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Congratulations to our December Graduates. It is always nice to see our students move out into the world where they will continue to make a difference. It is reassuring to know that agriculture continues to be in the hands of bright and highly motivated young people.

November and December have been very busy months, beginning with the ASA, SSSA and CSSA meetings in Phoenix, followed by the Association of Public and Land-grant Universities meeting, the Texas Wheat Board, Texas Cotton State Support Meeting, Council of Scientific Society Presidents and the Texas Plant Protection Association.

I have been conducting the faculty reviews in Amarillo and Vernon, to wrap them up prior to the departure of Dr. John Sweeten, who is retiring from his role as Resident Director and Unit Head of those two centers. A big thanks to the leadership that John has provided for these two centers and our commodity groups.

We have finally reached substantial completion of our new turf building. We will be organizing an open house for early May, but will be moving into the facility soon! You can watch a video about the new facility at:
https://www.youtube.com/watch?v=95R0nuYYptI

A big thank you goes out to those who organized the Department’s Thanksgiving feast and spent time cutting up turkeys and pies. Though I was unable to be there, I understand the food was plentiful and delicious.

There are several new faces on our team. Joni Fields-Surovik and Yvonne Coleman have joined us as Business Associates in the main office and Kyle Gervers joined us as a Research Assistant under Dr. Wayne Smith. Kyle will be working with the USDA at the Southern Plains Agricultural Research Center on F&B Road. December 7 we said goodbye to Delroy Collins, a Senior Research Associate in the sorghum breeding program, who is retiring after 40 years of dedicated service to the Texas A&M University.

We are looking forward to our holiday break and the time we will have to spend with family. Please remember our Christmas Open House from 4:00 p.m. to 7:00 p.m. at my home on December 17.

I wish you all a Merry Christmas and a Happy New Year! Thanks to each of you for another great year!

Dr. David Baltensperger
dbaltensperger@tamu.edu

Comments from our Department Head

Annual Red River Crops Conference set Jan. 24-25

The fourth annual Red River Crops Conference is set for Jan. 24-25 at the Childress Event Center, 1100 N.W. 7th St., Childress, TX.

“Planning for Success – Crop Production Information Designed for Southwest Oklahoma and the Texas Rolling Plains,” will be hosted by the Texas A&M AgriLife Extension Service and Oklahoma State University Cooperative Extension.

The annual conference alternates between Oklahoma and Texas and addresses special agricultural production circumstances in the Red River region in both states, according to Dr. Emi Kimura, AgriLife Extension agronomist in Vernon.

There will be a $25 per person registration fee, and pre-registration is encouraged. Make checks payable to the Red River Crops Conference. For a copy of the registration form, go to http://agrilife.org/redrivercropsconference/ or contact any county Extension office in Texas or Oklahoma.

Registration forms should be mailed to Texas A&M AgriLife Extension Service, Childress County Courthouse, Box 9, Childress, Texas 79201.

Continuing education units will be offered, including 12 for certified crop advisors, six for Texas Department of Agriculture private pesticide applicators and four from the Oklahoma Department of Agriculture, Food and Forestry.

Both days will begin with registration at 8 a.m. and conclude at 4 p.m. Cotton will be featured on Jan. 24 and in-season and summer crops will be featured on Jan. 25.

Click Here to read the complete article with a list of speakers.
December 2016 Master’s and Doctoral Degree Candidates

Agronomy

Yong Chen
Yong received his Ph.D in Agronomy under the supervision of Drs. Nithya Rajan and Srinivasulu Ale. Originally from Anshan City, China, he earned his Master’s degree in Environment Science from the Institute of Soil Science in China. He is currently interviewing with USDA.

Plant Breeding

Brijesh Angira
Brijesh received his Ph.D in Plant Breeding under Dr. Dirk Hays. He is from India and earned his Master of Science in Plant Sciences from West Texas A&M. Brijesh is currently exploring the possibilities available in the plant breeding field.

Henry Awika
Henry received his Ph.D. in Plant Breeding under the supervision of Dr. Dirk Hays. He earned his Bachelor of Science in Environmental Science in his native country, Kenya.

Geraldo De Carvalho, Jr.
Geraldo received his Ph.D. in Plant Breeding under the supervision of Dr. William Rooney. He is originally from Brazil.
December 2016 Master’s and Doctoral Degree Candidates

Plant Breeding (cont)

Ammani Kyanam
Ammani earned her Master of Science in Plant Breeding under Dr. David Stelly.
A native of Hyderabad, Andhra Pradesh in India, Ammani earned her Bachelor of Science in Agriculture Science from Acharya NG Ranga Agricultural University in Hyderabad.
Ammani will remain at TAMU working on a Ph.D in Plant Breeding under Dr. William Rooney.

Dustin Wilkerson
Dustin earned his Master of Science in Plant Breeding under the supervision of Dr. Steven Hague.
Originally from Paris, Missouri, Dustin earned his Bachelor of Science in Plant Breeding from the University of Missouri in Columbia.
He will be continuing his education at Cornell University where he will pursue his Ph.D. focused on scrub willow breeding under Dr. Larry Smart.

Soil Science

Sabrina Alam
Sabrina earned her Ph.D. in Soil Science under the supervision of Dr. Youjun Deng.
She is from Bangladesh and earned her Master of Science in Soil Science from the University of Chittagong.
Keya Howard

Keya earned her Ph.D. in Soil Science under the supervision of Dr. Terry Gentry.

A native of Houston, Texas, Keya received a Master of Science in Environmental Science from the University of Zurich in Switzerland.

She has several interviews scheduled, two in teaching and one in environmental science.

Mariana Valdez Velarca

Mariana earned her Master of Science in Soil Science under the supervision of Dr. Fugen Dou.

A native of Mexico, she earned her Bachelor of Science in Environmental Engineering from ITESO in Guadalajara.

Yuanyuan Chen

Yuanyuan earned her Ph.D. in Molecular and Environmental Plant Sciences under the supervision of Dr. Seth Murray.

She is from Luoyant City in the Henan province of China, and received her Master of Science from the China Agriculture University in Beijing.

Yuanyuan has started working as a post-doc in the National Key Laboratory of Crop Genetic Improvement at Huazong Agricultural University in Wuhan, China.
Soil and Crop Sciences Graduating Class of 2016

Plant and Environmental Soil Science

Barrett Dean Ancinec
From Clyde, TX, Barrett has accepted a position with the USDA Natural Resources Conservation Service.

David Boyer Cottrell
From Fort Worth, TX, David has accepted a position as Farm Manager for Terhune Farms in Perryton, TX.

Justin Keith Dixon
From Visalia, California, Justin has accepted a position in the Feed and Nutrition Management Division of Cargill.

Drew Chandler Ferguson

Jared Shane Goldman
From El Paso, TX, Jared wants to use science to improve quality of life. He will remain at TAMU to pursue his Master's Degree in Molecular and Environmental Plant Sciences under Dr. Scott Finlayson.

Kayla Marie Howard
Growing up in a military family, Kayla traveled all over the country and the world. She is graduating in the honors program and plans a career focused on sustainable and urban agriculture.

Matthew Richard Killian
From Troy, TX, Matthew will be working with JMJ Farms. In the spring he will be assisting with the TAMU Entomology department with an on-farm research project.

Clarissa Marquez

William Ray McInnes
No Photo Available
No Photo Available
From Fulshear, Texas, Corey will be the Assistant Grounds Manager for the Reno Aces, a farm team for the Arizona Diamondbacks.

From Bay City, Texas, Russell has accepted a position with the Golf Club of Houston.

From Litchfield Park, Arizona, Ryan will be working with AgriCorps as an extension agent in Ghana or as an agronomist for Robinson Fresh.

From San Antonio, Ross has accepted a job managing a hydroponic lettuce/microgreen greenhouse for Living Spices, Inc. in San Diego, CA.

Originally from Guatemala, then Houston. Will take a semester off to travel Europe and South America before starting graduate school.

From Fulshear, Texas, Corey will be the Assistant Grounds Manager for the Reno Aces, a farm team for the Arizona Diamondbacks.
Baltensperger receives Borlaug Lifetime Achievement Award from TPPA

By: Blair Fannin

Dr. David Baltensperger, head of the department of soil and crop sciences at Texas A&M University in College Station, has received the Norman Borlaug Lifetime Achievement Award from the Texas Plant Protection Association.

Baltensperger received the award for contributions to the association and to Texas agriculture.

The award was given at the association's annual conference held recently at the Brazos Center in Bryan.

Dr. Ronnie Schnell, Texas A&M AgriLife Extension Service cropping systems specialist, College Station, received the academic/agency award, while Lee Hutchins of Sinton received the association's consultant award.

Graduate student awards were presented to Texas A&M students Kevin Cox and Limeng Xie, both from College Station.

Dr. David Baltensperger, soil and crop sciences department head at Texas A&M University in College Station, received the Norman Borlaug Lifetime Achievement Award from the Texas Plant Protection Association. Also pictured are Dr. Betsy Pierson, association past president and associate professor of horticultural sciences at Texas A&M, and Ray Smith, association board chairman, College Station. (Texas A&M AgriLife Extension Service photo by Blair Fannin)

Luke Pruter took first place in the poster contest. Dr. Seth Murray is a member of his graduate committee and is the PI of the grant under which Luke is working. (Texas A&M AgriLife Extension Service photo by Blair Fannin)

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Sadie Church placed second in the poster contest. She is working on her Master of Science under Dr. Ronnie Schnell.
Diana Zapata, who is working on her Ph.D in Agronomy under Dr. Nithya Rajan, won two awards at tri-societies conferences in Phoenix last month.

Diana placed second in the graduate poster competition at ASA in the Soil Carbon and Greenhouse Gas Community. Her poster was titled “Comparing the Carbon Sequestration Potential of Winter Wheat under Conventional and No-Till Systems.”

She also placed third in the graduate student Oral Competition at the Soil and Water Management and Conservation division at SSSA with her talk “Effect of Long-Term Tillage and Land Use on Soil CO2 Emissions.”

Dr. C. Wayne Smith, Associate Department Head for Teaching, has been selected to receive the Auburn University College of Agriculture Outstanding Alumni Award for the Department of Crop, Soil and Environmental Science. Dr. Smith received his Bachelor of Science in Agricultural Science and his Master of Science in Agronomy and Soils from Auburn University before going to the University of Tennessee in Knoxville for his Ph.D in Plant and Soil Science.

Don “Wes” Dyer, who is working on his Master of Science under Dr. Ben Wherley, placed third in the C5-Golf and Turf Oral Presentation competition at the Crop Science Society of America meeting in Phoenix.

Wes spoke about “Evaluation of Temporal and Spatial Dynamics of Water Movement in Sand-Based Construction Systems.”
Kirstin Burnett, a senior working on a double major in Animal Science and Turfgrass Science, was selected to receive an award from the Sports Turf Managers Association. The award, sponsored by the Foundation for Safer Athletic Fields for Everyone (SAFE), will be presented during the STMA Conference in Orlando, FL, in January. The Foundation is the charitable organization of the STMA. It was established in 2000 to fund research, educational programs and scholarships geared toward the sports field profession.

Scott Gee, a junior studying Turfgrass Science, recently accepted a summer internship with Winfield Solutions. Scott is currently a Turf Club Officer as well as an undergraduate student researcher at the Turf Field Lab. Students are relocated to Minnesota for the summer where they establish research plots and collect data on various experimental products for Winfield. In addition, the interns are given the opportunity to shadow sales team members and work on marketing content for that team; and to work on specific projects including a new to the world biostimulant product, continued advancement of adjuvant and fertilizer technology, and involvement in data mapping and variable rate chemical applications. Winfield Solutions manufactures and distributes seed and crop protection products for growers, dealers, and other industrial customers.

Extension Program Specialist Matt Brown and his wife, Katie, welcomed their son Connor James Brown into the family December 6. Connor weighed 8 lbs. 10 oz. Welcome to the world, Connor!
Welcome to the Department!

Joni Fields-Surovik  
Joined the business office

Yvonne Coleman  
Joined the Business Office

Kyle Gervers  
Joined as a Research Assistant  
working with USDA at the Southern Plains Agricultural Research Center

Please keep these members of our Soil and Crop Sciences family in your thoughts and prayers.

In Sympathy

Debbie Sutherland, Administrative Coordinator for Extension, and her husband, Billy, as they mourn the death of Billy’s father Earl Sutherland, 93, who passed away December 6.

In Concern

Dr. Lloyd Rooney as he recovers from a fall. He underwent surgery to repair his right femur.

Mrs. Gladys Wilding, wife of Professor Emeritus Larry Wilding, as she recovers from open heart surgery to repair a tear in her aorta.
Dr. Ed Runge, Director of Monsanto’s Beachell-Borlaug International Scholars Program, travelled to New Delhi in November to recognize 24 Indian scholars and their universities.

Runge has been Director and chairman of the judging panel since the beginning.

MBBIS is a fellowship program supporting Ph.D students involved with wheat or rice breeding. The program, which began in 2009, was the solution to a problem which caught the attention of Dr. Norman Borlaug.

Borlaug realized that wheat and rice production were increasing at a slower pace than the population, which was of great concern predominantly in the developing nations. He knew something had to be done. In 2008 he challenged Monsanto to address the issue.

Monsanto rose to the challenge, offering $10 million over five years to be used to support students studying wheat or rice plant breeding. The company later extended the program for three more years, contributing another $3 million.

According to Runge, in the eight years since its inception, the MBBI program has supported 89 scholars from thirty different countries, and nearly 40% were female. The $13 million dollars provided by Monsanto, the program’s sole sponsor, has funded 52 fellowships in wheat research and 37 in rice breeding.

Eight students from Texas A&M have been accepted into the program, with over $1 million dollars given in support for their research.

MBBI Scholars are selected by an independent judging panel which considers the quality of the student, and his/her professor and collaborators, as well as the research being conducted. Priority is given to those whose career goal is work in the public sector.

“One big program requirement is that the students must have at least a year of experience in both a developing or transition country and a western country,” Runge stated. “That is a strong point in the program. The students must learn to work with two distinctly different groups of people. These colleagues should be very important as the scholar’s careers develop.”

As the 8th year comes to completion, the allocated funds have been depleted. TAMU Soil and Crop Sciences faculty are now working with Monsanto to determine the future of the project. Whether or not the program will continue, and in what form, are yet to be determined.

They will meet in College Station in January to discuss the next phase.
Just as lentils add variety to a soup, Dr. Emi Kimura believes they could add variety to the crop options for wheat producers in the Rolling Plains.

Lentils are legumes that grow in pods on a bushy plant, and as a legume, they are high in nitrogen, which would be beneficial for the following wheat crop, Kimura, a Texas A&M AgriLife Extension Service agronomist in Vernon, said. “In the Rolling Plains of Texas, our crop options are limited because of rainfall,” she said. “Our average is 25 inches of annual precipitation, but that is not spread out through the growing season. Primarily it comes in the spring and fall, so during the summer growing season, we really don’t have enough moisture. We have to concentrate on drought-tolerant crops.”

Currently, she said, the crop options for fall planting are limited to canola. Canola has done very well, improving soil tilth for the following wheat production. “But it would be nice to have an additional crop rotation option to not only improve soil health, but to also improve wheat production,” Kimura said. “Lentil is a grain legume that can improve overall fertility in the soil through nitrogen fixation as well as allow grassy weed control and break disease cycles.”

Lentils are also known to be very tolerant to the extreme environmental conditions such as high temperatures and low limited moisture conditions, she said. “If we get too much stress during the flowering or fruit set, that might reduce the yield potential, but it is still a strong drought-tolerant crop that can be planted as a winter crop,” Kimura said.

In the U.S., the lentil crop is generally planted in the Pacific Northwest in Washington and Idaho and is planted in the spring, she said. However, there have been considerable studies to improve the winter hardiness of lentils so they can be planted in the fall as winter lentils. “I believe winter lentils will work better than spring lentils because our summer precipitation is so low and summer heat might be too high,” Kimura said.

“I planted a variety called Morton winter lentil on Sept. 30 at the AgriLife Research station at Chillicothe, along with winter wheat and canola, just to compare the rotation options. Next year I will come back and plant winter wheat after the winter lentil to investigate how it positively or negatively affects the winter wheat.”

Beyond this initial study, Kimura said more studies will need to be done on seeding rate, variety, timing, and weed and insect control.

Some other considerations will be eventual marketing, but first has to come the testing to see if it will grow here, she said. It is planted with the same drill as canola or winter wheat, but harvesting could be slightly different. Several methods need to be tested, but it might be similar to canola. The lentil harvest would be after wheat and canola.

Kimura said she is not sure if lentils lend themselves to grazing or harvesting for forage prior to harvest of the grain. She is testing if the forage can be harvested this fall because as a legume it would have a higher forage quality than just a grass. “If we can make it work, we can improve crop diversity or available crop options for Rolling Plains’ wheat producers, but also we can contribute to improved diversification of available protein sources for Texas,” she said.
Mixing spring crops with winter wheat might boost forage for stocker cattle grazing across Texas, according to a Texas A&M AgriLife Extension Service specialist.

Roughly half of the 6 million wheat acres in Texas are grazed on any given year, said Dr. Clark Neely, AgriLife Extension state small grains and oilseed specialist in College Station. Test plots he's grown for multiple years indicate producers could be getting more pounds per acre of beef on that land.

“We know forage production in small grains systems is incredibly important, so we wanted to look at increasing fall forage production without impacting grain yield or spring forage production,” Neely said.

Winter wheat remains vegetative all fall and vernalizes in the spring, Neely said. Vernalization is the need for a set amount of chilling hours below 45 degrees in order for a plant variety to switch gears from vegetative growth to reproductive growth. Without vernalization, the plant is prevented from initiating stem elongation and a rapid growth period in its life cycle.

“We wanted to bypass the vernalization stage and get straight to the rapid growth period in the fall,” he said. “We know we can do that with spring type wheats because they will head out by December if planted in September. We proposed doing a blend of winter and spring types to get the best of both worlds.”

Spring small grains do not require vernalization and growth is strictly based on heat units, Neely said. If planted early in the fall, spring types will initiate reproductive growth and begin stem elongation and rapid biomass production, unlike winter types that stay vegetative until spring.

An experiment examining the impact of interseeding spring barley and winter wheat was conducted at three locations – College Station, McGregor and Comanche – over the 2014-15 and 2015-16 growing seasons. Three mixtures – no spring, 25 percent spring and 50 percent spring barley – were planted at four seeding rates – 50, 75, 100, 125 pounds per acre with winter wheat.

“We doubled or almost tripled our fall forage at the 50/50 rate with the spring barley,” Neely said. “This was good news, but the next big question was how the blend would affect spring forage growth. We saw a small decrease in the College Station spring growth, but there was no impact at Comanche. No spring yield data was available from our third location due to wet field conditions.

“Despite the small suppression in spring growth at College Station, we still saw an 860-pound-per-acre yield advantage for total season-long forage production and 1,760 additional pounds of forage at Comanche overall.”

He said the seeding rate was not significant at either location for straight wheat, but planting at the 75 and 100 pounds per acre seeding rate generally optimized forage production when doing a 50 percent blend with the barley.

Oat, spring wheat and spring barley interseeding treatments planted at a one-to-one ratio were included in statewide cool-season forage variety trials in the 2015-16 season, where the spring barley treatment ranked first out of 40 entries at Comanche and College Station.

These results suggest interseeding spring barley with winter wheat can enhance fall forage production and therefore total season forage yield for producers grazing wheat.

“It has been very convincing; we have an opportunity to increase our fall forage without hurting the spring grazing,” Neely said.

Continued research will be needed to address impacts on forage quality and determine if the spring crop will die off or interfere with grain harvest in dual-purpose cropping systems, he said.
The wheat may be planted, but there's still a lot of work to do to maximize production, whether for forage, grain or both, said Dr. Jourdan Bell, Texas A&M AgriLife Extension Service agronomist in Amarillo.

Managing irrigation, in-season fertility, diseases and weeds will be critical for wheat producers who already face low crop prices and a predicted dry spring, Bell said.

Wheat conditions across the Texas High Plains are variable going into the winter.

"There is a lot of dryland wheat that is stressed right now," she said. "We had good precipitation for early wheat in August and September to get the crop started, but we have had very little since then. We are returning to drought conditions."

Bell said poor dryland wheat stands will not fare well moving into next spring unless the region gets good winter precipitation.

"We also have some wheat acres that are very lush due to early season precipitation, irrigation and warm fall temperatures. While the lush fall growth provided good fall forage, it may harbor insects as well as increase the risk for spring diseases, including wheat streak mosaic virus."  

"Moving forward, there are things we need to do," she said. "At this point, producers have already made their varietal selections for the year. So we need to focus on agronomic management, including irrigation and fertility. Most wheat varieties use 22 inches of total water, with most of that water use in the spring."

Bell said it will be important for producers to decide how they are going to allocate water to their wheat crop and consider the critical periods for crop water use, especially if the region continues moving into drought conditions.

"When we do our wheat ‘Picks’ each year, we take into consideration the whole package, which includes disease susceptibility, drought tolerance and water-use efficiency," she said. "It is important to look to see which variety is going to perform well under drought conditions and which one is going to produce more wheat per inch of water."

Newer varieties have the potential to yield much higher if managed well, but they still have the same critical time periods for water stress.

"Ideally under well-watered conditions, we are able to meet the crop water demand from germination through soft dough," Bell said. "However, if well capacity or water is limited for wheat production, producers often ask, ‘When are the critical times to irrigate?’"

Germination and emergence are key to getting a good stand, she said. Tilling is key to having a good crop going into the winter – wheat planted in September tillers in October/November, which is often ideal for grazed and dual-purpose systems.

"Moving into spring, we want to maximize the number of seeds per head so it is critical to hit the jointing stage with water. If water is available, it is also very beneficial to irrigate at flowering."

For those who plant TAM 112 for increased drought tolerance, it is still important to have water at these critical growing stages, she said. Dryland wheat must still have enough stored soil moisture at planting for fall vegetative growth.

"This year in some of the areas with limited precipitation, producers got just enough to germinate the crop, but the crop is currently in poor condition because there was not sufficient stored soil moisture to draw from."

When discussing germination, producers need to understand the importance of seedling vigor and realize the bin-saved seed they might have opted to use due to low prices could have resulted in poor germination and seedling vigor, Bell said. Quality seed is needed for good germination and vigor.

In-season fertility management is also important to maximize production. It is recommended that producers coordinate their fertility program to the production goal – grain only, dual purpose or grazing only, she said. Generally, the best option is to do a split application, with one in the fall planting and one in late winter.

This provides the producer the opportunity to assess field conditions prior to top-dressing and prevent overgrowth in the fall, Bell said. In addition to harboring insects, overgrown wheat will use stored soil moisture. If winter precipitation is not sufficient enough to rebuild soil moisture reserves, there could be a water deficit in the spring as the crop is transitioning into reproductive development.

She said the best time to top-dress fertilizer is at Feekes 5, around mid-February, to ensure nitrogen is available to the plant by the jointing stage or Feekes 6. Feekes 5 is when the meaningful tillers have developed and the growing point is moving above the soil surface.

Because the crop is transitioning from vegetative to reproductive development, this is also when cattle should be pulled off wheat so they don’t graze off that growing point, if the wheat will be carried to grain production, Bell said.

"With no soil test, we advise applying 1.2 pounds of nitrogen per acre per bushel yield goal for grain-only production. For dual-purpose wheat, the recommendation is 3.75 pounds of nitrogen per acre per bushel yield goal – 2 pounds at planting to satisfy the forage growth and 1.5 pounds top-dressing in the spring for grain production.

"If the wheat is solely for graze out, we recommend 30 pounds of nitrogen per 1,000 pounds of forage. While many of our graze-out producers are cutting back on their input costs, maximum forage production is necessary to make wheat pasture profitable," Bell said.

These application rates, however, do not account for the nitrogen in the root zone, she said.

"At the current wheat prices, do not apply nitrogen without a soil test. Soil tests account for nitrogen in the soil and could potentially save you thousands of dollars in fertilizer."

And finally, if the spring yield potential looks good, producers will need to determine if it will be economical to manage for disease, she said. There are several modes of action for fungicides, so you need to be scouting early to determine what products you need to use.

Bell said she conducted a fungicide trial targeting stripe rust at Booker using two application dates – April 2 at early heading to minimize damage to the flag leaf and May 6 at late-flower to address producers’ concerns with saving test weight. The first application provided significant control but the second added very little.

"We estimated the first one saved about 20 bushels per acre, so it was effective and paid for itself," she said.

Bell’s final advice to producers was “weed management is critical in the spring – weeds rob the water and nutrients from your crop.”
December
3-5 - CSSP - Washington D.C.
5 - Celebrate World Soils Day at National Academies
6-7 - Texas Plant Protection Conference - Bryan-College Station
8-9 - America Seed Trade Assn. - Chicago, IL
13 - 15 - Texas Turfgrass Annual Conference and Show - San Antonio
13 - Blackland Income Growth Conference - Waco
16 - College of Agriculture and Life Sciences Graduation - 2:00 p.m.
17 - Christmas Open House at the home of Dr. Baltensperger
19 - Faculty Meeting - 1:30 p.m. - Dr. Elsa Murano presenting

January
4-6 - Beltwide Cotton Conference - Dallas, TX
9 - 13 - AgriLife Conference - TAMU campus, College Station
11 - Department Awards - Annual Faculty/Staff Meeting  1:15 p.m.  Heep 101
16-17 - Turfgrass Producers of Texas - Premier Best Western, Bryan TX
17-20 - Turfgrass Ecology and Management Short Course - Rudder Tower
18 - Global Pulse Day - more info at http://pulses.org/global-pulse-day
24-25 - Red River Crops Conference - Childress, TX
January 31-Feb 2 - Texas/Oklahoma Cotton Physiology Meeting - College Station Hilton

February
2-3 - Soil Survey and Land Resource Workshop
9-11 - Plant Science Research Network - Phenomics, Tucson, AZ
10-14 - Phenome 2017 - Tucson, AZ
11 - Aggieland Saturday
16-20 - AAAS Annual Meeting - Boston, MA
17 - Plant Breeding Symposium - MSC
Feb. 28 - Inventory Completion Goal

Save the Date
May 16-18 - Southern Department Heads Meeting
May 24 - Deadline for Staff Evaluations