Mississippi Wheat and Oat Variety Trials, 2000

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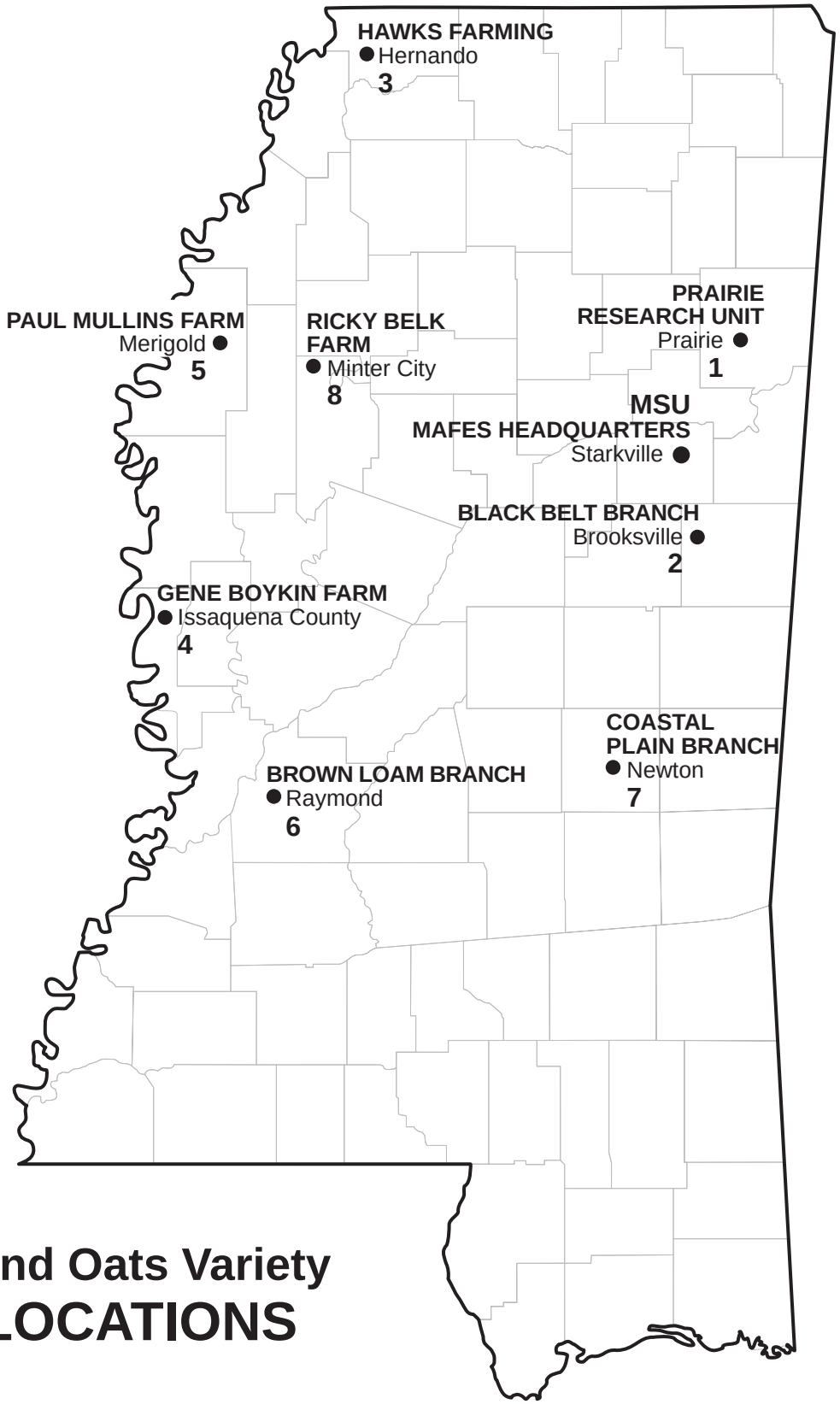

Wheat and Oats Variety
TEST LOCATIONS

Mississippi Wheat and Oat Variety Trials, 2000

Introduction

Small grains are grown throughout Mississippi for grain. Wheat is the primary crop, followed by oats. Wheat and oat variety trials were conducted at eight locations in Mississippi in 1999-2000. Wheat yields in the range of 30 to 50 bushels per acre were common, and yields in the 60- to 80-bushel range can be produced under good management and favorable weather conditions. Oat yields from 50 to 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 20-foot rows spaced 7 inches apart.

Cultural Practices. Plots were limed and fertilized according to soil test recommendations. Foliar fungicides were not applied at branch stations to ensure that varieties were evaluated under maximum disease pressure. Fungicides at off-station locations were applied at producer discretion. Herbicides were applied as needed at each location for weed control.

Seed Source. Seeds of all private entries were supplied by participating companies. Public varieties were selected by the Technical Advisory Committee. Seeds of all public varieties were breeder or foundation seeds from the states that developed the varieties.

Planting Rate. All seeds were packaged for planting at the rate of 20 seeds per foot of row for both wheat and oats. 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 seeds 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 panicle.

Lodging. Lodging was rated on a 1 to 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% to 50% of plants down; 4 = all plants leaning considerably, or 50% to 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 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 at each location. 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. Avoid poorly drained, heavy soils of the Delta and bottom land areas of east Mississippi.

Seeding Methods. Timely and proper seeding technique insures 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 seedbeds (no tillage), as well as traditionally prepared seedbeds. The optimum seeding depth ranges from 1 to 2 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 discing. Seeding rates should be increased about 25% when utilizing the "rough in" system to compensate for poorer establishment, because 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 recommended for late-planted small grains, because 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 to 100 pounds of seed per acre, depending upon the variety and planting date. Use the low rate 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, then plant 100 to 120 pounds per acre. When seeding aerially, apply about 150 pounds per acre. Seeding rates are similar for oats. This should result in final plant stands of about 20 plants per square foot.

Cold Requirements. Winter varieties of small grains require a period of cold weather (less than 40 °F) before the plants will form seed heads. The time varies with variety, but approximately 4 to 9 weeks are required. This process is called vernalization. Most of the wheat varieties planted in the state require low temperatures to reproduce; oats do not. In some years, south Mississippi does not have enough cold weather 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 and Disease Resistance. Several diseases may attack wheat and oat plants in Mississippi. Leaf rust, stem rust, and several head diseases are very common. Planting disease-resistant varieties is the most practical and economical control. However, chemical control may be required to control severe outbreaks. For more specific information, refer to *Extension Plant Disease Dispatch M-123*.

Fertilization. Keep soil pH 6 or higher. Have soil tested and apply lime, phosphate, and potash according to 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. Wheat requires approximately 2 pounds of nitrogen for each bushel of grain it produces. Apply approximately 25% of the nitrogen in the fall. Apply the remainder in the spring after dormancy breaks, but before the second node is visible, which generally occurs from mid-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*.

Use of Data Tables and Summary Statistics

The yield potential of a given variety cannot be measured 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 estimate of yield potential. This natural variation is often responsible for yield differences seen 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 an estimate of the amount of unexplained variation in a given trial. This unexplained variation can be the result of variation between plots, with respect to soil type, fertility, insects, diseases, drought stress, etc. Overall, the higher the CV, 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, the more precise the trial. The R^2 is generally considered a better measure of precision than the CV for comparison of different trials.

Weather Summary by Location

Location 1 - Prairie Research Unit, Prairie. Soil moisture was low at planting. Rainfall 5 days after planting resulted in good emergence. Temperatures were above normal with below average rainfall for the growing season. This resulted in very little disease. Dry conditions allowed plots to be harvested in a timely manner.

Location 2 - Black Belt Branch, Brooksville. Wheat and oats were planted in a moist seedbed, and adequate stands were achieved shortly after planting. Winter weather was unseasonably mild with below-normal rainfall. This promoted plant growth that resulted in advanced crop development. Early spring temperatures and rainfall were below normal. This led to an ideal grain fill period with low disease pressure. Additionally, dry conditions resulted in timely harvest.

Location 3 - Hawks Farming, Hernando. Growing conditions were excellent throughout the season. Rainfall was adequate but below average, and temperatures were above average from October through January. Rainfall and temperatures were above normal in February. March was warmer and drier than average. The critical month of April was cooler and drier than average. May was again drier and warmer than average. Rust and Stagonospora were present but did not appear to significantly impact yields. Scab was very light.

Location 4 - Gene Boykin Farm, Issaquena County. Weather for the 1999-2000 growing season was generally milder than normal. There were no excess cold periods during the growing season. Rainfall was light throughout most of the growing season. There were some showers during late March and early April.

Location 5 - Paul Mullins Farm, Merigold. The winter was mild and relatively dry. A wet spring caused some disease pressure. The decision was not to treat with fungicide. There were no late freezing temperatures. True army worms were treated with a pint of methyl-parathion.

Location 6 - Brown Loam Branch, Raymond. Good soil moisture at planting resulted in good emergence of wheat and oat seedlings. Mild weather throughout the growing season resulted in good plant growth. Disease and insects were not significant problems. The crop was harvested in a timely manner, and yields were good.

Location 7 - Coastal Plain Branch, Newton. Adequate soil moisture at planting time resulted in good germination and seedling growth. Mild winter weather and adequate rainfall resulted in good plant growth, and the crop matured somewhat earlier than normal. Below-normal rainfall occured from January to May. Little or no disease pressure developed. Harvest was accomplished in a timely manner, and yields were good.

Location 8 - Ricky Belk Farm, Minter City. Wheat was planted into a good seedbed with adequate soil moisture and emerged to a good uniform stand. The winter weather was mild with ideal rainfall for wheat. Weather continued to be ideal for excellent wheat yields until a storm on April 1-2 with high winds and 8 inches of rain. Not all plots were heading on this date, but approximately 50% of the plots that were heading were blown down and never fully recovered. April weather remained wet, but May's weather was drier, allowing for good harvest conditions. Some disease pressure developed in early May when the plots were in the milk to dough stages.

Table 1. 1999-00 wheat yields at location 1, MAFES Prairie Research Unit in Prairie (Houston clay soil).[1]

Brand/Variety	1999-00 yield	2-year avg. yield	3-year avg. yield	Test weight	Seed weight	Date headed	Plant height	Lodging score[2]
	bu/A	*bu/A*	*bu/A*	*lb/bu*	*g/1000*		*in*	
AgriPro Mallard	93.3	80.0	68.6	57	39.5	04/04	41	1
Croplan Genetics SR204	86.1	–	–	58	31.5	04/04	44	2
Dixie 911	82.5	–	–	57	25.7	04/08	42	1
Terral TVX8910	81.5	–	–	57	33.6	04/06	42	1
AR584A-3-1	80.1	–	–	58	36.3	04/02	43	2
Pioneer variety 2684	80.0	82.4	71.2	58	35.8	04/03	38	2
AgriPro Patton	79.4	75.1	–	59	36.0	04/05	46	2
LA9070G45-3-3-1	79.4	–	–	56	38.8	04/04	39	3
LA9115C25-3-6-2	79.2	–	–	57	34.6	04/03	37	2
Delta King 1551W	79.0	73.4	67.7	60	30.7	04/08	44	1
NK Coker 9543	78.2	72.4	64.0	57	27.2	04/03	38	2
Delta King 9027	78.2	70.4	67.5	57	25.3	04/09	39	2
NK Coker 9704	78.1	70.7	63.1	58	40.8	04/02	41	2
Roane	78.0	71.3	66.4	58	28.6	04/09	42	2
Dixie 2000	77.3	–	–	59	30.3	04/06	42	2
SS 516	77.3	–	–	57	33.9	04/03	40	1
Genesis 9939	77.1	75.5	–	60	35.0	04/07	45	1
LA90144B16-3-2	76.8	–	–	58	37.1	03/30	36	1
VA96W-270	76.7	–	–	58	37.0	03/30	40	2
Terral TV 8555	76.6	70.4	61.2	57	32.1	04/08	38	1
SS 535	76.4	–	–	58	29.2	04/03	42	1
GA88622E51	76.2	–	–	55	27.5	04/04	35	2
Pioneer variety 26R24	75.7	–	–	57	31.4	04/06	38	3
GA90524E35	75.4	–	–	59	33.3	04/04	35	2
AR656-5-1	75.4	–	–	57	36.0	04/10	42	1
AR LA85411	75.1	70.1	–	59	30.9	04/02	42	2
NK Coker 9663	74.9	70.8	63.5	57	30.9	04/06	41	2
AR494B-2-2	73.9	–	–	57	35.7	04/07	43	1
SS 522	73.3	66.7	61.0	55	30.8	04/01	42	2
Delta King 9121	73.1	64.7	60.4	58	37.6	04/08	44	1
GA901146E15	72.7	–	–	55	29.1	04/05	35	2
SS 518	72.5	–	–	56	31.6	04/02	36	3
Croplan Genetics SR211	72.4	–	–	58	27.0	04/04	41	1
AGS 2000	72.1	–	–	58	40.3	04/04	38	2
USG 3209	71.4	74.0	64.0	57	32.9	04/06	36	3
USG 3709	70.9	–	–	56	27.5	04/03	46	2
AgriPro Shelby	70.0	67.8	61.6	57	33.5	04/04	41	3
LA8983B14-3-1-2	69.7	–	–	57	36.0	04/01	36	2
Terral LA422	69.1	68.1	58.4	58	37.7	04/01	37	2
Croplan Genetics SR218	68.8	–	–	57	28.3	04/15	45	2
FFR 540W	68.6	–	–	57	28.1	04/06	46	1
VA96W-158	68.5	–	–	57	26.9	04/04	39	2
AgriPro D95-7763	67.6	–	–	57	34.0	04/07	43	2
Pioneer variety XW682	66.5	–	–	58	30.6	04/04	43	2
Pioneer Variety 26R46	66.2	–	–	58	40.5	04/03	39	1
LA89423B40-3	64.4	–	–	56	33.2	03/28	38	3
AgriPro Shiloh	61.4	62.6	57.9	57	35.7	04/04	39	2
Pioneer variety 2691	55.1	64.1	55.5	58	34.4	03/24	35	2
Overall Mean	74.4	71.1	63.3					
LSD (.10)	11.0	6.8	5.5					
Error degrees of freedom	141	108	135					
CV (%)	12.7	11.5	12.8					
R^2 (%)	41	58	79					

[1]Planted October 27, 1999. Harvested June 7, 2000. Soil fertility: pH=7.7; P=M; K=H.
Fertilizer added: 120 lb N/A. Herbicide: Harmony Extra @ 0.3 oz/A. Previous Crop: Canola.
[2]See "Procedures" for a description of lodging scores.

Table 2. 1999-00 wheat yields at location 2, MAFES Black Belt Branch in Brooksville (Brooksville silty clay soil).[1]

Brand/Variety	1999-00 yield	2-year avg. yield	3-year avg. yield[2]	Test weight	Seed weight	Date headed	Plant height	Lodging score[3]
	bu/A	*bu/A*	*bu/A*	*lb/bu*	*g/1000*		*in*	
Pioneer variety XW682	110.8	–	–	59	46.4	03/22	45	1
AGS 2000	106.0	–	–	60	43.6	03/22	40	1
VA96W-270	103.9	–	–	59	37.9	03/27	40	1
Pioneer variety 2684	102.0	67.8	–	59	40.2	03/23	38	1
VA96W-158	101.2	–	–	58	35.0	03/30	44	1
USG 3709	97.5	–	–	58	42.5	04/02	46	1
LA90144B16-3-2	97.2	–	–	57	35.4	03/24	38	2
GA901146E15	95.7	–	–	56	31.2	03/25	41	1
Delta King 1551W	94.6	59.7	–	57	32.0	04/03	40	1
NK Coker 9704	93.8	60.3	–	60	34.7	04/03	43	1
Pioneer Variety 26R46	93.3	–	–	57	47.0	03/22	41	1
Pioneer variety 2691	93.0	61.7	–	56	34.0	03/22	40	1
Genesis 9939	92.9	58.8	–	57	33.4	04/08	42	1
USG 3209	92.4	58.2	–	56	38.2	03/25	41	3
NK Coker 9663	91.7	61.4	–	59	48.2	03/22	44	2
Croplan Genetics SR218	91.5	–	–	58	36.5	04/08	47	1
Pioneer variety 26R24	91.4	–	–	57	32.3	03/25	41	3
SS 516	91.3	–	–	56	34.2	03/26	42	1
AgriPro Patton	88.8	57.5	–	56	34.6	04/08	42	1
GA88622E51	88.6	–	–	54	30.8	03/27	38	2
SS 535	88.4	–	–	60	36.5	03/29	41	1
LA89423B40-3	88.1	–	–	58	34.5	03/25	43	1
SS 522	87.9	60.5	–	58	31.5	04/04	39	2
Dixie 911	87.7	–	–	59	31.8	04/03	45	1
AR656-5-1	86.9	–	–	58	39.3	04/08	44	1
Dixie 2000	86.0	–	–	59	29.3	04/08	43	2
Terral LA422	85.6	58.3	–	58	37.6	03/24	40	1
LA9070G45-3-3-1	85.4	–	–	58	43.7	03/23	40	1
Roane	84.7	54.1	–	60	31.7	04/08	40	1
AgriPro Shelby	84.7	57.5	–	57	37.7	03/23	44	3
LA9115C25-3-6-2	84.3	–	–	56	38.7	03/22	36	1
AR494B-2-2	84.2	–	–	58	35.1	03/27	43	2
Terral TVX8910	83.2	–	–	55	34.8	04/07	47	1
SS 518	82.7	–	–	57	38.2	03/22	37	2
Delta King 9121	81.7	51.2	–	56	27.0	04/08	39	1
Delta King 9027	81.6	53.1	–	58	29.9	04/08	41	3
NK Coker 9543	81.1	59.1	–	57	27.4	04/04	40	2
Croplan Genetics SR204	80.8	–	–	59	30.2	04/08	43	1
AR LA85411	78.9	52.8	–	58	33.3	03/27	38	2
AgriPro Mallard	78.4	56.4	–	55	31.2	04/08	42	1
AgriPro D95-7763	77.4	–	–	56	35.5	03/27	42	1
AR584A-3-1	76.8	–	–	58	38.2	04/01	44	2
FFR 540W	75.9	–	–	58	35.1	04/07	39	1
Croplan Genetics SR211	75.5	–	–	58	30.4	04/08	44	2
GA90524E35	74.8	–	–	55	37.1	03/22	36	1
LA8983B14-3-1-2	74.7	–	–	57	30.3	03/22	39	1
Terral TV 8555	70.1	48.6	–	57	34.7	04/08	40	1
AgriPro Shiloh	60.4	42.2	–	57	36.7	04/08	43	1
Overall Mean	87.2	56.8	–					
LSD (.10)	12.8	7.7	–					
Error degrees of freedom	141	108	–					
CV (%)	12.6	16.3	–					
R^2 (%)	51	94	–					

[1]Planted October 27, 1999. Harvested June 7, 2000. Soil fertility: pH=6.9; P=H; K=M.
Fertilizer added: 176 lb 0-17-34 Preplant; 20 lb N Preplant; 80 lb N in February. Previous Crop: Soybeans
Herbicide: Hoelon @ 2.66 pt/A at Seedling Stage; Hoelon @ 2.66 pt/A + Harmony @ 0.5 oz/A.
[2]No 3-year average.
[3]See "Procedures" for a description of lodging scores.

Table 3. 1999-00 wheat yields at location 3, Hawks Farming in Hernando (Collins silt loam soil).[1]

Brand/Variety	1999-00 yield	2-year avg. yield	3-year avg. yield	Test weight	Seed weight	Date headed	Plant height	Lodging score[2]
	bu/A	*bu/A*	*bu/A*	*lb/bu*	*g/1000*		*in*	
SS 522	100.5	77.9	78.8	60	32.2	04/06	39	1
NK Coker 9663	98.2	75.7	74.4	62	40.6	04/06	41	1
AR584A-3-1	97.4	–	–	57	35.2	04/11	41	1
Terral TV 8555	96.4	73.2	67.8	56	29.0	04/10	36	1
Genesis 9939	94.4	75.5	–	57	35.5	04/07	37	1
AgriPro Shiloh	93.8	74.4	75.2	56	35.6	04/12	39	1
AgriPro D95-7763	93.7	–	–	57	34.8	04/12	38	1
AGS 2000	91.3	–	–	58	39.6	04/09	36	1
SS 535	90.9	–	–	59	31.2	04/09	38	1
Roane	90.8	77.5	79.4	58	28.5	04/12	31	1
AgriPro Shelby	90.2	67.6	65.1	59	35.9	04/04	38	1
AR LA85411	88.9	65.2	–	58	33.8	04/06	37	1
VA96W-158	87.7	–	–	57	36.0	04/07	40	1
GA88622E51	87.6	–	–	55	28.1	04/07	34	1
Croplan Genetics SR204	86.2	–	–	59	29.9	04/06	40	1
Pioneer variety XW682	85.6	–	–	58	42.5	04/04	41	1
Croplan Genetics SR211	85.2	–	–	56	26.9	04/10	38	1
FFR 540W	84.9	–	–	58	33.2	04/10	40	1
AgriPro Mallard	84.9	70.0	68.8	55	28.0	04/13	39	1
NK Coker 9543	83.9	63.3	58.4	57	28.7	04/10	33	1
Pioneer variety 26R24	83.9	–	–	57	29.9	04/10	40	1
Pioneer Variety 26R46	83.9	–	–	58	41.3	04/04	36	1
Delta King 1551W	83.6	70.1	69.9	58	31.8	04/10	34	1
NK Coker 9704	83.2	68.1	68.0	59	31.9	04/13	35	1
USG 3209	82.5	65.1	62.1	57	37.0	04/10	33	1
Terral TVX8910	82.0	–	–	56	33.5	04/05	36	1
AR656-5-1	80.9	–	–	56	33.2	04/12	35	1
AR494B-2-2	80.5	–	–	58	34.1	04/10	39	1
Dixie 2000	80.5	–	–	56	25.1	04/10	35	1
LA9070G45-3-3-1	80.0	–	–	57	36.9	04/05	34	1
Delta King 9027	79.7	64.5	64.7	56	25.3	04/11	38	1
SS 518	79.6	–	–	56	32.5	04/11	34	1
USG 3709	79.1	–	–	55	35.2	04/05	39	1
Pioneer variety 2684	79.0	64.3	61.7	60	40.1	04/10	37	1
AgriPro Patton	78.6	67.7	–	56	34.1	04/13	36	1
Terral LA422	77.9	56.1	57.1	59	34.9	04/05	36	1
LA90144B16-3-2	77.1	–	–	56	30.9	03/28	34	1
Croplan Genetics SR218	75.3	–	–	57	32.7	04/09	40	1
Dixie 911	75.0	–	–	55	24.8	04/10	37	1
GA901146E15	75.0	–	–	56	31.4	04/10	34	1
GA90524E35	74.6	–	–	55	28.7	04/12	32	1
LA89423B40-3	72.5	–	–	55	30.5	04/10	34	1
Delta King 9121	71.4	64.3	65.6	57	26.8	04/10	33	1
VA96W-270	68.2	–	–	59	36.9	04/06	35	1
Pioneer variety 2691	68.0	55.4	54.6	58	34.2	04/06	36	1
LA8983B14-3-1-2	66.8	–	–	56	26.7	04/07	34	1
LA9115C25-3-6-2	66.5	–	–	57	34.4	04/06	37	1
SS 516	65.7	–	–	58	38.2	04/14	36	1
Overall Mean	82.6	68.2	67.0					
LSD (.10)	7.5	5.0	4.7					
Error degrees of freedom	141	108	135					
CV (%)	7.7	8.9	10.3					
R^2 (%)	74	93	89					

[1]Planted October 22, 1999. Harvested June 9, 2000. Soil fertility: pH=6.0; P=H; K=H.
Fertilizer added: 25 lb N/A Preplant; 100 lb N/A. Herbicide: Harmony @ .5 oz/A. Previous Crop: Soybeans.
[2]See "Procedures" for a description of lodging scores.

Table 4. 1999-00 wheat yields at location 4, Gene Boykin Farm in Issaquena County (silty loam clay soil).[1]

Brand/Variety	1999-00 yield	2-year avg. yield	3-year avg. yield	Test weight	Seed weight	Date headed	Plant height	Lodging score[2]
	bu/A	*bu/A*	*bu/A*	*lb/bu*	*g/1000*		*in*	
SS 516	87.9	–	–	58	31.7	04/04	26	1
Pioneer variety XW682	87.7	–	–	59	41.8	04/01	34	1
Genesis 9939	86.5	61.5	–	59	30.0	04/08	28	1
VA96W-270	85.9	–	–	61	34.5	04/02	31	1
Pioneer variety 2684	84.4	62.8	61.1	59	40.2	03/27	34	1
Delta King 1551W	82.9	59.4	61.7	61	28.4	04/05	35	1
Delta King 9027	82.8	57.4	60.9	61	26.5	04/08	35	1
Pioneer Variety 26R46	82.8	–	–	59	39.8	03/26	40	1
AgriPro Patton	81.9	56.0	–	55	28.9	04/04	33	1
AR584A-3-1	81.7	–	–	59	35.5	04/05	37	1
AgriPro Mallard	80.0	53.1	59.3	58	26.3	04/10	37	1
AGS 2000	79.9	–	–	62	41.1	03/30	31	1
USG 3209	78.1	58.3	57.4	59	32.4	03/28	38	1
LA9115C25-3-6-2	77.4	–	–	59	40.3	03/27	34	1
SS 535	76.7	–	–	61	28.3	04/04	34	1
Croplan Genetics SR211	75.3	–	–	60	27.4	04/09	38	1
Terral LA422	75.3	54.3	54.0	61	34.3	04/02	36	1
Delta King 9121	74.7	54.0	56.3	60	25.8	04/10	32	1
AgriPro Shelby	74.6	46.4	51.6	61	35.9	04/01	30	1
Dixie 911	74.4	–	–	58	25.9	04/11	35	1
Dixie 2000	74.0	–	–	60	26.4	04/11	27	1
USG 3709	73.0	–	–	57	33.8	04/05	40	1
FFR 540W	72.3	–	–	59	34.5	04/10	36	1
Terral TV 8555	72.0	47.4	52.5	59	33.0	04/06	37	1
NK Coker 9543	69.8	55.5	58.3	59	27.6	04/07	29	1
LA90144B16-3-2	69.2	–	–	59	31.9	03/31	32	1
AR656-5-1	68.9	–	–	57	29.8	04/07	39	1
GA90524E35	67.6	–	–	56	29.5	03/28	26	1
GA901146E15	65.9	–	–	59	24.6	03/27	30	1
AgriPro Shiloh	65.3	51.1	54.6	59	30.8	04/07	36	1
NK Coker 9704	65.0	49.1	53.0	61	29.5	04/05	34	1
Roane	64.6	50.0	56.9	60	28.8	04/10	37	1
AR494B-2-2	64.2	–	–	58	33.0	04/04	36	1
Croplan Genetics SR218	62.5	–	–	61	29.4	04/12	37	1
Pioneer variety 26R24	61.3	–	–	59	30.4	04/02	35	1
AR LA85411	59.1	45.4	–	60	29.4	04/03	28	1
Pioneer variety 2691	59.0	43.5	42.2	58	32.3	03/22	33	1
LA89423B40-3	58.8	–	–	58	31.4	04/03	33	1
Terral TVX8910	58.1	–	–	58	34.9	04/06	33	1
SS 522	56.3	44.2	54.3	59	25.7	04/05	34	1
LA8983B14-3-1-2	45.6	–	–	58	25.0	03/31	27	1
Croplan Genetics SR204	44.8	–	–	62	27.2	04/10	37	1
AgriPro D95-7763	44.7	–	–	61	33.3	04/08	34	1
GA88622E51	32.5	–	–	56	28.6	04/05	28	1
Overall Mean	70.1	52.7	55.6					
LSD (.10)	17.4	10.4	7.4					
Error degrees of freedom	129	102	126					
CV (%)	21.2	23.9	19.6					
R^2 (%)	53	81	81					

[1]Planted October 25, 1999. Harvested May 25, 2000. Soil fertility: pH=6.8; P=H+; K=H.
Fertilizer added: 110 lb N/A. Herbicide: 2,4-D @ 1 qt/A. Previous Crop: Corn.
NOTE: Because of browsing by deer, no yield data were taken for NK Coker 9663, LA 9070G45-3-3-1, SS 518 and VA 96W-158.
[2]See "Procedures" for a description of lodging scores.

Table 5. 1999-00 wheat yields at location 5, Paul Mullins Farm in Merigold (sandy loam soil).[1]

Brand/Variety	1999-00 yield	2-year avg. yield	3-year avg. yield[2]	Test weight	Seed weight	Date headed	Plant height	Lodging score[3]
	bu/A	*bu/A*	*bu/A*	*lb/bu*	*g/1000*		*in*	
Delta King 1551W	89.8	72.5	–	56	31.4	04/12	41	1
AGS 2000	85.1	–	–	58	40.9	04/04	38	1
AgriPro D95-7763	84.9	–	–	57	35.4	04/12	44	1
Genesis 9939	81.2	71.6	–	56	30.3	04/13	41	1
Dixie 2000	81.0	–	–	56	28.0	04/15	39	1
Pioneer variety 2691	81.0	66.8	–	55	34.3	03/28	37	1
Delta King 9027	80.7	68.4	–	56	26.3	04/13	42	1
AR584A-3-1	80.0	–	–	58	34.2	04/10	46	1
SS 516	78.6	–	–	56	31.7	04/08	39	1
Croplan Genetics SR204	78.4	–	–	60	27.3	04/14	43	1
Roane	77.6	69.2	–	58	29.4	04/13	37	1
USG 3209	77.2	65.7	–	56	30.6	04/07	36	1
NK Coker 9663	76.7	71.5	–	56	38.1	04/08	43	1
Croplan Genetics SR218	76.4	–	–	58	30.7	04/15	42	1
Pioneer variety 26R24	76.0	–	–	56	25.9	04/10	39	1
Pioneer Variety 26R46	75.7	–	–	56	43.1	04/06	38	1
AgriPro Shelby	75.1	68.4	–	57	30.9	04/06	42	1
LA9070G45-3-3-1	75.0	–	–	53	31.0	04/09	36	1
Pioneer variety 2684	74.9	63.7	–	58	32.1	04/07	38	1
FFR 540W	74.9	–	–	57	34.0	04/14	44	1
Dixie 911	73.8	–	–	56	25.2	04/14	43	1
VA96W-270	72.7	–	–	57	34.4	04/08	38	1
Croplan Genetics SR211	72.3	–	–	56	24.3	04/13	44	1
AR494B-2-2	72.2	–	–	55	28.4	04/10	42	1
Terral LA422	71.0	59.8	–	55	28.7	04/08	38	1
GA88622E51	70.8	–	–	53	24.7	04/11	38	1
USG 3709	70.7	–	–	54	30.8	04/11	42	1
GA901146E15	70.4	–	–	52	21.4	04/06	38	1
LA89423B40-3	70.3	–	–	55	29.2	04/09	39	1
AR LA85411	69.8	66.4	–	60	33.7	04/10	41	1
Terral TV 8555	69.0	63.4	–	56	28.5	04/12	39	1
Delta King 9121	68.2	65.0	–	56	22.5	04/12	41	1
SS 535	68.2	–	–	57	25.7	04/11	38	1
SS 518	67.2	–	–	54	25.2	04/04	35	1
SS 522	67.2	67.9	–	58	27.1	04/12	44	1
AgriPro Shiloh	66.9	67.6	–	56	32.8	04/12	40	1
NK Coker 9543	66.4	55.7	–	54	21.2	04/12	40	1
NK Coker 9704	65.9	59.9	–	56	22.5	04/11	41	1
Pioneer variety XW682	65.3	–	–	55	35.8	04/07	40	1
LA90144B16-3-2	64.8	–	–	54	26.5	04/09	35	1
AgriPro Mallard	64.4	59.0	–	54	24.2	04/13	40	1
AR656-5-1	64.3	–	–	54	30.0	04/14	42	1
LA8983B14-3-1-2	64.2	–	–	55	24.8	04/09	35	1
GA90524E35	63.4	–	–	51	25.4	04/04	34	1
LA9115C25-3-6-2	63.4	–	–	54	26.8	04/08	37	1
Terral TVX8910	62.3	–	–	54	26.5	04/11	44	1
AgriPro Patton	59.8	63.4	–	53	29.6	04/12	41	1
VA96W-158	54.0	–	–	53	24.2	04/07	40	1
Overall Mean	72.1	65.6	–					
LSD (.10)	7.8	5.2	–					
Error degrees of freedom	141	108	–					
CV (%)	9.3	9.6	–					
R^2 (%)	65	79	–					

[1]Planted October 20, 1999. Harvested June 1, 2000. Soil fertility: pH=6.7; P=H; K=H.
Fertilizer added: 41-0-0-4S @ 300 lb/A. Previous Crop: Double Crop Soybeans.
[2]No 3-year average.
[3]See "Procedures" for a description of lodging scores.

Table 6. 1999-00 wheat yields at location 6, MAFES Brown Loam Branch in Raymond (Loring silt loam soil).[1]

Brand/Variety	1999-00 yield	2-year avg. yield	3-year avg. yield	Test weight	Seed weight	Date headed	Plant height	Lodging score[2]
	bu/A	*bu/A*	*bu/A*	*lb/bu*	*g/1000*		*in*	
AGS 2000	61.9	–	–	61	45.2	03/27	36	1
USG 3709	60.2	–	–	58	37.9	03/30	37	1
USG 3209	56.0	51.5	49.5	59	36.5	03/26	32	1
GA90524E35	53.9	–	–	57	29.8	03/29	32	1
Pioneer variety XW682	53.7	–	–	57	33.3	03/17	34	1
Pioneer Variety 26R46	53.6	–	–	58	41.5	03/19	31	1
AR584A-3-1	53.0	–	–	59	37.0	04/02	38	1
Pioneer variety 26R24	52.5	–	–	56	30.2	03/24	34	1
Croplan Genetics SR218	50.4	–	–	58	31.4	03/24	37	1
VA96W-270	49.9	–	–	58	35.5	03/27	31	1
Pioneer variety 2684	49.3	44.9	47.1	57	35.6	03/21	28	1
SS 535	49.2	–	–	58	27.7	03/30	32	1
Terral LA422	48.7	44.1	47.6	58	33.4	04/05	33	1
Terral TVX8910	48.5	–	–	57	34.0	03/17	34	1
NK Coker 9543	48.3	47.4	49.3	58	27.2	03/18	33	1
Genesis 9939	47.9	45.7	–	57	30.5	03/27	35	1
LA9115C25-3-6-2	47.6	–	–	57	36.8	04/04	31	1
Delta King 9121	47.5	39.3	36.6	57	26.1	03/21	35	1
GA901146E15	47.3	–	–	53	23.5	03/28	30	1
LA9070G45-3-3-1	47.2	–	–	56	33.2	03/19	30	1
AgriPro Shelby	47.0	41.9	49.5	58	29.4	03/21	35	1
Dixie 2000	46.9	–	–	57	23.0	04/04	34	1
AR LA85411	46.6	42.1	–	58	31.1	03/31	33	1
AgriPro Patton	46.3	42.8	–	56	29.5	03/24	36	1
GA88622E51	45.9	–	–	56	26.6	03/18	33	1
AR494B-2-2	45.9	–	–	57	32.3	03/30	37	1
SS 516	45.6	–	–	56	36.5	04/05	35	1
Pioneer variety 2691	45.5	43.2	43.8	56	30.7	03/25	28	1
AgriPro Mallard	44.9	40.0	46.9	54	23.6	04/04	34	1
SS 522	44.9	43.9	50.2	56	28.8	04/01	35	1
Delta King 9027	44.7	40.3	42.7	56	24.4	04/04	34	1
LA90144B16-3-2	44.7	–	–	55	28.4	03/21	27	1
Dixie 911	43.9	–	–	57	25.1	04/04	35	1
Roane	43.4	36.9	41.0	59	25.9	04/05	32	1
NK Coker 9704	43.2	42.0	48.2	58	29.0	03/31	32	1
FFR 540W	43.2	–	–	57	30.9	03/20	35	1
AR656-5-1	42.3	–	–	57	33.3	04/04	31	1
Croplan Genetics SR211	41.9	–	–	57	25.3	04/04	34	1
LA8983B14-3-1-2	41.1	–	–	56	25.4	03/21	30	1
Terral TV 8555	40.7	41.9	46.7	56	25.9	04/01	31	1
LA89423B40-3	40.6	–	–	55	27.7	03/24	33	1
AgriPro Shiloh	40.3	40.6	46.2	56	28.9	04/04	33	1
AgriPro D95-7763	39.1	–	–	56	29.9	03/30	35	1
Delta King 1551W	38.0	37.8	43.5	56	27.0	04/04	30	1
VA96W-158	37.4	–	–	56	30.5	03/24	33	1
SS 518	37.2	–	–	54	30.9	04/04	29	1
NK Coker 9663	34.3	34.0	37.0	56	30.8	03/21	31	1
Croplan Genetics SR204	31.9	–	–	58	24.1	03/22	35	1
Overall Mean	46.1	42.1	45.4					
LSD (.10)	6.5	5.8	5.0					
Error degrees of freedom	141	108	135					
CV (%)	12.0	16.6	16.4					
R^2 (%)	67	55	71					

[1]Planted November 4, 1999. Harvested May 30, 2000. Soil fertility: pH=6.5; P=H; K=H.
Fertilizer added: 100 lb N/A; Lime @ 1 ton/A. Previous Crop: Double Crop Soybeans.
[2]See "Procedures" for a description of lodging scores.

Table 7. 1999-00 wheat yields at location 7, MAFES Coastal Plain Branch Station in Newton (Prentiss very fine sandy loam soil).[1]

Brand/Variety	1999-00 yield	2-year avg. yield	3-year avg. yield	Test weight	Seed weight	Date headed	Plant height	Lodging score[2]
	bu/A	*bu/A*	*bu/A*	*lb/bu*	*g/1000*		*in*	
Pioneer variety XW682	87.3	–	–	61	40.8	03/17	41	1
VA96W-158	87.1	–	–	59	31.6	03/26	42	1
LA9070G45-3-3-1	85.3	–	–	58	37.2	03/20	36	1
USG 3209	85.1	70.6	62.9	60	35.7	03/27	38	3
GA90524E35	83.2	–	–	56	31.3	03/20	35	2
AGS 2000	83.0	–	–	60	36.5	03/15	40	1
LA9115C25-3-6-2	80.8	–	–	60	38.0	03/15	35	2
Pioneer variety 26R24	80.5	–	–	59	30.1	03/28	41	3
VA96W-270	78.0	–	–	62	36.6	03/26	38	1
AR LA85411	77.9	66.7	–	61	28.9	03/31	41	1
AgriPro Patton	77.6	65.4	–	60	32.9	04/03	39	1
NK Coker 9663	77.5	68.2	63.4	61	36.4	03/20	41	1
AgriPro Shelby	77.5	64.9	63.7	62	37.3	03/22	42	1
SS 522	77.1	64.4	63.5	60	28.4	03/31	40	2
SS 518	76.8	–	–	57	30.5	03/13	39	1
GA901146E15	76.3	–	–	55	26.2	03/22	36	2
Delta King 1551W	76.2	60.8	59.4	56	25.0	04/02	39	2
Pioneer Variety 26R46	76.0	–	–	55	29.7	03/17	38	1
AR584A-3-1	75.7	–	–	61	32.7	03/31	45	2
GA88622E51	75.1	–	–	57	26.7	04/02	35	1
LA90144B16-3-2	74.5	–	–	53	23.9	03/22	33	2
AR656-5-1	73.7	–	–	60	32.7	04/03	42	1
Terral TVX8910	73.5	–	–	58	29.6	04/03	39	1
USG 3709	72.3	–	–	56	24.3	03/31	42	2
Delta King 9027	71.9	56.6	55.8	62	25.7	04/03	41	3
Pioneer variety 2691	71.8	58.9	55.5	57	28.2	03/17	37	1
Dixie 911	71.7	–	–	60	26.0	04/05	43	3
Croplan Genetics SR218	71.7	–	–	61	31.0	04/08	41	1
FFR 540W	70.6	–	–	62	33.7	04/04	40	1
Terral TV 8555	70.4	59.8	59.3	59	30.8	04/04	39	1
Pioneer variety 2684	70.0	65.1	60.3	62	40.6	03/24	38	1
Terral LA422	69.3	54.7	55.4	56	21.6	03/25	39	1
Roane	68.7	56.3	59.2	62	29.3	04/09	37	1
LA8983B14-3-1-2	68.4	–	–	58	25.6	03/22	37	2
AR494B-2-2	67.9	–	–	53	19.5	03/27	42	2
Dixie 2000	67.4	–	–	59	26.0	04/04	42	4
NK Coker 9543	67.2	55.8	55.1	57	23.9	03/31	35	2
Croplan Genetics SR211	66.5	–	–	60	26.2	04/04	47	4
AgriPro Shiloh	66.1	59.4	61.0	56	27.5	04/04	36	4
LA89423B40-3	65.9	–	–	51	19.2	03/27	37	2
Delta King 9121	65.3	50.8	51.8	60	26.3	04/06	38	1
Genesis 9939	65.1	55.6	–	58	26.3	04/05	39	3
AgriPro Mallard	63.0	54.3	53.6	57	25.2	04/05	36	1
SS 516	62.5	–	–	51	18.8	03/28	39	2
Croplan Genetics SR204	61.4	–	–	61	25.8	04/06	43	3
AgriPro D95-7763	61.3	–	–	58	25.1	04/02	41	3
NK Coker 9704	60.0	53.5	57.3	61	30.1	03/31	38	1
SS 535	54.1	–	–	61	31.3	04/03	36	2
Overall Mean	72.6	60.1	58.6					
LSD (.10)	12.1	6.9	5.4					
Error degrees of freedom	141	108	135					
CV (%)	14.2	13.9	13.7					
R^2 (%)	43	78	75					

[1]Planted October 29, 1999. Harvested May 24, 2000. Soil fertility: pH=6.1; P=H; K=M.
Fertilizer added: 100 lb N/A; 60 lb K_20. Herbicide: Hoelon @ 2 pt/A + Harmony @ 0.50 oz/A.
Previous Crop: Wheat.
[2]See "Procedures" for a description of lodging scores.

Table 8. 1999-00 wheat yields at location 8, Ricky Belk Farm in Minter City (Dundee very fine sandy loam soil).[1]

Brand/Variety	1999-00 yield	2-year avg. yield	3-year avg. yield[2]	Test weight	Seed weight	Date headed	Plant height	Lodging score[3]
	bu/A	*bu/A*	*bu/A*	*lb/bu*	*g/1000*		*in*	
Pioneer variety 2684	109.0	83.1	–	59	41.2	04/05	43	2
Genesis 9939	105.0	79.6	–	55	32.3	04/14	44	2
LA90144B16-3-2	104.9	–	–	57	33.6	03/31	40	2
GA901146E15	104.7	–	–	56	31.2	04/05	39	2
GA88622E51	104.3	–	–	55	30.5	04/10	39	2
Terral TV 8555	103.9	78.5	–	57	32.6	04/14	48	2
Delta King 1551W	103.1	80.0	–	56	32.3	04/10	42	2
Dixie 2000	102.9	–	–	57	27.0	04/14	44	3
NK Coker 9704	102.9	78.5	–	58	30.7	04/10	45	2
Croplan Genetics SR211	101.9	–	–	57	26.0	04/14	45	3
Delta King 9027	101.5	77.9	–	57	26.2	04/14	35	2
Delta King 9121	100.6	74.0	–	56	27.6	04/14	44	1
FFR 540W	100.5	–	–	58	36.7	04/14	46	1
Dixie 911	100.2	–	–	57	29.4	04/14	45	2
Pioneer variety 26R24	100.1	–	–	58	31.8	04/10	44	2
Croplan Genetics SR218	98.7	–	–	58	31.7	04/14	53	3
Pioneer variety 2691	98.0	75.4	–	56	35.6	03/24	41	2
Roane	97.7	75.4	–	58	30.9	04/14	45	2
AR494B-2-2	97.3	–	–	56	31.2	04/10	48	2
VA96W-270	96.7	–	–	58	39.9	04/10	49	1
Terral TVX8910	96.1	–	–	57	34.9	04/10	44	2
AgriPro D95-7763	96.0	–	–	57	35.9	04/10	50	3
SS 516	95.7	–	–	56	37.1	04/05	41	1
AgriPro Patton	95.2	77.8	–	56	33.6	04/10	43	1
VA96W-158	93.6	–	–	57	35.7	04/05	42	1
USG 3709	92.7	–	–	56	35.1	04/10	50	3
SS 522	92.4	75.8	–	59	31.1	04/14	48	2
Croplan Genetics SR204	90.3	–	–	58	29.4	04/14	47	1
AR584A-3-1	90.2	–	–	57	36.3	04/10	47	4
SS 535	89.4	–	–	57	32.5	04/10	41	3
AGS 2000	89.2	–	–	58	44.0	04/05	38	3
LA8983B14-3-1-2	88.1	–	–	57	29.5	04/05	45	2
AR656-5-1	85.8	–	–	58	40.2	04/10	49	1
AgriPro Shelby	84.6	70.2	–	57	33.9	04/05	37	3
NK Coker 9543	84.1	66.2	–	55	24.9	04/10	42	3
AgriPro Mallard	83.8	70.0	–	55	28.9	04/14	46	3
LA9115C25-3-6-2	82.0	–	–	55	35.7	04/05	43	3
AgriPro Shiloh	81.3	69.1	–	57	36.7	04/14	49	3
LA9070G45-3-3-1	80.8	–	–	56	37.0	04/05	48	3
Pioneer Variety 26R46	79.6	–	–	57	41.2	04/05	44	2
USG 3209	79.3	66.8	–	55	35.2	04/05	43	4
LA89423B40-3	76.2	–	–	55	34.5	04/05	34	2
Terral LA422	75.3	62.8	–	57	34.9	04/05	39	3
NK Coker 9663	69.0	67.9	–	55	33.1	04/05	46	4
Pioneer variety XW682	67.0	–	–	57	42.4	04/05	44	3
SS 518	65.4	–	–	55	32.5	04/05	40	4
GA90524E35	56.4	–	–	54	31.9	03/28	38	3
AR LA85411	42.1	52.0	–	55	32.1	04/05	37	4
Overall Mean	90.3	72.7	–					
LSD (.10)	14.4	7.3	–					
Error degrees of freedom	141	108	–					
CV (%)	13.6	12.1	–					
R^2 (%)	63	89	–					

[1]Planted October 26, 1999. Harvested June 8, 2000. Soil fertility: pH=6.5; P=H; K=H.
Fertilizer added: 100 lb 18-46-0 at Planting; 200 lb 46-0-0 Top Dress. Herbicide: 2,4-D @ 1 qt/A.
Previous Crop: Soybeans
[2]No 3-year average.
[3]See "Procedures" for a description of lodging scores.

Table 9. Summary of 1999-00 yields for wheat variety trials in Mississippi.

Brand/Variety	Brooksville	Hernando	Prairie	North avg.	Newton	Raymond	South avg.	Issaquena	Merigold	Minter City	Delta avg.	Overall avg.
	bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
ApriPro Mallard	78.4	84.9	93.3	85.6	63.0	44.9	53.9	80.0	64.4	83.8	76.1	74.1
AgriPro Patton	88.8	78.6	79.4	82.2	77.6	46.3	61.9	81.9	59.8	95.2	79.0	75.9
AgriPro Shelby	84.7	90.2	70.	81.6	77.5	47.0	62.2	74.6	75.1	84.6	78.1	75.4
AgriPro Shiloh	60.4	93.8	61.4	71.9	66.1	40.3	53.2	65.3	66.9	81.3	71.2	67.0
AgriPro D95-7763	77.4	93.7	67.6	79.6	61.3	39.1	50.2	44.7	84.9	96.0	75.2	70.6
AR 494B-2-2	84.2	80.5	73.9	79.5	67.9	45.9	56.9	64.2	72.2	97.3	77.9	73.3
AR 584A-3-1	76.8	97.4	80.1	84.7	75.7	53.0	64.4	81.7	80.0	90.2	84.0	79.4
AR 656-5-1	86.9	80.9	75.4	81.0	73.7	42.3	58.0	68.9	64.3	85.8	73.0	72.3
AR LA85411	78.9	88.9	75.1	81.0	77.9	46.6	62.2	59.1	69.8	42.1	57.0	67.3
Croplan Genetics SR204	80.8	86.2	86.1	84.4	61.4	31.9	46.7	44.8	78.4	90.3	71.2	70.0
Croplan Genetics SR211	75.5	85.2	72.4	77.7	66.5	41.9	54.2	75.3	72.3	101.9	83.2	73.9
Croplan Genetics SR218	91.5	75.3	68.8	78.6	71.7	50.4	61.0	62.5	76.4	98.7	79.2	74.4
Delta King 9027	81.6	79.7	78.2	79.8	71.9	44.7	58.3	82.8	80.7	101.5	88.3	77.6
Delta King 9121	81.7	71.4	73.1	75.4	65.3	47.5	56.4	74.7	68.2	100.6	81.2	72.8
Delta King 1551W	94.6	83.6	79.0	85.7	76.2	38.0	57.1	82.9	89.8	103.1	91.9	80.9
Dixie 911	87.7	75.0	82.5	81.7	71.7	43.9	57.8	74.4	73.8	100.2	82.8	76.2
Dixie 2000	86.0	80.5	77.3	81.3	67.4	46.9	57.1	74.0	81.0	102.9	86.0	77.0
FFR 540W	75.9	84.9	68.6	76.5	70.6	43.2	56.9	72.3	74.9	100.5	82.6	73.9
SS 516	91.3	65.7	77.3	78.1	62.5	45.6	54.1	87.9	78.6	95.7	87.4	75.6
SS 518	82.7	79.6	72.5	78.3	76.8	37.2	57.0	–	67.2	65.4	66.3	68.8
SS 522	87.9	100.5	73.3	87.2	77.1	44.9	61.0	56.3	67.2	92.4	72.0	75.0
SS 535	88.4	90.9	76.4	85.2	54.1	49.2	51.6	76.7	68.2	89.4	78.1	74.2
AGS 2000	106.0	91.3	72.1	89.8	83.0	61.9	72.5	79.9	85.1	89.2	84.8	83.6
GA90524E35	74.8	74.6	75.4	74.9	83.2	53.9	68.6	67.6	63.4	56.4	62.5	68.7
GA901146E15	95.7	75.0	72.7	81.1	76.3	47.3	61.8	65.9	70.4	104.7	80.3	76.0
GA88622E51	88.6	87.6	76.2	84.1	75.1	45.9	60.5	32.5	70.8	104.3	69.2	72.6
Genesis 9939	92.9	94.4	77.1	88.1	65.1	47.9	56.5	86.5	81.2	105.0	90.9	81.3
LA8983B14-3-1-2	74.7	66.8	69.7	70.4	68.4	41.1	54.7	45.6	64.2	88.1	66.0	64.8
LA9115C25-3-6-2	84.3	66.5	79.2	76.7	80.8	47.6	64.2	77.4	63.4	82.0	74.3	72.7
LA89423B40-3	88.1	72.5	64.4	75.0	65.9	40.6	53.2	58.8	70.3	76.2	68.4	67.1
LA90144B16-3-2	97.2	77.1	76.8	83.7	74.5	44.7	59.6	69.2	64.8	104.9	79.6	76.1
LA9070G45-3-3-1	85.4	80.0	79.4	81.6	85.3	47.2	66.3	–	75.0	80.8	77.9	76.2
NK Coker 9543	81.1	83.9	78.2	81.0	67.2	48.3	57.7	69.8	66.4	84.1	73.4	72.4
NK Coker 9663	91.7	98.2	74.9	88.3	77.5	34.3	55.9	–	76.7	69.0	72.9	74.7
NK Coker 9704	93.8	83.2	78.1	85.0	60.0	43.2	51.6	65.0	65.9	102.9	77.9	74.0
Pioneer variety 2684	102.0	79.0	80.0	87.0	70.0	49.3	59.7	84.4	74.9	109.0	89.4	81.1
Pioneer variety 2691	93.0	68.0	55.1	72.1	71.8	45.5	58.6	59.0	81.0	98.0	79.3	71.4
Pioneer variety 26R46	93.3	83.9	66.2	81.1	76.0	53.6	64.8	82.8	75.7	79.6	79.4	76.4
Pioneer variety 26R24	91.4	83.9	75.7	83.7	80.5	52.5	66.5	61.3	76.0	100.1	79.1	77.7
Pioneer variety XW682	110.8	85.6	66.5	87.7	87.3	53.7	70.5	87.7	65.3	67.0	73.4	78.0
Roane	84.7	90.8	78.0	84.5	68.7	43.4	56.0	64.6	77.6	97.7	80.0	75.7
Terral LA422	85.6	77.9	69.1	77.5	69.3	48.7	59.0	75.3	71.0	75.3	73.9	71.5
Terral TV 8555	70.1	96.4	76.6	81.0	70.4	40.7	55.6	72.0	69.0	103.9	81.6	74.9
Terral TVX8910	83.2	82.0	81.5	82.2	73.5	48.5	61.0	58.1	62.3	96.1	72.2	73.2
USG 3209	92.4	82.5	71.4	82.8	85.1	56.0	70.5	78.1	77.2	79.3	78.2	77.8
USG 3709	97.5	79.1	70.9	82.5	72.3	60.2	66.2	73.0	70.7	92.7	78.8	77.0
VA96W-270	103.9	68.2	76.7	82.9	78.0	49.9	63.9	85.9	72.7	96.7	85.1	79.0
VA96W-158	101.2	87.7	68.5	85.8	87.1	37.4	62.3	–	54.0	93.6	73.8	75.7
Overall Mean	87.2	82.6	74.4	81.4	72.6	46.1	59.4	70.1	72.1	90.3	77.7	74.5
LSD (.10)	12.8	7.5	11.0	6.2	12.1	6.5	6.8	17.4	7.8	14.4	11.5	31.6
Error degrees of freedom	141	141	141	423	141	141	282	129	141	141	411	1116
CV (%)	12.6	7.7	12.7	11.2	14.2	12.0	13.9	21.2	9.3	13.6	15.0	13.4
R^2 (%)	51	74	41	62	43	67	82	53	65	63	69	78

Table 10. Two-year summary of 1998-99 and 1999-00 yields for wheat variety trials in Mississippi.

Brand/Variety	Brooksville	Hernando	Prairie	North avg.	Newton	Raymond	South avg.	Issaquena	Merigold	Minter City	Delta avg.	Overall avg.
	bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
ApriPro Mallard	56.4	70.0	80.0	68.8	54.3	40.0	47.1	53.1	59.0	70.0	60.7	60.4
AgriPro Patton	57.5	67.7	75.1	66.8	65.4	42.8	54.1	56.0	63.4	77.8	65.7	63.2
AgriPro Shelby	57.5	67.6	67.8	64.3	64.9	41.9	53.4	46.4	68.4	70.2	61.7	60.6
AgriPro Shiloh	42.2	74.4	62.6	59.7	59.4	40.6	50.0	51.1	67.6	69.1	62.6	58.4
AR LA85411	52.8	65.2	70.1	62.7	66.7	42.1	54.4	45.4	66.4	52.0	54.6	57.6
Delta King 9027	53.1	64.5	70.4	62.7	56.6	40.3	48.4	57.4	68.4	77.9	67.9	61.1
Delta King 9121	51.2	64.3	64.7	60.1	50.8	39.3	45.1	54.0	65.0	74.0	64.3	57.9
Delta King 1551W	59.7	70.1	73.4	67.7	60.8	37.8	49.3	59.4	72.5	80.0	70.6	64.2
SS 522	60.5	77.9	66.7	68.3	64.4	43.9	54.2	44.2	67.9	75.8	62.6	62.7
Genesis 9939	58.8	75.5	75.5	69.9	55.6	45.7	50.6	61.5	71.6	79.6	70.9	65.5
NK Coker 9543	59.1	63.3	72.4	64.9	55.8	47.4	51.6	55.5	55.7	66.2	59.1	59.4
NK Coker 9663	61.4	75.7	70.8	69.3	68.2	34.0	51.1	–	71.5	67.9	69.7	63.4
NK Coker 9704	60.3	68.1	70.7	66.4	53.5	42.0	47.7	49.1	59.9	78.5	62.5	60.3
Pioneer variety 2684	67.8	64.3	82.4	71.5	65.1	44.9	55.0	62.8	63.7	83.1	69.8	66.7
Pioneer variety 2691	61.7	55.4	64.1	60.4	58.9	43.2	51.1	43.5	66.8	75.4	61.9	58.6
Roane	54.1	77.5	71.3	67.6	56.3	36.9	46.6	50.0	69.2	75.4	64.9	61.3
Terral LA422	58.3	56.1	68.1	60.8	54.7	44.1	49.4	54.3	59.8	62.8	58.9	57.3
Terral TV 8555	48.6	73.2	70.4	64.1	59.8	41.9	50.8	47.4	63.4	78.5	63.1	60.4
USG 3209	58.2	65.1	74.0	65.8	70.6	51.5	61.0	58.3	65.7	66.8	63.6	63.8
Overall Mean	56.8	68.2	71.1	65.4	60.1	42.1	51.1	52.7	65.6	72.7	63.6	61.1
LSD (.10)	7.7	5.0	6.8	3.8	6.9	5.8	4.5	10.4	5.2	7.3	4.6	2.5
Error degrees of freedom	108	108	108	324	108	108	216	102	108	108	306	816
CV (%)	16.3	8.9	11.5	12.2	13.9	16.6	15.1	23.9	9.6	12.1	15.1	13.9
R^2 (%)	94	93	58	92	78	55	82	81	79	89	87	89

Table 11. Three-year summary of 1997-98, 1998-99, and 1999-00 yields for wheat variety trials in Mississippi.

Brand/Variety	Hernando	Prairie	North avg.	Newton	Raymond	South avg.	Issaquena	Overall avg.
	bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*
ApriPro Mallard	68.8	68.6	68.6	53.6	46.9	48.5	59.3	59.4
AgriPro Shelby	65.1	61.6	63.3	63.7	49.5	54.0	51.6	58.3
AgriPro Shiloh	75.2	57.9	66.5	61.0	46.2	51.6	54.6	59.0
Delta King 9027	64.7	67.5	66.1	55.8	42.7	48.3	60.9	58.3
Delta King 9121	65.6	60.4	63.0	51.8	36.6	43.3	56.3	54.1
Delta King 1551W	69.9	67.7	68.8	59.4	43.5	50.2	61.7	60.4
SS 522	78.8	61.0	69.9	63.5	50.2	55.4	54.3	61.6
NK Coker 9543	58.4	64.0	61.2	55.1	49.3	52.6	58.3	57.0
NK Coker 9663	74.4	63.5	69.0	63.4	37.0	46.0	–	57.5
NK Coker 9704	68.0	63.1	65.6	57.3	48.2	51.7	53.0	57.9
Pioneer variety 2684	61.7	71.2	66.5	60.3	47.1	50.4	61.1	60.3
Pioneer variety 2691	54.6	55.5	55.1	55.5	43.8	48.8	42.2	50.3
Roane	79.4	66.4	72.9	59.2	41.0	47.9	56.9	60.6
Terral LA422	57.1	58.4	57.7	55.4	47.6	51.4	54.0	54.5
Terral TV 8555	67.8	61.2	64.5	59.3	46.7	52.0	52.5	57.5
USG 3209	62.1	64.0	63.1	62.9	49.5	54.7	57.4	59.2
Overall Mean	67.0	63.3	65.1	58.6	45.4	50.4	55.6	57.9
LSD (.10)	4.7	5.5	3.6	5.4	5.0	0.6	7.4	2.5
Error degrees of freedom	135	135	270	135	135	270	126	630
CV (%)	10.3	12.8	11.6	13.7	16.4	15.9	19.6	14.4
R^2 (%)	89	79	85	75	71	80	81	84

Table 12. Wheat varietal reactions to disease in Mississippi.[1]

Brand/Variety	Leaf rust[2]	Stagonospora leaf blotch[2]	Other diseases[3]	Brand/Variety	Leaf rust[2]	Stagonospora leaf blotch[2]	Other diseases[3]
AgriPro Mallard	MR	R	BYD	GA901146E15	–	–	–
AgriPro Patton	–	R	–	GA88622E51	–	R	–
AgriPro Shelby	MR	MS	–	Genesis 9939	–	MR	–
AgriPro Shiloh	MR	MR	–	LA8983B14-3-1-2	–	MR	–
AgriPro D95-7763	–	–	–	LA9115C25-3-6-2	R	R	–
AR 494B-2-2	S	MR	–	LA89423B40-3	R	–	–
AR 584A-3-1	MR	R	BYD	LA90144B16-3-2	–	R	–
AR 656-5-1	–	–	–	LA9070G45-3-3-1	–	MR	–
AR LA85411	–	R	–	NK Coker 9543	MR	MS	BYD
Croplan Genetics SR204	–	R	–	NK Coker 9663	R	MR	–
Croplan Genetics SR211	–	R	–	NK Coker 9704	MR	MR	–
Croplan Genetics SR218	–	MR	–	Pioneer variety 2684	MS	MS	BYD,BS
Delta King 9027	MR	R	–	Pioneer variety 2691	R	MS	–
Delta King 9121	R	MR	–	Pioneer variety 26R46	S	MS	–
Delta King 1551W	R	MR	–	Pioneer variety 26R24	–	–	–
Dixie 911	–	R	–	Pioneer variety XW682	–	MS	–
Dixie 2000	–	MR	–	Roane	MR	R	BYD
FFR 540W	–	–	–	Terral LA422	MR	MS	BS
SS 516	–	–	–	Terral TV 8555	MR	MS	–
SS 518	R	MS	BYD	Terral TVX8910	–	R	–
SS 522	R	R	–	USG 3209	R	MS	BS
SS 535	–	R	–	USG 3709	R	–	–
AGS 2000	–	R	–	VA96W-270	–	R	–
GA90524E35	–	MR	–	VA96W-158	–	R	–

[1]Prepared by Dr. Larry Trevathan, plant pathologist, Department of Entomology and Plant Pathology.
[2]R = resistant, little or no disease; MR = moderately resistant, little or no economic loss; MS = moderately susceptible, moderate economic loss possible; S = susceptible, economic loss probable; – = disease symptoms not observed.
[3]BS = Bacterial stripe; BYD = Barley yellow dwarf. Stripe rust observed on a number of wheat varieties was considered to be a function of below-normal temperatures during the spring.

Table 13. Oat varietal reactions to disease in Mississippi.[1]

Brand/Variety	Leaf rust[2]	Stagonospora leaf blotch[2]	Other diseases[3]	Brand/Variety	Leaf rust[2]	Stagonospora leaf blotch[2]	Other diseases[3]
Chapman	–	–	BYD	LA9344E10	–	–	–
Horizon 314	–	–	–	Secretariat LA495	–	–	BYD
LA90113AFL2-1-19-3-1	–	–	BYD	SC 910337	–	–	–
LA90151C11-2-1	–	–	–	SS 76-30	–	–	–
LA9339E45	–	–	–				

[1]Prepared by Dr. Larry Trevathan, plant pathologist, Department of Entomology and Plant Pathology.
[2]R = resistant, little or no disease; MR = moderately resistant, little or no economic loss; MS = moderately susceptible, moderate economic loss possible; S = susceptible, economic loss probable; – = disease symptoms not observed.
[3]BS = Bacterial stripe; BYD = Barley yellow dwarf. Stripe rust observed on a number of wheat varieties was considered to be a function of below-normal temperatures during the spring.

Table 14. Average number of wheat seeds per pound for varieties entered in 2000 variety trials.

Brand/Variety	1999-00 average	2-year average	Brand/Variety	1999-00 average	2-year average
	seeds/lb	*seeds/lb*		*seeds/lb*	*seeds/lb*
AgriPro Mallard	14706	14448	GA901146E15	16331	–
AgriPro Patton	11868	13051	GA88622E51	16471	–
AgriPro Shelby	11537	12223	Genesis 9939	13981	12737
AgriPro Shiloh	11618	11882	LA8983B14-3-1-2	15917	–
AgriPro D95-7763	11155	–	LA9115C25-3-6-2	14141	–
AR 494B-2-2	14225	–	LA89423B40-3	15585	–
AR 584A-3-1	13441	–	LA90144B16-3-2	13599	–
AR 656-5-1	17205	–	LA9070G45-3-3-1	12870	–
AR LA85411	13700	–	NK Coker 9543	13717	14424
Croplan Genetics SR204	15941	–	NK Coker 9663	11564	11597
Croplan Genetics SR211	15434	–	NK Coker 9704	12769	13395
Croplan Genetics SR218	12377	–	Pioneer variety 2684	11694	11604
Delta King 9027	15985	16606	Pioneer variety 2691	13729	13585
Delta King 9121	16818	15768	Pioneer variety 26R46	11006	11083
Delta King 1551W	17434	16221	Pioneer variety 26R24	12457	–
Dixie 911	15637	–	Pioneer variety XW682	10979	–
Dixie 2000	15967	–	Roane	19000	16976
FFR 540W	13330	–	Terral LA422	16008	14668
SS 516	11181	–	Terral TV 8555	11961	13580
SS 518	12759	–	Terral TVX8910	12598	–
SS 522	13059	13356	USG 3209	11828	11858
SS 535	11834	–	USG 3709	11060	–
AGS 2000	10406	–	VA96W-270	12164	–
GA90524E35	12600	–	VA96W-158	12438	–

Table 15. Average number of oat seeds per pound for varieties entered in 2000 variety trials.

Brand/Variety	1999-00 average	2-year average	Brand/Variety	1999-00 average	2-year average
	seeds/lb	*seeds/lb*		*seeds/lb*	*seeds/lb*
Chapman	18510	17401	LA9344E10	21667	–
Horizon 314	15637	15598	Secretariat LA495	16516	15812
LA90113AFL2-1-19-3-1	16690	–	SC 910337	14255	–
LA90151C11-2-1	21152	–	SS 76-30	15105	–
LA9339E45	18357	–			

Table 16. 1999-00 oat yields at location 1, MAFES Prairie Research Unit in Prairie (Houston clay soil).[1]

Brand/Variety	1999-00 yield	2-Year avg. yield	3-Year avg. yield	Test weight	Date headed	Plant height	Lodging score[2]
	bu/A	*bu/A*	*bu/A*	*lb/bu*		*in*	
Horizon 314	96.7	89.5	–	38	04/17	52	3
LA90113AFL2-1-19-3-1	95.1	–	–	37	04/17	53	3
Secretariat LA495	92.7	90.3	84.4	38	04/14	51	2
LA90151C11-2-1	89.4	–	–	38	04/14	49	1
LA9339E45	88.6	–	–	37	04/12	56	3
Chapman	87.1	83.0	75.3	37	04/12	43	2
SC 910337	71.8	–	–	41	04/14	52	3
LA9344E10	67.7	–	–	35	04/17	47	3
SS 76-30	62.2	–	–	37	04/21	52	2
Overall mean	83.5	87.6	79.8				
LSD (.10)	14.1	12.7	10.2				
Error degrees of freedom	24	12	9				
CV (%)	13.9	16.2	17.2				
R^2 (%)	69	58	73				

[1]Planted October 27, 1999. Harvested June 7, 2000. Soil fertility: pH=7.7; P=M; K=H.
Fertilizer added: 120 lb N/A. Herbicide: Harmony Extra @ 0.3 oz/A.
[2]See "Procedures" for a description of lodging scores.

Table 17. 1999-00 oat yields at location 2, MAFES Black Belt Branch in Brooksville (Brooksville silty clay soil).[1]

Brand/Variety	1999-00 yield	2-Year avg. yield	3-Year avg. yield	Test weight	Date headed	Plant height	Lodging score[2]
	bu/A	*bu/A*	*bu/A*	*lb/bu*		*in*	
LA90113AFL2-1-19-3-1	107.8	–	–	35	03/27	49	4
Horizon 314	101.8	95.8	–	36	03/29	51	4
Secretariat LA495	99.3	85.9	70.4	36	04/04	56	2
Chapman	92.1	80.5	63.4	34	03/24	47	3
LA9344E10	83.4	–	–	36	04/08	54	1
LA9339E45	83.3	–	–	36	04/08	60	3
LA90151C11-2-1	70.5	–	–	35	04/04	51	3
SS 76-30	59.5	–	–	37	03/27	60	4
SC 910337	52.5	–	–	37	04/04	50	4
Overall mean	83.4	87.4	66.9				
LSD (.10)	26.4	15.4	12.1				
Error degrees of freedom	24	10	8				
CV (%)	26.1	18.2	22.8				
R^2 (%)	55	79	91				

[1]Planted October 27, 1999. Harvested June 7, 2000. Soil fertility: pH=6.9; P=H; K=M.
Fertilizer added: 176 lb 0-17-34 Preplant; 20 lb N Preplant; 60 lb N in February. Herbicide: Harmony @ 0.5 oz/A.
[2]See "Procedures" for a description of lodging scores.

Table 18. 1999-00 oat yields at location 6, MAFES Brown Loam Branch in Raymond (Loring silty loam soil).[1]

Brand/Variety	1999-00 yield	2-Year avg. yield	3-Year avg. yield	Test weight	Date headed	Plant height	Lodging score[2]
	bu/A	*bu/A*	*bu/A*	*lb/bu*		*in*	
LA90113AFL2-1-19-3-1	142.7	–	–	34	04/02	49	2
Horizon 314	138.2	120.8	–	35	03/30	53	1
Secretariat LA495	135.1	119.2	112.3	34	04/04	54	1
LA90151C11-2-1	133.1	–	–	36	03/01	50	1
Chapman	122.9	106.9	102.7	32	04/05	48	1
LA9344E10	114.8	–	–	32	03/30	59	1
LA9339E45	105.0	–	–	32	04/02	57	1
SC 910337	96.8	–	–	36	04/02	53	3
SS 76-30	88.0	–	–	36	04/01	59	2
Overall mean	119.6	115.7	107.5				
LSD (.10)	20.7	12.9	6.2				
Error degrees of freedom	24	12	9				
CV (%)	14.3	12.5	7.7				
R^2 (%)	67	79	94				

[1]Planted November 4, 1999. Harvested May 30, 2000. Soil fertility: pH=6.5; P=H; K=H.
Fertilizer added: 65 lb N/A.
[2]See "Procedures" for a description of lodging scores.

Table 19. 1999-00 oat yields at location 7, MAFES Coastal Plain Branch in Newton (Prentiss fine sandy loam soil).[1]

Brand/Variety	1999-00 yield	2-Year avg. yield	3-Year avg. yield	Test weight	Date headed	Plant height	Lodging score[2]
	bu/A	*bu/A*	*bu/A*	*lb/bu*		*in*	
Chapman	77.1	56.2	62.1	30	03/24	42	1
Secretariat LA495	75.7	74.9	78.0	32	03/31	50	1
LA9339E45	72.6	–	–	31	04/05	53	2
SS 76-30	69.5	–	–	31	03/27	54	2
LA90113AFL2-1-19-3-1	61.3	–	–	28	03/27	48	2
SC 910337	52.7	–	–	32	04/03	49	2
LA90151C11-2-1	51.1	–	–	30	03/31	44	2
Horizon 314	43.9	52.3	–	28	04/03	48	2
LA9344E10	41.5	–	–	28	04/10	47	2
Overall mean	60.6	61.1	70.0				
LSD (.10)	10.3	8.5	6.1				
Error degrees of freedom	24	12	9				
CV (%)	14.0	15.6	11.6				
R^2 (%)	85	88	93				

[1]Planted October 29, 1999. Harvested May 24, 2000. Soil fertility: pH=6.1; P=H; K=M.
Fertilizer added: 65 lb N/A; 60 lb K_20. Herbicide: Harmony @ 0.50 oz/A.
[2]See "Procedures" for a description of lodging scores.

Table 20. Summary of 1999-00 yields for oat variety trials in Mississippi.

Brand/Variety	Prairie	Brooksville	North avg.	Newton	Raymond	South avg.		Overall avg.
	bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*		*bu/A*
Chapman	87.1	92.1	89.6	77.1	122.9	100.0		94.8
Horizon 314	96.7	101.8	99.2	43.9	138.2	91.0		95.1
LA90113AFL2-1-19-3-1	95.1	107.8	101.4	61.3	142.7	102.0		101.7
LA90151C11-2-1	89.4	70.5	80.0	51.1	133.1	92.1		86.0
LA9339E45	88.6	83.3	86.0	72.6	105.0	88.8		87.4
LA9344E10	67.7	83.4	75.6	41.5	114.8	78.1		76.9
Secretariat LA495	92.7	99.3	96.0	75.7	135.1	105.4		100.7
SC 910337	71.8	52.5	62.1	52.7	96.8	74.7		68.4
SS 76-30	62.2	59.5	60.9	69.5	88.0	78.7		69.8
Overall Mean	83.5	83.4	83.4	60.6	119.6	90.1		86.8
LSD (.10)	14.1	26.4	14.7	10.3	20.7	11.3		9.2
Error degrees of freedom	24	24	48	24	24	48		96
CV (%)	13.9	26.1	20.9	14.0	14.3	15.0		18.0
R^2 (%)	69	55	59	85	67	91		82

Table 21. Two-year summary of 1998-99 and 1999-00 yields for oat variety trials in Mississippi.

Brand/Variety	Prairie	Brooksville	North avg.	Newton	Raymond	South avg.		Overall avg.
	bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*		*bu/A*
Chapman	83.0	80.5	81.8	56.2	106.9	81.6		81.7
Horizon 314	89.5	95.8	92.5	52.3	120.8	86.6		89.4
Secretariat LA495	90.3	85.9	88.3	74.9	119.2	97.1		92.8
Overall Mean	87.6	87.4	87.5	61.1	115.7	88.4		87.9
LSD (.10)	12.7	15.4	9.4	8.5	12.9	7.4		5.8
Error degrees of freedom	12	10	22	12	12	24		46
CV (%)	16.2	18.2	17.1	15.6	12.5	13.9		15.5
R^2 (%)	58	79	72	88	79	94		89

Table 22. Three-year summary of 1997-98, 1998-99, and 1999-00 yields for oat variety trials in Mississippi.

Brand/Variety	Prairie	Brooksville	North avg.	Newton	Raymond	South avg.		Overall avg.
	bu/A	*bu/A*	*bu/A*	*bu/A*	*bu/A*	*bu/A*		*bu/A*
Chapman	75.3	63.4	69.5	62.1	102.7	82.4		76.0
Secretariat LA495	84.4	70.4	77.4	78.0	112.3	95.2		86.7
Overall Mean	79.8	66.9	73.8	70.0	107.5	88.8		87.3
LSD (.10)	10.2	12.1	11.4	6.1	6.2	4.9		5.5
Error degrees of freedom	9	8	18	9	9	27		23
CV (%)	17.2	22.8	26.8	11.6	7.7	11.2		14.4
R^2 (%)	73	91	69	93	94	92		92

Commercial Wheat Brands/Varieties Entered

AgriPro Seeds, Incorporated **P.O. Box 2365** **Jonesboro, AR 72402**	**AgriPro Mallard** **AgriPro Shelby** **AgriPro Shiloh** **AgriPro Patton** **AgriPro D95-7763 (Exp.)**
AgSouth Genetics **P.O. Box 88823** **Dunwoody, GA 30356**	**AGS 2000 (was GA Moss)**
Cache River Valley Seed **P.O. Box 10** **Cash, AR 72421**	**Dixie 911** **Dixie 2000**
Delta King Seed Co. **P.O. Box 970** **McCrory, AR 72101**	**Delta King 9027** **Delta King 9121** **Delta King 1551W**
FFR Seed **969 Cloverleaf Drive** **Southaven, MS 38671**	**FFR 540W**
Genesis Brand Seed **P.O. Box 21085** **Lansing, MI 48909**	**Genesis 9939**
Land O'Lakes, Inc. **P.O. Box 171376** **Memphis, TN 38187**	**Croplan Genetics SR204** **Croplan Genetics SR211** **Croplan Genetics SR218**
Novartis Seeds, Inc. **P.O. Box 729** **Bay, AR 72411**	**NK Coker 9543** **NK Coker 9663** **NK Coker 9704**
Pioneer Hi-Bred International **6767 Old Madison Pike, #110** **Huntsville, AL 35806**	**Pioneer variety 2684** **Pioneer variety 2691** **Pioneer variety 26R46** **Pioneer variety 26R24** **Pioneer variety XW682 (Exp.)**
Southern States Coop **P.O. Box 26234** **Richmond, VA 23260**	**SS 516** **SS 518** **SS 522** **SS 535**
Terral Seed Company, Inc. **P.O. Box 826** **Lake Providence, LA 71254**	**Terral LA422** **Terral TV 8555** **Terral TVX8910 (Exp.)**
UniSouth Genetics, Inc. **2640-C Nolensville Rd.** **Nashville, TN 37211**	**USG 3209** **USG 3709 (was USG 97-41)**

Public Wheat Varieties Entered

University of Arkansas 115 Plant Science Building Fayetteville, AR 72701	AR 494B-2-2 (Exp.) AR 584A-3-1 (Exp.) AR 656-5-1 (Exp.) AR LA85411 (was LA 85411D4-6-3-1)
University of Georgia Georgia Station Griffin, GA 30223	GA90524E35 GA901146E15 GA88622E51
Louisiana State University Agronomy Department Baton Rouge, LA 70803	LA8983B14-3-1-2 LA9115C25-3-6-2 LA89423B40-3 LA90144B16-3-2 LA9070G45-3-3-1
VCIA Foundation Seed Farm P.O. Box 78 Mt. Holly, VA 22524	VA96W-270 (Exp.) VA96W-158 (Exp.) Roane

Public and Commercial Oat Brands/Varieties Entered

Clemson University Crop & Soil Environmental Science Box 340359 Clemson, SC 29634-0359	SC 910337
North Florida Research and Education Center University of Florida Route 3, Box 4320 Quincy, FL 32351	Chapman
Louisiana State University Agronomy Department Baton Rouge, LA 70803	LA90113AFL2-1-19-3-1 LA90151C11-2-1 LA9339E45 LA9344E10
Plantation Seeds, Inc. Route 1 Box 695 Newton, GA 31770	Horizon 314 (was FL 920HR31,314)
Southern States Coop P.O. Box 26234 Richmond, VA 23260	SS 76-30
Terral Seed, Inc. P.O. Box 826 Lake Providence, LA 71254	Secretariat LA495

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