

7969-309

3/20/2014

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

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

MAR 20 2014

Khalid H. Akkari, Ph.D.
BASF Corporation
26 Davis Drive
P.O. Box 13528
Research Triangle Park, NC 27709-3528

Subject: Notifications per PRN 98-10

EPA Registration No.: 7969-309
Sercadis™ Xemium® Brand Fungicide
D#: 488068

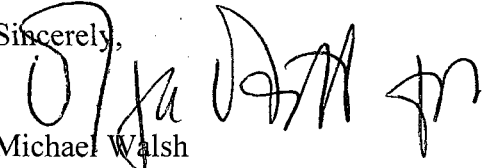
Date of Submission: February 26, 2014

Dear Dr. Akkari:

The Agency is in receipt of your Applications for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the abovementioned product. The Registration Division (RD) has conducted a review of your request and finds that the action 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 action, please contact Olga Odiott at (703)308-9369.

Sincerely,


Michael Walsh
Acting Product Manager 13
Insecticide Branch
Registration Division (7505P)

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Please read instructions on reverse before completing form.

Form Approved. OMB No. 2070-0080. Approval expires 2-28-95



United States
Environmental Protection Agency
Washington, DC 20460

Registration
 Amendment
 Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number EPA Reg. No.: 7969-309	2. EPA Product Manager MARK SUAREZ	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Sercadis™ Xemium® Brand Fungicide; (BAS 700 04F)	PM# 13	
5. Name and Address of Applicant (Include ZIP Code) BASF Corporation, Agricultural Products P.O. Box 13528, 26 Davis Drive Research Triangle Park, NC 27709 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input checked="" type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input checked="" type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

BASF Corporation, Company Number 7969, is hereby submitting a notification to revise the 2nd paragraph of the Environmental Hazards section on the Sercadis™ Xemium® Brand Fungicide (EPA Reg. No. 7969-309) supplemental label to allow application to rice when flooded.

PRIA Fee Category: None (Notification)

PRIA Fee: None; S

E-Mail: khalid.akkari@basf.com

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Metal	<input checked="" type="checkbox"/> Plastic
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt	No. per container
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input checked="" type="checkbox"/> Container		4. Size(s) Retail Container 1 pint, 1 gallon, 2 1/2 gallon, > 55		5. Location of Label Directions <input checked="" type="checkbox"/> on labeling adhered to container	
6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled				<input type="checkbox"/> Other _____	

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Khalid H. Akkari	Title Principal Regulatory Manager	Telephone No. (Include Area Code) (919) 547-2976
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature <i>K. H. Akkari</i>	3. Title Product Registration Manager	
4. Typed Name Khalid H. Akkari	5. Date February 26, 2014	

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The Chemical Company

February 26, 2014.

U. S. Environmental Protection Agency
Office of Pesticide Programs (7504P)
One Potomac Yard, (South Building)
2777 South Crystal Drive,
Document Processing Desk, Room S-4900,
Washington, DC 22202-4501

Attention: **Ms. Olga Odiott** (PM Team 13)

Dear Ms. Odiott:

**SUBJECT: Sercadis™ Xemium® Brand Fungicide: EPA Reg. No. 7969-309
Notification for Use on Rice**

**Reference: Active Ingredient: Fluxapyroxad (BAS 700F): EPA Reg. No. 7969-312
Xemium® Fungicide Technical: EPA Reg. No. 7969-312**

BASF Corporation, Company Number 7969, is hereby submitting a notification to revise the 2nd paragraph of the **Environmental Hazards** section on the **Sercadis™ Xemium® Brand Fungicide** (EPA Reg. No. 7969-309) by adding the statement in bold as follows:

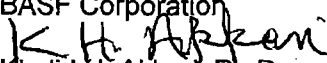
"DO NOT apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark, **except as specified in this label for use on flooded rice"**.

The reason for the revision is to ensure that the product can be applied to rice when flooded based on the registration approval dated February 14, 2014 that included use on rice.

The following documents are being submitted in support of the notification for **Sercadis™ Xemium® Brand Fungicide**:

1. EPA Form 8570-1 "Application for Pesticide" for **Sercadis™ Xemium® Brand Fungicide**
2. **Sercadis™ Xemium® Brand Fungicide** proposed supplemental labeling

If you have any questions or need further information, I can be reached by phone at 919-547-2976, or via e-mail at khalid.akkari@basf.com.

Sincerely,
BASF Corporation

Khalid H. Akkari, Ph.D.
Principal Regulatory Manager
Regulatory Affairs.

Xemium is a registered trademark of BASF Corporation
Sercadis is trademark of BASF Corporation

Group	7	Fungicide
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Supplemental Label

Sercadis™

XEMIUM® BRAND FUNGICIDE

For disease control in the following crops: berries and small fruits, Brassica leafy vegetables, bulb vegetables, cucurbit vegetables, grapes, leafy vegetables, rice, root vegetables, sorghum and millet, strawberries, sugarcane, and tree nuts

This supplemental label expires on September 30, 2016 and must not be used or distributed after this date.

Powered by Xemium® fungicide

Active Ingredient:

fluxapyroxad*: 1*H*-Pyrazole-4-carboxamide, 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)-

26.55%

Other Ingredients:

73.45%

Total:

100.00%

* Equivalent to 2.47 pounds of active ingredient per gallon

EPA Reg. No. 7969-309

Environmental Hazards

This pesticide is toxic to fish. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

DO NOT apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark, except as specified in this label for use in rice. **DO NOT** contaminate water when disposing of equipment washwaters or rinsate.

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow groundwater.

This product is classified as having high potential for reaching aquatic sediment via runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of this active ingredient or its degradates from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecast to occur within 48 hours.

Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

Groundwater Advisory

This chemical has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Directions For Use

- It is a violation of federal law to use this product in a manner inconsistent with its labeling.
- The supplemental labeling and the entire **Sercadis™ Xemium® brand fungicide** container label, EPA Reg. No. 7969-309, must be in possession of the user at the time of application.
- Read the label affixed to the container for **Sercadis** before applying.
- Use of **Sercadis** according to this labeling is subject to the use precautions and limitations imposed by the label affixed to the container for **Sercadis**.

Restrictions and Limitations

Crop Rotation Restriction - Barley, berries and small fruits, Brassica leafy vegetables, bulb vegetables, corn (all types), cotton, cucurbit vegetables, dried shelled peas and beans, edible-podded legume vegetables, fruiting vegetables, grapes, leafy vegetables, millet, oat, oilseed crops (including flax seed, rapeseed and sunflower), peanut, pome fruits, rice, root vegetables, rye, sorghum, soybean, stone fruits, strawberries, succulent shelled peas and beans, sugar beet, sugarcane, tree nuts, tuberous and corn vegetables (including potato), and wheat and triticale may be

planted immediately following the last application. For all other crops, **DO NOT** plant sooner than 365 days after the last application.

Application Instructions

Apply **Sercadis™ Xemium® brand fungicide** according to the rate, timing, and resistance management use instructions in the **Crop-specific Directions** in this label. Observe the additional instructions on application methods, additive use and mixing order on the **Sercadis** main label.

Table 1. Sercadis™ Xemium® brand fungicide Restrictions and Limitations Overview*

Crop**	Minimum Time from Application to Harvest (PHI) (days)	Maximum Product Rate per Application (fl ozs/A)	Maximum Number of Applications per Season	Maximum Number of Sequential Applications	Maximum Product Rate per Season (fl ozs)
Berries and small fruits subgroups	0, 14	9.1	3	2	27.3
Brassica leafy vegetables group	3	4.6	3	2	13.8
Bulb vegetables group	7	9.1	3	2	27.3
Cucurbit vegetables group	0	4.6	3	2	13.8
Grapes – Botrytis disease	14	9.1	3	2	27.3
Grapes – all other diseases	14	4.55	6	2	27.3
Leafy vegetables group (except Brassica)	1	9.1	3	2	27.3
Rice	28	6.8	2	2	13.6
Root vegetables (except sugar beet) subgroup	7	4.6	3	2	13.8
Sorghum and millet	21	4.6	2	2	9.2
Strawberries	0	9.1	3	2	27.3
Sugarcane	14	5.7	2	2	11.4
Tree nuts group	14	5.7	3	2	17.1

*See Table 2. Sercadis™ Xemium® brand fungicide Crop-specific Directions for additional directions.

**For a complete list of crops within a crop group, see Table 2. Sercadis™ Xemium® brand fungicide Crop-specific Directions.

Table 2. Sercadis™ Xemium® brand fungicide Crop-specific Directions

Crop	Target Disease	Product Use Rate per Application (fl ozs/A)	Maximum Number of Applications per Season	Maximum Product Rate per Season (fl ozs/A)	Minimum Time from Application to Harvest (PHI) (days)
Berries and small fruits subgroups* Bushberry subgroup Blueberry* (highbush and lowbush) Currant Elderberry Gooseberry Huckleberry Caneberry subgroup Blackberry (all varieties) Loganberry Raspberry (black and red) Wild raspberry Low growing berry subgroup Bearberry Bilberry Cloudberry Cranberry Lingonberry Muntries Partridgeberry	Alternaria leaf spot and fruit rot (<i>Alternaria</i> spp.) Botrytis gray mold (<i>Botrytis cinerea</i>) Leaf spot and blotch (<i>Mycosphaerella</i> spp., <i>Septoria</i> spp.) Monilinia blight and mummy berry (<i>Monilinia</i> spp.) Phomopsis leaf spot, twig blight, and fruit rot (<i>Phomopsis</i> spp.) Powdery mildew (<i>Sphaerotheca</i> spp., <i>Microshaera</i> spp., <i>Oidium</i> spp.) Spur blight (<i>Didymella</i> spp., <i>Phoma</i> spp.) Suppression Only: Rust (<i>Pucciniastrum</i> spp., <i>Arthuriomyces</i> spp., <i>Phragmidium</i> spp., <i>Kuehneola</i> spp.)	3.4 to 9.1	3	27.3	0 (bushberry, caneberry, and low growing berry)
Small fruit vine climbing subgroup, (except fuzzy kiwifruit) Amur river grape Gooseberry Kiwifruit, hardy Maypop Schisandra berry					14 (small fruit vine climbing)

Application Directions. Begin applications of **Sercadis** prior to onset of disease development and continue on a 7 to 14 day interval. Use the shorter interval and/or the higher rate when disease pressure is high.

DO NOT apply **Sercadis** to any crops in the Berries and Small Fruits subgroups, including blueberries (highbush and lowbush), as a tank mix with any other pesticide products (including fungicides, insecticides, herbicides), adjuvants, liquid fertilizers, nutrients, any other additives, or anything other than water.

Mix **Sercadis** with water only for applications to crops listed in the Berries and Small Fruits subgroups.

Resistance Management. To limit the potential for development of resistance, **DO NOT** apply more than 27.3 fl ozs of **Sercadis** per acre per season. **DO NOT** apply more than three (3) applications of **Sercadis** per season.

DO NOT make more than two (2) sequential applications of **Sercadis** before alternating to a labeled **non-Group 7** fungicide.

*Not registered for use in California.

Table 2. Sercadis™ Xemium® brand fungicide Crop-specific Directions (continued)

Crop	Target Disease	Product Use Rate per Application (fl ozs/A)	Maximum Number of Applications per Season	Maximum Product Rate per Season (fl ozs/A)	Minimum Time from Application to Harvest (PHI) (days)
Brassica leafy vegetables group* Head and stem Broccoli Broccoli, Chinese Brussels sprouts Cabbage Cabbage, Chinese Cabbage, Chinese mustard Cauliflower Cavalo broccolo Kohlrabi Leafy greens Broccoli raab Chinese cabbage (bok choy) Collards Kale Mizuna Mustard greens Mustard spinach Rape greens	Alternaria leaf spot (<i>Alternaria</i> spp.) Black leg (<i>Phoma lingam</i>) Cercospora leaf spot (<i>Cercospora brassicicola</i>) Powdery mildew (<i>Erysiphe polygoni</i>) Rhizoctonia blight (<i>Rhizoctonia solani</i>) Ring spot (<i>Mycosphaerella brassicicola</i>) White leaf spot (<i>Pseudocercospora capsellae</i>) <u>Suppression Only:</u> Sclerotinia stem rot (<i>Sclerotinia sclerotiorum</i>) Southern blight (<i>Sclerotium rolfsii</i>)	3.4 to 4.6	3	13.8	3

Application Directions. Begin applications of **Sercadis** prior to onset of disease development and continue on a 7 to 14 day interval.

Use the shorter interval and/or the higher rate when disease pressure is high.

Resistance Management. To limit the potential for development of resistance, **DO NOT** apply more than 13.8 fl ozs of **Sercadis** per acre per season. **DO NOT** apply more than three (3) applications of **Sercadis** per season.

DO NOT make more than two (2) sequential applications of **Sercadis** before alternating to a labeled **non-Group 7** fungicide.

*Not registered for use in California.

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Table 2. Sercadis™ Xemium® brand fungicide Crop-specific Directions (continued)

Crop	Target Disease	Product Use Rate per Application (fl ozs/A)	Maximum Number of Applications per Season	Maximum Product Rate per Season (fl ozs/A)	Minimum Time from Application to Harvest (PHI) (days)
Bulb vegetables group* Chive, fresh leaves Chive, Chinese, fresh leaves Daylily, bulb Elegans hosta Fritillaria, bulb Fritillaria, leaves Garlic, bulb Garlic, great-headed, bulb Garlic, serpent, bulb Kurrat Lady's leek Leek Leek, wild Lily, bulb Onion, Beltsville bunching Onion, bulb Onion, Chinese, bulb Onion, fresh Onion, green Onion, macrostem Onion, pearl Onion, potato, bulb Onion, tree, tops Onion, Welsh, tops Shallot, bulb Shallot, fresh leaves	Powdery mildew (<i>Leveillula taurica</i>) Purple blotch and leaf blight (<i>Alternaria porri</i>) Rust (<i>Puccinia porri</i>) Stemphylium leaf blight and stalk rot (<i>Stemphylium vesicarium</i>)	3.4 to 9.1	3	27.3	7
	Botrytis leaf blight (<i>Botrytis</i> spp.) Botrytis neck rot (<i>Botrytis</i> spp.)	4.6 to 9.1			

Application Directions. Begin applications of **Sercadis** prior to onset of disease development and continue on a 7 to 14 day interval. Use the shorter interval and/or the higher rate when disease pressure is high.

Resistance Management. To limit the potential for development of resistance, **DO NOT** apply more than 27.3 fl ozs of **Sercadis** per acre per season. **DO NOT** apply more than three (3) applications of **Sercadis** per season.

DO NOT make more than two (2) sequential applications of **Sercadis** before alternating to a labeled **non-Group 7** fungicide.

*Not registered for use in California.

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Table 2. Sercadis™ Xemium® brand fungicide Crop-specific Directions (continued)

Crop	Target Disease	Product Use Rate per Application (fl ozs/A)	Maximum Number of Applications per Season	Maximum Product Rate per Season (fl ozs/A)	Minimum Time from Application to Harvest (PHI) (days)
<p>Cucurbit vegetables group*</p> <p>Chayote Chinese waxgourd Citron melon Cucumber Gherkin Pumpkin Watermelon</p> <p>Edible gourd</p> <p>Hytan Cucuzza Chinese okra</p> <p>Momordica spp.</p> <p>Balsam apple Balsam pear Bitter melon Chinese cucumber</p> <p>Muskmelon</p> <p>Cantaloupe Casaba Crenshaw melon Golden pershaw melon Honeydew melon Honey balls Mango melon Persian melon Pineapple melon Santaclaus melon Snake melon</p> <p>Summer squash</p> <p>Crookneck squash Scallop squash Straightneck squash Vegetable marrow Zucchini</p> <p>Winter squash</p> <p>Butternut squash Calabaza Hubbard squash Acorn squash Spaghetti squash</p>	<p>Alternaria leaf blight (<i>Alternaria cucumerina</i>)</p> <p>Powdery mildew (<i>Podosphaera</i> spp., <i>Sphaerotheca</i> spp., <i>Erysiphe</i> spp.,)</p> <p>Cercospora leaf spot (<i>Cercospora citrulina</i>)</p> <p>Gummy stem blight (<i>Didymella bryoniae</i>)</p> <p>Microdochium blight (<i>Plectosporium tabacinum</i>)</p> <p>Target leaf spot (<i>Corynespora cassicola</i>)</p>	<p>3.4 to 4.6</p> <p>4.6</p>	<p>3</p>	<p>13.8</p>	<p>0</p>

(continued)

Table 2. Sercadis™ Xemium® brand fungicide Crop-specific Directions (continued)

Cucurbit vegetables group, continued

Application Directions. For optimal disease control, begin applications of **Sercadis** prior to disease development and continue on a 7 to 14 day interval if conditions are conducive for disease development. Use the higher rate and shorter interval when disease pressure is high.

DO NOT apply **Sercadis** to any crops in the Cucurbit-Vegetable Group as a tank mix with any other pesticide products (including fungicides, insecticides, herbicides), adjuvants, liquid fertilizers, nutrients, any other additives, or anything other than water.

Mix **Sercadis** with water only for applications to crops listed in the Cucurbit Vegetable Group.

Resistance Management. To limit the potential for development of resistance, **DO NOT** apply more than 13.8 fl ozs of **Sercadis** per acre per season. **DO NOT** make more than two (2) sequential applications of **Sercadis** before alternating to a labeled **non-Group 7** fungicide. In areas where gummy stem blight resistance to **Group 7** fungicides have been confirmed, tank mix with chlorothalonil at full label rates and adhering to all label precautions.

*Not registered for use in California.

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Table 2. Sercadis™ Xemium® brand fungicide Crop-specific Directions (continued)

Crop	Target Disease	Product Use Rate per Application (fl ozs/A)	Maximum Number of Applications per Season	Maximum Product Rate per Season (fl ozs/A)	Minimum Time from Application to Harvest (PHI) (days)
Grapes	Powdery mildew (<i>Erysiphe necator</i>)	3.4 to 4.55	6	27.3	14
	Black rot (<i>Guignardia bidwellii</i>)	4.55			
	Botrytis gray mold (<i>Botrytis cinerea</i>) Aids in control: Summer bunch rot (<i>Aspergillus</i> spp., <i>Alternaria</i> spp., <i>Botrytis</i> spp., <i>Cladosporium</i> spp., <i>Penicillium</i> spp., <i>Rhizopus</i> spp.)	4.5 to 9.1	3		

Application Directions. For powdery mildew control, begin applications of **Sercadis** as of bud break or prior to onset of disease. When using 3.4 fl ozs per acre, continue on a 10 to 14 day interval. Longer spray intervals for powdery mildew control may be possible with higher rates of **Sercadis**. The effectiveness of longer spray intervals will depend on the current powdery mildew infection level in the field, the amount of disease pressure after application and factors such as crop growth stage and rate of growth.

For black rot control, begin applications of **Sercadis** before pre-bloom and continue on a 10 to 14 day interval. Begin applications targeted against **Botrytis gray mold** prior to disease development when conditions favor disease development during early bloom, bunch preclosure and veraison. Use the higher rates from bunch preclosure to veraison. Use shorter intervals when disease pressure is high.

For all other diseases listed, begin applications of **Sercadis** prior to onset of disease development and continue on a 10 to 14 day interval. Use the higher rate and shorter interval when disease pressure is high.

DO NOT apply **Sercadis** to Grapes as a tank mix with any other pesticide products (including fungicides, insecticides, herbicides), adjuvants, liquid fertilizers, nutrients, any other additives, or anything other than water.

Mix **Sercadis** with water only for application to Grapes.

Resistance Management. To limit the potential for development of resistance, **DO NOT** apply more than 27.3 fl ozs of **Sercadis** per acre per season. **DO NOT** make more than two (2) sequential applications of **Sercadis** before alternating to a labeled **non-Group 7** fungicide.

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Table 2. Sercadis™ Xemium® brand fungicide Crop-specific Directions (continued)

Leafy vegetables group, continued

Application Directions. Begin applications of **Sercadis** prior to onset of disease development and continue on a 7 to 14 day interval. Use the shorter interval and/or the higher rate when disease pressure is high.

Tank Mix Restrictions

Spinach (all varieties). **DO NOT** apply **Sercadis** to spinach as a tank mix with any other pesticide products (including fungicides, insecticides, herbicides), adjuvants, liquid fertilizers, nutrients, any other additives, or anything other than water.

Mix **Sercadis** with water only for applications to Spinach (all varieties).

Leafy Vegetables (except spinach). It is impossible for BASF to test all varieties of leafy vegetables for sensitivity to **Sercadis** under all environments and all potential product mixture combinations. Local conditions can also influence crop tolerance and may not match those under which BASF has conducted testing. Proceed with caution with regard to **Sercadis** use, particularly in tank mixes and/or adjuvant combinations on leafy vegetables. To reduce the risk of leafy vegetable injury, BASF recommends testing **Sercadis** or **Sercadis** tank mixtures on a small portion of the crop before broadscale use.

To the extent consistent with applicable law, the user assumes all risks associated with adding products to the **Sercadis** spray solution. Refer also to the **Conditions of Sale and Warranty** section of this label.

Resistance Management. To limit the potential for development of resistance, **DO NOT** apply more than 27.3 fl ozs of **Sercadis** per acre per season. **DO NOT** apply more than three (3) applications of **Sercadis** per season.

DO NOT make more than two (2) sequential applications of **Sercadis** before alternating to a labeled **non-Group 7** fungicide.

*Not registered for use in California.

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Table 2. Sercadis™ Xemium® brand fungicide Crop-specific Directions (continued)

Crop	Target Disease	Product Use Rate per Application (fl ozs/A)	Maximum Number of Applications per Season	Maximum Product Rate per Season (fl ozs/A)	Minimum Time from Application to Harvest (PHI) (days)
Rice* Wild Rice*	Aggregate sheath spot (<i>Rhizoctonia oryzae-sativae</i>) Sheath blight (<i>Rhizoctonia solani</i>)	3.4 to 6.8	2	13.6	28

Application Directions. Begin applications of **Sercadis** at the first sign of disease. Repeat applications on 7 to 14 day intervals as needed if conditions for disease infection continue. Use the shorter interval and/or the higher rate when disease pressure is high.

Sercadis can be applied by ground sprayer or aerial equipment. For ground application, apply a minimum of 15 gpa (gallons per acre) spray solution. For aerial application, apply 7 to 10 gpa spray solution. **DO NOT** apply **Sercadis** through any type of irrigation system. Apply **Sercadis** with a non-ionic spray (NIS) adjuvant at 0.25% v/v. Under hot weather conditions apply **Sercadis** with 1% COC. BASF recommends the use of a Chemical Producers and Distributors Association certified adjuvant.

Resistance Management. To limit the potential for development of resistance, **DO NOT** apply more than 13.6 fl ozs of **Sercadis** per acre per season. **DO NOT** make more than two (2) sequential applications of **Sercadis** before alternating to a labeled **non-Group 7** fungicide.

*Not Registered for use in California.

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Table 2. Sercadis™ Xemium® brand fungicide Crop-specific Directions (continued)

Crop	Target Disease	Product Use Rate per Application (fl ozs/A)	Maximum Number of Applications per Season	Maximum Product Rate per Season (fl ozs/A)	Minimum Time from Application to Harvest (PHI) (days)
Root vegetables (except sugar beet) subgroup* Beet, garden Burdock, edible Carrot Celeriac Chervil, turnip-rooted Chicory Ginseng Horseradish Parsley, turnip-rooted Parsnip Radish Radish, Oriental Rutabaga Salsify Salsify, black Salsify, Spanish Skirret Turnip	Alternaria leaf spot/blight (<i>Alternaria</i> spp.)	3.4 to 4.6	3	13.8	7
	Powdery mildew (<i>Erysiphe</i> spp., <i>Leveillula</i> spp.)	4.6			
	Suppression Only: Sclerotinia white mold/cottony rot (<i>Sclerotinia sclerotiorum</i>) Southern blight (<i>Sclerotium rolfsii</i>)				

Application Directions. For optimal disease control, begin applications of **Sercadis** prior to disease development and continue on a 7 to 14 day interval if conditions are conducive for disease development. Use the higher rate and shorter interval when disease pressure is high.

Resistance Management. To limit the potential for development of resistance, **DO NOT** apply more than 13.8 fl ozs of **Sercadis** per acre per season. **DO NOT** make more than two (2) sequential applications of **Sercadis** before alternating to a labeled **non-Group 7** fungicide.

*Not registered for use in California.

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Table 2. Sercadis™ Xemium® brand fungicide Crop-specific Directions (continued)

Crop	Target Disease	Product Use Rate per Application (fl ozs/A)	Maximum Number of Applications per Season	Maximum Product Rate per Season (fl ozs/A)	Minimum Time from Application to Harvest (PHI) (days)
Sorghum* Milo* Millet* (pearl and proso)	Gray leaf spot and Cercospora leaf spot (<i>Cercospora</i> spp.) Northern leaf blight (<i>Exserohilum turcicum</i>) Rust (<i>Puccinia</i> spp.) Southern leaf blight and Bipolaris leaf spot (<i>Bipolaris</i> spp.)	3.4 to 4.6	2	9.2	21

Application Directions. For optimal disease control, begin applications of **Sercadis** prior to disease development. Use the higher rate when disease pressure is high.

Resistance Management. To limit the potential for development of resistance, **DO NOT** apply more than 9.2 fl ozs of **Sercadis** per acre per season. **DO NOT** apply more than two (2) sequential applications of **Sercadis** before alternating to a **non-Group 7** fungicide.

*Not registered for use in California.

Table 2. Sercadis™ Xemium® brand fungicide Crop-specific Directions (continued)

Crop	Target Disease	Product Use Rate per Application (fl ozs/A)	Maximum Number of Applications per Season	Maximum Product Rate per Season (fl ozs/A)	Minimum Time from Application to Harvest (PHI) (days)
Strawberries*	Leaf spot (<i>Mycosphaerella fragariae</i> , <i>Ramularia tulasnei</i>)	3.4 to 5.7	3	27.3	0
	Powdery mildew (<i>Sphaerotheca macularis</i>)	6.9 to 9.1			
	Botrytis gray mold (<i>Botrytis cinerea</i>)				

Application Directions. Begin applications of **Sercadis** no later than 10% bloom, or prior to disease development and continue on a 7 to 14 day interval. Use the shorter interval and/or the higher rate when disease pressure is high.

The restricted entry interval (REI) for treated strawberries is **12 hours**. Refer to the **Agricultural Use Requirements** on the **Sercadis** main label for PPE required for early entry to treated areas as permitted under the Worker Protection Standard.

Resistance Management. To limit the potential for development of resistance, **DO NOT** apply more than 27.3 fl ozs of **Sercadis** per acre per season. **DO NOT** make more than two (2) sequential applications of **Sercadis** before alternating to a labeled **non-Group 7** fungicide.

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Table 2. Sercadis™ Xemium® brand fungicide Crop-specific Directions (continued)

Crop	Target Disease	Product Use Rate per Application (fl ozs/A)	Maximum Number of Applications per Season	Maximum Product Rate per Season (fl ozs/A)	Minimum Time from Application to Harvest (PHI) (days)
Sugarcane*	Brown rust (<i>Puccinia melanocephala</i>) Orange rust (<i>Puccinia kuehnii</i>)	3.4 to 5.7	2	11.4	14

Application Directions. Begin applications of **Sercadis** at the first sign of disease. Repeat applications on 14 to 28 day intervals as needed if conditions for rust infection continue. Use the shorter interval and/or the higher rate when disease pressure is high.

Sercadis can be applied by ground or air. When applying by air, **DO NOT** use less than 5 gallons of spray solution per acre.

Resistance Management. To limit the potential for development of resistance, **DO NOT** apply more than 11.4 fl ozs of **Sercadis** per acre per season. **DO NOT** apply more than two (2) sequential applications of **Sercadis** before alternating to a labeled **non-Group 7** fungicide.

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Table 2. Sercadis™ Xemium® brand fungicide Crop-specific Directions (continued)

Crop	Target Disease	Product Use Rate per Application (fl ozs/A)	Maximum Number of Applications per Season	Maximum Product Rate per Season (fl ozs/A)	Minimum Time from Application to Harvest (PHI) (days)
<p>Tree Nuts Group*</p> <p>Almond Beech nut Brazil nut Butternut Cashew Chestnut Chiquapin Filbert Hickory nut Macadamia nut Pecan Pistachio Walnut (black and English)</p>	<p>Alternaria late blight (<i>Alternaria</i> spp.)</p> <p>Botrytis blossom and shoot blight (<i>Botrytis cinerea</i>)</p> <p>Brown rot/Blossom blight (<i>Monilinia</i> spp.)</p> <p>Eastern filbert blight (<i>Anisogramma anomala</i>)</p> <p>Green fruit rot/Jacket rot (<i>Botrytis cinerea</i>, <i>Sclerotinia sclerotiorum</i>, <i>Monilinia laxa</i>)</p> <p>Leaf rust (<i>Tranzschelia discolor</i>)</p> <p>Panicle and shoot blight (<i>Botryosphaeria dothidea</i>)</p> <p>Scab (<i>Cladosporium carpophilum</i>, <i>C. caryigenum</i>)</p> <p>Shothole (<i>Wilsonomyces carpophilus</i>)</p> <p>Suppression Only:</p> <p>Hull rot (<i>Rhizopus stolonifer</i> and <i>Monilinia</i> spp.)</p>	<p>3.4 to 5.7</p>	<p>3</p>	<p>17.1</p>	<p>14</p>

(continued)

Table 2. Sercadis™ Xemium® brand fungicide Crop-specific Directions (continued)

Tree nuts group, continued

Application Directions. For almond, begin applications of **Sercadis** prior to onset of disease development and continue on a 7 to 14 day interval up to 14 days before harvest.

For filbert, begin applications at budswell to budbreak, or prior to infection and onset of disease development. Continue on a 7 to 14 day interval to cover and protect new growth.

For pecan, begin applications of **Sercadis** prior to onset of disease development and continue on a 7 to 21 day interval for the control of scab. Use the shorter interval and/or the higher rate when disease pressure is high.

For pistachio, apply **Sercadis** prior to onset of disease development and continue on a 10 to 30 day interval. Use the higher rate and shorter intervals when disease pressure is high.

For all other crops listed, apply **Sercadis** prior to disease development and continue on a 7 to 28 day interval. In all cases use the shorter interval when shoot growth is rapid.

No restriction on livestock feeding of almond hulls.

For aerial application to tree nuts, **DO NOT** use less than 10 gallons of spray solution per acre.

Resistance Management. To limit the potential for development of resistance, **DO NOT** apply more than 17.1 fl ozs of **Sercadis** per acre per season. **DO NOT** make more than two (2) sequential applications of **Sercadis** before alternating to a labeled **non-Group 7** fungicide.

* Not registered for use in California.



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The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must 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 weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

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