

# CITRUS CENTER

(956) 968-2132

WESLACO, TEXAS 78596

February 2001

## NEWSLETTER

Vol.19 No.1

### DR FRENCH WINS PRESTIGIOUS AWARD

At the 55th Annual Meeting of the Rio Grande Horticultural Society in Weslaco this January, Dr Victor French was awarded the Arthur T. Potts Award for his services to the Society and to Texas citriculture. Previous Citrus Center recipients include Richard Hensz, John Fucik and Bob Leyden.

In making the presentation, the society president, Lynn Brandenberger, described Dr French's achievements over the 28 years he has been at the Citrus Center. He has served two terms as president of the society, as well as treasurer, section vice-president and associate editor of the society journal - he is the author of more papers in the journal than any other contributor. As entomologist at the Center, he has described six new pests in the Valley, and his work has led to the registration of at least nine pesticides, as well as Section 18 labeling for several others. He served as Interim Director in 1994 and 1995, and over the years has developed highly productive relationships with scientists at TAES, TAEX, USDA-ARS and USDA-APHIS. He has also contributed to the Center's continuing education courses and supervises graduate students.

This award is well deserved, and all at the Citrus Center are proud of Victor's achievements.

**John da Graca and Mani Skaria**

### HORTICULTURAL SOCIETY POSTER WINNERS

The scientific poster awards competition was one of the highlights of the 55<sup>th</sup> Annual Meeting of the Rio Grade Valley Horticultural Society (RGVHS) held recently at the Texas A&M Experiment Station's Hoblitzelle Auditorium. There were a total of 19 posters, the most ever shown at any RGVHS meeting, with participants from Texas A&M University at College Station, Texas A&M-Kingsville Citrus Center, University of Texas-Pan American, USDA-ARS, USDA-APHIS-PPQ, Texas Agricultural Experiment Station (TAES) and Texas Agricultural Extension Service (TAEX) in Weslaco.

Posters featured a wide range of research topics with a certificate and monetary award given to the top 3 posters. 1<sup>st</sup> prize went to: T.X. Liu and T.Y. Chen,

TAES, on Lace wing predation of aphids on vegetables; 2<sup>nd</sup> prize to M. Skaria and J.V. French (Citrus Center) on Root weevil /Phytophthora—a new pest-disease complex on Texas citrus; and 3<sup>rd</sup> prize to I. Lauziere and J. Legaspi (TAES) on Jalisco fly, a parasitoid of Mexican rice borer. A big thanks needs to be given to Mr. Joe Mitchell, of BASF Corp. and Dr. Alan Dalrymple of Uniroyal Chemical Co., for providing award money; also to Ms Nora Solis-Gracia, Research Associate, TAES, for doing an outstanding job as coordinator for the poster session.

**J. Victor French**



## STATE SENATORS AND REPRESENTATIVES VISIT CENTER

On February 2, the Center hosted a visit by nearly 40 Texas State Senators and Representatives, together with their spouses, who were in the Valley at the invitation of the Chamber of Commerce. After visiting the orchid greenhouse and the Special Programs vegetable greenhouse at the Experiment Station, they were shown the sites of the proposed new Citrus Center and the Agriculture Discovery Center there. The infrastructure needs of TAES/TAEX were outlined to them by the Director, Dr Amador. They then paid a 1-hour visit to the Citrus Center where they saw the present facilities, including the original structures and the newer graduate student apartments. They were treated to a Mexican merienda in the Hensz Auditorium, and were addressed by the Texas A&M University-Kingsville President, General Marc Cisneros who described the work being done at the Center and the need for new facilities. The present session of the legislature is being asked for Tuition Revenue Bonds to build the new Center which, at the request of President Cisneros, will include classrooms to enable Valley students to take TAMUK courses by distance education in all the universities colleges. Representative Mike Wise of Weslaco also addressed a news conference on an initiative to support small business in rural Texas. Each visitor was handed a box of Rio Red grapefruit as they left.



Merienda Time

### John da Graca



President Cisneros addresses visiting legislators and their guests

## THE “ORANGE-IN” OF THE SPECIES

Citrus is believed to have its origins in southern China some 30 million years ago. Its taxonomy is complex, controversial and sometimes confusing, with two classification systems used in parallel, one devised by Swingle describes 16 species, while that of Tanaka divides them into 162! Phylogenetic studies in the 1970s indicated that there are really only three true species within cultivated citrus, namely citron, mandarin and pummelo. All others are derived from hybridization of these species, mostly in very early times. They in turn were suggested to have originated from four citrus types called papedas, including *Citrus hystrix*; its leaves are used in several Thai recipes.

A recent genetic study on a number of Citrus and related genotypes was conducted in Italy using molecular markers (Nicolosi et al., 2000). The results support both the theory of the original four, and the citron-mandarin-pummelo theory. The following are now believed to be the origins of the well known types:

— both sweet orange and sour orange were the result of (separate) pummelo X mandarin crosses,

— lemon and sweet lime are derived from citron X sour orange,

— Rangpur lime and rough lemon are derived from citron X mandarin,

— Mexican lime is derived from citron X *C. micrantha* (closely related to *C. hystrix*),

— Clementine is from mandarin X sweet orange

— Grapefruit is from a relatively recent pummelo X sweet orange cross in the West Indies.

— Kumquats, classified as *Fortunella* species, are actually very closely related to Citrus.

The pictures are in some cases more complex, with evidence of other later crosses also occurring, for example Volkamer lemon has mostly citron and sour orange markers, but also some mandarin.

What use is this information? Understanding the origins of each type can explain the susceptibility or resistance to certain diseases, and can be used in selecting sources of genes for developing new varieties and for crosses targeting genetic mapping.

**John da Graca and Eliezer Louzada**

## DR. JESUSA CRISOSTOMO LEGASPI ACCEPTS FLORIDA POSITION

Dr. Jesusa Crisostomo (Susie) Legaspi, citrus and sugarcane entomologist at the Texas A&M Agricultural Research and Extension Center in Weslaco, since 1992—recently left the Valley for a new position in Florida. She will serve as a research entomologist with the USDA ARS Biological Control Laboratory in Gainesville, and also have a joint faculty appointment with Florida A&M University in Tallahassee. Overseeing a highly successful research program, Susie has made outstanding contributions in developing and implementing effective biological controls for key sugarcane and citrus pests in South Texas. Through her efforts a parasitic wasp, known as the Jalisco fly imported from the Ameca Valley of Mexico, has proven very effective in controlling the Mexican Rice borer—the main pest of sugarcane grown in the Valley. Orchard surveys under her direction were instrumental in collection and identification of 11 native parasitic wasp species attacking citrus leafminer—a relatively new Texas citrus pest. Most recently, Dr. Legaspi led a cooperative project with Citrus Center, Agricultural Extension, and USDA -APHIS scientists to re-establish biocontrol of the Florida red scale as part of the biointensive IPM program for Texas citrus. Dr. Legaspi’s hard work and dedication are exemplified by her outstanding publication record of both research and extension articles. She has authored several articles for the Citrus Center’s Newsletter.

Dr. Legaspi will be missed by all of us that have had the privilege of working with her during her tenure at the Texas Agricultural Experiment Station in Weslaco. We wish her and family—husband Dr. Benjamin Legaspi, and children—Michelle and Jon Kyle, the very best in their relocation to a new home and job in Florida.

**J. Victor French**



## WRITERS VISIT CITRUS CENTER

Recently two writers for mass circulation US newspapers visited the Center to learn more about Texas citriculture, and especially the red grapefruit. David Karp, who writes for the Los Angeles Times and Gourmet Magazine, is planning an article for the magazine later this year, and spent some time in mid-December meeting with scientists at the center. He also met with the retired Director, Dr Richard Hensz. He has previously written articles about citrus in California, most recently an article about pummelos. Johnny Apple, who writes for the New York Times, visited the center in February. He was particularly interested in the history of the red grapefruit, and is planning a write-up for his newspaper.

**John da Graca**

## CITRUS CENTER VISITORS

Mr. Keith Patterson from Gowan Company and Dr. Alan Dalrymple from Uniroyal Chemical visited Dr. French.

The Center hosted several tours of Winter Texans as well as two classes of elementary school students.

Subscriptions to the bimonthly Newsletter are \$5 a year or \$8 for two years. International rate is \$7 a year. Make checks payable to Texas A&M University-Kingsville. Address comments or inquiries to Newsletter Editor, Texas A&M University- Kingsville Citrus Center, 312 N. International Blvd, Weslaco, Texas 78596 or, in the case of signed articles, directly to the staff member named. Articles appearing in the Newsletter may be reproduced, in whole or in part, without special permission. Newspapers, periodicals and other publications are encouraged to reprint articles which would be of interest to their readers. Credit is requested if information is reprinted.

Mention of a trademark, proprietary product, or vendor does not constitute a guarantee or warranty of the product by the Texas A&M University-Kingsville Citrus Center and does not imply its recommendation to the exclusion of the other products that may also be suitable.

## EMPLOYEE OF THE YEAR

At the end of 2000 the Center introduced an Employee of the Year Award to recognize an outstanding member of the staff for exemplary work during the year. From the nominations received from supervisors, we found it impossible to separate the top two, and therefore decided to give the award to both. They are:

Maribel Reyes (Senior Purchasing Clerk)  
Teddy Medrano (Farm Foreman).

Congratulations to both.

**Jose Amador and John da Graca**

**NON-PROFIT ORG.**  
**U.S. POSTAGE PD.**  
PERMIT NO. 2  
WESLACO, TEXAS 78596