From the editor:
The News reflects only a small segment of what we do at the EREC. For additional information you are welcome to arrange a visit, or learn more about us on our website.

In addition to this newsletter, we send information and notices about seminars and meetings via email. If you would like to be included on our mailing or email lists, please contact us. If you prefer to reduce your paper intake, you can ask to be removed from this list and we will send you the News as a pdf file. This newsletter may also be found on our website at: http://erec.ifas.ufl.edu

Your comments, questions, and corrections are always welcome.

Kathleen L. Kraschuk, Editor
Email: kkraschuk@ufl.edu
Phone: 561-993-1517
Fax: 561-993-1762

FRIDAY SEMINAR SERIES

We are pleased to begin this season’s Friday Seminar Series on September 8, at 10:45 a.m.

Mr. Gene Joyner, Courtesy Extension Agent with the Palm Beach County Extension Office, will discuss “Hurricane Preparation and Recovery for the Home Landscape.”

This year we again look forward to an exciting Friday Seminar Series and hope that you will be able to join us. Seminars are free, and the public is welcome to attend.

Inside this issue:
Student interns 2
Ethanol Production & Sugarcane 3
EDIS Publications 4
Faculty accomplishments 6

From the Director’s Desk:
We want to express our thanks and appreciation to the entire Palm Beach County legislative delegation for their support of the UF/IFAS budget initiatives this year. Their support of the initiatives helped IFAS in the program areas of agriculture, family and consumer sciences, 4-H, natural resources and Sea Grant. A fifteen million dollar Community Budget Issue Request (CBIR), sponsored by Senator Skip Campbell and other south Florida legislators, and later endorsed as a Legislative Budget Request (LBR) by the board of governors, was approved for IFAS. These funds will be used specifically for repairs of damages from the 2004-2005 hurricanes with 2.4 million dollars of this LBR designated for repairs at the Everglades REC. These funds will also help address some deferred maintenance problems. In a CBIR sponsored by Representative Richard Machek and other south Florida legislators, the sugarcane program at the Everglades and Immokalee RECs received $300,000 to address critical research challenges facing that industry. Additional research components are being added to the sugarcane breeding and genetics program, along with more research to help improve sugarcane production, with particular emphasis on sugarcane nutrition. Nitrogen recommendations for sandland sugarcane are one of the critical areas to be addressed. Additional projects related to monitoring and control of insects and plant pathogens will be expanded both in burned sugarcane and green cane. A new research component to be added will be a more thorough study and evaluation to document the impact of the wildlife populations that flourish in the EAA.

Agro-Terrorism
Are you prepared?

Come on out and join the Palm Beach County Sheriff’s Office Agricultural Crimes Unit as they present a program on Ag-Terrorism and Crime Prevention for Farms and Ag Businesses. A complementary barbeque luncheon will be provided following the program.

When: Thursday September 21, 2006 (0800-0830 registration coffee and pastries, 0830-1145 program, 1145 barbeque luncheon)

Where: The University of Florida Everglades Research and Education Center Conference Center, 3200 East Canal St South Belle Glade (the experiment station on CR 880)

Who: Sheriff Ric Bradshaw, the Agricultural Crimes Unit, Terrorism experts and other guest speakers

RSVP agunit@pbso.org or 561-996-1680

For additional information contact the Agricultural Crimes Unit at 561-996-1680

agunit@pbso.org

September 8, 2006
October 13, 2006
November 3, 2006
December 1, 2006
January 5, 2007
February 2, 2007
March 1, 2007
April 6, 2007
May 4, 2007

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 organ soils.

UF/IFAS is Providing Solutions for Your Life
See the new Solutions website: http://solutionsforyourlife.com

All programs and related activities sponsored for, or assisted by, the Institute of Food and Agricultural Sciences are open to all persons without discrimination with respect to race, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations.

Chris T. Waddell


Student Interests Left to Right:
Jeffrey Dent worked in the Soil and Water Department for Dr. Tim Lang. He worked on sand dune restoration projects, and also helped with facility maintenance and cleanup. He also worked with the Plant Breeding Department, harvesting corn, and caring for the grass plots.

Keisha Hodges worked with Dr. Greg Nussley in the Entomology Department. She worked on silage corn IPM experiments from mid-July through mid-August. Keisha worked on corn plants and ears, and evaluated them for insects damage. She also ground and weighed corn samples from the trial. One of her other tasks was to sort suction trap samples for aphids and psyllids.

Tryshina (Ty) Davis worked in the Plant Breeding Department for Dr. Alan Wright. She measured soil and plant tissue phosphorous concentrations for lettuce and celery experiments and also helped out with clerical tasks.

Travis Spencer did a good job for Dr. Mabry McCray this year. His work included grading lentil plots, weighing leaf samples for analyses, assisting with washing glassware and other lab preparation, and collecting soybean leaf samples in the field.

Shirley Holly was an intern for Dr. Elise Pearlstine, she worked both in the office and in the field. She assisted on bird surveys of nesting birds in agricultural fields and in the Stormwater Treatment Areas. She also was a valuable resource in managing databases and in organizing and working with digital photographs of wildlife in the EAA.

POSTERS - 2006


Economic studies analyzing the impacts of free trade agreements on the U.S. sugar industry continue to appear. A recent one is titled "The Impact of Central America Free Trade Area (CAFTA) on the United States Sugar Market," by P. Lynn Kennedy and Hassan Marzoughi, Department of Agricultural Economics and Agribusiness at the University of Kentucky. It uses the U.S. sugar demand elasticity and the amount of increase in the U.S. sugar import quota under CAFTA to estimate the magnitude of the impact. The main result is a decrease of 1.7 cents per pound in the domestic price of sugar, or approximately 8.6%. Although this is a small amount, this decrease could result in the incurrence of significant U.S. government expenditures given the current structure of the U.S. non-recourse loan program. Copies of the paper can be requested from the LSU agricultural economics department at hmzaroz@lsu.edu

The Policy Corner
By José Alvarez

The Policy Corner
By José Alvarez

The Policy Corner
By José Alvarez

The Policy Corner
By José Alvarez

The Policy Corner
By José Alvarez

The Policy Corner
By José Alvarez

The Policy Corner
By José Alvarez

The Policy Corner
By José Alvarez
CHALLENGES AND OPPORTUNITIES

ENVIRONMENT / EAA / LAKE OKEECHOBEE


Dr. José Alvarez was honored at the celebration of the 75th anniversary of the Cuban Agricultural Sector in Havana, Cuba on February 16, 2006. Thirteen emeritus faculty were recognized for their service to the Center. His book, Cuba's Agricultural Sector (UPF, 2004) has been nominated for eligibility for the Food and Agriculture Organization of the United Nations, Rome, 2006. "Evaluation of cotton varieties for the 2006 growing season." John F. Carlin, H. Cheng, J. M. Shine. Dr. José Alvarez was awarded the 2006 Alice Hanson Jones Prize for North American and Caribbean economic history. The winner will be announced at the association’s annual meeting in Pittsburgh next September. Drs. Rob Gilbert, Curtis Rainbolt and Melissa Morris (USDA-ARS) received a Denver T. Loupe best presentation award at the annual American Society of Sugar Cane Technologists meeting in Ft. Myers, FL. June 14-16, 2006 for their talk entitled “Sugarcane yield and morphological responses to long-term flooding.” INTELLECTUAL PROPERTY


Sizing energy prices in the US have led to a resur- gent interest in energy crops in general and sugarcane for energy in particular. One possible use of sugarcane for energy diverts molasses or juice to ethanol production. Dr. Gaspar Korn-dorfer, Universidade Federal de Uberlandia in Brazil, was recently invited to the Ever-glades Research and Education Center to provide an update on the Brazil sugarcane industry. He indicated that the ethanol market in Brazil is driven by the fact that all gasoline has 20-25% ethanol added. At the Brazil level of production the ~ 440,000 acres of Florida sugarcane could yield 320 million gallons of etha-nol annually. If a local Florida market for ethanol de- velops, Florida sugarcane producers would have a tre mendous opportunity to meet this demand.

However, a challenge to ethanol production from Flor ida is the byproduct termed vinasse (ethanol stillage), which is produced in large volumes during ethanol production from sugarcane. In Brazil each gallon of ethanol produced generates roughly 12 gallons of vinasse. Clearly, this is a lot of material to deal with, and how it is handled depends largely on the environmental, economic and regulatory conditions of the region of interest. In Brazil and Australia, vinasse is regarded as a valu able byproduct and it is land-applied as a fertilizer. Vinasse has high potassium, sulfur and micronutrient content. It is often combined with mill mud to increase fertilizer value and reduce leaching potential of the material. We should regard these research challenges facing us today as an opportunity to work together more closely in multidisciplinary teams. Sugarcane is the agricul tural crop which most closely mimics the sugarcane natural vegetation found in the EAA. Due to a recogni tion of excellent science and diligent implementation by growers, it is possible to produce a crop while conforming to the stringent regulations on water qual ity and quantity required for the Everglades. While there are concerns regarding byproducts from ethanol production, this makes it all the more imperative for soil and water scientists, agronomists, and agricultural engineers to work together to solve these complex issues.

The effects of using vinasse as a fertilizer in Florida are not yet known. There are a number of researchable issues that need to be examined regarding ethanol production in Florida sugarcane. These include:

• Are there feedstock (i.e. variety) differences in ethanol and vinasse production potential?
• What is the fate of vinasse when land-applied to organic and sand soils?
• Can technologies such as anaerobic digestion be used to economically reduce volume and increase nutrient content of vinasse? An additional benefit of an aerobic digestion is production of biogas.
• Would combining vinasse with nul mill increase fertilizer value and reduce leaching potential of the material?

Recent USDA releases available online:

USDA ERS 2006 Edition: Agricultural Resources and Environmental Indicators: http://www.ers.usda.gov/publications/arei/ Topics include:

• Land and Farm Resources
• Water and Wetland Resources
• Knowledge Resources and Productivity
• Agricultural Production Management
• Conservation and Environmental Policies Affecting Agriculture
**Economic Contribution of EREI Research**

*article by Dr. José Alvarez*

In all previous issues of this Newsletter, this section has discussed the economic contribution that the Everglades Research and Education Center has provided to the state of Florida and the country since its establishment in 1931. The information was taken from a study conducted in 2005 by A. R. Evans, Max R. Langham and Leo C. Polopolus titled Historic Analysis of the Economic Contribution of the Everglades Research and Education Center (EREI). This issue continues with more recent contributions.

Publishing is perhaps one of the most important endeavors of a research institute. At EREI, where education complements the investigation efforts, the economic estimation of research results is of utmost importance. UF/IFAS/EXTENSION materials are available through the Electronic Data Information Source (EDIS) at http://edis.ifas.ufl.edu.

Research/Extension projects at the EREC fall under three major areas (Crop Improvement, Pest Management, Soil and Water) and one supporting field: Economics and Trade. Since its inception and until last December, its 14 scientists (2 full, 2 associate, 4 assistant, and 1 adjunct professors; 3 research associates; 1 post-doctorate associate; and 1 assistant scientist) had placed 151 documents in EDIS. In 2005, these fact sheets received a total of 182,865 "hits". The statistics include each viewing of the HTML version and click-through the "printer-friendly version" as a separate hit. The Table shows a breakdown, by major research area and supporting discipline, of both the number of documents and hits:

These statistics testify to the significant contribution of our scientists. They also reveal the interest of our clientele for the output generated by the EREC.

### AREA OF RESEARCH | EDIS DOCUMENTS | HITS IN 2005
--- | --- | ---
Crop Improvement | 43 | 36,628
Pest Management | 64 | 87,065
Soil and Water | 13 | 11,338
Economics and Trade | 31 | 47,934
TOTAL | 151 | 182,865

---

**RECENT EDIS PUBLICATIONS**

Publications from June of 2005 to August 2006

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Year</th>
</tr>
</thead>
</table>

---

**RECENT EDIS PUBLICATIONS continued...**

Translating Research Into Application

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Year</th>
</tr>
</thead>
</table>