

KSARC NEWS

KIKA DE LA GARZA SUBTROPICAL AGRICULTURAL RESEARCH CENTER...

a research laboratory of the Agricultural Research Service of the U.S. Department of Agriculture

MONTHLY HIGHLIGHTS

October saw KSARC hold it's first annual All-Staff Day at Rio Farms (See recap on Page 2) and saw the arrival of our first cool front of the season. We were well on our way into the fall! BIRU employees also "treated" us to a Halloween display of costumes in the entry way of Bldg. 200. With the arrival of **November**, KSARC was getting prepared to host the U.S. Mexico Border Conference for the first time (See story on Page 5). Also, see Announcement for **2002 Field Day** - Page 8.

FROM THE CENTER

Well, well, well Thanksgiving 2001 is done and Christmas is on the way. I always love this time of the year. It means children, family, friends, and a time to think about our accomplishments during the past year. As I look back, I recall a long flight from Honolulu to McAllen. Of being met at the airport by Mr. Balderas and the long drive through unknown country to the Howard-Johnson Motel in Donna. The Howard-Johnson's room 234 was our home for the next two months (before we left, the room was filled by things Diane bought to put in our new home). My first few days at KSARC were filled with amazement as I met the many wonderful people that I would be working with in the months and years to come. I have been located at several other ARS research locations, but nothing near the size of KSARC. Dr. Jones' research unit has more SY's than any of these locations (Lubbock, El Reno, and Hilo). I recall the many meetings that Olivia and I made during my first few months as we tried to learn as much as possible about "Valley" Agriculture. The budget review (ARMPs), held in July, enabled me to

begin to see both the financial strengths and weaknesses of KSARC. During the review, your Research Leaders made wonderful presentations about your research and they were well received by our Area Director and his staff. I think back about our planning for the first All Staff meeting. Each of you has to agree that the speakers were O.K. They were enjoyable to listen to and they knew their subject matter. And finally, Dr. Charles A. Onstad and Dr. Rodriguez's meeting of USA and Mexican scientists where KSARC had the honor of hosting the American part of the meetings. A big congratulations goes to the Honey Bee group (especially Dr. Rubink) on their pilot run of their soon to be famous HONEY BEE SCHOOL. Where do we go from here? As always, research needs money and I along with the Research Leaders will be working to secure new funding. We must get at least 5% new money each year just to stay even. Particular emphasis will be given to new base funding for the Crop Quality and Fruit Insect Research Unit and construction money for new facilities as we begin the move from the North Farm to Rio Farms. Field Day is scheduled



RE-CAP OF KSARC'S ALL-STAFF DAY

by ANNETTE MANZANARES

The First Annual KDLG-SARC District, All-Staff Day was held on October 30th, 2001 at Rio Farms. I'm sure everyone agrees that it proved to be an informative, fun, and relaxing experience for all. After our pleasant ride on VTC buses from the Center, we were greeted by a welcoming smile and handshake from Mr. Emilio Chavez and Mr. Steve Neck (I don't know if they actually intended to be greeters, but they fulfilled this duty well!). As we found our way to the coffee pot and to our seats, Dr. Jerry Quisenberry welcomed his staff and asked us to ponder the question of "What is the Future of Agriculture in the Rio Grande Valley?" and to draw our own conclusions at the end of the day.

Dr. Jose' Amador, TX A&M Center Director, covered the 4 most critical factors affecting Valley agriculture and expounded on each by presenting the effects, solutions, and alternatives available to farmers to ensure agricultural survival in the Area. An informative slide presentation complemented his talk. Mr. Andy Scott, Director of Research, and Dr. Dale Murden, General Manager, Rio Farms, provided us with a history and understanding of their operation. Mr. Robert Cornelison, Port Director, Port Isabel/San Benito Navigation

gave us information on transportation of crops through the Intercoastal Canal and Mr. Mike Perez, City Manager, McAllen, enlightened us as to the phenomenal growth being experienced in the City of McAllen and the resulting concerns connected with rapid urbanization. A common thread was woven by the talks given by Mr. Ken Jones, Lower Rio Grande Valley Development Council, Mr. Jack Nelson, Rio Grande Valley Sugar Growers, Inc., and Dr. Sebastian Acosta, INIFAP, Rio Bravo, Mexico, in that the water issue is probably the single most critical factor in determining the survival and success of Valley/Northern Mexico agriculture, a point also emphasized by each of the other speakers. We were introduced to the Value Frozen Foods, Inc. operation by Mr. Larry Griffin, General Manager, and Mr. Eduardo Luna, Plant Manager. I was surprised to learn that Valley Frozen Foods, Inc. is the largest frozen vegetable producer in the State of Texas. Mr. Ray Prewett, Executive Vice President, Texas Vegetable Association, covered consumer market trends and Dr. John da Graca of the Citrus Center gave us an enlightening presentation on Valley citrus, emphasizing

the fact that the Rio Grande Valley produces the best grapefruit in the world (and here I was telling everyone that Texas produces the best grapefruit in the country!)

We all seemed to be well-fed, communicative and amply entertained by "La Estudiantina" thanks to the efforts of Ms. Olivia Pedraza.

From a personal standpoint, I was delighted to meet several individuals I'd never seen or heard of who work at the Center. That in itself made the experience enjoyable!

So, what do you think is the "Future of Agriculture in the Rio Grande Valley"? My thoughts on the subject are that if you think you can, you will find solutions to current problems in the Ag community. Certainly, a concerted effort by Valley community leaders, farmers, agricultural specialists and our Mexican neighbors could yield much in a positive direction.

I think we all agree that a special "Thank you" is due to our Center Director, Dr. Jerry Quisenberry, for introducing us to this new concept. I know we'll all be looking forward to next year's event!



SAFETY

by CONNIE VELAND



A Safety Committee-sponsored New Employee Orientation was held on October 25, 2001. Employees attending included research scientists, technicians, and student workers. The program included an introduction to the hierarchy of the USDA-ARS, Area Office from the location perspective, focusing on the roles and responsibilities at each level. At the facility level, the roles and responsibilities of supervisors and employees were enumerated with the use of two ARS videos and handouts. Following the video presentation the program focused on safety, health, and environmental practices

and procedures at KSARC. The following employees and safety committee members made presentations in their area of expertise: Ms. Mari Gomez, Location Administrative Officer, spoke on the Occupational Surveillance Program; Mr. Paul Thompson, Chemical Hygiene Officer, covered the importance of keeping accurate chemical inventories and on the preparation of forms for unwanted chemical and hazardous waste; Mr. David McCommas, Pesticide Safety Officer, covered pesticide safety; and Mr. Ed Stein, Area Safety Specialist, spoke on hazardous waste management practices. On October 25, 2001, the second part of the safety orientation was held. Mr. Manuel Varela, of the Weslaco Fire Department, made a presentation on fire prevention. Our thanks to Mr. Arturo Cavazos, of the Honey Bee Research Unit, for coordinating this effort. (Continued on Page 3)

FROM THE CENTER DIRECTOR

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for April 18, 2002 and we must all support our field chairman, Mr. Fred Gomez and the subcommittee chairpersons. If you are a member of one of these subcommittees GREAT, if not find one and join (if you are not sure how- call Olivia and she will get you signed up). I think you will find the experience quite rewarding.

Several of the committees are already hard at work. Chairman of the publicity sub-committee, Dr. Showler, has a very active committee. They have already developed a handout and attended the 3-day farm show at Mercedes. Finally, I want say to each of you how much I have enjoyed working with you this past year. The scientists and support staff of KSARC are the best.

KIDS AND AGRICULTURE

BY DR. ALLAN SHOWLER

KSARC scientists and technicians made presentations on cotton insect research, fruit fly quarantine, and apiculture for the Texas Ag Women's Association at the Kids, Kows & More 2001 Expo at the Mercedes Livestock Showgrounds, 28-29 November. About 800 fourth grade school children from throughout the LRGV were bussed to attend presentations on subjects that also included presentations by non-USDA groups on citrus, cows, and other topics. This was a good opportunity for KSARC to show children that agriculture is both important and interesting.

SAFETY by Connie Veland

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After the presentation, all participants met in front of Building 213 to observe a demonstration on the use of several fire extinguishers to extinguish small fire incidents. Five participants actually got first-hand experience at extinguishing fires using the equipment provided.

Special thanks to our good sports - Ms. Rene' Sauer for

her participation in David's demonstration of modeling a spray suit and Ms. Emma Garcia for demonstrating her talent in putting out a fire. Great job, Girls!



BEE SMART BEE SCHOOL



As a result of interest from local, state, and federal public agencies for safety training about Africanized honey bees, the Honey Bee Research Group designed a Honey Bee Safety and Awareness Training program, called "Bee Smart." On September 14 a pilot program was presented to 20 Border Patrol supervisory personnel. (The Border Patrol has frequent encounters, many times serious, with Africanized honey bees.) The one-day program began with an introduction by Jerry Quisenberry and a short tour of the honey bee laboratory. This was followed by presentations on basic honey bee biology by Bill Rubink and on honey bee safety issues by Art Cavazos. An interview with Dr. William McKenna, Harlingen Allergist on medical issues of bee stings, followed. The program culminated with an afternoon of "hands-on" eye-opening experience with live Africanized and European bees in the Honey Bee Group's experimental apiaries at USDA/APHIS, Moore Air Base, Mission, TX. Comments on the training session were highly favorable and plans are to offer the course 4 times a year, beginning in February 2002, to fire departments, other government agencies, and to pest control operators who have expressed a need for training. Rene Davis filmed the entire event and a video training tape will be prepared

FACILITIES UPDATE by Tommy Stanford

The expansion of the conference room in the Honey Bee lab, building 213, is being planned. This will give KSARC its own larger and more practical conference facility that will enable larger groups of the KSARC staff to gather for meetings and seminars. Additionally, the expansion will allow KSARC to serve as the host location for more regional and national meetings of ARS and cooperator groups. A trend has developed in ARS where different groups that meet on a regular basis are choosing to hold their meetings at ARS field research locations instead of at ARS Headquarters and Area Office locations where they have typically met in the past. Many of the individuals attending the meetings don't often get a chance to visit an ARS field location. In April 2002 KSARC will host a meeting of ARS Information Technology Division from Headquarters along with all of the Area Computer Specialists from around the country. KSARC has also been proposed as the site for a national meeting of ARS Civil Rights Specialists later in the year.

WELCOME TO THE WORLD!



Congratulations to Mr. and Mrs. Jaime Cavazos, born to them a son, Jacob Michael Cavazos, on October 25th. Weighed 9 lbs, 4 oz., 21 3/4 in. long.



HAPPY BIRTHDAY

October	November	December
Sylvia Cano	Ramiro Balderas	Jaime Cansino
Andres Cruz	Buch Cavazos III	Jaime Cavazos
Frank de la Fuente	Miguel Diaz, Jr.	Roy Dare
Jesus de Leon	Carlos Gracia	Julia de Leon
Lucas Leal	Veronica Guzman	Lupe Gonzales
Juan Martinez	Cerardo Latigo	Jesus Maldonado
Rene' Martinez	Eloy Rodriguez	Sergio Maldonado
Olivia Pedraza	Rebecca Saenz	James Nech
Juan Ramos	Tom Sappington	Tommy Stanford
Connie Ueland	Allan Showler	Aleena Moreno
Irene Villarreal	Larry Zibilske	Orlando Zamora
		Marissa Gonzalez

TRAVEL

A Visit to "Ground Zero" by Annette Manzanares

Fred and I were in New York City last month and decided to pay a visit to the "Ground Zero" site, not so much out of curiosity, but as a matter of respect. New York is very much a part of me and the lower end of Manhattan holds a special place for me from my early teen years. My mother worked on the New York Stock Exchange for many years and the greatest outing for my younger sister and I was when we had a day off from school and we were able to hop the subway from Queens to have lunch with Mom in the Financial District. In those days, the World Trade Center did not yet exist; but after being built in the late 60's/early 70's, it became the signature icon of the New York City skyline. As we walked around the edges of the barriers, stark reminders of that infamous day were everywhere, including the odor of jet fumes in the air, and the dust covering the streets and remaining buildings. Fred was eager to talk to the NYPD officers guarding the site and offer them words of encouragement. You couldn't help but notice the emotions on their faces masked by a look of determination and pride. All the while, numerous aide workers were scurrying to deliver hot coffee and food to make them as comfortable as possible under the circumstances. We shook their hands and commended them on their efforts. They seemed grateful for the gesture. We walked a few city blocks further on to find rows of people waiting to file by St. Paul's Chapel, the oldest church in Manhattan, and the only surviving building so close to the former World Trade Center (300 yards). The Chapel remained unmarred and totally intact, a miracle in itself, and is now rightly known as "The Chapel That Stood". An aide worker handed me a red magic marker and asked me to sign the memorial at the front gate. I more than willingly obliged. Some laid bouquets of flowers in memory of those lost, others stood in awe. The scene of the chapel and its visitors from all over the world will remain in our memories for as long as we live, along with the expressions on the faces of the residents of the city and the aide workers. They seemed to be one, displaying their patriotism and resolve as Americans and for Americans. It was a good visit under tragic circumstances, and we were glad that we decided to hail that cab and go to the site before heading home. REMEMBER: You can't fax a handshake, You can't pat a voicemail on the back, and You can't have lunch with an e-mail. Some things are just better in person. Make the most of every day. God Bless!



BORDER CONFERENCE by Olivia Pedraza



The Border Conference (2001 INIFAP-ARS Joint Meeting) was held November 6-7 in Weslaco and Rio Bravo. KSARC hosted the first day of the meeting at the Honey Bee Conference Room. The objective of the meeting was to discuss ongoing joint projects and to plan further cooperative research. Dr. Hom, ARS Administrator, and Dr. Jesus Moncada, INIFAP Administrator, were both present, as well as our Area Director Dr. Charles Onstad and Dr. Luis Angel Rodriguez del Bosque, Area Director for CIRNE (Tamaulipas, Nuevo Leon, Coahuila and San Luis Potosi). Areas of discussion on the first day were Water-Soil and Plant Health. After a long and productive day, all participants were hosted to dinner at Jerry & Diane's house. (We all know who really did all the work - thanks Diane for a delicious meal). A fun and relaxing evening was to be had by all. The following day, INIFAP hosted the meeting at the INIFAP Experiment Station in Rio Bravo. Thanks to Dr. Rodriguez for providing the transportation. Dr. Onstad could be heard asking, "How does everyone have their passports"? Areas of discussion for the second day were Animal Health and Modern Tools. The hospitalities extended to our scientists were outstanding. After another long and productive day, all participants were treated to dinner at a local restaurant in Rio Bravo.

The conference was a success and may just become an annual event. A BIG thanks to all who worked behind the scenes to make it a success.



Dr. Floyd Hom, ARS Administrator, speaks at Border Conference.

Dr. Jerry Quisenberry speaks at Border Conference



Group Photo at Rio Bravo Experiment Station

MEET OUR NEW EMPLOYEES.....



The Beneficial Insects Research Unit (BIRU) and KSARC welcome Mr. Julian Ortega, student Office Automation Assistant who works with Ms. Emma Garcia. Mr. Ortega is majoring in Business Administration at STTC.

The BIRU welcomes Ms. Marissa Gonzalez as of December 2, 2001, who is the new Biological Science Technician for Dr. Jesus De Leon.

The Location Support Division of KSARC welcomes Ms. Constance Cave, as of December 2, 2001, who will be working with Ms. Mari Gomez as the Accounting Technician.

ON THE FRINGE.....

Every November, on the anniversary of the Kennedy Assassination, there is a conference where researchers meet and update the state of evidence about the murder. The meeting lasts 3 days and Dr. Don Thomas of the Crop Quality and Fruit Insects Research Unit, KSARC, was the keynote speaker this year. Dr. Thomas spoke on how the evidence meshes with the filmed evidence. The group meeting is called "November in Dallas".

Congratulations go out to Mr. Esteban Garcia of the Location Support Division who is betrothed to Ms. Samantha Vinson of Harlingen. The two will be joined in marriage on Saturday, December 15th. Welcome to a new dimension of life, Steve, outside of cyberspace!

Our continued good wishes go out to our Center Director, Dr. Jerry Quisenberry, on his recovery from heart surgery, and to Mr. Lupe Gonzales on his recovery from back surgery. Also, best wishes to Mr. Lucas Leal, as he recovers from heart surgery.



Where do computers go when they die?

Unfortunately, they are placed in a storage area for future generations to worry about or they make their way to the local landfill. The latter is a concern of federal, state and local governments. Too many computers and their component parts end up in landfills. Computers and their accessories not only take up valuable landfill space, but they also contain hazardous components that can leach out into a community's water supply. Some cities have begun organizing electronic recycling programs to deal with the problem and are encouraging residents to turn in unwanted monitors and other parts so they can be recycled and disposed of responsibly.

What's in a computer?

Computers contain a host of electronic parts manufactured from about three dozen compounds and elements, some of which are hazardous when left to decay in a landfill.

What are the primary components of a 60- pound computer?

Based on weight, silica is the primary constituent, due to the 15 pounds of glass contained in a typical computer unit. Second is plastics, with almost 14 pounds used to build the housing and other parts. About 12 pounds of iron go into the structural and magnetized components and more than 8 pounds of aluminum is found in the conductivity, housing, and connectors. Four pounds of copper are used in the conductivity and cathode ray tube, and more than 3 pounds of lead is found in the metal joining and the radiation shield. A pound of zinc is divided among such parts as the battery and printed wiring board. The remaining 2% is a combination of elements, the most common ones being: nickel, tin, gold, silver, chromium, cadmium, platinum, mercury, and arsenic.

How can I help?

Call your local municipality and inquiry about their recycling program for computers. Let's all practice responsible disposal of computers and electronic accessories.

Be sure to check out the November issue of the Agricultural Research Magazine. Page 22 highlights research done by Dr. Walker Jones on the Glassy-winged sharpshooter and Page 6 contains a story about Mr. Jim Everitt's research on remote sensing of aquatic weeds in south Texas.

- ♦ Drs. Allan Showler and Tom Sappington and Drs. Foster, Reuter, Roland and El-Lissy of USDA-APHIS, completed a large field study and laboratory assays that demonstrated that reduced rates (8 and 10 oz./acre) ulv malathion combined with cottonseed oil were as effective as a conventional rate (16 oz./acre) of ulv malathion for boll weevil control. Nontarget arthropod populations were also affected by the lower rates. The manuscript was accepted by Southwest Entomologist.
- ♦ On October 23rd and 24th, Dr. Gary Elzen, accompanied by Dr. Walker Jones, Mr. Sergio Maldonado, Ms. Eileen Herrera, and Mr. Richard Greene (ARS, Office of International Research Programs [OIRP]) traveled to the Autonomous University of Nuevo Leon (UANL), Department of Microbiology and Immunology, Monterrey, Mexico, to finalize research plans for the OIRP-funded (3 years) Cooperative Agreement between UANL Scientists, Drs. Christina Rodriguez and Patricia Tamez, and the Beneficial Insects Research Unit, USDA-ARS, Weslaco, TX.
- ♦ Dr. Shoil Greenberg took part in the 2001 Entomology Science Conference, Texas A&M University, College Station, and delivered two invited presentations entitled: "Boll weevil feeding and reproduction as a function of cotton square availability", in cooperation with Dr. Tom Sappington; and "Results of 2001 studies about effects of defoliants alone and in combination with insecticides on boll weevil mortality", in cooperation with Drs. Tom Sappington and Gary Elzen, USDA-ARS, Weslaco, TX, and Drs. Alton Sparks and John W. Norman, Jr. Texas Agricultural Research and Extension Center, Weslaco, Texas.
- ♦ Dr. Don Thomas was awarded a "Certificate of Appreciation" from USDA-APHIS for "Cooperation and support of Fruit Fly program activities-especially in the area of identification".
- ♦ Dr. Allan Showler has gotten a manuscript accepted by the Journal of Chemical Ecology titled, "Effects of water deficit stress, shade, weed competition, and kaolin particle film on selected foliar free amino acid accumulations in cotton, *Gossypium hirsutum* (L.)." The study shows that the water deficit stress and light reduction to cotton plants have influences on the quantities of different foliar free amino acids. This allowed the interpretation of foliar free amino acid contents in cotton plants that were subject to weed competition and to application of kaolin particle film on the leaves. Interpretation of free amino acid levels shows what kind(s) of stress the plant is experiencing because of weed pressure or foliar coverage with the white reflective kaolin particle film. This work will be useful for plant stress diagnostic work.

KIDS, KOWS and MORE by Connie Veland and Henry Graham



On November 27th and 28th, we attended an event in Mercedes known as Kids, Kows and More. This is the Ag Women's Expo focused on educating youth (4th graders) from throughout the Valley on the importance of agriculture. We represented USDA-ARS with a booth on the importance of honey bees. Our presentation was a challenge with the first group, but the remainder of the day went great. We had between 50-80 students at a time with only 15 minutes per group to tell our story about the importance of honey bees, and what a great job Henry did with keeping their attention! While Henry talked to a large group, Connie took 15-20 students at a time and showed off the Queen bee in the observation hive and explained the use of tools and the making of honey and wax. We had a great time even if we only had 3 minutes between groups to breathe. All the students were very cooperative and the questions we got were impressive. What a great way to educate our youth of tomorrow!



JUST THE FACTS from ADMIN

BY MARI GOMEZ

The Administrative Office welcomes Constance (Connie) Cave as the new Accounting Technician. She comes to us from the Department of Defense in San Antonio, TX. She has two children, son and daughter both living in San Antonio. Each is expecting their third child in April. That will give her six grandchildren, they are her joy! Connie enjoys reading, golf and her passion is cooking. We are very pleased to have her join our team.

The Thrift Savings Plan open season for Federal civilian employees continues through January 31, 2002. During this time, all FERS

and CSRS employees may enroll in the TSP, and current participants may change the amount they contribute. FERS employees can now contribute up to 12 percent of their basic pay. CSRS employees can contribute up to 7 percent of their basic pay. To enroll or change your contribution amount, you should generally use [Form TSP-1](#), Election Form, which is available on the Web site (www.tsp.gov) or from your local personnel office.

The FY 2002 Appropriations Bill funding USDA agricultural programs was signed by the President on November 28, 2001. The Appropriations Act provides ARS with research program funding of \$979,464,000 an increase of \$82,630,000 over FY 2001. The Act also provides modernization and construction funding of \$118,987,000 for ARS facilities. It will be a few weeks before we know if any of the money for facilities will make its way down to KSARC.



by Fred Gomez and Gerry Latigo

Current Field Projects:

FALL PLANTING

- ♦ Conservation Tillage plots (Conventional, No-Till and Ridge) are being evaluated for residue degradation in Blocks A, C, F, and G.
- ♦ Hyacinth beans, or more commonly known as Lab beans, have been planted at a rate of 15 lbs. per acre on Block H to improve soil fertility and to check for soil variability after corn and cotton density study plots.
- ♦ Block 1 has been leveled and seeded to 8 treatments of legume cover crops on a randomized complete block design for a sustainable agricultural research study to be started in the Spring.
- ♦ Block B was seeded to corn (3rd year) following cotton on a continuing study to evaluate 7 soil amendment treatments.
- ♦ Block E was planted to Fall corn on Ridge and Conventional Tillage plots with a Crotalaria/Clover mix seeded to the Organic plots to improve soil fertility for the Spring planting.

2002 Annual Field Day

Preliminary work is underway to organize and display ongoing research of the Kika de la Garza Subtropical Agricultural Research Center (KSARC) to the farming community and the general public. Various subcommittees have been formed to address the many facets needed to accomplish the Field Day activities which include:

- ♦ Proposed tours (2-3 tours) of research study plots.
- ♦ Poster Session
- ♦ Seminars
- ♦ Display Booths
- ♦ Lunch

The Field Day events have been scheduled for April 18th, 2002. For further details on Program developments contact:

FIELD DAY CHAIRMAN

Fred Gomez at (956) 969-4884 or e-mail at fgomez@weslaco.ars.usda.gov or



AERIAL VIEW OF NORTH FARM

DEMONSTRATION PLOTS SUBCOMMITTEE

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