

Citrus Center



Weslaco, Texas

Vol.27 No.4

NEWSLETTER

August 2009

Groundbreaking Ceremony

John da Graça

As reported in the June 2009 newsletter, the groundbreaking ceremony for the new building took place on June 23. The list of attendees included several state and university VIPs, community leaders, members of the Citrus Center Advisory Committee, many growers, and colleagues from Texas A & M AgriLife, USDA-ARS, USDA-APHIS amongst others.

The Chancellor of the Texas A & M University System, Dr Michael McKinney started the ceremony with references to the creation of the Star Ruby and Rio Red grapefruits here, and said the next 60 years would bring unimaginable marvels. Other speakers at the groundbreaking included Texas Agriculture Commissioner Todd Staples; Dr. John da Graca, center director; state Senator Eddie Lucio, Jr.; state Representative Armando "Mando" Martinez; Dr. Steven Tallant, President of Texas A&M-Kingsville; Ray Prewett, President of Texas Citrus Mutual; and Geof Edwards, of Kell Munoz architects in San Antonio. Other distinguished guests included Mr Greg Garcia (Texas A & M System Associate Vice-Chancellor for government relations, Dr Mark Hussey (Texas A & M Vice-Chancellor and Dean of the College of Agriculture & Life Sciences, Dr Bill Kuvlesky (Texas A & M Kingsville Assistant Dean of Agriculture, Natural Resources & Human Sciences), Dr Mike Gould (Director, AgriLife Research & Extension Center, Weslaco), Mr Josue Reyes (Skanska Construction) and Ms Becky Bonham (Chairman of Texas Citrus Mutual).

After the formal groundbreaking with the ceremonial shovels, refreshments were served in the Rio Red room.

Farm Service Agency Establishing Tree Assistance Program (TAP)

Mani Skaria

As per information I received from Juan M. Garcia, State Executive Director, Texas State FSA Office, College Station, TX, a TAP assistance is available for citrus growers and nurserymen that suffered loss as a result of natural disaster happened since January 1, 2008. The eligibility is on calendar year basis. The assistance is available for growers and nurserymen that suffered tree deaths in excess of 18 percent (15 + 3). One of the requirements for this program is establishing a Normal Tree Mortality Rate. The deadline for submission is September, 25, 2009. Please see the TAMUK Citrus Center Newsletters August and October, 2008 issues for two articles on water damage assessments. Your individual damage can be different. If you need more information, please contact Mr. Juan Garcia at 979-680-5152.

Welcome back, Jose Luis Perez

Mani Skaria

The faculty and staff at the Citrus Center welcome Jose L. Perez back to the Citrus Center, this time as a doctoral student. Jose has been accepted for a cooperative Ph.D program between the Texas A&M University Department of Horticultural Sciences and TAMUK Agronomy and Resource Sciences. Jose's exact research project is not yet outlined. He will be working under two co-chairs, one from College Station and one at the Citrus Center (Skaria).

We have known Jose since 2003 when he was a UTPA undergraduate working as an intern at the Citrus center with Dr. Bhimu Patil. I have served as a member of his

Groundbreaking June 23, 2009 for New Citrus Center Building



Front row (L-R), Dr Tallant, Dr McKinney, Commissioner Staples, Mr Geof Edwards (architect), Mr Jimmie Steidinger (grower, Advisory Committee member), Senator Eddie Lucio Jr.



TAMUK President Steve Tallant



Texas A&M System Chancellor
Mike McKinney



Texas Agriculture Commissioner
Todd Staples



University and Industry Leaders



Groundbreaking reception

Insect-Resistant Screens for Budwood Increase Blocks

John da Graça

The threat of greening disease to the citrus industry of Texas is a major concern, and various programs have been initiated including drawing up an action plan, surveys in orchards and dooryards, lab diagnoses and various psyllid control strategies. The current source of budwood for Texas nurseries is the foundation and increase blocks at the Citrus Center and are exposed. Although a rigorous psyllid control program using registered pesticides has been implemented, some of these trees could still become infected through psyllids which could land on them, feed, transmit the bacterium and then die from the pesticide. During the annual testing for the aphid-transmitted *Citrus tristeza virus* this year, four adjacent standard Valencia trees were found with the virus; all trees from the affected row were removed, and all trees in the foundation and increase blocks, as well as the nursery (over 3,000 in total) were tested by PCR, a more sensitive assay than the serological test usually used. No other infected trees were detected. This clearly illustrated the absolute need to get the trees under protective structures to prevent infection by any vectored pathogen.

In 2007, we constructed a screened structure to house potted foundation trees, and 50 20-gallon pots containing the major commercial varieties have been established. Other varieties will be established shortly.

In July this year, we received news that a proposal to the Economic Development Administration (EDA) of the US Department of Commerce for \$400,000 to cover all the increase trees with insect-resistant structures has been successful. We plan to build four separate structures so that if there is a breach in one, the others will not be exposed at the same time. Once installed, all future budwood sources should never be exposed to disease vectors – the rootstock seedlings for the increase blocks will be raised and budded under screen using budwood from screened foundation trees. Even though covered, pesticides will still be applied in case of accidental entry of the insect.



Budwood Increase trees

A Citrus Researcher from Trinidad and Tobago at the Citrus Center

Mani Skaria and John da Graça



Dexter Samm, a citrus researcher from the Republic of Trinidad and Tobago was our guest for two week training on various aspects of citrus tree production. Samm's visit was arranged through his supervisor, Dr. Nadeer Baksh, citrus pathologist and a friend of both Skaria and Da Graça. We can clearly say that we miss Samm because he made friends with each and every one of us

at the Center and at the Best Western Palm Aire hotel where he stayed.

Of course, he had a very productive and busy schedule, learning sophisticated tricks in the laboratory, sucking psyllids, sweating in the nursery, and evaluating *Phytophthora* in the field.

Though his country lies outside the hurricane belt, the Trinidad and Tobago is within the tristeza belt. The country once had approx. 7,500 acres of citrus on sour orange but has lost many trees to tristeza. The newer plantings are on Cleopatra mandarin rootstock which is CTV tolerant. Sweet oranges, mandarins and grapefruit are the main varieties grown.

Samm's responsibility is to oversee the disease-free citrus nursery production in the country. We look forward to more interactions with Samm and his colleagues in Trinidad and Tobago. The picture above shows Samm inspecting citrus nursery trees at the Citrus Center.

Back to Washington State Apple and Cherry Orchards after Two Decades

Mani Skaria

During the recent APS meeting in Portland, Oregon, I joined 50 other plant pathologists from the USA and overseas on a field tour of the apple and cherry orchards in the Yakima Valley of Washington state and in Oregon. Before moving to Texas in 1988, I worked at Washington State University and lived in Yakima Valley for a year. So, going back to familiar places after two decades was exciting, but also stimulating for what could be learned for possible new ways of citrus cultivation under HLB threat.

When I left WA State, I saw some growers were launching a move towards close planting of apple trees. Today, I see the apple tree spacing as a quantum leap from a 24x24 ft spacing (=75 trees per acre) of the 1980s to the current trend of 3x10 ft (=1,452 trees/acre). According to Tim Smith, WA State Extension horticulturist at Wenatchee, a five year-old Gala apple tree in a 4x10 space on M9 rootstock can produce 40-50 pounds of fruit per year and it will be productive for many years. I am equally impressed by the apple industry's next possible quantum leap – some apple growers are aiming towards making \$1 a square foot, means \$43,560 per acre per year. In a global economy and global competition, growers that can maximize returns from every square foot of the orchard will be far ahead of conventional systems. The apple industry seems to be heading to the right direction with innovative production systems. The citrus industry personnel, researchers, regulators and policy makers have a lot to learn from the apple producers –especially when HLB threatens the very survival of the citrus industry.

The picture below (Left) shows small apple trees growing (3 x 10 ft spacing) inside the “grow tubes” that protect them from animal and other problems, near Toppinish, WA. The picture (Right) shows a small tree inside the “Grow Tube” protected.



The picture below shows the production and tree size of a three-year old apple orchard at the same location. The fruit on the ground are from thinning for size control. The new production system allows the growers to plant orchards on shorter cycles—making it possible to change cultivars as driven by the market and overall profitability.



The organic apple production had increased from 18,000 bins to 79,000 bins in 2009 with an area of 13,000 acres in WA.

Apples See Page 5

Apples from Page 4

We were introduced to a state of the art apple pre-sizing packinghouse of the Zirkle Fruit Company in Selah, WA. It pre-sizes apples for the whole industry. They also have a sophisticated cherry packing line. Cherries picked in orchards are immediately dumped into super-cool water in 18 wheeler trucks. Some of the cherries picked are hauled more than five hours in super-cooled containers to the packing line in Selah, WA for same day packing. Cherries go out within 24 hours without pesticide treatment.

The trip also took us to the Mid-Columbia Agricultural Research and Extension Center, Hood River, Oregon where we saw cherry and pear productions. I am convinced that our citrus industry can learn a lot from the pome fruit and stone fruit operations in the Pacific Northwest.

Jose Luis from Page 1

graduate committee when he did his MS at the Horticultural department, TAMU, College Station, September 2005 to May 2007, under Dr. Bhimu Patil. After his graduation from TAMU, we hired him at the Citrus Center as a Research Assistant (May 2007 to December 2007) for the Citrus Commodity Survey in the Valley, and in east Texas area. We have first hand information on Jose's progress thus far. He is recently married and has a full time job as a chemist with the U.S. Department of Agriculture, ARS in Weslaco, Dr. Nasir Malik as supervisor.

We wish Jose well on his part-time Ph.D program. His desire to be back in the Valley to help the family and fellow citizens is commendable. We wish him the best.

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.

Phone: 956-447-3360 Fax: 956-969-0649



Texas A&M University-Kingsville
Citrus Center
312 N. International Blvd
Weslaco, TX 78596