

100-641

09104/20090

1/22



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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Ms Pat Dinnen
Syngenta Crop Protection
P.O. BOX 18300
Greensboro, NC 27419

SEP 4 2009

Subject: Label Notification(s) for Pesticide Registration Notice 2007-4

Dear Registrant:

The Agency is in receipt of your Application(s) for Pesticide Notification under Pesticide Registration Notice (PRN) 2007-4 dated August 5, 2009 for:

EPA Registration 100-641 Banner® Fungicide

The Registration Division (RD) has conducted a review of this request for applicability under PRN 2007-4 and finds that the label change(s) requested falls within the scope of PRN-2007-4. The label has been date-stamped "Notification" and will be placed in our records.


Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on nonrefillable containers. The code may appear either on the label (and can be added by non-notification/PR Notice 98-10) or durably marked on the container itself.

If you have any questions, please contact me directly at 703-305-6249 or Banza Djapao of my staff at 703-305-7269.

Sincerely,

A handwritten signature in black ink, appearing to read "Linda Arrington".

Linda Arrington
Notifications & Minor Formulations Team Leader
Registration Division (7505P)
Office of Pesticide Programs

 United States Environmental Protection Agency Washington, DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number <hr/> Notification <hr/>
	Application for Pesticide - Section I	
	1. Company/Product Number 100-641	

4. Company/Product (Name) Banner Fungicide	2. EPA Product Manager Shaja B. Joyner	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
5. Name and Address of Applicant (Include ZIP Code) Syngenta Crop Protection, Inc. P. O. Box 18300 Greensboro, NC 27419 <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 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 type="checkbox"/> Other - Explain below.

NOTIFICATION
SEP - 4 2009

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

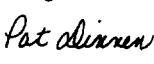
Notification of label change per PR Notice 2007-4. This Notification is consistent with the guidance of PR Notice 2007-4 and the requirements of EPA's regulations at 40 CFR §§156.10, 156.140, 156.144 156.146, and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula for 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 the amended label is not consistent with the requirements of 40 CFR §§156.10, 156.140, 156.144, 156.146, and 156.156, 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.

Syngenta is amending the Storage and Disposal section of the label by Notification according to the directions stated in PR Notice 2007-4.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes* <input 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 checked="" type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
*Certification must submitted		If "Yes" Unit Packaging wgt. No. per Container	If "Yes" Unit Packaging wgt. No. per container		
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 2.5 gallons		5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			<input checked="" type="checkbox"/> Other <u>Pressure Sensitive</u>		

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)					
Name Pat Dinnen	Title Label Group Leader	Telephone No. (Include Area Code) 336-632-2494			
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 		3. Title Regulatory Specialist			
4. Typed Name Pat Dinnen		5. Date August 5, 2009			

3/22

Syngenta Crop Protection, Inc.
P.O. Box 18300
Greensboro, NC 27419-8300
www.syngenta.com



FedEx

August 5, 2009

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

Attention: Ms. Linda Arrington

**SUBJECT: BANNER® FUNGICIDE
EPA REG. NO. 100-641
NOTIFICATION OF LABEL CHANGE PER PR NOTICE 2007-4**

Syngenta Crop Protection, Inc. is submitting Notification for Banner Fungicide, EPA Reg. No. 100-641. Syngenta is amending the Storage and Disposal section of the label by Notification according to the directions stated in PR Notice 2007-4.

Attached are:

- One copy of the label with the changes clearly marked
- One unmarked copy of the label
- A CD of the unmarked copy of the label for "Electronic Comparison and Review"
- Certificate with Respect to Label Integrity Form
- Completed EPA Form 8570-1

Thank you in advance for approving this Notification. If you have any questions, please contact me at 336-632-2494.

Sincerely,

Pat Dinnen
Label Group Leader
Regulatory Affairs

Enclosures

Certification with Respect to Label Integrity

Version: 9/11/02

I certify that the information (including, but not limited to, text, tables, and graphics) contained in the electronic file identified below by file name and submitted with this certification is the same information as that on the paper copies of these documents included with this submission.

PROPOSED LABEL		
EPA Registration #	Date Submitted to EPA	Electronic file name
100-641	8/5/2009	000100-00641.20090805.BANNER_PRN2007-4_AUG2009.pdf

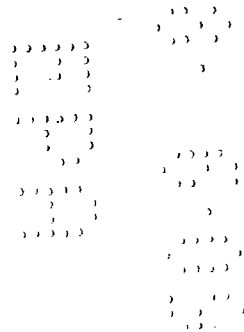
I certify that the statements that I have made on this form are true, accurate, and complete. I acknowledge that any knowingly false or misleading statements may be punishable by fine or imprisonment or both under applicable law.

Pat Dinnen
Signature

August 5, 2009
Date

Pat Dinnen
Name (typed)

Label Group Leader
Title



5/22

**Banner®
Fungicide**

Broad spectrum and systemic disease control for turf and ornamentals

Active Ingredient:

Propiconazole: CAS No. 60207-90-1..... 14.3%

Other Ingredients*: 85.7%

Total: 100.0%

Banner contains a nominal 1.1 pounds of active ingredient per gallon.

*Contains xylene-range aromatic solvent

NOTIFICATION

SEP - 4 2009

KEEP OUT OF REACH OF CHILDREN.

WARNING/AVISO

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

See additional precautionary statements and directions for use inside booklet.

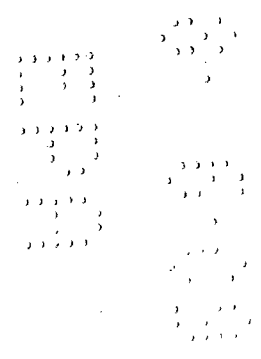
EPA Reg. No. 100-641

EPA Est.

Product of Switzerland
Formulated in the USA

SCP

2.5 gallons
Net Contents



FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
NOTE TO PHYSICIAN	
If ingested, lavage stomach to avoid aspiration. A slurry of activated charcoal in water can be left in the stomach. Give a saline laxative and supportive therapy.	
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	
HOT LINE NUMBER	
For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING/AVISO

Causes substantial, but temporary eye injury. Causes skin irritation. Do not get in eyes, on skin, or on clothing. Harmful if swallowed, inhaled, or absorbed through the skin. Avoid breathing vapor or spray mist.

Personal Protective Equipment (PPE)

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.

Applicators and other handlers must wear:

- 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
- Chemical-resistant apron when cleaning equipment, mixing, or loading

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.

Engineering Control Statements

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

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

This pesticide is toxic to fish. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters.

Physical or Chemical Hazards

Do not use or store near heat or open flame. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

Chemigation

Do not apply this product through any type of irrigation system.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product should be followed carefully. 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 manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

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

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

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

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.

NOTE: Do not apply more than 5.4 gallons of Banner/A/calendar year.

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

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

NON-AGRICULTURAL USE REQUIREMENTS

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

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

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN PLANT INJURY OR POOR DISEASE CONTROL.

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in the original container in cool place.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of federal law. If these wastes cannot be used according to label instructions, contact your local State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Disposal/Handling

Plastic Containers

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available 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 from burning containers.

FOR BULK AND MINIBULK CONTAINERS:

Container Disposal:

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

CONTAINER PRECAUTIONS:

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

REFILL ONLY WITH Banner Fungicide:

The contents of this container cannot be completely removed by cleaning. Refilling with materials other than Banner will result in contamination and may weaken container.

After filling and before transporting, check for leaks.

Do not refill or transport damaged or leaking container.

GENERAL INFORMATION

Banner is a systemic fungicide for use on turfgrasses for the control of dollar spot (*Sclerotinia homoeocarpa*), brown patch (*Rhizoctonia solani*), anthracnose (*Colletotrichum graminicola*), red thread (*Laetisaria fuciformis*), pink patch (*Limonomyces roseipellis*), rust (*Puccinia graminis*), powdery mildew (*Erysiphe graminis*), stripe smut (*Ustilago striiformis* and *Urocystis agropyri*), summer patch (*Magnaporthe poae*), necrotic ring spot (*Leptosphaeria korrae*), spring dead spot (*Leptosphaeria korrae*, *Leptosphaeria narmari*, *Ophiosphaerella herpotricha*, *Gaeumannomyces graminis*), take-all patch (*Gaeumannomyces graminis*), leafspot (*Bipolaris* spp., *Drechslera* spp.), gray leafspot (*Pyricularia grisea*), pink snowmold (*Microdochium nivale*), Fusarium patch (*Fusarium nivale*), gray snowmold (*Typhula* spp.), yellow patch (*Rhizoctonia cerealis*), and zoysia patch (*Rhizoctonia solani*).

Banner also controls numerous diseases on ornamentals and other landscape and nursery plantings. It controls powdery mildews, rusts, leafspots, scabs, and blights. Refer to the appropriate section for specified diseases and plants.

Do not apply this product through any type of irrigation system. Do not use Banner as a tree injection. Do not use Banner in Greenhouses.

MIXING INSTRUCTIONS

Fill the spray tank $\frac{1}{2}$ - $\frac{3}{4}$ full with water. Add the proper amount of Banner, and then add the rest of the water. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

If Banner is tank mixed with other products, use the following sequence:

1. Always check the compatibility of the tank mix using a jar test with proportionate amounts of Banner, other chemicals to be used, and the water, before mixing in the spray tank.
2. Provide sufficient jet or mechanical agitation during filling and application to keep the tank mix uniformly suspended.
3. Fill tank at least $\frac{1}{2}$ full of clean water.
4. Add wettable powders to the tank first, allowing them to completely suspend in the tank before proceeding. This process can be hastened by premixing the product in water before adding to the tank.
5. Add flowables or suspensions next.
6. Add Banner next.
7. Add emulsifiable concentrates last.
8. Do not leave tank mix combinations in the spray tank for prolonged periods without agitation. Mix and apply them the same day.

Tank Mixes

For broader spectrum control, Banner can be tank mixed with other fungicides. For example, Subdue® may be tank mixed with Banner or used alone when conditions are favorable for Pythium blight. Banner is also compatible with numerous herbicides and insecticides. Check compatibility before tank mixing. Add Unite® (3 pts./100 gals.) to tank mixes which are incompatible. Follow the directions under **Mixing Instructions**, for tank mixes. Observe all directions, precautions, and limitations on labeling of all products used in tank mixes. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are registered.

TURFGRASS AND DICHONDRA DISEASE CONTROL

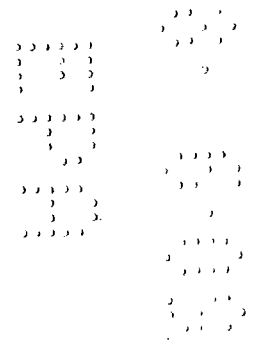
1. USE BANNER IN A PREVENTATIVE DISEASE CONTROL PROGRAM.
2. Apply in sufficient water to ensure thorough coverage.
3. Apply after mowing **OR** allow sprayed area to completely dry before mowing.
4. For control of foliar diseases, allow sprayed area to completely dry before irrigation.
5. For control of soil-borne diseases, Banner can be watered in after application.
6. Under conditions optimum for high disease pressure, use the higher rate and the shorter interval.

7. For optimum turf quality and disease control, use Banner in conjunction with turf management practices that promote good plant health and optimum disease control.
8. Evaluate spray additives prior to use. Label directions are based on data obtained with no additives.
9. Before use of any fungicide, proper diagnosis of the organism causing the disease is important. Use of diagnostic kits or other means of identification of the disease organism is essential to determine the best control measures.
10. Do not apply more than 16 fl. oz./1,000 ft.²/calendar year.

IMPORTANT:

Bermudagrass can be sensitive to Banner. Do not exceed 4 fl. oz./1,000 sq. ft. every 30 days on any variety of bermudagrass. In FL, do not apply Banner to bermudagrass golf course greens when temperatures exceed 90°F.

NOTE: Do not graze animals on treated areas. Do not feed clippings from treated areas to livestock or poultry.



Turfgrass - Specific Diseases, Rates, and Application Timing

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing	Instructions
Dollar Spot <i>(Sclerotinia homoeocarpa)</i>	0.5	22	7 days	Apply when conditions are favorable for disease development.
	0.5	22	14 days	Tank mix with low label rate of one of the following fungicides: Daconil Weather Stik, Daconil Ultrex.
	1	44	21-28 days	Tank mix with low label rate of one of the following fungicides: Daconil Weather Stik Daconil Ultrex Chipco 26019
	1-2	44-88	14-28 days	If using the 1-2 fl. oz./1,000 sq. ft. rate without tank mixing, make no more than 3 consecutive applications for dollar spot control before rotating to an alternate EPA-registered fungicide having a different mode of action.
Anthracnose <i>(Colletotrichum graminicola)</i>	1-2	44-88	14-28 days	Apply when conditions are favorable for disease development. When disease pressure is high, use higher rates of Banner and shorter intervals. For broad spectrum control, tank mix with a registered contact fungicide at the label rate. If disease is present, mix 2 fl. oz. of Banner per 1,000 sq. ft. with the label rate of the above mentioned contact fungicides.

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing	Instructions
Brown Patch (<i>Rhizoctonia solani</i>)	1-2	44-88	14-21 days	Begin applications in May or June before disease is present. Tank mix with a registered contact fungicide labeled for brown patch control at the label rate. Under conditions of high temperatures and high humidity, use the higher rates of Banner and shorter intervals.
Powdery Mildew (<i>Erysiphe graminis</i>) Rust (<i>Puccinia graminis</i>)	1-2	44-88	14-28 days	Apply when conditions are favorable for disease development. If disease is present, use 2 fl. oz. of Banner per 1,000 sq. ft.
Red Thread (<i>Laetisaria fuciformis</i>) Pink Patch (<i>Limonomyces roseipellis</i>)	2	88	14-21 days	Apply when conditions are favorable for disease development.
Stripe Smut (<i>Ustilago striiformis</i>) (<i>Urocystis agropyri</i>)	1-2	44-88	Fall or Spring	Apply once in the fall after grass becomes dormant or in the early spring before grass starts to grow.
Gray Leafspot (<i>Pyricularia grisea</i>)	1-2	44-88	14 days	Apply when conditions are favorable for disease development. If using the 1 fl. oz./1,000 sq. ft. rate, tank mix with a registered contact fungicide, at the label rate.
Melting Out Leaf Spot (<i>Bipolaris</i> spp.) (<i>Drechslera</i> spp.)	1-2	44-176	14 days	Under light to moderate pressure, apply Banner to reduce the severity of leaf spot or melting out caused by Helminthosporium-type pathogens. For broad spectrum disease control, tank mix the 1 fl. oz. Banner with a registered contact fungicide, at the label rate. Tank mix the 1-2 fl. oz./1,000 sq. ft. Banner rate with a registered contact fungicide at the label rate.
Summer Patch Poa Patch (<i>Magnaporthe poae</i>)	2 4	88 176	14 days 28 days	Apply Banner beginning in April. Use the 4 fl.oz./1,000 sq. ft. rate on a 28-day schedule and the 2 fl. oz./1,000 sq. ft. rate on a 14-day schedule.

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing	Instructions
Take-All Patch <i>(Gaeumannomyces graminis)</i>	2-4	88-176	Spring and Fall	Apply Banner to reduce the severity of take-all patch. Make 1-2 fall applications in September and October or when night temperatures drop to 55°F, and 1-2 spring applications in April and May, depending on local recommendations.
Spring Dead Spot <i>(Leptosphaeria korrae, Leptosphaeria narmari, Ophiosphaerella herpotricha, Gaeumannomyces graminis)</i>	4	176	30 days	Make 1-3 applications. For one application, apply in September or October. For multiple applications, begin sprays in August.
Necrotic Ring Spot <i>(Leptosphaeria korrae)</i>	4	176	Fall or Spring	Apply in the fall and/or the early spring depending on local recommendations.
Snowmold Gray <i>(Typhula spp.)</i> Pink <i>(Microdochium nivale)</i>	2-4	88-176	Late Fall	Apply one application in the late fall before snow cover. Do not apply on top of snow. For optimum disease control, the 2 and 3 fl. oz. Banner rates should be tank mixed with either PCNB or chlorothalonil at label rates.
Fusarium patch <i>(Fusarium nivale)</i>	2-4	88-176	Fall-Early Spring	Apply when conditions are favorable for disease development.
Yellow patch <i>(Rhizoctonia cerealis)</i>	3-4	130-176	Late Fall	Apply one application in the late fall before snow cover. Do not apply on top of snow. If using a 3 fl. oz./1,000 sq. ft. rate, tank mix with a registered contact fungicide at the label rate.
Zoysia patch, large patch of zoysia <i>(Rhizoctonia solani)</i>	3-4	130-176	Early Fall	Make one application in the early fall (mid-September to mid-October) prior to development of disease symptoms. Consult local turfgrass extension experts to determine the optimum application timing for your area.

Dichondra - Specific Disease, Rate, and Application Timing

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing	Instructions
Dichondra Rust (<i>Puccinia dichondrae</i>)	2	88	14-21 days	Apply when conditions are favorable for disease development.

Establishment of Cool Season Turfgrass

Banner provides control of many diseases of turf, and its primary use is as a fungicide for use against the diseases listed on this label. As an additional benefit, Banner will improve the rate of establishment when it is applied to cool season grass seedlings or sod.

New Seedlings: Apply 1 fl. oz./1,000 sq. ft. at the 2 to 3-leaf stage of growth for faster root development and top growth.

Sod: Apply 1 fl. oz./1,000 sq. ft. 2-6 weeks before cutting for increased sod knitting and faster establishment after laying.

Disease Control in Nurseries (Field) and Landscape Plantings

1. USE BANNER IN A PREVENTATIVE DISEASE CONTROL PROGRAM. To determine the use directions for controlling a disease on an ornamental plant species, select the plant species in Table 1. The number in parentheses following the plant species refers you to the disease(s) controlled in Table 2. Find the disease in Table 2. The letter in brackets following the disease refers you to the application regime in Table 3.
2. Allow spray to dry before overhead irrigation is applied.
3. Optimum benefit of Banner is obtained when used in conjunction with sound disease management practices.

General Recommendations

Banner may be used at rates of 2-24 fl. oz./100 gals. water for control of diseases of ornamental plant species (see Tables 1, 2, and 3).

NOTE: For outdoor uses, you can apply up to 5.4 gallons of Banner/acre/crop/calendar year.

For general disease control in landscapes, apply 6-8 fl. oz./100 gals. water every 21 days. For best control, begin Banner applications before disease development.

Note: Plant tolerances to Banner have been found acceptable for the specific genera and species of plants listed under the **Directions for Use**. In addition, crop tolerance to Banner has been demonstrated (at a rate of 6-8 fl. oz./100 gals.) on the following ornamental plants: ajuga, Bartlett pear, bayberry, camellia, candy tuft, cotoneaster, elm, English ivy, euonymus, German statice, holly, hollyhock, impatiens, linden, liriopse, magnolia, maples, peony, privet, raphiolepis, redbud, sweetgum, sycamore, tulip tree, vinca, and wax myrtle. Other plant species may be sensitive to Banner and diseases other than those listed may not be controlled. Before using Banner on plants or for diseases that are not listed in the **Directions for Use**, test Banner on a small scale basis first. Do not apply Banner to African violets, begonias, Boston fern, or geraniums. Apply the recommended rates for a particular type of disease, i.e., rust, powdery mildew, etc., and evaluate for phytotoxicity and disease control prior to widespread use.

Table 1. Ornamentals - Plant Species

Numbers in parentheses refer to diseases controlled. See Table 2.

Herbaceous Ornamental	Woody Ornamental	Non-bearing Fruits and Nuts (Nurseries and Landscape Plantings)
Calendula (4a) Carnation (5f) Chrysanthemum (2a) Delphinium (4a) Gomphrena (3a) Iris (5d) Marigold (3a) Monarda (4c) Phlox (4c) Snapdragon (5d) Sweet William (3k) (<i>Dianthus barbatus</i>) Zinnia (4c)	Amelanchier (4d) Ash (4c) Azalea (2c,4b) Crabapple (3c,3q,4c,5a) Crape Myrtle (4a) Dogwood (3h,4c) Douglas Fir (5b) Hawthorn (5a) Juniper (1a) Lilac (4c) Oaks (3p) Pines (1b,1c) Poplars (5b) Pyracantha (3o) Red Tip Photinia (3i) Rhododendron (2c,3n) Roses (3g,4e,5c) (Outdoor Use Only) Shasta Fir (5e)	Apple (3q,4d,5a) Cherry (2b,3d) Citrus (3m) Nectarine (2b) Peach (2b) Pecan (3b,3c,3f,3l,3n,4e) Plum (2b) Walnut (3j)

Table 2. Diseases

Letters in brackets refer to application regimes. See Table 3.

1. Conifer Blights
 - a. *Phomopsis juniperovora* (Phomopsis Blight) [B]
 - b. *Sirococcus strobolinus* (Tip Blight) [D]
 - c. *Sphaeropsis sapinea* (Diplodia Tip Blight) [B]

2. Flower Blight
 - a. *Ascochyta chrysanthemi* (Ray Blight) [C]
 - b. *Monilinia* spp. [A]
 - c. *Ovulinia* spp. [B]

3. Leaf Blights/Spots
 - a. *Alternaria* spp. [B]
 - b. *Cercospora* spp. (Brown Leaf Spot) [C]
 - c. *Cladosporium* spp. (Scab) [C]
 - d. *Coccomyces hiemalis* [A]
 - e. *Collectrichum* spp. [B]
 - f. *Cristulariella* spp. (Zonate leafspot) [C]
 - g. *Diplocarpon rosae* (Blackspot) [B]
 - h. *Discula* spp. (Anthracnose) [A]
 - i. *Fabraea maculata* (syn. *Entomosporium maculata*) [B]
 - j. *Gnomonia leptostyla* (Anthracnose) [C]
 - k. *Heterosporium echinulatum* [B]
 - l. *Mycosphaerella caryigena* (Downy Spot) [C]
 - m. *Mycosphaerella fructicola* (Greasy Spot) [E]
 - n. *Septoria* spp. (Leaf Scorch) [C]
 - o. *Spilocaea pyracanthae* [B]
 - p. *Tubakia dryina* [D]
 - q. *Venturia inaequalis* (Scab) [A]

4. Powdery Mildew
 - a. *Erysiphe* spp. [B]
 - b. *Microsphaera* spp. [C]
 - c. *Oidium* spp. [B]
 - d. *Podosphaera* spp. [B]
 - e. *Sphaerotheca pannosa* [B]

- 5. Rust
 - a. *Gymnosporangium juniperi-virginianae* [A]
 - b. *Melampsora occidentalis* [D]
 - c. *Phragmidium* spp. [B]
 - d. *Puccinia* spp. [B]
 - e. *Pucciniastrum goeppertianum* [D]
 - f. *Uromyces dianthi* [B]
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Table 3. Application Regimes

- [A] Mix 2-4 fl. oz. of Banner in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply every 14-21 days during the period of primary infection. If disease is present, tank mix with an EPA-registered contact fungicide. For flower blight, apply Banner when there is 5-10% bloom and again at 70-100% bloom. For dogwoods, apply the 2-4 fl. oz. rate every 14 days, or apply 8 fl. oz. of Banner every 28 days.
 - [B] Mix 5-8 fl. oz. of Banner in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply as needed, beginning when conditions are favorable for disease development. For blackspot, apply with a registered contact fungicide labeled for blackspot. For Calendula, apply every 30 days. For diplopedia tip blight, make 3 applications every 14 days prior to major period of infection. For juniper phomopsis blight, make first application as soon as junipers start to grow, and repeat the applications every 14-21 days during periods of active growth.
 - [C] Mix 8-12 fl. oz. of Banner in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply every 30 days, beginning when conditions are favorable for disease development. For pecans, apply the 12 fl. oz. rate beginning at bud break. Apply 3 times on 14-day intervals. For walnuts, apply 8.5 fl. oz. at 14-21 day intervals. For ray blight, apply 12 fl. oz. at 7-day intervals or 20 fl. oz. at 14-day intervals.
 - [D] Mix 16 fl. oz. of Banner in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply every 14-28 days, beginning when conditions are favorable for disease development. For Douglas fir needle rust, apply once in May. For tip blight, initial application is in mid-late winter, and apply 3 times at 2-month intervals.
 - [E] Mix 20-24 fl. oz. of Banner in 100 gals. of water and apply as a full coverage spray to the point of drip. Apply during June to August time period.
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Note: To avoid possible illegal residues, do not apply to apple, cherry, citrus, nectarine, peach, pecan, plum, or walnut trees that will bear harvestable fruit within 12 months.

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