MISSISSIPPI WHEAT & OAT

VARIETY TRIALS, 2020

Information Bulletin 549 • August 2020

MISSISSIPPI'S OFFICIAL VARIETY TRIALS

MISSISSIPPI STATE UNIVERSITY™
MS AGRICULTURAL AND
FORESTRY EXPERIMENT STATION

TECHNICAL ADVISORY COMMITTEE

Erick Larson, Chairman
MSU Extension Service
Grain Crops Specialist
Plant and Soil Sciences
Mississippi State University

Tom Allen
Plant Pathologist
Delta Research and Extension Center
Stoneville, Mississippi

John Blanton
Interim Associate Director, MAFES
Mississippi State University

Wes Burger
Associate Director, MAFES
Mississippi State University

Keith Daniels
Superintendent
MAFES Research Centers
Mississippi State University

Darrin Dodds
Department Head
Plant and Soil Sciences
Mississippi State University

Josh White
Manager, Forage Variety Testing
Plant and Soil Sciences
Mississippi State University

NOTICE TO USER

This Mississippi Agricultural and Forestry Experiment Station Information Bulletin is a summary of research conducted at locations shown on the map on the second page. It is intended for the use of colleagues, cooperators, and sponsors. The interpretation of data presented herein may change after additional experimentation. Information included herein is not to be construed either as a recommendation for use or as an endorsement of a specific variety or product by Mississippi State University or the Mississippi Agricultural and Forestry Experiment Station.

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, 2020

MAFES Official Variety Trial Contributors

Brad Burgess
Director, Variety Evaluations
Mississippi State University

Tom Allen
Associate Extension/Research Professor
Delta Research and Extension Center

Jake Bullard
Assistant Director, Variety Evaluations
Mississippi State University

Dan Haire
Extension Agent II
DeSoto County Extension Service

Erick Larson
Extension Grain Crops Specialist
Plant and Soil Sciences
Mississippi State University

Bisoondat Macoon
Research Professor
and Facilities Coordinator
Brown Loam Branch Experiment Station

Isaac Pickett
Research Associate I
Brown Loam Branch Experiment Station

Brett Rushing
Assistant Extension/Research Professor
Coastal Plain Branch Experiment Station

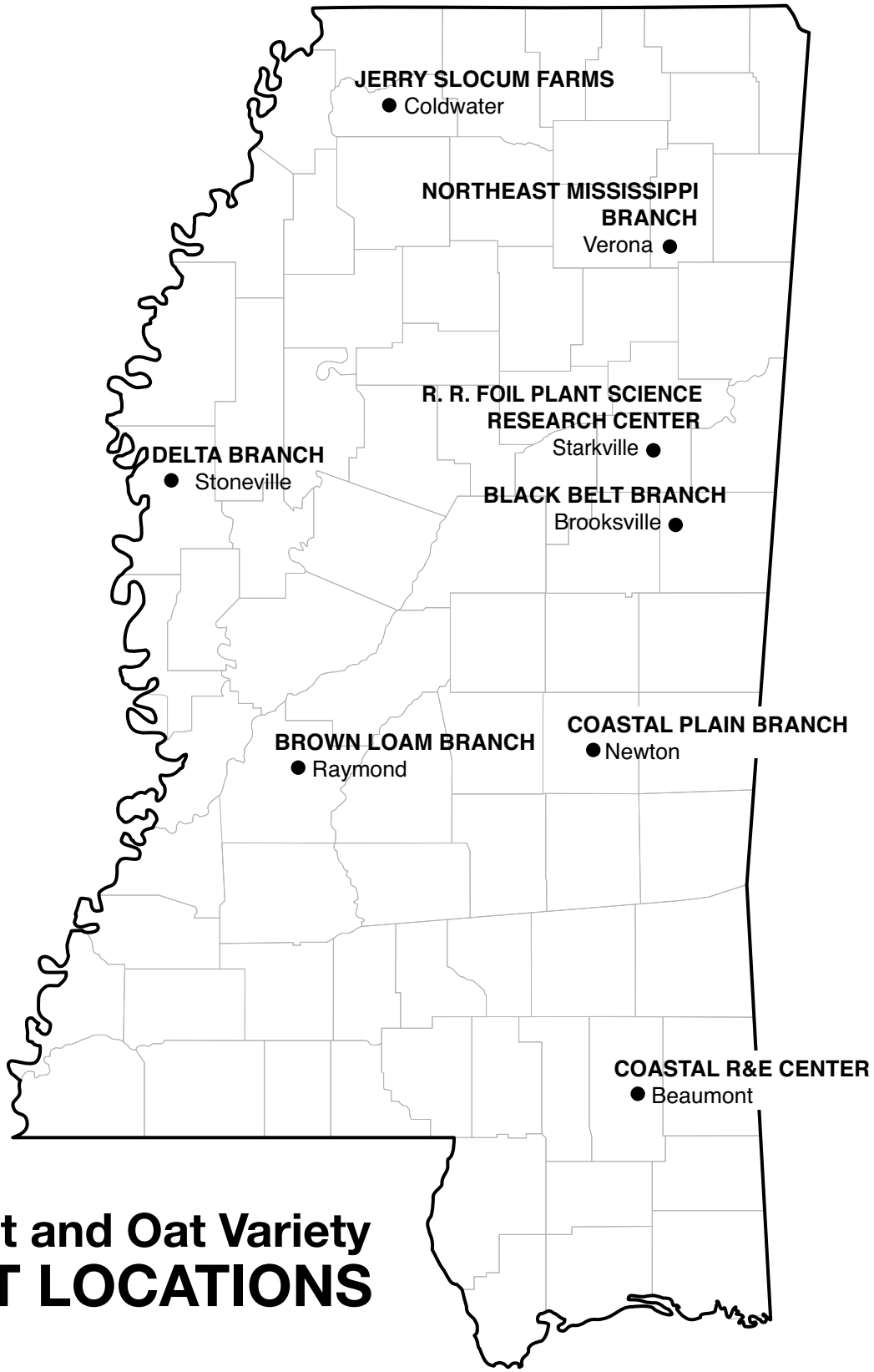
Justin McCoy
Assistant Professor
North Mississippi Research and
Extension Center

Josh White
Manager, Forage Variety Testing
Plant and Soil Sciences
Mississippi State University

For more information, contact Burgess at (662) 325-2390; email, Brad.Burgess@msstate.edu. Recognition is given to Jason Hillhouse, research technician for the Variety Trial Program, for his assistance in packaging, planting, harvesting, and recording plot data. This publication was prepared by Dixie Albright, office associate for MAFES Research Support Units. Josh White, manager of forage variety testing, performed statistical analyses

This document was approved for publication as Information Bulletin 549 of the Mississippi Agricultural and Forestry Experiment Station. It was published by the Office of Agricultural Communications, a unit of the Mississippi State University Division of Agriculture, Forestry, and Veterinary Medicine. It is a contribution of the Mississippi Agricultural and Forestry Experiment Station.

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



Wheat and Oat Variety
TEST LOCATIONS

Mississippi Wheat and Oat Variety Trials, 2020

Introduction

Small grains are grown throughout Mississippi. Wheat is the primary crop, followed by oats. Wheat variety trials were conducted at nine locations, while oat trials were conducted at five locations in Mississippi in 2019–2020. 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 = all plants leaning slightly or only a few plants down; 3 = 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	60 bu/A
Bill	55 bu/A
Charlie	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.

Table. 1 2019–20 MSU OVT wheat and oat locations and dates.

Location	Soil type	Planting date	Harvest date	Crop tested
Beaumont	McLaurin sandy loam	11/21/19	6/01/20	wheat
Brooksville	Brooksville silty clay	11/11/19	6/17/20	wheat & oat
Coldwater	Calloway silt loam	11/06/19	6/12/20	wheat
Newton[1]	Prentiss very fine sandy loam	11/20/19	6/11/20	wheat
Raymond	Loring silt loam	11/13/19	6/15/20	wheat & oat
Starkville[1]	Marietta fine sandy loam	11/08/19	6/03/20	wheat & oat
Stoneville	Bosket very fine sandy loam	11/19/19	6/02/20	wheat & oat
Verona	Leeper silty clay	11/18/19	6/16/20	wheat & oat

[1]Wheat yield data not reported due to stand damage as a result of animals or flooding.

Wheat and Oat Seed Sources

Table 2. Companies supplying wheat brands/varieties entered.

Company	Brand	Variety	Seed treatment
AgriMAXX Wheat Company 7167 Highbanks Rd. Mascoutah, IL 62258	AgriMAXX AgriMAXX AgriMAXX AgriMAXX AgriMAXX AgriMAXX AgriMAXX	481 415 473 EXP 2003 492 496 506	Cruiser, PRIME ST, Maxium
CORTEVA Agriscience AG Division of Dow DuPont 425 Abbeydale Way Columbia, SC 29229	Pioneer Pioneer Pioneer Pioneer Pioneer	26R10 26R36 26R41 26R45 26R59	Cruiser, Vibrance, QuattroH
Delta Grow Seed P.O. Box 219 England, AR 72406	Delta Grow Delta Grow	1000 3500	—
U. of Georgia UGA-CAES-Griffin Campus 1109 Experiment St. Griffin, GA 30223	U. of Georgia U. of Georgia U. of Georgia U. of Georgia U. of Georgia U. of Georgia U. of Georgia	GA11656-17 E11 GA09129-16E55 GA09436-16LE12 GA10407-17 E8 GA10268-17 LE16 GA101298-17 LE11 GA101004-17 LE17	Dividend Extreme
Dyna-Gro Seed 6221 Riverside Dr., Suite One Dublin, OH 43017	Dyna-Gro Dyna-Gro Dyna-Gro Dyna-Gro Dyna-Gro	9701 9811 9002 WX20731 WX20737	Dividend Extreme
Louisiana State University SPESS 104 M.B. Sturgis Hall Baton Rouge, LA 70803	LSU LSU	LA12080LDH-72 LA15166-LDH272	Vibrance Extreme + Cruiser
Limagrain Cereal Seeds 257 E. Hail Bushnell, IL 61422	— LCS	L11713	
Progeny Ag Products 1529 Hwy. 193 South Wynne, AR 72396	Progeny Ag Progeny Ag Progeny Ag Progeny Ag Progeny Ag Progeny Ag Progeny Ag Progeny Ag Progeny Ag Progeny Ag Progeny Ag	PGX 18-9 #BULLET #Turbo #FURY PGX 19-3 PGX 19-12 PGX 18-7 PGX 18-8 PGX 18-11 PGX 19-15 PGX 19-17	Evergol Energy/Gaucho 600
UniSouth Genetics 3205 C Hwy. 46 S Dickson, TN 37055	USG USG USG USG	3536 3571 3640 3539	Ipconazole + Metalaxyl + Imidacloprid
U. of Arkansas	U. of Arkansas U. of Arkansas	AR7133C-19-4 AR6146E-1-4	Vibrance Extreme & Gaucho 600

Continued.

Table 2 (continued). Companies supplying wheat brands/varieties entered.

Company	Brand	Variety	Seed treatment
Local Seed Company 802 Rozelle St. Memphis, TN 38104	Local Seed Local Seed Local Seed Local Seed	LWX 20D LWX 20B LWX 20A LW2848	Radius Premium
Stratton Seed Company 1530 Hwy. 79 South Stuttgart, AR 72160	AGS GoWheat GoWheat GoWheat AGS AGS AGS GoWheat	2055 2058 2032 LA754 2038 2024 3040 6000	CruiserMaxx + Vibrance Extreme
Texas A&M AgriLife Research 2600 S Neal Commerce, TX 75429	Texas A&M Texas A&M	TX15D9579 TX15D9597	CruiserMaxx + Vibrance
VA Tech Eastern Virginia AREC 2229 Menokin Rd. Warsaw, VA 22572	VA TECH VA TECH	Hilliard Liberty 5658	Foothold Virock Raxil ProMD + Resonate 600ST

Table 3. Companies supplying oat brands/varieties entered.

Company	Brand	Variety	Seed treatment
Stratton Seed Company 1530 Hwy. 79 South Stuttgart, AR 72160	Horizon	270	CruiserMaxx + Vibrance Extreme
Angelina Grain Company 16371 Hwy. 15 South Vidalia, LA 71373	Sweet Caroline	FL 0720	Nipsit Suite

Summaries of Wheat Yields

Table 4. 2019–20 summary of wheat variety trials in Mississippi.

Brand	Variety[1]	Brooksville	Coldwater	Verona	North average	Beaumont	Raymond	South average	Stoneville (delta)	Overall average
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
AgriMAXX	473	84.7	71.8	73.8	76.8	72.7	72.1	72.4	78.9	75.7
AgriMAXX	481	60.5	55.4	70.9	62.3	66.4	63.1	64.7	30.6	57.8
AgriMAXX	492	70.3	59.1	62.7	64.0	61.7	72.1	66.9	45.0	61.8
AgriMAXX	496	83.0	72.8	74.4	76.7	48.5	71.4	59.9	79.3	71.6
AgriMAXX	503	79.1	30.2	74.5	61.2	51.4	61.9	56.7	69.7	61.1
AgriMAXX	415	86.3	69.2	74.6	76.7	74.4	73.9	74.2	61.2	73.3
AgriMAXX	EXP 2003 *	81.0	74.0	71.5	75.5	46.1	54.1	50.1	73.1	66.6
AGS	2024	71.2	60.1	70.1	67.1	47.3	67.6	57.4	54.6	61.8
AGS	2038	53.2	71.4	74.9	66.5	71.9	64.5	68.2	67.7	67.3
AGS	2055	60.1	75.5	76.4	70.7	69.4	60.6	65.0	65.0	67.8
AGS	3040	57.4	68.3	79.3	68.3	73.7	63.3	68.5	67.2	68.2
Delta Grow	DG 1000	92.0	73.3	72.9	79.4	76.6	75.8	76.2	87.9	79.8
Delta Grow	DG 3500	65.7	56.5	60.1	60.8	58.1	67.6	62.9	35.2	57.2
Dyna-Gro	9002	79.4	78.7	74.5	77.5	63.8	69.1	66.4	71.9	72.9
Dyna-Gro	9701	88.9	74.5	77.9	80.4	74.0	65.5	69.8	82.3	77.2
Dyna-Gro	9811	81.8	75.5	76.6	78.0	69.1	80.3	74.7	75.1	76.4
Dyna-Gro	Blanton	58.8	61.0	76.3	65.4	30.0	67.0	48.5	37.3	55.1
Dyna-Gro	Rutledge	56.6	64.6	62.6	61.2	48.9	59.2	54.1	52.7	57.4
Dyna-Gro	WX20731 *	79.4	74.4	77.9	77.2	76.2	72.3	74.3	68.7	74.8
Dyna-Gro	WX20737 *	77.6	70.3	79.7	75.9	61.6	77.1	69.4	64.0	71.7
Go Wheat	6000	66.2	62.1	74.2	67.5	55.9	57.0	56.4	44.0	59.9
Go Wheat	LA754	43.6	60.4	73.3	59.1	61.3	34.0	47.7	32.7	50.9
Go Wheat	2032	62.1	56.3	69.6	62.7	44.7	65.1	54.9	48.9	57.8
Go Wheat	2058	66.6	76.0	77.7	73.4	82.1	73.7	77.9	79.5	75.9
Limagrain Cereal Seeds	L11713	74.0	55.0	73.6	67.5	60.2	65.3	62.7	42.0	61.7
Local Seed	LWX20A *	79.8	82.5	73.4	78.6	56.3	44.9	50.6	74.3	68.5
Local Seed	LW2046	88.8	75.1	79.7	81.2	56.3	61.9	59.1	72.0	72.3
Local Seed	LWX20D *	51.3	62.4	65.2	59.6	50.2	53.6	51.9	45.0	54.6
Local Seed	LW 2848	81.7	71.0	77.4	76.7	75.5	71.0	73.3	86.2	77.1
LSU	AR09137UC-17-2 *	68.1	60.9	74.0	67.7	52.7	82.7	67.7	47.5	64.3
LSU	LA12080LDH-72 *	72.7	57.8	70.3	66.9	66.6	70.8	68.7	48.9	64.5
LSU	LA15166-LDH272 *	63.2	56.1	67.4	62.2	73.5	62.3	67.9	42.5	60.8
Pioneer	26R36	78.2	71.8	81.2	77.0	76.5	83.0	79.7	57.7	74.7
Pioneer	26R41	81.6	70.2	72.9	74.9	60.6	84.0	72.3	76.8	74.3
Pioneer	26R59	96.1	54.8	79.9	76.9	66.6	71.3	69.0	60.3	71.5
Pioneer	26R10	84.4	71.5	81.8	79.2	70.3	70.3	70.3	68.5	74.5
Pioneer	26R45	85.8	49.9	77.1	70.9	56.0	70.3	63.2	85.0	70.7
Progeny Ag	#Bullet	82.9	71.6	72.3	75.6	75.0	81.5	78.2	79.9	77.2
Progeny Ag	#Turbo	56.4	64.9	67.6	63.0	70.7	71.9	71.3	57.6	64.8
Progeny Ag	PGX18-9 *	74.4	85.0	73.0	77.5	46.4	63.9	55.2	71.8	69.1
Progeny Ag	PGX19-12 *	85.7	79.3	80.8	81.9	73.8	68.6	71.2	68.7	76.1
Progeny Ag	PGX19-15 *	77.7	58.2	87.4	74.4	64.1	79.4	71.8	60.9	71.3
Progeny Ag	PGX19-17 *	84.5	56.5	85.1	75.4	76.0	75.8	75.9	44.8	70.5
Progeny Ag	PGX19-3 *	85.8	24.7	78.4	63.0	52.1	59.6	55.8	79.9	63.4
Progeny Ag	#FURY	51.5	36.2	72.5	53.4	71.2	58.0	64.6	38.5	54.7
Progeny Ag	PGX18-7 *	90.2	71.9	78.0	80.0	70.0	90.6	80.3	66.9	77.9
Progeny Ag	PGX18-8 *	73.7	81.6	77.6	77.6	67.3	76.6	72.0	62.1	73.1
Progeny Ag.	PGX18-11 *	57.4	61.0	57.4	58.6	83.6	68.8	76.2	50.7	63.1
Texas A&M	TX15D9579 *	46.8	61.5	56.7	55.0	72.5	45.4	58.9	24.5	51.2
Texas A&M	TX15D9597 *	58.2	59.6	57.7	58.5	58.9	61.4	60.2	49.6	57.6
U. of Arkansas	AR06146E-1-4 *	43.3	61.3	69.3	58.0	49.7	65.9	57.8	50.2	56.6
U. of Georgia	GA09129-16E55 *	43.6	55.7	59.0	52.8	42.2	44.2	43.2	35.8	46.7
U. of Georgia	GA09436-16LE12 *	55.3	56.7	52.8	55.0	64.1	54.3	59.2	41.7	54.2
U. of Georgia	GA101004-17 LE17 *	57.0	50.9	60.7	56.2	76.3	58.1	67.2	33.2	56.0
U. of Georgia	GA101298-17 LE11 *	39.8	68.3	73.3	60.4	31.9	43.9	37.9	52.0	51.5
U. of Georgia	GA10268-17 LE16 *	80.2	66.6	78.3	75.0	54.8	71.8	63.3	68.1	70.0
U. of Georgia	GA10407-17 E8 *	60.7	61.0	76.1	65.9	51.4	61.1	56.3	49.7	60.0
U. of Georgia	GA11656-17 E11 *	60.3	57.6	76.9	64.9	48.7	61.3	55.0	59.9	60.8
USG	3536	72.3	70.7	64.9	69.3	77.2	69.6	73.4	71.3	71.0
USG	3539	85.8	80.9	74.9	80.5	58.4	67.8	63.1	75.4	73.8

[1]Continued

Table 4 (continued). 2019–20 yield summary of wheat variety trials in Mississippi.

Brand	Variety[1]	Brooksville	Coldwater	Verona	North average	Beaumont	Raymond	South average	Stoneville (delta)	Overall average
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
USG	3571	74.7	68.0	61.9	68.2	49.0	64.4	56.7	71.7	65.0
USG	3640	57.4	65.7	61.5	61.6	63.9	54.4	59.2	38.6	56.9
VA Tech	HILLIARD	84.5	71.6	82.8	79.6	71.8	69.2	70.5	63.1	73.8
VA Tech	Liberty 5658	69.1	66.0	81.1	72.1	74.5	59.3	66.9	62.0	68.7
Mean		70.6	64.7	72.6	69.3	62.5	66.0	64.3	59.5	66.0
CV		10.6	11.4	13.2		16.4	17.4		13.5	
LSD (0.05)		10.4	10.3	13.4		14.3	16.0		11.2	
R^2		82.8	76.2	66.2		65.8	56.1		84.0	
Error DF		189	189	189		189	189		189	

[1]Variety followed by an asterisk indicates an experimental entry.

Table 5. Two-year summary of wheat variety trials in Mississippi.

Brand	Variety[1]	Brooksville	Coldwater	Verona	Beaumont	Raymond	Stoneville	Overall average
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
AgriMAXX	415	73.1	72.8	73.4	64.8	75.2	61.0	70.0
AgriMAXX	473	76.3	70.6	75.3	61.4	76.6	71.9	72.0
AgriMAXX	481	50.1	63.3	76.0	70.9	57.0	47.5	60.8
AGS	2024	59.7	64.3	67.0	57.4	62.2	59.5	61.7
AGS	2038	46.5	66.6	66.2	71.7	51.4	62.4	60.8
AGS	2055	62.6	68.5	72.6	77.9	67.8	69.5	69.8
Delta Grow	DG 1000	77.9	72.0	69.7	68.8	76.3	72.0	72.8
Delta Grow	DG 3500	52.1	65.6	67.1	67.5	56.9	39.9	58.2
Dyna-Gro	9002	70.0	77.1	72.3	60.5	76.3	66.5	70.5
Dyna-Gro	9701	76.6	72.6	75.0	70.3	71.2	71.5	72.9
Dyna-Gro	9811	73.2	73.4	72.7	57.5	77.1	66.4	70.1
Go Wheat	2032	55.1	68.4	72.1	67.0	59.4	57.1	63.2
Go Wheat	2058	66.2	76.7	70.8	78.8	77.0	71.9	73.6
Go Wheat	LA754	48.5	69.6	75.6	66.1	44.1	44.6	58.1
Limagrain Cereal Seeds	L11713	67.3	64.7	70.9	66.4	70.8	49.5	64.9
Local Seed	LW 2848	73.6	73.3	74.8	68.2	75.1	72.8	73.0
Pioneer	26R10	69.5	71.8	71.1	56.7	71.5	62.8	67.2
Pioneer	26R36	69.7	74.1	74.0	67.7	76.5	56.0	69.7
Pioneer	26R41	72.4	71.5	64.3	59.9	78.7	67.9	69.1
Pioneer	26R45	77.4	64.6	76.4	48.8	76.8	73.3	69.6
Pioneer	26R59	75.9	65.8	74.7	62.4	72.4	53.8	67.5
Progeny Ag	#Bullet	74.8	76.3	73.8	65.8	79.3	71.7	73.6
Progeny Ag	#FURY	53.3	52.2	71.4	77.3	58.6	46.8	59.9
Progeny Ag	#Turbo	55.6	60.1	74.0	76.6	76.4	47.5	65.0
Progeny Ag	PGX18-7 *	79.0	73.6	74.7	64.8	81.7	56.1	71.6
Progeny Ag	PGX18-8 *	68.2	71.5	70.7	56.9	73.1	46.7	64.5
Progeny Ag.	PGX18-11 *	53.0	63.4	70.7	81.6	66.5	49.5	64.1
Texas A&M	TX15D9579 *	40.4	59.7	58.9	72.2	45.0	26.1	50.4
Texas A&M	TX15D9597 *	50.8	66.8	62.6	66.2	55.1	50.2	58.6
U. of Arkansas	AR06146E-1-4 *	49.4	65.8	75.3	65.5	64.1	56.4	62.8
U. of Georgia	GA09129-16E55 *	44.3	63.8	66.6	56.6	46.0	48.1	54.2
U. of Georgia	GA09436-16LE12 *	49.3	64.0	53.1	67.9	43.8	42.4	53.4
USG	3536	71.3	70.1	67.5	68.0	75.6	67.8	70.0
USG	3539	74.6	70.5	65.7	50.7	70.0	66.7	66.4
Overall Mean		63.5	68.4	70.5	65.9	67.2	58.1	65.6

[1]Variety followed by an asterisk indicates an experimental entry.

Table 6. Three-year summary of wheat variety trials in Mississippi.

Brand	Variety[1]	Brooksville	Coldwater	Beaumont	Raymond	Stoneville	Overall avg.	
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	
AgriMAXX	415	77.4	77.8	71.8	82.7	64.5	74.8	
AgriMAXX	473	83.9	78.1	76.9	85.4	72.4	79.3	
AGS	2024	71.0	69.6	70.8	68.7	61.1	68.3	
AGS	2038	59.8	68.6	77.8	66.7	67.0	68.0	
AGS	2055	75.6	74.0	88.4	76.9	69.0	76.8	
Delta Grow	DG 1000	82.5	75.9	78.3	82.3	72.3	78.3	
Delta Grow	DG 3500	63.5	70.3	78.4	65.8	44.8	64.5	
Dyna-Gro	9701	85.9	80.2	79.6	80.0	71.2	79.4	
Dyna-Gro	9811	80.4	78.0	74.7	83.9	67.6	76.9	
Go Wheat	2058	74.7	82.1	81.9	79.9	70.1	77.7	
Go Wheat	LA754	60.6	70.3	77.9	53.5	48.9	62.3	
Pioneer	26R10	71.6	75.8	69.0	81.1	66.0	72.7	
Pioneer	26R36	78.0	81.3	78.4	85.2	58.8	76.3	
Pioneer	26R41	81.1	75.7	72.6	86.2	70.0	77.1	
Pioneer	26R45	82.8	72.5	62.9	83.7	71.1	74.6	
Pioneer	26R59	80.6	72.2	77.0	81.3	60.4	74.3	
Progeny Ag	#Bullet	84.8	82.0	75.0	85.7	71.0	79.7	
Progeny Ag	#Turbo	71.8	66.9	79.5	78.7	53.1	70.0	
U. of Arkansas	AR06146E-1-4 *	62.2	69.9	79.1	68.6	59.2	67.8	
USG	3536	78.8	75.8	78.4	82.7	67.6	76.6	
Overall Mean		75.3	74.8	76.4	78.0	64.3	73.8	

[1]Variety followed by an asterisk indicates an experimental entry.

MAFES Black Belt Branch, Brooksville

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 a season when above-average rainfall was recorded. Timely fertilizer applications and raised seedbeds allowed for decent yields, despite the excessive rainfall. Harvest was completed in a timely manner.

Planting date . . . .November 11
Harvest date . . . .June 17
Soil type . . . . . .Brooksville silty clay
Soil pH 6.7
Soil fertility . . . . . .P=M, K=M
Previous crop . . .Soybean
Fertilizer . . . . . .Preplant — 0-20-20 @ 200 lb/A
Topdress — 46 lb N/A (46-0-0) on February 28; 70 lb N/A (33-0-0-120) on March 25
Herbicide . . . . . .Preemergence — Gramoxone @ 32 oz/A on November 11; Zidua @ 1.75 oz/A, delayed PRE

Table 7. Yields of 64 wheat varieties at MAFES Black Belt Branch, Brooksville (Brooksville silty clay soil).

Brand	Variety[1]	2019–20 yield	2-year avg.	3-year avg.	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*(1-5)*	*in*
Pioneer	26R59	96.1	75.9	80.6	36	1
Delta Grow	DG 1000	92.0	77.9	82.5	39	1
Progeny Ag	PGX18-7 *	90.2	79.0	—	35	1
Dyna-Gro	9701	88.9	76.6	85.9	41	1
Local Seed	LW2046	88.8	—	—	36	1
AgriMAXX	415	86.3	73.1	77.4	34	1
Pioneer	26R45	85.8	77.4	82.8	40	1
USG	3539	85.8	74.6	—	38	1
Progeny Ag	PGX19-3 *	85.8	—	—	38	1
Progeny Ag	PGX19-12 *	85.7	—	—	35	1
AgriMAXX	473	84.7	76.3	83.9	36	1
VA Tech	HILLIARD	84.5	—	—	41	1
Progeny Ag	PGX19-17 *	84.5	—	—	29	1
Pioneer	26R10	84.4	69.5	71.6	34	1
AgriMAXX	496	83.0	—	—	37	1
Progeny Ag	#Bullet	82.9	74.8	84.8	39	1
Dyna-Gro	9811	81.8	73.2	80.4	37	1
Local Seed	LW 2848	81.7	73.6	—	38	1
Pioneer	26R41	81.6	72.4	81.1	38	1
AgriMAXX	EXP 2003 *	81.0	—	—	38	1
U. of Georgia	GA10268-17 LE16 *	80.2	—	—	36	1
Local Seed	LWX20A *	79.8	—	—	36	1
Dyna-Gro	WX20731 *	79.4	—	—	37	1
Dyna-Gro	9002	79.4	70.0	—	36	1
AgriMAXX	503	79.1	—	—	41	1
Pioneer	26R36	78.2	69.7	78.0	37	1
Progeny Ag	PGX19-15 *	77.7	—	—	36	1
Dyna-Gro	WX20737 *	77.6	—	—	37	1
USG	3571	74.7	—	—	37	1
Progeny Ag	PGX18-9 *	74.4	—	—	36	1
Limagrain Cereal Seeds	L11713	74.0	67.3	—	32	1
Progeny Ag	PGX18-8 *	73.7	68.2	—	33	1
LSU	LA12080LDH-72 *	72.7	—	—	36	1
USG	3536	72.3	71.3	78.8	36	1
AGS	2024	71.2	59.7	71.0	35	1
AgriMAXX	492	70.3	—	—	32	1
VA Tech	Liberty 5658	69.1	—	—	37	1
LSU	AR09137UC-17-2 *	68.1	—	—	37	1
Go Wheat	2058	66.6	66.2	74.7	35	1
Go Wheat	6000	66.2	—	—	37	1
Delta Grow	DG 3500	65.7	52.1	63.5	29	1
LSU	LA15166-LDH272 *	63.2	—	—	34	1
Go Wheat	2032	62.1	55.1	—	34	1

Continued

Table 7 (continued). Yields of 64 wheat varieties at MAFES Black Belt Branch, Brooksville (Brooksville silty clay soil).

Brand	Variety[1]	2019–20 yield	2-year avg.	3-year avg.	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*(1-5)*	*in*
U. of Georgia	GA10407-17 E8 *	60.7	—	—	35	1
AgriMAXX	481	60.5	50.1	—	27	1
U. of Georgia	GA11656-17 E11 *	60.3	—	—	37	1
AGS	2055	60.1	62.6	75.6	40	1
Dyna-Gro	Blanton	58.8	—	—	34	1
Texas A&M	TX15D9597 *	58.2	50.8	—	34	1
Progeny Ag.	PGX18-11 *	57.4	53.0	—	31	1
USG	3640	57.4	—	—	31	1
AGS	3040	57.4	—	—	36	1
U. of Georgia	GA101004-17 LE17 *	57.0	—	—	34	1
Dyna-Gro	Rutledge	56.6	—	—	31	1
Progeny Ag	#Turbo	56.4	55.6	71.8	34	1
U. of Georgia	GA09436-16LE12 *	55.3	49.3	—	38	1
AGS	2038	53.2	46.5	59.8	39	1
Progeny Ag	#FURY	51.5	53.3	—	33	1
Local Seed	LWX20D *	51.3	—	—	34	1
Texas A&M	TX15D9579 *	46.8	40.4	—	29	1
Go Wheat	LA754	43.6	48.5	60.6	36	1
U. of Georgia	GA09129-16E55 *	43.6	44.3	—	32	1
U. of Arkansas	AR06146E-1-4 *	43.3	49.4	62.2	35	1
U. of Georgia	GA101298-17 LE11 *	39.8	—	—	39	1
Mean		70.6				
CV		10.6				
LSD (0.05)		10.4				
R^2		82.8				
Error DF		189				

[1]Variety followed by an asterisk indicates an experimental entry.

MSU Coastal R&E Center, Beaumont

Crop Summary

The wheat plots were planted in late November following a cover crop of iron clay peas. Soil moisture at planting was sufficient for germination, and wheat quickly emerged to a good stand. Above-average rainfall was observed at this location. Easter storms, containing high winds, promoted considerable lodging of many varieties. Harvest was completed in a timely manner.

Planting date . . . .November 21
Harvest date . . . .June 1
Soil type . . . . . .McLaurin sandy loam
Soil pH 6.2
Soil fertility . . . . . .P=M, K=M
Previous crop . . .Iron clay pea
Fertilizer . . . . . .Preplant — 13-13-13 @ 250 lb/A
Topdress — 66 lb N/A (33-0-0-12S) on February 4; 66 lb N/A (33-0-0-12S) on March 2
Herbicide . . . . . .Preemergence — Gramoxone @ 32 oz/A on November 21; Zidua @ 1.75 oz/A delayed PRE

Table 8. Yields of 64 wheat varieties at MSU Coastal R&E Center, Beaumont.

Brand	Variety[1]	2019–20 yield	2-year avg.	3-year avg.	Date headed	Plant height	Lodging score
		bu/A	*bu/A*	*bu/A*		*in*	*(1-5)*
Progeny Ag.	PGX18-11 *	83.6	81.6	—	3/28	36	2
Go Wheat	2058	82.1	78.8	81.9	4/07	31	1
USG	3536	77.2	68.0	78.4	3/24	31	3
Delta Grow	DG 1000	76.6	68.8	78.3	4/08	32	1
Pioneer	26R36	76.5	67.7	78.4	4/07	33	2
U. of Georgia	GA101004-17 LE17 *	76.3	—	—	3/26	33	5
Dyna-Gro	WX20731 *	76.2	—	—	4/08	35	1
Progeny Ag	PGX19-17 *	76.0	—	—	3/21	31	5
Local Seed	LW 2848	75.5	68.2	—	4/09	36	2
Progeny Ag	#Bullet	75.0	65.8	75.0	4/08	33	2
VA Tech	Liberty 5658	74.5	—	—	3/23	35	2
AgriMAXX	415	74.4	64.8	71.8	3/30	32	3
Dyna-Gro	9701	74.0	70.3	79.6	3/26	38	3
Progeny Ag	PGX19-12 *	73.8	—	—	4/09	34	2
AGS	3040	73.7	—	—	3/28	38	3
LSU	LA15166-LDH272 *	73.5	—	—	3/20	32	4
AgriMAXX	473	72.7	61.4	76.9	4/08	24	3
Texas A&M	TX15D9579 *	72.5	72.2	—	3/15	34	4
AGS	2038	71.9	71.7	77.8	3/28	37	3
VA Tech	HILLIARD	71.8	—	—	3/30	36	1
Progeny Ag	#FURY	71.2	77.3	—	3/26	31	4
Progeny Ag	#Turbo	70.7	76.6	79.5	3/28	34	1
Pioneer	26R10	70.3	56.7	69.0	3/27	36	3
Progeny Ag	PGX18-7 *	70.0	64.8	—	3/20	37	3
AGS	2055	69.4	77.9	88.4	3/28	35	3
Dyna-Gro	9811	69.1	57.5	74.7	3/28	33	3
Progeny Ag	PGX18-8 *	67.3	56.9	—	3/20	29	1
Pioneer	26R59	66.6	62.4	77.0	4/08	30	2
LSU	LA12080LDH-72 *	66.6	—	—	3/21	33	4
AgriMAXX	481	66.4	70.9	—	3/18	32	4
U. of Georgia	GA09436-16LE12 *	64.1	67.9	—	3/22	32	4
Progeny Ag	PGX19-15 *	64.1	—	—	3/29	31	2
USG	3640	63.9	—	—	3/19	41	4
Dyna-Gro	9002	63.8	60.5	—	3/30	34	3
AgriMAXX	492	61.7	—	—	3/27	32	4
Dyna-Gro	WX20737 *	61.6	—	—	4/12	33	1
Go Wheat	LA754	61.3	66.1	77.9	3/20	34	5
Pioneer	26R41	60.6	59.9	72.6	4/05	34	2
Limagrain Cereal Seeds	L11713	60.2	66.4	—	3/24	32	5
Texas A&M	TX15D9597 *	58.9	66.2	—	3/21	33	5
USG	3539	58.4	50.7	—	4/09	35	2
Delta Grow	DG 3500	58.1	67.5	78.4	3/25	30	5

Continued.

Table 8 (continued). Yields of 64 wheat varieties at MSU Coastal R&E Center, Beaumont.

Brand	Variety[1]	2019–20 yield	2-year avg.	3-year avg.	Date headed	Plant height	Lodging score
		bu/A	*bu/A*	*bu/A*		*in*	*(1-5)*
Local Seed	LW2046	56.3	—	—	3/31	31	1
Local Seed	LWX20A *	56.3	—	—	3/31	29	3
Pioneer	26R45	56.0	48.8	62.9	4/06	34	3
Go Wheat	6000	55.9	—	—	3/21	33	5
U. of Georgia	GA10268-17 LE16 *	54.8	—	—	3/24	35	5
LSU	AR09137UC-17-2 *	52.7	—	—	3/22	36	5
Progeny Ag	PGX19-3 *	52.1	—	—	4/13	35	2
U. of Georgia	GA10407-17 E8 *	51.4	—	—	3/20	35	5
AgriMAXX	503	51.4	—	—	4/15	38	4
Local Seed	LWX20D *	50.2	—	—	3/17	33	5
U. of Arkansas	AR06146E-1-4 *	49.7	65.5	79.1	3/22	35	5
USG	3571	49.0	—	—	4/12	36	4
Dyna-Gro	Rutledge	48.9	—	—	3/19	31	5
U. of Georgia	GA11656-17 E11 *	48.7	—	—	3/29	29	5
AgriMAXX	496	48.5	—	—	—	31	3
AGS	2024	47.3	57.4	70.8	3/22	36	5
Progeny Ag	PGX18-9 *	46.4	—	—	4/08	30	3
AgriMAXX	EXP 2003 *	46.1	—	—	3/31	33	3
Go Wheat	2032	44.7	67.0	—	3/20	30	5
U. of Georgia	GA09129-16E55 *	42.2	56.6	—	3/18	34	5
U. of Georgia	GA101298-17 LE11 *	31.9	—	—	3/21	36	5
Dyna-Gro	Blanton	30.0	—	—	3/19	30	5
Mean		62.5					
CV		16.4					
LSD (0.05)		14.3					
R^2		65.8					
Error DF		189					

[1]Variety followed by an asterisk indicates an experimental entry.

Jerry Slocum Farms, Coldwater

Crop Summary

The wheat plots were planted into corn residue following the previous season's crop. The field was strip-tilled prior to planting the wheat, and it received frequent rain during the fall, making planting difficult due to muddy soil conditions. The plots were planted in early November, and a good stand was achieved. The plot area received above-average rainfall throughout the growing season. Harvest was completed in a timely manner.

Planting date . . .November 6
Harvest date . . . .June 12
Soil type . . . . . .Calloway silt loam
Soil pH 6.3
Soil fertility . . . . .P=M, K=M
Previous crop . . .Corn
Fertilizer . . . . . .Preplant — 23-63-106-10S-0.5/Zn
Topdress — 35 lb N/A (32% UAN) on February 29; 70 lb N/A (33-0-0-12S) on April 2
Herbicide . . . . . .Preemergence — Parazone 3SL @ 32 oz/A and Zidua SC @ 2 oz/A on November 10
Postemergence — Quelex @ 0.75 oz/A on February 29
Insecticide . . . . . .Lambda cyhalothrin @ 2.67 oz/A on February 29

Table 9. Yields of 64 wheat varieties at Jerry Slocum Farms, Coldwater (Calloway silt loam soil).

Brand	Variety[1]	2019–20 yield	2-year avg.	3-year avg.	Date headed	Plant height	Lodging score
		bu/A	*bu/A*	*bu/A*		*in*	*(1-5)*
Progeny Ag	PGX18-9 *	85.0	—	—	4/08	29	1
Local Seed	LWX20A *	82.5	—	—	4/08	29	1
Progeny Ag	PGX18-8 *	81.6	71.5	—	4/08	30	1
USG	3539	80.9	70.5	—	4/13	33	1
Progeny Ag	PGX19-12 *	79.3	—	—	4/10	30	1
Dyna-Gro	9002	78.7	77.1	—	4/13	30	1
Go Wheat	2058	76.0	76.7	82.1	4/10	27	1
Dyna-Gro	9811	75.5	73.4	78.0	4/08	31	1
AGS	2055	75.5	68.5	74.0	4/10	30	1
Local Seed	LW2046	75.1	—	—	4/10	35	1
Dyna-Gro	9701	74.5	72.6	80.2	4/13	33	1
Dyna-Gro	WX20731 *	74.4	—	—	4/15	33	1
AgriMAXX	EXP 2003 *	74.0	—	—	4/10	30	1
Delta Grow	DG 1000	73.3	72.0	75.9	4/15	32	1
AgriMAXX	496	72.8	—	—	4/13	30	1
Progeny Ag	PGX18-7 *	71.9	73.6	—	4/08	30	1
AgriMAXX	473	71.8	70.6	78.1	4/13	31	1
Pioneer	26R36	71.8	74.1	81.3	4/08	32	1
Progeny Ag	#Bullet	71.6	76.3	82.0	4/13	34	1
VA Tech	HILLIARD	71.6	—	—	4/08	27	1
Pioneer	26R10	71.5	71.8	75.8	4/10	27	1
AGS	2038	71.4	66.6	68.6	4/13	32	1
Local Seed	LW 2848	71.0	73.3	—	4/10	34	1
USG	3536	70.7	70.1	75.8	4/08	34	1
Dyna-Gro	WX20737 *	70.3	—	—	4/13	30	1
Pioneer	26R41	70.2	71.5	75.7	4/08	29	1
AgriMAXX	415	69.2	72.8	77.8	4/08	29	1
AGS	3040	68.3	—	—	4/08	27	1
U. of Georgia	GA101298-17 LE11 *	68.3	—	—	4/05	34	1
USG	3571	68.0	—	—	4/10	33	1
U. of Georgia	GA10268-17 LE16 *	66.6	—	—	4/10	35	1
VA Tech	Liberty 5658	66.0	—	—	4/10	31	1
USG	3640	65.7	—	—	4/05	33	1
Progeny Ag	#Turbo	64.9	60.1	66.9	4/08	26	1
Dyna-Gro	Rutledge	64.6	—	—	4/02	28	1
Local Seed	LWX20D *	62.4	—	—	4/02	33	1
Go Wheat	6000	62.1	—	—	4/05	32	1
Texas A&M	TX15D9579 *	61.5	59.7	—	4/05	28	1
U. of Arkansas	AR06146E-1-4 *	61.3	65.8	69.9	4/02	34	1
U. of Georgia	GA10407-17 E8 *	61.0	—	—	4/02	32	1

Continued.

Table 9 (continued). Yields of 64 wheat varieties at Jerry Slocum Farms, Coldwater (Calloway silt loam soil).

Brand	Variety[1]	2019–20 yield	2-year avg.	3-year avg.	Date headed	Plant height	Lodging score
		bu/A	*bu/A*	*bu/A*		*in*	*(1-5)*
Progeny Ag.	PGX18-11 *	61.0	63.4	—	4/02	28	1
Dyna-Gro	Blanton	61.0	—	—	4/02	32	1
LSU	AR09137UC-17-2 *	60.9	—	—	4/05	35	1
Go Wheat	LA754	60.4	69.6	70.3	4/15	36	1
AGS	2024	60.1	64.3	69.6	4/08	33	1
Texas A&M	TX15D9597 *	59.6	66.8	—	4/05	28	1
AgriMAXX	492	59.1	—	—	4/05	27	1
Progeny Ag	PGX19-15 *	58.2	—	—	4/10	26	1
LSU	LA12080LDH-72 *	57.8	—	—	4/05	29	1
U. of Georgia	GA11656-17 E11 *	57.6	—	—	4/05	36	1
U. of Georgia	GA09436-16LE12 *	56.7	64.0	—	4/05	33	1
Progeny Ag	PGX19-17 *	56.5	—	—	4/02	21	1
Delta Grow	DG 3500	56.5	65.6	70.3	4/02	30	1
Go Wheat	2032	56.3	68.4	—	4/15	30	1
LSU	LA15166-LDH272 *	56.1	—	—	4/05	29	1
U. of Georgia	GA09129-16E55 *	55.7	63.8	—	4/02	32	1
AgriMAXX	481	55.4	63.3	—	4/02	30	1
Limagrain Cereal Seeds	L11713	55.0	64.7	—	4/02	27	1
Pioneer	26R59	54.8	65.8	72.2	4/08	36	1
U. of Georgia	GA101004-17 LE17 *	50.9	—	—	4/02	32	1
Pioneer	26R45	49.9	64.6	72.5	4/08	36	1
Progeny Ag	#FURY	36.2	52.2	—	4/05	30	1
AgriMAXX	503	30.2	—	—	4/13	29	1
Progeny Ag	PGX19-3 *	24.7	—	—	4/08	32	1
Mean		64.7					
CV		11.4					
LSD (0.05)		10.3					
R^2		76.2					
Error DF		189					

[1]Variety followed by an asterisk indicates an experimental entry.

MAFES Brown Loam Branch, Raymond

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 a season when above-average rainfall was recorded. Timely fertilizer applications and raised seedbeds allowed for decent yields, despite the excessive rainfall. Harvest was completed in a timely manner.

Planting date . . .November 13
Harvest date . . . .June 15
Soil type . . . . . .Loring silt loam
Soil pH 6.5
Soil fertility . . . . .P=M, K=M
Previous crop . . .Soybean
Fertilizer . . . . . .Topdress — 40 lb N/A (33-0-0-12S) on February 27; 80 lb N/A (46-0-0) on March 17
Herbicide . . . . . .Gramoxone @ 32 oz/A on November 13; Zidua @ 1.75 oz/A delayed PRE

Table 10. Yields of 64 wheat varieties at MAFES Brown Loam Branch, Raymond (Loring silt loam soil).

Brand	Variety[1]	2019–20 yield	2-year avg.	3-year avg.	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*(1-5)*	*in*
Progeny Ag	PGX18-7 *	90.6	81.7	—	36	2
Pioneer	26R41	84.0	78.7	86.2	33	1
Pioneer	26R36	83.0	76.5	85.2	31	1
LSU	AR09137UC-17-2 *	82.7	—	—	36	2
Progeny Ag	#Bullet	81.5	79.3	85.7	37	4
Dyna-Gro	9811	80.3	77.1	83.9	37	1
Progeny Ag	PGX19-15 *	79.4	—	—	28	1
Dyna-Gro	WX20737 *	77.1	—	—	33	1
Progeny Ag	PGX18-8 *	76.6	73.1	—	34	1
Delta Grow	DG 1000	75.8	76.3	82.3	40	1
Progeny Ag	PGX19-17 *	75.8	—	—	32	1
AgriMAXX	415	73.9	75.2	82.7	37	1
Go Wheat	2058	73.7	77.0	79.9	30	1
Dyna-Gro	WX20731 *	72.3	—	—	36	1
AgriMAXX	492	72.1	—	—	32	2
AgriMAXX	473	72.1	76.6	85.4	37	1
Progeny Ag	#Turbo	71.9	76.4	78.7	33	1
U. of Georgia	GA10268-17 LE16 *	71.8	—	—	35	2
AgriMAXX	496	71.4	—	—	35	1
Pioneer	26R59	71.3	72.4	81.3	31	1
Local Seed	LW 2848	71.0	75.1	—	37	2
LSU	LA12080LDH-72 *	70.8	—	—	36	1
Pioneer	26R45	70.3	76.8	83.7	36	1
Pioneer	26R10	70.3	71.5	81.1	29	1
USG	3536	69.6	75.6	82.7	30	5
VA Tech	HILLIARD	69.2	—	—	35	1
Dyna-Gro	9002	69.1	76.3	—	36	1
Progeny Ag.	PGX18-11 *	68.8	66.5	—	31	1
Progeny Ag	PGX19-12 *	68.6	—	—	36	4
USG	3539	67.8	70.0	—	35	2
Delta Grow	DG 3500	67.6	56.9	65.8	33	1
AGS	2024	67.6	62.2	68.7	32	1
Dyna-Gro	Blanton	67.0	—	—	31	1
U. of Arkansas	AR06146E-1-4 *	65.9	64.1	68.6	32	1
Dyna-Gro	9701	65.5	71.2	80.0	39	1
Limagrain Cereal Seeds	L11713	65.3	70.8	—	32	1
Go Wheat	2032	65.1	59.4	—	31	1
AGS	2038	64.5	51.4	66.7	33	1
USG	3571	64.4	—	—	36	1
Progeny Ag	PGX18-9 *	63.9	—	—	36	5
AGS	3040	63.3	—	—	33	1
AgriMAXX	481	63.1	57.0	—	32	1
LSU	LA15166-LDH272 *	62.3	—	—	33	1

Continued.

Table 10 (continued). Yields of 64 wheat varieties at MAFES Brown Loam Branch, Raymond (Loring silt loam soil).

Brand	Variety[1]	2019–20 yield	2-year avg.	3-year avg.	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*(1-5)*	*in*
AgriMAXX	503	61.9	—	—	36	2
Local Seed	LW2046	61.9	—	—	32	1
Texas A&M	TX15D9597 *	61.4	55.1	—	31	1
U. of Georgia	GA11656-17 E11 *	61.3	—	—	36	1
U. of Georgia	GA10407-17 E8 *	61.1	—	—	31	1
AGS	2055	60.6	67.8	76.9	34	1
Progeny Ag	PGX19-3 *	59.6	—	—	35	3
VA Tech	Liberty 5658	59.3	—	—	35	1
Dyna-Gro	Rutledge	59.2	—	—	31	1
U. of Georgia	GA101004-17 LE17 *	58.1	—	—	33	1
Progeny Ag	#FURY	58.0	58.6	—	37	1
Go Wheat	6000	57.0	—	—	31	1
USG	3640	54.4	—	—	36	1
U. of Georgia	GA09436-16LE12 *	54.3	43.8	—	35	1
AgriMAXX	EXP 2003 *	54.1	—	—	33	5
Local Seed	LWX20D *	53.6	—	—	31	1
Texas A&M	TX15D9579 *	45.4	45.0	—	32	1
Local Seed	LWX20A *	44.9	—	—	34	5
U. of Georgia	GA09129-16E55 *	44.2	46.0	—	34	2
U. of Georgia	GA101298-17 LE11 *	43.9	—	—	36	2
Go Wheat	LA754	34.0	44.1	53.5	36	3
Mean		66.0				
CV		17.4				
LSD (0.05)		16.0				
R^2		56.1				
Error DF		189				

[1]Variety followed by an asterisk indicates an experimental entry.

MAFES Delta Branch, Stoneville

Crop Summary

The wheat plots were planted in a well-prepared seedbed that had been disked and harrowed just prior to planting. Soil moisture at planting was adequate for germination, and the plots quickly emerged to a stand. Above-average rainfall was observed throughout the entire growing season. This excess soil moisture resulted in a reduced yield potential at this location. Harvest was completed in a timely manner.

Planting date . . . .November 19
Harvest date . . . .June 2
Soil type . . . . . .Bosket very fine sandy loam
Soil pH 6.2
Soil fertility . . . . . .P=H, K=H
Previous crop . . .Soybean
Fertilizer . . . . . .Preplant — 13-13-13 @ 140 lb/A on November 18
Topdress — 30 lb N/A (46-0-0) on February 10; 103 lb N/A (46-0-0) on March 16
Herbicide . . . . . .Preemergence — Gramoxone @ 32 oz/A on November 19; Zidua @ 1.75 oz/A delayed PRE

Table 11. Yields of 64 wheat varieties at MAFES Delta Branch, Stoneville (Bosket very fine sandy loam soil).

Brand	Variety[1]	2019–20 yield	2-year avg.	3-year avg.	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*(1-5)*	*in*
Delta Grow	DG 1000	87.9	72.0	72.3	38	1
Local Seed	LW 2848	86.2	72.8	—	38	1
Pioneer	26R45	85.0	73.3	71.1	38	1
Dyna-Gro	9701	82.3	71.5	71.2	37	1
Progeny Ag	#Bullet	79.9	71.7	71.0	35	1
Progeny Ag	PGX19-3 *	79.9	—	—	38	1
Go Wheat	2058	79.5	71.9	70.1	28	1
AgriMAXX	496	79.3	—	—	33	1
AgriMAXX	473	78.9	71.9	72.4	33	1
Pioneer	26R41	76.8	67.9	70.0	33	1
USG	3539	75.4	66.7	—	37	3
Dyna-Gro	9811	75.1	66.4	67.6	38	1
Local Seed	LWX20A *	74.3	—	—	36	1
AgriMAXX	EXP 2003 *	73.1	—	—	34	1
Local Seed	LW2046	72.0	—	—	38	1
Dyna-Gro	9002	71.9	66.5	—	30	1
Progeny Ag	PGX18-9 *	71.8	—	—	35	1
USG	3571	71.7	—	—	39	1
USG	3536	71.3	67.8	67.6	36	2
AgriMAXX	503	69.7	—	—	38	1
Dyna-Gro	WX20731 *	68.7	—	—	33	1
Progeny Ag	PGX19-12 *	68.7	—	—	34	1
Pioneer	26R10	68.5	62.8	66.0	32	1
U. of Georgia	GA10268-17 LE16 *	68.1	—	—	35	1
AGS	2038	67.7	62.4	67.0	31	1
AGS	3040	67.2	—	—	32	1
Progeny Ag	PGX18-7 *	66.9	56.1	—	32	2
AGS	2055	65.0	69.5	69.0	30	1
Dyna-Gro	WX20737 *	64.0	—	—	35	1
VA Tech	HILLIARD	63.1	—	—	33	1
Progeny Ag	PGX18-8 *	62.1	46.7	—	28	1
VA Tech	Liberty 5658	62.0	—	—	35	1
AgriMAXX	415	61.2	61.0	64.5	31	1
Progeny Ag	PGX19-15 *	60.9	—	—	31	1
Pioneer	26R59	60.3	53.8	60.4	28	1
U. of Georgia	GA11656-17 E11 *	59.9	—	—	36	1
Pioneer	26R36	57.7	56.0	58.8	34	1
Progeny Ag	#Turbo	57.6	47.5	53.1	33	1
AGS	2024	54.6	59.5	61.1	28	1
Dyna-Gro	Rutledge	52.7	—	—	31	1
U. of Georgia	GA101298-17 LE11 *	52.0	—	—	31	1

Continued.

Table 11 (continued). Yields of 64 wheat varieties at MAFES Delta Branch, Stoneville (Bosket very fine sandy loam soil).

Brand	Variety[1]	2019–20 yield	2-year avg.	3-year avg.	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*(1-5)*	*in*
Progeny Ag.	PGX18-11 *	50.7	49.5	—	28	1
U. of Arkansas	AR06146E-1-4 *	50.2	56.4	59.2	34	1
U. of Georgia	GA10407-17 E8 *	49.7	—	—	32	1
Texas A&M	TX15D9597 *	49.6	50.2	—	27	1
Go Wheat	2032	48.9	57.1	—	27	1
LSU	LA12080LDH-72 *	48.9	—	—	32	1
LSU	AR09137UC-17-2 *	47.5	—	—	36	1
AgriMAXX	492	45.0	—	—	28	1
Local Seed	LWX20D *	45.0	—	—	27	1
Progeny Ag	PGX19-17 *	44.8	—	—	27	1
Go Wheat	6000	44.0	—	—	32	1
LSU	LA15166-LDH272 *	42.5	—	—	30	1
Limagrain Cereal Seeds	L11713	42.0	49.5	—	30	1
U. of Georgia	GA09436-16LE12 *	41.7	42.4	—	33	1
USG	3640	38.6	—	—	29	1
Progeny Ag	#FURY	38.5	46.8	—	30	1
Dyna-Gro	Blanton	37.3	—	—	28	1
U. of Georgia	GA09129-16E55 *	35.8	48.1	—	34	2
Delta Grow	DG 3500	35.2	39.9	44.8	26	1
U. of Georgia	GA101004-17 LE17 *	33.2	—	—	30	1
Go Wheat	LA754	32.7	44.6	48.9	28	1
AgriMAXX	481	30.6	47.5	—	27	1
Texas A&M	TX15D9579 *	24.5	26.1	—	26	1
Mean		59.5				
CV		13.5				
LSD (0.05)		11.2				
R^2		84.0				
Error DF		189				

[1]Variety followed by an asterisk indicates an experimental entry.

MAFES 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 a season when above-average rainfall was recorded. Timely fertilizer applications and raised seedbeds allowed for decent yields, despite the excessive rainfall. Harvest was completed in a timely manner.

Planting date . . .November 18
Harvest date . . . .June 16
Soil type . . . . . .Leeper silty clay
Soil pH 6.4
Soil fertility . . . . .P=M, K=M
Previous crop . . .Soybean
Fertilizer . . . . . .Topdress — 46 lb N/A (46-0-0) on February 28; 70 lb N/A (33-0-0-12S) on March 25
Herbicide . . . . . .Preemergence — Gramoxone @ 32 oz/A on November 18; Zidua @ 1.75 oz/A delayed PRE

Table 12. Yields of 64 wheat varieties at MAFES Northeast Mississippi Branch, Verona.

Brand	Variety[1]	2019–20 yield	2-year avg.	3-year avg.[2]	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*(1-5)*	*in*
Progeny Ag	PGX19-15 *	87.4	—	—	33	1
Progeny Ag	PGX19-17 *	85.1	—	—	36	1
VA Tech	HILLIARD	82.8	—	—	42	1
Pioneer	26R10	81.8	71.1	—	37	1
Pioneer	26R36	81.2	74.0	—	38	1
VA Tech	Liberty 5658	81.1	—	—	38	1
Progeny Ag	PGX19-12 *	80.8	—	—	40	1
Pioneer	26R59	79.9	74.7	—	33	1
Local Seed	LW2046	79.7	—	—	39	1
Dyna-Gro	WX20737 *	79.7	—	—	38	1
AGS	3040	79.3	—	—	38	1
Progeny Ag	PGX19-3 *	78.4	—	—	39	1
U. of Georgia	GA10268-17 LE16 *	78.3	—	—	33	1
Progeny Ag	PGX18-7 *	78.0	74.7	—	33	1
Dyna-Gro	WX20731 *	77.9	—	—	39	1
Dyna-Gro	9701	77.9	75.0	—	38	1
Go Wheat	2058	77.7	70.8	—	37	1
Progeny Ag	PGX18-8 *	77.6	70.7	—	40	1
Local Seed	LW 2848	77.4	74.8	—	30	1
Pioneer	26R45	77.1	76.4	—	40	1
U. of Georgia	GA11656-17 E11 *	76.9	—	—	37	1
Dyna-Gro	9811	76.6	72.7	—	37	1
AGS	2055	76.4	72.6	—	37	1
Dyna-Gro	Blanton	76.3	—	—	33	1
U. of Georgia	GA10407-17 E8 *	76.1	—	—	40	1
AGS	2038	74.9	66.2	—	36	1
USG	3539	74.9	65.7	—	35	1
AgriMAXX	415	74.6	73.4	—	33	1
Dyna-Gro	9002	74.5	72.3	—	39	1
AgriMAXX	503	74.5	—	—	39	1
AgriMAXX	496	74.4	—	—	34	1
Go Wheat	6000	74.2	—	—	38	1
LSU	AR09137UC-17-2 *	74.0	—	—	34	1
AgriMAXX	473	73.8	75.3	—	35	1
Limagrain Cereal Seeds	L11713	73.6	70.9	—	37	1
Local Seed	LWX20A *	73.4	—	—	37	1
Go Wheat	LA754	73.3	75.6	—	35	1
U. of Georgia	GA101298-17 LE11 *	73.3	—	—	32	1
Progeny Ag	PGX18-9 *	73.0	—	—	33	1
Delta Grow	DG 1000	72.9	69.7	—	39	1
Pioneer	26R41	72.9	64.3	—	35	1

Continued.

Table 12 (continued). Yields of 64 wheat varieties at MAFES Northeast Mississippi Branch, Verona.

Brand	Variety[1]	2019–20 yield	2-year avg.	3-year avg.[2]	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*(1-5)*	*in*
Progeny Ag	#FURY	72.5	71.4	—	36	1
Progeny Ag	#Bullet	72.3	73.8	—	40	1
AgriMAXX	EXP 2003 *	71.5	—	—	40	1
AgriMAXX	481	70.9	76.0	—	35	1
LSU	LA12080LDH-72 *	70.3	—	—	38	1
AGS	2024	70.1	67.0	—	34	1
Go Wheat	2032	69.6	72.1	—	36	1
U. of Arkansas	AR06146E-1-4 *	69.3	75.3	—	41	1
Progeny Ag	#Turbo	67.6	74.0	—	36	1
LSU	LA15166-LDH272 *	67.4	—	—	37	1
Local Seed	LWX20D *	65.2	—	—	38	1
USG	3536	64.9	67.5	—	39	1
AgriMAXX	492	62.7	—	—	36	1
Dyna-Gro	Rutledge	62.6	—	—	34	1
USG	3571	61.9	—	—	34	1
USG	3640	61.5	—	—	34	1
U. of Georgia	GA101004-17 LE17 *	60.7	—	—	33	1
Delta Grow	DG 3500	60.1	67.1	—	34	1
U. of Georgia	GA09129-16E55 *	59.0	66.6	—	37	1
Texas A&M	TX15D9597 *	57.7	62.6	—	36	1
Progeny Ag.	PGX18-11 *	57.4	70.7	—	35	1
Texas A&M	TX15D9579 *	56.7	58.9	—	36	1
U. of Georgia	GA09436-16LE12 *	52.8	53.1	—	39	1
Mean		72.6				
CV		13.2				
LSD (0.05)		13.4				
R^2		66.2				
Error DF		189				

[1]Variety followed by an asterisk indicates an experimental entry.
[2]No 3-year data

Wheat and Oat Seeds per Pound

Table 13. Average number of wheat seeds per pound.

Brand	Variety	2019–20
AgriMAXX	473	12,300
AgriMAXX	481	10,800
AgriMAXX	492	12,900
AgriMAXX	496	12,700
AgriMAXX	503	12,000
AgriMAXX	415	14,000
AgriMAXX	EXP 2003 *	11,500
AGS	2024	16,477
AGS	2038	12,950
AGS	2055	12,924
AGS	3040	13,050
Delta Grow	DG 1000	14,568
Delta Grow	DG 3500	12,009
Dyna-Gro	9002	11,500
Dyna-Gro	9701	11,950
Dyna-Gro	9811	13,960
Dyna-Gro	Blanton	11,280
Dyna-Gro	Rutledge	10,490
Dyna-Gro	WX20731 *	13,050
Dyna-Gro	WX20737 *	11,770
Go Wheat	6000	12,820
Go Wheat	LA754	9,940
Go Wheat	2032	11,564
Go Wheat	2058	14,330
Limagrain Cereal Seeds	L11713	12,200
Local Seed	LWX20A *	11,500
Local Seed	LW2046	11,600
Local Seed	LWX20D *	9,920
Local Seed	LW 2848	15,600
LSU	AR09137UC-17-2 *	12,400
LSU	LA12080LDH-72 *	14,320
LSU	LA15166-LDH272 *	13,730
Pioneer	26R36	13,465
Pioneer	26R41	12,025
Pioneer	26R59	12,025
Pioneer	26R10	10,522
Pioneer	26R45	12,526
Progeny Ag	#Bullet	12,777
Progeny Ag	#Turbo	13,990
Progeny Ag	PGX18-9 *	11,870
Progeny Ag	PGX19-12 *	13,780
Progeny Ag	PGX19-15 *	14,740
Progeny Ag	PGX19-17 *	13,560
Progeny Ag	PGX19-3 *	12,150
Progeny Ag	#FURY	11,340
Progeny Ag	PGX18-7 *	13,900
Progeny Ag	PGX18-8 *	11,100
Progeny Ag.	PGX18-11 *	11,500
Texas A&M	TX15D9579 *	11,840
Texas A&M	TX15D9597 *	12,500
U. of Arkansas	AR06146E-1-4 *	13,100
U. of Georgia	GA09129-16E55 *	13,811
U. of Georgia	GA09436-16LE12 *	12,577
U. of Georgia	GA101004-17 LE17 *	10,000
U. of Georgia	GA101298-17 LE11 *	10,815
U. of Georgia	GA10268-17 LE16 *	11,095
U. of Georgia	GA10407-17 E8 *	10,479
U. of Georgia	GA11656-17 E11 *	10,500
USG	3536	11,500
USG	3539	12,000
USG	3571	13,480
USG	3640	10,500
VA Tech	HILLIARD	15,080
VA Tech	Liberty 5658	13,014

Table 14. Average number of oat seeds per pound.		
Brand	**Variety**	**2019–20**
Horizon	270	14,515
Sweet Caroline	FL 0720	14,790

Summaries of Oat Yields

Table 15. 2019-20 yield summary of oat official variety trials in Mississippi.						
Brand	**Variety**	**Brooksville**	**Starkville**	**Verona**	**Overall average**	
		bu/A	*bu/A*	*bu/A*	*bu/A*	
Plantation Seed	Horizon 270	40.9	32.8	47.8	40.5	
Sweet Caroline	FL 0720	42.5	32.9	44.2	39.9	
Mean		41.7	32.8	46.0	40.2	
CV		12.6	18.5	16.6		
LSD (0.05)		NS	NS	NS		
R^2		80.7	33.8	90.0		
Error DF		3	3	3		

Table 16. Two-year summary of oat variety trials in Mississippi.						
Brand	**Variety**	**Brooksville**	**Starkville**	**Verona**	**Overall average**	
		bu/A	*bu/A*	*bu/A*	*bu/A*	
Sweet Caroline	FL 0720	45.3	74.3	50.6	56.7	
Overall Mean		45.3	74.3	50.6	56.7	

MAFES Black Belt Branch, Brooksville

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 a season when above-average rainfall was recorded. Timely fertilizer applications and raised beds allowed for fair yields, despite the excessive rainfall that occurred. Harvest was completed in a timely manner.

Planting date . . .November 11
Harvest date . . . .June 17
Soil type . . . . . .Brooksville silty clay
Soil pH 6.7
Soil fertility . . . . .P=M, K=M
Previous crop . . .Soybean
Fertilizer . . . . . .Preplant — 0-20-20 @ 200 lb/A
Topdress — N @ 46 lb/A (46-0-0) on February 28; N @ 70 lb/A (33-0-0-120) on March 25
Herbicide . . . . . .Preemergence — Gramoxone @ 32 oz/A on November 11

Table 17. Yields of two oat varieties at MAFES Black Belt Branch, Brooksville (Brooksville silty clay soil).

Brand	Variety	2019–20 yield	2-year avg.	3-year avg.[1]	Plant height	Lodging score
		bu/A	*bu/A*	*bu/A*	*in*	*(1-5)*
Sweet Caroline	FL 0720	42.5	45.3	—	46	5
Plantation Seed	Horizon 270	40.9	—	—	44	5
Mean		41.7				
CV		12.6				
LSD (0.05)		NS				
R^2		80.7				
Error DF		3				

[1]No 3-year average.

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. Above average rainfall was observed at this location, which resulted in reduced yield potential. Harvest was completed in a timely manner.

Planting date . . .November 8
Harvest date . . . .June 3
Soil type . . . . . .Marietta fine sandy loam
Soil pH 6.4
Soil fertility . . . . .P=M, K=M
Previous crop . . .Corn
Fertilizer . . . . . .Topdress — N @ 25 lb/A (33-0-0-12S) on January 29; P & K @ 20 lb/A (0-20-20) on Jan 29; N @ 46 lb/A (46-0-0) on February 28; N @ 70 lb/A (33-0-0-12S) on March 25
Herbicide . . . . . .Preemergence — Gramoxone @ 32 oz/A on November 8

Table 18. Yields of two oat varieties at MAFES Research Center, Starkville.

Brand	Variety	2019–20 yield	2-year avg.	3-year avg.[1]	Plant height	Lodging score
		bu/A	*bu/A*	*bu/A*	*in*	*(1-5)*
Sweet Caroline	FL 0720	32.9	74.3	—	47	1
Plantation Seed	Horizon 270	32.8	—	—	42	1
Mean		32.8				
CV		18.5				
LSD (0.05)		NS				
R^2		33.8				
Error DF		3				

[1]No 3-year average.

MAFES 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 a season when above-average rainfall was recorded. Timely fertilizer applications and raised beds allowed for fair yields, despite the excessive rainfall that occurred. Harvest was completed in a timely manner.

Planting date . . .November 18
Harvest date . . . .June 16
Soil type . . . . . .Leeper silty clay
Soil pH 6.4
Soil fertility . . . . .P=M, K=M
Previous crop . . .Soybean
Fertilizer . . . . . .Topdress — N @ 46 lb/A (46-0-0) on February 28; N @ 70 lb/A (33-0-0-12S) on March 25
Herbicide . . . . . .Preemergence — Gramoxone @ 32 oz/A on November 18

Table 19. Yield of two oat varieties at the MAFES Northeast Mississippi Branch, Verona.

Brand	Variety	2019–20 yield	2-year avg.	3-year avg.[1]	Plant height	Lodging score
		bu/A	*bu/A*	*bu/A*	*in*	*(1-5)*
Plantation Seed	Horizon 270	47.8	—	—	51	2
Sweet Caroline	FL 0720	44.2	50.6	—	52	2
Mean		46.01				
CV		16.6				
LSD (0.05)		NS				
R^2		90				
Error DF		3				

[1]No 3-year average.

Data Not Reported

R.R. Foil Plant Science Research Center, Starkville

No wheat data were reported from this location due to the damage that occurred from excessive rainfall received during the growing season. Many plots had their stands significantly reduced or completely drowned due to the overabundance of rain.

Coastal Plain Branch Experiment Station, Newton

No data were reported from this location due the extensive damage observed to the plots, caused by deer and birds.

MS AGRICULTURAL AND
FORESTRY EXPERIMENT STATION

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.

George M. Hopper, Director **www.mafes.msstate.edu**