

Oldham County Ag Talk

April 2018- May 2018



Amanda Spiva

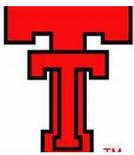
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The past few months have been busy for Oldham County 4-Hers and their livestock projects! The following youth competed at either one or all of these major shows: San Angelo Stock Show, San Antonio Stock Show, Houston Stock Show, and Rodeo Austin. Brody & Cash Black; Saige & Stock Martin; Lani & Shiloh Wright; Anna, Chesna & Jentry Harbert; Heidi & Hanna Gruhlkey; Lacy & J’Cee Petty; Mason, Miles & Jackson Neelley; Lynlee, Ethan & May Claire Spinhirne; Jada, Kiersen & Reese Green; Trevor Kent; Baylee Sides; Madisyn Brickler; Coy Hammitt.

San Angelo: Stock was 1st in his AOB class

San Antonio: Stock was 2nd in his Maine-Anjou class and was Reserve Breed, Saige was 1st in her Brahman class, Lani was 4th in her Swine Cross Class, The horse judging team of J’Cee, Lacy, Jentry and Coy was 7th as a team, and J’Cee was 3rd high individual.

Houston: Anna’s Chester was 3rd in its class, Lani was 9th with her cross, the horse judging team was 7th overall with J’Cee 3rd high individual, and Lacy was 17th.

Congratulations and good job to all the kids that showed and competed. You are a group of talented, hard workers.



“Texas A&M AgriLife Extension provides equal opportunities in its programs and employment to all persons, regardless of race, color, sex, religion, national origin, disability, age, genetic information, veteran status, sexual orientation, or gender identity.” “The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating”

Drones help researchers monitor High Plains wheat
Moisture-deficient winter offers prime drought-tolerance measurements

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AMARILLO – The Texas A&M AgriLife Research dryland wheat variety nursery near Bushland is being monitored weekly by drone flights, offering wheat breeders a chance to see changes on a more real-time basis.



Drones are being used to monitor weekly growth on the Texas A&M AgriLife Research wheat variety plots near Bushland. (Texas A&M AgriLife photo by Kay Ledbetter)

Dr. Jackie Rudd, AgriLife Research wheat breeder in Amarillo, said the dryland wheat variety nursery typically has varieties yielding an average of 30 bushels per acre, but some years that can fall to 8-10 bushels per acre due to drought and other environmental conditions.

“This year is undetermined,” Rudd said. “But it looks like it is out of moisture to survive on.”

He said the dryland nursery was planted Oct. 11 into good moisture and it came up and really looked good, but the rain shut off and “we haven’t had rain since then.”

The dryland variety nursery is mirrored across the state with locations in the Rolling Plains, South Plains and further south, all evaluating a large number of different genetic sets to determine how they will do throughout the Great Plains.

“We take advantage of what environments we have,” he said. “It’s been very dry this year, matching close to 2011 when we yielded 8-12 bushels per acre. Some varieties, however, yielded 18 bushels per acre that year. That’s what we are looking at, comparing the genetics here and throughout the state under multiple locations and different conditions.”

<https://www.youtube.com/watch?v=b7W6JaUEVRw&feature=youtu.be>

Rudd said they have been monitoring the situation to see the difference in color and growth rate, which has varied with how they started in the fall. Varieties with a good root system had a good stand establishment, got their root down and survived through the winter quite well.

“They are surviving entirely on subsoil moisture at this time,” he said. “But the more we dig down and check, there’s not much moisture under it at all. A week of this hot, windy weather, and it won’t be a pretty sight.”

He said some don’t have much of a root system left. Some might have had roots earlier but those have almost disappeared due to the dry weather.

“Jointing and stem elongation started last week, and things were looking pretty good,” Rudd said. “But when I was walking the field taking notes last week, I kicked some plants and they literally fell over.”



The roots of dryland wheat in the Texas A&M AgriLife Research variety plots dried up.
(Texas A&M AgriLife photo by Kay Ledbetter)

“Many plants are not rooted at the crown. There may be some variety differences, but it seems to be uniform across the dryland nursery and several nearby dryland wheat fields. My first thought was an insect or a pathogen, but I really think that it is just dry.

“I’ve never seen anything quite like this – a decent looking plant with almost no crown roots,” Rudd said. “An observation by our crop physiologist, Dr. Qingwu Xue, is that the plant is surviving on the seedling roots and it was just too dry to form crown roots.

“The seedling roots can get the wheat seedling off to a good start and continue to grow down to deep soil for water uptake. However, a root system without crown roots is very difficult to sustain a large developing above-ground plant.”

Some varieties, however, appear to be doing better than others, Rudd said.

“We need to evaluate these 5,000 plots one at a time,” he said. “Our normal process is to walk around here and go plot by plot and write in the book what we are getting. This year we’ve had 16 flights over the plots using UAVs.”

He said they are using the flights to visually measure how fast the stand established in the fall, how well it did when the cold temperatures hit – some lost a lot of leaf area while others kept right on growing – and the spring green-up.

“Some varieties started greening two weeks ago and some started last week and some are really just now starting to green up,” Rudd said.

“With drones flying over weekly, we can actually plot that through the year, the biomass or the leaf area collection, and measure the color differences with the camera and also spectral reflectance and what the greenness pattern really is,” he said. “We are measuring by ground and by air, and that’s very important information we can get in a short amount of time by drone.”

To walk this dryland field, it would take three to four hours of walking and writing notes in the notebook, Rudd said. With the drone, it takes 10-15 minutes.

“It’s a big change from having to walk the field, although we are still doing that now to ground-truth and make sure everything the drones are recording is correct,” he said. “But I’m gaining more confidence in the drone information, and I think it’s going to give us efficiency and a lot more data to make our selections. We can see plant development through the year and adjust what groups of material we are going to focus on at harvest.” Rudd said the same breeding lines growing in the dryland nursery are also in the irrigated nursery, which is on track for yields over 100 bushels per acre.

“Comparing yields and drone data from the dryland plots with those collected from irrigated plots will provide an outstanding look at drought resistance,” he said. “Once harvest comes, we will know for sure how valuable the data we have been collecting really is, and most importantly this year, to visualize drought tolerance in each individual breeding line and variety.”

Application Timing is Critical With Auxin Herbicides

by Josh McGinty – Extension Agronomist, Corpus Christi, TX; Scott Nolte – State Extension Weed Specialist, College Station, TX; Peter Dotray – Extension Weed Specialist, Lubbock, TX; Muthu Bagavathiannan – Research Weed Scientist, College Station, TX; Gaylon Morgan – State Extension Cotton Specialist, College Station, TX

With the introduction of new formulations of 2,4-D (Enlist One and Enlist Duo) and dicamba (XtendiMax, Engenia, and FeXapan) for use in Enlist and XtendFlex cotton, growers now have more options for controlling emerged broadleaf weeds, especially those that may be resistant to glyphosate. While these herbicides can provide excellent weed control, it is important to remember that the efficacy of these products (as well Liberty and other glufosinate formulations) is very dependent on weed size. Of particular concern are the *Amaranthus* weeds, Palmer amaranth and common waterhemp, which can easily grow more than an inch per day under prime growing conditions in the spring and summer. The labels of Enlist One and Enlist Duo recommend targeting weeds that are between 3 and 6 inches tall. For XtendiMax, FeXapan, and Engenia, the labels recommend applications be made to weeds less than 4 inches tall. While Liberty is not an auxinic herbicide, its effectiveness is also very much dependent on weed size and its label recommends treating weeds less than 3 inches tall. If weeds are allowed to grow beyond these sizes, they will be much more difficult (if not impossible) to control through chemical means alone.

In 2017, a series of experiments were conducted at Corpus Christi, TX to investigate the efficacy of 2,4-D and dicamba on Palmer amaranth of various sizes. Applications of 0.95 lb 2,4-D/A (equivalent to 4.75 pints of Enlist Duo, or 2.0 pints of Enlist One) and 0.5 lb/A dicamba (equivalent to 22 fl oz of XtendiMax or FeXapan, or 12.8 fl oz of Engenia) were made to weeds which were 4, 8, and 16 inches tall. In this case, these applications were made exactly 7 days apart, indicating that Palmer amaranth was doubling in height every week. Applications were made with TeeJet TTI nozzles at a total spray volume of 10 GPA (it is important to note that the revised labels of XtendiMax and FeXapan now recommend a minimum of 15 GPA). Weed control evaluations made 28 days after application revealed that 2,4-D provided 97% control of 4 inch tall Palmer amaranth, and control decreased to 87% and 78% when applied on 8 and 16 inch weeds, respectively (Figure 1). A similar trend was observed when using dicamba, where 98% control of 4 inch tall weeds was achieved, but control of 8 and 16 inch weeds decreased to 75% and 67%, respectively (Figure 2). These results are consistent with field observations of several AgriLife Extension and Research faculty statewide, that large weeds are often much more difficult to control, and that timely application of any postemergence herbicide is critical for achieving acceptable levels of weed control. As can be seen from the aforementioned experiment, the delay of an application by just a few days can make the difference between excellent weed control and a control failure.

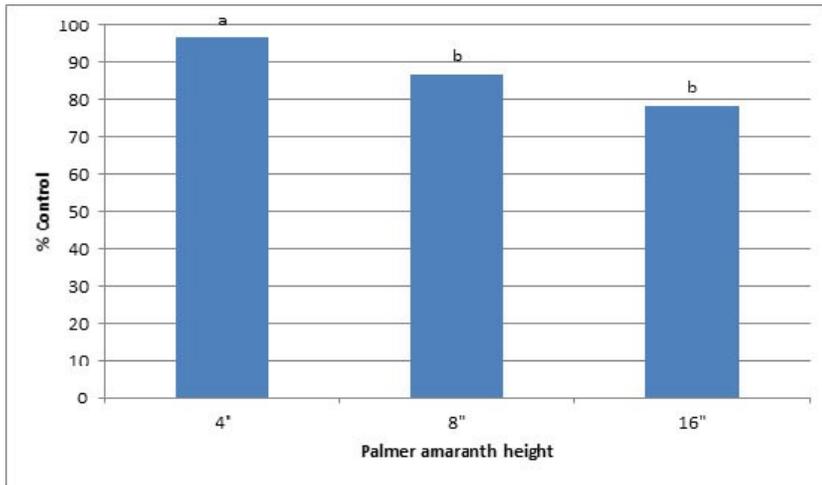


Figure 1. Control of Palmer amaranth with 0.95 lb/A 2, 4-D, 28 days after treatment.

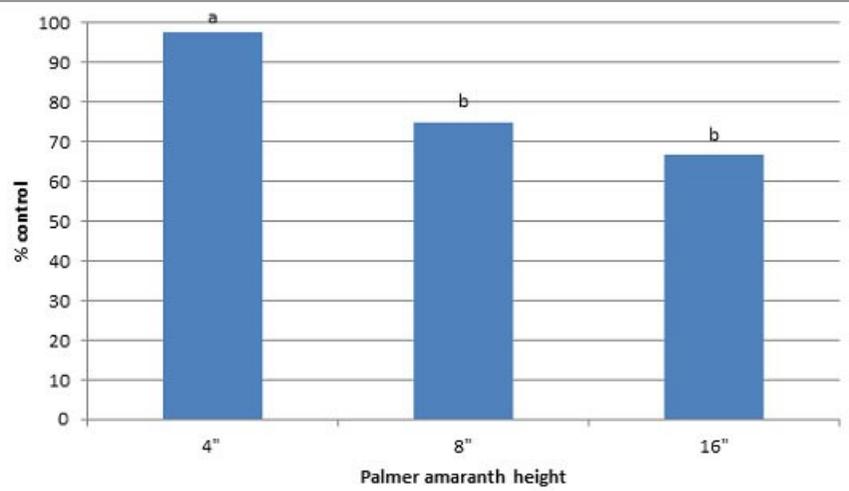


Figure 2. Control of Palmer amaranth with 0.5 lb/A dicamba, 28 days after treatment.





Texas Ranchers Eligible for Drought Disaster Assistance

Oldham County fits under: Long season Small Grains, Short Season Small Grains, Full Season Improved Native Pasture

The U.S. Department of Agriculture announced that ranchers and livestock owners in impacted Texas counties may be eligible for assistance through the 2018 Livestock Forage Disaster Program (LFP).

Many Texas counties recently met qualifying drought ratings and may be eligible for LFP compensation for grazing losses for covered livestock on land that is in native or improved pastureland with permanent vegetative cover or certain crops planted specifically for grazing.

Qualifying drought ratings for this USDA Farm Service Agency (FSA) program are determined using the [U.S. Drought Monitor](#).

Eligible livestock include alpacas, beef cattle, buffalo, beefalo, dairy cattle, deer, elk, emus, equine, goats, llamas, reindeer, or sheep that have been or would have been grazing the eligible acres during the normal grazing period.

Applications are required for 2018 losses. To expedite applications, producers who experienced losses in 2018 are encouraged to collect records documenting their losses. Supporting documents may include information related to grazing leases, federal grazing permits, contract grower agreements, and more.

“We encourage producers to contact their county office and make an appointment to learn more about applying for LFP and related program requirements,” Gary Six, FSA state executive director in Texas, said.

FSA disaster assistance program information can also be found online at disaster.fsa.usda.gov.

To apply for LFP, contact your [local USDA service center](#).