PREMION®

FUNGICIDE


## BEAT ANTHRACNOSE, DOLLAR SPOT, AND MANY OTHER TURFGRASS DISEASES WITH PREMION® FUNGICIDE.

PREMION is powered by PCNB, a multi-site contact fungicide and the only FRAC Group 14 fungicide registered for turfgrass use. It also contains tebuconazole, a proven FRAC Group 3 DMI fungicide, giving PREMION dual modes of action and contact and systemic activity.

The unique mode of action from PCNB gives PREMION unsurpassed anthracnose control and makes it a very valuable and effective fungicide resistance management tool.

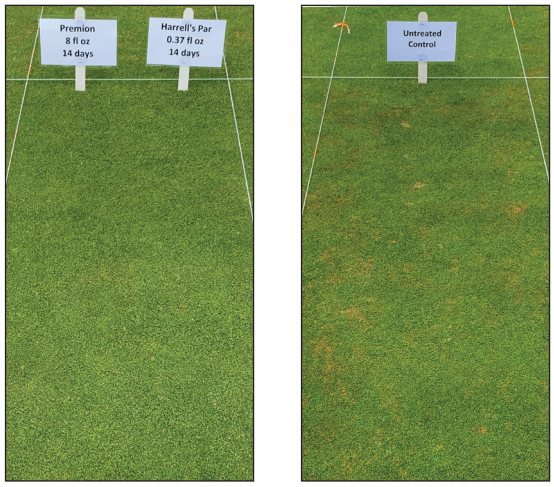
# ANTHRACNOSE IS DIFFICULT TO MANAGE

Anthracnose is one of the most difficult turfgrass diseases to manage for several reasons. Anthracnose may be active during long periods of the year. It infects both creeping bentgrass and annual bluegrass as either a foliar blight or a basal rot. Anthracnose has developed widespread resistance to strobilurin and benzimidazole fungicides, and many isolates exhibit lessened sensitivity to triazole fungicides as well. The most challenging situation involves a fungicide-resistant anthracnose isolate causing basal rot of annual bluegrass while this host plant is already struggling during summer stress.

# UNSURPASSED ANTHRACNOSE CONTROL

University turfgrass pathologists generally recommend using at least two active ingredients with proven anthracnose activity in every fungicide spray targeting this disease, and using as many different modes of action as possible in a fungicide program. Enter PREMION powered by PCNB, a multi-site contact fungicide. Teamed with tebuconazole, a proven DMI fungicide, this combination provides dual modes of action against anthracnose. In fact, PCNB is the only FRAC Group 14 fungicide registered for turfgrass use. This gives PREMION a unique mode of action against anthracnose, including fungicide-resistant or insensitive isolates, which are the most difficult to control. PREMION provides unsurpassed anthracnose control as verified in recent university field trials when tested against other leading anthracnose fungicides.

Learn more about FRAC Groups at www.frac.info, the Fungicide Resistance Action Committee.




PREMION® treatment at 8 fl. oz./1,000 sq. ft. and untreated control in a 2019 Michigan State University anthracnose trial at the Hancock Turfgrass Research Center. Photos taken August 14, 2019. See lower left of this page for more trial information.

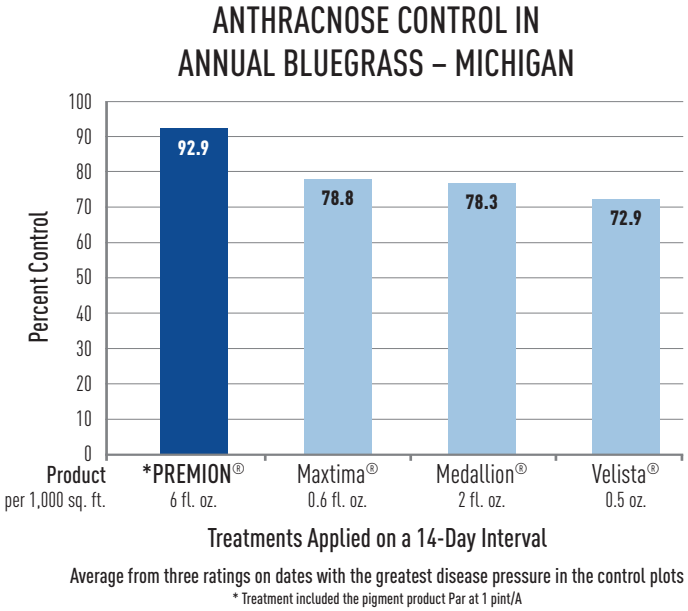



Figure 1: Selected treatments from an anthracnose trial conducted by Michigan State University in 2019. Data shown corresponds to dates when anthracnose pressure was the greatest in the untreated control plots. Assessments were made within (or nearly so) the application interval of 14 days.

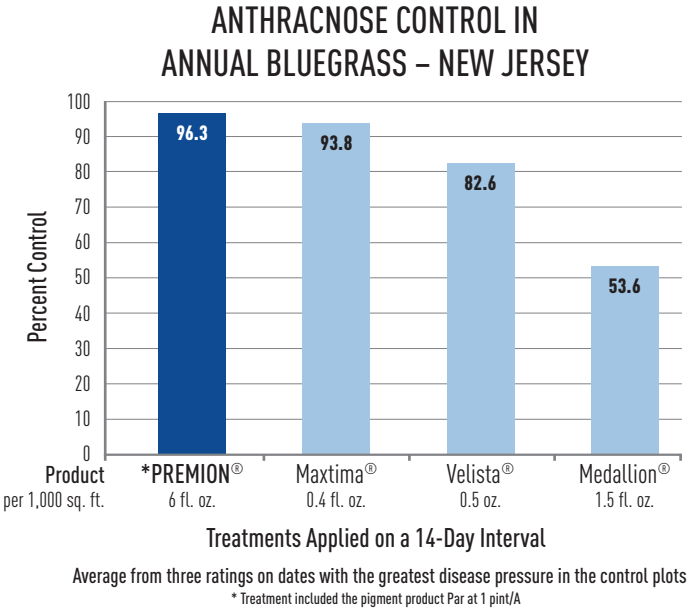



Figure 2: Selected treatments from an anthracnose trial conducted by Rutgers University in 2020. Data shown corresponds to dates when anthracnose pressure was the greatest in the untreated control plots. Assessments were made within (or nearly so) the application interval of 14 days.

# USING PREMION IN ANTHRACNOSE CONTROL PROGRAMS

Anthracnose control programs are generally most effective when they begin at least one month before disease symptoms historically first appear at a given site. That means the first preventative fungicide application targeting anthracnose should be made in late spring to early summer in most areas. PREMION is a great choice for that first preventative anthracnose fungicide application. Besides providing outstanding anthracnose control, PREMION adds a new mode of action from PCNB to your overall fungicide program, which may help delay the development of fungicide resistance by both anthracnose and dollar spot. This makes PREMION a very valuable and effective fungicide resistance management tool.

PREMION has been evaluated as a component of overall anthracnose fungicide programs. A recent university field trial shows outstanding performance from a fungicide program that began with a PREMION application in early summer.

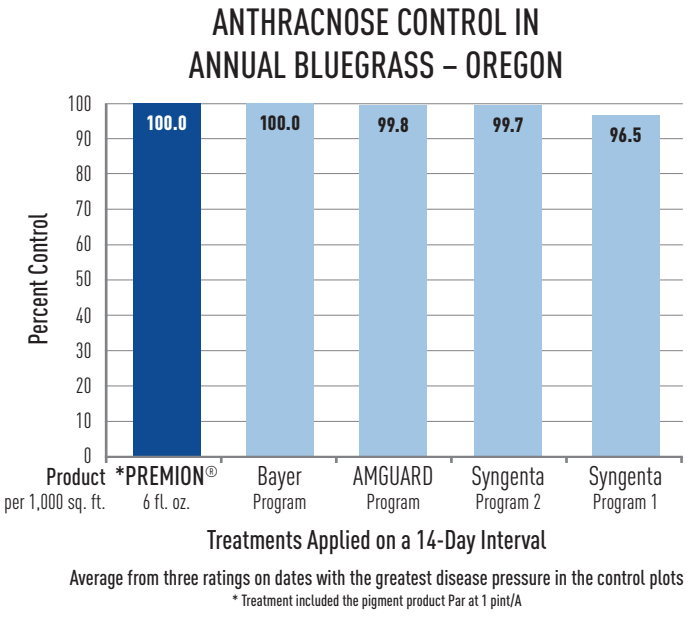



Figure 3: Selected treatments from an anthracnose trial conducted by Oregon State University in 2020. Data shown corresponds to dates when anthracnose pressure was the greatest in the untreated control plots. Assessments were made within (or nearly so) the application interval of 14 days.

# NOT JUST AN ANTHRACNOSE FUNGICIDE

Although PREMION provides unsurpassed anthracnose control, it is not just an anthracnose fungicide. The multi-site contact activity and unique mode of action of PCNB, along with the systemic activity of tebuconazole, make it very effective on a wide range of other turfgrass diseases.

Because PREMION is powered by PCNB, it provides outstanding control of Microdochium Patch/pink snow mold, gray snow mold, and speckled snow mold. In fact, PREMION controls more than 20 common turfgrass diseases, including brown patch, brown ring patch (Waitea patch), dollar spot, fairy ring, summer patch, take-all patch, and many other listed diseases.

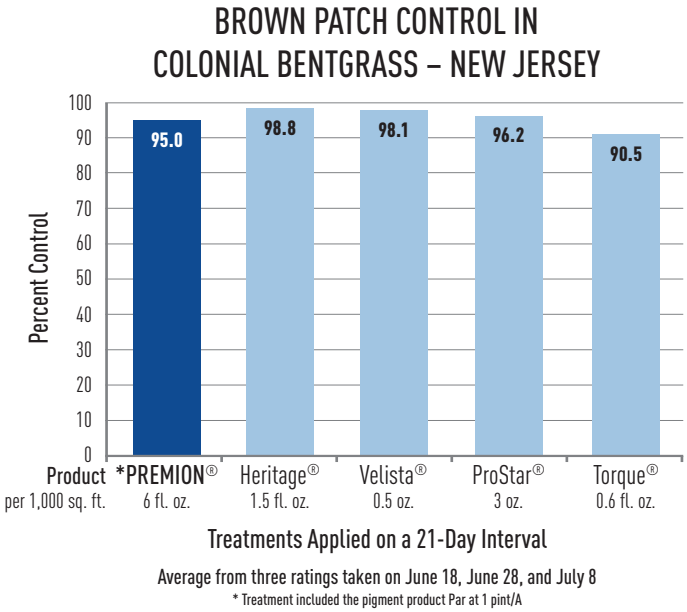



Figure 4: Selected treatments from a brown patch trial conducted by Rutgers University in 2015. Data shown follows late spring / early summer treatment applications that correspond to the suggested PREMION application window.

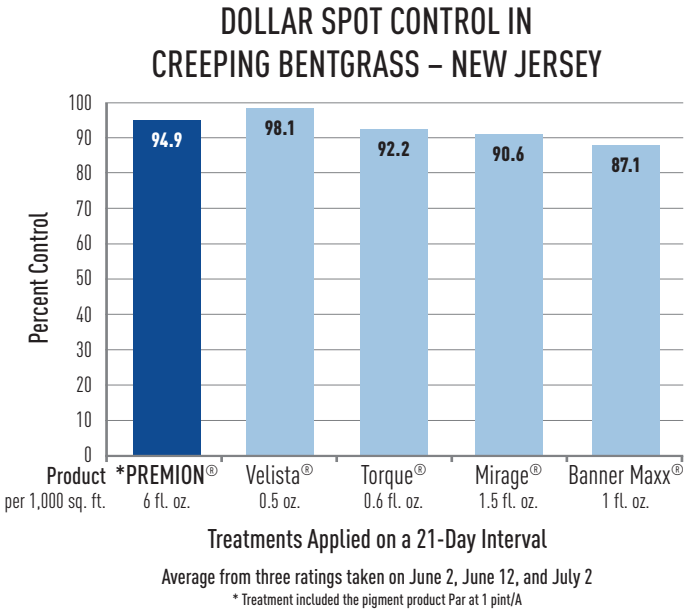
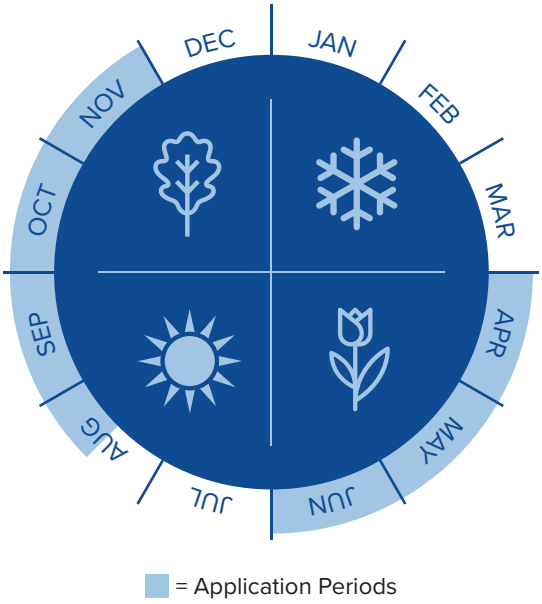



Figure 5: Selected treatments from a dollar spot trial conducted by Rutgers University in 2015. Data shown follows late spring / early summer treatment applications that correspond to the suggested PREMION application window.

## APPLICATION GUIDELINES

- Apply PREMION to well established turfgrass that is not under excessive heat, drought, or plant growth regulator stress. Do not apply PREMION to turfgrass in saturated soils.
- Use PREMION as part of a control program that consists of a sequence of fungicide active ingredients that have different modes of action and proven efficacy against the target disease.
- Most PREMION research evaluated it in combination with the pigment product Par® at one pint per acre, but other similar pigment products can be used to further enhance turfgrass tolerance.
- For use on golf course greens, tees, and fairways only.

## RECOMMENDED APPLICATION WINDOWS




## PREMION APPLICATION RATES

The table below lists PREMION application rates and application intervals for some commonly targeted golf turf diseases. See the PREMION label for a full list of diseases controlled, precautions, directions for use and complete application information.

| Target Disease | Application Rate (fl. oz./1,000 sq. ft.) | Application Rate (gal/acre) | Application Interval |
|---|---|---|---|
| **Anthracnose** *(Colletotrichum cereale)* | 4 to 8 | 1.36 to 2.72 | 14 – 21 days |
| **Brown Patch** *(Rhizoctonia solani)* | 6 to 8 | 2.04 to 2.72 | 14 – 28 days |
| **Brown Ring Patch/Waitea Patch** *(Waitea circanata* var. *circinata)* | 6 to 8 | 2.04 to 2.72 | 14 – 28 days |
| **Dollar Spot** *(Clarireedia* spp.*)* | 6 to 8 | 2.04 to 2.72 | 14 – 28 days |
| **Fairy Ring** (caused by basidiomycete fungi) | 6 to 8 | 2.04 to 2.72 | 28 days |
| **Microdochium Patch** *(Microdochium nivale)* | 8 to 12 | 2.72 to 4.08 | 28 days |
| **Summer Patch** *(Magnaporthe poae)* | 6 to 8 | 2.04 to 2.72 | 14 – 28 days |



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