

new jersey turfgrass association



clippings &

Green
World



Summer 2007 | VOL 67

Welcome to the

Rutgers Turfgrass Research Field Day



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Inside this issue:

- ▷ **Pictorial Review - Field Days**
- ▷ **Green Expo Schedule and Seminars**
- ▷ **Green Expo Registration Form**



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President's Message

by Chris Carson, NJTA President

Progress... and Passion!

As I approach the end of the presidency of NJTA, I've been looking back at and digesting the amazing success story of our Association. As members you should know that your Board has been working hard for many years to grow, improve and –at times- correct what we do and how we do it.

Let's take a look at the Rutgers Turf Field Days, for example. Ten years ago, attendance was poor at this important display of the great science being undertaken on our behalf by the Center for Turfgrass Science... and we didn't understand why. Working with Center Director Dr. Bruce Clarke, we worked collaboratively to find ways to improve the situation, and improve it we did.

The first and most important step was the decision to separate the Field Days into two: one dedicated to Golf and Fine Turf, the other to Sports and Lawn/Landscape. This decision yielded higher attendance, and those attendees spread the word of what they learned. Further attendance growth naturally followed.

Encouraged by this resurgence, many smaller improvements were made, including shortening the day, moving Golf permanently to Hort Farm II, initiating a partnership with the Sports Field Management Association at the Adelphia Farm, and many others. This year, at the suggestion of members, the golf day was moved from Thursday to Tuesday. I am delighted to tell you that the net result of all of these changes has been continued growth and participation: this year, a record total attendance of 763 was reached!

The main reason for this growth, of course, is that attendees perceive great value by attending. We know that the scientists and staff of the Center are working hard for the turf industry, and we value the useful information we get there... information we can use to help us with our jobs. For that, and for so much more, I thank Drs. Clarke and Meyer and the entire team at Rutgers; they continue to do important, groundbreaking work. NJTA is proud of our role in their success as supporters, advisors, and – as is the case for Field Days – behind the scenes facilitators.

NJTA Board member Pedro Perdomo chairs the Field Days Committee, and he and his committee did their usual superb job. Thanks, too, to lunch sponsors Ken



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Green World

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What a Summer!

by Cece Peabody, MAT, CMP,
NJTA Executive Director



Wow! What a summer! The activities started ramping up when the promotion about the Field Days 'hit the stands' in June. The number of attendees who wanted to spend the day at either the Golf and Fine Turf tours on July 31st or the Lawn and Landscape tours and Sports Field Managers outdoor trade show on August 1st exceeded any expectations I may have had. And apparently the totals exceeded any prior Field Days. According to the reports, the tours were exceptional and informative, the weather certainly held out, and cooperated with the planning and execution of the tours. The events were eye-opening for me and I learned so much about this industry.

The NJTA Board and especially President Chris Carson, who also serves as Expo Education Chair, have also been busy planning and gathering speakers to put on the finest educational program to date at this year's Green Expo...read the seminar shorts in this issue, then fill out your registration.

So now that the summer is officially over...make sure your calendar is highlighted to attend the 32nd Annual New Jersey Green Expo., December 4-6. It will be another worthwhile turf industry experience for you. And I look forward to seeing you in Atlantic City.

Cece Peabody

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Practical Fungicide Resistance in Turf Stands

by Richard Buckley, Director
Soil Testing and Plant Diagnostic Services
New Jersey Agricultural Experiment Station

By the early 1900's fungicides were being used on turfgrass for disease control. Early fungicides provided protection by chemically modifying basic biological processes. The deactivation of these processes resulted in the shut down of several vital cell functions and caused death to the fungus. Broad spectrum chemical modifications of this sort were usually achieved with a metal like zinc or copper and were not specific to fungi. They were also found to be phytotoxic to plant material, so they were modified to be confined to the outsides of the plants. In order for them to be effective fungicides they had to be placed on the plant before the fungus was present to prevent the establishment of an infection. There are similar materials still on the market that we refer to as contacts. In the 1960's materials with the capability to enter plants and theoretically cure active infections were being developed and brought to market. In order to overcome the problem of non-specific biological activity caused by the early fungicides, the toxic effects of the newer materials needed to be confined to the target fungus. Consequently, the toxic effect of these new products usually focused on a single or narrow range of metabolic processes in the fungus. This single site toxicosis is often overcome by changes in the fungus. Reports of fungicide resistance quickly followed the introduction of the new materials.

Fungicide resistance is a stable, inheritable adjustment by the fungal population to the toxic effects of the fungicide. The changes in the fungal cell that bring about resistance are sometimes regulated by a single gene. This phenomenon is called monogenic resistance. In some fungi the changes are regulated by multiple genes, which is known as polygenic resistance. Fungicides that are at the highest risk of resistance problems are those that affect a single metabolic site in the fungus and those in which the resistance factor is governed by a single gene.

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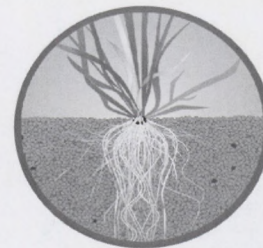
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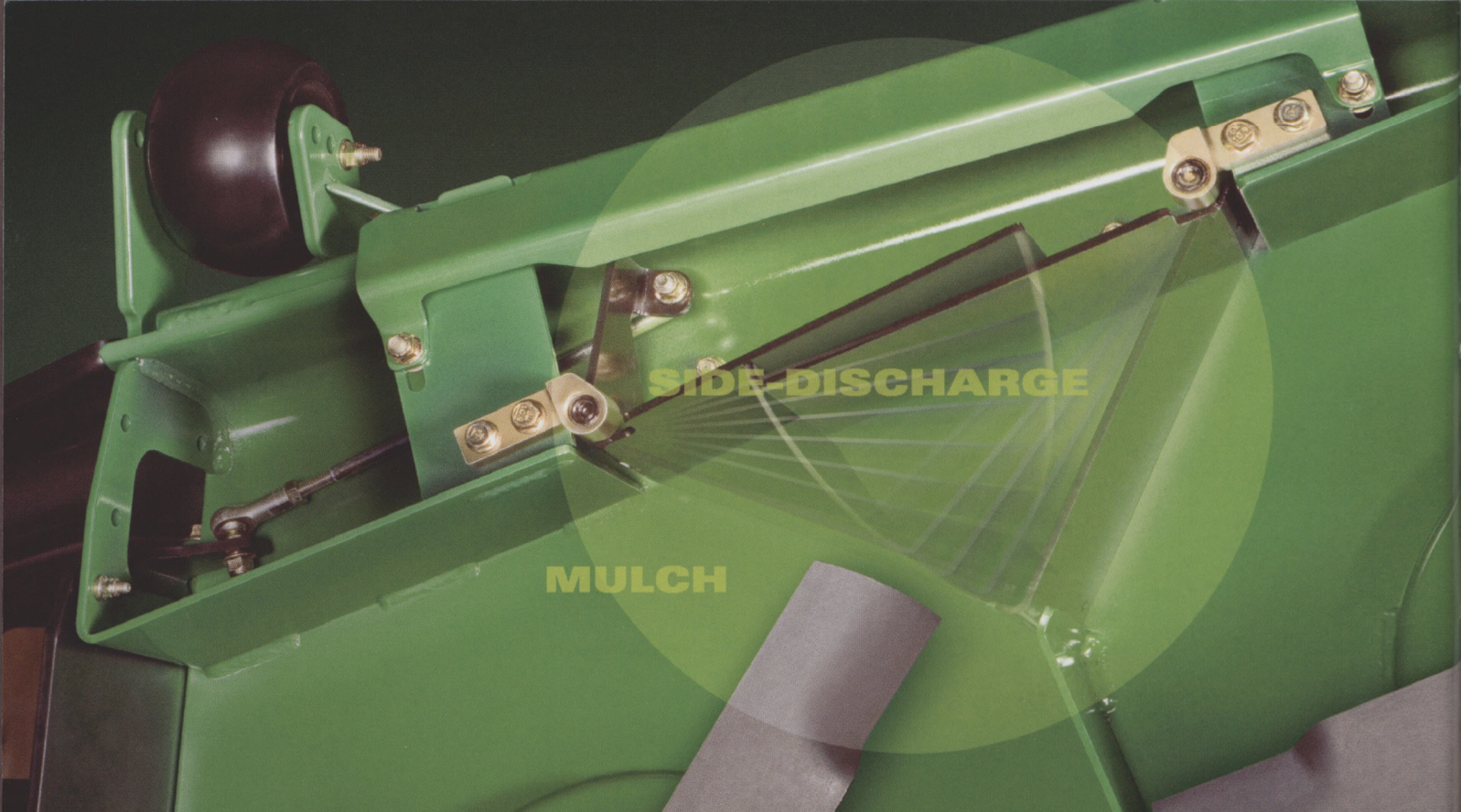


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Mike Dykstra, Dykstra Landscape Services Inc., Grand Haven, Michigan



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Practical Fungicide... *continued*

It is possible that any fungus has the ability to resist two or more fungicides. This phenomenon is known as cross resistance. Cross resistance usually occurs in closely related compounds in the same chemical classes. For instance, fungal populations resistant to propiconazole are often resistant to triadimefon and fenarimol. All of these materials are found in the same chemical class (sterole demethylation inhibitors).


Fungicide resistance does not develop spontaneously. In normal fungal populations, resistant biotypes are always present. Increases in the population of these resistant biotypes are brought on by the fungicide program. If the material one uses only attacks sensitive biotypes, then over time, the resistant biotypes dominate the population and control efforts fail. This generally occurs when a single material or materials in the same chemical class are repeatedly used over a period of time. It is also not uncommon for resistance

to occur if less than optimal rates of the materials are used. This allows a broader range of tolerant biotypes to survive and prosper. The point at which satisfactory disease control is no longer provided in the field by your program is called practical resistance.

Be aware that all fungicide failures are not due to practical resistance. Improper diagnosis, improper dilution rates, poor selection of materials, bad timing, tank incompatibilities, improper calibration and bad nozzle choices are just a few of the possibilities. That being said, we have seen several cases in the Plant Diagnostic Laboratory this summer of practical resistance to dollar spot and anthracnose. If you suspect practical resistance and have ruled out other reasons for your disease control failures, then we suggest screening for fungicides in the following chemical classes: sterole demethylation inhibitors, the strobilurins, and benzamidazoles. In order to screen for resistance, we isolate the causal agents from diseased plant material and grow them on mycological media

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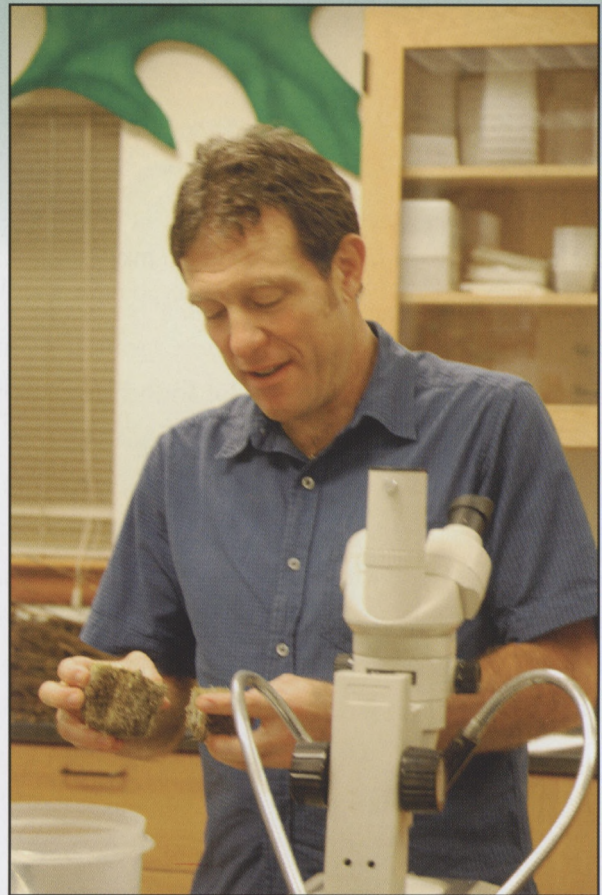
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amended with a fungicide in each of the mentioned chemical classes. We use different concentrations of the materials in each media. The concentrations range from below to well above field rates. Over a period of several days we compare the growth rates of the target fungus on the fungicide amended media to an isolate of the fungus on a non-amended media. If the growth rates are similar, we determine the sample to be insensitive or laboratory resistant to the material we are testing for. If this is the case, adjustments to your fungicide program are in order.

Next issue we will discuss tactics for minimizing the risk of practical fungicide resistance in your turfgrass.

Richard Buckley is a new Board member of NJTA.

Read more about him on page 9



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WHO'S RICHARD BUCKLEY?

I am the newest member of the NJTA Board of Directors. It is an honor to have the opportunity to serve the industry in this capacity. My good friend and former class mate, Dr. Karen Plumley, asked me to participate on the NJTA Board by suggesting that mid-career was a good time to get involved and give something back to the industry. Although it is hard to imagine that I am mid-career, the idea of service to an industry that has served me so well is exciting. It was an offer I could not refuse.

Many of you know me as the Director of Soil Testing and Plant Diagnostic Services at Rutgers University. I solve plant problems and am a frequent lecturer on diseases and insect pests in turfgrass and ornamental plants. Odds are that you have been subjected to my lectures in your quest for pesticide credits. I actually gave my first public presentation for Rutgers at the turf field day in 1989 and have taught, lectured, or presented more than 1400 classes and lectures since.

I am a Delaware native and attended the University of Delaware where, in between Grateful Dead concerts, I managed to get a degree in Agriculture. My emphasis was a double major in entomology and plant pathology. Growing up, I worked in the fields and packing houses of several central Delaware fruit and vegetable farms. As a student,

I worked in the soil testing lab at UD and did field research with the agronomy specialist. With these experiences, I developed an interest in integrated pest management in agronomic cropping systems.

That interest in agronomic crops served me well in the transition to turfgrass. I came to Rutgers in August of 1988 for graduate school in the Department of Plant Pathology. I studied insect resistance in endophyte infected perennial ryegrass and tall fescue under the direction of Dr. Philip Halisky and subsequently received my Master of Science in Plant Pathology from Rutgers in 1991. Dr. Halisky was an instructor in the Rutgers Professional Golf Turf Management School at the time, so I began to get my feet wet as a lecturer in his class. Under his tutelage, I eventually took over the class and currently teach four classes in the turf school.

In September of 1991, I was hired by Rutgers Cooperative Extension as a technician in the newly formed Plant Diagnostic Laboratory. In this position, I was mentored as a turfgrass diagnostician by Dr. Bruce Clarke and Dr. Karen Kackley. I was promoted to coordinator of the laboratory in 1993 and was named Director of Soil Testing and Plant Diagnostic Services when those programs were merged in 2005. Since the inception of the Plant Diagnostic Laboratory, I have looked at more than 30,000 samples for nematode, disease, weed, or insect pest diagnosis. This

...continued on page 22



The Rutgers Plant Diagnostic Lab

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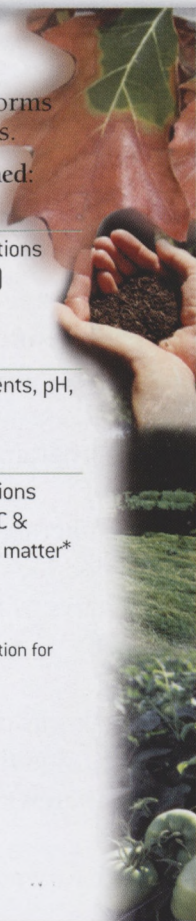
Saturated [Organic] Media Extract Analysis: Nutrients, pH, electrical conductivity, inorganic nitrogen

Sport Turf

- Level 1** Fertility Test: Nutrients, pH, recommendations
- Level 2** Complete Test: Nutrients, pH, estimated CEC & cation saturation, soluble salt level, organic matter* content, soil textural class
- Level 3** Sand Root Zone Test

*Organic matter content would be determined by loss-on-ignition for golf course greens, as described by USGA guidelines.

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2007 Rutgers Turfgrass Field Days A HUGE SUCCESS!

It seems that 2007 was destined to be a year for the record books. Tom Glavine won his 30th game, Pedro Martinez struck out number 3000, and A-Rod became the youngest player to get 500 homers.

What does this have to do with Field Days you ask? This year's Field Days were also record breaking with 351 in attendance for the Golf and Fine Turf Day held at the Horticultural Farm II and 412 at the Lawn, Landscape, and Sports Fields Day held at the Adelphia Research Station.

The Landscape Turf Day was a collaborative effort with the Sports Field Managers of New Jersey. We had tried this once before and received so much positive feedback that we knew we needed to work together again. The mix of educational stops and equipment show and demonstrations was a huge success, as the numbers indicate. The word seems to have gotten out about the event and Cablevision was on the scene conducting interviews for a local program called "Neighborhood Journal."

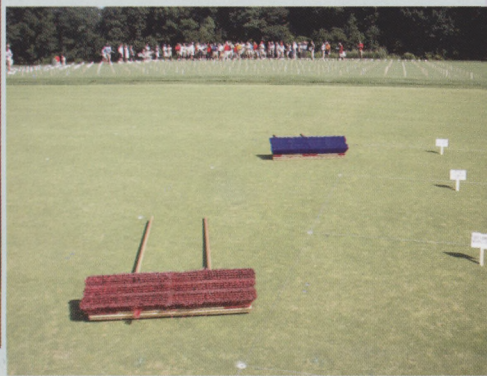
The weather leading up to the events was ideal for the development of many turfgrass diseases and gave attendees a good look at resistant varieties and effective control products. The weather also spared us from the 100+ degree days of the last two years and the air was not as still, which made moving around the plots a breeze (pun intended).

This year was definitely a success due in large part to the combined efforts of the vendors, associations, faculty, sponsors, and the attendees. A special thanks goes to the farm supervisors George Zimienski and Bill Dickson and their crews for once again making sure that everything went well.

We look forward to seeing all of you again next year!

*by Pedro Perdomo, NJTA Board Member
& Field Days Chairman*

Snapshot Moments from Rutgers Turfgrass Field Days



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Tuesday, December 4, 2007

Expo attendees have asked us to pack as many pesticide credits as possible in the opening day, and we've done just that...and the speakers we've lined up are the best in the business. They will surely provide you and your staff with the education you need to do your job better!

9:30-11:30 Core Session (4 credits core)

"Understanding the Factors That Influence Pesticide Performance: With Understanding Comes Environmental Stewardship, Cost Effectiveness, and Good Control."
Pedro Perdomo, Cleary Chemical

"Techniques, Tips, and Tricks to Calibrate and Apply Pesticides"
Dr. John Grande, Rutgers University

12:30-2:30 3B Session (3 credits 3B, PP2, 6B, 8C)

"Buying Quality Seed Is the First Step Toward Stress and Pest Tolerance"
Dr. Stacy Bonos, Rutgers University

"Biological and Biorational Controls for Turfgrass Insect Pests"
Dr. Albrecht Koppenhöfer, Rutgers University

"Scouting and Diagnosis Is the Key to Good Pest Control"
Rich Buckley, Rutgers University

2:45-4:45 3A Session (4 credits 3A, PP2, 6B, 8C)

"The Pests of Ornamental Plants: Identify, Search, and Destroy!"
Rich Buckley, Rutgers University and Dr. Karen Kackley, Asst. Professor, Kutztown University

Many of our golf attendees begin their Expo with the 4 credit core session, but they also look forward to the dedicated golf session on Tuesday afternoon. This year's program is focused on design and construction issues, and we've lined up a great team of speakers who will discuss important aspects of design, especially relating to greens and their surrounds. GCSAA CEU's will be awarded at the end of each day.

Golf Session "Bunkers and Greens"

12:30-4:30 (1 credit 3B, PP2, 6B, 8C)

This session sponsored by Chris Wallick, Course Contractors, Inc.

12:30-1:15 "Myths and Misunderstandings About USGA Versus California Greens"
Josh Honig, Rutgers University

"Manipulating Microbes... Can It Be Done?"
Dr. Mike Boehm, Ohio State University

1:15-2:00 "Updating the USGA Greens Concept: Lessons Learned From Rutgers Research"
Dr. Jim Murphy, Rutgers University

2:00-3:00 "The Rebuilding of Tavistock Golf Club: A Quick Tour, and Lessons Learned"
Tom Grimal, Superintendent, Tavistock Country Club

"Tavistock Design Challenges"
Jim Nagle, Architect, Forse Design

3:00-3:30 "Have We Gone Too Far With Bunker Maintenance? How to Achieve Perfect Hazards and Happy Members in Three Easy Steps"
Dave Oatis, USGA

3:30-4:00 "The Soil Food Web and Your Greens: Manipulating Microbes... Can It Be Done?"
Dr. Mike Boehm, Ohio State University

Golf attendees will move right into the popular cocktail reception sponsored by Ken Kubik of Grass Roots, Inc. Kick off your first night at Expo in style as you visit with old friends and make new ones at this great social evening. Last year's reception proved to be a highlight for attendees, and this year's event should be even more special!

4:00-7:00 Golf Mix and Mingle Cocktail Reception
Hosted by Grass Roots, Inc.

4:00-6:00 NJLCA State Convention

NJ Green Expo attendees are welcome to join us for an informative and interactive roundtable networking opportunity, organized by fellow NJLCA landscape professionals for landscape professionals, at our first ever State Convention. We will examine the state of the State, regarding critical issues affecting landscape professionals and their livelihoods. Do permits, licenses, and registrations get your business down? Attend this unique networking event for ways to stay ahead of the curve.

6:00-10:00 NJLCA Landscape Achievement Awards Dinner

The 9th Annual Landscape Achievement Awards program sponsored by the New Jersey Landscape Contractors Association is designed to reward landscape professionals who execute quality landscaping projects. In sponsoring the Awards program, NJLCA strives to increase public awareness of environmental improvement through quality landscaping, and to encourage the landscape contractor's consistent use of quality materials and workmanship. Please join us for the awards ceremony where the NJLCA will present the awards to this year's winners!

Please Note: Speakers and topics listed in this brochure are subject to change.

You've asked us to make our General Session less technical and more diverse, and we've heard you loud and clear. David Zerfoss, a nationally renowned speaker will share his perspective on the future of our business, and our powerful lineup of speakers will present an interesting and entertaining perspective of the Green Industry.

GENERAL SESSION

- 9:00-12:00 (1 credit 3A, 3B, PP2, 6B, 8C)
- 9:00-9:05 NJTA Annual Meeting
- 9:05-9:10 "Welcome" *Dr. Brad Hillman, Senior Associate Director of NJ Agricultural Experiment Station*
- 9:10-9:50 "2007 Snapshots of Turf Problems and Solutions" *Dr. Jim Murphy, Rutgers University*
- 9:50-10:20 "How I Spent My Summer 'Vacation': Lessons Learned in the Turf & Ornamental Diagnosis Lab." *Rich Buckley, Rutgers University*
- 10:20-10:30 Awards
- 10:30-11:10 "Green Industry Business Forecast" *David Zerfoss, President, Husqvarna and Chairman of the Outdoor Power Equipment Institute*
- 11:10-11:40 "Rutgers News You Can Use!" *Dr. Bruce Clarke, Rutgers University*
- 11:40-12:00 Awards

Thanks to Mary Lou DesChamps and Storr Tractor Company, a free lunch is once again offered to all attendees. Join us to catch up with old friends, have a private discussion with our speakers, and enjoy a quick meal.

12:00-1:00 LUNCH sponsored by Storr Tractor Company

Wednesday afternoon is loaded with breakout sessions that will target your specific area of interest. Whether golf or sports fields, landscape turf or landscape contracting, there is something for everybody. And don't forget that the Grand Opening of our Trade Show immediately follows!

USGA Golf Session

- 1:00-4:00 (1 credit core, 3 credits 3B, PP2, 6B, 8C)
This session sponsored by Rob Finnesey, Tree Tech, Inc.
GCSAA CEU's will be awarded at the end of each day.
- 1:00-1:45 "Why You Should Care About Fungicide Resistance, and What You Can Do About It!" *Dr. Mike Boehm, Ohio State University*
- 1:45-2:30 "Let's Take a Look Inside Your Turfgrass Plant: What's Actually Happening in There?" *Dr. Tom Gianfagna, Rutgers University*
- 2:30-3:00 "What's New on the Label?" *4-6 industry reps, five minutes each*

- 3:00-3:30 "New and Emerging Diseases of Cool Season Grasses" *Dr. Mike Boehm, Ohio State University*
- 3:30-4:00 "Lessons Learned in Championship Preparation" *Dave Oatis, USGA*

This program has been designed with you in mind: you will not want to sit in the back of the room for these sessions. Be prepared to learn something valuable for you and your business, including how to turn your job into a career. Don't miss these sessions designed and presented by landscape professionals for landscape professionals.

NJLCA Session

- 1:00-4:00 For each hour, choose one of our three one-hour sessions listed. Only those sessions with credits noted will offer credits.
- 1:00- 2:00 "Leadership and Your Brand" *David Zerfoss, President, Husqvarna and Chairman of the Outdoor Power Equipment Institute*
- 2:00 - 3:00 Core Session (2 credits core)
"NJDEP Regulatory Update" (Credits pending DEP approval as of press time) *Bruce Reimbold, NJDEP*
- "Opportunities in the Green Industry for Latinos" *Ed Correa, Bilingual Training Solutions*
- "Using QuickBooks to Automate and Standardize the Landscape Business Process, Part I" *Drew Shepherd, Magic Gardens Landscaping / NJLCA*
- 3:00 - 4:00 3A Session (2 credits 3A, PP2, 6B, 8C)
"Ornamental Insect and Disease Control" (Credits pending DEP approval as of press time) *David Crank, Bayer Environmental Science*
- "Oportunidades En La Industria Verde Para Los Latinos" *Ed Correa, Bilingual Training Solutions*
- "Using QuickBooks to Automate and Standardize the Landscape Business Process, Part II" *Drew Shepherd, Magic Gardens Landscaping / NJLCA*

Sports Field Manager's Session

- 1:00-4:00 (1 credit 3B, PP2, 6B, 8C)
GCSAA CEU's will be awarded at the end of each day.
- 1:00-1:30 SFMANJ Business Meeting
- 1:30-2:15 "Management Strategies for High Traffic Fields" *Dr. Mike Goatley, Virginia Technical Institute, Co-author of SPORTS FIELDS: A manual for Design Construction and Maintenance*
- 2:15-2:45 "A Cost-Based Approach to Assess Task Management" *Don Savard, CSFM, CGM, Salesianum School*
- 2:45-3:30 "Environmental Turfcraft for Sports Fields" *Kevin Trotta, North Rockland School District*

GREEN EXPO

- 1:00-4:00 Landscape Turf Session (1 credit Core, 5 credits 3B, PP2, 6B, 8C)
- 1:00-1:45 "The Top 5 Landscape Turf Diseases"
Dr. Bruce Clarke, Rutgers University
- 1:45-2:30 "The Top 4 Insect Pests of Landscape Turf"
Dr. Albrecht Koppenhöfer, Rutgers University
- 2:30-3:00 "Top 5 Cultural Practices That Reduce Disease in Landscape Turf" *Dr. Karen Kackley, Asst. Professor, Kutztown University*
- 3:00-3:30 "Proper Utilization of Herbicides: Selection and Timing Can Make All the Difference!"
Dr. Steven Hart, Rutgers University

- 3:30-4:00 "DEP Regulatory Update: How to Comply"
Bruce Reimbold, NJ DEP

4:00-7:00

Trade Show Grand Opening

An Arena full of vendors, more than 600 attendees, and free food and drink all add up to a great evening. Come to the Trade Show to see what's new in equipment and services, to enjoy some fine refreshment, and to catch up with your peers.

The Trade Show Grand Opening is sponsored by Lee Kozsey and Syngenta.

Thursday, December 6, 2007

Our Thursday morning sessions offer focused presentations for the entire Green Industry. Whether you require the technical expertise of our Golf presenters, the diverse information of the Sports group, the SIMA testing or CLT review presented by the NJLCA, or the important landscape turf solutions, you will find what you need this morning.

And don't forget that the Trade Show follows immediately from 10:00 to 1:00... with a free lunch!

- 7:00-10:00 Golf Early Bird (6 credits 3B, PP2, 6B, 8C)
- 7:00-7:45 "Cultural Practices and Disease Control on Golf Courses"
Dr. Paul Vincelli, University of Kentucky
- 7:45-8:30 "PGR Use in Turfgrass Management: What, How, and Why"
Dr. Bingru Huang, Rutgers University
- 8:30-9:15 "Implications of Sand Topdressing and Irrigation Practices on Anthracnose of Annual Bluegrass Putting Greens" *John Inguagiato, Rutgers University*
- 9:15-10:00 "Impact of Sprayer Technology on the Development of Foliar Diseases on Golf Courses"
Dr. Bruce Clarke, Rutgers University

Sports Field Managers Association of NJ

- 7:00-10:00 (1 credit 3B, PP2, 6B, 8C)
- 7:00-8:00 Early Bird Sports Field Managers: Networking roundtable
- 8:00-8:30 "Elements of Sports Field Construction"
Dr. Mike Goatley, Virginia Technical Institute, Co-author of SPORTS FIELDS: A manual for Design Construction and Maintenance
- 8:30-9:00 "Renovation of a Little League Infield"
Jim Hermann, CSFM, Total Control Inc.

- 9:00-9:30 "Grant Writing: What You Need to Know"
Beth Richmond, Bedford Recreation
- 9:30-10:00 "Low-Impact Pesticides for Turf"
Brad Park, Rutgers University

Today's program deals with key building blocks for a successful landscape professional: Professional certification preparation, hardscape sessions taught by hands-on tech professionals that provide the tools for "bullet-proof" walls and patio design, pesticide re-certification, and the law. Attend this morning session and protect yourself from litigation, protect your customers from faulty construction and protect your livelihood from violations.

NJLCA Session

- 8:00-1:00 For each hour, choose one of our three one-hour sessions listed. Only those sessions with credits noted will offer credits.

CLT Written Exam

The Certified Landscape Technician exam is a national hands-on testing program exclusively administered in New Jersey by the New Jersey Landscape Contractors Association (NJLCA) in conjunction with Professional Landcare Network (PLANET). Certification seeks to recognize proficiency in the landscape workforce, upgrade the status of the landscape professional, and provide the public with a means of identifying qualified landscape professionals. Today we offer candidates the written portion of the exam; however, the "hands-on" portion must also be completed in order to receive the designation of CLT.

CLP Written Exam

The Certified Professional Landscape Exam is a 4-hour multiple choice format test covering business management topics. Interior and exterior landscape company owners and managers who want to establish themselves (and their company) as a leader in the industry should take this exam.

CSP Written Exam

The Certified Snow Professional exam, administered by the Snow and Ice Management Association (SIMA), seeks to raise the standards of the profession, offer guidelines for achievement, identify persons with acceptable knowledge of the principles and practice of the snow profession, and improve performance within the profession by requiring participation in a continuing program of professional and educational development.

GREEN EXPO

Thursday, December 6, 2007 (Continued)

- 8:00-9:00 "CLT Exam Review"
Ed Correa, Bilingual Training Solutions
- 3A Session (2 credits 3A)
"Ornamental Insect Control" (Credits pending
DEP approval as of press time)
JB Toorish, Lesco/John Deere Landscapes
- "Paver Installation: The Nuts and Bolts"
Kevin Minton, EP Henry
- CSP Written Exam (Hour 1)
- 9:00-10:00 "Avoiding Litigation" Ken Morris, Esq.
- "CLT Exam Review"
Ed Correa, Bilingual Training Solutions
- 3A Session (2 credits 3A)
"Ornamental Disease Control"
(Credits pending DEP approval as of press time)
JB Toorish, Lesco/John Deere Landscapes
- "Segmental Retaining Walls"
Kevin Minton, EP Henry
- CSP Written Exam (Hour 2)
- 10:00-11:00 CSP Written Exam (Hour 3)
- 11:00-12:00 CSP Written Exam (Hour 4)
- 12:00-1:00 CSP Written Exam (Hour 5)

Landscape Turf Session

- 8:00-10:00 2 credits 3B, PP2, 6B, 8C
- 8:00-8:30 "Invasive Pest and Disease Update"
Bill Hlubik, Rutgers University
- 8:30-9:00 "How to Buy Quality Seed...and Why!"
Dr. Bill Meyer, Rutgers University
- 9:00-9:30 "Weed Control and ID for the Advanced
Applicator: What's New and Important?"
Pat McCullough, Rutgers University
- 9:30-10:00 "Cultural Control of Lawn Diseases"
Dr. Paul Vincelli, University of Kentucky

10:00-1:00 Trade Show

Lunch will be served at 11:00 am

Sports Field Managers of NJ

- 12:00-2:00 (1 credit 3B, PP2, 6B, 8C)
- 12:00-12:30 "Bermudagrass Use for Sports Fields
in the Mid-Atlantic"
Mike Kelley, Poly Tech High School, Delaware
- 12:30-1:00 "Selecting a Synthetic Infill System" Ken
Mathis, Brick Township Parks
- 1:00-1:30 "IPM at a NJ High School: Myth vs. Reality"
Rich Watson, Pine Hill School District
- 1:30-2:00 "Management of Synthetic Infill Systems"
Kevin Malone, CSFM, Columbia University
- 1:00-4:00 **NJLCA Testing**

Got Certification? Today is your day to step up. Whether just getting started in the business or a seasoned veteran of landscape contracting, take advantage of this—first time ever in New Jersey—multiple certification offering.

- 1:00-2:00 CSP Written Exam (Hour 1 of 6)
CSP Written Exam (Hour 2 of 6)
CSP Written Exam (Hour 3 of 6)
CSP Written Exam (Hour 4 of 6)
CSP Written Exam (Hour 5 of 6)
CSP Written Exam (Hour 6 of 6)
- 2:00-3:00 CLT Written Exam (Hour 1 of 2)
CLT Written Exam (Hour 2 of 2)
- 3:00-4:00 CLP Written Exam (Hour 1 of 3)
CLP Written Exam (Hour 2 of 3)
CLP Written Exam (Hour 3 of 3)

We end NJ Green Expo as we began it, with a two hour education block dedicated to Core issues. Get the basic information you and your applicators need, and the elusive core credits you require, as well at this final NJ Green Expo session!

- 12:00-2:00 Core Session (4 credits core)
"Environmental Impact on Herbicide Efficacy:
Understand What's Happening to the Chemicals
You Apply" Pat McCullough, Rutgers University
- "Techniques, Tips, and Tricks to Calibrate
and Apply Pesticides"
Dr. John Grande, Rutgers University



NJTA'S LEGISLATIVE & REGULATORY ROOTS

Are you aware of the efforts the New Jersey Turfgrass Association makes to represent our industry interests in Trenton? If not, you should! The NJTA supports our members in many ways, including regulatory and legislative representation in Trenton. The NJTA promotes the professionalism, economic contributions, quality of life and environmental stewardship our industry stands for. This is a message that is not always understood by our government, and because of that we must continue to spread our roots with key legislative and regulatory officials! We are a proud industry and certainly we have a great story to tell.

Recently the NJTA has increased its efforts to gain stronger recognition as a credible source of scientific information on many issues pertaining to the turfgrass industry. Over the years we have provided support on "hot" issues such as water allocation, pesticide use bans, School IPM, landscaper licensing, fertilizer bans, business taxation and others. NJTA has been included on many key governmental task forces pertaining to regulatory and legislative affairs affecting the industry. Currently board members of the NJTA sit on the New Jersey Department of Environmental

by Brian R. Feldman, Legislative Chairman

Protection Integrated Pest Management Task Force, Water Use Task Force and Nutrient Management Task Force. Having representation is critical. If you have no voice, you will never be heard.

The NJTA has also increased its support to allied associations that are simultaneously helping to protect our interests. This type of allied synergy is just what the industry needs. No better example of this is that of the support we provide the New Jersey Greens Industry Council (<http://www.nj-alliance.org>). The NJGIC is a very important group that provides education, regulatory and legislative support for the entire "Green's Industry", including the interests of turfgrass professionals. Formerly known as the Alliance for Environmental Concerns, The New Jersey Greens Industry Council has become a broader group, able to support more issues than ever before. The NJGIC has taken the lead on many regulatory and governmental affairs throughout the state, of which, NJTA members have benefited. This type of allied partnership is something the NJTA believes in and will continue to support on behalf of our members.

...continued on page 23

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New Jersey Turfgrass Foundation

UPDATE

The New Jersey Turfgrass Foundation was established in 1991 to further the work done by the NJTA, specifically "to promote, foster, finance and perform charitable, scientific, literary and educational work in the turfgrass industry in New Jersey."

Formed as a stand-alone entity -but supported by the NJTA umbrella- the Foundation has done great work over the 16 years of our existence, work that NJTA members support in many ways.

The Foundation's main event is the Annual Rutgers Turfgrass Research Golf Classic. This fundraiser has grown tremendously over the years, with record attendance of 322 at the three courses at Fiddlers Elbow in 2007. More than just a great day of golf and camaraderie, this event generates funds from participants and sponsors that are distributed directly or indirectly to the turfgrass program at Rutgers.

Though the Foundation is set up as a separate entity with its own Board of Trustees, it functions in partnership with the NJ Turfgrass Association, and NJTA's support is important: in order to ensure that maximum proceeds generated by the Classic go to support Rutgers, NJTA donates the considerable gift of the services of our executive director. Over the years this contribution has a value of several hundred thousand dollars, and has helped the Foundation build its net worth and steadily increase its direct contributions to Rutgers. Coupled with the significant volunteer hours contributed by NJTA and Foundation Board Members, the bottom line profit from this fundraiser is remarkable.

Did you know that the direct financial contributions by NJTA and the Foundation to the Rutgers turf program now exceed well over a million dollars? Or that we are also building an endowment fully earmarked for long-term support of that same program?

How about the fact that this endowment is now valued at almost \$500,000... and that we've just increased our target goal for that fund to one million dollars?

Let's take a look at the most recent P&L statement. Net profits from the Classic were \$92,000. Following Foundation guidelines, \$51,000 has been directed to immediate support of the Center for Turfgrass Science and to student scholarships, \$10,000 is going to support the Henry Indyk Graduate Fellowship Endowment (we've pledged \$50,000, and NJTA has pledged \$25,000, to this \$400,000 initiative), and \$31,000 will be deposited into the Foundation Endowment, taking its value to about \$475,000.

With this amazing success comes great responsibility, and Foundation President Marie Pompei has initiated a review of our policies and procedures to ensure that we operate professionally, legally, and in the best interests of The Center for Turfgrass Science. To that end, she's begun -and I pledge, as incoming president, to continue- an investment policy review. We will be refining our investment objectives to best match our Foundation's mission, to make sure we comply with the laws pertinent to our status as a tax-deductible entity, and to properly match investment risk with fiscal responsibility.

As we undertake a review of our past and as we tweak the direction of our future, it has become clear that a little idea put forward 16 years ago has grown to be a vital, viable and fruitful organization. With your continued support, the NJ Turfgrass Foundation is poised for even greater growth, and I invite all interested members to volunteer your time for the good of our industry. Please give me a call at (908) 232-3621 or email me at echolakecc@aol.com and I'll let you know how you can help be a part of this amazing success story!

...by Chris Carson, NJTF Vice-President



2007 New Jersey GREEN EXPO Turf and Landscape Conference

December 4, 5 & 6, 2007 • Trump Taj Mahal Casino & Resort • Atlantic City, NJ • OFFICIAL REGISTRATION FORM

The New Jersey Turfgrass Association (NJTA) and the New Jersey Landscape Contractors Association (NJLCA) proudly present the New Jersey GREEN EXPO Turf & Landscape Conference, in cooperation with: Golf Course Superintendents Association of NJ (GCSANJ), Sports Field Managers Association of NJ (SFMANJ), and Rutgers University/School of Environmental and Biological Sciences (SEBS).

— What is Your BUSINESS Category? —

Check All that Apply:

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| <input type="checkbox"/> Cemetery | <input type="checkbox"/> Hardscape Contractor |
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| <input type="checkbox"/> Student | <input type="checkbox"/> Lawn Maintenance |
| <input type="checkbox"/> Professional (Architect, University) | <input type="checkbox"/> Other |

— HOTEL RESERVATION INFORMATION —

All requests for lodging during the Green Expo 2007 must be handled directly through Trump Taj Mahal Casino-Resort. Please call **(800) 825-8888** and provide Registration Code **ANJTA07**. **Cut-off date for discounted rates is November 10, 2007.** Reservations made after this date are based on space availability and prevailing hotel rates.

— ATTENDEE REGISTRATION —

Use this form for yourself and your spouse. Duplicate this form for additional registrants, and provide complete information for each registrant. Thank you. Download forms at www.njturfgrass.org.

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Register Online at: www.njturfgrass.org

Final Deadline Date for Receipt of this Registration Form is November 10, 2007. After this date, everyone must register ONSITE for an additional \$10 per category. Cancellations received prior to November 10, 2007 will be assessed a \$50 cancellation/processing fee. NO REFUNDS will be granted after November 10, 2007.

MAIL WHITE & YELLOW COPY to EXPO • KEEP PINK COPY • Date Received: _____

Register Online: www.njturfgrass.org or www.njlca.org

— REGISTRATION CHOICES —

Friday, November 10, 2007 is final date to register using this form.
After this date, you must register ONSITE for \$10 addl per category.

Did you attend the 2006 Expo? ☐ YES ☐ NO

	NJTA/NJLCA Member	Non-Member	Total
1-Day Education Sessions & Trade Show	\$ 100	\$ 125	\$ _____
Which Day? <input type="checkbox"/> Tues <input type="checkbox"/> Weds <input type="checkbox"/> Thurs			
2-Day Education Sessions & Trade Show	\$ 150	\$ 200	\$ _____
Which 2 Days? <input type="checkbox"/> Tues <input type="checkbox"/> Weds <input type="checkbox"/> Thurs			
3-Day Education Sessions & Trade Show	\$ 200	\$ 250	\$ _____
Tuesday, Wednesday, and Thursday			
Spouse Badge (Entire Event)	\$ 40	\$ 50	\$ _____
Trade Show Only (Price Per Day) Number # _____ @ \$ 40 = \$ _____			
Which Days? <input type="checkbox"/> Weds <input type="checkbox"/> Thurs			
TOTAL Registrations: \$ _____			

— JOIN US! 2008 MEMBERSHIP —

NJTA Membership Year: January 1, 2008 - December 31, 2008

NJTA Choices: _____ Renewal _____ New

Green Industry Business Partner: _____ @ \$250 (Up to 4 names)

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Individual Member: _____ @ \$75.00

Name: _____

NJLCA Membership Year: September 1, 2007 - August 31, 2008

NJLCA Choices: _____ Renewal _____ New

Level I - Annual Gross Sales less than \$100,000 @ \$145 _____

Level II - Annual Gross Sales \$100,000 - \$350,000 @ \$195 _____

Level III - Annual Gross Sales \$350,000 - \$750,000 @ \$275 _____

Level IV - Annual Gross Sales above \$750,000 @ \$375 _____

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— Totals: Registrations and Membership —

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Green World

► GRANULAR SEX PHEROMONE FORMULATIONS FOR ORIENTAL BEETLE MATING DISRUPTION

Applied Turfgrass Research from Rutgers, the State University, and the New Jersey Turfgrass Association

Project Period: 2006

Principal Investigator: Albrecht M. Koppenhöfer, Specialist in Turfgrass Entomology, Dept. Entomology, Blake Hall, 93 Lipman Drive, Rutgers University, New Brunswick, NJ 08901; Ph: (732) 932-9802; Fax: (732) 932-7229; Email: koppenhofer@aesop.rutgers.edu

Summary of Accomplishment

The oriental beetle is the most important insect pest of turfgrass in New Jersey, southeastern New York, Connecticut, and Rhode Island. Previous research has shown the feasibility of using mating disruption with microencapsulated sprayable sex pheromone formulations for oriental beetle management in turfgrass. However, sprayable formulations need to be applied at least twice during the pest's flight period and can contaminate clothing articles coming in contact with treated surfaces. This will limit the ability of sprayable formulations to compete with chemical insecticides. To overcome the limitations we are developing oriental beetle mating disruption technology based on dispersible formulations that should cover the entire flight period with one application and will not contaminate clothing article. We are comparing the efficacy and contamination potential of bead- and wax-based formulations and optimize application rates for the better formulation. Both formulations have already shown excellent potential in preliminary field trials in 2005. This project will provide turfgrass managers with a durable, environmentally and economically sound, easily implementable, and highly IPM compatible alternative to chemical insecticides. Mating disruption has the potential to largely replace insecticide applications for oriental beetle control.

In 2006 we conducted two field trials. In a large scale (~1 acre replicates) trial, we compared wax-based beads produced by Suterra applied at 1 bead every 10 ft × 10 ft to smaller more numerous soywax-based granules produced by USDA-ARS NCAUR applied uniformly, both at 0.9 oz active ingredient/acre. Our observations on trap captures and male attraction to caged females showed very similar results that indicated that both the Suterra beads and the USDA granules can disrupt oriental beetle mate finding to a high degree (90-99%), but only the Suterra beads were effective over a sufficiently long period. Our observations on the inherently extremely variable oriental beetle larval densities did not support these trends with 50% reduction by the USDA granules but only 38% reduction by the Suterra beads. In small scale field trial (~0.25 acre replicates), application pattern (10 ft × 10 ft m vs. 20 ft × 20 ft) had no effect on reduction in trap captures by Suterra beads (98-99%). While we did not conduct a formal experiment on the contamination aspects of the formulations, our empirical observations suggested that no significant contamination occurred. During 2007 we tested further improved dispersible formulations and their potential to contaminate shoes.

Conventional and Molecular Turfgrass Breeding

Rutgers Bentgrass Breeding Project Summary 2006

Green World



Applied Turfgrass Research from Rutgers, the State University, and the New Jersey Turfgrass Association

Project Period: 2006

Principal Investigator: Stacy A. Bonos, Assistant Professor, Dept. of Plant Biology and Pathology, 59 Dudley Rd., Foran Hall, Rutgers University, New Brunswick, NJ 08901;
Ph: (732) 932-9711 x255; Fax: (732) 932-9441;
Email: bonos@aesop.rutgers.edu

The main research objectives of the breeding program include developing improved, pest resistant, and stress tolerant, turfgrasses that could be utilized for all turfgrass situations throughout the Northeast and other parts of the country. The need for the development of improved genetically disease resistant, insect resistant and stress tolerant turfgrasses is important to the advancement of golf course, athletic field, and landscape management in the years to come. The development of turfgrass varieties that require less pesticide and management inputs through genetic improvement will also greatly benefit the environment and the public at large.

For the bentgrass project we have been concentrating on improving disease resistance in creeping bentgrass, colonial bentgrass and velvet bentgrass. In order to accomplish this it is important to identify new sources of disease resistance. Over 4,000 clones of creeping, colonial and velvet bentgrass were collected from New Jersey and New England and established in a mowed-spaced plant trial in the fall of 2005. These plants were inoculated and evaluated for disease resistance this past year to identify new sources of resistance to dollar spot (caused by the fungus – *Sclerotinia homoeocarpa*) and brown patch (caused by the fungus *Rhizoctonia solani*) diseases. Approximately 55 velvet bentgrass clones from 15 new sources were identified with improved disease resistance. Approximately, 25 colonial bentgrass plants from 10 new sources were identified with improved brown patch resistance. Approximately, 23 creeping bentgrass clones from 15 new sources were identified with improved brown patch and dollar spot resistance. These plants will be established in a spaced-plant nursery in 2007 and will be incorporated into the current bentgrass germplasm base at NJAES to improve the genetic diversity of these species.

Creeping Bentgrass

In creeping bentgrass, we have been concentrating our efforts on developing cultivars with improved dollar spot resistance (caused by the fungus *Sclerotinia homoeocarpa*). This past year five new cultivars were released. Memorial, 007, Tyee, Macken-

zie and Authority. Memorial and 007 join Declaration, Kingpin and Benchmark as cultivars selected for enhanced dollar spot resistance. This past year, over 88 new creeping bentgrass clones with improved dollar spot resistance were used to develop five new experimental selections. These crossing blocks, along with open pollinated plants with good floret fertility were planted in a putting bentgrass trial in the fall of 2006. These plots will be evaluated for dollar spot disease, other important diseases and turf quality in the upcoming years.

Additionally, we are also concentrating on improving wear and traffic tolerance of creeping bentgrass. This past season we applied traffic stress on approximately 1100 bentgrass plots. We determined traffic stress tolerance among creeping bentgrass cultivars, which will be used to provide practical cultivar recommendations to stakeholders. We also have identified several promising selections with improved traffic tolerance that will be used to improve traffic stress tolerance in creeping bentgrass.

Colonial Bentgrass

Perhaps one of the biggest limitations for the more widespread use of colonial bentgrass on fairways is its susceptibility to brown patch disease (caused by the fungus *Rhizoctonia solani*) (Figure 1). Breeding for resistance to this disease has been one of the major objectives in the colonial bentgrass breeding program. Two experimental selections with significantly improved brown patch resistance over commercial cultivars and excellent turf quality have been licensed and are in the process of being increased for commercial seed production. This past year, over 133 colonial bentgrass plants with improved brown patch disease resistance were utilized to develop five experimental selections. These crossing blocks, along with open pollinated plants with good floret fertility were planted in a fairway bentgrass trial this fall. These plots will be evaluated for brown patch disease and fairway turf quality this upcoming year.



Presidents Message - continued from page 3

Kubik of Grass Roots, Inc. and MaryLou DesChamps from Storr Tractor...your continuing support of NJTA and Rutgers is appreciated!

The success of Field Days is an example of great passion from the dedicated men and women of the Center for Turfgrass Science, and passion from your NJTA Board. From this passion comes commitment, and from this commitment comes the excellence of the Field Days, of Green Expo and the Golf Classic, and in many other important behind the scenes tasks we undertake. If you would like to be a part of this amazing success story... if you too would like to give back to your profession... if you feel like now is the time to contribute your talents to the turfgrass industry, NJTA wants you. Please call me at (908) 232-3621 or email at echolakecc@aol.com and we'll discuss how you can be a part of our progress. We want your passion!

See you at Expo!

Chris Carson

Legislative Roots- continued from page 16

We still need your help! Although we have made great strides in promotion of our industry, we need your help. Become involved with your local government, talk to your local & state representatives, go to township meetings and make your voice heard on issues pertaining to your business. Legislators love to hear from their constituents. Look up your legislator and make an effort. The web address below is a great source to look up your respective district legislator <http://www.njleg.state.nj.us/members/legsearch.asp>

Upcoming Legislative & Regulatory Events Involving the New Jersey Turfgrass Association:

September 18th – New Jersey Green Industry Council
“Day in the District”

October 4th – Assemblyman Speaker Roberts Green Industry Educational Seminar

November 20th – NJGIC Annual Meeting

December 4th, 5th and 6th – NJDEP Educational Seminar (Presented at Greens Industry Expo)

*also, check out the Rutgers the Economic Impact Study at <http://www.turf.rutgers.edu/> which is a great resource for understanding the economic segments of our great industry.

NJTA PATRONS...

Clippings & Green World would like to thank **our** Patrons for their continued support. Please consider adding your name and/or business name to what we hope will be an extensive list of supporters so that this periodical can continue to grow!

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Who's Richard Buckley? ...continued from page 9

figure accounts for around 13,500 samples of dead and dying turfgrass, some of which might have been yours. I am sorry that your turfgrass misfortune is good for me and our laboratories, but I thank you for your support none-the-less. Keep up the good (bad?) work.

All is not turfgrass in my life. I have a beautiful 8 year old daughter, Alex, who I spend as much time with as possible. This summer she discovered the ocean, so we spent sunny weekends learning to body surf. I still enjoy the Grateful Dead and my music collection in my down time, but the real fun these days comes from pretending to be Lance Armstrong out on the road riding as many miles as I can manage on my bicycle.

Calendar of Events 2007



December 4, 5, 6, 2007

NEW JERSEY GREEN EXPO TURF & LANDSCAPE CONFERENCE

Trump Taj Mahal
Atlantic City, NJ

www.njturfgrass.org

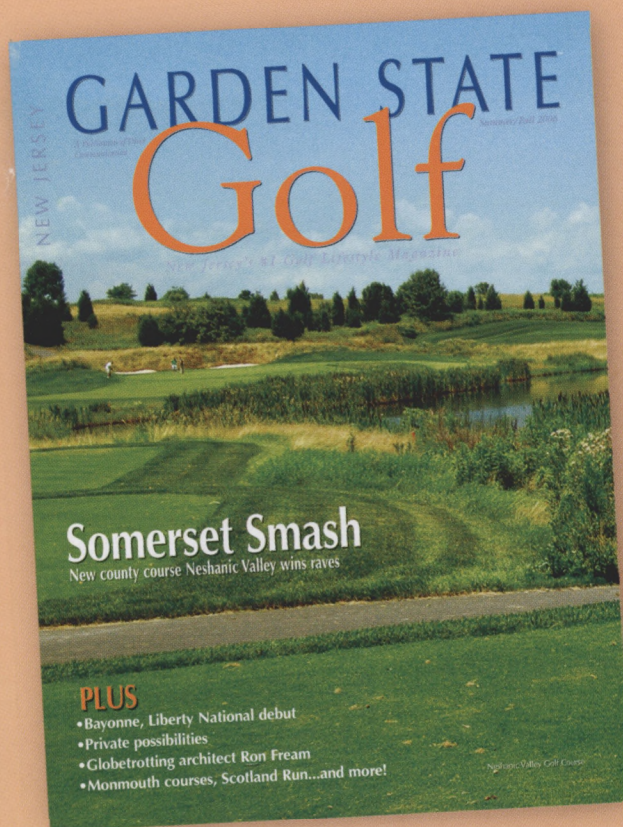
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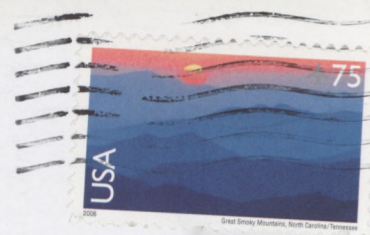
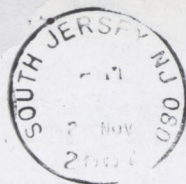
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