



We create chemistry

# Turf Solutions

Your guide to healthy, quality turf.



# Xzemplar®

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.

### Preventive dollar spot treatment with Xzemplar fungicide



Untreated

21-day trial Source: University of Wisconsin, 2014



Xzemplar 8.3 mL/100m<sup>2</sup>

### Curative dollar spot treatment with Xzemplar fungicide



Untreated

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



Xzemplar 8.3 mL/100m<sup>2</sup>

#### Active ingredient

Fluxapyroxad – 300 g/L

#### Fungicide class

SDHI or Succinate-Dehydrogenase Inhibitors (Group 7)

#### Formulation

Suspension concentrate (SC)

#### Packaging

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

#### Signal Word

Contains allergen soy

**For use on golf courses only.**

## Current labelled diseases controlled with Xzemplar fungicide

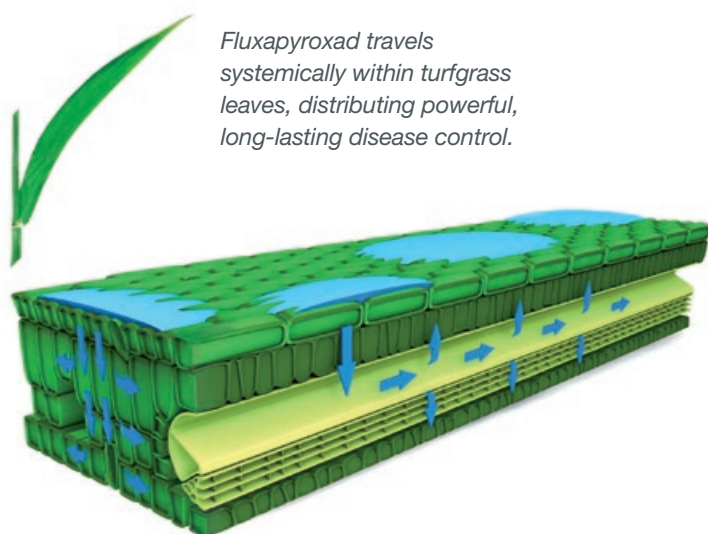
Disease	Application interval	Rate (ml/100 m <sup>2</sup> )
Brown patch	14 – 21 days	6.7
Brown ring patch*	21 – 28 days	8.3
Dollar spot*	14 – 21 days	6.7
Dollar spot*	21 – 28 days	8.3
Fairy ring*	21 – 28 days	8.3
Leaf spot	21 – 28 days	8.3
Microdochium patch (suppression)	Single application in the fall prior to snow cover	8.3
Pink snow mold (suppression)	Single application in the fall prior to snow cover	8.3
Summer patch*	21 – 28 days	8.3

\*Refer to label for additional instructions.

## 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.



## 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.

### 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

### Vincelli ratings

- Brown patch: 3.5/4
- Fairy ring: 3/4
- Summer patch: 2.5/4

## Cool-season 28-day fairway program

Timing	Product	Active ingredient	Rate /100 m <sup>2</sup>	Key diseases and benefits
1 May 15	<b>Xzemplar fungicide</b>	Fluxapyroxad	8.3 ml	Dollar spot ( <i>Sclerotinia homoeocarpa</i> ), Fairy ring ( <i>Basidiomycete fungii</i> ), Leaf spot ( <i>Drechslera spp.</i> , <i>Bipolaris spp.</i> ), Microdochium patch ( <i>Fusarium</i> ) ( <i>Microdochium nivale</i> ), Summer patch ( <i>Magnaporthe poae</i> )
2 Jun 15	<b>Maxtima fungicide</b>	Mefentrifluconazole	12.5 ml	Anthrachnose ( <i>Collectotrichum cereale</i> ), Dollar spot ( <i>Sclerotinia homoeocarpa</i> ), Microdochium patch ( <i>Fusarium</i> ) <sup>1</sup> ( <i>Microdochium nivale</i> ), Take-all patch <sup>1</sup> ( <i>Gaeumannomyces graminis</i> )
3 Jul 15	<b>Honor fungicide</b>	Pyraclostrobin + Boscalid	35 g	Anthrachnose ( <i>Collectotrichum cereale</i> ), Brown patch ( <i>Rhizoctonia solani, zaeae</i> ), Dollar spot ( <i>Sclerotinia homoeocarpa</i> ) Pythium ( <i>Pythium spp.</i> ), Summer patch ( <i>Magnaporthe poae</i> ), <b>Plant Health Benefits*</b>
4 Aug 15	<b>Xzemplar fungicide</b>	Fluxapyroxad	8.3 ml	Brown patch ( <i>Rhizoctonia solani, zaeae</i> ), Dollar spot ( <i>Sclerotinia homoeocarpa</i> )
5 Sep 15	<b>Maxtima fungicide</b>	Mefentrifluconazole	12.5 ml	Anthrachnose ( <i>Collectotrichum cereale</i> ), Dollar spot ( <i>Sclerotinia homoeocarpa</i> ), Microdochium patch ( <i>Fusarium</i> ) <sup>1</sup> ( <i>Microdochium nivale</i> ), Take-all patch <sup>1</sup> ( <i>Gaeumannomyces graminis</i> )
6 Oct 15	<b>Xzemplar fungicide</b>	Fluxapyroxad	8.3 ml	Dollar spot ( <i>Sclerotinia homoeocarpa</i> ), Microdochium patch ( <i>Fusarium</i> ) ( <i>Microdochium nivale</i> )
7 Nov 1	<b>Insignia® Pro fungicide + Medallion® fungicide</b>	Pyraclostrobin + Mefentrifluconazole + Fludioxonil	25 ml + 60 ml	Gray snow mold ( <i>Typhula spp.</i> ), Microdochium patch ( <i>Fusarium</i> ) ( <i>Microdochium nivale</i> ), Pink snow mold ( <i>Microdochium nivale</i> ), <b>Plant Health Benefits*</b>

<sup>1</sup> Suppression.

\* Plant Health Benefits refer to products that contain the active ingredient pyraclostrobin.

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.

## 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 and reduce resistance risk. Using a rotation of different FRAC groups is critical to reduce resistance risk.

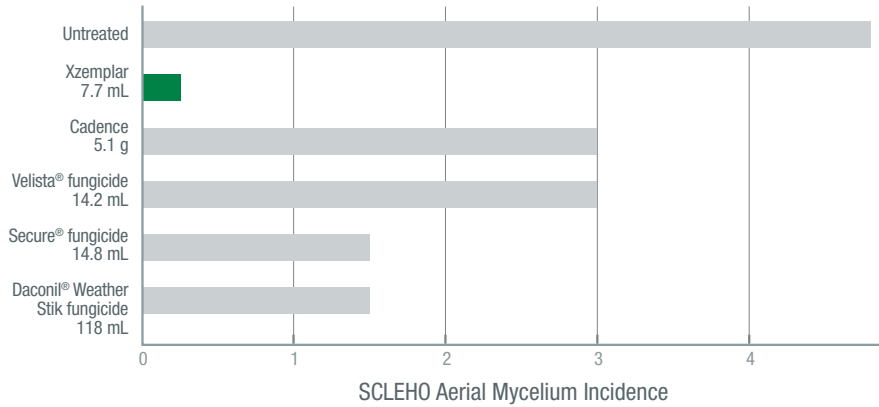
### Start early.

Treat your fairways with an application of **Xzemplar** fungicide in the late spring and alternate with **Maxtima**® 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.

### Regional Turf Spray Programs from BASF.

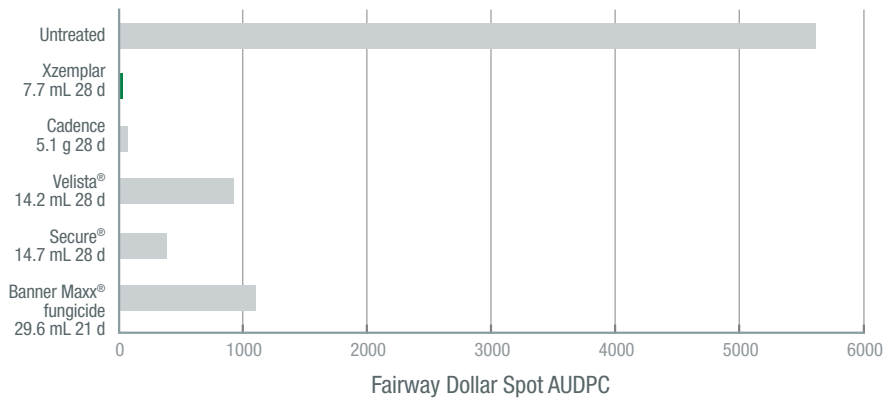
Find the best disease solutions for your turfgrass with a customized rotation management plan tailored to your region with BASF Regional Turf Spray Programs at **BetterTurf.ca**

### Curative dollar spot control\*



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

### Preventive dollar spot control\*



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

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

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

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



# Maxtima<sup>®</sup>

Fungicide

A game-changing DMI that brings turf safety into the modern era.

Maxtima<sup>®</sup> fungicide is the new turf-safe, broad-spectrum demethylase inhibitor (DMI) you can afford to spray at any temperature, on any turf, anywhere on your course to bring disease-free playing conditions to more areas than ever before.

## How Maxtima works.

Powered by Revysol<sup>®</sup>, Maxtima is a DMI systemic fungicide that provides fast control of key diseases and long-lasting protection.

## This unique chemistry delivers:

- Enhanced binding power: Molecule flexes to accommodate differing binding pocket structures, enhancing performance on DMI-resistant diseases
- Proven turf safety
- Powerful residual for long-lasting control of the diseases that affect warm- and cool-season turf
- Favourable regulatory profile for lower use rates coupled with lower toxicity to non-target organisms

## Diseases controlled

Anthracnose, brown patch, brown ring patch, dollar spot, fairy ring, gray snow mold, summer patch, take-all patch and suppression of pink snow mold and microdochium patch

## Active ingredient

Mefentrifluconazole – 400 g/L

## Fungicide class

DMI or Demethylation Inhibitors (Group 3)

## Formulation

Suspension concentrate (SC)

## Packaging

2 x 3.16 L

## Rate

6.25 to 25 ml/100 m<sup>2</sup>

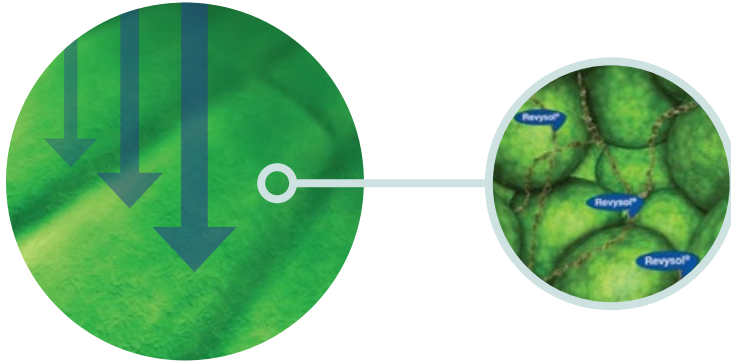
Maximum 7.5 L/ha annually.

## NC State University, 2022 ratings\*

- Anthracnose: 4/4
- Dollar Spot: 4/4
- Fairy ring: 4/4
- Summer patch: 3/4

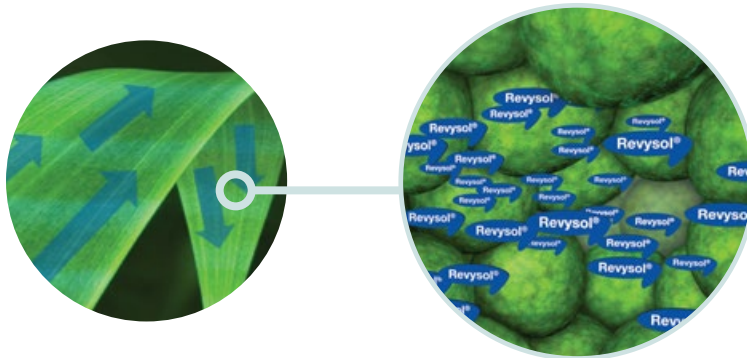
\* 1 – Good control when disease pressure is low  
2 – Good control when disease pressure is moderate, excellent control when disease pressure is low  
3 – Good control under high disease pressure, excellent control when pressure is moderate  
4 – Excellent control when conditions are highly favourable for disease development

## Strong efficacy



Rapid uptake of Revysol provides outstanding and quick action to stop infection.

## Long-lasting protection



After uptake, the majority of Revysol is well-protected in the inner leaf. Slow release from this inner-leaf reservoir provides long-lasting protection.

## Controls the toughest diseases.

Superior control of anthracnose, brown patch, dollar spot, fairy ring, gray snow mold, summer patch and take-all patch.

## Strong residual.

Strong residual coupled with fairway price.

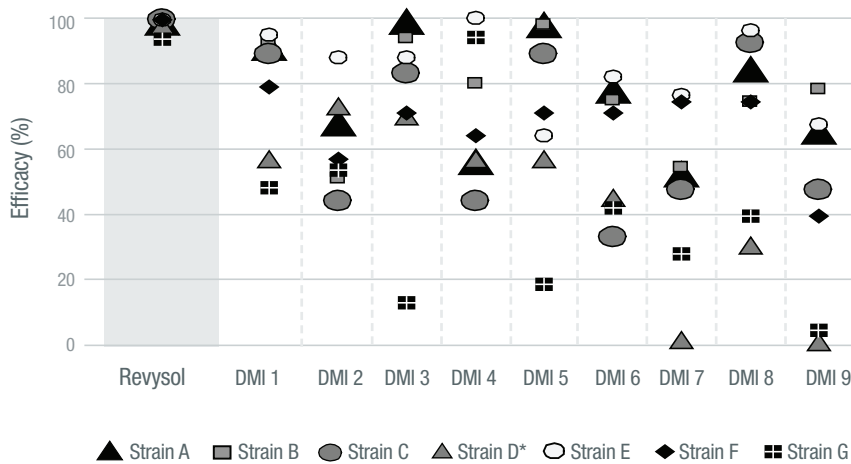
## Advanced turfgrass safety.

Advanced turfgrass safety on any turf, in any season.

## Unique DMI chemistry.

Rotation partner for greens, fairways and tees.

### Revysol provides outstanding activity against DMI-resistant Septoria isolates



Efficacy of various DMI compounds against highly adapted strains of *Zymoseptoria tritici* in the glasshouse (inoculation one day after application; 33% of the registered dose rate). \*Strain D = Phenotype with increased efflux





# Confidence is the name of the game.

For healthy, quality turf that's impressive from the inside out – even in the worst environmental conditions – superintendents can count on Intrinsic® brand fungicides. This innovative lineup provides superior, broad-spectrum control and a strong foundation of **Plant Health Benefits**<sup>1</sup> that make it easier for turf to handle the toughest pressures, especially around long weekends in the summer. It all adds up to championship conditions all year long.

## Proven solutions that maximize turf health.

- Protect your greens with Lexicon®, Canada's newest broad spectrum fungicide with proven **Plant Health Benefits**<sup>1</sup>
- Safeguard your tees and fairways with Honor® fungicide, shielding against 20 diseases like dollar spot, anthracnose, brown patch and microdochium
- Control key diseases, like grey snow mold, pink snow mold and microdochium patch, on greens, tees and fairways with Insignia® Pro fungicide

### Disease resistance

Controls up to 20 diseases with up to 28 days of residual control.

### Greater growth efficiency

Proven **Plant Health Benefits**<sup>1</sup> for longer, stronger roots.

### Stress tolerance

Faster recovery time from extreme temperatures, drought and mechanical stress.



<sup>1</sup> **Plant Health Benefits** refer to products that contain the active ingredient pyraclostrobin.



## Root Growth Demonstration for the Golf Industry Show in 2015.



Pots were seeded Jan 6, 2015 and were grown for 38 days. Fungicide treatments were made at 10 and 24 days post seeding.

- Lexicon – 15ml/100m<sup>2</sup> 4 replications were made of each plot.
- Heritage TL – 63ml/100m<sup>2</sup> Grown at 26 Davis Dr, RTP North Carolina.

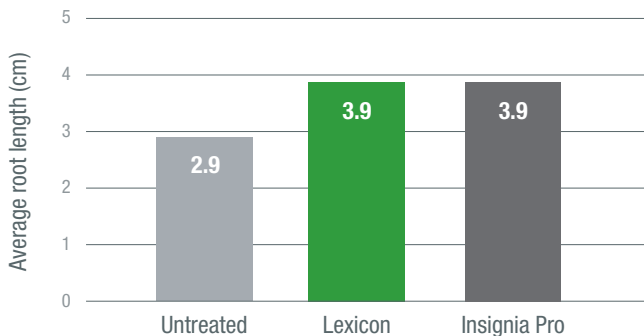
## Improved plant health with Intrinsic.

- Net photosynthesis: A reduction in the turf's rate of respiration results in an increase in carbon available for growth and development
- Increased nitrate reductase activity
- Reduced ethylene production
- Increased activity of stress-reducing enzymes (antioxidants)

## Benefits with Intrinsic applications.

- Enhanced root growth
- Reduced canopy temperatures
- A turf stand better able to withstand environmental and mechanical stress

## Plant Health Benefits<sup>1</sup> improve root strength in turfgrass



Applications were made on July 13 and August 6, 2024.  
Source: University of Maryland

For more information on our turf solutions, contact your local BASF Turf Representative or visit [BetterTurf.ca](https://www.betterturf.ca).

# Lexicon®

Fungicide

A strong foundation you can count on under the toughest conditions.

Lexicon® fungicide delivers broad-spectrum control of up to 14 diseases, including anthracnose, dollar spot, pythium, summer patch, take-all patch and microdochium patch.

- Controls diseases on turf for up to 28 days to ensure the longest possible spray intervals
- Unique Intrinsic® **Plant Health Benefits**<sup>1</sup> help mitigate environmental and mechanical stress<sup>2</sup> for healthier turf and enhanced golf surfaces

## How Lexicon works.

New Lexicon fungicide adheres tightly to the leaf's waxy surface, ensuring rainfastness, and redistributes to areas of the leaf not directly sprayed. Its unique molecular design allows the fungicide to penetrate the vascular system and move within the leaf. This redistribution, combined with its high activity level, provides long-lasting preventive and curative reliability for consistent disease control. In addition, the **Plant Health Benefits**<sup>1</sup> of Lexicon mitigate environmental and mechanical stress and promote healthy turf and enhance playing surfaces, making it a reliable choice for maintaining high-quality turf.

<sup>1</sup> **Plant Health Benefits** refer to products that contain the active ingredient pyraclostrobin.

<sup>2</sup> All comparisons are to untreated, unless otherwise stated.

<sup>3</sup> Rust is controlled when Lexicon® fungicide is applied preventatively at a minimum of 7.5 ml/100 m<sup>2</sup> on a 14-day application interval against the co-occurring diseases listed on the label. Lexicon should not be used if rust is the only targeted disease.

<sup>4</sup> Refer to label for disease-specific rates and restrictions.

## Diseases controlled

Anthracnose, brown patch, brown ring patch, dollar spot, fairy ring, gray leaf spot, gray snow mold/typhula blight, leaf spot, microdochium patch (fusarium patch) and pink snow mold, pythium blight, pythium root dysfunction, rust<sup>3</sup>, summer patch and take-all patch

## Timing<sup>4</sup>

Apply Lexicon preventatively, when conditions are favourable for disease.

## Active ingredients

Pyraclostrobin - Group 11  
Fluxapyroxad - Group 7

## Packaging

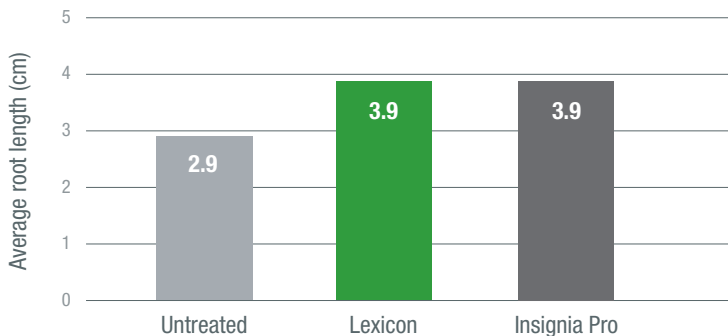
4 x 610 ml jugs

## Rate

One case of Lexicon treats 1.63 to 3.25 hectares (4 to 6 acres).

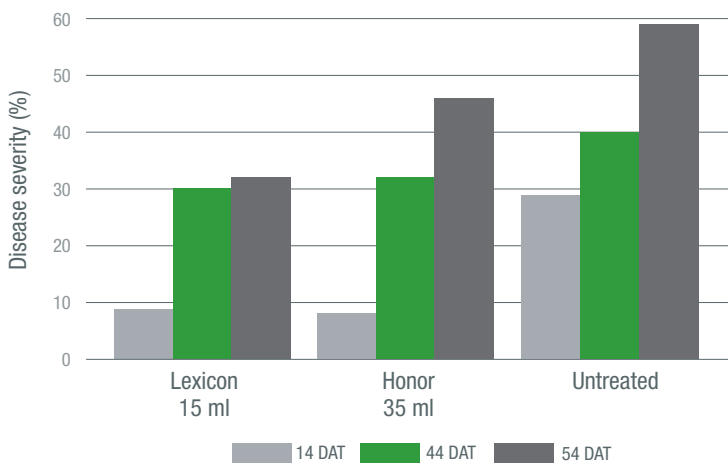
DO NOT apply more than 54 ml/100 m<sup>2</sup> (5.4 L/ha) per year for control of all labelled diseases.

## Plant Health Benefits<sup>1</sup> improve root strength in turfgrass



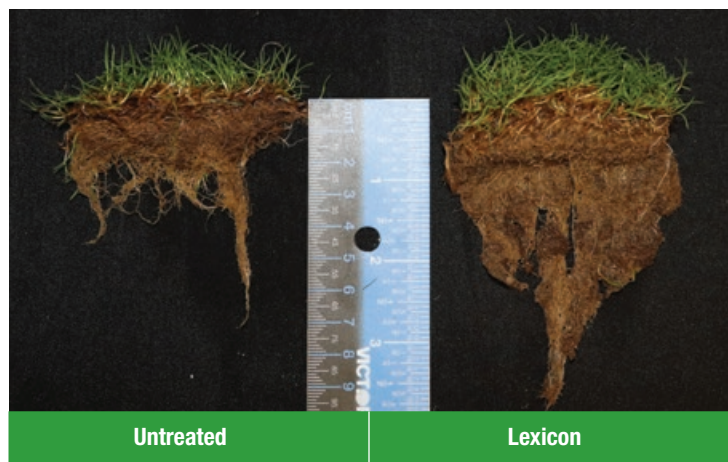
Applications were made on July 13 and August 6, 2024.  
Source: University of Maryland

## Summer patch control



Magnaporthe poa inoculated May 15 to Kentucky bluegrass;  
applications May 22, June 19 and July 17 on 28-day interval in New Jersey.  
Source: B. Clarke, 2012

## Lexicon Plant Health Benefits<sup>1</sup>



Source: BASF Plant Health Study



# Honor<sup>®</sup>

Fungicide

## Controls turf diseases while helping turf mitigate and recover from minor stress.

Honor<sup>®</sup> fungicide offers 28 days of control for 20 turf diseases, including summer patch, anthracnose and dollar spot.

- Multiple modes of action for control of dollar spot
- Unique Intrinsic<sup>®</sup> **Plant Health Benefits**<sup>1</sup> can help turf mitigate environmental and mechanical stress<sup>2</sup>

### How Honor works.

Honor contains both Groups 7 and 11 fungicide active ingredients and is formulated as a dry granule, to dissolve in solution quickly and easily. Honor binds tightly to the waxy cuticle of turf and translocates quickly into the plant, making it rapidly rainfast. Honor protects against diseases by disrupting the fungal cells' ability to produce energy, thereby stopping spore germination and fungal growth. Translaminar and locally systemic, Honor protects the entire leaf surface.

### Diseases controlled.

Anthracnose, bentgrass dead spot, brown patch, brown ring patch, dollar spot, fairy ring, fusarium patch/pink snow mold, gray leaf spot, gray snow mold/typhula blight, leaf spot, melting out, powdery mildew, pythium blight, pythium root dysfunction, rapid blight, red thread, rhizoctonia leaf or sheath spot, rust, summer patch, take-all patch<sup>3</sup>

<sup>1</sup> **Plant Health Benefits** refer to products that contain the active ingredient pyraclostrobin.

<sup>2</sup> All comparisons are to untreated, unless otherwise stated.

<sup>3</sup> Suppression only.

### Timing

Apply Honor prior to the onset of disease. To optimize the **Plant Health Benefits**<sup>1</sup> of Intrinsic, apply prior to environmental or mechanical stress.

### Active ingredient

Boscalid – Group 7  
Pyraclostrobin – Group 11

### Packaging

1 x 16.3 kg

### Rate

18.3 to 35 g/100m<sup>2</sup>  
Refer to label for specific disease rate.

### NC State University, 2022 ratings\*

- Anthracnose: 4/4
- Dollar Spot: 4/4
- Fairy ring: 4/4
- Summer patch: 4/4

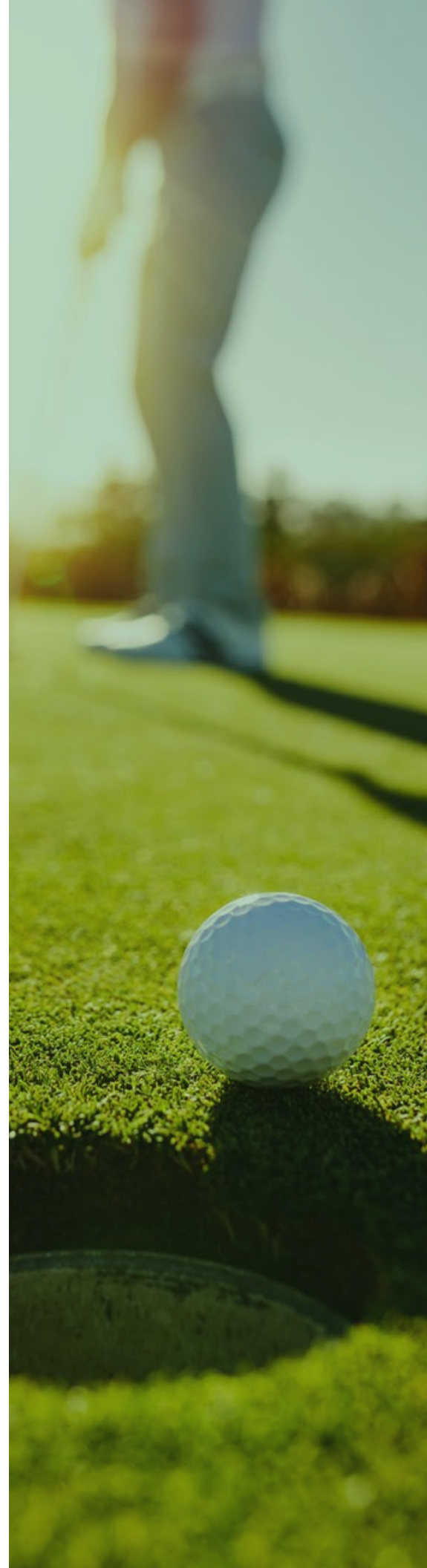
\* 1 – Good control when disease pressure is low  
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4 – Excellent control when conditions are highly favourable for disease development

## Enhanced root growth



## Aerification recovery

	After 1 week	After 2 weeks	After 3 weeks
<b>Honor</b>	25%	58%	67%
<b>Azoxystrobin</b>	19%	47%	55%
<b>Untreated</b>	13%	50%	55%



# Insignia® Pro

Fungicide

Enhanced snow mold control in turfgrass.

**New Insignia® Pro fungicide combines two liquid snow mold control products in a convenient premix to provide enhanced control of both pink and gray snow mold.**

- As an Intrinsic® brand fungicide, it provides **Plant Health Benefits**<sup>1</sup> for broad-spectrum disease control, stronger roots and higher stress tolerance to survive the winter
- Reduces fall environmental stress to promote carbohydrate production and root growth for survival during extended periods of ice cover in winter
- Comparable performance in snow mold trials to treatment combinations with 3 to 10 times the active ingredient load
- Offers a shorter re-entry interval, compared to competitors, for flexibility and convenience
- Apply with fludioxonil for additional protection under high pressure situations

<sup>1</sup> Plant Health Benefits refer to products that contain the active ingredient pyraclostrobin.

## Active ingredients

Pyraclostrobin – Group 11

Mefentrifluconazole – Group 3

## Packaging

One case of Insignia Pro contains:

2 x 2.53 L jugs

1 case will treat 2 to 3 hectares.

## Diseases Controlled

Pink snow mold

Gray snow mold

## How it works

Insignia Pro uses two active ingredients that are rapidly absorbed by the leaves. They control snow mold by interfering with sterol and cell membrane biosynthesis and inhibiting fungal spore germination, mycelial growth and sporulation.

# Vision Pro™ HD

Turf Colourant

The next generation of turf colourant.

Vision Pro™ HD turf colourant gives your turf a natural, consistent green colour throughout the application period. Vision Pro HD does not break down in UV light and is a compatible tank-mix partner.

## Timing

Vision Pro HD can be applied any time turf would benefit from a natural green colour. The ideal time to apply is in early spring and/or late fall.

## Packaging

4 x 3.78 L

## Rate

1.2 to 2.4 L/ha





**BASF**  
We create chemistry

# Regional Turf Spray Programs from BASF.

Find the best disease solutions for your turfgrass with a customized rotation management plan tailored to your region with BASF Regional Turf Spray Programs at **BetterTurf.ca**

For more information on our turf solutions, contact your local BASF Turf representative or visit [www.BetterTurf.ca](http://www.BetterTurf.ca)

### Always read and follow label directions.

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