influences vary with putting green construction.

Root zone mix composition is the subject of research underway at Ohio State University, North Carolina State University, and Rutgers University. In all locations, the emphasis is on inorganic amendments. These projects have shown that:

(1) Calcined diatomaceous earth and calcined clay increase water and K retention in the root zone.

(2) Zeolite, as well as calcined diatomaceous earth and calcined clay, increases water retention as compared to 100% sand. At the same time, hydraulic conductivity is reduced but remains higher than normally recommended. Increased retention of nitrate and ammonium was also observed.

(3) Addition of organic and inorganic amendments to sand reduces the bulk density of the root zone and generally increase total porosity. Changes in air-filled porosity depend on the rate of addition and type of amendment. All amendments generally reduce root zone hydraulic conductivity.

All three projects are in their infancy and none have contributed uniquely new information. Hopefully, as the studies progress, the researchers will be able to relate laboratory measures of root zone bulk density, total and air-filled porosity, and hydraulic conductivity to the long-term performance of putting greens.

Concern that some inorganic root zone amendments lack physical stability is being investigated at Cornell University. Laboratory testing indicates that the six zeolites, calcined diatomaceous earth and calcined clay tested are stable to weathering and traffic.

Sand particle shape has been shown by Penn State University researchers to influence root zone mix properties. Sub-angular grained sand, when compared to sand with rounded grains, underwent a greater decrease in bulk density when peat was added. Sand particle shape effects on changes in total porosity when blended with peat varied with the sand:peat ratio. Capillary porosity was highest in the angular sand mixes. Sand particle shape had little influence on the reduction in hydraulic conductivity observed when the sands were blended with peat. While these observations are interesting, they will not become useful pieces of information until the dependencies of long-term putting green performance on these various properties of root zone mixes are clearly defined.

The final research project I want to report on is a study at the University of Tennessee. This 10-year investigation of the use of geotextiles as the intermediate layer between a USGA root zone mix and the underlying gravel is now in its eighth year. All 10 of the geotextiles tested have increased root zone water retention and none have clogged. Eight of the geotextile greens have percolation rates ranging between 8 and 12 inches/hour. All of the geotextile greens are judged to be more effective and more reliable than a green constructed with an intermediate ("choker") sand layer.

When results of this study were reported four years ago, there was a great deal of skepticism regarding the use of geotextiles in place of the intermediate sand layer. This year's report should dispel some of that skepticism. What needs to be done now is research how a geotextile green performs when subjected to all the stresses normally imposed on putting greens.

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CHAPTER DELEGATES DIGEST

By Mark Kienert

It was my honor to represent the Wisconsin Golf Course Superintendents Association at the recent convention of delegates from across the country held in Lawrence, Kansas, September 5-7, 1997. This was my fifth trip in as many years and each one has been privilege to attend and to be a vocal part of.

This yearís convention highlighted presentations from various GCSAA staff members explaining their department's goals and objective. Candidates running for office were introduced to the general assembly.

In a budgetary setback for the WGCSA, the seminar rebate program was eliminated in one fell swoop. This program has been cropped and reinstated over the years. If you look at our financial report, you will notice that our chapter received a rebate of nearly four thousand dollars. This money, earned by our education committee, is pumped back into our chapter providing us with the means to hire someone, lets say, from out of state to address our educational offerings like we did at our monthly meeting held at Christmas Mountain in the Dells.

The show of hands was so unanimous that a negative show of hands was never asked for, of which mine, quite certainly, would have been one. Deja vu. For your information, regional seminars lose $200,000 per year. By eliminating the rebate program, the deficit was reduced by only $50,000, leaving us with a $150,000 deficit. This has the same effect as suturing one inch of stitches in a four inch wound.

The problem lies in regional seminar program, WHICH I WOULD HATE TO SEE ELIMINATED. Or, most truthfully, in the size of the budget allocated to the educational department. I'm disappointed that a little more of the recently enacted dues increase wasn't directed toward maintaining the educational offerings. I addressed this fundamental budgetary problem of the educational department with Julian Arredondo, CFO. Like Julian told the delegates, maybe it's time to "stick a fork in it" and eliminate some of the programs that lose money for the association.

Major news at this years convention has to be the future implementation of membership standards and how they will affect the chapters and association. Bruce Williams led a group discussion through a proposed time line. A membership standards resource group (now a committee with official standing) has been formed to digest all the inputs and to structure the implementation of those membership standards.

As a side note, I got a kick out of the presentation as GCSAA hired a high profile consulting group to assist and lead in the developmental process. Some of the presentation went like this. High Profile Consultant says: "Well, during the afternoon the group discussed....,. Ah, Bruce, why don't you inform the delegates of our progress of that afternoon." To which Bruce would reply by spending the next twenty minutes explaining the course of that afternoon. This went on time after time. If Bruce didn't get a paycheck from that consultant after the day, he should have because he performed 99% of the membership standards presentation.

One very obvious hurdle to overcome will be the two vs. four year college debate. This issue has already bruised the egos of some university professors on both sides of the fence, not to say anything about golf course superintendents in possessing those types of degrees respectively. During the question and answer, and there wasn't much due to the fact that most of the presentation was based on speculation, I asked the resource group (committee) to consider "grandfathering" NO ONE this time around. This was one common complaint I heard in the dual membership debate and subsequent backlash.

It appears that GCSAA is taking a slow conservative approach in the planning process with the earliest implementation of standards in any form coming no sooner than the year 2002. This will allow as many members who wish to have their voice and input heard. If you have any suggestions, concerns, please address them to the Membership Standards Committee. Stay tuned to Newsline for future committee reports.

Oconomowoc GC looks to restore Donald Ross character

By Rick Pledl

Editor's note: Maybe this column should be called From Down The Road for this issue since it is about one of only two Donald Ross golf courses in Wisconsin-Oconomowoc GC. The article originally appeared in Volume 9, No. 4, August 1997 issue of Wisconsin Golf, and it appears here with permission of John Hughes, editor of that excellent monthly magazine devoted to golf in Wisconsin. Rick Pledl is the associate editor.

Craig Schreiner was hired as golf course architect for the project. He is one of only a small number of golf course architects who holds degrees in turfgrass management (Ohio State University-Wooster in 1974) and landscape architecture (Oregon State University in 1975). He also prepared himself for a golf course design career by working for Wadsworth Golf Construction and for architects Don Sechrest (1985-1988) and Dr. Mike Hurdzan before forming Schreiner Design in 1990.

Donald Ross, who emigrated to Boston in 1899 from his native Scotland, was the most prolific and prominent golf course architect of the first half of the 20th century. Although he died in 1948, he continues to cast a long shadow in the world of golf course design. Several of his works, including courses at Pinehurst CC in North Carolina which brought him early fame, are still considered among the best courses in the U.S.

The Donald Ross Society has recognized 412 courses in the U.S. and Canada as being Ross designs, but, as a testament to his continuing popularity among golf traditionalists, numerous other clubs across the continent claim they too have courses that were designed by Ross.

That's why golf course architect, and self-described "Rossian," Craig Schreiner was skeptical when first contacted by Oconomowoc GC, one of just two Wisconsin courses designed by Ross (the other is Kenosha CC). His skepticism lasted as long as it took him to get to Oconomowoc.

Upon arriving, Schreiner said he realized Ross' imprint on the land was "pretty well unblemished." But in the 80 years since the course was built, the architect's features had grown fuzzy. Eight decades worth of maintenance reduced the size of greens and the depth, shape and severity of bunkers. And various committees over the years planted trees and removed bunkers in their attempts to improve on Ross' design.

Or, as Oconomowoc GC superintendent Harvey Miller said: "The course was starting to look tired. Over the years, the trees were planted at random without any real thought involving shots and especially no insight into when the tree grows up."

Now Oconomowoc GC has hired Schreiner to put things back the way they were, or at the very least, return the course's original character. It's a task Schreiner is familiar with, having carved out a niche for himself in the design business as a Ross expert. Oconomowoc GC is the seventh Ross course he's worked on, including 1995 Ryder Cup site Oak Hill CC.

Schreiner completed a master plan in 1995 which laid out the changes he wanted to make at Oconomowoc GC

and which would also act as a blueprint for future maintenance procedures. Then he convinced the club membership, with more than a little difficulty initially, to install a state-of-the-art double row irrigation system.

Now members are starting to see more tangible results on the course. Specifically, Schreiner is increasing the size of the greens, which shrunk as a result of decades of mowing. Putting surfaces will be enlarged by about 30 percent around the course, bringing back some of Ross' most strategic pin placements and also reducing stress on the greens. And fairway lines are being returned to their original shapes.

While trees are being removed and bunkers replaced—Schreiner uses Ross' original plans, like those hanging in the bar at the club, and old photographs when available—there are situations that call for slight deviations from the original.

Schreiner sometimes has to make a judgment call, in particular, because equipment is so different than it was in Ross' day. But we're not talking titanium drivers here, the equipment that has influenced Oconomowoc GC the most is what's used by the staff. Ross created steep greens on Nos. 6 and 9, for instance, but greens are cut shorter—and, therefore, are faster—today than Ross would ever have imagined. As a result, those two greens will probably be rebuilt to lessen their severity.

"We're going to keep the same principle there; people really aren't going to know the green has changed when we get done," Schreiner said,. "We're just going to lessen the slopes, keep them somewhat steep in today's standards so that the character is still there that Ross wanted."

Changes will also be made to several tees because playing conditions have changed so dramatically since the course was built in 1915. In those days, players could count on considerable roll on their drives because fairways were often rock-hard.

Today's fairways are softer thanks to irrigation improvements, which has created a situation where Oconomowoc GC plays to a par of 70 from the back tees and 73 from the forward tees. Schreiner will move up some of the forward tees and make par 70 all around.

So far, four holes have been redone, and Schreiner hopes to do five more this fall.

Asked to explain why Ross is still held in such high esteem almost 50 years after his death, Schreiner says there are three reasons, and they appeal to players and course designers alike.

First, Ross' courses are fair and playable to golfers of all abilities, and secondly, he never fought natural contours; he worked with them.

Finally, Ross is revered for the wonderful contours he built into greens. His courses require skill with the putter. "You'll never find Ross greens that are just flat and round," Schreiner said. "He never did it because nature never did it."

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August Meeting Held At La Crosse Country Club

Beautiful La Crosse Country Club was the setting for our August 4th WGCSA monthly meeting. Fifty-eight attendees enjoyed a lunch buffet before heading out to the course for an exciting day of golf.

The event for the day was a one best ball foursome and three flag events. The flag event winners were # 1 long putt—Mark Hjortness, # 7 closest to the pin—Joe Check, and # 11 long drive—Chad Johnson. The best ball winners with a score of 54 were the team of Mark Hjortness, Karl Braem, Paul Neuman, and Mark Kienert. Second place was taken in a scorecard playoff with a 58 by the team of Gene Hogden, Gene Kohlmeyer, Jerry Blaha, and Steve Vernkamp.

This course is a true Wisconsin jewel in a fabulous setting. Congratulations go out to superintendent Jack Tripp for having this course is such great condition.

Mark your Calendars!

WTA EXPO '98

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DOLLAR SPOT CONTROL;
Old Stand-bys Breath New Life When Tank Mixed in Reduced-rate Mixtures

Jeffrey S. Gregos, Department of Plant Pathology
Turfgrass Disease Diagnostic Lab, University of Wisconsin-Madison

When I was asked to interview for my current position, I was told that I would have to provide an article that could be published in the Grass Roots. Several months later it was. It was an article on reduced-rate tank mixtures for fungicide resistance management of *Sclerotinia homeocarpa*. Shortly after publication of the article (Dollat spot resistance management with reduced-rate mixture, The Grass Roots, March/April 1997), I received a phone call from a superintendent wondering if these could possibly work. Well, I have over five years of data to back this up now, and one of those years is from my dollar spot control trial conducted this summer.

Dollar spot is probably one of the easiest fungal pathogens to control. In the U. S. it accounts for the highest dollar amount of fungicide sale in the turf and ornamental market. So, you ask why manage for disease resistance? Well that same superintendent that called me when I published the article could be facing fungicide resistance himself, based on some preliminary testing that I conducted this summer. He may only be dealing with benzamidizol resistance, but there is the possibility of DMI resistance also. Think of it this way, if you had resistance to both of these chemicals the possibility of 28 day or more spray schedules would be a thing of the past. This could possibly mean more frequent applications, resulting in additional chemical and labor costs. With this in perspective lets concentrate on the results from my trial this year.

Methods

This evaluation was conducted at O. J. Noer Turfgrass Research and Education Facility on the newly established creeping bentgrass maintained under golf course green management conditions, at 0.20 inch cutting height. Individual plots, 3 ft x 10 ft, were arranged in a randomized complete block design with three replications. The experimental area was inoculated on August 12. Treatments were applied with a CO2-powered boom sprayer, using XR Teejet 8008 VS nozzles, at 30 psi, in water equivalent to 3 gal per 1000 sq ft. All applications were initiated on August 5, 1997. Fourteen day applications were also applied on August 17 and September 2. Twenty-one day applications were reapplied on August 25. Number of infection centers per square foot, three subsamples per plot, were rated on August 25, September 3, & 12.

Results

The results of my field trial this year are on the next page (Table 1). For the most part, almost every chemical provided satisfactory control. However some of these required at least two applications before satisfactory control was obtained. Treatments in italics are part of the reduced-rate mixture study, and are applied at non-conventional rates and timings. However, their full rate was included as a comparison on a 21 day application schedule. Some chemicals seem to have slight phytotoxic effects on the turf. Mainly darkening of the turf and some thinning was noted. These treatments included the following: Banner Maxx 1.0 fl. oz. + Heritage 0.2 oz., Banner Maxx 1.0 fl. oz. + Daconil Ultrex 3.8 oz., Sentinel 0.167 oz. + Heritage 0.2 oz., Sentinel 0.167 oz. + Daconil Ultrex 3.8 oz., *Banner Maxx 0.22* fl. oz., *Banner Maxx 2.0* fl. oz., *Rubigan 1.5* fl. oz. This is not astonishing information as these chemicals are in the DMI family of fungicides, all of which possess the possibility of growth regulation. So if you are dealing with high populations of annual bluegrass, or have growth regulators in your management practices they should be used with caution. This effect

would probably be more pronounced on greens height of cut, than fairways or tees, do to the increased stress factors. The Chipco Aliette and Fore mixture had limited control, but was better than the untreated check.

As my results have proven, the possibility of using reduced-rate mixtures in a dollar spot management regime are well suited for this task. One year's results are not enough to bank a total switch in your management practices, so this will be replicated again next year. I will also be testing them next year on the course that probably has developed *Sclerotinia homoeocarpa* resistance. I will also include some of them in my brown patch control trial at the O.J. Noer to see their efficacy on this disease.

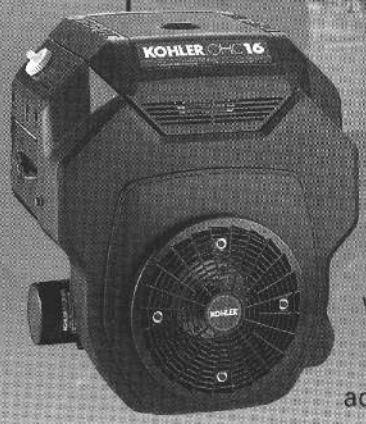
TABLE 1. Number of Dollar Spot Infection Centers per Square Foot

Table 1. Number of Dollar Spot Infection Centers per Square Foot

Trt. #	Treatment	Form.	Rate	Rate Unit	Interval	8-25 Rating		St. Dev.	9-3 Rating		St. Dev.	9-12 Rating		St. Dev.
1	ECHO	75 WDG	4.2	OZ/1000 FT2	10 DAY	4.3	g-q	2.3	4.0	cdef	2.5	0.1	g	0.3
2	ECHO	6 F	6.0	FL OZ/1000 FT2	10 DAY	3.1	j-q	2.1	4.0	cdef	2.3	0.4	g	0.7
3	BANNER MAXX	1.24 MC	1.0	FL OZ/1000 FT2	21 DAY	7.6	c-k	3.4	0.0	f	0.0	0.0	g	0.0
	HERITAGE	50 WDG	0.2	OZ/1000 FT2										
4	BANNER MAXX	1.24 MC	1.0	FL OZ/1000 FT2	21 DAY	3.3	i-q	2.1	0.0	f	0.0	0.0	g	0.0
	DACONIL ULTREX	82.5 WDG	3.8	OZ/1000 FT2										
5	SENTINEL	40 WDG	0.167	OZ/1000 FT2	21 DAY	6.0	d-o	4.3	0.0	f	0.0	0.0	g	0.0
	HERITAGE	50 WDG	0.2	OZ/1000 FT2										
6	SENTINEL	40 WDG	0.167	OZ/1000 FT2	21 DAY	2.0	n-q	2.6	0.0	f	0.0	0.0	g	0.0
	DACONIL ULTREX	82.5 WDG	3.8	OZ/1000 FT2										
7	CHIPCO 26019 FLO	2 SC	2.0	FL OZ/1000 FT2	14 DAY	1.1	pq	1.1	4.6	cdef	1.9	1.3	fg	2.4
8	CHIPCO 26019 FLO	2 SC	3.0	FL OZ/1000 FT2	14 DAY	3.0	k-q	2.6	5.4	cdef	2.4	0.0	g	0.0
9	CHIPCO 26019 FLO	2 SC	4.0	FL OZ/1000 FT2	14 DAY	1.3	opq	0.9	4.9	cdef	2.6	0.0	g	0.0
10	CHIPCO 26 GT	2 SC	2.0	FL OZ/1000 FT2	14 DAY	3.0	k-q	2.6	7.4	cd	3.7	0.0	g	0.0
11	CHIPCO 26 GT	2 SC	3.0	FL OZ/1000 FT2	14 DAY	2.2	m-q	1.7	6.7	cde	3.9	0.1	g	0.3
12	CHIPCO 26 GT	2 SC	4.0	FL OZ/1000 FT2	14 DAY	2.1	m-q	2.1	6.7	cde	6.3	0.0	g	0.0
13	EXP10702B	2 SC	2.0	FL OZ/1000 FT2	14 DAY	2.1	m-q	0.9	9.0	c	7.6	0.1	g	0.3
14	EXP10702B	2 SC	3.0	FL OZ/1000 FT2	14 DAY	0.4	q	0.5	9.0	c	6.2	0.1	g	0.3
15	EXP10702B	2 SC	4.0	FL OZ/1000 FT2	14 DAY	2.6	l-q	2.2	4.8	cdef	2.8	0.1	g	0.3
16	----------	----------	-----	----------	-------	15.6	a	8.5	26.8	a	9.8	18.6	a	5.7
17	----------	----------	-----	----------	-------	11.1	bc	4.2	15.1	b	6.6	12.0	c	6.5
18	EXP80318A	1.67 SC	0.5	FL OZ/1000 FT2	14 DAY	0.6	q	0.7	0.9	f	1.4	0.0	g	0.0
19	EXP80318A	1.67 SC	1.0	FL OZ/1000 FT2	14 DAY	0.7	q	0.7	0.6	f	0.7	0.0	g	0.0
20	DACONIL ULTREX	82.5 WDG	3.8	OZ/1000 FT2	14 DAY	1.6	n-q	1.7	3.6	cdef	2.0	1.1	fg	2.0
21	DACONIL ZN	4.17 F	6.0	FL OZ/1000 FT2	14 DAY	0.8	q	1.1	3.1	def	1.3	0.0	g	0.0
22	CHIPCO ALIETTE SIG	80 WDG	4.0	OZ/1000 FT2	14 DAY	2.3	m-q	2.6	4.9	cdef	3.1	0.0	g	0.0
	CHIPCO 26 GT	2 SC	4.0	FL OZ/1000 FT2										
23	CHIPCO ALIETTE	80 WDG	4.0	OZ/1000 FT2	14 DAY	8.1	c-h	5.9	16.0	b	8.7	7.0	d	5.1
	FORE FLO	4 SC	13.0	FL OZ/1000 FT2										
24	CHIPCO ALIETTE SIG	80 WDG	4.0	OZ/1000 FT2	14 DAY	2.0	n-q	1.4	4.0	cdef	1.9	0.0	g	0.0
	DACONIL ULTREX	82.5 WDG	3.8	OZ/1000 FT2										
25	*DACONIL ULTREX*	*82.5 WDG*	*2.5*	*OZ/1000 FT2*	*21 DAY*	8.9	c-g	3.9	0.8	f	0.8	2.7	f	1.7
26	*DACONIL ULTREX*	*82.5 WDG*	*3.8*	*OZ/1000 FT2*	*21 DAY*	9.7	b-e	4.9	2.4	def	1.8	2.7	f	1.7
27	*BAYLETON*	*25 DF*	*0.11*	*OZ/1000 FT2*	*21 DAY*	10.2	bcd	3.8	4.9	cdef	2.0	4.8	e	2.2
28	*BAYLETON*	*25 DF*	*1.0*	*OZ/1000 FT2*	*21 DAY*	2.2	m-q	1.3	0.1	f	0.3	0.0	g	0.0
29	*BANNER MAXX*	*1.24 MC*	*0.22*	*FL OZ/1000 FT2*	*21 DAY*	8.0	c-i	4.2	1.3	ef	1.2	0.7	fg	1.3
30	*BANNER MAXX*	*1.24 MC*	*2.0*	*FL OZ/1000 FT2*	*21 DAY*	2.9	k-q	2.4	0.4	f	0.5	0.0	g	0.0
31	*RUBIGAN*	*1 SC*	*0.5*	*FL OZ/1000 FT2*	*21 DAY*	7.2	c-l	3.5	3.6	cdef	1.4	0.8	fg	1.2
32	*RUBIGAN*	*1 SC*	*1.5*	*FL OZ/1000 FT2*	*21 DAY*	6.9	c-m	3.9	1.1	f	1.1	0.0	g	0.0
33	*CHIPCO 26 GT*	*2 SC*	*2.0*	*FL OZ/1000 FT2*	*21 DAY*	9.1	c-f	3.7	0.2	f	0.4	0.9	fg	2.0
34	*CHIPCO 26 GT*	*2 SC*	*3.0*	*FL OZ/1000 FT2*	*21 DAY*	10.3	bcd	6.1	2.3	def	1.9	0.1	g	0.3
35	*FUNGO FLO*	*4.5 F*	*0.25*	*FL OZ/1000 FT2*	*21 DAY*	7.9	c-i	4.0	1.6	ef	1.8	0.0	g	0.0
36	*FUNGO FLO*	*4.5 F*	*2.0*	*FL OZ/1000 FT2*	*21 DAY*	0.4	q	0.5	0.0	f	0.0	0.0	g	0.0
37	*DACONIL ULTREX*	*82.5 WDG*	*2.5*	*OZ/1000 FT2*	*21 DAY*	7.1	c-l	2.8	0.2	f	0.7	0.0	g	0.0
	FUNGO FLO	*4.5 F*	*0.25*	*FL OZ/1000 FT2*										
	CHIPCO 26 GT	*2 SC*	*2.0*	*FL OZ/1000 FT2*										
38	*DACONIL ULTREX*	*82.5 WDG*	*2.5*	*OZ/1000 FT2*	*21 DAY*	6.2	d-n	4.5	0.8	f	1.0	0.0	g	0.0
	CHIPCO 26 GT	*2 SC*	*2.0*	*FL OZ/1000 FT2*										
	BAYLETON	*25 DF*	*0.11*	*OZ/1000 FT2*										
39	*DACONIL ULTREX*	*82.5 WDG*	*2.5*	*OZ/1000 FT2*	*21 DAY*	5.7	d-p	3.5	0.2	f	0.4	0.1	g	0.3
	CHIPCO 26 GT	*2 SC*	*2.0*	*FL OZ/1000 FT2*										
	BANNER MAXX	*1.24 MC*	*0.22*	*FL OZ/1000 FT2*										
40	*DACONIL ULTREX*	*82.5 WDG*	*2.5*	*OZ/1000 FT2*	*21 DAY*	5.1	e-q	1.7	0.1	f	0.3	0.0	g	0.0
	CHIPCO 26 GT	*2 SC*	*2.0*	*FL OZ/1000 FT2*										
	RUBIGAN	*1 SC*	*0.5*	*FL OZ/1000 FT2*										
41	*DACONIL ULTREX*	*82.5 WDG*	*2.5*	*OZ/1000 FT2*	*21 DAY*	2.7	l-q	1.3	0.4	f	0.5	0.0	g	0.0
	FUNGO FLO	*4.5 F*	*0.25*	*FL OZ/1000 FT2*										
	BAYLETON	*25 DF*	*0.11*	*OZ/1000 FT2*										
42	*DACONIL ULTREX*	*82.5 WDG*	*2.5*	*OZ/1000 FT2*	*21 DAY*	4.2	g-q	2.7	0.8	f	1.0	0.0	g	0.0
	FUNGO FLO	*4.5 F*	*0.25*	*FL OZ/1000 FT2*										
	BANNER MAXX	*1.24 MC*	*0.22*	*FL OZ/1000 FT2*										
43	*DACONIL ULTREX*	*82.5 WDG*	*2.5*	*OZ/1000 FT2*	*21 DAY*	10.1	bcd	6.1	0.3	f	0.5	0.0	g	0.0
	FUNGO FLO	*4.5 F*	*0.25*	*FL OZ/1000 FT2*										
	RUBIGAN	*1 SC*	*0.5*	*FL OZ/1000 FT2*										
44	*CHIPCO 26 GT*	*2 SC*	*2.0*	*FL OZ/1000 FT2*	*21 DAY*	7.8	c-j	2.8	0.0	f	0.0	0.0	g	0.0
	FUNGO FLO	*4.5 F*	*0.25*	*FL OZ/1000 FT2*										
	BAYLETON	*25 DF*	*0.11*	*OZ/1000 FT2*										
45	*CHIPCO 26 GT*	*2 SC*	*2.0*	*FL OZ/1000 FT2*	*21 DAY*	4.9	f-q	2.7	0.0	f	0.0	0.0	g	0.0
	FUNGO FLO	*4.5 F*	*0.25*	*FL OZ/1000 FT2*										
	BANNER MAXX	*1.24 EC*	*0.22*	*FL OZ/1000 FT2*										
46	*CHIPCO 26 GT*	*2 SC*	*2.0*	*FL OZ/1000 FT2*	*21 DAY*	3.6	h-q	2.0	0.1	f	0.3	0.0	g	0.0
	FUNGO FLO	*4.5 F*	*0.25*	*FL OZ/1000 FT2*										
	RUBIGAN	*1 SC*	*0.5*	*FL OZ/1000 FT2*										
47	EAGLE	40 WP	0.6	OZ/1000 FT2	21 DAY	2.1	m-q	1.3	0.2	f	0.7	0.0	g	0.0
48	CHECK					13.9	ab	8.7	27.8	a	8.2	13.9	b	7.9
LSD (P=.05)								3.87			4.5			1.84
Standard Deviation								2.39			2.78			1.14
CV								47.07			69.92			81.0

Means followed by the same letter do not significantly differ (p= 05, Duncan's New MRT)
* All treatments in italics are part of the reduced-rate fungicide mixture study

AN ENGINE THIS QUIET WAS LONG OVERDUE.



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