



Texas Rice

Texas A&M University System Agricultural
Research and Extension Center
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Extension at Home and Abroad

Where can you go to find information on adapted varieties of fruit trees, nutritional requirements for children, meal planning suggestions for diabetics, and the best planting time for row crops? One stop at your local County Extension office can handle all these questions and many more.

Americans are blessed with one of the best Extension organizations in the world, and within the U.S., Texans are especially fortunate. Now more than ever it is critical that we recognize the valuable role that Extension plays in our daily lives, whether we raise children or crops or cattle.

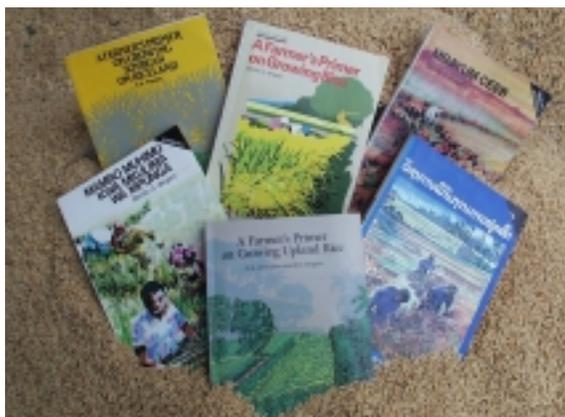
Texas Cooperative Extension has provided informal education aimed at helping Texans improve their economic well being and quality of life since 1914.

Formerly known as the Texas Agricultural Extension Service, the agency changed its name in 2001 to better reflect its mission of service to all Texans. Cooperative Extension in Texas, and America, traces its roots to a 70-acre farm near Terrell in Kaufman County a century ago.

In 1903, Dr. Seaman A. Knapp, a special agent for the U.S. Department of Agriculture, persuaded a producer there to provide land for a “demonstration” farm to show how new production methods

could be profitable.

By following Knapp’s instructions, farmer Walter C. Porter was able to double his cotton harvest the next year. Porter’s neighbors quickly followed suit.



Originally published by the International Rice Research Institute in 1979, *A Farmer's Primer on Growing Rice* was translated into 41 languages, reaching farmers in over 20 countries worldwide.

Such early successes toward improving agricultural production and family living gave impetus to legislation that allowed states to establish extension agencies affiliated with land-grant colleges. Extension in Texas was linked to Texas A&M to help “extend” the college’s research findings to the people by providing practical advice and education in every county.

Texas Cooperative Extension today is a partnership between the Texas A&M University System, county and federal government, and many private and non-profit organizations.

Extension programs are geared to the needs in each county, as determined by the citizens themselves. Extension specialists and county agents provide research and educational resources, primarily in agriculture, family and consumer science, human nutrition and health, environment and natural resources, community development, and 4-H and youth development.

Texas Cooperative Extension is the largest Extension agency in the nation, employing 1,400 people statewide, with 250 county offices. Extension programs reach some 15 million Texans annually with help from a network of more than 150,000 volunteers. Texas 4-H enrollment leads the nation, accounting for one-sixth of the national total of 6.6 million members.

Throughout the U.S., Extension offices work in cooperation with land-grant universities to provide our citizens with every opportunity for success. Unfortunately, these services are not found in every country, and especially not in third-world or developing countries.

To fill this need, government and non-profit agencies worldwide work to bring information and aid to farmers and families in need. The following briefly summarizes some of these organizations and gives a

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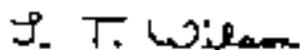
From the Editor..

Each February, the Texas Rice Research Foundation Board meets with researchers from Texas A&M and USDA to review last year's research progress and research plans for next year. Following consultation with its Board members, and input from industry and scientific review panels, TRRF decides how best to allocate rice grower check-off funds. This year, TRRF is providing nearly \$600,000 to fund 10 projects and to purchase critical research equipment.

Continuing research support from the Texas rice industry allows the Beaumont/Eagle Lake Centers to develop new varieties and improve rice production and management practices. Of the 10 projects that are being funded this year, seven focus on research and three focus on communication and educational outreach. Four of the research projects focus on varietal improvement and evaluation, one on plant physiology, one on water and weed management, and one on insect management. Funding for communication and outreach will provide support for publishing *Texas Rice* newsletter, the *Rice Production Guidelines*, and the *Texas Rice Crop Surveys*.

TRRF funding supports a comprehensive cross-section of rice industry needs. Throughout the year, *Texas Rice* will highlight each of the projects. Our goal in working with the Texas rice industry is to continue to increase the efficiency of agricultural production. Agriculture is the foundation of our state and our nation, and as with any other business, its long-term viability requires continued work.

Sincerely,



L. T. Wilson



TRRF Funded Projects for 2003

<u>Varietal Improvement and Evaluation</u>		
\$102,000	McClung	Development of Improved Rice Cultivars
\$60,000	Tabien	Development of High Yielding, Good Quality, Disease, Insect Resistant & Herbicide Tolerant Rice Varieties
\$5,200	Park	Direct Manipulation of Yield Determinants in Rice
\$46,000	Turner	Evaluating University & Private Industry Varieties for Production in Texas
<u>Plant Physiology</u>		
\$49,527	Tarpley	Rice Physiology Research
<u>Water and Weed Management</u>		
\$75,000	McCauley	Texas Rice Weed and Water Management
<u>Entomological Management</u>		
\$58,202	Way	Entomology Research & Extension Program
<u>Communication and Educational Outreach</u>		
\$11,535	Cockrell	Communications, Press and Public Outreach for the Texas Rice Industry
\$4,520	Fritz	Educational Publications for Texas Rice Producers
\$24,000	Stansel	Texas Rice Crop Survey
<u>Personnel</u>		
\$60,000	Wilson	Personnel Support at Eagle Lake Station
<u>Equipment and Improvements</u>		
\$5,217		Eagle Lake Tractor Payment
\$9,278		Beaumont Tractor Payment
\$26,721	Tabien	Hege 1000 Series Drill
\$21,732	Tabien	Kincaid/Great Plains 6" Drill
\$7,246	Eason	Sample Dryer
\$18,000	Way	8 Cylinder Truck
\$15,000	T.R.I.A.	Improvements to Seed Processing Plant
\$599,178	TOTAL	

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Farming Rice

a monthly guide for Texas growers

Providing useful and timely information to Texas rice growers, so that they may increase productivity and profitability on their farms.

Using Gibberellic Acid to Reduce Herbicide Costs in Rice

Reducing herbicide rate can have a major effect on rice production costs. Postemergence herbicide control is typically budgeted at about \$20 to \$25 per acre. Flooding rice after postemergence herbicide application helps maintain weed control, but flooding early can have detrimental effects when young rice seedlings are short and can be submerged. Gibberellic acid is labeled as a postemergence plant growth regulator to stimulate shoot growth at a cost of about \$2 per acre. By mixing postemergence herbicides and plant growth regulator, low rates of herbicide can be applied when weeds are small, and the size of young rice seedlings can be increased to allow early flooding.

Studies conducted at the Crowley Rice Research Station showed mixtures of two common postemergence rice herbicides, Stam M4 or Arrosolo, with RyzUp, a foliar formulation of gibberellic acid, could be applied as early as the 2- to 3-leaf stage (two weeks after emergence) to improve rice production. Weed control with standard rates of these herbicides (3 or 4 quarts per acre) provided 95% weed control. Decreasing the rate of herbicide to 2 quarts per acre resulted in 70% weed control. With the addition of RyzUp to the herbicides, weed control continued to be more than 95% with the standard rates and improved markedly (90%) with the low herbicide rate. This is attributed in part to the increase in seedling growth with gibberellic acid. The plant growth regulator in-

creased seedling height 3 inches, providing a competitive advantage for the rice and, in conjunction with early flooding, resulted in adequate weed control even at the reduced rate of herbicide. These results were consistent for both herbicides.

At maturity, the weed control results were reflected in grain yield. With excellent weed control from the 3 or 4 quarts per acre rates of herbicide alone or in mixture with the plant growth regulator, grain yields averaged 7,400 pounds per acre. Without the plant growth regulator, poor weed control at the reduced rate of herbicide (2 quarts per acre) resulted in 6,300 pounds per acre, which was a significant decline. With the addition of plant growth regulator and subsequent increase in weed control at the low rate of herbicide, grain yield was 7,200 pounds per acre and not statistically different from the standard rates of herbicide.

In addition to reducing costs, reducing herbicide rates resulted in less herbicide injury to the rice, as injury was cut approximately in half at the low rate. In rice production, the addition of a plant growth regulator to stimulate seedling growth along with an early herbicide application and early flooding can improve rice production by reducing herbicide costs between \$5 and \$10 per acre. *

Richard Dunand, Professor, and R. Russell Dilly Jr.,
Research Associate, Rice Research Station, Crowley, La.
Excerpted from *Louisiana Agriculture*, Summer 1998.

When RyzUp (gibberellic acid) is used, as in the left photo, it enhances growth in young rice to allow early flooding and increase the ability of plants to shade out weeds and have a competitive edge when lower than recommended herbicide rates are used.



Photos by Richard Dunand



Rice Leadership Comes to Beaumont

It was a bright, sunny day in late March when we were treated to a first-class crawfish feast at Mike Doguet's farm in China, TX. Mike was hosting the luncheon as part of a list of activities for the first session of the 2003-05 Rice Leadership Development Class.

The Rice Leadership Development Program began in 1989 as a means to provide future leaders with a comprehensive understanding of the rice industry, as well as deliver training for personal development and communication skills. During a two year period, class members attend 4 one-week sessions that take them all across the U.S. rice belt, finishing up in Washington D.C. when they graduate the program.

Beaumont was the second to last stop in the week-long session that began in Houston with personal development training by Dr. Karen King, a trip to Riviana Foods, the USA Rice Federation and U.S. Rice Producers Association offices, a tour of Anheuser Busch, Inc., the largest domestic user of rice, and a session with Creed Rice to learn about international rice brokering. The group then moved on to El Campo where they met with marketing master Linda Raun of Lowell Farms, followed by a tour of Rice Belt Warehouse, where they heard from Dick Ottis and Jay Davis. The next stop was a visit to RiceTec in Alvin to learn about hybrid rice development and marketing. After leaving Beaumont, the group was headed for Louisiana to tour Farmers Rice Milling Company in Lake Charles, a stop at Kevin Berken's farm to learn about south Louisiana production practices, and then on to the LSU Rice Research Station at Crowley.

USA Rice Federation representative Chuck Wilson, who is the Director of Grower Relations, coordinates the Rice Leadership Development Class, and serves as a tour guide and liaison for the weeklong sessions. As Chuck explained the impact and significance of the program, he emphasized that the purpose goes beyond just exposing class members to various production techniques, marketing strategies and conservation practices.

"The personal development training gives participants the confidence to represent their industry in any setting, from legislative meetings to state department banquets," said Chuck. "After all, they can't fully con-



L to R: Chuck Wilson, Dow Brantley, Ralph Allen, Chris Crutchfield, Bill McNeil, Mike Doguet, Fred Zaunbrecher, Curtis Berry, and Brad Koen.

centrate on their objectives if they are worried about which fork to use first." The personal development training also includes media relations, public speaking, and conducting effective meetings.

The Rice Leadership Development Program is sponsored by John Deere Company and Syngenta Crop Protection, Inc. through a grant to The Rice Foundation. The program is administered by the USA Rice Federation. This year's class includes rice farmers Fred Zaunbrecher, Duson, LA; Ralph Allen, Ruleville, MS; Bill McNeil, England, AR; Curtis Berry, Robinsonville, MS; Dow Brantley, Lonoke, AR and industry representatives Brad Koen, DeWitt, AR; and Chris Crutchfield, Sacramento, CA.

Applicants to the program must demonstrate leadership potential, derive their primary livelihood as rice farmers or from industry related professions, be between the ages of 25 and 45, and commit to attending all four sessions of the program. Each year a committee of rice industry and agribusiness leaders evaluate applications, letters of recommendation, as well as conduct personal interviews to determine the 5 rice producers and 2 industry related representatives who will make up the Rice Leadership Development Class. Personal interviews are conducted at the USA Rice Outlook Conference that rotates between each of the six rice-producing states. The deadline for applying for the upcoming class is October 5th, 2003. Later this spring you will be able to visit the USA Rice Federation website at www.usarice.com to download an application and get more information. You may also contact Chuck Wilson at 870-673-7541 or email cwilson@usarice.com. *

Grower Profile...

Raun Family Farms

The Raun rice farming tradition started in 1915, when George Raun decided that rice was better suited to the damp Texas climate than hogs and corn.

Russell Raun was born in Nebraska in 1911, where his dad farmed wheat, oats and corn. In 1913, the family moved to El Campo to raise hogs and corn. They traveled to Texas in a Model T Ford as far as central Kansas, but the roads became impassable and the rest of the trip had to be made by train. Shortly after arriving, Russell's father, George, established a modern hog operation, with enough acres of feed corn to make the farm self-sustainable.

In 1914, the best-laid plans turned to dust, when record drought conditions devastated the corn crop. To make matters worse, that also coincided with a swine viral epidemic that killed nearly all the hogs George Raun had depended on to sustain his farming operation in Texas. Not willing to give up, he looked to the newly emerging rice industry and decided this offered the best opportunity for their family farm. So in 1915 the Raun rice farming tradition began, and it continues to this day with George's sons and grandsons, all farming within a 50-mile radius of the original home site in El Campo.

Russell, George's oldest son, did not go directly into farming. He experimented with a few careers, and traveled the country on a motorcycle, often taking long trips back to Nebraska to visit family. Even so, at the tender age of 19, Russell began farming rice like his dad. He had 250 acres back then, with only one tractor and two mules to get all the work done. Russell remembers the early days, before mechanized farming, when the rice was cut with a binder and stacked in shocks to dry. Then, mules were used to pull the bundle wagons to the thresher and the rice was processed right in the field. By the early 1940's, a few rice farmers were beginning to use combines to harvest their crop. Russell saw the value in switching to more modern farming practices, but there was a problem; to use a combine to harvest your rice crop, you had to have a dryer to take the moisture out of the grain once it left the field.



Layton and Russell Raun standing in front of the rice dryer and storage facility in El Campo that Russell built back in 1946.

With a sense of determination that most certainly came from his father, Russell decided to build his own dryer. Lacking the experience and know-how, Russell looked to a friend at the Hancock Dryer in El Campo to make the project a reality. By 1946, the dryer was complete, and Russell had taken a giant step towards modernization of the family's rice farm.

It was during this time that Russell began his tenure on the Texas Rice Improvement Association Board of Directors, a position he still holds today. He also serves on the Texas Rice Council Board and was President of the Rice Marketing Association Co-op for 21 years.

Russell's support of the rice industry has involved more than just attending meetings and serving in key leadership positions. Throughout his career he has been on the cutting edge of technology and innovation, always looking for ways to increase production and efficiency. Based on a wooden structure devised by his father, Russell designed concrete water boxes that serve as permanent water gates in the butts of all levees. The boxes reduce the amount of labor needed for water management, and provide a more accurate means to regulate irrigation water in the fields, which can further reduce costs.

Russell was also the first farmer to use a combination of Ordram and Propanil to control sprangletop in rice fields. For this discovery, the company that manufactured the chemicals sent Russell and his wife Theresa on a trip to the Bahamas. Tank mixing these

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Grower Profile continued...



Layton with his wife Linda, and Russell with his wife Margaret. Russell was in a losing fight with a rose bush and got the shiner. When I asked if he wanted me to touch that up, he said “No, just say that Margaret did it.” Now who would believe that?!

two chemicals is now common practice, and has been a tremendous benefit to farmers throughout the rice belt.

It was shortly after this trip that Theresa died of cancer, leaving behind Russell and their two children, Layton and Joy.

As the oldest, and only son, Layton worked long hours on the farm with his dad. After graduating from high school Layton went on to Texas Tech and received a degree in Agricultural Engineering. As an officer in the U.S. Air Force he was sent to Texas A & M to study Meteorology and was then stationed in London, England. Two of his children, Joanna and Scott, were born in England. The other two children, Rachel and Ursula, were born in Texas. Layton’s wife, Linda Dale, also has one son, Wade Hall, who farms rice in the El Campo area. Layton and Linda were married in 1980.

Although Russell is still quite active in the family business, Layton has taken most of the farming responsibilities. They own 2900 acres of rice land, and farm in a tight two-year rotation. For alternative crops they also grow soybeans and sorghum when dry winters permit early spring planting. All the irrigation water comes from 5 wells scattered throughout the

Raun property. Layton is exploring the possibility of supplementing well water with canal water, as there have been problems in the past with salt build-up around the inlet areas.

This year the Rauns will grow Cocodrie, Wells, CL161, CLXL8 and a new experimental line called XP710. They are looking closely at the Clearfield lines, as red rice can be a real problem in their area, especially since they ratoon all their fields and practice the short two-year rotation.

The Rauns do the majority of their own scouting, but use Dan Bradshaw occasionally in the crunch times. Major weed pests, besides red rice, include sprangletop, barnyard grass, yellow nutsedge, and morning glory vine. For weed control they use Command and a glycosulfate on the first application, applied by ground rig, and then apply Propanil, Londex, and Permit by air as needed.

Independent Dusting Service in El Campo does all the air applications, often with planes that are equipped with electrostatic spray nozzles. This is a relatively new technology that has the potential to save growers a significant amount in chemical costs. (See *New Technology* on page 7.)

Another example of cutting edge technology on the Raun farm is the Global Positioning Satellite (GPS) unit installed in the combine. The monitor tracks yield and moisture readings throughout the fields, and the data is compiled into a map that shows exactly where areas of high and low yield are occurring. It was this technology that indicated areas of low performance near inlet areas due to salt from the irrigation water. With three years of field data, Layton is hoping to use the information to make adjustments that will decrease variability in the fields.

Insect pests include rice water weevil, controlled by Icon as a seed treatment, and rice stink bugs, controlled by either methyl parathion or SevinXLR. Layton said in one year out of five, they have to spray fields early for the fall armyworm.

In normal seasons, Russell and Layton have 4 fertilizer applications: 40-50-50 at preplant, 60 units of nitrogen at the 4-leaf stage, and nitrogen again at early PI and late PD for a total of 180-200 units for the season. Depending on the variety, 50 to 100 units of nitrogen will be applied for the ratoon crop.

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Grower Profile continued...

Even with a full time schedule on the farm, Layton, like his dad, still finds time to serve the rice industry in key leadership positions. Layton has been a member of the Texas Rice Producers Legislative Group since its formation in 1988. He believes there is a pressing need for the rice industry to have a unified voice in Washington, and continues to work towards making that goal a reality. Layton also serves on the Texas Rice Research Foundation Board.

The Raun family has seen many changes in the rice industry since George first came to Texas in 1913 - from mule driven teams for plowing to Global Satellite Positioning units on modern day combines. The family has all hopes that the rice industry in Texas will endure, and the Raun farming tradition will continue for generations to come. *



Speck Thornton, owner of Independent Dusting Service, explains the advantages of the new electrostatic sprayers. Looking on is Blake Dobbins, President of Spectrum Electrostatic Sprayers, Inc.

New Technology With Potential to Cut Grower Costs

A new nozzle and aerial spraying system to cut pesticide use on agricultural crops is now on the market. The equipment is being manufactured and sold by a Texas company under an exclusive license granted by Agricultural Research Service, the chief research agency of the U.S. Department of Agriculture.

The nozzle and electrostatically-charged chemical spraying system were developed by ARS agricultural engineer James B. Carlton, now retired. Carleton designed the aerial application system while working at the agency's Areawide Pest Management Research Unit in College Station, Texas.

The system reduces the amount of chemical that must be sprayed and helps get the chemical onto the crop with less drift. This is possible due to the positive and/or negative charged particles being attracted to the crop on the ground, which is neutral. The particles 'stick' to the plants, covering all surfaces including the underside of leaves. The system has been shown to provide good insect control on several agricultural crops.

Spectrum Electrostatic Sprayers of San Antonio is marketing the nozzles and spraying system for airplanes. This system is most effective for low volume (LV) and ultra-low volume (ULV) applications of pesticides.

Millions of acres of grain, cotton and vegetable crops are treated annually with crop protection materials by agricultural aircraft. Additionally, millions of acres are treated annually with ULV applications of chemicals for mosquito control and outbreaks of introduced pests. This technology has the potential to reduce chemical use on these acres.

The types of chemicals that can be applied with aerial spray nozzles include liquid formulations of pesticides, herbicides, insecticides, fungicides and fertilizers. Benefits of the electrostatic aerial spray system include a safer operation with less risk to the applicator and the environment.

In Texas, Independent Dusting Service in El Campo is the only aerial applicator offering this new technology. Father and son owners Spot and Speck Thornton believe the system has great potential for rice farmers. The only snag is that crop protection chemicals are not currently labeled for the lower application rate. The Thorntons are currently working with the Texas Department of Agriculture and the Environmental Protection Agency to resolve these problems. *

Contact Information:

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El Campo, TX, 979-543-5272

Extension in the News...

Marvin Lesikar in Jackson County

As Aggies go, Marvin Lesikar is as true as they come. A graduate of Texas A&M, and a veteran Extension agent of 36 years, Marvin has spent his life learning, and educating others, about agriculture in Texas.

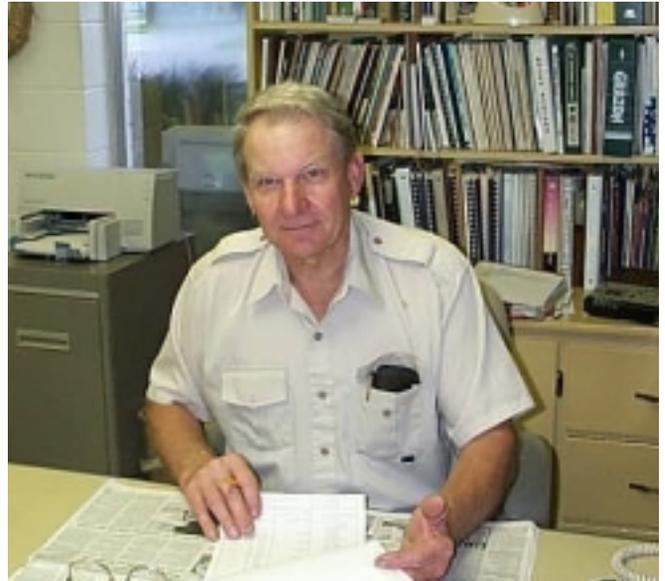
Marvin grew up on a farm in Victoria County where his dad raised cotton, corn and sorghum. As the second of four boys, Marvin had many responsibilities on the farm, leaving little time for extracurricular activities. He did participate in 4-H through junior high and high school, raising hogs and field plots of corn and sorghum.

After high school, Marvin enrolled at Texas A&M University where he acquired a BS in Animal Science, and then went on to get his MS in Agricultural Education. During his college career Marvin managed a hay-baling operation to provide funds for his schooling.

Marvin's first job after college was an assistant county agent position in Brazoria County in 1967, which is where he got his first experience in rice production. After that he went on to become the CEA for agriculture in Angleton, then Burleson and finally settled in Jackson County in 1976.

Marvin and his wife Clarenceine have four children and four grandchildren. His son Shane just completed a tour of duty in the U.S. Marine Corp and is now attending Victoria College to study instrumentation technology. Shane plans to help his dad manage the family farm in Victoria County. Marvin's daughter Penny lives in Bryan, and Clarenceine's daughter Shelia serves in the Air Force in Mississippi and her son Eddie will soon be moving to Edna to help out on the farm.

Well known in rice circles, Marvin has gained a reputation for his skill in 'troubleshooting' problems. When growers call for help, he usually makes it to the farm that day to inspect the field. If he doesn't know the answer, then samples are carried to someone who does. Marvin takes full advantage of the research connection, and will bring in Texas A&M scientists to help solve his grower's problems. According to Marvin, rice producers in particular are keen on learning the latest



research and technology that may benefit their farming operation.

He has done extensive on-farm trials throughout his career in cooperation with rice researchers Joe Krauss and Arlen Klosterboer, among others. In the past, disease and weed control have been the top priorities for his producers.

More recently, Marvin has done extensive work educating growers about the benefits of reduced tillage systems, both economic and environmental. He said that especially in wet years, the reduced or no-till systems have proven to be a great advantage as it allows farmers to plant on time, even with rainy spring weather like we've had this year. Working with growers, Marvin has looked at different herbicide combinations that give the best results in these systems.

Jackson County rice farmer Hal Koop has worked with Marvin for many years on various problems such as crown rot, stem rot and salt problems in his rice fields. According to Hal, Marvin has been a tremendous resource for the farmers and has aggressively sought solutions to their toughest problems. "He is all about dollars and cents, and the bottom line," said Hal. "If it doesn't make economic sense for the farmers, then he doesn't recommend it."

Hal said the farmers will miss Marvin sorely when he 'officially' retires, and it will be hard for the agency to fill his shoes in Jackson County. *

Extension continued...

description of the work they accomplish in developing countries.

The United States Agency for International Development (USAID)

The United States has a long history of extending a helping hand to those people overseas struggling to make a better life, recover from a disaster or striving to live in a free and democratic country. It is this caring that stands as a hallmark of the United States and shows the world our true character as a nation.

USAID's history goes back to the Marshall Plan reconstruction of Europe after World War II. In 1961, President John F. Kennedy signed the Foreign Assistance Act into law and created USAID. The agency receives foreign policy guidance from

the Secretary of State and works to support long-term and equitable economic growth in developing countries. This advances U.S. foreign policy objectives by supporting economic growth, agriculture and trade.

With headquarters in Washington, D.C., USAID's strength is its field offices around the world. They work in

close partnership with private voluntary organizations, local organizations, universities, and international agencies. USAID has working relationships with more than 3,500 American companies and over 300 U.S.-based private voluntary organizations.

An example of their work is the Farmer Assistance Program where 21,000 farm families in Honduras have been trained in improved land cultivation practices which have reduced soil erosion by 70,000 tons a year.

USAID also helps developing countries indirectly by facilitating partnerships between U.S. companies and their local governments. Land O'Lakes began working with a beneficiary of the Integrated Farmers Training Program located in Karsana, Gwagwa District of Abuja, Nigeria. This program was designed to generate employment through crop/livestock production and crop processing. One of the long-term benefits to Nigerian citizens is economic growth and

development, which will reduce their dependence on foreign aid.

Consultative Group on International Agricultural Research (CGIAR)

The 1950s, '60s, and early '70s were a period of widespread international concern that many developing countries would inevitably succumb to famine. These dire predictions were defeated by the reorientation of domestic policies, sharply focused research by developing country scientists, a massive effort by farmers, and the impact of international agricultural research on tropical agriculture.

Unprecedented harvests, particularly in Asia, from new varieties of rice and wheat based on international

research raised hopes and optimism that the scope of agricultural transformation could be extended worldwide.

As a result, a series of high-level consultations held in Bellagio, Italy and elsewhere explored how best the international community could protect and strengthen the four international agricultural re-

search centers which had demonstrated their potential contribution to developing countries - CIAT (headquartered in Colombia, for tropical agriculture), CIMMYT (Mexico, maize and wheat), IITA (Nigeria, tropical agriculture), and IRRI (the Philippines, rice).

On May 19, 1971, the first formal meeting was held at the World Bank. Since then, membership of the CGIAR has increased from eighteen to fifty-eight countries, and the number of centers has grown to sixteen (see Figure 1), with more diversified research.

The mission of CGIAR is to contribute to food security and poverty eradication in developing countries through research, partnerships, capacity building, and policy support; and to promote sustainable agricultural development based on the environmentally sound management of natural resources.

All benefits of CGIAR research are kept within

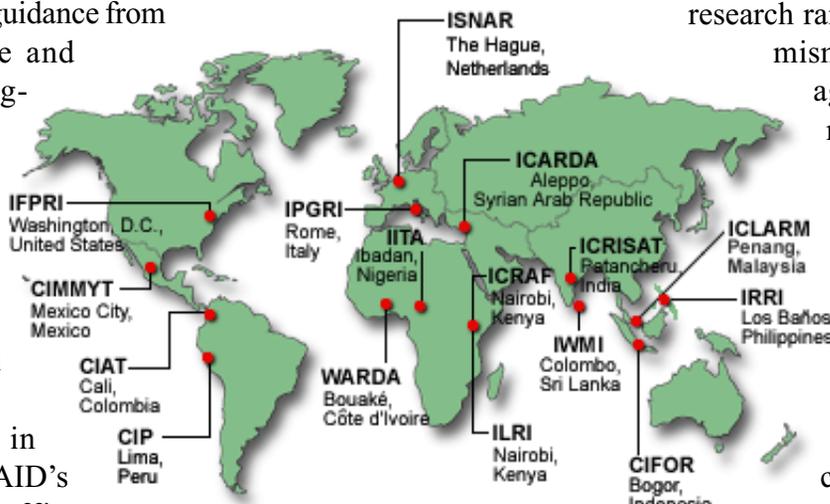


Figure 1 - CGIAR Research Centers

Extension continued...

the public domain, freely available to everyone. These benefits range from developing crops suited to local conditions, to better farming systems that reduce agriculture's impact on natural resources.

Over the 30 years of its existence, the CGIAR has made a major contribution to poverty reduction and food security in developing countries. For example, more than 300 CGIAR-developed varieties of wheat and rice, and more than 200 varieties of maize, are being grown by farmers in developing countries. Food production has doubled, improving health and nutrition for millions of people. New, environment-friendly technologies developed by CGIAR have 'saved' between 230 and 340 million hectares of land from cultivation worldwide, helping to conserve land and water resources and biodiversity. CGIAR holds in public trust the world's largest collection of plant genetic resources (over 600,000 accessions of more than 3,000 crop, forage, and pasture species.)

And CGIAR works with developing country partners to strengthen their scientific capacities. More than 75,000 scientists and technical experts have received training at the Centers.

The International Rice Research Institute (IRRI), which is a member of the CGIAR family, published 'A Farmer's Primer on Growing Rice', authored by Dr. Benito S. Vergara. The publication was written in simple, easily read text with many descriptive illustrations. The intent was to make modern rice growing techniques and cultural practices available to the average farmer in developing countries. The book has been very successful, and quickly became the world's most widely published agricultural text. Since 1979, the Primer has been published in 41 languages in more than 20 countries.

Dr. Tom Hargrove was editor, and then communications head of IRRI from 1973 to 1991. He said that working with Dr. Vergara on the Farmer's Primer was one of the most rewarding experiences of his life. "Many were critical at first," recalls Tom, "because the book was written in such simple terms. But the information was sound, and presented in such a way that even the most uneducated farmers could understand." Tom then went on to help 16 other countries 'co-publish' translations of the book.

If the book had been published commercially, rather than through IRRI (which grants no royalties)

Dr. Vergara could have made a small fortune. He responded to this in an interview for PlanetRice by saying, "I never got anything material from publication of the Primer...but I do have that sense of satisfaction that will never die, that my book has helped so many people, especially rice farmers." Dr. Vergara is project leader of the Philippine Science Heritage Center.

Sibol ng Agham at Teknolohiya (SIBAT)

Translated from Filipino as 'Wellspring of Science and Technology', SIBAT was formed by nine rural and Manila-based appropriate technology organizations in January of 1984 with the goal of creating self-reliant and self-sufficient communities that are able to produce for and respond to the communities' socio-economic needs, and to generate surplus food in support of national industrialization. In addition, the organization is working toward the development and judicious utilization of renewable resources, and application of appropriate infrastructures to support production systems and rural industries.

One area of focus has been community seedbanking to help farmers in the Philippines regain access and control over what SIBAT considers the "heart and soul" of farm production – seeds. The main goal of community seedbanking is to restore the traditional, indigenous or endemic seeds cultivated in the region for generations. One basic requirement of this effort is training farmers to determine the source and characteristics of their seeds. Determining the source enables farmers to find out for themselves the environment from which the seed was derived (i.e., upland, lowland, including climatic conditions). Characteristics include yield, resistance or vulnerability to pests, crop duration, aroma, texture and taste.

Seeds that SIBAT's farmer-beneficiaries now have under their control include grains such as rice, corn, peanuts and legumes. They also have seeds of vegetables such as squash, eggplant, ampalaya, tomato and yams, among other endemic crops.

Agricultural Cooperative Development International/Volunteers in Overseas Cooperative Assistance (ACDI/VOCA)

ACDI/VOCA is a private, nonprofit organization that promotes broad-based economic growth and the

continued on next page

Extension continued...

development of civil society in emerging democracies and developing countries. Offering a comprehensive range of technical assistance services, ACIDI/VOCA addresses the most pressing development problems.

Driven by the goal of adding value to local enterprise, ACIDI/VOCA helps build businesses, agricultural systems, financial systems and grassroots organizations that are the basis for prosperous free markets and stable democracies.

Among their accomplishments, they designed a U.S.-based training program for seven cooperative heads and local officials as a part of its Agricultural Cooperatives in Ethiopia (ACE) Project. Owing to the success of an Ethiopian cooperative training program in June 2000, a second delegation visited the U.S. this year to participate in a similar tour.

Another example of ACIDI/VOCA's efforts is grain industry work in Bulgaria. A group of six Bulgarian grain industry professionals traveled to the U.S. for a three-week study tour to implement a warehouse receipts system for storage and marketing of grain in Bulgaria. As a result, Bulgaria currently has 22 licensed public grain warehouses with a total storage capacity of 230,000 MT. Credit allocated to depositors comes to \$1.6 million and the National Grain Service has issued about 730 warehouse receipts.

More recently, ACIDI/VOCA designed a U.S.-based training program for six Romanian swine producers under its Romanian Agricultural Development Project (RAD). The group attended sessions on pork quality, financial management and nutrition. The intense training program empowered the producers with information and technology to strengthen their own operations and therefore benefit Romania's economy.

Cooperative State Research, Education, and Extension Service (CSREES) International Programs Office

The mission of CSREES is to advance knowledge for agriculture, the environment, human health and well-being, and communities. The agency works on the premise that agriculture is a knowledge-based, global enterprise, sustained by the innovation of scientists and educators.

The CSREES International Programs Office was created to foster relations with countries outside the U.S., especially underdeveloped areas that have the

most pressing need for assistance. They sponsor a 'train the trainer' program that sends experts from various fields of agriculture on assignments to developing countries to work directly with individuals that will in turn provide training to others in their country.

Coming soon from CSREES is the Extension en Espanol (EEE) program that will offer a variety of services including extension-related documents in Spanish, bilingual news reports, columns and feature stories, links to other extension web sites with Spanish language materials, educational materials to learn more about Hispanic communities and reaching out to Spanish-speaking audiences, and an online forum to consult with other specialists about Spanish language materials. In addition, EEE will offer free translation services for those who have documents that may have substantial use nationally, providing they meet other established criteria. This is a collaborative effort involving CSREES, Texas A&M University, New Mexico State University, the University of Illinois and the University of California.

Given all the resources utilized by these organizations, some might ask 'Why all the effort to help underdeveloped countries?' Besides the obvious humanitarian reasons, Dr. Ed Price, Associate Vice Chancellor for International Agriculture at Texas A&M, gave the best explanation. "Helping other countries to establish 'extension-like' programs will ultimately raise the average income, which leads to an increase in trade *and* imports. Poor countries don't make good customers." Dr. Price went on to emphasize that with countries like Japan, Great Britain and others in the EU, the markets are set and will only fluctuate slightly. Therefore the most rapidly expanding markets for U.S. companies, the ones that offer the most growth potential, are in developing countries.

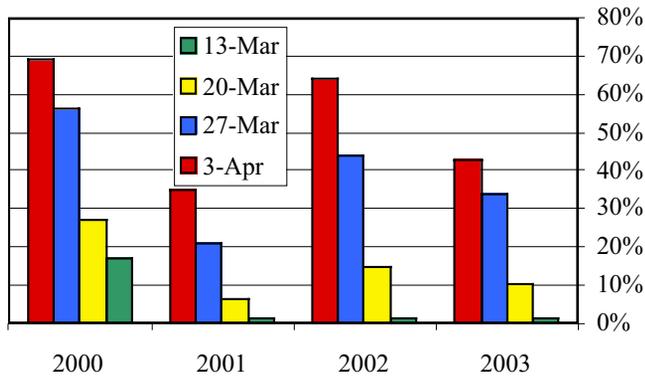
Thus, it is in everyone's best interest to do what we can to help - whether it be through volunteerism, financial or political support. And as world government agencies and non-profit organizations struggle to fill the role of Extension in developing countries, it should give us a better appreciation for what we have at home. Texas is served by one of the finest Extension organizations in the United States - let's hope we never take that for granted. *

Many thanks to Dave Mayes, Associate Head, Extension Communications Specialist, for his help in compiling this article.

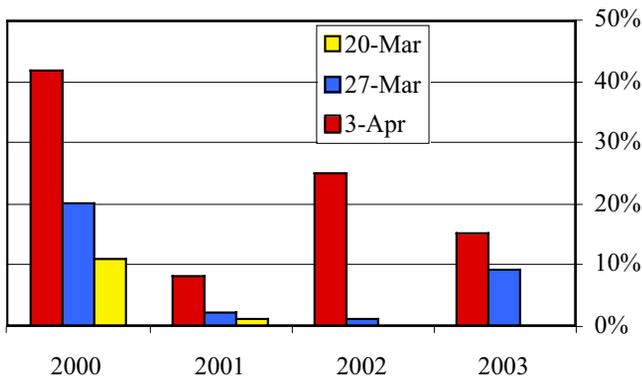
Rice Crop Update

As expected, planting was delayed this year throughout the rice belt due to excessive late winter and early spring rains. Going back to March 13th, only 1% of the acreage was planted in 2003 as compared to 17% in 2000. By April 3, we were up to 43% planted, but still well behind the 69% planted by that date in 2000. With warm, dry conditions most of the first week of April we should see a large percentage of the remaining acreage planted.

Planted



Emerged



Web Resources

Cooperative State Research, Education and Extension Service
<http://www.reeusda.gov/>

CSREES International Programs Office
<http://www.reeusda.gov/serd/ip/contactpage.htm>

Texas Cooperative Extension
<http://tce.tamu.edu/>

Texas A&M Research and Extension Center
<http://beaumont.tamu.edu/>

The U.S. Agency for International Development
<http://www.usaid.gov/>

Consultative Group on International Agricultural Research
<http://www.cgiar.org/>

International Rice Research Institute
<http://www.irri.org/>

Agricultural Cooperative Development/ Volunteers in Overseas Cooperative Assistance
<http://www.acdivoca.org/>

Texas County Extension Offices
<http://county-tx.tamu.edu/>

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