MISSISSIPPI WHEAT & OAT VARIETY TRIALS, 2022

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MISSISSIPPI'S OFFICIAL VARIETY TRIALS



MISSISSIPPI STATE UNIVERSITY MS AGRICULTURAL AND FORESTRY EXPERIMENT STATION

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NOTE TO USER

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This report contains data generated as part of the Mississippi Agricultural and Forestry Experiment Station research program. Joint sponsorship by the organizations listed on pages 4-5 is gratefully acknowledged.

Trade names of commercial products used in this report are included only for clarity and understanding. All available names (i.e., trade names, code numbers, chemical names, etc.) of varieties or products used in this research project are listed on pages 4-5.



Mississippi Wheat and Oat Variety Trials, 2022

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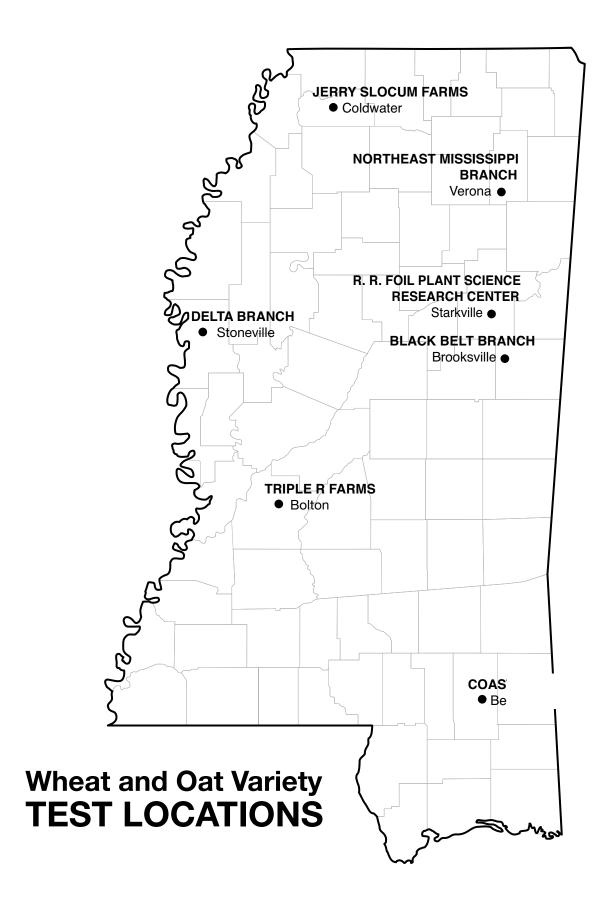
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Find variety trial information online at mafes.msstate.edu/variety-trials.



Mississippi Wheat and Oat Variety Trials, 2022

INTRODUCTION

Small grains are grown throughout Mississippi. Wheat is the primary crop, followed by oats. Wheat variety trials were conducted at eight locations, while oat trials were conducted at four locations in Mississippi in 2021–2022. Wheat yields typically range from 40–60 bushels per acre and often produce 60–80 bushels per acre under good management and favorable weather conditions. Oat yields from 50–80 bushels per acre are common.

PROCEDURES

Experimental Design. Experimental design for each crop species at each location was a randomized complete block with four replications. Plots consisted of seven 15-foot rows spaced 7.5 inches apart.

Cultural Practices. Plots were limed and fertilized according to soil test recommendations. Foliar fungicides were not applied to most trial locations to insure that genetic performance of the varieties was evaluated under natural environmental conditions. Herbicides were applied as needed at each location for weed control.

Seed Source. Seeds of all private entries were supplied by participating companies. Seeds of all public varieties were breeder or foundation seed from the state that developed the variety.

Planting Rate. All seeds were packaged for planting at the rate of 20 seeds per foot of row for both crops. Plots were planted with a cone, spinner-divider planter.

Yield. A plot combine was used to harvest the total plot area after the plots were trimmed to a standard length. Harvested seed were converted to bushels per acre (60 pounds per bushel for wheat and 32 pounds per bushel for oats).

Heading Date. At most locations, the heading date for each variety was recorded. This is the date when 50% of the heads were extended above the flag leaf.

Plant Height. The height of plants was measured from the soil to the top of the spike or head.

Lodging. Lodging was rated on a 1–5 scale: 1 = almost all plants erect; $2 = \text{all plants leaning slightly or only a few plants down; <math>3 = \text{all plants leaning moderately or } 25-50\%$ of plants down; 4 = all plants leaning considerably or 50-80% of plants down; and 5 = all plants down.

Seed Test Weight. The test weight for each variety was determined from a composite sample from all replications.

Disease Ratings. All varieties were rated for development of leaf rust and Septoria leaf and Stagonospora glume blotch according to *James' Manual of Assessment Keys for Plant Diseases.* At growth stages 10.5 (spikes emerged) and 11.1 (milky ripe), 10 plants were selected at random from each plot. The percentage of leaf area affected by each disease on the flag leaf was recorded. From these data, an assessment was made of the overall disease response of each variety.

IMPORTANT FACTORS FOR PRODUCERS

Land Selection. Waterlogged soils often limit wheat productivity. Poorly drained, heavy soils of the Delta and bottomland areas of east Mississippi should be avoided.

Seeding Methods. Timely and proper seeding techniques insure rapid, successful establishment of small-grain seedlings. Planting into a moist weed-free seedbed with a grain drill is the preferred seeding method for small grains. Modern drills are capable of seeding in many unprepared (no tillage) as well as traditionally prepared seedbeds. The optimum seeding depth ranges from 1-1.5 inches, depending upon soil moisture status and soil type. Deep seeding is recommended when soil moisture is marginally dry, particularly on light, sandy soils. Producers who do not have grain drills may "rough in" small grains by broadcast sowing on recently tilled soil and covering the seed with a light tillage operation, such as a harrow, field cultivator, or shallow disking. Seeding rates should be increased approximately 25% when utilizing the "rough in" system to compensate for poorer establishment since seeding depth is random and no firming over the seed occurs with this method. When field conditions are too wet to permit tractor operations, or when over-seeding an existing crop, small grains may be aerially broadcast seeded. Seeding rates should be increased about 75% compared with drilled rates since surface establishment is extremely dependent upon ambient environmental conditions. Thus, aerial seeding is usually only recommended for late-planted small grains since evaporation rates are much lower late in the fall and little time remains to seed using normal planting methods.

Seeding Rates. Normal seeding rates for planting with a drill vary from 80–100 pounds of seed per acre, depending upon the variety and planting date. The low rate should be used when planting at the normal date and the higher rates when planting late or when planting conditions are poor. If seed is broadcast and covered with a disk or field cultivator, 100–120 pounds of seed per acre should be planted. When seeding aerially, about 150 pounds per acre should be applied. Seeding rates are similar for oats. This rate should result in final plant stands of approximately 25–30 plants per square foot.

Cold Requirements. Winter varieties of small grains require a certain amount of cold weather (less than 40°F) before the plants will form seed heads. This process is called vernalization. Most of the wheat varieties planted in Mississippi require low temperatures to reproduce; oats do

not. In some years, there is not enough cold weather in south Mississippi for some northern-adapted wheat varieties, resulting in little or no seed-head production. Normally, these varieties have late heading dates at south Mississippi locations. Check adaptation of unfamiliar varieties with an MSU Extension Service agent or seed company representative.

Planting Dates. Planting before recommended planting dates often results in establishment difficulty, increased stress and pest problems (freeze injury, aphids, Hessian fly, and disease). Late planting may not expose wheat plants to cool temperatures long enough for proper development. Recommended planting dates vary according to the region:

North Mississippi	Oct. 1 to Nov. 5
Central Mississippi	Oct. 15 to Nov. 25
South Mississippi	Nov. 1 to Dec. 10

Disease Management. Several diseases may attack wheat and oat plants in Mississippi. Leaf rust, Stripe rust, and several head diseases are very common. Planting disease-resistant varieties is the most practical and economical method to manage diseases; however, chemical control may be required to control severe outbreaks.

Fertilization. Keep soil pH 6 or higher. Growers should test and apply lime, phosphate, and potash according to soil analysis recommendations. If soybeans follow a wheat crop on heavy soils (clays, clay loams, and silt loams), apply phosphate and potash for the soybean crop before planting the wheat. This practice is not recommended on sandy soils because potash may be leached away. Nitrogen rate recommendations vary from 90-160 pounds per acre depending primarily upon soil texture, with higher rates needed on clay soils. Split application of nitrogen fertilizer is strongly encouraged for wheat production to improve crop-fertilizer use efficiency. One-third or less of the total nitrogen should be applied when dormancy breaks in the spring on tillering wheat. Apply the balance of the nitrogen when wheat becomes strongly erect and stem elongation begins, which generally occurs from late February through mid-March.

Weed Control. Mississippi State University Extension Service Publication 1532, *Weed Control Guidelines for Mississippi*, provides detailed information for controlling weeds in wheat and oats. For more specific information, refer to MSU Extension Information Sheet 961, *Small Grains Production*. **Saving Seed.** Many private and public wheat varieties are protected from unauthorized replanting by the Plant Variety Protection Act (PVPA) and/or United States patent. Seed produced from a **patented variety** cannot be planted for any purpose, including nontraditional uses. PVPA-protected seed cannot be sold, advertised, offered, delivered, consigned, exchanged, or exposed for sale without permission from the proprietary seed owner. In addition, no one can try to buy, transfer, or possess the variety in any way. It also is illegal to clean or condition such seed to sell for planting purposes. Retail dealers, seed cleaners, and consumers all are legally responsible for these violations. An exemption to the 1994 amended PVPA allows growers to collect and save seed produced from any legally purchased PVPA-protected variety. They can use this seed for their *own* future planting, but they cannot sell, trade, or transfer it to *others* for planting purposes. No one can replant a wheat variety that is **patented** for any reason. For further information please refer to these websites:

MSU Extension Service Information Sheet 1763: http://msucares.com/pubs/infosheets/is1763.pdf

Plant Variety Protection Act http://151.121.3.150/science/PVPO/PVPO_Act/whole2.pdf

Plant Variety Protection Office PVP Database http://www.ars-grin.gov/cgi-bin/npgs/html/pvplist.pl

United States Patent Database http://www.uspto.gov/patft/index.html

Use of Data Tables and Summary Statistics

The yield potential of a given variety cannot be predicted with complete accuracy. Consequently, replicate plots of all varieties are evaluated for yield, and the yield of a given variety is estimated as the mean of all replicate plots of that variety. Yields vary somewhat from one replicate plot to another, which introduces a certain degree of error to the estimation of yield potential. This natural variation is often responsible for yield differences among different varieties. Thus, even if the mean yields of two varieties are numerically different, they are not necessarily significantly different in terms of yield potential. In other words, the ability to measure yield is not precise enough to determine whether such small differences are observed purely by chance or because of superior performance.

The least significant difference (LSD) is an estimate of the smallest difference between two varieties that can be declared to be the result of something other than random variation in a particular trial. Consider the following example for a given trial:

Variety	Yield
Abe Bill Charlie	60 bu/A 55 bu/A 51 bu/A
LSD	7 bu/A

The difference between variety Abe and variety Bill is 5 bushels per acre (60 - 55 = 5). This difference is **smaller** than the LSD (7 bushels per acre). Consequently, it is concluded

that variety Abe and variety Bill have the same yield potential since the observed difference occurred purely due to chance.

The difference between variety Abe and variety Charlie is 9 bushels per acre (60 - 51 = 9), which is **larger** than the LSD (7 bushels per acre). Therefore, it is concluded that the yield potential of variety Abe is superior to that of variety Charlie since the difference is larger than would be expected purely by chance.

The coefficient of variation (CV) is a measure of the relative precision of a given trial and is used to compare the relative precision of different trials. The CV is generally considered to be an estimate of the amount of unexplained variation in a given trial. This unexplained variation could be the result of variation between plots with respect to soil type, fertility, insects, diseases, weather stress, etc. In general, the higher the CV is, the lower the precision in a given trial.

The coefficient of determination (R^2) is another measure of the level of precision in a trial and is also used to compare the relative precision of different trials. The R^2 is a measure of the amount of variation that is explained, or accounted for, in a given trial. For example, an R^2 value of 90% indicates that 90% of the observed variation in the trial has been accounted for in the trial with the remaining 10% being unaccounted. The higher the R^2 value is, the more precise the trial. The R^2 is generally considered to be a better measure of precision than is the CV for comparison of different trials.

WHEAT AND OAT SEED SOURCES

	Table 1. 2021–2	022 MSU wheat and oat planti	ng dates.	
Location	Soil type	Planting date	Harvest date	Crop tested
Beaumont	McLaurin sandy loam	11/5/21	6/3/22	Wheat & Oat
Bolton	Loring silt loam	11/9/21	6/8/22	Wheat
Coldwater	Loring-Grenada silt loam	11/10/21	6/14/22	Wheat
Starkville	Marietta fine sandy loam	11/3/21	6/6/22	Wheat & Oat
Stoneville	Bosket very fine sandy loam	11/8/21	6/13/22	Wheat & Oat
Verona	Leeper silty clay	11/2/21	6/7/22	Wheat & Oat

	Table 2. Companies supplying wheat brands/va	rieties entered.
Company	Brand	Variety
AgriMAXX Wheat Co. 7167 Highbanks Rd. Mascoutah, IL 62258	AgriMAXX AgriMAXX AgriMAXX AgriMAXX AgriMAXX AgriMAXX AgriMAXX	514 503 EXP 2105 516 473 513
AgSouth Genetics	AgSouth Genetics AgSouth Genetics	AGS 2055 AGS 3022
Delta Grow Seed P.O. Box 219 England, AR 72406	Delta Grow Delta Grow Delta Grow Delta Grow	1200 3500 1000 1800
Dixie Bell	Dixie Bell Dixie Bell	DB918 DB702
Dyna-Gro Seed 6221 Riverside Dr., Suite One Dublin, OH 43017	Dyna-Gro Dyna-Gro Dyna-Gro Dyna-Gro Dyna-Gro Dyna-Gro Dyna-Gro Dyna-Gro	9701 WX20738 9393 9811 9002 9120 9172
Pioneer	Pioneer Pioneer Pioneer	26R41 26R59 26R36
Progeny Ag Products 1529 Hwy. 193 S. Wynne, AR 72396	Progeny Ag Progeny Ag	#CHAD 21-2 #BINGO #TURBO 21-1 #BUSTER 21-4 20-2 #BULLET 21-3
UniSouth Genetics, Inc. 3205 C Hwy. 46 S. Dickson, TN 37055	USG USG USG	3472 3352 3783
Revere Seed	Revere Seed Revere Seed Revere Seed	2169 2266 X22A
Continued.		

Table 2 (continued). Companies supplying wheat b	orands/varieties entered.
Company	Brand	Variety
Stratton Seed Co. 1530 Hwy. 79 S. Stuttgart, AR 72160	Go Wheat Go Wheat Go Wheat Go Wheat Go Wheat	6056 2058 6000 LA754 2032
Virginia Crop Improvement Association	VCIA VCIA	VA17W-75 Liberty 5658
SunGrains	SunGrains SunGrains SunGrains SunGrains SunGrains SunGrains SunGrains SunGrains SunGrains SunGrains SunGrains	AR11051-15-3 * LA12275LDH-56 * GA 111055-19LE12 * AR09137UC-17-2 * LA15203-LDH112 * LA15203-LDH274 * GA 121012-19LE8 * LA13154D-WN1 * GA 151313-LDH224-19E38 * LANC11558-33 * GA 11052-19LE15 *

	Table 3. Companies supplying oat brands/var	ieties entered.
Company	Brand	Variety
SunGrains	SunGrains SunGrains SunGrains	LA15015SB-S50 * LA14105SBS56-1 * LA14032SBS-163-2 *
Angelina Grain Co. 16371 Hwy. 15 S. Vidalia, LA 71373	Sweet Caroline	FL 0720
GoWild	GoWild	Savage

SUMMARIES OF WHEAT YIELDS

Brand	Variety ¹	Coldwater	Starkville	Verona	North avg.	Beaumont	Bolton	South avg.	Stoneville (Delta)	Overall avg.
		bu/A	bu/A	bu/A	bu/A	bu/A	bu/A	bu/A	bu/A	bu/A
AgriMAXX	473	61.1	67.9	87.4	72.1	57.8	62.9	60.3	79.7	69.5
AgriMAXX	503	72.4	71.5	102.9	82.3	44.2	38.6	41.4	71.3	66.8
AgriMAXX	513	66.2	66.2	91.7	74.7	41.6	51.2	46.4	69.7	64.4
AgriMAXX	514	66.3	82.2	94.0	80.8	64.6	51.4	58.0	71.9	71.7
AgriMAXX	516	66.6	70.5	100.4	79.2	59.9	58.8	59.4	84.8	73.5
AgriMAXX	EXP 2105	70.2	71.3	91.1	77.5	47.7	42.2	44.9	83.5	67.6
AgSouth Genetics	AGS 2055	68.0	67.5	98.1	77.8	65.4	53.6	59.5	69.6	70.4
AgSouth Genetics	AGS 3022	72.4	63.8	93.2	76.5	68.5	51.9	60.2	68.5	69.7
Delta Grow	1000	62.4	66.2	97.9	75.5	60.9	60.0	60.5	81.5	71.5
Delta Grow	3500	60.9	73.5	97.6	77.3	72.6	58.5	65.6	71.3	72.4
Delta Grow	1200	67.7	82.0	96.3	82.0	61.0	64.0	62.5	78.7	74.9
Delta Grow	1800	70.3	57.7	91.1	73.0	67.5	56.7	62.1	72.6	69.3
Dixie Bell	DB702	70.9	63.2	101.2	78.4	61.5	46.9	54.2	82.5	71.0
Dixie Bell	DB918	65.1	66.7	102.6	78.1	58.1	56.6	57.4	75.4	70.7
Dyna-Gro	9002	66.0	67.2	94.0	75.7	55.6	62.2	58.9	76.8	70.3
Dyna-Gro	9120	67.0	64.6	94.6	75.4	55.5	54.8	55.2	68.9	67.6
Dyna-Gro	9172	60.7	64.2	102.5	75.8	56.6	58.1	57.4	77.2	69.9
Dyna-Gro	9393	61.6	69.7	92.5	74.6	57.0	57.7	57.3	67.6	67.7
Dyna-Gro	9701	64.1	75.7	94.8	78.2	52.2	62.4	57.3	73.2	70.4
Dyna-Gro	9811	65.6	69.5	99.1	78.0	68.1	54.6	61.4	72.6	71.6
Dyna-Gro	WX20738	80.1	74.9	98.3	84.4	63.7	55.4	59.6	62.2	72.4
GoWheat	2032	63.6	56.5	95.5	71.8	27.8	46.5	37.1	81.8	61.9
GoWheat	2058	72.3	65.4	97.8	78.5	65.6	60.8	63.2	75.4	72.9
GoWheat	6000	67.0	64.6	95.0	75.5	42.2	47.2	44.7	78.9	65.8
GoWheat	6056	67.6	69.4	93.8	76.9	55.4	58.3	56.8	78.8	70.5
GoWheat	LA754	75.3	63.0	92.2	76.8	66.6	51.9	59.2	69.1	69.7
Pioneer	26R36	67.9	60.7	103.4	77.3	51.8	56.2	54.0	78.2	69.7
Pioneer	26R41	69.8	63.9	106.2	80.0	72.8	59.5	66.2	70.7	73.8
Pioneer	26R59	66.8	63.0	98.8	76.2	53.6	47.5	50.5	73.4	67.2
Progeny Ag	#BULLET	61.3	67.6	93.4	74.1	55.0	59.5	57.3	79.7	69.4
Progeny Ag	#BUSTER	68.0	71.7	106.5	82.1	67.2	49.1	58.2	71.2	72.3
Progeny Ag	#CHAD	72.4	79.8	87.6	79.9	72.1	55.6	63.9	63.6	71.8
Progeny Ag	#TURBO	66.5	72.3	97.6	78.8	69.5	38.5	54.0	75.8	70.0
Progeny Ag	#BINGO	69.1	76.2	97.3	80.9	62.2	48.2	55.2	67.2	70.0
Progeny Ag	20-2	69.9	67.7	101.0	79.5	43.5	39.4	41.5	71.2	65.5
Progeny Ag	21-1	77.7	72.1	97.0	82.3	67.6	54.0	60.8	62.1	71.8
Progeny Ag	21-2	66.9	79.4	94.5	80.3	68.0	52.8	60.4	81.7	73.9
Progeny Ag	21-3	59.8	63.5	95.4	72.9	50.8	42.4	46.6	71.4	63.9
Progeny Ag	21-4	69.8	70.4	97.8	79.3	55.4	44.5	49.9	76.7	69.1
Revere Seed	2169	65.6	76.7	102.3	81.5	50.4	60.6	55.5	71.7	71.2
Revere Seed	2266	61.7	74.4	93.2	76.5	48.5	34.9	41.7	73.2	64.3
Revere Seed	X22A	69.8	71.5	90.3	77.2	67.0	59.2	63.1	72.3	71.7
SunGrains	AR09137UC-17-2 *	57.8	66.9	97.2	74.0	59.9	51.5	55.7	71.6	67.5
SunGrains	AR11051-15-3 *	64.2	73.7	95.5	77.8	62.2	52.1	57.2	63.9	68.6
SunGrains	GA 11052-19LE15 *	61.5	53.8	93.8	69.7	51.3	43.6	47.5	67.9	62.0
SunGrains	GA 111055-19LE12 *	60.8	67.4	92.2	73.5	63.3	52.5	57.9	73.7	68.3
SunGrains	GA 121012-19LE8 *	59.2	61.3	98.6	73.0	68.6	46.8	57.7	81.1	69.3
SunGrains	GA 151313-LDH224-19E38 *	67.7	57.6	92.3	72.5	63.3	56.0	59.7	65.8	67.1
SunGrains	LA12275LDH-56 *	70.4	69.2	95.6	78.4	59.7	50.9	55.3	63.5	68.2
SunGrains	LA13154D-WN1 *	64.3	58.6	93.0	72.0	61.6	46.1	53.9	70.8	65.7
SunGrains	LA15203-LDH112 *	65.8	64.1	94.7	74.9	63.0	60.6	61.8	69.3	69.6
SunGrains	LA15203-LDH274 *	62.8	62.2	92.7	72.5	17.4	38.2	27.8	51.4	54.1
SunGrains	LANC11558-33 *	59.4	57.3	87.0	67.9	62.1	48.1	55.1	66.0	63.3
JSG	3352	74.2	69.0	94.9	79.4	47.0	39.3	43.1	79.9	67.4
USG	3472	70.6	74.8	96.7	80.7	61.6	56.6	59.1	71.1	71.9
JSG	3783 Liborty 5658	68.8	66.1	101.2	78.7	56.3	57.1	56.7	76.9	71.1
	Liberty 5658	60.6	49.6	91.6	67.3	70.5	47.7	59.1	80.2	66.7
VCIA	VA17W-75	67.8	61.8	91.1	73.6	52.1	35.6	43.8	65.6	62.3
Maan		<u> </u>	07.0	00.0	70.0	50.0	F10	FF 0	70.0	00.0
Mean		66.7	67.6	96.0	76.8	58.2	51.9	55.0	72.8	68.8
		8.8	16.1	9.8		11.5	12.0		9.7	
LSD (0.05)		8.2	15.2	13.2		9.3	8.7		9.8	
		52.0	56.3	22.8		76.0	69.0		63.5	
Error DF		171	171	171		171	171		171	

Brand	Variety ¹	Coldwater	Starkville	Verona	Beaumont	Bolton	Stoneville	Overall avg.
		bu/A	bu/A	bu/A	bu/A	bu/A	bu/A	bu/A
AgriMAXX	473	72.1	82.8	90.7	68.7	73.8	87.6	79.3
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AgriMAXX	513	77.2	82.7	93.6	53.8	68.8	79.5	75.9
AgriMAXX	514	83.1	95.7	93.9	67.4	65.8	88.0	82.3
AgriMAXX	516	79.2	87.6	94.5	69.5	71.1	91.8	82.3
AgSouth Genetics	AGS 2055	79.0	78.1	98.9	75.6	71.7	80.7	80.7
Delta Grow	1000	67.1	76.5	96.7	69.8	70.0	85.7	77.6
Delta Grow	3500	73.8	85.0	96.7	74.0	72.6	76.8	79.8
Delta Grow	1200	75.9	90.4	98.1	68.8	75.4	92.8	83.6
Dyna-Gro	9002	77.3	84.8	96.8	60.9	76.0	86.1	80.3
Dyna-Gro	9120	75.0	83.2	96.1	67.1	70.2	83.3	79.1
Dyna-Gro	9172	71.3	83.9	103.9	71.2	75.3	90.0	82.6
Dyna-Gro	9701	75.3	86.0	90.6	66.6	75.0	82.3	79.3
Dyna-Gro	9811	75.7	79.7	93.9	80.7	72.3	79.9	80.4
Dyna-Gro	WX20738	78.1	90.4	92.2	74.4	65.2	72.2	78.8
GoWheat	2032	73.7	76.7	98.0	51.8	61.3	82.4	74.0
GoWheat	2058	79.3	82.2	96.1	76.9	74.3	81.2	81.6
GoWheat	6000	80.0	80.3	99.2	60.5	63.6	83.2	77.8
GoWheat	LA754	77.3	76.5	89.9	73.5	61.8	67.4	74.4
Progeny Ag	#BULLET	68.2	79.2	94.2	63.8	70.0	88.5	77.3
Progeny Ag	#TURBO	75.3	82.5	89.8	77.8	59.8	80.8	77.7
Progeny Ag	#BINGO	79.0	90.7	96.1	69.3	69.1	87.2	81.9
Revere Seed	2169	78.2	88.8	101.5	68.5	78.1	84.6	83.3
SunGrains	AR09137UC-17-2 *	70.1	82.0	93.6	66.2	65.6	79.2	76.1
SunGrains	AR11051-15-3 *	73.0	85.9	95.9	64.9	65.8	73.5	76.5
SunGrains	LA12275LDH-56 *	77.3	79.0	91.3	69.9	63.0	75.5	76.0
SunGrains	LA15203-LDH112 *	73.4	79.4	91.0	69.0	73.4	74.8	76.8
SunGrains	LA15203-LDH274 *	73.3	76.2	88.2	38.6	57.3	66.0	66.6
USG	3472	78.3	88.8	95.2	63.9	72.0	86.8	80.8
VCIA	Liberty 5658	72.5	66.1	89.2	86.6	61.1	83.4	76.5
Overall Mean		75.9	83.0	95.0	67.6	68.6	82.0	78.7

Brand	Variety ¹	Coldwater	Verona	Beaumont	Bolton	Stoneville	Overall avg.
		bu/A	bu/A	bu/A	bu/A	bu/A	bu/A
AgriMAXX	473	72.0	85.1	70.0	73.2	84.7	77.0
AgriMAXX	503	67.9	94.5	55.9	58.8	81.4	71.7
AgSouth Genetics	AGS 2055	77.8	91.4	73.5	68.0	75.5	77.2
Delta Grow	1000	69.1	88.8	72.1	72.0	86.4	77.7
Delta Grow	3500	68.0	84.5	68.7	71.0	62.9	71.0
Dyna-Gro	9002	77.7	89.3	61.9	73.7	81.3	76.8
Dyna-Gro	9120	73.4	90.7	65.3	72.5	76.9	75.7
Dyna-Gro	9701	75.0	86.4	69.1	71.8	82.3	76.9
Dyna-Gro	9811	75.7	88.1	76.9	75.0	78.3	78.8
GoWheat	2032	67.9	88.5	49.4	62.6	71.2	67.9
GoWheat	2058	78.2	90.0	78.6	74.1	80.6	80.3
GoWheat	6000	74.0	90.8	58.9	61.4	70.2	71.1
GoWheat	LA754	71.7	84.4	69.4	52.6	55.8	66.8
Progeny Ag	#BULLET	69.4	86.9	67.6	73.8	85.6	76.7
Progeny Ag	#TURBO	71.8	82.4	75.4	63.8	73.1	73.3
Progeny Ag	#BINGO	79.1	91.0	70.8	69.0	81.0	78.2
SunGrains	AR09137UC-17-2 *	67.1	87.1	61.7	71.3	68.7	71.2
VCIA	Liberty 5658	70.3	86.5	82.5	60.5	76.3	75.2
Overall Mean		72.6	88.1	68.2	68.1	76.2	74.6

Mississippi Agricultural and Forestry Experiment Station 7

MSU COASTAL R&E CENTER, BEAUMONT

Crop Summary

The wheat plots were planted in early November following a crop of sorghum. There was good soil moisture at planting for germination, and all plots quickly emerged to a good stand. Rainfall occurred at the time of harvest at this location, but harvest was delayed for only about a week and was then completed without difficulties. Planting dateNovember 5 Harvest dateJune 3 Soil typeMcLaurin sandy loam Soil pH6.2 Soil fertilityP=M; K=M Previous crop ...Grain Sorghum (2021 growing season) FertilizerPreplant — 13-13-13 @ 250 lb/A Topdress — N @ 33 lb/A (33-0-0-12S), P&K @ 25 lb (0-20-20) on January 31; N @ 66 lb/A (33-0-0-12S) on March 11 HerbicidePreemergence — Gramoxone SL 2.0 @ 32 oz/A on November 5

Brand	Variety ¹	2021–2022 yield	2-year avg.	3-year avg.	Plant height	Lodging score	Date headed
2.	00014	bu/A	bu/A	bu/A	in	(1-5)	1/0
Pioneer	26R41	72.8			30	1	4/6
Delta Grow	3500	72.6	74.0	68.7	40	4	4/4
Progeny Ag	#CHAD	72.1	_	_	35	1	4/3
/CIA	Liberty 5658	70.5	86.6	82.5	37	1	4/5
Progeny Ag	#TURBO	69.5	77.8	75.4	35	1	4/3
SunGrains	GA 121012-19LE8 *	68.6	_		34	2	3/29
AgSouth Genetics	AGS 3022	68.5	_	_	36	2	3/28
Dyna-Gro	9811	68.1	80.7	76.9	34	2	4/5
Progeny Ag	21-2	68.0	—	—	33	1	4/6
Progeny Ag	21-1	67.6	—	—	36	1	4/6
Delta Grow	1800	67.5	_	_	35	4	4/10
Progeny Ag	#BUSTER	67.2	_		37	1	4/8
Revere Seed	X22A	67.0	_		34	1	4/7
GoWheat	LA754	66.6	73.5	69.4	34	1	4/4
GoWheat	2058	65.6	76.9	78.6	28	1	4/9
AgSouth Genetics	AGS 2055	65.4	75.6	73.5	38	1	4/6
AgriMAXX	514	64.6	67.4	_	36	4	4/8
Dyna-Gro	WX20738	63.7	74.4	_	35	3	4/6
SunGrains	GA 111055-19LE12 *	63.3			37	2	4/9
SunGrains	GA 151313-LDH224-19E38 *	63.3			37	3	4/3
SunGrains	LA15203-LDH112 *	63.0	69.0	_	31	2	4/6
SunGrains	AR11051-15-3 *	62.2	64.9		36	1	4/5
Progeny Ag	#BINGO	62.2	69.3	70.8	34	1	4/7
SunGrains	LANC11558-33 *	62.1			34	3	4/4
SunGrains	LA13154D-WN1 *	61.6		_	37	1	3/21
JSG	3472	61.6	63.9		36	1	4/8
Dixie Bell	DB702	61.5			34	1	4/7
Delta Grow	1200	61.0	68.8		38	4	4/9
Delta Grow	1000	60.9	69.8	72.1	38	4	4/9
AgriMAXX	516	59.9	69.5	12.1	38	3	4/0
			66.2		30	<u> </u>	4/9
SunGrains SunGrains	AR09137UC-17-2 * LA12275LDH-56 *	59.9 59.7	69.9	61.7	39	3	4/4
			69.9				
Dixie Bell	DB918	58.1	68.7		34	1	4/7
AgriMAXX	473	57.8		70.0	38	4	4/10
Dyna-Gro	9393	57.0		_	31	3	4/7
Dyna-Gro	9172	56.6	71.2	_	35	3	4/6
JSG	3783	56.3			34	1	4/9
Dyna-Gro	9002	55.6	60.9	61.9	34	3	4/8
)yna-Gro	9120	55.5	67.1	65.3	30	3	4/10
GoWheat	6056	55.4	_		32	1	4/6
Progeny Ag	21-4	55.4	—		29	1	4/12
Progeny Ag	#BULLET	55.0	63.8	67.6	40	2	4/3
Pioneer	26R59	53.6		_	32	1	4/8
)yna-Gro	9701	52.2	66.6	69.1	34	2	4/8
/ČIA	VA17W-75	52.1	_		29	1	3/28
Pioneer	26R36	51.8	_	_	30	1	4/12

Brand	Variety ¹	2021–2022 yield	2-year avg.	3-year avg.	Plant height	Lodging score	Date headed
		bu/A	bu/A	bu/A	in	(1-5)	
SunGrains	GA 11052-19LE15 *	51.3	—	—	37	2	4/10
Progeny Ag	21-3	50.8	_		32	1	4/10
Revere Seed	2169	50.4	68.5		34	1	4/10
Revere Seed	2266	48.5			34	1	4/12
AgriMAXX	EXP 2105	47.7			33	1	4/14
USG	3352	47.0			36	1	4/11
AgriMAXX	503	44.2	58.1	55.9	35	4	4/13
Progeny Ag	20-2	43.5	_	_	34	1	4/11
GoWheat	6000	42.2	60.5	58.9	30	1	3/21
AgriMAXX	513	41.6	53.8	_	35	4	4/9
GoWheat	2032	27.8	51.8	49.4	34	1	3/19
SunGrains	LA15203-LDH274 *	17.4	38.6	—	30	1	3/10
Mean		58.2					
CV		11.5					
LSD (0.05)		9.3					
R ²		76.0					
Error DF		171					

TRIPLE R FARMS, BOLTON

Crop Summary

The plots were planted into a well-prepared seedbed that had been prepared with a vertical tillage implement just prior to planting. Adequate soil moisture was present at planting for germination. All plots quickly emerged to a good stand. Time and weather allowed for only a single application of nitrogen in the spring. Harvest was completed in a timely manner.

Planting dateNovember 9
Harvest dateJune 8
Soil type Loring silt loam
Soil pH6.5
Soil fertilityP=M; K=M
Previous crop Soybean
FertilizerPreplant — 13-13-13 @ 250 lb/A on November 9
Topdress — N @ 130 lb/A (33-0-0-12S) on March 1
HerbicidePreemergence — Gramoxone SL 2.0 @ 32 oz/A
Postemergence — Harmony Extra SG @ 0.9 oz/A,
Axial XL @ 16.5 oz/A on March 1

Brand	Variety ¹	2021–2022 yield	2-year avg.	3-year avg.	Plant height	Lodging score
		bu/A	bu/A	bu/A	in	(1-5)
Delta Grow	1200	64.0	75.4	_	35	<u></u> 1
AgriMAXX	473	62.9	73.8	73.2	31	1
Dyna-Gro	9701	62.4	75.0	71.8	35	1
Dyna-Gro	9002	62.2	76.0	73.7	32	1
GoWheat	2058	60.8	74.3	74.1	28	1
Revere Seed	2169	60.6	78.1		34	1
SunGrains	LA15203-LDH112 *	60.6	73.4		31	1
Delta Grow	1000	60.0	70.0	72.0	27	1
Pioneer	26R41	59.5			30	1
Progeny Ag	#BULLET	59.5	70.0	73.8	31	1
Revere Seed	X22A	59.2			33	1
AgriMAXX	516	58.8	71.1		34	1
Delta Grow	3500	58.5	72.6	71.0	37	1
GoWheat	6056	58.3			29	1
Dvna-Gro	9172	58.1	75.3		31	1
Dyna-Gro	9393	57.7			30	1
USG	3783	57.1			29	1
Delta Grow	1800	56.7			33	1
Dixie Bell	DB918	56.6			31	1
USG	3472	56.6	72.0		35	1
Pioneer	26R36	56.2	12.0		31	1
SunGrains	GA 151313-LDH224-19E38 *	56.0			32	1
	#CHAD	55.6			35	1
Progeny Ag	WX20738	55.4	65.2		35	1
Dyna-Gro Dyna-Gro	9120	54.8	70.2	72.5	32	1
		54.6				1
Dyna-Gro	9811 21-1		72.3	75.0	31 31	
Progeny Ag		54.0	71 7			1
AgSouth Genetics	AGS 2055	53.6	71.7	68.0	34	1
Progeny Ag	21-2	52.8	—		27	1
SunGrains	GA 111055-19LE12 *	52.5		_	32	1
SunGrains	AR11051-15-3 *	52.1	65.8		30	1
GoWheat	LA754	51.9	61.8	52.6	33	1
AgSouth Genetics	AGS 3022	51.9			28	1
SunGrains	AR09137UC-17-2 *	51.5	65.6	71.3	31	1
AgriMAXX	514	51.4	65.8		34	1
AgriMAXX	513	51.2	68.8		32	1
SunGrains	LA12275LDH-56 *	50.9	63.0	—	31	1
Progeny Ag	#BUSTER	49.1		_	27	1
Progeny Ag	#BINGO	48.2	69.1	69.0	33	1
SunGrains	LANC11558-33 *	48.1		—	30	1
VCIA	Liberty 5658	47.7	61.1	60.5	32	1
Pioneer	26R59	47.5		_	30	1
GoWheat	6000	47.2	63.6	61.4	28	1
Dixie Bell	DB702	46.9	_		33	1

Brand	Variety ¹	2021–2022 yield	2-year avg.	3-year avg.	Plant height	Lodging score	
		bu/A	bu/A	bu/A	in	(1-5)	
SunGrains	GA 121012-19LE8 *	46.8	—	—	31	1	
GoWheat	2032	46.5	61.3	62.6	30	1	
SunGrains	LA13154D-WN1 *	46.1	_	_	31	1	
Progeny Ag	21-4	44.5	_	_	31	1	
SunGrains	GA 11052-19LE15 *	43.6	_	_	31	1	
Progeny Ag	21-3	42.4			33	1	
AgriMAXX	EXP 2105	42.2			33	1	
Progeny Ag	20-2	39.4	—	—	33	1	
USG	3352	39.3			28	1	
AgriMAXX	503	38.6	57.2	58.8	31	1	
Progeny Ag	#TURBO	38.5	59.8	63.8	33	1	
SunGrains	LA15203-LDH274 *	38.2	57.3	_	30	1	_
VCIA	VA17W-75	35.6	_		29	1	
Revere Seed	2266	34.9	—		32	1	
Mean		51.9					
CV		12.0					
LSD (0.05)		8.7					
R ²		69.0					
Error DF		171					

JERRY SLOCUM FARMS, COLDWATER

Crop Summary

The wheat plots were planted no-till into soybean residue following the previous season's crop. The plots were planted in early November into soil with adequate moisture for germination. All plots quickly emerged to a good stand. Timely fertilizer applications and rainfall allowed for good yield potential. Harvest was completed in a timely manner, and good yields were observed at this location. Planting date ...November 10 Harvest date ...June 14 Soil typeLoring-Grenada silt loams Soil pH6.3 Soil fertilityP=M; K=M Previous crop ...Soybean FertilizerTopdress — N @ 21 lb/A (21-0-0-24S) on February 11; N @ 99 lb/A (33-0-0-12S) on March 23 HerbicidePreemergence — Parazone 3SL (Paraquat 3 lb/gal) @ 32 oz/A, Zidua SC @ 2 oz/A Postemergence — Axial Bold @ 15 oz/A, Quelex @ 0.75 oz/A on March 4 InsecticideLambda-cyhalothrin @ 2 oz/A on March 4

Brand	Variety ¹	2021–2022 yield	2-year avg.	3-year avg.	Plant height	Lodging score
		bu/A	bu/A	bu/A	in	(1-5)
Dyna-Gro	WX20738	80.1	78.1	—	34	1
Progeny Ag	21-1	77.7	—	—	33	1
GoWheat	LA754	75.3	77.3	71.7	34	1
USG	3352	74.2			34	1
AgSouth Genetics	AGS 3022	72.4	—	—	34	1
AgriMAXX	503	72.4	86.8	67.9	34	1
Progeny Ag	#CHAD	72.4	—	—	28	1
GoWheat	2058	72.3	79.3	78.2	32	1
Dixie Bell	DB702	70.9	_	—	32	1
USG	3472	70.6	78.3		33	1
SunGrains	LA12275LDH-56 *	70.4	77.3		40	1
Delta Grow	1800	70.3	_	_	39	1
AgriMAXX	EXP 2105	70.2			35	1
Progeny Ag	20-2	69.9	—	—	34	1
Progeny Ag	21-4	69.8			35	1
Revere Seed	X22A	69.8	_	_	29	1
Pioneer	26R41	69.8	_	_	34	1
Progeny Ag	#BINGO	69.1	79.0	79.1	29	1
USG	3783	68.8	_		32	1
Progeny Ag	#BUSTER	68.0	_	_	31	1
AgSouth Genetics	AGS 2055	68.0	79.0	77.8	35	1
Pioneer	26R36	67.9		_	33	1
VCIA	VA17W-75	67.8	_	_	35	1
SunGrains	GA 151313-LDH224-19E38 *	67.7	_	_	32	1
Delta Grow	1200	67.7	75.9	_	32	1
GoWheat	6056	67.6		—	32	1
Dyna-Gro	9120	67.0	75.0	73.4	32	1
GoWheat	6000	67.0	80.0	74.0	33	1
Progeny Ag	21-2	66.9			29	1
Pioneer	26R59	66.8	_	_	32	1
AgriMAXX	516	66.6	79.2	_	35	1
Progeny Ag	#TURBO	66.5	75.3	71.8	35	1
AgriMAXX	514	66.3	83.1	—	34	1
AgriMAXX	513	66.2	77.2	_	36	1
Dyna-Gro	9002	66.0	77.3	77.7	33	1
SunGrains	LA15203-LDH112 *	65.8	73.4	_	35	1
Revere Seed	2169	65.6	78.2	_	34	1
Dyna-Gro	9811	65.6	75.7	75.7	35	1
Dixie Bell	DB918	65.1	_	_	29	1
SunGrains	LA13154D-WN1 *	64.3	_	_	36	1
SunGrains	AR11051-15-3 *	64.2	73.0	_	33	1
Dyna-Gro	9701	64.1	75.3	75.0	36	1

Brand	Variety ¹	2021–2022 yield	2-year avg.	3-year avg.	Plant height	Lodging score
		bu/A	bu/A	bu/A	in	(1-5)
GoWheat	2032	63.6	73.7	67.9	35	່ 1 ໌
SunGrains	LA15203-LDH274 *	62.8	73.3		36	1
Delta Grow	1000	62.4	67.1	69.1	36	1
Revere Seed	2266	61.7	_	_	32	1
Dyna-Gro	9393	61.6	_	_	29	1
SunGrains	GA 11052-19LE15 *	61.5	_	_	34	1
Progeny Ag	#BULLET	61.3	68.2	69.4	35	1
AgriMAXX	473	61.1	72.1	72.0	36	1
Delta Grow	3500	60.9	73.8	68.0	35	1
SunGrains	GA 111055-19LE12 *	60.8	_	_	33	1
Dyna-Gro	9172	60.7	71.3	_	32	1
VČIA	Liberty 5658	60.6	72.5	70.3	34	1
Progeny Ag	21-3	59.8	_	_	33	1
SunGrains	LANC11558-33 *	59.4	_	—	31	1
SunGrains	GA 121012-19LE8 *	59.2	_	_	36	1
SunGrains	AR09137UC-17-2 *	57.8	70.1	67.1	37	1
Mean		66.7				
CV		8.8				
LSD (0.05)		8.2				
R ²		52.0				
Error DF		171				

R. R. FOIL PLANT SCIENCE RESEARCH CENTER, STARKVILLE

Crop Summary

The plots were planted into a seedbed that had been disked and harrowed prior to planting. The plots emerged to a good stand following planting. Harvest was completed in a timely manner.

Planting dateNovember 3
Harvest dateJune 6
Soil type Marietta fine sandy loam
Soil pH6.4
Soil fertilityP=M; K=M
Previous crop Soybean
Fertilizer Topdress — N @ 50 lb/A (33-0-0-12S) on
February 15; N @ 50 lb/A (33-0-0-12S)
on March 24; N @ 50 lb/A
(33-0-0-12S) on April 21
HerbicidePreemergence — Gramoxone SL 2.0 @ 32 oz/A
on November 3
Postemergence — Harmony Extra SG @ 0.9
oz/A, Zidua SC @ 1.8 oz/A on February 15

Brand	Variety ¹	2021–2022 yield	2-year avg.	3-year avg. ²	Plant height	Lodging score
		bu/A	bu/A	bu/A	in	(1-5)
AgriMAXX	514	82.2	95.7	—	38	1
Delta Grow	1200	82.0	90.4	_	34	1
Progeny Ag	#CHAD	79.8	—	—	29	1
Progeny Ag	21-2	79.4	—	—	30	1
Revere Seed	2169	76.7	88.8	—	35	1
Progeny Ag	#BINGO	76.2	90.7	—	33	1
Dyna-Gro	9701	75.7	86.0	—	38	1
Dyna-Gro	WX20738	74.9	90.4	—	39	1
USG	3472	74.8	88.8	—	35	1
Revere Seed	2266	74.4	_	_	34	1
SunGrains	AR11051-15-3 *	73.7	85.9	—	38	1
Delta Grow	3500	73.5	85.0	_	35	1
Progeny Ag	#TURBO	72.3	82.5		34	1
Progeny Ag	21-1	72.1	_	_	34	1
Progeny Ag	#BUSTER	71.7	_	_	34	1
Revere Seed	X22A	71.5	_	_	31	1
AgriMAXX	503	71.5	88.6	_	38	1
AgriMAXX	EXP 2105	71.3	_	_	36	1
AgriMAXX	516	70.5	87.6	_	33	1
Progeny Ag	21-4	70.4	_	_	35	1
Dvna-Gro	9393	69.7		_	31	1
Dyna-Gro	9811	69.5	79.7	_	38	1
GoWheat	6056	69.4			33	1
SunGrains	LA12275LDH-56 *	69.2	79.0	_	41	1
USG	3352	69.0	_	_	38	1
AgriMAXX	473	67.9	82.8		36	1
Progeny Ag	20-2	67.7			36	1
Progeny Ag	#BULLET	67.6	79.2		37	1
AgSouth Genetics	AGS 2055	67.5	78.1		38	1
SunGrains	GA 111055-19LE12 *	67.4			34	1
Dyna-Gro	9002	67.2	84.8		35	1
SunGrains	AR09137UC-17-2 *	66.9	82.0	_	38	1
Dixie Bell	DB918	66.7		_	33	1
AgriMAXX	513	66.2	82.7	_	35	1
Delta Grow	1000	66.2	76.5	_	41	1
JSG	3783	66.1			34	1
GoWheat	2058	65.4	82.2		30	1
Dvna-Gro	9120	64.6	83.2		35	1
GoWheat	6000	64.6	80.3	_	32	1
Dyna-Gro	9172	64.2	83.9		34	1
SunGrains	LA15203-LDH112 *	64.1	79.4		38	1

Brand	Variety ¹	2021–2022 yield	2-year avg.	3-year avg. ²	Plant height	Lodging score
		bu/A	bu/A	bu/A	in	(1-5)
Pioneer	26R41	63.9	_	_	34	1
AgSouth Genetics	AGS 3022	63.8	—	—	31	1
Progeny Ag	21-3	63.5	—	—	35	1
Dixie Bell	DB702	63.2		_	36	1
Pioneer	26R59	63.0		_	32	1
GoWheat	LA754	63.0	76.5	_	36	1
SunGrains	LA15203-LDH274 *	62.2	76.2	_	34	1
VCIA	VA17W-75	61.8		_	32	1
SunGrains	GA 121012-19LE8 *	61.3	—	_	34	1
Pioneer	26R36	60.7	—	_	34	1
SunGrains	LA13154D-WN1 *	58.6	_	_	35	1
Delta Grow	1800	57.7			34	1
SunGrains	GA 151313-LDH224-19E38 *	57.6		_	36	1
SunGrains	LANC11558-33 *	57.3	_	_	30	1
GoWheat	2032	56.5	76.7	_	32	1
SunGrains	GA 11052-19LE15 *	53.8		_	30	1
VCIA	Liberty 5658	49.6	66.1	—	34	1
Mean		67.1				
CV		16.1				
LSD (0.05)		15.2				
R ²		56.3				
Error DF		171				

DELTA BRANCH EPERIMENT SATION, STONEVILLE

Crop Summary

The wheat plots were planted in a conventional seedbed that had been disked and harrowed just prior to planting. Soil moisture at planting was ideal for germination, and the plots quickly emerged to a good stand. Rainfall during early June delayed harvest slightly but didn't appear to reduce yield potential at this location. Harvest was completed without difficulties.

Planting date November 8
Harvest dateJune 13
Soil typeBosket very fine sandy loam
Soil pH6.2
Soil fertilityP=H; K=H
Previous cropSoybean
Fertilizer Preplant — 19-19-19 @ 140 lb/A on November 3
Topdress — N @ 34 lb/A (46-0-0) on February
24; N @ 48 lb/A (46-0-0) on March 31
HerbicidePreemergence — Gramoxone SL 2.0 @ 32 oz/A

on November 8

Brand	Variety ¹	2021–2022 yield	2-year avg.	3-year avg.	Date headed	Plant height	Lodging score
		bu/A	bu/A	bu/A		in	(1-5)
AgriMAXX	516	84.8	91.8	_	4/28	39	1
AgriMAXX	EXP 2105	83.5	—	—	4/28	35	1
Dixie Bell	DB702	82.5	—	—	4/28	36	1
GoWheat	2032	81.8	82.4	71.2	4/4	35	1
Progeny Ag	21-2	81.7	_	—	4/22	30	1
Delta Grow	1000	81.5	85.7	86.4	4/28	39	1
SunGrains	GA 121012-19LE8 *	81.1	—	_	4/22	40	1
VCIA	Liberty 5658	80.2	83.4	76.3	4/19	37	1
USG	3352	79.9			4/28	39	1
Progeny Ag	#BULLET	79.7	88.5	85.6	4/28	38	2
AgriMAXX	473	79.7	87.6	84.7	4/28	37	1
GoWheat	6000	78.9	83.2	70.2	4/28	33	1
GoWheat	6056	78.8	_	_	4/28	34	1
Delta Grow	1200	78.7	92.8	_	4/28	34	1
Pioneer	26R36	78.2	_		2/24	33	1
Dyna-Gro	9172	77.2	90.0		4/22	35	1
USG	3783	76.9			4/28	36	1
Dvna-Gro	9002	76.8	86.1	81.3	4/28	39	1
Progeny Ag	21-4	76.7	_		4/28	31	1
Progeny Ag	#TURBO	75.8	80.8	73.1	4/20	36	1
Dixie Bell	DB918	75.4			4/25	31	1
GoWheat	2058	75.4	81.2	80.6	4/19	34	1
SunGrains	GA 111055-19LE12 *	73.7			4/24	37	1
Pioneer	26R59	73.4			4/25	32	1
Revere Seed	2266	73.2			4/27	33	1
Dyna-Gro	9701	73.2	82.3	82.3	4/27	38	2
Delta Grow	1800	72.6	02.3	02.3	4/20	37	1
Dvna-Gro	9811	72.6	79.9	78.3	4/20	38	1
			79.9	70.3	4/20		•
Revere Seed	X22A	72.3				34	1
AgriMAXX	514	71.9	88.0		4/5	33	1
Revere Seed	2169	71.7	84.6		4/27	39	1
SunGrains	AR09137UC-17-2 *	71.6	79.2	68.7	4/22	43	1
Progeny Ag	21-3	71.4		—	4/28	36	1
Delta Grow	3500	71.3	76.8	62.9	4/11	35	1
AgriMAXX	503	71.3	87.2	81.4	4/28	36	1
Progeny Ag	20-2	71.2	—	—	4/22	32	1
Progeny Ag	#BUSTER	71.2	_		4/22	35	1
JSG	3472	71.1	86.8		4/28	38	2
SunGrains	LA13154D-WN1 *	70.8			4/20	41	3
Pioneer	26R41	70.7	—	_	4/14	31	1
AgriMAXX	513	69.7	79.5		4/27	40	1
AgSouth Genetics	AGS 2055	69.6	80.7	75.5	4/28	37	1
SunGrains	LA15203-LDH112 *	69.3	74.8		4/24	41	1
GoWheat	LA754	69.1	67.4	55.8	4/21	34	3
Dyna-Gro	9120	68.9	83.3	76.9	4/27	34	1

Brand	Variety ¹	2021–2022 yield	2-year avg.	3-year avg.	Date headed	Plant height	Lodging score
		bu/A	bu/A	bu/A		in	(1-5)
AgSouth Genetics	AGS 3022	68.5	—	—	4/24	37	1
SunGrains	GA 11052-19LE15 *	67.9	_	_	4/28	43	1
Dyna-Gro	9393	67.6	_	_	4/27	32	1
Progeny Ag	#BINGO	67.2	87.2	81.0	4/28	38	1
SunGrains	LANC11558-33 *	66.0		—	4/20	32	1
SunGrains	GA 151313-LDH224-19E38 *	65.8		—	4/19	41	1
VCIA	VA17W-75	65.6			4/14	31	1
SunGrains	AR11051-15-3 *	63.9	73.5	—	4/27	40	1
Progeny Ag	#CHAD	63.6		—	4/20	32	1
SunGrains	LA12275LDH-56 *	63.5	75.5		4/22	41	1
Dyna-Gro	WX20738	62.2	72.2	—	4/22	39	1
Progeny Ag	21-1	62.1		—	4/22	32	1
SunGrains	LA15203-LDH274 *	51.4	66.0	—	4/21	40	1
Mean		72.8					
CV		9.7					
LSD (0.05)		9.8					
R ²		63.5					
Error DF		171					

NORTHEAST MISSISSIPPI BRANCH, VERONA

Crop Summary

The plots were planted no-till into the previous season's soybean residue on the existing 76-inch raised beds. These raised beds were beneficial in the spring, when plots received plenty of rainfall. Timely fertilizer applications and the presence of raised seedbeds promoted good wheat. Harvest was completed in a timely manner without difficulties.

)
-0-12S)
-12S)
-
@ 32 oz/A
@ 0.9
ruary 15

Brand	Variety ¹	2021–2022 yield	2-year avg.	3-year avg.	Plant height	Lodging score	Test weight
		bu/A	bu/A	bu/A	in	(1-5)	lb/bu
Progeny Ag	#BUSTER	106.5		—	41	1	57.8
Pioneer	26R41	106.2	—	—	36	1	57.8
Pioneer	26R36	103.4	—	—	40	1	57.9
AgriMAXX	503	102.9	104.6	94.5	39	1	57.3
Dixie Bell	DB918	102.6	—	—	35	1	56.5
Dyna-Gro	9172	102.5	103.9	—	41	1	57.3
Revere Seed	2169	102.3	101.5	—	36	1	55.7
Dixie Bell	DB702	101.2	—	—	39	1	55.6
USG	3783	101.2	—	—	36	1	54.4
Progeny Ag	20-2	101.0	—	_	36	1	59.4
AgriMAXX	516	100.4	94.5		38	1	56.9
Dyna-Gro	9811	99.1	93.9	88.1	38	1	55.5
Pioneer	26R59	98.8	—		35	1	54.2
SunGrains	GA 121012-19LE8 *	98.6	—		38	1	54.8
Dyna-Gro	WX20738	98.3	92.2		38	1	56.5
AgSouth Genetics	AGS 2055	98.1	98.9	91.4	41	1	57.3
Delta Grow	1000	97.9	96.7	88.8	39	1	54.9
Progeny Ag	21-4	97.8		_	36	1	56.2
GoWheat	2058	97.8	96.1	90.0	34	1	56.7
Progeny Ag	#TURBO	97.6	89.8	82.4	34	1	57.2
Delta Grow	3500	97.6	96.7	84.5	37	1	56.0
Progeny Ag	#BINGO	97.3	96.1	91.0	34	1	55.8
SunGrains	AR09137UC-17-2 *	97.2	93.6	87.1	40	1	54.8
Progeny Ag	21-1	97.0	_	_	36	1	56.5
USG	3472	96.7	95.2	_	36	1	57.1
Delta Grow	1200	96.3	98.1		37	1	55.8
SunGrains	LA12275LDH-56 *	95.6	91.3	_	38	1	56.8
SunGrains	AR11051-15-3 *	95.5	95.9	_	42	1	56.5
GoWheat	2032	95.5	98.0	88.5	30	1	56.9
Progeny Ag	21-3	95.4	_	_	32	1	55.0
GoWheat	6000	95.0	99.2	90.8	36	1	56.4
USG	3352	94.9	_	_	36	1	57.7
Dyna-Gro	9701	94.8	90.6	86.4	43	1	57.4
SunGrains	LA15203-LDH112 *	94.7	91.0	_	35	1	58.2
Dyna-Gro	9120	94.6	96.1	90.7	38	1	57.5
Progeny Ag	21-2	94.5	_	_	36	1	53.8
AgriMAXX	514	94.0	93.9	_	35	1	56.3
Dyna-Gro	9002	94.0	96.8	89.3	39	1	54.7
GoWheat	6056	93.8	_		39	1	57.7
SunGrains	GA 11052-19LE15 *	93.8		_	40	1	57.7
Progeny Ag	#BULLET	93.4	94.2	86.9	40	1	56.0

Brand	Variety ¹	2021–2022 yield	2-year avg.	3-year avg.	Plant height	Lodging score	Test weight
		bu/A	bu/A	bu/A	in	(1-5)	lb/bu
Revere Seed	2266	93.2	_	_	37	1	55.4
AgSouth Genetics	AGS 3022	93.2	—	—	35	1	55.5
SunGrains	LA13154D-WN1 *	93.0	—	—	36	1	54.6
SunGrains	LA15203-LDH274 *	92.7	88.2	—	36	1	56.0
Dyna-Gro	9393	92.5	_	_	34	1	54.5
SunGrains	GA 151313-LDH224-19E38 *	92.3	_	_	36	1	56.2
GoWheat	LA754	92.2	89.9	84.4	37	1	55.2
SunGrains	GA 111055-19LE12 *	92.2		—	38	1	56.4
AgriMAXX	513	91.7	93.6	—	36	1	56.9
VCIA	Liberty 5658	91.6	89.2	86.5	38	1	57.4
AgriMAXX	EXP 2105	91.1	_	_	39	1	56.5
Delta Grow	1800	91.1			39	1	57.1
VCIA	VA17W-75	91.1	_	_	37	1	55.6
Revere Seed	X22A	90.3	_	_	35	1	57.2
Progeny Ag	#CHAD	87.6	_	_	31	1	53.3
AgriMAXX	473	87.4	90.7	85.1	40	1	55.7
SunGrains	LANC11558-33 *	87.0	_	—	33	1	55.9
Mean		96.0					
CV		9.8					
LSD (0.05)		13.2					
R ²		22.8					
Error DF		171					

WHEAT AND OAT SEEDS PER POUND

Brand Variety Seeds per pound Fungicide and/or Insecticio						
	-	• •	Ū			
/CIA	VA17W-75	14,441	CruiserMaxx Cereals+Cruiser 5FS			
	Liberty 5658	13,713	Foothold Virock+Awaken ST			
)yna Gro	9120 9172	13,682	DynaShield Foothold w/ Awaken			
		13,381	DynaShield Foothold w/ Awaken			
	9701	13,407	DynaShield Foothold w/ Awaken			
	9811 WX20738	12,213 11,379	DynaShield Foothold w/ Awaken DynaShield Foothold w/ Awaken			
	9393	10,990				
	9002	11,478	DynaShield Foothold w/ Awaken DynaShield Foothold w/ Awaken			
Sungrains	GA 151313-LDH224-19E38	14,840	Vibrance Extreme			
oungranns	GA 111055-19LE12	12,815	Vibrance Extreme			
	GA 121012-19LE8	11,140	Vibrance Extreme			
	GA 11052-19LE15	10,906	Vibrance Extreme			
	LA12275LDH-56	9,743	CruiserMaxx Vibrance			
	LA13154D-WN1	11,586	CruiserMaxx Vibrance			
	LA15203-LDH112	12,270	CruiserMaxx Vibrance			
	LA15203-LDH172	9,998	CruiserMaxx Vibrance			
	LA16020-LDH22	10,985	CruiserMaxx Vibrance			
	LANC11558-33	11,052	CruiserMaxx Vibrance			
Delta Grow	1000	11,845				
	1200	13,890				
	1800	12,550				
	3500	10,407				
griMaxx	514	12,600	PrimeST			
gimasi	513	11,500	PrimeST			
	503	11,600	PrimeST			
	516	11,800	PrimeST			
	473	12,400	PrimeST			
Jni. Of Arkansas	AR09137UC-17-2	12,060	Gaucho 600 + Vibrance Extreme			
	AR11051-15-3	10,520	Gaucho 600 + Vibrance Extreme			
griMaxx	EXP 2105	10,600	PrimeST			
levere Seed	2169	12,200	Radius Premium			
	2266	10,600	Radius Premium			
	X22A	13,000	Radius Premium			
ISG	3783	11,990	lpconazole, metalaxyl, imidicloprid			
352	3352	10,730	lpconazole, metalaxyl, imidicloprid			
472	3472	12,190	Ipconazole, metalaxyl, imidicloprid			
rogeny	# BULLET	11,495	ProServoW			
	#CHAD	13,270	ProServoW			
	#BUSTER	12,420	ProServoW			
	#BINGO	12,880	ProServoW			
	#TURBO	11,445	ProServoW			
	21-1	10,740	ProServoW			
	21-2	13,800	ProServoW			
	21-3	13,140	ProServoW			
	20-2	11,208	ProServoW			
GS	2055	12,870	CruiserMaxx, Vibrance Extreme			
oWheat	2058	12,034	CruiserMaxx, Vibrance Extreme			
	2032	10,455	CruiserMaxx, Vibrance Extreme			
	LA754	9,353	CruiserMaxx, Vibrance Extreme			
	6000	11,603	CruiserMaxx, Vibrance Extreme			
rogeny	21-4	13,567	ProServoW			
ixie Bell	DB702	13,600	Foothold Viroc			
	DB918	10,750	Cruiser Vibrance Cereals			
loWheat	6056	12,420	CruiserMaxx, Vibrance Extreme			
lioneer	26R36	12,500	LumiGEN			
	26R59	10,500	LumiGEN			
	26R41	12,000	LumiGEN			

Table 14. Average number of oat seeds per pound.					
Brand	Variety	Treatment	Seeds per pound		
Sweet Caroline	FL 0720	Untreated	15,980		
SunGrains	LA14032SBS-163-2	Untreated	15,440		
SunGrains	LA14105SBS56-1	Untreated	14,735		
SunGrains	LA15015SB-S50	Untreated	14,535		
GoWild	Savage	CruiserMaxx, Vibrance Extreme	11,408.		

SUMMARY OF OAT YIELDS

Brand	Variety ¹	Starkville	Verona	North avg.	Beaumont (South)	Stoneville (Delta)	Overall avg.
		bu/A	bu/A	bu/A	bu/A	bu/A	bu/A
GoWild	Savage	95.1	92.4	93.8	22.0	55.2	66.2
SunGrains	LA14105SBS56-1 *	105.4	81.1	93.2	20.7	67.1	68.6
SunGrains	LA15015SB-S50 *	109.1	77.7	93.4	24.4	64.2	68.8
SunGrains	LA14032SBS-163-2 *	104.3	84.9	94.6	21.8	68.1	69.8
Sweet Caroline	FL 0720	96.6	77.1	86.8	33.3	59.6	66.6
Mean		102.1	82.7	92.4	24.4	62.8	68.0
CV		15.8	14.9		12.1	17.3	
LSD (0.05)		NS	NS		4.5	NS	
R ²		21	35		80	46	
Error DF		12	8		12	12	

Table 16. Two-year summary of oat variety trials in Mississippi.							
Brand	Variety	Starkville	Verona	Stoneville	Overall avg.		
		bu/A	bu/A	bu/A	bu/A		
Sweet Caroline	FL 0720	119.5	68.1	90.8	92.8		
Overall Mean		119.5	68.1	90.8	92.8		

Table 17. Three-year summary of oat variety trials in Mississippi.					
Brand	Variety	Starkville	Verona	Overall avg.	
		bu/A	bu/A	bu/A	
Sweet Caroline	FL 0720	90.6	60.1	75.4	
Overall Mean		90.6	60.1	75.4	

MSU COASTAL R&E CENTER, BEAUMONT

Crop Summary

The oat plots were planted in early November following a crop of sorghum. There was good soil moisture at planting for germination, and all plots quickly emerged to a good stand. Rainfall occurred at the time of harvest at this location, but harvest was delayed only about a week and was then completed without difficulties.

Brand	Variety ¹	2021–2022 yield	2-year avg. ²	3-year avg. ²	Plant height	Lodging score
		bu/A	bu/A	bu/A	in	(1-5)
Sweet Caroline	FL 0720	33.3		—	47	3
SunGrains	LA15015SB-S50 *	24.4			48	2
GoWild	Savage	22.0	_	_	49	3
SunGrains	LA14032SBS-163-2 *	21.8	_	_	47	3
SunGrains	LA14105SBS56-1 *	20.7	_	_	45	2
Mean		24.4				
CV		12.1				
LSD (0.05)		4.5				
R ²		80				
Error DF		12				

R. R. FOIL PLANT SCIENCE RESEARCH CENTER, STARKVILLE

Crop Summary

The plots were planted into a seedbed that had been disked and harrowed prior to planting. The plots emerged to a good stand following planting. Harvest was completed in a timely manner.

Planting date November 3
Harvest dateJune 6
Soil typeMarietta fine sandy loam
Soil pH6.4
Soil fertilityP=M; K=M
Previous crop Soybean
Fertilizer
on February 15; N @ 50 lb/A (33-0-0-12S)
on March 24; N @ 50 lb/A (33-0-0-12S)
on April 21
HerbicidePreemergence — Gramoxone SL 2.0 @ 32 oz/A on November 3
Postemergence — Harmony Extra SG @
0.9z/A on February 15

Brand	Variety ¹	2021–2022 yield	2-year avg.	3-year avg.	Plant height	Lodging score
		bu/A	bu/A	bu/A	in	(1-5)
SunGrains	LA15015SB-S50 *	109.1	—	—	48	1
SunGrains	LA14105SBS56-1 *	105.4		_	41	1
SunGrains	LA14032SBS-163-2 *	104.3		_	49	1
Sweet Caroline	FL 0720	96.6	119.5	90.6	40	1
GoWild	Savage	95.1	_	—	49	1
lean		102.1				
CV		15.8				
LSD (0.05)		NS				
R ²		21				
Error DF		12				

DELTA BRANCH EPERIMENT SATION, STONEVILLE

Crop Summary

The oat plots were planted in a well-prepared seedbed that had been disked and harrowed just prior to planting. Soil moisture at planting was ideal for germination, and the plots quickly emerged to a good stand. Rainfall that occurred during early June, delayed harvest slightly but didn't appear to hurt yield potential at this location. Harvest was completed without difficulties.

Planting dateNovember 8
Harvest dateJune 13
Soil typeBosket very fine sandy loam
Soil pH
Soil fertilityP=H; K=H
Previous crop Soybean
Fertilizer
Topdress — N @ 34 lb/A (46-0-0) on February 24;
N @ 48 lb/A (46-0-0) on March 31
HerbicidePreemergence — Gramoxone SL 2.0 @ 32 oz/A

on November 8

Brand	Variety ¹	2021–2022 yield	2-year avg.	3-year avg.²	Plant height	Lodging score	
		bu/A	bu/A	bu/A	in	(1-5)	
SunGrains	LA14032SBS-163-2 *	68.1	—	—	49	1	
SunGrains	LA14105SBS56-1 *	67.1	_	_	43	1	
SunGrains	LA15015SB-S50 *	64.2	_	_	40	1	
Sweet Caroline	FL 0720	59.6	90.8	—	45	1	
GoWild	Savage	55.2	—	—	47	2	
Mean		62.8					
CV		17.3					
LSD (0.05)		NS					
R ²		46					
Error DF		12					

Northeast Mississippi Branch, Verona

Crop Summary

The plots were planted into the previous season's soybean residue on the existing 76-inch raised beds. These raised beds were beneficial in a spring with plenty of rainfall. Timely fertilizer applications and raised seedbeds allowed for good yields. Harvest was completed in a timely manner without difficulties.

Planting date November 2	
Harvest dateJune 7	
Soil typeLeeper silty clay	
Soil pH	
Soil fertility P=M; K=M	
Previous crop Soybean	
Fertilizer	2S)
on February 15; N @ 50 lb/A (33	-0-0-12S)
on March 24; N @ 50 lb/A (33-0	-0-12S)
on April 21	-
HerbicidePreemergence — Gramoxone SL 2.0 on November 4) @ 32 oz/A
Postemergence — Harmony Extra S	G @ 0.9
oz/A on February 15	
-	

Brand	Variety ¹	2021–2022 yield	2-year avg.	3-year avg.	Plant height	Lodging score
		bu/A	bu/A	bu/A	in	(1-5)
GoWild	Savage	92.4	—	—	50	ĺ1´
SunGrains	LA14032SBS-163-2 *	84.9	_	_	48	1
SunGrains	LA14105SBS56-1 *	81.1			50	1
SunGrains	LA15015SB-S50 *	77.7			47	1
Sweet Caroline	FL 0720	77.1	68.1	60.1	50	1
Mean		82.7				
CV		14.9				
_SD (0.05)		NS				
R ²		35				
Error DF		8				



The mission of the Mississippi Agricultural and Forestry Experiment Station and the College of Agriculture and Life Sciences is to advance agriculture and natural resources through teaching and learning, research and discovery, service and engagement which will enhance economic prosperity and environmental stewardship, to build stronger communities and improve the health and well-being of families, and to serve people of the state, the region and the world.

Scott Willard, Director

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