



# ***2021 SMALL GRAIN PERFORMANCE TRIALS***

LAES Research Summary No. 224. August 2021





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## Performance of Small Grain Varieties in Louisiana, 2020-21

Stephen A. Harrison<sup>1</sup>, Kelly Arceneaux<sup>1</sup>, Reddy Biradar<sup>1</sup>, Blair Buckley<sup>4</sup>, Dennis Burns<sup>2</sup>, Fred Collins<sup>5</sup>, Caitlin deNux<sup>5</sup>, Dustin Ezell<sup>6</sup>, Jacob Fluitt<sup>3</sup>, Katie Fontenot<sup>1</sup>, Don Groth<sup>3</sup>, Allysson Harding<sup>1</sup>, Dustin Harrell<sup>3</sup>, Manoch Kongchum<sup>3</sup>, Dana Landry<sup>5</sup>, James Leonards<sup>3</sup>, G. Boyd Padgett<sup>5</sup>, Trey Price<sup>6</sup>, Myra Purvis<sup>6</sup>, Daniel Stephenson<sup>5</sup>, William Waltman<sup>4</sup>, and Greg Williams<sup>7</sup>

### Introduction

Small grain variety trials are conducted annually by scientists of the Louisiana State University Agricultural Center Agricultural Experiment Station (LSUAC) to evaluate grain yield, agronomic performance, and disease reaction of varieties and advanced lines. The trials are conducted at seven LSUAC research stations representative of the major soil and climate regions of the state. Entries are included in the trials based upon previous performance or at the request of the originating agency. Inclusion of an entry in the trials does not constitute an endorsement. The performance trial in north Louisiana is divided by relative maturity into two groups, early and medium-late (normal) to facilitate planting and harvest. The north Louisiana early trial included six varieties (bold font) and four experimental lines (normal font) while the normal trial included 33 commercial varieties and 33 experimental lines. There were 45 entries in the south Louisiana performance trials.

A fungicide split was added to the wheat performance trials at Baton Rouge, Alexandria and Winnsboro starting in 2020. At

these locations there were six replications in each trial with three of those receiving two fungicide applications and three without fungicide.

New entries in the statewide trials are tested in the north Louisiana normal trial and in a south Louisiana vernalization trial, unless prior testing in Baton Rouge nurseries indicates an entry is adapted to south Louisiana, in which case it is also tested in the south Louisiana variety trials. South Louisiana consists of the Baton Rouge, Crowley, and Jeanerette locations; whereas North Louisiana consists of locations at Alexandria, Bossier City, St. Joseph, and Winnsboro.

When choosing varieties, growers should consult their local extension agents and choose varieties based on two-year data within a region, not based on a single year or location. Fusarium headblight reaction should also weigh heavily in variety choice.

Growers should also consider specific data from the LSUAC variety trial location that most closely matches the weather and soil conditions of their farm and should avoid growing a single variety on a large acreage.

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1 Professor and variety trial coordinator, Research Associate, Research Associate, Research Farm Assistant 2, and Research Associate, respectively. SPESS Department, Baton Rouge.  
2 Extension Specialist, Northeast Research Station, St. Joseph.  
3 Research Associate, Professor, Professor, Assistant Professor, and Research Associate, respectively. Rice Research Station, Crowley.  
4 Associate Professor, and Research Associate, respectively. Red River Research Station, Bossier City.  
5 Research Associate, Research Associate, Professor, Professor, and Research Associate, respectively. Dean Lee Research Station, Alexandria.  
6 Research Associate, Associate Professor and Research Associate, respectively. Macon Ridge Research Station, Winnsboro.  
7 Research Associate. Iberia Research Station, Jeanerette.

Growing several varieties helps to hedge against losing the entire crop to chance occurrences in weather or shifts in pathogen or pest races or virulence patterns. Yield, test weight, maturity, and disease resistance are important traits to consider when selecting varieties. If a grower plans to plant wheat early, he should avoid varieties that have a very early heading date in order to reduce the danger of freeze damage. Specific management and cultural practices for a location are presented at the bottom of the tables, along with unusual or key observations about that test. All plots were seeded at the recommended rate with seed provided by the originating agency or company (**Appendix A**).

#### **Characteristics Evaluated and Statistics Reported:**

Data are collected on grain yield, test weight, heading and maturity dates, plant height, lodging, and disease reaction, as appropriate at each location. Grain yield was adjusted to 13% moisture. **Least significant differences (LSD's)** are reported at the 10% probability level. An LSD of 10% probability ( $\alpha=0.10$ ) is the level of difference in a trait (like yield) that occurs between two varieties once in every 10 comparisons as a result of random chance due to greater soil fertility, better drainage, slightly greater harvest length, or any other "uncontrollable or unmeasurable factors" in the test, even if the varieties had the same genetic yield potential. If the LSD (0.10) for yield in a trial is 7.0 bu/a, there is a 10% chance that two varieties with a reported yield difference of 7.0 bu/acre are genetically equal and a 90% probability they have differences in genetic potential in that particular environment. LSD values are influenced by the degree of precision that soil fertility, stand establishment, plot length, harvest efficiency, and other variables of the trials are controlled, and by the number of replications of each variety or treatment. The letters 'NS' are used in the text and Tables to

indicate lack of significance (**not significantly different**) at the 10% probability level. Correlations are sometimes given to indicate the degree to which two traits, such as rust rating and yield, are related. A correlation between rust rating and yield of  $r = -1.0$  would indicate that for every unit increase in rust there was a proportional decrease in yield.

Wheat leaf rust, stripe rust, and oat crown rust are reported as percentage of the upper two leaves affected by the disease. Two replications are evaluated for leaf rust, between flowering and the early dough stage of kernel development. Wheat and oat stem rust are reported on a scale of 0-9, where a 0 indicates no disease and a 9 indicates that the plant was killed by the disease. Stem rust is normally rated somewhat later than leaf rust.

Bacterial streak, Septoria leaf and glume blotch are rated on a scale of 0 to 9 during the dough stage of development. A rating of 0 indicates that no disease was present, while a 9 indicates very severe disease. The upper few leaves, heads, and stems below the head are the portions rated for these diseases. Since bacterial streak (black chaff) is not controlled by fungicides, it is important that this disease be distinguished from septoria blotch. Heading day is given as calendar day (day of year). Lodging is rated on a 0-9 scale, where a 0 indicates that all plants were completely upright. Fusarium headblight is rated on a 0-9 scale in yield plots and in inoculated, misted nurseries. A seed sample from the yield plots is rated for percent Fusarium Damaged Kernels (FDK) and then submitted to the USDA Wheat DON Lab at the University of Minnesota to determine Deoxynivalenol toxin (DON) concentration. The same procedure is followed for the misted nurseries except that samples are hand harvested and processed to avoid blowing out small, scabby seed.

### Traits and Rating Scales for LAES Wheat and Oat Performance Trials.

Trait	Abbrev.	Description
Yield	BUPA	Grain yield in bushels per acre adjusted to 13% moisture.
Test weight	TWT	Volume weight of grain in pounds per bushel
Heading day	HD	Day of calendar year (days after December 31) at 50% heading.
Growth Habit	GH	Normally taken on oat trials where a lower number indicates earlier and more upright growth habit and a high number indicates a prostrate growth habit during early or mid-winter. Higher numbers may be indicative of winter hardiness.
Relative Maturity	RELMAT	Relative Heading Date on a 0 - 9 scale where a lower number is earlier, taken after flag leaf stage and before maturity. Normally taken for trials that are not rated every week due to distance.
Vernalization	VERN	An indication of the degree of heading when not all varieties head properly. Rated on a 0 – 9 where a higher number indicates more normal heading and a lower number indicates heads emerged unevenly or not at all.
Plant height	HT	Plant height in inches.
Lodging rating	LOD	Lodging rated on a scale of 0 - 9, where a 0 indicates no lodging and a 9 indicates complete lodging (all plants flat).
Leaf rust	LRFUST	Percent of upper two leaves affected by leaf rust, rated during grain fill. This rating is generally taken during soft to mid-dough but varies somewhat by location and variety.
Stripe rust	STRUST	Percent of upper two leaves affected by stripe rust, rated between flag leaf and mid grain fill.
Septoria	SEPT	Septoria leaf & glume blotch rated on a scale of 0 - 9, where 0 indicates no disease and 9 indicates severe disease on the flag leaf and head.
Bacterial Streak	BACT	Bacterial streak (black chaff) rated on a scale of 0 - 9, where 0 indicates no disease and 9 indicates severe disease on the flag leaf and head.
Fusarium Headblight	FHB	FHB is rated on a scale of 0 - 9, where 0 indicates no disease and 9 indicates severe disease on the head.
Fusarium Damaged Kernels	FDK	Is measured as the percent of grains shriveled and discolored by FHB
Fusarium DON toxin	DON	Don in ppm is determined at the USDA mycotoxin lab in Minneapolis.
Fusarium Index	FHBI	Is a numerical rating of Fusarium resistance calculated by converting FHB, FDK, and DON to a percent of the test mean then doing this formula: Index = (FHB%mean + FDK%mean + 2*DON%mean)/4.
Phenotype	PHE	Phenotypic rating, an overall visual rating prior to harvest. 0=poor, 9=excellent. This rating is a visual rating of ‘eye-appeal’.

## **Growing Conditions and General Comments for 2020-2021**

The 2020-2021 growing season presented lots of challenges for researchers and producers, particularly in south Louisiana. The fall was very wet and prevented planting or proper stand establishment and growth at several locations. The Baton Rouge location was planted but received a 5" rain two days later. Stands and tillering were inadequate, and the trial was abandoned in February. The trial at Crowley also suffered from an extremely wet fall and winter, and never developed adequately. The Bossier City trial was not planted due to very wet soils all fall. The St. Joseph trial was not harvested due to daily rainfall during the harvest season.

The Jeanerette location in South Louisiana produced excellent data, as did the Winnsboro location in North Louisiana. Rainfall delayed harvest and lowered test weights but yield and other data were very good. Oat variety trials were lost at Baton Rouge, Bossier City and Alexandria. The Winnsboro oat trials produced good data.

## **Performance of Wheat Varieties Across South Louisiana**

### **South Region Means**

#### Baton Rouge

Test was abandoned due to poor stands and tillering resulting from fall and winter-long excessive rainfall.

#### Crowley

The Crowley test was abandoned due to poor tillering and growth resulting from heavy fall rains and waterlogged soil.

#### Jeanerette

The Jeanerette trial produced excellent grain yields ranging from 34.1 to 85.3 bu/acre (**Table 1**). Agrimaxx 492 had the highest grain yield of commercial varieties (81.8 bu/acre) along with a test weight, substantially higher than the test average.

**Table 15** shows that it also has pretty good resistance to Fusarium headblight. Four breeding lines round out the top five entries for yield. The 15 highest-yielding entries had heading dates of less than 100, whereas 6 of 8 entries with heading dates greater than 100 had less than average yields.

Test weights were somewhat low due to rainfall after maturity, with a range of 51.1 to 58.2 lbs/bu. The earliest heading date was 81 (March 22) to 115 (April 27). The later heading entries were generally lower yielding.

AR09137UC-17-2 had the highest two-year mean yield across south Louisiana (**Table 2**) followed by LA13154D-WN1 and Progeny PGX 20-15. The highest yielding varieties across South Louisiana were Agrimaxx 492, Delta Grow 3500, AGS 2055, and Delta Grow 1800. Agrimaxx 492 and Delta Grow 1800 also have good scab (Fusarium) resistance (**Table 15**).

Fourteen wheat varieties and two breeding lines were evaluated in south Louisiana for each of the past three years (**Table 3**). Delta Grow 1800 has the highest average yield (62.3 bu/acre) and the highest average test weight. Go Wheat LA754 also yielded over 60 bu/acre. FHB and leaf rust pressure have been relatively low for the past three years.

## Performance of Wheat Varieties Across North Louisiana

### Early Maturity North Region Means:

#### 2021 Data

Ten entries were evaluated in the early-maturity trials across two North Louisiana locations (**Table 4**) including two medium-late maturity varieties as cross checks (AGS 2055 and AGS 2038). The breeding line 'LA16020LDH-22' had the highest yield in the non-fungicide protected trial (78.3 bu/acre) and the second-highest yield in the fungicide protected trial (83.4 bu/acre). It also showed good FHB resistance with the lowest FDK and DON content averaged across two misted inoculated FHB nurseries. Pioneer 26R94 had the highest yield in the fungicide split. Fungicide protection increased grain yield by an average of 12.5 bu/acre but had minimal effect (+0.5 lbs/bu) on test weight. Test weights were somewhat low due to post-maturity rainfall.

Stripe rust pressure was moderately high at Alexandria and Winnsboro. In the non-fungicide protected split stripe rust ratings arranged from 0% to 30% with a mean of 11%. Fungicide use decreased stripe rust by an average of 4% with a range of 0.1% to 13.3%.

Fusarium headblight pressure was low in the yield trial plots. In the misted nursery, FHB ratings ranged from 2.3 to 6.0 (0-9 scale). FHB was somewhat lighter at Winnsboro in the misted nursery this year than is normal. There were significant differences in FDK and seed quality among entries in the misted inoculated nurseries. FHB and FDK levels were moderately high in the misted nursery. The average FDK was 40% with a range of 29% to 56%. DON levels were at moderate levels for a misted nursery with a mean of only 8.5 ppm and a range of

3.1ppm to 16.1 ppm. The misted nursery is intended to create intense FHB disease pressure in order to separate reaction of varieties. FDK and DON are much higher than would normally occur in the field except in very severe epidemics.

#### Two years

AGS 2038 had the highest two-year mean yield of nine entries across North Louisiana in the early-maturing trial (**Table 5**). AGS 2038 and AGS 2055 are included as medium late checks in the early trial; Pioneer 26R94 had the highest yield of the six early varieties, but the range of heading dates for all entries was only about seven days.

Fungicide protection increased average yield by 15.0 bu/acre and test weight by 1.3 lbs/bu. Fungicide application also reduced stripe rust and Fusarium severity. Stripe rust ratings ranged from 0.7% to 30.4% in the non-fungicide protected split.

Average FDK rating across four misted nursery trials was 33.8% with a range of 21.7% to 51.7%. AGS 3015 has the lowest FDK rating and the lowest DON level. DON concentration ranged from 5.0 ppm to 25.1 ppm.

#### Three years

The two medium maturity checks had the highest three-year mean yields in the early trial (**Table 6**). There was very little separation of yield or test weight and differences between varieties were not significant. The average yield was 64.7 bu/acre and the average test weight was 55.0 lbs/bu. There were significant differences among entries for stripe rust percent infection with a range of 0.5% to 22.8%. AGS 3015 had the lowest percent FDK and also the lowest DON concentration.



### Alexandria

LA16020LDH-22 had the highest yield in the early trial at Alexandria without fungicide protection, while Pioneer 26R94 had the highest yield with fungicide protection (**Table 7**). The fungicide split yielded an average of 14.4 more bu/acre than the non-fungicide split. Test weight was only calculated by hand for the fungicide split due to issues with the combine weigh system. Average test weight was only 54.0 lbs/bu due to several significant rainfall events between maturity and harvest.

Stripe rust pressure was high at Alexandria with a range of 0% to 33% in the non-fungicide split. The five highest-yielding entries has 2% or less stripe rust whereas the three of the five lowest-yielding entries had greater than 10% stripe rust. FHB pressure was light in the yield plots but very high in the misted nursery, as expected. The average FHB field symptom score (FHB) was 6.0 on a 0-9 scale. Average FDK (infected kernels) was 60% with a range of 38% to 85%. FDK and DON were very high in the misted inoculated nursery, with mean FDK of 59.5% and mean DON of 15.7 ppm. AGS 3015 and LA16020LDH-22 had the lowest FDK and DON levels.

### Bossier City

This test was abandoned due to herbicide drift.

### St. Joseph

The test at St. Joseph could not be harvested due to persistent rainfall in May and June.

### Winnsboro

Yields of the ten entries evaluated in the early-heading variety trial at Winnsboro were excellent (**Table 8**). The six

reps were split with three receiving two applications of a foliar fungicide (Miravis Ace at 13.7 fl oz/A) and three without fungicide protection. The second fungicide application was timed at average flowering date for maximum FHB control. The average yield in the fungicide protected split was 90.2 bu/acre, 8.4 bu/acre higher than the mean for the non-protected split. LA16020LDH-22 had the highest yield in the non-protected split (93.8 bu/acre). AGS 2055 (late maturity check) had the highest yield (97.6 bu/acre) in the fungicide protected split. LA16020LDH-22 also had excellent ratings for stripe rust, FDK and DON. FDK ranged from 12.5% to 27.5% and DON ranged from 0.3 to 2.4 ppm in the misted nursery.

Test weights were good in Winnsboro, with a mean of 57.9 and 57.0 in the two splits. Stripe rust pressure was significant with a range of 0% to 45% in the protected split and 0% to 28% in the non-protected split.

### **Normal Maturity North Region Means:**

#### North Louisiana Normal Trial 2021

**Table 9** contains data for 66 entries tested across two locations in the normal maturity trial for North Louisiana. The average yield in the fungicide protected split was 77.2 bu./acre. The average yield increase from fungicide application was 8.7 bu/acre but there was little impact of fungicide on test weight, probably due to post maturity rainfall that decreased test weights for all plots. SY Viper and Progeny Chad had the highest yields in the non-protected split while Agrimaxx 514 and Dyna-Gro 9002 had the highest yields in the fungicide protected plots.

The six highest-yielding entries in the non-protected split all had 0% stripe rust and above average phenotype ratings. Phenotype is simply a rating of visual appeal of a plot during

grain fill. The average stripe rust incidence was 6% for the fungicide plots and 11% for the non-protected plots.

In the misted FHB nursery, the average FDK was 30% and the average DON was 7.4%. AgriMaxx 481, Dyna-Gro 9172 and SY Richie had the lowest FDK ratings of released varieties. Five breeding lines had the lowest FDK ratings. Four breeding lines had the lowest DON ratings, followed by AgriMaxx 481 with 4.0 ppm DON. The average DON concentration was 7.4 ppm with a range of 2.4 ppm to 14.2 ppm.

#### North Louisiana Normal Trial Two Year

**Table 10** contains data for the normal maturity wheat trial across North Louisiana for two years. The average yield in non-protected plots ranged from 57.7 to 78.4 bu/acre, with a mean of 69.7 bu/acre. SY Viper had the highest two-year mean yield (84.1 bu/acre) followed by Progeny PGX 19-12, Progeny #Chad, Delta Grow 1000, and AgriMaxx 473, all with yields greater than 76 bu/acre.

The average yield in the fungicide protected split (79.0 bu/acre) was 9.4 bu/acre greater than the mean of the non-protected split. Progeny PGX 19-12 had the highest yield in the protected split followed by Dyna-Gro 9002, and Progeny #Chad with yields above 85 bu/acre. Fungicide increased average test weight by 0.8 lbs/bu.

Average stripe rust rating in the fungicide protected split was 5.3% less than in the non-protected split. The 10 highest-yield entries in the non-protected split had 0% stripe rust while five of 10 lowest-yielding entries had greater than 25% stripe rust. Nine of the 10 highest-yielding lines also had below average DON concentration.

In the misted FHB nursery, the average FDK rating was 20% with a range of 11% to 38%. The average DON concentration was 8.4 ppm with a range of 5.1 to 20.3 ppm.

#### North Louisiana Normal Trial Three Year

AgriMaxx 492 had the highest yield of 23 entries tested across North Louisiana for three years (**Table 11**). Nine entries yielded greater than 70.0 bu/acre and test mean yield was 68.5 bu/acre. Delta Grow 1800 had the highest average test weight (57.3 lbs/bu). Progeny #Buster and AgriMaxx 492 also had average test weights greater than 57 lbs/bu.

The average stripe rust incidence was 9.4% with a range of 0% to 48.%. The five highest-yield entries had less than 0.5% stripe rust while the five lowest-yielding entries had an average of 31.8% stripe rust. This clearly shows the importance of stripe rust control, either through genetic resistance indicated in the table, or through timely fungicide application.

In the misted FHB nursery over three years, the average FDK rating was 28% with a range of 14% to 50%. Delta Grow 1800, classified as R to FHB in **Table 15**, had the lowest FDK rating and the second-lowest DON concentration.

#### Alexandria

Grain yield in the non-protected split at Alexandria ranged from 25.5 bu/acre to 72.9 bu/acre with a mean of 54.9 bu/acre (**Table 12**). AR11-51-15-2 had the highest yield (72.9 bu/acre) followed by SY Viper and Pioneer 26R59 with yields greater than 70 bu/acre. In the fungicide protected split, AgriMaxx 514 had the highest yield (83.9 bu/acre) followed by Dyna-Gro WX20738. AgriMaxx 492, Dyna-Gro 9002, and Pioneer 26R59 with yields over 81 bu/acre.

The effect of fungicide protection on yield in this trial was very large with a mean increase of 13.5 bu/acre. The effect of fungicide application on yield ranged from a 43.6 bushel increase to a 13.7 bushel decrease. Stripe rust incidence ranged from 0% to 87% at Alexandria. The two varieties that had the highest level of stripe rust incidence had an average yield increase of 39.0 bu/acre resulting from fungicide application.

FHB severity was very high in the misted nursery at Alexandria. FDK in the FHB misted nursery ranged from 18% to 83% and DON ranged from 4.7 ppm to 39.6 ppm.

#### Winnsboro

Yields were very high at Winnsboro in 2021 (**Table 13**) with a range of 33.6 bu/acre to 90.7 bu/acre in the non-protected split. Test weights were also relatively high. Progeny #Chad had the highest yield followed by Go Wheat 6000. AgriMaxx 473, AgriMaxx 492, and SY Viper with yields greater than 87.5 bu/acre. In the fungicide protected split Progeny PGX 19-12 and Dyna-Gro 9172 yielded over 95 bu/acre. The average yield in the fungicide split was 86.3 bu/acre and the average response to fungicide was 8.6 bu/acre and 1.3 lbs/bu. The two entries with the greatest response to fungicide application were breeding lines that are extremely susceptible to stripe rust. Stripe rust pressure was fairly high, with a range of 0% to 60% in the non-protected split. The five entries with the highest stripe rust incidence (greater than 25%) had an average yield response of 26.4 bu/acre to fungicide protection and an average increase in test weight of 8.0 lbs/bu.

In the misted FHB nursery, average FDK was 17% with a range of 5% to 53%. The average DON concentration was 1.9 ppm with a range of 0.1 ppm to 6.2 ppm.

**Table 14** has performance of 36 entries over two years at Winnsboro. The average yield response to fungicide application was 9.1 bu/acre. Yield in the non-protected split ranged from 63.6 bu/acre to 86.6 bu/acre. Pioneer 26R45 had the highest yield in the non-protected split (86.6 bu/acre) and the second-highest yield in the fungicide protected split (89.5 bu/acre). Progeny PGX 19-12 had the highest yield in the fungicide protected split (93.8 bu/acre).

LA15203-LDH112 had the highest test weight in the non-protected split (58.2 lbs/bu). The average test weight was 55.7 lbs/bu on the non-protected split and 57.2 lbs/bu on the fungicide protected split, a difference of 1.5 lbs/bu.

In the misted FHB nursery, the average FDK and DON levels were 13% and 4.6 ppm, respectively. FDK ranged from 3% to 33%, and DON ranged from 2.2 ppm to 24.4 ppm.

#### **Fusarium Headblight Reaction of Varieties**

Fusarium headblight is the most important disease of wheat in the eastern US due to the large acreage of corn which is a co-host of FHB. FHB ratings should be heavily weighed when choosing varieties for production in Louisiana. The most effective way for growers to avoid economic loss to FHB is to choose FHB resistant varieties and couple that with timely application of effective fungicides if environmental conditions are favorable for FHB development. Predictions for likelihood of a scab epidemic can be found by referencing the following map during boot to grain fill stages in the spring.

<http://www.wheatscab.psu.edu/>

**Table 15** presents the FHB, FDK, and DON numerical values of entries in the north Louisiana variety trials. A Fusarium headblight Index (FHBI) is calculated for each entry

tested for the past two years. FHB Index values are calculated for two-year and three-year means. FHB Reaction type is calculated based on the numerical **FHB Index values**. **FHB Index (FHBI)** is calculated by taking the mean FHB, FDK, and DON value for each variety and dividing that value by the test mean for each value, then multiplying that value by 10.

$$\text{FHBI} = [(\text{FHB}/\text{FHB mean} + \text{FDK}/\text{FDK mean} + (2 * \text{DON}/\text{DON mean})/4] * 10.$$

The FHBI ratings ranged from 5.9 to 18.9 for three-year averages. Liberty 5658 and Delta Grow 1800 have the lowest three-year mean FHBI and are classified as Resistant to FHB. It should be noted that there are no completely resistant varieties due to the complex genetic control of FHB resistance. There are 11 additional varieties and breeding lines classified as moderately resistant to FHB. A moderately resistant variety should have an adequate level of resistance to FHB to tolerate a moderate FHB epidemic, particularly when coupled with using a listed fungicide at heading. Five varieties were classified as susceptible or very susceptible.

The FHB data for 36 entries tested for two years is also presented in **Table 15**. FHBI ranged from 4.3 to 19.6 for two-year data. AgriMaxx 472 and Progeny #Bullet had FHBI values of less than 5.0. The average FHBI was 10.0 and the five varieties classified as susceptible or very susceptible had FHBI ratings of 14.9 or greater.

### **Performance of Oat Varieties Across North Louisiana**

Heavy rainfall of the past two seasons has made oat production and harvest of oat variety trials very difficult for the past two years. **Table 16** presents the performance of 25 oat varieties and breeding lines in Winnsboro for 2021. Trials in

Baton Rouge and Alexandria were lost and could not be harvested due to severe lodging.

The highest-yielding released varieties are LA10044SBSB-1, Horizon 270 and LA99016. The average yield of all entries was 75.0 bu/acre, and the average test weight was 32.5 lbs/bu. Horizon 306 had the highest test weight and above-average yield. Crown rust data from the (not harvested) Baton Rouge trial is also presented. Crown rust pressure was high at Baton Rouge with a mean of 25% and a range of 4% to 48%. The variety TAMO 412 had the lowest crown rust, 1%. Four breeding lines have less than 10% crown rust and three of those had above average yields.

Table 1. Wheat performance trial at Jeanerette, LA for 2021.



Brand / Variety	Grain Yield (bu/a)	Test Weight (lbs/bu)	Head Day (of year)	Maturity Day (of year)	Plant Height (in)	Lod Score (0-9)
AR09137UC-17-2	85.3	55.9	97.5	141.5	31.3	0.0
LA13154D-WN1	82.0	53.6	89.0	133.0	30.4	1.2
<b>AGRIMAXX 492</b>	<b>81.8</b>	<b>57.9</b>	<b>97.5</b>	<b>141.5</b>	<b>29.0</b>	<b>0.6</b>
GA15VDH-FHB-MAS23-18LE43	81.4	57.5	93.5	137.5	26.0	0.6
PROGENY PGS 20-15	78.9	56.5	96.5	140.5	31.3	1.2
<b>AGS 2038</b>	<b>77.4</b>	<b>56.2</b>	<b>89.5</b>	<b>133.5</b>	<b>31.0</b>	<b>0.6</b>
LA16020LDH-22	76.0	54.9	82.0	126.0	26.0	1.8
LANC11558-33	75.9	56.5	91.0	135.0	25.7	0.6
FLLA11004-7	75.8	56.3	91.3	135.3	33.2	1.2
LA15203-LDH274	74.5	54.2	84.0	128.0	29.0	2.4
LA12080LDH-72	74.5	54.6	91.8	135.8	31.4	1.2
<b>AGRIMAXX 481</b>	<b>74.1</b>	<b>56.3</b>	<b>87.5</b>	<b>131.5</b>	<b>28.4</b>	<b>1.2</b>
LA12275DH-56	74.0	57.5	94.5	138.5	31.7	1.2
<b>GO WHEAT 6000</b>	<b>72.4</b>	<b>54.2</b>	<b>89.0</b>	<b>133.0</b>	<b>29.6</b>	<b>1.2</b>
<b>PIONEER 26R94</b>	<b>72.2</b>	<b>55.2</b>	<b>88.5</b>	<b>132.5</b>	<b>31.3</b>	<b>0.6</b>
<b>AGS 2055</b>	<b>72.0</b>	<b>54.6</b>	<b>101.0</b>	<b>145.0</b>	<b>29.7</b>	<b>0.6</b>
<b>DELTA GROW 3500</b>	<b>71.8</b>	<b>55.6</b>	<b>87.0</b>	<b>131.0</b>	<b>26.2</b>	<b>1.8</b>
<b>DELTA GROW 1800</b>	<b>71.7</b>	<b>58.0</b>	<b>93.8</b>	<b>137.8</b>	<b>30.7</b>	<b>0.6</b>
DYNA-GRO WX20738	71.4	54.3	98.0	142.0	30.7	0.6
<b>AGS 2024</b>	<b>70.4</b>	<b>55.4</b>	<b>88.5</b>	<b>132.5</b>	<b>26.6</b>	<b>1.2</b>
<b>HARVEY AP1983</b>	<b>69.7</b>	<b>52.8</b>	<b>88.0</b>	<b>132.0</b>	<b>30.0</b>	<b>0.6</b>
GA11656-17E11	69.7	57.0	91.0	135.0	32.7	0.6
LA15166LDH-272	69.1	57.0	101.0	145.0	27.1	0.0
GA10127-18E26	68.5	56.7	97.5	141.5	29.1	0.0
<b>GO WHEAT LA754</b>	<b>68.4</b>	<b>51.1</b>	<b>88.0</b>	<b>132.0</b>	<b>27.8</b>	<b>1.2</b>
FL14167LDH-158	68.1	53.9	87.5	131.5	30.3	0.6
<b>DYNA-GRO RIVERLAND</b>	<b>67.5</b>	<b>55.0</b>	<b>86.3</b>	<b>130.3</b>	<b>29.4</b>	<b>0.6</b>
<b>DYNA-GRO PLANTATION</b>	<b>66.7</b>	<b>55.8</b>	<b>87.0</b>	<b>131.0</b>	<b>27.7</b>	<b>1.8</b>
AR15V31-26-2285W	65.8	58.2	108.0	152.0	30.9	0.0
GA12505B14-18LE23F	65.7	57.8	100.0	144.0	29.8	0.6
LA15203-LDH200	63.9	54.5	110.0	154.0	29.9	0.6
FLLA10033C-6	63.5	54.2	88.5	132.5	29.3	0.6
<b>USG 3640</b>	<b>63.1</b>	<b>55.9</b>	<b>86.3</b>	<b>130.3</b>	<b>28.4</b>	<b>1.8</b>
<b>DYNA-GRO BLANTON</b>	<b>61.7</b>	<b>54.3</b>	<b>83.0</b>	<b>127.0</b>	<b>26.8</b>	<b>1.8</b>
<b>LIBERTY 5658</b>	<b>61.5</b>	<b>56.5</b>	<b>95.5</b>	<b>139.5</b>	<b>28.8</b>	<b>0.6</b>
<b>AGS 3015</b>	<b>60.4</b>	<b>55.1</b>	<b>85.5</b>	<b>129.5</b>	<b>28.4</b>	<b>1.2</b>
LA15166-LDH296	60.3	54.0	110.0	154.0	29.1	0.0
LA15203-LDH112	59.4	55.1	110.0	154.0	28.9	0.0




Table 1. Wheat performance trial at Jeanerette, LA for 2021.



Brand / Variety	Grain Yield (bu/a)	Test Weight (lbs/bu)	Head Day (of year)	Maturity Day (of year)	Plant Heightt (in)	Lod Score (0-9)
<b>USG 3536</b>	<b>59.2</b>	<b>54.0</b>	<b>115.0</b>	<b>189.0</b>	<b>31.1</b>	<b>0.0</b>
LA13009D-23	59.1	55.4	89.0	133.0	27.7	1.8
LA15VDH-FHB-MAS10-16	58.6	53.7	81.3	125.3	29.2	1.8
GA131246LDH-18E35	50.0	55.4	91.8	135.8	28.7	3.6
GA15VDH-FHB-MAS30-18ESc4	49.5	52.1	89.0	133.0	25.9	3.0
<b>AGS 3040</b>	<b>47.4</b>	<b>55.4</b>	<b>97.0</b>	<b>141.0</b>	<b>29.2</b>	<b>3.0</b>
LA14016SB-BR5-3	34.1	54.3	92.5	136.5	28.1	1.8
<b>MEAN</b>	<b>67.7</b>	<b>55.3</b>	<b>93.1</b>	<b>137.8</b>	<b>29.2</b>	<b>1.1</b>
<b>CV%</b>	<b>9</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>81</b>
<b>LSD(0.10)</b>	<b>7.4</b>	<b>0.7</b>	<b>1.3</b>	<b>1.3</b>	<b>1.6</b>	<b>1.2</b>

- Iberia Research Station in Jeanerette, LA. Greg Williams AND Boyd Padgett.
- Bold 'Brand/variety' indicates the entry is commercially available; others are non-released breeding lines.
- Lod Score is lodging score, scale of 0 = none to 9 = 100% lodged.
- Cultural Practices: Baldwin silty clay loam. 6 drills x 8" x 20' harvested. Planted 11/18/20. Harvested 5/26/21. 100 #N as 46-0-0 on 2/26/21/ Finesse herbicide at 0.4 oz/acre on 11/20/20.


Table 2. Wheat performance trial across South Louisiana for two years, 2020 & 2021.



Brand / Variety	Grain Yield (bu/a)	Test Weight (lbs/bu)	Head Day (of year)	Plant Height (in)	Lodging Score (0-9)
AR09137UC-17-2	63.4	54.3	97.3	28.3	0.0
LA13154D-WN1	59.4	55.1	86.0	28.0	1.2
PROGENY PGX 20-15	58.8	57.6	91.8	29.4	1.2
<b>AGRIMAXX 492</b>	<b>57.8</b>	<b>57.0</b>	<b>96.9</b>	<b>24.6</b>	<b>0.6</b>
<b>DELTA GROW 3500</b>	<b>56.6</b>	<b>56.6</b>	<b>88.4</b>	<b>26.8</b>	<b>1.8</b>
<b>AGS 2055</b>	<b>56.6</b>	<b>53.9</b>	<b>98.6</b>	<b>27.5</b>	<b>0.6</b>
<b>DELTA GROW 1800</b>	<b>56.3</b>	<b>58.1</b>	<b>89.4</b>	<b>28.9</b>	<b>0.6</b>
LA12275DH-56	56.3	57.4	93.8	29.9	1.2
LANC11558-33	55.4	56.9	87.0	24.2	0.6
<b>PIONEER 26R94</b>	<b>54.8</b>	<b>56.3</b>	<b>83.3</b>	<b>30.0</b>	<b>0.6</b>
<b>AGS 2024</b>	<b>53.9</b>	<b>56.5</b>	<b>83.8</b>	<b>24.4</b>	<b>1.2</b>
<b>AGS 2038</b>	<b>53.8</b>	<b>55.2</b>	<b>92.1</b>	<b>27.1</b>	<b>0.6</b>
LA12080LDH-72	53.8	54.7	88.1	27.9	1.2
<b>AGRIMAXX 481</b>	<b>53.4</b>	<b>57.0</b>	<b>87.3</b>	<b>26.7</b>	<b>1.2</b>
<b>GO WHEAT LA754</b>	<b>53.3</b>	<b>53.8</b>	<b>85.1</b>	<b>26.7</b>	<b>1.2</b>
<b>DYNA-GRO RIVERLAND</b>	<b>52.5</b>	<b>56.2</b>	<b>81.4</b>	<b>29.4</b>	<b>0.6</b>
<b>GO WHEAT 6000</b>	<b>52.5</b>	<b>51.0</b>	<b>93.0</b>	<b>28.1</b>	<b>1.2</b>
<b>DYNA-GRO PLANTATION</b>	<b>52.2</b>	<b>57.2</b>	<b>87.3</b>	<b>27.0</b>	<b>1.8</b>
<b>HARVEY AP 1983</b>	<b>50.4</b>	<b>54.1</b>	<b>82.0</b>	<b>28.6</b>	<b>0.6</b>
<b>DYNA-GRO BLANTON</b>	<b>50.0</b>	<b>55.8</b>	<b>80.5</b>	<b>26.1</b>	<b>1.8</b>
<b>USG 3640</b>	<b>49.7</b>	<b>56.5</b>	<b>82.4</b>	<b>28.7</b>	<b>1.8</b>
LA15166LDH-272	48.6	48.4	101.0	24.5	0.0
<b>AGS 3015</b>	<b>48.3</b>	<b>56.1</b>	<b>83.5</b>	<b>27.4</b>	<b>1.2</b>
FLLA10033C-6	48.2	54.6	84.3	29.7	0.6
FL14167LDH-158	48.0	55.0	80.3	27.7	0.6
<b>LIBERTY 5658</b>	<b>46.9</b>	<b>56.4</b>	<b>94.8</b>	<b>25.9</b>	<b>0.6</b>
LA15203-LDH200	43.2	50.5	105.5	26.1	0.6
LA15203-LDH112	41.9	48.2	107.9	25.8	0.0
<b>AGS 3040</b>	<b>39.2</b>	<b>51.9</b>	<b>97.0</b>	<b>27.7</b>	<b>3.0</b>
<b>MEAN</b>	<b>52.2</b>	<b>54.9</b>	<b>90.0</b>	<b>27.3</b>	<b>1.0</b>
<b>CV%</b>	<b>10</b>	<b>1</b>	<b>1</b>	<b>5</b>	
<b>LSD(0.10)</b>	<b>9.2</b>	<b>NS</b>	<b>6.4</b>	<b>2.7</b>	

- Iberia Research Station in Jeanerette, LA. Greg Williams and Boyd Padgett.
- Bold 'Brand/variety' indicates the entry is commercially available; others are non-released breeding lines.
- Lodging Score on a scale of 0 = none to 9 = completely lodged.
- NS indicates that variety mean differences were not statistically significant.
- Cultural Practices: Contains data from 2020 and 2021 Jeanerette. Baldwin silty clay loam. 6 drills x 8" x 20' harvested.


Table 3. Wheat performance trial across South Louisiana for three years, 2019 - 2021.



Brand / Variety	Grain Yield (bu/a)	Test Weight (lbs/bu)	Head Day (of year)	Plant Height (in)	Lodging Score (0-9)
<b>DELTA GROW 1800</b>	62.3	58.0	89.7	31.0	0.3
<b>GO WHEAT LA754</b>	60.5	55.6	84.4	27.8	0.9
<b>AGRIMAXX 492</b>	59.7	56.1	95.1	27.2	0.5
<b>AGS 2038</b>	58.6	55.1	91.5	29.7	0.3
<b>DELTA GROW 3500</b>	58.5	56.8	87.8	27.8	0.8
<b>PIONEER 26R94</b>	58.3	57.2	83.1	29.9	0.5
LA12080LDH-72	58.2	55.5	87.1	28.8	1.1
<b>AGS 2024</b>	57.8	56.6	84.6	25.1	0.5
<b>DYNA-GRO PLANTATION</b>	57.7	57.1	85.8	27.8	0.8
<b>AGS 2055</b>	57.7	53.4	97.1	28.8	0.3
<b>LIBERTY 5658</b>	56.5	55.4	94.9	28.8	0.3
<b>USG 3640</b>	56.2	57.2	83.2	28.8	0.8
<b>DYNA-GRO BLANTON</b>	55.8	56.8	80.8	26.5	1.6
<b>AGS 3015</b>	55.1	57.3	82.5	28.1	0.5
FLLA10033C-6	53.7	55.9	83.2	29.8	0.3
<b>AGS 3040</b>	49.8	52.1	93.9	29.1	1.3
<b>MEAN</b>	57.3	56.0	87.8	28.4	0.7
<b>CV%</b>	12	2	1	5	128
<b>LSD(0.10)</b>	NS	2.2	2.8	2.0	NS


- Contains data from 2020 Crowley and 2019, 2020, 2021 Jeanerette.
- **Bold** 'Brand/variety' indicates the entry is commercially available; others are non-released breeding lines.
- **Lodging score** on a scale where 0=none and 9=entire plot lodged.
- **NS** indicates that variety mean differences were not statistically significant.

Table 4. Early maturity wheat performance across North Louisiana for 2021. With and without fungicide.

 Research · Extension · Teaching	Grain Yield <sup>2</sup> (bu/a), fungicide <sup>3</sup>		Grain Yield (bu/a), untreated		Test Weight (lbs/bu), fungicide		Test Weight (lbs/bu), untreated		Lodging Score <sup>4</sup> (0-9), fungicide		Lodging Score, untreated		Heading Day <sup>5</sup> (of year), fungicide		Heading Day (of year), untreated		Plant Height (in), fungicide		Plant Height (in), untreated		Stripe Rust <sup>6</sup> (%), fungicide		Stripe Rust (%), untreated		Phenotype <sup>7</sup> (0-9), fungicide		Phenotype (0-9), untreated		FHB Score <sup>8</sup> (0-9), fungicide		FHB Score (0-9), untreated		FDK <sup>9</sup> (%), fungicide		FDK (%), untreated		Seed Quality <sup>10</sup> (0-9), fungicide		Seed Quality (0-9), untreated		Misted Nursery <sup>11</sup> FHB Score (0-9)		Misted Nursery FDK (%)		Misted Nursery SDQ (0-9)		Misted Nursery DON <sup>12</sup> (ppm)	
	Brand / Variety <sup>1</sup>	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated	fungicide	untreated					
LA16020LDH-22	83.4	78.3	56.2	56.0	1.2	0.2	86.5	86.7	35.3	35.5	0	0	7.0	7.0	1.0	2.3	0	1	6.5	6.5	3.5	32	2.7	3.1																								
AGS 2038	81.8	73.5	57.0	57.1	0.5	0.0	91.7	91.2	41.5	39.2	0	1	6.0	6.0	0.5	1.3	2	4	4.5	4.0	5.0	44	1.8	11.8																								
PIONEER 26R94	84.8	69.7	57.3	57.2	0.8	0.2	88.2	88.0	40.7	38.2	3	3	5.5	6.0	1.8	3.0	2	1	4.5	5.5	4.8	34	2.5	8.8																								
FLLA11004-7	81.6	69.5	55.4	55.0	0.8	0.0	91.5	93.3	41.7	39.2	2	3	6.0	6.0	0.5	1.0	2	1	4.0	4.5	2.3	36	2.3	8.2																								
AGS 2055	80.7	64.5	54.9	54.7	0.2	0.8	92.0	94.3	37.0	36.5	1	4	6.0	6.0	0.3	1.5	1	3	5.0	4.5	6.0	56	1.5	16.1																								
AGS 3015	72.7	63.1	56.2	55.3	1.3	0.3	87.7	86.8	36.3	37.8	12	18	5.5	4.5	1.5	2.5	1	3	4.5	4.0	3.5	29	2.8	3.8																								
FLLA10033C-6	77.5	63.0	55.5	54.4	0.0	0.0	89.8	89.4	39.5	39.7	12	13	6.0	6.0	1.0	1.6	1	4	5.5	3.5	3.8	40	2.3	8.0																								
AGS 2024	67.0	61.1	55.5	55.0	2.0	1.7	90.0	90.3	35.7	35.8	8	22	5.5	4.5	1.7	3.2	3	3	4.5	4.0	5.5	49	1.3	10.9																								
DELTA GROW 3500	70.4	56.4	56.1	55.6	2.8	2.0	87.8	87.7	37.0	36.0	25	30	4.5	4.0	1.7	3.8	2	4	4.0	4.0	5.3	39	2.5	6.5																								
FL14167LDH-158	76.7	52.7	55.1	54.0	0.2	0.2	89.7	90.6	38.8	36.2	5	15	6.0	5.5	1.2	2.0	1	4	5.0	3.5	5.3	41	2.0	6.9																								
MEAN	77.7	65.2	55.9	55.5	1.0	0.6	89.5	89.8	38.4	37.4	7	11	5.8	5.6	1.1	2.2	1	3	4.8	4.4	4.5	40	2.1	8.5																								
CV%	10	11	1	1	68	149	2	1	.	.	109	65	.	.	42	26	.	.	.	.	16	13	17	23																								
LSD(0.10)	8.1	10.6	0.9	1.4	2.3	2.0	3.1	NS <sup>13</sup>	.	.	15.1	7.2	.	.	1.4	0.8	.	.	.	.	1.2	NS	NS	8.4																								

Dean Lee Research Station in Alexandria and Macon Ridge Research Station in Winnsboro, LA. Boyd Padgett, Trey Price, Steve Harrison, Dustin Ezell, Myra Purvis, Kelly Arceneaux, Allysson Harding, Hanamareddy Biradar, and Katie McCarthy Fontenot.


1. **Bolded** 'Brand/variety' indicates the entry is commercially available; others are non-released breeding lines.
2. **Grain yield** is bushels per acre adjusted to 13% moisture.
3. **Fungicide** used was Muravus Ace, rate of 13.7 oz/acre, applied at about boot stage and anthesis.
4. **Lodging score** on a scale of 0 = none to 9 = 100% lodged.
5. **Heading day** recorded as the day approximately 50% of the total spikelets are visible.
6. **Stripe rust** rating indicates percentage leaf area of upper three leaves covered in rust spores.
7. **Phenotype** represents overall visual appeal with a higher score indicating a more attractive plot. Average of three ratings in spring.
8. **FHB Score** is relative amount of heads showing field symptoms of FHB on a 0-9 scale.
9. **FDK** is percent Fusarium Damaged Kernels.
10. **Seed Quality (SDQ)** is a relative, visual rating of seed plumpness, uniformity, and visible defects (disease, insect damage, etc.), 0 = poor.
11. **Misted Nursery** inoculated with scabby corn and mist irrigated to create heavy Fusarium Headblight pressure.
12. **DON** is Deoxynivalenol toxin concentration.
13. **Not Significant (NS)**: variety mean differences were not statistically significant.

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	Brand / Variety <sup>1</sup>		Grain Yield <sup>2</sup> (bu/a), fungicide <sup>3</sup>		Test Weight (lbs/bu), fungicide		Lodging Score <sup>4</sup> (0-9), fungicide		Heading Day <sup>5</sup> (of year), fungicide		Plant Height (in), fungicide		Stripe Rust <sup>6</sup> (%), fungicide		Phenotype <sup>7</sup> (0-9), fungicide		FHB Score <sup>8</sup> (0-9), fungicide		FDK <sup>9</sup> (%), fungicide		Seed Quality <sup>10</sup> (0-9), fungicide		Misted Nursery <sup>11</sup> FHB Score (0-9)		Misted Nursery FDK (%)	Misted Nursery SDQ (0-9)
AGS 2038	80.8	69.7	56.3	55.8	0.5	0.0	90.3	89.8	41.5	39.2	0	1	6.5	6.0	1.0	2.1	10	11	5.3	5.0	5.7	41	2.3	18.8		
PIONEER 26R94	84.7	67.9	57.5	56.2	0.8	0.2	84.8	85.0	40.7	38.2	3	3	5.8	5.8	2.8	4.4	9	7	5.8	6.3	5.0	25	3.8	10.4		
AGS 3015	75.8	64.7	56.9	55.7	1.3	0.3	83.8	83.2	36.3	37.8	12	18	5.8	5.0	2.0	3.3	2	4	6.3	6.0	5.2	22	4.0	5.0		
FLLA10033C-6	79.2	63.9	55.8	54.3	0.0	0.0	86.9	85.5	39.5	39.7	12	13	6.3	5.8	1.6	3.1	3	8	6.8	5.3	4.3	30	3.5	11.5		
AGS 2055	78.6	63.2	54.6	54.0	0.2	0.8	90.7	92.0	37.0	36.5	1	4	6.5	6.0	1.0	2.1	5	8	6.0	5.8	6.5	52	2.2	25.1		
FL14167LDH-158	80.4	58.8	56.2	54.7	0.2	0.2	85.1	86.6	38.8	36.2	5	15	6.3	5.5	1.7	3.5	2	7	6.5	5.3	5.0	29	3.5	8.3		
DELTA GROW 3500	74.1	57.8	56.5	54.8	2.8	2.0	84.2	83.8	37.0	36.0	25	30	5.5	4.5	2.6	5.2	7	17	5.3	4.3	5.8	30	4.0	8.2		
AGS 2024	69.4	57.0	55.6	53.6	2.0	1.7	87.2	88.3	35.7	35.8	8	22	5.8	4.8	2.7	4.6	9	14	5.3	4.3	6.2	43	2.0	15.3		
MEAN	77.9	62.9	56.2	54.9	1.0	0.7	86.6	86.8	38.3	37.4	8	13	6.0	5.4	1.9	3.6	6	9	5.9	5.3	5.5	34	3.2	12.8		
CV%	9	10	1	1	66	134	2	1	.	.	101	60	6	9	28	17	32	46	10	8	13	20	16	37		
LSD(0.10)	7.5	NS	1.4	NS	NS	NS	3.3	3.3	.	.	NS	8.3	NS	0.8	1.0	1.0	NS	NS	0.9	NS	1.4	11.8	1.1	8.6		

1. **Bolded** 'Brand/variety' indicates the entry is commercially available; others are non-released breeding lines.
2. **Grain yield** is bushels per acre adjusted to 13% moisture.
3. **Fungicide** used was Muravus Ace, rate of 13.7 oz/acre, applied at about boot stage and anthesis.
4. **Lodging scale** of 0 = none to 9 = 100% lodged.
5. **Heading day** recorded as the day approximately 50% of the total spikelets are visible.
6. **Stripe rust** rating indicates percentage leaf area of upper three leaves covered in rust spores.
7. **Phenotype** represents overall visual appeal with a higher score indicating a more attractive plot. Average of three ratings in spring.
8. **FHB Score** is relative amount of heads showing field symptoms of FHB on a 0-9 scale.
9. **FDK** is percent Fusarium Damaged Kernels.
10. **Seed Quality (SDQ)** is a relative, visual rating of seed plumpness, uniformity, and visible defects (disease, insect damage, etc.), 0 = poor.
11. **Misted Nursery** inoculated with scabby corn and mist irrigated to create heavy Fusarium Headblight pressure.
12. **DON** is Deoxynivalenol toxin concentration.
13. **Not Significant (NS)**: variety mean differences were not statistically significant.




Table 6. Early maturity wheat performance across North Louisiana for three years, 2019 - 2021.

 <b>University of Georgia AgCenter</b> Research · Extension · Teaching											Misted Nursery <sup>11</sup> FHB Score (0-9)	Misted Nursery FDK (%)	Misted Nursery SDQ (0-9)	Misted Nursery DON <sup>11</sup> (ppm)
Brand / Variety <sup>1</sup>	Grain Yield <sup>2</sup> (bu/a)	Test Weight	Lod Score <sup>3</sup> (0-9)	Head Day <sup>4</sup> (of year)	Plant Ht (in)	Stripe Rust <sup>5</sup> (%)	Pheno-type <sup>6</sup> (0-9)	FHB Score <sup>7</sup> (0-9)	FDK <sup>8</sup> (%)	Seed Quality <sup>9</sup> (0-9)				
AGS 2038	69.5	55.5	0.0	93.2	39.2	1	6.1	2.1	14	4.8	6.4	52	2.0	18.5
AGS 2055	66.9	54.2	0.6	94.7	36.5	3	5.9	1.9	9	5.3	6.9	62	1.9	24.3
FLLA10033C-6	66.2	54.5	0.1	87.9	39.7	9	5.9	3.1	12	5.2	4.6	38	3.4	9.7
PIONEER 26R94	64.6	56.3	0.5	88.3	38.2	2	5.7	4.4	6	6.2	5.9	33	3.8	10.0
AGS 3015	64.6	55.9	0.3	85.2	37.8	13	5.2	3.3	5	5.8	5.1	21	4.4	4.3
AGS 2024	60.8	54.0	1.0	91.1	35.8	16	5.2	3.9	24	4.2	6.5	49	2.1	13.0
DELTA GROW 3500	60.6	54.8	2.2	85.6	36.0	23	5.0	5.4	31	3.8	5.9	35	4.0	6.8
MEAN	64.7	55.0	0.7	89.4	37.6	10	5.6	3.5	14	5.0	5.9	41	3.1	12.4
CV%	10	1	122	1	.	70	10	16	29	8	13	17	18	34
LSD(0.10)	NS <sup>12</sup>	NS	NS	3.0	.	9.9	0.7	0.9	15	1.1	1.2	12.3	1.0	6.4

Dean Lee Research Station in Alexandria and Macon Ridge Research Station in Winnsboro, LA. Boyd Padgett, Trey Price, Steve Harrison, Dustin Ezell, Myra Purvis, Kelly Arceneaux, Allysson Harding, Hanamareddy Biradar, and Katie McCarthy Fontenot.

1. **Bolded** 'Brand/variety' indicates the entry is commercially available; others are non-released breeding lines.
2. **Grain yield** is bushels per acre adjusted to 13% moisture.
3. **Lodging scale** of 0 = none to 9 = 100% lodged.
4. **Heading day** recorded as the day approximately 50% of the total spikelets are visible.
5. **Stripe rust** rating indicates percentage leaf area of upper three leaves covered in rust spores.
6. **Phenotype** represents overall visual appeal with a higher score indicating a more attractive plot. Average of three ratings in spring.
7. **FHB Score** is relative amount of heads showing field symptoms of FHB on a 0-9 scale.
8. **FDK** is percent Fusarium Damaged Kernels.
9. **Seed Quality (SDQ)** is a relative, visual rating of seed plumpness, uniformity, and visible defects (disease, insect damage, etc.), 0 = poor.
10. **Misted Nursery** inoculated with scabby corn and mist irrigated to create heavy Fusarium Headblight pressure.
11. **DON** is Deoxynivalenol toxin concentration.
12. **Not Significant (NS)**: variety mean differences were not statistically significant.


Table 7. Early maturity wheat performance at Alexandria for 2021. With and without fungicide.

 Brand / Variety <sup>1</sup>	Grain Yield <sup>2</sup> (bu/a), fungicide <sup>3</sup>		Grain Yield (bu/a), untreated		Test Weight (lbs/bu), fungicide		Heading Day <sup>4</sup> (of year), fungicide		Heading Day (of year), untreated		Plant Height (in), fungicide		Plant Height (in), untreated		Stripe Rust <sup>5</sup> (%), fungicide		Stripe Rust (%), untreated		FHB Score <sup>6</sup> (0-9), fungicide		FHB Score (0-9), untreated		Misted Nursery <sup>7</sup> FHB Score (0-9)		Misted Nursery FDK <sup>8</sup> (%)		Misted Nursery SDQ <sup>9</sup> (0-9)		Misted Nursery DON <sup>10</sup> (ppm)	
LA16020LDH-22	71.5	67.9	53.7	84.0	83.0	35.3	35.5	0	0	0.3	1.3	3.5	40	2.0	4.5															
AGS 2024	57.3	54.9	53.9	89.3	89.7	41.5	39.2	2	17	0.0	2.0	7.5	75	1.0	20.4															
AGS 2038	67.3	54.5	55.0	92.0	91.0	40.7	38.2	0	0	0.0	0.7	7.5	68	1.0	21.3															
PIONEER 26R94	73.5	52.1	55.0	86.7	86.7	41.7	39.2	1	1	0.3	2.0	6.5	55	2.0	16.3															
FLLA11004-7	70.3	51.9	54.0	91.7	95.3	37.0	36.5	0	0	0.0	0.3	3.5	58	1.5	15.6															
FLLA10033C-6	64.6	51.9	53.7	89.0	88.7	36.3	37.8	15	15	0.0	0.7	5.5	60	1.0	15.1															
AGS 2055	63.8	48.9	53.4	93.3	97.0	39.5	39.7	0	1	0.0	1.0	8.0	85	0.0	30.5															
AGS 3015	55.5	48.5	54.2	86.0	84.3	35.7	35.8	13	15	0.0	1.7	4.5	38	2.5	7.3															
DELTA GROW 3500	63.4	42.3	54.4	85.7	86.0	37.0	36.0	12	33	0.0	2.7	7.0	55	2.0	12.6															
FL14167LDH-158	64.3	34.8	53.0	88.7	91.0	38.8	36.2	7	17	0.7	0.7	6.5	63	1.0	13.2															
MEAN	65.2	50.8	54.0	88.6	89.2	38.4	37.4	5	10	0.1	1.3	6.0	60	1.4	15.7															
CV%	15	18	1	2	1	6	6	170	75	233	45	12	11	25	17															
LSD(0.10)	NS <sup>11</sup>	13.0	0.7	2.6	1.7	3.2	3.4	NS	10.4	NS	0.8	1.3	12.5	0.7	4.8															

Dean Lee Research Station in Alexandria, LA. Boyd Padgett, Steve Harrison, Kelly Arceneaux, Allysson Harding, Hanamareddy Biradar, and Katie McCarthy Fontenot. 16 oz/acre Axial and 0.6 oz/acre Harmony Extra applied on 2/1/20.

1. **Bolded** 'Brand/variety' indicates the entry is commercially available; others are non-released breeding lines.
2. **Grain yield** is bushels per acre adjusted to 13% moisture.
3. **Fungicide** used was Muravus Ace, rate of 13.7 oz/acre, applied at about boot stage and anthesis.
4. **Heading day** recorded as the day approximately 50% of the total spikelets are visible.
5. **Stripe rust** rating indicates percentage leaf area of upper three leaves covered in rust spores.
6. **FHB Score** is relative amount of heads showing field symptoms of FHB on a 0-9 scale.
7. **Misted Nursery** inoculated with scabby corn and mist irrigated to create heavy Fusarium Headblight pressure.
8. **FDK** is percent Fusarium Damaged Kernels.
9. **SDQ** is seed quality, a relative, visual rating of seed plumpness, uniformity, and visible defects (disease, insect damage, etc.), 0 = poor.
10. **DON** is Deoxynivalenol toxin concentration.
11. **Not Significant (NS)**: variety mean differences were not statistically significant.

Table 8. Early maturity wheat performance at Winnsboro for 2021. With and without fungicide.

 Research · Extension · Teaching	Grain Yield <sup>2</sup> (bu/a), fungicide <sup>3</sup>		Grain Yield (bu/a), untreated		Test Weight (lbs/bu), fungicide		Test Weight (lbs/bu), untreated		Lodging Score <sup>4</sup> (0-9), fungicide		Lodging Score, untreated		Heading Day <sup>5</sup> (of year), fungicide		Heading Day (of year), untreated		Stripe Rust <sup>6</sup> (%), fungicide		Stripe Rust (%), untreated		Phenotype <sup>7</sup> (0-9), fungicide		Phenotype (0-9), untreated		FHB Score <sup>8</sup> (0-9), fungicide		FHB Score (0-9), untreated		FDK <sup>9</sup> (%), fungicide		FDK (%), untreated		Seed Quality <sup>10</sup> (0-9), fungicide		Seed Quality (0-9), untreated		Misted Nursery <sup>11</sup> FHB Score (0-9)		Misted Nursery FDK (%)		Misted Nursery SDQ (0-9)		Misted Nursery DON <sup>12</sup> (ppm)		
	Brand / Variety <sup>1</sup>																																												
LA16020LDH-22	95.4	93.8	58.7	58.2	2.3	0.3	89.0	90.3	0	0	7.0	7.0	1.7	3.3	0	1	6.5	6.5			15	4.0	0.3																						
AGS 2038	96.3	92.6	58.9	59.2	1.0	0.0	91.3	91.3	0	1	6.0	6.0	1.0	2.0	2	4	4.5	4.0	2.5	20	2.5	2.4																							
PIONEER 26R94	96.0	87.2	59.7	59.4	1.7	0.3	89.7	89.3	5	4	5.5	6.0	3.3	4.0	2	1	4.5	5.5	3.0	13	3.0	1.2																							
FLLA11004-7	92.9	87.1	56.9	56.0	1.7	0.0	91.3	91.3	5	5	6.0	6.0	1.0	1.7	2	1	4.0	4.5	1.0	15	3.0	0.8																							
AGS 2055	97.6	80.1	56.5	56.1	0.3	1.7	90.7	91.7	2	7	6.0	6.0	0.7	2.0	1	3	5.0	4.5	4.0	28	3.0	1.8																							
FLLA10033C-6	90.3	79.8	57.4	55.5	0.0	0.0	90.7	90.5	7	10	6.0	6.0	2.0	3.0	1	4	5.5	3.5	2.0	20	3.5	1.0																							
FL14167LDH-158	89.1	79.5	57.2	55.5	0.3	0.5	90.7	90.0	3	13	6.0	5.5	1.7	4.0	1	4	5.0	3.5	3.0	20	3.0	0.7																							
AGS 3015	90.0	77.7	58.3	56.4	2.7	0.7	89.3	89.3	10	21	5.5	4.5	3.0	3.3	1	3	4.5	4.0	2.5	20	3.0	0.4																							
DELTA GROW 3500	77.4	70.5	57.9	56.8	5.7	4.0	90.0	89.3	45	28	4.5	4.0	3.3	5.0	2	4	4.0	4.0	3.5	23	3.0	0.4																							
AGS 2024	76.7	67.3	57.2	56.1	4.0	3.3	90.7	91.0	18	27	5.5	4.5	3.3	4.3	3	3	4.5	4.0	3.5	23	2.0	1.5																							
MEAN	90.2	81.2	57.9	57.0	2.0	1.1	90.3	90.4	9	12	5.8	5.6	2.1	3.3	1	3	4.8	4.4	2.8	20	2.9	1.1																							
CV%	4	3	1	1	48	105	1	1	41	56	6	7	28	18	66	46	15	13	26	13	11	49																							
LSD(0.10)	5.5	2.6	0.8	0.9	1.3	1.8	1.1	1.2	7.0	9.8	0.7	0.7	0.8	0.9	NS <sup>13</sup>	2.1	NS	1.0	1.5	4.9	0.6	1.8																							

**Macon Ridge Research Station in Winnsboro, LA.** Trey Price, Steve Harrison, Dustin Ezell, Myra Purvis, Kelly Arceneaux, Allysson Harding, Hanamareddy Biradar, and Katie McCarthy Fontenot. Planted 11-2-20. Zidua (3.25 oz/A) + metribuzin (2 oz/A) applied on 12/8/20. 30-0-0-2S topdress (50# N/A) on 1/28/21 and 3/4/21. Miravis Ace (13.7 oz/acre) applied to fungicide split reps on 4/6/21 and 4/19/21.

1. **Bolded** 'Brand/variety' indicates the entry is commercially available; others are non-released breeding lines.
2. **Grain yield** is bushels per acre adjusted to 13% moisture.
3. **Fungicide** used was Muravus Ace, rate of 13.7 oz/acre, applied at about boot stage and anthesis.
4. **Lodging score** on a scale of 0 = none to 9 = 100% lodged.
5. **Heading day** recorded as the day approximately 50% of the total spikelets are visible.
6. **Stripe rust** rating indicates percentage leaf area of upper three leaves covered in rust spores.
7. **Phenotype** represents overall visual appeal with a higher score indicating a more attractive plot. Average of three ratings in spring.
8. **FHB Score** is relative amount of heads showing field symptoms of FHB on a 0-9 scale.
9. **FDK** is percent Fusarium Damaged Kernels.
10. **Seed Quality (SDQ)** is a relative, visual rating of seed plumpness, uniformity, and visible defects (disease, insect damage, etc.), 0 = poor.
11. **Misted Nursery** inoculated with scabby corn and mist irrigated to create heavy Fusarium Headblight pressure.
12. **DON** is Deoxynivalenol toxin concentration.
13. **Not Significant (NS)**: variety mean differences were not statistically significant.

Table 9. Late maturity wheat performance trial across North Louisiana for 2021. With and without fungicide.


 Brand / Variety <sup>1</sup>	Grain Yield <sup>2</sup> (bu/a), fungicide <sup>3</sup>		Grain Yield (bu/a), untreated		Test Weight (lbs/bu), fungicide		Test Weight (lbs/bu), untreated		Lodging Score <sup>4</sup> (0-9), fungicide		Lodging Score, untreated		Heading Day <sup>5</sup> (of year), fungicide		Heading Day (of year), untreated		Plant Height (in), fungicide		Plant Height (in), untreated		Stripe Rust <sup>6</sup> (%), fungicide		Stripe Rust (%), untreated		Phenotype <sup>7</sup> (0-9), fungicide		Phenotype (0-9), untreated		FHB Score <sup>8</sup> (0-9), fungicide		FHB Score (0-9), untreated		Misted Nursery <sup>9</sup> FHB Score (0-9)		Misted Nursery FDK <sup>10</sup> (%)		Misted Nursery SDQ <sup>11</sup> (0-9)		Misted Nursery DON <sup>12</sup> (ppm)				
SY VIPER	83.1	81.5	55.3	55.6	0.0	0.2	90.8	91.0	37.0	36.7	0	0	6.5	7.0	0.5	1.3	3.8	28	3.5	7.2																							
PROGENY #CHAD	86.5	81.0	54.6	54.4	1.8	1.7	91.7	90.0	35.0	34.8	0	0	7.0	6.5	0.5	1.0	3.0	33	2.3	8.7																							
PROGENY PGX 19-12	86.0	78.6	54.1	53.9	0.7	0.2	95.5	94.8	36.2	37.0	0	0	6.5	7.0	0.5	0.8	1.8	29	2.3	7.4																							
AR11051-15-3	79.1	76.9	55.8	56.0	0.2	0.7	92.7	92.0	39.2	39.3	0	0	6.5	6.0	0.7	1.0	2.3	36	2.3	7.7																							
AGRIMAXX 514	88.1	76.6	54.1	53.6	0.0	0.5	95.7	95.3	36.0	36.5	0	0	6.5	6.5	0.2	1.0	1.8	31	2.8	8.1																							
PIONEER 26R59	83.2	76.5	53.3	53.4	0.0	0.0	96.2	93.5	34.2	35.3	0	0	6.5	6.5	0.8	0.8	3.5	50	1.5	10.3																							
DELTA GROW 1200	85.2	76.5	53.7	54.0	0.0	0.0	95.7	93.8	36.0	37.0	4	27	6.0	7.0	0.8	0.5	5.0	43	2.0	14.2																							
DYNA-GRO 9811	82.8	76.4	55.2	55.0	0.0	0.0	93.2	91.3	37.3	36.7	0	0	7.0	6.5	0.7	1.2	1.8	30	2.8	6.2																							
LA12275DH-56	77.4	76.1	56.9	57.4	0.5	0.0	90.8	91.3	39.3	38.0	0	0	6.0	6.0	0.2	0.5	3.5	33	2.8	8.2																							
AGRIMAXX 473	80.6	76.1	54.6	53.9	0.0	0.0	97.8	96.8	38.3	37.7	0	0	5.5	6.0	0.2	0.5	1.3	25	2.0	5.0																							
DELTA GROW 1000	73.5	75.6	55.0	53.7	0.0	0.0	96.7	94.8	36.5	35.3	0	0	5.5	6.0	0.3	0.8	2.0	28	2.3	6.6																							
PIONEER 26R41	85.8	75.5	54.2	54.4	0.0	0.0	96.3	93.5	35.7	35.8	0	0	6.5	6.5	0.3	0.8	1.8	40	2.0	10.9																							
LA15203-LDH200	77.3	75.3	55.8	56.7	0.2	0.0	94.8	93.8	37.3	37.3	0	0	7.0	7.0	0.7	0.5	1.3	29	2.8	8.9																							
DYNA-GRO WX20738	81.3	74.9	55.0	54.9	0.0	0.0	89.7	90.0	38.2	36.7	5	19	7.0	7.0	0.8	1.0	4.3	29	3.3	5.7																							
DELTA GROW 1800	78.1	74.7	56.3	56.2	0.2	0.3	93.0	90.8	38.3	37.3	0	1	6.5	6.5	0.5	0.5	1.7	26	3.0	6.0																							
DYNA-GRO 9172	86.5	74.7	54.8	54.9	0.0	0.0	96.3	98.0	37.2	35.8	0	0	6.0	6.0	0.3	0.5	1.8	23	3.0	5.2																							
PROGENY #BUSTER	81.7	74.5	55.8	55.6	0.0	0.0	95.7	91.5	37.7	38.2	0	0	6.0	6.5	0.5	1.0	2.7	29	2.5	6.3																							
LA13154D-WN1	79.8	74.0	55.5	55.1	0.2	0.0	91.2	93.0	35.3	33.2	6	11	6.5	6.0	0.8	1.7	3.5	48	2.3	9.8																							
LA15203-LDH274	79.9	73.8	55.8	56.0	0.5	0.3	88.5	87.5	37.0	36.8	4	4	7.0	7.0	0.8	1.7	1.5	25	3.3	7.5																							
AGRIMAXX 492	83.6	73.8	56.2	56.8	0.8	0.3	89.3	91.0	36.3	34.7	11	22	7.0	7.5	0.7	1.3	4.0	26	3.5	8.2																							
DYNA-GRO BLANTON	79.0	73.8	56.1	56.1	1.3	1.3	89.3	89.5	36.7	36.8	6	3	6.0	6.5	2.0	2.7	4.0	38	2.3	7.7																							
PROGENY PGX 20-8	80.7	73.5	54.2	54.7	0.3	0.0	101.5	101.8	37.0	36.2	0	0	6.0	6.5	0.2	0.5	1.0	26	2.8	5.9																							
PROGENY PGX 20-11	81.0	73.1	54.0	54.3	0.0	0.0	99.2	100.8	36.2	35.8	0	0	5.5	6.0	0.3	0.3	2.0	35	2.5	9.3																							
DYNA-GRO 9002	87.7	72.9	54.2	54.9	0.0	0.0	93.3	91.8	37.8	37.3	0	0	6.5	6.0	0.7	1.0	3.3	29	2.8	5.9																							
SY RICHIE	80.5	72.9	54.7	54.6	0.0	0.0	89.2	90.5	36.3	37.2	0	3	7.0	7.0	0.3	1.5	3.8	23	3.8	4.5																							
LANC11558-33	79.4	72.7	56.9	56.8	0.0	0.0	89.0	89.8	35.2	34.7	1	5	7.0	7.0	1.0	1.8	4.8	21	3.0	3.7																							
SREXP117	78.4	72.1	54.3	54.2	0.0	0.3	93.3	91.0	35.0	36.7	0	0	7.0	6.5	0.3	1.0	2.8	23	3.3	4.6																							
PROGENY #BULLET	77.6	72.0	54.6	54.6	0.0	0.0	99.0	98.0	38.2	37.3	0	0	5.5	6.0	0.0	0.6	1.7	26	2.5	4.8																							
USG 3536	79.2	71.5	54.1	53.5	0.0	0.0	97.7	92.5	38.3	36.0	1	2	5.5	6.0	0.2	0.8	4.5	48	1.5	13.7																							
NC16-19288	70.4	70.5	57.2	56.8	0.0	0.0	93.5	94.0	37.7	38.8	0	0	6.0	6.0	0.5	1.0	2.7	35	2.0	8.2																							
SY 547	82.9	70.5	55.5	55.7	0.0	0.0	90.8	91.3	39.8	36.2	0	2	6.0	6.0	0.7	0.8	2.3	25	2.5	4.9																							
PROGENY PGX 20-15	69.6	70.0	55.9	55.2	0.8	0.5	95.5	96.5	39.0	37.7	0	0	6.0	6.5	0.5	1.0	2.3	27	3.3	8.1																							
SREXP119	75.0	69.6	55.1	55.1	0.0	0.0	91.2	91.0	34.7	34.7	0	1	7.0	6.5	0.3	1.0	3.5	19	3.8	7.1																							
AR15V31-26-2285W	75.1	69.4	56.8	56.3	0.2	0.0	91.7	91.0	38.0	38.8	1	7	5.5	5.0	0.5	0.8	2.0	20	3.0	6.7																							
AR09137UC-17-2	80.6	69.4	56.0	55.7	0.7	0.7	90.7	90.3	38.0	37.0	7	25	6.0	6.0	0.8	1.7	5.5	39	2.5	11.7																							

Table 9. Late maturity wheat performance trial across North Louisiana for 2021. With and without fungicide.



 Research · Extension · Teaching	Grain Yield <sup>2</sup> (bu/a), fungicide <sup>3</sup>		Grain Yield (bu/a), untreated		Test Weight (lbs/bu), fungicide		Test Weight (lbs/bu), untreated		Lodging Score <sup>4</sup> (0-9), fungicide		Lodging Score, untreated		Heading Day <sup>5</sup> (of year), fungicide		Heading Day (of year), untreated		Plant Height (in), fungicide		Plant Height (in), untreated		Stripe Rust <sup>6</sup> (%), fungicide		Stripe Rust (%), untreated		Phenotype <sup>7</sup> (0-9), fungicide		Phenotype (0-9), untreated		FHB Score <sup>8</sup> (0-9), fungicide		FHB Score (0-9), untreated		Misted Nursery <sup>9</sup> FHB Score (0-9)		Misted Nursery FDK <sup>10</sup> (%)		Misted Nursery SDQ <sup>11</sup> (0-9)		Misted Nursery DON <sup>12</sup> (ppm)			
	Brand / Variety <sup>1</sup>																																									
HARVEY AP 1983	77.2	69.3	55.8	56.0	0.2	0.0	89.0	90.5	35.8	38.7	6	2	6.5	5.5	1.5	1.8	4.8	38	2.3	8.3																						
USG 3640	80.3	68.6	56.3	55.5	0.5	0.0	91.2	94.3	37.8	38.0	16	8	5.5	5.5	1.3	1.5	1.7	23	3.0	6.2																						
AGS 2055	82.8	68.4	55.1	54.9	0.2	0.0	92.3	91.8	37.7	40.3	3	5	6.0	6.0	0.8	1.3	5.0	45	2.8	12.7																						
LA15203-LDH112	75.0	68.4	55.5	56.9	0.0	0.0	94.8	93.5	37.8	36.0	0	0	6.0	6.5	0.7	0.8	3.0	30	2.3	7.6																						
PIONEER 26R45	80.3	68.1	54.7	55.0	0.2	0.0	96.8	96.0	36.7	35.0	9	31	6.0	6.0	0.0	0.2	4.0	38	2.5	12.6																						
GA12505B14-18LE23F	75.7	68.1	57.0	56.8	0.3	0.7	90.8	91.8	36.7	35.8	4	12	6.0	6.0	0.7	1.8	5.0	39	2.0	7.4																						
GO WHEAT 6000	76.3	67.8	56.6	56.4	0.7	1.0	89.5	90.0	36.3	35.7	12	44	6.0	6.5	0.5	1.8	4.3	29	2.8	5.5																						
LA15166-LDH296	80.4	67.5	55.5	55.8	0.3	0.5	94.0	97.3	36.2	35.8	0	0	7.0	6.5	0.5	0.5	3.8	29	2.8	6.7																						
LA12080LDH-72	73.9	67.4	55.8	55.4	0.3	0.3	89.0	90.3	37.3	36.5	0	16	6.5	7.0	1.0	1.5	4.8	41	2.0	9.5																						
NC15-21835	69.3	67.1	55.9	57.0	0.1	0.4	95.4	93.0	38.1	36.8	2	9	6.0	6.5	0.3	0.8	2.3	20	3.0	2.9																						
PROGENY PGX 20-2	74.3	67.0	56.2	55.9	0.3	0.0	100.5	97.8	35.8	36.5	1	1	5.5	5.5	0.0	0.3	1.0	26	2.8	5.4																						
GO WHEAT LA754	73.1	66.4	53.8	54.2	0.0	1.0	88.8	90.0	37.3	36.7	2	2	6.5	6.0	1.8	2.2	4.0	23	4.0	7.9																						
DELTA GROW 1500	76.3	65.7	52.8	51.9	0.0	0.0	103.8	103.0	35.5	39.2	0	0	6.0	6.0	0.3	0.7	2.0	28	2.5	7.5																						
LA13009D-23	75.2	65.5	56.7	56.1	0.3	0.8	89.8	90.0	35.2	36.8	7	8	6.5	5.5	1.0	1.7	3.5	35	2.5	7.4																						
LW2026	73.8	64.9	55.9	55.6	0.0	0.0	89.3	89.5	37.0	38.2	1	3	6.0	6.0	2.3	3.0	5.8	44	2.0	9.4																						
LA15VDH-FHB-MAS10-16	67.2	64.0	56.1	56.1	1.3	0.8	87.5	89.0	36.5	35.2	1	8	6.0	6.5	0.3	0.7	2.8	19	3.8	4.5																						
DYNA-GRO RIVERLAND	76.9	63.4	57.1	56.1	1.2	0.5	87.2	89.8	34.5	35.2	24	42	5.5	5.0	1.0	2.0	4.0	31	2.3	9.4																						
NC11363-25	75.7	63.0	57.1	56.7	0.0	0.0	91.5	91.3	36.2	35.0	0	15	6.5	6.0	0.5	2.0	3.5	30	2.0	7.2																						
LA15166LDH-272	67.1	62.7	56.1	55.5	0.0	0.0	91.2	90.5	35.8	34.5	18	31	7.0	6.5	0.6	1.0	3.5	29	2.8	7.1																						
DYNA-GRO PLANTATION	74.3	62.1	57.3	56.7	0.7	1.0	88.2	88.8	34.7	34.5	23	32	5.0	5.0	1.5	3.0	6.3	40	2.3	9.0																						
AGS 3040	69.3	61.1	55.4	53.6	1.2	1.2	89.8	91.0	37.2	36.8	30	39	5.5	4.0	0.5	1.7	5.0	44	1.8	20.0																						
AGS 2038	81.5	60.1	56.5	58.1	0.0	0.0	91.7	91.8	38.2	37.3	0	0	6.0	6.0	0.7	0.8	2.3	33	2.3	7.7																						
LIBERTY 5658	77.0	60.0	55.6	55.2	0.0	0.5	89.7	89.3	34.5	32.0	14	45	6.0	5.0	0.8	1.0	2.8	24	3.5	4.7																						
GA131246LDH-18E35	66.1	59.6	56.7	55.3	0.6	0.7	90.0	90.3	36.3	36.7	24	18	6.0	4.0	0.3	1.2	3.8	24	2.8	7.2																						
NC12164-200T	73.5	56.9	57.6	57.2	0.0	0.2	91.5	93.0	36.2	36.0	16	29	6.0	6.0	0.3	1.3	2.3	23	3.0	2.8																						
GA15VDH-FHB-MAS23-18LE43F	74.9	56.6	57.2	56.0	0.5	0.3	85.8	91.3	33.8	35.3	17	44	7.0	5.0	0.5	1.2	3.0	23	3.3	8.1																						
AGRIMAXX 481	74.9	56.1	56.9	55.2	1.2	1.5	90.7	89.5	35.5	36.3	24	27	5.5	4.0	1.0	2.7	4.0	21	3.5	4.0																						
GA10127-18E26	71.2	55.6	56.3	55.1	0.3	0.2	93.3	91.8	38.5	37.7	22	29	5.0	5.0	0.3	1.2	2.5	25	3.3	5.6																						
GA15VDH-FHB-MAS30-18ESc43F	64.6	53.2	55.1	54.5	0.7	0.0	88.8	90.8	32.0	32.5	30	34	6.0	5.0	1.0	1.8	2.8	23	3.0	2.4																						
LA14016SB-BR5-3	56.3	40.0	53.7	45.5	0.2	2.2	91.8	92.0	35.3	36.7	48	47	4.5	3.0	0.8	2.5	4.8	36	2.3	7.8																						
NC11546-14	58.6	38.4	57.1	48.4	0.5	1.5	91.8	93.0	34.8	36.2	32	40	5.0	3.5	0.5	2.3	1.8	34	2.3	4.4																						
MEAN	77.2	68.5	55.6	55.1	0.3	0.3	92.6	92.5	36.6	36.4	6	11	6.2	6.0	0.6	1.2	3.2	30	2.7	7.4																						
CV%	10	15	2	2	193	185	4	2	.	.	204	107	.	.	81	55	42	36	30	54																						
LSD(0.10)	9.6	15.0	1.1	3.5	0.9	1.2	3.8	4.6	.	.	11.3	28.0	.	.	0.7	1.0	2.3	18	1.1	6.6																						




Table 9. Late maturity wheat performance trial across North Louisiana for 2021. With and without fungicide.

 Brand / Variety <sup>1</sup>	Grain Yield <sup>2</sup> (bu/a), fungicide <sup>3</sup>	Grain Yield (bu/a), untreated	Test Weight (lbs/bu), fungicide	Test Weight (lbs/bu), untreated	Lodging Score <sup>4</sup> (0-9), fungicide	Lodging Score, untreated	Heading Day <sup>5</sup> (of year), fungicide	Heading Day (of year), untreated	Plant Height (in), fungicide	Plant Height (in), untreated	Stripe Rust <sup>6</sup> (%), fungicide	Stripe Rust (%), untreated	Phenotype <sup>7</sup> (0-9), fungicide	Phenotype (0-9), untreated	FHB Score <sup>8</sup> (0-9), fungicide	FHB Score (0-9), untreated	Misted Nursery <sup>9</sup> FHB Score (0-9)	Misted Nursery FDK <sup>10</sup> (%)	Misted Nursery SDQ <sup>11</sup> (0-9)	Misted Nursery DON <sup>12</sup> (ppm)

**Macon Ridge Research Station in Winnsboro, LA.** Trey Price, Steve Harrison, Dustin Ezell, Myra Purvis, Kelly Arceneaux, Allysson Harding, Hanamareddy Biradar, and Katie McCarthy Fontenot.

1. **Bolded** 'Brand/variety' indicates the entry is commercially available; others are non-released breeding lines.
2. **Grain yield** is bushels per acre adjusted to 13% moisture.
3. **Fungicide** used was Muravus Ace, rate of 13.7 oz/acre, applied at about boot stage and anthesis.
4. **Lodging score** on a scale of 0 = none to 9 = 100% lodged.
5. **Heading day** recorded as the day approximately 50% of the total spikelets are visible.
6. **Stripe rust** rating indicates percentage leaf area of upper three leaves covered in rust spores.
7. **Phenotype** represents overall visual appeal with a higher score indicating a more attractive plot. Average of three ratings in spring.
8. **FHB Score** is relative amount of heads showing field symptoms of FHB on a 0-9 scale.
9. **Misted Nursery** inoculated with scabby corn and mist irrigated to create heavy Fusarium Headblight pressure.
10. **FDK** is percent Fusarium Damaged Kernels.
11. **Seed Quality (SDQ)** is a relative, visual rating of seed plumpness, uniformity, and visible defects (disease, insect damage, etc.), 0 = poor.
12. **DON** is Deoxynivalenol toxin concentration.

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Brand / Variety <sup>1</sup>	Grain Yield <sup>2</sup> (bu/a), fungicide <sup>3</sup>		Grain Yield (bu/a), untreated		Test Weight (lbs/bu), fungicide		Test Weight (lbs/bu), untreated		Lodging Score <sup>4</sup> (0-9), fungicide		Lodging Score, untreated		Heading Day <sup>5</sup> (of year), fungicide		Heading Day (of year), untreated		Plant Height (in), fungicide		Plant Height (in), untreated		Stripe Rust <sup>6</sup> (%), fungicide		Stripe Rust (%), untreated		Phenotype <sup>7</sup> (0-9), fungicide		Phenotype (0-9), untreated		FHB Score <sup>8</sup> (0-9), fungicide		FHB Score (0-9), untreated		FDK <sup>9</sup> (%), fungicide		FDK (%), untreated		DON <sup>10</sup> (ppm), fungicide		DON (ppm), untreated		Seed Quality <sup>11</sup> (0-9), fungicide		Seed Quality (0-9), untreated		Misted Nursery <sup>12</sup> FHB Score (0-9)		Misted Nursery FDK (%)	Misted Nursery SDQ (0-9)	Misted Nursery DON <sup>13</sup> (ppm)
SY VIPER	84.1	78.4	56.1	56.0	0.2	0.1	90.2	90.2	37.0	36.7	0	0	6.6	6.4	1.0	1.5	3	8	1.3	1.7	5.5	5.5	2.8	15	5.0	9.7																							
PROGENY PGX 19-12	88.0	77.5	54.5	54.3	0.4	0.1	96.0	96.0	36.2	37.0	0	0	6.6	6.4	0.6	0.8	1	3	1.0	0.5	7.0	7.0	1.3	15	4.5	6.5																							
PROGENY #CHAD	85.4	76.9	54.8	53.7	1.7	1.1	85.1	85.1	35.0	34.8	0	0	6.4	6.1	1.8	2.8	1	5	0.5	1.5	4.5	5.0	4.6	17	3.8	6.7																							
DELTA GROW 1000	78.3	76.2	55.8	54.7	0.0	0.0	96.5	96.5	36.5	35.3	0	0	5.7	5.8	0.5	0.7	3	1	0.6	0.4	6.0	7.0	1.4	14	4.6	5.0																							
AGRIMAXX 473	83.1	76.0	55.2	54.6	0.0	0.0	96.5	96.5	38.3	37.7	0	0	5.8	5.8	0.4	0.5	3	1	0.6	0.2	7.5	6.5	1.0	11	5.1	3.6																							
PROGENY #BULLET	80.1	74.9	55.2	55.5	0.0	0.0	97.6	97.6	38.2	37.3	0	0	5.6	5.8	0.3	0.5	1	1	0.3	0.2	8.0	7.5	1.1	14	4.9	4.0																							
DYNA-GRO 9811	82.7	74.4	56.0	55.7	0.0	0.0	90.5	90.5	37.3	36.7	0	0	6.3	6.0	1.3	1.5	8	8	0.7	1.2	5.0	6.0	2.0	18	4.8	6.0																							
PROGENY #BUSTER	81.4	74.3	56.5	56.6	0.3	0.0	91.0	91.0	37.7	38.2	0	0	5.7	6.3	0.8	1.3	8	5	0.8	1.9	6.0	6.0	1.7	16	4.8	6.4																							
LA12275DH-56	77.0	74.0	56.9	57.0	0.3	0.0	87.6	87.6	39.3	38.0	0	0	5.8	6.3	1.1	1.6	8	10	1.5	1.7	7.5	5.0	3.9	19	4.5	7.6																							
PIONEER 26R59	80.8	73.3	54.1	54.2	0.0	0.0	94.2	94.2	34.2	35.3	0	0	6.0	5.9	1.1	1.3	6	8	1.9	1.7	7.0	6.0	2.5	27	4.0	8.2																							
PIONEER 26R45	82.9	73.3	55.2	55.4	0.1	0.0	96.0	96.0	36.7	35.0	9	31	5.9	5.8	0.3	0.3	6	3	0.5	0.5	7.0	7.5	2.5	19	4.6	9.1																							
AGRIMAXX 492	83.6	73.1	57.1	56.8	0.6	0.2	89.2	89.2	36.3	34.7	11	22	6.8	7.0	1.8	2.3	1	15	0.3	0.8	7.0	6.5	4.1	20	5.3	8.2																							
DELTA GROW 1800	77.3	72.9	57.3	56.3	0.1	0.2	85.9	85.9	38.3	37.3	0	1	6.4	6.8	1.2	1.8	3	1	0.2	0.8	8.0	7.0	3.3	16	4.6	5.6																							
LA15203-LDH200	77.4	72.3	56.5	56.8	0.3	0.0	93.8	93.8	37.3	37.3	0	0	6.6	6.5	0.8	0.8	8	8	1.9	1.2	6.5	7.0	1.4	16	4.9	7.7																							
SY RICHIE	80.0	72.0	55.0	54.4	0.4	0.0	86.9	86.9	36.3	37.2	0	3	6.9	6.5	1.2	2.8	8	15	0.9	2.2	6.5	6.0	3.6	16	4.8	6.4																							
LA13154D-WN1	80.4	71.9	56.0	54.5	0.7	0.0	86.2	86.2	35.3	33.2	6	11	6.3																																				

1. **Bolded** 'Brand/variety' indicates the entry is commercially available; others are non-released breeding lines.
2. **Grain yield** is bushels per acre adjusted to 13% moisture.
3. **Fungicide** used was Muravus Ace, rate of 13.7 oz/acre, applied at about boot stage and anthesis.

Table 10. Late maturity wheat performance trial across North Louisiana for two years. With and without fungicide.

Brand / Variety <sup>1</sup>	 Research · Extension · Teaching																											
	Grain Yield <sup>2</sup> (bu/a), fungicide <sup>3</sup>	Grain Yield (bu/a), untreated	Test Weight (lbs/bu), fungicide	Test Weight (lbs/bu), untreated	Lodging Score <sup>4</sup> (0-9), fungicide	Lodging Score, untreated	Heading Day <sup>5</sup> (of year), fungicide	Heading Day (of year), untreated	Plant Height (in), fungicide	Plant Height (in), untreated	Stripe Rust <sup>6</sup> (%), fungicide	Stripe Rust (%), untreated	Phenotype <sup>7</sup> (0-9), fungicide	Phenotype (0-9), untreated	FHB Score <sup>8</sup> (0-9), fungicide	FHB Score (0-9), untreated	FDK <sup>9</sup> (%), fungicide	FDK (%), untreated	DON <sup>10</sup> (ppm), fungicide	DON (ppm), untreated	Seed Quality <sup>11</sup> (0-9), fungicide	Seed Quality (0-9), untreated	Misted Nursery <sup>12</sup> FHB Score (0-9)	Misted Nursery FDK (%)	Misted Nursery SSDQ (0-9)	Misted Nursery DON <sup>13</sup> (ppm)		

4. Lodging score on a scale of 0 = none to 9 = 100% lodged.

5. Heading day recorded as the day approximately 50% of the total spikelets are visible.

6. Stripe rust rating indicates percentage leaf area of upper three leaves covered in rust spores.

7. Phenotype represents overall visual appeal with a higher score indicating a more attractive plot. Average of three ratings in spring.

8. FHB Score is relative amount of heads showing field symptoms of FHB on a 0-9 scale.


9. FDK is percent Fusarium Damaged Kernels.

10. DON is Deoxynivalenol toxin concentration. Data from 2020 only.

11. Seed Quality (SDQ) is a relative, visual rating of seed plumpness, uniformity, and visible defects (disease, insect damage, etc.), 0 = poor.

12. Misted Nursery inoculated with scabby corn and mist irrigated to create heavy Fusarium Headblight pressure.

Table 11. Late maturity wheat performance trial across North Louisiana for three years, 2019-2021. No fungicide.

 Brand / Variety <sup>1</sup>	Grain	Test	Lod	Head	Plant	Stripe	Leaf	Pheno-	FHB	FDK <sup>9</sup>	DON <sup>10</sup>	Seed	Misted	Misted	Misted	Misted
	Yield <sup>2</sup> (bu/a)	Weight	Score <sup>3</sup> (0-9)	Day <sup>4</sup> (of year)	Ht (in)	Rust <sup>5</sup> (%)	Rust <sup>6</sup> (%)	type <sup>7</sup> (0-9)	Score <sup>8</sup> (0-9)	(%)	(ppm)	Quality <sup>11</sup> (0-9)	Nursery <sup>12</sup> FHB Score (0-9)	Nursery FDK (%)	Nursery SDQ (0-9)	Nursery DON <sup>13</sup> (ppm)
AGRIMAXX 492	75.3	57.0	1.2	89.3	33.6	0	0	6.5	2.8	16	0.8	6.0	4.0	23	5.0	7.1
DYNA-GRO 9811	74.1	56.0	0.3	91.8	37.6	0	0	5.7	1.6	9	1.2	5.8	2.9	31	4.0	7.8
DYNA-GRO 9002	73.5	55.4	0.2	93.2	37.8	0	2	5.5	1.8	5	0.6	6.7	2.9	25	4.8	3.8
SY RICHIE	73.1	54.9	0.2	86.8	36.1	0	0	6.2	3.3	21	2.2	5.8	4.5	22	4.5	7.4
PIONEER 26R59	72.6	53.5	0.2	95.2	33.7	0	8	5.5	1.4	6	1.7	6.0	3.3	36	3.8	8.4
PROGENY #BUSTER	72.6	57.1	0.1	92.7	37.6	6	1	5.9	1.2	5	1.9	6.3	2.4	27	4.2	11.6
DELTA GROW 1800	71.7	57.3	0.4	85.3	37.9	0	0	6.3	2.0	3	0.8	7.0	3.4	14	4.7	4.3
DELTA GROW 1000	71.4	54.8	0.2	97.8	39.6	0	0	5.5	0.7	3	0.4	6.3	2.0	23	4.2	8.7
AGS 2055	70.6	54.6	0.4	90.7	38.2	12	0	5.5	2.3	13	6.6	5.0	5.6	48	3.2	23.9
SY VIPER	69.5	56.5	0.7	91.0	38.2	0	9	5.9	1.6	6	1.7	6.3	3.5	23	4.5	11.6
LIBERTY 5658	69.2	56.5	0.2	87.1	37.4	20	4	5.3	1.9	5	1.7	6.5	3.2	15	5.2	4.7
PIONEER 26R45	68.0	54.5	0.4	98.9	38.0	0	4	5.4	0.3	4	0.5	7.0	2.1	22	4.6	7.4
SY 547	67.7	55.8	1.0	92.1	38.4	5	0	5.0	0.8	13	0.8	6.0	2.2	27	4.2	7.6
PROGENY #BULLET	67.2	55.3	0.2	98.9	38.1	1	0	5.3	0.6	7	0.2	6.5	2.0	20	4.5	7.6
LA12080LDH-72	67.0	54.7	0.9	84.9	37.6	2	3	6.5	3.4	9	0.8	6.0	4.7	19	4.0	4.6
AGS 2038	66.2	55.4	0.6	90.3	40.3	1	0	5.3	2.1	26	6.1	4.5	5.1	50	2.4	26.1
AGRIMAXX 473	65.8	54.8	0.0	98.1	39.1	0	0	5.5	0.6	9	0.2	5.5	1.8	24	4.5	9.7
DYNA-GRO BLANTON	65.5	55.1	1.3	83.0	34.8	9	0	5.3	4.8	41	7.3	4.3	5.9	48	2.6	12.6
DYNA-GRO PLANTATION	65.2	56.0	1.9	81.6	33.4	36	0	5.2	4.9	34	4.2	4.8	6.3	29	4.2	9.0
USG 3640	64.4	55.2	0.2	85.0	37.6	26	0	5.3	3.9	36	4.8	3.8	5.4	32	4.2	8.3
GO WHEAT LA754	63.8	53.2	2.1	81.3	35.1	12	2	5.4	4.6	60	4.2	3.3	6.0	39	3.8	7.6
AGRIMAXX 481	62.7	55.5	1.6	82.8	35.1	36	0	4.4	4.4	40	5.0	4.0	6.4	25	4.2	8.4
AGS 3040	59.2	54.7	1.1	84.9	36.1	48	0	4.9	2.8	16	0.6	4.8	4.8	20	4.6	6.2
MEAN	68.5	55.4	0.7	89.7	37.0	9	2	5.5	2.3	17	2.4	5.5	4.0	28	4.2	9.3
CV%	11	2	138	2	5	68	.	11	28	85	.	17	26	40	23	34
LSD(0.10)	7.3	1.5	0.7	3.0	1.9	17.1	.	1	1.0	13.3	.	1.5	1.5	14.2	1.1	9.7

Dean Lee Research Station in Alexandria and Macon Ridge Research Station in Winnsboro, LA. Boyd Padgett, Trey Price, Steve Harrison, Dustin Ezell, Myra Purvis, Kelly Arceneaux, Allysson Harding, Hanamareddy Biradar, and Katie McCarthy Fontenot.

1. **Bolded** 'Brand/variety' indicates the entry is commercially available; others are non-released breeding lines.
2. **Grain yield** is bushels per acre adjusted to 13% moisture.
3. **Lodging scale** of 0 = none to 9 = 100% lodged.
4. **Heading day** recorded as the day approximately 50% of the total spikelets are visible.
5. **Stripe rust** rating indicates percentage leaf area of upper three leaves covered in rust spores.
6. **Leaf rust** rating, percent tissue of upper three leaves affected by leaf rust.
7. **Phenotype** represents overall visual appeal with a higher score indicating a more attractive plot. Average of three ratings in spring.
8. **FHB Score** is relative amount of heads showing field symptoms of FHB on a 0-9 scale.
9. **FDK** is percent Fusarium Damaged Kernels.
10. **DON** is Deoxynivalenol toxin concentration. Data from only 2019 & 2020.
11. **Seed Quality (SDQ)** is a relative, visual rating of seed plumpness, uniformity, and visible defects (disease, insect damage, etc.), 0 = poor.
12. **Misted Nursery** inoculated with scabby corn and mist irrigated to create heavy Fusarium Headblight pressure.
13. **DON** data from misted nursery contains data from 2019-2021.

Table 12. Late maturity wheat performance trial at Alexandria for 2021. With and without fungicide.









 Research · Extension · Teaching	Brand / Variety <sup>1</sup>	Grain Yield <sup>2</sup> (bu/a), fungicide <sup>3</sup>		Grain Yield (bu/a), untreated	Test Weight (lbs/bu), fungicide	Heading Day <sup>4</sup> (of year), fungicide		Heading Day (of year), untreated	Plant Height (in), fungicide		Plant Height (in), untreated	Lodging Score <sup>4</sup> (0-9), fungicide		Lodging Score, untreated	Stripe Rust <sup>6</sup> (%), fungicide		Stripe Rust (%), untreated	FHB Score <sup>7</sup> (0-9), fungicide		FHB Score (0-9), untreated	Misted Nursery <sup>8</sup> FHB Score (0-9)	Misted Nursery FDK <sup>9</sup> (%)	Misted Nursery SDQ <sup>10</sup> (0-9)	Misted Nursery DON <sup>11</sup> (ppm)	
 Research · Extension · Teaching	AR11051-15-3	68.9	72.9	53.2	92.7	89	38.5	39.3	0.0	0.0	0	0	0.3	0.0	3.0	58	1.5	13.7							
	SY VIPER	72.9	72.3	53.5	91.7	90	37.7	36.7	0.0	0.0	0	0	0.0	0.3	4.0	50	2.0	13.5							
	PIONEER 26R59	81.0	70.7	52.6	95.0	91	33.3	35.3	0.0	0.0	0	0	0.3	0.0	3.5	68	1.0	16.8							
	PROGENY PGS 20-15	57.4	68.9	54.5	93.7	92	38.8	37.0	0.0	0.0	0	0	0.3	0.0	2.0	43	2.0	12.7							
	DELTA GROW 1000	53.5	67.2	52.0	104.7	92	37.7	35.3	0.0	0.0	0	0	0.0	0.0	3.0	40	2.0	10.6							
 Research · Extension · Teaching	PROGENY #CHAD	76.8	66.4	53.4	87.7	91	33.3	34.8	0.0	0.0	0	0	0.0	0.0	3.0	50	1.5	14.0							
	DYNA-GRO 9811	78.1	65.8	53.5	91.7	91	38.5	36.7	0.0	0.0	0	0	0.3	0.0	1.0	38	3.0	9.0							
	DELTA GROW 1800	72.5	65.3	56.4	90.0	90	39.8	37.3	0.0	0.0	0	2	0.0	0.0	1.0	38	2.5	9.4							
	AR15V31-26-2285W	62.3	64.3	55.5	91.0	91	38.7	38.8	0.0	0.0	5	0	0.0	0.0	1.5	35	2.5	12.3							
	LA12275DH-56	71.3	64.1	55.4	91.7	90	39.3	38.0	0.0	0.0	0	0	0.0	0.0	5.0	48	2.0	14.7							
 Research · Extension · Teaching	AGRIMAXX 473	74.4	63.6	52.2	102.3	98	38.7	37.7	0.0	0.0	0	0	0.0	0.0	1.0	30	2.0	7.1							
	SREXP117	75.9	63.4	52.5	92.0	91	34.3	36.7	0.0	0.0	0	0	0.0	0.0	2.0	33	2.5	6.9							
	LA15203-LDH200	67.5	63.4	53.9	97.3	92	38.2	37.3	0.0	0.0	0	0	1.0	0.0	1.5	40	2.5	14.1							
	PROGENY #BUSTER	81.2	63.2	54.4	93.0	91	36.7	38.2	0.0	0.0	0	0	0.0	0.0	4.0	35	2.5	10.5							
	AGRIMAXX 514	83.9	62.8	51.3	98.0	92	36.7	36.5	0.0	1.0	0	0	0.0	0.0	2.0	45	2.0	14.9							
 Research · Extension · Teaching	DYNA-GRO 9172	79.7	62.8	52.4	101.7	102	35.5	35.8	0.0	0.0	0	0	0.0	0.0	2.0	35	2.5	9.5							
	PROGENY PGX 19-12	76.2	62.8	52.0	98.7	107	36.7	35.8	0.0	1.0	0	0	0.3	0.0	3.0	50	2.0	12.5							
	AGS 3040	54.3	62.6	54.8	88.0	92	36.3	36.8	1.0	0.0	57	32	0.0	0.3	8.0	78	0.5	39.6							
	SREXP119	76.3	62.2	54.5	90.7	91	34.8	34.7	0.0	0.0	0	0	0.0	0.0	4.5	28	3.0	13.3							
	PIONEER 26R41	76.0	61.7	51.9	98.3	92	35.2	35.8	0.0	0.0	0	0	0.3	0.0	1.5	60	1.5	19.1							
 Research · Extension · Teaching	DELTA GROW 1200	79.8	60.9	51.1	99.3	87	35.7	37.0	0.0	0.0	0	53	0.7	0.0	5.0	43	2.0	14.2							
	LA13154D-WN1	69.2	60.0	52.5	91.3	91	36.8	33.2	0.0	0.0	0	18	0.0	0.3	5.0	43	2.5	15.7							
	SY 547	74.2	59.5	53.5	90.7	92	41.3	36.2	0.0	0.0	0	0	0.0	0.0	2.5	33	2.5	8.7							
	AGS 2055	77.2	59.4	53.3	92.0	92	37.3	40.3	0.0	0.0	3	3	0.0	0.7	7.0	73	1.0	22.1							
	PROGENY PGX 20-8	74.5	58.0	51.7	105.0	109	36.8	36.2	0.7	0.0	0	0	0.0	0.0	1.0	43	2.0	10.2							
 Research · Extension · Teaching	DYNA-GRO 9002	81.3	57.9	53.9	95.3	92	38.0	37.3	0.0	0.0	0	0	0.0	0.0	3.0	40	2.0	9.9							
	PROGENY #BULLET	67.1	57.9	52.0	103.7	104	38.5	37.3	0.0	0.0	0	0	0.0	0.0	2.0	30	2.5	7.6							
	LA13009D-23	63.0	56.8	54.6	88.0	88	33.3	36.8	0.0	0.0	18	10	0.0	0.0	5.0	43	2.5	12.0							
	DYNA-GRO WX20738	83.8	56.3	53.4	89.7	89	37.8	36.7	0.0	0.0	0	38	0.0	0.7	5.0	45	2.5	10.8							
	DYNA-GRO BLANTON	56.5	56.2	53.4	87.7	87	35.3	36.8	0.0	0.0	10	0	1.3	1.0	4.5	63	1.0	14.0							
 Research · Extension · Teaching	GO WHEAT LA754	64.4	55.9	50.3	86.7	89	36.8	36.7	0.0	0.0	3	0	1.3	0.0	4.5	33	3.0	13.6							
	GA131246LDH-18E35	48.1	55.7	55.3	80.0	90	36.3	36.7	0.0	0.0	43	10	0.0	0.0	5.5	35	2.5	11.7							
	DELTA GROW 1500	73.2	55.5	49.4	106.3	107	35.2	39.2	0.0	0.0	0	0	0.0	0.0	2.0	38	2.0	12.4							



Table 12. Late maturity wheat performance trial at Alexandria for 2021. With and without fungicide.



 AgCenter Research · Extension · Teaching	Brand / Variety <sup>1</sup>	Grain Yield <sup>2</sup> (bu/a), fungicide <sup>3</sup>		Grain Yield (bu/a), untreated	Test Weight (lbs/bu), fungicide	Heading Day <sup>4</sup> (of year), fungicide		Heading Day (of year), untreated	Plant Height (in), fungicide		Plant Height (in), untreated	Lodging Score <sup>4</sup> (0-9), fungicide		Lodging Score, untreated	Stripe Rust <sup>6</sup> (%), fungicide		Stripe Rust (%), untreated	FHB Score <sup>7</sup> (0-9), fungicide		FHB Score (0-9), untreated	Misted Nursery <sup>8</sup> FHB Score (0-9)		Misted Nursery FDK <sup>9</sup> (%)	Misted Nursery SDQ <sup>10</sup> (0-9)	Misted Nursery DON <sup>11</sup> (ppm)	
	LW2026	63.5	55.1	54.2	87.3	88	37.2	38.2	0.0	0.0	0	0	3.0	1.3	6.5	70	1.0	17.2								
	SY RICHIE	78.7	54.4	52.9	87.3	89	35.0	37.2	0.0	0.0	0	7	0.0	0.0	4.0	38	2.5	8.5								
	PROGENY PGX 20-2	62.4	54.3	54.1	99.7	103	35.2	36.5	0.0	0.0	0	0	0.0	0.0	1.0	43	2.0	9.4								
	HARVEY AP 1983	65.4	54.1	53.7	86.3	92	35.3	38.7	0.0	0.0	14	0	1.0	0.0	6.5	65	1.5	15.8								
	LA15203-LDH112	70.7	53.8	53.5	95.3	100	38.0	36.0	0.0	0.0	0	0	0.0	0.0	4.0	43	2.0	13.9								
	LA15203-LDH274	68.8	53.6	53.6	83.3	81	35.3	36.8	0.0	0.0	7	7	0.0	0.0	1.5	43	2.0	14.3								
	LANC11558-33	69.7	53.5	55.0	87.7	88	34.2	34.7	0.0	0.0	2	10	0.0	0.0	4.0	28	3.0	6.2								
	USG 3536	71.7	53.1	52.7	103.0	86	39.0	36.0	0.0	0.0	0	3	0.0	1.0	8.0	83	0.5	26.2								
	AR09137UC-17-2	73.9	52.3	54.4	90.7	87	38.2	37.0	0.0	0.0	0	50	0.3	1.7	6.0	60	1.5	21.7								
	GA12505B14-18LE23F	68.0	52.1	56.0	89.7	92	36.8	35.8	0.0	0.0	0	20	0.0	1.3	7.0	60	1.5	12.6								
	AGRIMAXX 492	81.6	51.7	54.4	89.3	91	36.2	34.7	0.7	0.0	0	43	0.0	0.0	5.5	43	2.5	15.2								
	LA15VDH-FHB-MAS10-16	48.8	51.2	54.9	85.7	86	37.2	35.2	0.0	0.0	0	12	0.0	0.0	3.0	33	2.5	8.6								
	LA14016SB-BR5-3	34.2	49.6	52.0	91.0	90	34.5	36.7	0.0	0.0	80	33	0.0	0.0	6.0	50	1.5	14.0								
	NC16-19288	69.7	49.2	57.0	92.0	.	37.7	38.8	0.0	0.0	0	0	0.3	0.0	3.0	40	2.0	12.9								
	NC11363-25	70.3	48.8	55.5	92.0	92	36.8	35.0	0.0	0.0	0	30	0.0	1.3	5.0	48	1.5	13.2								
	LA12080LDH-72	65.4	48.2	55.1	86.7	87	37.7	36.5	0.7	0.0	0	32	0.0	1.3	7.0	58	1.5	18.0								
	DYNA-GRO PLANTATION	59.4	47.2	55.3	85.3	85	34.2	34.5	1.0	0.0	42	43	0.3	1.7	7.5	60	1.5	17.4								
	GA10127-18E26	61.2	46.3	54.2	92.7	88	36.7	37.7	0.0	0.0	40	42	0.0	0.0	2.5	30	3.0	7.9								
	GA15VDH-FHB-MAS30-18ESc43F	41.2	45.7	52.0	86.7	91	31.8	32.5	0.0	1.0	55	52	0.0	0.0	1.5	18	3.5	4.7								
	LA15166-LDH296	70.2	45.7	53.7	97.0	102	36.2	35.8	0.0	0.0	0	0	0.7	0.0	5.0	38	2.5	10.9								
	NC15-21835	62.6	45.2	52.5	97.3	.	38.4	36.8	0.0	0.0	0	23	0.0	0.0	3.0	20	3.0	6.1								
	DYNA-GRO RIVERLAND	52.6	45.0	53.2	83.0	88	37.0	35.2	0.0	0.0	28	72	1.0	1.3	5.5	45	2.0	14.4								
	PROGENY PGX 20-11	79.0	44.7	52.1	106.0	104	38.2	37.7	0.0	0.0	0	0	0.0	0.0	2.0	50	2.0	13.7								
	NC11546-14	42.9	44.6	56.3	92.0	91	34.2	36.2	0.0	0.0	63	27	0.0	0.0	2.0	43	2.0	7.8								
	LA15166LDH-272	75.6	43.4	54.8	88.5	89	36.8	34.5	0.0	0.0	1	62	0.0	0.0	4.0	45	2.0	13.4								
	PIONEER 26R45	64.9	40.1	52.7	99.3	92	38.5	35.0	0.7	0.0	0	62	0.0	0.0	6.5	63	1.5	22.7								
	AGRIMAXX 481	58.6	40.0	55.4	85.0	87	35.0	36.3	1.0	0.0	52	23	0.0	0.7	3.5	33	2.5	7.3								
	GO WHEAT 6000	69.2	34.9	54.6	88.3	88	37.5	35.7	0.0	0.0	0	87	0.0	1.3	5.5	38	2.5	8.9								
	GA15VDH-FHB-MAS23-18LE43F	67.4	33.2	56.0	88.3	91	32.3	35.3	0.0	0.0	23	68	0.0	0.0	3.5	40	2.5	15.8								
	NC12164-200T	64.6	32.6	56.3	92.3	89	37.0	36.0	0.0	0.0	3	53	0.0	0.0	1.0	30	3.0	5.2								
	LIBERTY 5658	73.1	29.5	53.9	89.7	86	35.7	32.0	0.0	0.0	8	77	0.0	0.0	3.5	40	2.0	7.7								
	AGS 2038	67.1	25.5	54.8	92.3	92	38.3	37.3	0.0	0.0	0	0	1.0	0.0	2.5	45	2.0	12.4								
	USG 3640	68.2	58.5	54.6	87.3	102	37.7	38.0	0.0	0.0	33	0	0.7	0.0	1.0	33	2.0	11.3								

Table 12. Late maturity wheat performance trial at Alexandria for 2021. With and without fungicide.

 Brand / Variety <sup>1</sup>	Grain Yield <sup>2</sup> (bu/a), fungicide <sup>3</sup>		Test Weight (lbs/bu), fungicide	Heading Day <sup>4</sup> (of year), fungicide		Plant Height (in), fungicide	Plant Height (in), untreated	Lodging Score <sup>4</sup> (0-9), fungicide		Stripe Rust <sup>6</sup> (%), fungicide	Stripe Rust (%), untreated	FHB Score <sup>7</sup> (0-9), fungicide		Misted Nursery <sup>8</sup> FHB Score (0-9)	Misted Nursery FDK <sup>9</sup> (%)	Misted Nursery SDQ <sup>10</sup> (0-9)	Misted Nursery DON <sup>11</sup> (ppm)
	Grain Yield (bu/a), untreated			Heading Day (of year), untreated				Lodging Score, untreated				FHB Score (0-9), untreated					
MEAN	68.1	54.6	53.7	92.6	92	36.6	36.4	0.1	0.0	9	17	0.2	0.3	3.9	45	2.1	13.0
CV%	9	20	2	3	.	4	4	487	811	54	100	177	309	47	28	34	43
LSD(0.10)	8.7	18.8	1.9	3.6	.	1.8	1.4	NS <sup>12</sup>	NS	7	23	0.5	1.1	3.4	22	1.2	9.4


**Dean Lee Research Station in Alexandria, LA.** Boyd Padgett, Steve Harrison, Kelly Arceneaux, Allysson Harding, Hanamareddy Biradar, and Katie McCarthy Fontenot. 16 oz/acre Axial and 0.6 oz/acre Harmony Extra applied on 2/1/20.

- 1. Bolded 'Brand/variety'** indicates the entry is commercially available; others are non-released breeding lines.
- 2. Grain yield** is bushels per acre adjusted to 13% moisture.
- 3. Fungicide** used was Muravus Ace, rate of 13.7 oz/acre, applied at about boot stage and anthesis.
- 4. Heading day** recorded as the day approximately 50% of the total spikelets are visible.
- 5. Lodging score** on a scale of 0 = none to 9 = 100% lodged.
- 6. Stripe rust** rating indicates percentage leaf area of upper three leaves covered in rust spores.
- 7. FHB Score** is relative amount of heads showing field symptoms of FHB on a 0-9 scale.
- 8. Misted Nursery** inoculated with scabby corn and mist irrigated to create heavy Fusarium Headblight pressure.
- 9. FDK** is percent Fusarium Damaged Kernels.
- 10. SDQ** is seed quality, a relative, visual rating of seed plumpness, uniformity, and visible defects (disease, insect damage, etc.), 0 = poor.
- 11. DON** is Deoxynivalenol toxin concentration.
- 12. Not Significant (NS):** variety mean differences were not statistically significant.

Table 13. Late maturity wheat performance trial at Winnsboro for 2021. With and without fungicide.

Brand / Variety <sup>1</sup>	Grain Yield <sup>2</sup> (bu/a), fungicide <sup>3</sup>		Grain Yield (bu/a), untreated		Test Weight (lbs/bu), fungicide		Test Weight (lbs/bu), untreated		Lodging Score <sup>4</sup> (0-9), fungicide		Lodging Score, untreated		Heading Day <sup>5</sup> (of year), fungicide		Heading Day (of year), untreated		Stripe Rust <sup>6</sup> (%), fungicide		Stripe Rust (%), untreated		Phenotype <sup>7</sup> (0-9), fungicide		Phenotype (0-9), untreated		FHB Score <sup>8</sup> (0-9), fungicide		FHB Score (0-9), untreated		FDK <sup>9</sup> (%), fungicide		FDK (%), untreated		Seed Quality <sup>10</sup> (0-9), fungicide		Seed Quality (0-9), untreated		Misted Nursery <sup>11</sup> FHB Score (0-9)		Misted Nursery FDK (%)		Misted Nursery SDQ (0-9)		Misted Nursery DON <sup>12</sup> (ppm)			
PROGENY #CHAD	92.4	90.7	56.2	55.5	3.7	2.3	91.3	89.7	0	1	7.0	6.5	0.7	2.0	0.5	1.5	4.5	4.5	3.0	15	3.0	3.5																								
GO WHEAT 6000	87.7	89.8	58.5	57.5	1.3	2.0	90.7	90.7	0	1	6.0	6.5	1.0	2.3	0.0	1.0	6.0	6.0	3.0	20	3.0	2.2																								
AGRIMAXX 473	83.1	88.6	56.2	56.4	0.0	0.0	95.3	96.3	0	0	5.5	6.0	0.3	1.0	1.0	1.5	4.5	5.5	1.5	23	2.0	4.0																								
AGRIMAXX 492	93.0	88.5	57.8	58.0	0.3	0.7	90.7	91.0	0	1	7.0	7.5	1.3	2.7	0.5	3.5	6.0	5.0	2.5	10	4.5	1.2																								
SY VIPER	90.6	87.6	57.4	57.2	0.0	0.3	91.0	91.3	1	0	6.5	7.0	1.0	2.3	0.5	1.0	6.0	7.0	3.5	6	5.0	0.9																								
LA15203-LDH274	89.2	87.3	57.6	57.3	1.0	0.7	89.7	89.7	0	0	7.0	7.0	1.3	3.3	0.5	1.0	5.0	5.0	1.5	8	4.5	0.8																								
DYNA-GRO WX20738	91.8	87.3	56.6	55.8	0.0	0.0	90.3	90.3	0	0	7.0	7.0	1.0	1.3	0.5	1.0	6.0	5.5	3.5	13	4.0	0.5																								
DELTA GROW 1200	90.3	86.9	55.5	54.1	0.0	0.0	95.7	96.0	0	0	6.0	7.0	1.0	1.0	2.0	1.0	4.5	4.5																												
PROGENY PGS 20-15	88.3	86.9	58.0	56.9	1.3	1.0	95.3	94.0	0	0	6.0	6.5	1.0	2.0	2.0	3.0	4.5	4.0	2.5	15	4.0	2.4																								
PIONEER 26R45	91.0	86.7	56.3	55.5	0.0	0.0	96.7	97.3	0	0	6.0	6.0	0.0	0.3	1.0	1.0	4.5	5.0	1.5	13	3.5	2.6																								
AGRIMAXX 514	92.6	85.7	55.8	54.2	0.0	0.0	96.0	96.3	0	0	6.5	6.5	0.3	2.0	1.0	1.0	5.0	4.5	1.5	18	3.5	1.4																								
DYNA-GRO BLANTON	90.7	85.5	58.8	57.9	2.7	2.7	90.0	90.3	3	5	6.0	6.5	3.0	4.3	1.0	1.0	5.5	4.5	3.5	13	3.5	1.4																								
LANC11558-33	94.7	85.4	58.8	58.0	0.0	0.0	90.3	90.3	0	0	7.0	7.0	2.0	3.7	0.5	2.0	5.5	5.0	5.5	15	3.0	1.2																								
SY RICHIE	84.8	85.2	56.3	55.5	0.0	0.0	90.0	91.0	0	0	7.0	7.0	0.7	3.0	0.5	1.5	5.0	5.0	3.5	8	5.0	0.6																								
PROGENY PGX 19-12	95.6	85.1	55.3	54.4	1.3	0.3	95.0	95.7	0	0	6.5	7.0	1.0	1.7	1.0	2.0	4.5	5.0	1.5	15	2.5	2.1																								
PIONEER 26R41	94.5	84.6	56.7	56.3	0.0	0.0	94.7	94.0	0	0	6.5	6.5	0.7	1.7	0.5	2.0	5.5	5.5	2.0	20	2.5	2.7																								
LA12275DH-56	85.3	84.1	58.4	58.8	1.0	0.0	91.7	91.7	0	1	6.0	6.0	0.3	1.0	0.5	1.0	6.5	6.0	2.0	18	3.5	1.8																								
PROGENY PGX 20-8	84.7	83.8	56.0	55.8	0.0	0.0	99.7	99.3	0	0	6.0	6.5	0.3	1.0	1.0	0.5	4.5	5.0	1.0	10	3.5	1.7																								
USG 3536	91.3	83.8	56.4	55.7	0.0	0.0	97.3	94.7	0	0	5.5	6.0	0.3	0.7	1.5	2.5	5.0	4.5	1.0	13	2.5	1.2																								
DYNA-GRO 9811	91.2	83.5	57.3	56.4	0.0	0.0	91.0	91.3	0	0	7.0	6.5	1.0	2.3	1.5	1.0	4.5	5.5	2.5	23	2.5	3.5																								
LA13154D-WN1	94.5	83.3	57.8	56.2	0.3	0.0	91.3	93.7	2	4	6.5	6.0	1.7	3.0	1.0	1.0	4.5	5.0	2.0	53	2.0	4.0																								
LA15203-LDH200	85.7	83.2	58.3	58.5	0.3	0.0	94.3	94.3	0	0	7.0	7.0	0.7	1.0	0.5	1.0	5.0	5.5	1.0	18	3.0	3.7																								
AGS 2038	94.7	83.2	58.2	58.0	0.0	0.0	91.0	91.7	0	0	6.0	6.0	1.0	1.7	1.5	1.5	5.0	4.5	2.0	20	2.5	2.9																								
DYNA-GROG 9002	90.4	82.9	54.7	55.7	0.0	0.0	94.3	91.7	0	1	6.5	6.0	1.3	2.3	1.5	1.0	5.5	5.0	3.5	18	3.5	1.9																								
DYNA-GRO 9172	95.2	82.6	55.9	55.2	0.0	0.0	95.7	96.7	0	0	6.0	6.0	0.7	1.0	0.5	0.0	6.0	6.0	1.5	10	3.5	0.8																								
LA15166-LDH296	85.2	82.1	57.0	57.0	0.7	1.0	93.7	95.7	0	0	7.0	6.5	0.3	1.0	0.5	1.0	5.5	6.0	2.5	20	3.0	2.5																								
PROGENY #BUSTER	86.2	82.0	57.9	57.1	0.0	0.0	93.3	91.7	0	0	6.0	6.5	1.0	2.0	0.5	0.5	4.0	5.5	2.0	23	2.5	2.2																								
PROGENY #BULLET	85.0	81.3	56.5	55.7	0.0	0.0	97.3	96.0	0	0	5.5	6.0	0.0	1.0	1.0	1.0	5.0	4.0	1.5	23	2.5	2.1																								
DELTA GROW 1000	84.8	81.2	56.6	55.3	0.0	0.0	94.7	95.7	0	0	5.5	6.0	0.7	1.7	1.5	2.0	4.0	4.5	1.5	15	2.5	2.7																								
DELTA GROW 1800	80.1	81.0	58.5	58.4	0.3	0.7	90.7	91.0	0	0	6.5	6.5	1.0	1.0	1.0	1.0	4.5	5.0	2.0	15	3.5	2.6																								
AR09137UC-17-2	91.9	80.8	57.5	56.5	1.3	1.3	91.0	91.3	0	0	6.0	6.0	1.3	1.7	1.5	1.5	6.0	6.0	5.0	18	3.5	1.7																								
PIONEER 26R59	83.8	80.4	55.4	54.9	0.0	0.0	94.7	94.3	0	1	6.5	6.5	1.0	1.7	0.5	1.0	5.5	5.0	3.5	33	2.0	3.8													</											

Table 13. Late maturity wheat performance trial at Winnsboro for 2021. With and without fungicide.

 Brand / Variety <sup>1</sup>	Grain Yield <sup>2</sup> (bu/a), fungicide <sup>3</sup>		Grain Yield (bu/a), untreated		Test Weight (lbs/bu), fungicide		Test Weight (lbs/bu), untreated		Lodging Score <sup>4</sup> (0-9), fungicide		Lodging Score, untreated		Heading Day <sup>5</sup> (of year), fungicide		Heading Day (of year), untreated		Stripe Rust <sup>6</sup> (%), fungicide		Stripe Rust (%), untreated		Phenotype <sup>7</sup> (0-9), fungicide		Phenotype (0-9), untreated		FHB Score <sup>8</sup> (0-9), fungicide		FHB Score (0-9), untreated		FDK <sup>9</sup> (%), fungicide		FDK (%), untreated		Seed Quality <sup>10</sup> (0-9), fungicide		Seed Quality (0-9), untreated		Misted Nursery <sup>11</sup> FHB Score (0-9)		Misted Nursery FDK (%)		Misted Nursery SDQ (0-9)		Misted Nursery DON <sup>12</sup> (ppm)	
DYNA-GRO RIVERLAND LA15166LDH-272	91.9	75.7	59.1	57.2	1.0	1.0	90.3	90.3	10	13	5.5	5.0	1.7	2.7	2.0	1.0	4.5	4.5	2.5	18	2.5	4.5																						
	75.8	75.6	57.7	57.1	0.0	0.0	92.3	91.0	0	0	7.0	6.5	1.0	2.0	0.0	2.0	6.0	5.5	3.0	13	3.5	0.9																						
PROGENY PGX 20-2 USG 3640	82.7	75.5	59.0	57.8	0.7	0.0	98.0	96.0	2	3	5.5	5.5	0.0	0.7	1.0	0.5	3.5	4.5	1.0	10	3.5	1.5																						
SREXP119	87.6	75.4	58.5	57.3	1.0	0.0	90.3	91.7	8	15	5.5	5.5	2.0	3.0	0.5	1.5	5.5	4.5	2.0	13	4.0	1.1																						
AGS 2055	76.5	74.6	56.3	56.1	0.0	0.0	91.0	91.0	0	1	7.0	6.5	0.7	2.0	0.5	0.5	6.0	4.5	2.5	10	4.5	1.0																						
NC15-21835	89.5	74.4	56.3	55.0	0.3	0.0	93.0	91.7	3	7	6.0	6.0	1.0	2.0	2.5	1.5	5.0	4.5	3.0	18	4.5	3.4																						
	76.9	74.3	58.7	57.2	0.3	0.7	93.0	93.0	0	0	6.0	6.5	0.7	1.3	0.5	2.0	5.5	4.5	2.0	20	3.0	1.3																						
GO WHEAT LA754 NC12164-200T	80.4	73.4	56.0	53.9	0.0	2.0	90.3	90.3	3	5	6.5	6.0	2.3	4.3	3.0	2.5	5.0	4.5	3.5	13	5.0	2.2																						
AR15V31-26-2285W	89.1	73.1	58.8	57.7	0.0	0.3	92.3	94.3	3	5	6.0	6.0	0.7	2.7	1.5	1.0	5.5	4.5	3.5	15	3.0	0.4																						
LA15VDH-FHB-MAS10-16	84.6	72.8	58.8	58.4	0.3	0.0	91.3	91.0	2	14	5.5	5.0	1.0	1.7	0.5	1.5	5.0	6.0	2.5	5	3.5	1.0																						
DELTA GROW 1500	80.8	72.6	57.7	57.4	2.7	1.7	90.0	90.0	3	3	6.0	6.5	0.7	1.3	2.0	1.5	4.5	4.5	2.5	5	5.0	0.4																						
	89.7	72.6	55.3	52.7	0.0	0.0	100.3	101.7	0	0	6.0	6.0	0.7	1.3	2.0	2.5	4.5	4.0	2.0	18	3.0	2.6																						
GA15VDH-FHB-MAS23-18LE43F DYNA-GRO PLANTATION	87.9	72.1	58.7	56.6	1.0	0.7	92.0	91.3	2	19	7.0	5.0	1.0	2.3	1.0	1.5	4.5	4.0	2.5	5	4.0	0.4																						
LW2026	88.2	72.0	60.0	57.5	1.3	2.0	90.0	90.0	15	22	5.0	5.0	2.3	4.3	3.0	2.0	5.0	4.5	5.0	20	3.0	0.6																						
LA13009D-23	80.6	71.4	57.8	56.8	0.0	0.0	90.0	90.0	4	5	6.0	6.0	2.7	4.7	1.5	3.5	4.5	4.5	5.0	18	3.0	1.6																						
AGRIMAXX 481	85.1	71.3	58.5	56.9	0.7	1.7	91.0	90.7	3	7	6.5	5.5	2.0	3.3	0.5	2.0	6.5	5.5	2.0	28	2.5	2.8																						
	88.2	66.9	59.5	56.2	2.0	3.0	90.0	90.3	10	31	5.5	4.0	2.0	4.7	1.5	3.5	5.0	4.5	4.5	10	4.5	0.8																						
GA131246LDH-18E35	86.8	62.1	58.6	54.8	1.5	1.3	90.7	90.3	13	26	6.0	4.0	0.7	2.3	0.0	2.0	5.0	4.0	2.0	13	3.0	2.6																						
GA10127-18E26	82.7	61.8	57.9	55.5	0.7	0.3	94.3	94.3	10	17	5.0	5.0	0.7	2.3	0.0	1.5	5.5	4.5	2.5	20	3.5	3.3																						
AGS 3040	77.9	60.0	56.5	53.7	1.3	2.3	90.7	90.7	20	46	5.5	4.0	1.0	3.0	1.0	2.0	4.5	4.0	2.0	10	3.0	0.5																						
GA15VDH-FHB-MAS30-18ESc43F	83.1	58.2	56.8	53.4	1.3	0.0	90.7	90.7	7	16	6.0	5.0	2.0	3.7	4.0	2.5	4.0	3.5	4.0	28	2.5	0.1																						
NC11546-14	66.0	34.2	58.2	43.3	1.0	3.0	92.0	93.7	20	53	5.0	3.5	1.0	4.7	1.5	6.5	4.5	3.5	1.5	25	2.5	1.0																						
LA14016SB-BR5-3	70.1	33.6	56.1	41.0	0.5	4.3	92.7	92.7	35	60	4.5	3.0	1.7	5.0	0.0	10.0	6.0	3.0	3.5	23	3.0	1.7																						
MEAN	86.3	77.8	57.4	56.1	0.5	0.6	92.7	92.7	3	6	6.2	6.0	1.1	2.2	1.1	2.2	5.0	4.9	2.5	17	3.3	1.9																						
CV%	6	6	1	2	139	128	1	2	127	77	7.2	8.0	49	26	86	26	14	14	28	54	28	77																						
LSD(0.10)	7.3	6.1	0.8	1.2	1.0	1.1	1.8	2.0	6	6	0.7	0.8	0.7	0.8	NS <sup>13</sup>	1.7	1.2	1.1	1.2	15	1.5	2.5																						

**Macon Ridge Research Station in Winnsboro, LA.** Trey Price, Steve Harrison, Dustin Ezell, Myra Purvis, Kelly Arceneaux, Allysson Harding, Hanamareddy Biradar, and Katie McCarthy Fontenot. 0-60-60 preplant fertilizer. Planted 11-2-20. Zidua (3.25 oz/A) + metribuzin (2 oz/A) applied on 12/8/20. 30-0-0-2S topdress (50# N/A) on 1/28/21 and 3/4/21. Miravis Ace (13.7 oz/acre) applied to fungicide split reps on 4/6/21 and 4/19/21.

1. **Bolded** 'Brand/variety' indicates the entry is commercially available; others are non-released breeding lines.
2. **Grain yield** is bushels per acre adjusted to 13% moisture.
3. **Fungicide** used was Muravus Ace, rate of 13.7 oz/acre, applied at about boot stage and anthesis.
4. **Lodging score** on a scale of 0 = none to 9 = 100% lodged.
5. **Heading day** recorded as the day approximately 50% of the total spikelets are visible.
6. **Stripe rust** rating indicates percentage leaf area of upper three leaves covered in rust spores.
7. **Phenotype** represents overall visual appeal with a higher score indicating a more attractive plot. Average of three ratings in spring.
8. **FHB Score** is relative amount of heads showing field symptoms of FHB on a 0-9 scale.
9. **FDK** is percent Fusarium Damaged Kernels.
10. **Seed Quality (SDQ)** is a relative, visual rating of seed plumpness, uniformity, and visible defects (disease, insect damage, etc.), 0 = poor.
11. **Misted Nursery** inoculated with scabby corn and mist irrigated to create heavy Fusarium Headblight pressure.
12. **DON** is Deoxynivalenol toxin concentration.
13. **Not Significant (NS)**: variety mean differences were not statistically significant.



Table 14. Late maturity wheat performance trial at Winnsboro for two years, 2020 & 2021. With and without fungicide.



 Brand / Variety <sup>1</sup>	Grain Yield <sup>2</sup> (bu/a), fungicide <sup>3</sup>		Grain Yield (bu/a), untreated		Test Weight (lbs/bu), fungicide		Test Weight (lbs/bu), untreated		Lodging Score <sup>4</sup> (0-9), fungicide		Lodging Score, untreated		Heading Day <sup>5</sup> (of year), fungicide		Heading Day (of year), untreated		Stripe Rust <sup>6</sup> (%), fungicide		Stripe Rust (%), untreated		Phenotype <sup>7</sup> (0-9), fungicide		Phenotype (0-9), untreated		FHB Score <sup>8</sup> (0-9), fungicide		FHB Score (0-9), untreated		FDK <sup>9</sup> (%), fungicide		FDK (%), untreated		Seed Quality <sup>10</sup> (0-9), fungicide		Seed Quality (0-9), untreated		Misted Nursery <sup>11</sup> FHB Score (0-9)		Misted Nursery FDK (%)		Misted Nursery SDQ (0-9)		Misted Nursery DON <sup>12</sup> (ppm)		
PIONEER 26R45	89.5	86.6	56.2	55.8	0.0	0.0	94.2	94.3	0	0	5.9	5.8	0.5	0.7	6	3	7.0	7.5	1.8	7	5.0	3.5																							
AGRIMAXX 473	85.2	82.2	56.3	56.2	0.0	0.0	93.8	94.3	0	0	5.8	5.8	0.7	1.0	3	1	7.5	6.5	1.5	12	5.0	3.0																							
PROGENY #BULLET	85.1	80.6	56.5	56.4	0.0	0.0	94.8	93.8	0	0	5.6	5.8	0.7	1.0	1	1	8.0	7.5	1.5	12	5.0	2.5																							
PROGENY #CHAD	87.9	80.4	55.8	54.0	3.7	2.3	85.2	86.2	0	1	6.4	6.1	2.2	3.7	1	5	4.5	5.0	5.3	9	3.8	4.2																							
SY VIPER	88.4	80.4	57.6	57.0	0.0	0.3	89.3	89.0	1	0	6.6	6.4	1.8	2.7	3	8	5.5	5.5	3.3	3	6.0	8.3																							
PROGENY PGX 19-12	93.8	80.3	55.4	54.7	1.3	0.3	93.8	93.8	0	0	6.6	6.4	1.2	1.7	1	3	7.0	7.0	1.5	8	4.8	3.4																							
AGRIMAXX 492	88.3	80.2	58.3	57.4	0.3	0.7	87.5	88.5	0	1	6.8	7.0	3.0	4.2	1	15	7.0	6.5	4.5	16	5.3	7.3																							
GO WHEAT 6000	82.2	79.6	57.9	56.3	1.3	2.0	84.8	86.7	0	1	6.1	6.0	2.7	3.7	3	5	6.5	6.5	4.3	15	4.5	6.0																							
DELTA GROW 1000	86.4	79.2	56.9	55.9	0.0	0.0	93.2	93.8	0	0	5.7	5.8	1.0	1.3	3	1	6.0	7.0	1.8	8	5.0	3.3																							
PROGENY #BUSTER	83.5	78.0	58.0	57.7	0.0	0.0	92.0	90.7	0	0	5.7	6.3	1.3	2.3	8	5	6.0	6.0	2.0	14	4.3	6.0																							
SY RICHIE	81.9	77.9	55.9	54.8	0.0	0.0	85.2	87.8	0	0	6.9	6.5	1.5	4.7	8	15	6.5	6.0	3.5	9	5.0	6.3																							
LIBERTY 5658	86.1	77.5	58.0	56.8	0.0	0.0	85.7	85.8	5	14	6.0	5.0	2.2	3.5	3	5	7.0	6.0	2.3	8	5.8	5.1																							
DYNA-GRO 9811	86.9	77.3	57.5	56.7	0.0	0.0	87.8	90.3	0	0	6.3	6.0	2.0	3.0	8	8	5.0	6.0	3.3	15	4.5	6.2																							
LA12275DH-56	80.7	77.3	57.8	57.5	1.0	0.0	89.0	88.8	0	1	5.8	6.3	1.7	2.7	8	10	7.5	5.0	3.3	13	4.5	5.5																							
AR09137UC-17-2	87.9	77.1	57.9	55.6	1.3	1.3	88.0	88.5	0	0	6.1	5.8	3.5	3.8	10	15	6.5	6.0	4.5	13	5.0	6.1																							
PROGENY PGX 20-15	82.4	76.1	57.0	55.3	1.3	1.0	91.5	90.3	0	0	6.0	6.1	2.7	3.5	13	18	5.5	3.0	2.8	11	4.8	8.0																							
LANC11558-33	83.0	76.0	58.4	56.7	0.0	0.0	85.2	86.0	0	0	6.4	6.5	3.2	5.7	1	8	7.0	6.0	6.8	9	5.0	5.4																							
DYNA-GRO 9002	86.5	76.0	56.3	55.8	0.0	0.0	90.8	90.5	0	1	6.3	6.0	2.8	3.3	1	5	8.0	7.0	3.3	9	5.8	2.2																							
LA13154D-WN1	88.1	75.8	57.4	54.8	0.3	0.0	88.2	88.8	2	4	6.3	5.9	3.3	4.8	3	10	6.0	4.5	3.5	29	4.0	7.2																							
LA15203-LDH112	80.5	75.7	57.8	58.2	0.0	0.0	91.3	90.8	0	0	6.0	5.9	2.0	2.0	10	5	6.0	6.5	2.0	9	3.8	4.4																							
DELTA GROW 1800	77.8	75.5	58.9	57.4	0.3	0.7	85.5	87.3	0	0	6.4	6.8	1.7	2.8	3	1	8.0	7.0	4.5	10	4.5	5.0																							
LA15203-LDH200	81.6	75.2	58.1	57.7	0.3	0.0	92.7	93.0	0	0	6.6	6.5	1.0	1.3	8	8	6.5	7.0	1.5	11	5.0	6.1																							
SY 547	83.7	74.8	57.3	56.4	0.0	0.0	90.7	90.5	0	4	6.0	5.5	1.7	1.7	3	13	6.5	6.0	2.3	9	4.8	3.8																							
PIONEER 26R59	79.9	74.2	55.7	55.1	0.0	0.0	92.2	92.5	0	1	6.0	5.9	1.8	2.5	6	8	7.0	6.0	3.3	18	4.5	5.3																							
AGS 2038	86.8	70.5	57.2	55.4	0.0	0.0	89.2	89.8	0	0	6.1	5.6	2.7	3.2	18	38	4.5	4.0	4.3	33	2.8	22.2																							
HARVEY AP 1983	81.5	70.4	56.6	54.4	0.3	0.0	84.5	84.5	4	5	6.3	5.5	4.3	6.2	18	28	5.0	4.5	5.0	11	3.5	10.7																							
LA12080LDH-72	78.4	69.9	56.5	54.6	0.0	0.7	85.7	86.2	0	0	6.2	6.5	2.7	4.5	3	10	6.5	5.0	3.3	18	3.3	3.9																							
DYNA-GRO RIVERLAND	85.1	69.2	58.1	55.1	1.0	1.0	84.7	84.2	10	13	5.7	5.0	4.3	5.3	15	40	5.5	3.5	2.8	11	3.5	12.7																							
AGS 2055	83.8	68.7	56.1	53.8	0.3	0.0	90.2	89.8	3	7	6.1	5.9	2.7	3.5	25	20	5.0	4.0	4.8	28	4.0	24.4																							
LA15166LDH-272	75.1	68.7	57.7	56.6	0.0	0.0	88.7	88.7	0	0	6.4	5.6	2.5	3.0	3	13	7.0	5.5	4.3	9	5.0	4.2																							
DYNA-GRO BLANTON	84.5	67.9	57.3	54.0	2.7	2.7	84.0	84.7	3	5	6.0	5.1	5.2	6.3	28	45	4.0	3.5	4.0	21	3.5	11.8																							
DYNA-GRO PLANTATION	80.1	67.2	58.8	55.6	1.3	2.0	83.5	84.0	15	22	5.2	5.4	4.2	6.3	23	30	4.0	4.0	6.3	21	4.8	9.4																							
USG 3640	82.3	67.0	57.8	55.0	1.0	0.0	86.3	85.3	8	15	5.7	5.4	4.0	5.5	18	33	6.0	3.5	3.0	8	5.5	4.4																							
GO WHEAT LA754	78.1	66.3	56.2	53.0	0.0	2.0	84.7	84.7	3	5	6.1	5.5	4.0	6.2	15	50	6.0	3.0	4.5	10	6.0	6.4																							
AGS 3040	78.7	65.6	56.5	54.3	1.3	2.3	84.8	85.8	20	46	5.9	5.0	2.0	4.0	1	5	6.5	5.0	4.0	8	5.0	6.2																							
AGRIMAXX 481	83.4	63.6	58.5	55.0	2.0	3.0	84.0	84.2	10	31	5.7	4.4	4.2	6.5	10	30	6.5	4.5	6.0	13	5.0	7.4																							
Mean	83.7	74.6	57.2	55.7	0.6	0.6	88.4	88.7	2	5	6.1	5.8	2.5	3.6	8	14	6.2	5.5	3.5	13	4.6	6.9																							
CV%	6	6	1	1	.	.	2	2	.	.	8	9	27	16	.	16	.	.	22	71	21	38																							
LSD(0.10)	7.0	9.5	1.5	2.5	.	.	4.2	4.3	.	.	0.9	1.0	1.6	2.1	.	2.1	.	.	2.0	16	2.0	11.1																							

Table 14. Late maturity wheat performance trial at Winnsboro for two years, 2020 & 2021. With and without fungicide.

	Grain Yield <sup>2</sup> (bu/a), fungicide <sup>3</sup>	Grain Yield (bu/a), untreated	Test Weight (lbs/bu), fungicide	Test Weight (lbs/bu), untreated	Lodging Score <sup>4</sup> (0-9), fungicide	Lodging Score, untreated	Heading Day <sup>5</sup> (of year), fungicide	Heading Day (of year), untreated	Stripe Rust <sup>6</sup> (%), fungicide	Stripe Rust (%), untreated	Phenotype <sup>7</sup> (0-9), fungicide	Phenotype (0-9), untreated	FHB Score <sup>8</sup> (0-9), fungicide	FHB Score (0-9), untreated	FDK <sup>9</sup> (%), fungicide	FDK (%), untreated	Seed Quality <sup>10</sup> (0-9), fungicide	Seed Quality (0-9), untreated	Misted Nursery <sup>11</sup> FHB Score (0-9)	Misted Nursery FDK (%)	Misted Nursery SDQ (0-9)	Misted Nursery DON <sup>12</sup> (ppm)
	Brand / Variety <sup>1</sup>																					

**Macon Ridge Research Station in Winnsboro, LA.** Trey Price, Steve Harrison, Dustin Ezell, Myra Purvis, Kelly Arceneaux, Allysson Harding, Hanamareddy Biradar, and Katie McCarthy Fontenot.

1. **Bolded** 'Brand/variety' indicates the entry is commercially available; others are non-released breeding lines.
2. **Grain yield** is bushels per acre adjusted to 13% moisture.
3. **Fungicide** used was Muravus Ace, rate of 13.7 oz/acre, applied at about boot stage and anthesis.
4. **Lodging score** on a scale of 0 = none to 9 = 100% lodged.
5. **Heading day** recorded as the day approximately 50% of the total spikelets are visible.
6. **Stripe rust** rating indicates percentage leaf area of upper three leaves covered in rust spores.
7. **Phenotype** represents overall visual appeal with a higher score indicating a more attractive plot. Average of three ratings in spring.
8. **FHB Score** is relative amount of heads showing field symptoms of FHB on a 0-9 scale.
9. **FDK** is percent Fusarium Damaged Kernels.
10. **Seed Quality (SDQ)** is a relative, visual rating of seed plumpness, uniformity, and visible defects (disease, insect damage, etc.), 0 = poor.
11. **Misted Nursery** inoculated with scabby corn and mist irrigated to create heavy Fusarium Headblight pressure.
12. **DON** is Deoxynivalenol toxin concentration.



Table 15. Fusarium Headblight Misted Nursery Data from Alexandria and Winnsboro for Normal Wheat Variety Trials.



 AgCenter <small>Research · Extension · Teaching</small> Brand / Variety				FHB <sup>3</sup>						FDK <sup>6</sup>						DON <sup>7</sup>					
	2021 FHB Reaction	3 Year FHB Index <sup>2</sup>	2 Year FHB Index	AX + WN 2021 (0-9)	FHB WN 2020 (0-9)	FHB WN 2019 (0-9)	FHB WN 2018 (0-9)	2 Year FHB Mean <sup>4</sup> (0-9)	3 Year FHB Mean <sup>5</sup> (0-9)	AX + WN 2021 (%)	FDK WN 2020 (%)	FDK WN 2019 (%)	FDK WN 2018 (%)	2 Year FDK Mean <sup>4</sup> (%)	3 Year FDK Mean <sup>5</sup> (%)	AX + WN 2021 (ppm)	DON WN 2020 (ppm)	DON WN 2019 (ppm)	DON WN 2018 (ppm)	2 Year DON Mean <sup>4</sup> (ppm)	3 Year DON Mean <sup>5</sup> (ppm)
	Type <sup>1</sup>																				
LIBERTY 5658	R	5.9	6.6	2.8	1.8	4.0	.	2.6	2.9	24	4	15	.	14	14	5	5	4	.	5	5
DELTA GROW 1800	R	6.5	7.6	1.7	4.3	4.0	2.0	3.3	3.4	26	6	15	5	16	16	6	5	3	3	6	5
PROGENY #BULLET	MR	6.9	4.9	1.7	1.8	5.0	2.8	1.1	2.0	26	5	50	8	14	21	5	.	17	3	4	6
DYNA-GRO 9002	MR	7.0	5.8	3.3	1.5	5.0	.	2.4	3.1	29	1	68	.	15	26	6	2	12	.	4	5
SY 547	MR	7.6	6.1	2.3	2.5	4.5	.	1.9	2.4	25	3	73	.	14	25	5	5	12	.	5	7
DELTA GROW 1000	MR	8.2	5.7	2.0	1.0	4.5	1.3	1.4	2.1	28	1	70	5	14	25	7	3	19	4	5	8
AGRIMAXX 473	MR	8.2	4.3	1.3	1.4	5.5	1.3	1.0	2.0	25	2	73	5	11	25	5	3	24	4	4	8
SY RICHIE	MR	8.2	8.3	3.8	2.8	7.0	-	3.6	4.3	23	9	40	.	16	21	5	8	6	.	6	6
DYNA-GRO 9811	MR	8.6	7.2	1.8	2.5	5.5	2.3	2.0	2.7	30	5	80	15	18	30	6	6	12	7	6	7
PROGENY PGX 19-12	MR	.	6.7	1.8	1.0	.	.	1.3	.	29	3	.	.	15	.	7	6	.	.	6	.
LA15203-LDH112	MR	.	7.2	3.0	1.3	.	.	2.0	.	30	2	.	.	16	.	8	5	.	.	6	.
LA15203-LDH200	MR	.	7.6	1.3	3.3	.	.	1.4	.	29	7	.	.	16	.	9	6	.	.	8	.
LA15166LDH-272	MR	.	8.2	3.5	3.8	.	.	3.4	.	29	4	.	.	16	.	7	5	.	.	6	.
LA12080LDH-72	MR/MS	9.1	11.6	4.8	5.0	4.5	.	5.1	5.0	41	10	8	.	27	23	9	6	2	.	8	7
PROGENY #BUSTER	MR/MS	9.4	7.0	2.7	1.0	5.0	.	1.7	2.4	29	4	65	.	16	26	6	6	22	.	6	9
AGRIMAXX 492	MR/MS	9.4	10.3	4.0	4.8	5.5	2.5	4.1	4.4	26	18	43	15	20	24	8	8	5	9	8	8
AGRIMAXX 481	MR/MS	9.5	10.2	4.0	5.5	8.0	-	5.1	5.7	21	14	38	.	18	22	4	10	5	5	7	7
USG 3640	MR/MS	9.7	10.3	1.7	4.3	8.0	4.3	3.9	4.8	23	5	48	33	21	26	6	10	4	11	8	7
SY VIPER	MR/MS	9.8	9.7	3.8	2.0	5.5	2.8	2.8	3.3	28	2	53	13	15	23	7	12	10	4	10	10
GO WHEAT 6000	MR/MS	.	9.2	4.3	6.0	.	.	4.5	.	29	14	.	.	18	.	6	7	.	.	6	.
PROGENY #CHAD	MR/MS	.	9.4	3.0	5.3	.	.	4.6	.	33	2	.	.	17	.	9	5	.	.	7	.
LANC11558-33	MR/MS	.	9.7	4.8	6.0	.	.	6.3	.	21	4	.	.	15	.	4	8	.	.	6	.
LA12275DH-56	MR/MS	.	9.7	3.5	4.5	.	.	3.9	.	33	9	.	.	19	.	8	7	.	.	8	.
PIONEER 26R45	MS	9.9	9.6	4.0	1.0	5.0	0.5	2.5	3.0	38	2	60	5	19	27	13	6	11	3	9	10
GO WHEAT LA754	MS	10.4	11.8	4.0	6.5	5.0	3.8	5.4	5.3	23	18	55	30	22	29	8	10	3	10	9	8
PIONEER 26R59	MS	10.8	10.0	3.5	1.5	6.5	2.0	2.5	3.3	50	3	78	18	27	37	10	6	13	6	8	9
DYNA-GRO PLANTATION	MS	12.4	14.2	6.3	7.3	8.0	.	6.0	6.4	40	34	50	.	30	34	9	12	3	.	10	9
AGS 3040	MS	12.7	14.8	5.0	4.0	7.0	2.5	4.9	5.3	44	3	45	10	24	28	20	8	3	3	14	12
PROGENY PGX 20-15	MS	.	10.6	2.3	4.8	.	.	3.7	.	27	13	.	.	19	.	8	11	.	.	9	.
AR09137UC-17-2	MS	.	11.5	5.5	2.8	.	.	4.3	.	39	5	.	.	22	.	12	7	.	.	10	.
LA13154D-WN1	MS	.	12.2	3.5	4.8	.	.	4.4	.	48	10	.	.	29	.	10	8	.	.	9	.
DYNA-GRO BLANTON	S	13.4	15.1	4.0	6.3	9.0	.	4.4	5.3	38	53	65	.	38	43	8	17	4	.	12	11
DYNA-GRO RIVERLAND	S	.	14.9	4.0	3.8	.	.	4.6	.	31	11	.	.	28	.	9	18	.	.	14	.
HARVEY AP 1983	S	.	16.2	4.8	7.5	.	.	6.1	.	38	26	.	.	31	.	8	18	.	.	13	.
AGS 2038	VS	17.5	16.5	2.3	4.0	8.0	4.5	3.3	4.2	33	28	95	38	32	45	8	27	25	17	17	19
AGS 2055	VS	18.9	19.6	5.0	4.8	9.0	3.3	4.5	5.4	45	24	95	45	34	47	13	28	16	20	20	19
AGRIMAXX 514	.	.	.	1.8	.	.	.	.	.	31	.	.	.	.	.	8	.	.	.	.	.
AR11051-15-3	.	.	.	2.3	.	.	.	.	.	36	.	.	.	.	.	8	.	.	.	.	.
AR15V31-26-2285W	.	.	.	2.0	.	.	.	.	.	20	.	.	.	.	.	7	.	.	.	.	.
DELTA GROW 1200	.	.	.	5.0	.	.	.	.	.	43	.	.	.	.	.	14	.	.	.	.	.
DELTA GROW 1500	.	.	.	2.0	.	.	.	.	.	28	.	.	.	.	.	7	.	.	.	.	.
DYNA-GRO 9172	.	.	.	1.8	.	.	.	.	.	23	.	.	.	.	.	5	.	.	.	.	.


Table 15. Fusarium Headblight Misted Nursery Data from Alexandria and Winnsboro for Normal Wheat Variety Trials.

				FHB <sup>3</sup>						FDK <sup>6</sup>						DON <sup>7</sup>						
	2021 FHB Reaction Type <sup>1</sup>	3 Year FHB Index <sup>2</sup>	2 Year FHB Index	AX +	FHB	FHB	FHB	2 Year	3 Year	AX +	FDK	FDK	FDK	2 Year	3 Year	AX +	DON	DON	DON	2 Year	3 Year	
				WN	WN	WN	WN	FHB	FHB	WN	WN	WN	WN	FDK	FDK	FDK	FDK	WN	WN	WN	DON	DON
				2021	2020	2019	2018	Mean <sup>4</sup>	Mean <sup>5</sup>	2021	2020	2019	2018	Mean <sup>4</sup>	Mean <sup>5</sup>	2021	2020	2019	2018	Mean <sup>4</sup>	Mean <sup>5</sup>	
Brand / Variety				(0-9)	(0-9)	(0-9)	(0-9)	(0-9)	(0-9)	(%)	(%)	(%)	(%)	(%)	(%)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	
DYNA-GRO WX20738	.	.	.	4.3	.	.	.	.	.	29	.	.	.	.	.	6	.	.	.	.	.	
GA10127-18E26	.	.	.	2.5	.	.	.	.	.	25	.	.	.	.	.	6	.	.	.	.	.	
GA12505B14-18LE23F	.	.	.	5.0	.	.	.	.	.	39	.	.	.	.	.	7	.	.	.	.	.	
GA131246LDH-18E35	.	.	.	3.8	.	.	.	.	.	24	.	.	.	.	.	7	.	.	.	.	.	
GA15VDH-FHB-MAS23-18LE43F	.	.	.	3.0	.	.	.	.	.	23	.	.	.	.	.	8	.	.	.	.	.	
GA15VDH-FHB-MAS30-18ESc43I	.	.	.	2.8	.	.	.	.	.	23	.	.	.	.	.	2	.	.	.	.	.	
LA13009D-23	.	.	.	3.5	.	.	.	.	.	35	.	.	.	.	.	7	.	.	.	.	.	
LA14016SB-BR5-3	.	.	.	4.8	.	.	.	.	.	36	.	.	.	.	.	8	.	.	.	.	.	
LA15166-LDH296	.	.	.	3.8	.	.	.	.	.	29	.	.	.	.	.	7	.	.	.	.	.	
LA15203-LDH274	.	.	.	1.5	.	.	.	.	.	25	.	.	.	.	.	8	.	.	.	.	.	
LA15VDH-FHB-MAS10-16	.	.	.	2.8	.	.	.	.	.	19	.	.	.	.	.	4	.	.	.	.	.	
LW2026	.	.	.	5.8	.	.	.	.	.	44	.	.	.	.	.	9	.	.	.	.	.	
NC11363-25	.	.	.	3.5	.	.	.	.	.	30	.	.	.	.	.	7	.	.	.	.	.	
NC11546-14	.	.	.	1.8	.	.	.	.	.	34	.	.	.	.	.	4	.	.	.	.	.	
NC12164-200T	.	.	.	2.3	.	.	.	.	.	23	.	.	.	.	.	3	.	.	.	.	.	
NC15-21835	.	.	.	2.3	.	.	.	.	.	20	.	.	.	.	.	3	.	.	.	.	.	
NC16-19288	.	.	.	2.7	.	.	.	.	.	35	.	.	.	.	.	8	.	.	.	.	.	
PIONEER 26R41	.	.	.	1.8	.	.	.	.	.	40	.	.	.	.	.	11	.	.	.	.	.	
PROGENY PGX 20-11	.	.	.	2.0	.	.	.	.	.	35	.	.	.	.	.	9	.	.	.	.	.	
PROGENY PGX 20-15	.	.	.	2.3	.	.	.	.	.	27	.	.	.	.	.	8	.	.	.	.	.	
PROGENY PGX 20-2	.	.	.	1.0	.	.	.	.	.	26	.	.	.	.	.	5	.	.	.	.	.	
PROGENY PGX 20-8	.	.	.	1.0	.	.	.	.	.	26	.	.	.	.	.	6	.	.	.	.	.	
SREXP117	.	.	.	2.8	.	.	.	.	.	23	.	.	.	.	.	5	.	.	.	.	.	
SREXP119	.	.	.	3.5	.	.	.	.	.	19	.	.	.	.	.	7	.	.	.	.	.	
USG 3536	.	.	.	4.5	.	.	.	.	.	48	.	.	.	.	.	14	.	.	.	.	.	
MEAN	.	.	.	3.2	3.6	6.2	2.5	3.5	3.9	30	11	60	21	20	28	7	9	10	9	8	9	
CV%	.	.	.	42	46	14	31	35	32	36	90	28	32	56	48	54	40	27	35	46	46	
LSD(0.10)	.	.	.	2.3	2.8	1.5	1.3	1.9	1.6	18	18	28	11	12	15	7	9	5	4.6	6.3	6.9	

Misted nurseries are inoculated with scabby corn and mist irrigated to create heavy Fusarium Headblight pressure. Data from 2021 include Alexandria and Winnsboro nurseries; data from previous years are Winnsboro location only.

1. **FHB Reaction Type** is observed reaction based on FDK and DON for two or more years. Reaction Types are Resistant, Moderately Resistant, Moderately Susceptible, Susceptible, and Very Susceptible.
2. **FHB Index** is a numerical rating that is  $10 * (\text{FHB\% MEAN} + \text{FDK\% MEAN} + 2 * \text{DON\% MEAN}) / 4$ . It weighs DON twice because FDK values are much higher than DON and DON determines rejection. It standardized 2 vs 3 years by using percent of the mean rather than numerical value. 3 year covers data from 2019-2021, while 2 year covers 2020-21.
3. **FHB rating** is a 0-9 score of head symptoms, where a 0 indicates no symptoms and a 9 indicates complete head coverage.
4. **2 year** means incorporate all data from 2020 & 2021.
5. **3 year** means incorporate all data from 2019, 2020, & 2021.
6. **FDK** is percent Fusarium Damaged Kernels determined by visual inspection and comparison to standards.
7. **DON** is parts per million of Deoxynivalenol toxin.

Table 16. Oat variety trial data from Winnsboro, LA. 2021.

									
Brand / Variety <sup>1</sup>	Grain Yield (bu/a)	Test Weight (lbs/bu)	Growth Habit <sup>2</sup> (0-9)	Leafiness <sup>3</sup> (0-9)	Winter Stress <sup>4</sup> (0-9)	Heading Day <sup>5</sup> (of year)	Lodging Score <sup>6</sup> (0-9)	Crown Rust <sup>7</sup> (%)	Phenotype <sup>8</sup> (0-9)
NC12-3578	110.5	33.2	6.3	4.6	3.6	95.7	2.0	40	5.1
LA10044SSBS-1	104.5	33.1	4.4	4.4	4.4	89.2	6.0	37	4.1
NC12-3922	91.7	33.7	5.5	4.6	3.2	91.5	2.7	13	5.9
<b>HORIZON 270</b>	<b>90.4</b>	<b>31.9</b>	<b>4.6</b>	<b>4.1</b>	<b>2.6</b>	<b>89.5</b>	<b>3.0</b>	<b>18</b>	<b>5.0</b>
<b>LA99016 CK</b>	<b>89.2</b>	<b>33.5</b>	<b>5.8</b>	<b>5.6</b>	<b>2.6</b>	<b>93.3</b>	<b>3.3</b>	<b>15</b>	<b>6.2</b>
TX16OCS7100	87.5	32.2	5.5	5.1	2.6	93.2	1.0	4	5.8
FL12034-10	86.8	30.4	4.0	5.0	3.4	89.3	1.3	15	5.8
LA14100SBS-43-1	84.3	33.3	4.8	5.1	3.6	92.2	1.3	7	5.9
LA14100SBS-49-1-1	83.9	32.3	5.6	5.8	2.4	94.7	3.3	5	6.0
FL11017-7	83.3	33.1	4.5	4.9	3.2	89.0	7.3	32	5.0
<b>TAMO 412</b>	<b>81.7</b>	<b>33.7</b>	<b>5.6</b>	<b>5.0</b>	<b>2.0</b>	<b>90.3</b>	<b>3.0</b>	<b>1</b>	<b>5.9</b>
<b>HORIZON 306</b>	<b>78.8</b>	<b>35.3</b>	<b>5.6</b>	<b>5.5</b>	<b>2.8</b>	<b>95.8</b>	<b>5.0</b>	<b>30</b>	<b>5.9</b>
TX14OCS5212	77.0	29.5	5.1	5.5	4.4	91.0	4.3	18	5.6
TX15OCS6163	73.9	33.9	5.6	4.3	2.8	92.8	4.3	5	5.3
<b>BOB</b>	<b>71.4</b>	<b>35.0</b>	<b>5.0</b>	<b>4.4</b>	<b>3.4</b>	<b>90.8</b>	<b>6.3</b>	<b>48</b>	<b>4.2</b>
<b>JUGGERNAUT</b>	<b>68.4</b>	<b>31.4</b>	<b>3.9</b>	<b>4.4</b>	<b>4.8</b>	<b>89.7</b>	<b>2.0</b>	<b>20</b>	<b>4.4</b>
TX15OCS6142	67.4	34.8	3.8	4.3	5.0	88.8	6.3	13	4.8
NC12-3447	64.5	31.2	5.4	5.1	3.0	90.8	7.0	33	4.5
LA14063SBS-36-1	61.0	31.9	5.1	4.3	2.6	93.0	5.7	22	5.5
NC17-6550	60.7	32.0	6.6	4.6	2.6	95.2	8.3	47	4.7
TX16OCS7015	57.5	30.8	3.5	4.4	4.2	88.3	5.7	25	4.2
LA10001SSBS-20-1	54.3	33.3	6.6	6.3	2.6	97.3	5.0	22	5.5
<b>FL0720-R6 (SWEET CAROLINE)</b>	<b>52.8</b>	<b>32.9</b>	<b>5.1</b>	<b>4.8</b>	<b>4.6</b>	<b>95.0</b>	<b>8.3</b>	<b>45</b>	<b>4.4</b>
FLLA09044SBS-U1	49.5	32.1	4.0	4.4	4.6	88.7	5.0	33	3.5
<b>BROOKS CK</b>	<b>48.7</b>	<b>28.2</b>	<b>4.4</b>	<b>4.6</b>	<b>4.0</b>	<b>90.5</b>	<b>9.0</b>	<b>77</b>	<b>4.2</b>
<b>MEAN</b>	<b>75.0</b>	<b>32.5</b>	<b>5.1</b>	<b>4.8</b>	<b>3.4</b>	<b>91.8</b>	<b>4.7</b>	<b>25</b>	<b>5.1</b>
<b>CV%</b>	<b>24</b>	<b>2</b>	<b>8</b>	<b>11</b>	<b>35</b>	<b>2</b>	<b>37</b>	<b>37</b>	<b>14</b>
<b>LSD(0.10)</b>	<b>24.8</b>	<b>0.8</b>	<b>0.5</b>	<b>0.6</b>	<b>1.3</b>	<b>1.5</b>	<b>2.4</b>	<b>12.6</b>	<b>0.8</b>

**Macon Ridge Research Station, Winnsboro, LA.** Planting 11/21/21 & harvest 5/30/21. 30-0-0 # + 30-0-0 # split UAN topdress. Amber for weed control. Stephen Harrison, Trey Price, Kelly Arceneaux, Dustin Ezell, Myra Purvis. CV's are high due to pattern lodging resulting from strong downdrafts after heading.

1. **Bolded** 'Brand/variety' indicates the entry is commercially available; others are non-released breeding lines.
2. **Growth Habit** where 0 = very early springlike; 9 = very late winter/prostrate. Data includes ratings from Baton Rouge and Winnsboro.
3. **Leafiness** where 0 = poor leafiness/forage; 9 = excellent forage potential/very leafy. Data includes ratings from Baton Rouge and Winnsboro.
4. **Winter Stress** tolerance, where 0 = yellow/poor; 9 = dark green/excellent tolerance. Data includes ratings from Baton Rouge and Winnsboro.
5. **Heading Day** recorded as the day approximately 50% of the total spikelets are visible. Data includes ratings from Baton Rouge and Winnsboro.
6. **Lodging score** scale of 0 = none to 9 = 100% lodged.
7. **Crown Rust** is percent tissue of upper three leaves affected by rust.
8. **Phenotype** is general appearance rating (vigor, color, tillering, etc). Average of overall rating in winter and spring. 0 = poor, 9 = excellent. Data includes ratings from Baton Rouge and Winnsboro.

## **Appendix A. Entries in the 2021 Louisiana Agricultural Experiment Station Small Grain Performance Trials.**

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### **WHEAT**

#### **AgriMAXX**

AgriMAXX 473, 481, 492, 514  
AgriMAXX Wheat Company  
7167 Highbanks Road  
Mascoutah, IL 62258

#### **AgriPro**

SREXP117, SREXP119, SY Richie, SY Viper, SY 547  
AgriPro  
1521 N Convent St./Suite 200  
Bourbonnais, IL 60914

#### **AGSouth Genetics**

AGS 3015  
AGSouth Genetics  
1113 Pretoria Road/P.O. Box 398  
Albany, GA 31708

#### **University of Arkansas**

All numbered AR lines  
University of Arkansas Division of Agriculture  
1366 W. Altheimer Dr.  
Fayetteville, AR 72704

#### **Delta Grow**

Delta Grow 1000, 1200, 1500, 1800, 3500  
Delta Grow Seed  
220 N W 2<sup>nd</sup>/P.O. Box 219  
England, AR 72046

#### **Dyna-Gro**

Dyna-Gro Blanton, Plantation, Riverland, WX20738,  
9002, 9172, 9811  
Dyna-Gro Seed  
11 Gin Road  
Rayville, LA 71269

#### **University of Florida**

All numbered FL lines  
University of Florida  
3105 McCarty Hall B  
Gainesville, FL 32611

#### **University of Georgia**

All numbered GA lines  
University of Georgia  
1109 Experiment St.  
Griffin, GA 30223

#### **Harvey**

Harvey AP 1983  
Harvey Fertilizer & Gas Company  
P.O. Box 189  
Kinston, NC 28502

#### **Local Seed Company**

LW2026  
Local Seed Company LLC  
802 Rozelle St.  
Memphis, TN 38104

**LSU AgCenter**

All numbered LA lines  
Louisiana Agric. Experiment Stn.  
SPESS – LSU  
104 MB Sturgis Hall  
Baton Rouge, LA 70803

**North Carolina State University**

All numbered NC lines  
North Carolina State University  
840 Method Road, Unit 3, Box 7629  
Raleigh, NC 27695

**Pioneer**

Pioneer 26R41, 26R45, 26R59, 26R94  
Dupont Pioneer  
912 River Rd.  
Marksville, LA 71351

**Progeny**

#Bullet, #Buster, #Chad;  
PGX 19-12, 20-2, 20-8, 20-11, 20-15  
Erwin-Keith, Inc. / Progeny  
1529 Hwy. 193  
Wynne, AR 72396

**OATS****AGSouth Genetics**

Horizon 306  
AGSouth Genetics  
1113 Pretoria Road/P.O. Box 398  
Albany, GA 31708

**Stratton**

GO Wheat LA754, 6000; AGS 2024, 2038, 2055, 3040  
Stratton Seed Co.  
1530 Hwy 79 South  
Stuttgart, AR 72160

**UniSouth Genetics**

USG 3536, 3640  
UniSouth Genetics, Inc.  
3205-C HWY 46 S  
Dickson, TN 37055

**Virginia Tech University**

Liberty 5658  
Virginia PI & State University  
EVAREC  
2229 Menokin Road  
Warsaw, VA 22572

**Angelina**

Sweet Caroline (FL0720-R6)  
Angelina Grain Company  
16371 Hwy 15 South  
Vidalia, LA 71373

**University of Florida**

All Numbered FL lines  
University of Florida  
3105 McCarty Hall B  
Gainesville, FL 32611

**LSU AgCenter**

All numbered LA lines; Bob, Brooks, LA99016  
included as checks  
Louisiana Agric. Experiment Stn.  
SPES – LSU  
104 MB Sturgis Hall  
Baton Rouge, LA 70803

**North Carolina State University**

All numbered NC lines  
North Carolina State University  
840 Method Road, Unit 3, Box 7629  
Raleigh, NC 27695

**Seedway**

Juggernaut  
Seedway Inc.  
5901 Vera Cruz Rd  
Emmaus, PA 18049

**Stratton**

Horizon 270  
Stratton Seed Co.  
1530 Hwy 79 South  
Stuttgart, AR 72160

**Texas A&M University**

All numbered TX and TAMO lines  
Texas AgriLife Research  
TAMU – Commerce  
Dept. of Ag Science  
Commerce, TX 75