Welcome Back Students!

In This Month’s Agenda:
- Comments from the Department Head
- Dr. Baumann Retires
- Wheat Variety Picks
- State Employees Charity Drive
- Bennett Women’s Conference
- Army Worm update
- More....

Texas A&M University Department of Soil & Crop Sciences TAMU 2474, College Station, TX 77843 Ph. 979.845.3041
Soil and Crop Sciences is off to a wonderful fall. We have many exciting programs that are developing, from Drone and Sensor Technology, to Soil Security, to Genome Editing to new interactions with corporate partners. Our semester is underway with student numbers similar to the past year and continued growth in our distance program. The enthusiasm of new students and new faculty combines to bring a renewed vigor to the department.

A special thanks to all the supporters of our scholarships and fellowships that made school possible for many of these students. If you have questions about how to make a donation to the department please feel free to contact either John Bernheim – jbernheim@txamfoundation.com or me – dbaltensperger@tamu.edu.

Special thanks also to Judy Young for all her efforts to prepare for the annual promotion and tenure process and to all the faculty for providing input into the process. The thoughtful consideration of each candidate makes ours a transparent and valued activity.

Crops around the state are more likely stressed by too much rain currently rather than drought. We have many fields where cotton sprouting in the boll is a problem and some sorghum has been impacted by head diseases. The opportunity to control weeds in our forage systems is exceptional as many have shown up following heavy August rains preceded by 4 to 6 weeks with virtually no rain.

Many of our scientists participated in the National Association of Plant Breeders in Raleigh, North Carolina in late August including visits to NC State and Cotton Inc, and SAS. Dr. Seth Murray has arrived for his one-year assignment in Washington D.C. (more in the next newsletter), we had exciting discussions with administration on “Big Ideas” in soils and are moving forward rapidly with a Soil Security Umbrella. We are also exploring how rapidly we can explore gene editing technology and building infrastructure to accomplish this, including enhanced transformation facilities and support.

I had several opportunities to see the state in the past few weeks including trips to Dallas, Overton and Kerrville. It is always wonderful when we have leading scientists visit from around the world. Recently Dr. Randall Cygan was here to visit Dr. Deng and provide a seminar on modeling at the molecular level. We have a large group of Brazilian scientists and producers visiting now.

Congratulations to Dr. Liu and Dr. Xue on their appointments as Editor of Books and Special Publications for the tri-Societies and as Associate Editor for Crop Science, respectively. Soil and Crop Sciences at Texas A&M has a long tradition of service leadership for many National organizations. Thanks to all that participate.

A special note that we will miss Dr. Paul Baumann and Dr. Matt Elmore who will both be departing from the department this month (see article inside). It was good to see many of you at the retirement Bash for Paul. Thanks to Kathy Peacock and Alisa Hairston for leading our annual Charitable Campaign. We look forward to the plans developed by two newly appointed task forces: “improvement in the departmental climate,” and our “graduate curriculum review.”

Don’t forget to put the fall harvest festival on your calendar for Friday October 7 at the equine center. The College tailgate will be on a separate weekend this year –Oct 29.
Statewide AgriLife Extension weed specialist retires after 27 years

By: Kay Ledbetter

Weed problems in crops have been the focus of Dr. Paul Baumann for more than 27 years. But as of Aug. 31, he’ll be turning his interests to retirement.

Baumann, the Texas A&M AgriLife Extension Service state weed specialist in College Station, is retiring Aug. 31 (Texas A&M AgriLife photo)

Dr. Paul Baumann, the Texas A&M AgriLife Extension Service state weed specialist in College Station, is retiring Aug. 31 (Texas A&M AgriLife photo)

Data generated from these studies have provided the foundation for more than 1,300 educational programs, over 30 publications, graduate student training and consistent program financial support, Baltensperger said.

“Even though I have had the great fortune to work with industry on solving a number of issues relative to weed management, I honestly feel my greatest contribution is the rigorous training of my graduate students,” Baumann said. “They are all now engaged in Texas agriculture through their positions as university professors and specialists, industry scientists and sales representatives, plant breeders and private consultants.

“Quite frankly, I could not be more proud of them. I had the good fortune of being trained in grad school by the best, Dr. Morris Merkle at Texas A&M, and Drs. John Abernathy and Jack Gipson at Texas Tech. I owed it to them to continue their legacy. If we don’t train our students to serve Texas agriculture, who will?”

Baumann said the biggest challenge during his career, without question, was weed resistance to herbicides and environmental challenges to the continued use of traditional herbicides such as atrazine.

“What I am seeing in other parts of the country relative to weed resistance is frightening,” he said. “Different weeds showing resistance to several modes of action of herbicides at a rapid pace, which is a situation that we have not yet faced in Texas with a couple of exceptions.

“Weed specialists are on a constant treadmill to devise new methods for controlling these weeds, most of the time using innovative approaches with old herbicide chemistry,” Baumann said. “Recently, the agrochemical industry has started once again to devote greater emphasis on developing new chemistry and crop tolerance to existing herbicides. I just hope this keeps pace with what we are dealing with in Texas.”

He said agriculture will continue to be challenged by environmental concerns arising out of the use of new and old herbicides. Herbicides in use today have undergone years of testing for adverse effects on human health and the environment prior to their introduction to the marketplace.

“It will be the responsibility of both university and industry researchers to address new challenges with solid field and laboratory research to confirm that products are safe, and make the general public aware of the cost/benefit analysis associated with their loss.”

Specific challenges addressed by Baumann’s program include the potential loss of the herbicide atrazine; finding herbicides for consistent grassbur control and acceptable forage tolerance; and determining the value of jatropha as an oilseed biofuel.

Additionally, Baumann partnered with other AgriLife Extension specialists to address the issue of glyphosate or Round-up-resistant weeds in Texas. He wrote AgriLife Extension publications and conducted county meetings to educate clientele and recommend solutions.

He was asked to be a speaker on many occasions, including at the O.D. Butler Field Day, Blackland Income Growth Conference, Texas Plant Protection Association Conference, Stiles Farm Field Day and Upper Gulf Coast Ranch Expo.

Baumann worked with agencies and foundations such as the National Park Service, conducting weed surveys and providing recommendations for management in National Parks. Internationally, he has consulted for the Norman Borlaug Institute for International Agriculture in Guatemala and dairy farms in Mexico. He has also presented research papers on two visits to Germany and Mexico.

Most recently, he received the Texas A&M AgriLife Vice Chancellor’s Award in Excellence for AgriLife Extension specialists in recognition of the impact he has made on the field of weed science.

Baumann has been a member of the Weed Science Society of America, the Southern Weed Science Society and the American Agronomy Society, serving on several committees for each of those organizations.

While the weed scientist may be retiring to spend more time with family, he said he won’t be walking away completely.

“I will no doubt engage in some private consulting as well. I have made many, many good farmer friends along my career path and owe them a great deal of gratitude. They have helped me to keep focused on real, practical issues and what my responsibility was to them. I hope I have met their expectations.”

By: Kay Ledbetter
Women landowner numbers are growing. Simultaneously, interest in wildlife operations is increasing. An upcoming two-day conference will bring the two together in the Edwards Plateau region.

“Women in Wildlife Conservation – Resources to Set a Stewardship Path,” hosted by the Texas A&M AgriLife Extension Service, will take place Oct. 3-4 at the Inn on Barons Creek in Fredericksburg. The conference, funded by the Ruth and Eskel Bennett Trust, is an effort to reach women landowners interested in enhancing the wildlife component of their operations, said Dr. Larry Redmon, AgriLife Extension program leader and associate head, Texas A&M soil and crop science department in College Station.

“We wanted to provide a program for these landowners, whether they are new to a ranch or longtime caretakers, with some information on improving their property for wildlife, either for recreational purposes or possible business ventures,” Redmon said.

“This is our second year, and we wanted to offer some different topics and experts for those women who might want to come back, as well as other landowners looking for a little help or education,” he said. “For a look at what was offered the first year, I invite you to go view this video: http://bit.ly/2aYZE8t.”

This year’s program will provide experts on topics such as “What Women Need to Know About Finances and Their Hunting Enterprise” and “Key Points for Developing Hunting Lease Agreements.” Additionally, experts will be brought in to discuss rainwater harvesting for wildlife, the Master Naturalist program, and deer, habitat and land management, in addition to personal stories from women ranchers involved in successful operations.

Cost of the two-day conference is $75 and includes the opening breakfast as well as all other meals, break refreshments and tour transportation. Hotel rooms are available at the Inn on Barons Creek for $99 per night under the Bennett-TAMU group code.

The second day will include tours of several operations, including a winery.

For more information, go to the website: http://bennetttrust.tamu.edu/, or contact Redmon at l-redmon@tamu.edu or an AgriLife Extension agent in the region.
Cotton yields in West Texas are looking better with recent rains, but extended untimely rains have producers in the Upper Gulf Coast and Blacklands worried about yields and lint and seed quality, according to a Texas A&M AgriLife Extension Service specialist.

Dr. Gaylon Morgan, AgriLife Extension cotton specialist, College Station, said recent rains that moved across the state brought beneficial moisture to cotton fields in some areas such as the High Plains and Rolling Plains. However, he added, prolonged wet conditions have been detrimental to cotton fields in the Upper Gulf Coast and Blacklands.

“It’s a big issue, but we don’t know how big,” he said. “We know lint and seed quality will be off quite a bit. The total impact on these estimated 375,000 acres will not be known until these fields are harvested, ginned and classed.”

Quality will depend greatly on whether rains stop or continue, Morgan said. Producers had cotton fields with open bolls, and many had defoliated their fields before the rain came.

Continuous rain over seven to nine days in the Upper Gulf Coast and Blacklands regions starting in mid-August caused a major cotton sprouting issue, and continued scattered showers since have delayed harvests, he said. Delays have caused further degradation of fiber quality and delayed harvest has prevented producers from knowing the extent of the damage.

Most fields will require a second round of defoliation treatment, which is an additional expense on top of a decrease in lint and seed quality, he added.

“It was not the amount of rain that fell, it was that the rainfall occurred consistently over several days, and the cotton lint did not dry out, which provided a perfect environment for seeds to germinate,” Morgan said.

Lint with sprouted seeds is problematic for ginning because it is difficult to separate the lint from the seed and costly lint cleaning is required to obtain the best possible lint, he said. Producers will have to wait for everything to dry out, then harvest, gin and have their cotton classed to determine quality losses in seed and lint.

Without quality seed, producers will likely face additional costs, Morgan said, because they typically swap seed for ginning expenses.

Producers face investing more money to defoliate, harvest and complete the ginning process before lint can be classed to determine fiber quality discount, he said. Lower color grades are expected to be the biggest discount at this point, but strength reductions and higher leaf grades are a possibility as well.

Also, there will be some level of yield loss in fields due to lint on the ground and hardlock bolls, he added.

Morgan said one producer he’d talked to in the Blacklands compared lint values of fields harvested before and after the prolonged rains. The producer saw a 20 percent loss in lint value from wet fields compared to those harvested and ginned before the rains started.

Losses are expected to vary greatly when it comes to yields or staining, trash content, strength and color grade, and Morgan recommends producers visit with their insurance agents before counting fields as total losses.

“The hope is that the quality isn’t going to be as bad as expected,” Morgan said. “But the gins haven’t ginned much of the damaged cotton at this point and we won’t know the level of lint and seed discounts until then. The take-home message is that we need to give these cotton fields every opportunity to allow the lint and seed to dry down and ‘bleach-out’ some of the stains. Otherwise, putting high moisture seed cotton into a module will further degrade lint and seed quality while the modules are waiting to be ginned.”
Developing technology offers researchers advancement without man hours, machine harvesting

Story by Kay Ledbetter
Photos by Beth Ann Luedeker

It’s been said a picture is worth a thousand words. But for Dr. Seth Murray, the images captured by an unmanned aerial vehicle or self-propelled ground vehicle could be worth more than a thousand man hours.

The images can then lead to the selection of the next higher yielding crop variety, not in 10 years, but over two or three years.

Murray, a Texas A&M AgriLife corn breeder in the soil and crop science department of Texas A&M University at College Station, said the world of genomics and DNA markers has been around for 30 years, but only recently have they been routinely incorporated into the breeding programs.

Genomics allows researchers to identify genetic locations in plants exhibiting certain phenotypic traits they need to improve production.

But what is needed now is more development of high-throughput field phenotyping, or HTFP, tools for the next generation of plant breeding, Murray said.

Working with large teams of faculty, staff and students from across the Texas A&M system, he said his current project is to develop analysis methods and software that will allow HTFP data collection to aid in his breeding decisions.

“One of the big traits we are after is plant height in corn,” he said. “We spend three weeks with a crew of 10 people taking notes in the field, and one whole week of that is devoted to plant height.”

He explained that plant height in Texas corn is highly correlated to grain yield. Under the stressful field conditions of most Texas growers, taller corn seems to have higher vigor to resist those stresses. He cautioned that just selecting for tall plants would not improve yield, but it is one of many traits he uses.

To get the data that helps a breeder know which varieties are providing the necessary traits, measurements must be taken, Murray explained. Plant height is a primary and relatively straightforward example of a phenotype that could be automated by HTFP data collection.

The most promising tools to improve field-relevant phenotyping are systems that include sensors carried by ground vehicles or unmanned aerial vehicles, he said. Sensing data provides two major opportunities: to automate routine measurements in the field and to discover new phenotypes that were previously infeasible or impossible to collect.

Those personnel walking the fields must measure with sticks. But now there are sensors that can do that, he said. Currently, he is working with other researchers to test three different techniques: fixed-wing aircraft, a rotary copter aircraft and a ground vehicle.

“The first question now is can we use these images to replace the measurements we are already taking for height?” Murray said.

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as well as collaborating teams in Corpus Christi and Uvalde are vital. “We have learned that even the commercial tools for growers are not yet ready for prime-time without some intellectual expertise,” he cautioned. “An exciting part is that we have about 17,000 plots out in the field of 5,000 different genetic sources that we need to take measurements on, so there is no way we could take height measurements throughout the growing season with the old methods. But these UAVs have let us take measurements every week throughout the growing season.”

As we begin to mine this data, we can determine if some of these varieties grow well under early season stress and some under late-season stress. If we can identify those and cross them, then we think we can get varieties that grow well under all seasons of stress. It’s a lot of data though, and we are just beginning to have analytical tools for these discoveries.”

Two of Murray’s graduate students are working to confirm genes that relate to plant height.

Individual genes have small effects and it is hard for us to accurately measure those changes. With this, we could measure that and say, ‘Do these genes actually work?”

Murray’s research project includes a first-of-its-kind high-clearance, self-propelled ground vehicle built to include all the sensors he needed. It has ultrasonic sensors that use sound waves to measure height.

Murray said they needed an upgradable sensor payload to measure multiple variables of plant growth and development across the many different breeding programs at Texas A&M. The vehicle has a 10-foot clearance with high stability to phenotype corn, sorghum and other row crops through maturity without disrupting the crop. Additionally, the ground vehicle has active sensors for measuring normalized difference vegetation index, or NDVI, infrared thermometers to measure the ground and crop temperatures and a weather station to measure air temperature and wind speed.

All that information is fed into a data logger, combined with a real time kinematic or RTK GPS signal, to precisely tell where that machine is and what it is measuring. “We had our machine custom made because corn grows so tall,” he said. “We are in the process of writing the analysis code. By the end of this year we will know whether it can do what we need it to do.”

He said they’ve also had the fixed-wing plane fly all the fields involved in one experiment with corn and sorghum, taking measurements once a week.

“Now we have lots of data to go back and look at. The sky’s the limit. There are many things beyond height, but height is the simplest,” Murray said.

He said temperature and NDVI are things that agronomist have been using for a while. Another is texture. “Combines for small plot work are often less accurate than we would like, but they are faster than hand harvesting and hand shelling. But if the UAVs or ground vehicle can give us an indication of the potential in early generations, then we could plant experiments without the goal of harvest, just getting the UAV data to get a value of the variety. “We’re looking for that one needle in the haystack, and if we find a technology that can do that faster, then instead of growing 17,000 plots, maybe we can grow 70,000 plots and not have to run a small plot combine and select potential high yielders. Instead, we can harvest those plots we actually know have value.”

Hear more from Dr. Murray at: https://www.youtube.com/watch?v=2s-R58qsJiSE&feature=youtu.be

Dr. Seth Murray, right, and students from the Soil and Crop Sciences and Biological and Agricultural Engineering departments with the ground vehicle. Left to right are Jacob Pekar, Mario Mendez, Grant Richardson, Jeffrey Demieville, and Brandon Hartley. Colby Ratcliff is in the driver’s seat.
Congratulations!

Peebles selected as a Golden Opportunities Scholar

The American Society of Agronomy (ASA), Crop Science Society of America (CSSA) and Soil Science Society of America (SSSA) announced that William Peebles has been selected as a Golden Opportunity Scholar.

The award will formally be presented during the scientific societies’ Annual Meeting, Nov 6-9 in Phoenix, AZ. The annual awards are presented for outstanding contributions to agronomy through education, national and international service, and research.

Peebles, a senior Plant and Environmental Soil Science major, works at the Texas A&M Cotton Improvement Lab, where he assists with cotton breeding efforts and conducts undergraduate research, and is the Merchandise Coordinator for the Texas A&M Agronomy Club.

Following completion of his bachelor’s degree, William would like to pursue a master’s degree in plant breeding. He hopes to be a plant breeder one day for a university or a non-profit organization with the goal of improving food security.

Gholson represented well at water resources conference

PhD student Drew Gholson, who also serves as an Texas A&M University AgriLife Extension Program Specialist I for Water Resources, received an award for his oral presentation at the annual conference of the Universities Council on Water Resources. Gholson’s presentation was “A Survey of Public Perceptions and Attitudes about Water Quantity following an Exceptional Drought in Texas”.

He is working on his PhD in Soil Science under Dr. Diane Boellsdorff

Francis Recognized for Outstanding Support

Linda Francis, Administrative Assistant in the Extension Office, received the 2016 award for Outstanding Administrative Support from the Texas Extension Specialists Association at their summer meeting on Lake Conroe.

Linda serves as the Extension office manager and is also the personal assistant to 5 state specialists: Drs. Morgan-Cotton, Redmon-Forages, Boellstorff-Water Resources, Neely-Small Grains, and Mowrer - Soils.

She has been serving in that capacity for fifteen years.
Texas’ State Employee Charitable Campaign has begun and will continue through October 31.

The Soil and Crop Sciences Department is getting involved with the fundraising efforts, giving faculty and staff several opportunities to contribute to their favorite charities. In addition to committing to direct donations through payroll deduction, the department will be holding several fun fundraising activities.

Raffle tickets will be sold beginning September 12 for the opportunity to win one of two gift baskets that will be created. The “Game Day” basket includes many Aggie items - a T-shirt, cup, koozies, dominoes, Aggie towel and an Aggie Flag, and more (sorry – it does not include any tickets). The “Movie Night” basket includes a variety of movies, popcorn, several types of candy, and a 2-litre bottle of soda.

Tickets will be sold for $1 each and will go on sale Sept. 12. They will be available from Kathleen Peacock in the business office (Heep 434) and from Alisa Hairston in room 350. The baskets will be on display in the business office until the drawing, which will take place during the Harvest Festival.

October 29 there will be a Chili Cook-off at noon in the 4th floor atrium. Dust off your recipes and save the date. Those who don’t cook may purchase a bowl and sample the different recipes. There will be more information to follow!

For more information on the Campaign go to

http://www.tamus.edu/secc/ or check them out on Facebook at

https://www.facebook.com/2016SECC
The Aggie Turf Club kicked off the 2016-17 school year with its first meeting September 7. The club, under the supervision of Dr. Ben Wherley and Dr. Richard White, meets every other Wednesday from 5:00 to 6:15 p.m. in Heep 440.

Open to students of all majors, the purpose of the Turf Club is to broaden student awareness and knowledge of the turfgrass industry, including available internships, jobs and other opportunities in the industry.

The club also provides excellent networking opportunities for students to meet industry professionals. Members of the Aggie Turf Club serve to enhance Texas AYM University’s reputation as a leader in the turfgrass industry and give back to the university, and local community, through service and volunteer events.

Officers for this year are: President - Kevin Hejl; Student Officers - Corey Diaz, Scott Gee and Russell Rafter. Club treasurer and one student officer position are currently vacant. Those will be filled at the Sept. 21 meeting.

The new turfgrass building and shop are expected to be completed by mid-December.

We are always looking for new members! Come join the club!
Extension and NRCS join together with farmers to discuss conservation tillage

Texas AgriLife Extension, NRCS and producers from the Blacklands region came together September 8 at Oscar Store, southeast of Temple, to discuss conservation tillage practices and to open the door for more on-farm research trials in the state.

Dr. Jake Mowrer, AgriLife Extension specialist in Soil Nutrient & Water Resource Management, Nathan Haile of NRCS, Ryan Collett, manager of the Stiles Farm Foundation, and Lyle Zoeller, AgriLife Extension Agent for Bell County organized the meeting.

“Dr. Paul DeLaune has done a lot with no-till and cover cropping in Vernon (Rolling Plains), but there has not been much done here in the Blacklands,” explained Mowrer. “We want to try to get some science behind the current recommendations.” Meaning science that addresses the challenges of farming on Blackland soils.

“For me, it is important to meet with farmers who have a stake and see what you have to say about how it affects the bottom line. If we are going to push statewide for reduced tillage and cover crops, I cannot get behind that if producers are going to lose money,” Mowrer told the group.

Haile explained that the purpose of the meeting was open the door to learn how the agencies can help producers get to a place where they can both conserve and produce.

“You need to conserve so you can keep farming, but it is not one size fits all,” Hale stated. “In the past A&M was going one way and NRCS was going another. All of us need to get together and head the same direction, see if it works and see if we can help producers.”

There will be more meetings and more discussions to come.
Students and Cotton industry leaders from the Brazilian state of Matogrosso met with Texas A&M University researchers from Soil and Crop Sciences, Agriculture Economics and the college of Engineering September 8 and 9 on the A&M campus to explore research areas of common interest.

The program was led by Dr. Jean Belot, an IMAmt cotton breeder. IMAmt, Instituto Mato-Grossense do Algodão, is the cotton growers’ research institute in Brazil.

Dr. Belot presented an overview of cotton production systems in the humid Cerrados region of Brazil, the organization of Brazilian growers and specific objectives for their cotton breeding programs. He discussed the genetic tools currently used in IMAmt’s cotton breeding program and the new challenges they face.

Topics presented by the A&M researchers included:

- AgriLife Research Cotton Programs, Dr. David Baltensperger
- Cotton Production in Texas and the U.S. - Dr. Gaylon Morgan, State Extension Cotton Specialist
- Cotton Trade Perspective - Dr. John Robinson, Extension Economist
- Cotton Breeding - Drs. Wayne Smith; Steve Hague and David Stelly
- Unmanned Aerial Systems - Dr. Murilo Maeda, Soil & Crop Sciences Dept.
  
  Dr. Jinah Jung, College of Engineering
  Misty Vidrine, Program Coordinator, TAMU AgriLife Research
- Boll Weevil Genome and Old World Bollworm - Keerti Rathore, Soil and Crop Sciences Dept.
  
  Dr. Gregory Sword, Cotton Entomologist
Fall army worms are on the march in parts of Texas.

Texas A&M AgriLife Extension Service agents in a few of the agency’s districts have reported increased armyworm activity in hayfields and pastures over the past few weeks. Dr. Vanessa Corriher-Olson, AgriLife Extension forage specialist in Overton, said producers should expect an increase in armyworm numbers following recent rains and cooler temperatures in areas of the state.

“armyworms are on the march across the state following recent rain events and a drop in temperatures. Armyworms can devastate rangeland and pastures quickly. (Texas A&M AgriLife Extension photo by Adam Russell)

“I was getting calls about them before the rain,” she said. “They like cooler temperatures and wet conditions in the spring and fall, so we could see a swell in their numbers.”

Armyworm moths can lay up to 2,000 eggs that hatch in two to three days, according to a 2015 report by AgriLife Extension entomologist Dr. Allen Knutson. There are four to five generations per year.

Corriher-Olson said armyworm caterpillars are picky eaters that prefer high-quality, fertilized forage typically found on fields maintained for hay production. They are a common pest of Bermudagrass, sorghum, corn, wheat, rye grass and many other crops in north and central Texas.

Producers should scout each morning for armyworms, she said. Armyworms are night feeders that try to avoid daytime temperatures.

Armyworms are green, brown or black in color and can be identified by the white inverted Y on their head. They can grow up to 1 inch in length when mature.

https://www.youtube.com/watch?v=hZlhX9mSkRU

The pest got its name because they appear to march across hay fields, consuming the grass in their path.

The threshold for insecticide spray treating a pasture is three or more armyworms per square foot, Corriher-Olson said. Armyworms in those numbers should be treated immediately. Armyworms in the last two or three days of their larval stage consume 85 percent of their diet.

Corriher-Olson recommends insecticides labeled for armyworm control in pastures and hayfields. She said applicators should always follow all label instructions on pesticide use and restrictions.

“You don’t need to wait a day if their numbers are at threshold,” she said. “They are going to do a lot of damage quickly. If you find them in the morning, spray that day.”


Save The Dates!

The 2017 Small Grains Workers Meeting has tentatively been set for August 2-3 in Amarillo.

The AgriLife Wheat Field Day will be May 18 in Bushland.
Good quality cuttings of hay could be in the future for hay producers across the state following widespread rains.

Dr. Larry Redmon, Texas A&M AgriLife Extension Service program leader, College Station, said spring and summer presented subprime conditions for hay production on both ends of the weather spectrum. Redmon said spring rains made it difficult for hay producers to access meadows and delayed or prevented first cuttings. The delays resulted in good quantities of hay but diminished nutrient values and quality. The spring deluge was followed by 70-75 days of summer heat, including multiple 100 degree days in much of the state, that decreased moisture levels rapidly, Redmon said.

The lack of moisture slowed growth and in some cases led to dormancy in hay meadows. But then the rains came.

"I’m looking at fields that looked burnt up a week ago, and now they’re green and growing," Redmon said. "It looks like producers might get a good second or third harvest."

According to the U.S. Department of Agriculture National Agriculture Statistics Service May 1 hay stock report, Texas had its highest surplus of fall/winter hay since 2008, 2.5 million tons, or 9 percent above 2015. Redmon said producers who fertilized hay meadows based on forecasts that delivered rain would likely benefit most and see good new growth over the next few weeks. He said the next cutting would likely produce good yields and quality as long as fields are accessible when grasses peak.

Rangeland and pasture conditions around the state also improved following the rains and should provide adequate grazing in many areas until forages go dormant, according to AgriLife Extension agent reports.

Producers who fertilized hay meadows before widespread rains last week can expect good quality growth for second or third cuttings over the next few weeks. (Texas A&M AgriLife Extension Service photo by Adam Russell)
Texas wheat variety “Picks” for High Plains, Rolling Plains released

The Texas A&M AgriLife Extension Service has released its “Picks” of annual grain wheat varieties for the 2016-2017 cropping season in the High Plains and Rolling Plains.

Dr. Jourdan Bell, Dr. Calvin Trostle and Dr. Emi Kimura, AgriLife Extension agronomists from Amarillo, Lubbock and Vernon, respectively, along with statewide small grains and oilseed specialist Dr. Clark Neely, compiled the list of Picks.

“Our ongoing Picks criteria include a minimum of three years of data in AgriLife wheat variety trials across numerous annual locations within each region of Texas,” said Trostle. “As we have noted before, a Pick variety means this: Given the data, these are the varieties we would choose to include and emphasize on our farm for wheat grain production.”

The data are derived from High Plains wheat grain testing coordinated by the Texas A&M AgriLife wheat breeding program based at Amarillo. Irrigated and dryland test sites range from Lamesa to Stratford, including a test site at New Mexico State University-Clovis.

Standability can also be an important varietal trait that is an important consideration for high input production. Considering multiple traits in addition to yield potential enables a producer to better manage potential risk and better position specific varieties for their management, Bell said.

Among the top High Plains Picks are:
- Full irrigation – TAM 113, TAM 114, TAM 304, WB Grainfield, Iba and Winterhawk.
- Dryland – TAM 111, TAM 112, TAM 113, TAM 114, WB Grainfield, Iba, T158 and Winterhawk.

“We initially discussed removing TAM 111 from our Picks list due to a modest decline in recent yields and its susceptibility to leaf and stem rust,” she said. “However, TAM 111 is still a top-yielding variety in our regional variety trials. So, for producers, as long as you understand that good management, which will include timely scouting for rusts and treatment if needed, is an important key for TAM 111, then it remains a good choice.”

TAM 114 has good across-the-board resistance to rusts, good straw strength, desirable milling and baking qualities, and also has intermediate resistance to some biotypes of Hessian fly, Bell said. WB Grainfield grain yields are good and key rust resistance is in place.

T158, a Limagrain product, is on the recommended list due to its tolerance to stripe rust under both dryland and limited irrigation.

On the two and three-year “watch list” are Gallagher, by Oklahoma State University, due to its good rust resistance, she said. Denali and Byrd, both from PlainsGold/Colorado State, show good yields and have generated discussion as possible Picks, though susceptibility to rusts is a concern.

“TAM 304 remains a viable choice for true high-input production systems with high irrigation, high nitrogen fertility applications, etc. where producers are shooting for yields at 100 bushels per acre or more,” Bell said.

Kimura said the Picks list for the Rolling Plains region includes Greer by Syngenta; TAM 114, Texas A&M; WB Cedar, Monsanto; Gallagher, Oklahoma State; WB 4458, Monsanto; and TAM 304, Texas A&M. Yields are obtained only from dryland trials in the Rolling Plains.

Bentley and SY Grit are on the “watch list” for the Rolling Plains. Both have moderate to good resistance to leaf and stripe rust and have performed reasonably well in yield trials the past two years. In their first year of testing, Monsanto’s WB 4721 and WB 4515 and Syngenta’s SY Southwind did well across the Rolling Plains in 2016. She said a more complete discussion of each variety can be found at http://bit.ly/2bd3PMM, including yield trends from past trials and photos of each variety taken during growing season in the Rolling Plains.

“Pick varieties with a minimum of three years under AgriLife testing in the High Plains continue to yield an average of 7-11 percent better as a group than all other varieties in both irrigated and dryland tests,” Trostle said.

“Though you may have a variety for your production conditions that you really like, we encourage you to include one of our Picks in your cropping. Perhaps a Pick variety that has a specific disease package, which may have been valuable in the stripe rust outbreaks of 2015 and 2016, or relative maturity that contrasts with your current variety would be a good complement to your overall program.”


More information will be posted by Neely on Picks for the Blacklands, South Texas and Lower Rio Grande Valley on http://varietytesting.tamu.edu/wheat/index.htm and titled Wheat Variety Grain Picks—Other Texas Regions.
September
6 - Promotion and Tenure Meeting
10 - Retirement Celebration for Dr. Paul Baumann - Wellborn Community Center
14 - USGA
20 - Agronomy Society Meeting - every other Tuesday
21 - Aggie Turf Club Meeting - every other Wednesday
19-21 - Sorghum Improvement Conference (SICNA) 2016 - Manhattan, KS

October
3-4 - Bennett Ladies Conference - New Braunfels
6-7 - Surface Mine Reclamation Workshop - College Station
7 - Harvest Festival - TAMU Equine Center
22 - Agronomy Society Corn Maze Opens - open weekends through Nov. 13
24 - 28 - Fall Ranch Management University
29 - College of Agriculture and Life Sciences Tailgate - College Station

November
29 - 30 - Amarillo Farm and Ranch Tour

November 30 - Dec. 1 - Texas State Support Committee Project Review Meeting - Lubbock

Save the Date
December 6-7 - Texas Plant Protection Conference - Bryan-College Station
Dec. 8-9 - America Seed Trade Assn. - Chicago, IL
January 9 - 13 - AgriLife Conference - TAMU campus, College Station
January 31-Feb 2 - Texas/Oklahoma Cotton Physiology Meeting