

Nearly 200 Attend UF Turfgrass Field Day

Event Showcases New Research, Environmentally Friendly Management

EDITOR'S NOTE: *In the last issue we listed the research projects the FGCSA is funding in cooperation with the FTGA and others. Here is a report to the state's general news media from the University of Florida's Envirotron and GC Horn Turf Plots, where that research is being conducted.*

By Georgia Gelmis

GAINESVILLE — Nearly two hundred green industry professionals visited University of Florida facilities July 17-18 to learn about the latest Florida-friendly turfgrass management practices. The two-day event highlighted research on pest control, fertilization and nutrient leaching.

The North Central Florida Turfgrass Field Day allows industry professionals to learn about ongoing UF research and to network with peers. With over 5 million acres of home lawns and 200,000 acres of golf courses in Florida, UF scientists are continually developing better methods for managing turfgrass, as well as breeding new species that require less water and fertilizer and with higher pest resistance.

The first day of the 2007 Turfgrass Field Day included tours of the Envirotron greenhouses on the UF campus, where turfgrass experiments are conducted in a controlled environment, and of the sports turf at the recreational sports fields and Ben Hill Griffin Stadium. The second part of the afternoon was devoted to educational sessions on weed control and fertilization conducted by UF/IFAS faculty.

On the second day, participants gathered at the UF/IFAS Plant Science Research and Education Unit in Citra,

the premiere turfgrass research facility in the nation. Faculty-led tours of the outdoor turfgrass plots were followed by a lunch sponsored by Environmental Turf and a putting contest on the greens.

Event attendees included UF faculty and students, horticulturalists, golf course managers and pesticide operators

with the facility in Citra and the research studies under way there. The Envirotron Unit on campus continues to also generate excellent data and information in more controlled growth environments.”

Billy Crow, associate professor of entomology and nematology, talked about his work on new methods for managing nematodes with beneficial parasites such as the fungus *Paecilomyces lilacinus*. If used together with water, this fungus can significantly suppress nematode numbers in the soil.

Carol Stiles, assistant professor of plant pathology, explained the effectiveness of fungicides such as Insignia, Heritage and Prostar, in combination with soil-wetting agents, for controlling fairy ring in bermudagrass and increasing turf quality.

Phil Harmon, assistant professor of plant pathology, explained the UF/IFAS turfgrass disease diagnostic program, made possible by support from FTGA and FGCSA. This rapid diagnostic program for managers of high-quality turf costs \$75 and can provide a preliminary diagnosis within 36 hours of receiving a sample. The final report provides a diagnosis based on culture plate results, and will include fungicide recommendations based on UF research.

Members of the student body were involved in the event as well. Entomology and nematology graduate student Scott Portman's presentation on the *Larria bicolor* wasp as a biocontrol for mole crickets made golf course managers aware of this economical, effective alternative to chemical controls.

The 2007 Turfgrass Field Day also showcased research by Laurie Trenholm, Jerry Sartain, Eileen Buss and Michael Dukes that hopes to shed new light on fertilization, pest control and



From lab to turf plots Dr. Jerry Sartain continues to find the best sustainable nutrient application rates that will be environmentally responsible. Photo by Joel Jackson

eager to learn new techniques for sounder, more efficient management of lawns and sports turf.

Golf course managers are always interested in finding new ways to combat pests and diseases harmful to bermudagrass. The 2007 Turfgrass Field Day spotlighted research being conducted by faculty members Billy Crow, Carol Stiles and Phil Harmon on ways to effectively deal with golf course pests and diseases at the lowest cost and in the most environmentally sound ways.

“We should be pleased and proud of the results our support is helping to produce across the whole spectrum of turf management issues,” said Joel Jackson, executive director of the Florida Golf Course Superintendents Association. “We were very impressed

irrigation management.

A five-year DEP grant allows UF/IFAS professors Laurie Trenholm and Jerry Sartain to explore the effects of nutrient leaching from fertilizer on a variety of turfgrasses. The study is under way at three locations in the state, including sites in the Panhandle and South Florida. The unique Citra facility affords these researchers an opportunity to test a number of different grasses at once in a single location. Turfgrass Field Day participants were able to walk the plots and see for themselves the visual qualities of various grasses under different fertilizer and irrigation regimes.

“I enjoyed meeting with the researchers and learning more about growing healthy turfgrass in Florida,” said Jeff Michel, in field development and technical science with Bayer Environmental Science. “The information Dr. Trenholm presented on zoysiagrass nutrient requirements was very interesting. I also enjoyed seeing the turf disease trials on seashore paspalum, bermudagrass and St. Augustinegrass.”

Eventually the findings of the nutrient leaching study, which is currently in year three, will be used to determine new fertilizer policies around the state.

Kevin Kenworthy, assistant professor of agronomy, updated Field Day participants on the University of Florida’s turfgrass breeding program, a program that has focused on developing environmentally sound turfgrass cultivars since 1943. Nineteen cultivars with increased disease and pest resistance, that require less water and fertilizer, have been released by the program since its inception. As Floridians face greater restrictions for water and applied nutrients, this work becomes more relevant and important than ever.

Eileen Buss, associate professor of entomology and nematology, is looking at the short-term effects of nitrogen on chinch bug fecundity in St. Augustinegrass. Though healthy turf typically has a good resistance to pest invaders, Buss’s experiments may necessitate a reevaluation of the relationship between fertility regimes and feeding a major pest species.

Michael Dukes, associate professor of agricultural and biological engineering, tests irrigation controllers known as Smart Water Application Technologies (SWAT), which consist of evapotranspiration controllers, soil moisture sensor controllers and rain sensors that are commonly found in irrigation systems. According to UF scientists, these water savers can reduce water use by 10-60 percent during dry years, and up to 90 percent in normal to high rainfall years.

A highlight of this year’s Turfgrass Field Day was the tour of Ben Hill Griffin Stadium at Florida Field and the recreational sports fields on the University of Florida campus. John Mascaro, executive director of the North Florida Sports Turf Managers Association, arranged the tours of the sports facilities.

“There are a huge number of people involved in the sports turf industry here in North Florida. We are trying to provide additional educational opportunities for them in conjunction with the NFSTMA and the University of Florida,” said Mascaro.

Mascaro led a group of about 50 Field Day participants in an hour-long tour from the Southwest Recreational Fields over to the stadium. Along the way he spoke about the necessity of keeping UF fields safe, playable and looking good for the TV cameras.

Wayne Zurburg, maintenance superintendent for UF’s Recreational Sports division, gave Field Day participants an overview of the intensive care regimen employed on the Southwest Recreational Fields. Zurburg’s team manages 19 acres of Tifway 419 bermudagrass and a four-field softball complex. His job includes keeping the turf in prime condition for events like the annual Swamp Bowl football tournament.

“I’ve been to other colleges around the Southeast and I’ve never seen facilities to match ours,” said Zurburg. “People are blown away when they come here. Our kids get to practice on turf that’s of the same quality as Florida Field.”

Zurburg and his team mow three times a week, topdress multiple times



Besides training lawn care technicians in Green Industry BMPs, Dr. Laurie Trenholm along with research assistant Basil Wetherington, is conducting fertilizer leaching studies funded by the Florida Dept. of Environmental Protection. Photo by Joel Jackson.

a year, fertilize on a strict schedule and aerate every 30-45 days to reduce compaction. Zurburg credits UF’s 10-year capital-outlay plan with having money in place for new equipment when it’s needed.

“We have a great crew with a real passion and love for the turf,” said Zurburg. “That’s really what keeps it looking so good.”

Mike Cheeseman, maintenance turf manager for Florida Field, spoke to participants in the stadium about management practices employed on Florida Field. The stadium turf had just been aerified, verticut and topdressed, so it was in top condition for the Field Day.

Turfgrass Field Day happens every year and brings together a dynamic cross section of industry professionals and researchers. The event affords a unique opportunity for business and science to intersect and allows participants to share ideas and techniques for continued improvement of Florida turf.