Table 2. Efficacy of fungicides and tank mixtures for reducing dollar spot severity at OJ Noer, Big Foot CC and Milwaukee CC in 2005.

	Tracturent	Rate		OJ Neor ^a		Big Foot CC ^a		Milwaukee CC ^b	
	Treatment			Aug 4 ^c	Aug 30 ^d	Jul 29 ^c	Aug 26 ^d	Jul 28 ^c	Aug 26°
1	Non-treated control			28.3	56.3 a	12.5	107.0a	71.8	15.0bc
2	Chipco 26GT	4	FL OZ/M	47.3	0.0d	25.5	0.8e	56.3	5.0cd
3	Chipco 26GT	2	FL OZ/M	45.0	1.5d	17.8	7.0e	68.8	5.0cd
4	Emerald	0.18	OZ/M	43.3	0.5d	7.5	0.0e	67.5	0.0d
5	Banner Maxx	2	FL OZ/M	42.3	4.5cd	54.3	2.0e	50.0	0.0d
6	Banner Maxx	0.5	FL OZ/M	31.5	8.8cd	10.3	23.5de	47.5	5.0cd
7	Spotrete	5	OZ/M	32.5	38.8b	31.3	69.0a-d	66.3	21.3b
8	3336F	4	FL OZ/M	22.8	14.5cd	27.3	85.3ab	67.5	31.3a
9	Curalan EG	1	OZ/M	14.5	0.3d	25.5	0.3e	53.8	2.5d
10	Turfcide 400	3	FL OZ/M	17.3	25.3bc	19.0	79.0abc	56.3	21.3b
11	Fore Rainshield	8	OZ/M	8.8	15.3bc	17.5	60.5bcd	57.5	30.0a
12	Daconil Ultrex	5	OZ/M	19.5	0.0d	25.8	0.8e	50.0	3.8cd
13	Daconil Ultrex	1.8	OZ/M	18.8	14.5cd	36.3	39.3cde	76.3	7.5cd
14	Rubigan AS	1.5	FL OZ/M	15.8	11.0cd	22.0	27.8de	52.5	5.0cd
15	Eagle	2.4	FL OZ/M	10.3	2.0d	26.3	7.0e	50.0	0.0d
16	Lynx	2	FL OZ/M	17.3	0.3d	18.8	1.8e	51.3	0.0d
17	Bayleton	1	OZ/M	9.0	0.3d	36.3	1.3e	48.8	1.3d
18	Bayleton	0.25	OZ/M	30.8	6.5cd	43.8	32.5de	61.3	6.3cd
	Banner MAXX	2	FL OZ/M	10.8	0.0d	66.8	0.0e	62.5	0.0d
19	Chipco 26GT	4	FL OZ/M						
	Banner MAXX	0.5	FL OZ/M	16.3	0.3d	27.5	0.3e	55.0	0.0d
20	Chipco 26GT	2	FL OZ/M						
21	Banner MAXX	2	FL OZ/M	27.0	0.0d	17.5	0.0e	61.3	0.0d
	Curalan EG	1	OZ/M						
22	Banner MAXX	0.5	FL OZ/M	7.3	0.0d	40.3	0.3e	52.5	0.0d
	Curalan EG	1	OZ/M						
23	Banner MAXX	2	FL OZ/M	14.8	0.0d	22.0	0.0e	65.0	0.0d
	Daconil Ultrex	5	OZ/M						
24	Banner MAXX	0.5	FL OZ/M	18.5	3.8cd	14.0	9.0e	73.8	0.0d
	Daconil Ultrex	1.8	OZ/M						
25	Banner MAXX	2	FL OZ/M	15.5	0.3d	36.5	0.0e	48.8	0.0d
	Bayleton	1	OZ/M						
26	Banner MAXX	0.5	FL OZ/M	00.0	0.51	20.2	0.2		0.01
	Bayleton	0.25	OZ/M	23.8	0.5d	28.3	8.3e	71.3	0.0d

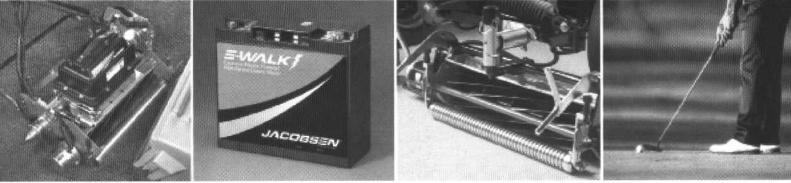
^a Number of dollar spot infection centers (DSIC's, 2-inch diameter) per 3 x 5 ft plot.

^b The percent dollar spot disease per 3 x 5 ft plot.

^c Initial dollar spot severity at the time of first application of treatments

^d Dollar spot severity two weeks after the second fungicide treatment and four weeks after the study began.





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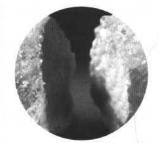
oz/M) (Table 2). Most demethylation inhibitor (DMI) fungicides had good control. Eagle 2.4 fl oz/1000 ft2 (treatment 15) had an acceptable control but Bayleton 1 oz/1000 ft² (treatment 17) had the best effect in this study. The iprodione (treatments 2 and 3) and the vincozlin (treatment 9) all significantly reduced the disease. Other fungicides showing excellent control were Lynx (treatment 16) and Emerald (treatment 4) as in the other locations. Various combinations of two different fungicides worked well. In some cases, the half rates of tank-mixed fungicides had the same excellent dollar spot control as the full rates. Examples of this would be the half rate Chipco 26GT/Banner MAXX tank-mix (treatment 20) and Curalan EG/Banner MAXX (treatment 22) and the full rate mix of the same products, treatment 19 and treatment 21, respectively.

At Big Foot CC where the disease pressure was heavy, most fungicide treatments significantly reduced dollar spot severity as compared with the non-treated control, but the half rates of single fungicides could not hold the disease (Table 2). DMI fungicides were variable on controlling the disease. Rubigan AS (treatment 14) did not keep the disease below 20 DSIC's per plot. High rate Banner MAXX (treatment 5), Eagle (treatment 15), and high rate Bayleton (treatment 17) worked the best among the DMI's tested. Among the contact fungicides, high rate Daconil Ultrex (treatment 12) consistently had the best control as at OJ Noer. Here again, the combination treatments were consistently effective. All of the full rate combinations, and the half rate of Banner MAXX/Chipco 26GT (treatment 20) and Banner MAXX/Curalan EG (treatment 22) had excellent control.

The trial conducted at Milwaukee CC was hampered by the rapid progression of the disease before our study. At the time of the first spraying the percent disease ranged from 25 to 85% over all plots (Table 2). Due to the very high initial disease pressure at Milwaukee CC, the treatments were evaluated using the percent disease instead of a spot count. The results were similar to those at OJ Noer and Big Foot CC. The tank-mixed fungicides continued to have excellent control and half-rate mixes performed just as well as full rate mixes. One thing of note at Milwaukee CC is that disease pressure seemed dramatically less in the second rating (Aug 26) than the first rating (July 28). On the non-treated control plots, the disease rating was initially 71.8% on July 28 and became reduced to 15.0% on August 26.

The half rates of single fungicides worked well at the moderate disease pressure but broke down under the heavy disease pressure. In all of our field locations, the low rate tank mixtures continued to hold up as

well as the high rate combinations. What are the best fungicides of reducing dollar spot severity in our study? Among the treatments tested, treatments 2, 4, 9, 12, 16, 17, 19, 20, 21, 22, 23, and 25 consistently had excellent control of dollar spot in all three locations. Preventative fungicide applications are always preferable for dollar spot management, but dollar spot outbreaks are unavoidable because of changing environmental conditions and the persistent nature of this pathogen. Because of this, a curative fungicide approach is an important thing to keep in mind. These field evaluations of various fungicides commercially available in Wisconsin will provide valuable guidance to local turfgrass mangers for dollar spot management. We would like to thank two superintendents, Pat Sisk and Jim Knulty, for their participation, not only for maintaining the plots, but also rating the disease severity. Their cooperative efforts were essential in carrying out this study. \checkmark



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EXPO 2006 "A Crowd Pleaser"

By Tom Schwab, O.J. Noer Turfgrass Research and Education Facility, University of Wisconsin-Madison

Midwest turf managers got a treat on January 10th and 11th, when they attended the revamped Wisconsin Turfgrass and Greenscape EXPO. Attendance numbered 268 individuals from all walks of turf management. Local speakers provided the majority of education, along with several experts from Minnesota, Illinois, and Rhode Island who all gave enlightening presentations. The weather was even a treat as attendees enjoyed some rare blue skies and temperatures in the 40s.

The EXPO committee can't take the credit for the good weather but they can for finding excellent education. They decided to incorporate more local speakers into this year's show because of all the lessons learned in Wisconsin from this brutal year of ice damage in the spring and drought conditions the during summer. Jerry Kershasky from Westmoor Country Club described the roundtable portion of the golf section best. He said it was similar to the Wisconsin Golf Turf Symposium where one subject is chosen and intensely discussed to find all the answers. The panel of local experts in the round-table included Mike Handrich from Racine CC, Rod Johnson from Sheboygan Pine Hills, Gary Tanko of Sentry World, and Pat Sisk of Milwaukee CC.

Local expertise was also evident by our roster of UW-Madison turf professors who talked about everything from mowing heights, to changing the makeup of rootzones, and controlling prominent insect and disease problems. UW professors additionally talked about tree health, remote sensing tools, and the new NR151 technical standard that will soon affect everyone who manages more than 5 acres of turf.

Sports field managers benefited from the local expertise of Raechal Volkening from the Milwaukee Brewers organization, Chris Brindley from UW-Stevens Point, Dan Wyatt from UW-Madison, Alan Johnson from the Packers, and several state high school field managers. They talked about managing fields with budgets that are shrinking, maintenance of the new increasingly popular infill artificial turf surfaces, and developing creative internship and volunteer programs.

Lawn and landscape professionals learned about immigration laws, invasive species initiatives,







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woody ornamental and perennial flower care, and much more. EXPO had something for everyone that works with turf including taking care of the other plants we are responsible for.

Turf equipment technicians greatly benefited from EXPO '06, with the very popular Turf Equipment Technician's Workshop that was held on the first day. Nearly 30 mechanics attended to learn everything about reel mowers including maintenance, rebuilding, grinding, setup, and problem diagnosis.

Last but not least was the trade show, which was reworked this year to add more punch. It took place over fewer hours than in past years, but those hours were more productive for both the exhibitors and attendees. The trade show was held on the first day and it was strictly trade-show-only hours for the whole time it was open. This allowed exhibitors undistracted time to display and talk about their wares without conflicts from educational presentations. A listing of the 37 EXPO exhibitors is shown on page 50 as a reference. They

help to bring you the great education of EXPO, so please return the favor by giving them a chance for your 2006 business.

The exhibitors likewise helped sponsor the exciting raffle that was part of EXPO this year. Just ask Doug DeVries from Reid Municipal Golf Course how exciting it was. Doug won the Grand Prize \$1,000 travel voucher. Other prizes included a pair of Badger men's basketball tickets donated by John Powless, a Home Depot Gift Card from UAP, four Chicago Blackhawk hockey tickets



Dr. John Stier gave several informative presentations at this year's EXPO.



Doug DeVries displays his \$1,000 Grand Prize raffle voucher.

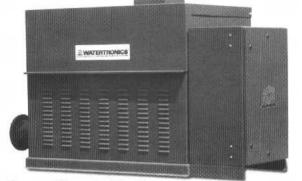


Dean Musbach presents Reinders' annual Daconil promotion check to WTA president Rich Riggs. This promotion has generously given nearly \$109,000 towards turf research in Wisconsin since its inception.

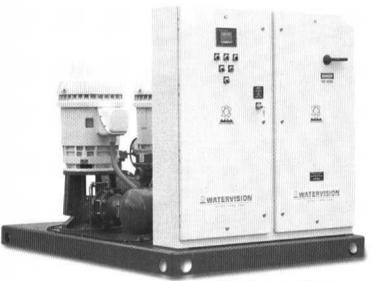


EXPO organizer and raffle prize drawer Audra Anderson made several attendees' day by picking their lucky tickets.





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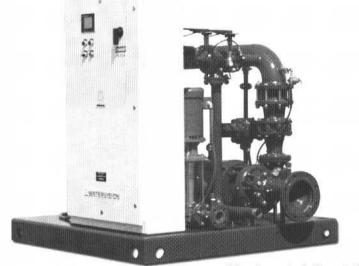
- VFD driven jockey pump which efficiently performs dual duties of pressure maintenance, while serving as the primary supplier of incidental daytime syringing and hand watering up to 150 GPM.
- Additional pumps are individually pressure regulated with Watertronics' Electronic Butterfly Valve, ensuring surge-free starts and stops.
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from Cleary Chemical, an Al Harris autographed Packers' jersey from Reinders, and a pair of Packers' tickets for next season donated by the Packers.

Many other awards were presented during EXPO. The luncheon banquet afforded time for the WTA to accept several donations to the Wisconsin Distinguished Graduate Fellowship. The Fellowship is a program that guarantees important Wisconsin turf research will be conducted indefinitely. Many UW-Madison turf students also received awards that were important to their more immediate future of paving for books and tuition. The list of 2006 scholarship recipients and donators is listed below. The turf industry is stronger for the contributions from all these individuals.

The turf industry is likewise stronger because of all the great education of EXPO. Thanks go to all the educators, trade show participants, and attendees that continue to make EXPO one of the best turf meetings available. Everyone involved was especially pleased with this year's show.

2006 Wisconsin Turfgrass and Greenscape EXPO Research and Scholarship Recipients

Scholarship Donor	Recipient	Amount
WGCSA/James R. Love Scholarship	Dan Lloyd	\$1,500
Chalet Nursery Scholarship	Dan Lloyd	\$500
J.W. Turf John Buck Scholarship	William Kreuser	\$1,000
Bayer Environmental Scholarship	Adam Moeller	\$1,000
Spring Valley Turf Products Scholarship	Shannon Barstow	\$600
WTA Scholarship	Steve Sartorius	\$600
WTA Scholarship	Brad DeBels	\$600
WTA Scholarship	Michael Boettcher	\$600
WTA Scholarship	Patrick Bastron	\$600
David Mergatroyd Memorial Scholarship	Paul Nelson	\$500
Turf Research Donor Recipient		Amount

DHD Tree Products Horst/ Aquatrols WI Turf Reinders/ Daconil

Distinguished Graduate Fellowship	\$1,000
Distinguished Graduate Fellowship	\$1,700
Distinguished Graduate Fellowship	\$1,250
Distinguished Graduate Fellowship	\$4,750



The UW-Madison turf student scholarship recipients pictured with the scholarship and research donators.

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2006 Wisconsin Turfgrass and Greenscape EXPO Exhibitors

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BASF

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Tim Keating 630-885-3130 *Turf & ornamental plant protectants.*

Contree Sprayer & Equipment Co

Kevin White 920-356-0121 *Custom built sprayers, parts and service.*

DHD Tree Products

Dan Quast 920-386-9000 Fertilizer, plant protectants, tree supplies, greens roller.

Dow AgroSciences

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Robert Wasser 262-206-0775 Fertilizer, seed, control products, equipment and golf accessories.

Midwest Turf Products

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Milorganite

Jaime Staufenbeil 414-221-6816 Organic nitrogen fertilizer.

National Golf Graphics

Peter Meyer 608-222-9363 Golf course signage, accessories, flags & on course drinking water systems.

National Seed

Dan Biddick 208-890-4453 Seed, fertilizer, mulch, erosion blankets. North Pacific Ag Products Darren MacFarlane 800-461-3477

Olds Seed Solutions Chris Wendorf 608-249-9291 Seed and custom seed blends.

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ProGreen Plus Mike Akin 414-751-1113 Fertilizers, aquatic supplies, seed and chemicals.

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Rain Now Paul Roessler 608-850-7246 Above ground watering systems

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