

SWFREC Update

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**SOUTHWEST FLORIDA RESEARCH
& EDUCATION CENTER**



Center Director's Corner



The devastating effects of Hurricane Wilma were widespread across Southwest Florida when she came ashore near Marco Island in the early hours of October 24. The mammoth storm had set a record for the strongest hurricane in history in terms of atmospheric pressure, and when it made landfall as a near-Category 3 storm, the Immokalee area was among the hardest hit.

You name it as far as agriculture was concerned, and it was affected. Vegetable fields full of newly planted tomatoes, peppers, cucumbers, eggplant, and squash were flooded. Many citrus trees were broken or uprooted or blown over, and those left standing were stripped of many leaves and much fruit.



Greenhouses were mangled, and the plants they housed strewn about or drowned across acres of water-soaked ground.

Hurricane Wilma took its toll on annex buildings and greenhouses at the SWFREC. Of all the crops in the ground, tomatoes and sugarcane fared the best.

At the SWFREC, the post-Wilma situation was similar. Much of the citrus fruit in the Southwest Florida Foundation grove was blown to the ground. The sugarcane was severely lodged but rebounded successfully enough to provide some recent harvest data.



The lysimeter project was heavily damaged, including vegetable plants inside the containers and the equipment used to determine irrigation needs of the crops. The one bright spot is that the tomatoes planted in field #1 came through surprisingly well, and the first harvest was just completed.

Our greenhouses didn't fare so well. One was totally destroyed,

and six others require extensive repairs. Several of our out-buildings also were heavily damaged, including the entomology and water resources annex buildings, which have been declared total losses. Dormitory facilities and other buildings also received heavy damage and are being repaired as priority, time, and resources dictate.

As agriculture in the Immokalee area continues to rebound from Hurricane Wilma, so does the SWFREC. With assistance from UF/IFAS administration and facilities personnel in Gainesville, cleanup is nearly complete and projects are resuming to the extent that they can given our limited facility resources to date. As our center continues to rebound, the primary goal of our faculty and staff remains to conduct research and education that produces valuable information for our growers, farms, and other clients.

Christine Waddill

ctwaddill@ifas.ufl.edu

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Spotlight On . . . Plant Pathology Program

With its emphasis on diseases of vegetables, this SWFREC department conducts three areas of research: diagnosis, epidemiology, and management. The program is led by associate professor of plant pathology Dr. Pam Roberts.

Having lost its fall trials and a greenhouse to Hurricane Wilma, the Plant Pathology Program is in the process of rebuilding and initiating new projects. Ongoing studies include research on *Phytophthora capsici*, bacterial spot on tomato and pepper, gummy and downy mildew on cucurbits, and late blight on tomato.

In spring 2006, Dr. Roberts hopes that a new capability to type certain races of late blight will assist growers. The service will be offered through the Plant Pathology Program and the Florida Plant Disease Diagnostic Clinic.



Dr. Pam Roberts surveys crops in a Plant Pathology pepper trial conducted at the SWFREC.



Watermelon vine decline continues to be a threat to entire crops.

A primary focus of the Plant Pathology Program remains watermelon vine decline, which has wiped out entire crops throughout the area.

“There are several pathogens that may be involved in watermelon vine decline,” Dr. Roberts explains. “We’ll be doing trials in the spring to determine which pathogens are involved, whether there are factors that are contributors, and if there are any insecticides, cultural methods, or different varieties to mitigate the disease.”

In addition to research efforts, the Plant Pathology Program conducts the Plant Diagnostic Clinic, which is led by Dr. Rosa Muchovej. The clinic enables growers to bring in samples for diagnostic study. In addition to providing results of the samples, the clinic offers recommended treatment plans. Growers can receive their results via mail, fax, or e-mail. Those who use e-mail receive an added benefit: When they receive a message that their results are complete, they get a direct link to the results along with a username that enables access to the E-Clinic database. Sample results are logged into the database, which lists diseases in southwest Florida by crop, county, and date. Growers then can get a feel for new disease problems in the area.

The cost to utilize the clinic is \$20 per sample. Beginning January 1, 2006, an invoice will be attached to results reports sent back to growers. The clinic is open from 9:00am-12:00pm and 1:00-4:00pm Monday–Friday; samples may be dropped off during SWFREC normal business hours (8:00am-5:00pm).

For more information about the SWFREC Plant Pathology Program, contact Dr. Roberts at 239-658-3400 or via e-mail at pdr@ifas.ufl.edu.



Dr. Rosa Muchovej oversees the SWFREC Plant Diagnostic Clinic.

Tour Examines Ag-related Hurricane Damage

A group of state and federal officials toured south Florida on November 21 to get an up-close look at the devastation that Hurricane Wilma caused to agricultural producers. Included in the group were Chuck Conner, Deputy Secretary of the United States Department of Agriculture; Charles Bronson,



Officials in the group—from left) Rep. Adam Putnam, Rep. Mario Diaz-Balart, FDACS Commissioner Charles Bronson, and USDA Deputy Secretary Chuck Conner—answer questions from the media during a stop at TCB Farms.

Commissioner of the Florida Department of Agriculture and Consumer Services; United States Representative Mario Diaz-Balart, whose district covers Miami and a portion of Collier County; and US Representative Adam Putnam, who is from Bartow and is well-known for his support of the Florida citrus industry.

The group's visit to southwest Florida included a stop at TCB Farms just south of Immokalee, which was hit hard by Wilma and left with acres and acres of twisted and downed greenhouses.

"Until you see (the damage), I think it's tough to understand because we don't have all those

visuals that we get from the Gulf Coast," Diaz-Balart said. "If help is not on the way—and soon—frankly, there's going to be a lot of people out of business."

The purpose of the group's visit was to give Conner a first-hand look at the damage caused to south Florida's agricultural industry. The federal and state officials vowed that they are united in their effort to bring aid to producers in the region. Said Putnam: "It's our obligation to get (producers) back on their feet."

The day culminated with the officials taking hurricane-related questions from growers assembled at the Hendry Co. Coop. Extension Service in LaBelle.

Upcoming Events

January 10: *Scouting for Citrus Insect Pests and Diseases Workshop.* 9:00am-3:00pm, Hendry Co. Coop. Extension Service, LaBelle. 5 CEUs for Pesticide License Renewal; 5 CEUs for Certified Crop Advisors. Registration is required; registration fee day of the event is \$15 per person. For more information and to register, phone 863-674-4092.

January 17: *Citrus Squeezer Seminar: The Weather, Flower Bud Induction, and Current Status after the Hurricanes—and Next Year's Flowering, Fruit Set, and Fruit Yield.* 10am-1pm, SWFREC, Immokalee. 2 CEUs for Certified Crop Advisors. For more information and to RSVP, phone Hendry Co. Coop. Extension Service, 863-674-4092.

February 21: *Citrus Squeezer Seminar: Topic to be announced.* 10am-1pm, SWFREC, Immokalee. For more information and to RSVP, phone Hendry Co. Coop. Extension Service, 863-674-4092.

March 15: *Collier County Agricultural Tour (sponsored by Collier Co. Coop. Extension Service, Naples).* For more information and to register, phone 239-353-4244.

March 21: *Citrus Squeezer Seminar: Topic to be announced.* 10am-1pm, SWFREC, Immokalee. For more information and to RSVP, phone Hendry Co. Coop. Extension Service, 863-674-4092.



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RESEARCH AND
EDUCATION CENTER**

2686 State Road 29 North
Immokalee, FL 34142

Phone: 239-658-3400
Fax: 239-658-3469
E-mail: swfrec@ifas.ufl.edu



We're on the Web!

<http://swfrec.ifas.ufl.edu>

SWFREC Staff News

- ◆ Dr. Bob Rouse, associate professor of citrus horticulture, attended two international conferences in the fall. He attended the International Congress of Citrus Nurserymen in September in Cairo, Egypt, where he presented "Current Status of the Citrus Industry and Budwood Program in Florida." And at the International Society for Tropical Horticulture in October in the Dominican Republic, he presented "Florida Citrus Nursery Industry, Budwood Program, and Current Disease Threats."
- ◆ Dr. Ed Hanlon, professor of soil science, and Dr. Randy Brown in Gainesville taught Environmental Soil, Water, and Land Use (SOS 5234) during the fall 2005 semester. A total of twenty-four students participated, representing the United States; Kenya and Uganda, Africa; and Columbia, South America. Students explored land-use effects related to the behavior of water and soil in a landscape context. This course is part of the Soil and Water Science Department Masters of Science Program offered entirely through distance education technologies.
- ◆ Dr. Sanjay Shukla, assistant professor and water resources scientist, was named recipient of the 2005 Award of Excellence for Applied Research at the Southern Region Water Quality Conference in October in Lexington, Kentucky. He was unable to attend the conference; however, Dr. Ed Hanlon was in attendance and accepted the award on Dr. Shukla's behalf.



Former SWFREC assistant director Ed Holcomb made a surprise appearance at the center's holiday staff luncheon on December 16.



Shukla