

3200 East Palm Beach Road  
Belle Glade, FL 33430-4702

Phone: 561-993-1500  
Fax: 561-993-1582  
Editor: K.L. Krawchuk  
E-mail: klkr@ifas.ufl.edu

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**UF/IFAS: Science at work for you**

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# NEWS

Winter 2005  
Volume 2, Issue 1



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Credits for the last issue were inadvertently omitted.

The Everglades Soil Testing Lab. article was written by Dr. Ron Rice and Joan Lee.

Photographs for the ESTL article were taken by Ron Rice and Norman Harrison.

Dr. Jose Alvarez writes the Policy Corner and the Economic Contributions columns.

This newsletter is largely a group effort of the faculty and staff at the EREC. It's purpose is to inform you, our friends and clients, about current research and extension projects at our center.

Special thanks to Norman Harrison for contributing photographs, and his technical expertise, and also to Molly Sklapsky for proofreading and contributing articles.

Folding and labeling of our mailings is a group effort from some really good volunteers. You know who you are ... **Thank you!!**

If you would like to be placed on this mailing list, the EREC email notification list; or should you no longer wish to receive this publication, please phone or email Kathy at 561-993-1517 or klkr@ifas.ufl.edu



## *From the Director's Desk:*

Education of clientele is a critical outcome of a solid science-based research program. Our job is incomplete without the step of extending our research results to our customers in the form of an education program that is understandable, clear and practical with specific recommendations that growers can implement.

The education or extension of the research can take place in a number of ways. We use electronic technology to share information with our growers. This is done through an email list, electronic newsletter or a real-time update on an EREC designated web page. In other cases, a hard copy update/

newsletter mailed periodically is preferred by growers. Additional strategies include educational meetings, workshops and field days, each demonstrating the research work that is being conducted. Factors determine if research trials are performed at the research and education farm or better demonstrated on a producer's farm. One to one consultations or specific visits to a single producer farm is also part of the extension/education effort.

Education through extension is the key to meeting our overall goal of communicating the most recent science-based research to growers, enabling them to take the information



and use it in their operations to remain profitable and farm in an environmentally sensitive manner.

*Chris Waddill*

email: ctwaddill@ifas.ufl.edu

*Best Wishes for a healthy, safe, and prosperous New Year!*

Established by an act of the Florida Legislature on June 14, 1921, the Everglades Research and Education Center (EREC) in Belle Glade, Florida is an agricultural and environmental research and education unit of the University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS).

The Everglades Research and Education Center is distinctive in that it is the only academic agricultural research and extension education facility in the United States located on subtropical organic soils.

## *Economic Contribution of EREC Research*

In October 2001, the Food and Resource Economics Department at UF/IFAS published the results of a study conducted by Edward A. Evans, Max R. Langham and Leo C. Polopolus titled Historic Analysis of the Economic Contribution of the Everglades Research and Education Center (EREC).

These are some of its conclusions:  
• EREC engages in technology transfer through its Extension Program. A prominent feature of this program has been organic soil sample testing for making fertilizer recommendations to local farmers [featured in Vol. 1, Issue 2 of this Newsletter]. In addition,

faculty members use a combination of transfer methods to provide the latest information to representatives of both the public and private sectors. The various methods of technology transfer used include seminars, CD-ROM short courses, field days, workshops, personal consultations, and various forms of publications.

- The Center provides for graduate student training and has on-site student accommodations. It also gives students the opportunity to interact with growers and to have a hands-on learning environment where faculty are conducting research in problem solving situations.

## *Focus on Faculty . . . . . Dr. Curtis Rainbolt*

Dr. Curtis Rainbolt has accepted the position of Assistant Professor of Weed Science at the Everglades Research and Education Center. Please join the faculty and staff in welcoming Dr. Rainbolt.



He received his PhD in Plant Science from the University of Idaho, his dissertation was titled, "Herbicide-Resistant Crop Management and Crop Safety

with Imazamox". Before joining the EREC, he was the Area Specialized Sugarcane Extension Agent for the Everglades Agricultural Area. Dr. Rainbolt's area of focus is weed control and ecology in sugarcane, rice, sod, and vegetable crops. As an extension agent, Dr. Rainbolt's role included the transfer of technology and information from university researchers to sugarcane growers in five counties. He has produced educational materials, conducted field trials and assembled an advisory committee to address extension needs.

Along with other projects, Dr. Rainbolt will be collaborating with Graham Kinston (co-leader), Rob Gilbert (co-leader), Gregg Nuessly, Richard Raid, Ron Rice, and industry stock holders, to investigate crop physiology, yield accumulation, weed management and insect population in differing sugarcane harvest management strategies.

Curtis may be contacted at (561) 993-1531, or by email at CRRainbolt@ifas.ufl.edu

All programs and related activities sponsored for, or assisted by, the Institute of Food and Agricultural Sciences are open to all persons with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations.

## University of Florida Teaching Programs in South Florida

The UF/IFAS teaching program in southern Florida includes both undergraduate and graduate programs. The undergraduate programs are offered at Ft. Lauderdale REC in Davie, Indian River REC in Ft. Pierce, and Tropical REC in Homestead. Matriculated students are enrolled at UF with all classes taken in southern Florida.



Video presentations such as this one offer opportunities for growers and workers to receive continuing education units towards certification

Undergraduate classes are offered in various disciplines in soils, irrigation, environmental horticulture, landscaping, entomology, plant pathology, weed science, turfgrass sciences, and agribusiness classes. The Undergraduate degrees are offered in:

- Environmental Horticulture
- Turfgrass Sciences
- Entomology
- Agribusiness



Soil and Water Science students visit with Joan Lee, Sr. Chemist, on a tour of the Everglades Soil Testing Laboratory

The Masters of Science Program in Environmental Science offered by the Soil and Water Science Department (SWS) is available at all UF RECs in south Florida. This program started fall 2002. The program allows professionals in the field of environmental sciences with full time jobs to earn a Masters degree at their own pace. All classes are offered through the Internet. Instructors interact

with students through email and chatrooms. This program has seen exponential increase in enrollment with 22 currently enrolled graduate students throughout the state of Florida. For more information on this program and how to apply, please check the SWS distance education program website at <http://soils.ifas.ufl.edu/distance> or contact the Soil and Water Science Department Distance Education Coordinator:

Sabine Grunwald; [sgrunwald@ifas.ufl.edu](mailto:sgrunwald@ifas.ufl.edu)  
Phone: 352-392-1951 ext 204.



Dr. Daroub addresses local area growers at a BMP workshop

Dr. Samira Daroub, Assistant Professor in Soil and Water Sciences at the Everglades REC offers both undergraduate and graduate classes in soil sciences, environmental sciences and irrigation. Dr. Daroub teaches two undergraduate classes in Soil Science and Soil Fertility out of the Ft. Lauderdale REC. Both of these classes are offered through Polycom videoconferencing to almost all UF research stations in Florida. Dr. Daroub also teaches graduate classes in soil science and environmental nutrient management. She may be contacted at:

Samira Daroub at Everglades REC  
[sdaroub@ufl.edu](mailto:sdaroub@ufl.edu)  
561-993-1593  
<http://erec.ifas.ufl.edu/>



Dr. Vic Guzman explaining his lettuce research to students in the Soil and Water Science Class



Fertilizer loader demonstrated by Don Davies at Wedgworth's Inc. to a class touring the fertilizer plant

These classes are offered on the Internet and are available to any student in the United States. You do not need to be a matriculated student to take classes at UF. Classes can be taken by anyone as non-degree seeking. For more information on spring semester undergraduate and graduate course offerings, please check the College of Agricultural and Life Sciences (CALs) website: [www.cals.disted.ufl.edu](http://www.cals.disted.ufl.edu)

For more information on classes offered or how to apply to degree programs, please contact the academic coordinators in the following UF/IFAS RECs:

Jane Slane at Ft. Lauderdale REC  
[jslane@ufl.edu](mailto:jslane@ufl.edu)  
954-577-6371  
<http://frec.ifas.ufl.edu/>

Kimberly Wilson at Indian River REC  
[kwilson@mail.ifas.ufl.edu](mailto:kwilson@mail.ifas.ufl.edu)  
772-468-3922 Ext.126  
<http://irrec.ifas.ufl.edu/>

Wendy Meyer at Tropical REC  
[wlm@ifas.ufl.edu](mailto:wlm@ifas.ufl.edu)  
305-246-7001  
<http://trec.ifas.ufl.edu/>



Students with Dr. Daroub at the subsidence post behind the EREC. The post was driven to bedrock in 1924, and the top was level with the soil surface. This photo indicates that about 75 inches of subsidence has occurred over the past 80 years.

## Summer Interns

Eight local area High School students and one FAMU Graduate participated in internship programs at the EREC this summer. The program, initiated to provide local area students with an opportunity to explore science and research careers, proved beneficial to both students and faculty.

Planting, harvesting, sample collection and preparation, data entry, and laboratory work, kept student interns busy over the summer. Students learned scientific techniques and assisted in the planning of experiments.

Participating professors commented that this was a positive experience for both students and faculty. Students gained experience that will assist them in their future education and faculty members were able to benefit by the additional summer help. Not only did H.S. students learn the scientific method, they were mentored by both faculty and young professionals including a recent FAMU graduate working here under the 2004 Research Internship Program: "Summer Research with the Florida Agricultural Experiment Station", and two resident UF graduate students.

Research on chemistry, biology and agriculture conducted at the Everglades Research and Education Center provides a wide range of career possibilities for future college graduates and the prospect of local employment. The summer internship program provides the local area high schools with information about research at the Center and the incentive for other cooperative programs.



Participating students, left to right: **Yolanda Lee**, Glades Central H.S.; **Markenson Pierre**, Glades Day School; **Geline Lucate**, Glades Day School; **Lawrence Griffin**, Glades Central H.S.; **Slande Santeclair**, Pahokee Middle Senior H.S.; and, FAMU graduate **Lucritia Jackson** from South Bay.  
Missing from photo: **Joseph Sampson**, Everglades Prep Academy; **Emily Byers**, Glades Day School; **Joanne Michel**, Pahokee Middle Senior H.S.

## EREC Faculty and Staff Notes

**Edith Aguilar** is the new part-time receptionist, you may meet Edith between the hours of 2 and 4.

**R.J. Dixon** is retiring after 15 years as maintenance mechanic. He will be greatly missed for his ability to fabricate equipment and design innovative solutions that address problems unique to our muck soils.

**Maria Fabelo** retired in January after nearly 18 years of service as a Lab Technician. Maria worked in the Water Lab for most of this time. She looks forward to spending more time with her family.

**Lawrence Griffin** has been hired to work with the corn breeding program. Lawrence first came to the EREC as a summer intern.

**Nancy Johnson** resigned after nine years at the EREC. She was employed for 3 years as the receptionist and then 6 years as Senior Secretary for the Center Director. She is planning to spend her time traveling and cooking.

**Dr. Yigang Luo** was hired as a Post Doc in mid-August and will be working with Dr. Ronald Rice on field and laboratory studies addressing sugarcane phosphorus (P) fertilization and soil P chemistry issues related to EAA organic soils. His lab work will take place in the Soil Research Unit, which is part of the overall Everglades Soil Testing Laboratory. His support comes from a grant funded by the Florida Department of Agricultural and Consumer Services. Yigang is well qualified for this work, having recently (May 2004) received his Ph.D. from the University of Florida Agronomy Department. The Sugar Cane Growers Cooperative of Florida funded Yigang's Ph.D. program and his dissertation is titled "Soil-P Dynamics and Sugarcane Responses in Everglades Histosols".

**Margaret Robins** retired this summer after 25 years of service, she has moved to Georgia to be closer to family. Margaret worked as a lab technician, and most recently as the receptionist.

**Brandi Schoenfeld** will again be wearing many hats. She will now be serving as Office Manager for the Center Director, in addition to her other duties as Program Assistant for both the Soil and Water Department and the EREC Business Office.

**Molly Sklapsky** joins us from Michigan, she is the new web designer for the EREC and also assists with publications. Molly has a degree in soil science, and her experience provides her with the necessary insights to identify the demands of the faculty and the scope of their specific projects.

## The Policy Corner

By Jose Alvarez

A recent report published by the "Center for Agricultural Policy and Trade Studies" at North Dakota State University, contains good news about the domestic and international sugar markets. Entitled "2004 Outlook of the U.S. and World Sugar Markets, 2003-2013," the results of an econometric study is based on assumptions about general economic conditions, agricultural policies, population growth, weather conditions, and technological changes. Both the U.S. and world sugar economies are predicted to improve over the next 10 years after the current over-supply is reduced. World demand for sugar is expected to grow faster than world supply, resulting in Caribbean sugar prices gradually increasing from 7.57 cents/lb in 2003 to 8.75 cents/lb in 2013, if the United States maintains its sugar program. The Central American Free Trade Agreement is expected to increase U.S. imports slightly, but with little impact on U.S. prices. World trade volumes of sugar are expected to increase throughout the forecast period.