**Safety in American Football**

A symposium held in 1994 by the American Society for Testing and Materials (ASTM) culminated in the publication of a book titled, *Safety in American Football*. This text, edited by Earl F. Hoerner, is a compilation of scientific review articles presented at the symposium which focused on understanding and minimizing the risk associated with the game of American Football.

There is something for everyone who might be associated with the game of football in this text, from coaches training and communication, to certifying protective equipment, to field standards and performance. This is a valuable text for opening a dialogue within a community where administrators, athletic directors, coaches, and sports turf managers need to coordinate activities to maximize safety. The section on managing the field surface includes researchers from Penn State, Michigan State and Texas A & M. This is a text filled with loads of technical material and data that address issues such as peak deceleration, degrees of rotation and shear resistance when studying surface traction. Copies are available from the ASTM, 100 Barr Harbor Dr., West Conshohocken, PA 19428.

**The 1997 New York State Turfgrass and Grounds EXPO is Set!**

The Turfgrass and Grounds EXPO is returning this November to Syracuse, NY for the first time in over a decade to the brand new OnCenter Convention Center and the historic Hotel Syracuse. Headlining the conference is former Washington Redskin quarterback and ESPN’s #1 football analyst, Joe Theismann.

The 1997 EXPO has expanded educational offerings from industry leaders from around the world to address issues important to turf managers in the northeast. One day seminars include golf course reconstruction and renovation with renowned architect Craig Schriener; sports turf management techniques with safety gurus Floyd Perry and Dave Mellor of the Milwaukee Brewers; and a full day on turfgrass irrigation systems with GCSAA seminar instructor Brian Vinchesi. Other program highlights include a session on alternative pest management on the golf course with Dr. Joe Vargas and Cornell’s own Dr. Eric Nelson; and a session on the new bentgrasses with superintendents growing the upright bents.

For lawn and landscape managers, there will be a session on marketing a natural look with native plants and trees for low maintenance, followed by Audubon International representatives who will discuss the backyard and school yard sanctuary program. In addition, there will

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**Winning Fields**

The New York State Turfgrass Association (NYSTA) in cooperation with the Cornell Turfgrass Program and the Association of Superintendents of Buildings and Grounds continued a tradition of reaching new audiences with the 1997 Sports Turf Tour: *Winning Fields*.

Over 100 sports turf and grounds managers from across the state attended the two premier locations at Dutchess Stadium and on the campus of SUNY Potsdam. Lively and interactive training sessions on sports turf management included topics ranging from fertilization and watering, to Integrated Pest Management (IPM) and communication. The faculty was led by John Liburdi, town of Colonie, and Kevin Trotta, North Rockland Schools; with Dominic Morales, program leader at SUNY Delhi, and Dr. Frank Rossi, Extension Specialist with the Cornell University Turfgrass Team. NYSTA is planning another *Winning Fields* sports turf tour for 1998.
Tall Fescue Seed Inhibits Clover Infestation

A research group in Arkansas investigated the influence of germinating seedlings of tall fescue (Festuca arundinacea) on the growth and development of several clover species. This work was conducted in a forage management situation with a forage type tall fescue cultivar and five clover species including white clover (Trifolium repens).

Standard methods of determining the allelopathic effects of one species on another were utilized, i.e., extracts of one species were introduced into pots where the weed species was growing. This was not conducted under field conditions. Still, this is not the first report of allelopathy with tall fescue species. Several years ago another research group in Arkansas identified the influence of turf type tall fescue cultivars on crabgrass infestation. No peer reviewed report is available from those studies.

Allelopathy is the influence of one species on the growth of another species. This influence can be physical, as in the shading of light or being under debris, or it can be chemical where one species exudes a chemical that alters the growth of another species. This research on tall fescue identified a subtle effect of endophyte-infected tall fescue on the growth of clover. As concern over the use of pesticides grows, an improved understanding of these types of plant interactions will be essential to maintaining high quality, functional turf stands.


Seed Priming

Turfgrass establishment from seed is both the most critical time in the life of a stand and also the hardest to control the many variables associated with success. Germination time, seedling emergence and seedling development all influence the species and possibly the cultivars that will be selected. Kentucky bluegrasses have been difficult in this vein resulting from their extended time of establishment (up to 4 to 6 weeks). Therefore, seed priming, which is a preplant treatment that alters the hydration process of germination and subsequently reduces the establishment time, is being investigated.

Seed priming can be accomplished using an osmoticum such as salt or polyethylene glycol (PEG), or through solid matrix priming (SMP) with compounds that have a high water holding capacity such as soft coal, leonardite or sphagnum moss. An experiment was conducted at Penn State University to investigate the viability of SMP as a means of enhancing cool-season turfgrass (bluegrass, ryegrass and tall fescue) establishment. Field experiments indicated that success of SMP treatment was dependent on species and cultivars. Still, the researchers concluded that SMP seed could be desirable under cool periods when seedling emergence would be reduced or for quick establishment.

In a separate experiment conducted on Kentucky bluegrass, SMP seed did not directly increase seedling growth rate, however, seedlings were larger. Again, this could be desirable for enhanced establishment under suboptimal conditions.

The Field Day is a wonderful opportunity to touch base with Cornell’s extensive turf activities in an efficient one-day format.

Cornell University’s Turfgrass Program announces its summer Field Day to be held at the Turfgrass Field Research Laboratory in Ithaca on Tuesday August 26, 1997.

The popular annual event gets underway at 8:00 am and features educational sessions, a trade show, an electronic technology demonstration, diagnostic exercises, a turf quiz, Integrated Pest Management techniques, and soil testing demonstrations.

Following a famous Cornell-recipe chicken barbecue luncheon, the afternoon session will tour current research projects including plant growth regulators, physical soil amendments and pesticide leaching, nematodes for grub control, microbial ecology of composts, nontarget effects of fungicides, personnel management, safe storage of pesticides, crabgrass control, selecting bluegrasses, and bentgrass establishment.

Cornell’s turfgrass program is dedicated to developing efficient turfgrass management systems based on sound scientific research information. Emphasis is placed on improving cultural management by increasing stress tolerance; providing a greater understanding of turf pest ecology to reduce pesticide usage and minimize environmental impacts; and establishing a core educational curriculum delivered by emerging and traditional strategies to meet the current and evolving needs of the turf industry and society at large.

Preregistration before August 11 is $30. After August 11, the registration fee is $40. The fee covers all events and materials. The Field Day is a wonderful opportunity to touch base with Cornell’s extensive turf activities in an efficient one-day format. The event is sponsored by the Cornell Turfgrass Program in cooperation with the New York State Turfgrass Association. New York State DEC pesticide credits will be available.

For further information, contact Kelly Woodhouse at (607) 255-3090.

Make your plans now to attend Cornell’s Turfgrass Short Course in January 1998.

Cornell Turfgrass Short Course

“The Tradition of Excellence Continues”

The cornerstone of the Cornell Turfgrass Program’s outreach efforts is the intensive two week experience known as the Cornell Turfgrass Short Course. Over the last 12 years the course has grown in quantity and quality of information presented and boasts over 800 alumni around the world. This is a must-attend event for turfgrass managers new to the industry as well as for managers who have never had formal training. It serves as a comprehensive review of topics ranging from the basic scientific principles of grasses and soils, to the research behind turfgrass and environmental management practices. Specific case study work is developed for golf turf, sports turf and lawn care managers integrating the concepts learned during the course with practical experience from industry leaders and students. As a result of the overwhelming response to the January course in Ithaca on the Cornell campus, a second two week session is being held on Long Island in late February. If you’d like more information on the Short Course, contact Kelly Woodhouse at (607) 255-3090.