

**Lexicon<sup>®</sup> Intrinsic<sup>®</sup> brand fungicide**  
For championship performance under pressure



# contents

## **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 Lexicon® Intrinsic® brand fungicide, the foundation for championship greens**
- 2 Two powerful chemistries for the ultimate in broad-spectrum disease control**
- 3 Greater disease control for greater peace of mind**
- 4 Cool-season turf diseases controlled with Lexicon Intrinsic brand fungicide**
- 6 Warm-season turf diseases controlled with Lexicon Intrinsic brand fungicide**
- 8 Intrinsic brand fungicides, for turf that's healthy and fit**
- 10 The holiday spray program, anchored by Lexicon Intrinsic brand fungicide**
- 11 Technical facts about Lexicon Intrinsic brand fungicide**
- 13 Testimonials**

# Lexicon® Intrinsic® brand fungicide, the foundation for championship greens

**Lexicon Intrinsic** brand fungicide delivers peak disease performance under pressure. This industry-leading fungicide optimizes disease control and provides plant health benefits for longer, stronger roots, increased growth efficiency, and greater stress tolerance. The result is championship conditions on your greens, all year long.

A top choice of superintendents around the country, **Lexicon Intrinsic** brand fungicide controls a wide variety of key turf diseases, including fairy ring, dollar spot, brown patch, *Pythium* and *Bipolaris* leaf spot.

## Key Features and Benefits:

- Broad-spectrum control of 27\* diseases
- Long residual of up to 28 days
- Plant health benefits
- Foundational product for greens



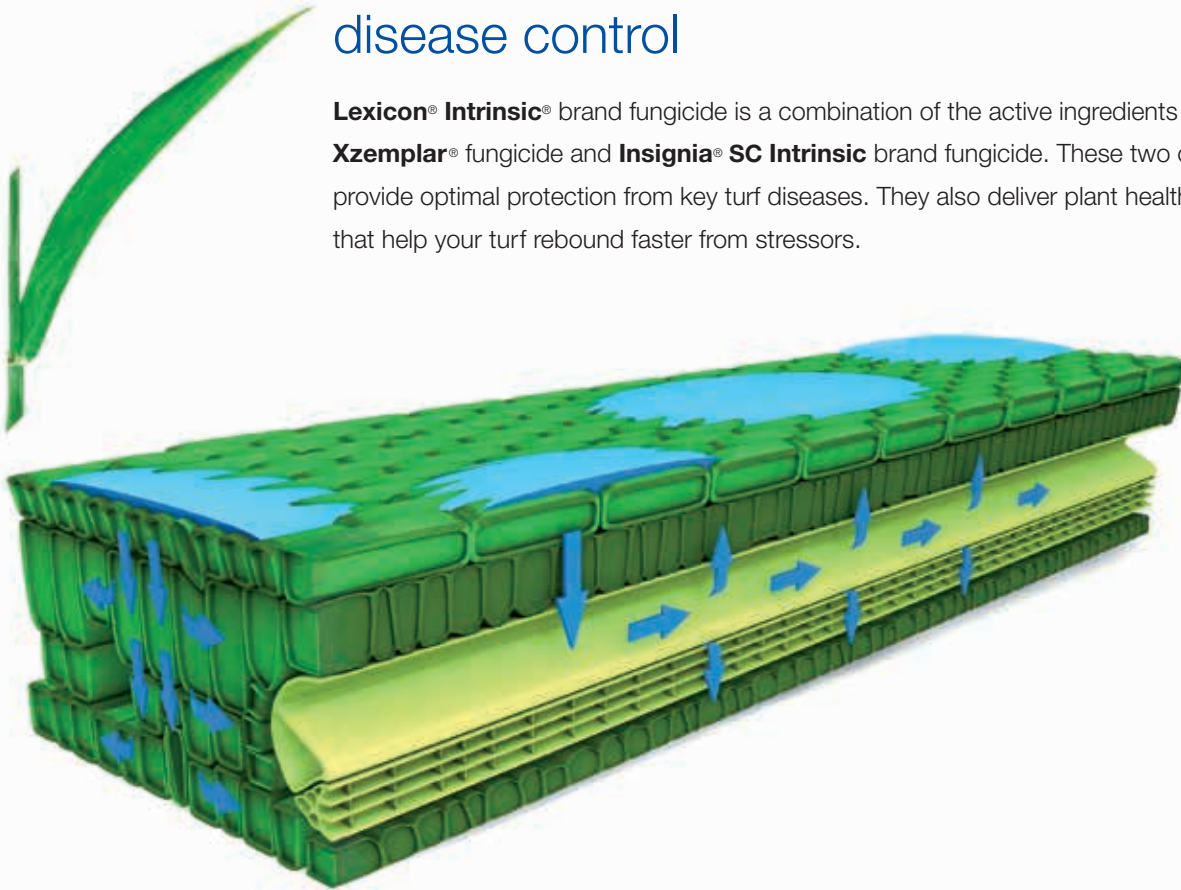
## For Use on All Major Turfgrass Sites:

- Golf courses
- Sports and athletic fields
- Parks and recreational areas
- Residential lawns
- Commercial and municipal lawns
- Institutional lawns
- Cemeteries
- Sod farms
- Other maintained turfgrass areas

\* Subject to a BASF Recommendation under FIFRA 2(ee) for spring dead spot in certain states.  
See [www.cdms.net](http://www.cdms.net) for BASF Technical Information Bulletin.

## Two powerful chemistries for the ultimate in broad-spectrum disease control

**Lexicon® Intrinsic®** brand fungicide is a combination of the active ingredients found in **Xzemplar®** fungicide and **Insignia® SC Intrinsic** brand fungicide. These two chemistries provide optimal protection from key turf diseases. They also deliver plant health benefits that help your turf rebound faster from stressors.



above:

**Lexicon Intrinsic** brand fungicide travels systemically within turfgrass leaves, distributing powerful, long-lasting disease control.

### **Lexicon Intrinsic** brand fungicide, for quick knockdown and long residual

Most fungicides on the market provide either quick knockdown or long residual.

**Lexicon Intrinsic** brand fungicide provides both benefits.

In addition to being tightly bound to the waxy leaf surface, making it rainfast, this innovative fungicide 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 **Lexicon Intrinsic** brand fungicide, resulting in reliable, more consistent disease control.

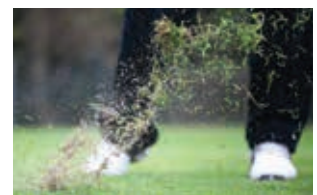
# Greater disease control for greater peace of mind

Healthy turf is strong, disease-resistant and resilient, which is the kind of quality turf you can expect from **Lexicon® Intrinsic®** brand fungicide. Research has shown that this fungicide provides excellent control of 27\* key cool- and warm-season diseases on turfgrass. Whatever the season, your turf has protection from the toughest challenges, and you have peace of mind.

**Powerful residual** — **Lexicon Intrinsic** brand fungicide controls 27\* diseases for up to 28 days, providing the confidence that comes with long-lasting control.

**Broad-spectrum foundation** — With its broad-spectrum control, this fungicide is the perfect foundation for enhancing the overall performance of your spray program.

**More resilient greens** — **Lexicon Intrinsic** brand fungicide provides championship conditions and faster recovery from stressors like heat, humidity, drought, heavy play and aeration.



\* Subject to BASF FIFRA 2(ee) Recommendation for spring dead spot in certain states. See [www.cdms.net](http://www.cdms.net) for BASF Technical Bulletin.



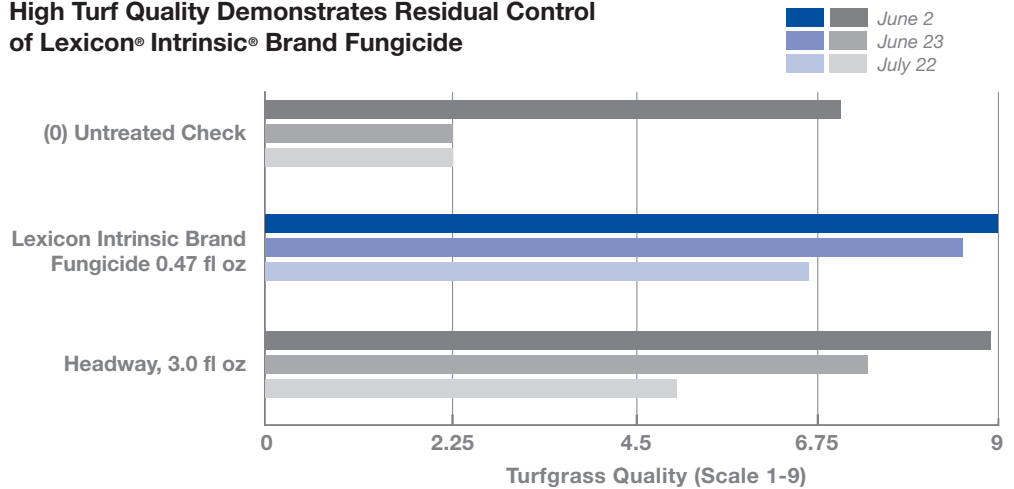
# Cool-season turf diseases controlled with **Lexicon® Intrinsic®** brand fungicide

## Lexicon® Intrinsic® Brand Fungicide Delivers Superior Dollar Spot Control Versus Interface and Headway



The numbers in parentheses denote the number of rating dates out of 13 when dollar spot lesions were fewer than five in plots. Interface and Headway data reflects disease breakthroughs at 28 days. Applications were made on June 4, July 2 and July 30. Source: Dr. Rick Latin, Purdue University, 2014.

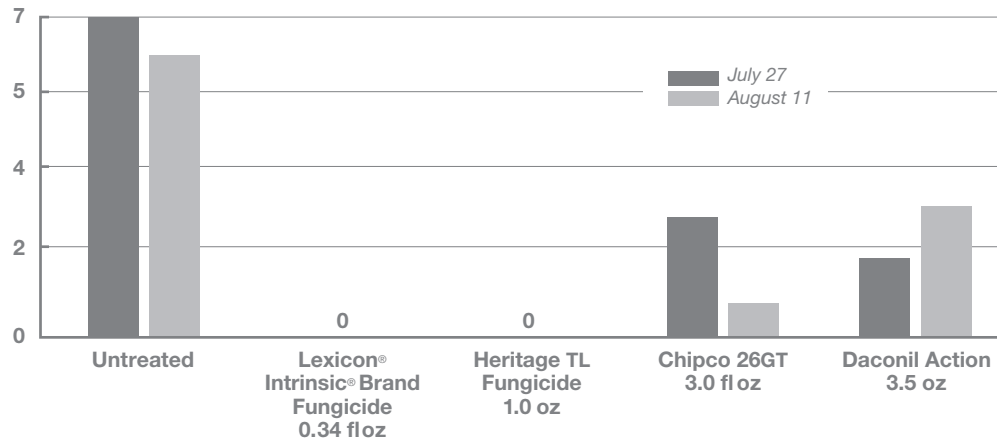
## High Turf Quality Demonstrates Residual Control of Lexicon® Intrinsic® Brand Fungicide



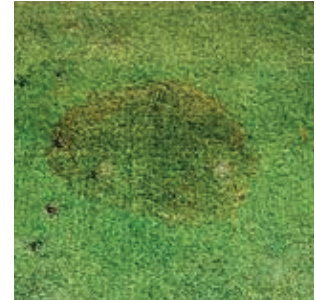
Observations as shown with last rating 28 days after last application. Applications on 21-day interval 5/13, 6/3 and 6/24. Source: Dr. Bruce Martin, Clemson University, 2014.

above:  
Dollar spot  
(*Sclerotinia homoeocarpa*)

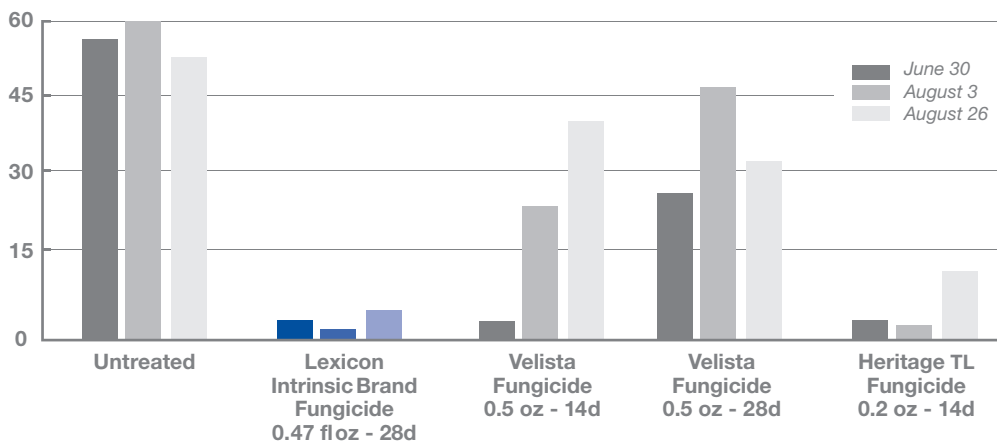
**Lexicon® Intrinsic® Brand Fungicide  
Provides Outstanding Brown Patch Control on Bentgrass Fairways**



Initial application on July 13, 2012.  
Ratings = brown patch severity index 0-10. 10 = >90% brown patch.  
Source: Penn State University, 2012.



**Lexicon Intrinsic Brand Fungicide  
Outperforms Velista In Control Of Summer Patch On Bentgrass Greens**



0 = no disease; 100 = total coverage. Initial application on May 19, 2015.  
Source: The Ohio State University.

top to bottom:

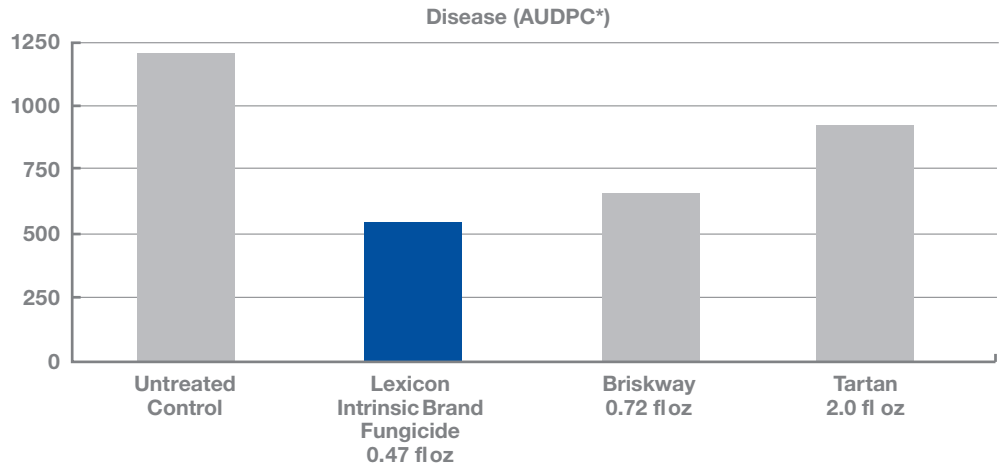
Brown patch

Photo: Dr. Henry Wetzel,  
Consultant

Summer patch  
(Magnaporthe poae)

# Warm-season turf diseases controlled with **Lexicon® Intrinsic®** brand fungicide

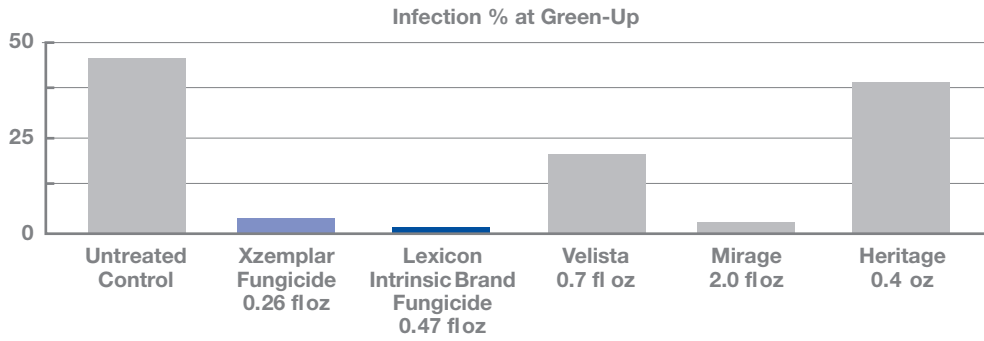
## Lexicon Intrinsic Brand Fungicide Surpasses Briskway and Tartan in Fairy Ring Trials



\*AUDPC = Calculated disease severity ratings over the trial period. Lowest rating is the least disease. 2 applications early curative on Champion green 3/12 and 4/15. Observations May – July 2015. Source: Dr. Jim Kerns, Matt Martin, NC State University.



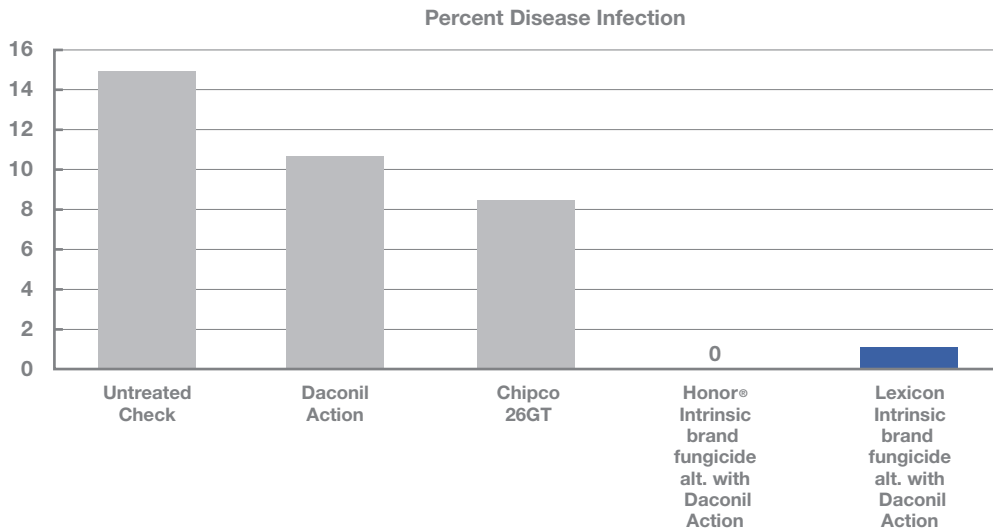
**Lexicon® Intrinsic® Brand Fungicide  
Outperforms On Control Of Large Patch On Zoysiagrass**



Two fall applications and one spring application in 'Zeon' zoysiagrass. Observations at green-up April 19, 2016. Source: NC State University, Dr. J. Kerns and Lee Butler, 2015 - 2016



**Lexicon Intrinsic Brand Fungicide Delivers Control Of *Bipolaris* Leaf Spot**



**top to bottom:**  
 Large patch *Rhizoctonia Solani*,  
*Bipolaris* spp. of leaf spot  
 and blight  
 Large patch photo courtesy  
 of Dr. Mike Richardson, Univer-  
 sity of Arkansas  
*Bipolaris* photo courtesy  
 of Dr. Bruce Martin,  
 Clemson University

Source: Clemson University, Dr. B. Martin, 2013.

# Intrinsic® brand fungicides, for turf that's healthy and fit

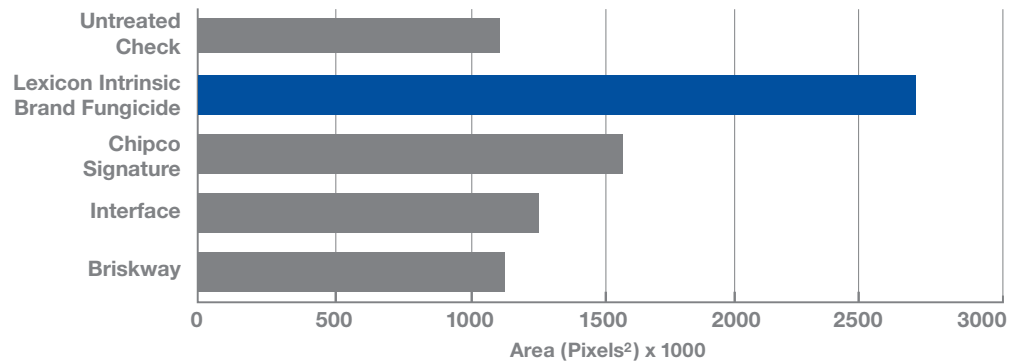
**Intrinsic®** brand fungicides deliver optimal disease control and plant health benefits that improve turf fitness. These innovative fungicides maximize the photosynthesis process in turfgrass, leading to stronger, longer roots, greater growth efficiency and turf that recovers more quickly from stress. Your turf will have the resilience to bounce back from tough environmental conditions like heat, humidity and heavy play, as well as mechanical stresses like aeration.

**Intrinsic** brand fungicides provide broad-spectrum control of 27\* diseases, with up to 28 days of residual control. Wherever your region and whatever your challenges, **Intrinsic** brand fungicides deliver quality that keeps disease in check and turf healthy.

## Overview of Intrinsic Brand Fungicides

| Product  | Primary Use Sites                                    | Key Benefits   |
|--|--|--|
| <b>Lexicon® Intrinsic</b><br>brand fungicide     | Greens, approaches, surrounds, new sod               | <b>Premier greens foundation:</b><br>Industry-leading foundation for disease control and plant health in cool- or warm-season greens, or any high-value playing surface where disease control and turfgrass quality are critical |
| <b>Honor® Intrinsic</b><br>brand fungicide       | Fairways, roughs, tees, bunker faces, primary roughs | <b>Superior disease control for fairways &amp; tees:</b><br>Excellent fairway disease control with a focus on dollar spot and patch diseases   |
| <b>Insignia® SC Intrinsic</b><br>brand fungicide | Fairways, primary roughs, tees                       | <b>Broad-spectrum control that delivers value:</b><br>Controls a wide array of diseases course wide  |

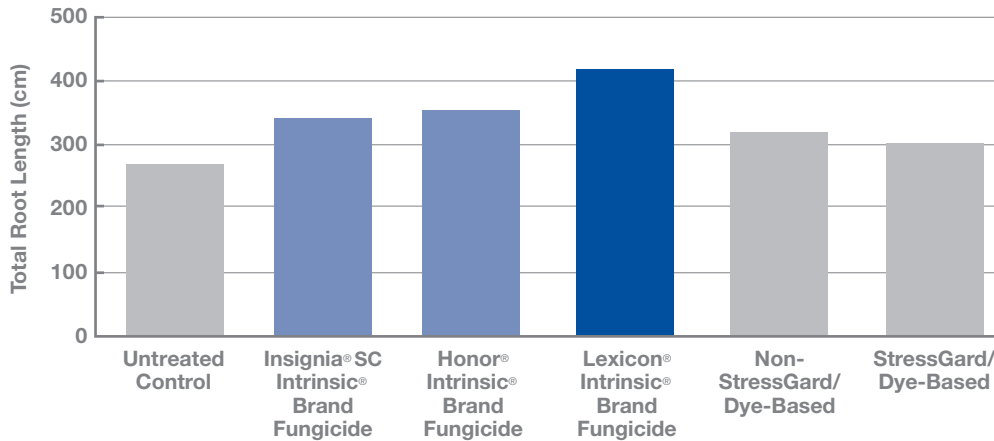
## Lexicon® Intrinsic Brand Fungicide Provides Enhanced Coverage at Grow-In



*Pixels are a measure of vegetative growth. A higher percentage indicates growth in sprigs versus bareground area. Source: BASF study. Dr. R. Keese, Dr. S. Anas, BASF Biology, RTP, NC.*

*Consult label for full list of diseases controlled. Spring dead spot control is subject to BASF FIFRA 2(ee) Recommendation. See [www.cdms.net](http://www.cdms.net) for BASF Technical Bulletin.*

**Lexicon® Intrinsic® Brand Fungicide Promotes Substantially Superior Root Length**

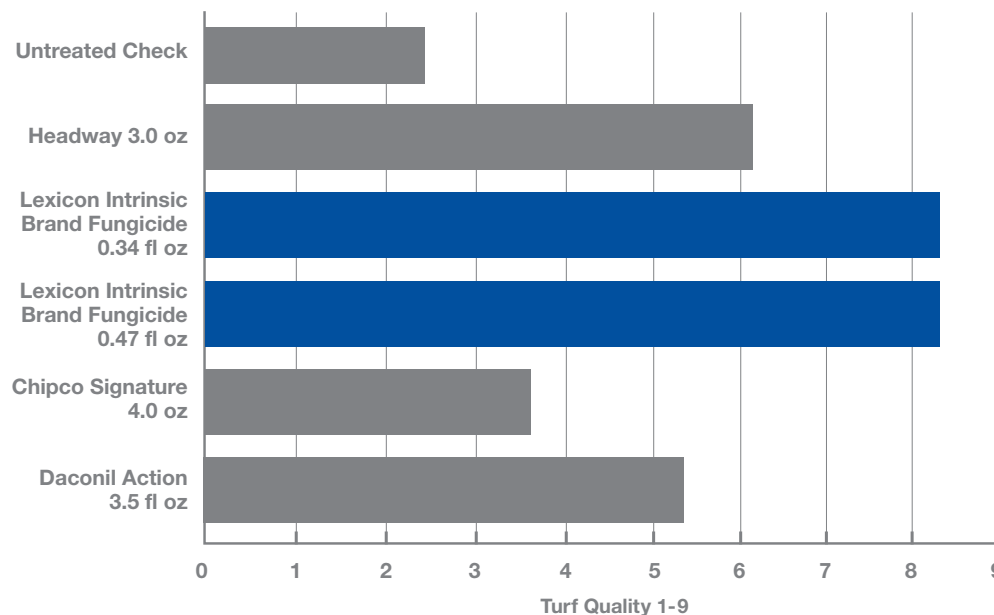


Root cores were analyzed with WinRhizo software in July 2013, two months following green-up and five months after the last application. Source: Clemson University, Dr. B. Martin, 2013.



**top to bottom:**  
 Root systems of turf treated with **Lexicon Intrinsic** brand fungicide (center), compared to those of untreated turf (at left) and turf treated with competitive fungicides at right: Briskway fungicide, Daconil Action fungicide, Heritage TL fungicide, Interface fungicide and Tartan fungicide.

**Lexicon Intrinsic Brand Fungicide Turf Quality Superior to Headway and Chipco Signature**



Rate oz/1,000 sq ft. Applications made on a 14-day interval. Rating taken on July 31, 2014. Initial application on May 8, 2014. Source: University of Missouri, 2014.

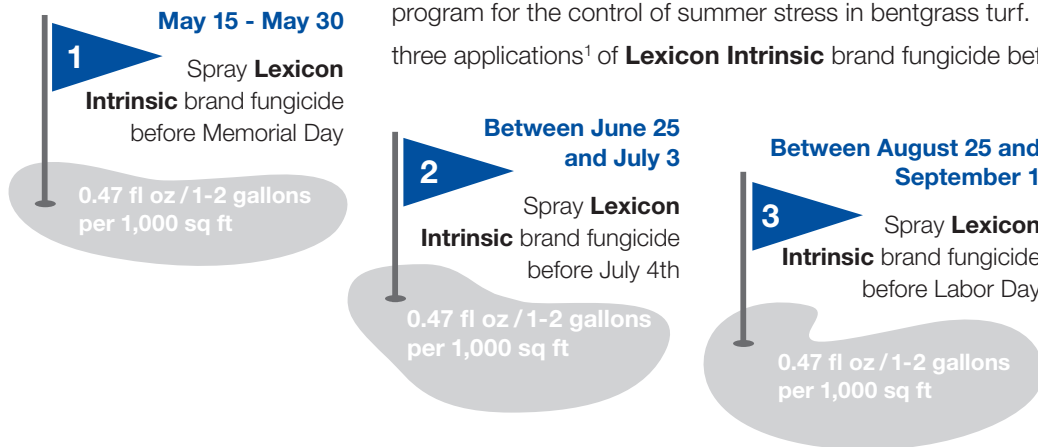
Demonstrations conducted in a greenhouse under greenhouse conditions. All treatments were made at the manufacturer's recommended labeled rates.

# The Holiday Spray program, anchored by **Lexicon® Intrinsic®** brand fungicide

## Cool-Season Greens Holiday Spray Program

The Holiday Spray program from BASF has become the industry's foremost fungicide program for the control of summer stress in bentgrass turf. Research demonstrates that three applications<sup>1</sup> of **Lexicon Intrinsic** brand fungicide before major summer holidays

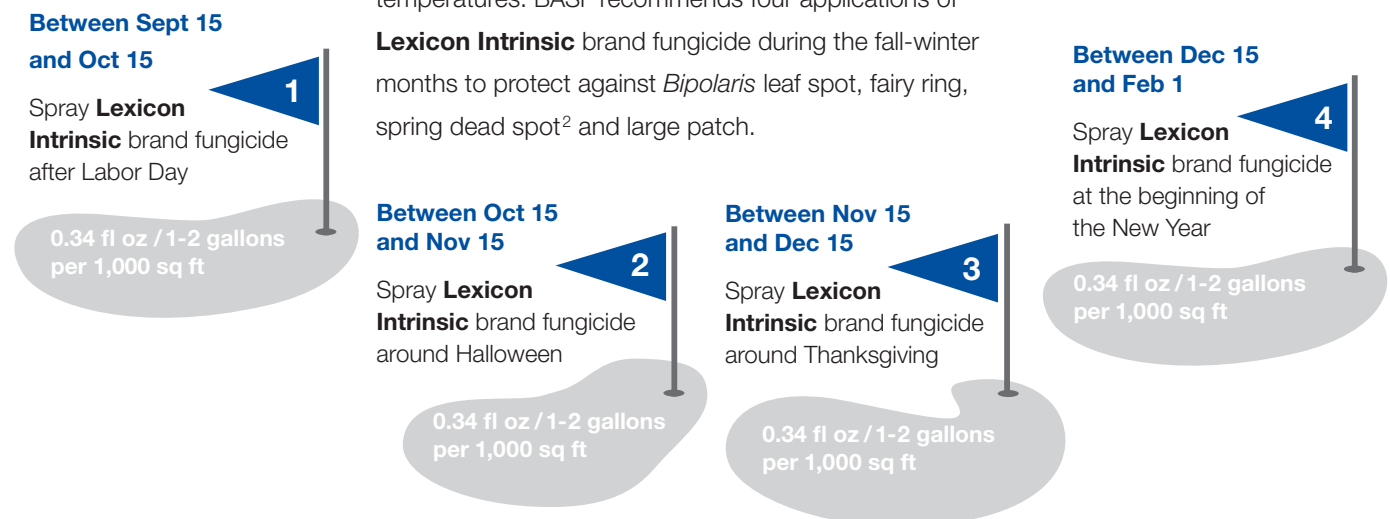
will promote optimal disease control while boosting plant health, enabling turfgrass to survive and thrive during the hot summer months.



## Warm-Season Greens Holiday Spray Program

**Lexicon® Intrinsic®** brand fungicide delivers effective broad-spectrum disease control on Bermudagrass greens during the winter stress period. This innovative fungicide also provides a plant health foundation so that warm-season turf can withstand colder temperatures. BASF recommends four applications of

**Lexicon Intrinsic** brand fungicide during the fall-winter months to protect against *Bipolaris* leaf spot, fairy ring, spring dead spot<sup>2</sup> and large patch.



<sup>1</sup> *Lexicon Intrinsic* brand fungicide can be applied in 3-4 applications at 0.34 - 0.47 fl oz not to exceed 1.7 total fl oz of product (74 fl oz /a) per calendar year.

<sup>2</sup> Now subject to BASF FIFRA 2(ee) Recommendation for spring dead spot in certain states.

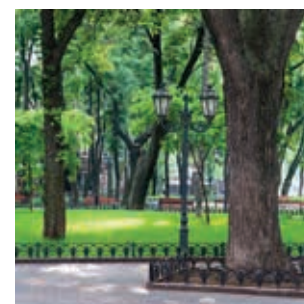
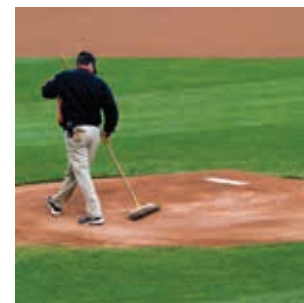
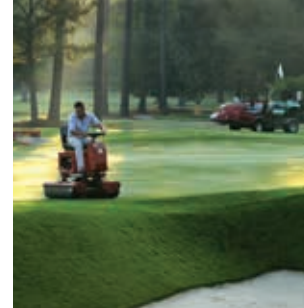
# Technical facts about Lexicon® Intrinsic® brand fungicide

- **Lexicon Intrinsic brand fungicide active ingredients:** fluxapyroxad 14.33% + pyraclostrobin 28.58%
- **Fungicide class:** Group 7 (SDHI) and Group 11 (Strobilurin)
- **Formulation:** Suspension concentrate (SC)
- **Packaging:** 4 x 21 fl oz
- **Rate:** 0.34 fl oz to 0.47 fl oz/1,000 sq ft on 14-to 28-day intervals
- **Signal word:** CAUTION
- **REI:** Wait until sprays are dried for all uses other than sod farms.  
On sod farms, REI is 12 hours.
- **PPE:** Long-sleeved shirt and pants; chemical-resistant gloves; shoes plus socks

## Diseases Controlled With Lexicon Intrinsic Brand Fungicide

| Diseases   | Cool-Season Turf | Warm-Season Turf |
|--|------------------|------------------|
| Anthracnose                                      | ■                |                  |
| Bentgrass dead spot                              | ■                |                  |
| Bermudagrass decline                             |                  | ■                |
| Brown patch                                      | ■                | ■                |
| Brown ring patch                                 | ■                |                  |
| Dollar spot                                      | ■                | ■                |
| Fairy ring                                       | ■                | ■                |
| Fusarium patch/pink snow mold                    | ■                | ■                |
| Grey leaf spot                                   | ■                | ■                |
| Large patch                                      |                  | ■                |
| Melting out                                      | ■                |                  |
| Pink patch                                       | ■                | ■                |
| Pythium blight                                   | ■                | ■                |
| Pythium root rot                                 | ■                | ■                |
| Pythium root dysfunction                         | ■                |                  |
| Rapid blight                                     | ■                |                  |
| Red thread                                       | ■                |                  |
| Rhizoctonia leaf or sheath spot (Bipolaris spp.) | ■                | ■                |
| Rust   | ■                | ■                |
| Gray snow mold                                   | ■                |                  |
| Spring dead spot*                                | ■                | ■                |
| Summer patch                                     | ■                |                  |
| Take-all patch                                   | ■                |                  |
| Yellow tuft                                      | ■                |                  |
| Zoysia patch                                     |                  | ■                |

\* Now subject to BASF FIFRA 2(ee) Recommendation for spring dead spot in certain states. See [www.CDMS.net](http://www.CDMS.net) for BASF Technical Information Bulletins.



above:  
Common use sites for  
**Lexicon Intrinsic brand**  
fungicide



**this page:**

*The beautiful greens,  
fairways and roughs of  
Oakmont Country Club*

## Testimonials

*“We look at the trials - we look at field days at Rutgers and Penn State and other universities - and we see how products perform in those settings. We kind of take a scientific approach. Lexicon [Intrinsic brand fungicide] and Xzemplar [fungicide] have obviously developed very well over the years and have shown that they can do a job and be very efficient and very effective.”*

**– Mark Kuhns, Director of Grounds, Baltusrol Golf Club**

*“During the PGA we expect to have firm, fast conditions. A product like Lexicon [Intrinsic brand fungicide] allows us to develop roots and plant health in order to push the greens to their limits. The broad range of diseases controlled has made choosing it an easy decision on our part.”*

**– Dan Kilpatrick, Superintendent, Lower Course,  
Baltusrol Golf Club**

*“Lexicon [Intrinsic brand fungicide] definitely goes a long way in helping us achieve that balance — which can be sometimes tough to do — of keeping the plant right on that edge of great playability, but we also want to keep it relatively healthy at the same time.”*

**– Trent Inman, CGCS, Old Memorial Golf Club**

*“At the end of the day, what we’re doing, what we’re applying to the golf course, is about one thing, and that’s results. And BASF products have been an integral part in not only our day-to-day maintenance of the golf course, but also in preparation for the U.S. Open.”*

**- David Delsandro, Director of U.S. Open Operations  
and Projects, Oakmont Country Club**



**BASF**

26 Davis Drive  
Research Triangle Park,  
NC 27709  
USA  
+1 919-547-2000  
betterturf.basf.us

Always read and follow  
label directions.

Honor, Intrinsic, Insignia, Lexicon and Xzemplar are registered trademarks of BASF. Mirage and Signature are trademarks, and Chipco, Interface, Stressgard, Tartan and ProStar are registered trademarks of Bayer Environmental Science. Briskway, Action and Heritage are trademarks, and Daconil, Headway and Velistar are registered trademarks of Syngenta Professional Products.

© 2020 BASF Corporation.  
All rights reserved.  
PSS 14-30-412 January 2020