

10163-274



06/28/2007  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Julie Butcher  
Registration Specialist  
Gowan Company  
P.O. Box 5569  
Yuma, AZ 85366

JUN 28 2007

Subject: Rubigan A.S. Turf & Ornamental  
EPA Registration No. 10163-274  
Your Amendment dated October 25, 2006  
Decision No. 369681

Dear Ms. Butcher:

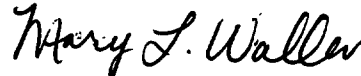
The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended is acceptable provided the following changes are made:

1. Pages 8&9: Replace Rubigan A.S. in all places with the phrase "Rubigan A.S. Turf and Ornamental".
2. Page 8: Delete the phrase "Directions for Use" after the " *POA ANNUA* Management Program...." heading.
3. Page 8: After the "POA ANNUA Management Program...." heading, 5th sentence, delete the phrase "supplemental labeling" and replace it with the sentence "The Directions for Use for the *POA ANNUA* Management program". The sentence should read, "The Directions for Use for the *POA ANNUA* Management Program describes various options for managing...."
4. Page 8: After the "POA ANNUA Management Program...." heading, 6th sentence, delete the phrase "this bulletin is" and replace it with the phrase "the directions are". Delete the 7th sentence in its entirety. The sentence should read, "The program should not be undertaken unless the directions are fully understood by the user."
5. Page 8: Revise the heading of the 2nd table to read, "*POA ANNUA* Control Programs for Rubigan A.S. Turf and Ornamental".
6. Page 8: The last paragraph after the "Anticipated Results" section, delete the phrase "in the programs recommended" and replace it with the phrase "as directed". The sentence should read, "Applications of Rubigan A.S. Turf and Ornamental as directed in this label are expected...."
7. Page 10: Under the "Notice of Conditions of Sale and Warranty and Liability Limitations" section, delete the phrase, "recommendations" and add the word "directions". The sentence should read, "Our directions for use of this product are based on tests believed to reliable."

2/12

One copy of the label stamped "Accepted with Comments" is enclosed for your records. Please submit one copy of the final printed label before the product is released for shipment. If you have any questions, please contact Tamue L. Gibson by phone at (703) 305-9096 or via email at [gibson.tamue@epa.gov](mailto:gibson.tamue@epa.gov).

Sincerely,



Mary L. Waller  
Product Manager (21)  
Fungicide Branch  
Registration Division (7505P)

Enclosure

ACCEPTED  
with COMMENTS  
In EPA Letter Dated 8/12

JUN 28 2007  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
10163-274

# Rubigan® A.S.

## Turf and Ornamental

A locally systemic fungicide for the control of specified disease on turf grasses and ornamentals. For use on golf courses, parks, athletic fields, commercial and residential areas. To be applied only by or under the supervision of commercial applicators responsible for disease and weed control programs.

	% By Wt.
<b>ACTIVE INGREDIENT</b>	
Fenarimol: a-(2-chlorophenyl)-a-(4-chlorophenyl)-5-pyrimidinemethanol .....	11.6%
<b>OTHER INGREDIENTS</b> .....	88.4%
	<b>TOTAL</b> 100.0%

Contains 1 pound active ingredient per gallon

### KEEP OUT OF REACH OF CHILDREN CAUTION

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.)

FIRST AID	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious or convulsing person.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-888-478-0798 for emergency medical treatment information.	

#### PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes eye irritation. Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing spray mist and contact with skin, eyes and clothing.

#### 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 C on an EPA chemical resistance category selections chart.

#### Applicators and Other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride or Viton
- Shoes plus socks
- Goggles or face shield

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.

NET CONTENTS \_\_\_ GALLONS

EPA Reg. No. 10163-274  
EPA Est. No. 67545-AZ-1



Produced For:  
Gowan Company  
P. O. Box 5569  
Yuma, Arizona 85366-5569

4/12

**USER SAFETY RECOMMENDATIONS**

Users should:

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

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish. Do not apply directly to water, or 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. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas.

**DIRECTIONS FOR USE**

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

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

**AGRICULTURAL USE REQUIREMENTS**

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

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

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

- Coveralls
- Chemical-resistant gloves such as barrier laminate or butyl rubber
- Shoes plus socks
- Goggles or face shield

**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 (WPS) for agricultural pesticides (40CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, or greenhouses. Keep unprotected persons out of treated areas until sprays have dried.

Read all Directions for Use carefully before applying.

**GENERAL INFORMATION**

Rubigan A.S. Turf and Ornamental fungicide is a locally systemic product that provides both protective and curative (eradicant) action. Rubigan A.S. Turf and Ornamental is recommended for use as a foliar spray for the control of selected turf and ornamental diseases.

**Chemigation:** Do not apply Rubigan A.S. Turf and Ornamental through any type if irrigation system.

**Application Directions**

Add Rubigan A.S. Turf and Ornamental to the spray tank during the last half of the filling operation. Agitate thoroughly during the filling and spraying operation to ensure a uniform mixture. Use only a properly calibrated fungicide sprayer with nozzle screens and inline strainers no finer than 50 mesh. Calibrate spray equipment to deliver sufficient water volume for uniform coverage.

**For use on:** golf courses, parks, athletic fields and commercial areas.

**Maximum Application and Use Rate:** No single application to exceed 8 fl oz/1000 sq ft. For all turf uses, do not make more than 12 applications per year or exceed the cumulative rate of 32 fl oz per 1000 sq ft per year.

5/12

APPLICATION RATES FOR RUBIGAN A.S. TURF AND ORNAMENTAL FOR GREENS AND TEES

Disease Organism	Rate of Rubigan A.S. (fl oz/1000 sq ft)	Spray Interval (days)	Disease Pressure	Comments (see below)
Dollar spot ( <i>Sclerotinia homoeocarpa</i> ) ( <i>Moellerodiscus spp.</i> )	0.75	10-21	Low to Moderate	Make all applications for dollar spot as standard foliar applications. For preventative applications, apply product prior to the appearance of visible disease symptoms at the lowest application rate and at the longest interval.
	1.5	14-28	Moderate to Heavy	For curative applications to areas with visible symptoms of dollar spot, apply product at the highest rate for that disease and continue at the shortest spray interval for that rate until the disease is brought under control. At this time, the lower rate, longer spray interval recommendations can begin
Copper spot ( <i>Gloeocercospora sorghi</i> )	0.75	10-21	Low to Moderate	Make all applications for copper spot as standard foliar applications. For preventative applications, apply product prior to the appearance of visible disease symptoms at the lowest application rate and at the longest interval.
	1.5	14-28	Moderate to Heavy	For curative applications to areas with visible symptoms of copper spot, apply product at the highest rate for that disease and continue at the shortest spray interval for that rate until the disease is brought under control. At this time, the lower rate, longer spray interval recommendations can begin
Rhizoctonia blight/brown patch ( <i>Rhizoctonia solani</i> )	1.5	7-14	Low to Moderate	Make all applications for rhizoctonia as standard foliar applications. For preventative applications, apply product prior to the appearance of visible disease symptoms at the lowest application rate and at the longest interval.
	1.5	7-14	Moderate to Heavy	Use tank mixes as discussed below.
Necrotic ring spot ( <i>Leptosphaeria korrae</i> )	2.0	30	All	For control of necrotic ring spot, apply product to the turfgrass and thoroughly irrigate with 0.25 to 0.5 inch of water.  For greens and tees, apply Rubigan A.S. Turf and Ornamental preventively at 2.0 fl oz/1000 sq ft beginning in April with a second application at 2.0 fl oz/1000 sq ft in May. If conditions are favorable in the fall for disease occurrence, applications 14 days prior to the anticipated appearance of disease symptoms may be necessary.
Summer patch ( <i>Magnaporthe poae</i> )	2.0	30	All	For control of summer patch, apply product to the turfgrass and thoroughly irrigate with 0.25 to 0.5 inch of water.  For greens and tees, apply Rubigan A.S. Turf and Ornamental preventively at 2.0 fl oz/1000 sq ft beginning in April with a second application at 2.0 fl oz/1000 sq ft in May. If conditions are favorable in the fall for disease occurrence, applications 14 days prior to the anticipated appearance of disease symptoms may be necessary.

6/12

APPLICATION RATES FOR RUBIGAN A.S. TURF AND ORNAMENTAL FOR GREENS AND TEES (Continued)

Disease Organism	Rate of Rubigan A.S. (fl oz/1000 sq ft)	Spray Interval (days)	Disease Pressure	Comments (see below)
Fusarium blight ( <i>Fusarium roseum</i> , <i>F. triticum</i> )	2.0	30	All	For control of fusarium blight, apply product to the turfgrass and thoroughly irrigate with 0.25 to 0.5 inch of water.  For greens and tees, apply Rubigan A.S. Turf and Ornamental preventively at 2.0 fl oz/1000 sq ft beginning in April with a second application at 2.0 fl oz/1000 sq ft in May. If conditions are favorable in the fall for disease occurrence, applications 14 days prior to the anticipated appearance of disease symptoms may be necessary.
Take-all patch ( <i>Gaeumannomyces graminis</i> )	4.0	30	All	For control of take-all patch, apply product to the turfgrass and thoroughly irrigate with 0.25 to 0.5 inch of water.  For greens and tees, apply Rubigan A.S. Turf and Ornamental preventatively in two applications of 4.0 fl oz/1000 sq ft at 30-day intervals. Make applications prior to permanent snow cover or frozen soil. If conditions are favorable in the fall for disease occurrence, applications 14 days prior to the anticipated appearance of disease symptoms may be necessary.
Spring dead spot ( <i>Ophiosphaerella korrae</i> )	6.0	Single application	All	For preventative control of spring dead spot, make a single application of 6.0 fl oz/1000 sq ft in September, or as a split application each at 4.0 fl oz/1000 sq ft in early September and early October applied at 14-30 day intervals. For optimum control, apply when soil temperatures are between 80° and 60° F at a depth of 2 inches. For optimum control of spring dead spot, utilize the 30-day spray interval between applications.  For control of spring dead spot, apply product to the turfgrass and thoroughly irrigate with 0.25 to 0.5 inch of water.
	4.0	2 applications 14-30 day intervals	All	
Fusarium patch/pink snow mold ( <i>Microdochium nivale</i> )	8.0	Single application	All	Single high rate applications such as required to control these diseases may inhibit germination of creeping bentgrass for up to 30 days following application.  This recommendation does not apply to the control of fusarium patch (pink patch) as it occurs under the conditions of cool, wet weather in the western United States (CA, OR, WA). Under these conditions, apply Rubigan A.S. Turf and Ornamental at the rate of 2.0 fl oz/1000 sq ft every 3 to 4 weeks during periods of favorable disease conditions.  For fusarium patch control, apply the initial treatment as a standard foliar application prior to permanent snow cover or frozen soil. A second application may be necessary in late winter or early spring if conditions are favorable for renewed disease development.
	4.0	2 applications 30 day intervals	All	

<p>Typhula blight/gray snow mold (<i>Typhula incarnata</i>) (<i>Typhula ishikariensis</i>)</p>	<p>8.0</p>	<p>1 or 2 applications (A second application may be necessary in late winter or early spring if conditions are favorable for renewed disease development.)</p>	<p>All</p>	<p>Single high rate applications such as required to control these diseases may inhibit germination of creeping bentgrass for up to 30 days following application.</p> <p>For typhula blight control, apply the initial treatment as a standard foliar application prior to permanent snow cover or frozen soil. A second application may be necessary in late winter or early spring if conditions are favorable for renewed disease development.</p>
--	------------	--	------------	--

When treating golf greens and tees, always treat aprons and approaches.

**APPLICATION RATES FOR RUBIGAN A.S. TURF AND ORNAMENTAL FOR OTHER TURF AREAS**

Disease Organism	Rates of Rubigan A.S. (fl oz/1000 sq ft)	Spray Interval (days)	Disease Pressure	Comments (see below)
<p>Dollar spot (<i>Sclerotinia homoeocarpa</i>) (<i>Moellerodiscus spp.</i>)</p>	0.75	10-21	Low to Moderate	<p>Make all applications for dollar spot as standard foliar applications. For preventative applications, apply product prior to the appearance of visible disease symptoms at the lowest application rate and at the longest interval.</p>
	1.5	14-28	Moderate to Heavy	<p>For curative applications to areas with visible symptoms of dollar spot, apply product at the highest rate for that disease and continue at the shortest spray interval for that rate until the disease is brought under control. At this time, the lower rate, longer spray interval recommendations can begin</p>
<p>Anthracnose (<i>Colletotrichum graminicola</i>)</p>	1.75-3.5	30	All	<p>Make applications for anthracnose prior to the anticipated appearance of disease symptoms and continued at 30-day intervals as long as conditions for disease continue.</p>
<p>Copper spot (<i>Gloeocercospora sorghi</i>)</p>	0.75	10-21	Low to Moderate	<p>Make all applications for copper spot as standard foliar applications. For preventative applications, apply product prior to the appearance of visible disease symptoms at the lowest application rate and at the longest interval.</p>
	1.5	14-28	Moderate to Heavy	<p>For curative applications to areas with visible symptoms of copper spot, apply product at the highest rate for that disease and continue at the shortest spray interval for that rate until the disease is brought under control. At this time, the lower rate, longer spray interval recommendations can begin</p>
<p>Rhizoctonia blight/brown patch (<i>Rhizoctonia solani</i>)</p>	1.5	7-14	Low to Moderate	<p>Make all applications for rhizoctonia blight as standard foliar applications. For preventative applications, apply product prior to the appearance of visible disease symptoms at the lowest application rate and at the longest interval.</p>
	1.5	7-14	Moderate to Heavy	<p>Use tank mixes as discussed below.</p>

Necrotic ring spot ( <i>Leptosphaeria korrae</i> )	4.0-8.0	Single application	All	Apply Rubigan A.S. Turf and Ornamental preventively in a single 4.0-8.0 fl oz/1000 sq ft application in April or as a split application with 2.0-4.0 fl oz/1000 sq ft applied in April and 2.0-4.0 fl oz/1000 sq ft applied in May. Use the higher rate listed when area to be treated has a previous history of disease infestation.  For control of necrotic ring spot, apply product to the turfgrass and thoroughly irrigate with 0.25 to 0.5 inch of water.
	2.0-4.0	2 applications (Split applications applied in April and May.)	All	
Summer patch ( <i>Magnaporthe poae</i> )	4.0-8.0	Single application	All	Apply Rubigan A.S. Turf and Ornamental preventively in a single 4.0-8.0 fl oz/1000 sq ft application in April or as a split application with 2.0-4.0 fl oz/1000 sq ft applied in April and 2.0-4.0 fl oz/1000 sq ft applied in May. Use the higher rate listed when area to be treated has a previous history of disease infestation.  For control of summer patch, apply product to the turfgrass and thoroughly irrigate with 0.25 to 0.5 inch of water.
	2.0-4.0	2 applications (Split applications applied in April and May.)	All	
Fusarium blight ( <i>Fusarium culmorum</i> ) ( <i>Fusarium poae</i> )	4.0-8.0	Single application	All	Apply Rubigan A.S. Turf and Ornamental preventively in a single 4.0-8.0 fl oz/1000 sq ft application in April or as a split application with 2.0-4.0 fl oz/1000 sq ft applied in April and 2.0-4.0 fl oz/1000 sq ft applied in May. Use the higher rate listed when area to be treated has a previous history of disease infestation.  For control of fusarium blight, apply product to the turfgrass and thoroughly irrigate with 0.25 to 0.5 inch of water.
	2.0-4.0	2 applications (Split applications applied in April and May.)	All	
Fusarium patch/pink snow mold ( <i>Microdochium nivale</i> )	8.0	Single application	All	Single high rate applications such as required to control these diseases may inhibit germination of creeping bentgrass for up to 30 days following application.  This recommendation does not apply to the control of fusarium patch (pink patch) as it occurs under the conditions of cool, wet weather in the western United States (CA, OR, WA). Under these conditions, apply Rubigan A.S. Turf and Ornamental at the rate of 2.0 fl oz/1000 sq ft every 3 to 4 weeks during periods of favorable disease conditions.  For fusarium patch control, apply the initial treatment as a standard foliar application prior to permanent snow cover or frozen soil. A second application may be necessary in late winter or early spring if conditions are favorable for renewed disease development.
	4.0	2 applications 30 day intervals	All	



9/12

Typhula blight/gray snow mold ( <i>Typhula incarnata</i> ) ( <i>Typhula ishikariensis</i> )	8.0	Single application	All	Single high rate applications such as required to control these diseases may inhibit germination of creeping bentgrass for up to 30 days following application.  For typhula blight control, apply the initial treatment as a standard foliar application prior to permanent snow cover or frozen soil. A second application may be necessary in late winter or early spring if conditions are favorable for renewed disease development.
	4.0	2 applications 30 day intervals	All	
Corticium red thread ( <i>Laetisaria fuciformis</i> )	8.0	30	All	Single high rate applications such as required to control these diseases may inhibit germination of creeping bentgrass for up to 30 days following application.  Begin applications for corticium red thread 1 to 2 weeks prior to the anticipated appearance of disease symptoms. Make applications at 30-day intervals with a maximum of 2 applications during any one season.
Take-all patch ( <i>Gaeumannomyces graminis</i> )	4.0-8.0	1 or 2 applications 30 days for split applications.	All	For take-all patch, apply Rubigan A.S. Turf and Ornamental preventively in a single 8.0 fl oz/1000 sq ft application or as a split application each at 4.0 fl oz/1000 sq ft applied at 30-day intervals. Make applications prior to permanent snow cover or frozen soil.  For control of take-all patch, apply product to the turfgrass and thoroughly irrigate with 0.25 to 0.5 inch of water.
Powdery mildew ( <i>Erysiphe graminis</i> )	2.0-4.0	Single application	All	For curative applications to areas with visible symptoms of powdery mildew, apply product at the highest rate for that disease and continue at the shortest spray interval for that rate until the disease is brought under control. At this time, the lower rate, longer spray interval recommendations can begin.
Spring dead spot ( <i>Ophiosphaerella horrae</i> )	6.0	Single application	All	For preventative control of spring dead spot, make a single application of 6.0 fl oz/1000 sq ft in September, or as a split application each at 4.0 fl oz/1000 sq ft in early September and early October applied at 14-30 day intervals. For optimum control, apply when soil temperatures are between 80° and 60° F at a depth of 2 inches. For optimum control of spring dead spot, utilize the 30-day spray interval between applications.  For control of spring dead spot, apply product to the turfgrass and thoroughly irrigate with 0.25 to 0.5 inch of water.
	4.0	2 applications 14-30 day intervals	All	

**Tank Mixtures**

When disease pressure from rhizoctonia blight increases to moderate, control will be enhanced by tank mixing Rubigan A.S. Turf and Ornamental with a contact fungicide containing the active ingredient chlorothalonil. If a tank mixture is used, apply the minimum label rate recommended for the control of rhizoctonia blight. Under conditions of heavy rhizoctonia blight pressure, additional sequential applications of a contact fungicide may be necessary to keep the disease adequately controlled. This product must not be tank mixed with products containing label prohibitions against tank mixing. Do not mix products containing iron with Rubigan A.S. Turf and Ornamental. No label dosage rates should be exceeded and the most restrictive label limitations and precautions must be adhered to. For disease control, do not use wetting agents or non-ionic surfactants with this product.

**Additional Disease Control**

If turf is treated for additional diseases, Rubigan A.S. Turf and Ornamental is compatible with most commonly used turf fungicides. Leaf spotting organisms such as *Dreschlera* and *Bipolaris* will require the use of a fungicide containing the a.i. chlorothalonil for control. If a tank mixture is used, follow label directions for the use of that product and apply at the minimum rate recommended for control of the target disease organism.

**RATE CONVERSION CHART FOR TURF**

Label Rates of Rubigan A.S./1000 sq ft.	Quantity Rubigan A.S. Per Acre
0.75 fl oz	1 qt
1.50 fl oz	2 qt
2.00 fl oz	2.75 qt
4.00 fl oz	5.5 qt
6.00 fl oz	8 qt
8.00 fl oz	11 qt

**POA ANNUA MANAGEMENT PROGRAM FOR OVERSEEDED BERMUDAGRASS GREENS AND TREES  
DIRECTIONS FOR USE**

*Poa annua* behaves as a true winter annual weed in southern warm season turfgrass areas. As such, it reduces turf quality in overseeded bermudagrass and is a significant management problem for golf course superintendents. Rubigan A.S. fungicide can be used as a tool for reducing *Poa annua* in overseeded bermudagrass greens and tees. Methods of reducing *Poa annua* populations can be varied to fit easily into a golf course turf management program. This supplemental labeling describes various options for managing *Poa annua* populations using Rubigan A.S. The program should not be undertaken unless this bulletin is fully understood by the user. In addition, the user must read and follow all use directions, precautions and limitations on the label for Rubigan A.S.

**Rubigan A.S. Growth Regulating Effect:** Rubigan A.S. may exert a growth regulating effect in certain plants by reducing the biosynthesis of gibberellic acid. This effect is expressed as a reduction in internode elongation and suppression of overall plant growth. In the presence of sufficiently high rates of Rubigan A.S. or prolonged exposure, a species sensitive to this effect may be selectively suppressed. In turf, this effect allows the competitive balance to shift in favor of less sensitive cultivars. *Poa annua* has demonstrated a significantly greater sensitivity to Rubigan A.S. than perennial turfgrass species and most of their cultivars. Proper use of this selectivity can assist the golf course superintendent in managing the *Poa annua* composition of greens and tees.

**Management of *Poa annua* Using Rubigan A.S.:** Rubigan A.S., a highly effective, locally systemic fungicide, is labeled for control of a number of economically important turfgrass diseases. The *Poa annua* management program for Rubigan A. S. can be timed to coincide with fall fungicide applications for control of late season diseases in Bermudagrass, including spring dead spot.

For optimum control, apply Rubigan A.S. prior to germination of *Poa annua*. Treatment alternatives include a program of either 2 or 3 applications to reach the 12 fluid ounce/1000 square feet rate of Rubigan A.S.

Timing is the critical issue in achieving control of *Poa annua*. Apply Rubigan A.S. prior to germination of *Poa annua*. If a later overseeding date is scheduled, the three application strategy is most effective.

**Overseeding:** Fine bladed perennial ryegrass or blends of ryegrass cultivars are recommended for overseeding. To avoid seedling stress the last application of Rubigan A.S. must be made at least 2 weeks before overseeding perennial ryegrass and it is recommended that the medium to high seeding rate be followed. If either *Poa trivialis* or bentgrass is used for overseeding, follow the 3 application program. To avoid seedling stress when overseeding *Poa trivialis* or bentgrass, the final application of Rubigan A.S. must be made at least 30 days before overseeding.

**POA ANNUA CONTROL PROGRAMS FOR RUBIGAN A.S.**

Program	Number of Applications	Application Rate Rubigan A.S.	Spray Interval	Application Timing
A	2	6.0 fl oz per 1000 sq ft	14 days	First application prior to <i>Poa annua</i> germination
B	3	4.0 fl oz per 1000 sq ft	14 days	First application prior to <i>Poa annua</i> germination

**Note:** A single application of no more than 2.0 fluid ounces of Rubigan A.S. per 1000 square feet in late December or early January following the establishment of overseeding will help enhance the suppression of *Poa annua* and prolong this effect through the spring season.

**Anticipated Results:** Application of Rubigan A.S. for management of *Poa annua* will coincide with the onset of winter dormancy in bermudagrass. Extended periods of low temperatures and heavy rainfall after an application of Rubigan A.S. may result in yellowing of bermudagrass. This effect is attributable to developing dormancy of bermudagrass, not to Rubigan A.S. application. Normal germination and growth of the overseeded grasses can be expected. Avoid the use of plant growth regulators (PGR's) within two weeks of an application of Rubigan A.S. For best results, water in application with at least 0.25 inches of rainfall or irrigation. For optimum results, apply Rubigan A.S. in a minimum volume of water equivalent to 2 gallons per 1000 square feet.

Applications of Rubigan A.S. in the programs recommended in this label are expected to result in *Poa annua* control in the range of 75 to 95 percent. Results are most apparent during the following spring season when *Poa annua* seedheads are visible and plant populations can be measured. Concurrent control of turf diseases susceptible to Rubigan A.S. at the rates applied can be expected as a part of the *Poa annua* control program.

11/12

**Precaution:**

- Do not apply a single application of Rubigan A.S. in excess of 6.0 fluid ounces per 1000 square feet to greens and tees.
- Make each subsequent application at an angle to the previous application of Rubigan A.S. Avoid spray overlap.
- During periods of environmental stress, a single high rate application of Rubigan A.S. may rapidly eliminate *Poa annua* from greens, tees or other close cut turf areas. Do not apply this treatment if rapid elimination of *Poa annua* is a potential problem.
- Do not mix products containing iron with Rubigan A.S. Turf and Ornamental.
- Refer to the label for Rubigan A.S. for additional use directions, precautions and limitations before use.

**ORNAMENTALS**  
**For Control of Powdery Mildew of Field, Landscape and Container Grown Ornamentals**

Rubigan A.S. Turf and Ornamental is a locally systemic fungicide for the prevention or therapeutic control of powdery mildew of field or landscape grown roses and field, landscape or container grown ornamentals. Once dried on the leaf surface, Rubigan A.S. Turf and Ornamental is absorbed into the plant foliage and is not easily washed off by the rain or overhead irrigation. Used as directed Rubigan A.S. Turf and Ornamental will not harm the foliage or floral tissues.

**Note to User (Phytotoxicity):** Environmental factors significantly affect phytotoxicity. While Rubigan A.S. Turf and Ornamental has been tested on numerous ornamental plants without causing serious phytotoxicity, because of the numerous varieties grown, it is recommended that a small group of plants be treated at the recommended rate under anticipated growing conditions and observed for phytotoxic symptoms. Application of Rubigan A.S. Turf and Ornamental at recommended rates may cause leaf puckering and other growth effects on the foliage of rose cultivars growing under cool, foggy or overcast conditions. Plants growing under such conditions develop more slowly and are more sensitive to these growth effects. The rose cultivars Royalty and Visa have exhibited growth effects under these conditions while the same cultivars growing under sunny conditions have exhibited no such effects.

**Application Directions**

Add Rubigan A.S. Turf and Ornamental to the spray tank during the last half of the filling operation. Continuous agitation during completion of filling and spraying will be necessary to ensure a uniform spray mixture. Apply Rubigan A.S. Turf and Ornamental with sufficient pressure and spray volume to ensure thorough wetting of all plant surfaces. Special care must be taken to thoroughly wet new terminal growth and plant areas already diseased. Applications of Rubigan A.S. Turf and Ornamental must begin at the earliest appearance of signs of symptoms of disease.

**APPLICATION RATES FOR RUBIGAN A.S. TURF AND ORNAMENTAL  
 FIELD, LANDSCAPE, AND CONTAINER GROWN ORNAMENTALS**

Species	Disease	Rates and Timing for Rubigan A.S. Turf and Ornamental†
Ajuga Begonia Calendula Chrysanthemum Dahlia Delphinium, Hydrangea Phlox Sweet Pea Verbena Zinnia	Powdery Mildew	3-5 fl oz/100 gallons every 10 to 14 days
Crape Myrtle Euonymus Photinia Roses (field and landscape only)	Powdery Mildew	6-10 fl oz/100 gallons every 10 to 14 days
Crabapple Hawthorn	Scab Rust Powdery Mildew	4-12 fl oz/100 gallons every 7 to 14 days beginning at green tip
Ornamental Dogwood	Powdery Mildew	8 fl oz/100 gallons every 14 to 28 days

† Apply Rubigan A.S. Turf and Ornamental at the recommended rate and maximum spray interval only when using as a preventative or when leaf infection is less than 10 percent. Use the higher rates and shorter spray intervals when greater than 10 per cent leaf infection occurs and environmental conditions encourage disease spread.

**Tank Mixtures:** In areas where black spot occurs, Rubigan A.S. Turf and Ornamental must be tank-mixed with an EPA registered, commercially available fungicide. Use the recommended label rate of the selected tank-mix product for black spot control and the appropriate rate of Rubigan A.S. Turf and Ornamental from the table above. This product must not be tank mixed with products containing label prohibitions against tank mixing. No label dosage rates should be exceeded and the most restrictive label limitations and precautions must be adhered to.

12/12

**STORAGE AND DISPOSAL**

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

**Pesticide Storage:** Avoid freezing. Do not store near heat or open flame. Store in original container only. In case of leak or spill, use absorbent materials to contain liquids and dispose of waste.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

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

**FOR 24-HOUR EMERGENCY ASSISTANCE (SPILL, LEAK OR FIRE), CALL CHEMTREC® (800) 424-9300.  
For other product information, contact GOWAN COMPANY, LLC or see Material Safety Data Sheet.**

**NOTICE OF CONDITIONS OF SALE AND WARRANTY AND LIABILITY LIMITATIONS**

**Important:** Read the entire Directions for Use and Notice of Conditions of Sale and Warranty and Liability Limitations before using this product. If terms are not acceptable return the unopened container for a full refund.

Our recommendations for use of this product are based on tests believed to be reliable. However, it is impossible to eliminate all risk associated with the use of this product. Crop injury, inadequate performance, or other unintended consequences may result due to soil or weather conditions, off target movement, presence of other materials, method of use or application, and other factors, all of which are beyond the control of Gowan Company. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer and User.

Gowan Company warrants that this product conforms to the specifications on the label and is reasonably fit for the intended purpose referred to on the label when used in strict conformance with Direction for Use, subject to the above stated risk limitations. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, GOWAN COMPANY MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

TO THE FULLEST EXTENT PERMITTED BY LAW, GOWAN COMPANY'S EXCLUSIVE LIABILITY FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, OR ANY OTHER LEGAL THEORY IS STRICTLY LIMITED TO THE PURCHASE PRICE PAID OR REPLACEMENT OF PRODUCT, AT GOWAN COMPANY'S SOLE DISCRETION.

Rubigan® is a registered trademark used under license by Gowan Company, LLC.

EPA Text Pending: Rubigan AS T&O (resent 6-22-07)