

2016 SMALL GRAIN PERFORMANCE TRIALS



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LOUISIANA STATE UNIVERSITY AGRICULTURAL CENTER

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Performance of Small Grain Varieties in Louisiana, 2015-16

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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 2016 statewide wheat performance trials included 66 varieties (bold font) and experimental lines (normal font).

New entries in the statewide trials are tested at all locations, but may be dropped from a region the following year if they show little potential, usually late-heading lines in south Louisiana. 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. 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. Growing several varieties helps 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. Rainfall and temperature information for each location is presented in Figure 1. All plots were seeded at the recommended rate with seed provided by the originating agency or company (Appendix A).

-
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 - 3 Research Associate, Professor, Associate Professor, Associate Professor, and Research Associate, respectively. Rice Research Station, Crowley.
 - 4 Associate Professor, Research Farm Assistant 1, and Research Associate, respectively. Red River Research Station, Bossier City.
 - 5 Associate Professor, Regional Director, and Associate Professor, respectively. Dean Lee Research Station, Alexandria.
 - 6 Assistant Professor and Research Associates, respectively. Macon Ridge Research Station, Winnsboro.
 - 7 Professor and Research Associates. Iberia Research Station, Jeanerette.

Characters 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 (*Puccinia triticina*), stripe rust (*Puccinia striiformis*), and oat crown rust (*Puccinia coronata*) 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 (*Puccinia graminis*) 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 (*Xanthomonas campestris* pv. *translucens*), Septoria leaf (*Mycosphaerella graminicola*) and glume blotch (*Leptosphaeria nodorum*) 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 two 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.

Traits and Rating Scales for LAES Wheat and Oat Performance Trials.		
Trait	Abbreviation	Description
Yield	Yield	Grain yield in bushels per acre adjusted to 13% moisture.
Test weight	Test wt	Volume weight of grain in pounds per bushel
Heading day	Head day	Day of calendar year (days after December 31) until 50% heading.
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	Leaf rust	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	Stripe rust	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.
Powdery mildew	Powd mild	Powdery mildew rating on a scale of 0 - 9, where 0 indicates no disease and 9 indicates severe disease present on the foliage. Rated in early to mid spring.
Phenotype	Phe	Phenotypic rating, an overall visual rating prior to harvest. 0=excellent, 9=poor. This rating is a visual rating of 'eye-appeal'.

Growing Conditions and General Comments for 2015-2016

The 2015-16 growing season was less than optimal, as was the previous year. A wet fall resulted in delayed planting at many locations. A very wet and warm winter resulted in waterlogged soils which reduced tillering and slowed plant growth. The warm winter also prevented adequate vernalization of some late-heading entries. Rainfall during flowering resulted in moderate Fusarium headblight (FHB) pressure throughout the state. The wet weather pattern extended into April and May leading to delayed harvest at some locations. FHB and weathering from heavy rainfall after maturity resulted in reduced yields and low test weights.

Bacterial streak (*Xanthomonas*) and Leaf blotch (predominately Septoria) were moderate throughout the trials. Leaf rust pressure was moderate to high, while stripe and stem rust pressures were low. Some locations experienced moderate lodging due to delayed harvest.

Results and Discussion

Performance of Wheat Varieties Across South Louisiana

South Region Means:

There were 50 variety and breeding line entries in South Louisiana trials in 2016. Winter rains led to waterlogged soils resulting in slower rates of growth and tillering. In addition, Fusarium head blight (FHB), delayed harvest, and late, partially vernalized entries also had a negative impact on test weight and yield. Heavy rainfall in April and May contributed to this as well. Early maturing entries tended to yield higher than later maturing varieties. The lines “LA01110D150-FTH” and LA01110D150-NT are add-ons to the trial that are breeder seed lots of LA754 that were Not Treated (NT) or treated with a recommended rate of Foothold plus Awaken (FTH) to evaluate the impact of that particular seed treatment.

The average yield (27.5 bu/acre) across Baton Rouge, Crowley, and Jeanerette was very low (Table 1). Test weights were low with an average of 52.4 lbs/bu. The top 14 entries all yielded above 40 bu/acre, well above the average, and had test weights above the mean. Three LA experimental lines, LA01110D-150-625, LA03200E-2, and LA01110D-150-241 and two varieties, AGS 2035 and AGS 2040, all had yields above 42.5 bu/acre and test weights greater than 54.2 lbs/bu.

There was a strong negative correlation between heading date and grain yield ($r = -0.89^{**}$), that is, later entries had lower yields than earlier-heading entries. The top four yielding entries all headed at least 7 days earlier than the mean of 97 days. All fourteen entries with yields above 40 bu/acre headed at least 2 days before the mean, while the 19 entries with yields less than 15 bu/acre had heading dates at least six days later than the mean. Leaf rust pressure was high with a mean of 10% and a range of 0 to 51%. Three of the top five yielding entries had leaf rust ratings of 0%. Stem rust developed late and severity was low with a mean rating of 0.7 (0-9 scale).

Of the 21 entries tested across South Louisiana for two years, the LA experimental line LA01110D-150-625 had the highest yield (45.3 bu/acre) compared to the mean of 33.6 bu/acre (Table 2). Two other LA lines, LA03200E-2 and LA01110D-150-241, and the varieties AGS 2040 and AGS 2035 also had yields above 42.6 bu/acre. Test weights were low, with an average of 50.7 lbs/bu.

AGS 2035 (58.6 bu/acre) had the highest yield across south Louisiana for three years, followed by LA03200E-2 (57.9 bu/acre), Jamestown (56.6 bu/acre), and USG 3120 (56.4 bu/acre) compared to the mean of 52.6 bu/acre (Table 3). The top seven entries all had heading dates earlier than the mean of 91 days. There was significant variation among entries for leaf rust, stem rust, and FHB incidence.

Baton Rouge

Wet conditions delayed planting at Baton Rouge until December 18, well past optimal, which favored earlier-heading entries. Late planting combined with heavy winter rains reduced growth and tillering and resulted in low yields. Warm winter temperatures also prevented adequate vernalization of late entries and resulted in delayed harvest and poor yields and test weights. The variety AGS 2040 (66.0 bu/acre) had the highest yield at this location followed by LA03200E-2 (65.0 bu/acre), AGS 2035 (63.8

bu/acre), AGS 3000 (63.7 bu/acre), and LA01110D-150-625 (62.4 bu/acre), all well above the mean of 33.1 bu/acre (Table 4). These five entries also had test weights ranging from 55.7 lbs/bu to 54.2 bu/acre, compared to the mean of 53.0 lbs/bu.

Leaf rust pressure was light with a mean of 2% and ratings ranging from 0 to 8%. Lodging was severe due to heavy rainfall after maturity and delayed harvest with a range of 2.5 to 8.5 and a mean of 5.0. Heading day ranged from 90 to 114 with a mean of 100 days. Eighteen late entries did not completely head out because of inadequate vernalization and had yields ranging from 2.1 bu/acre to 19.9 bu/acre with 16 of these with yields too low to measure test weight.

By omitting the partially/non vernalized entries, a clearer analysis of the earlier entries was obtained (Table 5). Of 30 fully vernalized entries at Baton Rouge, yields ranged from 66.0 bu/acre to 23.6 bu/acre with a mean of 48.9 bu/acre.

Crowley

Planting was delayed in Crowley (November 30) and wet waterlogged soils inhibited early-season plant growth and tillering, and greatly reduced yields. At this location AGS 3000 had the highest yield (38.3 bu/acre), followed by USG 3120 (37.9 bu/acre), LA08095C-37 (35.8 bu/acre), Dyna-Gro Savoy (35.2 bu/acre), and AGS 2035 (35.0 bu/acre). The average yield was only 20.9 bu/acre (Table 6). The 19 lowest yielding entries had yields from 3.4 bu/acre down to 13.4 bu/acre. Test weights ranged from 50.7 lbs/bu to 58.4 lbs/bu with a mean of 55.1 lbs/bu.

Leaf rust pressure was moderately high with a mean of 7% and ranged from 0 to 44%. Fusarium head blight pressure was moderate with a mean of 0.6%. The top five yielding entries all had heading dates of 81 days or earlier. The 19 lowest yielding entries all had heading dates of 100 days or later and the correlation between heading date and yield was -0.93**.

Of twenty entries tested for two years, the variety, Dyna-Gro Savoy, and the experimental line GA-04434-12LE28 had the highest yields of 39.5 bu/acre compared to the mean of 30.2 bu/acre. The experimental lines LA01110D-150-625, LA03200E-2, and LA01110D-150-241 also had yields above 37.0 bu/acre.

Jeanerette

Yields were low at Jeanerette in 2016. The breeding line LA01110D-150-241 having the highest yield of 45.9 bu/acre followed by AR01040-4-1, LA01110D150-625, LA01110D150-NT, and LA01110D150-FTH, all with yields above 40 bu/acre, compared to the mean of 28.7 bu/acre (Table 7). Test weights ranged from 35.1 to 55.6 lbs/bu with a mean of 49.1 lbs/bu. The top five yielding entries all had test weights of 51.3 lbs/bu and above.

Leaf rust pressure was high (mean of 18%) with ratings ranging from 0 to 85%. Four of the top five yielding entries had leaf rust ratings of 0%. Stem rust pressure was low.

Jeanerette data from 2016 was analyzed with the 20 lowest yielding/non-vernalized entries dropped in order to minimize distortion (Table 8). This lowered the CV% and raised the mean a little but does not change the conclusion that it was a very difficult year for wheat production in south Louisiana.

Performance of Wheat Varieties Across North Louisiana

North Region Means:

The North Louisiana trials performed better than those in the South. Data included are from Alexandria, St. Joseph, and Winnsboro. Data from the trial at the Bossier City location was poor due to prolonged wet conditions prior to harvest. LA01110D-150-241 (66.4 bu/acre) had the highest yield of 66 entries tested across North Louisiana in 2016 (Table 9). PGX 15-12, Delta Grow 3500, VA12W-72, AGS 2055, and LA08090C-9-2 also all had yields above 60.0 bu/acre. The mean yield was 41.7 bu/acre. The top three yielding entries all had test weights above 55.0 lbs/bu compared to the test mean of 49.9 lbs/bu. Leaf rust pressure was high with ratings ranging from 0 to 64% and a mean of 14%. The entries with the highest leaf rust ratings generally had yields below average, which indicates that the disease was severe enough to reduce yield in susceptible varieties. Stripe rust pressure was relatively low, with a mean of 2%. The mean heading date was 97 days with the top 14 yielding entries heading earlier than the mean.

Delta Grow 3500 (60.3 bu/acre) had the highest yield of 37 entries tested over two years, (Table 10). LA01110D-150-241 (57.3 bu/acre), Hilliard (56.7 bu/acre), Pioneer 26R41 (55.9 bu/acre), and LA03200E-2 (55.3 bu/acre) all had yields well above the mean of 47.6 bu/acre. The top five entries all had test weights higher than the mean of 51.5 lbs/bu. The mean heading date was 97 days with 13 of the 14 lowest-yielding entries having heading dates of 100 days or later. There was a negative correlation between yield and heading date ($r = -0.42^{**}$), and leaf rust ($r = -0.74^{**}$) such that the higher-yielding entries generally had earlier heading dates and lower levels of leaf rust. Fusarium Headblight has been a major disease problem for the past two years. FHB ratings ranged from 1.3 to 5.1 and there were significant differences among varieties. It is difficult to evaluate entries for resistance to FHB because the disease is so dependent on heading date and rainfall timing which often results in late or early-heading entries escaping exposure to the disease. Comparisons of FHB ratings need to be made within a fairly narrow heading date range. FDK (percent Fusarium Damaged Kernels) ranged from 18% to 45%. LANC817-41-2, which has the lowest FDK, contains the gene *Fhb1* which is known to reduced FHB incidence and FDK.

Pioneer 26R41 (68.1 bu/acre) had the highest yield of 20 entries over three years (Table 11). AGS 2038, Dyna-Gro 9171, and LA03200E-2 all had yields of 63.0 bu/acre or higher compared to the mean of 60.0 bu/acre. The mean heading date was 100 days with the top three yielding entries all heading later. Later-heading entries have yielded more in the prior two years whereas earlier-heading entries had higher yields in 2016, which enforces the notion that growers should plant a range of maturities in any given year. Yield was negatively correlated with leaf rust ($r = -0.56^{**}$).

Alexandria

Very wet winter conditions led to uneven stands among plots, which contributed to a high CV (percent unexplained variation). Early plots suffered significant bird damage at Alexandria which decreased harvested yields of the earliest plots. The mean yield was 35.9 bu/acre with the top seven entries having yields greater than 54.0 bu/acre (Table 12). Delta Grow 3500 (61.7 bu/acre) had the highest yield followed by VA12W-72 (56.4 bu/acre), Hilliard (56.3 bu/acre), LA08090C-9-2 (56.1 bu/acre), and LA03200E-2 (54.8

bu/acre). Test weights ranged from 36.6 lbs/bu (Dixie Extreme) to 58.8 lbs/bu (AGS 3000) with a mean of 51.8 bu/acre. Leaf rust pressure was high with a mean rating of 23% and a range of 0 to 91%. Varieties with a high leaf rust rating generally had low yields (correlation = -0.63**) as would be expected. While bacterial levels were low (mean = 0.3, 0-9 scale), there were significant differences among entries. Seed quality has a strong negative correlation with grain yield ($r = -0.67^{**}$) indicating that varieties with poor yields also had low seed quality.

Bossier City

The wheat trial at Bossier City had weather-related problems across the growing season and harvest was delayed several weeks by continued rainfall. Data from the test at Bossier City was discarded due to very low yields and very high CV%.

St. Joseph

Yields at St. Joseph were better than at most sites, ranging from 7.4 bu/acre to 75.5 bu/acre with a mean of 44.5 bu/acre (Table 13). The experimental line PGX 15-12 (79.5 bu/acre) had the highest yield followed by LA01110D-150-241 (75.5 bu/acre), LA01110D150-FTH (Foothold plus Awaken) (66.2 bu/acre), LA01110D150-NT (no seed treatment) (65.8 bu/acre), and AGS 2055 (65.8 bu/acre). Test weights ranged from 37.1 lbs/bu (PGX 15-14) to 57.5 lbs/bu (PGX 15-12) with a mean of 49.8 lbs/bu. The six lowest yielding entries had yields too low to obtain test weights.

The top 23 yielding entries all headed out prior to the mean of 102 days. Lodging was moderate with a mean of 3.2 (0-9 scale). The seven lowest-yielding entries all had lodging ratings of 7.5 or above. Leaf rust pressure was moderate, with ratings ranging from 0 to 38% and a mean of 6%. The 12 highest-yielding entries all had leaf rust ratings of 0%. Stripe rust and Septoria pressure were also moderate with means of 3% and 2% respectively. Twenty-five entries had leaf rust ratings of 0%, and 44 had stripe rust ratings of 0%.

The experimental line, LA01110D-150-241 (61.5 bu/acre), had the highest yield of 37 entries at St. Joseph over two years. Delta Grow 3500 (57.6 bu/acre), Pioneer 26R41 (57.2 bu/acre), AGS 2055 (56.3 bu/acre), and AGS 2038 (56.2 bu/acre) all had yields well above the two-year mean of 47.1 (bu/acre). Four of the five had leaf rust ratings of 0%.

Winnsboro

Winnsboro had the highest mean yield (49.1 bu/acre) in the state for 2016 (Table 14). Delta Grow 3500 (74.9 bu/acre) had the highest yield, followed by LA01110D-150-241 (72.3 bu/acre), LA09011UB-2 and VA12W-72 (68.8 bu/acre), AGS 2038 (68.7 bu/acre), and AGS02024 (68.0 bu/acre), all with yields well above the mean of 49.1 bu/acre. Test weights were very low, probably due to post-maturity weathering. Test weights ranged from 37.0 lbs/bu to 56.8 lbs/bu with a mean of 48.4 lbs/bu. The top six yielding entries all had test weights of 51.0 lbs/bu or above.

Heading date ranged from 81 days to 107 days with a mean of 97 days. The top 10 yielding entries all headed out prior to 93 days. Lodging was minimal with a mean of 1.0 (0-9 scale). Leaf rust pressure was moderate (mean = 7%) with 12 of the top yielding entries having a rating of 0%. Stripe rust pressure was moderate with a mean of 1 (0-9

scale). Heavy spring rains resulted in widespread leaf blotch and bacterial streak with means of 2.1 and 0.3 (both 0-9 scale), respectively.

Seed quality (0 = excellent and 9 = very poor) was measured on seed samples by visual inspection in the lab. A low number (0-3) for seed quality rating indicates that the seed were plump, uniform and high quality with very little weathering or other blemishes. Seed Quality was very highly negatively correlated yield ($r = -0.82^{**}$) and test weight ($r = -0.92^{**}$). This indicates that those entries with poor yields also had very low quality seed from weathering and/or disease.

Delta Grow 3500 (66.4 bu/acre) had the highest yield of 37 entries over two years at Winnsboro followed by LANC8170-41-2, Syngenta SY Viper, and Hilliard, all with yields above 62.0 bu/acre compared to the mean of 51.0 bu/acre. These four entries all had leaf rust ratings of 5% or less.

Statewide Performance of Wheat Varieties

Of 55 entries tested across six locations, LA01110D-150-241 (54.5 bu/acre) had the highest yield followed by Delta Grow 3500 (51.7 bu/acre), LA01110D-150-625 (50.9 bu/acre) and LA03200E-2 (50.6 bu/acre). The average yield was 36.8 bu/acre (Table 15). Test weights ranged from 40.8 lbs/bu to 56.8 lbs/bu with a mean of 52.1 lbs/bu. The top four yielding entries all had test weights above 54.0 lbs/bu.

Phenotype was highly negatively correlated with yield ($r = -0.86^{**}$) and test weight ($r = -0.75^{**}$). Phenotype is a visual rating (0 = best, 9 = worst) of overall appearance of a variety rated several times during the spring. It gives an overall evaluation of how pretty and productive a plot appears over the season. The mean heading date was 96 days with 19 of the 20 highest-yielding entries heading before the mean. Leaf rust ratings ranged from 0 to 56% with a mean of 10%. Stem rust was much less severe statewide.

Delta Grow 3500 (50.5 bu/acre) had the highest yield statewide out of 21 entries for two years (Table 17). LA01110D-150-241 (50.5 bu/acre), LA03200E-2 (49.9 bu/acre), and LA01110D-150-625 (49.3 bu/acre) all outperformed the mean (42.8 bu/acre) by a wide margin. All four had test weights equal to or greater than 52.0 lbs/bu, heading dates earlier than 95 days and leaf rust ratings of 2% or less.

Performance of Oat Varieties

Baton Rouge

Yields were low in Baton Rouge due to prolonged duration of waterlogged soils in the winter followed by heavy rains after maturity. Of 25 entries, LA08085BS-T2 (104.4 bu/acre) had the highest yield followed by LA07007SBSBSB-18, LA06059SBSBSBSB-4-S, LA08085SS-T3, and Horizon 270 all with yields above 82.0 bu/acre (Table 17). The yield mean was 64.0 bu/acre.

The first four of these entries had test weights above 30.0 lbs/bu. LA08085BS-T2 (34.5 lbs/bu) had the highest test weight compared to the mean (26.9 lbs/bu). The wet, cool winter resulted in substantial winter stress (plant yellowing), with ratings ranging from 2.3 to 6.0 (0-9 scale) and a mean of 4.3. Crown rust and stem rust pressure were moderate with means of 10% and 1.6 (0-9 scale), respectively. Lodging was also severe due to heavy post-maturity rainfall and delayed harvest, with a mean of 6.7 (0-9 scale).

Winnsboro

Oat grain yields were higher at Winnsboro due to lower levels of winter stress and lodging. Horizon 270 (103.3 bu/acre) had the highest yield of 25 entries, followed by LA07007SBSBSB-18 (100.9 bu/acre), Horizon 306 (94.3 bu/acre), TX07CS2257 (91.7 bu/acre) and LA06059SBSBSBSB-4-S1 (90.0 bu/acre) compared to the mean of 78.4 bu/acre (Table 18). The 10 highest-yielding entries all yielded more than 85.0 bu/acre.

Winter stress tolerance was moderate (mean = 2.6) with the top three entries having ratings greater than the mean. Lodging was low to moderate with a mean of 2.5. Crown rust pressure was moderate and stem rust pressure was low with means of 6% and 0.7%, respectively.

Performance of Oat Varieties Across Louisiana

LA07007SBSBSB-18 (95.4 bu/acre) had the highest yield across Louisiana in 2016 (Table 19). LA08085BS-T2 (92.2 bu/acre), Horizon 270 (89.4 bu/acre), LA06059SBSBSBSB-4-S1 (82.9 bu/acre), and TX07CS2257 (81.4 bu/acre) all had yields well above the mean (69.5 bu/acre) and test weights above the mean (28.3 lbs/bu). LA08085BS-T2 had the highest test weight (34.1 lbs/bu) and second-highest yield.

Horizon 270 (91.8 bu/acre) had the highest yield of 15 entries statewide over 3 years (Table 20). The entries LA07007SBSBSB-18 and LA08085SS-T3 also had yields above 83.0 bu/acre. The two LA entries had crown rust ratings of 0%. All three had stem rust ratings of 1.0 (0-9 scale) or less.

Figure 1. Rainfall and temperature graphs.

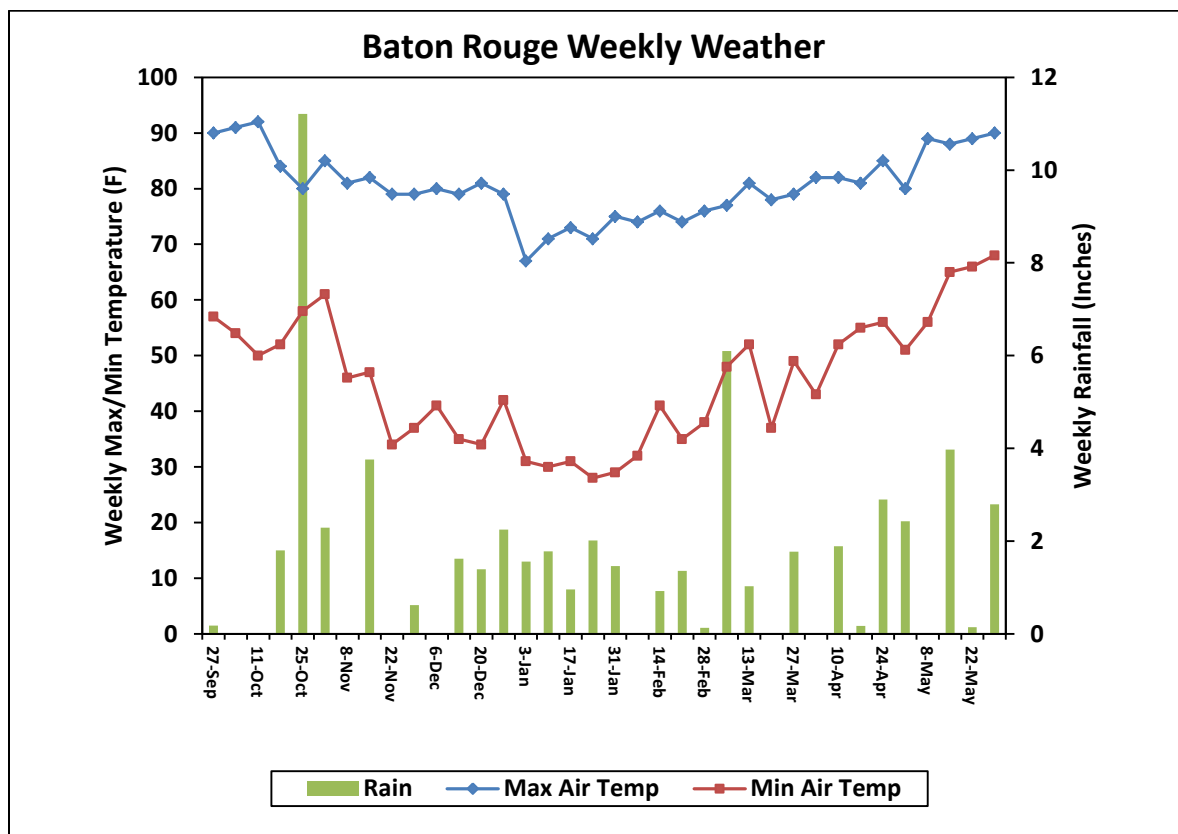
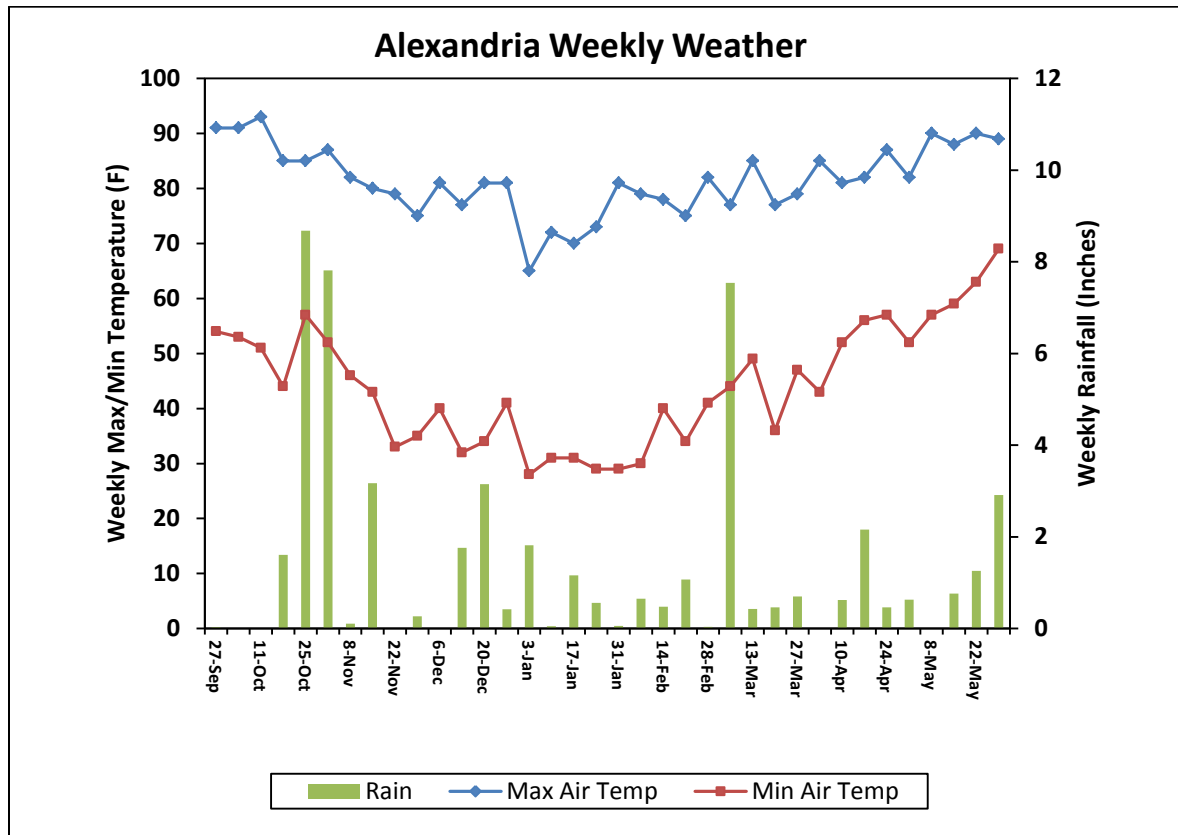


Figure 1. Rainfall and temperature graphs.

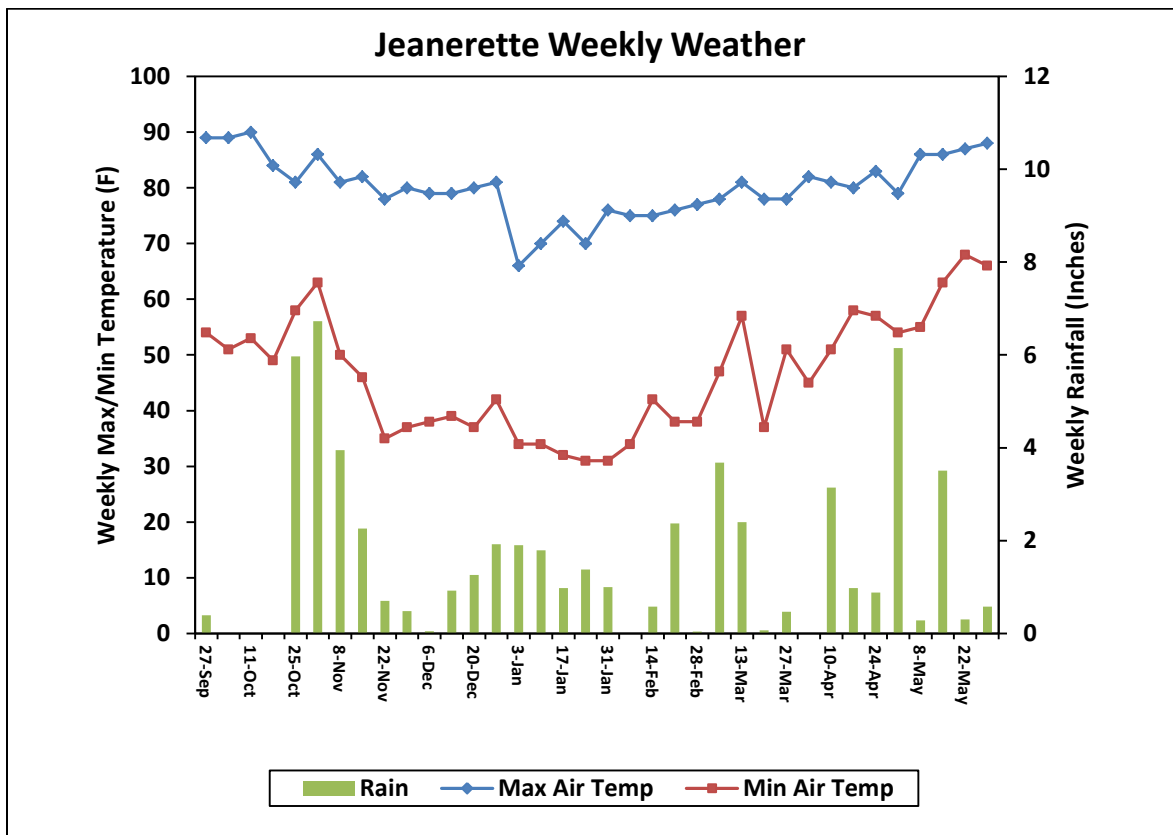
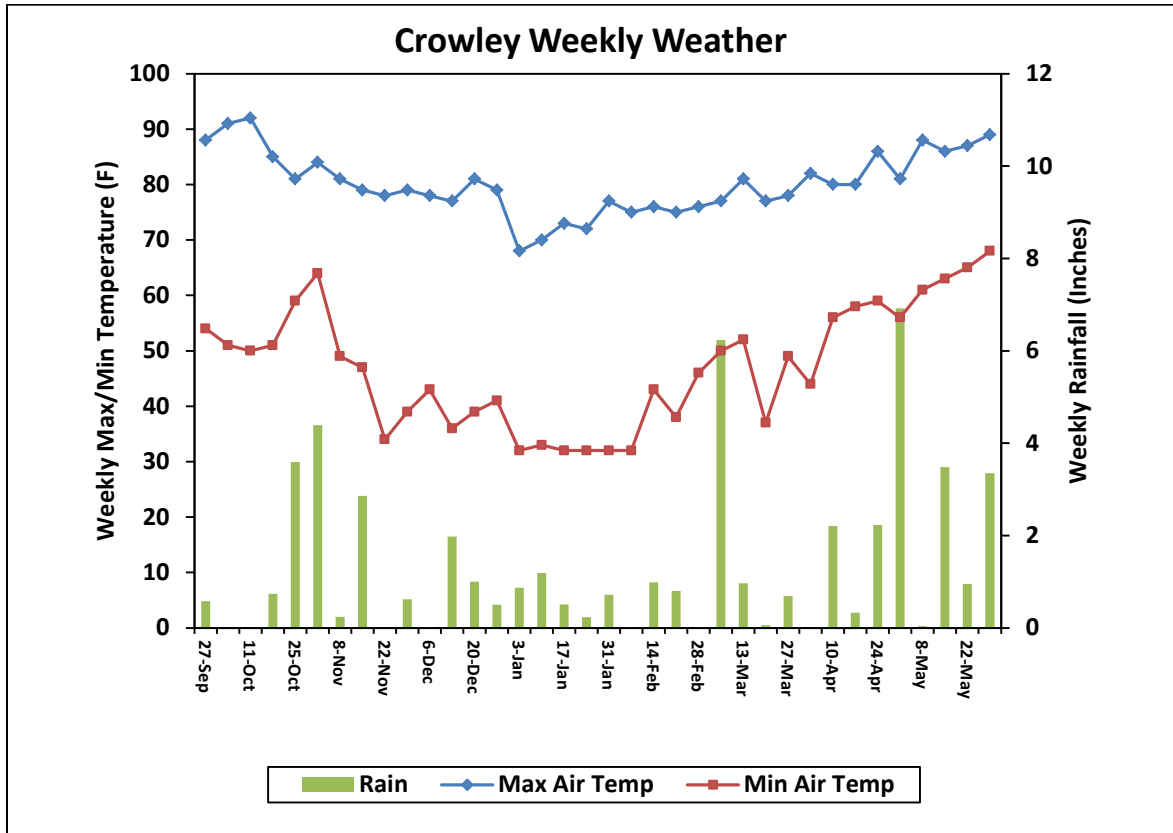


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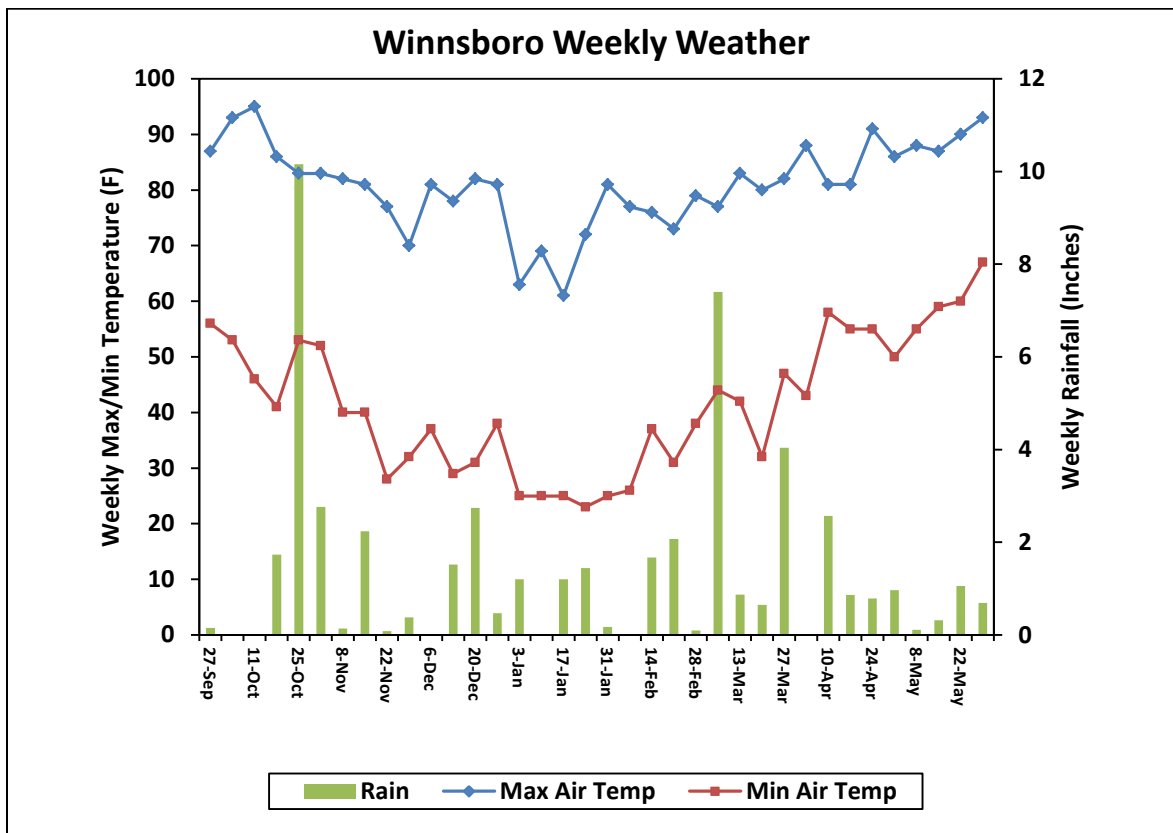
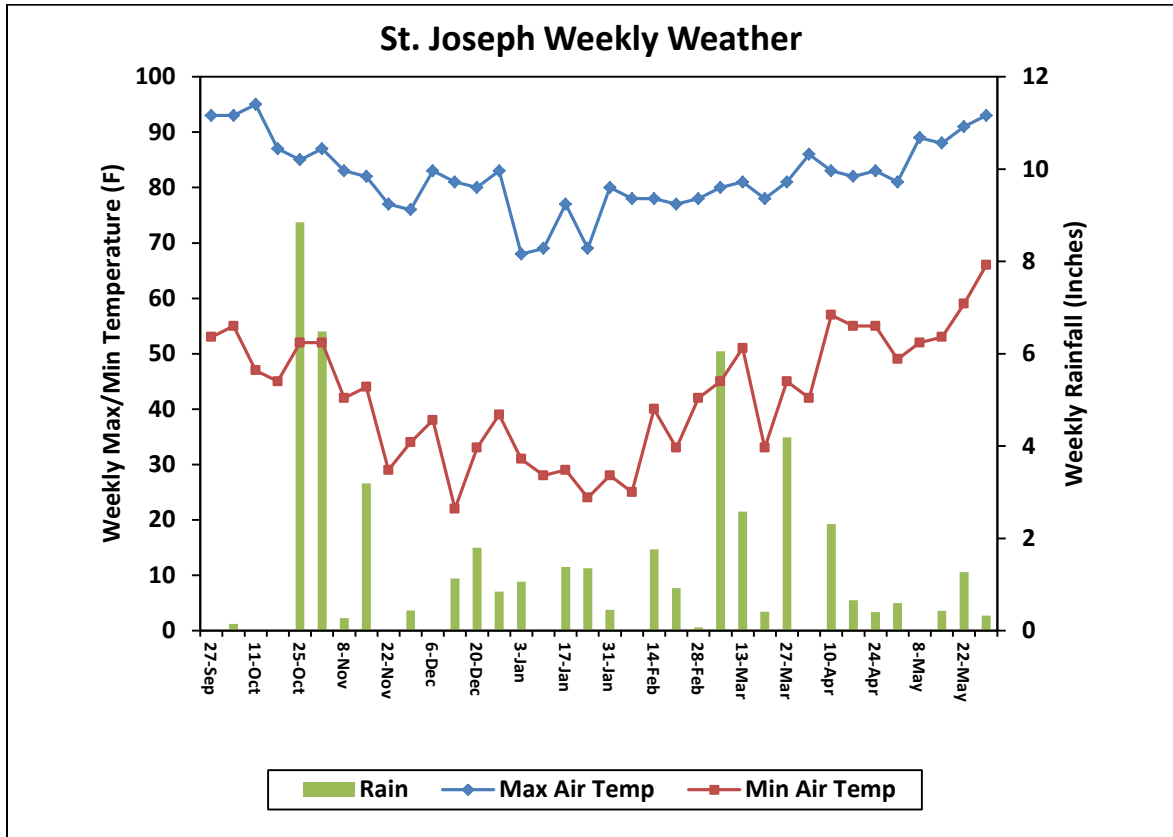


Table 1. Performance trial at South Louisiana for 2016.

	Grain Yield	Test Wt	Head Day	Plant Ht	Lodging Score	Leaf Rust	Stem Rust	Pheno type
Brand / variety	bu/a	lbs/bu	of yr	in	0-9	%	0-9	0-9
LA01110D-150-625	45.8	55.6	90	33	4.8	1	0.0	4.6
AGS 2035	45.7	54.7	86	33	3.8	0	0.2	4.3
LA03200E-2	45.4	55.6	89	31	4.1	26	0.3	4.9
AGS 2040	44.3	56.2	85	32	3.3	0	0.1	4.1
LA01110D-150-241	42.6	54.3	95	34	3.4	0	0.6	4.1
JAMESTOWN	42.5	56.5	87	30	3.1	2	0.0	4.0
DYNA-GRO SAVOY	42.0	54.3	86	31	3.6	0	0.0	4.3
LA01110D150-NT	41.6	54.6	91	33	4.1	4	2.8	6.0
AGS 2024	41.6	54.1	90	30	3.5	0	0.4	4.3
AR01040-4-1	41.4	52.9	90	35	3.6	4	0.2	5.6
PIONEER 26R94	41.0	54.2	89	34	4.4	0	0.0	3.9
AGS 3000	40.8	56.5	79	32	4.5	0	0.0	3.4
DELTA GROW 3500	40.5	54.2	93	32	4.6	0	0.0	3.4
LA01110D150-FTH	40.5	54.4	92	33	3.9	3	1.8	6.0
AGS 2038	39.1	53.5	92	35	4.0	1	0.1	4.4
LA09011UB-2	39.1	54.9	95	29	4.5	2	0.1	4.6
USG 3120	38.3	54.3	85	34	3.0	2	0.4	4.8
GA061349-13LE31	36.2	53.1	96	31	2.1	0	0.0	3.6
LANC8170-41-2	35.9	54.8	96	31	2.3	8	0.1	5.3
VA12W-72	35.7	50.6	98	31	3.0	3	0.0	3.9
LA08095C-37	35.5	55.3	86	34	3.9	16	0.0	5.0
SY CYPRESS	35.3	53.9	86	30	4.3	13	0.1	6.0
GA051102-13LE43	34.6	52.9	98	32	3.3	0	0.0	4.3
LA08115C-30	33.0	53.3	86	32	3.9	4	3.4	7.0
GA-04434-12LE28	32.4	53.3	95	32	2.8	0	0.0	4.3
LA08090C-9-2	32.3	53.6	92	32	2.6	0	0.0	4.0
PGX 15-12	31.8	52.3	98	30	3.3	0	0.2	4.9
GA061349-13LE29	30.8	50.3	101	31	3.8	0	0.0	4.4
AGS 2055	29.9	50.6	100	33	3.5	0	0.3	4.3
HILLIARD	24.1	50.5	101	32	3.0	3	0.0	5.0
DELTA GROW 1000	15.7	48.1	108	31	4.1	9	1.6	6.9
PIONEER 26R41	14.9	46.6	103	29	2.9	11	2.9	7.4
PGX 15-10	14.1	46.5	110	31	3.9	7	1.1	6.9
ARMOR ARW1511	12.9	46.3	109	32	4.3	6	0.9	6.6
SY VIPER	12.5	45.6	105	33	5.5	29	0.0	6.5
DYNA-GRO WX 15781	12.2	46.6	109	32	4.1	8	1.0	6.9
PGX 15-16	12.0	44.2	110	26	4.3	5	0.2	6.9
DIXIE 16-1	11.8	46.8	108	32	4.0	7	1.3	7.0
PROGENY 243	11.2	47.2	103	32	6.4	14	0.0	6.9
DIXIE 16-2	7.1	40.6	106	30	5.5	20	2.0	7.5
PGX 15-14	6.5	41.3	104	29	5.9	34	2.1	7.3
ARMOR ARW1521	6.4	50.7	109	29	4.5	24	1.0	7.0
PROGENY 870	5.5	49.4	106	29	4.9	13	1.1	6.6
ARMOR ARW1516	5.4	50.7	104	29	6.8	27	1.7	6.6
ARMOR ARW1514	5.3	37.2	104	28	7.4	31	2.3	7.8
DYNA-GRO WX 16771	5.2	49.9	109	29	6.1	27	1.7	7.0
AGRIMAXX EXP 1674	4.8	40.1	107	28	7.3	30	2.6	7.3
DYNA-GRO 9642	4.3	55.2	112	26	7.8	32	0.6	7.0
USG 3013	4.3	58.7	107	31	6.9	51	1.3	7.6
PROGENY 357	3.0	55.0	108	29	7.3	42	1.2	7.1
Mean	27.5	52.4	97	31	4.3	10	0.7	5.6
CV	20	4	2	45	29	90	154	11
LSD (0.10)	10.5	5.6	3	2	1.8	20	1.3	1.4

Bold 'Brand/variety' indicates the entry is commercially available, others are non-released breeding lines.

Data from Baton Rouge, Crowley, and Jeanerette, LA.



Table 1. Performance trial at South Louisiana for 2016.

	Grain Yield	Test Wt	Head Day	Plant Ht	Lodging Score	Leaf Rust	Stem Rust	Pheno type
Brand / variety	bu/a	lbs/bu	of yr	in	0-9	%	0-9	0-9

Correlations: There was a strong relationship between heading date and yield. Later heading lines yielded poorly. Correlation Yield,HeadDay = -0.89**; Corr Yld,Lfrust = -0.73**, Yield, Stem Rust = -0.50**, Yield. Phenotype = -0.85**.

Table 2. Wheat performance trial across South Louisiana for two years, 2015 and 2016.

Brand / variety	Grain Yield bu/acre	Test Wt lbs/bu	Head Day of yr	Plant Ht in	Lodging Score 0-9	Leaf Rust %	Stem Rust 0-9	Fus H Blight 0-9	Pheno type 0-9
LA01110D-150-625	45.3	53.0	91	34	3.8	1	0.0	0.4	4.6
AGS 2040	44.8	53.4	86	32	2.9	0	0.1	0.5	4.1
AGS 2035	43.8	52.1	88	34	2.9	0	0.2	1.2	4.3
LA03200E-2	43.7	52.5	90	32	3.6	26	0.3	1.2	4.9
LA01110D-150-241	42.7	51.8	94	35	2.5	0	0.6	0.9	4.1
DYNA-GRO SAVOY	41.9	51.2	86	31	4.3	0	0.0	2.8	4.3
DELTA GROW 3500	39.8	51.0	92	32	4.0	0	0.0	0.5	3.4
JAMESTOWN	39.4	52.4	88	30	3.5	2	0.0	0.5	4.0
PIONEER 26R94	38.0	51.4	89	35	3.7	0	0.0	0.8	3.9
USG 3120	37.6	51.0	86	34	2.9	1	0.4	1.5	4.8
AGS 2038	37.1	50.9	93	35	3.4	0	0.1	1.0	4.4
AR01040-4-1	36.4	50.8	91	36	3.6	3	0.2	0.8	5.6
SY CYPRESS	35.1	50.7	87	30	4.0	11	0.1	0.5	6.0
GA-04434-12LE28	34.4	51.1	93	32	2.9	0	0.0	1.0	4.3
LANC8170-41-2	32.7	52.6	94	30	1.9	6	0.1	0.1	5.3
AGS 2055	26.0	48.6	98	33	4.9	0	0.3	1.2	4.3
HILLIARD	23.3	48.0	99	32	3.1	3	0.0	0.3	5.0
PIONEER 26R41	20.1	46.0	102	30	2.6	9	2.9	0.0	7.4
SY VIPER	16.1	45.2	100	34	5.4	24	0.0	0.8	6.5
USG 3013	14.7	48.7	102	30	5.2	37	1.3	0.5	7.6
PROGENY 870	9.3	47.0	104	29	3.9	12	1.1	0.1	6.6
MEAN	33.6	50.7	92.8	32	3.6	6	0.3	0.8	5.0
CV%	18	5	2	5	36	128	244	136	14
LSD (0.10)	8.1	1.7	3.1	1	1.6	12	0.9	NS	1.3
Data from 2015 and 2016 at the Rice Research Station (Crowley) and Iberia Research Station (Jeanerette), and from 2016 at Central Station (Baton Rouge).									
Bold 'Brand/variety' indicates the entry is commercially available, others are non-released breeding lines.									
Lodging 0 = none and 9 = severe.									
Phenotype = visual appearance. 0 = excellent and 9 = ugly.									
Correlaitons with Yield: TestWt = 0.90**, HeadDay = 0.90**, LeafRust = -0.55**, FHB = 0.42*, StemRust = -0.34*, PHE = -0.78**.									

Table 3. Wheat performance trial across South Louisiana for three years, 2014, 2015 and 2016.

	Grain Yield	Test Wt	Head Day	Plant Ht	Lodging Score	Leaf Rust	Stem Rust	Fus Hd. Blt	Pheno- type
Brand / Variety	bu/acre	lbs/bu	of yr	in	0-9	%	0-9	0-9	0-9
AGS 2035	58.6	55.1	88	35	2.3	0	0.2	2.1	4.1
LA03200E-2	57.9	55.4	90	32	2.8	23	0.3	2.0	4.2
JAMESTOWN	56.6	55.6	88	30	2.7	1	0.0	0.8	4.1
USG 3120	56.4	54.3	87	34	2.3	1	0.4	2.0	4.5
DYNA-GRO SAVOY	55.5	54.3	86	31	3.4	0	0.0	3.3	4.3
AGS 2040	55.3	56.0	86	32	2.2	0	0.1	0.9	3.9
PIONEER 26R94	54.7	54.9	89	35	2.9	0	0.0	1.8	4.1
AGS 2038	54.7	54.2	93	36	2.6	0	0.1	1.9	4.3
SY CYPRESS	51.7	54.1	88	31	3.1	10	0.1	0.9	5.6
PIONEER 26R41	42.7	52.0	101	30	2.1	8	2.9	0.6	6.1
PROGENY 870	34.5	51.9	102	30	3.0	13	1.1	0.6	5.9
MEAN	52.6	54.4	91	32	2.7	5	0.5	1.5	4.6
CV%	12	4	2	4	44	10	189	75	12
LSD (0.10)	7.5	1.4	2	1	NS	7	1.0	1.2	1.2
Data from 2014, 2015 and 2016 at the Rice Research Station (Crowley) and Iberia Research Station (Jeanerette); and 2014 and 2016 at Central Station (Baton Rouge).									
Bold 'Brand/variety' indicates the entry is commercially available, others are non-released breeding lines.									
Lodging 0 = none and 9 = severe.									
Phenotype = visual appearance. 0 = excellent and 9 = ugly.									

Table 4. Wheat performance trial at Baton Rouge, LA for 2016.

	Grain Yield	Test Wt	Head Day	Plant Ht	Lodging Score	Leaf Rust	Pheno- type
Brand / variety	bu/a	lbs/bu	of yr	in	0-9	%	0-9
AGS 2040	66.0	55.7	92	32	4.3	0	3.8
LA03200E-2	65.0	55.8	97	33	4.8	3	3.8
AGS 2035	63.8	54.6	93	37	3.8	2	4.5
AGS 3000	63.7	57.0	90	34	5.5	0	3.8
LA01110D-150-625	62.4	54.2	98	33	5.0	0	4.3
PIONEER 26R94	62.0	55.7	98	36	4.0	0	3.8
DYNA-GRO SAVOY	60.0	53.4	91	32	4.5	0	4.5
DELTA GROW 3500	59.8	54.6	97	34	4.5	0	3.3
JAMESTOWN	57.4	56.3	94	31	4.0	0	3.5
AGS 2024	57.3	52.0	99	31	3.5	0	4.0
LA01110D150-NT	56.8	52.6	101	34	4.5	2	4.5
LA01110D150-FTH	54.0	52.4	101	32	4.5	2	4.5
LA09011UB-2	53.0	55.2	99	30	4.5	1	5.3
LA01110D-150-241	50.1	51.8	101	35	3.5	0	4.3
LANC8170-41-2	48.7	53.9	104	32	2.8	1	5.0
AR01040-4-1	47.3	49.5	97	35	3.5	0	4.8
SYNGENTA SY CYPRESS	46.8	53.1	97	32	5.0	3	5.5
USG 3120	46.7	53.2	95	34	3.8	1	5.0
AGS 2038	45.0	53.2	100	37	4.3	0	4.3
VA12W-72	44.3	50.5	106	33	3.8	0	4.3
GA-04434-12LE28	42.8	51.4	100	35	3.0	1	4.5
LA08115C-30	41.2	50.5	95	31	4.8	6	6.0
LA08095C-37	39.8	53.8	100	35	4.8	4	5.0
GA061349-13LE31	39.5	53.1	103	33	2.5	0	4.3
AGS 2055	39.2	49.9	107	35	4.0	0	4.0
GA051102-13LE43	36.5	51.2	106	35	4.0	0	5.0
PGX 15-12	36.5	52.4	106	34	4.8	1	5.8
LA08090C-9-2	31.1	54.1	105	34	3.3	0	4.5
GA061349-13LE29	28.5	51.0	108	34	4.5	1	5.3
HILLIARD	23.6	52.1	113	34	6.0	1	6.5
PGX 15-10	19.9	49.2		34	4.0	2	6.8
ARMOR ARW1511	19.5	49.9		36	4.3	2	6.8
DYNA-GRO WX 15781	16.6	49.6		36	4.0	1	6.8
PGX 15-16	16.2			29	7.0	3	7.3
DELTA GROW 1000	15.6			35	5.0	1	6.8
PIONEER 26R41	15.6	50.2		33	3.5	4	6.8
DIXIE 16-1	13.1			37	4.8	2	7.0
SYNGENTA SY VIPER	12.3		109	37	6.5	3	6.0
DIXIE 16-2	9.2			33	5.8	4	7.0
ARMOR ARW1521	8.2			33	5.5	4	7.0
PGX 15-14	7.8			33	6.5	4	7.0
PROGENY 243	7.4			33	8.3	6	7.3
DYNA-GRO WX 16771	6.3			34	6.3	5	7.0
ARMOR ARW1516	5.1			32	7.8	5	6.8
ARMOR ARW1514	4.8			32	7.8	4	7.0
AGRIMAXX EXP 1674	4.7		114	34	6.8	3	6.5
USG 3013	4.6			35	8.0	8	7.3
DYNA-GRO 9642	3.0			31	7.8	5	7.0
PROGENY 870	2.4			31	8.3	4	6.8
PROGENY 357	2.1			33	8.5	7	6.8
Mean	33.1	53.0	100	33	5.0	2	5.5
CV	18	2	2	5	22	67	9
LSD (0.10)	7.1	1.7	4	3	1.3	2	0.8

Data from Ben Hur Research Farm, Central Station, Baton Rouge, LA. Steve Harrison, Kelly Arceneaux, Katie McCarthy, Ally Lunos.

Cultural and Site: Planted 12-18-15. Harvested 5-30-16. 13-23-48+10S Preplant; 30-0-0 Urea with Agrotain flew on in early Feb; 90-0-0 as 32% liquid ~Feb 20. Powerflex in Jan. The fall and winter were very wet with frequent saturated soils that reduced tillering and plant development. Heavy rainfall in April and early May resulted in premature leaf senescence of some varieties partly due to FHB and bacterial streak. The winter was much warmer than normal and many entries failed to properly vernalize, resulting in very late heading and low yields and test weights. Harvest was delayed because so many entries were still green after the earlier entries were ready for combining.

Missing test weights and heading dates are for varieties that headed very late and had yields too low to determine test weight or grain moisture.

Bold 'Brand/variety' indicates the entry is commercially available, others are non-released breeding lines / experimental lines.

Table 5. Wheat performance trial at Baton Rouge, LA for 2016. Very late heading, non-adapted lines were dropped from this table.

	Grain Yield	Test Wt	Head Day	Plant Ht	Lodging	Leaf Rust	Pheno type
Brand / variety	bu/a	lbs/bu	of yr	in	0-9	%	0-9
AGS 2040	66.0	55.7	92	32	4.3	0	3.8
LA03200E-2	65.0	55.8	97	33	4.8	3	3.8
AGS 2035	63.8	54.6	93	37	3.8	2	4.5
AGS 3000	63.7	57.0	90	34	5.5	0	3.8
LA01110D-150-625	62.4	54.2	98	33	5.0	0	4.3
PIONEER 26R94	62.0	55.7	98	36	4.0	0	3.8
DYNA-GRO SAVOY	60.0	53.4	91	32	4.5	0	4.5
DELTA GROW 3500	59.8	54.6	97	34	4.5	0	3.3
JAMESTOWN	57.4	56.3	94	31	4.0	0	3.5
AGS 2024	57.3	52.0	99	31	3.5	0	4.0
LA01110D150-NT	56.8	52.6	101	34	4.5	2	4.5
LA01110D150- FOOHOLD	54.0	52.4	101	32	4.5	2	4.5
LA09011UB-2	53.0	55.2	99	30	4.5	1	5.3
LA01110D-150-241	50.1	51.8	101	35	3.5	0	4.3
LANC8170-41-2	48.7	53.9	104	32	2.8	1	5.0
AR01040-4-1	47.3	49.5	97	35	3.5	0	4.8
SYNGENTA SY CYPRESS	46.8	53.1	97	32	5.0	3	5.5
USG 3120	46.7	53.2	95	34	3.8	1	5.0
AGS 2038	45.0	53.2	100	37	4.3	0	4.3
VA12W-72	44.3	50.5	106	33	3.8	0	4.3
GA-04434-12LE28	42.8	51.4	100	35	3.0	1	4.5
LA08115C-30	41.2	50.5	95	31	4.8	6	6.0
LA08095C-37	39.8	53.8	100	35	4.8	4	5.0
GA061349-13LE31	39.5	53.1	103	33	2.5	0	4.3
AGS 2055	39.2	49.9	107	35	4.0	0	4.0
GA051102-13LE43	36.5	51.2	106	35	4.0	0	5.0
PGX 15-12	36.5	52.4	106	34	4.8	1	5.8
LA08090C-9-2	31.1	54.1	105	34	3.3	0	4.5
GA061349-13LE29	28.5	51.0	108	34	4.5	1	5.3
HILLIARD	23.6	52.1	113	34	6.0	1	6.5
Mean	48.9	53.2	99	33	4.2	1	4.6
CV	14	2	2	5	26	177	11
LSD	8.1	1.5	4	3	1.3	2	0.9

Data from Ben Hur Research Farm, Central Stations, Baton Rouge, LA. Steve Harrison, Kelly Arceneaux, Katie McCarthy, Ally Lunos.

Cultural and Site: Planted 12-18-15. Cultural and Site: Planted 12-18-15. Harvested 5-30-16. 13-23-48+10S Preplant; 30-0-0 Urea with Agrotain flew on in early Feb; 90-0-0 as 32% liquid ~Feb 20. Powerflex in Jan. The fall and winter were very wet with frequent saturated soils that reduced tillering and plant development. Heavy rainfall in April and early May resulted in premature leaf senescence of some varieties partly due to FHB and bacterial streak. The winter was much warmer than normal and many entries failed to properly vernalize, resulting in very late heading and low yields and test weights. Harvest was delayed because so many entries were still green after the earlier

Bold 'Brand/variety' indicates the entry is commercially available, others are non-released breeding lines.

Table 6. Wheat performance trial at Crowley, LA for 2016.

Brand / variety	Grain Yield		Test	Head	Plant	Lodging	Leaf	Stem	Fus	Pheno	Headrow Disease Nursery Data			
	2016	2-YR	Wt	Day	Ht		Rust	Rust	HdBlig	type	Leaf	Leaf	Stem	Pheno
	bu/a		lbs/bu	of yr	in	0-9	%	0-9	%	0-9	0-9	0-9	0-9	0-9
DYNA-GRO SAVOY	35.2	39.5	57.2	79	32	2.8	0	0.0	4.9	4.0	0.5	3.5	0.0	6.0
GA-04434-12LE28	26.5	39.5	58.1	88	33	2.5	1	0.0	0.0	4.0	2.0	3.5	0.0	4.0
LA01110D-150-625	31.9	39.4	57.5	84	35	4.5	3	0.0	0.1	5.0	1.5	2.5	0.0	4.5
LA03200E-2	33.3	38.7	57.7	84	32	3.5	44	0.4	1.3	6.0	3.5	4.5	0.5	5.0
LA01110D-150-241	31.9	37.2	57.2	88	36	3.3	1	0.7	0.1	4.0	0.5	3.0	0.0	4.0
USG 3120	37.9	37.0	57.2	81	35	2.3	4	0.0	0.7	4.5	2.5	4.5	2.0	6.0
AGS 2035	35.0	36.8	55.9	81	33	3.8	0	0.4	1.2	4.0	1.0	2.5	0.0	3.5
JAMESTOWN	32.7	36.1	57.7	82	32	2.3	3	0.0	0.0	4.5	2.5	3.5	0.0	4.5
PIONEER 26R94	32.0	35.4	55.9	87	35	4.8	0	0.0	0.2	4.0	0.0	3.0	0.0	4.5
DELTA GROW 3500	28.5	35.0	55.8	88	33	4.8	1	0.0	0.0	3.5	0.5	3.5	0.0	4.5
AGS 2040	31.2	34.6	58.1	78	33	2.3	0	0.1	0.5	4.5	1.0	5.0	0.0	4.0
AGS 2038	34.8	33.2	54.7	85	35	3.8	2	0.1	0.5	4.5	0.0	2.5	0.0	4.0
SYNGENTA SY CYPRESS	32.6	30.6	57.4	82	31	3.5	28	0.3	0.0	6.5	3.5	5.0	0.0	6.0
LANC8170-41-2	26.2	27.7	56.0	90	31	1.8	5	0.0	0.0	5.5	5.0	5.0	0.0	6.5
HILLIARD	20.7	24.4	50.7	97	32	0.0	0	0.0	0.0	3.5	0.5	2.5	0.0	4.5
SYNGENTA SY VIPER	16.6	23.2	50.8	97	34	4.5	26	0.0	0.0	7.0	5.0	5.0	0.0	6.5
AGS 2055	21.7	22.8	54.0	93	34	3.0	0	0.1	0.0	4.5	0.0	5.5	0.0	5.0
USG 3013	3.9	15.2		102	30	5.8	39	2.5	0.0	8.0	0.0	2.5	0.0	4.5
PIONEER 26R41	4.7	14.2		100	29	2.3	8	3.1	0.0	8.0	3.5	6.5	5.5	8.0
PROGENY 870	4.8	12.4	56.1	104	29	1.5	6	0.6	0.0	6.5	2.5	5.0	3.5	6.5
AGS 3000	38.3		57.9	76	33	3.5	0	0.0	0.9	3.0	0.0	2.5	0.0	3.0
LA08095C-37	35.8		57.5	81	35	3.0	30	0.0	1.0	5.0	1.0	3.0	0.0	4.5
AGS 2024	34.6		57.7	85	31	3.5	0	0.9	0.4	4.5	0.5	3.0	0.0	3.5
AR01040-4-1	32.8		58.0	84	37	3.8	10	0.5	0.2	6.5	3.0	3.5	0.0	4.5
GA061349-13LE31	30.7		52.4	89	31	1.8	0	0.0	0.0	3.0	0.0	2.5	0.0	3.5
LA09011UB-2	30.4		55.6	88	31	4.5	1	0.0	0.0	4.0	2.5	5.0	0.5	5.5
LA08090C-9-2	30.0		51.2	90	33	2.0	1	0.0	0.0	3.5	0.5	3.0	0.0	4.5
VA12W-72	28.8		52.4	91	32	2.3	3	0.0	0.0	3.5	2.0	3.0	0.0	4.5
PGX 15-12	28.4		53.0	91	31	1.8	0	0.0	0.0	4.0	0.0	4.0	1.0	5.5
GA051102-13LE43	27.5		52.5	92	33	2.5	0	0.0	0.0	3.5	0.0	3.5	0.0	3.5
LA01110D150- FOOHOLD	27.0		58.4	85	36	3.3	7	3.4	0.5	7.5	2.0	4.0	1.5	5.0
GA061349-13LE29	26.7		51.3	94	30	3.0	0	0.0	0.0	3.5	0.0	3.0	0.0	3.0
LA01110D150-NT	26.4		58.5	85	35	3.8	8	3.1	0.4	7.5	5.0	5.5	6.0	7.0
LA08115C-30	25.7		58.7	79	34	3.0	7	4.7	18.3	8.0	6.5	4.5	7.5	8.0
PROGENY 243	13.4		53.6	100	33	4.5	9	0.0	0.0	6.5	2.5	3.0	0.0	5.5
PGX 15-16	9.7		51.8	106	26	1.5	10	0.0	0.0	6.5	1.5	2.0	1.0	5.0
DIXIE 16-1	8.2		52.0	104	31	3.3	6	1.6	0.0	7.0	2.0	6.0	1.5	6.5
ARMOR ARX1511	7.7		51.1	106	31	4.3	5	0.8	0.0	6.5	0.5	5.0	1.0	7.0
PGX 15-10	7.1		51.0	106	31	3.8	4	1.2	0.0	7.0	1.5	5.0	1.5	6.5
DELTA GROW 1000	6.2		51.5	106	31	3.3	4	1.5	0.0	7.0	1.5	4.0	3.0	5.5
DYNA-GRO WX 15781	5.8		51.5	106	32	4.3	3	0.8	0.0	7.0	2.0	5.0	2.0	6.5
DYNA-GRO 9642	5.6		55.2	109	25	7.8	6	0.6	0.1	7.0	1.5	6.0	0.0	7.0
ARMOR ARX1516	5.1			102	28	5.8	3	1.1	0.0	6.5	4.5	7.0	5.0	7.5
ARMOR ARX1514	4.8			100	27	7.0	18	3.7	0.0	8.5	5.0	6.5	4.0	7.5
ARMOR ARX1521	4.6			106	28	3.5	6	1.3	0.0	7.0	2.0	7.0	2.5	7.0
DIXIE 16-2	4.4			102	29	5.3	8	3.2	0.0	8.0	4.0	6.5	2.5	7.0
PGX 15-14	4.2			100	29	5.3	8	2.5	0.0	7.5	5.0	6.0	5.0	7.5
PROGENY 357	4.0			104	29	6.0	27	0.9	0.0	7.5	6.0	7.0	1.0	8.0
AGRIMAXX EXP 1674	3.6			101	27	7.8	9	3.8	0.0	8.0	4.5	7.0	4.5	8.0
DYNA-GRO WX 16771	3.4			106	28	6.0	4	1.3	0.0	7.0	4.5	7.0	4.0	7.5
Mean	20.9	30.2	55.1	93	32	3.7	7	0.9	0.6	5.7	2.1	4.4	1.3	5.5
CV%	15	13	2	1	5	38	128	163	444	13	50	22	79	12
LSD (0.10)	3.5	8.8	1.2	1	2	1.6	11	1.7	3.3	1.2	1.8	1.6	1.8	1.1

Data from at Rice Research Station (South Unit) . Dustin Harrell, Don Groth, Boyd Padgett, Ron Regan, James P. Leonards, and Jacob Fluit

Cultural and Site: Crowley Silt Loam soil . Planted 11-30-15. Harvested 5-5-16. Fertilizer: 250# 0-24-24 on 12/10; 100# 21-0-0-24 on 12/10; 90# 46-0-0 on 1/29.

Herbicides: Osprey (4.75 oz) plus Harmony Extra (0.9 oz) plus 1% MSO plus 3 pts Prowl /acre on 1/9. The fall and winter were very wet with frequent saturated soils that reduced tillering and plant development.

Bold 'Brand/variety' indicates the entry is commercially available, others are non-released breeding lines.

Table 7. Wheat performance trial at Jeanerette, LA for 2016.

	Grain Yield		Test	Head	Plant	Leaf	Stem	Sept	Fus
	2016	2-YR	Wt	Day	Ht	Rust	Rust	oria	H Blight
Brand / variety	bu/a		lbs/bu	of yr	in	%	0-9	0-9	0-9
LA01110D-150-241	45.9	44.4	53.8	99	30	0	0.8	0.0	0.0
AGS 2040	35.8	44.3	54.9	88	30	0	0.0	0.0	1.0
LA01110D-150-625	43.1	42.7	55.1	93	31	0	0.0	0.0	0.0
AGS 2035	38.3	40.7	53.5	89	31	0	0.0	0.5	0.5
LA03200E-2	38.0	38.0	53.4	91	29	19	0.0	0.0	0.8
AGS 2038	37.6	37.0	52.8	95	33	0	0.0	1.8	0.3
GA-04434-12LE28	27.8	35.8	50.3	100	29	0	0.0	0.0	0.0
AR01040-4-1	44.1	35.2	51.3	93	33	0	0.0	0.0	0.0
DYNA-GRO SAVOY	30.9	35.2	52.5	91	28	0	0.0	1.8	1.3
DELTA GROW 3500	33.3	34.6	52.2	96	30	0	0.0	0.0	0.0
SY CYPRESS	26.6	33.8	51.3	86	28	4	0.0	1.3	1.5
USG 3120	30.3	33.5	52.6	85	31	0	0.0	1.3	1.5
JAMESTOWN	35.6	32.8	55.0	90	26	3	0.0	0.0	0.0
PIONEER 26R94	34.3	31.5	51.0	88	33	0	0.0	0.5	1.3
LANC8170-41-2	32.9	29.7	54.5	97	29	15	0.3	0.0	0.0
PIONEER 26R41	24.5	28.3	45.7	106	28	19	1.3	0.0	0.0
USG 3013	0.5	24.0		111	29	85	0.8	0.5	0.0
AGS 2055	29.0	22.6	47.9	104	30	0	0.5	0.0	0.0
HILLIARD	28.1	22.0	49.2	98	30	7	0.0	0.0	0.0
SY SY VIPER	8.6	10.9	38.6	110	31	46	0.0	0.0	0.0
PROGENY 870	10.5	9.6	40.6	108	28	24	0.3	0.0	0.0
LA01110D150-NT	41.4		52.8	93	31	0	0.8	0.5	0.3
LA01110D150- FTH	40.4		52.4	95	31	0	0.5	0.0	0.0
GA051102-13LE43	39.9		55.1	100	30	0	0.0	0.0	0.0
GA061349-13LE31	38.4		53.7	99	30	0	0.0	0.0	0.0
GA061349-13LE29	37.2		48.7	106	29	0	0.0	0.0	0.0
LA08090C-9-2	35.9		55.6	89	30	0	0.0	0.0	0.3
VA12W-72	34.0		49.0	100	28	5	0.0	0.0	1.0
LA09011UB-2	33.9		53.9	100	27	3	0.0	0.0	0.0
AGS 2024	32.8		52.7	90	27	0	0.0	1.0	2.3
LA08115C-30	32.3		50.8	90	29	0	0.0	0.5	2.5
LA08095C-37	30.9		54.5	86	31	8	0.0	1.0	1.8
PGX 15-12	30.7		51.6	101	27	0	0.0	0.0	0.0
DELTA GROW 1000	28.4		43.5	110	29	17	1.0	0.0	0.0
AGS 3000	20.4		54.8	77	28	0	0.0	1.3	0.0
PGX 15-10	15.6		39.6	114	29	13	0.8	0.0	0.0
DYNA-GRO WX 15781	14.9		39.0	113	29	15	0.8	0.0	0.0
DIXIE 16-1	14.8		39.8	111	31	10	1.0	0.0	0.0
PROGENY 243	13.0		40.7	107	30	22	0.0	0.0	0.0
ARMOR ARW1511	11.5		38.9	113	30	9	1.0	0.0	0.0
PGX 15-14	10.5		41.3	108	27	75	0.3	0.0	0.0
PGX 15-16	10.1		36.6	114	26	1	0.0	0.0	0.0
DIXIE 16-2	8.1		40.6	109	28	41	0.5	0.0	0.0
ARMOR ARW1516	7.8		41.2	106	27	75	0.5	0.0	0.0
DYNA-GRO WX 16771	7.6		35.1	112	28	61	1.0	0.0	0.0
ARMOR ARW1514	7.4		37.2	109	27	59	0.0	0.0	0.0
AGRIMAXX EXP 1674	6.6		40.1	108	27	64	0.5	0.0	0.0
ARMOR ARW1521	6.2		40.9	112	27	52	0.0	0.0	0.0
PROGENY 357				112	27	76	1.5	0.0	0.0
DYNA-GRO 9642				115	23	71	0.8	0.0	0.0

Table 7. Wheat performance trial at Jeanerette, LA for 2016.

	Grain Yield		Test	Head	Plant	Leaf	Stem	Sept	Fus
	2016	2-YR	Wt	Day	Ht	Rust	Rust	oria	H Blight
Brand / variety	bu/a		lbs/bu	of yr	in	%	0-9	0-9	0-9
Mean	28.7	32.1	49.1	100	29	18	0.3	0.2	0.3
CV	25	22	6	2	4	61	245	251	140
LSD	9.9	7.5	3.9	3	2	13	0.8	0.7	0.5

Data from Iberia Research Station, Jeanerette, LA. Greg Williams and Sonny Viator.

Cultural and Site: Planted 11-13-15. harvested 5-16-16. Very wet early season: 13" in November 4.27" in December and 6.41" in January. 20-20-20 applied preplant followed by 100-0-0 as urea on 2-18-16. 2,4-D amine on 12-12-15 followed by Finesse 0.4 oz/acre on 1-20-16. Some varieties failed to vernalize.

Bold 'Brand/variety' indicates the entry is commercially available, others are non-released breeding lines.

Table 8. Wheat performance trial at Jeanerette, LA for 2016. Very late heading, non-adapted lines were dropped from this table.

Brand / variety	Grain Yield bu/a	Test Wt lbs/bu	Head Day of yr	Plant Ht in	Leaf Rust %	Stem Rust 0-9	Septoria 0-9	Fus H Blight 0-9
LA01110D-150-241	45.9	53.8	99	30	0	0.8	0.0	0.0
AR01040-4-1	44.1	51.3	93	33	0	0.0	0.0	0.0
LA01110D-150-625	43.1	55.1	93	31	0	0.0	0.0	0.0
LA01110D150-NT	41.4	52.8	93	31	0	0.8	0.5	0.3
LA01110D150-FTH	40.4	52.4	95	31	0	0.5	0.0	0.0
GA051102-13LE43	39.9	55.1	100	30	0	0.0	0.0	0.0
GA061349-13LE31	38.4	53.7	99	30	0	0.0	0.0	0.0
AGS 2035	38.3	53.5	89	31	0	0.0	0.5	0.5
LA03200E-2	38.0	53.4	91	29	19	0.0	0.0	0.8
AGS 2038	37.6	52.8	95	33	0	0.0	1.8	0.3
GA061349-13LE29	37.2	48.7	106	29	0	0.0	0.0	0.0
LA08090C-9-2	35.9	55.6	89	30	0	0.0	0.0	0.3
AGS 2040	35.8	54.9	88	30	0	0.0	0.0	1.0
JAMESTOWN	35.6	55.0	90	26	3	0.0	0.0	0.0
PIONEER 26R94	34.3	51.0	88	33	0	0.0	0.5	1.3
VA12W-72	34.0	49.0	100	28	5	0.0	0.0	1.0
LA09011UB-2	33.9	53.9	100	27	3	0.0	0.0	0.0
DELTA GROW 3500	33.3	52.2	96	30	0	0.0	0.0	0.0
LANC8170-41-2	32.9	54.5	97	29	15	0.3	0.0	0.0
AGS 2024	32.8	52.7	90	27	0	0.0	1.0	2.3
LA08115C-30	32.3	50.8	90	29	0	0.0	0.5	2.5
LA08095C-37	30.9	54.5	86	31	8	0.0	1.0	1.8
DYNA-GRO SAVOY	30.9	52.5	91	28	0	0.0	1.8	1.3
PGX 15-12	30.7	51.6	101	27	0	0.0	0.0	0.0
USG 3120	30.3	52.6	85	31	0	0.0	1.3	1.5
PIONEER 26R41	30.2	45.7	106	28	19	1.3	0.0	0.0
AGS 2055	29.0	47.9	104	30	0	0.5	0.0	0.0
DELTA GROW 1000	28.4	43.5	110	29	17	1.0	0.0	0.0
HILLIARD	28.1	49.2	98	30	7	0.0	0.0	0.0
GA-04434-12LE28	27.8	50.3	100	29	0	0.0	0.0	0.0
Mean	33.2	49.1	100	29	18	0.3	0.2	0.3
CV	22	6	2	4	61	245	251	140
LSD	8.9	3.9	3	2	13	0.8	0.7	0.5

Data from Iberia Research Station, Jeanerette, LA. Greg Williams and Sonny Viator.

Cultural and Site: Planted 11-13-15. harvested 5-16-16. Very wet early season: 13" in November 4.27" in December and 6.41" in January. 20-20-20 applied preplant followed by 100-0-0 as urea on 2-18-16. 2,4,D amine on 12-12-15 followed by Finesse 0.4 oz/acre on 1-20-16. Some varieties failed to vernalize.

Bold 'Brand/variety' indicates the entry is commercially available, others are non-released breeding lines.

Table 9. Wheat performance trial across North Louisiana for 2016.

Brand / variety	Grain Yield bu/a	Test Wt lbs/bu	Head Day of yr	Plant Ht in	Lod Score 0-9	Stripe Rust %	Leaf Rust %	Leaf Blotch 0-9	Pheno type 0-9	Fus HBlt 0-9	FDK 0-9	Seed Qual 0-9
LA01110D-150-241	66.4	55.1	93	41	0.2	4	0	2.3	3.5	0.8	3.2	3.5
PGX 15-12	64.4	55.8	95	37	0.1	1	0	1.5	4.5	0.0	1.2	2.8
DELTA GROW 3500	62.9	56.6	89	38	1.5	2	0	2.3	3.5	1.5	2.2	3.0
VA12W-72	62.9	52.6	93	38	0.6	0	3	1.5	4.0	0.0	2.2	3.7
AGS 2055	61.5	49.1	96	41	0.6	0	0	2.3	3.0	0.0	5.3	5.2
LA08090C-9-2	60.9	55.6	92	39	0.3	2	0	2.0	3.0	0.5	2.5	3.3
LA01110D150-FTH	59.2	54.9	89	41	0.5	10	0	3.3	4.0	1.8	2.5	3.3
LA01110D150-NT	58.5	54.2	89	40	0.0	12	0	3.5	5.0	1.8	2.8	3.3
AGS 2038	58.0	53.2	91	40	0.0	4	0	2.3	4.0	3.3	3.7	4.8
LA09011UB-2	57.4	56.6	90	36	2.2	0	1	2.5	4.5	0.3	2.0	3.5
GA061349-13LE29	57.3	52.1	96	38	0.6	0	0	1.3	3.5	0.0	4.3	4.8
LA01110D-150-625	56.1	56.4	90	41	1.3	0	0	2.3	4.0	1.0	1.5	3.0
LA03200E-2	55.8	54.9	89	39	0.8	2	18	3.0	4.0	1.5	3.2	3.8
LANC8170-41-2	55.5	55.6	93	38	1.1	1	12	1.8	4.5	0.3	1.3	3.0
HILLIARD	55.4	50.6	97	41	0.9	0	1	1.5	4.0	0.0	3.3	4.8
PIONEER 26R94	55.3	54.9	88	39	0.0	0	0	2.3	3.5	1.8	2.2	3.2
LA08115C-30	54.7	54.1	85	37	0.0	0	12	4.3	5.5	3.0	3.0	3.8
AGS 2024	54.5	53.4	90	36	0.8	1	0	4.0	4.0	2.0	3.5	4.2
GA061349-13LE31	53.1	52.7	94	38	0.3	1	0	2.3	4.5	0.0	4.7	4.2
AGS 2040	52.9	55.7	85	39	0.2	0	0	5.0	5.0	0.0	1.3	3.2
DELTA GROW 1000	52.3	52.5	104	41	1.9	0	0	1.0	4.5	0.0	1.5	3.8
GA051102-13LE43	52.2	54.2	95	40	0.2	0	0	2.3	4.0	0.0	4.7	3.7
SY CYPRESS	51.0	54.4	82	35	1.5	18	15	3.0	5.5	0.5	1.3	3.3
JAMESTOWN	50.2	56.6	88	36	3.4	2	3	3.8	4.5	0.0	1.0	3.5
ARMOR ARW1511	49.3	52.5	106	40	0.8	0	0	1.0	4.0	0.0	1.0	3.7
USG 3120	49.2	54.2	83	40	0.0	16	0	3.3	5.0	1.0	2.3	3.8
DYNA-GRO WX 15781	49.0	52.3	105	40	0.7	0	1	1.0	4.0	0.0	1.3	3.8
PGX 15-10	48.4	52.6	106	41	1.6	2	0	1.3	3.5	0.0	1.5	3.8
GA-04434-12LE28	48.1	51.4	90	40	2.0	7	1	2.8	4.0	1.8	3.7	4.5
AR01040-4-1	48.0	52.6	88	43	0.2	5	9	1.8	4.0	0.0	1.7	3.8
AGS 2035	48.0	52.5	85	41	0.5	22	1	3.5	5.5	0.5	3.0	4.2
DIXIE 16-1	46.0	50.4	105	38	1.4	0	1	1.3	4.0	0.0	1.8	4.2
PGX 15-16	45.8	52.7	103	35	2.4	0	2	1.3	5.0	0.0	1.7	3.7
PIONEER 26R41	45.4	49.6	103	38	1.4	0	4	1.5	5.0	0.0	3.7	5.0
LA08095C-37	44.4	53.7	85	41	0.8	2	6	3.0	5.5	2.0	2.8	4.0
DYNA-GRO SAVOY	41.9	55.0	82	35	0.6	4	0	6.0	7.0	0.0	2.3	4.7
AGS 3000	37.6	57.3	79	38	0.0	0	0	5.3	5.0	0.5	1.5	3.3
SY VIPER	37.6	50.3	98	41	3.8	0	34	1.5	4.0	0.3	2.3	4.7
DELTA GROW 7500	36.7	45.0	101	38	0.5	0	15	1.3	4.5	0.0	3.4	6.2
DIXIE MCALISTER	35.7	44.8	103	38	0.4	0	16	1.5	5.5	0.0	3.2	6.2
AGRIMAXX 413	35.6	44.8	102	37	0.6	0	16	1.5	5.5	0.0	3.3	6.0
PROGENY 870	34.2	41.4	103	38	0.4	0	14	1.5	5.5	0.0	3.8	7.0
DYNA-GRO 9171	33.8	42.4	102	37	0.7	0	12	1.8	5.0	0.3	4.2	6.7
GO WHEAT 2056	33.4	44.2	104	38	0.6	0	12	2.0	5.0	0.0	3.2	6.7
AGRIMAXX 415	32.6	47.2	100	38	2.9	0	20	1.5	5.5	0.0	3.5	5.7
USG 3201	32.2	45.7	101	36	4.1	0	29	1.5	5.0	0.0	3.2	6.2
PROGENY 243	31.9	46.0	99	43	4.0	1	20	1.8	6.5	0.0	2.3	5.2
PIONEER 26R59	29.5	42.5	100	35	2.3	0	32	1.0	5.0	0.0	3.0	6.2
DYNA-GRO 9522	29.4	46.3	103	39	3.3	0	31	2.0	5.0	0.0	2.7	6.2
DELTA GROW 2700	28.1	46.0	104	39	1.9	1	30	2.0	5.5	0.0	2.3	5.8

Table 9. Wheat performance trial across North Louisiana for 2016.

Brand / variety	Grain Yield bu/a	Test Wt lbs/bu	Head Day of yr	Plant Ht in	Lod Score 0-9	Stripe Rust %	Leaf Rust %	Leaf Blotch 0-9	Pheno type 0-9	Fus HBlt 0-9	FDK 0-9	Seed Qual 0-9
AGRIMAXX 444	27.6	45.2	104	39	2.4	0	28	1.5	5.5	0.0	2.5	5.3
PIONEER 26R53	27.5	47.4	100	37	3.9	0	21	2.0	5.5	0.8	2.6	5.6
USG 3404	27.0	45.7	105	38	2.7	1	26	1.8	6.0	0.0	2.2	5.5
AGRIMAXX 446	26.2	46.9	103	37	2.5	4	39	1.8	6.5	0.0	3.2	6.0
PGX 15-14	25.3	41.7	102	37	3.1	0	24	1.3	5.5	0.0	3.3	6.3
ARMOR ARW1516	24.8	41.2	101	38	3.4	0	24	2.0	5.5	0.0	3.7	6.2
SY HARRISON	24.5	41.8	103	37	3.0	0	43	1.8	6.0	0.0	3.3	6.3
AGRIMAXX EXP 1674	24.1	43.1	102	37	2.7	0	34	1.5	6.0	0.0	3.2	6.0
ARMOR ARW1514	23.6	42.0	102	38	2.7	0	27	1.5	5.0	0.0	3.3	6.2
DIXIE 16-2	22.6	42.3	102	36	2.7	1	29	1.5	6.0	0.0	2.8	5.8
ARMOR ARW1521	22.1	44.1	104	38	4.6	2	10	1.5	6.0	0.0	3.0	6.2
DYNA-GRO WX 16771	21.4	46.4	106	37	4.8	0	10	1.8	5.5	0.0	2.7	6.2
DIXIE EXTREME	14.0	38.5	103	39	6.8	10	59	1.5	6.5	0.0	3.3	7.0
USG 3013	13.7	41.7	105	36	6.7	0	63	1.3	6.5	0.0	3.2	6.3
DYNA-GRO 9642	13.5	40.2	109	36	7.5	0	19	1.8	6.5	0.0	2.8	6.8
PROGENY 357	12.3	45.4	104	37	6.3	0	64	1.3	7.0	0.0	3.3	7.0
Mean	41.7	49.9	97	38	1.9	2	14	2.1	4.9	0.4	3.3	4.8
CV	17	4	2	3	87	169	62	27	12	122	25	14
LSD	10.3	2.7	3.0	3.2	1.8	4	17	ns	ns	ns	0.9	0.9

Data from Alexandria, St. Joseph, and Winnsboro, LA.

Bold 'Brand/variety' indicates the entry is commercially available, others are non-released breeding lines.

NS indicates non-significant differences among varieties.

Leaf Blotch is a indistinguishable complex of leaf diseases that may include spetorai, tan spot, and bacterial streak; 0 = none and 9 = severe.

Seed Quality is a visual rating of seed plumpness and brightness and visual blemishes with 0 = perfect and 9 = very poor.

FDK is a visual estimate of the Fusarium Damaged Kernels on a 0 = none to 9 = severe scale. FDK can contribute to poor SDQ rating.

Table 10. Wheat performance trial across North Louisiana for two years, 2015 and 2016.

Brand / variety	Grain Yield bu/a	Test Wt lbs/bu	Heading Day of yr	Plant Ht in	Lodging Score 0-9	Stripe Rust %	Leaf Rust %	Fus H Blight 0-9	FDK %	Pheno type 0-9
DELTA GROW 3500	60.3	54.7	92	36	1.6	1	0	4.7	24	3.8
LA01110D-150-241	57.3	52.2	94	40	0.8	2	0	4.4	29	3.9
HILLIARD	56.7	52.7	98	39	1.0	0	1	2.1	34	4.0
PIONEER 26R41	55.9	52.9	102	35	1.5	0	3	1.7	36	4.1
LA03200E-2	55.3	53.8	92	38	0.8	4	14	4.6	31	4.1
LANC8170-41-2	54.4	53.8	95	36	0.6	0	8	2.3	18	4.3
AGS 2055	54.0	48.5	97	39	0.8	0	0	4.3	45	2.8
AGS 2038	53.4	52.8	95	41	0.2	4	0	4.6	35	3.8
LA01110D-150-625	52.8	54.5	93	41	1.5	0	0	4.3	24	4.1
JAMESTOWN	50.3	56.4	91	36	2.2	3	2	2.8	23	4.3
PIONEER 26R94	50.2	53.7	91	39	0.2	0	0	5.1	27	4.0
AR01040-4-1	49.7	52.3	93	44	0.6	2	6	3.0	23	4.0
SY VIPER	48.9	52.0	98	41	3.1	0	27	2.4	31	4.0
GO WHEAT 2056	48.4	48.8	102	37	0.9	0	9	2.0	32	4.4
SY CYPRESS	48.2	53.3	88	35	1.8	26	12	3.8	21	5.6
DIXIE MCALISTER	48.1	49.2	101	35	0.7	0	13	1.9	33	4.4
AGS 2040	47.9	55.6	89	37	0.5	2	0	4.2	22	5.1
PROGENY 870	47.3	47.5	102	36	0.8	0	13	2.1	38	4.8
GA-04434-12LE28	47.1	49.7	93	37	1.6	3	1	5.0	37	4.5
DYNA-GRO 9171	47.0	48.0	101	36	0.8	0	9	2.3	41	4.5
AGRIMAXX 413	46.9	50.9	101	36	0.9	0	14	2.3	33	4.5
AGS 2035	46.7	52.8	89	40	0.6	30	1	4.2	31	5.4
USG 3120	45.1	52.7	88	38	0.7	27	0	4.7	29	5.1
USG 3201	45.1	50.9	101	36	3.5	0	20	1.6	32	4.9
DELTA GROW 7500	44.5	50.3	101	38	1.0	5	10	1.3	34	4.9
PIONEER 26R53	44.4	53.1	100	35	3.2	0	14	1.4	28	4.6
AGRIMAXX 415	44.3	52.1	100	37	3.2	1	16	1.5	36	4.9
USG 3404	44.2	49.3	104	38	2.7	0	21	1.4	26	5.1
DYNA-GRO SAVOY	43.9	53.4	87	36	0.5	2	0	4.2	31	6.1
AGRIMAXX 446	43.6	51.7	103	38	2.2	2	30	1.4	32	5.3
DYNA-GRO 9522	42.8	50.8	103	38	2.3	0	23	1.3	30	4.5
AGRIMAXX 444	42.7	50.0	103	37	2.4	0	20	1.5	30	4.8
DELTA GROW 2700	42.6	50.5	103	37	1.9	0	21	1.7	30	4.8
PIONEER 26R59	42.5	49.0	101	34	1.9	0	23	1.4	32	4.5
USG 3013	40.1	50.2	102	33	4.6	0	39	1.7	32	5.0
SY HARRISON	38.0	47.2	103	37	3.3	1	35	2.0	34	5.1
DIXIE EXTREME	31.1	46.2	102	40	5.7	4	42	1.6	35	5.6
Mean	47.6	51.5	97	37	1.7	3	12	2.8	31	4.6
CV (0.10)	14	5	1	6	87	127	67	27	21	12
LSD	11.8	1.5	3	2	1.3	7	13	1.3	7.8	1.3

Data from 2015 and 2016 Bossier City, St. Joseph, and Winnsboro, LA and 2016 Alexandria.

Bold 'Brand/variety' indicates the entry is commercially available, others are non-released breeding lines.

NS indicates non-significant differences among varieties.

Phenotype is 'eye appeal' 0 = excellent and 9 = ugly.

FDK is estimated Fusarium Damaged Kernels on a 0 = none to 9 = severe. FDK can contribute to poor SQ rating.

Significant Correlations with Yield: TestWt = +0.57**, HdDay = -0.42**, Lod = -0.64**, LfRust = -0.74**, FHB = +0.52**, PHE = -0.70**

Table 11. Wheat performance trial across North Louisiana for three years, 2014, 2015 and 2016.

Brand / variety	Grain Yield bu/a	Test Wt lbs/bu	Heading Day of yr	Plant Ht in	Lod Score 0-9	Stripe Rust %	Leaf Rust %	Fus H Blight 0-9	FDK %	Pheno type 0-9
PIONEER 26R41	68.1	54.3	105	35	1.3	0	2	1.4	33.9	4.3
AGS 2038	64.8	54.4	101	40	0.5	4	0	3.5	35.9	4.1
DYNA-GRO 9171	63.1	50.6	103	35	0.8	0	8	1.9	36.0	4.3
LA03200E-2	63.0	55.2	96	36	0.8	4	10	3.7	33.3	3.6
JAMESTOWN	61.4	57.0	95	35	1.8	3	1	2.4	23.6	4.1
PIONEER 26R94	61.0	55.2	95	38	0.3	0	0	3.9	24.4	4.2
GO WHEAT 2056	60.9	51.1	104	35	1.0	0	7	1.5	32.7	4.4
DIXIE MCALISTER	60.7	51.1	104	35	0.7	0	12	1.4	32.0	4.7
USG 3201	60.7	53.4	103	36	2.8	0	15	1.2	31.7	4.8
PROGENY 870	60.4	50.1	104	35	0.8	0	11	1.6	37.7	4.4
SY CYPRESS	59.8	54.7	93	35	1.5	26	8	2.9	23.4	4.8
USG 3404	59.7	51.7	105	37	2.2	0	16	1.1	24.4	4.3
DELTA GROW 7500	59.3	52.2	103	36	1.0	5	7	0.9	31.2	4.6
PIONEER 26R53	59.2	54.7	104	34	2.5	0	11	1.1	25.7	4.2
USG 3120	59.0	54.6	93	38	0.7	27	0	4.2	28.5	4.4
AGS 2035	58.2	54.6	95	38	0.7	30	1	3.3	32.9	4.9
DYNA-GRO SAVOY	58.0	54.7	93	34	0.9	2	0	3.8	31.5	5.1
AGS 2040	56.0	56.2	94	35	0.6	2	0	3.3	23.4	4.3
SY HARRISON	55.8	49.8	104	36	2.6	1	27	1.5	32.5	4.6
DIXIE EXTREME	50.0	49.5	106	39	4.5	4	33	1.2	36.3	4.8
Mean	60.0	53.3	100	36	1.4	6	9	2.3	31.0	4.4
CV	12	4	1	6	89	11	81	37	24	14
LSD	7.4	2.3	3	1	1.1	9	10	1.0	7.6	0.8

Data from 2014 and 2016 Alexandria; 2014 and 2015 Bossier City; and 2014, 2015, and 2016 St. Joseph, and Winnsboro, LA.

Bold 'Brand/variety' indicates the entry is commercially available, others are non-released breeding lines.

NS indicates non-significant differences among varieties.

Phenotype is 'eye appeal' 0 = excellent and 9 = ugly.

FDK is estimated Fusarium Damaged Kernels on a 0 = none to 9 = severe. FDK can contribute to poor SDQ rating.

Significant Correlations with Yield: LfRust = -0.56**, PHE = -0.49*

Table 12. Wheat performance trial at Alexandria for 2016.

Brand / variety	Grain Yield bu/a	Test Wt lbs/bu	Head Day of yr	Plant Ht in	Lod Score 0-9	Leaf Rust %	Bact eria 0-9	Fus Blight 0-9	Seed Qual 0-9	FDK 0-9	DON ppm
DELTA GROW 3500	61.7	53.3	91	41	0.0	0	0.0	0.0	3.0	3.5	
VA12W-72	56.4	55.9	88	37	0.0	6	0.0	0.0	3.0	1.5	
HILLIARD	56.3	54.3	91	41	0.5	2	0.0	0.0	4.0	2.5	
LA08090C-9-2	56.1	58.5	84	40	0.5	0	1.0	0.5	3.0	2.0	
LA03200E-2	54.8	57.0	80	39	0.0	44	0.0	1.5	4.0	4.5	
AGS 3500	54.4	58.7	83	41	1.5	0	0.0	1.5	2.5	2.5	
JAMESTOWN	54.1	58.5	80	37	0.5	4	1.8	0.0	3.0	1.0	
LA01110D-150-241	51.5	56.0	88	41	1.0	0	0.0	0.8	3.5	3.0	
LANC8170-41-2	49.0	58.3	88	39	0.0	26	0.0	0.3	2.0	1.0	
LA08115C-30	48.8	56.1	76	39	0.0	30	3.8	3.0	3.5	3.0	
LA01110D150- FOOHOLD	47.3	56.1	82	42	2.5	0	1.8	1.8	3.0	2.0	
AGS 2024	47.1	56.3	77	37	0.0	0	0.0	2.0	4.0	3.5	
GA061349-13LE29	46.4	55.9	91	38	1.0	0	0.0	0.0	4.0	2.5	
PGX 15-12	46.3	54.8	90	36	0.5	0	0.0	0.0	3.0	1.0	
GA-04434-12LE28	45.4	55.3	84	40	1.0	1	3.8	1.8	3.5	3.0	
LA01110D150-NT	45.3	55.5	82	41	0.0	0	0.0	1.8	3.0	2.0	
PIONEER 26R41	45.0	49.6	98	39	0.0	2	0.0	0.0	5.0	3.5	
ARMOR ARW1511	44.6	53.8	102	41	0.5	0	0.0	0.0	4.0	1.0	
LA09011UB-2	44.5	58.3	85	38	3.0	1	1.8	0.3	3.0	1.5	
DELTA GROW 1000	44.2	52.4	101	42	0.0	0	0.0	0.0	4.0	1.5	
AGS 2035	43.5	57.2	76	43	0.0	0	0.0	0.5	3.5	1.5	
AGS 2038	43.1	54.6	81	40	0.0	0	0.0	3.3	5.0	4.5	
DYNA-GRO WX 15781	42.8	52.0	101	41	0.0	0	0.0	0.0	4.0	1.0	
SYNGENTA SY CYPRESS	42.7	57.6	73	35	0.0	63	0.0	0.5	2.5	1.0	
LA01110D-150-625	42.6	56.5	81	43	1.0	0	0.0	1.0	3.0	1.5	
PGX 15-16	42.2	55.6	98	37	1.0	3	0.0	0.0	2.5	1.0	
GO WHEAT 2056	40.9	47.1	100	39	0.0	20	0.0	0.0	6.0	3.5	
PGX 15-10	40.7	53.1	102	41	0.5	0	0.0	0.0	4.5	1.0	
AGS 2040	40.5	57.3	77	38	0.0	0	0.0	0.0	3.0	1.5	
AGRIMAXX 413	39.9	47.8	99	38	0.0	26	0.0	0.0	5.0	3.0	
PIONEER 26R94	39.7	57.2	78	40	0.0	0	0.5	1.8	3.0	2.0	
PROGENY 243	38.5	52.2	93	42	2.5	27	0.0	0.0	3.5	1.0	
GA061349-13LE31	37.4	56.3	90	38	0.0	0	0.0	0.0	3.5	3.5	
DELTA GROW 7500	37.1	50.3	98	37	0.0	29	0.0	0.0	5.0	3.0	
DYNA-GRO 9171	36.9	43.6	98	39	0.5	17	0.0	0.3	7.0	4.0	
DIXIE MCALISTER	36.9	47.9	100	38	0.5	29	0.0	0.0	6.0	3.5	
GA051102-13LE43	36.4	55.9	88	40	1.0	0	0.0	0.0	3.5	4.0	
LA08095C-37	36.2	56.4	77	41	0.0	0	0.0	2.0	4.0	3.0	
DIXIE 16-1	35.7	49.5	101	40	0.0	0	0.0	0.0	4.5	2.0	
AGRIMAXX 415	35.3	53.3	95	37	0.0	33	0.0	0.0	4.0	2.5	
USG 3201	34.7	49.1	97	38	3.5	53	0.0	0.0	5.5	2.5	
USG 3120	34.7	56.8	76	41	0.0	0	2.0	1.0	4.5	2.5	
PROGENY 870	34.1	40.1	100	37	0.0	24	0.0	0.0	7.0	3.0	
DYNA-GRO 9522	29.5	49.7	97	40	1.5	46	0.0	0.0	5.0	3.0	
USG 3404	28.8	49.8	101	38	1.0	44	0.0	0.0	4.0	1.5	

Table 12. Wheat performance trial at Alexandria for 2016.

Brand / variety	Grain Yield bu/a	Test Wt lbs/bu	Head Day of yr	Plant Ht in	Lod Score 0-9	Leaf Rust %	Bact eria 0-9	Fus Blight 0-9	Seed Qual 0-9	FDK 0-9	DON ppm
DELTA GROW 2700	26.5	48.7	100	41	0.5	53	0.0	0.0	5.0	2.0	
AGRIMAXX 446	25.3	51.0	101	38	0.5	57	0.0	0.0	5.0	3.0	
AGRIMAXX 444	25.3	49.5	100	39	1.5	51	0.0	0.0	4.5	2.0	
PGX 15-14	24.6	45.2	97	37	1.5	41	0.0	0.0	5.5	3.0	
ARMOR ARW1514	24.6	44.5	98	37	1.0	49	0.0	0.0	6.0	3.5	
SYNGENTA HARRISON	24.0	46.6	100	37	1.5	71	0.0	0.0	4.5	3.0	
AR01040-4-1	23.0	54.5	78	44	1.0	18	0.5	0.0	3.5	1.0	
AGRIMAXX EXP 1674	23.0	45.0	99	37	1.0	55	0.0	0.0	6.0	2.5	
DYNA-GRO WX 16771	22.9	47.1	101	37	0.5	13	0.0	0.0	6.0	2.5	
PIONEER 26R59	22.2	45.3	97	35	1.0	64	0.0	0.0	6.0	2.5	
ARMOR ARW1516	21.3	45.7	96	37	0.0	39	0.0	0.0	5.5	2.5	
PIONEER 26R53	21.0	50.2	96	36	3.0	40	0.0	0.8	5.5	3.0	
ARMOR ARW1521	20.9	45.5	100	37	1.0	12	0.0	0.0	6.0	3.5	
DIXIE 16-2	19.3	46.1	96	37	2.5	51	0.0	0.0	6.0	3.5	
AGS 3000	19.2	58.8	72	39	0.0	0	2.3	0.5	3.0	1.0	
SYNGENTA SY VIPER	17.2	51.3	92	41	4.5	72	0.0	0.3	5.0	2.5	
USG 3013	13.7	45.1	102	37	2.5	90	0.0	0.0	5.5	2.5	
DYNA-GRO SAVOY	12.1	55.4	75	35	0.0	0	2.8	0.0	5.5	3.5	
DYNA-GRO 9642	11.7	39.2	103	36	5.0	17	0.0	0.0	7.0	3.5	
PROGENY 357	9.9	45.4	99	37	2.5	83	0.0	0.0	6.0	3.0	
DIXIE EXTREME	8.8	36.6	98	39	4.0	91	0.0	0.0	6.5	3.0	
Mean	35.9	51.8	91	39	0.9	23	0.3	0.4	4.4	2.5	
CV	24	5	2	3	100	45	350	123	14	29	
LSD	10.0	4.3	2.4	2	1.5	13	1.3	0.6	1.1	1.2	

Data from Dean Lee Research Station, Alexandria, LA. Ronnie Levy, Boyd Padgett.

Cultural and Site Information: Planted 11-14-15. PowerFlex (2 fl oz/A + ¼% NIS v/v) 12-11-15. Fertilized (150# 33-0-0-12) 1-6-16. Fertilized (120# 46-0-0-0) 2-12-16. Karate (2 fl oz/A) 2-26-16. Very wet winter resulted in some plots with poor stands. Substantial bird damage on early -maturing plots.

Leaf Blotch is mostly Septoria nodorum blotch but has some other causes.

Bacteria is bacterial streak (Xanthomonas).

Seed Quality is a visual rating of seed plumpness and brightness and visual blemishes with 0 = perfect and 9 = very poor.

Fus Hbt is a visual estimate of the Fusarium Headblight Infection on the heads, on a 0 = none to 9 = severe scale. Rated in mid to late grain fill.

FDK is a visual estimate of the Fusarium Damaged Kernels on a 0 = none to 9 = severe scale. FDK can contribute to poor SQ rating.

DON is parts per million of deoxynivalenol mycotoxin in grain.

Table 13. Wheat performance trial at St. Joseph for 2016.

Brand / variety	Grain Yield 2016	Grain Yield 2-year	Test Wt	Head Day	Plant Ht	Lod Score	Leaf Rust	Stripe rust	Sept oria	Bact eria	FDK	Seed Qual
	bu/a		lbs/bu	of yr	in	0-9	%	%	0-9	0-9	0-9	0-9
LA01110D-150-241	75.5	61.5	56.0	98	41	0.0	0	7	1.0	0.0	3.5	3.5
DELTA GROW 3500	59.5	57.6	55.1	94	31	3.0	0	3	3.5	1.5	1.0	3.5
PIONEER 26R41	39.9	57.2	50.5	106	37	3.5	8	0	1.5	0.0	3.5	5.0
AGS 2055	65.8	56.3	50.3	100	41	1.5	0	0	2.5	3.5	5.5	5.5
AGS 2038	62.1	56.2	53.3	100	41	0.0	0	1	2.0	1.0	3.5	5.0
LA01110D150-NT	65.8	55.8	54.5	96	38	0.0	0	13	3.0	0.0	3.0	3.5
AGS 2040	63.7	54.2	55.5	95	41	0.5	0	0	3.5	6.0	1.0	3.5
AR01040-4-1	55.7	52.6	51.3	98	43	0.0	2	8	3.5	0.0	1.5	4.5
LANC8170-41-2	55.2	51.8	54.0	97	35	2.8	0	1	3.0	1.0	1.5	4.0
JAMESTOWN	42.3	50.9	55.7	93	34	7.3	4	0	3.0	3.0	1.0	4.0
HILLIARD	48.1	50.8	48.1	101	40	2.0	0	0	2.5	2.5	3.5	6.0
SYNGENTA SY CYPRESS	50.5	50.5	51.4	91	35	3.8	3	23	2.5	0.0	1.0	4.0
LA01110D-150-625	58.9	49.9	57.9	98	38	2.0	0	0	2.0	0.0	1.5	3.0
AGS 2035	47.3	49.8	50.8	94	39	1.3	0	23	3.5	2.0	3.5	4.5
USG 3120	54.7	49.7	53.0	90	38	0.0	0	18	2.5	0.0	1.5	4.0
PIONEER 26R94	62.4	48.4	55.5	96	36	0.0	0	0	2.0	2.0	2.0	3.5
GO WHEAT 2056	27.7	47.8	41.7	108	38	1.5	7	0	2.0	0.0	3.0	8.0
PIONEER 26R53	25.7	47.3	45.6	103	41	8.3	6	0	2.0	0.5	2.0	6.0
PROGENY 870	30.1	47.0	41.9	107	41	1.0	7	0	2.5	0.0	3.5	7.0
DYNA-GRO SAVOY	53.6	46.9	55.1	90	36	1.5	0	8	3.5	3.5	1.0	4.0
DIXIE MCALISTER	31.5	46.6	44.5	106	37	0.8	5	0	2.5	0.0	2.5	6.5
SYNGENTA SY VIPER	43.5	46.4	49.4	104	42	5.3	4	0	2.5	0.0	1.5	5.0
AGRIMAXX 446	20.7	44.4	45.4	108	36	4.0	15	8	2.0	0.0	2.5	7.0
DYNA-GRO 9171	26.2	43.4	42.3	105	35	1.5	8	0	2.0	0.0	2.5	7.0
DELTA GROW 2700	23.5	42.8	43.9	108	37	3.8	18	0	2.0	0.0	2.5	7.0
USG 3201	21.4	42.8	42.9	106	34	6.8	15	0	2.0	0.0	3.0	7.0
AGRIMAXX 413	29.9	42.5	43.3	104	36	1.5	9	0	2.5	0.0	3.0	7.0
DELTA GROW 7500	32.3	41.8	43.0	105	40	1.3	5	0	2.0	0.0	3.0	7.0
AGRIMAXX 415	23.8	41.7	44.8	104	39	5.5	10	0	2.0	0.0	2.5	6.5
USG 3404	16.8	41.4	44.0	110	39	5.3	18	0	2.0	0.0	2.0	7.0
AGRIMAXX 444	23.2	41.0	42.8	107	40	4.3	10	0	2.0	0.0	2.0	6.0
GA-04434-12LE28	39.4	40.9	46.2	96	38	4.5	1	13	3.0	0.0	4.0	5.5
USG 3013	7.4	40.4		108	34	7.8	35	0	1.5	0.0	3.0	7.0
PIONEER 26R59	26.3	39.3	41.7	103	36	4.0	7	0	1.5	0.0	2.5	6.5
DYNA-GRO 9522	20.5	38.4	43.0	107	36	6.0	18	0	2.0	1.0	1.5	7.0
SYNGENTA SY HARRISON	19.8	37.5	41.8	106	36	4.3	9	0	2.5	0.0	2.5	7.5
DIXIE EXTREME	11.6	30.2		107	39	8.0	10	20	2.0	0.0	3.0	7.5
PGX 15-12	79.2		57.5	99	39	0.0	0	1	1.5	0.0	1.0	3.0
LA01110D150- FTH	66.2		56.3	96	38	0.0	0	13	3.0	0.0	2.5	3.5
VA12W-72	63.5		51.0	99	39	1.5	0	0	2.5	0.0	2.0	4.0
GA051102-13LE43	61.6		55.3	99	41	0.0	0	0	2.0	4.0	4.5	3.0
GA061349-13LE31	61.0		53.8	98	38	0.8	0	2	2.0	1.0	4.5	4.0
LA08090C-9-2	60.3		55.1	99	38	0.5	0	2	2.0	0.0	3.5	4.5
GA061349-13LE29	60.2		51.5	100	37	1.0	1	0	2.5	0.0	5.0	5.0
LA09011UB-2	58.9		55.4	94	31	4.0	0	0	3.0	6.0	2.0	4.0

Table 13. Wheat performance trial at St. Joseph for 2016.

Brand / variety	Grain Yield 2016	Grain Yield 2-year	Test Wt	Head Day	Plant Ht	Lod Score	Leaf Rust	Stripe rust	Sept oria	Bact eria	FDK	Seed Qual
	bu/a		lbs/bu	of yr	in	0-9	%	%	0-9	0-9	0-9	0-9
LA08115C-30	53.7		54.9	93	33	0.0	1	0	6.5	5.5	2.5	4.0
LA03200E-2	52.9		53.9	96	39	2.0	1	4	2.5	2.0	2.0	4.0
DELTA GROW 1000	49.3		52.7	109	39	4.8	0	0	2.5	0.0	1.0	4.5
DIXIE 16-1	49.0		51.8	110	35	3.5	5	0	2.0	0.0	1.5	4.0
AGS 2024	48.5		52.3	102	35	2.0	0	2	2.0	0.0	4.0	4.5
ARMOR ARW1511	47.0		52.0	112	36	1.8	0	0	2.0	1.0	1.0	4.0
DYNA-GRO WX 15781	46.5		53.1	110	38	1.8	3	0	2.5	1.0	1.0	3.5
LA08095C-37	42.6		52.5	93	41	2.0	14	4	3.0	0.0	2.5	4.5
PGX 15-10	42.0		52.0	110	42	3.8	0	3	1.5	0.0	1.5	4.0
PGX 15-16	38.5		50.2	109	32	5.5	1	0	2.0	0.0	1.5	5.0
AGS 3000	32.1		56.5	84	35	0.0	0	0	4.0	4.0	1.5	3.5
ARMOR ARW1514	27.6		42.4	105	38	4.0	7	0	2.5	1.0	2.5	6.5
PGX 15-14	22.2		37.1	106	39	4.3	12	0	2.0	0.0	3.5	7.5
DIXIE 16-2	21.7		39.2	106	33	3.5	10	0	2.0	1.0	1.5	5.5
ARMOR ARW1516	20.4		38.5	105	38	6.3	12	0	2.0	0.0	3.0	6.5
PROGENY 243	20.0		41.3	103	44	6.8	8	0	2.5	1.5	2.5	7.0
AGRIMAXX EXP 1674	18.7		40.3	107	35	4.3	20	0	2.0	0.0	3.0	6.5
ARMOR ARW1521	13.3			109	39	8.8	6	3	1.5	0.0	2.5	7.0
DYNA-GRO WX 16771	10.7			111	35	8.8	9	0	2.0	0.0	3.0	7.0
PROGENY 357	9.7			108	37	7.5	38	0	2.0	0.0	3.0	7.5
DYNA-GRO 9642	8.3			115	37	8.5	20	0	2.0	0.0	2.0	6.5
Mean	44.5	47.1	49.8	102	38	3.2	6	3	2.4	0.8	2.5	5.3
CV%	15	14	2	2	-	60	71	171	22	178	29	12
LSD (0.10)	8.0	NS	2.1	3.1	-	2.2	7	8	0.9	2.5	1.2	1.1

Data from Northeast Research Station, St. Joseph, LA. Rick Mascagni, Trey Price.

Cultural and Site Information: Northeast Research Station. 1 qt/a gramoxone applied 11/24/15. Planted 11/25/15. 0.4 oz/a Finesse herbicide + NIS applied on 1/6/16. 100-0-0 as 32% liquid applied 2/5/16. 50-0-0 as 32% liquid applied on 2/29/16. Harvested

Bold 'Brand/variety' indicates the entry is commercially available, others are non-released breeding lines.

Lodging: 0 = none; 9 = severe.

Table 14. Wheat performance trial at Winnsboro for 2016.

Brand / variety	Grain Yield		Test	Head	Lod	Leaf	Stripe	Leaf	Bact	Pheno	FDK	Seed
	2015	2-year	Wt	Day	Score	Rust	Rust	Blotch	Score	type		Qual
	bu/a		lbs/bu	of yr	0-9	%	%	0-9	0-9	0-9	0-9	0-9
DELTA GROW 3500	74.9	66.4	56.0	91	0.0	0	2	2.3	0.0	3.5	3.0	3.0
LANC8170-41-2	62.3	62.7	54.5	95	0.0	1	0	1.8	0.0	4.5	1.5	3.0
SYNGENTA SY VIPER	52.0	62.6	50.0	99	2.0	5	0	1.5	0.0	4.0	3.0	4.0
HILLIARD	62.0	62.5	49.4	101	0.0	0	0	1.5	0.0	4.0	4.0	4.5
LA01110D150- FOOHOLD	64.1	60.0	52.4	90	0.0	0	8	3.3	0.0	4.0	3.0	3.5
LA01110D-150-241	72.3	58.7	53.3	92	0.0	0	1	2.3	0.0	3.5	3.0	3.5
PIONEER 26R41	51.2	58.0	47.9	104	0.0	4	0	1.5	0.0	5.0	4.0	5.0
LA03200E-2	59.9	57.0	53.8	91	0.0	4	0	3.0	0.0	4.0	3.0	3.5
AR01040-4-1	65.3	56.9	51.9	89	0.0	2	1	1.8	1.0	4.0	2.5	3.5
AGS 2038	68.7	56.1	51.6	92	0.0	0	7	2.3	0.0	4.0	3.0	4.5
PIONEER 26R94	63.8	56.1	52.0	89	0.0	0	0	2.3	1.0	3.5	2.5	3.0
DYNA-GRO SAVOY	59.9	54.9	54.4	83	0.0	0	0	6.0	6.5	7.0	2.5	4.5
SY CYPRESS	59.9	52.4	54.1	83	0.0	7	14	3.0	0.0	5.5	2.0	3.5
PIONEER 26R59	40.1	52.0	40.4	101	1.3	7	0	1.0	0.0	5.0	4.0	6.0
JAMESTOWN	54.3	50.5	55.6	90	1.0	0	4	3.8	0.0	4.5	1.0	3.5
GA-04434-12LE28	59.5	50.1	50.1	91	0.0	2	2	2.8	0.0	4.0	4.0	4.5
DELTA GROW 7500	40.7	49.3	44.2	102	0.0	4	0	1.3	0.0	4.5	4.0	6.0
DIXIE MCALISTER	38.6	49.3	42.0	103	0.0	7	0	1.5	0.0	5.5	3.5	6.0
DYNA-GRO 9171	38.4	49.2	41.2	102	0.0	7	0	1.8	0.0	5.0	6.0	6.0
USG 3120	58.2	48.9	52.9	84	0.0	0	14	3.3	0.0	5.0	3.0	3.0
PROGENY 870	38.4	48.8	42.0	103	0.0	4	0	1.5	0.0	5.5	5.0	7.0
USG 3404	35.4	48.6	43.2	104	1.0	9	2	1.8	0.0	6.0	3.0	5.5
USG 3201	40.5	48.2	45.0	102	1.8	7	0	1.5	0.0	5.0	4.0	6.0
GO WHEAT 2056	31.7	47.8	43.8	103	0.0	6	0	2.0	0.0	5.0	3.0	6.0
AGRIMAXX 413	37.0	47.6	43.1	104	0.0	6	0	1.5	0.0	5.5	4.0	6.0
DELTA GROW 2700	34.2	47.5	44.4	104	0.8	7	1	2.0	0.0	5.5	2.5	5.5
AGS 2035	53.1	47.5	49.4	84	0.0	2	21	3.5	0.0	5.5	4.0	4.5
AGS 2055	56.9	47.5	43.7	96	0.0	0	0	2.3	0.0	3.0	7.0	7.0
AGRIMAXX 415	38.6	47.4	43.4	101	1.8	8	0	1.5	0.0	5.5	5.5	6.5
PIONEER 26R53	35.9	46.7	45.1	102	0.0	6	0	2.0	0.0	5.5	3.0	5.0
DYNA-GRO 9522	38.1	46.4	44.4	104	1.5	21	0	2.0	0.0	5.0	3.5	6.5
AGS 2040	54.6	46.0	54.3	84	0.0	0	0	5.0	5.5	5.0	1.5	3.0
AGRIMAXX 446	32.8	45.9	43.7	102	2.0	31	0	1.8	0.0	6.5	4.0	6.0
AGRIMAXX 444	34.2	45.4	43.4	104	1.0	10	0	1.5	0.0	5.5	3.5	5.5
USG 3013	20.0	41.5	38.3	104	7.8	44	0	1.3	0.0	6.5	4.0	6.5
SY HARRISON	29.9	40.2	37.0	104	2.5	29	0	1.8	0.0	6.0	4.5	7.0
DIXIE EXTREME	21.6	29.8	40.4	104	7.0	48	0	1.5	0.0	6.5	4.0	7.0
LA09011UB-2	68.8		56.1	92	0.0	1	0	2.5	0.0	4.5	2.5	3.5
VA12W-72	68.8		51.0	93	0.0	0	0	1.5	0.0	4.0	3.0	4.0
AGS 2024	68.0		51.6	91	0.0	0	0	4.0	0.0	4.0	3.0	4.0
PGX 15-12	67.7		55.0	95	0.0	1	0	1.5	0.0	4.5	1.5	2.5
LA01110D-150-625	66.7		54.9	92	0.8	0	1	2.3	0.0	4.0	1.5	3.0
LA08090C-9-2	66.4		53.2	92	0.0	0	2	2.0	0.0	3.0	2.0	2.5
GA061349-13LE29	65.2		49.0	97	0.0	0	0	1.3	0.0	3.5	5.5	5.5
LA01110D150-NT	64.4		52.5	90	0.0	0	11	3.5	0.0	5.0	3.5	3.5

Table 14. Wheat performance trial at Winnsboro for 2016.

Brand / variety	Grain Yield		Test	Head	Lod	Leaf	Stripe	Leaf	Bact	Pheno	FDK	Seed
	2015	2-year	Wt	Day	Score	Rust	Rust	Blotch	Score	type		Qual
	bu/a		lbs/bu	of yr	0-9	%	%	0-9	0-9	0-9	0-9	0-9
DELTA GROW 1000	63.5		52.5	104	0.0	1	0	1.0	0.5	4.5	2.0	3.0
PGX 15-10	62.4		52.6	105	0.0	0	0	1.3	0.0	3.5	2.0	3.0
LA08115C-30	61.8		51.5	86	0.0	1	1	4.3	2.0	5.5	3.5	4.0
AGS 3000	61.5		56.8	81	0.0	1	1	5.3	1.5	5.0	2.0	3.5
GA061349-13LE31	60.9		47.8	94	0.0	0	0	2.3	0.0	4.5	6.0	5.0
GA051102-13LE43	58.8		51.4	97	0.0	0	0	2.3	0.0	4.0	5.5	4.5
DYNA-GRO WX 15781	57.8		51.7	104	0.0	0	0	1.0	1.0	4.0	2.0	4.0
PGX 15-16	56.9		52.3	103	0.0	0	0	1.3	0.0	5.0	2.5	3.5
ARMOR ARW1511	56.4		51.7	104	0.0	0	0	1.0	0.5	4.0	1.0	3.0
LA08095C-37	54.5		51.7	86	0.0	8	0	3.0	0.0	5.5	3.0	3.5
DIXIE 16-1	53.3		50.0	104	0.0	0	0	1.3	0.0	4.0	2.0	4.0
PROGENY 243	37.3		42.2	101	2.0	19	1	1.8	0.0	6.5	3.5	5.0
ARMOR ARW1516	32.7		37.9	103	2.3	11	0	2.0	0.0	5.5	5.5	6.5
ARMOR ARW1521	32.2		42.7	104	2.3	11	0	1.5	0.0	6.0	3.0	5.5
AGRIMAXX EXP 1674	30.6		42.7	102	2.0	14	0	1.5	0.0	6.0	4.0	5.5
DYNA-GRO WX 16771	30.5		45.6	107	3.0	8	0	1.8	0.0	5.5	2.5	5.5
PGX 15-14	28.9		40.6	103	2.8	9	0	1.3	0.0	5.5	3.5	6.0
DIXIE 16-2	26.7		41.6	104	2.0	15	1	1.5	0.0	6.0	3.5	6.0
DYNA-GRO 9642	20.6		42.2	109	7.8	21	0	1.8	0.0	6.5	3.0	7.0
ARMOR ARW1514	18.8		39.0	104	2.3	11	0	1.5	0.0	5.0	4.0	6.0
PROGENY 357	17.3			104	7.0	57	0	1.3	0.0	7.0	4.0	7.5
Mean	49.1	51.0	48.1	97.3	1.0	7	1	2.1	0.3	4.9	3.3	4.8
CV	14	12	3	2	154	101	125	27	211	12	25	16
LSD	8.2	NS	2.9	3	1.8	10	3	1.0	1.0	1.0	1.4	1.2

Data from Macon Ridge Research Station, Winnsboro, LA. Rick Mascagni, Trey Price, Myra Purvis, John Stapp, Hunter Pruitt, Steve Harrison, Kelly Arceneaux, Katie McCarthy, and Ally Lunos.

Cultural and Site Information: Planted 11-15-15. Harvested 5-25-16. 50# N as aliquid 30-0-0=2 on 2-5-16 plus 50# on 2-26-16.topdress application. 3.5 oz/acre of Poweflex herbicide on 12-10-15. Very wet winter resulted in some plots with poor stands. Heavy spring rains caused high levels of foliar disease and led to premature senescence of some varieites, particularly later-headng ones. **23 of the 27 highest-yielding entries headed earlier than the test mean.**

NS indicates that variety mean difference were not statistically significant. There was a very large variety X year interaction. This inidcates that variety rankings were reversed across 2015 and 2016, thus preventing 2-year mean yield differences from being significant at both St. Jospheh and Winnsboro.

Test Weights are very low for some entries. These are hand-run test weights and are double checked when the low values were noticed. Scabby kernles and poor grain fill due to foliar dieases undoubtedly contributed.

Seed Quality is a visual rating of seed plumpness and brightness and visual blemishes with 0 = perfect and 9 = very poor.

FDK is a visual estimate of the Fusarium Damaged Kernels on a 0 = none to 9 = severe scale. FDK can contribute to poor SQ rating.

Leaf Blotch is mostly Septoria nodorum botch but has some other causes.

Bacteria is bacterial streak (Xanthomonas).

PHE score is a visual 'PHEnotype' rating. It is overall appearance of the plot on a 0-9 scale where a lower score indicates a prettier plot.

Table 15. Performance trial across Louisiana for 2016.

Brand / variety	Grain Yield bu/a	Test Wt lbs/bu	Head Day of yr	Plant Ht in	Lodging 0-9	Stripe Rust %	Leaf Rust %	Stem Rust 0-9	Fus H Blight 0-9	Pheno type 0-9
LA01110D-150-241	54.5	54.5	94	36	1.6	4	0	0.6	0.3	3.9
DELTA GROW 3500	51.7	55.0	92	33	2.9	2	0	0.0	0.5	3.4
LA01110D-150-625	50.9	55.9	90	35	2.8	0	1	0.0	0.4	4.4
LA03200E-2	50.6	55.4	89	33	2.3	2	22	0.3	1.2	4.6
LA01110D150-NT	50.0	54.5	90	35	1.8	12	2	2.8	0.8	5.7
LA01110D150-FTH	49.9	54.6	91	35	2.0	10	2	1.8	0.8	5.3
VA12W-72	49.3	51.3	96	32	1.7	0	3	0.0	0.3	3.9
AGS 2040	48.6	56.0	85	33	1.6	0	0	0.1	0.5	4.4
AGS 2038	48.6	53.4	91	36	1.8	4	0	0.1	1.3	4.3
PIONEER 26R94	48.5	54.4	89	35	1.9	0	0	0.0	1.1	3.8
LA09011UB-2	48.2	55.5	93	31	3.2	0	1	0.1	0.1	4.6
PGX 15-12	48.1	53.5	97	32	1.5	1	0	0.2	0.0	4.8
AGS 2024	48.1	53.9	90	31	2.0	1	0	0.4	1.6	4.2
AGS 2035	46.8	53.9	86	35	1.9	22	0	0.2	0.7	4.7
LA08090C-9-2	46.6	54.3	92	34	1.3	2	0	0.0	0.3	3.7
JAMESTOWN	46.5	56.5	88	31	3.3	2	2	0.0	0.0	4.2
AGS 2055	45.7	50.1	98	35	1.9	0	0	0.3	0.0	3.8
LANC8170-41-2	45.7	55.1	95	32	1.6	1	10	0.1	0.1	5.0
AR01040-4-1	44.7	52.8	89	37	1.7	5	6	0.2	0.1	5.1
GA061349-13LE31	44.7	52.9	95	33	1.1	1	0	0.0	0.0	3.9
GA061349-13LE29	44.1	50.9	99	32	2.0	0	0	0.0	0.0	4.1
LA08115C-30	43.9	53.6	86	33	1.7	0	7	3.4	7.9	6.5
USG 3120	43.7	54.3	84	35	1.3	16	1	0.4	1.1	4.8
GA051102-13LE43	43.4	53.4	97	34	1.6	0	0	0.0	0.0	4.2
SY CYPRESS	43.2	54.1	85	31	2.7	18	14	0.1	0.7	5.8
DYNA-GRO SAVOY	41.9	54.6	85	32	1.9	4	0	0.0	2.1	5.2
GA-04434-12LE28	40.2	52.7	93	34	2.3	7	1	0.0	0.6	4.2
LA08095C-37	40.0	54.8	86	36	2.2	2	12	0.0	1.6	5.2
HILLIARD	39.8	50.6	99	34	1.8	0	2	0.0	0.0	4.7
AGS 3000	39.2	56.8	79	33	2.0	0	0	0.0	0.5	3.9
DELTA GROW 1000	34.8	50.2	106	34	2.9	0	5	1.6	0.0	6.1
PGX 15-10	32.0	49.1	108	34	2.6	2	4	1.1	0.0	5.8
DYNA-GRO WX 15781	31.4	49.0	107	34	2.2	0	4	1.0	0.0	5.9
ARMOR ARW1511	31.1	48.5	108	34	2.3	0	3	0.9	0.0	5.8
PIONEER 26R41	30.2	48.1	103	32	2.1	0	8	2.9	0.0	6.6
DIXIE 16-1	29.6	48.5	106	34	2.6	0	4	1.3	0.0	6.0
PGX 15-16	28.9	47.9	107	29	3.2	0	3	0.2	0.0	6.3
SY VIPER	25.0	47.7	102	35	4.6	0	31	0.0	0.1	5.7
PROGENY 243	21.6	46.8	101	35	5.1	1	17	0.0	0.0	6.8
PROGENY 870	20.5	45.7	105	31	2.4	0	13	1.1	0.0	6.3
PGX 15-14	17.2	41.6	103	31	4.3	0	29	2.1	0.0	6.7
ARMOR ARW1516	16.5	43.9	103	31	4.9	0	25	1.7	0.0	6.3
DIXIE 16-2	15.5	41.9	104	31	3.9	1	25	2.0	0.0	7.0
ARMOR ARW1521	15.4	46.9	107	31	4.6	2	17	1.0	0.0	6.7
ARMOR ARW1514	15.3	40.8	103	31	4.8	0	29	2.3	0.0	6.8
AGRIMAXX EXP 1674	14.9	42.0	105	30	4.7	0	32	2.6	0.0	6.8
DYNA-GRO WX 16771	14.4	47.9	108	31	5.4	0	19	1.7	0.0	6.5
USG 3013	9.9	45.1	106	32	6.8	0	56	1.3	0.0	7.3
DYNA-GRO 9642	9.8	47.7	111	28	7.6	0	26	0.6	0.0	6.8
PROGENY 357	8.6	51.1	106	31	6.7	0	53	1.2	0.0	7.1

Table 15. Performance trial across Louisiana for 2016.

	Grain Yield	Test Wt	Head Day	Plant Ht	Lodging	Stripe Rust	Leaf Rust	Stem Rust	Fus H Blight	Pheno type
Brand / variety	bu/a	lbs/bu	of yr	in	0-9	%	%	0-9	0-9	0-9
Mean	36.8	52.1	96.2	33	2.9	2	10	0.7	0.5	5.3
CV	18	4	2	2	52	106	89	154	341	11
LSD (0.10)	8.4	3.1	2.2	2	1.3	3	12	1.3	1.9	1.2

Bold 'Brand/variety' indicates the entry is commercially available, others are non-released breeding lines.

Data from Alexandria, Baton Rouge, Crowley, Jeanerette, St. Joseph, and Winnsboro, LA.

Table 16. Performance trial across Louisiana for two years, 2015 and 2016.

Brand / variety	Grain Yield bu/a	Test Wt lbs/bu	Head Day of yr	Plant Ht in	Lod Score 0-9	Stripe Rust %	Leaf Rust %	Stem Rust 0-9	Fus H Blight 0-9	Pheno type 0-9
DELTA GROW 3500	50.5	52.5	92	33	2.7	1	0	0.0	2.7	3.6
LA01110D-150-241	50.5	52.0	94	36	1.6	1	0	0.6	2.6	4.0
LA03200E-2	49.9	53.0	91	34	2.1	2	20	0.3	2.9	4.5
LA01110D-150-625	49.3	53.6	91	36	2.5	0	0	0.0	2.4	4.4
AGS 2040	46.4	54.2	87	33	1.6	1	0	0.1	2.3	4.6
AGS 2038	45.8	51.6	93	37	1.6	2	0	0.1	2.8	4.1
JAMESTOWN	45.4	54.0	89	32	2.8	2	2	0.0	1.7	4.1
AGS 2035	45.4	52.3	89	36	1.6	17	0	0.2	2.7	4.8
PIONEER 26R94	44.7	52.3	90	36	1.8	0	0	0.0	2.9	3.9
LANC8170-41-2	44.3	53.1	95	32	1.2	0	7	0.1	1.2	4.8
AR01040-4-1	43.3	51.4	92	38	1.9	1	4	0.2	1.9	4.8
DYNA-GRO SAVOY	43.0	52.0	86	32	2.2	1	0	0.0	3.5	5.2
SY CYPRESS	42.1	51.7	87	31	2.8	15	12	0.1	2.2	5.8
USG 3120	41.6	51.6	87	35	1.7	15	1	0.4	3.1	4.9
HILLIARD	41.2	49.9	99	34	1.9	0	2	0.0	1.2	4.5
GA-04434-12LE28	41.0	50.6	93	33	2.2	2	1	0.0	3.0	4.4
AGS 2055	41.0	48.6	98	35	2.6	0	0	0.3	2.8	3.5
PIONEER 26R41	39.3	49.3	102	32	2.0	0	6	2.9	0.8	5.8
SY VIPER	33.3	48.5	99	36	4.2	0	25	0.0	1.6	5.3
PROGENY 870	30.1	47.3	103	31	2.2	0	13	1.1	1.1	5.7
USG 3013	29.7	49.5	102	31	4.9	0	38	1.3	1.1	6.3
Mean	42.8	51.5	93	34.0	2.3	3	6	0.4	2.2	4.7
CV	15	5	2	5	58	113	129	244	43	14
LSD (0.10)	7.9	1.9	2	1.2	1.0	7	8	0.9	0.9	1.1

Bold 'Brand/variety' indicates the entry is commercially available, others are non-released breeding lines.

Data from 2016 Alexandria, Baton Rouge, Crowley, Jeanerette, St. Joseph, and Winnsboro, LA; and 2015 Bossier City, CR, JE, SJ, and WN.

Table 17. Oat Variety Trial at Baton Rouge, LA 2016.

DESIG	Yield bu/A	Test Weight lb/bu	Seed Quality 0-9	Leafi- ness 0-9	Growth Habit 0-9	Winter Stress 0-9	Head Day of yr	Lod Score 0-9	Crown Rust %	Stem Rust 0-9	Pheno- type 0-9
LA08085BS-T2	104.4	34.5	4.0	5.1	4.3	3.3	88	7.7	0	3.0	4.0
LA07007SBSBSB-18	97.7	31.4	4.3	4.6	4.5	3.7	88	6.0	0	3.0	3.8
LA06059SBSBSBSB-4-S1	82.4	31.5	5.0	4.4	5.8	5.3	89	8.0	3	1.0	4.3
LA08085SS-T3	82.2	30.1	4.0	5.4	3.7	5.7	89	8.0	0	2.0	3.8
HORIZON 270	82.1	27.1	4.7	4.5	4.3	2.3	88	5.7	4	0.0	4.0
LA08084SBSBS-15	78.9	30.7	4.7	4.5	4.5	5.7	89	6.0	0	4.0	3.8
TX07CS2257	77.3	29.3	4.7	4.8	5.7	4.3	88	7.3	3	2.0	4.0
LA07007SBSBSB-24	75.3	30.6	4.7	4.3	4.0	3.0	86	6.7	0	2.0	3.5
TX09CS1029	75.0	28.4	4.0	5.2	5.5	2.7	92	6.7	6	0.0	3.8
LA09066SBS-U3	74.7	25.1	5.7	3.4	4.0	6.0	84	7.0	0	3.0	5.5
TX07CS1948	68.7	26.2	4.3	5.6	7.0	2.7	97	7.7	1	2.0	4.0
LA09045SBS-U3	67.3	24.3	6.0	4.9	3.7	5.0	89	6.7	0	1.0	4.8
TX09CS1112	67.0	21.4	4.7	4.5	5.3	3.0	94	5.0	2	1.0	5.5
LA02065SBSBSBSB-88	65.5	29.3	4.7	5.5	5.8	3.0	90	7.0	0	3.0	4.5
LA07059SBSBSB-44	65.0	30.7	5.3	3.8	4.5	5.3	84	5.7	0	1.0	4.3
TX09CS049	63.5	22.7	4.3	5.9	6.7	3.3	100	7.3	2	1.0	4.8
FL0720-R6	63.2	26.5	4.0	5.7	4.5	4.7	98	6.3	0	1.0	4.0
LA06063SBSB-S1	60.7	30.1	5.3	4.3	4.2	5.7	84	4.3	3	0.0	4.5
LA09092SBS-U1	50.2	29.6	4.7	4.1	3.2	5.7	83	4.0	0	2.0	4.0
HORIZON 306	49.1	22.3	5.3	5.5	5.2	4.3	101	7.0	9	3.0	4.8
LA99016	47.0	27.1	4.7	5.2	6.0	4.7	97	5.3	4	0.0	4.0
NC12-3578	37.9	20.9	5.0	5.4	6.3	5.3	96	6.3	23	0.0	5.3
NC12-3447	34.0	16.7	7.0	5.7	6.0	5.0	93	7.7	25		5.0
NC12-3753	24.4	17.3	6.7	5.1	6.3	6.0	92	8.7	75		5.5
BROOKS	6.7	27.1	7.7	4.9	4.8	5.3	97	9.0	100		7.3
Mean	64.0	26.9	5.0	4.9	5.0	4.3	91	6.7	10	1.6	4.5
CV (%)	20	5	13	10	9	15	1	16	53	-	11
LSD (0.05)	20.5	2.5	1.0	0.8	0.8	1.1	1.7	1.7	11	-	1.1

Wint Stress 0 = highly stressed, complete loss of chlorophyll. 9 = None, green and lush.

Winter Growth Habit 0 = very early spring-like; 9 = very late winter/prostrate.

Leafiness 0 = poor leafiness/forage; 9 = excellent forage potential/very leafy.

Stem Rust Stem Rust came in very late and only 1 rep was rated. Some entries could not be scored.

PHENotype General appearance (vigor, color, tillering, etc). Average of overall rating in winter and spring. 0 = excellent, 9 = poor.

TEST 2 reps, 5' x 14' harvested

Planted 11/29/2015.

~35-0-0 Flown on in mid January. 50-0-0 topdress N as 32% liquid in late February.

Substantial lodging from storms and heavy disease (crown rust) pressure contributed to high yield CV and low yields/ test wts..

Exceptionally wet winter with prolonged periods of saturated soils during the winter months as well as heavy rains after maturity.

Cooperators Steve Harrison, Kelly Arceneaux, Katie McCarthy, Ally Lunos, Chris Roider.

Table 18. Oat Variety Trial at Winnsboro, LA 2016.

DESIG	Yield bu/A	Test Wt lb/bu	Seed Qual 0-9	Growth Habit 0-9	Winter Stress 0-9	Leafi- ness 0-9	Head Day of yr	Lod Score 0-9	Crown Rust %	Stem Rust 0-9	Pheno- type 0-9
HORIZON 270	103.3	30.7	4.7	3.5	5.0	5.2	88	1.5	0	0.5	4.5
LA07007SBSBSB-18	100.9	31.4	3.7	3.5	2.5	4.7	81	0.5	0	1.0	4.8
HORIZON 306	94.3	29.8	4.0	3.0	2.5	5.5	90	3.0	10	0.5	4.0
TX07CS2257	91.7	31.4	4.3	4.5	2.0	4.8	81	1.0	2	0.5	4.5
LA06059SBSBSB-4-S1	90.0	32.4	3.7	5.0	2.0	5.0	85	1.0	1	0.0	5.3
LA09045SBS-U3	87.3	28.2	5.3	3.5	3.0	5.5	88	3.0	2	1.0	5.0
TX07CS1948	86.7	31.3	4.0	6.5	4.0	4.8	87	2.5	0	0.5	4.8
LA07059SBSBSB-44	86.4	32.5	4.3	4.0	1.5	5.2	78	1.5	0	2.0	5.3
LA08084SBSBS-15	86.2	32.3	4.0	4.5	2.5	5.0	88	3.5	0	1.0	4.3
LA07007SBSBSB-24	85.5	28.9	4.7	3.5	3.5	4.8	82	1.5	2	1.0	4.8
LA06063SBSB-S1	82.3	34.8	3.3	3.5	2.0	4.8	81	1.5	0	0.5	5.5
LA02065SBSBSB-88	82.1	29.6	5.0	6.0	3.5	5.5	90	1.5	0	1.0	4.5
FL0720-R6	81.6	31.5	3.0	3.5	2.0	5.7	90	1.5	0	0.5	4.3
LA08085BS-T2	80.0	33.8	4.0	4.0	3.0	4.7	90	0.5	2	0.5	5.3
LA99016	79.2	29.9	4.3	5.5	2.5	5.3	94	4.0	3	1.0	4.0
NC12-3578	78.0	27.1	4.7	5.5	2.0	5.3	96	6.5	5	0.5	4.8
TX09CS049	77.1	30.7	3.7	6.0	4.0	4.7	102	0.5	0	0.5	5.0
LA08085SS-T3	76.9	30.6	4.0	3.5	1.5	4.8	87	1.0	0	0.5	6.0
TX09CS1029	74.2	29.9	4.3	4.5	3.0	4.8	88	1.0	0	1.0	5.5
LA09066SBS-U3	65.2	29.3	4.3	4.0	2.0	5.0	81	1.0	0	0.5	5.8
TX09CS1112	63.4	25.2	4.3	5.0	2.5	4.8	90	0.0	15	1.0	5.5
LA09092SBS-U1	57.5	33.7	3.3	4.0	3.0	5.5	80	1.0	0	0.5	5.8
NC12-3447	56.8	23.5	3.7	5.0	1.5	5.0	92	7.5	14	1.0	5.0
NC12-3753	51.6	22.8	3.3	6.0	1.5	5.2	95	7.5	28	1.0	4.8
BROOKS	41.4	22.2	3.7	3.5	3.0	5.3	88	7.5	70	0.0	5.5
Mean	78.4	29.7	4.1	4.4	2.6	5.1	88	2.5	6	0.7	5.0
CV (%)	11	3	14	15	30	7	3	36	98	75	8
LSD (0.05)	11.6	11.6	0.8	1.2	1.4	ns	5	15.0	10	ns	0.7

Winter Stress 0 = highly stressed, complete loss of chlorophyll. 9 = None, green and lush.

Winter Growth Habit 0 = very early spring-like; 9 = very late winter/prostrate.

Leafiness 0 = poor leafiness/forage; 9 = excellent forage potential/very leafy.

SDQ Seed Quality based on visual appearance: 0 = excellent and 9 = poor.

Stem Rust Stem Rust came in very late ad only 1 rep was rated. Some entries could not be scored.

PHENotype General appearance (vigor, color, tillering, etc). Average of overall rating in winter and spring. 0 = excellent, 9 = poor.

2 reps, 5' x 13'. 2 reps, 5' x 14' harvested. Planted 11-13-15. harvested 5-22-16. 80-0-0 topdress N as 30-0-0-2

TEST liquid. Amber herbicide.

Cooperators

Steve Harrison, Kelly Arceneaux, Katie Mccarthy, Ally Lunos, Trey Price, Hunter Pruitt, and Myra Purvis.

Table 19. Oat Variety Trials across Louisiana for 2016.

DESIG	Yield bu/A	Test Wt lb/bu	Seed Qual 0-9	Wint Stress 0-9	Grow Habit 0-9	Leaf iness of yr	Head Day 0-9	Lodg ing 0-9	Crown Rust %	Stem Rust 0-9	Pheno type 0-9
LA07007SBSBSB-18	95.4	31.4	4.0	3.2	4.1	4.6	84	3.8	0	1.0	4.3
LA08085BS-T2	92.2	34.1	4.0	3.2	4.2	4.9	89	4.8	1	0.5	4.6
HORIZON 270	89.4	28.9	4.7	3.4	4.0	4.8	88	4.0	2	0.5	4.3
LA06059SBSBSB-4-S1	82.9	32.0	4.3	4.0	5.5	4.7	87	5.2	2	0.0	4.8
TX07CS2257	81.4	30.4	4.5	3.4	5.2	4.8	85	4.8	2	0.5	4.3
LA08085SS-T3	79.6	30.3	4.0	4.0	3.6	5.2	88	5.2	0	0.5	4.9
LA08084SBSBS-15	79.4	31.5	4.3	4.4	4.5	4.7	89	5.0	0	1.0	4.0
LA07007SBSBSB-24	77.3	29.8	4.7	3.2	3.8	4.5	84	4.6	1	1.0	4.1
LA09045SBS-U3	77.3	26.3	5.7	4.2	3.6	5.2	88	5.2	1	1.0	4.9
TX07CS1948	74.9	28.7	4.2	3.2	6.8	5.3	92	5.6	0	0.5	4.4
LA07059SBSBSB-44	73.1	31.6	4.8	3.8	4.3	4.4	81	4.0	0	2.0	4.8
FL0720-R6	72.4	29.0	3.5	3.6	4.1	5.7	94	4.4	0	0.5	4.1
TX09CS1029	71.6	29.2	4.2	2.8	5.1	5.1	90	4.4	3	1.0	4.6
LA06063SBSB-S1	71.5	32.5	4.3	4.2	3.9	4.5	83	3.2	2	0.5	5.0
LA02065SBSBSB-88	71.1	29.5	4.8	3.2	5.9	5.5	90	4.8	0	1.0	4.5
LA09066SBS-U3	69.9	27.2	5.0	4.4	4.0	4.0	82	4.6	0	0.5	5.6
HORIZON 306	69.7	26.8	4.7	3.6	4.3	5.5	96	5.4	10	0.5	4.4
TX09CS049	67.7	26.7	4.0	3.6	6.4	5.4	101	4.6	1	0.5	4.9
TX09CS1112	65.2	23.3	4.5	2.8	5.2	4.6	92	3.0	9	1.0	5.5
LA99016	61.2	28.5	4.5	3.8	5.8	5.3	95	4.8	3	1.0	4.0
NC12-3578	56.4	24.0	4.8	4.0	6.0	5.4	96	6.4	14	0.5	5.0
LA09092SBS-U1	53.8	31.7	4.0	4.6	3.5	4.7	82	2.8	0	0.5	4.9
NC12-3447	44.1	20.1	5.3	3.6	5.6	5.4	93	7.6	19	1.0	5.0
NC12-3753	37.0	20.0	5.0	4.2	6.2	5.1	93	8.2	51	1.0	5.1
BROOKS	23.8	23.4	5.7	4.4	4.3	5.1	93	8.4	85	0.0	6.4
Mean	69.5	28.3	4.5	3.7	4.8	5.0	89	5.0	8	0.7	4.7
CV%	15	4	13	20	11	9	2	20	71	75	10
LSD (0.10)	20.0	3.4	NS	NS	0.7	NS	5	2.6	14	NS	NS

Data from: 2016 Baton Rouge and Winnsboro.

Winter Stress Tolerance 0 = highly stressed, complete loss of chlorophyll; 9 = None, green and lush.

Winter Growth Habit 0 - very early springlike; 9 = very late winter/prostrate.

Leafiness 0 = very poor forage potential/few leaves; 9 = excellent leafiness/forage.

Phenotype General appearance in March and April. 0 = excellent, 9 = very poor.

Correlations with Yield

CrownRust = -0.80**; LOD = -0.64*; WintStress = -0.42*; SdQual = -0.52**; TWT = -0.74**.

Table 20. Oat Variety Trials across Louisiana for two years, 2015 and 2016

	Yield	Test Wt	Seed Qual	Wint Stress	Grow Habit	Leafiness	Head Day	Lod Score	Crown Rust	Stem Rust	Phenotype
DESIG	bu/A	lb/bu	0-9	0-9	0-9	of yr	0-9	0-9	%	0-9	0-9
HORIZON 270	91.8	29.7	4.7	3.1	4.0	4.8	90	4.0	2	0.5	4.0
LA07007SBSBSB-18	86.4	30.7	4.0	3.7	3.9	4.6	85	3.8	0	1.0	4.2
LA08085SS-T3	85.8	31.0	4.0	4.3	3.7	5.2	89	5.2	0	0.5	4.8
LA08084SBSBS-15	80.7	30.8	4.3	4.6	4.8	4.7	88	5.0	0	1.0	4.0
LA06059SBSBSBSB-4-S1	79.4	31.0	4.3	4.4	5.6	4.7	88	5.2	2	0.0	4.8
FL0720-R6	76.2	30.0	3.5	4.1	4.4	5.7	95	4.4	0	0.5	4.2
HORIZON 306	75.0	29.1	4.7	4.1	4.5	5.5	95	5.4	10	0.5	4.0
LA07007SBSBSB-24	74.0	29.3	4.7	2.9	3.9	4.5	85	4.6	1	1.0	4.0
LA02065SBSBSBSB-88	72.0	30.1	4.8	3.3	6.1	5.5	91	4.8	0	1.0	4.6
TX07CS1948	71.6	29.1	4.2	3.7	7.0	5.3	92	5.6	0	0.5	4.1
TX09CS1029	71.4	29.2	4.2	3.6	5.2	5.1	91	4.4	3	1.0	4.4
TX09CS1112	71.1	25.1	4.5	3.3	5.3	4.6	92	3.0	9	1.0	5.7
LA99016	65.7	29.5	4.5	4.1	6.4	5.3	95	4.8	3	1.0	4.0
LA06063SBSB-S1	63.9	32.3	4.3	4.3	4.5	4.5	84	3.2	2	0.5	4.8
BROOKS	36.4	24.7	5.7	4.7	4.6	5.1	93	8.4	85	0.0	5.8
Mean	73.4	29.5	4.4	3.9	4.9	5.0	90	4.8	8	0.7	4.9
CV%	13	4	12	22	16	10	2	23	63	66	11
LSD(0.10)	17.1	2.9	NS	1.7	0.7	1	3	2.1	11	-	0.8
<p>Data from: 2016 Baton Rouge and 2015 and 2016 Winnsboro.</p> <p>Seed Quality: 0 = very pretty seed, no defects; 9 = ugly seed.</p> <p>Wint Stress Tolerance: 0 = highly stressed, complete loss of chlorophyll; 9 = None, green and lush.</p> <p>Winter Growth Habit: 0 - very early spring-like; 9 = very late winter/prostrate.</p> <p>Leafiness: 0 = very poor forage potential/few leaves; 9 = excellent leafiness/forage.</p> <p>Phenotype: General appearance in March and April. 0 = excellent, 9 = very poor.</p> <p>Correlations with Yield: CrownRust = -0.8088; LOD = -0.64*; WintStress = -0.42*; SdQual = -0.52**; TWT = -0.74**.</p>											

Appendix A. Entries in the 2016 Louisiana Agricultural Experiment Station Small Grain Performance Trials.

<u>Brand</u>	<u>Line/Variety</u>	<u>Originating Agency</u>
<u>WHEAT</u>		
AGS	AGS 2024, 2035, 2038, 2040.....	AGSouth Genetics P.O. Box 72246 Albany, GA 31708
AgriMAXX	AgriMAXX 413, 415, 444, 446, Exp. 1674.....	AgriMAXX Wheat Company 7167 Highbanks Road Mascoutah, IL 62258
ARMOR	ARX 1511, ARX 1514, ARX 1516, ARX 1521.....	Armor Seed 183 S. Pennsylvania Ave. Waldenburg, AR 72475
Delta Grow	Delta Grow 1000, 2700, 7500.....	Delta Grow Seed 220 N W 2nd England, AR 72046
Dixie	McAlister, Xtreme, DXEX16-1, DXEX16-2.....	Cache River Valley Seed, LLC P.O. Box 10 Cash, AR 72421
Dyna-Gro	Dyna-Gro 9171, 9522, 9642, WX1781, WX16771..... Savoy	Dyna-Gro Seed 11 Gin Road Rayville, LA 71269
GA	All numbered GA/UGA lines.....	Georgia Agric. Experiment Stn. Crop & Soil Science - UGA 1109 Experiment St. Griffin, GA 30223
LA	All numbered LA lines,.....	Louisiana Agric. Experiment Stn. SPESS - LSU Baton Rouge, LA 70803
Pioneer	26R41, 26R53, 26R59, 26R94.....	Dupont Pioneer 59 Greif Parkway, Suite 200 Delaware, OH 43015
Progeny	Progeny 243, 357, 870, PGX 15-10, 15-12, 15-14..... 15-16	Progeny Ag Products 1529 Hwy. 193 South Wynne, AR 72396

Appendix A. Entries in the 2016 Louisiana Agricultural Experiment Station Small Grain Performance Trials.

<u>Brand</u>	<u>Line/Variety</u>	<u>Originating Agency</u>
<u>WHEAT</u>		
Stratton	Go Wheat 2056.....	Stratton Seed Company P.O. Box 1088 Stuttgart, AR 72160
Syngenta	Cypress, Harrison, Viper.....	Syngenta 7099 Parkbrook Ln Cordova, TN 38018
USG	USG 3013, 3120, 3201, 3404.....	UniSouth Genetics, Inc. 3205-C HWY 46 S Dickson, TN 37055
VA	Jamestown, Hilliard, VA12W-72.....	Virginia PI & State University EVAREC 2229 Menokin Road Warsaw, VA 22572

Appendix A. Entries in the 2016 Louisiana Agricultural Experiment Station Small Grain Performance Trials.

<u>Brand</u>	<u>Line/Variety</u>	<u>Originating Agency</u>
<u>OATS</u>		
FL	All Numbered FL lines.....	North Florida Res. & Education Center 155 Research Road Quincy, FL 32351
LA	All Numbered LA lines.....	Louisiana Agric. Experiment Station SPESS - LSU Baton Rouge, LA 70803
NC State	Brooks.....	North Carolina Agric. Expt. Station Crop Science Department North Carolina State University Raleigh, NC 27695
Plantation	Horizon 270, 306.....	Plantation Seed P.O. Box 398 Newton, GA 39870
Plot Spike	LA 99016.....	Ragan & Massey, Inc. 101 Ponchatoula Parkway Ponchatoula, LA 70454
TAMO/TX	All numbered TAMO/TX lines.....	Texas AgriLife Research TAMU - Commerce Dept. of Ag Science Commerce, TX 75429