



Dr. Harold W. Browning, Center Director  
UF/IFAS Citrus Research & Education Center  
700 Experiment Station Road  
Lake Alfred, FL 33850-2299  
Tel. (863) 956-1151  
Fax (863) 956-4631

# Citrus Leaves

June 2005

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

Volume 23, No. 5

## In This Issue

|                                      |   |
|--------------------------------------|---|
| Citrus Canker Concerns .....         | 1 |
| Building 24 .....                    | 1 |
| In Memoriam, Dr. Galen Brown .....   | 2 |
| In IFAS: New deans .....             | 2 |
| Swimming in Cold Water - UF News     | 2 |
| Meet . . . The Schumann Lab .....    | 3 |
| FSHS 118th Annual Meeting .....      | 4 |
| What's Buzzin' at Your Library ..... | 5 |
| Student News .....                   | 5 |
| Welcome, Farewell .....              | 6 |
| Volleyball Tradition at CREC .....   | 7 |
| Manuscripts Submitted .....          | 7 |
| Calendar .....                       | 8 |

**Color pdf of  
Citrus Leaves**  
[www.crec.ifas.ufl.edu](http://www.crec.ifas.ufl.edu)

## This is IT at CREC

### ISD Tip of the Month

Visit the UF Software Licensing Services website ([sls.ufl.edu](http://sls.ufl.edu)) for a list of available software, pricing and ordering instructions. Pay attention to the Licensing Agreements; most specify that the software may be installed only on UF-owned machines, and only University employees and registered students may use the software. Contact [isd@crec.ifas.ufl.edu](mailto:isd@crec.ifas.ufl.edu) with questions.

### 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](mailto: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.

## Citrus Canker in Polk County; Concern Grows

### Employees Reminded of Citrus Decontamination Procedures

Citrus canker was confirmed in a Frostproof nursery and groves owned by Ben Hill Griffin Inc., marking the first citrus canker find in Polk County since a statewide outbreak in 1916.

All trees within 1900-ft. radius from infected trees must be destroyed, an area that encompasses approximately 250 acres. Over 1000 acres of citrus trees, owned by Ben Hill Griffin Inc., and 255 acres owned by Alico, Inc., are being removed and burned.

Another outbreak is under investigation at the Hickory Branch Nursery in the Venus area of south Highlands.

Citrus canker is a bacterial disease that causes leaf and fruit drop, and a general decline in tree health. Symptoms include brown, raised lesions surrounded by an oily, water-soaked margin and a yellow ring or halo. Photos of symptoms can be found on the Florida Dept. of Agric. and Consumer Services website: [doacs.state.fl.us/canker/photos.html](http://doacs.state.fl.us/canker/photos.html).

There is no "cure" for the disease and

the current strategy is eradication. The disease does not affect humans or animals.

### How is Citrus Canker Spread?

Citrus canker is a bacterial disease that can be spread by wind and rain for short to medium distances - within trees, or to neighboring trees. Severe tropical storms, hurricanes and tornadoes can spread the bacterium longer distances, over miles. The movement of infected material on clothing, vehicles (see photo) and equipment can also spread the disease.



*If citrus canker were detected at the center, our citrus would be destroyed and the area placed under a citrus quarantine.*

### Decontamination A Must

CREC employees are reminded that if citrus canker were detected at the center, all of our citrus would be destroyed and the area placed under a citrus quarantine. Replanting would not be allowed until the quarantine was removed. There are strict

*See Citrus Canker, p. 2*

Right, an artist rendering of Building 24 with a two-story addition to the north, with construction to begin sometime this year. The addition will house plant pathology laboratories. Lower right: the building in the late 1940s.



## Citrus Canker . . . from p. 1

restrictions on the movement of plant material and fruit off the Center. There is a vehicle wash station north of the center near the farm operations buildings. Decontamination involves the removal of plant debris from vehicles, equipment and clothing, and washing with appropriate and approved decontamination materials, before entering citrus groves/greenhouses and upon exiting. There are separate chemicals approved for personnel and clothing vs. vehicles and equipment. CREC is also subject to inspections regarding proper decontamination procedures.

Also, if you suspect citrus canker or have questions regarding plant symptoms on any citrus, you should not bring in or move the plant material - doing so could spread the disease if it is indeed citrus canker. Arrangements should be made for inspections on-site. Questions can be directed to your supervisor or to Dr. Timmer at CREC.



### In Memoriam

**Dr. Galen Brown**, retired Florida Dept. of Citrus mechanical harvesting program administrator, died of cancer at his daughter's home in Michigan. He was 67.

Dr. Brown had a distinguished career in agricultural engineering, working with harvesting systems for a variety of fruit and vegetable crops. He spent most of his career with the USDA-ARS, retiring from the agency in 1995 and then assuming the position with the FDOC. His office was based at CREC.

Dr. Brown worked with the Florida citrus industry to develop commercially viable mechanical harvesting systems for citrus and initiated programs on fruit abscission and automated robotic harvesting for citrus. He was a fellow of the American Society of Agricultural Engineers.

Dr. Brown is survived by his wife, Ann, his mother, Lucille, a brother, two daughters and two granddaughters.

Contributions in his honor may be made to Michigan State University, Galen K. Brown Endowment Fund, University Development, 4700 S. Hagadorn, Suite 220, East Lansing, MI 48823.

### In IFAS

**Dr. Kirby Barrick** was named dean of the UF/IFAS College of Agricultural and Life Sciences. He is currently associate dean for academic programs in the College of Agricultural, Consumer, and Environmental Sciences at the University of Illinois at Urbana-Champaign. Prior to that, he was chairman of The Ohio State University De-



partment of Agricultural Education and assistant director of the university's 4-H youth development program. He is scheduled to begin August 25.

**Dr. Mark McLellan** was named dean for research and director of the Florida Agricultural Experiment Station in UF/IFAS. His appointment becomes effective July 11.

Dr. McLellan is currently director of Texas A&M University's Institute of Food Science and Engineering. Prior to that, McLellan was director of Cornell University's Institute of Food Science and chairman of Cornell's Department of Food Science and Technology. He received a bachelor's degree in food science from the University of Massachusetts Amherst, and master's and doctoral degrees in food science from Michigan State University.



## Swimming in Cold Water May Fuel The Appetite

**A UF News Release  
by Meredith Jean Morton**

*CREC's public relations intern Meredith Morton worked for the UF News and Public Affairs office on campus this past year. Below is a portion of a May 2005 UF news release written by Meredith (full version online: [www.napa.ufl.edu/2005news/calorieswim.htm](http://www.napa.ufl.edu/2005news/calorieswim.htm)). It was picked up by Reuters news service, ABC,*

**Citrus canker decontam/disinfection guidelines, UF/IFAS Citrus Pest Management Guide:** [edis.ifas.ufl.edu/CG040](http://edis.ifas.ufl.edu/CG040)

**FL Dept. of Agriculture & Consumer Services:** [doacs.state.fl.us/canker](http://doacs.state.fl.us/canker)

**Florida Citrus Canker Eradication Program Helpline:**  
Miami-Dade / Broward / Palm Beach / Monroe counties:  
Tel. (800) 850-3781  
All other Florida counties: Tel. (800) 282-5153

**Photos of citrus canker symptoms:**  
[doacs.state.fl.us/canker/photos.html](http://doacs.state.fl.us/canker/photos.html)

**UF/IFAS Citrus Canker Extension website:** [canker.ifas.ufl.edu](http://canker.ifas.ufl.edu)

**Citrus Canker: The Pathogen and Its Impact**

[www.apsnet.org/online/feature/citruscanker/](http://www.apsnet.org/online/feature/citruscanker/)  
Tim R. Gottwald, USDA-ARS Ft. Pierce; James H. Graham, UF/IFAS CREC; and Tim S. Schubert, FDCAS/DPI Gainesville. 2002.

*NBC and other news media.*

GAINESVILLE, Fla.—Exercise in cold water instead of warm water may increase people's appetites, making it harder for them to lose extra pounds, a University of Florida study finds.

Results indicate people may consume more calories after exercising in cold water, according to Lesley White, a UF researcher who designed the study to better understand why aquatic exercise is often less successful than equal amounts of jogging or cycling for people who want to lose weight.

"It's possible that individuals who exercise in cooler water may have an exaggerated energy intake following exercise, which may be a reason why they don't lose as much weight," said White, an assistant professor in the College of Health and Human Performance. "So it may not be the exercise itself that causes the problem because you can match the exercise energy expenditure; rather it's the increased eating after the exercise is over."

White said her research is not meant to suggest that swimming or aquatic exercise is ineffective for building physical fitness. In fact, water exercise is suggested for people who are overweight because the buoyancy given by the water makes exercising easier for people with joint or

*see Swimming, p. 6*

**Dr. Ed Exteberria** at CREC was named to the Editorial Board for the Journal of Plant Signaling and Behavior in the "Intracellular Transport and Endocytosis" unit. He was also elected to a second term as editor of the Proceedings of the Florida State Horticultural Society. For more news for the FSHS, see page 4.

# Meet . . . The Schumann Lab

by Meredith Jean Morton

Dr. Arnold Schumann and his laboratory group study citrus nutrition, fertilizers, soil science and associated production practices. The lab utilizes new technology using computer and satellite-based technology, such as geographical information system (GIS) and geographical positioning system (GPS) tools, to collect data on trees, soil, weather and other characteristics and help citrus growers make better management decisions on fertilization, irrigation and other practices to optimize tree growth and production. Examples include technology for measuring soil electrical conductivity, soil organic matter, nutrient content, water tables and other soil chemical characteristics, and correlating soil data with citrus production.

The lab includes a group of people with diverse backgrounds and experiences. They are working to develop the use of precision agriculture technology with applications in citrus nutrition and soil science, as well as Nitrogen Best Management Practices for Ridge citrus growers.

## Dr. Arnold Schumann

joined the CREC faculty in February 2001 as Assistant Professor of Citrus Nutrition. He brought over 15 years of experience in agronomy and plant nutrition to CREC.

A native of South Africa, Dr. Schumann holds a bachelor's degree and MSc. in Agronomy from the University of Natal in South Africa. He received his Ph.D. in 1997 from the Crop and Soil Science Department at the University of Georgia, where he studied with Dr. Malcolm Sumner.

Prior to coming to Lake Alfred, Dr. Schumann conducted weed management research at the Institute for Commercial Forestry at the University of Natal.

Dr. Schumann and his wife, **Rhonda**, who works at CREC in Dr. Nigg's lab, have an 18-year old daughter, **Sylvia**, who graduated from Auburndale High School and will begin college at UF this summer. Dr. Schumann's lab and office are located in Building 10.

**Dr. Ganesh Bora** (right) joined Dr. Schumann's lab in April 2005, to work on precision agriculture and crop nutrition. He is involved in variable rate fertilizer application with a main focus of improving the response time of rate change of the present spreader.

Dr. Bora received his Ph.D. from Kansas State University in Precision Agriculture and Biological and Agricultural Engineering. His M.S. is from Bangkok, Thailand, and his BS is from India.

"I am originally from the tea-rich state of Assam, in India," Dr. Bora says. "And I came to the USA from Bangkok, Thailand, where I lived for more than five years."

In his spare time Dr. Bora likes to travel and go to the gym.

He was recently selected as one of the three finalists for the

Graduate Student Research Award by the American Society of Agricultural Engineers (ASAE) to present his research in ASAE's annual international meeting in Tampa June 17-20.

**Marjie Cody** (right) goes with Laura Waldo to the field to collect water samples to run nitrate analysis using the rapid flow analyzer.

She has been at CREC for 25 years, where she worked with Dr. Wheaton for 23 years until his retirement. She has been working in Dr. Schumann's lab for about a year.

Marjie has a bachelor's degree in chemistry from Longwood University, in Virginia. She is a native of Gether, Virginia, but has lived in Florida for 25 years. Her husband, Gene, works at Cody Auto Parts, and they have two children, a 21-year-old daughter, LeeAnn, and an 18-year-old son, Turner.

Some of Marjie's hobbies include sewing, collecting stamps and "doing whatever the kids want to do."

**Kevin Hostler** has also been working at CREC for 25 years. He said he conducts variable rate fertilizer tests and "does whatever Dr. Schumann tells [him] to do."

He jokingly says he enjoys reading scientific journals in his free time.

**Laura Waldo** has been working in Dr. Schumann's lab since April 2004, conducting Ridge Citrus BMP verification.

"I maintain the sites where we monitor leaching," Waldo says. She also processes data for analysis.

She takes water samples to test the fertilizer levels, to verify the effectiveness of the Nitrogen Best Management Practices.

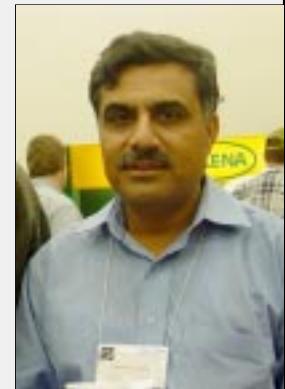
Laura has a bachelor's degree in horticulture science from Florida Southern College, and is interested in landscape design as a hobby. Before coming to CREC, she worked at Universal Studios in Orlando doing landscape design.

**Dr. Qamar Zaman** (right) has been at CREC since February 2002, and is working on precision agriculture projects for Dr. Schumann. He is a precision agriculture engineer from Pakistan, and will finish working in the U.S. in August.

Dr. Zaman graduated from Newcastle University in England.

Although he says he works a lot, Dr. Zaman says he does enjoy watching television in his spare time.

**Kirandeep Mann** is a student working with Dr. Schumann and is currently in Gainesville.



## FSHS 118th Annual Meeting News

### Burns elected President; CREC scientists bring home awards

Over 220 scientists, growers and producers attended the 118<sup>th</sup> Florida State Horticultural Society Annual Meeting in Tampa, June 5-7, which featured seminars on current issues in citrus, ornamentals, fruits and vegetables and related topics.

Craig Campbell, outgoing chairman of the board, passed the chairman's gavel to last year's president, Dr. George Hochmuth. **Dr. Jackie Burns** was elected president for the incoming year.

Also elected into office was member-at-large Richard Tyson and re-elected for a

second term was proceedings editor **Dr. Edgardo Etxeberria**. They join the current slate of officers: treasurer Garvie Hall, secretary Dr. Jeffrey Brecht, program coordinator Dr. Steven Sargent, newsletter editor Anita Neal, student best paper award chair Dr. Elizabeth Lamb, and member-at-large Chris Oswalt.

The Best Paper award for the Citrus Section went to **Diane Bright (CREC), James H. Graham (CREC), Michael S. Irey and Leslie E. Baucum** for their study, "Soil, rootstock, and climatic factors affect populations of *Phytophthora nicotianae* in South Florida citrus plantings," 2004 Proc. Fla. State Hort. Soc. 117:148-151. The authors were awarded a medal, certificate and \$200.

The Best Paper in the Handling and Processing Section was awarded to Dr.

**Fernando Alferez (CREC), Jacqueline K. Burns (CREC), and Lorenzo Zacarias** for their study, "Postharvest peel pitting in citrus is induced by changes in relative humidity,"(2004 Proc. Fla. State Hort. Soc. 117:355-358). The authors were awarded a medal, certificate and \$200.

**Dr. Jim Syvertsen** is the Citrus Section vice-president. Mongi Zekri was voted citrus section vice-president elect. For the Handling and Processing section, Dr. Jan Narcisco is the sectional vice-president, and Dr. Anne Plotto is the vice-president elect

Many attendees commented that this was the most exciting meeting in years, with new programs and workshops. Registration was up 20% over last year.

*see FSHS News, p. 6*



Far left: **Dr. Jackie Burns** (left) and **Dr. Fernando Alferez** (center) accept the Best Paper Award - Handling and Processing Section from FSHS Chairman of the Board Craig Campbell. Dr. Burns was also elected FSHS president. Second from left: **Dr. James Graham** (left) and **Dr. Mike Irey** accept the Best Paper Award - Citrus Section from Craig Campbell. Diane Bright (pictured second from right) and Leslie E. Baucum were also authors. Far right, **Dr. Ed Etxeberria** holds up the 2004 Proceedings of the Florida State Horticultural Society, now available in print, on CD and online to members. For information about membership or for membership dues forms, visit [www.fshs.org](http://www.fshs.org).

### CREC Presentations at FSHS

For a complete list, including abstracts, visit the FSHS website: [www.fshs.org](http://www.fshs.org).

Rootstock Observations among 'Hamlin' and 'Valencia' Orange Trees Growing at Central Ridge and Flatwoods Locations. **William S. Castle and James C. Baldwin, UF/IFAS CREC**.

The 10-year Performance and Survival of 'Marsh' Grapefruit Trees on Sun Chu Sha Mandarin and Various Citrumelo Rootstocks on Riviera Sand Depression, an Alfisol. **William S. Castle, UF/IFAS CREC** and Mace G. Bauer, IRREC, UF.

Economic Longevity of Trees on Swingle citrumelo and the Variability to Adaptation among Soils of the Indian River Production Area. Mace G. Bauer, UF/IFAS IRREC, **William S. Castle, UF/IFAS CREC**, Brian J. Boman, UF/IFAS IRREC, and Tom A. Obreza, UF Dept. of Soil and Water Science.

Relationships among rootstock, mineral content and peel thickness of Hamlin orange. Morgan K.T., R.E. Rouse, UF/IFAS SWFREC; **S.H. Futch, UF/IFAS CREC**; M.A. Zekri, Multi-county citrus agent, Hendry County; F.M. Roka, UF/IFAS SWFREC.

Mechanical Harvesting Has Little Effect On Citrus Tree Health And Productivity. **Kuo-Tan Li, James P. Syvertsen, and Jacqueline K. Burns, UF/IFAS CREC**.

Yield impacts on 'Valencia' oranges from late season mechanical harvesting without abscission agents. Roka, F.M., UF/IFAS SWFREC; **Jacqueline K. Burns and R.S. Baker, UF/IFAS CREC**.

Growth Conditions and Crop Load Affect Sheepnosing in Grapefruit. **James P. Syvertsen, UF/IFAS CREC; UF; L. Gene Albrigo, UF/IFAS CREC; M.A. Ritenour, UF/IFAS IRREC; J.M. Dunlop, UF/IFAS CREC; R. C. Vachon, The Packers of Indian River Ltd.**

Citrus Blight Incidence under Different Soil Fertilization and Liming Programs in Florida Flatwoods. B. J. Boman, UF/IFAS IRREC; R. D. Berger, UF/IFAS Plant Pathology; **K. Derrick, UF/IFAS CREC**; A. Battikh, UF/IFAS IRREC.

Sucrose transport into Citrus juice cells: evidence for an endocytic transport system. **Ed Etxeberria and Pedro Gonzalez, UF/IFAS CREC** and Javier Pozueta-Romero, Nafarroa, Spain.

"Citrus Canker in Florida: Status and Prospect for the Future," Speakers: Tim Gottwald, USDA/ARS; Tim Riley, USDA/APHIS; Tim Schubert, FDACS; **James Graham, UF/IFAS CREC**.

The Evaluation of Chemical Control of the Asian Citrus Psylla, *Diaphorina citri* Kuwayama (Homoptera: Psyllidae) and Management Approaches on Florida Citrus. **Carl C. Childers and Michael E. Rogers, UF/IFAS CREC**.

Thrips (Thysanoptera: Thripidae) species that are pests on Florida Grapefruit Varieties: Their Biologies, Seasonal and Relative Abundance, Damage to Fruit and Control. **C. C. Childers, UF/IFAS CREC**; Philip A. Stansly, UF/IFAS SWFREC.

*continued on page 6*

## What's Buzzin' At Your Library?

by Meredith Jean Morton

The next time you visit the Winter Haven Public Library, check out the display cases in the gallery (in the foyer between the library and coffee shop). CREC is currently presenting a display on insects, highlighting insect specimens from CREC entomologists, including Dr. Harold Browning and Dr. Michael Rogers. Pictures and additional information were contributed by Dr. Carl Childers, Dr. Robin Stuart and Dr. Herb Nigg.

CREC was asked to present the display to correlate with the children's library bug-themed summer reading program, "What's Buzzin' at Your Library?" The program and the display will run through the end of July. As part of the program, Dr. Rogers did a children's presentation, "The Wonderful World of Bugs" on



Above left: **Dr. Michael Rogers** did a children's presentation on insects as part of the Winter Haven Public Library's summer children's program; center, a child eyes a large wolf spider; far right, part of CREC's insect display at the library.

June 9 at the library.

CREC's display was designed by Meredith Morton, Monica Lewandowski and Gretchen Baut, and includes information on several insect orders in the six display cases. There is a case highlighting the entomology research at CREC, including information on Diaprepes and acarology, a case with an overview on insects, a Lepidoptera (butterflies and moths) case, Orthoptera (grasshoppers and crickets) case,

Coleoptera (beetles) case, and another display where children are encouraged to find camouflaged insects.

The cases are informative and presented in a fun, colorful way to interest both children and adults. We hope you have a chance to check it out!

*Winter Haven Public Library, 325 Avenue A Northwest, Winter Haven. Tel. (863) 291-5880; open Mon-Thurs, 9 am - 8 pm and Fri-Sat, 9 am - 5:30 pm.*

## Student News

**Divya Sonal Singh**, daughter of **Dr. Shila Singh and Dr Samunder Singh**,



graduated with highest honors from Auburndale High School on May 19. She received a purple graduation cord for

English, red cord for social science, green for science, white for mathematics and a black cord for foreign languages. She also received a silver cord, certificate and medal for community service, and a National Honor Society sash. She was a Superintendent's Scholar, a High Achieving Minority Scholar, a Principal's Award recipient, Silver Garland nominee, and received a certificate for perfect attendance for all four years of high school. She was awarded a \$73,000 full tuition scholarship to Tusculum College, in Greenville, Tennessee, where she will pursue pre-med studies.

**Zarnab Qamar** (right) daughter of **Dr. Qamar Zaman and Afshan Qamar**, received a certificate for exemplary

attendance, a certificate of achievement, the Principal's Award for Excellence in Reading, and completed two levels in the Excellence in Reading program at the Winter Haven Library by reading 100 books (50 books for each level). She also received two trophies. Zarnab completed kindergarten at Garden Grove Elementary in Winter Haven.

**Haley Love** (upper left), daughter of **Perry and Rhonda Love**, was named to the A/B Honor Roll, Presidential Academic Excellence Award at Hillcrest Elementary School in Lake Wales. Haley is 11 and will enter the 6th grade.



**Kyra Love** (middle left), 13-year old daughter of **Perry and Rhonda Love**, received the following awards for the 7th grade year at McLaughlin Middle School: All "A" Honor Roll, the Principal's Award, 2nd place in the Polk County Book Bowl, National Junior Honor Society inductee.



**Shelby Flynn**, daughter of **Richard and Karla Flynn**, was Salutatorian at Grace Lutheran School. She received the "Fruit of the Spirit Award", which included a \$75 savings bond, the President's Award for Outstanding Academic Excellence, Daughters of the American Revolution American History Contest Certificate, Mathematics Outstanding Achievement in Algebra, Civic Achieve-



*Shelby Flynn*

ment Award, and the American Scholastic Achievement League Certificate of Merit for Scholastic Challenge. Shelby will enter the International Baccalaureate High School in Bartow this fall. Karla Flynn works in Word Processing.

**Ben Garrison**, grandson of **Dr. Gene and Clydene Albrigo**, married **Tahany Elbaz** in a patio-dockside ceremony on March 26 in Shelter Island, California. Ben is in the US Navy and stationed in San Diego.



**Carrie and Susan Albrigo** (twin granddaughters) graduated from West Orange High School in Winter Garden on May 19.

For the furry members of the Albrigo household, Duncan McCloud of Floricats was 3<sup>rd</sup> best Exotic cat nationally and 13<sup>th</sup> best cat in the Southwestern Region for the 2004-05 show season (shown by Tom Albrigo and pictured in earlier Citrus Leaves). Bonnie of Floricats was the 18<sup>th</sup>



*see Albrigo cats, p. 7*

## FSHS News . . . from p. 4

Dr. Hochmuth added that new opportunities will be explored in the coming year, and he encourages all those interested to join or renew their membership. Regular membership is only \$50 per year and includes a printed copy of the meeting proceedings and society newsletters and updates. For more information on the society or to download a membership form, visit [www.fshs.org](http://www.fshs.org).



**Jan and Jim Syvertsen** (above) enjoy the FSHS meeting. Dr. Syvertsen is the vice-president for the Citrus Section. Next year's meeting will return to the Tampa Marriott Westshore, June 4-6, 2005.



**Buster Pratt** was honored posthumously with the FSHS Outstanding Horticulturist Award. He was a citrus grower in Haines City who had close collaborations with CREC scientists and served as secretary-treasurer of the Citrus Research and Education Foundation at CREC. Mr. Pratt was a former president and chairman of the board of the Florida State Horticultural Society.

Among the other FSHS awards presented, **Dr. Brian Boman** received the Presidential Gold Medal Award (Citrus Section) for contributions to Florida horticulture through work published in the Proceedings of the Florida Horticultural Society over the preceding six-year period in the Citrus Section.

A full list of award winners will be posted at [www.fshs.org](http://www.fshs.org).



**Dr. Carl Childers** hosted a visit from a All Saint's Academy, which included his grandson, Aaron (left). The students viewed various pests of citrus.



**Abscission Team Busy** - CREC's abscission program, led by Dr. Jackie Burns, were busy collecting data with mechanical harvesting trials through June. The team is evaluating several aspects of mechanical harvesting, tree health and fruit abscission ([www.crec.ifas.ufl.edu/abscission](http://www.crec.ifas.ufl.edu/abscission)).

## CREC Presentations at FSHS . . . from p. 4

Scarring Damage on 'Murcott' Tangors Caused by the Flower Thrips

*Frankliniella bispinosa* (Morgan). **Michael E. Rogers and Carl C. Childers, UF/IFAS CREC.**

Effect of application time and glyphosate formulations on weed control efficacy in young citrus groves. **Samunder Singh, Megh Singh and Steve Futch, UF/IFAS CREC.**

The impact of three hurricanes in 2004 on the Florida Citrus Industry: Lessons learned, what we know and what we don't know. **L.G. Albrigo<sup>1</sup>, J. Attaway<sup>1</sup>, K. Bowman<sup>2</sup>, R.S. Baker<sup>1</sup>, W.S. Castle<sup>1</sup>, K.W. Hancock<sup>3</sup>, C.W. McCoy<sup>1</sup>, R.P. Muraro<sup>1</sup>, M.E. Rogers<sup>1</sup>, M.A. Ritenour<sup>1</sup>, T. Spreen<sup>1</sup>, P.D. Spyke<sup>4</sup>, J.P. Syvertsen<sup>1</sup>, L.W. Timmer<sup>1</sup>, R.C. Vachon<sup>5</sup>. UF/IFAS; <sup>2</sup>USHRL-ARS; <sup>3</sup>Citrus Consultant, Ft. Pierce, <sup>4</sup>Arapaho Groves, Ft. Pierce and <sup>5</sup>The Packers of Indian River Ltd., Ft. Pierce.**

Vitamin C, B-Carotene, Lycopene and Sugar Concentrations in 'Flame' Grapefruit Juice with Various Phosphorus and Potassium Rates. **H. Dou, S. Jones, Florida Department of Citrus, CREC, T. Obreza, UF/IFAS Soil And Water Science Department, and R. Rouse, UF/IFAS SWREC.**

The Potential Of A Novel Product Citrus Clean For Citrus Postharvest Decay Control. **Jiuxu Zhang and Joe Ahrens, Florida Department of Citrus, CREC.**

## Swimming . . . from p. 2

balance problems.

"Water exercise is an excellent activity for many people, particularly those with joint disorders, thermal regulatory problems and balance or coordination difficulties," she said. "However, an earlier study reported that women who swam did not lose as much weight as those who jogged or cycled."

White's study was published in February in the International Journal of Sport Nutrition and Exercise Metabolism.

## Welcome

Sheth Anoop - volunteer (Dr. Gmitter)  
Ryan Atwood - Sci. research mgr (Dr. Castle)  
Mary Brawley - OPS (Dr. Bransky)  
Karthik J. John Karuppiah - student (Dr. Burns)  
Lily Kender - OPS (Dr. Singh)  
Jessica Noling - OPS (Dr. Graham)  
Ashish Misra - student (Dr. Ehsani)  
Dr. Gemma Pasquali - postdoc (Dr. Grosser)  
Dr. Vekateswara Potluri - visitor (Dr. Grosser)

Ann George - student (Dr. Singh)  
Sunny Liao - student (Dr. Chung)

## Farewell

Lynn Hines OPS (Dr. Childers)  
Tom Robnett OPS (Dr. Nigg)  
Gerald Perkins OPS (Dr. Miller)

Did we miss you? Send names to Monica Lewandowski at [mmlew@crec.ifas.ufl.edu](mailto:mmlew@crec.ifas.ufl.edu) or the CREC Switchboard.

## Volleyball a Long CREC Tradition



### New Players Welcome

by Meredith Jean Morton

With summertime here, many of us start to think about getting in shape. Everyone is looking for a fun, easy way to attain a fit look for the summer. What better way to exercise and have fun than playing a sport?

That sounds nice, you may be thinking, but when am I going to find time to play a sport?

Why not during your lunch break? At CREC, every Monday, Wednesday and Friday, during lunchtime, a dedicated group can be found at the volleyball court across from the Ben Hill Griffin, Jr. Citrus Hall, playing a competitive game or two of volleyball.

"This probably started about 36 years ago for the fun, exercise and competition," says Dr. Gene Albrigo, a veteran lunchtime player.

Albrigo says in the 36-year history of the CREC volleyball teams, probably 50 or 60 people have cycled through, playing at the center. CREC has even won trophies competing against other UF/IFAS Research and Education Centers, like Fort Pierce, or for entering teams in the city and county leagues.

### Albrigo Cats ... from p. 5



best kitten in the Southeastern Region and 1<sup>st</sup> best Exotic kitten regionally and 5<sup>th</sup> best nationally. Clydene (Floricats owner) will attend both regional awards ceremonies (Phoenix, AZ and Charlotte, NC) in June. Now that's the cat's meow!

"With more people involved, that would be something we could start up again," Albrigo says. "The competition was fun."

The regular players - usually enough to play between three and five people per side - are always interested in recruiting new members.

"We have a lot of talent," says Allan Burrage, who has been playing about one and a half years. "Recently, though, we have had a lot of our regular players leaving the center. So we're looking for some new people."

Playing volleyball during lunch breaks up the days for the players, says Burrage,

Left: Zhencai Wu (far left) in action as teammates Stephen Burrage, Samunder Singh and Patrick Dees look on. Above center, long-time volleyball veteran Gene Albrigo. Right: Rick Tempe hits the ball as Allan Burrage watches the action.

and it gives you time to get outside and away from your desk.

The regular players are especially interested in recruiting more females to come out and join the team. Burrage says there are a few women who play infrequently.

"We really hope more people will come out and join us," Burrage says. "We have a lot of fun, and it's a great way to get some exercise. Some come on out and get involved."



Zhencai Wu (far left) and Patrick Dees (center) serve up the ball; near left, even an injured hand doesn't stop William Swen from volleyball.

## Manuscripts Submitted to the Publications Committee in May

**S. H. Futch and J. H. Graham.** Field Diagnosis of Phytophthora Disease. *Citrus Industry Magazine*.

**F. Garcia-Sanchez, J. P. Syvertsen, and J. Dunlop.** Salinity Tolerance of Cleopatra Mandarin and Carrizo Citrange Citrus Rootstock Seedling is Affected by CO<sub>2</sub> Enrichment. *Journal of the American Society of Horticultural Sciences*.

**E. Knapp, G. M. Danyluk, D. Achor, and D. J. Lewandowski.** A Bipartite *Tobacco mosaic virus* - Defective RNA (dRNA) System to Study the Role of the N-terminal Methyltransferase Domain of the Replicase Protein in Cell-to-Cell Movement of dRNAs. *Virology*.

**D. J. Lewandowski and S. Adkins.** The Tubule-forming NSm Protein from Tomato Spotted Wilt Virus Complements Cell-to-cell and Long-distance Movement of Tobacco Mosaic Virus Hybrids. *Virology*.

**S. N. Mondal and L. W. Timmer.** Greasy Spot Rind Blotch, A Serious Problem for Production of Fresh Market Grapefruit. *Citrus Industry Magazine*.

| Sun  | Mon   | Tues   | Wed                   | Thurs   | Fri | Sat |
|--|---|--|-----------------------|---|-----|-----|
| calendar.ifas.ufl.edu<br>UF/IFAS Extension events statewide                                |   | <b>June 2005</b>   |                       | FloridaAgCalendar.com<br>Ag industry events statewide |     |     |
| June is the official start of hurricane season - stock up on supplies, update contact info |   | 1  | end of UF pay period  | 2   | 3   | 4   |
|  |   | Florida Citrus Industry Annual Conference; Singer Island, June 1-3 | Florida Citrus Mutual |   |     |     |
| 5<br><i>FSHS 118th Annual Meeting<br/>Tampa Marriott Westshore<br/>www.fshs.org</i>        | 6<br><i>Seminar Dr. Rouseff<br/>June 5-7;</i> | 7  | 8                     | 9   | 10  | 11  |
| 12   | 13  | 14   | 15                    | Faculty Mtg<br>end of UF pay period                   | 16  | 17  |
| 19   | 20  | 21   | 22                    | Prec. Ag applic;<br>FIPR teachers                     | 23  | 24  |
| 26   | 27  | 28   | 29                    | 30<br>end of UF pay period                            |     | 25  |

All events subject to change

### June

June 1-3: First Florida Citrus Industry Annual Conference, Singer Island. [www.flcitrusmutual.com](http://www.flcitrusmutual.com)

5-7 - Florida State Horticultural Society 118th Annual Meeting; Tampa Marriott Westshore. Abstracts and preliminary program online: [www.fshs.org](http://www.fshs.org). Registration \$110; students \$10.

7 - Seminar, Dr. Russell Rouseff, UF/IFAS Professor of Food Chemistry, CREC. "Development of a Sensory Guided Instrumental Analysis of Orange Juice Flavor Quality." BHG Room 1 – 11:00 a.m. – 12:00 p.m. (10:45, refreshments)

23 - Precision ag/Temik application meeting, BHG 1.

23 - Teacher program, Florida Institute of Phosphate Research, BHG 2; Teaching Lab.

### Citrus Canker Survey Training

See [www.crec.ifas.ufl.edu/CitrusCanker/index.htm](http://www.crec.ifas.ufl.edu/CitrusCanker/index.htm) for information on a series of citrus canker survey training sessions throughout Florida in June.

| Sun   | Mon | Tues             | Wed | Thurs   | Fri | Sat |
|---|-----|------------------|-----|---|-----|-----|
| calendar.ifas.ufl.edu<br>UF/IFAS Extension events statewide |     | <b>July 2005</b> |     | FloridaAgCalendar.com<br>Ag industry events statewide |     |     |
|   |     |                  |     |   | 1   | 2   |
| 3<br><i>Holiday Independence Day</i>                        | 4   | 5                | 6   | 7   | 8   | 9   |
| 10  | 11  | 12               | 13  | 14<br>end of UF pay period                            | 15  | 16  |
| 17  | 18  | 19               | 20  | 21<br>Faculty Mtg                                     | 22  | 23  |
| 24  | 25  | 26               | 27  | 28  | 29  | 31  |
| 31  |     |                  |     | end of UF pay period                                  |     |     |

Preparing a poster for a scientific meeting? Water and rain can ruin an ink-jet printed poster, and laminating can be expensive and require adequate lead time. A quick and inexpensive alternative is to give your poster a light coat or two of clear spray lacquer (make sure the ink on the poster has had time to dry sufficiently). While it won't make your poster waterproof, it will offer some water protection and could avert a disaster. Clear spray lacquer is available at many stores where hardware, crafts or home improvement supplies are sold.

Talk to the Photolab if you're interested in trying this out.

### July

21 - Faculty meeting, 8:30 am, BHG 3-4.