



# A TDL Year in Review: With Weather Like This, Who Needs a Diagnostic Lab?

By Paul Koch, Turfgrass Diagnostic Lab, University of Wisconsin - Madison

About the only thing superintendents around the state saved money on in 2009 was their fungicide budgets, and the weather certainly played the major role. By this point in the year everyone knows the story. It was the coldest summer on record for many areas in the state. July felt more like October, and October felt more like December. Despite the chill, for most superintendents in the state it was an ideal summer for managing turf. After the economic problems continually hurdled at our industry, an unbearably hot and humid summer would have been a rather cruel twist of fate.

Despite the cool weather the Turfgrass Diagnostic Lab (TDL) stayed plenty busy in 2009, as evidenced by the 2009 diagnostic summary in Table 1. Overall sample submissions ended up similar to 2008, though sample submissions in the fall were much heavier in 2009 than 2008. A significant drop in homeowner submissions was made up for with a significant increase in professional submissions. Professional submissions come from golf courses, athletic fields, and sod fields and their increase in numbers is encouraging considering the moderate weather and weak economy.

Spring of 2009 was hit or miss for many state golf courses, with most emerging from winter's grip in excellent or good condition. Some, especially in the Madison area, were hit hard with ice damage. Others in the North Woods were hit with some significant snow mold breakthrough, and many courses in north central Minnesota were hit hard

with a rare snow mold disease called snow scald (caused by the fungus *Myriosclerotinia borealis*). Despite these isolated pockets of damage, most entered the spring in good spirits.

Due to the "predictor of things to come" cool spring, leaf spots were more widespread than normal over much of the state. Most of the leaf spot damage was caused by *Drechslera* spp fungi, which cause a more diffuse reddening of older (lower) leaf blades that gives the entire turf stand a bronze or reddish color (Figure 1). In addition to allowing for optimal infection con-

ditions, the cool spring weather also hampered recovery from any leaf spot or *Microdochium* patch damage.

When summer finally did arrive in late June, it arrived with purpose. The hottest weather to hit the region in years roared in and stayed a week, flooding the TDL with brown patch and even a few *Pythium* samples (Figure 2). Many superintendents were grumbling about having to make unplanned brown patch or *Pythium* applications in June, and with budgets slashed to the breaking point a long, hot summer could have been

## 2009 TDL Diagnoses

<u>Diagnosis</u>	<u>Professional*</u>		<u>Homeowner*</u>	
Take-All Patch	11	(7)	0	(0)
Abiotic	11	(29)	22	(30)
Microdochium Patch	6	(1)	0	(0)
Leaf Spots	24	(9)	7	(2)
Insects	0	(1)	0	(1)
Anthracnose (Foliar and Basal Rot)	8	(2)	0	(0)
Fairy Rings	3	(2)	0	(1)
Necrotic Ring Spot	0	(3)	8	(20)
Summer Patch	1	(3)	0	(1)
Rhizoctonia Brown Patch	6	(1)	1	(2)
Brown Ring Patch	3	(3)	0	(0)
Rough Bluegrass ( <i>Poa trivialis</i> )	0	(0)	3	(8)
Typhula Blight	4	(2)	3	(5)
Snow Scald	2	NA	0	NA
Weed ID	2	(5)	24	(10)
Dollar Spot	3	(0)	0	(0)
Pythium foliar blight or root rot	5	(5)	1	(3)
Fungicide Resistance Assays	1	(0)	0	(0)
Other	1	(3)	0	(4)
<b>TOTAL</b>	<b>91</b>	<b>(80)</b>	<b>69</b>	<b>(85)</b>

Table 1. \*Numbers in parentheses are diagnoses in 2008



**Figure 1:** This general bronzing was common of many of the leaf spot samples submitted to the TDL in 2009.

a back breaker for some facilities. But as quick as the heat came in, it left, never to return for the most part in 2009.

The rest of the summer saw the usual suspects in varying numbers as humidity levels rose and fell. Take-all patch and necrotic ring spot were prevalent in moderate numbers in late June and early July. Bipolaris leaf spot was once again a severe and frustrating problem for several courses in July and August. Even foliar and basal rot anthracnose made an appearance at several courses in late August and September, with most of the severe damage caused by basal rot anthracnose. Autumn was continued quiet for the most part, with mild and dry conditions preventing any major disease outbreaks.

Several consecutive mild summers have kept intensive, summer long disease pressure at bay for the most part. But the return of a strong El Nino, which was prevalent in the mid to late 90's, could signal the return of hot and humid weather in 2010. But as 2009 showed us, it doesn't take hot and humid weather to cause a sample submission to the TDL. Here's wishing for a safe, relaxing holiday season and I hope to see many of you in San Diego.

### Thanks to our 2009 contract members

As most of you know, the TDL doesn't receive a single penny of support from the University or state of Wisconsin. Industry support is therefore critical to the success of the lab in maintaining excellent equipment that allows for faster, more accurate diagnoses and better sample reports. Much of this industry support comes in the form of contract memberships with the lab, and the vast majority of contract memberships are from the golf course industry. In trying economic times when several hundred dollars can help in many areas of



**Figure 2:** Summer did still make a guest appearance in 2009, and along with it came brown patch and a little bit of Pythium blight (pictured).

the budget, I greatly appreciate the 74 contract members from 2009 shown in Table 2. If there is any way you think the TDL can improve its services to contract members, please do not hesitate to call (608-845-2535) or email me (plkoch@wisc.edu).

### Thank you to the 2009 TDL contract members!!!

Abbey Springs CC	Antigo Bass Lake	Big Foot CC
Blackhawk CC	Blue Mounds CC	Bristlecone Pines GC
<b>Blackwolf Run</b>	Brown County GC	Brynwood CC
Bulls Eye CC	Chenequa CC	Debuck's Sod Farm
Eagle River GC	Eau Claire CC	Fox Valley GC
Frontier FS Coop	Green Bay Packers	Greenwood Hills CC
Hayward Golf & Tennis	<b>Horst Distributing</b>	House on the Rock Resort
Kenosha Grounds Care	Koshkonong Mounds GC	La Crosse CC
Lake Arrowhead GC	Lake Geneva CC	Lawsonia GC
Long Sod Farms	Lurvey Farms	Maple Bluff CC
Milwaukee CC	New Berlin Hills	New Richmond CC
North Hills CC	<b>North Shore CC</b>	North Shore GC
Oconomowoc CC	Olds Seed Solutions	Oneida Golf & CC
Oshkosh CC	Paul's Turf and Tree Nursery	Pine Hills CC
Portage CC	Racine CC	Reedsburg CC
<b>Reinders</b>	Rhineland CC	Rolling Meadows GC
SAS Management	Sentryworld GC	Silver Bay CC
South Hills CC	<b>Spring Valley Turf</b>	St. Germain CC
Stano Landscaping	<b>Summit Seed</b>	<b>Syngenta</b>
<b>The Bruce Company</b>	Tripoli CC	Tuckaway CC
Twin River Turf	Two Oaks North GC	<b>University Ridge GC</b>
Volkering Consulting	Watertown CC	Wausau CC
Weed Man Lawn Care	West Bend CC	Westmoor CC
Whispering Pines GC	<b>Whistling Straits GC</b>	Windy Acres GC
Wistl Sod Farm	Zimmerman Kettle Hills	

**Table 2.**

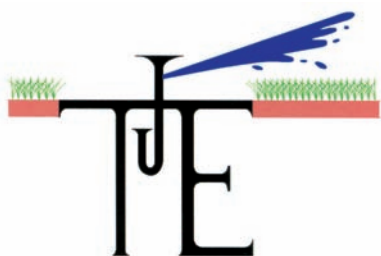


### Cash or Credit?

After months of work and planning by the TDL, UW Communications, the UW Division of Information Technology, and CashNet credit card services; the TDL website is now available to accept online credit card payments. More and more facilities are turning to credit cards for their ease and efficiency, and both your sample submission fees and contract memberships can now be paid online using a credit card. Visit the TDL website ([www.plantpath.wisc.edu/tdl](http://www.plantpath.wisc.edu/tdl)) and click on 'Pay Online' on the front page to be directed to the secure pay page.

To pay for sample submission fees, simply type the invoice number in the 'Invoice' box and the amount of the invoice to be paid in the 'Amount' box and click submit. Up to three invoices can be paid at one time. Directions on paying for a contract membership online depend on if you are a renewing a membership or starting a new membership. Membership renewals should wait until their renewal forms arrive in the mail, then use their contract membership number as their 'Invoice' number and type their desired contract level in the 'Amount' box. New members should type 'newmember' in the 'Invoice' box and the desired membership level in the 'Amount' box. Be sure to fill in your contact information on the pay page, and I will contact you shortly about your new membership.

If there are any questions about the security or use of this pay page, please do not hesitate to contact me. Also please note that we cannot accept credit cards at the TDL facility inside the OJ Noer, so all credit card payments must be issued online. Credit cards that are accepted are VISA, Mastercard, American Express, Discover, and Diners Club. Note that cash and checks are still accepted forms of payment for both sample submission fees and contract memberships. 🌱



### **T. J. Emmerich Associates, Inc** **Irrigation Consultants**

W28620 Beverly Lane • Hartland, WI 53029

**262-538-2776**

Golf Course • Commercial • Master Planning  
System Evaluations • GPS Services

**Thomas J. Emmerich**  
Certified Irrigation Designer

## ELIMINATE GUESSWORK WHEN SPRING FEEDING

Spring fertilization varies greatly on a number of factors. Cultural practices performed, soil amendments made, irrigation and drainage upgrades, fertilizers applied, and what happened last fall plays a significant role with this season's success. However, having a sound fertility program will provide you with your best chance of success for the upcoming season.

Typically, spring applications are applied after the early flush of shoot growth has occurred, but predicting spring weather can be a challenge when it comes to soil and air temperature, and precipitation. That's why choosing a fertilizer that performs in cool climates is so vital.



**John Meyer**  
Regional Manager  
AGROTAIN International, LLC

The nitrogen applied with UMAXX, a top performer in cool weather, is plant available as soon as watering in occurs. In addition, what the plant does not immediately use will be held onto the soil colloid as a reserve for future use.

This is a drastic change from other fertilizers.

Coated products are a great example of fertilizers that don't offer immediate plant nutrition and are subject to leaching once the protective coating breaks down.

Still other products rely on a process called mineralization, depending on soil microbes to break down nitrogen. Whereas soil microbes aren't fully active until the soil temperature reaches 55 degrees – which might not happen until late spring depending on the region – UMAXX begins working immediately and is not dependent on soil temperature for nitrogen release.

Although fine-tuning a spring fertilization program varies on many factors, its importance will be felt all summer long and even into the fall. The benefit of using an all-weather, long-lasting performer such as UMAXX provides immediate benefits, as well as a positive long-term impact. UMAXX gives the freedom to apply as a nitrogen component in a blend or part of a soluble fertilizer program. UMAXX offers consistent performance regardless of temperature or application type.

**For more information on UMAXX contact me  
at 952-334-6845 or [jmeyer@agrotain.com](mailto:jmeyer@agrotain.com)**

UMAXX is a registered trademark of AGROTAIN International LLC