



General Area Crop Progress

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Mid-June rains provided much needed moisture to the area. We have seen extremes from a very wet winter and spring to a dry June. The heavy clay blackland soils were cracking on the surface although there was still good moisture below. **Corn** has started grain fill with the later planted fields finishing silking. **Soybeans** are setting pods. Later **Grain Sorghum** is flowering. Sugarcane aphids have not moved in yet. The **Wheat** harvest has concluded. Yield reports range from 30-70 bushels per acre. Test weight was excellent as yields were down and we did not receive a rain on mature grains before harvest. The wheat matured rapidly with the heat and there was some pre-harvest seed shattering. All local wheat research trials have been harvested and we will publish the data as soon as it is compiled. Page 2 has the Variety Trial Results at Howe, TX. It was a very wet fall and winter then warm and dry. The unique weather generated Septoria leaf blotch and head scab but low rust pressure. The lower yielding environment grouped most of the varieties together making them mostly statistically indistinguishable. This emphasizes the importance of multi-year-location trials in making selections. **Cotton** in the area ranges from 3rd true leaf to squaring. There was a wide range of planting dates due to windows of opportunity to get in the field. Thrips and fleahoppers have been found in most fields, although we have outgrown the thrips. Bollworm/earworm moths are being trapped in corn fields.

Grasshoppers are currently a problem in some pastures and could move into adjacent crops. Grasshopper control is usually recommended at 8 grasshoppers per square yard across a field. There will typically be more on edges of a field as they move in from somewhere else. One way to count is to visualize a square foot in a pasture about 10 feet in front of you and walk towards it counting the grasshoppers that jump out on approach or are still there on inspection. Counting 9 square foot locations across a field will give a square yard. Control is easier and damage is reduced if they are treated when small and before they can fly. Below are a couple of links to pest management guides with control recommendations.

Managing Insect and Mite Pests of Texas Corn

<http://agrilife.org/lubbock/files/2016/02/ENTO-049.pdf>

Managing Insect Pests of Texas Forage Crops

<http://agrilife.org/lubbock/files/2017/08/Managing-Insect-Pests-of-Texas-Forage-Crops-ENTO-064-2017.pdf>

NEW TOPGUARD TERRA LABEL FOR TEXAS ROOT ROT IN ALFALFA

A New label for controlling Cotton or Texas Root Rot in Alfalfa was released this spring. This is a result of almost a decade of work in multiple locations. The fungicide can be applied in spring or between cuttings. See page 3 and there is an AgriLife Press Release coming soon.

ONLINE GENE DRIVE PRESENTATION Thursday July 2nd

Take the opportunity to understand and provide input on potential new pest control technologies. Gene drives are being developed in multiple species and Texas A&M Entomology has a federal grant to determine public sentiment and compile suggestions on how to develop, regulate, and use this technology. There will be an online meeting and opportunity to share input on July 2nd. See more on Page 4.

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Table 1

MEAN Comparison Table

Variety†	Head Type	Yield (bu/ac)	Test Weight (lb/bu)	Plant Height (inches)	Heading (Julian)	Forage (1-3) ¹	Stripe Rust FL Infection (%)
Blackland 1828	Awne	69.1 a	60.7 g-k	34.6 b-j	107.2 abc	1.3 hij	0.0 a
Pioneer 25R40	Awne	63.7 ab	62.1 b-k	33.3 e-k	109.2 a	1.4 hij	0.0 a
Blackland 1889	Awnless	63.2 ab	60.4 h-k	36.3 a-d	108.0 ab	1.3 hij	1.3 a
Syngenta Monument (HRWW)	Awne	62.5 abc	61.9 c-k	36.2 a-e	104.3 d-g	1.5 g-j	0.0 a
Go Wheat GW 6000	Awne	62.1 abc	62.3 b-j	35.7 a-g	100.3 ijk	2.8 ab	0.0 a
Agri-Pro SY Viper	Awnless	61.9 abc	61.8 c-k	37.2 ab	100.2 ijk	1.8 e-j	0.0 a
USG 3329	Awne	61.2 abc	60.7 g-k	36.5 a-d	104.7 def	1.3 hij	0.0 a
USG 3895	Awne	59.5 abc	61.8 c-k	33.0 g-k	103.7 efg	1.3 hij	0.0 a
TX16DDH579	Awne	59.4 abc	64.3 ab	38.2 a	104.7 def	2.6 abc	0.0 a
Pioneer 75R74	Awne	58.6 abc	62.3 b-j	33.2 f-k	104.7 def	1.5 g-j	0.0 a
TX15D9597	Awne	58.2 abc	63.2 a-f	35.0 b-i	94.7 no	2.5 a-d	0.0 a
Blackland 1853	Awne	57.8 abc	61.8 c-k	37.5 ab	108.2 ab	1.1 ij	0.0 a
Dyna-Gro 9012	Awne	57.8 abc	63.6 abc	33.7 d-k	105.7 cde	1.5 g-j	0.0 a
USG 3118	Tip-Awne	57.8 abc	61.8 c-k	33.8 d-k	98.8 kl	2.1 b-g	0.0 a
#Fury	Awnless	57.8 abc	62.6 b-h	34.7 b-j	99.3 jk	2.4 a-e	0.0 a
TAM 205 (HRWW)	Awne	57.7 abc	64.7 a	36.8 abc	106.0bcd	1.6 f-j	0.0 a
Agri-Pro SY 547	Awnless	57.6 abc	61.1 d-k	37.0 ab	102.2 ghi	1.6 f-j	0.0 a
Dyna-Gro 9522	Awne	57.6 abc	61.1 d-k	35.0 b-i	107.8 ab	1.6 f-j	0.0 a
Dyna-Gro 9811	Awne	57.4 abc	62.6 b-i	36.0 a-f	102.2 ghi	1.5 g-j	0.0 a
USG 3230	Awne	56.8 abc	61.0 e-k	34.7 b-j	102.8 fgh	1.6 f-j	0.0 a
Monsanto WB-2606	Awne	56.5 abc	61.9 c-k	33.0 g-k	109.3 a	1.3 hij	0.0 a
Dyna-Gro 9701	Awne	55.7 abc	61.6 c-k	37.3 ab	107.3 abc	1.3 hij	1.3 a
Monsanto WB-4269 (HRWW)	Awne	55.2 abc	62.7 b-h	32.2 ijk	98.8 kl	2.0 c-h	0.0 a
AGS 2055	Awne	54.9 abc	61.9 c-k	35.5 a-g	103.3 fg	2.5 a-d	0.0 a
Monsanto WB-2418	Tip-Awne	54.8 abc	61.4 c-k	34.8 b-j	105.0 def	1.0 j	3.8 a
Blackland 1825	Awne	54.7 abc	61.9 c-k	32.6 h-k	108.2 ab	1.0 j	16.3 b
Go Wheat GW 2032	Awne	54.5 abc	63.3 a-e	35.2 b-h	96.8 m	2.9 a	0.0 a
USG 3640	Awne	54.4 abc	62.5 b-i	36.8 abc	95.8 mn	2.9 a	0.0 a
Dyna-Gro 9002	Awne	53.9 bc	60.1 jk	35.7 a-g	106.2 bcd	1.1 ij	0.0 a
#Turbo	Awnless	53.9 bc	60.4 h-k	32.5 h-k	100.0 ijk	1.6 f-j	0.0 a
AGS 2038	Awne	53.5 bc	62.4 b-j	36.8 abc	103.3 fg	2.1 b-g	0.0 a
TX15D9579	Awne	53.4 bc	62.4b-j	33.2 f-k	93.3 o	2.9 a	0.0 a
USG 3539	Awne	53.3 bc	62.8 b-g	34.8 b-j	108.8 a	1.3 hij	0.0 a
USG 3536	Awne	52.9 bc	60.9 f-k	37.5 ab	109.5 a	1.1 ij	0.0 a
USG 3228	Awnless	52.8 bc	60.2 ijk	32.3 h-k	100.5 ijk	1.6 f-j	0.0 a
Monsanto WB-4418 (HRWW)	Awne	52.6 bc	62.3 b-j	33.2 f-k	96.8 m	2.3 a-f	0.0 a
AGS 2024	Awne	52.5 bc	63.4a-d	33.0 g-k	101.2 hij	2.6 abc	0.0 a
Blackland 1812	Awne	52.3 bc	61.8 c-k	36.0 a-f	108.0 ab	1.1 ij	6.3 a
Monsanto WB-Cedar (HRWW)	Awne	52.3 bc	61.7 c-k	32.3 h-k	95.5 mn	1.5 g-j	3.8 a
Monsanto WB-4699 (HRWW)	Awne	52.2 bc	62.5 b-i	32.0 jk	102.8 fgh	1.4 hij	0.0 a
AGS 3040	Tip-Awne	51.5 bc	61.8 c-k	35.5 a-g	97.2 lm	2.4 a-e	2.5 a
Gallagher (HRWW)	Awne	51.3 bc	62.4 b-j	34.7 b-j	100.3 ijk	1.9 d-i	0.0 a
Monsanto WB-4303 (HRWW)	Awne	49.8 bc	61.6 c-k	31.5 k	94.7 no	2.1 b-g	1.3 a
Syngenta Grit (HRWW)	Awne	49.8 bc	62.6 b-i	34.8 b-j	99.2 jk	1.9 d-i	0.0 a
Pioneer 25R61	Awne	47.4 c	59.9 k	34.0 c-k	106.3 bcd	1.5 g-j	30.0 c
	LSD (P = .05)	7.77	1.19	1.56	1.42	0.40	3.71
	CV (%)	9.91	1.69	3.94	1.22	16.2	180.0
	GRAND MEAN	56.08	61.95	34.79	102.73	1.76	1.47

Date Planted: November 4, 2019
Date Harvested: June 8, 2020

†Ranked according to Yield

¹Forage Scale: 1 – less upright growth; thin leaf blade, 2 – moderate upright growth & leaf blade, 3 – excellent upright growth, wide leaf blade

New label for control of Cotton Root Rot in Alfalfa

The Cotton Root Rot fungus, *Phytophthora omnivora*; attacks multiple plant species in the alkaline soils of the southwestern United States including alfalfa. This disease, also called Texas root rot (TRR); eats away at the tap roots of alfalfa causing the plants to wilt and eventually die with dry brown leaves stuck to the stems. It results in low hay production and bare areas where weeds can grow and contaminate hay. What makes it more devastating is that farmers invest hundreds of dollars in alfalfa seed expecting the field to last 5 or more years and TRR can wipe out large areas of a field in a single year. TRR is more prevalent in heavier alkaline soils and can persist for many years without growing cotton. Although not large in acreage compared to row crops alfalfa is grown throughout Texas and is especially important to the dairy and livestock industry.

Texas A&M AgriLife Extension has conducted trials with the fungicide Topguard Terra, active ingredient Flutriafol, on alfalfa starting in 2011 at San Angelo. Topguard Terra was given a section 24 label to control root rot in cotton in 2012 and has been used successfully since that date on cotton. Flutriafol was the first and only active ingredient found to provide satisfactory control of cotton root rot in field trials of cotton or any other crop. Credit for finding the product must be given to Tom Isakeit Ph.D., Extension Plant Pathologist at College Station and Rick Minzenmayer, IPM Agent, Ballinger, also with AgriLife Extension who conducted a product screening program in San Angelo for many years. In 2020 a full label has been granted for the use of Topguard Terra on alfalfa in 8 states.

In alfalfa, Topguard Terra is soil or stubble applied to protect plant roots. Research David Drake, Ph.D. IPM Agent, Commerce; has shown good results with spring broadcast applications and between cutting applications as late as July. Earlier is better, as is the case with many soil applied crop protection products that take irrigation or precipitation to be moved into the soil. The fungicide provides protection of plant roots from germinating fungal sclerotia when soils are warm and wet. Disease symptoms show up under hot dry conditions and the plants die because the much reduced roots cannot supply needed moisture and nutrients.

Application should be applied to fields with a history of TRR in alfalfa, cotton, or other crops. This disease tends to appear in the same areas year after year. Preventative treatments in areas known to have root rot will protect alfalfa stands. Annual treatments of already diseased alfalfa fields will result in healthier plants and reduced spread of the disease. Early research on alfalfa showed some protection with annual applications of 4 or 8 fluid ounces of Topguard Terra with the higher rates giving more consistent results. Higher rates should be used in areas with active root rot or historically severe root rot and on heavier soils. The label has expanded applications that allow two treatments per year not to exceed 12 fl. oz. per application and 19.5 fl. oz. per growing season. More research is currently being done on split applications.

Some producers with the use of aerial mapping and site specific application will be able to reduce costs by applying the fungicide to portions of the field that are affected by the disease. This technology is being used for TRR in cotton. It is not recommended apply Topguard Terra at seeding as is done with cotton as it can reduce seedling vigor under certain conditions. Most alfalfa is seeded in the fall so a spring application following fall planting will protect new stands. Treatments should be repeated annually to protect stands in known root rot areas. Texas A&M AgriLife Extension would like to acknowledge the alfalfa producers in Tom Green, Menard, Knox, Reeves, Cooke, and Lamar Counties that provided locations for research trials. Cheminova and FMC also provided partial research funding.

The Topguard Terra label for use on alfalfa can be found at <https://www.cdms.net/ldat/ldDJJ006.pdf>

Figure 1A and 1B. Photos of a Cotton root rot diseased area in San Angelo, TX untreated and treated with Topguard A; and forage samples from untreated and Topguard treated areas B. Courtesy David Drake.



Presented by Dr. Micky Eubanks, Professor
Department of Entomology, Texas A&M University

Emerging Technologies in Agriculture:
**What is Gene Drive and
Why Should Texans Care?**

July 2, 2020 | 1-2PM

Location: Online Presentation

- How might gene drive be used to manage agricultural pests?
- What are the tradeoffs in using or developing this technology?

For more information and to register:
<https://agriliferegister.tamu.edu/productListingDetails/3142>



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Calendar

July 2-Emerging Technologies in Agriculture: Gene Drive Online

July—Summer Crops Tour—Greenville, TX

Aug. 3-5 Virtual Beef Cattle Short course

For information on COVID-19

The Texas A&M AgriLife Extension Service is leading an education effort helping local governments with the Coronavirus Aid, Relief, and Economic Security (CARES) Act.

<https://agriflifeextension.tamu.edu/coronavirus/>

Extension Disaster Education Network (EDEN)

EDEN information on the Coronavirus can be found at:

<https://texashelp.tamu.edu/coronavirus-information-resources/>

USDA Resources can be found at:

<http://usda.gov/coronavirus>

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