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I suppose it would be an understatement to mention that it has warmed up across Texas. Our crops started with plenty of moisture, but depletion, irrigation and or maturity will occur rapidly.

Welcome to Dr. Sakiko Okumoto, who has just arrived in College Station. She will be getting set up over the next few days for her work on the genetics of nitrogen movement within crops.

Budgets at state and federal levels are projected to be level or less in the near future; industry and producer budgets continue to be constrained by decreased commodity prices. However, the long term success of our friends and former students has led to the potential for significant increases in benevolent giving. A special thanks to John Bernheim for leading this effort. I have committed significantly more time to meet with potential donors and foundation officers to enhance our efforts in everything from graduate student support and endowed professorships, to support of our club teams and recruiting scholarships. If you have questions about how to make a donation to the department please feel free to contact either John - jbernheim@txamfoundation.com or me - dbaltensperger@tamu.edu.

Thanks to Wayne Smith for leading our Graduate Academic Review with team leaders for soils, Cristine Morgan and Terry Gentry; agronomy, Richard White and Nithya Rajan; and plant breeding, Steve Hague and Bill Rooney.

Special thanks to our Harvest Festival committee as they work to organize a great event for Friday, October 7. It will be at the Equine Center this year.

We have had great visits with Monsanto representatives, several exciting field days and many more coming (See stories inside). I had the opportunity to visit with producers and former students in the Rio Grande valley about the many activities in which we participate and how we might better showcase them. The National Plant Germplasm meetings in Fort Collins highlighted the contributions of the Germplasm System to development of new cultivars for our producers. The Beaumont Rice Field Day will be next Thursday.

The soils critique was held in Lubbock and provided an opportunity to discuss improved interaction with NRCS. Thanks to Dr. Lewis for coordinating this year’s event. Jourdan Bell has graciously accepted the host role for 2017 in Amarillo.

We continue to meet with several departments and colleges to develop plans for a Masters in Regulatory Science. Thanks to Tim Herman for leading this effort. Thanks to Michael Thomson for leading several discussions on how to move forward with an enhanced gene editing program in our department by developing a core facility similar to our Agri-genomics lab.

A special thanks to all who have been dealing with air-conditioning issues for their patience and persistence in keeping work orders filed. It seems like several have been resolved, but with the heat intensity increasing we can expect more problems to emerge.

Hopefully, as the budget issues resolve over the next few weeks, we will have an opportunity to begin the search for our requested positions in soil microbiology, soil carbon, weed science, cereal science, and forages.

Texas is a big state, and harvest of our grain crops is moving north and in full swing. I encourage vigilance in safety as we hit long, hot days with significant travel around the state.

Thanks for all you do to make a difference!

David
Texas A&M University Specialists and County Agents from surrounding counties put on a Field Crops Tour June 16 at the Farm Services research fields in the Brazos River bottom in cooperation with the Tri-County Crops Committee, the Brazos Valley Water District and Robertson County Farm Bureau.

Dr. Clark Neely and Dr. Ronnie Schnell started the day speaking about soybean and corn cropping rotations. They are three years into a six-year trial being conducted in conjunction with Mississippi State. The trial is being funded by the U.S. and Mid-South Soybean Boards.

Several different crop rotations are being studied under dryland and irrigated conditions, as well as testing the effectiveness of removing crop residue through burning.

“Right now we are getting mixed results with the burning, but the yields are really pretty close,” Neely said. “We have not yet seen a consistent difference either way.”

Neely also pointed out that the extremely wet spring in 2015 hurt yields and temporarily skewed results. Corn and soybean yields were basically cut in half, while grain sorghum yields were down only about 14%. Double-cropped soybeans behind wheat also performed very poorly due to the very dry conditions during the summer.

“Based on the data right now, continuous corn production looks the best, but we are only three years in,” said Schnell. “Additional years of data may tell a different story in the end.”

Weed Science Program Specialist Matt Matocha discussed the weed management trials he is currently conducting in cotton, soybean, sorghum and corn. The untreated rows were easy to spot as they were well covered with grass and pigweeds. Matocha explained which herbicide program had been used on the other rows, commenting on the efficacy of each type of treatment.

“It is best to spray weeds that are 4” or less in height,” Matocha stressed to the gathered producers. “Timeliness is most critical to application, especially when you are trying to control herbicide resistant weeds. If you spray weeds such as Palmer pigweed and waterhemp beyond 4”, you decrease your chances of controlling them completely.”

At the cotton fields, Dr. Gaylon Morgan told the gathered producers that some of the Texas Department of Agriculture (TDA) regulations have changed regarding hormone-type herbicides. The modifications to the TDA rules will allow farmers to utilize the new Enlist and XtendFlex technology, one labeled, the new herbicides will have very strict application requirements stated on the labeled.

“Where they used to have application recommendations there will now be very specific application requirements,” Morgan stressed. “Tank-mixtures, tip size, tip type, wind speed, boom height, and other requirements will all be very explicitly specified. Updates on label requirements will be put on the companies’ (Dow AgroSciences and Monsanto)
websites, and it will be the applicators responsibility to stay current on the application requirements.”

Ronnie Schnell is conducting two separate fertility trials in his sorghum fields. The fertilization rate trial is intended to determine the application rate that produced the best yields, as well as the rate at which the greatest financial return per acre is realized.

“We determine the economically optimum application rate of the fertilizer by comparing yield per acre and cost per acre,” Schnell explained.

The second trial compares the timing of fertilizer applications to determine the optimum application window and the potential to extend that window with starter fertilizer.

Schnell also discussed the current sugar cane aphid problems being seen by producers. Some aphids were found in the test plots, but not yet enough to require intervention.

“We want to see fewer than 50 to 100 aphids per leaf” Schnell explained. “We are not at those numbers yet, but will monitor them very closely.”

In addition to insects and fertility issues, water issues can cause problems in irrigated crops, according to Forage and Water Extension Program Specialist Matt Brown. While the surface waters in Texas have a range of problems, from bacterial impairment to nitrate impairment, dissolved solids (primarily salts) can have the most serious impact.

“Dissolved solids are caused by runoff, underground formations and by evaporation and they cause two problems for crops,” Brown told the gathered producers. “Salt buildup can bind the water in the soil, making less available to the plants and the sodium damages the structure of medium to fine soils causing crusting and a loss of soil density.”

According to Brown forages are usually the most tolerant to high salt levels, followed by the field crops. Fruits are the least tolerant.

Brown suggested management practices to battle salt and sodium build-up include modified seed placement, using crop residue to reduce evaporation, increased or modified irrigation methods and chemical amendments to the soil.

“There is no cookie cutter answer for salinity management. There are too many variables,” said Brown. “Management depends on the soil and water samples and the irrigation method used on a field. It must all be done on an individual basis.”

As with many management decisions, Brown suggested it is best to consult with a specialist before initiating a remedy. He explained that AgriLife has a variety of publications, including one which addresses the critical salt levels for a variety of field crops.
Dr. Jake Mowrer and Dr. Ronnie Schnell conducted one stop on the field tour at the 2016 Stiles Farm Foundation Field Day.

Dr. Mowrer told the gathered producers that when it comes to the soil, what you can't see can often hurt you. He was referring to soil compaction.

Mowrer explained that every time a vehicle or farm implement crosses a field it compacts the soil. While no change is evident from the surface, the soil can become compacted enough to negatively impact the plant’s root systems.

Dr. Schnell showed producers what nitrogen deficiency looks like in corn, and discussed the possible benefits of rescue nitrogen.

Schnell also updated producers on the sugarcane aphids. He told producers that when 50-100 aphids are present on a leaf, it is time to treat the crop.

During the field tour there were also presentations on the use of a vet gun for horn fly control, and a drone demonstration.

The Stiles Farm Foundation encompasses 2,716 acres near Thrall, Texas, in Williamson County.

In memory of their father, James E. Stiles, J.V. and H.A. Stiles established the foundation in 1961 as a bequest to Texas A&M University, then called the Agriculture and Mechanical College of Texas, naming the Board of Regents as the trustees.

Texas A&M AgrilLife Extension Service manages the farm which includes a livestock operation and approximately 1,800 of the acres are in cropland. There are research and demonstration plots, but most of the farm is managed as a full-scale commercial operation.

This was the 54th Field Day at the Stiles Farm Foundation. The field days have been held annually since 1963, with the exception of 1996 when drought conditions caused them to be cancelled.
More from the Stiles Farm Foundation Field Day
Benefits of conservation tillage discussed at Field Crops Tour

At the Texas A&M AgriLife Extension Field Crops Tour, Dr. Gaylon Morgan discussed the benefits and drawbacks of no-till and conservation tillage management versus conventional farming methods.

While No-Till farming is easy to describe, there is no set parameters to define conservation tillage. Many producers consider anything less than their conventional tilling practices to be conservation.

Morgan told the producers that Dr. Frank Hons, soil scientist and retired Texas A&M University professor, conducted a long-term tillage study where conservation tillage was considered a reduction of eight passes to four. This reduction in tillage equated to higher yields in cotton and sorghum.

“Any reduction to the number of passes you make is beneficial for saving soil moisture,” Morgan stated. “There is about one-half inch of water loss for every tillage pass across the field.”

According to USDA reports cited by Morgan, Texas lags behind in the adoption of conservation tillage, especially no-till. Approximately 70 percent of crop land in the southeast is under strip till or no till, while Texas is only 30 percent.

“Herbicide tolerant crops now allow us to use less tillage,” Morgan explained. “Herbicides provide a viable option for managing weeds without tillage. Conservation tillage, no-till in particular, is not as straightforward as conventional tillage, but it can save $4 to $12 dollars per acre.”

Morgan explained that there are many benefits to conservation tillage including lower overhead/equipment costs; lower labor costs; water savings; and an improvement to the quality of the soil. Under reduced tillage, the soil can hold more moisture, which leads to yield stability.

“One of the benefits that producers frequently mention is an improved quality of life,” Morgan said. “They are spending less time on the tractor and have more time to spend with family or other interests.”

Switching to more sustainable practices can also open up marketing opportunities, Morgan stated, as there are companies who commit to purchasing a certain percentage of their products from “sustainable” production operations.

On the down side, the soil benefits of changing to a conservation tillage program are often not realized for four to seven years as changes to the soil take time. Producers have to be flexible and able to adapt to the challenges of getting a good stand.

“You must start with the right equipment and adjust your equipment to the field conditions. You need to find a different way to fertilize to get the nutrients down into the soil where they are more accessible to the plants’ roots,” Morgan explained. “And you must have a good spray rig because all your weed control will be done by spraying.”

Morgan stressed that producers switching to reduced tillage must have the right frame of mind and be prepared to adapt to their field situations.

Once established, strip till or no-till management can produce yields that are generally more stable, comparable to conventional tillage and possibly even higher. He pointed out that Dr. Hon’s research reported a ten to fifteen percent yield benefit just by reducing from eight to four passes across the field.

“I have more of an occasional-till style,” Morgan said. “Once in a while you have to put a disc in the field to deal with eroded areas or to decrease compaction in the controlled traffic lanes, especially after the wet springs that have occurred the past two years.”
A team of Texas A&M AgriLife Extension Service experts has initiated the first research trials on ornamental turfgrass varieties applying Earth-Kind landscaping principles, which emphasize environmental responsibility through water conservation and limited chemical inputs.

The trials, which will be conducted over a period of several years, will take place at Myer’s Park and Event Center, a 158-acre site near McKinney. The park is also the site for several Earth-Kind research and demonstration gardens where trials are being conducted on perennials, annuals, herbs, shrubs, grapes, crape myrtle and vegetables.

“Earth-Kind is a registered trademark of the AgriLife Extension,” explained Dr. Steve George. “AgriLife Extension landscape specialist based in Dallas. “Earth-Kind principles have been in use since the 1990s and focus on lower water use and a reduction in fertilizers and pesticides. There are years of research behind these principles and now they are going to be applied to test turfgrass varieties.”

George, who developed the Earth-Kind Environmental Landscape Management System, said to his knowledge this will be the first time anyone has ever conducted research trials on ornamental turfgrass using Earth-Kind principles.

According to experts, in urban areas exterior irrigation is estimated to account for as much as 60 percent of household water use, with the majority of that being used on turfgrass.

“Earth-Kind is a registered trademark of the AgriLife Extension,” explained Dr. Matt Elmore, AgriLife Extension turfgrass specialist at the Texas A&M AgriLife Research and Extension Center in Dallas and lead investigator on the trials, said the trials are being conducted in response to both turfgrass industry interest and for practical application by homeowners.

“We’ll be looking at things like how much water the different species need to remain green, as well as examine their overall durability and drought tolerance and how well they perform with limited chemical inputs,” Elmore said. “The research will examine which turfgrasses have the strongest genetics and how well they respond in different soil preparations. The overall goal is to find management techniques that improve turfgrass density and durability with limited fertilizer and chemical inputs.”

Elmore said the trials are being conducted on 20 plots, representing five treatments and four replications, of commonly used Bermuda grass varieties.

“In the future, we hope to add St. Augustine and zoysia grass varieties for testing as well,” he said.
it can grow. Then we can compare and analyze which soil improvements work better.”

“Earth-Kind turf research is a new area of research for us and there is a lot of potential to learn better ways to manage turfgrass in an environmentally friendly way,” said Dr. Greg Church, AgriLife Extension horticulturist, Collin County, who is collaborating in the research. “And it’s especially useful considering there hasn’t been research to date that supports using these practices on turfgrass.”

Church said after many years of drought in Texas, many Texas lawns need to be renovated through proper management strategies and this is one of the reasons for testing and developing strategies through the Earth-Kind Turfgrass Research project.

“We hope that homeowners, businesses, and commercial lawn-care businesses will adopt research-proven methods of managing and maintaining a healthy lawn,” he said.

Church and Elmore also expressed their appreciation to Myer’s Park, Texas Pure Products, Schiller Grounds Care, Trinity Industries and the Collin County Master Gardeners for their support of the project.

“Dr. Elmore and the Collin County Master Gardeners will help maintain the plots and collect research data over several years,” he said. “And there’s also the opportunity for other counties to replicate this trial at other locations with different types of turfgrasses and soils. This is just the beginning of this type of research, so we hope to expand it and test new ideas that will directly benefit the end user who adopts these practices.”

Watch Matt Elmore’s video:
https://youtu.be/Bm3z4ukpBws

Water Quality Training July 12 in Killeen will focus on Lampasas River

A free Texas Watershed Steward workshop on water quality and management related to the Lampasas River and other area watersheds will be held from 1-5 p.m. July 12 at Texas A&M University-Central Texas in Killeen.

The workshop will be held in the Founders Hall Building, 1001 Leadership Place.

The workshop will be presented by the Texas A&M AgriLife Extension Service and the Texas State Soil and Water Conservation Board in coordination with Texas A&M AgriLife Research and the Lampasas River Watershed Partnership.

Anyone interested in improving, or learning about, water quality in the Lampasas River and surrounding area is welcome to come, said workshop coordinators. Participants are encouraged to preregister online at http://tws.tamu.edu.

A free sandwich lunch provided by HEB will begin at 12:30 p.m. for attendees who preregister by July 10.

“The workshop is designed to help watershed residents improve and protect their water resources by becoming involved in local watershed protection and management activities,” said Heidi Prude, AgriLife Extension agent in Bell County.

Prude said the workshop will include an overview of water quality and watershed management in Texas and will primarily focus on water quality issues relating to the Lampasas River, including current efforts to help improve and protect the health of important area water sources.

A discussion on watershed systems, types and sources of water pollution, and ways to improve and protect water quality will all be included in the program, said Michael Kuitu, AgriLife Extension program specialist and coordinator for the Texas Watershed Steward program. There also will be a group discussion on community-driven watershed protection and management.

“Surface water in the Lampasas River is a critical source of water in the area,” said Lisa Prcin, research associate with AgriLife Research in Temple. “Stakeholders need to be armed with the knowledge to protect and restore water quality in the watershed.”

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Congratulations!

Brandon Smith, a Ph.D. Candidate under Dr. Monte Roquette and Luis Tedeschi, has been awarded the Graduate Student Travel Award for the Grazing Lands Nutrition Conference meeting July 17-19 in Park City, Utah.

Brandon has a poster describing the in situ digesta kinetics of Tifton 85 bermudagrass at different stages of maturity and with the addition of Distillers Dried Grain Solubles (DDGS). He will make another presentation at the following American Society of Animal Science Conference in Salt Lake City, Utah.

Dr. Steven Hague has been selected to receive the Crop Science Teaching Award from the Crop Science Society of America. The award will be presented in November at the CSSA Annual Meeting.

Dr. Hague is an Associate Professor specializing in Cotton Breeding. He teaches Plant Breeding and Genetics (SCSC 304), Production Agronomy Experiences (SCSC 305); and a Study Abroad course in Mexico (SCSC 421) as well as advising graduate students.

Former Student Dr. Sukumar Saha, who received his Ph.D. in Plant Breeding in 1989, has been selected to receive the 2016 International Service in Crop Science Award from the Crop Science Society of America. His award will be presented at the CSSA Annual Meeting in November.

Dr. Saha is currently the Acting Research Leader in the Crop Genetics Research Unit at the USDA Agriculture Research Station in Stoneville, MS.

Watershed Stewards cont.

Prcin said a watershed protection plan developed for the Lampasas River will also be discussed. The plan includes several best management practices to reduce pollution in the watershed and potentially lower bacteria levels in the Lampasas.

Attendees of the training will receive a copy of the Texas Watershed Steward Handbook and a certificate of completion. The program offers four continuing education units in soil and water management for certified crop advisers, four units for professional engineers and certified planners, four credits for certified teachers and two credits for nutrient management specialists. A total of four professional development hours are available for professional geoscientists licensed by the Texas Board of Professional Geoscientists.

There are also three general continuing education units available for Texas Department of Agriculture pesticide license holders, four for certified landscape architects and three for certified floodplain managers. Four continuing education credits are offered for each of the following Texas Commission on Environmental Quality occupational licensees: wastewater system operators, public water system operators, on-site sewage facility installers and landscape irrigators.

Kuitu said he wants to encourage local residents and other stakeholders throughout and beyond the area to attend the workshop to become better informed about their water resources.

The Texas Watershed Steward program is funded through a Clean Water Act nonpoint source grant from the Texas State Soil and Water Conservation Board and U.S. Environmental Protection Agency.
After eight years of research on no-till advantages and disadvantages with cotton crops, Dr. Paul DeLaune is convinced it’s not as much about the tillage as it is about the cover crop and/or rotation.

DeLaune, a Texas A&M AgriLife Research environmental soil scientist in Vernon, said he has compared no-till, strip till and conventional till, as well as cotton with a terminated wheat crop in the Rolling Plains.

“What we’ve seen over eight years is you are really not changing carbon levels,” he said. “But we shouldn’t be looking at one thing only. Even though carbon levels aren’t changing, we’ve dramatically changed some soil physical properties.”

With cotton, DeLaune said there’s not much residue, so there is little change in infiltration rates between no-till and conventional till cotton.

“But we have seen a greater infiltration rate where we have a terminated wheat crop – doubled or tripled our infiltration rates,” he said.

DeLaune said everyone knows cover crops aren’t free, as there is cost for the seed and use of soil moisture, but the benefits can potentially outweigh the costs over time.

“We have maintained our cotton yields. We have seen an increase in our soil nitrogen in the upper 6 inches, particularly following legume monospecies. We have seen a visible response to cotton behind those cover crops.”

He said his team measures neutron probes in all of the cover crop research plots every other week and he has compiled four years of moisture graphs.

“Yes cover crops use water,” DeLaune said. “But some people say cover crops make water. What they are talking about is increased infiltration. We pull soil moisture down by timing of cover crop termination in mid to late April, but if we get rains in May and plant in June, we get a much higher infiltration rate and by planting season, we are back to status quo.”

He said he likes to let the wheat form a head and stem before terminating it, adding that may use a little more water, but that’s what makes the residue, which is the key to protecting the soil surface, building root biomass and subsequently infiltration.
The ultimate goal with cover crops is to build soil structure and make it more functional, he said.

"With cotton on cotton, no-till alone is probably not going to cut it," DeLaune said. "But we've done very well with just a wheat cover crop, that's a $6 or $8 treatment per acre compared to the $20 to $25 per acre with a mix of some of these species."

But cover crops alone are not the answer, he said. "If you are doing continuous cotton, some type of cover crop would be good, but I would encourage a crop rotation," DeLaune said. "I have data that shows a cotton-sorghum rotation can increase carbon more rapidly, increasing carbon levels in four years under the rotation, whereas we haven't in eight years with cotton on cotton."

QUALITY COTTON CONFERENCE

AUGUST 4, 2016 LUBBOCK, TEXAS

AGENDA AND SPEAKERS

8:00 a.m. - Registration
8:45 a.m. - Concurrent Tours
  • Dr. Jane Dever and Carol Kelly
  • Drs. Dana Porter and Katie Lewis
  • Drs. Seth Byrd and Gaylon Morgan
  • Dr. Peter Dotray
Noon - Lunch to be provided
  • Dr. Doug Steele
  • Plains Cotton Growers
1:30 p.m. - USDA ARS Cotton Production and Processing Research Unit
  • John Wanjura
  • Dr. Jackie Smith
3:30 p.m. - Texas Tech University Fiber and Biopolymer Research Institute
  • Brendon Kelly

There is NO CHARGE for this program. 3 CEU’s will be available.

To RSVP, please call your County Extension Office or Danny Nusser at (806)376-0051 by AUGUST 1.
Three students from the Mexican state of Yucatan are interned in the Soil and Crop Sciences Department this summer under the guidance of Dr. Steve Hague and Dr. Muthu Bagavathiannan.

Pablo Rosete, Cristina Dzul Vela and Rusel Moo Aldance are part of the Yucatan Initiative, a program designed to encourage more students to pursue advanced degrees in the U.S., specifically at Texas A&M University.

Each of the students has already earned at least one degree. Cristina holds a Bachelor of Science in IT Management; Rusel holds a Bachelor of Science in IT; and Pablo has a Bachelor of Science in Marketing and a master’s degree in business which he earned at a university in Switzerland.

Each of the students had a different reason for choosing to intern with the Soil and Crop Department.

Cristina wants to help provide useful technologies in her home country.

“Agrotechnology is useful in every country,” stated Cristina. “I think interest in improving agriculture is growing in our country and I wanted to see what is happening in other countries.”

Rusel grew up on a bee farm and studied agriculture technology. In Guadalajara Jalisco he worked with a company that developed drones for Mexican farms.

“I want to do that in Yucatan,” Rusel said. “Farmers there don’t have the opportunity to use technology to improve their crops. I want to help do that.”

Pablo has more agriculture experience than the others. He and business partner Fredy Coral, an agriculture engineer, raise pigs and organic chickens. While his degrees are in business and marketing, he became involved with the technology industry when he created a foundation that helps provide tablets and laptops to children in rural communities.

“So many people have no idea how to use computers,” Pablo said. “I want to learn more about technology, to see if I have the skills required. I may want to teach, so I wanted to learn what my options are.”

“Texas A&M has a good reputation and I thought this internship would be a great opportunity to learn and improve my tech skills,” Pablo continued. “I am very glad to be here. I can’t describe how impressed I am with the A&M. I was shocked by the feeling you have here, the 12th man and the environment. I have studied in Utah and Wisconsin and the first time I really felt that college spirit was here at A&M.”

The Yucatan Initiative, established in 2015, was initially an agreement between the College of Engineering and a research consortium, SIIDETEY, in Yucatan. The primary objective is to provide students an opportunity to gain practical experience applying IT to a variety of fields

While the Initiative originally focused on engineering applications, the College of Agriculture and Life Sciences became involved this summer to expand the program into agriculture related fields.

Sponsors intend to introduce the students to IT applications in agriculture including unmanned aerial vehicles, remote sensing, computer modeling, geospatial analyses and more.

Continued next page
According to Cristina, the program is currently made available to students with a background in IT or engineering. They are required to have a basic proficiency in the English language and a good GPA. When applying, the students are also required to write an essay.

These three students were sponsored by Cámara Nacional de la Industria Electrónica, de Telecomunicaciones y Tecnologías de la Información (The National Chamber of the Electronics, Telecommunications and Information Technology), CANIETI. This organization has more than a thousand affiliated companies in Mexico and, according to their website, serves to represent the interests of the industry at the highest levels of the government.

CANIETI’s main goal is to boost the growth and competitiveness of the Mexican electronics, telecommunications, and information technologies industry.

As one means of achieving this goal, they sponsor the students for the 11-week internship at TAMU where they assist with research, study for graduate entrance exams and strengthen their proficiency with the English language.

“There are 46 students taking part in the program, 25 from Yucatan and 21 from the other Mexican states,” Cristina said. “The Yucatan government is very supportive of this program.”

After completing the internship, the students plan to take the GRE and graduate school application process. They hope to begin working on the next degree by the fall of 2017.

2016 Soil Critique

Dr. Katie Lewis hosted the 2016 Texas A&M Soils Critique at the Lubbock Research and Extension Center on June 14-15. Over 20 Soil Scientists and Agronomists from Texas A&M AgriLife Research and Extension, Texas Tech University, and NRCS attended along with several graduate and undergraduate students.

The Texas A&M Soils Critique is held annually to discuss ongoing Soil Science research, extension, and teaching programs and to develop strategies for addressing societal challenges related to the long-term sustainability of soil and the environment through informed and wise stewardship of soil and natural resources for production of food, feed, fiber, and fuel feedstocks.

The next Texas A&M Soils Critique will be hosted by Dr. Jourdan Bell at the Amarillo Research and Extension Center in June/July 2017.

2016 Texas A&M Soils Critique attendees visiting field research sites at the Texas A&M AgriLife Research and Extension Center in Lubbock. In this study, Dr. Katie Lewis is investigating the impacts of various cropping systems on emission of CO2 and other gases from soil.
The Aggie Weed Judging Team is gearing up to participate in the Southern Weed Science Society’s Weed Contest in Scott, Mississippi in early August.

The team includes six graduate students, Russ Garetson, Evan Gregory, Prabhu Govindasamy, Rui Liu, Seth Abugho, and Blake Young, as well as three undergraduates, Shirley Engelke, Zach Schaefer, and Brian Carrascoza.

The weed team coaching is provided to the students as part of SCSC 489/689: Essentials for Plant Systematics and Management in Agronomy, which is taught by Dr. Muthu Bagavathiannan, Dr. Kathy Carson and Dr. Vijay Singh. The students practice both in the classroom and in the field.

According to contest organizers, the weed contest is designed to provide an opportunity for graduate and undergraduate students in southern universities to broaden their applied skills in Weed Science as well as to help them network with weed scientists from other universities and industry.

The contest is comprised of five events, including weed identification, sprayer calibration, crop and weed response to herbicides, farmer problem solving, and a “mystery event” in which the team will have to solve an agronomic related problem that will not be disclosed until the contest.

In weed identification, the students will have to identify fifty weeds or weed seeds using the correct spelling of both the common and scientific name of each species. According to Dr. Bagavathiannan, the weed sizes will range from an early emerging seedling to a completely developed plant.

Calibration includes a written test (math problem solving) and a team sprayer calibration challenge. The type of sprayer to be used at the contest is not announced. It could be anything from a backpack sprayer to a greenhouse spray chamber.

Crop and weed response to herbicides, consists of ten to 15 plots which contain a minimum of six crops and six weeds. The students are required to identify what herbicide was used on each plot based on the symptomology observed on different plant species. The contestants are required to identify the herbicide by both the common name and the WSSA-approved chemical family name.

Crop/weed Situation and Recommendation (Farmer Problem Solving) will test the student’s ability to apply their knowledge. The students will role play an extension agent or an industry representative dealing with a farmer who will present them with two field problems. They must evaluate the situation and recommend the most effective legal remedy to address the issues. They will be judged on their approach to the farmer as well as on their handling of the problems.

“The team is hopeful to compete well at the event. The weed contest preparation is an excellent opportunity for the students to acquire job skills in Agronomy,” said Dr. Bagavathiannan.
July
14  Beaumont Rice Field Day - Beaumont, Texas
17 - 19  Texas Turfgrass Summer Conference, Hyatt Lost Pines Resort, Bastrop
23 - 26  Texas Seed Trade Assn. Annual Convention - Frisco, Texas
26  Cotton Breeder Field Day - Weslaco
28 - 29  Texas Ag Industries Association Summer Meeting - Rockwall, TX

August
1 - 2  Beef Cattle Short Course - College Station, TX
2 - 3  Southern Weed Science Society Weed Contest - Scott, MS
3 - 4  Small Grain and Wheat Workers Meeting - College Station, TX
4  Cotton Fiber Quality Conference and Tour - Lubbock, TX
12  TAMU College of Agriculture Graduation 9:00 a.m. - College Station
15-18  National Association of Plant Breeders Annual Meeting - Raleigh, NC

September
6  Promotion and Tenure Meeting