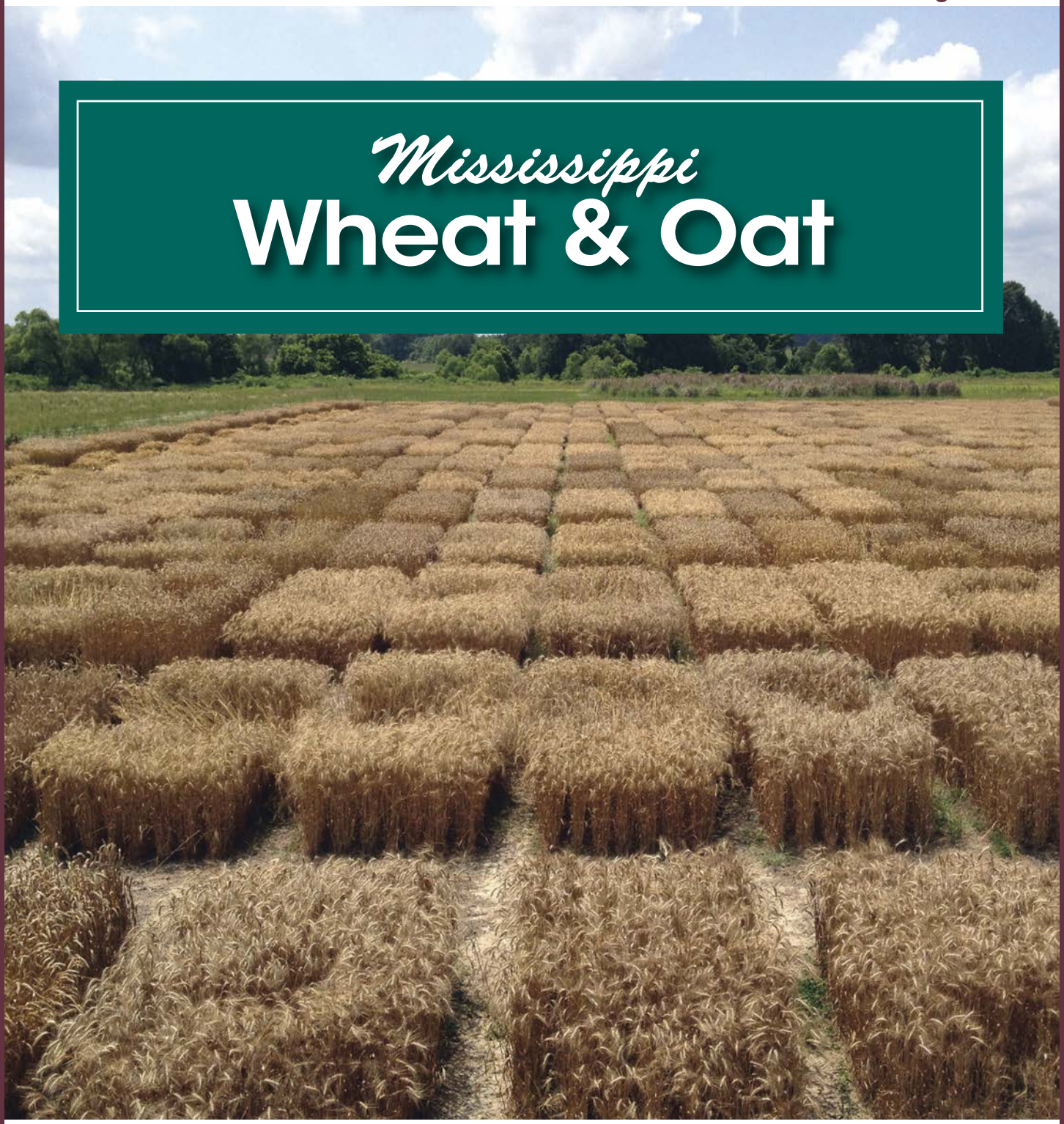
Information Bulletin 511 August 2016

Mississippi Wheat & Oat



VARIETY TRIALS, 2016

MISSISSIPPI'S OFFICIAL VARIETY TRIALS

MISSISSIPPI STATE UNIVERSITY™
MS AGRICULTURAL AND
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Delta Research and Extension Center
Stoneville, Mississippi

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Mississippi State University

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Cereal Grains Breeder
Syngenta

Reuben Moore
Associate Director, MAFES
Mississippi State University

Don Respess
County Extension Director III
Coahoma County

Dennis Rowe
Research Professor
Experimental Statistics
Mississippi State University

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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, 2016

MAFES Official Variety Trial Contributors

Brad Burgess
Director, Variety Evaluations
Mississippi State University

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

Jenny Bibb
Extension Associate I
Plant and Soil Sciences
Mississippi State University

Jake Bullard
Assistant Director, Variety Evaluations
Mississippi State University

Jon Carson
Extension Agent II
Issaquena County Extension Service

Dan Haire
Extension Agent II
DeSoto County Extension Service

Billy Johnson
Research Associate III
Coastal Plain Branch Experiment Station

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

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

Dennis Reginelli
Regional Extension Specialist II
North Mississippi Research and
Extension Center

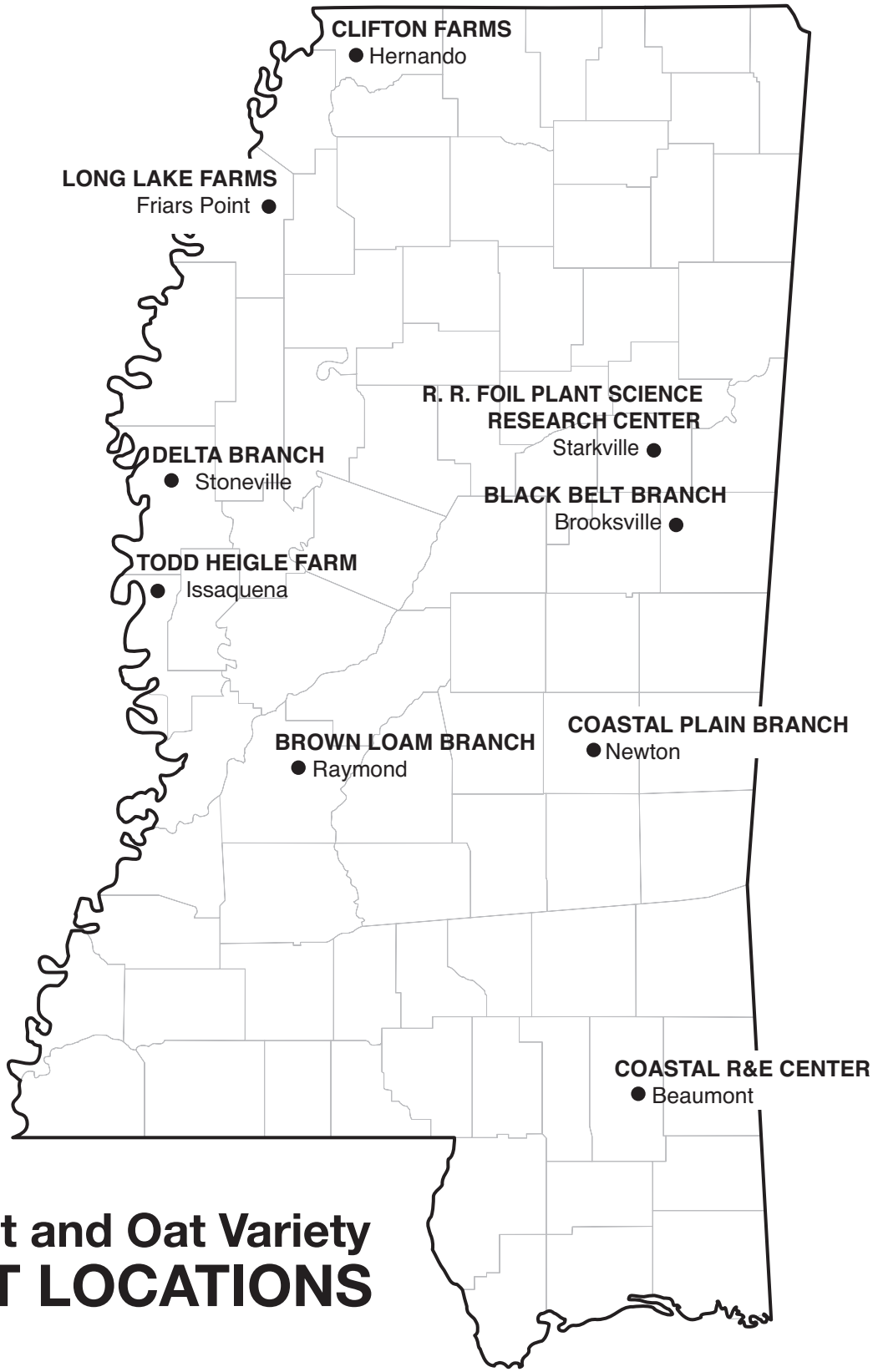
Don Respess
Extension Agent IV
MSU Extension Service

Dennis Rowe
Statistician
Research Support Units

For more information, contact Burgess at (662) 325-2390; email, Brad.Burgess@msstate.edu. Recognition is given to Jason Hillhouse and Jerry W. Nail, research technicians for the Variety Trial Program, for their assistance in packaging, planting, harvesting, and recording plot data. This publication was prepared by Dixie Albright, office associate for MAFES Research Support Units.

This document was approved for publication as Information Bulletin 511 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, 2016

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 2015–2016. 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.

Wheat and Oat Seed Sources

Table 1. Companies supplying wheat brands/varieties entered.

Company	Brand	Variety	Seed Treatment
AgriMAXX Wheat Company 7167 Highbanks Road Mascoutah, IL 62258	AgriMAXX AgriMAXX AgriMAXX AgriMAXX AgriMAXX AgriMAXX AgriMAXX	413 415 444 446 Exp. 1664 [E] Exp. 1675 [E] Exp. 1674 [E]	Vibrance Extreme + Cruiser
AgSouth Genetics P. O. Box 72246 Albany, GA 31708	AGS AGS AGS	2038 2024 2055	Vibrance/Senator
Armor Seed 183 S. Pennsylvania Ave. Waldenburg, AR 72475	Armor Armor Armor Armor Armor	ARW1511 [E] ARW1521 [E] ARW1516 [E] ARW1514 [E] ARW1556 [E]	Vibrant Extreme
B&S Seed Co., Inc. 1283 Hwy. 444 Duncan, MS 38740	Dixie Bell Dixie Bell Dixie Bell Dixie Bell Dixie Bell	DB 620 DB 500 DB 125 DB 7414 DB 600	Cruiser
Cache River Valley Seed P. O. Box 10 Cash, AR 72421	Dixie Dixie Dixie Dixie Dixie Dixie	McAlister Xtreme DXEX 16-1 [E] DXEX 16-2 [E] DXEX 15-1 [E] DXEX 16-3 [E]	Cruiser Maxx
Delta Grow Seed P. O. Box 219 England, AR 72406	Delta Grow Delta Grow Delta Grow Delta Grow	7500 2700 1000 3400	Dividend Extreme
University of Georgia UGA-CAES-Griffin Campus 1109 Experiment St. Griffin, GA 30223	University of Georgia University of Georgia University of Georgia University of Georgia	GA061349-13LE31 GA051102-13LE43 GA061349-13LE29 GA04434-12LE28	Dividend Vibrance
Dyna-Gro Seed 254 Highway 72 West Collierville, TN 38017	Dyna-Gro Dyna-Gro Dyna-Gro Dyna-Gro	9171 9522 WX16771 [E] Savoy	Foothold Extra
Louisiana State University SPESS 104 M. B. Sturgis Hall Baton Rouge, LA 70803	LSU LSU LSU LSU	LA03200E-2 [E] LA06146E-P4 [E] LA08115C-30 [E] LA09011UB-2 [E]	Vibrance + Maxim
Limagrain Cereal Seeds 257 E. Hail Bushnell, IL 61422	LCS LCS LCS	L11419 LCS 4343 L11541 L11544	Dividend Extreme Vibrance Extreme Cruiser
Pioneer Hi-Bred Intl. 59 Greif Parkway, Suite 200 Delaware, OH 43015	Pioneer Pioneer Pioneer Pioneer Pioneer	26R10 26R59 26R41 26R53 26R94	Vibrance Extreme + Gaucho

Continued.

Table 1 (continued). Companies supplying wheat brands/varieties entered.

Company	Brand	Variety	Seed Treatment
Progeny Ag Products 1529 Hwy. 193 South Wynne, AR 72396	Progeny Progeny Progeny Progeny Progeny Progeny Progeny	P243 PGX 15-10 [E] P870 P357 PGX 15-12 [E] PGX 15-14 [E] PGX 15-16 [E]	Evergol Energy + Gaucho
E. Virginia Ag. Res. & Ext. Center 2229 Menokin Road Warsaw, VA 22572	VA Tech VA Tech	HILLIARD VA12W-72 [E]	ProvokeST/Foothold/Storcide
UniSouth Genetics, Inc. 3205 C Hwy. 46 S Dickson, TN 37055	USG USG USG USG USG USG USG USG	3013 3201 3404 3523 Exp 3536 [E] Exp 3959 [E] Exp 3688 [E] 3756	RaxilMD Extra/Gaucho
University of Arkansas	University of Arkansas University of Arkansas	AR01040-4-1 [E] AR00343-5-1 [E]	Vibrance Extreme & Gaucho
Stratton Seed Company P. O. Box 1088 Stuttgart, AR 72160	Go Wheat Go Wheat	2056 2058	CruiserMaxx Vibrance

Table 2. Companies supplying oat brands/varieties entered.

Company	Brand	Variety	Seed Treatment
Louisiana State University SPESS 104 M.B. Sturgis Hall Baton Rouge, LA 70803	LSU LSU LSU LSU	LA07007-18 [E] LA07007-24 [E] LA08084-15 [E] LA06059-4-S1 [E]	Vibrance + Maxim
Plantation Seed P. O. Box 398 Newton, GA 39870	Horizon Horizon	270 306	Vibrance

Summaries of Wheat Yields

Table 3. 2015–16 yield summary of wheat variety trials in Mississippi.

Brand	Variety[1]	Brooks-ville	Hern-ando	Stark-ville	North avg.	Beau-mont	New-ton	Ray-mond	South avg.	Friars Point	Stone-ville	Delta avg.	
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	
AgriMAXX	413	79.1	53.8	78.7	70.5	37.9	70.1	89.9	66.0	90.7	41.4	66.1	
AgriMAXX	415	69.8	50.2	65.8	61.9	33.3	66.7	80.7	60.2	92.3	36.4	64.4	
AgriMAXX	444	71.6	60.7	71.3	67.9	29.5	64.2	76.3	56.7	83.8	35.9	59.8	
AgriMAXX	446	67.9	60.7	68.1	65.6	36.5	65.2	90.2	64.0	96.7	36.0	66.3	
AgriMAXX	Exp. 1664 [E]	91.0	53.7	81.1	75.2	58.9	70.6	95.8	75.1	88.3	61.8	75.0	
AgriMAXX	Exp. 1674 [E]	65.5	47.8	70.7	61.3	32.9	65.3	75.1	57.8	88.0	24.8	56.4	
AgriMAXX	Exp. 1675 [E]	67.5	52.2	65.9	61.9	42.6	65.6	82.1	63.4	89.7	30.7	60.2	
AGS	2024	93.9	54.6	66.4	71.6	39.1	66.9	85.2	63.8	95.2	55.9	75.5	
AGS	2038	87.5	40.9	89.2	72.5	65.6	68.1	84.3	72.7	85.3	66.3	75.8	
AGS	2055	93.2	37.7	84.1	71.7	66.1	69.5	75.1	70.2	88.0	51.0	69.5	
Armor	ARW1511 [E]	85.9	50.1	91.3	75.8	55.7	72.3	91.2	73.0	91.9	66.7	79.3	
Armor	ARW1514 [E]	66.8	39.9	68.7	58.4	39.3	60.6	81.6	60.5	81.1	23.6	52.3	
Armor	ARW1516 [E]	60.6	47.3	56.1	54.7	38.6	60.9	81.9	60.5	105.6	26.5	66.0	
Armor	ARW1521 [E]	62.3	47.3	74.3	61.3	45.2	63.0	78.9	62.4	95.4	34.7	65.0	
Delta Grow	3400	60.9	47.5	65.5	58.0	39.4	62.0	77.8	59.7	91.9	28.3	60.1	
Delta Grow	7500	71.0	38.4	69.6	59.7	43.9	63.9	87.1	65.0	93.1	33.0	63.1	
Delta Grow	DG 1000	76.2	44.6	82.8	67.9	61.2	70.6	78.6	70.1	87.3	61.6	74.4	
Delta Grow	DG 2700	68.9	56.8	66.8	64.2	43.5	64.5	79.0	62.3	90.0	41.7	65.9	
Dixie	DXEX 15-1 [E]	68.1	58.9	63.4	63.5	39.2	58.1	80.0	59.1	89.3	27.2	58.3	
Dixie	DXEX 16-1 [E]	79.9	51.7	78.9	70.2	56.0	73.0	99.4	76.1	81.7	62.4	72.1	
Dixie	DXEX 16-2 [E]	67.4	40.0	60.1	55.8	29.2	61.1	80.2	56.8	95.0	25.4	60.2	
Dixie	DXEX 16-3 [E]	92.9	49.5	86.6	76.3	59.1	69.1	91.1	73.1	98.3	62.0	80.2	
Dixie	McAlister	69.1	46.6	70.8	62.2	28.9	66.3	86.3	60.5	83.6	38.8	61.2	
Dixie	Xtreme	53.9	58.4	44.4	52.3	21.7	42.2	78.0	47.3	92.4	13.7	53.1	
Dixie Bell	DB 125	67.5	56.2	61.5	61.7	39.0	44.5	77.4	53.6	84.7	23.0	53.9	
Dixie Bell	DB 500	65.6	64.4	65.8	65.3	26.4	61.8	74.9	54.4	89.8	32.6	61.2	
Dixie Bell	DB 600	64.5	55.0	67.2	62.2	30.1	55.4	73.2	52.9	93.6	31.2	62.4	
Dixie Bell	DB 620	59.2	57.8	59.0	58.7	30.4	57.7	80.5	56.2	87.3	30.3	58.8	
Dixie Bell	DB 7414	65.1	54.6	66.2	62.0	25.8	51.0	71.9	49.6	90.0	23.4	56.7	
Dyna-Gro	9171	75.1	38.2	69.8	61.1	41.3	70.5	75.6	62.5	92.7	35.9	64.3	
Dyna-Gro	9522	66.0	54.5	70.5	63.7	36.2	63.4	74.5	58.0	94.3	35.5	64.9	
Dyna-Gro	Savoy	79.3	56.5	73.2	69.7	24.7	46.9	64.2	45.3	78.4	30.9	54.6	
Dyna-Gro	WX16771 [E]	57.2	38.5	74.2	56.7	48.6	57.9	77.1	61.2	94.2	22.8	58.5	
Go Wheat	2056	79.4	51.9	72.1	67.8	41.0	69.9	92.0	67.6	89.2	34.9	62.0	
Go Wheat	2058	90.8	50.0	85.1	75.3	52.0	79.2	95.1	75.4	98.2	45.6	71.9	
Limagrain Cereal Seeds	L11419	70.0	38.8	72.4	60.4	39.1	61.8	91.1	64.0	98.3	37.4	67.9	
Limagrain Cereal Seeds	L11541	83.4	56.6	84.6	74.9	53.6	68.4	73.9	65.3	86.8	65.8	76.3	
Limagrain Cereal Seeds	LCS 4343	60.7	36.0	68.3	55.0	32.2	50.1	66.2	49.5	90.3	27.5	58.9	
Limagrain Cereal Seeds	L11544	88.9	41.3	86.7	72.3	65.7	75.8	89.4	77.0	77.8	40.9	59.4	
LSU	LA03200E-2 [E]	74.1	49.3	81.7	68.4	53.6	67.0	82.1	67.5	85.1	32.0	58.5	
LSU	LA06146E-P4 [E]	78.4	44.6	69.7	64.3	27.6	55.8	67.4	50.3	87.1	44.6	65.8	
LSU	LA08115C-30 [E]	73.9	55.7	75.2	68.3	46.5	60.9	70.3	59.2	87.4	28.2	57.8	
LSU	LA09011UB-2 [E]	78.7	55.3	69.1	67.7	59.3	71.0	80.7	70.3	95.3	29.8	62.6	
Pioneer	26R10	61.0	63.9	58.2	61.0	32.2	60.2	80.7	57.7	88.6	22.0	55.3	
Pioneer	26R41	85.3	51.2	85.8	74.1	63.8	68.1	85.6	72.5	90.0	48.1	69.1	
Pioneer	26R53	63.8	56.6	75.1	65.2	39.5	63.6	81.8	61.6	85.6	35.8	60.7	
Pioneer	26R59	62.1	68.4	66.9	65.8	34.2	60.4	73.7	56.1	89.7	25.8	57.7	
Pioneer	26R94	83.9	62.8	67.1	71.3	35.1	67.2	85.7	62.7	79.0	63.9	71.4	
Progeny	P243	65.6	38.2	77.8	60.5	27.7	69.0	70.5	55.7	91.7	32.6	62.1	
Progeny	P357	41.3	56.6	40.7	46.2	18.4	44.0	56.8	39.7	81.4	11.7	46.6	
Progeny	P870	65.0	33.8	80.3	59.7	35.9	63.8	83.8	61.2	97.9	31.7	64.8	
Progeny	PGX 15-10 [E]	87.1	43.6	85.9	72.2	58.5	72.3	86.6	72.5	99.9	62.0	80.9	
Progeny	PGX 15-12 [E]	91.1	23.4	90.0	68.2	52.8	68.8	89.0	70.2	72.0	45.9	58.9	
Progeny	PGX 15-14 [E]	60.6	38.6	64.1	54.4	43.1	66.0	68.4	59.2	97.3	30.3	63.8	
Progeny	PGX 15-16 [E]	80.3	48.9	84.9	71.4	52.4	65.0	85.3	67.6	87.6	40.9	64.3	
U. of Arkansas	AR00343-5-1 [E]	79.1	64.5	73.3	72.3	54.3	66.5	84.2	68.3	74.1	42.2	58.2	
U. of Arkansas	AR01040-4-1 [E]	74.3	51.2	80.8	68.8	51.3	63.4	90.8	68.5	97.4	39.6	68.5	
U. of Georgia	GA-04434-12LE28 [E]	74.5	48.1	72.4	65.0	51.1	59.5	77.9	62.8	85.0	28.2	56.6	
U. of Georgia	GA051102-13LE43 [E]	88.6	55.1	73.2	72.3	66.3	68.3	88.1	74.2	99.1	14.2	56.7	
U. of Georgia	GA061349-13LE29 [E]	81.3	60.3	80.1	73.9	58.6	67.5	83.5	69.9	98.2	22.3	60.3	
U. of Georgia	GA061349-13LE31 [E]	85.8	63.8	88.6	79.4	70.6	67.2	86.1	74.6	93.4	36.9	65.2	

Continued.

Table 3 (continued). 2015–16 yield summary of wheat variety trials in Mississippi.

Brand	Variety[1]	Brooks-ville	Hern-ando	Stark-ville	North avg.	Beau-mont	New-ton	Ray-mond	South avg.	Friars Point	Stone-ville	Delta avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
USG	3013	51.0	60.8	38.4	50.1	19.3	45.4	65.9	43.5	83.1	17.0	50.1
USG	3201	67.8	54.5	64.3	62.2	39.7	66.2	81.1	62.4	95.0	33.3	64.2
USG	3404	69.3	68.3	70.7	69.5	25.7	62.6	73.0	53.8	80.3	34.8	57.6
USG	3523	54.5	62.6	56.1	57.7	24.4	55.2	71.4	50.3	77.6	26.4	52.0
USG	3756	72.1	52.7	71.9	65.5	28.3	68.5	77.3	58.0	93.8	30.5	62.2
USG	EXP 3536 [E]	87.0	56.1	90.5	77.9	56.6	71.7	87.8	72.0	79.0	66.6	72.8
USG	EXP 3688 [E]	80.4	49.0	71.4	66.9	49.2	59.7	89.1	66.0	91.0	53.1	72.0
USG	EXP 3959 [E]	61.8	50.9	79.9	64.2	39.2	63.6	80.1	61.0	93.5	35.7	64.6
Virginia Tech	Hillard	89.3	58.5	85.3	77.7	54.7	67.6	90.9	71.1	95.1	65.8	80.4
Virginia Tech	VA12W-72 [E]	80.4	48.3	88.1	72.2	61.1	63.0	98.9	74.3	77.2	42.8	60.0
Mean		73.1	51.2	72.6	65.6	43.1	63.6	81.1	62.6	89.4	37.7	63.6
LSD		8.3	8.8	11.1		7.2	5.3	9.9		12.6	7.2	
Error df		210	210	210		210	210	210		210	140	
CV		9.7	14.8	13.1		14.3	7.2	10.5		12.0	14.1	
R^2		80.0	70.4	65.6		86.3	78.5	62.6		38.0	91.1	

[1]Variety name followed by [E] denotes an experimental entry.

Table 4. Two-year summary of wheat variety trials in Mississippi.

Brand	Variety[1]	Brooksville	Hernando	Beaumont	Newton	Raymond	Overall avg.
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
AgriMAXX	413	56.7	67.2	41.4	61.9	76.6	60.8
AgriMAXX	415	52.0	66.6	38.1	58.6	68.4	56.7
AgriMAXX	444	55.4	77.8	33.3	57.3	63.8	57.5
AgriMAXX	446	50.8	72.1	42.4	62.7	74.8	60.6
AGS	2038	59.9	62.3	53.7	50.3	68.7	59.0
AGS	2055	66.6	61.9	52.9	56.7	58.9	59.4
Delta Grow	7500	52.9	55.6	41.6	55.1	71.8	55.4
Delta Grow	DG 2700	52.1	69.6	39.5	60.7	65.8	57.6
Dixie	DXEX 15-1 [E]	51.4	73.6	36.8	57.3	66.0	57.0
Dixie	McAlister	55.0	67.3	36.4	57.7	73.3	57.9
Dixie	Xtreme	43.8	73.1	29.0	43.9	66.1	51.2
Dixie Bell	DB 500	48.7	75.1	32.1	57.9	64.7	55.7
Dixie Bell	DB 620	50.8	69.4	35.0	57.3	63.9	55.3
Dyna-Gro	9171	57.8	60.9	40.9	61.6	69.7	58.2
Dyna-Gro	9522	49.1	67.6	35.3	58.1	63.6	54.8
Dyna-Gro	Savoy	57.2	68.2	30.8	35.0	49.3	48.1
Go Wheat	2056	59.0	67.2	43.6	64.1	79.2	62.6
Go Wheat	2058	67.3	65.9	47.5	67.1	79.4	65.4
Limagrain Cereal Seeds	L 11544	61.3	59.0	50.4	57.0	68.1	59.2
LSU	LA03200E-2 [E]	51.9	59.2	43.2	53.1	62.9	54.1
LSU	LA08115C-30 [E]	52.8	65.2	37.8	42.0	53.2	50.2
Pioneer	26R10	48.1	75.1	30.5	58.6	60.4	54.6
Pioneer	26R41	60.1	61.6	54.8	64.1	75.1	63.1
Pioneer	26R53	52.4	68.6	38.1	57.1	69.5	57.1
Pioneer	26R59	50.0	72.4	37.2	56.4	61.3	55.4
Pioneer	26R94	56.6	71.4	36.2	53.4	67.0	56.9
Progeny	P243	52.2	59.9	30.4	60.6	57.1	52.0
Progeny	P357	37.5	67.0	22.1	45.0	46.2	43.6
Progeny	P870	52.1	54.0	37.4	59.0	73.3	55.2
U. of Arkansas	AR00343-5-1 [E]	58.1	73.7	46.7	57.1	68.5	60.8
U. of Arkansas	AR01040-4-1 [E]	57.5	66.3	43.8	50.8	67.4	57.2
USG	3013	45.0	76.5	28.8	46.3	54.4	50.2
USG	3404	52.0	76.9	31.1	61.8	61.8	56.7
USG	3523	48.0	73.1	34.3	58.1	62.2	55.2
USG	3756	58.2	69.5	31.7	62.0	66.0	57.5
Virginia Tech	Hillard	61.1	70.5	49.0	56.3	74.2	62.2
Mean		53.9	67.8	38.7	56.2	65.9	56.5

[1]Variety name followed by [E] denotes an experimental entry.

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

Brand	Variety[1]	Brooksville	Hernando	Beaumont	Raymond	Overall avg.	
		bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	
AgriMAXX	413	58.0	68.3	52.0	76.4	63.7	
AgriMAXX	415	53.0	67.2	48.0	74.9	60.8	
AgriMAXX	444	54.8	77.8	47.6	67.7	62.0	
AgriMAXX	446	53.2	74.7	52.0	78.4	64.6	
AGS	2038	58.3	64.1	58.0	69.4	62.4	
Delta Grow	7500	55.3	56.3	53.5	75.7	60.2	
Dixie	McAlister	53.2	63.3	48.4	74.5	59.9	
Dixie	Xtreme	49.1	77.5	41.0	70.1	59.4	
Dyna-Gro	9171	59.5	73.2	56.7	77.8	66.8	
LSU	LA03200E-2 [E]	55.2	66.0	53.5	68.8	60.9	
Pioneer	26R10	49.6	80.1	42.7	68.0	60.1	
Pioneer	26R41	58.5	65.4	60.7	77.1	65.4	
Pioneer	26R53	56.8	70.3	51.9	73.8	63.2	
Progeny	P357	38.1	67.8	36.5	52.1	48.6	
Progeny	P870	55.2	58.1	48.5	76.6	59.6	
USG	3404	52.9	78.4	44.4	67.2	60.7	
USG	3523	49.2	75.1	49.3	67.7	60.3	
Mean		53.5	69.6	49.7	71.5	61.1	

[1]Variety name followed by [E] denotes an experimental entry.

MAFES Black Belt Branch, Brooksville

Crop Summary

Extremely dry conditions from late summer through October generally delayed wheat plantings until November. Unfortunately, persistent rainy weather beginning in early November substantially restricted production wheat plantings during fall 2015. Locations were planted whenever soils allowed mechanical traffic and sufficient moisture was present for seed germination. The plots were planted into a firm seedbed with excellent soil moisture. All plots emerged to a good stand. No issues were observed during the growing season. All plots were harvested in a timely manner, and good yields were observed at this location.

Planting date . . . . . **November 17**
Harvest date . . . . . **June 3**
Soil type . . . . . **Brooksville silty clay**
Soil pH **6.4**
Soil fertility . . . . . **P=M, K=M**
Previous crop . . . . . **Oats**
Fertilizer added . . . . . **Preplant — 0-0-60 @ 200 lb/A and 33-0-0-12S @ 100 lb/A on November 17**
Topdress — 41 lb/A of N and 15 lb/A of S (33-0-0-12S) on February 29; 92 lb/A of N (urea) on March 1; and 31 lb/A of N and 11 lb/A of S (33-0-0-12S) on March 23
Herbicide applications . . . . **Preemergence — Roundup Powermax @ 32 oz/A on November 17**
Postemergence — Axial XL @ 16.4 oz/A and Harmony Extra SG @ 0.9 oz/A on February 29

Table 6. Yields of 71 wheat varieties at MAFES Black Belt Branch, Brooksville (Brooksville silty clay soil).

Brand	Variety[1]	2015–16 yield	2-year avg.	3-year avg.	Date headed	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*			*in*
AGS	2024	93.9	—	—	4/11	1	40
AGS	2055	93.2	66.6	—	4/21	1	38
Dixie	DXEX 16-3 [E]	92.9	—	—	4/16	1	43
Progeny	PGX 15-12 [E]	91.1	—	—	4/19	1	36
AgriMAXX	Exp. 1664 [E]	91.0	—	—	4/23	1	43
Go Wheat	2058	90.8	67.3	—	4/23	1	35
Virginia Tech	Hillard	89.3	61.1	—	4/18	1	36
Limagrain Cereal Seeds	L 11544	88.9	61.3	—	4/13	1	38
U. of Georgia	GA051102-13LE43 [E]	88.6	—	—	4/15	1	38
AGS	2038	87.5	59.9	58.3	4/18	1	42
Progeny	PGX 15-10 [E]	87.1	—	—	4/23	3	38
USG	EXP 3536 [E]	87.0	—	—	4/21	1	43
Armor	ARW1511 [E]	85.9	—	—	4/23	1	41
U. of Georgia	GA061349-13LE31 [E]	85.8	—	—	4/15	1	39
Pioneer	26R41	85.3	60.1	58.5	4/19	1	39
Pioneer	26R94	83.9	56.6	—	4/9	1	38
Limagrain Cereal Seeds	L11541	83.4	—	—	4/19	1	37
U. of Georgia	GA061349-13LE29 [E]	81.3	—	—	4/18	1	37
USG	EXP 3688 [E]	80.4	—	—	4/17	1	41
Virginia Tech	VA12W-72 [E]	80.4	—	—	4/17	1	36
Progeny	PGX 15-16 [E]	80.3	—	—	4/19	1	35
Dixie	DXEX 16-1 [E]	79.9	—	—	4/25	1	39
Go Wheat	2056	79.4	59.0	—	4/21	1	38
Dyna-Gro	Savoy	79.3	57.2	—	4/5	1	39
U. of Arkansas	AR00343-5-1 [E]	79.1	58.1	—	4/19	1	42
AgriMAXX	413	79.1	56.7	58.0	4/19	1	39
LSU	LA09011UB-2 [E]	78.7	—	—	4/13	1	36
LSU	LA06146E-P4 [E]	78.4	—	—	4/5	1	35
Delta Grow	DG 1000	76.2	—	—	4/23	1	40
Dyna-Gro	9171	75.1	57.8	59.5	4/18	1	40
U. of Georgia	GA-04434-12LE28 [E]	74.5	—	—	4/15	1	41
U. of Arkansas	AR01040-4-1 [E]	74.3	57.5	—	4/1	1	37
LSU	LA03200E-2 [E]	74.1	51.9	55.2	4/19	1	39
LSU	LA08115C-30 [E]	73.9	52.8	—	4/11	1	35
USG	3756	72.1	58.2	—	4/19	1	40

Continued.

Table 6 (cont.). Yields of 71 wheat varieties at MAFES Black Belt Branch, Brooksville (Brooksville silty clay soil).

Brand	Variety[1]	2015–16 yield	2-year avg.	3-year avg.	Date headed	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*			*in*
AgriMAXX	444	71.6	55.4	54.8	4/23	1	38
Delta Grow	7500	71.0	52.9	55.3	4/19	1	42
Limagrain Cereal Seeds	L11419	70.0	—	—	4/18	1	42
AgriMAXX	415	69.8	52.0	53.0	4/20	1	38
USG	3404	69.3	52.0	52.9	4/21	2	43
Dixie	McAlister	69.1	55.0	53.2	4/20	1	37
Delta Grow	DG 2700	68.9	52.1	—	4/22	1	38
Dixie	DXEX 15-1 [E]	68.1	51.4	—	4/23	1	39
AgriMAXX	446	67.9	50.8	53.2	4/26	1	38
USG	3201	67.8	—	—	4/20	1	38
AgriMAXX	Exp. 1675 [E]	67.5	—	—	4/23	1	38
Dixie Bell	DB 125	67.5	—	—	4/12	1	39
Dixie	DXEX 16-2 [E]	67.4	—	—	4/24	1	37
Armor	ARW1514 [E]	66.8	—	—	4/20	1	37
Dyna-Gro	9522	66.0	49.1	—	4/20	2	36
Dixie Bell	DB 500	65.6	48.7	—	4/25	1	40
Progeny	P243	65.6	52.2	—	4/18	1	41
AgriMAXX	Exp. 1674 [E]	65.5	—	—	4/20	1	35
Dixie Bell	DB 7414	65.1	—	—	4/20	4	35
Progeny	P870	65.0	52.1	55.2	4/19	3	39
Dixie Bell	DB 600	64.5	—	—	4/21	2	38
Pioneer	26R53	63.8	52.4	56.8	4/19	1	37
Armor	ARW1521 [E]	62.3	—	—	4/23	1	37
Pioneer	26R59	62.1	50.0	—	4/20	1	35
USG	EXP 3959 [E]	61.8	—	—	4/19	1	37
Pioneer	26R10	61.0	48.1	49.6	4/20	1	41
Delta Grow	3400	60.9	—	—	4/20	1	38
Limagrain Cereal Seeds	LCS 4343	60.7	—	—	4/19	1	42
Progeny	PGX 15-14 [E]	60.6	—	—	4/21	1	38
Armor	ARW1516 [E]	60.6	—	—	4/23	1	38
Dixie Bell	DB 620	59.2	50.8	—	4/25	1	39
Dyna-Gro	WX16771 [E]	57.2	—	—	4/20	1	36
USG	3523	54.5	48.0	49.2	4/21	2	39
Dixie	Xtreme	53.9	43.8	49.1	4/21	1	43
USG	3013	51.0	45.0	—	4/23	2	36
Progeny	P357	41.3	37.5	38.1	4/21	3	40
Mean		73.1					
LSD		8.3					
Error df		210					
CV		9.7					
R^2		80.0					

[1]Variety name followed by [E] denotes an experimental entry.

MSU Coastal R&E Center, Beaumont

Crop Summary

Extremely dry conditions from late summer through October generally delayed wheat plantings until November. Unfortunately, persistent rainy weather beginning in early November substantially restricted production wheat plantings during fall 2015. Locations were planted whenever soils allowed mechanical traffic and sufficient moisture was present for seed germination.The wheat plots were planted into a seedbed that was prepared using conventional tillage techniques. Soil moisture was adequate at planting, and all plots quickly emerged to a stand. Rainfall was frequent during the spring, and some varieties did not appear to tiller as well as they should have. Harvest was completed in a timely manner without difficulties.

Planting date . . . . . **November 6**
Harvest date . . . . . **May 23**
Soil type . . . . . **McLaurin sandy loam**
Soil pH **6.3**
Soil fertility . . . . . **P=H, K=H**
Previous crop . . . . . **Grain Sorghum**
Fertilizer added . . . . . **Preplant — 13-13-13 @ 300 lb/A Topdress — 50 lb/A of N and 18 lb/A of S (33-0-0-12S) on February 8; and 83 lb/A of N and 30 lb/A of S (33-0-0-12S) on March 7**
Herbicide application . . . **Postemergence — Axial XL @ 16.4 oz/A and Harmony Extra SG @ 0.9 oz/A on March 4**

Table 7. Yields of 71 wheat varieties at MSU Coastal R&E Center, Beaumont (McLaurin sandy loam).

Brand	Variety[1]	2015–16 yield	2-year avg.	3-year avg.	Seed weight	Test weight	Date headed	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*g/1000*	*lb/bu*			*in*
U. of Georgia	GA061349-13LE31 [E]	70.6	—	—	27	53	4/5	1	31
U. of Georgia	GA051102-13LE43 [E]	66.3	—	—	31	54	3/15	1	29
AGS	2055	66.1	52.9	—	15	50	4/8	3	33
Limagrain Cereal Seeds	L 11544	65.7	50.4	—	27	54	3/27	1	33
AGS	2038	65.6	53.7	58.0	36	56	3/26	1	37
Pioneer	26R41	63.8	54.8	60.7	29	55	4/2	1	32
Delta Grow	DG 1000	61.2	—	—	26	52	4/8	1	39
Virginia Tech	VA12W-72 [E]	61.1	—	—	37	58	3/27	1	34
LSU	LA09011UB-2 [E]	59.3	—	—	24	54	4/5	1	30
Dixie	DXEX 16-3 [E]	59.1	—	—	23	49	4/2	1	34
AgriMAXX	Exp. 1664 [E]	58.9	—	—	22	49	3/27	1	32
U. of Georgia	GA061349-13LE29 [E]	58.6	—	—	31	59	3/26	1	31
Progeny	PGX 15-10 [E]	58.5	—	—	23	54	4/14	1	37
USG	EXP 3536 [E]	56.6	—	—	21	54	4/11	1	34
Dixie	DXEX 16-1 [E]	56.0	—	—	18	46	4/10	1	35
Armor	ARW1511 [E]	55.7	—	—	26	48	4/2	1	33
Virginia Tech	Hillard	54.7	49.0	—	30	54	3/18	1	29
U. of Arkansas	AR00343-5-1 [E]	54.3	46.7	—	32	57	4/10	1	33
LSU	LA03200E-2 [E]	53.6	43.2	53.5	39	56	3/20	1	30
Limagrain Cereal Seeds	L11541	53.6	—	—	24	50	4/8	1	43
Progeny	PGX 15-12 [E]	52.8	—	—	32	54	4/1	1	34
Progeny	PGX 15-16 [E]	52.4	—	—	26	55	4/11	1	32
Go Wheat	2058	52.0	47.5	—	20	50	4/5	2	36
U. of Arkansas	AR01040-4-1 [E]	51.3	43.8	—	32	55	4/1	1	35
U. of Georgia	GA-04434-12LE28 [E]	51.1	—	—	23	47	4/10	1	29
USG	EXP 3688 [E]	49.2	—	—	33	55	4/2	1	38
Dyna-Gro	WX16771 [E]	48.6	—	—	22	52	3/16	1	32
LSU	LA08115C-30 [E]	46.5	37.8	—	31	52	3/24	1	35
Armor	ARW1521 [E]	45.2	—	—	34	55	3/31	1	33
Delta Grow	7500	43.9	41.6	53.5	18	52	4/8	1	33
Delta Grow	DG 2700	43.5	39.5	—	23	52	4/9	1	36
Progeny	PGX 15-14 [E]	43.1	—	—	20	49	4/10	1	31
AgriMAXX	Exp. 1675 [E]	42.6	—	—	20	47	4/5	1	34
Dyna-Gro	9171	41.3	40.9	56.7	25	51	4/1	1	34
Go Wheat	2056	41.0	43.6	—	26	55	4/3	1	33
USG	3201	39.7	—	—	19	49	4/4	2	33
Pioneer	26R53	39.5	38.1	51.9	24	52	4/9	1	30
Delta Grow	3400	39.4	—	—	22	47	4/9	2	38
Armor	ARW1514 [E]	39.3	—	—	19	48	4/11	1	34

Continued.

Table 7 (cont.). Yields of 71 wheat varieties at MSU Coastal R&E Center, Beaumont (McLaurin sandy loam).

Brand	Variety[1]	2015–16 yield	2-year avg.	3-year avg.	Seed weight	Test weight	Date headed	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*g/1000*	*lb/bu*			*in*
Dixie	DXEX 15-1 [E]	39.2	36.8	—	35	52	3/30	1	32
USG	EXP 3959 [E]	39.2	—	—	26	53	4/3	1	34
AGS	2024	39.1	—	—	28	51	3/22	2	30
Limagrain Cereal Seeds	L11419	39.1	—	—	26	54	3/30	1	35
Dixie Bell	DB 125	39.0	—	—	27	55	3/17	1	31
Armor	ARW1516 [E]	38.6	—	—	31	54	4/9	1	38
AgriMAXX	413	37.9	41.4	52.0	32	55	4/5	1	33
AgriMAXX	446	36.5	42.4	52.0	16	50	4/13	1	33
Dyna-Gro	9522	36.2	35.3	—	25	54	4/5	1	33
Progeny	P870	35.9	37.4	48.5	17	46	4/10	1	34
Pioneer	26R94	35.1	36.2	—	33	58	4/1	1	35
Pioneer	26R59	34.2	37.2	—	23	54	4/10	1	31
AgriMAXX	415	33.3	38.1	48.0	20	51	4/9	1	32
AgriMAXX	Exp. 1674 [E]	32.9	—	—	27	52	4/11	1	36
Pioneer	26R10	32.2	30.5	42.7	20	50	4/5	1	32
Limagrain Cereal Seeds	LCS 4343	32.2	—	—	26	56	4/11	1	37
Dixie Bell	DB 620	30.4	35.0	—	20	48	4/8	1	44
Dixie Bell	DB 600	30.1	—	—	18	49	4/13	1	37
AgriMAXX	444	29.5	33.3	47.6	19	49	4/13	1	32
Dixie	DXEX 16-2 [E]	29.2	—	—	31	57	4/2	1	37
Dixie	McAlister	28.9	36.4	48.4	17	49	4/7	1	34
USG	3756	28.3	31.7	—	20	49	4/8	2	35
Progeny	P243	27.7	30.4	—	17	50	4/9	3	37
LSU	LA06146E-P4 [E]	27.6	—	—	30	56	4/1	1	35
Dixie Bell	DB 500	26.4	32.1	—	34	57	3/16	1	34
Dixie Bell	DB 7414	25.8	—	—	18	48	4/14	2	35
USG	3404	25.7	31.1	44.4	20	51	4/11	2	34
Dyna-Gro	Savoy	24.7	30.8	—	23	52	4/14	3	34
USG	3523	24.4	34.3	49.3	19	48	4/8	2	35
Dixie	Xtreme	21.7	29.0	41.0	18	50	4/9	3	35
USG	3013	19.3	28.8	—	14	50	4/14	1	38
Progeny	P357	18.4	22.1	36.5	22	49	4/10	3	32
Mean		43.1							
LSD		7.2							
Error df		210							
CV		14.3							
R^2		86.3							

[1]Variety name followed by [E] denotes an experimental entry.

Clifton Farms, Hernando

Crop Summary

Extremely dry conditions from late summer through October generally delayed wheat plantings until November. Unfortunately, persistent rainy weather beginning in early November substantially restricted production wheat plantings during fall 2015. Locations were planted whenever soils allowed mechanical traffic and sufficient moisture was present for seed germination. The wheat plots were planted no-till into soybean residue from the previous crop. Soil moisture was adequate at planting, and all plots emerged to a stand. Frequent rainfall during the early spring resulted in poor tillering, producing below-average yields for this location. Harvest was completed in a timely manner without difficulties.

Planting date . . . . . **November 24**
Harvest date . . . . . **June 10**
Soil type . . . . . **Loring silt loam and Grenada silt loam**
Soil pH **6.0**
Soil fertility . . . . . **P=M, K=M**
Previous crop . . . . . **Soybeans**
Fertilizer added . . . . . **Topdress — 40 lb/A of N and 7 lb/A of S (28-0-0-5S) on February 28 and 53 lb/A of N (32-0-0) on March 28**
Herbicide application . . . **Gramoxone @ 32 oz/A on November 24**
Fungicide application . . . **Tebuconazole @ 4 oz/A on April 28**

Table 8. Yields of 71 wheat varieties at Clifton Farms, Hernando (Loring silt loam and Grenada silt loam).

Brand	Variety[1]	2015–16 yield	2-year avg.	3-year avg.	Date headed	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*			*in*
Pioneer	26R59	68.4	72.4	—	4/20	1	22
USG	3404	68.3	76.9	78.4	4/25	1	33
U. of Arkansas	AR00343-5-1 [E]	64.5	73.7	—	4/20	1	29
Dixie Bell	DB 500	64.4	75.1	—	4/18	1	34
Pioneer	26R10	63.9	75.1	80.1	4/22	1	32
U. of Georgia	GA061349-13LE31 [E]	63.8	—	—	4/20	1	32
Pioneer	26R94	62.8	71.4	—	4/18	1	30
USG	3523	62.6	73.1	75.1	4/22	1	32
USG	3013	60.8	76.5	—	4/20	1	32
AgriMAXX	444	60.7	77.8	77.8	4/25	1	33
AgriMAXX	446	60.7	72.1	74.7	4/25	1	27
U. of Georgia	GA061349-13LE29 [E]	60.3	—	—	4/13	1	31
Dixie	DXEX 15-1 [E]	58.9	73.6	—	4/15	1	32
Virginia Tech	Hillard	58.5	70.5	—	4/15	1	28
Dixie	Xtreme	58.4	73.1	77.5	4/25	1	33
Dixie Bell	DB 620	57.8	69.4	—	4/20	1	29
Delta Grow	DG 2700	56.8	69.6	—	4/22	1	31
Pioneer	26R53	56.6	68.6	70.3	4/22	1	28
Limagrain Cereal Seeds	L11541	56.6	—	—	4/18	1	32
Progeny	P357	56.6	67.0	67.8	4/20	1	32
Dyna-Gro	Savoy	56.5	68.2	—	4/25	1	32
Dixie Bell	DB 125	56.2	—	—	4/15	1	34
USG	EXP 3536 [E]	56.1	—	—	4/22	1	30
LSU	LA08115C-30 [E]	55.7	65.2	—	4/18	1	33
LSU	LA09011UB-2 [E]	55.3	—	—	4/22	1	29
U. of Georgia	GA051102-13LE43 [E]	55.1	—	—	4/18	1	31
Dixie Bell	DB 600	55.0	—	—	4/20	1	32
Dixie Bell	DB 7414	54.6	—	—	4/22	1	33
AGS	2024	54.6	—	—	4/20	1	29
Dyna-Gro	9522	54.5	67.6	—	4/22	1	29
USG	3201	54.5	—	—	4/20	1	30
AgriMAXX	413	53.8	67.2	68.3	4/20	1	28
AgriMAXX	Exp. 1664 [E]	53.7	—	—	4/22	1	31
USG	3756	52.7	69.5	—	4/25	1	29
AgriMAXX	Exp. 1675 [E]	52.2	—	—	4/22	1	28
Go Wheat	2056	51.9	67.2	—	4/18	1	27
Dixie	DXEX 16-1 [E]	51.7	—	—	4/25	1	31

Continued.

Table 8 (cont.). Yields of 71 wheat varieties at Clifton Farms, Hernando (Loring silt loam and Grenada silt loam).

Brand	Variety[1]	2015–16 yield	2-year avg.	3-year avg.	Date headed	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*			*in*
Pioneer	26R41	51.2	61.6	65.4	4/22	1	32
U. of Arkansas	AR01040-4-1 [E]	51.2	66.3	—	4/18	1	28
USG	EXP 3959 [E]	50.9	—	—	4/15	1	32
AgriMAXX	415	50.2	66.6	67.2	4/22	1	30
Armor	ARW1511 [E]	50.1	—	—	4/20	1	26
Go Wheat	2058	50.0	65.9	—	4/20	1	30
Dixie	DXEX 16-3 [E]	49.5	—	—	4/20	1	30
LSU	LA03200E-2 [E]	49.3	59.2	66.0	4/18	1	33
USG	EXP 3688 [E]	49.0	—	—	4/25	1	33
Progeny	PGX 15-16 [E]	48.9	—	—	4/18	1	27
Virginia Tech	VA12W-72 [E]	48.3	—	—	4/13	1	30
U. of Georgia	GA-04434-12LE28 [E]	48.1	—	—	4/18	1	28
AgriMAXX	Exp. 1674 [E]	47.8	—	—	4/25	1	33
Delta Grow	3400	47.5	—	—	4/20	1	30
Armor	ARW1516 [E]	47.3	—	—	4/22	1	30
Armor	ARW1521 [E]	47.3	—	—	4/18	1	28
Dixie	McAlister	46.6	67.3	63.3	4/22	1	28
LSU	LA06146E-P4 [E]	44.6	—	—	4/20	1	31
Delta Grow	DG 1000	44.6	—	—	4/22	1	31
Progeny	PGX 15-10 [E]	43.6	—	—	4/25	1	32
Limagrain Cereal Seeds	L 11544	41.3	59.0	—	4/15	1	31
AGS	2038	40.9	62.3	64.1	4/20	1	32
Dixie	DXEX 16-2 [E]	40.0	—	—	4/18	1	32
Armor	ARW1514 [E]	39.9	—	—	4/20	1	30
Limagrain Cereal Seeds	L11419	38.8	—	—	4/25	1	33
Progeny	PGX 15-14 [E]	38.6	—	—	4/20	1	28
Dyna-Gro	WX16771 [E]	38.5	—	—	4/15	1	29
Delta Grow	7500	38.4	55.6	56.3	4/20	1	25
Dyna-Gro	9171	38.2	60.9	73.2	4/20	1	32
Progeny	P243	38.2	59.9	—	4/22	1	33
AGS	2055	37.7	61.9	—	4/20	1	28
Limagrain Cereal Seeds	LCS 4343	36.0	—	—	4/22	1	29
Progeny	P870	33.8	54.0	58.1	4/22	1	27
Progeny	PGX 15-12 [E]	23.4	—	—	4/15	1	28
Mean		51.2					
LSD		8.8					
Error df		210					
CV		14.8					
R^2		70.4					

[1]Variety name followed by [E] denotes an experimental entry.

MAFES Coastal Plain Branch, Newton

Crop Summary

Extremely dry conditions from late summer through October generally delayed wheat plantings until November. Unfortunately, persistent rainy weather beginning in early November substantially restricted production wheat plantings during fall 2015. Locations were planted whenever soils allowed mechanical traffic and sufficient moisture was present for seed germination. Wheat plots were planted into a conventionally tilled seedbed. The freshly disked and harrowed soil had ample moisture for seed germination. All plots quickly emerged to a stand, tillered, and grew off well. Spring weather consisted of abundant rainfall. All plots were harvested in a timely manner, and good yields were observed for this location.

Planting date . . . . . **November 16**
Harvest date . . . . . **May 31**
Soil type . . . . . **Prentiss very fine sandy loam**
Soil pH **6.9**
Soil fertility . . . . . **P=M, K=M**
Previous crop . . . . . **Wheat**
Fertilizer added . . . . . **Preplant — 0-20-20 @ 150 lb/A**
Topdress — 99 lb/A of N and 36 lb/A of S (33-0-0-12S) on February 12; and 25 lb/A of N and 9 lb/A of S (33-0-0-12S) on March 16 and March 30
Herbicide application . . . **Postemergence — Axial XL @ 16.4 oz/A and Harmony Extra SG @ 0.9 oz/A on February 26**

Table 9. Yields of 71 wheat varieties at MAFES Coastal Plains Branch, Newton (Prentiss very fine sandy loam soil).

Brand	Variety[1]	2015–16 yield	2-year avg.	3-year avg.	Seed weight	Test weight	Date headed	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*g/1000*	*lb/bu*			*in*
Go Wheat	2058	79.2	67.1	—	33	50	4/15	1	36
Limagrain Cereal Seeds	L 11544	75.8	57.0	—	37	55	4/9	1	38
Dixie	DXEX 16-1 [E]	73.0	—	—	34	57	4/21	1	37
Armor	ARW1511 [E]	72.3	—	—	33	58	4/21	1	35
Progeny	PGX 15-10 [E]	72.3	—	—	32	57	4/22	1	30
USG	EXP 3536 [E]	71.7	—	—	32	58	4/22	1	34
LSU	LA09011UB-2 [E]	71.0	—	—	28	58	4/7	1	32
Delta Grow	DG 1000	70.6	—	—	36	58	4/20	1	36
AgriMAXX	Exp. 1664 [E]	70.6	—	—	35	58	4/22	1	35
Dyna-Gro	9171	70.5	61.6	—	27	57	4/18	1	37
AgriMAXX	413	70.1	61.9	—	29	56	4/18	1	40
Go Wheat	2056	69.9	64.1	—	26	55	4/20	1	38
AGS	2055	69.5	56.7	—	28	57	4/15	1	38
Dixie	DXEX 16-3 [E]	69.1	—	—	34	59	4/15	1	33
Progeny	P243	69.0	60.6	—	29	61	4/15	1	41
Progeny	PGX 15-12 [E]	68.8	—	—	30	56	4/13	1	45
USG	3756	68.5	62.0	—	31	56	4/13	1	37
Limagrain Cereal Seeds	L11541	68.4	—	—	28	59	4/21	1	40
U. of Georgia	GA051102-13LE43 [E]	68.3	—	—	26	56	4/10	1	33
AGS	2038	68.1	50.3	—	30	56	4/13	1	39
Pioneer	26R41	68.1	64.1	—	30	48	4/17	1	33
Virginia Tech	Hillard	67.6	56.3	—	29	58	4/15	1	36
U. of Georgia	GA061349-13LE29 [E]	67.5	—	—	27	60	4/11	1	32
Pioneer	26R94	67.2	53.4	—	34	58	4/8	1	36
U. of Georgia	GA061349-13LE31 [E]	67.2	—	—	26	58	4/13	1	34
LSU	LA03200E-2 [E]	67.0	53.1	—	32	59	4/20	1	34
AGS	2024	66.9	—	—	28	57	4/21	1	35
AgriMAXX	415	66.7	58.6	—	30	57	4/18	1	37
U. of Arkansas	AR00343-5-1 [E]	66.5	57.1	—	33	57	4/18	1	40
Dixie	McAlister	66.3	57.7	—	28	58	4/18	1	36
USG	3201	66.2	—	—	30	56	4/18	1	39
Progeny	PGX 15-14 [E]	66.0	—	—	27	59	4/20	1	35
AgriMAXX	Exp. 1675 [E]	65.6	—	—	27	57	4/20	1	40
AgriMAXX	Exp. 1674 [E]	65.3	—	—	25	55	4/18	1	33
AgriMAXX	446	65.2	62.7	—	31	55	4/22	1	38
Progeny	PGX 15-16 [E]	65.0	—	—	34	56	4/18	1	38
Delta Grow	DG 2700	64.5	60.7	—	28	58	4/20	1	37
AgriMAXX	444	64.2	57.3	—	27	58	4/20	1	33
Delta Grow	7500	63.9	55.1	—	25	53	4/20	1	32
Progeny	P870	63.8	59.0	—	26	51	4/19	1	35

Continued.

Table 9 (cont.). Yields of 71 wheat varieties at MAFES Coastal Plains Branch, Newton (Prentiss very fine sandy loam soil).

Brand	Variety[1]	2015–16 yield	2-year avg.	3-year avg.[2]	Seed weight	Test weight	Date headed	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*g/1000*	*lb/bu*			*in*
USG	EXP 3959 [E]	63.6	—	—	30	57	4/20	1	40
Pioneer	26R53	63.6	57.1	—	30	57	4/8	1	34
U. of Arkansas	AR01040-4-1 [E]	63.4	50.8	—	29	56	4/9	1	40
Dyna-Gro	9522	63.4	58.1	—	28	55	4/20	1	33
Armor	ARW1521 [E]	63.0	—	—	27	54	4/20	1	33
Virginia Tech	VA12W-72 [E]	63.0	—	—	38	58	4/9	1	31
USG	3404	62.6	61.8	—	28	57	4/20	1	35
Delta Grow	3400	62.0	—	—	27	53	4/18	1	32
Limagrain Cereal Seeds	L11419	61.8	—	—	26	54	4/18	1	32
Dixie Bell	DB 500	61.8	57.9	—	28	54	4/20	1	41
Dixie	DXEX 16-2 [E]	61.1	—	—	24	54	4/18	1	39
Armor	ARW1516 [E]	60.9	—	—	28	57	4/18	1	34
LSU	LA08115C-30 [E]	60.9	42.0	—	30	54	4/4	1	34
Armor	ARW1514 [E]	60.6	—	—	23	54	4/18	1	35
Pioneer	26R59	60.4	56.4	—	32	54	4/18	1	32
Pioneer	26R10	60.2	58.6	—	37	56	4/20	1	35
USG	EXP 3688 [E]	59.7	—	—	30	57	4/13	1	35
U. of Georgia	GA-04434-12LE28 [E]	59.5	—	—	37	55	4/10	1	34
Dixie	DXEX 15-1 [E]	58.1	57.3	—	26	59	4/20	1	35
Dyna-Gro	WX16771 [E]	57.9	—	—	29	57	4/20	1	33
Dixie Bell	DB 620	57.7	57.3	—	29	58	4/20	1	33
LSU	LA06146E-P4 [E]	55.8	—	—	33	59	4/7	1	33
Dixie Bell	DB 600	55.4	—	—	27	56	4/20	1	39
USG	3523	55.2	58.1	—	29	53	4/20	1	34
Dixie Bell	DB 7414	51.0	—	—	25	57	4/22	1	38
Limagrain Cereal Seeds	LCS 4343	50.1	—	—	24	54	4/15	1	33
Dyna-Gro	Savoy	46.9	35.0	—	28	57	4/2	1	34
USG	3013	45.4	46.3	—	27	58	4/20	1	35
Dixie Bell	DB 125	44.5	—	—	28	56	4/8	1	35
Progeny	P357	44.0	45.0	—	27	60	4/19	1	40
Dixie	Xtreme	42.2	43.9	—	25	58	4/18	1	35
Mean		63.6							
LSD		5.3							
Error df		210							
CV		7.2							
R^2		78.5							

[1]Variety name followed by [E] denotes an experimental entry.
[2]No 3-year averages.

MAFES Brown Loam Branch, Raymond

Crop Summary

Extremely dry conditions from late summer through October generally delayed wheat plantings until November. Unfortunately, persistent rainy weather beginning in early November substantially restricted production wheat plantings during fall 2015. Locations were planted whenever soils allowed mechanical traffic and sufficient moisture was present for seed germination.Wheat plots were planted no-till into a residue of the previous soybean crop. Soil moisture at planting was ideal for germination, and all plots quickly emerged to a good stand. Spring green-up was delayed by the cool and wet weather. After spring application of herbicide and nitrogen, the plants tillered and grew off well. Very little lodging was observed, and harvest was completed in a timely manner. Good yields were observed at this location.

Planting date . . . . . **November 13**
Harvest date . . . . . **May 27**
Soil type . . . . . **Loring silt loam**
Soil pH **6.0**
Soil fertility . . . . . **P=H, K=M**
Previous crop . . . . . **Soybeans**
Fertilizer added . . . . . **Preplant — 13-13-13 @ 200 lb/A**
Topdress — 41 lb/A of N and 15 lb/A of S (33-0-0-12S) on February 26 and 82 lb/A of N and 30 lb/A of S (33-0-0-12S) on March 16
Herbicide application . . . **Preemergence — Roundup Powermax @ 32 oz/A on November 13**
Postemergence — Axial XL @ 16.4 oz/A and Harmony Extra SG @ 0.9 oz/A on February 26

Table 10. Yields of 71 wheat varieties at MAFES Brown Loam Branch, Raymond (Loring silt loam soil).

Brand	Variety[1]	2015–16 yield	2-year avg.	3-year avg.	Seed weight	Test weight	Date headed	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*g/1000*	*lb/bu*			*in*
Dixie	DXEX 16-1 [E]	99.4	—	—	25	54	4/13	2	35
Virginia Tech	VA12W-72 [E]	98.9	—	—	31	48	4/5	1	34
AgriMAXX	Exp. 1664 [E]	95.8	—	—	17	53	4/19	2	37
Go Wheat	2058	95.1	79.4	—	24	52	4/11	2	42
Go Wheat	2056	92.0	79.2	—	22	54	4/20	1	37
Armor	ARW1511 [E]	91.2	—	—	19	47	4/11	2	35
Limagrain Cereal Seeds	L11419	91.1	—	—	21	49	4/5	1	41
Dixie	DXEX 16-3 [E]	91.1	—	—	23	52	4/19	1	37
Virginia Tech	Hillard	90.9	74.2	—	30	51	3/29	1	38
U. of Arkansas	AR01040-4-1 [E]	90.8	67.4	—	25	50	4/13	1	39
AgriMAXX	446	90.2	74.8	78.4	24	55	4/20	1	38
AgriMAXX	413	89.9	76.6	76.4	24	54	4/20	1	38
Limagrain Cereal Seeds	L 11544	89.4	68.1	—	24	52	4/11	2	42
USG	EXP 3688 [E]	89.1	—	—	26	56	4/19	1	42
Progeny	PGX 15-12 [E]	89.0	—	—	32	58	4/11	1	39
U. of Georgia	GA051102-13LE43 [E]	88.1	—	—	34	58	3/29	1	37
USG	EXP 3536 [E]	87.8	—	—	20	54	4/19	3	37
Delta Grow	7500	87.1	71.8	75.7	24	48	4/20	1	35
Progeny	PGX 15-10 [E]	86.6	—	—	25	56	4/19	3	39
Dixie	McAlister	86.3	73.3	74.5	20	53	4/13	1	36
U. of Georgia	GA061349-13LE31 [E]	86.1	—	—	24	53	4/11	1	33
Pioneer	26R94	85.7	67.0	—	29	55	4/11	1	36
Pioneer	26R41	85.6	75.1	77.1	23	50	4/20	3	37
Progeny	PGX 15-16 [E]	85.3	—	—	30	56	4/19	2	36
AGS	2024	85.2	—	—	21	55	3/29	1	35
AGS	2038	84.3	68.7	69.4	31	56	3/29	1	45
U. of Arkansas	AR00343-5-1 [E]	84.2	68.5	—	29	57	4/11	2	36
Progeny	P870	83.8	73.3	76.6	24	54	4/20	1	36
U. of Georgia	GA061349-13LE29 [E]	83.5	—	—	26	56	4/5	1	35
AgriMAXX	Exp. 1675 [E]	82.1	—	—	22	52	4/13	1	36
LSU	LA03200E-2 [E]	82.1	62.9	68.8	33	54	4/5	1	38
Armor	ARW1516 [E]	81.9	—	—	30	58	4/20	2	41
Pioneer	26R53	81.8	69.5	73.8	25	50	4/20	2	36
Armor	ARW1514 [E]	81.6	—	—	21	52	4/19	1	31

Continued.

Table 10 (cont.). Yields of 71 wheat varieties at MAFES Brown Loam Branch, Raymond (Loring silt loam soil).

Brand	Variety[1]	2015–16 yield	2-year avg.	3-year avg.	Seed weight	Test weight	Date headed	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*g/1000*	*lb/bu*			*in*
USG	3201	81.1	—	—	25	52	4/20	2	36
LSU	LA09011UB-2 [E]	80.7	—	—	22	51	4/20	3	35
Pioneer	26R10	80.7	60.4	68.0	21	44	4/20	3	36
AgriMAXX	415	80.7	68.4	74.9	20	53	4/20	2	36
Dixie Bell	DB 620	80.5	63.9	—	20	51	4/20	1	38
Dixie	DXEX 16-2 [E]	80.2	—	—	37	59	4/11	1	43
USG	EXP 3959 [E]	80.1	—	—	33	45	4/11	2	41
Dixie	DXEX 15-1 [E]	80.0	66.0	—	38	55	4/11	1	37
Delta Grow	DG 2700	79.0	65.8	—	23	54	4/20	2	39
Armor	ARW1521 [E]	78.9	—	—	32	53	4/11	1	41
Delta Grow	DG 1000	78.6	—	—	21	50	4/19	2	41
Dixie	Xtreme	78.0	66.1	70.1	32	57	4/20	2	40
U. of Georgia	GA-04434-12LE28 [E]	77.9	—	—	20	48	4/20	2	33
Delta Grow	3400	77.8	—	—	25	55	4/19	1	36
Dixie Bell	DB 125	77.4	—	—	25	55	3/29	1	36
USG	3756	77.3	66.0	—	22	51	4/20	1	41
Dyna-Gro	WX16771 [E]	77.1	—	—	26	54	3/29	1	36
AgriMAXX	444	76.3	63.8	67.7	23	51	4/20	2	40
Dyna-Gro	9171	75.6	69.7	77.8	27	52	4/11	2	38
AGS	2055	75.1	58.9	—	19	52	4/11	2	37
AgriMAXX	Exp. 1674 [E]	75.1	—	—	29	56	4/19	1	40
Dixie Bell	DB 500	74.9	64.7	—	31	58	4/5	1	38
Dyna-Gro	9522	74.5	63.6	—	21	53	4/19	2	38
Limagrain Cereal Seeds	L11541	73.9	—	—	25	57	4/19	1	43
Pioneer	26R59	73.7	61.3	—	19	50	4/20	1	37
Dixie Bell	DB 600	73.2	—	—	23	54	4/19	3	39
USG	3404	73.0	61.8	67.2	22	50	4/20	3	40
Dixie Bell	DB 7414	71.9	—	—	25	50	4/19	2	39
USG	3523	71.4	62.2	67.7	20	47	4/20	3	37
Progeny	P243	70.5	57.1	—	17	44	4/20	2	38
LSU	LA08115C-30 [E]	70.3	53.2	—	31	54	4/5	1	41
Progeny	PGX 15-14 [E]	68.4	—	—	23	52	4/19	3	39
LSU	LA06146E-P4 [E]	67.4	—	—	31	55	4/20	2	40
Limagrain Cereal Seeds	LCS 4343	66.2	—	—	27	56	4/19	1	37
USG	3013	65.9	54.4	—	24	55	4/20	1	35
Dyna-Gro	Savoy	64.2	49.3	—	29	45	4/19	2	39
Progeny	P357	56.8	46.2	52.1	18	46	4/20	2	40
Mean		81.1							
LSD		9.9							
Error df		210							
CV		10.5							
R^2		62.6							

[1]Variety name followed by [E] denotes an experimental entry.

Long Lake Farms, Friars Point

Crop Summary

Extremely dry conditions from late summer through October generally delayed wheat plantings until November. Unfortunately, persistent rainy weather beginning in early November substantially restricted production wheat plantings during fall 2015. Locations were planted whenever soils allowed mechanical traffic and sufficient moisture was present for seed germination. Wheat came up to a good stand after planting. After that, it remained very wet throughout the growing season until harvest. Harvest was completed in a timely manner without difficulties, and good yields were recorded.

Planting date . . . . . **November 5**
Harvest date . . . . . **June 9**
Soil type . . . . . **Commerce silt loam**
Soil pH **7.0**
Soil fertility . . . . . **P=H, K=M**
Previous crop . . . . . **Soybeans**
Fertilizer added . . . . . **Topdress — 46 lb/A of N (urea) on December 1, February 1, and March 1**
Herbicide application . . . . **Axial @ 16 oz/A on March 10**
Fungicide application . . . **Priaxor @ 8 oz/A on March 30**
Insecticide application . . . **Karate @ 1.7 oz/A on April 15**

Table 11. Yield of 71 wheat varieties at Long Lake Farms, Friars Point (Commerce silt loam).

Brand	Variety[1]	2015–16 yield	2-year avg.[2]	3-year avg.[2]	Date headed	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*			*in*
Armor	ARW1516 [E]	105.6	—	—	4/22	1	36
Progeny	PGX 15-10 [E]	99.9	—	—	4/23	1	38
U. of Georgia	GA051102-13LE43 [E]	99.1	—	—	4/16	1	37
Limagrain Cereal Seeds	L11419	98.3	—	—	4/22	2	35
Dixie	DXEX 16-3 [E]	98.3	—	—	4/18	1	34
U. of Georgia	GA061349-13LE29 [E]	98.2	—	—	4/19	1	33
Go Wheat	2058	98.2	—	—	4/22	1	33
Progeny	P870	97.9	—	—	4/21	1	34
U. of Arkansas	AR01040-4-1 [E]	97.4	—	—	4/15	1	41
Progeny	PGX 15-14 [E]	97.3	—	—	4/20	1	35
AgriMAXX	446	96.7	—	—	4/21	1	35
Armor	ARW1521 [E]	95.4	—	—	4/23	1	34
LSU	LA09011UB-2 [E]	95.3	—	—	4/11	1	33
AGS	2024	95.2	—	—	4/15	1	34
Virginia Tech	Hillard	95.1	—	—	4/19	1	38
USG	3201	95.0	—	—	4/21	2	35
Dixie	DXEX 16-2 [E]	95.0	—	—	4/22	1	35
Dyna-Gro	9522	94.3	—	—	4/22	1	34
Dyna-Gro	WX16771 [E]	94.2	—	—	4/20	1	39
USG	3756	93.8	—	—	4/19	1	39
Dixie Bell	DB 600	93.6	—	—	4/23	1	35
USG	EXP 3959 [E]	93.5	—	—	4/22	1	36
U. of Georgia	GA061349-13LE31 [E]	93.4	—	—	4/16	1	33
Delta Grow	7500	93.1	—	—	4/21	1	34
Dyna-Gro	9171	92.7	—	—	4/21	1	32
Dixie	Xtreme	92.4	—	—	4/21	2	40
AgriMAXX	415	92.3	—	—	4/20	1	38
Armor	ARW1511 [E]	91.9	—	—	4/22	1	36
Delta Grow	3400	91.9	—	—	4/21	1	39
Progeny	P243	91.7	—	—	4/19	1	37
USG	EXP 3688 [E]	91.0	—	—	4/10	1	35
AgriMAXX	413	90.7	—	—	4/20	1	36
Limagrain Cereal Seeds	LCS 4343	90.3	—	—	4/21	1	41
Pioneer	26R41	90.0	—	—	4/20	1	32
Delta Grow	DG 2700	90.0	—	—	4/22	1	37
Dixie Bell	DB 7414	90.0	—	—	4/23	1	44
Dixie Bell	DB 500	89.8	—	—	4/23	1	33
AgriMAXX	Exp. 1675 [E]	89.7	—	—	4/21	1	35
Pioneer	26R59	89.7	—	—	4/19	1	30
Dixie	DXEX 15-1 [E]	89.3	—	—	4/21	1	33
Go Wheat	2056	89.2	—	—	4/22	1	31

Continued.

Table 11 (cont.). Yield of 71 wheat varieties at Long Lake Farms, Friars Point (Commerce silt loam).

Brand	Variety[1]	2015–16 yield	2-year avg.[2]	3-year avg.[2]	Date headed	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*			*in*
Pioneer	26R10	88.6	—	—	4/21	1	32
AgriMAXX	Exp. 1664 [E]	88.3	—	—	4/21	1	39
AgriMAXX	Exp. 1674 [E]	88.0	—	—	4/19	1	36
U. of Arkansas	ARGA04510-11LE24 [E]	88.0	—	—	4/18	1	35
Progeny	PGX 15-16 [E]	87.6	—	—	4/21	1	33
LSU	LA08115C-30 [E]	87.4	—	—	4/11	1	33
Dixie Bell	DB 620	87.3	—	—	4/22	1	36
Delta Grow	DG 1000	87.3	—	—	4/23	1	35
LSU	LA06146E-P4 [E]	87.1	—	—	4/5	1	30
Limagrain Cereal Seeds	L11541	86.8	—	—	4/22	1	42
Pioneer	26R53	85.6	—	—	4/20	1	29
AGS	2038	85.3	—	—	4/16	1	34
LSU	LA03200E-2 [E]	85.1	—	—	4/11	1	32
U. of Georgia	GA-04434-12LE28 [E]	85.0	—	—	4/11	1	35
Dixie Bell	DB 125	84.7	—	—	4/9	3	38
AgriMAXX	444	83.8	—	—	4/20	1	35
Dixie	McAlister	83.6	—	—	4/20	1	31
USG	3013	83.1	—	—	4/22	2	40
Dixie	DXEX 16-1 [E]	81.7	—	—	4/22	1	36
Progeny	P357	81.4	—	—	4/21	1	32
Armor	ARW1514 [E]	81.1	—	—	4/22	1	40
USG	3404	80.3	—	—	4/21	1	38
Pioneer	26R94	79.0	—	—	4/11	1	38
USG	EXP 3536 [E]	79.0	—	—	4/21	1	40
Dyna-Gro	Savoy	78.4	—	—	4/5	1	33
U. of Georgia	GA03564-12E6 [E]	77.8	—	—	4/10	1	34
USG	3523	77.6	—	—	4/21	2	37
Virginia Tech	VA12W-72 [E]	77.2	—	—	4/14	1	32
U. of Arkansas	AR00343-5-1 [E]	74.1	—	—	4/21	1	38
Progeny	PGX 15-12 [E]	72.0	—	—	4/15	1	35
Mean		89.4					
LSD		12.6					
Error df		210					
CV		12.0					
R^2		38.0					

[1]Variety name followed by [E] denotes an experimental entry.
[2]No 2- or 3-year averages.

R. R. Foil Plant Science Research Center, Starkville

Crop Summary

Extremely dry conditions from late summer through October generally delayed wheat plantings until November. Unfortunately, persistent rainy weather beginning in early November substantially restricted production wheat plantings during fall 2015. Locations were planted whenever soils allowed mechanical traffic and sufficient moisture was present for seed germination. The plots were planted into a seedbed that had been prepared with conventional tillage methods, disking followed by do-all. Soil moisture at planting was optimum for germination. The plots received more than 4 inches of rain after planting, but all plots still emerged to a good stand. The plots received more than 35 inches of rainfall throughout the growing season, making it difficult to time applications of herbicide and fertilizer. Harvest was completed in a timely manner. Very little lodging was observed, and good yields were obtained at this location

Planting date . . . . . **November 14**
Harvest date . . . . . **June 1**
Soil type . . . . . **Marietta fine sandy loam**
Soil pH . . . . . **7.6 – 7.7**
Soil fertility . . . . . **P=H, K=H**
Previous crop . . . . . **Soybean**
Fertilizer added . . . . . **Topdress — 60 lb/A of N and 21 lb/A of S (33-0-0-12) on February 11; and 80 lb/A of N and 29 lb/A of S (33-0-0-12) on March 22**
Herbicide application . . . **Postemergence — Axial XL @ 16.4 oz/A on February 12**

Table 12. Yields of 71 wheat varieties at MAFES Research Center, Starkville (Marietta fine sandy loam).

Brand	Variety[1]	2015–16 yield	2-year avg.[2]	3-year avg.[2]	Seed weight	Test weight	Date headed	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*g/1000*	*lb/bu*			*in*
Armor	ARW1511 [E]	91.3	—	—	35	59	4/24	1	39
USG	EXP 3536 [E]	90.5	—	—	45	58	4/24	1	41
Progeny	PGX 15-12 [E]	90.0	—	—	36	60	4/16	1	38
AGS	2038	89.2	—	—	40	60	4/13	1	41
U. of Georgia	GA061349-13LE31 [E]	88.6	—	—	33	57	4/15	1	34
Virginia Tech	VA12W-72 [E]	88.1	—	—	41	59	4/16	1	38
U. of Georgia	GA03564-12E6 [E]	86.7	—	—	35	60	4/23	1	36
Dixie	DXEX 16-3 [E]	86.6	—	—	38	60	4/16	1	39
Progeny	PGX 15-10 [E]	85.9	—	—	38	57	4/24	1	38
Pioneer	26R41	85.8	—	—	40	59	4/22	1	35
Virginia Tech	Hillard	85.3	—	—	32	60	4/22	1	38
Go Wheat	2058	85.1	—	—	37	60	4/23	1	32
Progeny	PGX 15-16 [E]	84.9	—	—	35	60	4/22	1	34
Limagrain Cereal Seeds	L11541	84.6	—	—	25	58	4/23	1	38
U. of Arkansas	ARGA04510-11LE24 [E]	84.1	—	—	36	58	4/13	1	39
Delta Grow	DG 1000	82.8	—	—	35	59	4/23	1	39
LSU	LA03200E-2 [E]	81.7	—	—	38	60	4/12	1	38
AgriMAXX	Exp. 1664 [E]	81.1	—	—	38	58	4/23	1	39
U. of Arkansas	AR01040-4-1 [E]	80.8	—	—	35	56	4/15	1	40
Progeny	P870	80.3	—	—	27	58	4/23	1	33
U. of Georgia	GA061349-13LE29 [E]	80.1	—	—	39	58	4/19	1	39
USG	EXP 3959 [E]	79.9	—	—	21	57	4/23	1	36
Dixie	DXEX 16-1 [E]	78.9	—	—	32	55	4/24	1	37
AgriMAXX	413	78.7	—	—	25	56	4/23	1	33
Progeny	P243	77.8	—	—	35	57	4/18	1	39
LSU	LA08115C-30 [E]	75.2	—	—	31	58	4/11	1	40
Pioneer	26R53	75.1	—	—	30	59	4/22	1	33
Armor	ARW1521 [E]	74.3	—	—	27	57	4/23	1	37
Dyna-Gro	WX16771 [E]	74.2	—	—	31	57	4/24	1	34
U. of Arkansas	AR00343-5-1 [E]	73.3	—	—	30	57	4/17	1	45
U. of Georgia	GA051102-13LE43 [E]	73.2	—	—	35	55	4/13	1	37
Dyna-Gro	Savoy	73.2	—	—	32	58	4/12	1	33
U. of Georgia	GA-04434-12LE28 [E]	72.4	—	—	31	59	4/13	1	36

Continued.

Table 12 (cont.). Yields of 71 wheat varieties at MAFES Research Center, Starkville (Marietta fine sandy loam).

Brand	Variety[1]	2015–16 yield	2-year avg.[2]	3-year avg.[2]	Seed weight	Test weight	Date headed	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*g/1000*	*lb/bu*			*in*
Limagrain Cereal Seeds	L11419	72.4	—	—	33	58	4/22	1	53
Go Wheat	2056	72.1	—	—	26	56	4/23	1	34
USG	3756	71.9	—	—	32	57	4/18	1	40
USG	EXP 3688 [E]	71.4	—	—	30	59	4/16	1	38
AgriMAXX	444	71.3	—	—	32	56	4/24	1	35
Dixie	McAlister	70.8	—	—	31	56	4/23	1	35
USG	3404	70.7	—	—	31	56	4/23	1	38
AgriMAXX	Exp. 1674 [E]	70.7	—	—	28	55	4/22	1	34
Dyna-Gro	9522	70.5	—	—	33	56	4/17	1	35
Dyna-Gro	9171	69.8	—	—	30	53	4/23	1	35
LSU	LA06146E-P4 [E]	69.7	—	—	35	61	4/12	1	38
Delta Grow	7500	69.6	—	—	28	56	4/24	1	33
LSU	LA09011UB-2 [E]	69.1	—	—	24	59	4/12	1	32
Armor	ARW1514 [E]	68.7	—	—	26	56	4/22	1	34
Limagrain Cereal Seeds	LCS 4343	68.3	—	—	33	57	4/19	1	40
AgriMAXX	446	68.1	—	—	35	58	4/23	1	35
Dixie Bell	DB 600	67.2	—	—	28	54	4/23	1	36
Pioneer	26R94	67.1	—	—	27	57	4/10	1	35
Pioneer	26R59	66.9	—	—	29	55	4/19	1	33
Delta Grow	DG 2700	66.8	—	—	30	57	4/22	1	37
AGS	2024	66.4	—	—	28	58	4/13	1	36
Dixie Bell	DB 7414	66.2	—	—	35	54	4/23	1	38
AgriMAXX	Exp. 1675 [E]	65.9	—	—	25	58	4/23	1	30
AgriMAXX	415	65.8	—	—	27	58	4/23	1	37
Dixie Bell	DB 500	65.8	—	—	26	56	4/22	1	37
Delta Grow	3400	65.5	—	—	25	56	4/23	1	37
USG	3201	64.3	—	—	27	57	4/23	1	37
Progeny	PGX 15-14 [E]	64.1	—	—	31	56	4/23	1	36
Dixie	DXEX 15-1 [E]	63.4	—	—	27	54	4/22	1	34
Dixie Bell	DB 125	61.5	—	—	25	57	4/16	1	38
Dixie	DXEX 16-2 [E]	60.1	—	—	28	55	4/22	2	36
Dixie Bell	DB 620	59.0	—	—	28	55	4/23	1	35
Pioneer	26R10	58.2	—	—	31	53	4/23	1	38
Armor	ARW1516 [E]	56.1	—	—	27	51	4/23	1	38
USG	3523	56.1	—	—	28	54	4/24	1	38
Dixie	Xtreme	44.4	—	—	26	53	4/22	1	38
Progeny	P357	40.7	—	—	25	53	4/24	1	37
USG	3013	38.4	—	—	21	52	4/23	1	41
Mean		72.6							
LSD		11.1							
Error df		210							
CV		13.1							
R^2		65.6							

[1]Variety name followed by [E] denotes an experimental entry.
[2]No 2- or 3-year averages.

Wheat and Oat Seeds per Pound

Table 13. Average number of wheat seeds per pound.

Brand	Variety	2015–16	Brand	Variety	2015–16
AgriMAXX	413	—	LSU	LA03200E-2	10,294
AgriMAXX	415	—	LSU	LA06146E-P4	13,184
AgriMAXX	444	—	LSU	LA08115C-30	15,162
AgriMAXX	446	—	LSU	LA09011UB-2	13,616
AgriMAXX	Exp. 1664	—	LCS	L11419	13,577
AgriMAXX	Exp. 1675	—	LCS	LCS 4343	13,083
AgriMAXX	Exp. 1674	—	LCS	L11541	14,668
AGS	2038	12,132	LCS	L11544	10,685
AGS	2024	14,333	Pioneer	26R10	11,619
AGS	2055	13,109	Pioneer	26R59	12,657
Armor	ARW1511	12,555	Pioneer	26R41	11,647
Armor	ARW1521	13,348	Pioneer	26R53	13,283
Armor	ARW1516	12,974	Pioneer	26R94	10,671
Armor	ARW1514	13,493	Progeny	P243	13,562
Dixie Bell	DB 620	14,801	Progeny	PGX 15-10	13,181
Dixie Bell	DB 500	16,845	Progeny	P870	18,015
Dixie Bell	DB 125	10,894	Progeny	P357	17,323
Dixie Bell	DB 7414	13,738	Progeny	PGX 15-12	12,749
Dixie Bell	DB 600	13,967	Progeny	PGX 15-14	13,250
Dixie	McAlister	18,048	Progeny	PGX 15-16	13,427
Dixie	Xtreme	12,536	VA Tech	HILLIARD	13,832
Dixie	DXEX 16-1	12,942	VA Tech	VA12W-72	10,219
Dixie	DXEX 16-2	13,832	USG	3013	14,884
Dixie	DXEX 15-1	13,898	USG	3201	13,715
Dixie	DXEX 16-3	13,746	USG	3404	13,687
Delta Grow	7500	13,679	USG	3523	13,056
Delta Grow	2700	14,016	USG	Exp 3536	12,359
Delta Grow	1000	12,448	USG	Exp 3959	13,783
Delta Grow	3400	13,578	USG	Exp 3688	12,643
U. of Georgia	GA061349-13LE31	11,618	USG	3756	12,505
U. of Georgia	GA051102-13LE43	10,987	U. of Arkansas	AR01040-4-1	13,589
U. of Georgia	GA061349-13LE29	14,599	U. of Arkansas	AR00343-5-1	13,836
Dyna-Gro	9171	14,129	Go Wheat	2056	16,001
Dyna-Gro	9522	10,833	Go Wheat	2058	12,087
Dyna-Gro	WX16771	13,598	U. of Georgia	GA04434-12LE28	14,607
Dyna-Gro	Savoy	14,359			

Table 14. Average number of oat seeds per pound.

Brand	Variety	2015–16
Horizon	270	13,496
Horizon	306	13,714
LSU	*LA06059-4-S1*	16,526
LSU	*LA07007-18*	18,106
LSU	*LA07007-24*	15,384
LSU	*LA08084-15*	13,282

Summaries of Oat Yields

Table 15. 2015–16 yield summary of oat variety trials in Mississippi.

Brand	Variety[1]	Brooksville	Newton	Overall avg.	
		bu/A	*bu/A*	*bu/A*	
LSU	LA 06059-4-S1 [E]	43.7	47.8	45.8	
LSU	LA 07007-24 [E]	70.5	64.4	67.5	
LSU	LA 08084-15 [E]	50.7	23.8	37.2	
LSU	LA07007-18 [E]	65.6	72.0	68.8	
Plantation Seed	Horizon 270	53.0	58.0	55.5	
Plantation Seed	Horizon 306	50.1	56.3	53.2	
Mean		55.6	53.7	54.7	
LSD		13.9	9.9		
Error df		15	15		
CV		20.1	14.9		
R^2		53.9	86.1		

[1]Variety name followed by [E] denotes an experimental entry.

Table 16. Two-year yield summary of oat variety trials in Mississippi.

Brand	Variety[1]	Brooksville	Newton	Overall avg.	
		bu/A	*bu/A*	*bu/A*	
LSU	LA 06059-4-S1 [E]	33.0	32.9	32.9	
LSU	LA 07007-24 [E]	47.3	48.6	47.9	
LSU	LA 08084-15 [E]	34.7	20.8	27.8	
Plantation Seed	Horizon 270	44.0	46.5	45.3	
Plantation Seed	Horizon 306	39.7	47.2	43.5	
Overall Mean		39.7	39.2	39.5	

[1]Variety name followed by [E] denotes an experimental entry.

Table 17. Three-year yield summary of oat variety trials in Mississippi.

Brand	Variety[1]	Brooksville	Newton	Overall avg.	
		bu/A	*bu/A*	*bu/A*	
Plantation Seed	Horizon 270	56.4	48.8	52.6	
Plantation Seed	Horizon 306	47.6	48.9	48.2	
Overall Mean		52.0	48.8	50.4	

[1]Variety name followed by [E] denotes an experimental entry.

MAFES Black Belt Branch, Brooksville

Crop Summary

Extremely dry conditions from late summer through October generally delayed wheat plantings until November. Unfortunately, persistent rainy weather beginning in early November substantially restricted production wheat plantings during fall 2015. Locations were planted whenever soils allowed mechanical traffic and sufficient moisture was present for seed germination. The plots were planted into a firm seedbed with excellent soil moisture. All plots emerged to a good stand. No issues were observed during the growing season. Plots were harvested in a timely manner, and good yields were observed at this location.

Planting date . . . . . **November 17**
Harvest date . . . . . **June 3**
Soil type . . . . . **Brooksville silty clay**
Soil pH **6.4**
Soil fertility . . . . . **P=M, K=M**
Previous crop . . . . . **Oats**
Fertilizer added . . . . . **Preplant — 0-0-60 @ 200 lb/A and 33-0-0-12S @ 100 lb/A on November 17**
Topdress — 92 lb/A of N (urea) on March 1
Herbicide applications . . . . **Postemergence — Harmony Extra SG @ 0.9 oz/A on February 29**

Table 18. Yields of six oat varieties at MAFES Black Belt Branch, Brooksville (Brooksville silty clay soil).

Brand	Variety[1]	2015–16 yield	2-year avg.	3-year avg.	Date headed	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*			*in*
LSU	LA 07007-24 [E]	70.5	47.3	—	4/14	1	49
LSU	LA07007-18 [E]	65.6	—	—	4/13	1	38
Plantation Seed	Horizon 270	53.0	44.0	56.4	4/12	1	40
LSU	LA 08084-15 [E]	50.7	34.7	—	4/18	1	44
Plantation Seed	Horizon 306	50.1	39.7	47.6	4/14	1	40
LSU	LA 06059-4-S1 [E]	43.7	33.0	—	4/14	1	34
Mean		55.6					
LSD		13.9					
Error df		15					
CV		20.1					
R^2		53.9					

[1]Variety name followed by [E] denotes an experimental entry.

MAFES Coastal Plain Branch, Newton

Crop Summary

Extremely dry conditions from late summer through October generally delayed wheat plantings until November. Unfortunately, persistent rainy weather beginning in early November substantially restricted production wheat plantings during fall 2015. Locations were planted whenever soils allowed mechanical traffic and sufficient moisture was present for seed germination. The plots were planted into a conventionally tilled seedbed. The freshly disked and harrowed soil had ample moisture for seed germination. All plots quickly emerged to a stand, tillered, and grew off well. The spring weather consisted of abundant rainfall. All plots were harvested in a timely manner, and good yields were observed for this location.

Planting date ..... **November 16**
Harvest date ..... **May 31**
Soil type ..... **Prentiss very fine sandy loam**
Soil pH **6.9**
Soil fertility ..... **P=M, K=M**
Previous crop ..... **Wheat**
Fertilizer added ..... **Preplant — 0-20-20 @ 150 lb/A**
Topdress — 63 lb/A of N and 23 lb/A of S (33-0-0-12S) on February 12; and 25 lb/A of N and 9 lb/A of S (33-0-0-12S) on March 16 and March 30
Herbicide application ..... **Postemergence — Harmony Extra SG 0.9 oz/A on February 26**

Table 19. Yields of six oat varieties at MSU Coastal Plain Branch, Newton (Prentiss very fine sandy loam soil).

Brand	Variety[1]	2015–16 yield	2-year avg.	3-year avg.	Test weight	Date headed	Lodging score	Plant height
		bu/A	*bu/A*	*bu/A*	*lb/bu*			*in*
LSU	LA07007-18 [E]	72.0	—	—	35	4/13	1	33
LSU	LA 07007-24 [E]	64.4	48.6	—	29	4/8	1	43
Plantation Seed	Horizon 270	58.0	46.5	48.8	31	4/16	1	42
Plantation Seed	Horizon 306	56.3	47.2	48.9	31	4/18	1	46
LSU	LA 06059-4-S1 [E]	47.8	32.9	—	33	4/8	1	41
LSU	LA 08084-15 [E]	23.8	20.8	—	32	4/13	1	42
Mean		53.7						
LSD		9.9						
Error df		15						
CV		14.9						
R^2		86.1						

[1]Variety name followed by [E] denotes an experimental entry.

Todd Heigle Farm, Issaquena County

Data not reported due to poor stand

Wheat harvest data and variety yield performance were not published from the Issaquena County location due to substantial stand issues. Less-than-desirable stands were achieved due to above-average rainfall at this location after planting. Complete soil saturation occurred immediately after planting and persisted through late spring. These waterlogged soils resulted in plants that never produced tillers properly. The plants were very small in overall height and produced extremely small heads. As a result of these conditions, no data was collected from this location.

Delta Branch Experiment Station, Stoneville

Data not reported due to stand issues and bird feeding damage

Wheat harvest data and variety yield performance were not published from the Stoneville location due substantial stand issues and bird damage. Extremely dry conditions were followed by abundant rainfall that produced very wet soils, delaying planting until mid-December. Less-than-desirable stands were achieved due to the late planting date and above-average rainfall at this location. The lower end of the field was more saturated due to drainage, and these plots had a reduced number of total plants as well as tillers. Considerable bird damage was also observed after heading but before harvest. This damage was concentrated on the earlier maturing varieties, reducing their overall yield potential. It resulted in substantial variability within this trial.

Interpretation of Disease Reaction Values

Five locations were evaluated for the presence of foliar and stem diseases. The disease incidence and severity differed at each location, so the diseases rated at each location differed in some cases. Data are presented in the tables as an average or mean of the four replications for each variety from each location. Plant pathologists use a visual rating scale (*James' Manual of Assessment of Plant Diseases*), which has templates to guide evaluations on foliar diseases.

Leaf rust and stripe rust have diagrammatic representations of the amount of leaf area affected by each disease. The pictorial guides aid in making visual assessments of how much of the flag leaf of a wheat plant contains observable symptoms or rust pustule or fungal/bacterial lesion development. Values can range from 0% (no symptoms present) up to approximately 50% (most of the leaf diseased).

The grower must keep in mind the factors contributing to the amount of disease present at a particular location and on a certain variety. These factors include stage of plant growth, rainfall amounts, humidity, temperature, inoculum (or spore load), varietal susceptibility, and a host of other environmental/varietal interactions that coincide with disease incidence (the percentage of plants with symptoms) and severity (the amount of leaf area affected on those plants).

The ratings reflect mainly the severity of infection within an entire plot. So when a value of 15% occurs in the table for a particular variety, most of the plants in that plot have similar levels of symptom development. You will notice great variation from one location to another because of the factors contributing to disease development at that particular location. One variety may be severely affected in one year and less affected in the next year, depending on these factors.

We do not attempt in this publication to place arbitrary values on what makes a variety resistant, moderately susceptible, susceptible, or very susceptible. In addition, keep in mind that the main race of a particular pathogen (either leaf, stem, or stripe rust) may vary by location, as well as between years. The grower needs to look at several years in the past for a particular variety he is interested in growing and look at the numbers over those years.

Generally, varieties with disease severity values of from 0–5% would be considered resistant or at least highly tolerant to foliar diseases. Values from 5–10% would be considered moderately susceptible. Values from 10–15% would be considered susceptible. Any variety with consistent severity ratings above 15% — especially around 25% — should be considered highly susceptible. These values, however, are just for generalizing the disease reaction of a variety and should not be thought of as set in stone.

Values can and will vary for any variety from year to year. Growers should pay attention to the varietal disease reactions over several years and base their preference for a particular variety on a running average along with yield potential and their own farm history of foliar wheat diseases. Variety trials are conducted without any fungicide applications to allow for assessment of varietal performance based only on environmental growing conditions and varietal genetics.

For the most part, Fusarium head blight (or scab) was present at all of the locations, and ratings were conducted using a scale of 0–100% of the heads affected in a given plot. Additional diseases present throughout the variety trials (not rated at every location) included downy mildew, bacterial leaf streak, Barley yellow dwarf virus, smut, and Stagonospora leaf and glume blotch.

We suggest that you contact your small-grain specialist or county agent to help in making variety decisions on your farm.

Table 20. Evaluation of wheat varieties to leaf rust (LR) and Fusarium head blight (FHB) at Beaumont.[1]

Source/Cultivar	LR rating	FHB rating	Source/Cultivar	LR rating	FHB rating
AgriMAXX 413	15.0 m-s	0.3 g	LCS L11541	0.0 y	0.0 g
AgriMAXX 415	21.3 g-n	0.3 g	LCS L11544	0.3 y	22.5 de
AgriMAXX 444	31.3 b-f	0.0 g	LSU LA-03200E-2	15.0 m-s	78.8 ab
AgriMAXX 446	26.3 e-j	0.3 g	LSU LA-06146E-P4	0.3 y	60.0 c
AgriMAXX Exp. 1664	2.5 wxy	0.3 g	LSU LA-08115C-30	14.3 m-t	58.8 c
AgriMAXX Exp. 1674	33.8 b-e	0.0 g	LSU LA-09011UB-2	1.5 wxy	6.8 fg
AgriMAXX Exp. 1675	13.8 m-t	2.3 g	Pioneer 26R10	40.0 ab	0.0 g
AGS 2024 (GA-04434-11E44)	0.0 y	83.8 a	Pioneer 26R41	6.0 s-y	2.8 g
AGS 2038 (GA 001138-8E36)	0.0 y	23.3 de	Pioneer 26R53	27.5 d-h	0.3 g
AGS 2055	0.5 y	5.0 g	Pioneer 26R59 (XW13T)	31.3 b-f	0.0 g
Armor ARW 1511	2.3 wxy	0.3 g	Pioneer 26R94	0.0 y	77.5 ab
Armor ARW 1514	28.8 c-g	0.3 g	Progeny PGX 15-12	5.3 t-y	3.8 g
Armor ARW 1516	14.5 m-t	0.8 g	Progeny PGX 15-14	26.8 e-i	0.0 g
Armor ARW 1521	13.5 m-t	1.3 g	Progeny PGX 15-16	5.8 s-y	0.0 g
Delta Grow 1000	4.0 u-y	1.0 g	Progeny P243 PGX 14-3	32.5 b-e	0.0 g
Delta Grow 2700	27.5 d-h	0.3 g	Progeny P357	28.8 c-g	0.0 g
Delta Grow 3400	26.0 e-j	12.4 efg	Progeny P870	13.0 n-u	0.0 g
Delta Grow 7500	15.5 l-r	0.0 g	Progeny PGX 15-10	10.0 o-x	0.0 g
Dixie Bell DB 125	5.3 t-y	62.5 c	Univ. AR AR00343-5-1	8.0 q-y	20.0 def
Dixie Bell DB 500	21.3 g-n	0.0 g	Univ. AR AR01040-4-1	0.3 y	60.0 c
Dixie Bell DB 600	24.5 e-l	0.5 g	Univ. GA GA-04434-12LE28	7.0 r-y	28.8 d
Dixie Bell DB 620	36.3 bcd	0.3 g	Univ. GA GA-051102-13LE43	0.8 xy	5.3 g
Dixie Bell DB 7414	22.5 f-m	0.0 g	Univ. GA GA-061349-13LE29	3.4 v-y	1.8 g
Dixie DXEX 15-1	28.8 c-g	1.0 g	Univ. GA GA-061349-13LE31	0.0 y	21.0 de
Dixie DXEX 16-1	2.3 wxy	2.5 g	USG 3013	46.3 a	0.3 g
Dixie DXEX 16-2	36.3 bcd	0.0 g	USG 3201	12.5 n-v	0.0 g
Dixie DXEX 16-3	0.3 y	0.5 g	USG 3404	28.8 c-g	0.0 g
Dixie McAlister	19.3 h-o	0.5 g	USG 3523	25.0 e-k	0.0 g
Dixie Xtreme	37.5 abc	0.0 g	USG 3756	37.5 abc	0.0 g
Dyna-Gro 9171	17.0 j-q	0.5 g	USG EXP 3536	2.8 wxy	0.5 g
Dyna-Gro 9522	30.0 c-g	1.0 g	USG EXP 3688	2.0 wxy	4.3 g
Dyna-Gro Savoy	0.0 y	67.5 bc	USG EXP 3959	18.3 h-p	1.8 g
Dyna-Gro WX16771	9.3 p-y	9.5 efg	VA Tech. HILLIARD	9.3 p-y	4.8 g
GW 2056	10.3 o-w	0.8 g	VA Tech. VA12W-72	2.8 wxy	1.3 g
GW 2058	16.3 k-r	0.8 g	LSD (0.05)	9.5	14.0
LCS 4343	19.3 h-o	0.0 g	CV (%)	44.1	96.6
LCS L11419	18.0 i-p	0.0 g	*P*-value for F-statistic	<0.0001	<0.0001

[1]Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (P=0.05).

Table 21. Evaluation of wheat varieties to leaf rust (LR), stripe rust (SR), and Septoria blight (SB) at Friars Point.[1]

Source/Cultivar	LR rating	SR rating	SB rating	Source/Cultivar	LR rating	SR rating	SB rating
AgriMAXX 413	2.0	0.0	2.0	LCS L11541	6.0	0.0	1.3
AgriMAXX 415	9.3	0.0	0.0	LCS L11544	12.5	0.0	0.0
AgriMAXX 444	3.8	0.0	1.3	LSU LA-03200E-2	19.3	0.0	0.0
AgriMAXX 446	8.0	3.8	0.0	LSU LA-06146E-P4	5.3	3.0	0.0
AgriMAXX Exp. 1664	9.3	0.0	0.0	LSU LA-08115C-30	5.5	0.0	2.0
AgriMAXX Exp. 1674	1.3	3.0	0.0	LSU LA-09011UB-2	1.0	0.3	0.0
AgriMAXX Exp. 1675	7.3	3.0	0.0	Pioneer 26R10	6.8	3.0	0.0
AGS 2024 (GA-04434-11E44)	2.5	0.0	1.0	Pioneer 26R41	6.0	0.0	0.0
AGS 2038 (GA 001138-8E36)	5.0	2.0	1.7	Pioneer 26R53	8.8	0.0	2.5
AGS 2055	0.0	0.5	0.5	Pioneer 26R59 (XW13T)	11.0	2.0	2.0
Armor ARW 1511	2.8	0.0	0.0	Pioneer 26R94	3.0	0.0	1.3
Armor ARW 1514	5.0	0.0	0.0	Progeny PGX 15-12	11.5	0.0	0.0
Armor ARW 1516	7.8	0.0	1.0	Progeny PGX 15-14	4.3	0.0	0.0
Armor ARW 1521	4.3	0.0	0.8	Progeny PGX 15-16	4.8	2.8	0.0
Delta Grow 1000	2.5	0.0	0.0	Progeny P243 PGX 14-3	5.8	0.0	1.0
Delta Grow 2700	0.0	2.5	3.8	Progeny P357	6.5	1.0	0.0
Delta Grow 3400	5.2	0.0	1.0	Progeny P870	3.5	3.0	0.5
Delta Grow 7500	8.3	0.0	1.0	Progeny PGX 15-10	1.3	0.0	0.0
Dixie Bell DB 125	10.3	0.0	0.8	Univ. AR AR00343-5-1	5.3	2.5	0.0
Dixie Bell DB 500	8.8	0.0	3.8	Univ. AR AR01040-4-1	2.8	0.0	0.0
Dixie Bell DB 600	5.0	0.0	0.0	Univ. GA GA-04434-12LE28	0.5	5.0	0.0
Dixie Bell DB 620	4.5	3.8	0.0	Univ. GA GA-051102-13LE43	4.0	0.5	0.0
Dixie Bell DB 7414	6.7	0.0	0.0	Univ. GA GA-061349-13LE29	9.0	0.0	0.0
Dixie DXEX 15-1	15.0	0.0	0.0	Univ. GA GA-061349-13LE31	2.0	0.0	3.0
Dixie DXEX 16-1	4.3	0.0	1.5	USG 3013	10.3	0.0	0.0
Dixie DXEX 16-2	2.0	0.0	0.0	USG 3201	4.3	0.0	0.0
Dixie DXEX 16-3	7.5	0.0	0.0	USG 3404	2.3	0.0	0.0
Dixie McAlister	6.3	0.0	1.3	USG 3523	7.3	0.0	0.0
Dixie Xtreme	0.8	2.5	0.0	USG 3756	9.3	0.0	0.8
Dyna-Gro 9171	3.3	2.5	1.0	USG EXP 3536	10.0	0.0	0.0
Dyna-Gro 9522	1.0	0.0	0.0	USG EXP 3688	6.0	0.0	1.3
Dyna-Gro Savoy	7.5	0.0	0.0	USG EXP 3959	1.5	2.5	0.5
Dyna-Gro WX16771	6.0	6.3	0.0	VA Tech. HILLIARD	3.5	0.0	0.0
GW 2056	0.0	0.0	1.5	VA Tech. VA12W-72	4.5	0.0	0.0
GW 2058	4.0	0.0	0.5	LSD (0.05)	11.2	0.0	3.2
LCS 4343	5.5	0.0	4.3	CV (%)	141.7	401.6	339.1
LCS L11419	6.0	0.0	3.8	*P*-value for F-statistic	0.8280	0.7872	0.7810

[1]Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (P=0.05).

Table 22. Evaluation of wheat varieties to leaf rust (LR), stripe rust (SR), and Septoria blight (SB) at Newton.[1]

Source/Cultivar	LR rating	SR rating	SB rating	Source/Cultivar	LR rating	SR rating	SB rating
AgriMAXX 413	1.0 ef	0.0 e	0.0 e	LCS L11541	0.0 f	0.0 e	0.0 e
AgriMAXX 415	1.8 def	0.0 e	0.0 e	LCS L11544	0.0 f	2.5 cde	2.0 de
AgriMAXX 444	1.3 ef	0.0 e	0.0 e	LSU LA-03200E-2	1.8 def	0.0 e	2.8 cde
AgriMAXX 446	1.5 ef	0.0 e	1.0 e	LSU LA-06146E-P4	0.0 f	0.0 e	7.5 bc
AgriMAXX Exp. 1664	0.0 f	0.0 e	0.0 e	LSU LA-08115C-30	0.0 f	0.0 e	15.0 a
AgriMAXX Exp. 1674	3.5 c-f	0.0 e	0.0 e	LSU LA-09011UB-2	0.0 f	0.0 e	0.0 e
AgriMAXX Exp. 1675	0.0 f	0.0 e	0.0 e	Pioneer 26R10	5.3 cde	0.0 e	0.0 e
AGS 2024 (GA-04434-11E44)	0.0 f	0.0 e	3.8 b-e	Pioneer 26R41	0.0 f	0.0 e	0.0 e
AGS 2038 (GA 001138-8E36)	0.0 f	0.0 e	0.0 e	Pioneer 26R53	1.3 ef	0.0 e	0.0 e
AGS 2055	0.0 f	0.0 e	0.0 e	Pioneer 26R59 (XW13T)	7.3 bc	0.0 e	0.0 e
Armor ARW 1511	0.0 f	0.0 e	2.3 de	Pioneer 26R94	0.0 f	0.0 e	0.0 e
Armor ARW 1514	4.5 c-f	0.0 e	0.0 e	Progeny PGX 15-12	0.0 f	5.0 cd	0.0 e
Armor ARW 1516	0.5 ef	0.0 e	0.0 e	Progeny PGX 15-14	3.3 c-f	0.0 e	0.0 e
Armor ARW 1521	0.0 f	0.0 e	0.0 e	Progeny PGX 15-16	0.0 f	0.0 e	0.8 e
Delta Grow 1000	0.0 f	0.0 e	0.0 e	Progeny P243 PGX 14-3	0.5 ef	10.0 b	0.0 e
Delta Grow 2700	2.8 c-f	0.0 e	0.0 e	Progeny P357	11.8 ab	0.0 e	0.0 e
Delta Grow 3400	6.8 bcd	0.0 e	0.0 e	Progeny P870	0.5 ef	0.0 e	0.0 e
Delta Grow 7500	0.0 f	0.0 e	0.0 e	Progeny PGX 15-10	0.0 f	0.0 e	0.0 e
Dixie Bell DB 125	0.0 f	32.5 a	3.8 b-e	Univ. AR AR00343-5-1	0.8 ef	0.0 e	0.0 e
Dixie Bell DB 500	0.5 ef	0.0 e	0.0 e	Univ. AR AR01040-4-1	0.0 f	0.0 e	0.8 e
Dixie Bell DB 600	2.8 c-f	0.0 e	0.0 e	Univ. GA GA-04434-12LE28	0.0 f	0.0 e	6.3 bcd
Dixie Bell DB 620	5.3 cde	1.3 de	0.0 e	Univ. GA GA-051102-13LE43	0.0 f	0.0 e	0.0 e
Dixie Bell DB 7414	3.0 c-f	0.0 e	0.0 e	Univ. GA GA-061349-13LE29	0.0 f	0.0 e	0.0 e
Dixie DXEX 15-1	5.3 cde	0.0 e	0.0 e	Univ. GA GA-061349-13LE31	0.0 f	0.0 e	0.0 e
Dixie DXEX 16-1	0.0 f	0.0 e	0.0 e	USG 3013	14.3 a	0.0 e	0.0 e
Dixie DXEX 16-2	5.3 cde	0.0 e	0.0 e	USG 3201	2.0 def	0.0 e	0.0 e
Dixie DXEX 16-3	0.8 ef	0.0 e	0.0 e	USG 3404	4.0 c-f	0.0 e	0.0 e
Dixie McAlister	0.8 ef	0.0 e	0.0 e	USG 3523	3.3 c-f	2.5 cde	0.0 e
Dixie Xtreme	16.5 a	0.0 e	0.0 e	USG 3756	0.0 f	7.3 bc	0.0 e
Dyna-Gro 9171	0.0 f	0.0 e	0.0 e	USG EXP 3536	0.0 f	0.0 e	0.0 e
Dyna-Gro 9522	2.7 c-f	0.0 e	0.0 e	USG EXP 3688	0.0 f	2.5 cde	3.8 b-e
Dyna-Gro Savoy	0.0 f	0.0 e	7.8 b	USG EXP 3959	0.0 f	0.0 e	0.0 e
Dyna-Gro WX16771	1.3 ef	0.0 e	0.0 e	VA Tech. HILLIARD	0.0 f	0.0 e	0.0 e
GW 2056	1.8 def	0.0 e	0.0 e	VA Tech. VA12W-72	0.0 f	0.0 e	0.0 e
GW 2058	0.0 f	0.0 e	0.0 e	LSD (0.05)	5.0	5.0	5.0
LCS 4343	2.0 def	0.0 e	0.0 e	CV (%)	194.6	361.2	441.9
LCS L11419	3.5 c-f	7.0 bc	0.0 e	*P*-value for F-statistic	<0.0001	<0.0001	0.0008

[1]Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (P=0.05).

Table 23. Evaluation of wheat varieties to leaf rust (LR) and Fusarium head blight (FHB) at Raymond.[1]

Source/Cultivar	LR rating	FHB rating	Source/Cultivar	LR rating	FHB rating
AgriMAXX 413	0.5 j	2.8 hi	LCS L11541	0.0 j	0.5 i
AgriMAXX 415	4.0 e-j	3.8 ghi	LCS L11544	0.0 j	36.3 d
AgriMAXX 444	4.0 e-j	3.3 hi	LSU LA-03200E-2	1.8 g-j	42.5 d
AgriMAXX 446	0.8 ij	1.8 i	LSU LA-06146E-P4	0.0 j	86.3 a
AgriMAXX Exp. 1664	0.3 j	0.0 i	LSU LA-08115C-30	0.0 j	83.8 ab
AgriMAXX Exp. 1674	7.8 c-g	0.3 i	LSU LA-09011UB-2	0.0 j	13.8 e-h
AgriMAXX Exp. 1675	1.0 hij	0.3 i	Pioneer 26R10	15.0 ab	1.3 i
AGS 2024 (GA-04434-11E44)	0.0 j	83.8 ab	Pioneer 26R41	3.5 e-j	1.3 i
AGS 2038 (GA 001138-8E36)	0.0 j	56.3 c	Pioneer 26R53	1.0 j	0.0 i
AGS 2055	0.0 j	13.8 e-h	Pioneer 26R59 (XW13T)	3.3 e-j	1.3 i
Armor ARW 1511	0.0 j	0.0 i	Pioneer 26R94	0.0 j	72.5 b
Armor ARW 1514	2.0 g-j	0.0 i	Progeny PGX 15-12	0.0 j	1.0 i
Armor ARW 1516	9.0 c-f	1.3 i	Progeny PGX 15-14	9.8 b-e	0.0 i
Armor ARW 1521	1.5 g-j	0.3 i	Progeny PGX 15-16	0.0 j	0.0 i
Delta Grow 1000	2.5 f-j	1.3 i	Progeny P243 PGX 14-3	6.0 e-j	1.3 i
Delta Grow 2700	1.0 hij	0.3 i	Progeny P357	13.0 a-d	1.8 i
Delta Grow 3400	6.3 e-j	2.5 hi	Progeny P870	2.8 f-j	3.8 ghi
Delta Grow 7500	1.0 hij	0.3 i	Progeny PGX 15-10	0.0 j	0.3 i
Dixie Bell DB 125	3.8 e-j	81.3 ab	Univ. AR AR00343-5-1	1.8 g-j	7.5 f-i
Dixie Bell DB 500	0.3 j	0.0 i	Univ. AR AR01040-4-1	0.0 j	15.0 efg
Dixie Bell DB 600	2.0 g-j	0.0 i	Univ. GA GA-04434-12LE28	0.0 j	21.3 e
Dixie Bell DB 620	2.0 g-j	1.8 i	Univ. GA GA-051102-13LE43	0.0 j	11.3 e-i
Dixie Bell DB 7414	4.5 e-j	1.5 i	Univ. GA GA-061349-13LE29	0.0 j	17.5 ef
Dixie DXEX 15-1	3.0 f-j	1.3 i	Univ. GA GA-061349-13LE31	0.0 j	21.3 e
Dixie DXEX 16-1	0.0 j	0.5 i	USG 3013	14.3 abc	0.0 i
Dixie DXEX 16-2	1.8 g-j	0.0 i	USG 3201	1.0 hij	7.8 f-i
Dixie DXEX 16-3	0.0 j	1.5 i	USG 3404	7.3 d-i	2.0 i
Dixie McAlister	0.3 j	1.8 i	USG 3523	14.3 abc	0.0 i
Dixie Xtreme	18.8 a	0.0 i	USG 3756	2.3 g-j	0.5 i
Dyna-Gro 9171	4.3 e-j	7.5 f-i	USG EXP 3536	0.0 j	2.5 hi
Dyna-Gro 9522	7.5 d-h	1.8 i	USG EXP 3688	0.0 j	4.0 ghi
Dyna-Gro Savoy	0.0 j	87.5 a	USG EXP 3959	1.0 hij	0.8 i
Dyna-Gro WX16771	1.0 hij	1.3 i	VA Tech. HILLIARD	0.0 j	20.0 e
GW 2056	1.3 g-j	3.8 ghi	VA Tech. VA12W-72	0.0 j	11.3 e-i
GW 2058	0.0 j	0.3 i	LSD (0.05)	6.7	11.7
LCS 4343	1.5 g-j	0.0 i	CV (%)	174.8	69.9
LCS L11419	3.0 f-j	0.0 i	*P*-value for F-statistic	<0.0001	<0.0001

[1]Means followed by the same letter(s) within a column are not significantly different according to Fisher's Protected LSD (P=0.05).

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

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