

July 2006

Volume 23, No. 7
Color PDF available at
www.crec.ifas.ufl.edu



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Citrus Leaves is the monthly newsletter for employees and friends of CREC.

Citrus Leaves welcomes your contributions, suggestions, and corrections.

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For current manuscripts submitted for publication go to: <http://www.crec.ifas.ufl.edu/publications/faculty.htm>

For news from the Business Office go to: <http://www.crec.ifas.ufl.edu/services/businessoffice/index.htm>

Citrus Leaves

Dr. L. W. "Pete" Timmer Receives CREC Distinguished Professorship Award

The CREC is fortunate in having a program to recognize members of our faculty who have achieved significant accomplishment during their careers. Recently, Dr. Pete Timmer, Professor of Plant Pathology, was selected as the second recipient of the Citrus Research and Education Center Distinguished Professorship. This endowed award is offered to a CREC faculty member in recognition of sustained outstanding performance and contribution. Dr. Timmer was nominated by peers and was selected for his career-long contributions to citrus pathology in research as well as his leadership role in providing timely information on citrus diseases and their management through extension to citrus growers in Florida and throughout the world.



Dr. and Mrs. Pete Timmer
photo by Jan Syvertsen

CREC 2005 FSHS Best Paper Awards

Best Paper Awards for the 2005 Florida State Horticultural Society Proceedings were received by authors from CREC. The awards were from the Citrus Section and Handling and Processing Section. For the Citrus Section: Diane B. Bright, James H. Graham, Michael S. Irey, and Leslie E. Baucum for their paper entitled "Soil, rootstock, and climatic factors affect populations of *Phytophthora* *nicotianae* in South Florida citrus plantings," Proc. Fla. State Hort. Soc. 117:148-151. For the Handling and Processing Section: Fernando Alferez, Jacqueline K. Burns, and Lorenzo Zacarias for their paper entitled "Postharvest peel pitting in citrus is induced by changes in relative humidity," Proc. Fla. State Hort. Soc. 117:355-358. Congratulations to all the winners.

Lab Highlight - July 2006

Dr. Herb Nigg's Lab

This month's lab highlight visits with Dr. Herb Nigg, Professor of Entomology. Working in the lab with Dr. Nigg are Rhonda Schumann (Senior Chemist), Jeannette Barnes, and Ben Carter. This laboratory currently has projects on two insects, *Diaprepes abbreviatus* and *Anastrepha suspensa* (Caribbean fruit fly).

Diaprepes' larvae feed on the roots of citrus, cutting production. Caribbean fruit fly lays its eggs in citrus, particularly grapefruit, and the larvae (maggots) burrow into and feed on the flesh of the fruit. Both insects are quarantine pests. Florida ornamental nurseries must treat for *Diaprepes* before shipping plants out of Florida. Florida grapefruit growers participate in a Caribbean fly free zone certification program in order to export fruit to Japan and citrus-growing, western U.S. states.

Nigg's research on *Diaprepes* has been focused on distribution and movement, field monitoring methods, resistant rootstocks, pesticide toxicity, and genetic differentiation of populations. In addition, the lab has



photo by Gretchen Baut

(cont. from page 1 Timmer Award)

Pete has been an exceptionally innovative and effective researcher of numerous pathogens of citrus. He has published on and made major contributions to our knowledge for no less than 9 disease systems, some of which include systemic diseases such as citrus psoriasis virus and citrus blight; Phytophthora a soil-borne disease; foliage and fruit diseases that include postbloom fruit drop, Alternaria, greasy spot, scab-melanose, and canker. "Very soon after my arrival at CREC, I had the opportunity to collaborate with Pete in research on Blight, Phytophthora, and Mycorrhizas. I am privileged to be a very small part of Pete's mountain of contributions in citrus pathology," stated Dr. James Graham, Professor of Soil Microbiology at CREC.

In recent years, Pete accepted increased responsibility for extension. He assumed a major role in the improvement and publication of the Citrus Pest Management Guide over the last several years. For years, he has presented many talks at extension meetings,

maintained a webpage of useful information for the industry, and had a hotline with frequent updates of disease situations. Recently, he has been active in development and delivery of information on canker and greening disease.

Pete's knowledge of citrus diseases is widely sought

after by international colleagues and students through research collaborations, training programs, and research program evaluations. One former student and now Assistant Professor at Gulf Coast REC - Balm, Dr. Natalia Peres, expressed, "In a few words, I would say that Pete is the example that I've set for my career but I will be already happy if I accomplish 1/10 of what he has accomplished. He is not only an extraordinary professional but a wonderful person, truly an example to be followed."

For the Florida citrus industry, Pete's research and extension programs are strategically interwoven. His career is an excellent example of how a plant pathologist with a research/extension appointment should function. His research is oriented toward problem-solving and development of practical information that is immediately useful to the citrus industry. Pete has authored over 300 reports in scientific journals, extension fact sheets, trade magazines, and book chapters.

He is editor of the Citrus Pest Management Guide, and is lead editor for American Phytopathology Society publications on citrus diseases and their management. Pete has been active on the editorial board of Phytopathology and Plant Disease. He has served on international boards dealing with tropical plant pathology and exotic pathogen regulation. He has actively served the profession of plant pathology at CREC and department in Gainesville serving as President of the Florida Phytopathological Society. In recognition of his excellence in research and extension and service to Plant Pathology, Dr. Timmer was honored as an APS Fellow in 2000. Pete also has demonstrated administrative prowess



Peres (left) and Timmer (right) discuss and examine citrus for diseases.

by serving as Assistant Director of CREC from 1991-93 and has been instrumental in oversight responsibility for the CREC grove operations.

For his innovative research contributions, his leadership in citrus pathology extension, and his service to CREC and Florida citrus industry, we recognize Pete Timmer as a Citrus Research and Education Center Distinguished Professor.

(cont. from page 1 Nigg Lab Highlight)

determined the efficiency of the Tedder's trap and developed a more effective trap for Diaprepes adults, as well as providing an accurate method for monitoring the abundance of Diaprepes larvae in the field.

"We also provided the first long-term data on a tolerant and commercially available rootstock for Diaprepes as well as leads for pesticide control of adult beetles," stated Nigg. "We have developed three genetic methods to differentiate populations of Diaprepes. These have been used to indicate three introductions of Diaprepes into Florida, most likely from the Dominican Republic and Puerto Rico," Nigg continued, "We have also determined that the genetic profile of Diaprepes introductions into California match those from the Dominican Republic. Genetic work is proceeding with analyses of Diaprepes adults collected from Caribbean island nations."

Dr. Nigg's lab has been involved in Caribbean fruit fly research for 15 years and have provided data for baits and pesticides for this quarantine pest. "Our current research is on the consumption of various bait materials by this fly with the goal of increasing consumption thereby enabling a reduction of pesticide quantity in the bait," explains Nigg.

Continuing, Nigg states "To achieve this goal, we have developed a new and innovative method to measure the consumption of an individual fly. We can, in fact, measure the consumption of two different materials by the same individual fly. This allows the simultaneous presentation and consumption comparison of two materials."

The lab team's research has determined that 6.8% sucrose or fructose is preferred by *A. suspensa* and current baits contain either no sugar or about 14% sugar. They have also discovered that the bait used for Caribbean fruit fly management is consumed at a very low level. The consumption of the commercial bait cannot be improved by adding sucrose, suggesting a fundamental imperfection in the bait as Nigg's team continues to investigate the consumption of proteins, amino acids, and salts by this fly.

The Caribbean fruit fly free zone uses a malathion-bait combination that is 20% malathion (200,000 ppm). Nigg explains, "We have determined that 100 ppm of malathion can achieve the same mortality as 200,000 ppm malathion. Unfortunately, we have discovered that about 10% of male and female flies are resistant to either 100 ppm or 200,000 ppm malathion. We also discovered that under certain circumstances that malathion is not the compound causing mortality, that smaller, more toxic compounds associated with formulated malathion do the killing, and we have identified suspect compounds using gas chromatography-mass spectrometry."



Library News

with Marcia Alden

Library Sessions on Using Library Resources

Library sessions are being conducted on the use of library resources. The three sessions include searching the UF Library Catalog for books, journals and other material, accessing online journals, and using Interlibrary Loan.

The UF Library Catalog online is the key tool for answering the questions, "Does CREC have this book?" and "Does CREC have this journal?" Whether you know the exact information for the book or just "bits & pieces," the online catalog will help you find the item here at CREC or any of the other libraries within the University of Florida. An online tutorial is available at <http://www.library.health.ufl.edu/help/UFCatalog/home.htm#> to help you learn more about the catalog.

If a print journal isn't available at CREC, there's a good chance that a recent issue might be available online. The online library catalog can also be used for searching and linking to online journals. In the catalog, the online journals are listed along with the print journals, if access is available. The link to the journal displays only the years available online through UF. Online journals are also accessible through E-Journals but ONLY electronic journals are listed there.

When all else fails, if CREC doesn't have the book or journal, and it's not available electronically, then the material can be requested through Interlibrary Loan, or "ILL." Each person should have their own ILL account to request articles or books from main campus or beyond UF.

These are just a few of the resources available to us from UF. Click this link <http://www.uflib.ufl.edu/distance/ifas.html> to view some of the resources for IFAS Off-campus.

Public Relations

The CREC Public Relations Dept. had the opportunity to share a booth with the Central Florida Development Council, at the Institute of Food Technologies Annual Meeting and Food Expo in Orlando, June 25-27. Kathy Snyder helped man the booth with several other members of the Development Council during the 3-day event. Many students, some in their senior year in high school and those in undergraduate programs, stopped by the booth asking for information on UF/IFAS Food Sciences programs. Most of the student interests were in food safety programs.

In addition to students, Dean Mark McLellan stopped by the booth on Monday, extremely pleased at UF/IFAS' presence at the Food Expo. One of the items that CREC had for the taking was a Directory of Presenters from IFAS (approximately 25 posters, 12 formal lectures, 2 oral presentations, and 1 workshop). Drs. Russ Rouseff, Renee Goodrich, and Jose Reyes from CREC were participants in the various presentations.

Several teachers from both middle school and high school (from Panama City to Miami) were interested in receiving materials about the research programs and tours offered here at the Center. Kathy was able to give contact information from the IFAS directory for those seeking information not only from CREC but those from other Centers and Gainesville.

Business Office News



photo by Gretchen Baut

By now you've probably met Cheryl Petersen (ext. 1221), the newest member of the Business Office, if you haven't, stop by and introduce yourself. Cheryl joined the Business Office on May 19 and handles all travel (except for travel charged to SHARE) and basic PC purchases (Cardholder last names beginning with N-Z).

For all other accounts payable and PC purchases (Cardholder last names beginning with A-M) please contact Lorraine Jones (ext. 1320). For all SHARE travel and PO requisitions, contact Meredith Pretzie (ext. 1214) and of course, for all budget questions please contact Alta Church (ext. 1316).

For any other questions, please contact Jill McDonald at extension 1359.

Huanglongbing (Citrus Greening): First Grower Training



Participants were able to see HLB high suspect plant samples in the classroom.

The first grower field identification course for HLB or citrus greening was held in Immokalee, June 21, 2006. Attendees included growers, production managers, and company inspectors. Also in attendance were three visiting scientists from the Hawaii Department of Agriculture. The

workshop included a one hour classroom session, taught by Holly Chamberlain, UF/IFAS – CREC and Dr. Susan Halbert, FDACS-DPI. Participants were able to view previously collected HLB suspects and learned the proper procedures for submitting high suspect samples to DPI for PCR confirmation. After the classroom training, participants were transported to a known HLB-infected grove for further 'hands-on' learning. Two sessions were held, morning and afternoon, in both English and Spanish with a total of 72 attendees. The program was successfully coordinated with the assistance of regulatory agency representatives Matt Brodie, FDACS-DPI and Tim Riley, USDA-APHIS. Feedback for the program was very positive and requests for more field ID training for citrus inspections have been received.



Participants received an on-site grove ID training after classroom training.

CREC EMPLOYEE NEWS

Welcome

Dr. Hala Chaoui, OPS, Ehsani
 Dr. Hesham A. El-Shamy, Visiting Scientist, Grosser
 Mr. Dharmendra Saraswat, Postdoc, Ehsani
 Cheryl Petersen, Business Office, McDonald
 Kelly Cook, OPS, Syvertsen
 Carolina Emanuels, OPS, Rouseff
 Rosalia Garcia-Torres, Student, Reyes
 Naresh Pai, Student, Salyani
 Mr. Hasguang Meng, OPS, Orbovic
 Jenna Waters, OPS, Grosser
 Patrick Baker, OPS, Graham
 Levette Rucks, OPS, Graham
 Melinda Grosser, OPS, Graham
 Xiao Zhang, OPS, Timmer
 Joshua Atkins, OPS, M. Rogers
 Lawrence Bohannon, Volunteer, Armstrong
 Colleen Morrison, OPS, Grosser
 Holly Chamberlin, Research Programs,
 Timmer
 Ashish Mistra, Student, Ehsani



Congratulations to **Ahmad A. Omar** (recent Ph.D. graduate, pictured left) for receiving the 2006 Wilton R. Earle Award and 2006 travel award from the Society for In Vitro Biology at SIVB meeting June 3-7, 2006.



After the FSHS meeting in June, from left to right: **Luis Pozo, Fernando Alferez, Karthik J. John-Karuppiah, and Kuo-Tan Li** (pictured on right); all from Burn's lab, enjoyed an Indian

restaurant in Tampa, an invitation of Karthik. After attending the welcome reception of the Florida State Horticultural Society on June 4, 2006 in Tampa, a group of people from CREC (Pedro Gonzalez, Diego Pozueta and his wife Elena Tellez, Dr. Fernando Alferez, and a graduated student, Karthik J. John -Karuppiah, pictured to the left) visited a 370-foot topsail schooner from Spain.



**Kiran Mann, Student, Schumann
 Maria Albiach-Marti, Visiting Scientist, Dawson
 Dr. Hamdy Emara, Visiting Scientist, Grosser
 Elena Tellez Rubio, OPS, Bransky
 Amary Timpe, OPS, Ehsani
 Mary Brawley, OPS, Bransky
 Diamond Basnaw II, Volunteer, Hoover**

Farewell

Elizabeth Northeimer, OPS, Reyes
 Daniel Rivas, Student, Albrigo
 Avijit Roy, Postdoc, Bransky
 Ling Wang, OPS, Gmitter
 Marcia Alden, Librarian, Rouseff
 Melanie Watts, P.R., Rouseff
 Huang Shu, Biological Scientist, Gmitter
 Young Choi, Postdoc, Gmitter
 Tracy Meadows, Biological Scientist,
 Goodrich

Retired

Pam Holderman, Business Office, McDonald



Dr. Ed Etxeberria (pictured above) shares one of his photos during his April vacation to Spain. This picture was taken in the town of Lesaka in northern Spain right at the border with France. From left to right. Carlos Rene Rodriguez (brother-in-law), Merci Etxeberria (cousin), Hiram Martinez (brother-in-law); Tamara

Rodriguez (niece); Javier Pozueta (Spanish Co-worker); Carmen Pozueta (his daughter); Dr. Ed Etxeberria; Alma Etxeberria (sister); Leyda Etxeberria (sister); Ana Etxeberria (sister); Wilma Vazques (close family friend).



Sharath Cugati (student of **Dr. Bill Miller**, pictured to the right of Ms. Gator) obtained his Ph.D. in Agricultural & Biological Engineering at the May graduation. Also, his wife, **Inka Hublitz** (pictured to the left of Mr. Gator), obtained her Ph.D. from the same department at the same ceremony. The couple were also blessed with the birth of their son, **Leandro Tarun** (pictured with mom and dad), who arrived on the June 3, weighing 8 lb.

