



Immediate knockdown. Long residual. **Spotless fairways.** 

Xzemplar® fungicide

# Innovation that solves your toughest challenges.

BASF is dedicated to investing in research that produces quality solutions. For over 150 years, we have developed innovations that help to solve your most pressing challenges, supported by research and an experienced sales and technical team. We create chemistry that leads to healthy, quality turf, greater efficiency and more sustainable solutions for superintendents.

- 1 Xzemplar<sup>®</sup> fungicide, the new standard for dollar spot control
- 2 One active ingredient. Two key benefits.
- 3 The cornerstone of your dollar spot program
- 4 Cool-season turf disease control with Xzemplar fungicide

# Xzemplar fungicide technology sheet

### Xzemplar<sup>®</sup> fungicide, the new standard for dollar spot control.

Dollar spot is done. With **Xzemplar** fungicide, the days of spraying fairways and tees every 10 to 14 days for dollar spot are over. This best-in-class fungicide knocks down dollar spot immediately and provides one of the longest residuals in the industry — up to 28 days.

**Xzemplar** fungicide delivers both preventive and curative properties to ensure dollar spot-free fairways, tees and greens. The go-to solution for superintendents around the country, **Xzemplar** fungicide has set a new standard for control of one of the toughest turf diseases.

#### **Active ingredient**

Fluxapyroxad - 300g/L

#### Fungicide class

SDHI or Succinate-Dehydrogenase Inhibitors (Group 7)

**Formulation** Suspension concentrate (SC)

#### One case contains

2 x 2.02 L (1 bottle treats 2.4 to 3 ha)

Signal Word Contains allergen soy

#### For use on golf courses only

Preventative dollar spot treatment with Xzemplar fungicide

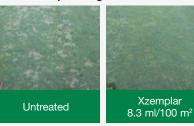




21 day trial

Source: University of Wisconsin, 2014

Curative dollar spot treatment with Xzemplar fungicide





Source: University of Connecticut, September 3, 2013, 4 DAT

September 3, 2013, We

Disease

Brown patch Brown ring pat

Dollar spot\*

Fairy ring\*

Leaf spot

Microdochium (suppression)

Pink snow mou (suppression)

Summer patch\*

\*Refer to label for additional instructions.

#### **Key Features and Benefits**

- Immediate knockdown
- Long residual of up to 28 days
- Preventive and curative properties
- Flexible spectrum of disease control
- Non-DMI that can be used anytime subject
  - to label restrictions

# Current Labelled Diseases Controlled With Xzemplar Fungicide

	Application Interval (days)	Rate Range (ml/100 m <sup>2</sup> )
	14 – 21	6.7
itch*	21 – 28	8.3
	14 – 21	6.7
	21 – 28	8.3
	21 – 28	8.3
	21 – 28	8.3
n patch	Single application in the fall prior to snow cover	8.3
ould	Single application in the fall prior to snow cover	8.3
า*	21 – 28	8.3



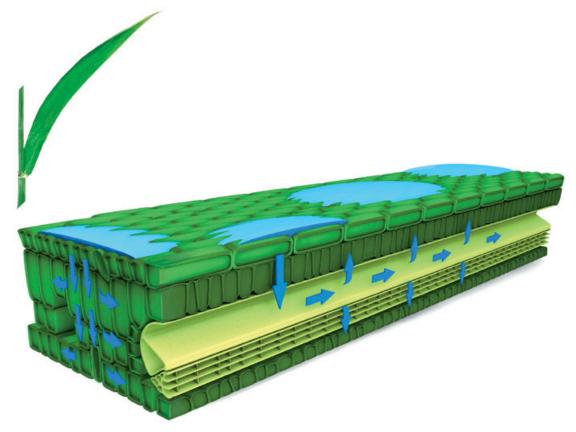


# One active ingredient. Two key benefits.

Most fungicides on the market provide either quick knockdown or long residual activity. **Xzemplar** fungicide provides both. This rare combination is the result of its novel active ingredient fluxapyroxad — the latest in carboxamide technology.

#### below:

Fluxapyroxad travels systemically within turfgrass leaves, distributing powerful, long-lasting disease control.



## Continuous redistribution in the plant.

The unique chemistry inside Xzemplar fungicide powers its ability to deliver preventive and curative properties. In addition to being tightly bound to the waxy leaf surface, making it rainfast, fluxapyroxad is redistributed to areas of the leaf that are not directly sprayed. Its unique molecular design lets it enter the transpiration stream and travel systemically within the leaf.

This redistribution, along with its high level of activity, ensures long-lasting preventive and curative effects from fluxapyroxad, resulting in reliable, more consistent disease control.

# The cornerstone of your dollar spot program.

The most effective way to control dollar spot is to stay ahead of it. With **Xzemplar** fungicide as the cornerstone of your spray program, coupled with other BASF fungicides, you're equipped with one of the industry's strongest lines of defense against dollar spot. Just seven critical applications of BASF fungicides will help protect your turf from dollar spot.

*Start early.* Treat your fairways with one application of **Cadence**<sup>®</sup> fungicide in the late spring and alternate with **Maxtima**<sup>®</sup> fungicide for exceptional safe-on-turf dollar spot control. Finish strong with **Xzemplar** in the fall to help maintain championship conditions your players will enjoy all season.

## Cool-Season 28-Day Fairway Program

Ti	ming	Product	Active Ingredient	Rate/100 m <sup>2</sup>	Key Diseases & Benefits
1	May 15	Cadence fungicide	Boscalid	5.6 g	Dollar spot (Sclerotinia homoeocarpa)
2	Jun 15	Maxtima fungicide	Mefentrifluconazole	12.5 ml	Anthracnose ( <i>Collectotrichum cereale</i> ), Dollar spot ( <i>Sclerotinia homoeocarpa</i> ), Microdochium patch (Fusarium) <sup>1</sup> ( <i>Microdochium nivale</i> ), Take-all patch <sup>1</sup> ( <i>Gaeumannomyces</i> graminis)
3	Jul 15	Renovo™ fungicide + Secure <sup>®</sup> fungicide	Thiophanate-methyl + Fluazinam	60 ml + 16 ml	Anthracnose (Collectotrichum cereale), Brown patch (Rhizoctonia solani, zaeae), Dollar spot (Sclerotinia homoeocarpa)
4	Aug 15	Xzemplar fungicide	Fluxapyroxad	8.3 ml	Brown patch ( <i>Rhizoctonia solani, zaeae</i> ), Dollar spot ( <i>Sclerotinia homoeocarpa</i> )
5	Sep 15	Maxtima fungicide	Mefentrifluconazole	12.5 ml	Anthracnose ( <i>Collectotrichum cereale</i> ), Dollar spot ( <i>Sclerotinia homoeocarpa</i> ), Microdochium patch (Fusarium) <sup>1</sup> ( <i>Microdochium nivale</i> ), Take-all patch <sup>1</sup> ( <i>Gaeumannomyces</i> graminis)
6	Oct 15	Xzemplar fungicide	Fluxapyroxad	8.3 ml	Dollar spot ( <i>Sclerotinia homoeocarpa</i> ), Microdochium patch (Fusarium) ( <i>Microdochium nival</i> e)
7	Nov 1	Insignia <sup>®</sup> Duo fungicide + Medallion <sup>®</sup> fungicide	Pyraclostrobin + Triticonazole + Fludioxonil	20 ml + 32 ml + 60 ml	Grey snow mould ( <i>Typhula</i> spp.), Microdochium patch (Fusarium) ( <i>Microdochium nivale</i> ), Pink snow mould ( <i>Microdochium nivale</i> ), Plant health

<sup>1</sup> Suppression

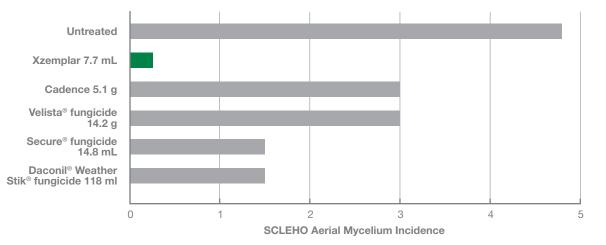
Start date to be determined by making first application when soil temperatures are 10°C and turf has been mowed a minimum of three times. For improved fairy ring control, apply a soil wetting agent 1-2 weeks prior to beginning fungicide applications.

Apply **Xzemplar** fungicide in a program alternating or tank mixing with other registered fungicides that have a different mode of action. Follow **Xzemplar** fungicide label instructions on sequential use specific to target pathogens and other Group 7 products.

# Cool-season turf disease control with **Xzemplar** fungicide.

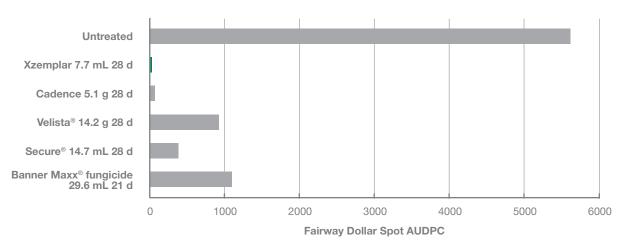
Research from key universities has demonstrated the effectiveness of **Xzemplar** fungicide in controlling dollar spot.

#### **Curative Dollar Spot Control\***



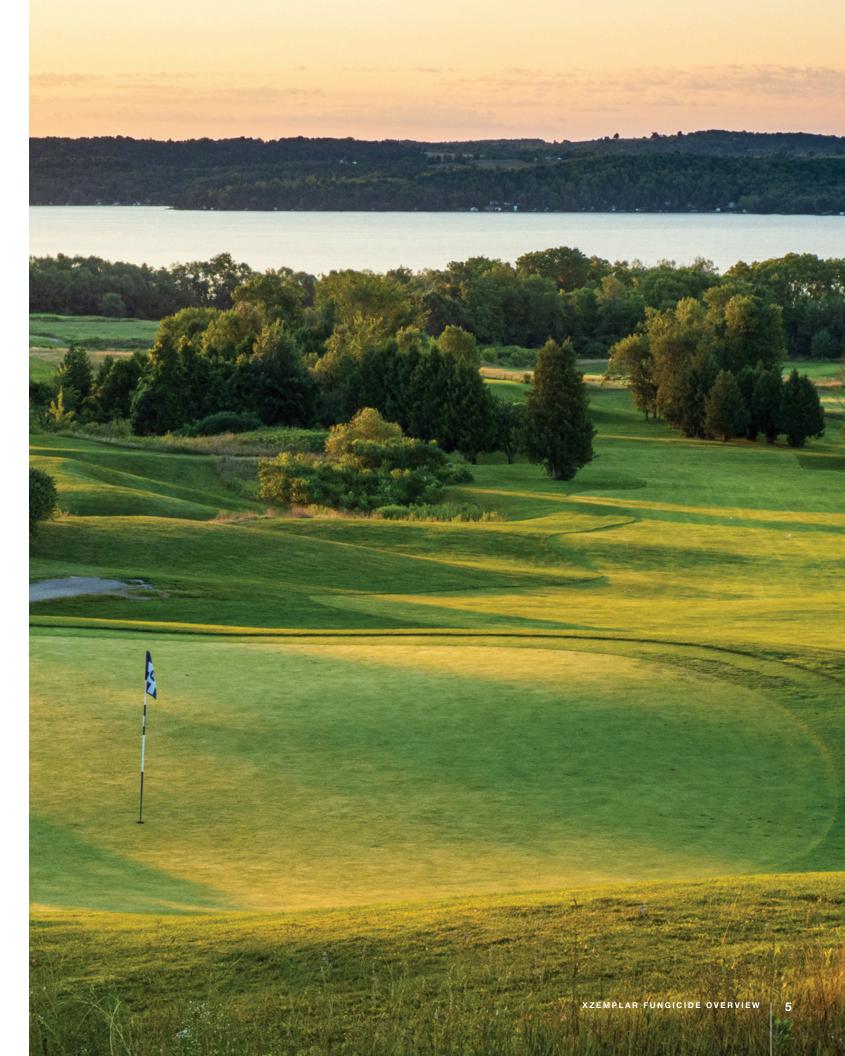
Note: Observations 4 days after treatment on March 3, 2013 Source: John Inguagiato, Ph.D., University of Connecticut, 2013

## Preventative Dollar Spot Control\*



Source: Joseph Roberts, Getaneh Achenef, Joseph Doherty and Cody Beckley, University of Maryland Turfgrass Pathology, 2016

\* All treatment units are per 100 m<sup>2</sup>



## Testimonial from Jimmy Devaney, Superintendent, Upper Course, Baltusrol Golf Club, Springfield, NJ:

"Dollar spot in our particular microclimate is a tough disease that we struggle with all year long. The big thing for us is getting out, being preventive and controlling our populations leading into the season. Products like Xzemplar [fungicide] help us do that."

#### **BASF** Canada

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#### Always read and follow label directions.

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