

2023 SMALL GRAIN PERFORMANCE TRIALS

LAES Research Summary No. 228

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Performance of Small Grain Varieties in Louisiana, 2022-23

Stephen A. Harrison¹, Kelly Arceneaux¹, Russell Anderson⁴, Reddy Biradar¹, Dennis Burns², Fred Collins⁵, Noah DeWitt¹, Dustin Ezell⁶, Jacob Fluitt³, Katie Fontenot¹, Manoch Kongchum³, James Leonards³, Tashia Monaghan⁵, G. Boyd Padgett⁵, Trey Price⁶, Myra Purvis⁶, Daniel Stephenson⁵, William Waltman⁴ and Greg Williams⁷

Introduction

Small grain variety trials are conducted annually by scientists of the Louisiana State University Agricultural Center Agricultural Experiment Station to evaluate grain yield, agronomic performance and disease reaction of varieties and advanced breeding lines. The trials are conducted at seven LSU AgCenter 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 breeder or company. Inclusion of an entry in the trials does not constitute an endorsement. The north Louisiana wheat trial included 36 released varieties (bold font in tables), 21 experimental lines (normal font in tables), and three seed treatment checks. There were 38 entries in the south Louisiana performance trials.

New entries in the statewide trials are tested in the north Louisiana trial and in a south Louisiana vernalization trial, unless prior testing in other Baton Rouge nurseries indicates an entry is adapted to south Louisiana, in which case it is also tested in the south Louisiana variety trial. 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 as this disease is difficult to control and frequently contributes to loss of yield and economic value.

Growers should also consider specific data from the LSU AgCenter 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 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**).

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1. Professor and variety trial coordinator, Research Associate, Research Associate, Assistant Professor, and Research Farm Assistant 2, respectively. SPESS Department, Baton Rouge.
 2. Extension Specialist, Northeast Research Station, St. Joseph.
 3. Research Associate, Professor, and Research Associate, respectively. Rice Research Station, Crowley.
 4. Research Associate, respectively. Red River Research Station, Bossier City.
 5. Research Associate, Professor, and Professor, 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.

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)** 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/acre, 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 that 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 and stripe 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 0-9 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 is rated for percent Fusarium damaged kernels (FDK) and then submitted to the U.S. Department of Agriculture 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. A Fusarium index is calculated as $2 * [(FHB \text{ field rating} / \text{mean field rating}) + (2 * FDK\% / \text{mean FDK}\%) + (2 * DON \text{ ppm} / \text{mean DON ppm})]$. FHB reaction type is based on this FHB index.

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 Dec. 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 to top of head.
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 and 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 in the field on a scale of 0-9, where 0 indicates no disease and 9 indicates severe disease on the head.
Fusarium damaged kernels	FDK	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. NIV is a similar compound to DON and is more common in south Louisiana.
Fusarium NIV toxin	NIV	NIV in ppm is determined at the USDA mycotoxin lab in Minneapolis and is similar to DON.
Fusarium index	FHBI	Is a numerical rating of Fusarium resistance calculated by converting FHB, FDK and DON to a proportion of the test mean and then giving 2x weight to FDK and DON. $FHB\ Index = 2 \times [(FHB\ field\ rating\ divided\ by\ the\ test\ mean\ rating) + (2 \times FDK\ \% \ divided\ by\ the\ test\ mean) + (2 \times DON\ ppm\ divided\ by\ the\ mean)]$. With this scale, 10 is exactly average FHB, FDK and DON. A variety with exactly average FHB, FDK and DON would have a index value of 5.
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 2022-2023

The 2022-2023 growing season was mostly favorable for wheat production. All seven wheat trials and four oat trial locations were successfully planted. Rainfall was less than average in the spring and leaf and stripe rust disease pressure were low. The crop was planted and harvested on time. Crown rust and stem rust developed on susceptible varieties/entries of oats and reached high levels before season's end. A late spring freeze caused significant damage to some entries in the wheat trial at Winnsboro and probably contributed to lodging at several locations. Oat trials were lost at Baton Rouge to heavy rainfall after planting and oat stands were less than ideal at Winnsboro as a result of heavy rains after planting.

Performance of Wheat Varieties Across South Louisiana South Region Means

All three south Louisiana locations produced good data in 2023. Disease pressure was low with the exception of stem rust at Baton Rouge. Fusarium headblight data was collected in the misted nursery at Baton Rouge. There was significant lodging, possibly due to freeze damage to lower stems. All entries vernalized despite relatively lower hours of vernalization than normal. There was a 31-day range in average heading date with the early and late extremes generally having low yields due to freeze damage in early lines or late grain filling under hot weather for the later lines.

The average yield was 61.4 bu/acre with a range of 47.8 bushels per acre to 75.2 bushels per acre (Table 1). The average test weight was 56.0 pounds per bushel. AGS 3022 had the highest yield across the region and the non-fungicide check (NF) of AGS 3022 had the second highest yield. The average yield of AGS 3022, AGS 3015 and GO Wheat 6000 with a fungicide seed treatment was 3.4 bushels per acre greater than the average of the same three varieties without a fungicide treatment.

Dyna-Gro 23777 had an average yield of 70.0 bushels per acre followed by GO Wheat LA754 at 69.3 bushels per acre. Seven of the eight entries with heading date later than 95 (April 5) had yields below the test average. Likewise, five of six entries with heading dates earlier than 80 (March 21) had yields below the test mean. Nine of the 10 highest yielding entries headed between March 21 and 31.

The average FDK (shriveled kernel percentage) in the misted nursery at Baton Rouge was 29.5% with a range of 5% to 70% but this may have been confounded with poorly filled kernels resulting from freeze damage rather than being caused by FHB.

Two years

AGS 3022 had a two-year mean yield of 80.8 bushels per acre followed by Dyna-Gro 23777 with a mean yield of 78.2 bushels per acre (Table 2). Disease pressure has been low in south Louisiana for the past two years.

The FHB data presented in Table 2 is from a misted, inoculated nursery in Baton Rouge. Misted nurseries are grown at three locations each year to screen varieties and breeding lines for resistance to Fusarium headblight disease. Tables 12 and 13 summarize the FHB reaction type of each variety and classify them for level of resistance.

Three years

Twelve entries have been tested across south Louisiana for three years (Table 3). AGS 3022 has the highest average yield followed by Delta Grow 3500 and Dyna-Gro Plantation. The average test weight was 55.9 pounds per bushel.

Baton Rouge

The average yield of 38 entries in Baton Rouge for 2023 was 61.6 bushels per acre (Table 4). Dyna-Gro 23777 had a yield of 84.0 bushels per acre and also had excellent test weight.

Crowley

Yields were excellent at Crowley with a mean of 82.0 and a high of 100.2 bushels per acre (Table 5). There was a 50 bushels per acre range in yields. AGS 3022 had the highest yield and also had a very good test weight. Significant lodging occurred at Crowley. Disease pressure in Crowley was very light during 2023.

Jeanerette

Yields in the Jeanerette trial were relatively low with a mean of 40.8 and a high of 57.2 bushels per acre (Table 6). Delta Grow DG1900 had the highest yield, followed by GO Wheat LA754 and Progeny Chad with yields also over 50 bushels per acre. Test weights at Jeanerette ranged from 50.6 to 61.8 pounds per bushel. Disease pressure was very light in Jeanerette.

Performance of Wheat Varieties Across North Louisiana

The trials at Alexandria and St. Joseph are not reported due to high CV (unexplained variation). The trials at Bossier City and Winnsboro produced very high yields with a north Louisiana average of 75.5 bushels per acre (Table 7). AGS 2055 had the highest average yield (97.7 bushels per acre) followed by Delta Grow DG 1700 and Agrimaxx 492. Agrimaxx 492 also had an exceptional test weight (59.3 pounds per bushel). The average test weight was 56.8 pounds per bushel.

Freeze damage was significant at Winnsboro and strongly influenced grain yield. The average freeze damage rating on a 0-9 scale (with 0 indicating no damage) was 2.2. Thirteen of the 14 lowest yielding lines had a freeze damage rating greater than 4.0, while the 19 highest yielding entries had little to no freeze damage.

Two years

Agrimaxx 492 has the highest two-year average yield (91.1 bushels per acre) across north Louisiana (Table 8). Dyna-Gro 23777 and AGS 2055 also have average yields over 87 bushels per acre. The average test weight was 55.9 pounds per bushel with a range of 53.6 to 58.1 pounds per bushel.

There were significant differences among entries for FHB reaction. FDK (shriveled kernels) ranged from 55% to 18% and DON mycotoxin concentration ranged from 22.6 ppm to 2.6 ppm.

Three years

The highest yield of 19 entries tested for three years is 87.5 bushels per acre for Agrimaxx 492. Progeny Chad and AGS 2055 also have average yield over 83 bushels per acre (Table 9). The average test weight was 55.5 pounds

per bushel with a range of 53.7 to 57.6 pounds per bushel. The entry with the highest yield also had the highest phenotype rating (overall visual appearance) and the entry with the lowest yield had the lowest phenotype rating.

Alexandria

The data from Alexandria are not reported due to a high CV%.

Bossier City

AGS 2055 had the highest yield at Bossier City (95.3 bushels per acre, Table 10). Agrimaxx 492, USG 3354, Delta Grow DG1700 and Delta Grow DG 1900 also had yields over 90 bushels per acre. The average yield of 61 entries was 76.8 bushels per acre and the average test weight was 56.9 pounds per bushel.

Eight of the nine latest-heading entries were among the nine entries with the lowest test weight, which indicates the impact of late grain filling on test weight.

St. Joseph

There was significant bird damage and bear damage to specific plots at St. Joseph. As a result CVs are quite high and data are not reported.

Winnsboro

The trial at Winnsboro produced excellent yields, with a high of 101.1 bushels per acre (Table 11). Agrimaxx 473, USG 3463, Delta Grow DG1700, TX18D3212 and Delta Grow 1000 all yielded over 100 bushels per acre.

Agrimaxx 492, Dyna-Gro Plantations, and Dyna-Gro Blanton had test weights over 60 pounds per bushel. The average test weight was 55.0 pounds per bushel.

Fusarium Headblight Screening Results

Tables 12 and 13 contain the FHB reaction type of all entries tested for two or more years. Entries are classified as Resistant, Moderately Resistant, Moderately Susceptible or Susceptible based on the Fusarium headblight index value over two or three years.

FHB index is calculated as: $2*(A + 2*B + 2*C)$ where:

A = FHB rating divided by the mean FHB rating.

B = FDK percent divided by the mean FDK percent.

C = DON ppm divided by the mean DON ppm.

The FHB Index gives more weight to DON and FDK since they are the standard by which grain is judged at the elevator.

Table 12 has values for FHB, FDK and DON from the misted nursery in Alexandria and Winnsboro for all entries in the North Louisiana variety trial. NIV (nivalenol) was measured by the USDA lab in 2023 from seed in the Alexandria and Baton Rouge misted nurseries. NIV is similar to DON but is found more commonly in south Louisiana, particularly in the rice growing region.

Agrimaxx 492 and Progeny Turbo were classified as Resistant, while eight additional varieties are moderately resistant to FHB and six entries were classified as Susceptible to FHB.

Three entries were classified as Resistant in the south Louisiana trial based on the misted nursery at Baton Rouge and five entries were classified as moderately resistant.

Oat Performance Trials

The oat performance trial was lost at Baton Rouge due to torrential rainfall immediately after planting. Data is not reported for Bossier City or Alexandria due to high CV% resulting from bird damage and severe lodging.

Despite stands that were less than ideal at Winnsboro, yields were excellent with a high of 120.7 bushels per acre and a mean of 98.4 bushels per acre (Table 14). The 11 highest-yielding entries at Winnsboro were breeding lines from the SunGrains universities Louisiana State University AgCenter, Texas A&M and the University of Florida. The highest yielding released varieties were Horizon 306 and TAMO412, both with yields greater than 100 bushels per acre.

Test weights were also excellent with a mean of 31.6 pounds per bushel. Two LSUAC sister lines (LA17089s) had test weights over 36 pounds per bushel along with excellent yields.

Thirteen entries have been tested across Louisiana for two years (Table 15). Yields ranged from 108.2 bushels per acre to 33.2 bushels per acre with a mean of 81.7 bushels per acre. Crown rust, stem rust and lodging lowered yields of most entries. The commercial varieties Savage, LA 99016, Horizon 306 and TAMO 412 all had fairly average yields in these trials.

Table 1. Wheat performance trial across south Louisiana for 2023.

Brand/Variety	Grain Yield (bu/acre)	Test Weight (lbs/bu)	Growth Habit (0-9)	Head Day (of year)	Lodging (0-9)	Stem Rust (0-9)	Phenotype (0-9)	HDDAY (Baton Rouge Misted Nursery)	FHB (0-9) (Baton Rouge Misted Nursery)	FDK (%) (Baton Rouge Misted Nursery)	DON (ppm) (Baton Rouge Misted Nursery)	NIV (ppm) (Baton Rouge Misted Nursery)	Seed Qual (0-9) (Baton Rouge Misted Nursery)
AGS 3022	75.2	57.5	4.8	82.4	4.8	0.0	5.8	89.0	4.0	25.0	0.4	2.6	3.0
AGS 3022-NF	71.2	57.2	5.0	81.7	5.4	0.0	5.8	92.0	4.5	17.5	0.2	2.6	3.0
DYNA-GRO 23777	70.0	58.3	4.7	83.8	4.0	0.0	6.0	93.0	4.3	40.0	0.4	3.6	2.5
FLLA16124LDH-51	69.9	57.7	4.8	80.9	6.0	0.0	5.8	93.5	3.0	32.5	0.2	1.8	3.0
GO WHEAT LA754	69.3	56.9	5.0	88.4	6.8	0.0	5.3	91.0	3.8	37.5	0.9	5.1	3.0
LA14191C-93-2-1-3	69.1	58.1	5.2	83.1	6.3	0.0	5.5	92.0	4.8	20.0	0.4	3.9	3.0
DELTA GROW 3500	68.8	56.1	5.3	92.6	2.4	0.0	5.8	97.0	2.5	22.5	0.3	1.8	3.0
LA17006LDH042	68.3	58.6	5.0	84.6	6.3	0.0	5.2	92.5	4.8	45.0	0.1	2.6	3.0
DELTA GROW 1800	67.3	57.1	5.2	89.3	4.0	0.0	6.0	97.5	2.5	5.0	0.1	0.5	4.0
LA14272CBW-15-1-2	67.2	56.7	6.0	88.6	5.9	0.0	6.0	91.0	3.8	7.5	0.1	2.3	3.5
DYNA-GRO PLANTATION	65.4	55.6	5.3	92.5	4.1	0.0	5.8	99.5	3.3	40.0	0.3	1.6	3.0
DYNA-GRO RIVERLAND	65.0	58.0	4.5	82.5	7.1	0.0	4.8	91.0	4.8	40.0	0.7	10.1	3.0
LA18003-NDH119	63.8	57.0	4.7	85.0	6.1	0.0	5.2	92.5	4.0	32.5	0.3	1.2	3.0
GA151313-20E48	63.7	57.4	4.7	82.2	4.0	0.0	5.0	88.5	4.8	35.0	0.1	2.8	3.0
AGS 3015	63.5	57.3	4.5	83.6	4.9	0.0	4.5	87.5	4.5	17.5	0.1	2.9	3.0
AGRIMAXX 481	63.2	56.9	5.8	92.1	3.6	0.0	6.0	97.0	3.3	15.0	0.7	3.1	3.0
DYNA-GRO BLANTON	62.8	56.3	4.8	78.4	5.0	0.0	5.3	87.5	5.0	70.0	0.8	11.5	2.0
PROGENY #CHAD	62.8	52.8	6.7	98.9	4.0	0.0	5.5	95.0	3.5	12.5	0.1	1.4	3.5
LA14272CBB-3-1-4	60.7	58.2	5.2	86.5	7.4	0.0	5.7	92.0	4.0	7.5	0.4	2.5	3.5
AGS 2055	60.6	51.5	6.7	98.7	1.5	0.0	5.8	104.0	0.5	25.0	0.3	4.0	3.0
AGS 3015-NF	60.5	57.5	5.0	83.8	6.3	0.0	4.7	90.0	4.8	27.5	0.2	3.8	3.0
LA14159SB-BR1-1	60.5	57.9	4.5	81.8	5.8	0.0	5.2	89.5	5.0	42.5	0.3	5.1	2.5
LA13019SC-23-3-1-3	59.6	54.2	6.3	98.8	3.1	0.0	5.7	99.5	2.3	25.0	0.4	1.0	3.0
PIONEER 26R94	59.5	56.2	4.0	77.8	6.1	0.0	4.7	88.0	4.0	52.5	1.0	10.4	2.0
GA12230-20E36	58.9	54.2	6.5	92.8	2.9	0.0	5.5	97.5	3.3	35.0	0.2	1.2	2.5
GA161240-20LE6	58.6	54.5	4.0	81.5	6.0	0.0	4.7	88.0	5.0	30.0	0.2	3.2	2.5
DG1900	58.0	52.7	6.7	98.1	3.3	0.0	6.0	103.5	2.3	17.5	0.3	0.5	3.0
LA14234CBW-31	57.5	57.4	5.2	81.7	7.1	2.0	5.0	90.5	5.0	20.0	0.3	5.8	3.5
AGS 2021	57.0	56.2	4.8	81.9	6.1	0.0	5.2	90.5	4.5	60.0	0.3	8.0	2.0
GO WHEAT 6000	56.9	54.3	4.5	79.4	6.6	0.0	5.0	90.0	4.5	45.0	0.2	3.3	2.5

Brand/Variety	Grain Yield (bu/acre)	Test Weight (lbs/bu)	Growth Habit (0-9)	Head Day (of year)	Lodging (0-9)	Stem Rust (0-9)	Phenotype (0-9)	HDDAY (Baton Rouge Misted Nursery)	FHB (0-9) (Baton Rouge Misted Nursery)	FDK (%) (Baton Rouge Misted Nursery)	DON (ppm) (Baton Rouge Misted Nursery)	NIV (ppm) (Baton Rouge Misted Nursery)	Seed Qual (0-9) (Baton Rouge Misted Nursery)
FL15105-LDH043	55.9	58.6	4.7	79.0	4.5	0.0	5.3	93.5	4.3	35.0	0.1	0.8	3.0
LA14269SB-BR32-4-1-1	55.3	57.2	5.8	86.7	8.4	2.5	4.7	92.0	3.5	25.0	0.3	1.9	3.0
GO WHEAT 6000-NF	53.7	53.8	4.7	79.7	7.1	0.0	4.7	92.0	5.0	40.0	0.4	3.3	2.5
LA15298GBB-5-1-4	52.2	59.2	3.7	74.6	5.4	0.0	3.7	88.5	4.8	42.5	0.2	1.9	2.5
GA131218-20E15	52.1	54.6	6.7	95.1	6.6	0.0	5.8	96.0	3.0	15.0	0.8	3.4	3.5
AGRIMAXX 492	51.8	54.8	6.7	96.6	7.3	2.0	5.5	99.5	1.3	20.0	0.4	2.5	3.0
TX17D2337	51.0	52.2	6.7	102.6	0.8	0.0	5.2	101.0	1.3	25.0	0.6	2.4	3.0
TX18D3212	47.8	48.2	6.5	106.8	0.3	0.0	5.3	104.0	1.0	17.5	0.5	1.7	3.0
MEAN	61.4	56.0	5.3	87.2	5.1	0.2	5.3	93.6	3.7	29.5	0.4	3.4	2.9
CV	10.4	2.1	6.6	1.9	28.5	151.6	6.9	2.2	23.5	57.4	75.9	39.1	17
LSD	11.0	2.3		4.6	4.4			3.5	1.5	NS	NS	2.3	NS
R-SQUARE	0.93	0.88	0.91	0.98	0.83	0.91	0.76	0.92	0.81	0.60	0.66	0.89	0.60

Data from Baton Rouge, Crowley and Jeanerette, Louisiana.

Bold: "Brand/Variety" indicates the entry is commercially available; others are nonreleased breeding lines.

Phenotype is a visual appeal rating with a higher score indicating a prettier plot.

Notes: Significant lodging occurred that was probably caused by stem nicking from the March hard freeze, even though no freeze damage was obvious until late grain fill.

The variety trial was on the far edge of the field, away from the epicenters of both stem rust and Hessian fly, and were not significantly impacted even though trials in an adjacent field were significantly impacted.

A very wet mild winter with unusually warm temperatures. Greatly reduced vernalization hours compared to normal. Dry and favorable harvest weather.

NF indicates seed that was not treated in order to evaluate the impact of seed treatment.

Table 2. Wheat performance trial across south Louisiana for two years.

Brand/Variety	Grain Yield (bu/acre)	Test Weight (lbs/bu)	Heading Day (of year)	Plant Height (in)	Stem Rust (0-9)	Phenotype (0-9)	Misted Nursery HDDY (of year)	Misted Nursery FHB (0-9)	Misted Nursery FDK (%)	Misted Nursery DON (ppm)	Misted Nursery NIV (ppm)
AGS 3022	80.8	57.0	86.3	30.7	0.0	5.3	91.8	3.8	26.3	4.2	2.6
DYNA-GRO 23777	78.2	57.9	87.5	33.9	0.0	6.4	95.3	5.1	46.3	13.5	3.6
DELTA GROW 3500	77.2	56.5	93.3	32.5	0.0	5.7	96.5	4.8	35.0	9.8	1.8
DYNA-GRO PLANTATION	76.6	56.3	92.3	32.4	0.0	5.8	97.0	5.1	37.5	6.8	1.6
DYNA-GRO RIVERLAND	74.8	57.7	85.2	34.9	0.0	5.6	93.3	5.9	40.0	6.5	10.1
AGRIMAXX 481	74.5	56.9	92.3	32.7	0.0	5.8	96.5	4.1	27.5	3.9	3.1
GO WHEAT LA754	73.1	55.5	91.8	33.6	0.0	5.8	93.5	5.1	43.8	7.3	5.1
PIONEER 26R94	72.5	56.8	82.9	35.0	0.0	5.3	92.0	5.3	43.8	6.6	10.4
PROGENY #CHAD	72.2	53.4	96.8	29.5	0.0	5.5	95.5	3.0	16.3	2.1	1.4
AGS 3015	71.7	57.0	86.7	32.6	0.0	5.2	89.5	4.8	20.0	3.3	2.9
DELTA GROW 1800	71.3	56.8	93.6	36.7	0.0	5.6	98.3	2.0	8.8	2.6	0.5
LA14159SB-BR1-1	70.8	57.1	85.6	34.5	0.0	6.1	90.3	4.8	40.0	5.6	5.1
GO WHEAT 6000	69.9	54.3	84.7	32.0	0.0	6.2	93.0	5.0	42.5	6.4	3.3
LA14234CBW-31	69.9	56.8	86.3	32.4	2.0	5.8	93.8	4.0	20.0	5.2	5.8
AGS 2055	69.7	53.0	98.3	32.6	0.0	5.5	102.5	3.5	47.5	33.9	4.0
AGS 2021	68.9	57.0	85.3	35.2	0.0	5.5	93.0	6.0	52.5	7.8	8.0
AGRIMAXX 492	60.5	53.8	96.6	31.8	2.0	5.9	98.5	1.6	25.0	8.4	2.5
TX17D2337	58.4	52.6	101.3	31.2	0.0	4.8	98.3	2.4	23.8	3.9	2.4
MEAN (19 entries)	71.5	55.9	90.1	33.0	0.2	5.7	94.9	4.2	33.1	7.7	4.1
CV%	8	2	1	4	154	8	2	15	41	73	36
LSD(0.10)	7.3	1.7	3.4	1.1		0.7	5.0	2.6	18.5	18.0	
R-SQUARE	0.93	0.87	0.98	0.90		0.80					

Contains data from Baton Rouge, Crowley, and Jeanerette in 2022 and 2023.

Table 3. Wheat performance trial across south Louisiana for three years.

Brand/Variety	Grain Yield (bu/acre)	Test Weight (lbs/bu)	Heading Day (of year)	Plant Height (in)	Lodging (0-9)	Stem Rust (0-9)	Phenotype (0-9)
AGS 3022	80.1	56.7	85.6	29.5	3.9	0.0	5.3
DELTA GROW 3500	76.4	56.3	92.3	30.9	2.2	0.0	5.7
DYNA-GRO PLANTATION	75.1	56.3	91.5	31.3	3.5	0.0	5.8
AGRIMAXX 481	74.5	56.8	91.5	31.7	3.0	0.0	5.8
DYNA-GRO RIVERLAND	73.8	57.3	85.4	33.6	5.3	0.0	5.6
PIONEER 26R94	72.4	56.6	83.8	34.1	4.6	0.0	5.3
GO WHEAT LA754	72.4	54.9	91.2	32.1	5.2	0.0	5.8
DELTA GROW 1800	71.4	57.0	93.6	35.2	3.1	0.0	5.6
GO WHEAT 6000	70.3	54.3	85.4	31.4	5.1	0.0	6.2
AGS 2055	70.0	53.2	98.7	31.9	1.3	0.0	5.5
AGS 3015	70.0	56.8	86.5	31.6	3.9	0.0	5.2
AGRIMAXX 492	63.6	54.5	96.8	31.1	5.4	2.0	5.9
MEAN (19 entries)	72.5	55.9	90.2	32.0	3.9	0.2	5.6
CV%	8	2	1	4	32	245	9
LSD(0.10)	6.8	1.6	2.9	1.1	3.6		0.7
R-SQUARE	0.93	0.89	0.98	0.92	0.90		0.76

Contains data from Baton Rouge, Crowley and Jeanerette in 2022 and 2023, and 2021 Jeanerette.

Table 4. Wheat performance trial at Baton Rouge, Louisiana, for 2023.

Brand/Variety	Grain Yield (bu/acre)	Test Weight (lbs/bu)	Head Day (of year)	Lodging (0-9)	Stem Rust (0-9)	Phenotype (0-9)	FHB (0-9) (Misted Nursery)	FDK (%) (Misted Nursery)	DON (ppm) (Misted Nursery)	NIV (ppm) (Misted Nursery)
DYNA-GRO 23777	84.0	59.9	81.0	1.0	0.0	6.0	4.3	40.0	0.4	3.6
AGS 3022	78.2	57.7	85.0	3.0	0.0	5.8	4.0	25.0	0.4	2.6
DELTA GROW 1800	77.3	57.0	89.0	2.8	0.0	6.0	2.5	5.0	0.1	0.5
AGS 3022-NF	73.6	57.4	85.0	5.0	0.0	5.8	4.5	17.5	0.2	2.6
LA14272CBW-15-1-2	72.7	58.3	88.5	5.3	0.0	6.0	3.8	7.5	0.1	2.3
LA14191C-93-2-1-3	72.3	59.3	84.0	5.0	0.0	5.5	4.8	20.0	0.4	3.9
FLLA16124LDH-51	71.7	57.5	85.5	6.0	0.0	5.8	3.0	32.5	0.2	1.8
DYNA-GRO BLANTON	69.0	58.2	78.5	1.0	0.0	5.3	5.0	70.0	0.8	11.5
DELTA GROW 3500	68.0	56.4	92.0	4.8	0.0	5.8	2.5	22.5	0.3	1.8
DG1900	66.6	55.7	93.0	3.0	0.0	6.0	2.3	17.5	0.3	0.5
PIONEER 26R94	66.2	57.5	74.5	3.8	0.0	4.7	4.0	52.5	1.0	10.4
GA12230-20E36	66.2	55.4	89.5	2.8	0.0	5.5	3.3	35.0	0.2	1.2
LA18003-NDH119	65.9	58.7	85.0	4.8	0.0	5.2	4.0	32.5	0.3	1.2
AGS 3015	65.9	58.1	81.5	3.0	0.0	4.5	4.5	17.5	0.1	2.9
PROGENY #CHAD	65.3	54.5	92.0	5.3	0.0	5.5	3.5	12.5	0.1	1.4
LA17006LDH042	64.8	58.5	84.0	5.0	0.0	5.2	4.8	45.0	0.1	2.6
LA14272CBB-3-1-4	64.7	59.8	87.0	7.0	0.0	5.7	4.0	7.5	0.4	2.5
DYNA-GRO PLANTATION	62.9	56.4	90.0	7.0	0.0	5.8	3.3	40.0	0.3	1.6
GO WHEAT LA754	62.3	56.8	88.5	6.5	0.0	5.3	3.8	37.5	0.9	5.1
AGRIMAXX 481	60.6	57.5	91.5	7.3	0.0	6.0	3.3	15.0	0.7	3.1
LA13019SC-23-3-1-3	59.9	55.8	93.5	6.3	0.0	5.7	2.3	25.0	0.4	1.0
AGS 2055	59.8	50.0	99.0	3.0	0.0	5.8	0.5	25.0	0.3	4.0
GO WHEAT 6000	59.8	57.2	79.0	4.3	0.0	5.0	4.5	45.0	0.2	3.3
AGS 3015-NF	59.4	58.1	84.0	4.3	0.0	4.7	4.8	27.5	0.2	3.8
DYNA-GRO RIVERLAND	59.2	59.2	85.0	5.3	0.0	4.8	4.8	40.0	0.7	10.1
LA14159SB-BR1-1	59.2	58.4	82.5	3.8	0.0	5.2	5.0	42.5	0.3	5.1
AGS 2021	57.7	58.1	81.0	3.8	0.0	5.2	4.5	60.0	0.3	8.0
TX17D2337	56.5	51.3	102.0	1.5	0.0	5.2	1.3	25.0	0.6	2.4
GA161240-20LE6	54.2	55.8	73.0	3.0	0.0	4.7	5.0	30.0	0.2	3.2
GO WHEAT 6000-NF	54.2	56.7	78.5	5.3	0.0	4.7	5.0	40.0	0.4	3.3

Brand/Variety	Grain Yield (bu/acre)	Test Weight (lbs/bu)	Head Day (of year)	Lodging (0-9)	Stem Rust (0-9)	Phenotype (0-9)	FHB (0-9) (Misted Nursery)	FDK (%) (Misted Nursery)	DON (ppm) (Misted Nursery)	NIV (ppm) (Misted Nursery)
GA151313-20E48	52.7	58.2	76.5	0.3	0.0	5.0	4.8	35.0	0.1	2.8
LA14269SB-BR32-4-1-1	50.9	56.5	87.5	8.3	2.5	4.7	3.5	25.0	0.3	1.9
AGRIMAXX 492	49.0	56.5	94.5	7.8	2.0	5.5	1.3	20.0	0.4	2.5
FL15105-LDH043	48.2	56.8	78.5	2.0	0.0	5.3	4.3	35.0	0.1	0.8
TX18D3212	48.2	45.2	104.0	0.5	0.0	5.3	1.0	17.5	0.5	1.7
GA131218-20E15	47.1	55.1	96.0	7.3	0.0	5.8	3.0	15.0	0.8	3.4
LA14234CBW-31	47.1	57.3	82.5	6.0	2.0	5.0	5.0	20.0	0.3	5.8
LA15298GBB-5-1-4	37.9	56.8	71.0	3.0	0.0	3.7	4.8	42.5	0.2	1.9
MEAN	61.6	56.7	86.1	4.3	0.2	5.3	3.7	29.5	0.4	3.4
CV%	13.2	2.2	1.2	38.1	151.6	6.9	23.5	57.4	75.9	39.1
LSD(0.10)	9.6	1.5	1.8	1.9	0.4	0.5	1.5	NS	NS	2.3
R-SQUARE	0.67	0.87	0.99	0.69	0.91	0.76	0.81	0.60	0.66	0.89

Central Station Ben Hur Farm in Baton Rouge, Louisiana. Stephen Harrison, Noah DeWitt, Kelly Arceneaux, Katie McCarthy, Chris Roider.

Bold: "Brand/Variety" indicates the entry is commercially available; others are nonreleased breeding lines.

Lod score is lodging score, scale of 0 = none to 9 = 100% lodged.

Phenotype is a visual appeal rating with a higher score indicating a prettier plot.

Notes: Significant lodging occurred that was probably caused by stem nicking from the March hard freeze, even though no freeze damage was obvious until late grain fill.

The variety trial was on the far edge of the field, away from the epicenters of both stem rust and Hessian fly, and were not significantly impacted even though trials in an adjacent field were significantly impacted.

A very wet mild winter with unusually warm temperatures. Greatly reduced vernalization hours compared to normal. Dry and favorable harvest weather.

NF indicates seed that was not treated in order to evaluate the impact of seed treatment.

Cultural practices: Planted Nov. 15, 2022. Harvested May 19, 2023. Fertilizer: 13-37-0-16S preplant. 40# N as urea flown on early February. 80# N as liquid 28-0-0-5 in early March. Zidua plus 2 oz metribuzin in early January.

Table 5. Wheat performance trial at Crowley, Louisiana, for 2023.

Brand/Variety	Grain Yield (bu/acre)	Test Weight (lbs/bu)	Head Day (of year)	Plant Height (in)	Lodging (0-9)
AGS 3022	100.2	58.3	88.8	29.5	6.5
AGS 3022-NF	99.7	57.6	89.8	30.0	5.8
GA151313-20E48	98.7	57.7	85.8	28.3	7.8
DELTA GROW 3500	96.8	57.3	94.8	31.0	0.0
FLLA16124LDH-51	94.1	58.3	87.5	29.3	6.0
DYNA-GRO PLANTATION	93.3	55.9	94.8	31.0	1.3
LA17006LDH042	91.7	59.2	85.8	31.3	7.5
AGRIMAXX 481	91.2	57.8	93.0	30.8	0.0
LA14191C-93-2-1-3	90.0	57.8	86.8	31.3	7.5
GO WHEAT LA754	89.4	57.2	91.5	34.3	7.0
AGS 3015	89.1	58.5	87.3	30.5	6.8
DYNA-GRO RIVERLAND	88.4	58.3	86.3	33.8	9.0
LA18003-NDH119	88.0	58.7	86.3	33.3	7.5
AGS 3015-NF	87.5	58.2	87.8	30.3	8.3
DYNA-GRO BLANTON	85.6	56.4	84.8	31.3	9.0
LA14272CBW-15-1-2	84.8	56.9	93.5	33.8	6.5
DELTA GROW 1800	83.7	57.5	91.8	32.0	5.3
LA14234CBW-31	83.3	57.5	85.8	30.5	8.3
DYNA-GRO 23777	83.0	59.0	88.0	33.0	7.0
AGS 2055	82.0	51.8	100.3	34.0	0.0
LA14159SB-BR1-1	79.8	57.0	85.0	31.5	7.8
AGS 2021	79.5	57.5	86.0	35.5	8.5
GA161240-20LE6	79.4	55.7	85.0	30.5	9.0
LA15298GBB-5-1-4	79.0	59.0	82.0	28.3	7.8
GA12230-20E36	78.9	55.0	94.3	28.5	3.0
LA14272CBB-3-1-4	78.9	58.1	89.0	33.5	7.8
FL15105-LDH043	77.0	58.4	85.8	30.3	7.0
PIONEER 26R94	76.9	57.4	85.3	37.0	8.5
GO WHEAT 6000	75.8	54.6	86.0	30.8	9.0
AGRIMAXX 492	75.2	56.2	97.5	31.0	6.8

Brand/Variety	Grain Yield (bu/acre)	Test Weight (lbs/bu)	Head Day (of year)	Plant Height (in)	Lodging (0-9)
LA13019SC-23-3-1-3	74.9	52.3	100.5	33.3	0.0
GO WHEAT 6000-NF	74.6	54.2	85.8	28.8	9.0
LA14269SB-BR32-4-1-1	73.2	57.3	90.0	30.5	8.5
PROGENY #CHAD	73.1	51.4	99.3	30.8	2.8
GA131218-20E15	68.5	54.5	96.8	28.8	6.0
TX17D2337	59.8	51.4	102.5	32.0	0.0
TX18D3212	59.1	47.5	104.0	33.0	0.0
DG1900	50.2	47.9	103.3	32.3	3.5
MEAN	82.0	56.2	90.7	31.4	5.8
CV%	6.0	1.7	1.9	4.1	21
LSD(0.10)	5.7	1.4	2.0	1.5	1.4
R-SQUARE	0.88	0.98	0.95	0.77	0.90

Rice Research Station in Crowley, Louisiana. Manoch Kongchum, James Leonards, Jacob Fluitt and Boyd Padgett.

Bold: "Brand/Variety" indicates the entry is commercially available; others are nonreleased breeding lines.

Lod score is lodging score, scale of 0 = none to 9 = 100% lodged.

Phenotype is a visual appeal rating with a higher score indicating a prettier plot.

Cultural practices: Planted Jan. 9, 2023. Harvested May 25, 2023. 250# 0-24-24-2.8 on Jan. 18, 2023 and 80#N/acre as 46-0-0 on Feb. 24, 2023. RoundUp plus Sharpen preplant and Prowl (2 pts/acre) on Jan. 18, 2023.

Table 6. Wheat performance trial at Jeanerette, Louisiana, for 2023.

Brand/Variety	Grain Yield (bu/acre)	Test Weight (lbs/bu)	Head Day (of year)	Plant Height (in)
DG1900	57.0	54.6	95.5	25.7
GO WHEAT LA754	56.0	56.6	85.3	28.3
PROGENY #CHAD	50.0	52.6	102.0	23.1
LA17006LDH042	48.2	58.1	83.8	27.0
DYNA-GRO RIVERLAND	47.4	56.7	77.5	26.1
AGS 3022	47.2	56.5	74.8	24.4
LA14191C-93-2-1-3	45.2	57.2	79.0	24.6
LA14272CBW-15-1-2	44.1	54.9	83.8	27.8
LA13019SC-23-3-1-3	44.0	54.6	99.8	26.2
FLLA16124LDH-51	44.0	57.1	72.0	23.2
DYNA-GRO 23777	42.9	56.1	81.0	27.0
FL15105-LDH043	42.5	60.8	72.5	22.8
LA14159SB-BR1-1	42.5	58.2	78.3	26.0
GA161240-20LE6	42.2	52.0	82.3	26.1
LA14234CBW-31	42.1	57.3	77.3	23.7
LA14269SB-BR32-4-1-1	41.9	57.7	83.0	25.3
DELTA GROW 3500	41.7	54.7	90.8	27.3
DELTA GROW 1800	40.9	56.8	87.0	29.0
GA131218-20E15	40.5	54.0	93.0	22.8
AGS 3022-NF	40.3	56.5	72.0	22.5
DYNA-GRO PLANTATION	40.0	54.5	91.5	26.6
GA151313-20E48	39.8	56.5	81.5	20.8
LA15298GBB-5-1-4	39.7	61.8	69.0	22.3
AGS 2055	39.7	52.3	97.0	26.3
LA14272CBB-3-1-4	38.7	56.7	83.8	26.5
AGRIMAXX 481	37.8	55.5	91.5	26.8
LA18003-NDH119	37.5	53.7	83.8	27.6
TX17D2337	36.8	53.9	103.0	24.1
TX18D3212	36.0	52.1	111.0	24.8
AGS 3015	35.7	55.4	81.0	25.0

Brand/Variety	Grain Yield (bu/acre)	Test Weight (lbs/bu)	Head Day (of year)	Plant Height (in)
PIONEER 26R94	35.3	53.7	72.0	27.2
GO WHEAT 6000	35.0	51.1	73.0	23.6
AGS 3015-NF	34.7	56.1	79.8	24.8
DYNA-GRO BLANTON	33.9	54.4	72.0	23.8
AGS 2021	33.8	53.1	78.3	27.4
GO WHEAT 6000-NF	32.3	50.6	74.3	23.4
GA12230-20E36	31.6	52.2	93.0	23.2
AGRIMAXX 492	31.3	51.9	96.8	23.3
MEAN	40.8	55.2	84.3	25.2
CV%	14.1	2.4	2.2	4
LSD(0.10)	6.8	1.5	2.1	6.8
R-SQUARE	0.61	0.84	0.98	0.80

Iberia Research Station in Jeanerette, Louisiana. Greg Williams and Boyd Padgett.

Bold: "Brand/Variety" indicates the entry is commercially available; others are nonreleased breeding lines.

Cultural practices: Baldwin silty clay loam. Planted Nov. 2, 2022. Harvested May 3, 2023 (early varieties) and May 23, 2023. 22# N as 13-13-13 on Dec. 6, 2022 and 120# N as 46-0-0 on Feb. 7, 2023. Finesse (0.5 oz/acre) plus Axial (16 oz/acre) plus 2,4,D (16 oz/acre) on Jan. 18, 2023.

Table 7. Wheat performance trial across north Louisiana for 2023.

Brand / Variety	Grain Yield (bu/a)	Test Weight (lbs/bu)	Head Day (of year)	Plant Height (in)	Lodging (0-9)	Freeze Damage (0-9)	Herbicide Damage (0-9)	Phenotype (0-9)	Misted Nursery HDDAY	Misted Nursery FHB (0-9)	Misted Nursery FDK (0-9)	Misted Nursery DON (ppm)	Misted Nursery NIV (ppm)	Misted Nursery Seed Quality (0-9)
AGS 2055	97.7	57.4	92.8	34.3	2.3	0.0	0.3	6.5	92.0	4.0	40	7.6	0.6	3.3
DG1700	95.3	55.9	95.2	36.3	1.3	0.0	0.3	7.0	84.5	5.0	30	6.7	2.8	3.3
AGRIMAXX 492	95.0	59.3	88.2	33.0	2.3	0.0	0.0	6.7	90.5	2.4	21	3.0	1.1	3.5
USG 3354	93.6	54.4	92.8	35.7	2.3	0.0	1.3	6.0	91.8	2.3	30	2.6	0.8	3.3
DG1900	91.2	55.3	93.3	32.7	4.0	0.0	0.3	6.2	83.5	2.1	26	1.3	0.8	3.5
USG 3463	91.1	56.5	98.0	31.7	1.3	0.0	0.0	6.2	87.8	1.8	27	1.2	0.7	4.5
TX18D3212	89.9	57.0	99.5	32.7	3.3	0.3	0.0	6.3	92.0	2.8	30	2.2	1.2	3.5
PROGENY #TURBO	88.6	57.2	98.3	33.7	0.7	0.0	0.7	6.0	88.3	2.6	25	2.4	0.8	3.8
PROGENY #CHAD	88.2	54.2	93.7	29.0	5.3	0.0	0.3	6.5	93.8	2.0	39	1.5	1.0	4.8
DYNA-GRO 9393	87.3	57.4	98.0	34.3	1.7	0.0	0.0	6.7	91.3	1.8	29	2.5	1.6	3.0
DELTA GROW 1200	87.0	51.2	101.2	36.0	3.3	0.0	0.0	6.5	100.0	1.6	41	2.2	1.1	3.0
PROGENY PGX 22-3	86.3	57.0	93.3	33.0	4.0	0.0	0.0	6.3	99.0	2.9	44	4.3	1.9	3.3
DELTA GROW 1000	86.2	53.7	96.5	39.0	0.3	0.0	0.7	5.8	81.3	2.0	30	3.5	1.0	3.3
DYNA-GRO 9172	85.9	54.7	99.2	38.7	0.3	0.0	0.0	6.3	97.0	1.3	28	6.0	1.4	3.0
AGRIMAXX EXP 2301	85.6	57.4	94.8	35.3	1.7	0.0	0.0	6.7	97.7	2.3	45	3.4	0.4	3.3
PIONEER 26R59	85.2	54.8	92.5	33.0	2.7	0.0	0.7	6.7	96.0	2.7	35	3.9	0.5	2.7
PROGENY #BUSTER	83.8	55.6	99.5	36.0	3.7	0.0	0.0	6.8	96.5	2.3	20	3.5	0.9	3.8
AGRIMAXX 473	83.8	53.5	97.7	38.3	1.3	0.0	0.3	6.2	93.5	2.1	33	2.3	0.9	3.3
AGRIMAXX 535	83.7	55.5	98.0	37.0	3.0	0.7	0.0	6.0	95.8	1.5	31	3.1	0.9	3.0
DYNA-GRO 23777	83.6	58.7	88.7	36.7	0.0	2.7	0.0	5.3	83.3	4.0	28	6.9	2.4	2.7
PROGENY BINGO	83.6	51.9	101.3	37.0	2.3	0.0	0.0	6.5	100.8	1.5	43	3.1	1.4	3.8
DYNA-GRO WX23444	82.9	55.0	91.5	34.3	5.0	0.0	0.0	6.3	88.0	1.9	44	2.2	0.7	3.3
PIONEER 26R33	82.8	56.1	95.2	37.3	5.0	0.0	0.0	6.3	95.3	1.9	35	5.4	1.7	3.5
PIONEER 26R45	82.7	52.6	100.2	40.0	3.7	0.7	1.0	6.2	93.5	1.6	43	1.7	0.7	3.5
AGRIMAXX 514	82.6	55.5	97.5	36.7	4.3	0.0	0.0	6.7	100.8	2.0	23	3.1	2.0	3.5

Brand / Variety	Grain Yield (bu/a)	Test Weight (lbs/bu)	Head Day (of year)	Plant Height (in)	Lodging (0-9)	Freeze Damage (0-9)	Herbicide Damage (0-9)	Phenotype (0-9)	Misted Nursery HDDAY	Misted Nursery FHB (0-9)	Misted Nursery FDK (0-9)	Misted Nursery DON (ppm)	Misted Nursery NIV (ppm)	Misted Nursery Seed Quality (0-9)
LA17006LDH042	82.1	59.4	92.3	34.3	0.3	2.0	1.3	5.5	90.5	2.6	25	1.3	0.7	4.3
DELTA GROW 1800	81.0	58.9	89.3	35.0	0.0	1.7	0.0	6.0	87.0	2.2	35	2.7	1.8	4.0
GA131218-20E15	80.3	58.3	89.0	30.3	1.0	1.0	2.3	5.8	94.0	3.5	36	7.6	3.3	3.3
GA12230-20E36	79.3	57.2	90.5	31.7	0.3	4.3	0.7	4.3	82.0	2.0	33	3.9	1.0	4.0
DYNA-GRO PLANTATION	79.2	59.3	92.7	32.0	0.3	1.3	2.0	5.3	86.0	4.8	24	5.4	2.4	3.0
TX17D2337	79.2	57.7	96.8	35.7	2.7	0.3	2.3	5.5	86.7	2.7	27	4.2	1.0	2.7
LA18003-NDH119	79.1	58.4	92.8	33.7	0.3	3.0	1.0	4.5	87.5	2.0	18	1.1	0.4	3.5
AGRIMAXX 481	79.0	59.2	91.3	31.7	0.0	1.3	1.7	5.0	88.0	5.3	43	3.2	0.9	3.5
PIONEER 26R41	78.3	56.1	97.8	32.7	3.3	0.0	0.7	6.2	97.0	1.4	38	2.5	1.6	3.3
PROGENY PGX 22-2	77.6	55.9	93.6	38.7	5.7	0.0	0.0	6.7	94.0	1.3	33	1.8	0.8	3.8
LA13019SC-23-3-1-3	77.5	58.5	95.5	32.0	1.3	0.3	0.3	6.0	93.5	3.8	33	3.1	2.1	3.3
DELTA GROW 3500	76.5	59.2	88.7	32.0	1.0	3.3	2.7	4.3	91.0	2.0	41	0.9	0.7	4.5
LA14269SB-BR32-4-1-1	76.5	60.6	90.7	33.0	0.0	2.0	0.7	5.7	87.3	2.0	35	1.8	1.2	3.3
USG 3783	76.1	54.5	94.8	33.7	2.3	2.0	0.0	6.8	96.5	2.1	55	7.2	2.1	2.8
GA151313-20E48	74.7	58.1	92.3	28.0	0.0	2.3	1.3	4.7	94.7	3.5	37	1.6	0.7	4.3
GA161240-20LE6	69.2	55.6	89.7	33.3	0.7	3.0	0.3	4.8	82.3	2.4	34	1.5	0.6	4.5
GO WHEAT 6000-NF	68.7	56.6	86.2	34.3	0.0	5.3	0.3	3.8	94.0	2.5	33	4.0	1.6	3.8
GO WHEAT 6000	68.0	58.3	87.8	32.7	0.0	5.7	0.3	3.7	88.0	1.5	26	3.6	0.8	3.3
GO WHEAT LA754	67.6	58.1	90.3	33.0	0.0	3.0	0.0	5.2	82.5	4.5	48	10.8	3.5	2.5
LA14272CBW-15-1-2	67.0	56.4	88.2	34.7	0.0	1.0	1.0	6.3	86.8	1.5	19	3.3	0.4	3.5
DYNA-GRO BLANTON	66.6	57.7	86.3	32.0	0.3	3.7	0.7	4.2	87.0	4.3	41	5.4	2.8	2.8
PROGENY PGX 22-4	65.2	50.6	102.0	35.3	4.0	0.0	0.0	6.7	99.0	1.9	25	2.9	0.6	3.8
DYNA-GRO RIVERLAND	64.5	57.7	84.5	35.3	0.0	4.3	0.0	4.2	88.0	4.0	33	3.4	1.7	3.5
AGS 3022-NF	64.4	58.4	89.0	31.7	0.0	6.3	0.0	3.8	83.5	2.0	29	2.8	0.5	3.8
AGS 3022	63.3	59.1	93.7	28.0	0.0	5.7	1.0	3.5	86.5	2.0	25	2.5	0.6	3.5

Brand / Variety	Grain Yield (bu/a)	Test Weight (lbs/bu)	Head Day (of year)	Plant Height (in)	Lodging (0-9)	Freeze Damage (0-9)	Herbicide Damage (0-9)	Phenotype (0-9)	Misted Nursery HDDAY	Misted Nursery FHB (0-9)	Misted Nursery FDK (0-9)	Misted Nursery DON (ppm)	Misted Nursery NIV (ppm)	Misted Nursery Seed Quality (0-9)
DROPPED - AGS 2021	62.8	57.0	88.2	35.3	0.0	6.0	0.0	3.2	90.5	2.6	11	2.8	1.1	4.0
LA14234CBW-31	62.0	59.6	91.7	32.7	0.0	5.3	0.0	3.8	85.5	1.9	21	3.6	0.9	4.0
AGS 3015	61.1	58.4	84.4	32.0	0.3	5.3	0.3	3.5	95.5	3.8	38	8.3	4.2	3.3
LA14191C-93-2-1-3	60.3	55.1	85.7	30.3	0.0	5.7	0.0	3.7	83.5	1.5	56	2.5	1.1	2.8
FLLA16124LDH-51	59.7	58.2	92.7	32.3	0.0	6.3	0.0	3.3	81.0	2.5	29	3.5	1.5	3.5
AGS 3015-NF	54.1	60.4		33.3	0.3	5.3	0.0	3.5	85.3	2.5	28	3.2	0.7	3.8
PIONEER 26R94	49.8	57.1	87.4	33.7	0.0	6.7	0.3	3.0	79.0	3.0	37	1.4	0.9	3.3
LA15298GBB-5-1-4	47.9	60.5	87.0	30.7	0.3	6.3	0.0	3.2	88.3	1.9	21	1.5	1.0	3.0
LA14272CBB-3-1-4	43.7	55.8	87.2	30.5	0.0	3.3	0.0	4.0	82.3	2.0	34	3.5	0.7	2.8
LA14159SB-BR1-1	38.6	58.3	86.8	31.7	0.0	7.3	0.0	3.0	78.8	1.0	23	4.4	1.6	3.0
FL15105-LDH043	36.5	59.3	85.5	29.7	0.0	7.0	0.0	2.7	79.5	2.0	20	0.9	0.5	4.3
MEAN	75.5	56.8	92.7	33.8	1.5	2.2	0.4	5.3	89.8	2.4	32	3.4	1.3	3.5
CV%	13	5	7	6	98	45.2	171.4	9.8	7	28	48	58	56	23
LSD(0.10)	25.2	3.6	6.7	*	*	*	*	*	11.3	0.5	NS	NS		1.0
R-SQUARE	0.83	0.59	0.67	0.73	0.67	0.90	0.53	0.90	0.74	0.82	0.66	0.85	0.77	0.61

Bold: "Brand/Variety" indicates the entry is commercially available; others are nonreleased breeding lines.

Contains data from Bossier City and Winnsboro for 2023.

LOD: Lodging score on a scale of 0 = none to 9 = 100% lodged. For * columns see individual location data, rated at one location only.

NS: Not significant - Variety mean differences were not statistically significant.

Misted nursery: Inoculated with scabby corn and mist irrigated to create heavy Fusarium headblight pressure. Data from Alexandria and Winnsboro nurseries.

Phenotype: Overall visual appeal with a higher score indicating a more attractive plot. Average of three ratings in spring.

FHB score: FHB rating on a 0-9 scale with 0 indicating no FHB symptoms on heads.

FDK is percent Fusarium damaged kernels from yield plots and from a misted and inoculated nursery.

DON is Fusarium mycotoxin (deoxynivalenol) in parts per million.

Seed quality (SDQ): Relative, visual rating of seed plumpness, uniformity and visible defects (disease, insect damage, etc.), 0 = poor.

Table 8. Wheat performance trial across north Louisiana for two years.

Brand / Variety	Grain Yield (bu/a)	Test Weight (lbs/bu)	Head Day (of year)	Plant Height (in)	Lodging (0-9)	Freeze Damage (0-9)	Herbicide Damage (0-9)	Stripe Rust (0-9)	Fusarium Headblight (0-9)	Phenotype (0-9)	HDDAY Misted Nursery	Misted Nursery FHB (0-9)	Misted Nursery FDK (0-9)	Misted Nursery DON (ppm)	Misted Nursery NIV (ppm)	Misted Nursery Seed Quality (0-9)
AGRIMAXX 492	91.1	57.3	100.2	34.9	0.8	0.0	0.0	0.0	1.3	6.7	95.5	2.1	20	5.2	1.1	3.4
DYNA-GRO 23777	88.5	58.1	96.8	37.8	0.2	2.7	0.0	0.0	3.0	5.3	93.0	4.3	33	12.4	2.4	2.6
AGS 2055	87.0	55.5	103.3	35.4	1.3	0.0	0.3	0.0	1.7	6.5	100.3	3.2	44	22.0	4.2	2.9
PROGENY #CHAD	84.0	54.3	101.5	31.4	1.8	0.0	0.3	0.0	1.3	6.5	98.3	2.0	28	3.9	1.0	3.8
DELTA GROW 1200	82.6	53.7	107.6	34.3	1.6	0.0	0.0	0.0	0.0	6.5	97.2	1.3	24	4.5	1.8	3.7
AGRIMAXX 481	82.6	57.6	100.3	34.3	0.0	1.3	1.7	0.0	3.0	5.0	96.3	4.0	33	10.8	0.9	3.7
DELTA GROW 1000	82.5	54.4	104.2	37.8	0.3	0.0	0.7	0.0	0.7	5.8	104.3	1.3	28	3.5	1.1	3.0
PROGENY BINGO	82.3	53.6	107.2	35.3	0.9	0.0	0.0	0.0	0.0	6.5	105.2	1.1	27	3.6	1.4	4.3
DELTA GROW 1800	81.9	57.2	100.2	37.8	0.0	1.7	0.0	0.0	1.0	6.0	95.2	1.7	29	2.6	0.7	4.0
PROGENY #BUSTER	81.2	56.0	104.7	34.9	1.2	0.0	0.0	0.0	1.0	6.8	101.5	2.0	18	4.4	0.9	3.5
DYNA-GRO PLANTATION	81.0	57.8	99.9	35.1	1.2	1.3	2.0	2.3	2.0	5.3	91.8	4.7	32	11.3	2.4	2.9
PROGENY #TURBO	80.4	55.7	102.7	33.5	0.2	0.0	0.7	0.0	1.0	6.0	94.2	2.1	19	2.8	0.8	3.5
PIONEER 26R59	80.2	54.0	104.2	31.6	1.0	0.0	0.7	0.0	0.3	6.7	102.8	2.3	29	6.9	0.5	3.0
AGRIMAXX 473	79.4	54.7	105.3	36.1	0.6	0.0	0.3	0.0	0.0	6.2	100.7	1.2	21	3.1	0.9	3.1
TX17D2337	79.3	57.3	103.7	35.1	0.9	0.3	2.3	0.0	2.0	5.5	96.0	2.7	35	10.5	1.0	2.4
DYNA-GRO 9172	79.2	54.5	105.3	35.5	0.6	0.0	0.0	0.0	0.0	6.3	102.8	0.7	18	5.3	1.4	4.3
USG 3783	79.1	54.4	106.4	33.0	1.0	2.0	0.0	0.3	0.0	6.8	101.5	1.8	36	6.2	2.1	2.8
AGS 3022	79.1	57.2	97.7	33.1	0.1	5.7	1.0	0.3	2.7	3.5	89.0	2.4	28	5.1	0.5	3.4
LA14234CBW-31	77.8	57.7	96.8	34.5	0.4	5.3	0.0	0.3	2.7	3.8	91.2	2.6	21	4.1	0.9	3.6
PIONEER 26R45	77.6	54.3	107.5	36.6	1.9	0.7	1.0	0.0	0.0	6.2	100.0	1.1	25	3.2	0.7	4.0
GO WHEAT 6000	77.2	56.3	94.6	34.9	0.7	5.7	0.3	0.0	2.0	3.7	93.2	2.2	24	5.2	0.8	3.3
PIONEER 26R41	75.6	56.0	105.1	31.6	1.3	0.0	0.7	0.0	1.0	6.2	102.2	1.5	31	4.5	1.6	3.1
GO WHEAT LA754	73.9	56.0	99.8	35.5	0.1	3.0	0.0	0.3	4.3	5.2	89.5	5.5	55	22.6	3.5	2.3
DYNA-GRO RIVERLAND	73.6	57.1	93.9	36.3	0.1	4.3	0.0	1.7	3.3	4.2	92.0	4.4	36	10.6	1.7	3.0
MEAN	80.7	55.9	102.0	34.8	0.8	1.4	0.5	0.2	1.4	5.7	97.2	2.4	29	7.2	1.4	3.3
CV%	11	3	4	6	134	66.3	157.0	472.9	41.2	8.1	6	36	36	69	51	22
LSD(0.10)	NS	1.4	3.6	2.1	NS						6.7	0.9	15.3	7.7		0.8
R-SQUARE	0.76	0.76	0.89	0.76	0.70	0.87	0.56	0.32	0.87	0.88	0.88	0.89	0.83	0.89	0.82	0.74

Bold: "Brand/Variety" indicates the entry is commercially available; others are nonreleased breeding lines.

Contains data from Bossier City and Winnsboro for 2023.

LOD: Lodging score on a scale of 0 = none to 9 = 100% lodged. For * columns see individual location data, rated at one location only.

NS: Not significant - Variety mean differences were not statistically significant.

Misted nursery: Inoculated with scabby corn and mist irrigated to create heavy Fusarium headblight pressure. Data from Alexandria and Winnsboro nurseries.

Phenotype: Overall visual appeal with a higher score indicating a more attractive plot. Average of three ratings in spring.

FHB score: FHB rating on a 0-9 scale with 0 indicating no FHB symptoms on heads.

FDK is percent Fusarium damaged kernels from yield plots and from a misted and inoculated nursery.

DON is Fusarium mycotoxin (deoxynivalenol) in parts per million.

Seed quality (SDQ): Relative, visual rating of seed plumpness, uniformity and visible defects (disease, insect damage, etc.), 0 = poor.

Table 9. Wheat performance trial across north Louisiana for three years, 2021, 2022 and 2023.

Brand / Variety	Grain Yield (bu/a)	Test Weight (lbs/bu)	Head Day (of year)	Plant Height (in)	Lodging (0-9)	Stripe Rust (%)	Fusarium Headblight (0-9)	Phenotype (0-9)	Misted Nursery HEAD DATE	Misted Nursery FHB (0-9)	Misted Nursery FDK (0-9)	Misted Nursery DON (ppm)	Misted Nursery NIV (ppm)	Misted Nursery Seed Quality (0-9)
AGRIMAXX 492	87.5	57.2	98.5	34.8	0.6	15	1.3	7.0	92.9	3	22.1	6.2	1.1	3.4
PROGENY #CHAD	83.4	54.3	99.4	32.1	1.7	0	1.1	6.5	96.9	2	29.2	5.5	1.0	3.3
AGS 2055	83.1	55.4	101.2	36.4	0.8	3	1.4	6.3	98.1	4	44.6	18.9	4.2	2.8
PROGENY BINGO	81.6	53.7	105.0	35.6	0.6	0	0.6	6.7	103.0	1	27.5	4.9	1.4	3.6
DELTA GROW 1200	81.4	53.8	105.1	34.8	0.9	18	0.3	6.7	94.6	2	28.3	6.6	1.8	3.3
DELTA GROW 1000	81.0	54.2	102.4	37.3	0.2	0	0.8	5.9	103.9	1	27.5	4.6	1.1	2.8
PROGENY #TURBO	80.4	55.7	102.7	33.5	0.2	0	1.0	6.0	94.2	2	19.1	2.8	0.8	3.5
DELTA GROW 1800	80.4	57.0	98.5	37.7	0.1	1	0.7	6.2	95.4	2	27.9	3.7	0.7	3.7
PROGENY #BUSTER	79.8	55.9	102.3	35.5	0.7	0	1.0	6.7	100.8	2	21.3	5.0	0.9	3.2
PIONEER 26R59	79.5	53.9	102.3	32.3	0.6	0	0.7	6.6	101.1	3	36.8	8.1	0.5	2.5
AGRIMAXX 473	78.6	54.5	103.4	36.4	0.3	0	0.3	6.1	100.9	1	21.8	3.7	0.9	2.8
DYNA-GRO 9172	78.2	54.6	104.0	35.6	0.3	0	0.3	6.2	100.0	1	19.5	5.2	1.4	3.8
DYNA-GRO PLANTATION	77.1	57.6	97.9	35.0	1.1	22	2.7	5.2	90.3	5	34.6	10.5	2.4	2.7
AGRIMAXX 481	76.8	57.1	98.4	34.7	0.6	18	2.8	4.6	95.5	4	28.1	8.1	0.9	3.6
PIONEER 26R45	75.6	54.4	105.3	36.3	1.1	21	0.1	6.1	97.9	2	29.2	6.4	0.7	3.5
PIONEER 26R41	75.6	55.7	103.0	32.4	0.8	0	0.9	6.3	100.4	2	33.8	6.6	1.6	2.8
GO WHEAT 6000	75.2	56.3	93.7	35.0	0.8	29	1.9	4.8	91.4	3	25.4	5.3	0.8	3.1
GO WHEAT LA754	72.4	55.6	98.0	35.8	0.5	2	2.9	5.5	89.3	5	44.2	17.7	3.5	2.8
DYNA-GRO RIVERLAND	71.5	56.9	93.2	36.0	0.3	29	2.4	4.5	90.6	4	34.2	10.2	1.7	2.8
MEAN	78.9	55.5	100.7	35.1	0.7	8.6	1.2	6.0	96.7	3	29.5	7.5	1.5	3.1
CV %	11	3	3	6	145	105.7	51.6	7.6	6	40	38	70	46	26
LSD(0.01)	7.3	1.1	2.9	1.9	1.1	25.2	1.0	1.0	5.0	1.0	12.0	6.3		0.7
R-SQUARE	0.81	0.78	0.91	0.78	0.70	0.87	0.86	0.85	0.85	0.86	0.86	0.87	0.00	0.00

Brand: "Brand/Variety" indicates the entry is commercially available; others are nonreleased breeding lines.

Contains data from Bossier City and Winnsboro for 2023; Alexandria, Bossier City, St. Joseph and Winnsboro for 2022; and Alexandria and Winnsboro for 2021.

LSD: Lodging score on a scale of 0 = none to 9 = 100% lodged. For * columns see individual location data, rated at one location only.

NS: Not significant - Variety mean differences were not statistically significant.

Misted nursery: Inoculated with scabby corn and mist irrigated to create heavy Fusarium headblight pressure.

Phenotype: Overall visual appeal with a higher score indicating a more attractive plot. Average of three ratings in spring.

FHB score: FHB rating on a 0-9 scale with 0 indicating no FHB symptoms on heads.

FDK is percent Fusarium damaged kernels from yield plots and from a misted and inoculated nursery.

DON is Fusarium mycotoxin (deoxynivalenol) in parts per million.

Seed quality (SDQ): Relative, visual rating of seed plumpness, uniformity and visible defects (disease, insect damage, etc.), 0 = poor.

Data from 2021 Alexandria and Winnsboro; 2022 trials with no fungicide: Alexandria, Bossier City, St. Joseph and Winnsboro; and 2023: Bossier City and Winnsboro.

Table 10. Wheat performance trial at Bossier City, Louisiana, for 2023.

Brand/Variety	Grain Yield (bu/acre)	Test Weight (lsb/bu)	Head Day (of year)	Plant Height (in)
AGS 2055	95.3	56.9	97.0	34.3
AGRIMAXX 492	92.5	58.7	95.7	33.0
USG 3354	92.5	52.4	96.0	35.7
DG1900	90.4	54.6	98.7	32.7
DG1700	90.2	54.7	101.3	36.3
DYNA-GRO BLANTON	88.6	56.8	91.3	32.0
GO WHEAT 6000-NF	88.3	56.8	90.3	34.3
DYNA-GRO WX23444	85.1	54.1	94.3	34.3
GO WHEAT 6000	84.8	57.1	90.7	32.7
LA17006LDH042	84.5	59.6	97.3	34.3
LA14269SB-BR32-4-1-1	84.3	61.8	94.3	33.0
PROGENY #CHAD	83.4	53.6	94.7	29.0
DYNA-GRO 9393	83.4	60.5	103.3	34.3
GO WHEAT LA754	82.9	58.2	91.3	33.0
DELTA GROW 1800	82.5	58.4	93.7	35.0
GA151313-20E48	82.3	58.2	94.7	28.0
DYNA-GRO 23777	82.2	57.5	94.3	36.7
PIONEER 26R33	81.5	57.3	102.7	37.3
PIONEER 26R45	81.4	53.5	109.0	40.0
GA12230-20E36	81.4	55.3	93.7	31.7
USG 3463	81.2	56.9	102.0	31.7
AGS 2021	80.9	58.3	90.0	35.3
LA18003-NDH119	80.3	58.0	96.0	33.7
GA161240-20LE6	79.7	55.1	93.0	33.3
LA14191C-93-2-1-3	79.6	58.7	89.0	30.3
PROGENY #TURBO	79.5	56.4	98.7	33.7
AGRIMAXX 481	79.4	59.5	95.0	31.7
TX18D3212	79.3	56.5	100.0	32.7
PROGENY PGX 22-3	78.6	58.0	100.7	33.0
PROGENY PGX 22-2	78.5	54.7	105.5	38.7
AGRIMAXX 535	78.5	54.9	103.0	37.0
FLLA16124LDH-51	76.9	59.1	94.3	32.3
PROGENY #BUSTER	76.9	53.4	106.7	36.0
DELTA GROW 3500	76.3	59.3	88.0	32.0
AGRIMAXX EXP 2301	76.0	56.9	98.7	35.3

Brand/Variety	Grain Yield (bu/acre)	Test Weight (lsb/bu)	Head Day (of year)	Plant Height (in)
LA14272CBW-15-1-2	75.3	57.6	90.3	34.7
LA14234CBW-31	75.1	62.3	92.3	32.7
PIONEER 26R59	74.8	54.8	100.7	33.0
DYNA-GRO 9172	74.8	52.6	107.0	38.7
AGS 3022-NF	74.7	59.2	91.7	31.7
DELTA GROW 1200	74.3	49.4	109.7	36.0
DYNA-GRO PLANTATION	74.0	58.6	93.3	32.0
DYNA-GRO RIVERLAND	72.8	58.1	89.3	35.3
AGRIMAXX 514	72.6	56.9	106.7	36.7
DELTA GROW 1000	72.3	52.2	108.3	39.0
PROGENY BINGO	72.0	50.1	106.7	37.0
TX17D2337	71.6	57.4	100.3	35.7
GA131218-20E15	71.0	58.1	93.7	30.3
USG 3783	70.5	53.5	104.5	33.7
AGS 3015-NF	69.5	61.9	91.5	33.3
AGS 3022	68.0	60.3	93.3	28.0
AGS 3015	66.9	58.8	90.5	32.0
LA13019SC-23-3-1-3	66.7	59.3	98.0	32.0
AGRIMAXX 473	66.5	52.0	107.3	38.3
FL15105-LDH043	64.9	59.3	90.3	29.7
PIONEER 26R41	64.9	55.4	104.7	32.7
LA15298GBB-5-1-4	59.3	62.9	89.7	30.7
PROGENY PGX 22-4	58.7	47.7	111.0	35.3
PIONEER 26R94	57.8	58.6	89.5	33.7
LA14272CBB-3-1-4	54.4	61.4	91.5	30.5
LA14159SB-BR1-1	53.6	58.7	89.3	31.7
MEAN	76.8	56.9	97.1	33.8
CV%	13.6	6.3	3.3	6.0
LSD(0.10)	14.2	4.9	4.5	3.0
R-SQUARE	0.55	0.55	0.85	0.73

Red River Research Station in Bossier City, Louisiana. William Waltman and Russell Anderson.

Bold: "Brand/Variety" indicates the entry is commercially available; others are nonreleased breeding lines.

Lod score is lodging score, scale of 0 = none to 9 = 100% lodged. The score for this trial was none in all categories.

Cultural practices: Planted Nov. 10, 2022, and harvested June 1, 2023. Harmony Extra at 0.6 oz/acre + Induce at 1 qt. acre on Feb. 28, 2023. Fertilized wheat with 100#/acre N.

Table 11. Wheat performance trial at Winnsboro for 2023.

Brand/Variety	Grain Yield (bu/a)	Test Weight (lbs/bu)	Head Day (of year)	Lodging (0-9)	Freeze Damage (0-9)	Herbicide Damage (0-9)	Phenotype (0-9)
AGRIMAXX 473	101.1	55.1	88.0	1.3	0.0	0.3	6.2
USG 3463	100.9	56.1	94.0	1.3	0.0	0.0	6.2
DG1700	100.5	57.1	89.0	1.3	0.0	0.3	7.0
TX18D3212	100.4	57.6	99.0	3.3	0.3	0.0	6.3
DELTA GROW 1000	100.1	55.1	84.7	0.3	0.0	0.7	5.8
AGS 2055	100.0	57.9	88.7	2.3	0.0	0.3	6.5
DELTA GROW 1200	99.7	53.1	92.7	3.3	0.0	0.0	6.5
PROGENY #TURBO	97.6	57.9	98.0	0.7	0.0	0.7	6.0
AGRIMAXX 492	97.4	60.0	80.7	2.3	0.0	0.0	6.7
DYNA-GRO 9172	97.0	56.8	91.3	0.3	0.0	0.0	6.3
PIONEER 26R59	95.6	54.7	84.3	2.7	0.0	0.7	6.7
AGRIMAXX EXP 2301	95.2	57.8	91.0	1.7	0.0	0.0	6.7
PROGENY BINGO	95.1	53.8	96.0	2.3	0.0	0.0	6.5
USG 3354	94.7	56.3	89.7	2.3	0.0	1.3	6.0
PROGENY PGX 22-3	94.0	56.0	86.0	4.0	0.0	0.0	6.3
PROGENY #CHAD	93.0	54.8	92.7	5.3	0.0	0.3	6.5
AGRIMAXX 514	92.6	54.1	88.3	4.3	0.0	0.0	6.7
DG1900	92.1	55.9	88.0	4.0	0.0	0.3	6.2
PIONEER 26R41	91.7	56.8	91.0	3.3	0.0	0.7	6.2
DYNA-GRO 9393	91.2	54.3	92.7	1.7	0.0	0.0	6.7
PROGENY #BUSTER	90.7	57.7	92.3	3.7	0.0	0.0	6.8
GA131218-20E15	89.5	58.6	84.3	1.0	1.0	2.3	5.8
AGRIMAXX 535	88.9	56.1	93.0	3.0	0.7	0.0	6.0
LA13019SC-23-3-1-3	88.4	57.6	93.0	1.3	0.3	0.3	6.0
TX17D2337	86.8	58.0	93.3	2.7	0.3	2.3	5.5
DYNA-GRO 23777	84.9	59.8	83.0	0.0	2.7	0.0	5.3
DYNA-GRO PLANTATION	84.4	60.0	92.0	0.3	1.3	2.0	5.3
PIONEER 26R33	84.1	54.9	87.7	5.0	0.0	0.0	6.3
PIONEER 26R45	84.0	51.7	94.3	3.7	0.7	1.0	6.2
USG 3783	81.6	55.4	88.3	2.3	2.0	0.0	6.8
DYNA-GRO WX23444	80.8	55.9	88.7	5.0	0.0	0.0	6.3
LA17006LDH042	79.6	59.2	87.3	0.3	2.0	1.3	5.5
DELTA GROW 1800	79.5	59.4	85.0	0.0	1.7	0.0	6.0
AGRIMAXX 481	78.6	58.9	87.7	0.0	1.3	1.7	5.0
LA18003-NDH119	77.8	58.8	89.7	0.3	3.0	1.0	4.5
GA12230-20E36	77.2	59.1	87.3	0.3	4.3	0.7	4.3
DELTA GROW 3500	76.8	59.1	89.3	1.0	3.3	2.7	4.3

Brand/Variety	Grain Yield (bu/a)	Test Weight (lbs/bu)	Head Day (of year)	Lodging (0-9)	Freeze Damage (0-9)	Herbicide Damage (0-9)	Phenotype (0-9)
PROGENY PGX 22-2	76.6	57.1	85.7	5.7	0.0	0.0	6.7
PROGENY PGX 22-4	71.8	53.6	96.0	4.0	0.0	0.0	6.7
LA14269SB-BR32-4-1-1	68.6	59.5	87.0	0.0	2.0	0.7	5.7
GA151313-20E48	67.0	58.0	90.0	0.0	2.3	1.3	4.7
GA161240-20LE6	58.8	56.1	86.3	0.7	3.0	0.3	4.8
LA14272CBW-15-1-2	58.6	55.1	86.0	0.0	1.0	1.0	6.3
AGS 3022	58.5	57.9	94.0	0.0	5.7	1.0	3.5
DYNA-GRO RIVERLAND	56.3	57.3	79.7	0.0	4.3	0.0	4.2
AGS 3015	55.3	58.0	80.3	0.3	5.3	0.3	3.5
AGS 3022-NF	54.0	57.5	86.3	0.0	6.3	0.0	3.8
GO WHEAT LA754	52.3	58.0	89.3	0.0	3.0	0.0	5.2
GO WHEAT 6000	51.2	59.4	85.0	0.0	5.7	0.3	3.7
GO WHEAT 6000-NF	49.1	56.4	82.0	0.0	5.3	0.3	3.8
LA14234CBW-31	48.9	56.9	91.0	0.0	5.3	0.0	3.8
AGS 2021 - DON'T REPORT	44.7	55.7	86.3	0.0	6.0	0.0	3.2
DYNA-GRO BLANTON	44.6	60.4	81.3	0.3	3.7	0.7	4.2
FLLA16124LDH-51	42.4	57.0	91.0	0.0	6.3	0.0	3.3
PIONEER 26R94	41.8	55.6	86.0	0.0	6.7	0.3	3.0
LA14191C-93-2-1-3	41.1	51.5	82.3	0.0	5.7	0.0	3.7
AGS 3015-NF	38.6	58.3		0.3	5.3	0.0	3.5
LA15298GBB-5-1-4	36.6	56.8	84.3	0.3	6.3	0.0	3.2
LA14272CBB-3-1-4	36.6	50.1	84.3	0.0	3.3	0.0	4.0
LA14159SB-BR1-1	23.7	56.8	84.3	0.0	7.3	0.0	3.0
FL15105-LDH043	8.1		80.7	0.0	7.0	0.0	2.7
MEAN	74.2	55.0	88.5	1.5	2.2	0.4	5.3
CV%	13	9	9	98	45.0	171.0	9.8
LSD(0.10)	12.8	6.5	10.6	2.0	1.3	1.0	0.7
R-SQUARE	0.90	0.75	0.34	0.67	0.90	0.53	0.90

Bold: "Brand/variety" indicates the entry is commercially available; others are nonreleased breeding lines.

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

NS: Not significant - Variety mean differences were not statistically significant.

Misted nursery: Inoculated with scabby corn and mist irrigated to create heavy Fusarium headblight pressure.

Phenotype: Overall visual appeal with a higher score indicating a more attractive plot. Average of three ratings in spring.

FHB score: FHB rating on a 0-9 scale with 0 indicating no FHB symptoms on heads.

FDK is percent Fusarium damaged kernels from yield plots and from a misted and inoculated nursery.

DON is Fusarium mycotoxin (deoxynivalenol) in parts per million.

Seed quality (SDQ): Relative, visual rating of seed plumpness, uniformity and visible defects (disease, insect damage, etc.), 0 = poor.

Macon Ridge Research Station, Winnsboro, Louisiana. Trey Price, Steve Harrison, Noah DeWitt, Dustin Ezell, Myra Purvis, Kelly Arceneaux and Katie McCarthy Fontenot.

Cultural practices: Planted Nov. 1, 2022. Pre-emergence Zidua (3.25 oz/A). Axial Bold (16 oz/A) 1-2 leaf stage. Metribuzin at three leaf stage (2 oz/A). 30-0-0-2S topdress (50# N/A) on Feb. 23, 2023 and again on March 8, 2023.

Table 12. Fusarium headblight misted nursery data from Alexandria and Winnsboro for north Louisiana wheat variety trials in 2023.

Brand/Variety	PID	REACTION TYPE	FHB INDEX 3-YR	FHB INDEX 2-YR	FHB INDEX 2023	FHB INDEX 2022	FHB INDEX 2021	FHB SCORE AVG (0-9)	FHB SCORE 2023 (AX + WN)	FHB SCORE 2022 (AX + WN)	FHB SCORE 2021 (AX + WN)	FDK PERCENT AVG (0-9)	FDK PERCENT 2023 (AX + WN)	FDK PERCENT 2022 (AX + WN)	FDK PERCENT 2021 (AX + WN)	DON PPM AVG	DON PPM 2023 (AX + WN)	NIV 2023 (AX)	DON PPM 2022 (AX + WN)	DON PPM 2021 (AX + WN)
AGRIMAXX 473	LW1701	RESISTANT	6.2	6.1	8.5	3.7	6.6	1.2	2.1	0.3	1.3	22.1	33	9	25	3.0	2	1	4	5
PROGENY #TURBO	LW1622	RESISTANT	6.7	6.7	8.0	5.4		2.1	2.6	1.6		19.1	25	14		2.2	2	1	3	
DYNA-GRO 9172	LW2103	MOD-RESISTANT	7.5	7.9	11.6	4.2	6.6	1.1	1.3	0.3	1.8	20.3	28	10	23	4.3	6	1	5	5
DELTA GROW 1800	LW1822	MOD-RESISTANT	7.6	7.7	9.3	6.1	7.4	1.7	2.2	1.4	1.7	25.8	35	16	26	3.7	3	2	4	6
DELTA GROW 1000	LW1607	MOD-RESISTANT	7.7	7.5	9.5	5.5	8.1	1.6	2.0	0.9	2.0	23.6	30	14	28	4.0	4	1	5	7
PROGENY #BINGO	LW2004	MOD-RESISTANT	7.7	7.3	10.2	4.5	8.5	1.3	1.5	0.6	1.8	27.5	43	11	29	4.0	3	1	4	7
PROGENY #BUSTER	LW1929	MOD-RESISTANT	7.9	7.5	8.4	6.7	8.5	2.2	2.3	1.8	2.7	21.3	20	15	29	4.0	3	1	5	6
PROGENY #CHAD	LW2006	MOD-RESISTANT	8.8	7.9	8.3	7.6	10.4	2.3	2.0	2.0	3.0	29.2	39	16	33	4.4	1	1	6	9
PIONEER 26R45	LW1814	MOD-RESISTANT	8.8	6.4	8.7	4.1	13.7	2.1	1.6	0.6	4.0	29.2	43	8	38	4.9	2	1	5	13
AGRIMAXX 492	LW1804	MOD-RESISTANT	8.8	8.3	8.1	8.4	9.9	2.8	2.4	1.9	4.0	22.1	21	19	26	4.9	3	1	7	8
AGS 3022	LW2116	MOD-RESISTANT	9.1	9.1	7.7	10.5		2.4	2.0	2.8		25.6	25	26		3.5	2	1	7	
GO WHEAT 6000	LW2016	MOD-RESISTANT	9.1	9.1	8.7	9.5	9.0	2.9	1.5	2.9	4.3	25.4	26	21	29	4.2	4	1	7	6
AGRIMAXX 481	LW1901	MOD-SUSCEPTIBLE	11.8	14.1	13.4	14.7	7.1	4.2	5.3	3.4	4.0	30.5	43	28	21	5.7	3	1	15	4
DELTA GROW 1200	LW2131	MOD-SUSCEPTIBLE	10.3	7.6	9.1	6.2	15.7	2.4	1.6	0.6	5.0	33.3	41	16	43	5.8	2	1	6	14
PIONEER 26R41	LW1201	MOD-SUSCEPTIBLE	9.7	8.7	8.7	8.7	11.8	1.6	1.4	1.6	1.8	33.8	38	24	40	5.4	2	2	6	11
PIONEER 26R59	LW1523	MOD-SUSCEPTIBLE	11.8	10.8	11.2	10.5	13.8	2.7	2.7	2.0	3.5	36.7	35	25	50	5.9	4	0	9	10
USG 3783	LW2219	MOD-SUSCEPTIBLE	12.0	12.0	17.1	6.8		1.8	2.1	1.5		36.3	55	18		4.8	7	2	5	
DYNA-GRO RIVERLAND	LW2001	SUSCEPTIBLE	14.0	15.4	11.4	19.5	11.2	4.3	4.0	4.9	4.0	34.2	33	39	31	8.1	3	2	18	9
DYNA-GRO PLANTATION	LW1910	SUSCEPTIBLE	15.3	16.2	13.2	19.3	13.4	5.2	4.8	4.6	6.3	34.6	24	40	40	8.5	5	2	17	9
AGS 2055	LW1533	SUSCEPTIBLE	19.1	22.8	17.2	28.3	11.7	3.9	4.0	2.6	5.0	43.3	40	51	39	12.8	8	1	36	7
GO WHEAT LA754	LW1730	SUSCEPTIBLE	21.5	27.7	22.3	33.0	9.3	5.0	4.5	6.5	4.0	44.2	48	63	23	14.1	11	4	34	8
LA14234CBW-31	LW2216	SUSCEPTIBLE		12.6	8.4	16.9		2.3	1.9	2.8		31.3	21	41		6.6	4	1	15	
LA14159SB-BR1-1	LW2215	SUSCEPTIBLE		13.5	8.8	18.1		2.8	1.0	4.5		29.4	23	36		7.5	4	2	17	
AGRIMAXX 514	LW2301				8.1				2.0				23				3	2		
AGRIMAXX 535	LW2302				8.8				1.5				31				3	1		

Brand/Variety	PID	REACTION TYPE	FHB INDEX 3-YR	FHB INDEX 2-YR	FHB INDEX 2023	FHB INDEX 2022	FHB INDEX 2021	FHB SCORE AVG (0-9)	FHB SCORE 2023 (AX + WN)	FHB SCORE 2022 (AX + WN)	FHB SCORE 2021 (AX + WN)	FDK PERCENT AVG (0-9)	FDK PERCENT 2023 (AX + WN)	FDK PERCENT 2022 (AX + WN)	FDK PERCENT 2021 (AX + WN)	DON PPM AVG	DON PPM 2023 (AX + WN)	NIV 2023 (AX)	DON PPM 2022 (AX + WN)	DON PPM 2021 (AX + WN)
AGRIMAXX EXP 2301	LW2303				11.5				2.3				45				3	0		
AGS 3015	LW1533				17.5				3.8				38				8	4		
DELTA GROW 3500	LW2306				7.8				2.0				41				1	1		
DG1700	LW2307				15.8				5.0				30				7	3		
DG1900	LW2307				6.5				2.1				26				1	1		
DROPPED ENTRY	LW2202				6.8				2.6				11				3	1		
DYNA-GRO 23777	LW2215				15.0				4.0				28				7	2		
DYNA-GRO 9393	LW2309				7.9				1.8				29				2	2		
DYNA-GRO BLANTON	LW1912				14.9				4.3				41				5	3		
DYNA-GRO WX23444	LW2310				9.6				1.9				44				2	1		
FL15105-LDH043	LW2311				5.2				2.0				20				1	0		
FLLA16124LDH-51	LW2312				9.7				2.5				29				3	1		
GA12230-20E36	LW2313				10.3				2.0				33				4	1		
GA131218-20E15	LW2314				16.3				3.5				36				8	3		
GA151313-20E48	LW2315				9.4				3.5				37				2	1		
GA161240-20LE6	LW2316				8.0				2.4				34				2	1		
LA13019SC-23-3-1-3	LW2318				10.8				3.8				33				3	2		
LA14191C-93-2-1-3	LW2319				11.3				1.5				56				3	1		
LA14269SB-BR32-4-1-1	LW2320				8.2				2.0				35				2	1		
LA14272CBB-3-1-4	LW2321				10.0				2.0				34				4	1		
LA14272CBW-15-1-2	LW2322				7.5				1.5				19				3	0		
LA15298GBB-5-1-4	LW2323				6.0				1.9				21				2	1		

Brand/Variety	PID	REACTION TYPE	FHB INDEX 3-YR	FHB INDEX 2-YR	FHB INDEX 2023	FHB INDEX 2022	FHB INDEX 2021	FHB SCORE AVG (0-9)	FHB SCORE 2023 (AX + WN)	FHB SCORE 2022 (AX + WN)	FHB SCORE 2021 (AX + WN)	FDK PERCENT AVG (0-9)	FDK PERCENT 2023 (AX + WN)	FDK PERCENT 2022 (AX + WN)	FDK PERCENT 2021 (AX + WN)	DON PPM AVG	DON PPM 2023 (AX + WN)	NIV 2023 (AX)	DON PPM 2022 (AX + WN)	DON PPM 2021 (AX + WN)
LA17006LDH042	LW2324				6.8				2.6				25				1	1		
LA18003-NDH119	LW2326				5.1				2.0				18				1	0		
PIONEER 26R33	LW2327				12.3				1.9				35				5	2		
PIONEER 26R94	LW1322				8.8				3.0				37				1	1		
PROGENY PGX 22-2	LW2328				7.2				1.3				33				2	1		
PROGENY PGX 22-3	LW2329				12.9				2.9				44				4	2		
PROGENY PGX 22-4	LW2330				8.1				1.9				25				3	1		
TX17D2337	LW2216				10.4				2.7				27				4	1		
TX18D3212	LW2331				8.6				2.8				30				2	1		
USG 3354	LW2332				8.7				2.3				30				3	1		
USG 3463	LW2333				6.2				1.8				27				1	1		
MEAN					10.0			2.6	2.4	2.3	3.4	29.5	32	23	32	5.8	3	1	8	8
CV%									28	48	41		48	32	35		58	56	61	51
LSD(0.10)									0	2	2		NS	12	17		NS		10	NS
R-SQUARE									0.82	0.86	0.76		0.66	0.89	0.84		0.85	0.77	0.86	0.84

FHB reaction type is observed reaction based on FDK and DON for two or more years.

Reaction types are resistant, moderately resistant, moderately susceptible and susceptible.

FHB Index is a numerical rating that is $2*[(FHB/FHB\ MEAN) + (2*FDK/FDK\ MEAN) + (2*DON\% / DON\ MEAN)]$. It weighs FHB once, FDK twice and DON three times as a proportion of the mean of all entries.

Because FDK and DON determines rejection. It standardized two versus three years by using percent of the mean rather than numerical value.

Contains data from misted nurseries at Alexandria and Winnsboro in 2020, 2022 and 2023.

FHB rating is a 0-9 score of head symptoms, where a 0 indicates no symptoms and a 9 indicates complete head coverage.

FDK is percent Fusarium damaged kernels determined by visual inspection and comparison to standards.

DON is parts per million of Deoxynivalenol toxin.

Table 13. Fusarium headblight misted nursery data from Baton Rouge misted nurseries for south Louisiana wheat variety trials.

Brand/Variety	PID	REACTION TYPE	FHB INDEX 2-YR	FHB INDEX 2023	FHB INDEX 2022	FHB SCORE AVG (0-9)	FHB SCORE 2023	FHB SCORE 2022	FDK PERCENT AVG	FDK PERCENT 2023	FDK PERCENT 2022	DON PPM AVG	DON PPM 2023	DON PPM 2022	NIV PPM 2023
DELTA GROW 1800	LW1822	RESISTANT	5.6	4.0	4.7	2.0	2.5	1.5	9	5	13	2	0	4	0
DG1900	LW1907	RESISTANT	6.9	8.0			2.3		12	18	6	1	0	1	1
FL15105-LDH043	LW2226	RESISTANT	7.2	8.9	3.7	3.1	4.3	2.0	23	35	10	1	0	2	1
AGS 3015	LW1913	MOD-RESISTANT	8.2	6.9	9.3	4.8	4.5	5.0	20	18	23	3	0	7	3
PROGENY #CHAD	LW2006	MOD- RESISTANT	10.0	5.5	11.0	3.0	3.5	2.5	16	13	20	6	0	12	1
LA14234CBW-31	LW2211	MOD- RESISTANT	10.6	10.5	10.1	4.0	5.0	3.0	20	20	20	5	0	10	6
TX17D2337	LW2216	MOD- RESISTANT	11.0	14.4	9.0	2.4	1.3	3.5	24	25	23	4	1	7	2
AGS 3022	LW2116	MOD- RESISTANT	11.2	11.5	10.3	3.8	4.0	3.5	26	25	28	4	0	8	3
AGRIMAXX 492	LW1804	MOD- SUSCEPTIBLE	12.7	10.4	12.4	1.6	1.3	2.0	25	20	30	6	0	12	2
AGRIMAXX 481	LW1901	MOD- SUSCEPTIBLE	13.8	15.7	12.2	4.1	3.3	5.0	28	15	40	4	1	7	3
LA14159SB-BR1-1	LW2208	MOD- SUSCEPTIBLE	13.8	13.6	13.8	4.8	5.0	4.5	40	43	38	6	0	11	5
DYNA-GRO 23777	LW1910	MOD- SUSCEPTIBLE	13.9	13.5	14.1	5.6	4.3	7.0	38	40	35	5	0	10	4
GO WHEAT 6000	LW2016	MOD- SUSCEPTIBLE	14.7	12.5	15.6	5.0	4.5	5.5	43	45	40	6	0	13	3
DELTA GROW 3500	LW1534	SUSCEPTIBLE	16.6	9.5	21.2	4.8	2.5	7.0	35	23	48	10	0	19	2
DYNA-GRO RIVERLAND	LW2001	SUSCEPTIBLE	17.4	19.8	16.0	5.9	4.8	7.0	40	40	40	6	1	12	10
AGS 2021	LW2202	SUSCEPTIBLE	18.5	15.1	18.8	6.0	4.5	7.5	53	60	45	8	0	15	8
GO WHEAT LA754	LW1730	SUSCEPTIBLE	25.2	21.9	18.1	5.1	3.8	6.5	44	38	50	7	1	14	5
AGS 2055	LW1533	SUSCEPTIBLE	23.4	9.0	51.9	3.5	0.5	6.5	48	25	70	34	0	68	4
AGS 3015-NF				9.3			4.8			28			0		4
AGS 3022-NF				7.6			4.5			18			0		3
DYNA-GRO BLANTON				25.2			5.0			70			1		12
DYNA-GRO PLANTATION				12.6			3.3			40			0		2
FLLA16124LDH-51				8.5			3.0			33			0		2
GA12230-20E36				9.9			3.3			35			0		1
GA131218-20E15				16.2			3.0			15			1		3
GA151313-20E48				9.5			4.8			35			0		3
GA161240-20LE6				10.5			5.0			30			0		3

Brand/Variety	PID	REACTION TYPE	FHB INDEX 2-YR	FHB INDEX 2023	FHB INDEX 2022	FHB SCORE AVG (0-9)	FHB SCORE 2023	FHB SCORE 2022	FDK PERCENT AVG	FDK PERCENT 2023	FDK PERCENT 2022	DON PPM AVG	DON PPM 2023	DON PPM 2022	NIV PPM 2023
GO WHEAT 6000-NF				14.0			5.0			40			0		3
LA13019SC-23-3-1-3				11.8			2.3			25			0		1
LA14191C-93-2-1-3				12.2			4.8			20			0		4
LA14269SB-BR32-4-1-1				9.8			3.5			25			0		2
LA14272CBB-3-1-4				10.3			4.0			8			0		3
LA14272CBW-15-1-2				4.1			3.8			8			0		2
LA15298GGB-5-1-4				11.6			4.8			43			0		2
LA17006LDH042				11.0			4.8			45			0		3
LA18003-NDH119				12.2			4.0			33			0		1
PIONEER 26R94				26.0			4.0			53			1		10
TX18D3212				10.9			1.0			18			0		2
MEAN			13.4	12.0	12.0		3.7	4.4		30	27		0	10	3
CV%							24	15		57	32		76	59	39
LSD(0.10)							1.5	1.1		NS	15		NS	10	2
R-SQUARE							0.81	0.95		0.60	0.89		0.66	0.87	0.89

FHB reaction type TYPE is observed reaction based on FDK and DON for two or more years.

Reaction Types are resistant, moderately resistant, moderately susceptible and susceptible.

FHB Index is a numerical rating that is $2 * [(FHB / FHB \text{ MEAN}) + (2 * FDK / FDK \text{ MEAN}) + (2 * DON\% / DON \text{ MEAN})]$. It weighs FHB once, FDK twice and DON three times as a proportion of the mean of all entries.

because FDK and DON determines rejection. It standardized two versus three years by using percent of the mean rather than numerical value.

Contains data from misted nurseries at Baton Rouge in 2022 and 2023.

FHB rating is a 0-9 score of head symptoms, where a 0 indicates no symptoms and a 9 indicates complete head coverage.

FDK is percent Fusarium damaged kernels determined by visual inspection and comparison to standards.

DON is parts per million of Deoxynivalenol toxin.

Table 14. 2023 Oat variety trial at Winnsboro.

Brand/Variety	Grain Yield (bu/acre)	Test Weight (lbs/bu)	Seed Quality (0-9)	LOD (0-9)	STAND (0-9)	Freeze Damage (0-9)	LEAFY (0-9)	GROWHAB (0-9)	RELMAT (0-9)	Crown Rust (%)	Phenotype (0-9)
LA17129SBSS-8-1	120.7	32.7	5.0	1.0	7.3	2.3	5.0	4.0	5.5	0	5.5
LA15015SB-S50	120.3	35.0	6.0	2.5	7.7	2.3	6.3	6.3	5.0	0	6.3
LA15029SB-18-1-1	119.1	31.8	5.7	1.0	6.7	2.3	5.7	6.0	5.0	0	6.3
TX18OCS9064	118.3	32.7	5.0	1.7	7.7	3.3	5.7	4.3	5.5	0	5.5
TX18OCS9142	115.8	32.5	4.3	1.3	6.7	1.3	5.7	6.7	4.5	0	5.8
TX18OCS9028	115.6	31.5	5.5	3.5	7.3	3.7	5.3	6.7	5.0	0	6.3
LA17089SBS-33-2	113.1	36.6	6.3	1.0	7.7	1.3	5.3	6.0	4.5	0	5.8
FL1035-2	112.6	35.5	5.3	3.7	5.7	2.3	5.7	6.0	4.0	0	5.3
LA17067SBSS-26-1	111.5	27.9	5.0	1.3	5.7	3.7	4.0	4.7	5.5	0	5.3
LA17089SBS-25-2	110.8	36.3	6.3	1.3	7.3	2.0	5.3	6.3	6.0	0	5.8
LAFL17541-5-1	110.4	30.5	5.3	1.3	7.7	4.0	4.3	2.3	6.0	0	4.5
HORIZON 306	109.1	32.0	5.0	5.0	8.0	3.0	7.0	4.3	4.5	0	6.3
TAMO412	104.9	33.6	4.5	2.0	6.3	2.7	4.3	8.0	4.0	0	5.8
LA17067SBSS-44-1	103.0	29.6	5.0	1.7	6.0	2.7	3.7	3.0	5.5	0	5.0
LA11074SBSBSBSB109-2	102.5	30.9	5.3	1.7	6.3	2.0	3.7	3.3	5.0	0	4.8
TX18OCS9018	101.7	33.2	5.3	3.3	7.3	2.0	5.3	7.3	4.0	0	4.8
LA99016 CK	100.3	31.8	4.5	3.3	7.3	2.3	5.3	8.0	6.0	0	5.8
FL13084-8	97.0	33.4	5.0	5.3	6.3	2.7	5.0	4.0	4.0	0	5.5
SAVAGE	96.4	30.1	4.0	1.0	7.7	1.7	5.0	6.3	5.5	0	5.8
LA14105SBSBS56-1	94.5	28.3	5.5	1.5	6.7	3.3	6.0	4.7	6.0	0	5.3
FL13088-3	94.4	27.8	5.0	2.5	5.7	2.0	5.3	4.0	4.5	0	5.5
TX18OCS9011	94.1	30.3	4.7	5.0	6.3	2.3	6.7	4.7	3.5	0	5.0
LA17130SBSS-27-1	88.7	31.4	6.0	2.0	7.0	1.3	4.3	3.0	5.0	0	5.0
LA17070SBSS-20-1	87.8	31.0	4.5	2.0	4.7	2.0	3.3	3.0	5.0	0	5.0
LA14063SBS-34-1-1	87.1	29.8	5.0	1.0	5.7	2.3	3.7	5.3	5.0	0	5.3

Brand/Variety	Grain Yield (bu/acre)	Test Weight (lbs/bu)	Seed Quality (0-9)	LOD (0-9)	STAND (0-9)	Freeze Damage (0-9)	LEAFY (0-9)	GROWHAB (0-9)	RELMAT (0-9)	Crown Rust (%)	Phenotype (0-9)
EK208	83.7	33.5	5.3	6.0	5.7	2.0	6.3	6.0	5.0	0	5.8
LA17126SBSS-48-1	83.1	25.6	4.5	2.0	4.7	2.3	3.0	2.3	4.5	0	4.5
LA13003SBSBS33-1-1	82.3	32.3	5.3	4.7	7.7	2.3	5.3	8.0	5.5	0	5.8
LA17008SBSS-24-1	79.4	35.5	5.3	5.3	7.0	3.3	4.0	3.3	4.0	0	5.0
LA17031SBSS-77-1	78.8	30.1	4.7	3.0	6.7	3.3	4.0	3.7	5.0	0	5.5
LA17080SBS-29-1-1	78.4	28.3	5.0	1.0	6.0	4.0	4.0	2.7	4.5	0	5.0
BROOKS CK	42.8	26.3	4.7	8.0	7.0	2.7	6.0	4.7	4.0	25	4.8
MEAN	98.4	31.6	5.2	2.8	6.7	2.5	5.0	5.0	4.9	1	5.4
CV%	12.7	3.4	11.1	59.0	17.0	26.0	19.9	12.6	12.2		9.1
LSD(0.10)	18.8	1.6	0.9	2.5	1.6	0.9	1.4	0.9	1.0		1.7
R-SQUARE	0.80	0.92	0.61	0.67	0.48	0.67	0.62	0.92	0.75		0.70

Comments:

Planted Nov. 1, 2022. Harvested May 27, 2023. Three reps. Harvested 15' x 5' plot size.

Management: 50-0-0 as 32% UAN on Feb. 11, 2023, and 25-0-0 as UAN on March 10, 2023. Amber herbicide applied.

Table 15. 2023 Oat variety trial across Louisiana for two years.

Brand/Variety	Grain Yield (bu/acre)	Test Weight (lbs/bu)	Growth Habit (0-9)	LEAFY (0-9)	Heading Day (of yr)	Plant Ht (in)	Lodging Score (0-9)	Crown Rust (%)	Stem Rust (%)	Phenotype (0-9)
LA11074SBSBSBSB109-2	108.2	28.8	3.5	4.6	93.6	41.0	3.3	14	0	5.3
FL1035-2	101.8	35.4	5.0	5.9	91.3	46.5	3.3	13	0	5.5
LA14105SBSBS56-1	92.2	28.5	4.8	5.9	99.0	44.6	5.2	14	5	5.5
LA15015SB-S50	91.8	33.1	5.3	6.4	100.8	44.9	5.2	13	1	6.0
LA14063SBS-34-1-1	89.9	30.5	4.8	3.9	95.8	46.7	4.4	13	0	5.3
SAVAGE	82.1	30.2	5.4	5.8	97.8	47.3	2.5	9	1	5.9
LA99016 CK	81.7	31.3	7.0	5.8	99.0	46.2	4.9	16	34	5.7
HORIZON 306	81.0	31.2	4.4	5.7	101.4	43.1	5.4	16	23	5.6
TAMO412	79.8	31.1	7.1	4.6	99.3	40.5	5.7	0	19	5.3
FL13084-8	76.0	33.5	3.9	5.2	93.4	44.6	4.7	14	18	5.0
LA13003SBSBS33-1-1	75.1	31.7	6.9	5.0	98.1	46.0	6.6	12	18	5.8
FL13088-3	70.0	28.2	3.9	5.4	96.3	41.4	4.2	13	20	5.0
BROOKS CK	33.2	23.5	4.4	5.3	97.9	46.0	8.3	53	26	4.5
MEAN	81.7	30.7	5.1	5.3	97.2	44.5	4.9	16	12	5.4
CV%	16.3	5.9	10.6	17.5	1.5	5.4	32.6	24	65	7.7
LSD(0.10)	18.1	2.0	1.3	ns	3.7	2.9	1.9	15	ns	0.6
R-SQUARE	0.88	0.88	0.92	0.61	0.99	0.75	0.86	0.99	0.90	0.80

Comments: Contains data from Winnsboro in 2023 and Alexandria, Baton Rouge, Bossier City and Winnsboro in 2022.

Appendix A. Entries in the 2023 Louisiana Agricultural Experiment Station Small Grain Performance Trials.

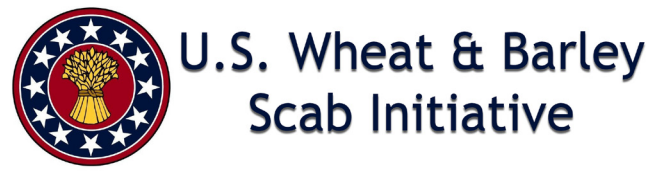
Wheat Brand/Abbreviation	Variety/Breeding Line	Originating Agency
AgriMAXX	AgriMAXX 473, 481, 492, 514	AgriMAXX Wheat Company 7167 Highbanks Road Mascoutah, IL 62258
AGS	AGS 2021, 3015, 3022, 3015, 4023, 4043	AGSouth Genetics 1113 Pretoria Road / P.O. Box 398 Albany, GA 31708
AR	All numbered AR lines	University of Arkansas Division of Agriculture 1366 W. Altheimer Drive Fayetteville, AR 72704
Delta Grow	Delta Grow 1000, 1200, 1800, 3500	Delta Grow Seed 220 N W 2nd / P.O. Box 219 England, AR 72046
Dyna Gro	Dyna-Gro Plantation, Riverland, WX20738. DG 9002, DG 9172, DG 9811	Dyna-Gro Seed 11 Gin Road Rayville, LA 71269
FL	All numbered FL lines	University of Florida 3105 McCarty Hall B Gainesville, FL 32611
GA	All numbered GA lines	University of Georgia 1109 Experiment St. Griffin, GA 30223
Grow Pro	SY Viper, GP 348, GP 381	Grow Pro Genetics 1521 N. Convent St., Suite 200 Bourbonnais, IL 60914
Local	Revere 5026, LWX22A	Local Seed Company, LLC 802 Rozelle St. Memphis, TN 38104
LA	All numbered LA lines	Louisiana Agricultural Experiment Station SPESS – LSU 104 MB Sturgis Hall Baton Rouge, LA 70803
NC State	All numbered NC lines	North Carolina State University 840 Method Road, Unit 3, Box 7629 Raleigh, NC 27695

Wheat Brand/Abbreviation	Variety/Breeding Line	Originating Agency
Pioneer	Pioneer 26R41, 26R45, 26R59, 26R94	Pioneer Hybrid 5410 La. 139 Marksville, LA 71351
Progeny	#Bingo, #Bullet, #Buster, #Chad, #Turbo	Erwin-Keith, Inc./Progeny 1529 Hwy. 193 South Wynne, AR 72396
Stratton	GO Wheat LA754, 6000, AGS 2055	Stratton Seed Co. 1530 Hwy 79 South Stuttgart, AR 72160
TX	All numbered TX lines	Texas AgriLife Research TAMU - Commerce Department of Ag Science Commerce, TX 75429
USG	USG 3352, USG 3472, USG 3783	UniSouth Genetics, Inc. 3205-C Hwy. 46 South Dickson, TN 37055
VA	Liberty 568	Virginia PI & State University EVAREC 2229 Menokin Road, Warsaw, VA 22572

Oat Brand/Abbreviation	Variety/Breeding Line	Originating Agency
AgSouth	Horizon 306	AGSouth Genetics 1113 Pretoria Road / P.O. Box 398 Albany, GA 31708
Angelina	FI0720-R6 (Sweet Caroline)	Angelina Grain Company 16371 La. 15 South Vidalia, LA 71373
FL	All numbered FL lines	University of Florida 3105 McCarty Hall B Gainesville, FL 32611
LA	All numbered LA lines	Louisiana Agric. Experiment Station SPESS – LSU, Baton Rouge, LA 70803
NC State	All numbered NC lines	North Carolina State University 840 Method Road, Unit 3, Box 7629 Raleigh, NC 27695
Stratton	Horizon 270, Savage	Stratton Seed Co. 1530 Hwy. 79 South Stuttgart, AR 72160
TAMO / TX	All numbered TAMO / lines	Texas AgriLife Research TAMU - Commerce Department of Ag Science Commerce, TX 75429

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