

### Rayora® Goes the Distance on Dollar Spot



"The quick uptake of Rayora® means it gets into the plant and starts working. This helps Rayora® provide both preventative and curative control of dollar spot."

> Jim Kerns, Ph.D. NC State University

# 21-DAY CONTROL OF DOLLAR SPOT IS JUST THE BEGINNING

Rayora® Fungicide contains flutriafol, a breakthrough active ingredient from FMC that now provides proven 21-day control of Dollar Spot. And it doesn't stop there with Dollar Spot – flutriafol also demonstrates curative activity and even works on certain insensitive strains. This next generation DMI fungicide also shows great control beyond Dollar Spot on Gray Leaf Spot, Spring Dead Spot, and other troublesome diseases.

## THE NEXT GENERATION OF DMI HAS ARRIVED

Rayora® is faster too – it's absorbed via roots and shoots and is translocated through the xylem quicker than any active ingredient in its class, giving complete protection throughout the plant. With both flexibility and proven turf safety, Rayora® Fungicide redefines what it means to be strong, yet safe on turf... for longer.

#### **PRODUCT ATTRIBUTES:**

- 21-Day preventative control of Dollar Spot in fairways
- Fastest uptake and translocation in its class
- Best-in-class uptake gives flexibility with irrigation, active protection of the sprayed leaf, and movement to new growth
- Rainfast within 2 hours
- Proven turf safety

#### **DISEASES CONTROLLED:**

- Dollar Spot (preventative and curative)
- Gray Leaf Spot
- Spring Dead Spot

Rayora® is also labeled for control of numerous diseases commonly found in turf

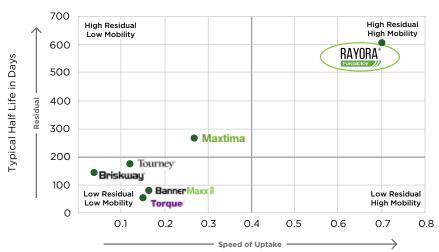
#### **LABELED USE SITES:**

- Golf Courses
- Commercial Sites
- Industrial Lawns

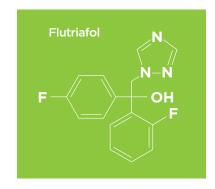


As shown in the chart below, Rayora® is far and away the fastest into the plant. No other comparable product gets into the turf faster than flutriafol, the active ingredient in Rayora®.

### **Systemicity and Persistence Matrix**



Translocation Stream Concentration Factor (TSCF)



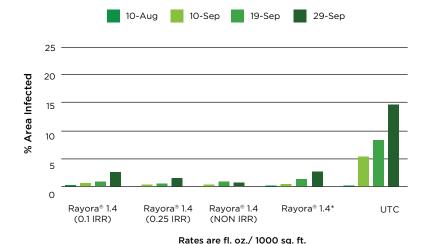
Data collected from the University of Hertfordshire Pesticide Properties Database and calculated the TSCF using the Briggs, Bromilow and Evans equation Pesticide Science, 1982, Vol. 13 pages 495-504.

#### 21-DAY CONTROL OF DOLLAR SPOT ON FAIRWAYS

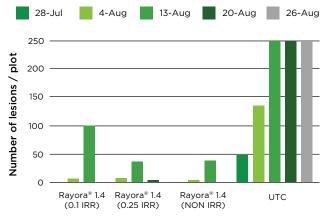
"Rayora® gave excellent control of Dollar Spot on a 21-day interval while demonstrating excellent movement from the roots to the foliage."

J.M. Vargas Jr., Ph.D. Michigan State University

#### 21-Day Preventative Dollar Spot Control



Nancy Dykema and Joe Vargas, Ph.D., Michigan State University Initial Application June 4, 2020 Creeping Bentgrass Treatments applied on 21-day intervals; 6 applications \*Applied at 96 GPA



Rates are fl. oz./ 1000 sq. ft.

Mr. Todd Hicks, The Ohio State University Initial Application June 8, 2020 Creeping Bentgrass 'Penncross' Treatments applied on 21-day intervals

#### **Irrigation Regime**

0.1 in of irrigation watering in Rayora®

0.25 in of irrigation watering in Rayora®

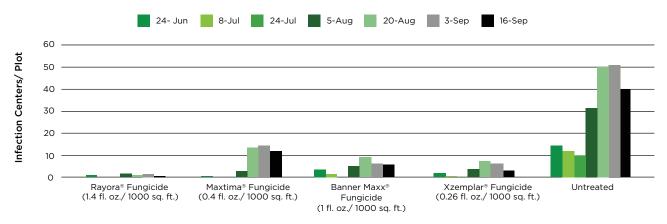
#### No irrigation

 Watering-in occurred immediately after application Flexibility in application interval demonstrates Dollar Spot control at the 1.4 fl. oz./1000 sq. ft rate of Rayora® Fungicide, regardless of irrigation. This is due to flutriafol's uniquely fast uptake into the plant's roots and shoots.

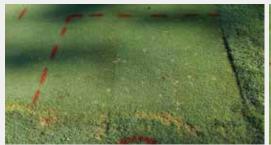
# DOLLAR SPOT CONTROL - EFFICACY ON CERTAIN INSENSITIVE STRAINS AND CURATIVE PERFORMANCE

Superintendents can be confident that the inside-out protection and curative activity Rayora® Fungicide offers will lessen the impact of Dollar Spot. Protection from foliar disease is provided to mature and newly developed leaf material.

#### **Preventative Dollar Spot Trial with Certain Insensitive Strains**



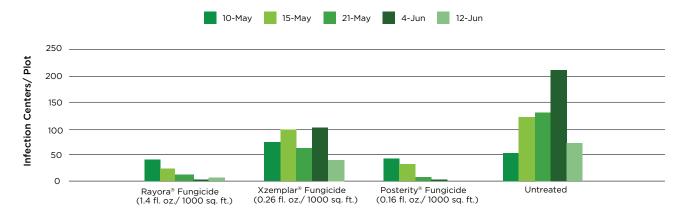
J. Inguagiato, Ph.D., Univ. of Connecticut Initial applications made May 14, 2019 Creeping Bentgrass Fairway; 21 Day Interval Confirmed DMI-Insensitive Location





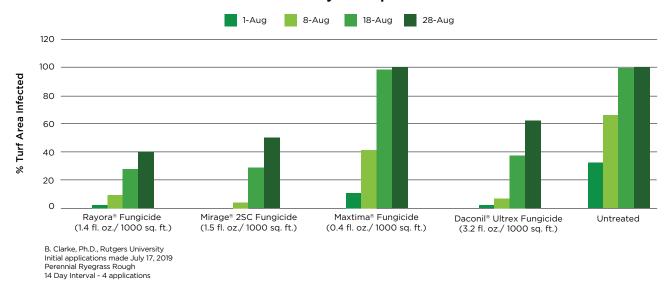
The control plot at a
Philadelphia course (left) shows
signs of Dollar Spot, while a plot
treated with Rayora® (right), two
weeks after application, is clear
of the disease.

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



J. Kerns, Ph.D.; North Carolina State University Initial applications made May 10, 2019 'Crenshaw' Creeping Bentgrass Fairway; 14 Day Interval Suspected SDHI-Insensitve strain

#### **Preventative Gray Leaf Spot Control**



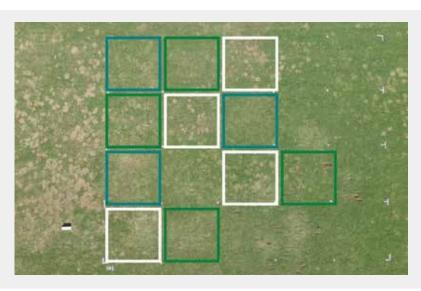
### Field Plots from the Virgina Tech Trial

Rayora® Fungicide (1.4 fl. oz./ 1000 sq. ft.)

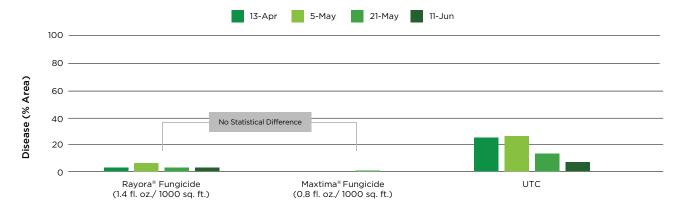
Maxtima® Fungicide (0.8 fl. oz./ 1000 sq. ft.)

**Untreated Control** 

VA Tech April 14, 2021



#### **Spring Dead Spot Control**



David McCall, PhD., Virginia Tech Applications made September 22, 2020 Hybrid Bermudagrass Tee Box

Always read and follow all label directions, restrictions and precautions for use. Not for use on residential turf. Some products may not be registered or sale or use in all states. Rayora fungicide may not be registered for sale or use in all states. Contact your local FMC representative or retailer for details and availability in your state.  $Maxtima, Navicon \ and \ Xzemplar \ are \ trademarks \ of \ BASF \ Corporation. \ Briskway, Banner \ Maxx, Daconil, Headway \ Maxtima, Navicon \ Anner \ Maxx, Daconil, Headway \ Maxtima, Maxima, Navicon \ Maxx, Daconil, Headway \ Maxtima, Maxx, Maxtima, Maxx, Ma$ and Posterity are trademarks of a Syngenta Group Company. Torque is a trademark of Cleary Chemical, LLC.  $Tourney\ is\ a\ trademark\ of\ Valent\ USA, LLC.\ FMC, the\ FMC\ logo, True\ Champions, and\ Rayora\ are\ trademarks\ or\ the constraints of\ Valent\ USA, LLC.\ FMC, the\ FMC\ logo, True\ Champions, and\ Rayora\ are\ trademark\ or\ the\ tradema$  $service\ marks\ of\ FMC\ Corporation\ or\ an\ affiliate.\ @2022\ FMC\ Corporation.\ All\ rights\ reserved.$ 



