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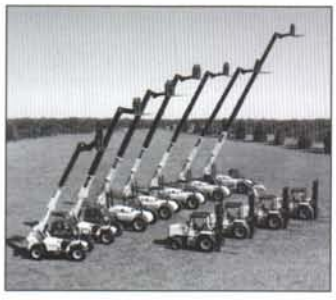

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TDL Year in Review and Upcoming Changes for 2005

By Steve Abler and Dr. Geunhwa Jung, *Turfgrass Diagnostic Lab, Department of Plant Pathology, University of Wisconsin-Madison*

TDL Year in Review

With another growing season behind us, it is time to look back at the samples that the TDL received over the past year. As most golf course superintendents already know, the arrival and departure of diseases that you see on your courses is heavily dependent on weather conditions. Consequently, the amount and type of samples that I receive in the lab often closely reflect the current weather cycles.

The year started off pretty quietly with near average rainfall and temperatures slightly above average. There was a marked increase in samples submitted in May when more than double the statewide average of rain fell. With the rainfall came a host of problems for many superintendents including flooding, reduced play, and difficulty keeping up with mowing the rapidly growing grass. To add insult to injury, several pathogens were taking advantage of the cool, wet weather by feasting on the succulent grasses.

The main disease problems during the late spring were foliar diseases such as *Microdochium* patch, *Rhizoctonia* yellow patch, and *Drechslera* blight of bentgrasses. The number of samples of these diseases increased from last year. Last year also had a wet spring, although not for as long as 2004.

Microdochium patch, also known as "pink snow mold" was the most common diagnosis in the spring and early summer with a sample increase of 1000% over the previous year (Table 1). Pink snow mold is a poor common name for this disease because snow is not necessary for disease development; in fact, the TDL received a sample with active *Microdochium* patch on July 14th this year!

The cool, wet soils during the spring were also very favorable for root diseases such as necrotic ring spot and take-all patch. Both of these diseases colonize and rot crown and root tissue of the host during these weather conditions. Because of the saturated soil conditions in May and June, we expected to see a lot of samples with these diseases when warmer, dryer weather caused the plants to wilt.

2004 TDL Diagnoses

Diagnosis	Professional*	Homeowner*
Take-All Patch	17 (18)	0 (0)
Microdochium Patch	13 (2)	7 (0)
Abiotic	10 (20)	20 (22)
Rough Bluegrass (*Poa trivialis*)	8 (6)	5 (10)
Summer Patch	8 (6)	0 (0)
Weed ID	8 (5)	12 (12)
Necrotic Ring Spot	7 (5)	19 (34)
Rhizoctonia Yellow Patch	6 (4)	0 (0)
Helminthosporium Leaf Spots	5 (2)	1 (3)
Rhizoctonia Brown Patch	3 (2)	1 (3)
Algae	2 (1)	0 (0)
Anaerobiosis	2 (0)	0 (0)
Fusarium Blight	2 (0)	1 (0)
Unknown	2 (0)	0 (0)
Ascochyta Leaf Spot	1 (0)	2 (3)
Cool-Season Pythium Blight	1 (0)	0 (0)
Insufficient Sample	1 (0)	2 (0)
Insects	0 (4)	2 (8)
Rust	0 (0)	2 (1)
Slime Mold	0 (0)	2 (0)
Fairy Rings	0 (3)	1 (1)
Limonomyces Pink Patch	0 (0)	1 (0)
Typhula Blight	0 (0)	1 (1)
TOTAL	96 (82)	79 (103)

Table 1. *Numbers in parentheses are diagnoses in 2003

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2005 Turfgrass Diagnostic Lab Services and Fees

TDL Service	Non-Member	TDL Member
Diagnosis With Phone Report	$100	$100
Diagnosis With Phone and Written Report	$125	$100
Out of State Fee	$25	$0
Site Visit	$250	$250*
Annual Disease Workshop	not included	included
Disease Alert Emails	not included	included
UW Turfgrass Research Results	not included	included

Table 2. *Contractors at the $1000 level receive one complimentary site visit.

In reality, we saw the number of take-all patch samples remain steady and the number of necrotic ring spot samples decrease from the previous year even though the spring was more conducive for disease development this year. This discrepancy is attributed to the fact that the cool weather in July and August did not cause enough stress on the damaged plants to cause them to wilt. In contrast, the wet spring of 2003 was followed by hot and dry weather which quickly caused damaged plants to wilt.

This summer was ideal for growing grass in much of the state with cool temperatures and well spaced rain showers. Because of this, incidence of hot weather problems such as *Pythium* blight, *Rhizoctonia* blight (brown patch) and anthracnose were minimal and superintendents got a break from all of the problems associated with the spring weather. As of December 1st, the lab had received 175 samples, which was ten less than 2003. It is interesting to note that there were a higher proportion of professional samples this year (55%) than last year (44%). I suspect this is because of the decrease in homeowner samples with insect damage, dying rough bluegrass, and drought stress which are associated with hot summer weather.

TDL Changes for 2005

There is going to be a significant change in the fee schedule for the TDL starting in 2005. The fee for professional samples from non-contractors of the lab is increasing; however the fee for TDL contractors will remain unchanged (Table 2). The reason for this change is due to the fact that the lab does not receive any state or university support, and does not generate nearly enough money to pay basic lab expenses. This puts a strain on plant pathology research funds and grants which are used to cover the difference. Furthermore, a survey of other turfgrass labs has shown that the new fees are comparable with the prices already charged by most other states. This means that there has never been a better time to support the TDL by becoming a contractor. The benefits include reduced rates on diagnoses with written reports and added features such as free annual disease workshops, disease alerts via email, and University of Wisconsin turfgrass research results. If you have any questions about the new fees schedule or want information on how to become a contractor please contact the TDL at (608) 845-2535 or swa@plantpath.wisc.edu.

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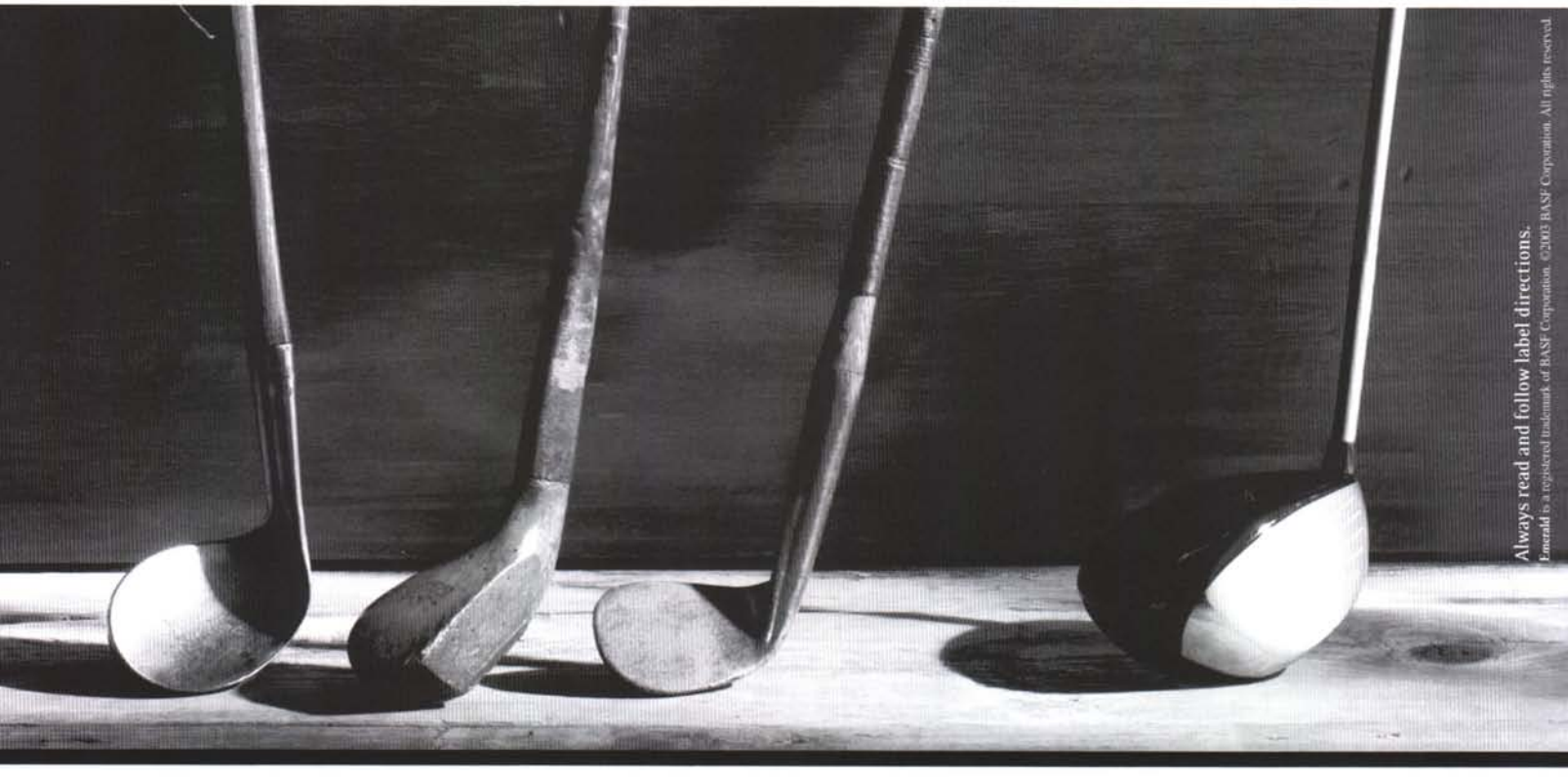

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Control of Sclerotinia Dollar Spot on Putting Greens in 2004

By Dr. Geunhwa Jung, Steve Abler, and Jonathan Rivers, *Department of Plant Pathology, University of Wisconsin-Madison*

Over the past years, I have been hearing several generic statements from superintendents such as, "the same fungicides did not seem to control dollar spot as effectively as previous years," or "I have to put down chemicals more frequently than before." In my opinion, those concerns are true on a few golf courses where fungicide insensitive isolates may be present due to intensive disease management practiced over the past years. In reality, most of golf courses in Wisconsin are just looking great. Superintendents are working hard to maintain the courses in a good shape with very limited tools and resources. I really admire them with their excellence and dedication. Here are results of our research on the chemical control of dollar spot on putting greens which was carried out in the summer of 2004. I hope that the results might give you more options or tools to consider in order to make the greens SPOT-LESS. The objective of this study was to determine the efficacy of fungicides and combinations of fungicides for controlling dollar spot incited by *Sclerotinia homoeocarpa* on a creeping bentgrass putting green.

MATERIALS AND METHODS

The study was conducted at the O.J. Noer Turfgrass Research and Education Facility on a stand of creeping bentgrass (*Agrostis stolonifera* 'Penncross') maintained at 0.156 inch cutting height. The individual plots measured 3 ft X 10 ft and were arranged in a randomized complete block design with four replications. Individual treatments were applied at a nozzle pressure of 40 p.s.i using a

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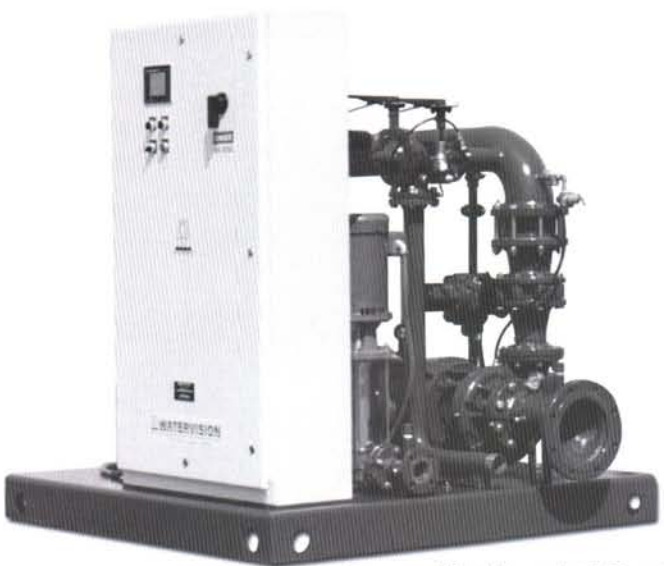

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Table 1. Spray schemes, dates and interval, of standard fungicides for the control of dollar spot on putting green at O. J. Noer Research and Education Facility in 2004.

	Fungicide Application Dates						
	June			July			August
Interval	6	25	30	8	22	29	4
14 day	X	X		X	X		X
21 day	X		X			X	
28 day	X			X			X

CO_2 pressurized boom sprayer equipped with two XR Teejet 8005 VS nozzles. All fungicides were agitated by hand and applied in the equivalent of 2 gallons of water per 1000ft^2. All treatments were initiated on June 9th and the last application was made on August 4th. Specific application dates for each interval are listed in the table 1.

RESULTS AND DISCUSSION

Disease infection centers per plot were recorded on June 30th, July 14th, July 22nd, August 2nd, and August 12th (Table 1). This year's dollar spot pressure on our plot was not high as shown in check treatment (#1) ranging from 2.3 to 9.5 patches (mean over four replications) per plot (Table 2). Overall turfgrass quality and turfgrass color were also recorded on selected dates. No noticeable difference in the quality and the color was observed among the treatments. In addition, no phytotoxicity was observed for any treatments during the duration of the trial.

Only treatment five was completely free of dollar spot on all five rating dates. Five other treatments (#2, 6, 11, 14, & 23) were disease free for four of the ratings and had less than one patch per plot on one rating date showing disease. As far as statistical concerns, those six treatments are not significantly different from each other. Fluctuation in means of disease ratings in some treatments over the course of the trial might be due to a combination of timings of the applications, onset of disease outbreak, and longevity of the chemicals.

If you need more information about the results, products, or interpretation of the results, please let Steve (swa@plantpath.wisc.edu) or myself (jung@plantpath.wisc.edu) know.

Table 2. Dollar spot ratings on 24 chemical treatments including an untreated control.

					Dollar Spot Patches Per Plot*									
	Treatment	Rate		Interval	June 30		July 14		July 22		August 2		August 12	
1	Untreated Control				2.3	bc	2.3	b	4.0	b	9.5	ab	6.3	a-d
2	Chipco 26 GT	4.00	FL OZ/M	14 Day	0.8	bc	0.0	d	0.0	e	0.0	f	0.0	f
3	Emerald	0.18	OZ/M	21 Day	0.3	c	0.0	d	0.0	e	0.0	f	2.0	def
4	Emerald	0.13	OZ/M	14 Day	0.3	c	0.0	d	0.3	e	0.0	f	0.0	f
5	Spectator	0.37	FL OZ/M	14 Day	0.0	c	0.0	d	0.0	e	0.0	f	0.0	f
6	Spectator	0.72	FL OZ/M	28 Day	0.8	bc	0.0	d	0.0	e	0.0	f	0.0	f
7	T-Storm	2.50	FL OZ/M	14 Day	0.0	c	0.3	d	0.3	e	0.8	f	0.5	ef
8	18 Plus	3.00	FL OZ/M	21 Day	1.5	bc	0.0	d	1.0	de	5.8	b-e	4.8	a-e
9	3336	4.00	FL OZ/M	14 Day	0.0	c	0.5	cd	0.5	e	1.5	ef	2.0	def
10	Spotrete	3.75	FL OZ/M	21 Day	1.8	bc	1.3	bcd	3.0	bcd	9.8	ab	6.0	a-d
11	Spectro	4.00	OZ/M	14 Day	0.0	c	0.0	d	0.0	e	0.5	f	0.0	f
12	Chipco 26GT	0.75	FL OZ/M	14 Day	2.8	b	2.5	b	4.5	b	9.0	b	6.8	ab
13	Banner MAXX	0.25	FL OZ/M	14 Day	2.0	bc	0.0	d	0.0	e	0.5	f	0.3	ef
	Chipco 26GT	0.75	FL OZ/M	14 Day										
14	Banner MAXX	0.25	FL OZ/M	14 Day	0.0	c	0.0	d	0.0	e	0.3	f	0.0	f
15	Curalan EG	0.25	OZ/M	14 Day	0.5	c	0.3	d	0.3	e	3.8	c-f	0.3	ef
16	Banner MAXX	0.25	FL OZ/M	14 Day	0.0	c	0.0	d	0.3	e	0.5	f	2.3	c-f
	Curalan EG	0.25	OZ/M	14 Day										
17	Banner MAXX	0.25	FL OZ/M	14 Day	0.3	c	0.0	d	0.3	e	0.5	f	0.3	ef
	Daconil WeatherStik	1.00	FL OZ/M	14 Day										
18	Daconil WeatherStik	1.00	FL OZ/M	14 Day	1.3	bc	1.8	bc	3.5	bc	8.3	b	2.3	c-f
19	Banner MAXX	0.25	FL OZ/M	14 Day	0.3	c	0.0	d	0.3	e	0.5	f	0.0	f
	Bayleton	0.25	OZ/M	14 Day										
20	Bayleton	0.25	OZ/M	14 Day	0.0	c	0.0	d	0.0	e	0.3	f	0.3	ef
21	Eagle	0.50	OZ/M	14 Day	0.8	bc	0.3	d	1.0	de	1.3	ef	0.8	ef
22	Rubigan AS	0.75	FL OZ/M	14 Day	0.8	bc	0.0	d	0.0	e	0.5	f	0.3	ef
23	Banner MAXX	0.50	FL OZ/M	14 Day	0.3	c	0.0	d	0.0	e	0.0	f	0.0	f
24	EcoGuard	20.00	FL OZ/M	14 Day	5.0	a	4.0	a	7.8	a	13.5	a	7.5	a
LSD (P=.05)					1.84		1.16		1.85		4		3.79	
Standard Deviation					1.3		0.82		1.31		2.83		2.68	
CV					170.1		176.17		132.17		96.98		143.46	

*Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

He Really Knows (and Loves) His Turf Equipment

By Lori Ward Bocher

When Editor Monroe Miller first asked Dennis Robinson if he'd do a *Personality Profile* interview a year or so ago, Dennis declined because he thought there were so many other people out there with more experience. But then something happened while he was helping at the PGA championship at Whistling Straights this past summer that changed his mind.

"*Golfdom* magazine had done a cover interview with David Swift, the superintendent at Whistling Straits," Dennis recalls. "I realized he's young enough to be my son! When I started at Horst Distributing (in 1980), a lot of today's young superintendents weren't even born yet or they were just children. The equipment and procedures I remember from being a golf course superintendent in the 1970s is ancient history to them. Very ancient."

So Dennis, a well-known sales rep for Horst Distributing, consented to an interview. His passion for his job, for his customers, for turf equipment, and for turf management comes through loud and clear. For those readers over 50 years of age, sit back and reminisce with Dennis; you'll find yourself nodding in agreement and thinking, "I remember that." For those younger than 50, you'll gain a new appreciation for your equipment and see how some things have come full circle in turf management.

"When I was younger I always appreciated talking to the old guys because they always had cool stories to tell," Dennis says. "Guys like Bill Kazda of Plum Lake Golf Club in Sayner. Guys who were around when golf courses were mowed with horses. I always thought that was neat.

Left to Right: Randy Mallmann, Dennis Robinson, Dr. Milt Engelke, Greg Kallenberg, Joe Deschler. This picture was taken at Jacobsen's Global Product Training held this past October at Tega Cay Golf Club, Charlotte, NC. Dr. Engelke held seminars on turfgrass management for all sales people in attendance.

"Now I talk to guys who can't imagine a Cushman Truckster with a kick start and not an electric key start, or a vehicle with handlebars instead of a steering wheel, or vehicles that didn't have brakes," he continues. "If you started a walking greens mower when it was engaged, you'd pull the rope and it would run away from you. A lot of strange things like that used to happen."

Back to the beginning...

Dennis has lived his entire life near Mishicot in Manitowoc County. Born in 1955, the youngest of four children, his life started on a dairy farm. "My dad sold the farm for health reasons in 1966 so I no longer was a farm boy," Dennis points out. "But I think one of the reasons I'm working with turf is because I've always wanted to work outside. That desire is in you if you've lived on a farm."

Another reason he's working with turf is because his first job just happened to be on a golf course - Fox Hills Inn and Country Club at Mishicot. "I started working there as a busboy when I was 16 years old," Dennis recalls. "I worked there through high school — from busboy to head busboy to buffet chef and bartender. Eventually I became the bar manager and ran all beverage operations."

But that yearning to work outside drew him to the driving range when he was 19 or 20. He worked his way up to crew foreman, assistant superintendent, and finally superintendent in 1975. Dennis never had any formal turf education. "I went to the School of Hard Knocks — to learn from your mistakes and other people's mistakes," he says. "This is probably something that can't be done anymore. But I learned by going to a lot of meetings and talking to a lot of people. I attended any turf seminar that I could get my hands on. I became a member of the WGCSA in 1975, and I attended my first GCSAA national conference in 1978 in San Antonio, Texas. And I've been to every GCSAA conference since then, either as a superintendent or as a salesman."

Dennis has always appreciated the way that golf course superintendents openly share their knowl-