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Citrus Leaves

April 2005

UF/IFAS Citrus Research and Education Center - News and Information

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Welcome New CREC Faculty

Dr. Reza Eshani

Assistant Professor, Precision Agriculture/Mechanical Harvesting

Dr. Jose Reyes

Assistant Professor, Food Process Engineering

Citrus Leaves

is the monthly newsletter for employees and friends of CREC.

Citrus Leaves welcomes your contributions, suggestions and corrections. Editor, Monica Lewandowski; E-mail mmlew@crec.ifas.ufl.edu; Ext. 1233. Photography and graphics, Gretchen Baut; Production and Distribution: Word Processing, Barbara Thompson, Supervisor; Kathy Snyder, Karla Flynn and Linda Murphy; Customer Service, Kathy Witherington and Nancy Burke.

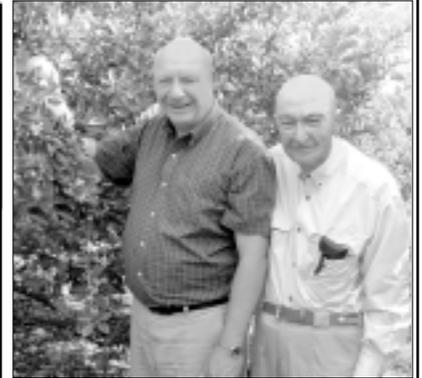
*All CREC faculty and staff
 are cordially invited
 to a luncheon honoring*

Dr. Clayton W. McCoy
UF/IFAS
Professor of Entomology



April 29, 2005
CREC
Ben Hill Griffin Jr.
Citrus Hall
12 noon

*Return response card below by April 20
 11:30 am, social; lunch at noon*



In Memoriam Buster Pratt

On a sad note, citrus grower James B. "Buster" Pratt, Jr., passed away on April 2 of congestive heart failure at the age of 80.

Mr. Pratt (pictured above, right, with Dr. McCoy) was active in the Florida citrus industry. He brought together citrus growers, scientists and regulatory personnel to establish the Diaprepes Task Force to help establish research priorities and educational programs.

After serving in the Marines in
see Buster Pratt, p. 3

*Cut and return to CREC Switchboard by April 20
 or e-mail your reponse to kms@crec.ifas.ufl.edu*

Response Card

Lunch is complimentary; RSVP required for lunch count.

Name _____

In recognition of Dr. Clay McCoy's 33 years of service to UF/IFAS, CREC and the citrus industry, a fund has been established towards support of graduate student education in entomology. Dr. McCoy requests that in lieu of gifts, donations be made toward student training in entomology. Checks payable to the CRE Foundation can be delivered to the CREC Switchboard.

The Citrus Research and Education Foundation is a non-profit 501 (c) (3) organization established to support programs at the UF/IFAS Citrus Research and Education Center. Contributions are tax-deductible.

Dr. Whitney Receives Citrus Engineering Award

Dr. Jodie D. Whitney, UF Professor Emeritus, received the Citrus Engineering Award at the 51st Annual Citrus Engineering Conference at CREC on March 10. Over 120 people attended the conference, which was hosted by the American Society of Mechanical Engineers - Florida Section.

The award, which is sponsored by Progress Energy Florida, recognizes lifetime achievements in citrus engineering.

Recipients are selected by the conference's planning committee, which was chaired by Dr. Elizabeth Webb, Brown Citrus Systems, Inc. Barry Wilson from Safechem, Inc. was the program moderator.

Steve Rudolph of Progress Energy Florida presented the award to Whitney, which includes a plaque and a \$5000 scholarship to be designated to the school of the recipient's choice. This year's scholarship will be donated to UF.

Dr. Whitney conducted research in agricultural engineering for 37 years at CREC retiring in 2002. He worked closely with the Florida citrus industry on industry-funded programs for citrus mechanical harvesting, precision agriculture, mechanical pruning, tree spacing and other aspects of citrus production. Recent work involved the use of computer and satellite technology to map tree canopy and fruit yields in commercial



Dr. Elizabeth Webb (right) and Dr. Whitney with the Citrus Engineering Award plaque.

citrus groves, maintain harvesting labor records and monitor citrus tree health and production.

Dr. Whitney holds a B.S. from Texas A & M University, M.S. from Pennsylvania State University and Ph.D. from Oklahoma State University. He is a licensed professional engineer and served as an officer in the U.S. Army and Army

Reserves.

The Citrus Engineering Conference is the ASME's oldest conference of this nature, focused on a specific topic. Opening remarks were provided by Al Kurzenhauser, ASME governor. "This is the best ASME meeting of its kind," Kurzenhauser said, referring to the quality of presentations and the support from both industry and academia. Special acknowledgement was given to Andy Hines from Progress Energy (formerly Florida Power), the organizer of the first Citrus Engineering Conference.

Other CREC faculty that have received the Citrus Engineering Award include the FDOC's C.D. Atkins (1990), and UF faculty Dr. Jim Kesterson (1997) and Dr. Chin Shu Chen (2001).

Dr. Bill Miller, Dr. Renée Goodrich and Dr. Robert Braddock serve on the Citrus Engineering Conference planning committee.



Above, Richard Bunce, program committee member, and Andy Hines (right) at the conference. Hines was the organizer of the first Citrus Engineering Conference 51 years ago.



Al Kurzenhauser, governor of the American Society of Mechanical Engineers, welcomed the audience. "This is the best ASME meeting of its kind," he said.



Barry Wilson from Safechem, Inc. (above left), was the program moderator, which included invited talks and a panel discussion on lessons learned by the citrus industry after the 2004 hurricanes.



Pam Russ' Last "Official" Day

Librarian Pam Russ' last official day at CREC was March 31, when she was presented with a collage of photos from her 38 years at CREC as librarian and webmaster. She will continue to come in on an occasional, "volunteer" basis.

Earlier in the month, a crew came in two vans for the UF Marston Science Library's Map Collection in Gainesville to pick up a collection of aerial maps of the state taken from 1968-2001. The map collection, which included 210 canisters of film and several hundred mylar prints (below), were part of the state survey of citrus acreage reported in the yearly Citrus Summary, published by the Florida Agricultural Statistics Service in Orlando. According to Pam, we had warehoused the material since 1996, but it will now be digitized and indexed at its new home in the Marston Science Library. Digitization should greatly facilitate the use of this resource.

The process is underway to hire two new professional staff positions as a librarian and webmaster. Dr. Mickey Parish is heading the librarian search committee, and Dr. Richard Buker is heading the webmaster search committee. Vivian Gregory is available in the library to assist patrons, and Monica Lewandowski, Gretchen Baut and Word Processing can help on a limited basis with website edits and changes.



Dr. McCoy To Retire End of May

Retirement luncheon at CREC on April 29

Dr. Clay McCoy, UF/IFAS Professor of Entomology, is retiring at the end of May after 33-years at CREC.

Dr. McCoy will be honored a luncheon at CREC on April 29. CREC faculty and staff are invited to attend (see page 1).

Dr. McCoy has conducted research in integrated pest management and biological control of citrus pests.

In recent years, he has focused on the *Diaprepes* root weevil, conducting research on management measures, including parasitoids and entomopathogenic nematodes for the biological control of the larvae. He served as the scientific coordinator of the *Diaprepes* Task Force, frequently working with growers and students on research projects and educational activities.

Dr. McCoy also conducted research on microbial control agents, particularly pathogenic fungi, for the biological control of citrus rust mite and other mites. He worked closely with Abbott Laboratories



Dr. McCoy worked frequently with citrus growers and students. Above, he points out *Diaprepes* larval damage on a citrus root.

in the 1970s on the development of a fungus, *Hirsutella thompsonii*, for the control of citrus rust mite. Registered under the trade name, MYCAR, this was the first use of a fungus as a biopesticide for mites.

Prior to joining the CREC faculty in 1972, Dr. McCoy spent five years at the USDA-ARS laboratory in Orlando.

Dr. McCoy is a native of rural Minnesota. He holds a B.S. in biology from Gustavus Adolphus College, M. Sc. in entomology from the University of Nebraska, and a Ph.D. in entomology from the University of California, Riverside.

Dr. McCoy and wife wife, Lynne, reside in Winter Park and have two grown children.

Buster Pratt . . . from p. 1

World War II, Mr. Pratt began working at CREC, then known as the Citrus Experiment Station. He worked in grove operations for the Coca Cola Food

Division while also managing the family citrus operations, which he did until his passing. He also served in the Korean War.

"Buster was a strong supporter of citrus research, being instrumental in many efforts to enhance our ability to meet industry needs. His tireless efforts in seeking solutions to *Diaprepes* damage to citrus trees continues to have impact on funding and program directions. Many of us will feel the effects of his loss as a friend, colleague and advocate," Center Director Dr. Harold Browning wrote in a centerwide message.

Mr. Pratt also worked in past years with CREC's Dr. Robert Koo (now retired) on fertigation, helping to pioneer its use for fertilizer application.



He was a founding member and the secretary/treasurer for the CRE Foundation, a non-profit organization established to support CREC programs.

Mr. Pratt was a past president of the Florida State Horticultural Society and Polk County Farm Bureau. Hewas inducted into the Florida Citrus Hall of Fame in 2001, and named Haines City Pioneer of the Year in 2004. He was active in Florida Farmers of America and other agricultural education activities.

Mr Pratt is survived by his wife, Jean, four children, two sisters, and 10 grandchildren.

In lieu of flowers, memorials may be made to the First United Methodist Church in Haines City, or to the CRE Foundation here at CREC.

Flowering Info Online:

Gene Albrigo posts information and advisories on citrus flowering: visit crec.ifas.ufl.edu and click on the "flower bud induction advisories" link in the lower right hand corner.

Toll-Free Florida Citrus Disease Hotline 1-866-365-3017

As we enter the flowering season, Florida citrus growers should be on the alert for outbreaks of postbloom fruit drop (PFD), scab, and *Alternaria* brown spot. Growers can call a toll-free hotline sponsored by Syngenta Crop Protection (1-866-365-3017) for the latest disease reports. Dr. L.W. "Pete" Timmer, Extension plant pathologist at CREC, provides current information on recent outbreaks, the status of the bloom and other relevant news on the hotline.

Information on PFD and other foliar fungal diseases is available on Timmer's citrus pathology website (www.crec.ifas.ufl.edu/timmer), including his PFD-Fungicide Application Decision System (PFD-FAD) and the Alter-Rater model for scheduling fungicide applications for *Alternaria* brown spot.

Far left: Buster Pratt was recognized by the *Diaprepes* Task Force when he stepped down as co-chair in 2001. He worked tirelessly to establish programs on the *Diaprepes* root weevil and helped secure funding for research and education.

Above right: Mr. Pratt at a Citrus Research and Education Foundation meeting. He was a founding member and secretary/treasurer of the CRE Foundation, a non-profit organization established to support CREC programs.

Dr. Alice Kersey, Polk County Extension agent, retired after 38 years!

A luncheon was held in her honor at CREC on March 29, attended by several family members and friends, including retired colleagues.



New UF/IFAS Study Says Benefits of Citrus Canker Eradication Program Outweigh Costs

The following article is adapted from a UF/IFAS news release by Chuck Woods.

A new University of Florida study by Ron Muraro (CREC), Thomas Spreen (UF Food and Resource Economics), Jim Graham (CREC) and Tim Schubert (FDACS Division of Plant Industry) indicates the benefits of the eradication program outweigh the costs eight to one.

“Without the eradication program, citrus canker will become widely established in Florida, with serious long-term consequences for the state’s \$9.1 billion citrus industry,” said Ron Muraro, a professor at CREC. “It would jeopardize our position in the world market.”

If citrus canker were to become endemic in Florida, exports of fresh fruit to Europe would likely cease, he said. Over the long run, the economic loss due to an endemic canker problem would be nearly \$2.5 billion.

The bacterial disease, which causes lesions on the leaves, stems and fruit of citrus trees, weakens citrus trees, causing a loss in yields and higher production costs. Removal and burning of infected or exposed trees is the only way to stop the disease.

“Opponents say Florida should abandon the current eradication program and learn to live with the citrus canker problem,” Muraro said. “They contend that the citrus industry will not incur losses that are big enough to outweigh the cost of the eradication program, but our research clearly indicates that this would not be the case.”

Dr. Thomas Spreen, UF/IFAS Professor of Food and Resource Economics, added that the cost estimates for concluding the eradication program in 2008 were developed in June 2004 before the hurricanes passed through the state. “Now we are beginning to see new outbreaks of citrus canker in Southwest Florida and the Indian River area, which means the program may have to continue beyond 2008,” said Dr. Spreen.

Dr. Jim Graham, a professor of soil microbiology at CREC, is studying the pathology of the disease and evaluating various control methods, said decisive action is the best policy when canker threatens the Florida citrus industry. Outbreaks of the disease have plagued the industry since the early 1900s, but have been throttled by eradication efforts in earlier campaigns. Previous programs

eradicated canker from the state in 1933 and 1994.

Summaries of the studies are online at is available on the UF/IFAS Extension publications database (edis) at edis.ifas.ufl.edu/FE531 and edis.ifas.ufl.edu/FE532.

Ron Muraro encourages anyone interested in learning more about the study to contact him at Ext. 1203 or by e-mail, rpm@crec.ifas.ufl.edu.

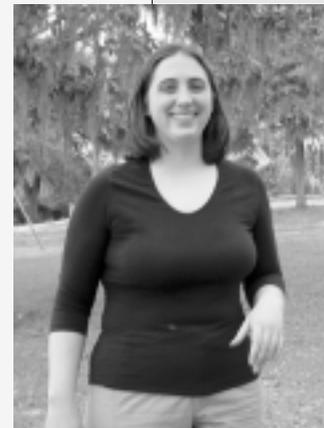
Meet . . . Meg Richards!

Meg Richards is a M.S. student in food science, working with Dr. Mickey Parish at CREC. Her research involves sanitation of food transport tankers, specifically investigations on the cleanliness, types of microflora, and biofilm formation present on the surfaces of clean manway gaskets of liquid transportation tankers.

Meg was born in Elmira, New York, but spent most of her life in Corning. She graduated for Corning Painted-Post East High School in 1999, Corning Community College in 2001 with a degree in mathematics and sciences, and from Cornell University in 2004 with a B.S. degree in food science (emphasis in food processing)

“As a child I was very interested in science and did a lot of experimenting in the kitchen with food, probably very much to my mother’s displeasure” Meg writes about her initial interest in science. “Throughout high school I planned to get a degree in biology, do research in biological sciences before I became certified to become a high school biology teacher.

My plan changed after I went on a 4-H three-day career exploration program about food science at Cornell in the summer of 1999.



Meg decided to pursue a career in food science after attending a 4-H career program at Cornell.

Decontaminate!

CREC employees are reminded that there are strict regulations on decontamination of personnel, clothing, tools, equipment and vehicles upon entering/exiting citrus groves, greenhouses and/or handling citrus material, as well as restrictions on the movement of plant material and fruit off the Center. Questions can be directed to you supervisor or to Dr. Timmer at CREC.

UF/IFAS Citrus Pest Management Guide for decontam/disinfection guidelines:

edis.ifas.ufl.edu/CG040

FL Dept. of Agriculture & Consumer Services:

doacs.state.fl.us/canker

For quarantine maps: doacs.state.fl.us/canker/maps.htm

Florida Citrus Canker Eradication Programs:

Miami: 800-850-3781 Winter Haven: 800-282-5153

Palmetto: 941-721-6622 Immokalee: 941-658-3684

Photos of citrus canker symptoms:

doacs.state.fl.us/canker/photos.html

Food science for me brought together all the aspects I love about science together with my love for cooking and experimenting with foods. I have done externships with Kraft Foods and Unilever-Best Foods, and an internship with Blue Lake Citrus Products.”

Meg’s parents, Ted and Tina Richards, reside in Corning, NY. She has five siblings: Cindy, Heather, Daniel, Jessica, and Benjamin, and two rabbits, Hannah and

Buster. She enjoys many hobbies, including cooking, sewing, quilting, reading, playing the French horn, going to the theater, camping, traveling, doing ballet and yoga, and being with my family and friends.

Photo, left: **Paul Winniczuk** prepares to clean and inspect the inside of a commercial tanker truck used to transport bulk shipments of orange juice, milk and other products. This UF/IFAS photo by Marisol Amador was distributed to news services on March 18 and is available on their website: news.ifas.ufl.edu/story.php?id=948.

Staff Opinion Survey Due April 15

UF is conducting an opinion survey of TEAMS and USPS employee on issues related to UF and work life. The survey is conducted by an independant consulting firm and individual responses will be kept confidential from UF

TEAMS and USPS employees should have received paper surveys, to be returned in the envelope provided. Employees are strongly encouraged to participate in this first-ever staff opinion survey.



Denise Dunn (left) presented a "Plant Path and Friends" seminar, "The nematode-Bt Connection - *Bacillus thuringiensis* crystal proteins: toxins that target nematodes?" on March 11.

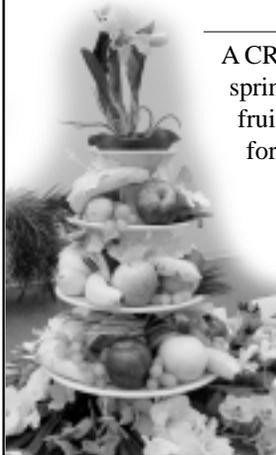
Dr. Mickey Parish presented, "An Introduction to Food Microbiology" on April 1.

Plant Path and Friends meet every Friday morning at 11 a.m. in the BHG Teaching Lab. Students, post-docs and visiting scientists are especially encouraged to present informal seminars. Topics are not limited to plant pathology.

Dr. Monica Lewandowski presented information on the history of the Florida citrus industry to Dr. James Holeton's Florida history class at Warner Southern College on March 2.

She also participated in Florida Ag Literacy Day on March 17 by reading a designated story, "How Groundhog's Garden Grew," to pre-k 3, pre-k 4 and K-2 classes at St. Paul's School in Winter Haven. Monica also spoke about life on her family's raisin ranch in Kingsburg, California, demonstrated how to "roll raisins," and brought different varieties of citrus.

The event is sponsored by the Florida Ag in the Classroom, part of FDACS, a non-profit organization that works to promote agricultural education. Statewide, ag industry representatives visited two thousand classrooms on that day. Florida Ag in the Classroom is funded by the "Florida agriculture" license plates.



A CREC tradition is the annual "ladies luncheon". Usually a Christmas event, his year's luncheon on March 14 was a spring themed Hawaiian luau, organized by women from Building 24 (2nd-3rd floors) and BHG. The luncheon included fruits, salads, ham and plenty of desserts, along with fun Hawaiian decor. The women also collected school supplies for Lake Alfred Elementary. The women voted to continue the event as a spring potluck.



Above: CREC hosted a group of agricultural scientists from Egypt on March 30. The group is visiting UF and Ohio for several weeks. On their visit to CREC, they met with Dr. Gene Albrigo, grad student Shamel Eldein, Dr. Jude Grosser, grad student Ahmad Omar, Dr. Fahiem Elborai Kora, Dr. Mohamed Ismail, Dr. Clay McCoy and Dr. Robin Stuart.

Dr. Mohamed Ismail traveled to Thailand on March 10 -24 as guest of the Dr. Nithiya Rattanapanone of the Postharvest Technology Institute at Chiang Mai



University. The travel was supported by a grant from Asia Development Bank to teach a short course in postharvest biology and technology to graduate students at the university. Dr. Ismail also visited the city of Fang near the borders with Myanmar (Burma) where most of Thailand's citrus is grown. The visit also included some sightseeing in both Chiang Mai and Bangkok, and including the famous Benchamabopitr/Marble Temple in Bangkok (photos).

"During the 6 months since my retirement from the FDOC, I have traveled to Italy, Greece, Egypt and Thailand to lecture at various universities and government institutions," Dr. Ismail writes.

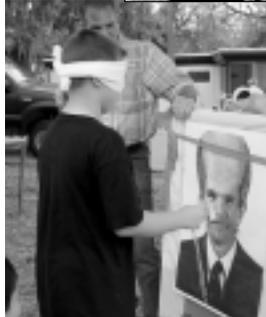
Good Weather for a Picnic

Special thanks to Horticulture, Ag Engineering, Facilities and many others for hosting this year's picnic at Lions Park in Lake Alfred. The weather was great, the food was delicious, and the games were enjoyed by all kids, big and little. Dr. Jim Syvertsen chaired the picnic's organization crew.

The picnic was also an opportunity to meet CREC's newest faculty members. Near right, Dr. José Reyes and his wife, along with their two sons, joined in the fun. Dr. Reyes is an assistant professor of food process engineering and in UF's Food Science and Human Nutrition Department.

Above, far right: Dr. Reza Ehsani and his wife, Elizabeth, and their two sons greet the crowd. Dr. Ehsani is an assistant professor in precision agriculture/mechanical engineering in the UF Agricultural and Biological Engineering Dept.

Near right, Julian McCoy at the fishing game; far right, runners take off in the "egg on a spoon" race. Games organizers were Dr. Gmitter, Dr. Jaya Soneji, Dr. Chunxian Chen, Margie Wendell, Becky Clarke, Dr. Rao, Misty Holt, Dr. Young Choi, Ling Wang, Huang Shu and Dr. Lihua Cao.



Left: In an unusual twist on "Pin the Tail on the Donkey," Fred Gmitter monitors the action in a game of "Pin the Hair on the Bald Guy," which looked a lot like a picture of a bald Fred.

Far left, Michael McCoy, son of Rachel McCoy, attempts to pin a piece of "hair" on the right spot. Near right, Allan Burrage's son seeks the "bald guy."



Above, left: Dr. Rao helps Michael McCoy with a game of dexterity that involved picking out paper clips out of rice grains in a timed event. Second from left, Dr. Lihua Cao helps the kids with a game of "Scooping the Cotton Balls," something that is harder than it looks. Center, Jim Baldwin keeps the ice chests stocked. Second from right: Amir Afunian concentrates during the "egg on a spoon race"; far right, Misty Holt helps the Reyes boys Carlos (left) and Andreas (center), as Amir looks on.

More Picnic

Lions Park in Lake Alfred was the site of another picnic, this one on March 23 as a farewell party for **Dr. Elisabeth Knapp** (far left



photo). Second from the left, John Cook works on the barbecue; center, Diann Achor; and far right, Julia Beretta (left), Ana Redondo and Dr. Mathias Choquer enjoy the cool evening weather. *Photos by Dr. Tatineni Satyanarayana.*

Welcome

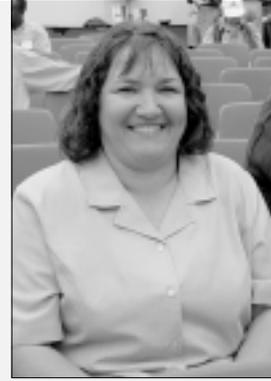
Jennifer Vick - OPS (Dr. Syvertsen)
Lynn Hines - OPS (Dr. Childers)
Mark Maliszewski - OPS (Dr. Albrigo)
Welcome to Dr. Reza Ehsani and Dr. Jose Reyes,
new UF/IFAS faculty members

Farewell

Tammy Flannery - FDOC (S. Barros)
Dr. Elisabeth Knapp - postdoc (Dr. D Lewandowski)
Sharld Brickman - OPS (Dr. Grosser)
Sharon Knauf - OPS (Dr. Grosser)

Robin Bryant, FDOC's mechanical harvesting program administrator, has relocated her office to the FDOC headquarters office in Lakeland.

Dr. William Stinson has been named the FDOC's scientific research director. Mike Sparks, who served in an interim role, is at the FDOC office in Lakeland.



Tammy Flannery, who worked for the FDOC, has a new job with the Florida Dept. of Agriculture and Consumer Services Food Safety Division in Winter Haven.



Dr. Elisabeth Knapp, a postdoc at CREC with **Dr. Dennis Lewandowski** (left), moved to accept a position with the Fraunhofer Center for Molecular Biotechnology in Delaware. At CREC, Dr. Knapp worked with Dr. Lewandowski on the tobacco mosaic virus as vectors of genes of interest in plants. Practical applications include the production of proteins, including pharmaceuticals, in plants. At Fraunhofer, Dr. Knapp will be involved in similar work. Dr. Shaila Rabindran, a formerly at CREC, is also at the Delaware center.

Right, Dr. Knapp was presented with an oil painting of a Florida landscape, done by Dr. Dennis Lewandowski, at a farewell reception on March 24. She was also given a framed collage of photos from her CREC days, including several soccer team photos.



Upcoming Seminars

Dr. Allen Overman, Professor of Agricultural and Biological Engineering, UF

Gainesville

Tuesday, April 19

11 am - 12 pm (refreshments at 10:45)

BHG Room 1

Florida Population Trends: The Case of the Missing Million

Dr. Overman has carried out research on advanced soil and water engineering, water reclamation and reuse, chemical transport, crop response to nutrients & water and mathematical modeling. He has authored over 200 publications, including a textbook on crop models. Population changes influence land values, water use, and impact most Floridians. Dr. Overman's seminar will relate population to water issues and other topics from the perspective of a scientist/engineer/farmer.

Dr. Mickey Parish, Professor of Food Microbiology, CREC

Tuesday, April 26

11 am - 12 pm (Refreshments at 10:45)

BHG Room 1

"Alicyclobacillus-mediated spoilage of low pH beverages"

All personnel welcome; all seminars are open to the public.

Manuscripts Submitted in March

A. Roy, A. Fayad, G. Barthe, and R. H. Brlansky. A Multiple Polymerase Chain Reaction Method for Reliable Sensitive and Simultaneous Detection of Multiple Viruses in Citrus Trees. *Journal of Virological Methods.*

R. Yuan, F. Garcia-Sanchez, F. Alferez, I. Kostenyuk, S. Singh, G. Zhong, J. P. Syvertsen, and J. K. Burns. The Effect of Annual Defoliation of Orange Trees on Yield, Juice Quality, Leaf Gas Exchange, and Fruit Size and Number. *Journal of the American Society of Horticultural Sciences.*

R. S. Buker, III and R. E. Rouse. The Influence of Citrus Rootstocks on *Bidens pilosa* Interference with *Citrus sinensis*. *Weed Science.*

L. R. Parsons. Soil Water Sensors for Improved Irrigation Management. *Florida Grower.*

M. Salyani and W. M. Miller. Precision Application Technology for Monitoring Soil Applied Pesticides in Florida Citrus Production. *7th Symp. on Fruit, Nut, and Vegetable Prod. Eng. Symp.*

S. Gowda, T. Satyanarayana, C. J. Robertson, S. M. Garnsey, and W. O. Dawson. Infection of Citrus Plants with Virions Generated in *Nicotiana benthamiana* Plants Agrionfiltrated with a Binary Vectorbased *Citrus tristeza virus*. *Proc. of the 16th Conf. IOCV.*

M. E. Rogers. Insecticide and Miticide Resistance Management. *Citrus Industry Magazine.*

D. G. Hall, R. E. Burns, C. C. Jenkins, K. L. Hibbard, D. L. Harris, J. M. Sivinski, and H. N. Nigg. A Field Comparison of Chemical Attractants and Traps for Caribbean Fruit Fly, *Anastrepha suspensa* (Loew) (Diptera: Tephritidae) in Florida Citrus. *Journal of Economic Entomology.*

H. Li, R. J. Stuart, J. P. Syvertsen, S. H. Futch, C. W. McCoy, and A. W. Schumann. Association of Soil pH, Water, Magnesium and Iron with Citrus Tree Decline and Diaprepes abbreviatus Root Weevil Distributions in Two Fields. *Journal of Experimental Botany (Plants and the Environment Section).*

H.-Q. Chen, L. Cao, K. L. Dekkers, J. A. Rollins, N. J. Ko, L. W. Timmer, and K.-R. Chung. A Novel Transcription Regulator Required for Fungal Pathogenesis in *Colletotrichum acutatum* causing Key Lime Anthracnose. *Molecular Plant Pathology.*

C. C. Childers, R. J. Beshear, G. Frantz, and M. Nelms. A Review of Thrips Species Biting Man Including Records in Florida and Georgia Between 1986-1997. *Florida Entomologist.*

Q. U. Zaman, A. W. Schumann, K. Hostler. Estimation of Citrus Fruit Yield Using Ultrasonically-Sensed Tree Size. *Applied Engineering in Agriculture.*

Sun Mon Tues Wed Thurs Fri Sat

calendar:ifas.ufl.edu
UF/IFAS Extension
events statewide

April 2005

FloridaAgCalendar.com
Ag industry events
statewide

					1 Plant Path and Friends	2
3	4	5	6	7	8 Plant Path and Friends	9
10	11	12 Florida Citrus Nurserymen meeting	13 Certified Crop Adviser seminar Fl Rural Water	14 Fl Rural Water Citrus Pest Mgt course 3-6 pm	15 Plant Path and Friends	16
17	18	19 Seminar Dr. Overman	20	21 end of UF pay period Citrus Pest Mgt course 3-6 pm	22 Plant Path and Friends	23
24	25	26 Seminar: Dr. M. Parish	27	28	29 Dr. McCoy Retire- ment Luncheon Plant Path and Friends	30

All events subject to change.

13 - Certified Crop Adviser Nutrient Mgt. and IPM Educational Seminar. BHG 1-2. Program online: www.crec.ifas.ufl.edu/cca
13-14 - Florida Rural Water Assoc. seminar, BHG 3-4.

19 - Seminar, Dr. Allen Overman, UF Professor of Agric. and Biological Engineering. Florida Population Trends: The Case of the Missing Million. BHG 1, 11 am - 12 pm (10:45 am, refreshments).

26 - Seminar, Dr. Mickey Parish, Professor of Food Microbiology, CREC. "Alicyclobacillus-mediated spoilage of low pH beverages." BHG 1, 11 am - 12 pm (10:45 am, refreshments).

29 - Luncheon to honor Dr. Clay McCoy, BHG 1-2; noon.

Classes at CREC This Semester:

Citrus Pest Management course offered at CREC
Thursdays, Jan. 6 – April 28, 2005; 3 - 6 p.m., BHG Teaching Lab

Plant Path and Friends hold weekly seminars every Friday at 11 am - 12 pm in the BHG Teaching Lab. CREC personnel, especially students and post-docs, are encouraged to present informal seminars. Topics are not limited to plant pathology. For more information, contact Dr. Chung, krchung@crec.ifas.ufl.edu.