

Performance of Small Grain Varieties in Alabama, 2018-2019



Cullman County 1925

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Performance of Wheat Varieties in Alabama, 2019

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“The mission of the Alabama Variety Testing Program is to provide research-based, unbiased results on the performance of various crop hybrids, cultivars, and varieties to the agricultural community in our state. We are intent on conducting these trials in a manner that will result in maximum biological yield through methods common to the top-producing farms in Alabama. We are committed to providing this information in a rapid, timely manner for its use during the decision-making process. The success of the program rests upon our ability to help Alabama producers provide a safe, dependable source of food and fiber for all families as well as economic sustainability for theirs.”

Methods

Planting dates for all trials in 2018-19 are shown in Table 1. Variety treatments were arranged in a randomized complete block experimental design with 3 replications. Fungicide treated seeds were drill planted to attain a population equivalent to local production practices. All tests were fertilized according to soil test recommendations, including 20 lbs/acre N at planting. A top dressing of 70 lbs/acre N was made in late February or early March, just prior to “jointing”.

Region	Ala. Exp. Station location and soil texture	2018-2019	
		Date planted	Date harvested
North	Sand Mountain Research & Ext. Center Wynntown fine sandy loam	Not planted	Not harvested
	Tennessee Valley Research & Ext. Center Decatur silt loam	October 31	June 5
Central	Black Belt Research & Ext. Center Vaiden clay	October 17	May 31
	Plant Breeding Unit, E.V. Smith Res. Ctr. Cahaba fine sandy loam	December 5	June 15
	Prattville Agricultural Research Unit Lucedale fine sandy loam	November 30	May 29
Southern	Brewton Agricultural Research Unit Benndale fine sandy loam	November 19	May 28
	Gulf Coast Research & Ext. Center Malbis fine sandy loam	December 18	Not harvested
	Wiregrass Research & Ext. Center Dothan fine sandy loam	December 19	Not harvested

Wheat trials were managed with foliar fungicides to prevent disease outbreaks. At maturity, grain was harvested using a small plot combine, cleaned, and weighed. Moisture and bushel test weight were also recorded unless otherwise noted.

Tables

**Abbreviations: REC, Research & Extension Center; ARU, Agricultural Research Unit*

2018 Wheat Variety Performance - Yield: Current & Multiple Year Averages

Northern Region

Table 2. Performance of wheat varieties in North Alabama, Tennessee Valley REC, Belle Mina

Central Region

Table 3. Performance of wheat varieties in Central Alabama, Black Belt REC, Marion Junction

Table 4. Performance of wheat varieties in Central Alabama, Prattville ARU, Prattville

Table 5. Performance of wheat varieties in Central Alabama, Plant Breeding Unit, Tallassee

Southern Region

Table 6. Performance of wheat varieties in South Alabama, Brewton ARU, Brewton

Oat and Triticale Variety Performance - Yield

Northern Region

Table 7. Performance of oat and triticale varieties in North Alabama, Tennessee Valley REC, Belle Mina

Central Region

Table 8. Performance of oat varieties in Central Alabama, Black Belt REC, Marion Junction, AL

Table 9. Performance of oat varieties in Central Alabama, Prattville ARU, Prattville

Table 10. Performance of oat varieties in Central Alabama, Plant Breeding Unit, Tallassee

Southern Region

Table 11. Performance of oat varieties in South Alabama, Brewton ARU, Brewton

Disease Ratings

Table 12. Disease ratings on wheat at Prattville ARU, Prattville, AL

Table 13. Disease ratings on wheat at Tennessee Valley REC, Belle Mina

Table 14. Disease ratings on oat at Prattville ARU, Prattville, AL and Tennessee Valley REC, Belle Mina, AL

Table 15. Disease ratings on triticale at Tennessee Valley REC, Belle Mina, AL

Table 2. Performance of Wheat Varieties in Alabama - Tennessee Valley REC - Belle Mina, AL		
Planting Date: 10/31/18	Harvest Date: 6/5/19	
Wheat	Grain Yield	Test Weight
	(bu/Acre)	(lbs/bu)
Dyna-Gro WX19621	87	58.5
Local Seed LWX19A	86	53.9
AgriMAXX EXP 1906	85	58.7
AgriMAXX 473	85	56.6
AgriMAXX EXP 1902	84	57.5
USG 3536	82	56.5
Local Seed LWX19D	81	58.1
Dyna-Gro WX18416	81	56.1
Local Seed LWX 2848	81	56.7
Dyna-Gro 9811	79	58.2
USG 3895	79	56.2
USG 3539	79	59.1
Limagrain L11719	79	57.1
AgriMAXX 415	78	58.8
Local Seed LWX19B	76	58.4
Dyna Gro 9522	76	57.2
Liberty 5658	75	59.6
Dyna-Gro TV 8861	75	57.5
Dyna-Gro 9701	74	56.3
VA 13W-38	74	58.8
VA09MAS2-131-6-2	73	58.1
Hilliard	73	58.0
AgriMAXX EXP 1913	73	57.3
AR06146E-1-4	72	58.9
Limagrain L11713	71	58.9
AGS 2055	71	57.8
AGS 3040	69	56.3
GA 071518-16E39	68	58.2
USG 3458	68	55.2
GoWheat 2032	67	58.9
AR07133C-19-4	66	58.1
GA 09129-16E55	66	59.5
AGS 3000	65	58.8
AGS 2024	64	58.4
AGS 3030	64	57.0
AgriMAXX 481	64	58.8
AGS 2038	61	56.6
USG 3640	61	58.5
USG 3118	60	57.1
GA 09377-16LE18	59	56.4
Dyna-Gro Plantation	58	59.0
TX15D9597	57	58.8
TX15D9608	57	57.4
GoWheat LA 754	54	56.8
GA 09436-16LE12	50	59.0
TX15D9579	43	55.0
Trial Mean	71	
LSD (0.1)	9	
CV (%)	10	
Pr>F	0.0001	

Wheat variety performance over multiple years at Tennessee Valley REC*

Variety	Average Yield (bu/Acre)		
	2018	2017-2018	2016-2018
	1 - year	2 - year	3 - year
Dyna Gro 9522	76	82	84
AGS 2024	64	74	80
AGS 2038	61	74	75

* Sorted by 3 year average

Table 3. Performance of Wheat Varieties in Alabama - Black Belt REC - Marion Junction, AL

Planting Date: 10/17/18			Harvest Date: 5/31/19		
Wheat	Grain Yield		Test Weight		
	(bu/Acre)		(lbs/bu)		
USG 3329	40		48.3		
AR07133C-19-4	38		50.2		
Local Seed LWX19B	33		48.0		
AgriMAXX EXP 1902	32		50.5		
AR06146E-1-4	31		50.3		
Dyna-Gro 9811	31		46.9		
TX15D9597	30		50.8		
AGS 2024	30		45.8		
VA 13W-38	29		51.0		
GoWheat 2032	29		48.8		
AgriMAXX 481	29		48.6		
USG 3539	29		48.7		
AGS 2055	28		47.3		
Local Seed LWX19D	27		49.5		
Local Seed LWX 2848	27		48.6		
AgriMAXX 415	27		51.9		
AgriMAXX EXP 1913	26		49.0		
GA 071518-16E39	26		47.4		
Limagrain L11713	26		48.2		
VA09MAS2-131-6-2	24		50.6		
TX15D9579	24		46.0		
AGS 2038	24		47.7		
AgriMAXX 473	23		48.3		
GoWheat LA 754	23		46.6		
Hilliard	23		47.9		
AGS 3030	22		47.9		
GA 09377-16LE18	21		45.5		
AGS 3000	21		49.2		
Dyna-Gro Plantation	21		50.3		
Local Seed LWX19A	20		45.6		
AgriMAXX EXP 1906	20		49.8		
GA 09129-16E55	18		46.9		
USG 3895	17		48.3		
USG 3536	16		48.0		
GA 09436-16LE12	15		49.6		
USG 3640	14		48.7		
TX15D9608	13		45.5		
Liberty 5658	11		44.9		
Trial Mean	25				
LSD (0.1)	14				
CV (%)	42				
Pr>F	0.2377				

Wheat variety performance over multiple years at Black Belt REC*

Variety	Average Yield (bu/Acre)		
	2019	2018-2019	2017-2018
	1 - year	2 - year	3 - year
AGS 2038	24	43	43
USG 3895	17	40	38
USG 3536	16	34	31
AGS 2024	30	25	30

* Sorted by 3 year average.

Table 4. Performance of Wheat Varieties in Alabama - Prattville ARU - Prattville, AL			
Planting Date: 11/30/18	Harvest Date: 5/29/19		
Wheat	Grain Yield (bu/Acre)	Test Weight (lbs/bu)	
AgriMAXX 481	94	61.6	
Dyna-Gro Plantation	87	61.8	
USG 3640	83	61.1	
TX15D9579	82	58.5	
AGS 2024	81	59.2	
GA 071518-16E39	80	60.8	
GoWheat 2032	80	61.3	
GA 09377-16LE18	79	60.2	
VA 13W-38	78	60.2	
Limagrain L11713	77	59.7	
USG 3895	76	56.8	
Liberty 5658	76	59.3	
TX15D9597	76	61.3	
AGS 3030	76	59.6	
AGS 2038	75	59.7	
GA 09129-16E55	75	61.3	
AR06146E-1-4	73	62.0	
TX15D9608	73	58.8	
AgriMAXX EXP 1906	73	55.8	
AgriMAXX EXP 1913	72	59.6	
GA 09436-16LE12	72	62.0	
AGS 2055	72	57.3	
GoWheat LA 754	72	59.4	
VA09MAS2-131-6-2	70	56.2	
Local Seed LWX19D	69	57.3	
AgriMAXX 473	65	53.6	
AGS 3000	65	61.4	
Dyna-Gro 9811	65	55.7	
Local Seed LWX 2848	62	54.6	
USG 3536	61	53.2	
Hilliard	58	55.5	
AgriMAXX 415	58	56.7	
USG 3539	57	54.4	
AR07133C-19-4	54	56.5	
Local Seed LWX19B	53	54.8	
USG 3329	48	51.0	
AgriMAXX EXP 1902	29	47.0	
Local Seed LWX19A	26	41.8	
Trial Mean	69		
LSD (0.1)	9		
CV (%)	10		
Pr>F	0.0001		
Wheat variety performance over multiple years at Prattville Agricultural Research Unit*			
Variety	Average Yield (bu/acre)		
	2019	2018 - 2019	2017 - 2019
	1-year	2-year	3-year
AGS 2024	81	87	64
AGS 2038	75	75	59
<i>* Sorted by 3 year average</i>			

Table 5. Performance of Wheat Varieties in Alabama - Plant Breeding Unit - Tallassee, AL			
Planting Date: 12/5/18	Harvest Date: 6/15/19		
Wheat	Grain Yield (bu/Acre)	Test Weight (lbs/bu)	
Dyna-Gro Plantation	45	53.6	
GA 09377-16LE18	40	51.8	
GA 09129-16E55	40	53.1	
TX15D9597	39	50.6	
GA 09436-16LE12	38	55.0	
GA 071518-16E39	38	53.7	
AgriMAXX 481	37	52.3	
GoWheat LA 754	36	49.2	
GoWheat 2032	36	50.2	
AGS 2024	35	51.9	
AR06146E-1-4	35	53.7	
AGS 2038	33	49.7	
USG 3895	33	49.0	
VA 13W-38	31	50.3	
AGS 3030	30	50.6	
USG 3640	30	49.4	
AGS 3000	29	52.3	
TX15D9608	27	-	
TX15D9579	26	49.4	
AGS 2055	25	-	
Liberty 5658	23	-	
Limagrain L11713	22	-	
VA09MAS2-131-6-2	22	-	
AgriMAXX EXP 1913	22	-	
Hilliard	21	-	
AR07133C-19-4	20	-	
AgriMAXX 415	19	-	
AgriMAXX EXP 1906	18	-	
Local Seed LWX19D	18	-	
USG 3329	16	-	
Local Seed LWX 2848	16	-	
USG 3539	15	-	
USG 3536	13	-	
Dyna-Gro 9811	13	-	
Local Seed LWX19B	12	-	
AgriMAXX 473	10	-	
Local Seed LWX19A	7	-	
AgriMAXX EXP 1902	2	-	
Trial Mean	26		
LSD (0.1)	9		
CV (%)	25		
Pr>F	0.0001		
Wheat variety performance over multiple years at EV Smith Plant Breeding Unit*			
Variety	Average Yield (bu/acre)		
	2019 1-year	2018 - 2019 2-year	2017 - 2019 3-year
AGS 2038	33	63	58
AGS 2024	35	51	50
<i>* Sorted by 3-year average</i>			

Table 6. Performance of Wheat Varieties in Alabama - Brewton ARU - Brewton, AL			
Planting Date: 11/19/18	Harvest Date: 5/28/19		
Wheat	Grain Yield (bu/Acre)	Test Weight (lbs/bu)	
GA 071518-16E39	89	62.6	
GoWheat 2032	80	62.8	
Dyna-Gro Plantation	78	62.6	
AgriMAXX 481	76	63.0	
GA 09377-16LE18	75	62.3	
AGS 2024	72	62.6	
TXLA14066DH-64	72	62.3	
GA 09129-16E55	69	62.4	
VA 13W-38	67	62.4	
GA 09436-16LE12	67	61.9	
AGS 3030	64	62.6	
USG 3640	63	62.6	
TXLA14066DH-88	62	62.9	
VA09MAS2-131-6-2	60	62.0	
AGS 2038	59	62.3	
AGS 2055	59	59.8	
GoWheat LA 754	58	61.9	
USG 3118	58	59.9	
USG 3895	57	62.0	
AR06146E-1-4	57	62.4	
Liberty 5658	57	62.1	
USG 3329	56	60.5	
AGS 3000	56	62.3	
Limagrain L11713	52	62.0	
USG 3539	49	56.9	
AR07133C-19-4	49	54.3	
AgriMAXX EXP 1913	48	60.7	
Hilliard	47	59.3	
USG 3536	47	60.3	
Trial Mean	62		
LSD (0.1)	14		
CV (%)	17		
Pr>F	0.0001		
Wheat variety performance over multiple years at Brewton ARU*			
Variety	Average Yield (bu/acre)		
	2019 1-year	2018 & 2019 2-year	2017 - 2019 3-year
AGS 2038	59	87	76
AGS 2024	72	80	69
Hilliard	47	77	64
* Sorted by 3-year average			

2019 Alabama Oat & Triticale Variety Trial Results

Table 7. Performance of Oat Varieties in Alabama - Tennessee Valley REC - Bell Mina, AL		
Planting Date: 10/31/18	Harvest Date: 6/5/19	
Oat	Grain Yield (bu/Acre)	Test Weight (lbs/bu)
LA10044SSBS-1	159	34.3
LA12068SBSB-58-1	147	35.0
Horizon 306	142	36.5
Horizon 720	116	37.1
Trial Mean	141	
LSD (0.1)	27	
CV (%)	12	
Pr>F	0.0913	
Performance of Triticale Varieties in Alabama - Tennessee Valley REC - Belle Mina, AL		
Planting Date: 10/31/18	Harvest Date: 6/5/19	
Triticale	Grain Yield (bu/Acre)	Test Weight (lbs/bu)
Trical Surge	66	50.8
Trical 342	51	49.8
FL 01143	49	50.3
Trical Merlin Max	32	47.2
Trial Mean	49	
LSD (0.1)	15	
CV (%)	19	
Pr>F	0.0215	

Table 8. Black Belt REC – Marion Junction, AL – Data from this trial will not be reported due to low yields and high variability.

Table 9. Performance of Oat Varieties in Alabama - Prattville ARU - Prattville, AL		
Planting Date: 11/30/18	Harvest Date: 6/14/19	
Oat	Grain Yield (bu/Acre)	Test Weight (lbs/bu)
LA10044SSBS-1	126	31.1
LA12068SBSB-58-1	109	30.7
Horizon 306	79	31.8
Horizon 720	64	29.1
Trial Mean	95	
LSD (0.1)	28	
CV (%)	19	
Pr>F	0.0184	

Table 10. Performance of Oat Varieties in Alabama - Plant Breeding Unit - Tallassee, AL		
Planting Date: 12/5/18	Harvest Date: 6/15/19	
Oat	Grain Yield (bu/Acre)	Test Weight (lbs/bu)
LA10044SSBS-1	57	32.0
Horizon 306	52	31.9
LA12068SBSB-58-1	45	31.3
Horizon 720	29	30.2
Trial Mean	46	
LSD (0.1)	7	
CV (%)	10	
Pr>F	0.0012	

Table 11. Performance of Oat Varieties in Alabama - Brewton ARU - Brewton, AL		
Planting Date: 11/19/18	Harvest Date: 5/28/19	
Oat	Grain Yield	Test Weight
	(bu/Acre)	(lbs/bu)
LA10044SSBS-1	69	-
Horizon 306	63	-
LA12068SBSB-58-1	56	-
Horizon 720	56	-
FL 0720	41	-
Trial Mean	57	
LSD (0.1)	20	
CV (%)	23	
Pr>F	0.1981	

Disease Notes on Wheat Variety Trials, 2019

Data Explanation

Disease ratings for the 2018-2019 variety trials for wheat, oats and triticale are summarized by location in Tables 1 through 4. Diseases were rated by K.L. Bowen, Professor of Plant Pathology, with help from graduate students, Chris Gorman and Matthew Stinson. Rust diseases were rated on a severity scale ranging from 0 to 100, indicating the proportion of the flag leaves that were affected across the plot. All other diseases are rated on a scale of 0 to 9, where 0 indicates no disease, 4-5 reflects about half of the plants are moderately affected, and 9 = severe disease affecting all plants in plot. Diseases were rated as close to soft dough as could be scheduled, late April to early May.

Discussion

Wheat variety trials at Prattville Agricultural Research Unit (PARU) and Tennessee Valley REC (TVREC, in Belle Mina) were rated in the spring of 2019. No wheat emerged from planted trials at Gulf Coast and southern sites were not visited. At PARU, trace to low levels of leaf rust, leaf and glume blotches, barley yellow dwarf and scab were seen (Table 12). No disease had been seen at PARU in 2018. At TVREC, no leaf rust was seen, but there were low levels of glume blotch, and low to moderate levels of leaf blotch and scab (Table 13). Leaf and glume blotches were slightly higher in intensity in 2019 than in 2018, while other diseases were similar between the two years. Fungicides had been applied to wheat variety trials at most locations and did a good job at minimizing foliar diseases. Barley/cereal yellow dwarf was seen consistently at PARU. No Fusarium head blight was found on AgriMAXX 415, AR06146E-1-4, and Local Seed LWX19B at either location.

Oats varieties had similarly low levels of Helminthosporium leaf spot at both PARU and TVREC (Table 14). Crown rust was noted at low levels only at PARU.

Only low to trace levels of diseases were noted on triticale at TVREC (Table 15). Among triticale cultivars, 'Trical 342' had notably higher scab and BYD than other cultivars; 'Trical Exp 70126' was notably disease free.

In all tables, the P-value indicates the level of statistical significance of differences among cultivars; the LSD is Least Significant Difference or the numerical difference that separates one cultivar from another.

Table 12. Disease ratings on wheat varieties at PARU, 7 May 2019. Leaf rust severity is on a scale of 0 to 100% of flag leaf affected; other diseases rated 0 to 10, where 5 = ~ 50% of plants in plot are wholly affected.

Cultivar	Leaf Rust (% severity)	Leaf blotch (0 to 9)	Glume blotch (0 to 9)	Barley yellow dwarf	Scab (= Fusarium head blight)
AgriMAXX 415	0.34	0.83	1.17	0	0
AgriMAXX 473	0.01	0.17	1.5	0	0
AgriMAXX 481	0	0.5	0.5	0	0.33
AgriMAXX EXP 1902	0.67	0.01	0.33	0	0
AgriMAXX EXP 1906	0	0.83	0.17	0	0
AgriMAXX EXP 1913	0	0.33	0.5	0	0
AGS 2024	0	0.83	0.5	0	0.83
AGS 2038	0	1.17	0.67	0.5	1
AGS 2055	0	1.67	0.33	0.17	0.67
AGS 3000	0	0.34	0.34	0	0
AGS 3030	0	0.5	0.5	0.17	0.83
AR06146E-1-4	0	0.83	0.67	0.17	0
AR07133C-19-4	0	0.34	0.5	0	0
DH12SRW056-058	0	0.67	1	0.01	0
Dyna-Gro 9811	0	1.5	0.67	0.33	0
Dyna-Gro Plantation	0	0.5	0.67	0	1.33
GA 071518-16E39	0	0.34	0.67	0	0.67
GA 08535-15LE29	0	1.17	0.67	0	0.67
GA 09129-16E55	0	0.5	0.33	0	0.33
GA 09377-16LE18	0	0.5	0.34	0	0.67
GA 09436-16LE12	0	1	0.5	0.33	1
GoWheat 2032	0	0.5	0.5	0	1.67
GoWheat LA 754	0	0.33	0.33	0	0.33
Hilliard	0	1.67	0.34	0.17	0
Limagrain L11713	0	0.33	0.17	0	0
Local Seed LWX 2848	0.01	0.83	1.33	0	0
Local Seed LWX19A	0.17	0	0.17	0	0
Local Seed LWX19B	0.01	0.33	1.67	0	0
Local Seed LWX19D	0.01	0.33	0.83	0.33	0
TX15D9579	0	0.83	0.67	0	0.5
TX15D9597	0	0.17	0.33	0	1.33
TX15D9608	0	0.64	1	0.17	0.33
USG 3329	1.67	0.33	0.83	0.17	0
USG 3536	0	0.5	1.33	0	0
USG 3539	0.34	0.17	1.17	0.17	0
USG 3895	0	0.83	0.17	0.5	0.33
VA 13W-38	0	0.83	0.34	0	0
VA09MAS2-131-6-2	0	0.83	0.34	0.17	0
LSD (P = 0.05)	0.55	1.05	0.90	0.36	0.98
P =	0.0036	0.0459	0.112	0.080	0.0289

Table 13. Disease ratings on wheat varieties at TVREC, 13 May 2019. Diseases are rated 0 to 10, where 5 = ~ 50% of plants in plot are wholly affected.

Cultivar	Leaf blotch	Glume blotch	Scab	Cultivar	Leaf blotch	Glume blotch	Scab
AgriMAXX 415	1	1.25	0	GA 08535-15LE29	2	1.5	2.25
AgriMAXX 473	1.25	2	1	GA 09129-16E55	2.75	0	1
AgriMAXX 481	2.25	0.26	2	GA 09377-16LE18	1.25	0.01	2
AgriMAXX EXP 1902	0.26	0.25	1.5	GA 09436-16LE12	0.75	0.5	1.75
AgriMAXX EXP 1906	1.25	1	2	GoWheat 2032	2.25	0.26	1.5
AgriMAXX EXP 1913	4.25	1	0.5	GoWheat LA 754	2.25	0.5	2
AGS 2024	2	0.5	2.25	Hilliard	1.5	0.5	0.5
AGS 2038	0.75	1	3.25	Limagrain L11713	4	0.26	0.5
AGS 2055	1.75	1	3	Limagrain L11719	2.25	0.75	1.5
				Local Seed LWX			
AGS 3000	0.75	1	2	2848	0.75	2.25	0.5
AGS 3030	2.75	0.75	0.5	Local Seed LWX19A	0.5	1.25	1.5
AGS 3040	2.5	2.5	1.5	Local Seed LWX19B	2.25	1.25	0
AR06146E-1-4	3.5	0.5	0	Local Seed LWX19D	1.5	0.5	1.25
AR07133C-19-4	1.25	0	1.75	TX15D9579	1.75	0.75	1.5
DH12SRW056-058	1.25	1.5	1.75	TX15D9597	2.25	1	1
Dyna Gro 9522	0.5	0.5	1	TX15D9608	2.75	1	0
Dyna-Gro 9701	2.75	1.25	0.5	USG 3118	1	1.25	0.5
Dyna-Gro 9811	1.75	1	0.5	USG 3458	0.5	0.75	1.25
Dyna-Gro Plantation	2.5	1.5	2	USG 3536	1.25	1.75	0.5
Dyna-Gro TV 8861	0.5	0.5	1.25	USG 3539	1	1.75	1
Dyna-Gro WX18416	0.75	0.75	0.5	USG 3895	1	0.26	0.5
Dyna-Gro WX19621	0.75	2	0.5	VA 13W-38	2.5	0.01	1
GA 071518-16E39	3.25	0.26	2	VA09MAS2-131-6-2	1.25	0.01	1.25
				P =	< 0.01	0.0084	0.0004
				LSD (P = 0.05)	1.99	1.29	1.3

Table 14. Disease ratings on oats varieties at PARU (7 May 2019) and TVREC (13 May 2019). Helminthosporium spot rated on a scale of 0 to 9, rust is % severity on upper leaf.

	PARU		TVREC
	Helminthosporium spot	Crown rust	Helminthosporium spot
Horizon 306	1	0.67	1.5
Horizon 720	0.5	0.01	1.17
LA10044SSBS-1	1	0	1
LA12068SBSB-58-1	1	0.34	0.83
P =	0.4484	0.2425	0.5319
LSD (P = 0.05)	0.94	0.76	1.02

Table 15. Disease ratings on triticale varieties at TVREC (13 May 2019). Diseases were rated on a scale of 0 to 9.

	Leaf blotch	Glume blotch	Fusarium head blight
Trical 342	0.75	0.5	1.5
Trical Surge	0.75	0.26	0.5
FL 01143	1.75	1	0
Trical Merlin Max	0.26	2.25	0
P =	0.0062	0.0881	0.1255
LSD (at P = 0.05)	0.98	1.2	1.38

2018-2019 Grain Sources

Wheat

Cultivar:	Source:
AGS 2024, AGS 2038, 2055	AGSouth Genetics
AGS 3000, AGS 3030, AGS 3040	Albany, Georgia
AgriMAXX 415, AgriMAXX 473, AgriMAXX 481	AgriMAXX Wheat Company
AgriMAXX EXP 1902*, AgriMAXX EXP 1906*	Mascoutah, Illinois
AgriMAXX EXP 1913*	
DynaGro 9522, DynaGro 9701, DynaGro 9811	Nutrien Ag Solutions
DynaGro Plantation, DynaGro TV8861	Bloomville, Ohio
DynaGro WX18416*, DynaGro WX19621*	
Limagrain L11719, Limagrain L11713	Limagrain Cereal Seeds
	Cordova, Tennessee
LWX19A*, LWX19B*	Local Seed Company
LWX19D*, LW2848	Memphis, Tennessee
Go Wheat LA754	Stratton Seed
Go Wheat 2032	Stuttgart, Arkansas
TX15D9579*, TX15D9597*, TX15D9608*	Texas A&M AgriLife Research
TXLA14066DH-66*, TXLA14066DH-88*	Commerce, Texas
USG 3458, USG 3536, USG 3895	UniSouth Genetics, Inc.
USG 3118, USG 3329, USG 3539	Dickson, Tennessee
AR0614E-1-4*, AR07133C-19-4*	University of Arkansas
	Fayetteville, Arkansas
GA071518-16E39*, GA09129-16E55*	University of Georgia
GA09436-16LE12*, GA09377-16LE18*	Griffin, Georgia
USG 3640	
Hilliard, Liberty 5658	Virginia Crop Improvement Assn.
VA09MAS2-131-6-2*, VA13W-38	Warsaw, Virginia

Oats

Cultivar:	
Horizon 270, Horizon 306	Plantation Seed Conditioners, Inc.
	Newton, Georgia
LA10044SSBS-1*, LA12068SBSB-58-1*	Louisiana State University.
	Baton Rouge, Louisiana
FL 0720*	Angelina Grain Company
	Vidalia, Louisiana
Triticale	
Trical 342, Trical Surge, TriCal Merlin Max	Northern Seed, LLC
FL 01143*	Union, Kentucky
* Experimental line; not yet commercially available	

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