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CORNELL UNIVERSITY TURFGRASS TIMES

Winning Fields Program

If you have responsibility for athletic field maintenance, you should attend the *Winning Fields* program sponsored by the New York State Turfgrass Association (NYSTA), Cornell University and the New York State Association for Superintendents of School Buildings and Grounds. The program will be held September 19, 1996 at Doubleday Field in Cooperstown, NY from 8:00 am – 3:00 pm.

The goal of the program is to provide an educational experience that addresses basic and advanced topics with emphasis on understanding the fundamental principles of sports turf management. Speakers include Frank Rossi of Cornell, Bob Emmons of SUNY Cobleskill, Dominic Morales of SUNY Delhi, John Liburdi, Jr. of Heritage Park, Jim Hornung of North Americare Park, and Joe Harris of Doubleday Field. Up to 7 DEC pesticide recertification credits may be earned by attending the program.

The registration fee for NYSTA members is \$50 (nonmembers \$60) and includes all seminars, coffee breaks and lunch. There also will be a commercial vendor exhibit area. For further information about attending the *Winning Fields* program contact NYSTA, PO Box 612, Latham, NY 12110, (800) 873-TURF, (518) 783-1229, fax (518) 783-1258. For information on exhibiting at the program contact Jim Hornung (716) 851-4179, or John Liburdi, Jr. (518) 869-2054.

Grow with Us! 1996 New York State Turfgrass and Grounds Exposition

Excitement is building towards the 1996 New York State Turfgrass and Grounds EXPO to be held November 12-15, 1996 at the Rochester Convention Center.

The theme for the 1996 EXPO "Grow with Us" exemplifies the tremendous growth in attendance and improvement in the educational program over the last 48 years. Also, it illustrates the "next generation" of the turfgrass conference to be held in 1997 at the OnCenter in Syracuse. Most importantly, the 1996 show will help us bid farewell to Rochester on a high note with an exciting educational program organized cooperatively by the New York State Turfgrass Association and the Cornell Turfgrass Team!

The traditional Tuesday one-day seminars brings us "Back to Basics", but also adds 3

exciting programs including "A Tree Workshop with Alex Shigo", and a Golf Course Construction seminar lead by Dominic Morales, the Delhi Professor who was responsible for "Bringing it All Together" with the addition of 9 holes to the Delhi College Course. Headlining that seminar are Dr. Michael Hurdzan and former Cornell Turfgrass Team member Dr. Norm Hummel. And rounding out the lineup on Tuesday is the first ever, Sports Turf Seminar with a full-day program that addresses sports turf soils, drainage, irrigation, renovation, and infield care.

The excitement grows on Wednesday with the Keynote Speech from Paul Maguire, former Buffalo Bill and now a color analyst with NBC Sports. Then the breakout sessions with international experts such as Dr. James Beard, Dr. David Minner, the inventor of SportGrass, renowned author Bob Emmons and of course your Cornell Turfgrass Team Members (Villani, Neal, Nelson, Ferrentino, Gruttadaurio, Petrovic, White, and Rossi). A special general session is planned for Thursday afternoon with Mr. Michael Zagata, the Commissioner of the New York State Department of Environmental Conservation, speaking on "Future Directions of the DEC". Following Commissioner Zagata, the Dean of the College of Agriculture and Life Sciences at Cornell, Dr. Daryl Lund will discuss future partnerships among the turf industries and Cornell, later Dr. Frank Rossi will provide his vision of the New York State Turfgrass Industry.

Once again the Trade Show is sure to be the largest display of turfgrass equipment and wares

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"The Seed Police?"

Did you ever wonder if what you purchase in a bag of seed is actually what the label says it is? A Registered Seed Technologist is one of the few reliable resources for accurately determining seed purity and viability, yet, what if you wanted to know the variety?

Researcher's at Ohio State University in Dr. Karl Danneberger's laboratory (Dr. Patty Sweeney and Rob Golembiewski) utilized current analytical techniques for effective discrimination of turfgrass varieties. In developing a protocol procedure, varieties of chewings fescue, creeping bentgrass, Kentucky bluegrass, tall fescue, and perennial ryegrass were tested.

The two questions that the researchers addressed were 1) could current genetic techniques be used to discriminate turfgrass varieties from seed, and 2) could genetic material from a single seed be used for variety identification. The answer to both questions was yes! Several university laboratories throughout the country could provide this service.

(From: Patricia Sweeney, R. Golembiewski, and K. Danneberger. 1996. Random Amplified Polymorphic DNA Analysis of Dry Turfgrass Seed. HortScience 31(3):400-401.)

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lest the national shows. Also, many new products are sneak previewed only for attendees of the EXPO. Preliminary programs have been mailed to NYSTA members, so register now! If you'd like more information, contact Beth Seme, Executive Director of the New York State Turfgrass Association, at (800) 873-TURF(8873).

Farewell From Joe Neal

Joe Neal, Associate Professor of Weed Science, couldn't leave without saying a personal goodbye—Ed.

You may recall from the last issue of *CUTT* that I will be leaving Cornell to accept a similar position at North Carolina State University. I could not leave without thanking you and the turfgrass and landscape industry organizations for the support, encouragement, and friendships offered so freely over the past twelve years. My decision to leave has more to do with opportunities and family ties in North Carolina than with

Nitrogen Fertilization and Brown Patch

The goal of an Integrated Pest Management (IPM) program is to maximize plant health so that as stress and pest pressures increase the plant is able to maintain acceptable quality. Several questions arise from the examination of this goal. How do you know if your plant is healthy? Even if the plant is healthy, if pest pressure is severe, will the plant be attacked? An of course, what is acceptable quality?

Researchers at the University of Maryland, Dr. Michael Fidanza and Dr. Peter Dernoeden, investigated the interaction among nitrogen source, application timing, and fungicide on Rhizoctonia Blight (brown patch) on perennial ryegrass maintained at golf course fairway height. With the scarcity of information available regarding the influence of turfgrass nutrition on disease incidence and severity, this is important research. The research focused on spring vs. fall emphasized fertilization programs of Ringer's Lawn Restore (a slow release nitrogen source) and water soluble urea. The interesting aspect of the work was the fungicide treatment. Ipridione (Chipco 26019 among others) was applied at the recommended rate, but at 21 day intervals as opposed to the 10 to 14 day interval on the label to determine if N fertilization influenced disease severity (i.e. will the brown patch kill the turf?).

In general, the plots not treated with the fungicide did not maintain acceptable quality as a result of severe brown patch infestation. In addition, spring N fertilization enhanced growth of the fungus during the initial infection periods from late June to late July in Maryland. However, there was a significant reduction in brown patch associated with the fall emphasized program of Ringer's Lawn Restore as compared to the spring program with water soluble urea. While the reduction was significant, the turf quality was deemed unacceptable for golf course fairway turf.

These results support the work of our Dr. Eric Nelson, who observed reduced brown patch when using Lawn Restore back in 1990! Furthermore, the Maryland researchers concluded, "in regions where brown patch is not a chronic and sever disease problem, fungicide application frequency may not be as important as it was under conditions of this study". A conclusion that truly challenges us to practice IPM.

(From: Michael Fidanza and P. Dernoeden. 1996 Interaction of Nitrogen Source, Application Timing, Fungicide on Rhizoctonia Blight in Ryegrass. HortScience 31(3):389-392.)



Scanning the Journals

A review of current journal articles

The researchers asked:
1) could current genetic techniques be used to discriminate turfgrass varieties from seed, and 2) could genetic material from a single seed be used for variety identification. The answer to both questions was yes!

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Cultivar	Visual Quality										Pest Damage	
	Spring Color	May	June	July	Aug.	Sept.	Fall Color	1995 Mean	3 Year Mean	Cutworm*	NRS**	
Alpine	2.9	4.2	8.8	8.4	7.2	6.8	6.7	7.1	7.6	0.3	1.3	
Cynthia	7.1	7.4	6.5	6.8	6.0	6.7	6.6	6.7	7.3	2.8	4.8	
Asset	7.3	7.7	7.3	7.6	6.0	6.8	6.6	7.1	7.3	0.0	0.5	
Touchdown	7.1	7.4	7.2	7.6	6.6	7.4	7.3	7.2	7.2	0.0	0.3	
Indigo	5.7	6.0	6.5	6.8	6.3	7.1	6.9	6.5	7.2	0.0	0.3	
Welcome	6.8	7.2	7.2	7.6	5.8	6.6	6.4	6.9	7.2	0.3	1.0	
Eclipse	6.8	5.6	6.8	7.2	6.2	7.0	6.9	6.6	7.1	0.0	1.0	
Bristol	6.7	7.0	5.9	6.2	5.9	6.6	6.5	6.3	7.0	0.0	2.0	
Enmundi	6.8	7.2	6.6	7.0	6.0	6.7	6.6	6.7	7.0	1.5	2.8	
Adelphi	7.2	6.7	7.2	7.6	6.2	6.9	6.8	6.9	7.0	0.0	0.8	
Bronco	7.8	8.2	6.7	7.0	6.5	7.3	7.1	7.1	7.0	0.0	1.0	
Midnight	5.7	6.0	5.6	5.9	6.2	6.9	6.8	6.1	7.0	1.5	3.3	
Ram I	7.3	7.7	6.7	7.1	5.8	6.5	6.3	6.7	6.9	5.5	7.8	
America	4.3	4.5	6.5	6.8	5.9	6.6	6.4	6.0	6.9	1.0	2.3	
Glade	5.9	6.2	6.8	7.1	6.6	7.4	7.2	6.8	6.9	0.5	0.8	
/icta	6.2	6.5	6.0	6.3	5.9	6.6	6.5	6.3	6.8	0.0	0.5	
Crest	6.2	6.5	6.1	6.4	5.7	6.4	6.3	6.2	6.8	3.0	5.3	
Coventry	4.6	4.8	7.2	7.6	5.4	6.1	6.0	6.2	6.7	0.3	0.8	
Banff	5.7	6.0	5.5	5.7	5.8	6.6	6.9	5.9	6.7	0.0	0.0	
Liberty	6.8	5.9	5.8	6.1	6.1	6.9	6.7	6.1	6.6	0.3	2.0	
LSD (0.05)	0.9	0.7	0.6	0.8	0.3	0.3	0.4	0.4	0.5	1.0	1.5	

* Cutworm damage rated on a scale of 0 to 9, where 0=no damage, 9=severe damage.

** NRS is the incidence of necrotic ringspot rated on a scale of 0 to 9, where 0=no disease, 9=severe disease.

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any dissatisfaction with Cornell. I have truly enjoyed working with my colleagues at Cornell, the Extension agents, and your industry organizations to provide weed management guidelines and educational opportunities. While my departure will leave a temporary void, you still have at Cornell one of the best turfgrass management teams in the country. I'm sure you will continue to support them as they work to help you and your industry.

I will miss my friends and colleagues at Cornell and throughout New York, but take with me many fond memories and all that I have learned from you (well, maybe not all but at least as much as an absentminded professor can retain). I bid you a fond farewell but look forward to seeing many of you at the NYSTA conference in November.

Cornell Turf Short Course Announced

The 12th annual Cornell Cooperative Extension Turfgrass Management Short Course will be held in Ithaca, NY January 6-10 and 13-17, 1997.

The 2-week long Short Course includes 75 teaching hours focusing on the principles of turfgrass establishment and maintenance. Topics studied include grass morphology, identification and selection; principles of soils, drainage, irrigation, fertilization, cultivation, and renovation; and pest management topics including identification and control strategies for insects, diseases and weeds. Additional subjects covered for professional development include developing budgets, communication skills, customer relations, motivation in management, developing turfgrass management strategies, and the selection, establishment and maintenance of ornamentals.

Forty instructors and assistants from Cornell University's Turfgrass Science Program, SUNY Agricultural and Technical Colleges at Cobleskill and Delhi, and the turfgrass industry

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	Visual Quality									Pest Damage*	
Cultivar	Spring Color	May	June	July	Aug.	Sept.	Fall Color	1995 Mean	Typhula Snow Mold	Brown Patch	
G-6	5.5	7.7	7.4	8.0	7.0	8.1	8.8	7.6	2.3	2.3	
Cato	5.2	7.4	7.0	7.6	6.6	7.8	8.5	7.3	0.7	0.7	
G-2	5.7	6.9	7.1	7.7	6.7	7.8	8.5	7.3	2.2	2.2	
BAR Ws42102	5.2	6.4	6.9	7.5	6.5	7.4	8.1	6.9	1.2	1.2	
Providence	5.7	6.8	6.6	7.1	6.2	7.8	8.4	6.9	1.3	1.3	
Crenshaw	6.1	7.5	6.3	6.9	6.0	7.2	7.9	6.8	2.8	2.8	
Southshore	5.5	6.6	6.6	7.2	6.3	6.9	7.5	6.7	2.7	2.7	
P. Links/Putter	6.5	7.4	6.2	6.7	5.9	7.3	8.0	6.7	3.0	3.0	
Penneagle	6.6	6.5	6.5	7.0	6.2	7.0	7.6	6.6	1.8	1.8	
Trueline	5.7	6.6	6.4	7.0	6.1	6.8	7.4	6.6	4.0	4.0	
Lopez	5.7	7.0	6.2	6.8	5.9	6.8	7.4	6.5	3.7	3.7	
18th Green	5.2	7.1	6.2	6.8	5.9	6.5	7.0	6.5	1.5	1.5	
Pro/Cup	5.7	6.7	6.1	6.6	5.8	7.0	7.6	6.4	1.5	1.5	
DF-1	5.5	6.6	5.9	6.5	5.7	7.2	7.8	6.4	3.3	3.3	
BAR As493	5.2	7.7	5.6	6.1	5.3	6.6	7.2	6.3	2.7	2.7	
ISI-At-90162	5.7	7.4	5.6	6.1	5.3	6.8	7.4	6.3	2.7	2.7	
Penncross	5.7	7.4	5.6	6.0	5.3	6.6	7.2	6.2	3.2	3.2	
OM-At-90163	5.7	7.1	5.5	5.9	5.2	7.0	7.6	6.1	1.5	1.5	
SR 7100	7.0	7.5	5.2	5.7	5.0	6.7	7.3	6.0	3.2	3.2	
Med 20685	6.1	6.7	5.4	5.9	5.2	6.7	7.2	6.0	4.5	4.5	
Med 20695	5.5	7.0	5.3	5.8	5.0	6.8	7.4	6.0	2.7	2.7	
Med 21149	5.8	7.1	5.4	5.8	5.1	6.4	7.0	6.0	3.5	3.5	
Med CB 46-2	5.5	7.1	5.5	6.0	5.2	5.6	6.1	5.9	4.0	4.0	
Med 20556	5.9	7.1	5.1	5.6	4.9	6.7	7.3	5.9	3.3	3.3	
Med 20686	5.7	7.1	5.2	5.7	5.0	6.4	7.0	5.9	4.2	4.2	
Exeter	6.1	7.0	5.2	5.6	4.9	6.6	7.1	5.8	0.8	0.8	
Med 20693	5.6	7.1	5.1	5.5	4.8	6.5	7.0	5.8	3.3	3.3	
Tendez	5.7	7.2	4.8	5.3	4.6	6.7	7.2	5.7	2.0	2.0	
Med 46-1	5.6	7.0	5.1	5.5	4.8	5.3	5.8	5.5	3.0	3.0	
Seaside	6.4	6.4	3.8	4.2	3.6	5.3	5.8	4.7	2.2	2.2	
LSD (0.05)	0.5	0.7	0.4	0.5	0.8	0.6	0.4	0.3	0.4	0.6	

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are involved in teaching the lectures and laboratories. Class enrollment is limited to 75 participants.

A pass/fail final exam is given at the end of the course to assess achievement of the course's educational goals from both the instructor's perspective as well as from the student's perspective. A Certificate of Completion is awarded at the end of the course.

The Short Course satisfies the New York State requirement for the 30-hour eligibility course for pesticide certification and 15 pesticide recertification credits are given upon course completion.

If you have any questions or would like to receive a registration form contact Joann Gruttadaurio, Short Course Director, at (607) 255-1792. Registration forms will be mailed to you in late October.

Pest Watch

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Typhula blight are not always effective against pink snow mold. Among the better choices for fungicide applications are chlorothalonil (e.g., Daconil 2787 40F) applied at 8 oz/1,000 sq. ft. or propiconazole (Banner 1.1E) applied at 4 oz/ 1,000 sq. ft. These fungicides are usually applied in late October to early December. Banner should be applied toward the early part of that window whereas Daconil may be applied in early December prior to snow cover.

In the spring, be sure to rake out any diseased areas to facilitate drying and fertilize to promote turfgrass growth. Snow molds generally are not devastating, but, if left untreated, could destroy vast areas of turf. So take some time now to prepare your turf for next spring.

ERIC NELSON DEPT. OF PLANT PATHOLOGY Snow molds generally are not devastating, but, if left untreated, could destroy vast areas of turf. So take some time now to prepare your turf for next spring.

