Sixteen faculty members of the University of Florida's IFAS Turf Team met with 26 members of the Turf Industry in an historic gathering in West Palm Beach to discuss the best ways to serve the Turf Industry in Florida. Photo by Joel Jackson.

Group (TAWG) as part of the coordination effort of the turf team. The TAWG will be made up of administration, department heads, and center directors. Topics discussed at the most recent meeting: Retreat report, coordinator report, coordinator duties, turf design team update.

As part of the effort for the turf coordinator to be visible to the industry, recent travel for July and August:

- FTGA Turf Certification Meeting, Belle Glade.
- Seven golf course test site visits.
- Two NTEP turf trial visits, Jupiter Island Club.
- Cricket Association. Retreat planning.
- GCSAA Program, Cherry Hill, NJ.
- IFAS Field Days, Gainesville.
- Golf Course tours of five courses in Naples.
- Florida GCSA Board Meeting in Orlando.
- Club Managers/Superintendent Workshop, Naples.

Florida Golf Alliance Update

The Florida Golf Alliance met Aug. 10 at the Registry Hotel in Naples. In attendance were President Ron Garl; Vice President Roy Bates; Treasurer Jack Brennan; Director Mike Fiddelke. Guests: Sylvia Garl and Joel Jackson, FGCSA director of communications.

The resignation of FGA Secretary Ann Palmer of the Mercury Titleholders was announced. Ann has moved out of the state. A motion was made to elect Joel Jackson as the new secretary. The motion was approved.

The FGA bylaws were presented for final approval. All board members were also given copies of the 1998-99 business plan and asked to review and give feedback prior to release to new prospective members.

The first-year goal of conducting a total golf economic impact study was the next topic of discussion. The board decided that Roy Bates and Jack Brennan would meet with Mike Goldie and Larry Pendelton to discuss the feasibility of involving the Florida Sports Foundation in funding the impact study to be done by Florida State University. Later reports indicate that such a study is under way and the FGA will support the research efforts by the FSU professors.

Roy will tweak the mailing list of potential member associations and the letter of invitation to join the FGA from Ron and a copy of the business plan will be sent to all prospective golf associations in the state.

The board then watched an eight-minute video on Golf House Tennessee, which showed a superb effort by the Tennessee golf industry to organize and unite state golf associations in one location.

1999 Florida Plants of the Year

Part 1

Last year we participated in the Florida Nurserymen and Growers Association's inaugural "Plants of the Year" program by publishing the 1998 selections of underutiized but proven Florida plant material. The plants are chosen by a committee of horticulturists, nurserymen, educators, landscape architects and other members of the horticulture industry representing Central, North and South Florida.

We present the 1999 Plants of the Year selections in a three-part series to make readers aware of landscape materials that are successful in the diverse Florida environment.

Black Sweet Potato

Common name: Black sweet potato. **Botanical name:** *Ipomocea batatas* 'Blackie' **Hardiness:** Zones 9-11. **Mature height & spread:** Trailing, about 9 inches tall, vines 6–8 feet long. **Classification:** groundcover or basket plant. **Landscape use:** Groundcover in partial shade. **Characteristics:** Deep purple-red leaves

Strong groundcover forming low, dense mounds in rich, moist soil; prefers a little shade but will thrive in full sun if the water supply is constant. The dark foliage is a good foil for other plants and is valued for use alone or in mixed baskets and window boxes. Edible storage roots with greenish yellow flesh, a firm texture and mild flavor will form late in the season.

Firespike

Common name: Firespike. **Botanical**

name: *Ondontonema strictum.* **Hardiness:** Zones 8-11. **Mature height & spread:** 4'x4'. **Classification:** Shrub. **Landscape use:** Specimen shrub. **Characteristics:** Brilliant red inflorescences through much of the year.

The dark green leaves are a perfect backdrop for bright red inflorescences produced through much of the year and each lasting several weeks. The plants are equally happy in sun or moderate shade and appreciate ample water. The individual flowers are small but the whole spike is often flattened or contorted like a cock's comb giving an even better show. With a relatively fast growth rate, this shrub makes a great trouble-free backdrop to your borders.

Snailseed

Common name: Snailseed. **Botanical name:** *Cocculus laurifolius.* **Hardiness:** Zones 9b—11. **Mature height & Spread:** 18' x 12'. **Classification:** Landscape shrub and cut foliage. **Landscape use:** Hedge, screen in sun or shade. **Characteristics:** Dense growth that stands hand-pruning well to make an informal hedge.

Handsome evergreen foliage provides a dark green background for other plantings. The foliage is valued for flower arranging, and is distinctive for the prominent veins running the length of the simple leaves. Its moderate growth makes it an excellent choice for the landscape in areas where it is hardy.

Turfax Tidbits
Plants Have Sweet Tooth Too

In my many years of pursuing the perfect putting surface, I have heard more than once that spraying a sugar solution on turfgrass helps supplement the plants' carbohydrates. I came across this article in the May/June 1998 issue of *Turfax* that gives some conditions and caveats on this practice.

While the basic concept of foliar carbohydrate applications has been demonstrated through research conducted 40 years ago, it is only recently that interest has arisen concerning this technique.

Q. Is the use of sugar applications to turfgrasses beneficial?

A. Based on the research conducted by J. Beard in 1957 and 1958, it has been documented that the leaves of creeping bentgrass *(Agrostis stolonifera)* have the capability to take up foliar-applied, water-soluble carbohydrates, such as glucose, fructose or sucrose The first two are monosaccharides and the third is a disaccharide. Further, it was demonstrated that these foliar-applied carbohydrates are readily translocated to metabolic sites in the plant where they are utilized in growth processes for the leaves, stems, and roots.

When adequate carbohydrate supplies are not available via photosynthesis and from storage sites within the plant, a foliar application of a water-soluble carbohydrate may prove beneficial. Such conditions include

(a) closely mowed turfs growing in the spring and autumn period under favorable temperatures for rapid shoot growth,
(b) severe turf scalping that results in root dieback,
(c) loss of the root system following spring root decline of warm-season turfgrasses, and
(d) during periods of tissue hardening prior to the onset of an environmental stress. Applications of water-soluble carbohydrates are not effective during severe heat stress conditions of midsummer.

While the basic concept of foliar carbohydrate applications has been demonstrated through research conducted 40 years ago, it is only recently that interest has arisen concerning this technique. Additional practical field research is needed concerning the most effective timings and rates of application. A potential negative dimension in the use of foliar-applied carbohydrates is the potential to induce accelerated spore germination/fungal invasion of turfgrass leaves, which increases the severity of attack by certain fungal causing diseases.

Annual subscriptions to TURFAX are available from Ann Arbor Press, 121 S. Main St., P.O. Box 310, Chelsea, MI 48118, Telephone: 800-858-5299, Fax: 734-475-8852 or E-mail: turfax@aol.com

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Lebanon Awarded Distribution Rights for IBDU

Isobutylidene diurea (IBDU), the much-coveted nitrogen source in the popular turf fertilizer line, Par Ex, will now be available from Lebanon Turf Products..

Isobutylidene diurea, in the past sold to the professional turf management market by Vigoro as IBDU™, will be sold under the trade name IsoPRO™ in 15 different blends including 21-3-16, 24-4-12 and 31-0-0, Grosh said. Lebanon already markets isobutylidene diurea in homogeneous granular form as IsoTek31™.

Lebanon has signed a marketing agreement with a subsidiary of Nu-Gro Corp. (TSE-NU), the new owner of the production facility for isobutylidene diurea, located in Bucks, Alabama. Nu-Gro recently purchased the Bucks plant from IB Chemical Company, a partnership of subsidiaries of Celanese and Mitsubishi.

Vigoro had held a supply contract with IB Chemical Company. IMC Global recently divested its Vigoro Professional Turf division and the isobutylidene diurea supply agreement was terminated. Lebanon jumped at the chance to become the marketer of isobutylidene diurea.

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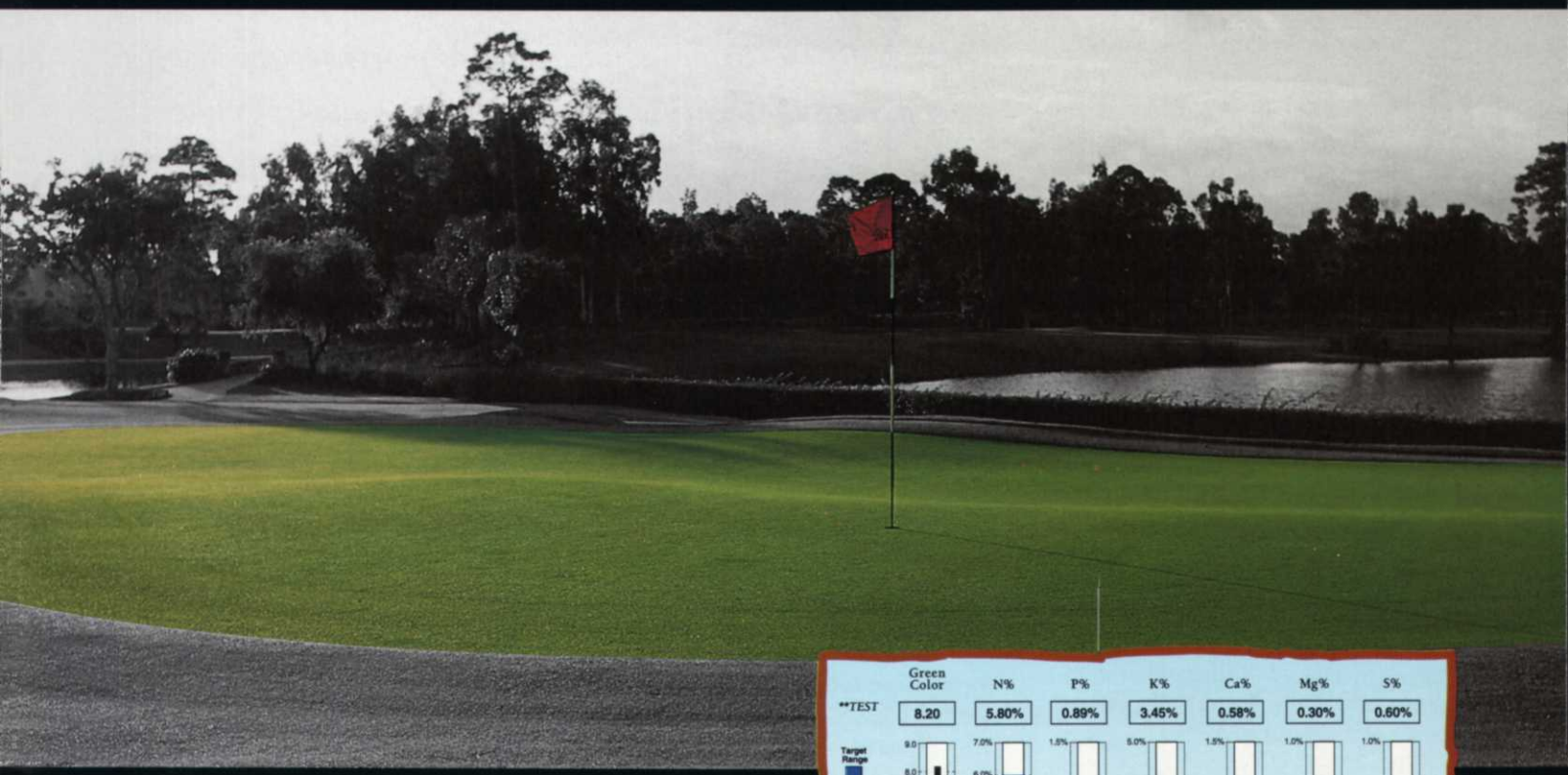

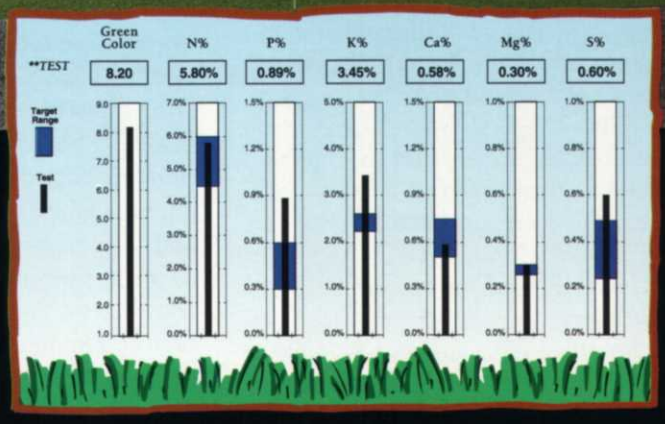

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FQPA Update

Vigilance Still Needed Despite Positive Indications

Until procedures for implementation of the 1996 Food Quality Protection Act are formalized, we need to stay vigilant and ready to present the facts and our views on the methodology that the Environmental Protection Agency uses to reassess tolerance levels of all pesticides.

The following communications are mostly positive in nature and show that pesticide users around the nation are being heard in Washington. However, the final determinations have yet to be made and strong opposition to pesticides remains active. From GCSAA correspondence:

• The Florida FQPA Working Group is planning to contact Florida senators and representatives during the August Congressional recess to help them realize the impact FQPA has on all pesticide users, not just food crops.

• EPA is beginning to release preliminary risk assessments on organophosphate (OP) insecticides. As assessments are released, anyone can submit data on the products. Products on the August list include Nemacur and Mocap. The set of documents is reportedly more than 1,000 pages and is being analyzed by industry advocates and registrant companies. Industry experts warn that the preliminary assessments do not incorporate new required data and are overstated. Refinements will follow. EPA plans to post more information on its web site at two locations: www.epa.gov/opppsps1/fqpa/ and www.epa.gov/oppead1/trac/. Industry advocates warn that EPA's action will likely prompt activist groups including the vocal Environmental Working Group to release more alarmist reports to the media about the danger of OPs.

In a recent federal court decision, EPA was strongly criticized for publicly committing to conclusions before scientific research is begun. The court threw out EPA risk assessments on second-hand smoke, and accused the agency of adjusting scientific procedure to validate its public conclusion.

• Marcia Mulkey, EPA director of office of pesticide programs, gave an update on FQPA issues at a session in Idaho in late July. She reported that EPA is waiting to see manufacturers' data before issuing a broad data call-in on OP use and exposure data. A consumer information brochure mandated by FQPA was due for release to grocery stores in late August. A draft reportedly had little information about the risks and benefits of pesticides, and focused on children's exposure. Mulkey admitted that EPA is concerned about starting a food scare and losing credibility as it implements the law.

• The National Association of Counties passed a resolution urging EPA to implement FQPA using the best available scientific data on pesticides, residues and toxicity, so that the important pesticide uses are preserved, and called for Congressional oversight of EPA.

• Opinion editorials throughout the country have criticized the new law and EPA's approach to implementation of the new law. Guest editors have said that EPA's "ban now, ask questions later" spells problems for consumers and disaster for farmers, and questioned whether EPA is acting to fix a safety problem that doesn't exist.

• In a recent federal court decision, EPA was strongly criticized for publicly committing to conclusions before scientific research is begun. The court threw out EPA risk assessments on second-hand smoke, and accused the agency of adjusting scientific procedure to validate its public conclusion. In wire reports, predictions were made that other agency efforts based on policy-driven science could face similar scrutiny–including the particulate matter/ozone rules, global warming theories, and phasing out the use of chlorine. Advocates at RISE note that pesticide manufacturers are facing a similar circumvention of science by EPA in the implementation of the Food Quality Protection Act, in particular the debate on OP risk assessments.

• GCSAA's Cynthia Smith reports that recent meetings in Idaho and Washington, D.C. have indicated that golf-course use of pesticides is not being factored into the "risk-cup analysis" for OP tolerance reassessments. This does not mean the turf care industry will not be impacted depending on what manufacturers are forced to do to gain reregistration.

FQPA Letter Writing

If you have had good intentions about writing your senators and congressman about EPA's implementation of the Food Quality Protection Act, but just haven't been able to get around to it. Here's an offer you can't refuse. Joel Jackson, director of communications, will prepare a letter for your signature on your club's letterhead. Just send three sheets of your club's letterhead stationery to draft letters to both Florida senators and your congressman/woman and a self-addressed stamped envelope to Joel Jackson, FQPA, 6780 Tamarind Circle, Orlando FL, 32819.

The letters will be returned to you for your signature and mailing to your legislators to keep the pressure on EPA to use good science and common sense in enacting the law.

Audubon Proposes Partner Chapter Initiative

Background

The Audubon Cooperative Sanctuary System would like to partner with GCSAA-affiliated chapters on a project to create greater awareness, participation, and stewardship action in the Audubon Cooperative Sanctuary Program for Golf Courses within each chapter.

Currently, about 15 percent of the golf courses in the U.S. are registered in the ACSP for Golf Courses and approximately 25 percent of those are certified in at least one of the six categories, mainly environmental planning.

It is believed that much greater participation can occur if:

- superintendents are properly informed about the program,
- they have a structured step-by-step approach;
- they have a comfortable time frame to work with, and have the support and dedication of their local GCSA chapters, GCSAA and the Audubon Cooperative Sanctuary System.

Goals

To increase the percentage of golf courses in the U.S. registered in the ACSP for Golf Courses; to increase the percentage of golf courses working towards becoming a Certified Audubon Cooperative Sanctuary; to recognize GCSA chapters for outstanding environmental stewardship commitment, to certify a large number of courses simultaneously.

Policy & Procedures

The ACSS will assist and recognize chapters that cooperate in this initiative. To become an Audubon Partner, a chapter must have at least 50 percent of its members registered in the ACSP, and be committed to following the guidelines of this initiative.

Workshops will be conducted by the ACSS and hosted by others, such as ACSP member courses within the chapter.

Objectives

- Establish step-by-step approach for the certification process through workshops.
- Develop timely workshops so golf courses can achieve full certification within a three-year period. Each workshop will give the participants the opportunity to fulfill the requirements for certification in at least one certification category during the workshop.
- Identify potential golf courses and superintendents to participate.
- Develop an environmental stewardship work ethic within the chapter.
- Establish the most effective and smoothest approach to the certification process for certifying many golf courses simultaneously. Recognize the chapter that participates through certificates, press releases, and listings in GCSAA and ,Audubon International publications and its web site.

Workshop Format

Each workshop will be a half-day event and primarily focus on one of the certification categories. Two workshops will be conducted each year, one in the fall and one in late winter. This provides the best opportunity for the superintendent to attend and participate. The workshops and their topics will be scheduled so the participating courses can become fully certified by the end of the last workshop.

Workshops will generally begin with a short lecture covering the topic, having participants fill out the Request for Certification with the assistance of an ACSS staff member, and prepare the participant for the next scheduled workshop.

Workshop Schedule and Events

First Year

- Environmental Planning is for courses that have not received certification in this category. Includes a two-hour lecture covering EP and the scope of the entire certification and workshop process.
- Water Conservation

Second Year

- Integrated Pest Management
- Wildlife Habitat Management

Third Year

- Water Quality Management
- Outreach and Education

Two-year Plan (Optional)

Depends on the status of the participants - Three all-day workshops.

First Year

- Environmental Planning
- Integrated Pest Management
- Water Conservation .

Second Year

- Wildlife Habitat Management
- Water Quality Management
- Outreach and Education

ACSS will provide an instructor along with the usual membership materials at the workshops. The participating chapter must cover ACSS traveling expenses.

PGA St. Lucie West Attains Certification

PGA St. Lucie West Country Club has achieved designation as a Certified Audubon Cooperative Sanctuary by the Audubon Cooperative Sanctuary System, the educational division of Audubon International endorsed by the U.S. Golf Association. PGA St. Lucie West Country Club is the 21st in Florida and the 144th course in the world to receive the honor.

"PGA St. Lucie West C.C. has shown a strong commitment to its environmental program. They are to be commended for their efforts to provide for wildlife on the golf course property," said Joellen Zeh, staff ecologist for the Cooperative Sanctuary System.

Rick Wise, CGCS, director of golf operations for PGA Golf Properties of Florida says, "PGA St. Lucie West's commitment to the preservation of wildlife habitats, as well as water quality and conservation is now and will remain a priority. Perpetuation of natural conditions will always be our primary goal. This accomplishment falls in line with the PGA's environmental commitment."

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New biological nematicide 'disappointing'

Quite a few new product announcements cross our desks each month, usually accompanied by fairly extensive marketing literature. One such packet arrived recently, touting a new biological nematicide: DiTera, from Abbott Laboratories. Upon first glance, DiTera has all the qualities turfgrass managers are looking for as an alternative to the 1960s chemistry of Nemacur and Mocap:

- Biological origin — DiTera is a product of the fermentation of a naturally-occurring fungus (Myrothecium s p.), which was originally isolated from a cyst nematode
- U.S. EPA registered — with the signal word "Caution" and a 4-hour reentry interval (compared to "Danger" and 48 hours for both Nemacur 3 and Mocap 20G)
- Broad-spectrum control — of root knot, cyst, lesion, stubby root, sting and several other nematode species
- Low toxicity— acute oral, dermal and inhalation LD50 rated in Category IV (practically non-toxic)
- No toxicity toward non-target organisms — including beneficial nematodes (free-living, saprophytic and insect-pathogenic species), birds and aquatic wildlife
- Flexible application timing and methodology
- No restrictions on the number of annual applications.

All this sounds great. So what is the problem? Apparently, DiTera doesn't work terribly well controlling nematodes in turfgrass. The first "red flag" we noticed was a very limited list of turf-related references included in the promotional package: one golf course superintendent and a spray applicator in Florida, and an Abbott Labs field technical specialist. No university references at all — highly unusual. Perhaps this might be one of those "snake oils" that don't work.

Coincidentally, we received the May issue of *The Newsletter,* published by the Golf Course Superintendents Association of New England, which cited the 1997 Turfgrass Nematode Studies performed by Dr. Robert Wick at the University of Massachusetts, Amherst. The research, funded by Abbott Labs and GCSANE, basically compared DiTera to Nemacur and a control, over two years, on two different putting greens, on ring, lance, stunt and root-knot nematodes.

Dr. Robert Dunn explains the progress of his research into biological controls for turf damaging nematodes at the July 1998 IFAS Field Days in Gainesville. Photo by Joel Jackson.

Some excerpts from the results:

- "Ring populations were not significantly reduced by either DiTera or Nemacur..."1996
- "DiTera did not reduce lance populations..."—1996
- "Stunt was not reduced by either the DiTera or Nemacur..."—1996
- "Ring and lance populations were not significantly reduced by either DiTera or Nemacur..."—1997
- "Nemacur significantly reduced stunt populations but DiTera did not..."—1997
- "Only Nemacur reduced root-knot juveniles compared to the control..." – 1997.

We contacted Dr. Rob Wick at UMass to confirm if we were reading the results correctly. His reply:

"I had high hopes for DiTera but it failed miserably. I am even retesting it again at 2x rates this year. I do not believe it will work for nematodes in turf, and I can't recommend it. Please call Bob Dunn, nematologist in Florida, who is also studying this product."

In the interim, we had contacted Dr. Bruce Martin at Clemson University, who concurred that results in his field trials to date have been disappointing. "It is early, however," he added, "and more data is needed before we can tell how DiTera might fit in a nematode management program."

Following Dr. Wick's suggestion, we contacted Dr. Robert Dunn, professor and extension nematologist at the University of Florida, Gainesville.

"DiTera kills nematodes in vitro very well," he said. "Unfortunately, the performance of the product in turfgrass systems, particularly in the sandy soils characteristic of golf greens, has been disappointing. I have yet to get a positive re-

sponse on a continuous basis, but I'm still looking for the secret. Frankly, I'm puzzled..."

Dr. Dunn forwarded a summary of the nematode research in progress at the University of Florida, which follows.

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1998 Nematology Studies at the University of Florida Envirogreen

Three nematology experiments are under way at the University of Florida's Envirogreen research facility for the 1998 season. Funds provided by the Florida Turfgrass Association have made it possible to hire an assistant, Mr. Paul Fox, to attend to this and related field research in turf nematology this year. Cooperation of the manufacturers of products being tested in Trial 2 (Nematicide Product Evaluation) also has been critical for establishing that study.

Biological control of turf nematodes

The nematodes' natural enemies that seem to be most promising for use as biological control agents are bacteria in the genus *Pasteuria*. Most work with these microbes has been done with root-knot nematodes as pests of annual food and feed crops. In some cases, *Pasteuria penetrans* has caused nearly complete collapse of extremely virulent root-knot nematode populations associated with peanut and some vegetable crops. I believe that I have isolated a *Pasteuria* that attacks the turfgrass root-knot nematode. Dr. Robin Giblin Davis (nematologist at UF AREC at Fort Lauderdale) has identified a related *Pasteuria* species that attacks sting nematodes in south Florida.

The Envirogreen has been found to be infested with both turf root-knot nematodes and sting nematodes, so it presents us a good opportunity to study these microbial enemies of two different turf nematodes in a field situation. in this experiment, there will be 10 plots treated with each of four treatments:

- *Pasteuria* specific to the turf root-knot nematode which is present at high levels in the Envirogreen
- *Pasteuria* specific to the sting nematode, which is present at low levels in the Envirogreen
- both of the above nematode parasites
- untreated control

We will sample regularly to study what percentage of each nematode species may become affected by its specific parasite, and how fast that infection may spread from the point of application, and what effect those infections have on nematode populations and turf growth.

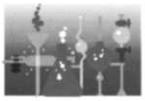
Nematicide Product Evaluation

The turf industry desperately needs objective comparisons of many products now available or being prepared for marketing for nematode control. Some are old nematicides being suggested for a relatively new use; others are entirely new biologically derived materials for which few or no data are available on their efficacy as nematicides. A single rate or sequence of applications of each of these products (list below) will be applied and nematode populations and turf quality monitored through the summer. Additional trials of some of these products will be conducted at other sites.

- Actinovate Plus® (*Streptomyces lydicus* WYEC108; Natural Industries,Inc.); University of Wyoming scientists have reported that this species can colonize the root zone of many kinds of plants and provide some protection against infection of those roots by fungal parasites. The manufacturer believes it can have a similar effect on nematodes.

- Agrimek® 0.15 EC (*avermectin* B; Novartis); the active ingredient of this well-known miticide-insecticide is very toxic to nematodes in vitro (in the lab—literally, "in glass") and in animals. However, there has been little success in getting it to behave well in soil and plant systems, at least in part because of very rapid and tight binding to soil organic matter and/or clay. We hope that the defined sands of USGA spec greens are a medium in which that binding is less of a problem, so the active ingredient can reach nematodes.

- Prosper-Nema® (Spores of nema-



tode-trapping fungi; Circle One, Brooksville, Fla.) A mixture of fungi antagonistic to nematodes formulated in a dry powder that is to be dissolved in water for spray application. Most field soils that have had any plants growing in them recently will already have large numbers of spores of such fungi in them.

• Deny®9 (0.6% *Burkholderia* (=*Pseudomonas*) *cepacia*, > 8.8 x 109 viable cells/fl. oz.: CCT Corporation): a rhizosphere bacterium that has been reported to colonize root surfaces and provide a barrier to infection by some fungal and bacterial pathogens of several kinds of crops: manufacturer believes it will do same for turf nematodes.

• DiTera (dried culture of a fungus, *Myriothecium verrucaria*, Abbott Laboratories): a fungus culture selected for toxic properties against plant-parasitic nematodes, now being marketed for control of root-knot and cyst nematodes on selected crops in California, Previous results on turf in Florida. Georgia, South Carolina, and Massachusetts have been disappointing, but we will try the most promising treatment sequence.

• MYX-473® (a pelargonic acid derivative: Mycogen Corp.): showed real promise in laboratory tests, but this is the first year of field tests on several Florida crops.

• Nemafert® (mixture of rapeseed meal and neem oilseed meal, from Atlantic Austalasia Ltd., in Australia): a top dressing or soil amendment based on two naturally nematicidal plant products that have been used successfully for centuries in some parts of the world, but this is a first test of this mixture on fine turf in the U.S.

We will sample regularly to study what percentage of each nematode species may become affected by its specific parasite . . .

• Neotrol® (composed 100% of ground-up plants of a patented variety of sesame; Parkway Research Corp.): another naturally nematicidal plant product, but there are serious questions of rates that might be most effective on turf in sandy soils, and against the range of nematodes normally found with turf.

• Safe-T Green® 18 (A proprietary blend of linear secondary alcohols reacted with ethylene oxide; SMI); researchers in Mississippi and Louisiana have had some success with this product on both turf and cotton, but results have not been consistent. This is the first test on turf nematodes that I know of in Florida.

• Telone® 11(1 ,3-dichloropropene; Dow AgroSciences); long known as an effective soil treatment for nematode control before planting many kinds of crops, but traditional rates are too phytotoxic to be applied to living turf. Application of selected lower rates by sub-surface soil injection has been very effective for reducing nematode damage to bermudagrass roots in sod farm conditions.

• Turfcure 376® (metam-sodium. AmVac); another soil fumigant well known as a preplant treatment; recent work in several Florida locations indicate that this may be safe for use at very low rates for nematode control under golf course conditions.

Population Dynamics of Turf Root-Knot Nematode

Since this area of the Envirogreen has been found to be infested with varying levels of the turf root-knot nematode *(Meloidogyne graminis)*, we are presented with an excellent opportunity to monitor its seasonal fluctuations at this site by simply sampling each plot at regular intervals.

In addition to the product comparison described above, I also have in progress four golf course evaluations of DiTera, separate rate studies with Neotrol, Nemafert, SafeT-Green, and Turfcure, a rate study with the biological agents (Actinovate, Deny, and Prosper-Nema), and commercially-applied field demonstrations/trials of Turfcure and Telone. There are large-scale trials of Agrimek being installed by Novartis this week, which I also expect to overview.

Robert A. Dunn
20 June, 1998

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