam bean	artichoke plume moth Colorado potato beetle corn borers leafminers loopers thrips worms (caterpillars)	6	7	artichoke, 2 all others, 7
root vegetables including black salsify, carrot, celeriac, chicory, edible burdock, garden beet, ginseng, horseradish, oriental radish, parsnip, radish, rutabaga, salsify, skirret, Spanish salsify, sugar beet, turnip, turnip-rooted chervil, turnip-rooted parsley	armyworms European corn borer flea beetle leafminers loopers thrips	3	7	3
spices including allspice, anise (seed), annatto (seed), black caraway, caper (buds), caraway, cardamom, cassia (buds), celery (seed), cinnamon, clove (buds), common fennel, coriander (seed), culantro (seed), cumin, dill (seed), Florence fennel (seed), fenugreek, grains of paradise, juniper (berry), lovage (seed),	flea beetle leafminers thrips	5	10	14

Crops	Pests Controlled	Maximum Number of Applications per Calendar Year	Minimum Days to Wait Before Reapplying	Minimum Days to Wait from Last Application to Harvest
mace, mustard (seed), nutmeg, poppy (seed), saffron, star anise, vanilla, and white pepper				
stone fruits including apricot, cherries, nectarine, peach, plum, and prune	borers European grapevine moth fruit flies fruitworm leafminers leafrollers light brown apple moth oriental fruit moth thrips worms (caterpillars)	6	7	apricot, all except cherry peach, plum, prune, nectarine, 14 cherry, plum, prune, 7 nectarine, peach, 1
strawberry	armyworms European grapevine moth leafrollers light brown apple moth thrips	5	5	1
succulent and dried beans and peas including adzuki bean, blackeyed pea, chickpea, cowpea, crowder pea, edible-pod pea, English pea, fava bean, field bean, field pea, garbanzo bean, garden pea, green pea, kidney bean, lentil, lima bean, lupins, mungbean, navy bean, pigeon pea, pinto bean, runner bean, snap bean, snow pea, sugar snap pea, tepary bean, wax bean, and yardlong bean	borers leafminers loopers thrips worms (caterpillars)	6	5	succulent, 3 dried, 28
sweet corn and popcorn (for earworms, treat silk frequently as it grows)	corn borers earworm worms (caterpillars)	6	3	1
tree nuts including almonds, cashew, chestnut, filbert (hazelnut), macadamia, pecans, pistachio, and walnuts	codling moth filbert worm husk fly (suppression) leafrollers light brown apple moth navel orangeworms peach twig borer pecan nut casebearer redhumped caterpillar shuckworms webworms	5	7	1
tropical tree fruits including, acerola, atemoya, avocado, biriba, black sapote, canistel, cherimoya,	suppression of European grapevine moth	4	7	1

Crops	Pests Controlled	Maximum Number of Applications per Calendar Year	Minimum Days to Wait Before Reapplying	Minimum Days to Wait from Last Application to Harvest
custard apple, feijoa, guava, ilama, jaboticaba, longan, lychee, mamey sapote, mango, papaya, passionfruit, pulasan, rambutan, sapodilla, soursop, Spanish lime, star apple, starfruit, sugar apple, ti leaves, wax jambu (wax apple), and white sapote	katydids light brown apple moth thrips worms (caterpillars)			
all crops listed in this table	fire ants	See application Ornamentals	directions in La	awns and

# **Lawns and Ornamentals**

Use Site	Pests Controlled	Directions
lawns	worms, including small (<3/4") armyworm, and sod webworm cat fleas (suppression only)	Mix the amount of Spinosad 0.5% SC specified per gallon of spray and uniformly apply a minimum of 3 gallons of spray per 1000 sq ft of area. Delay watering or mowing for 12 to 24 hours after application.  Armyworms: For best results, apply in early morning or late afternoon.  Cat fleas: Apply early or late in the day since control requires contact with dilute spray before drying. Thorough coverage is necessary.  Reapply in 7 to 14 days to control adults that have emerged from pupae present at time of initial treatment.
outdoor ornamentals (herbaceous and woody plants)	emerald ash borer <sup>1</sup> gall midges leaf feeding beetles leafminers sawfly larvae spider mites <sup>2</sup> thrips worms including loopers, webworms, bagworms, gypsy moth, and tent caterpillars	Mix the amount of Spinosad 0.5% SC specified per pint, quart or gallon of spray and uniformly spray foliage to point of runoff. Uniform coverage of upper and lower leaf surfaces is essential for effective insect control.
lawns, ornamentals, home gardens (see listed crops in previous table) and other outdoor areas	fire ants	Individual fire ant mounds: Mix the amount of Spinosad 0.5% SC specified per gallon of spray and use a sprinkler can or similar device to apply the diluted spray as a mound drench, using 1 to 2 gallons per mound. Do not use pressurized sprays. Apply about 10% of the spray volume around the perimeter of the mound and the remainder directly to the mound. Do not disturb fire ant mound prior to application. If possible, apply following recent rainfall. For best results apply when weather is cool, 65 to 85°F, or in early morning or late

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evening.

Mix 5 fl oz of Spinosad 0.5% SC per gallon of spray and apply to foliage and bark of the tree when adult emerald ash borer are first observed emerging from the bark or when adult emerald ash borer are first noticed feeding on the leaves of the tree. Reapply every 7 to 10 days until no additional adult emerald ash borer activity is observed. Applications to trees already heavily infested may not prevent the eventual loss of the tree due to existing pest damage.

<sup>2</sup>Apply when spider mites are first observed prior to webbing and before mite populations have become severe. Reapply after 7 to 10 days (3 to 5 days in greenhouses and structures that can be altered to be closed or open) to contact newly hatched nymphs and repeat until infestation is managed. **Uniform coverage of both upper and lower leaf surfaces is critical.** Addition of a nonionic spray adjuvant at 0.1% v/v has been shown to enhance control of spider mites (follow surfactant manufacturer's label directions).

#### **Terms and Conditions of Use**

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

## **Warranty Disclaimer**

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT PERMITTED BY LAW, SELLER MAKES NO OTHER EXPRESS NOR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

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It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Seller. All such risks shall be assumed by Buyer.

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- 1. Refund of purchase price paid by buyer or user for product bought, or
- 2. Replacement of amount of product used.

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