Information Bulletin 437



VARIETY TRIALS, 2007



MISSISSIPPI AGRICULTURAL & FORESTRY EXPERIMENT STATION • VANCE H. WATSON, DIRECTOR

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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, 2007

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Mississippi Wheat and Oat Variety Trials, 2007

INTRODUCTION

Small grains are grown throughout Mississippi. Wheat is the primary crop, followed by oats. Wheat and oat variety trials were conducted at six locations in Mississippi in 2006-2007. Wheat yields typically range from 40 to 60 bushels per acre and often produce 60 to 80 bushels per acre 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 15-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 insure that varieties were evaluated under natural 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. Seed of all private entries were supplied by participating companies. Seed 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 to 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 to 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 overseeding 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 lateplanted 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 to 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 to 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 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. Wheat variety reactions to prevalent diseases during this growing season are reported in Table 10.

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. Wheat generally requires 1.5 to 2 pounds of nitrogen for each bushel of grain produced.

Apply approximately 25% of the nitrogen in the fall. If wheat is grown following corn, grain sorghum, or rice apply 30-40 pounds of nitrogen in the fall. Apply the balance of the nitrogen 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 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. Such 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 MSU Extension Service Information Sheet 1763, which is available on the Web at msucares.com/pubs/infosheets/is1763.pdf. Other pertinent Web sites include:

Plant Variety Protection Act

151.121.3.150/science/PVPO/PVPO_Act/whole2.pdf

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

United States Patent Database

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 estimate 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 con-

cluded 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, weather 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

Newton

Wheat emerged to a good stand following a heavy rain soon after planting. Temperatures during the growing season were mild, but rainfall was well below normal. The rainfall deficit from January 1 until harvest was more than 15 inches. There was little to no disease pressure. Bird damage was minimal, and plots were harvested in a timely manner.

Raymond

At planting, soil moisture was optimum and wheat emerged to a good stand. Growing conditions were near normal except for below-normal rainfall in March, April, and May. There were few disease symptoms observed during the growing season, and insect pressure was light. Wheat was harvested under ideal conditions.

Minter City

Wheat was planted into a well-drained seedbed with good moisture. All plots emerged to a uniform stand. Winter temperatures were mild with below-normal rainfall; March was extremely dry. The plots were irrigated on April 2 with a center-pivot irrigation system. A cold snap during Easter weekend in April produced light frost two nights, but no freeze injury was observed in the plots. Weed, disease, and insect pressure were minimal. Harvest conditions were good and, and wheat was harvested in a timely manner.

Brooksville

Wheat and oat plots were planted into a stale seedbed following soybeans. Soil moisture was good, and plots quickly emerged to a good stand. The growing season was good with above-normal temperatures and below-normal rainfall. The extremely cold temperatures in April caused little freeze damage. Disease pressure was light, and very good yields were harvested.

Olive Branch

The variety trial had an excellent start with no disease pressure and very favorable growing conditions during the early growing season. Freezing temperatures over Easter weekend caused severe freeze damage to varieties that were headed out or in the late boot stage. Severe yield reductions were observed on these varieties. Plots were harvested under good weather conditions.

Stoneville

Wheat and oat varieties were planted after the plot area was disked and do-alled. Soil moisture was good, and a good stand was established. The growing season was mild and dry. Incidence of disease and insects were not a factor during the growing season. Plots were harvested on time without weather delays.

Cleveland

Excessive rainfall after planting reduced stands in some plots. The weather during the growing season was good to excellent. However, over the Easter weekend, temperatures were at or below freezing for 2 days. This unusual cold snap caused minimal freeze damage. The spring was uncharacteristically dry and warm. The dry conditions delayed the incorporation of nitrogen fertilizer and promoted volatility nitrogen loss. It is important to consider the lack of rainfall when looking at yields at this location.

| Table 1. Companies supplying oat brands/varieties entered. | | | | | | | |
|---|---|---|--|--|--|--|--|
| Louisiana State University LSU Dept. of Agronomy 221 M.B. Sturgis Hall Baton Rouge, LA 70803 | LA02030-S-B-171-S2 (Exp.) LA95033D63-1-C-S3 (Exp.) | LA966BSB-270-S2-C (Exp.) LA99016SBSB-98 (Exp.) | | | | | |
| Plantation Seed P.O. Box 398 Newton, GA 39870 | H-321 | | | | | | |
| Terral Seed Inc. P.O. Box 826 Lake Providence, LA 71254 | Terral Trophy (Exp.) | | | | | | |

| Table 2 | Table 2. Companies supplying wheat brands/varieties entered. | | | | | | | |
|---|---|--|--|--|--|--|--|--|
| AgriPro Coker/Syngenta Seeds 778 CR 680 Bay, AR 72411 | AgriPro Coker Beretta AgriPro Coker Panola AgriPro Coker 9553 | AgriPro Coker Magnolia (was D01*7759) AgriPro Coker D02-8486 (Exp.) | | | | | | |
| AgSouth Genetics P.O. Box 72246 Albany, GA 31721 | AGS 2010 AGS 2060 AGS 2031 (was GA-951395-3A31) | | | | | | | |
| University of Arkansas 115 Plant Science Bldg. Fayetteville, AR 72701 | AR Pat | | | | | | | |
| B & S Seed Co. Inc. 1283 Hwy 444 Duncan, MS 38740 | Dixie Bell DB2125 Dixie Bell DB3440 Dixie Bell DB7440 | | | | | | | |
| Cache River Valley Seed P.O. Box 10 Cash, AR 72421 | Dixie 989 Dixie 900 Dixie X427 (Exp.) | | | | | | | |
| Cullum Seed P.O. Box 9 Waldenburg, AR 72475 | Armor 260Z Armor 5110 Armor ARX9901 (Exp.) | | | | | | | |
| Delta Grow Seed P.O. Box 219 England, AR 72046 | Delta Grow 1600 Delta Grow 4100 | Delta Grow 4500 Delta Grow 5200 | | | | | | |
| Delta King Seed Co. P. O. Box 970 McCrory, AR 72101 | DK 7710 DK 7830 DK 9410 DK 9577 DK GR9108 | DK XTJ724 (Exp.) DK XTJ730 (Exp.) DK XTJ732 (Exp.) DK XTJ734 (Exp.) | | | | | | |
| Erwin Keith Inc. 1529 Hwy. 193 Wynne, AR 72396 | Progeny 145 Progeny 166 Progeny 185 | | | | | | | |
| University of Georgia UGA-CAES-Griffin Campus 1109 Experiment St. Griffin, GA 30223 | GA-951231-4E25 (Exp.) GA-951231-4E26 (Exp.) GA-96693-4E16 (Exp.) | | | | | | | |
| Hornbeck Seed Company P.O. Box 472 DeWitt, AR 72042 | HBK 3266 | | | | | | | |
| JGL Inc. 3540 South U.S. 231 Greencastle, IN 46135 | JGL 701 (Exp.) JGL 703 (Exp.) | | | | | | | |
| Louisiana State University LSU Dept. of Agronomy 221 M.B. Sturgis Hall Baton Rouge, LA 70803 | LA978UC-36-1-1-B (Exp.) LA978UC-101-1-1-C (Exp.) LA98202D-64-1-C (Exp.) | LA98214D-14-1-2-B (Exp.) LA99005UC-31-3 (Exp.) | | | | | | |
| Pioneer Hi-Bred Intl. 7501 Memorial Pkwy. Ste 205 Huntsville, AL 35802 | Pioneer variety 26R15 Pioneer variety 26R22 Pioneer variety 26R87 | | | | | | | |
| Terral Seed Inc. P.O. Box 826 Lake Providence, LA 71254 | Terral LA841 Terral LA482 (Exp.) Terral TV8331 | Terral TV8466 Terral TV8558 Terral TVX81170 (Exp.) | | | | | | |
| UniSouth Genetics Inc. 2640-C Nolensville Rd. Nashville, TN 37211 | USG 3209 USG 3295 USG 3350 | USG 3592 USG 3X633 (Exp.) | | | | | | |
| E. Virginia Ag. Res. & Ext. Center 2229 Menokin Road Warsaw, VA 22572 | VA02W-555 (Exp.) | | | | | | | |

| Table 3. 2007 yield summary of wheat variety trials in Mississippi. | | | | | | | | | |
|---|------------------------|--------------|---------|--------------|--------------|----------------|--------------|---------------|------------------|
| Brand/Variety | Brooksville (North) | Newton | Raymond | South avg. | Cleveland | Minter City | Stoneville | Delta avg. | Location avg. |
| | bu/A | bu/A | bu/A | bu/A | bu/A | bu/A | bu/A | bu/A | bu/A |
| AgriPro Coker Beretta | 88.9 | 58.1 | 72.2 | 64.1 | 55.9 | 74.5 | 71.8 | 67.4 | 70.2 |
| AgriPro Coker MAGNOLIA | 83.1 | 66.3 | 92.0 | 79.1 | 52.2 | 70.5 | 78.3 | 67.0 | 73.7 |
| AgriPro Coker 9553 | 88.7 | 57.0 61.9 | 87.1 | 72.4 | 43.6 | 73.5 | 86.8 | 64.7 70.7 | 71.2 |
| AgriPro Coker D02-8486 (Exp.) | 85.7 | 55.4 | 48.2 | 51.8 | 39.8 | 74.2 | 77.8 | 66.1 | 67.2 |
| AGS 2010 | 81.2 | 39.7 | 61.9 | 50.8 | 43.7 | 72.5 | 81.8 | 66.0 | 64.6 |
| AGS 2031 | 97.0 | 58.4 | 65.0 | 61.0 | 50.9 | 70.8 | 77.1 | 66.3 | 70.9 |
| AGS 2060 | 84.1 | 60.3 | 96.5 | 78.4 | 51.3 | 76.3 | 75.3 | 67.7 | 74.0 |
| AR Pat | 83.0 | 56.5 | 79.6 | 68.0 | 54.4 | 74.5 | 67.1 | 65.3 | 69.2 |
| Armor 5110 | 91.4 79.0 | 59.0 56.7 | 73.2 | 66.0 | 52.0 | 07.8 70.7 | 73.2 | 67.0 | 68.8 |
| Armor AXR9901(Exp.) | 74.4 | 54.2 | 71.5 | 62.9 | 50.3 | 68.1 | 65.1 | 61.1 | 63.9 |
| Delta Grow 1600 | 82.9 | 59.0 | 68.5 | 63.8 | 45.9 | 77.4 | 67.4 | 63.6 | 66.9 |
| Delta Grow 4100 | 78.4 | 55.1 | 70.8 | 62.9 | 52.3 | 71.0 | 69.7 | 64.3 | 66.2 |
| Delta Grow 4500 | 79.5 | 57.2 | 71.0 | 64.1 | 54.5 | 75.2 | 72.0 | 67.2 | 68.2 |
| Delta Grow 5200 | 80.6 | 54.8 | 72.9 | 63.9 | 54.5 | /4./ | 74.5 | 67.9 | 68.7 |
| Delta King 7830 | 85.0 | 58.5 | 69.3 | 63.9 | 52.0 | 69.1 | 76.2 | 67.0 | 69.0 |
| Delta King 9410 | 86.4 | 47.4 | 66.4 | 56.9 | 52.7 | 68.4 | 68.9 | 63.3 | 65.0 |
| Delta King 9577 | 88.8 | 62.3 | 66.4 | 64.4 | 47.6 | 69.2 | 80.5 | 67.4 | 70.1 |
| Delta King GR9108 | 88.8 | 61.4 | 67.3 | 64.4 | 49.2 | 65.0 | 78.3 | 64.2 | 68.4 |
| Delta King DK XTJ724 (Exp.) | 95.4 | 61.2 | 55.2 | 58.6 | 61.7 | 68.1 | 77.7 | 69.2 | 70.5 |
| Delta King DK X I J730 (Exp.) | 83.1 99.5 | 59.9 48.4 | 63.4 | 61.7 57.8 | 52.6 60.9 | 69.0 72.3 | 71.0 | 68.1 | 67.6 |
| Delta King DK XTJ732 (Exp.) | 95.9 | 58.9 | 68.9 | 63.9 | 49.1 | 71.4 | 75.9 | 65.4 | 70.0 |
| Dixie 989 | 84.2 | 60.4 | 67.9 | 64.2 | 50.6 | 70.7 | 73.1 | 64.8 | 67.8 |
| Dixie 900 | 79.7 | 54.9 | 71.3 | 63.1 | 52.6 | 70.8 | 73.2 | 66.7 | 67.7 |
| Dixie X427 (Exp.) | 88.4 | 59.9 | 73.8 | 66.8 | 58.7 | 66.3 | 80.9 | 68.6 | 71.3 |
| Dixie Bell DB2125 | 86.4 | 53.5 | 63.4 | 58.4 | 53.6 | <u> </u> | 80.2 | 69.1 62.9 | 68.4 |
| Dixie Bell DB7440 | 88.3 | 57.3 | 69.0 | 63.1 | 51.4 | 63.8 | 79.3 | 64.8 | 68.2 |
| GA-951231-4E25 (Exp.) | 94.2 | 51.3 | 63.5 | 56.2 | 50.3 | 63.1 | 84.1 | 65.8 | 68.9 |
| GA-951231-4E26 (Exp.) | 88.9 | 55.2 | 73.1 | 64.2 | 43.0 | 67.5 | 80.7 | 63.8 | 68.1 |
| GA-96693-4E16 (Exp.) | 101.7 | 71.9 | 85.4 | 78.6 | 58.3 | 67.3 | 81.9 | 69.2 | 77.8 |
| HBK 3266 | 88.6 96.9 | 59.2 62.7 | 91.8 | /5.0 51.3 | 52.3 | 71.6 | /6.4 82 1 | 68.1 71.2 | 74.3 68.7 |
| JGL 703 (Exp.) | 95.2 | 66.9 | 71.6 | 69.3 | 62.6 | 77.4 | 82.0 | 74.0 | 76.0 |
| LA978UC-36-1-1-B (Exp.) | 91.2 | 57.7 | 85.2 | 71.5 | 49.6 | 73.9 | 71.0 | 64.8 | 71.4 |
| LA978UC-101-1-1-C (Exp.) | 93.0 | 61.7 | 81.5 | 71.6 | 61.8 | 69.6 | 79.2 | 71.0 | 75.0 |
| LA98202D-64-1-C (Exp.) | 84.9 | 54.5 | 97.5 | 76.0 | 43.3 | 72.7 | 82.2 | 68.1 | 73.8 |
| LA98214D-14-1-2-B (Exp.) | 83.7 | 51.0 61.9 | 76.4 | 61.9 76.2 | 49.8 | 68.8 | 78.2 | 68.3 64.1 | 69.0 |
| Pioneer variety 26B15 | 86.0 | 49.3 | 61.7 | 55.4 | 58.7 | 64.9 | 80.8 | 68.2 | 66.9 |
| Pioneer variety 26R22 | 93.0 | 56.8 | 86.5 | 71.6 | 54.4 | 70.3 | 85.1 | 69.9 | 74.3 |
| Pioneer variety 26R87 | 87.4 | 52.2 | 88.8 | 70.6 | 42.1 | 71.7 | 77.1 | 63.7 | 69.9 |
| Progeny 145 | 86.0 | 56.2 | 65.7 | 60.9 | 56.1 | 73.1 | 69.7 | 66.3 | 67.8 |
| Progeny 166 Progeny 185 | 79.5 | 57.4 63.1 | 74.2 | 65.9 69.4 | 53.8 | 65.9 69.9 | /6.1 78.4 | 65.3 | 67.8 |
| Terral I A841 | 80.5 | 51.8 | 82.5 | 67.2 | 48.9 | 75.1 | 76.3 | 66.8 | 69.2 |
| Terral LA482 (Exp.) | 94.1 | 59.6 | 66.2 | 62.4 | 41.5 | 75.6 | 79.2 | 70.2 | 72.2 |
| Terral TV8331 | 84.9 | 53.6 | 77.8 | 65.7 | 46.9 | 76.0 | 75.4 | 66.1 | 69.1 |
| Terral TV8466 | 89.1 | 53.6 | 66.3 | 60.0 | 51.0 | 67.5 | 72.7 | 63.7 | 66.7 |
| Ierral I V8558 | 88.8 | 60.2 50.8 | 75.6 | 67.9 | 51.2 | 75.3 | 79.1 | 68.6 65.9 | 71.7 |
| USG 3209 | 88.5 | 61.1 | 82.4 | 71.7 | 49.9 | 70.8 | 77.0 | 67.4 | 70.1 |
| USG 3295 | 84.9 | 57.3 | 86.4 | 71.9 | 49.6 | 69.2 | 78.7 | 67.3 | 72.0 |
| USG 3350 | 79.7 | 55.7 | 74.8 | 65.3 | 48.6 | 71.6 | 80.3 | 68.5 | 69.3 |
| USG 3592 | 93.2 | 61.9 | 76.2 | 69.1 | 53.1 | 75.7 | 78.1 | 69.0 | 73.0 |
| USG 3X633 (Exp.) | 86.2 | 52.3 | 68.0 | 59.0 76.4 | 49.2 | 78.2 | 69.6 | 65.3 | 67.1 |
| νησενν-333 (μαμ.) | 02.0 | 01.9 | 50.5 | 70.4 | 55.5 | 70.2 | 73.4 | 03.5 | 74.1 |
| Overall mean | 87.2 | 57.4 | 74.2 | 65.7 | 51.7 | 71.2 | 76.3 | 66.8 | 69.9 |
| LSD (.10) | 6.7 | 6.9 | 12.5 | 7.0 | 7.6 | 8.9 | 9.8 | 5.1 | 3.6 |
| CV (%) | 65 | 1/2 | 13.8 | 12.6 | 12.0 | 10.7 | 11.0 | 514 | 1027 |
| R ² (%) | 62 | 57 | 63 | 75 | 61 | 32 | 45 | 78 | 82 |
| . , | | | | - | | | - | - | |

6 Mississippi Wheat and Oat Variety Trials, 2007

| Table 4. Two-year summary of yields for wheat variety trials in Mississippi. | | | | | | | | | |
|--|------------------------|--------|---------|---------------|-----------|------------|---------------|---------------|--|
| Brand/Variety | Brooksville (North) | Newton | Raymond | South avg. | Cleveland | Stoneville | Delta avg. | Location avg. | |
| | bu/A | bu/A | bu/A | bu/A | bu/A | bu/A | bu/A | bu/A | |
| AgriPro Coker Beretta | 87.3 | 63.7 | 69.9 | 66.3 | 77.2 | 77.9 | 77.6 | 75.5 | |
| AgriPro MAGNOLIA | 86.7 | 78.8 | 87.3 | 82.7 | 75.2 | 85.2 | 80.2 | 82.5 | |
| AgriPro Panola | 87.6 | 71.2 | 77.7 | 74.2 | 64.7 | 81.1 | 75.4 | 77.4 | |
| AgriPro Coker 9553 | 85.7 | 73.3 | 93.3 | 82.6 | 73.8 | 86.8 | 80.7 | 82.5 | |
| AĞS 2031 | 85.5 | 69.8 | 75.8 | 72.6 | 65.8 | 85.9 | 75.8 | 76.6 | |
| AGS 2060 | 80.7 | 75.5 | 89.2 | 81.9 | 72.0 | 84.0 | 78.0 | 80.1 | |
| AR Pat | 82.6 | 66.5 | 80.1 | 72.8 | 70.8 | 77.1 | 74.0 | 75.3 | |
| Armor 260Z | 88.6 | 74.7 | 61.3 | 68.5 | 74.7 | 74.4 | 74.5 | 75.1 | |
| Armor 5110 | 87.8 | 58.1 | 70.0 | 63.0 | 77.8 | 74.6 | 76.2 | 73.8 | |
| Delta Grow 1600 | 85.0 | 72.1 | 69.8 | 71.0 | 71.1 | 72.9 | 72.0 | 74.3 | |
| Delta Grow 4100 | 83.8 | 57.6 | 58.4 | 58.0 | 71.6 | 71.5 | 71.6 | 68.9 | |
| Delta Grow 4500 | 84.4 | 57.8 | 60.8 | 59.2 | 75.2 | 68.4 | 71.8 | 70.0 | |
| Delta Grow 5200 | 82.1 | 60.8 | 67.4 | 63.9 | 79.6 | 71.2 | 75.4 | 72.3 | |
| Delta King 7710 | 91.2 | 67.2 | 71.4 | 69.1 | 83.1 | 82.3 | 82.7 | 79.2 | |
| Delta King 7830 | 87.2 | 61.4 | 60.5 | 61.0 | 79.9 | 74.4 | 77.0 | 72.8 | |
| Delta King 9410 | 87.2 | 54.5 | 58.6 | 56.4 | 76.8 | 67.6 | 72.2 | 69.2 | |
| Delta King 9577 | 92.2 | 71.9 | 68.2 | 70.2 | 78.5 | 79.2 | 78.9 | 78.2 | |
| Delta King GR9108 | 84.5 | 75.3 | 68.5 | 72.1 | 74.1 | 80.3 | 77.2 | 76.7 | |
| Dixie 900 | 80.0 | 60.8 | 69.2 | 64.7 | 75.7 | 72.0 | 73.7 | 71.5 | |
| Dixie 989 | 84.3 | 74.0 | 70.0 | 72.0 | 76.2 | 77.7 | 77.0 | 76.5 | |
| Dixie Bell DB2125 | 88.4 | 59.5 | 57.3 | 58.4 | 79.1 | 79.1 | 79.1 | 73.0 | |
| Dixie Bell DB3440 | 80.4 | 63.6 | 57.2 | 60.6 | 73.7 | 67.6 | 70.4 | 68.7 | |
| HBK 3266 | 87.6 | 72.8 | 88.5 | 80.1 | 72.8 | 81.0 | 77.2 | 80.5 | |
| Pioneer variety 26B15 | 89.1 | 65.3 | 72.7 | 68.7 | 84.1 | 83.3 | 83.7 | 79.0 | |
| Pioneer variety 26B22 | 99.3 | 75.5 | 95.9 | 85.0 | 81.3 | 92.2 | 86.8 | 88.7 | |
| Progeny 145 | 84.0 | 57.4 | 60.6 | 58.9 | 75.4 | 67.9 | 71.6 | 69.3 | |
| Progeny 166 | 86.2 | 62.9 | 68.7 | 65.6 | 74.0 | 77.0 | 75.5 | 73.9 | |
| Progeny 185 | 82.2 | 77.3 | 74.8 | 76.1 | 71.1 | 79.6 | 75.3 | 77.0 | |
| Terral I A841 | 83.9 | 63.7 | 80.7 | 71.6 | 70.2 | 66.7 | 68.5 | 72.9 | |
| Terral TV8331 | 89.3 | 67.2 | 79.6 | 73.0 | 71.1 | 83.3 | 77.2 | 78.1 | |
| Terral TV8466 | 88.8 | 66.6 | 67.6 | 67.0 | 71.0 | 75.6 | 73.3 | 74.1 | |
| Terral TV8558 | 90.5 | 72.6 | 70.3 | 71.5 | 73.5 | 78.6 | 76.0 | 77.3 | |
| USG 3209 | 89.4 | 79.1 | 73.4 | 76.5 | 77.8 | 63.7 | 70.3 | 76.8 | |
| USG 3350 | 83.3 | 60.8 | 68.7 | 64.5 | 79.8 | 78.6 | 79.2 | 74.2 | |
| USG 3592 | 86.9 | 79.5 | 77.9 | 78.8 | 78.5 | 79.8 | 79.1 | 80.6 | |
| 000 0002 | 00.0 | 70.0 | 11.0 | 70.0 | 70.0 | 70.0 | 70.1 | 00.0 | |
| Overall mean | 86.4 | 67.7 | 72.0 | 70.0 | 75.2 | 77.1 | 76.1 | 75.8 | |
| LSD (.10) | 7.1 | 4.5 | 10.6 | 5.4 | 6.2 | 6.5 | 4.5 | 3.1 | |
| Error degrees of freedom | 204 | 204 | 168 | 372 | 196 | 204 | 400 | 976 | |
| CV (%) | 9.8 | 8.0 | 16.6 | 12.9 | 9.9 | 10.3 | 10.1 | 11.0 | |
| R² (%) | 40 | 90 | 62 | 76 | 93 | 64 | 88 | 83 | |

| Table 5. Three-year summary of yields for wheat variety trials in Mississippi. | | | | | | | | | | |
|--|------------------------|--------|---------|------------|----------------------|---------------|--|--|--|--|
| Brand/Variety | Brooksville (North) | Newton | Raymond | South avg. | Cleveland (Delta) | Location avg. | | | | |
| | bu/A | bu/A | bu/A | bu/A | bu/A | bu/A | | | | |
| AgriPro Coker Beretta | 90.0 | 72.8 | 73.4 | 73.0 | 82.5 | 80.3 | | | | |
| AgriPro Coker Panola | 85.6 | 80.0 | 75.9 | 78.2 | 81.6 | 81.1 | | | | |
| AgriPro Coker 9553 | 84.4 | 83.1 | 88.0 | 85.2 | 85.9 | 85.1 | | | | |
| AR Pat | 78.7 | 74.2 | 82.4 | 77.7 | 77.7 | 78.0 | | | | |
| Armor 260Z | 91.4 | 80.0 | 61.0 | 71.8 | 84.2 | 80.3 | | | | |
| Delta Grow 4100 | 85.5 | 68.1 | 60.5 | 64.8 | 80.5 | 74.5 | | | | |
| Delta Grow 4500 | 85.5 | 64.8 | 61.4 | 63.3 | 80.0 | 73.6 | | | | |
| Delta Grow 5200 | 82.2 | 69.5 | 67.7 | 68.7 | 86.1 | 77.0 | | | | |
| Delta King 7710 | 88.6 | 73.6 | 72.4 | 73.1 | 89.1 | 81.5 | | | | |
| Delta King 7830 | 86.2 | 69.4 | 60.4 | 65.5 | 83.4 | 75.6 | | | | |
| Delta King 9410 | 86.6 | 64.5 | 60.5 | 62.8 | 83.6 | 74.7 | | | | |
| Delta King 9577 | 92.3 | 76.3 | 66.1 | 71.9 | 86.1 | 81.0 | | | | |
| Delta King GR9108 | 81.6 | 80.4 | 63.5 | 73.6 | 79.3 | 77.4 | | | | |
| Dixie 900 | 86.6 | 70.3 | 67.8 | 69.2 | 82.5 | 77.3 | | | | |
| Dixie Bell DB2125 | 88.3 | 66.5 | 58.4 | 63.0 | 84.3 | 75.4 | | | | |
| HBK 3266 | 85.9 | 70.3 | 85.4 | 76.8 | 67.6 | 77.0 | | | | |
| Pioneer variety 26R15 | 91.0 | 67.8 | 77.0 | 71.7 | 84.8 | 80.3 | | | | |
| Pioneer variety 26R22 | 95.4 | 83.9 | 93.1 | 87.8 | 92.1 | 91.0 | | | | |
| Progeny 145 | 88.0 | 67.8 | 63.7 | 66.0 | 80.1 | 75.7 | | | | |
| Progeny 166 | 89.1 | 70.5 | 70.0 | 70.2 | 81.0 | 78.1 | | | | |
| Progeny 185 | 82.9 | 74.4 | 69.4 | 72.2 | 74.2 | 75.6 | | | | |
| Terral LA841 | 80.6 | 77.2 | 79.6 | 78.2 | 84.5 | 80.5 | | | | |
| Terral TV8466 | 88.9 | 74.9 | 68.3 | 72.1 | 81.0 | 79.0 | | | | |
| Terral TV8558 | 89.4 | 80.2 | 63.8 | 73.2 | 80.6 | 79.5 | | | | |
| USG 3209 | 83.7 | 80.4 | 67.6 | 74.9 | 78.4 | 78.2 | | | | |
| USG 3350 | 90.5 | 70.0 | 71.5 | 70.6 | 86.0 | 80.0 | | | | |
| USG 3592 | 86.7 | 74.5 | 72.1 | 73.5 | 76.2 | 77.7 | | | | |
| Overall mean | 86.9 | 73.5 | 70.4 | 72.2 | 82.0 | 78.7 | | | | |
| LSD (.10) | 8.2 | 4.5 | 9.4 | 4.7 | 6.3 | 3.5 | | | | |
| Error degrees of freedom | 234 | 234 | 154 | 388 | 227 | 849 | | | | |
| CV (%) | 14.0 | 9.2 | 17.0 | 12.7 | 11.3 | 12.8 | | | | |
| R ² (%) | 33 | 89 | 65 | 79 | 89 | 80 | | | | |

| Table 6. Yields of 60 wheat varieties at Todd Williams Farm, Olive Branch (Collin silt loam soil). ¹ | | | | | | | | | |
|---|-------------------|-----------------------------------|-----------------------|-----------------|-----------------|----------------|-----------------|-------------------|--|
| Brand/Variety | 2006-07 yield² | 2-year avg. yield ³ | 3-year avg. yield³ | Test weight⁴ | Seed weight⁴ | Date headed | Plant height | Lodging score⁵ | |
| | bu/A | bu/A | bu/A | lb/bu | g/1000 | | in | | |
| DK XTJ732 | 85.7 | _ | _ | _ | _ | 04/18 | 39 | 1 | |
| JGL 701 | 78.9 | | _ | _ | _ | 04/19 | 40 | 1 | |
| DK XTJ730 | 74.2 | _ | _ | _ | _ | 04/16 | 39 | 1 | |
| DK XTJ724 | 72.4 | — | — | _ | _ | 04/18 | 42 | 1 | |
| Dixie Bell DB2125 | 71.6 | _ | _ | _ | _ | 04/19 | 44 | 1 | |
| Delta Grow 1600 | 70.8 | — | _ | _ | _ | 04/19 | 39 | 1 | |
| Delta Grow 5200 | 69.6 | _ | _ | _ | _ | 04/19 | 41 | 1 | |
| Dixie Bell DB3440 | 69.5 | — | — | _ | — | 04/19 | 40 | 1 | |
| Dixie 900 | 69.4 | _ | _ | _ | _ | 04/19 | 43 | 1 | |
| Progeny 166 | 68.5 | _ | _ | _ | _ | 04/19 | 45 | 1 | |
| Delta Grow 4100 | 67.5 | — | — | _ | — | 04/18 | 42 | 1 | |
| Delta King 9410 | 67.3 | _ | _ | _ | _ | 04/18 | 44 | 1 | |
| Armor 5110 | 66.1 | — | — | _ | — | 04/19 | 43 | 1 | |
| AgriPro Coker Beretta | 65.1 | _ | _ | _ | _ | 04/19 | 36 | 1 | |
| USG 3350 | 63.2 | — | — | _ | — | 04/17 | 44 | 1 | |
| DK 7830 | 63.0 | — | — | _ | — | 04/16 | 42 | 1 | |
| AR Pat | 61.6 | — | _ | _ | — | 04/19 | 40 | 1 | |
| Delta Grow 4500 | 59.7 | — | — | _ | — | 04/18 | 39 | 1 | |
| DK 7710 | 59.3 | — | — | _ | — | 04/19 | 41 | 1 | |
| Dixie 989 | 57.0 | — | — | — | — | 04/18 | 40 | 1 | |
| Continued. | | | | | | | | | |

| Table 6 (continued) | Table 6 (continued). Yields of 60 wheat varieties at Todd Williams Farm, Olive Branch (Collin silt loam soil). ¹ | | | | | | | |
|--|---|-----------------------|-----------------------|-----------------|-----------------|----------------|-----------------|-------------------|
| Brand/Variety | 2006-07 yield² | 2-year avg. yield³ | 3-year avg. yield³ | Test weight⁴ | Seed weight⁴ | Date headed | Plant height | Lodging score⁵ |
| | bu/A | bu/A | bu/A | lb/bu | g/1000 | | in | |
| Progeny 145 | 54.5 | _ | _ | _ | _ | 04/18 | 45 | 1 |
| Terral TVX81170 | 54.4 | _ | _ | _ | _ | 04/10 | 41 | 1 |
| DK XTJ734 | 54.2 | _ | _ | _ | _ | 04/10 | 41 | 1 |
| USG 3X633 | 54.1 | _ | _ | _ | _ | 04/18 | 44 | 1 |
| Pioneer variety 26R15 | 52.0 | _ | _ | _ | _ | 04/17 | 36 | 1 |
| Terral TV8331 | 50.8 | _ | _ | _ | _ | 04/19 | 42 | 1 |
| Armor 260Z | 45.2 | — | — | — | — | 04/10 | 34 | 1 |
| Terral TV8466 | 41.9 | — | — | _ | _ | 04/17 | 37 | 1 |
| Progeny 185 | 40.7 | — | — | — | _ | 04/16 | 34 | 1 |
| Pioneer variety 26R22 | 38.8 | — | — | — | _ | 04/17 | 40 | 1 |
| Dixie X427 | 37.9 | _ | _ | _ | _ | 04/10 | 36 | 1 |
| Dixie Bell DB7440 | 37.8 | — | _ | _ | — | 04/10 | 40 | 1 |
| DK 9577 | 37.6 | _ | _ | _ | _ | 04/10 | 37 | 1 |
| JGL 703 | 37.2 | _ | _ | _ | _ | 04/18 | 38 | 1 |
| Terral TV8558 | 33.4 | _ | _ | _ | _ | 04/17 | 35 | 1 |
| Armor ARX 9901 | 24.4 | _ | _ | _ | _ | 04/16 | 30 | 1 |
| DK GR9108 | 21.7 | _ | _ | _ | _ | 04/07 | 38 | 1 |
| USG 3592 | 20.5 | _ | _ | _ | _ | 04/09 | 37 | 1 |
| AgriPro Coker MAGNOLIA | 19.1 | _ | _ | _ | _ | 04/16 | 38 | 1 |
| AgriPro Coker Panola | 18.8 | _ | _ | _ | _ | 04/09 | 34 | 1 |
| USG 3209 | 16.5 | | _ | | | 04/07 | 32 | 1 |
| VA02W-555 | 15.8 | _ | _ | _ | _ | 04/06 | 32 | 1 |
| USG 3295 | 15.7 | _ | _ | _ | _ | 04/10 | 32 | 1 |
| HBK 3266 | 15.6 | _ | _ | _ | | 04/09 | 38 | 1 |
| Terral LA482 | 15.2 | _ | _ | _ | _ | 04/07 | 37 | 1 |
| AGS 2031 | 14.4 | _ | _ | _ | _ | 04/09 | 33 | 1 |
| LA98202D-64-1-C | 14.3 | _ | _ | _ | _ | 04/09 | 33 | 1 |
| AgriPro Coker D02-8486 | 13.4 | | _ | | | 04/06 | 37 | 1 |
| Pioneer Variety 26R87 | 13.3 | | _ | _ | | 04/06 | 37 | 1 |
| LA978UC-36-1-1-B | 10.8 | | | | | 04/09 | 34 | 1 |
| GA 96693-4E16 | 9.2 | | _ | | | 04/03 | 38 | 1 |
| AGE2060 | 9.0 | | _ | | | 04/08 | 34 | 1 |
| | 7.9 | | | | | 04/06 | 30 | 1 |
| | 7.4 | | | | | 04/05 | 30 | 1 |
| CA 051221 4E26 | 6.9 | | | | | 04/04 | 30 | 1 |
| Torrol A941 | 5.0 | | | | | 04/03 | 34 | 1 |
| GA 951231-4E25 | 1.6 | | | | | 04/02 | 35 | 1 |
| AGS 2010 | 4.0 | | | | | 04/02 | 38 | 1 |
| L 498214D-14-1-2-B | 4.0 | | | | | 04/05 | 35 | 1 |
| | | | | | | 04/00 | | |
| Overall mean | 39.1 | _ | _ | | | | | |
| LSD (.10) | 7.3 | _ | _ | | | | | |
| Error degrees of freedom | 177 | _ | _ | | | | | |
| CV (%) | 15.9 | _ | _ | | | | | |
| R ² (%) | 96 | _ | _ | | | | | |
| ¹ Planted Oct. 24 , 2006 Harvested June 7, 2007 Soil fertility: pH=6.1; P=H+; K=H+ ¹ Planted Oct. 24 , 2006 Harvested June 7, 2007 Previous crop: Soybeans ² Due to freeze damage, yield data were not used in yield summaries. Previous crop: Soybeans ³ No 2- or 3-year yields. *No data was taken. *See "Procedures" for a description of lodging scores. | | | | | | -; K=H+ | | |

| Brand/Variety | 2006-07 | 2-year | 3-year | Test | Seed | Date | Plant | Lodging |
|------------------------|---------|------------|------------|--------|--------|--------|--------|--------------------|
| | yield | avg. yield | avg. yield | weight | weight | headed | height | SCOre ² |
| 04 00000 4540 | bu/A | bu/A | bu/A | lb/bu | g/1000 | 04/40 | in | |
| GA 96693-4E16 | 101.7 | | | 61 | 42 | 04/16 | 39 | 1 |
| DK XIJ732 | 99.5 | | | 60 | 33 | 04/13 | 39 | 1 |
| IGI 701 | 97.0 | | | 60 | 30 | 04/13 | 38 | 1 |
| DK XT.1734 | 95.9 | | | 61 | 40 | 04/23 | 40 | 1 |
| DK XTJ724 | 95.4 | _ | _ | 56 | 43 | 04/13 | 40 | 1 |
| JGL 703 | 95.2 | _ | _ | 59 | 32 | 04/16 | 40 | 1 |
| GA 951231-4E25 | 94.2 | _ | _ | 61 | 37 | 04/16 | 36 | 1 |
| Terral LA482 | 94.1 | _ | _ | 61 | 37 | 04/16 | 41 | 1 |
| LA99005UC-31-3 | 93.2 | _ | _ | 61 | 36 | 04/09 | 36 | 1 |
| USG 3592 | 93.2 | 86.9 | 86.7 | 62 | 32 | 04/16 | 36 | 1 |
| LA978UC-101-1-1-C | 93.0 | _ | _ | 61 | 35 | 04/11 | 38 | 1 |
| Pioneer variety 26R22 | 93.0 | 99.3 | 95.4 | 61 | 41 | 04/16 | 35 | 1 |
| Armor 260Z | 91.4 | 88.6 | 91.4 | 60 | 30 | 04/09 | 36 | 1 |
| DK 7710 | 91.3 | 91.2 | 88.6 | 61 | 28 | 04/23 | 43 | 1 |
| LA978UC-36-1-1-B | 91.2 | _ | _ | 61 | 36 | 04/13 | 37 | 1 |
| Terral TVX81170 | 89.6 | _ | _ | 61 | 30 | 04/23 | 34 | 1 |
| Terral TV8466 | 89.1 | 88.8 | 88.9 | 61 | 36 | 0/4/0 | 38 | 1 |
| AgriPro Coker Beretta | 88.9 | 87.3 | 90.0 | 60 | 27 | 04/16 | 36 | 1 |
| AGS 2031 | 88.9 | 85.5 | _ | 61 | 33 | 04/16 | 40 | 1 |
| Ierral 1V8558 | 88.8 | 90.5 | 89.4 | 61 | 29 | 04/09 | 36 | 1 |
| DK GR9108 | 88.8 | 84.5 | 81.6 | 58 | 41 | 04/16 | 41 | 1 |
| DK 9577 | 88.8 | 92.2 | 92.3 | 61 | 32 | 04/11 | 35 | 1 |
| AgriPro Coker Panola | 88.7 | 87.6 | 85.6 | 61 | 31 | 04/13 | 35 | 1 |
| HBK 3200 | 88.0 | 87.0 | 85.9 | 62 | 29 | 04/16 | 38 | 1 |
| AgriPro Cokor 0553 | 00.0 | 09.4 | 94.4 | 62 | 35 | 04/09 | 36 | 1 |
| Divio X427 | 88.4 | | - 04.4 | 61 | 34 | 04/15 | 36 | 1 |
| Divie Bell DB7440 | 88.3 | | | 61 | 34 | 04/23 | 40 | 1 |
| Pioneer variety 26B87 | 87.4 | | | 63 | 42 | 04/09 | 34 | 1 |
| Delta King 9410 | 86.4 | 87.2 | 86.6 | 60 | 35 | 04/16 | 42 | 1 |
| Dixie Bell DB2125 | 86.4 | 88.4 | 88.3 | 60 | 30 | 04/09 | 41 | 1 |
| USG 3X633 | 86.2 | _ | _ | 61 | 33 | 04/13 | 37 | 1 |
| Pioneer variety 26R15 | 86.0 | 89.1 | 91.0 | 62 | 32 | 04/13 | 33 | 1 |
| Progeny 145 | 86.0 | 84.0 | 88.0 | 60 | 32 | 04/16 | 42 | 1 |
| AgriPro Coker D02-8486 | 85.7 | _ | _ | 61 | 40 | 04/11 | 35 | 1 |
| DK 7830 | 85.0 | 87.2 | 86.2 | 60 | 38 | 04/13 | 40 | 1 |
| USG 3295 | 84.9 | — | _ | 61 | 35 | 04/16 | 34 | 1 |
| Terral TV8331 | 84.9 | 89.3 | _ | 61 | 41 | 04/09 | 39 | 1 |
| LA98202D-64-1-C | 84.9 | _ | _ | 62 | 38 | 04/11 | 38 | 1 |
| Dixie 989 | 84.2 | 84.3 | | 62 | 29 | 04/16 | 38 | 1 |
| AGS2060 | 84.1 | 80.7 | _ | 63 | 36 | 04/09 | 41 | 1 |
| LA98214D-14-1-2-B | 83.7 | _ | _ | 61 | 36 | 04/09 | 38 | 1 |
| DK XIJ/30 | 83.1 | | _ | 62 | 38 | 04/11 | 39 | 1 |
| | 83.1 | 86.7 | | 61 | 33 | 04/13 | 40 | 1 |
| AR Pat | 83.0 | 82.6 | /8./ | 61 | 33 | 04/23 | 41 | 1 |
| Della GIOW 1600 | 02.9 | 00.0 | | 60 | 30 | 04/10 | 26 | 1 |
| | 02.4 | 02.2 | 02.9 | 61 | 29 | 04/13 | 20 | 1 |
| AGS 2010 | 81.2 | | | 62 | 35 | 04/09 | 29 | 1 |
| Delta Grow 5200 | 80.6 | 82.1 | 82.2 | 60 | 29 | 04/03 | 40 | 1 |
| Terral A841 | 80.5 | 83.9 | 80.6 | 60 | 32 | 04/16 | 35 | 1 |
| Dixie 900 | 79.7 | 80.0 | 86.6 | 60 | 30 | 04/16 | 42 | 1 |
| USG 3350 | 79.7 | 83.3 | 90.5 | 60 | 33 | 04/13 | 38 | 1 |
| Delta Grow 4500 | 79.5 | 84.4 | 85.5 | 60 | 31 | 04/16 | 39 | 1 |
| Progeny 166 | 79.5 | 86.2 | 89.1 | 60 | 31 | 04/16 | 40 | 1 |
| Armor 5110 | 79.0 | _ | _ | 61 | 32 | 04/11 | 40 | 1 |
| Continued. | | | | | | | | |

| Table 7 (continued). Yields of 60 wheat varieties at MAFES Black Belt Branch, Brooksville (Brooksville silty clay soil). ¹ | | | | | | | | |
|--|------------------|----------------------|----------------------|----------------|----------------|-----------------|-----------------|-------------------------------|
| Brand/Variety | 2006-07 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 | |
| Delta Grow 4100 | 78.4 | 83.8 | 85.5 | 60 | 30 | 04/16 | 38 | 1 |
| Dixie Bell DB3440 | 76.0 | 80.4 | _ | 60 | 31 | 04/16 | 40 | 1 |
| Armor ARX 9901 | 74.4 | _ | _ | 63 | 34 | 04/13 | 37 | 1 |
| | | | | | | | | |
| Overall mean | 87.2 | 86.4 | 86.9 | | | | | |
| LSD (.10) | 6.7 | 7.1 | 8.2 | | | | | |
| Error degrees of freedom | 177 | 204 | 234 | | | | | |
| CV (%) | 6.5 | 9.8 | 14.0 | | | | | |
| R² (%) | 62 | 4.0 | 33 | | | | | |
| ¹ Planted Nov. 27, 2006 Fertilizer added: Preplant — 13-13-13 @ 300 lb/A; Topdress — 34-0-0 @ 265 lb/A Herbicide: None Previous crop: Sovbeans | | | | | | Soil fertility: | oH=6.2; P=M; | K=M |

 $^{2}\mbox{See}$ "Procedures" for a description of lodging scores.

| Table 8. Yields of 60 wheat varieties at G.R. Harden Farm, Cleveland (Brittain silt loam soil). ¹ | | | | | | | | |
|--|------------------|----------------------|----------------------|----------------|----------------|----------------|-----------------|-------------------------------|
| Brand/Variety | 2006-07 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 | |
| DK 7710 | 66.6 | 83.1 | 89.1 | 58 | 33 | 04/10 | 33 | 1 |
| JGL 703 | 62.6 | _ | _ | 55 | 33 | 04/10 | 32 | 1 |
| LA978UC-101-1-1-C | 61.8 | _ | _ | 57 | 41 | 03/29 | 27 | 1 |
| DK XTJ724 | 61.7 | _ | _ | 58 | 38 | 04/16 | 34 | 1 |
| DK XTJ732 | 60.9 | _ | _ | 55 | 25 | 04/16 | 33 | 1 |
| Dixie X427 | 58.7 | _ | _ | 56 | 36 | 04/10 | 29 | 1 |
| Pioneer variety 26R15 | 58.7 | 84.1 | 84.8 | 57 | 33 | 04/13 | 30 | 1 |
| GA 96693-4E16 | 58.3 | _ | _ | 57 | 36 | 03/30 | 30 | 1 |
| Terral TVX81170 | 57.0 | _ | _ | 55 | 32 | 04/11 | 34 | 1 |
| Progeny 145 | 56.1 | 75.4 | 80.1 | 57 | 34 | 04/11 | 35 | 1 |
| AgriPro Coker Beretta | 55.9 | 77.2 | 82.5 | 57 | 33 | 04/11 | 27 | 1 |
| VA02W-555 | 55.9 | _ | _ | 56 | 43 | 04/05 | 23 | 1 |
| Delta Grow 5200 | 54.5 | 79.6 | 86.1 | 58 | 31 | 04/13 | 34 | 1 |
| Delta Grow 4500 | 54.5 | 75.2 | 80.0 | 57 | 33 | 04/13 | 32 | 1 |
| AR Pat | 54.4 | 70.8 | 77.7 | 56 | 30 | 04/13 | 32 | 1 |
| Pioneer variety 26R22 | 54.4 | 81.3 | 92.1 | 56 | 35 | 04/12 | 33 | 1 |
| Progeny 166 | 53.8 | 74.0 | 81.0 | 56 | 33 | 04/12 | 34 | 1 |
| Dixie Bell DB2125 | 53.6 | 79.1 | 84.3 | 57 | 34 | 04/16 | 36 | 1 |
| USG 3592 | 53.1 | 78.5 | 76.2 | 55 | 33 | 04/04 | 31 | 1 |
| Delta King 9410 | 52.7 | 76.8 | 83.6 | 56 | 34 | 04/16 | 35 | 1 |
| DK XTJ730 | 52.6 | _ | _ | 55 | 34 | 04/16 | 29 | 1 |
| Dixie 900 | 52.6 | 75.7 | 82.5 | 57 | 36 | 04/11 | 37 | 1 |
| LA99005UC-31-3 | 52.5 | _ | _ | 56 | 40 | 04/05 | 26 | 1 |
| Delta Grow 4100 | 52.3 | 71.6 | 80.5 | 57 | 29 | 04/13 | 34 | 1 |
| HBK 3266 | 52.3 | 72.8 | 67.6 | 56 | 36 | 04/05 | 29 | 1 |
| AgriPro Coker MAGNOLIA | 52.2 | 75.2 | _ | 58 | 41 | 04/09 | 30 | 1 |
| Armor 5110 | 52.0 | _ | _ | 57 | 35 | 04/16 | 33 | 1 |
| JGL 701 | 52.0 | _ | _ | 54 | 33 | 04/11 | 28 | 1 |
| DK 7830 | 52.0 | 79.9 | 83.4 | 57 | 36 | 04/12 | 34 | 1 |
| Dixie Bell DB7440 | 51.4 | _ | _ | 57 | 33 | 04/10 | 35 | 1 |
| AGS2060 | 51.3 | 72.0 | _ | 59 | 39 | 04/05 | 32 | 1 |
| Terral TV8558 | 51.2 | 73.5 | 80.6 | 55 | 30 | 04/13 | 25 | 1 |
| Terral TV8466 | 51.0 | 71.0 | 81.0 | 57 | 33 | 04/13 | 30 | 1 |
| GA 951231-4E26 | 50.9 | _ | _ | 55 | 31 | 04/02 | 25 | 1 |
| Dixie 989 | 50.6 | _ | _ | 56 | 30 | 04/10 | 29 | 1 |
| Armor 260Z | 50.5 | 74.7 | 84.2 | 55 | 31 | 04/10 | 30 | 1 |
| Armor ARX 9901 | 50.3 | _ | _ | 57 | 33 | 04/05 | 27 | 1 |
| | | | | | | | | |

Continued.

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| Table 8 (continue | d). Yields o | f 60 wheat v | arieties at G. | .R. Harden | Farm, Cleve | and (Brittair | n silt loam s | soil).1 |
|--|------------------|------------------------|------------------------------------|----------------------|----------------|---------------------------------|-----------------|-------------------------------|
| Brand/Variety | 2006-07 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 | |
| GA 951231-4E25 | 50.3 | _ | _ | 55 | 34 | 04/02 | 24 | 1 |
| USG 3209 | 49.9 | 77.8 | 78.4 | 57 | 40 | 04/03 | 24 | 1 |
| LA98214D-14-1-2-B | 49.8 | _ | _ | 56 | 35 | 04/10 | 29 | 1 |
| USG 3295 | 49.6 | _ | _ | 58 | 38 | 04/04 | 26 | 1 |
| LA978UC-36-1-1-B | 49.6 | _ | _ | 56 | 38 | 04/05 | 27 | 1 |
| DK GR9108 | 49.2 | 74.1 | 79.3 | 54 | 38 | 04/05 | 32 | 1 |
| USG 3X633 | 49.2 | _ | _ | 56 | 35 | 04/11 | 30 | 1 |
| DK XTJ734 | 49.1 | _ | _ | 56 | 35 | 04/10 | 32 | 1 |
| Terral LA841 | 48.9 | 70.2 | 84.5 | 55 | 34 | 04/05 | 26 | 1 |
| USG 3350 | 48.6 | 79.8 | 86.0 | 56 | 35 | 04/03 | 34 | 1 |
| DK 9577 | 47.6 | 78.5 | 86.1 | 54 | 29 | 04/10 | 27 | 1 |
| AgriPro Coker 9553 | 47.4 | 73.8 | 85.9 | 56 | 38 | 04/04 | 24 | 1 |
| Terral TV8331 | 46.9 | 71.1 | _ | 56 | 37 | 04/13 | 36 | 1 |
| Dixie Bell DB3440 | 46.2 | 73.7 | _ | 55 | 31 | 04/16 | 34 | 1 |
| Delta Grow 1600 | 45.9 | 71.1 | _ | 54 | 30 | 04/12 | 25 | 1 |
| AGS 2010 | 43.7 | _ | _ | 57 | 34 | 04/05 | 26 | 1 |
| AgriPro Coker Panola | 43.6 | 69.7 | 81.6 | 55 | 29 | 04/05 | 25 | 1 |
| LA98202D-64-1-C | 43.3 | _ | _ | 57 | 43 | 03/29 | 25 | 1 |
| Progeny 185 | 43.3 | 71.1 | 74.2 | 55 | 30 | 04/10 | 28 | 1 |
| AGS 2031 | 43.0 | 65.8 | _ | 58 | 39 | 04/05 | 25 | 1 |
| Pioneer variety 26R87 | 42.1 | _ | _ | 57 | 40 | 03/30 | 25 | 1 |
| Terral LA482 | 41.5 | — | _ | 55 | 32 | 04/17 | 30 | 1 |
| AgriPro Coker D02-8486 | 39.8 | — | _ | 57 | 36 | 03/30 | 23 | 1 |
| | | | | | | | | |
| Overall mean | 51.7 | 75.2 | 82.0 | | | | | |
| LSD (.10) | 7.6 | 6.2 | 6.3 | | | | | |
| Error degrees of freedom | 160 | 196 | 227 | | | | | |
| CV (%) | 12.0 | 9.9 | 11.3 | | | | | |
| R² (%) | 61 | 93 | 89 | | | | | |
| ¹ Planted Nov. 27, 2006 Fertilizer added: 21-0-0 @ 1 | 100 lb/A on 1- | Harve 30-07; 46-0-0 | sted June 7, 20 @ 125 lb/A on 2 |)07 2-22-07; 46-0 | -0 @ 170 lb/A | Soil fertility: p on 3-20-07 | 0H=6.9; P=H; | K=H |

Herbicide: Harmony @ 0.6 oz/A on 2-21-07; Osprey @ 4.75 oz/A on 3-7-07 ²See "Procedures" for a description of lodging scores. Previous crop: Corn

| Table 9. Yields of 60 wheat varieties at Ricky Belk Farm, Minter City (Forestdale silt loam soil). ¹ | | | | | | | | | |
|---|------------------|-----------------------|-----------------------|----------------|----------------|----------------|-----------------|-------------------------------|--|
| Brand/Variety | 2006-07 yield | 2-year avg. yield² | 3-year avg. yield² | Test weight | Seed weight | Date headed | Plant height | Lodging score ³ | |
| | bu/A | bu/A | bu/A | lb/bu | g/1000 | | in | | |
| VA02W-555 | 78.2 | - | — | 56 | 38 | 04/16 | 26 | 1 | |
| Delta Grow 1600 | 77.4 | — | — | 55 | 33 | 04/19 | 31 | 1 | |
| JGL 703 | 77.4 | — | — | 55 | 32 | 04/19 | 33 | 1 | |
| LA98214D-14-1-2-B | 77.0 | _ | _ | 57 | 39 | 04/09 | 32 | 1 | |
| AGS2060 | 76.3 | — | — | 58 | 31 | 04/11 | 30 | 1 | |
| Terral TV8331 | 76.0 | _ | _ | 57 | 43 | 04/19 | 36 | 1 | |
| USG 3592 | 75.7 | _ | _ | 57 | 33 | 04/13 | 34 | 1 | |
| Terral LA482 | 75.6 | _ | _ | 55 | 34 | 04/13 | 38 | 1 | |
| Terral TV8558 | 75.3 | _ | _ | 55 | 33 | 04/19 | 31 | 1 | |
| Delta Grow 4500 | 75.2 | _ | _ | 57 | 33 | 04/19 | 34 | 1 | |
| Terral LA841 | 75.1 | _ | _ | 56 | 35 | 04/11 | 32 | 1 | |
| JGL 701 | 74.7 | _ | _ | 54 | 30 | 04/19 | 32 | 1 | |
| Delta Grow 5200 | 74.7 | _ | _ | 57 | 30 | 04/19 | 33 | 1 | |
| AgriPro Coker Beretta | 74.5 | _ | _ | 56 | 32 | 04/19 | 33 | 1 | |
| AR Pat | 74.5 | _ | _ | 58 | 33 | 04/23 | 32 | 1 | |
| AgriPro Coker D02-8486 | 74.2 | _ | _ | 57 | 40 | 04/06 | 29 | 1 | |
| LA978UC-36-1-1-B | 73.9 | _ | _ | 56 | 38 | 04/16 | 31 | 1 | |
| Continued. | | | | | | | | | |

| Table 9 (continued) | . Yields of | 60 wheat va | rieties at Ric | ky Belk Far | m, Minter C | ity (Forestda | le silt loam | soil).1 |
|---|------------------|------------------------------------|---|-----------------------------|----------------|-------------------------------------|------------------------------|-------------------------------|
| Brand/Variety | 2006-07 yield | 2-year avg. yield² | 3-year avg. yield² | Test weight | Seed weight | Date headed | Plant height | Lodging score ³ |
| | bu/A | bu/A | bu/A | lb/bu | g/1000 | | in | |
| Dixie Bell DB2125 | 73.7 | _ | _ | 56 | 34 | 04/19 | 39 | 1 |
| AgriPro Coker Panola | 73.5 | _ | _ | 57 | 34 | 04/16 | 28 | 1 |
| USG 3X633 | 73.2 | _ | _ | 56 | 37 | 04/19 | 31 | 1 |
| Progeny 145 | 73.1 | | _ | 57 | 30 | 04/19 | 35 | 1 |
| LA98202D-64-1-C | 72.7 | _ | _ | 59 | 41 | 04/11 | 28 | 1 |
| AGS 2010 | 72.5 | | _ | 58 | 35 | 04/09 | 32 | 1 |
| DK XTJ732 | 72.3 | _ | _ | 57 | 25 | 04/23 | 37 | 1 |
| AgriPro Coker 9553 | 72.1 | — | — | 57 | 37 | 04/13 | 25 | 1 |
| Pioneer variety 26R87 | 71.7 | _ | — | 60 | 41 | 04/11 | 32 | 1 |
| HBK 3266 | 71.6 | — | — | 56 | 32 | 04/13 | 30 | 1 |
| USG 3350 | 71.6 | — | — | 56 | 33 | 04/19 | 36 | 1 |
| DK XTJ734 | 71.4 | — | — | 56 | 31 | 04/19 | 38 | 1 |
| Delta Grow 4100 | 71.0 | — | — | 57 | 32 | 04/19 | 33 | 1 |
| Dixie 900 | 70.8 | — | — | 57 | 34 | 04/19 | 34 | 1 |
| USG 3209 | 70.8 | — | _ | 57 | 39 | 04/11 | 28 | 1 |
| GA 951231-4E26 | 70.8 | — | — | 57 | 33 | 04/09 | 32 | 1 |
| Armor 5110 | 70.7 | _ | _ | 57 | 34 | 04/19 | 35 | 1 |
| Dixie 989 | 70.7 | _ | _ | 56 | 27 | 04/19 | 32 | 1 |
| AgriPro Coker MAGNOLIA | 70.5 | _ | _ | 58 | 39 | 04/16 | 33 | 1 |
| Pioneer variety 26R22 | 70.3 | _ | _ | 57 | 39 | 04/19 | 34 | 1 |
| Progeny 185 | 69.9 | _ | _ | 55 | 34 | 04/16 | 32 | 1 |
| LA978UC-101-1-1-C | 69.6 | _ | _ | 56 | 36 | 04/13 | 32 | 1 |
| DK 9577 | 69.2 | _ | _ | 56 | 30 | 04/16 | 29 | 1 |
| USG 3295 | 69.2 | _ | _ | 56 | 32 | 04/13 | 31 | 1 |
| DK 7830 | 69.1 | _ | _ | 56 | 33 | 04/19 | 34 | 1 |
| DK XTJ730 | 69.0 | _ | _ | 56 | 29 | 04/19 | 34 | 1 |
| LA99005UC-31-3 | 68.8 | _ | _ | 56 | 36 | 04/09 | 30 | 1 |
| Terral TVX81170 | 68.8 | _ | _ | 55 | 33 | 04/16 | 34 | 1 |
| Delta King 9410 | 68.4 | _ | _ | 56 | 32 | 04/19 | 33 | 1 |
| DK XTJ724 | 68.1 | _ | _ | 57 | 33 | 04/23 | 36 | 1 |
| Armor ARX 9901 | 68.1 | _ | _ | 57 | 31 | 04/19 | 29 | 1 |
| Armor 260Z | 67.8 | _ | _ | 57 | 32 | 04/19 | 33 | 1 |
| AGS 2031 | 67.5 | _ | _ | 55 | 31 | 04/13 | 29 | 1 |
| Terral TV8466 | 67.5 | _ | _ | 57 | 37 | 04/19 | 33 | 1 |
| GA 96693-4E16 | 67.3 | _ | _ | 58 | 38 | 04/09 | 33 | 1 |
| Dixie Bell DB3440 | 66.8 | _ | _ | 56 | 35 | 04/19 | 36 | 1 |
| Dixie X427 | 66.3 | _ | _ | 56 | 34 | 04/19 | 30 | 1 |
| Progeny 166 | 65.9 | _ | _ | 57 | 32 | 04/19 | 35 | 1 |
| DK 7710 | 65.7 | _ | _ | 57 | 29 | 04/19 | 33 | 1 |
| DK GR9108 | 65.0 | _ | _ | 56 | 34 | 04/13 | 36 | 1 |
| Pioneer variety 26R15 | 64.9 | _ | _ | 56 | 32 | 04/23 | 34 | 1 |
| Dixie Bell DB7440 | 63.8 | _ | _ | 58 | 35 | 04/16 | 40 | 1 |
| GA 951231-4E25 | 63.1 | _ | _ | 58 | 34 | 04/11 | 32 | 1 |
| | | | | | | | | |
| Overall mean | 71.2 | _ | _ | | | | | |
| LSD (.10) | 8.9 | _ | _ | | | | | |
| Error degrees of freedom | 177 | _ | _ | | | | | |
| CV (%) | 10.7 | _ | _ | | | | | |
| R ² (%) | 32 | _ | _ | | | | | |
| ¹ Planted Nov. 24, 2006 Fertilizer added: Preplant — Herbicide: None ² No 2- or 3-year averages. | 18-46-0 @ 1 | Harve 00 lb/A; Topdre Previo | sted June 6, 20 ess — 46-0-0 @ ous crop: Cottor | 007 2 100 lb/A on : ו | 2-13-07; Topdr | Soil fertility: p ess — 28-0-0-5 | 0H=5.3; P=H; 5S@ 180 lb/A | K=H on 3-11-07 |
| ³ See "Procedures" for a desc | cription of loo | daina scores. | | | | | | |

| Table 10. Yield | ds of 60 wł | neat varieties | at MAFES [| Delta Branc | h, Stoneville | e (Tunica silt | y clay soil). | 1 |
|------------------------|------------------|----------------------|-----------------------|----------------|----------------|----------------|-----------------|-------------------------------|
| Brand/Variety | 2006-07 yield | 2-year avg. yield | 3-year avg. yield² | Test weight | Seed weight | Date headed | Plant height | Lodging score ³ |
| | bu/A | bu/A | bu/A | lb/bu | g/1000 | | in | |
| AgriPro Coker 9553 | 86.8 | 86.8 | _ | 59 | 40 | 04/01 | 28 | 1 |
| Pioneer variety 26R22 | 85.1 | 92.2 | _ | 57 | 40 | 04/05 | 33 | 1 |
| GA 951231-4E25 | 84.1 | — | _ | 59 | 41 | 03/29 | 30 | 1 |
| LA98202D-64-1-C | 82.2 | — | _ | 60 | 44 | 03/31 | 29 | 1 |
| JGL 701 | 82.1 | — | _ | 57 | 38 | 04/06 | 32 | 1 |
| JGL 703 | 82.0 | — | _ | 56 | 39 | 04/03 | 33 | 1 |
| GA 96693-4E16 | 81.9 | _ | _ | 60 | 43 | 03/29 | 32 | 1 |
| AGS 2010 | 81.8 | — | _ | 60 | 38 | 03/29 | 33 | 1 |
| Dixie X427 | 80.9 | _ | _ | 58 | 36 | 04/02 | 32 | 1 |
| Pioneer variety 26R15 | 80.8 | 83.3 | _ | 58 | 40 | 04/07 | 33 | 1 |
| AGS 2031 | 80.7 | 85.9 | _ | 58 | 36 | 04/01 | 29 | 1 |
| DK 9577 | 80.5 | 79.2 | _ | 57 | 29 | 04/01 | 26 | 1 |
| USG 3350 | 80.3 | 78.6 | — | 57 | 37 | 04/03 | 38 | 1 |
| Dixie Bell DB2125 | 80.2 | 79.1 | — | 58 | 36 | 04/05 | 38 | 1 |
| Dixie Bell DB7440 | 79.3 | — | _ | 58 | 35 | 04/01 | 34 | 1 |
| Terral LA482 | 79.2 | — | _ | 58 | 42 | 03/31 | 33 | 1 |
| LA978UC-101-1-1-C | 79.2 | — | _ | 59 | 44 | 03/30 | 30 | 1 |
| Terral TV8558 | 79.1 | 78.6 | — | 58 | 32 | 04/03 | 30 | 1 |
| USG 3295 | 78.7 | — | _ | 60 | 39 | 04/02 | 31 | 1 |
| Progeny 185 | 78.4 | 79.6 | _ | 56 | 35 | 04/02 | 35 | 1 |
| AgriPro Coker MAGNOLIA | 78.3 | 85.2 | _ | 57 | 42 | 04/01 | 30 | 1 |
| DK GR9108 | 78.3 | 80.3 | _ | 57 | 37 | 03/31 | 27 | 1 |
| LA98214D-14-1-2-B | 78.2 | _ | _ | 59 | 40 | 03/28 | 28 | 1 |
| Armor 5110 | 78.1 | _ | _ | 58 | 33 | 04/04 | 35 | 1 |
| USG 3592 | 78.1 | 79.8 | _ | 59 | 41 | 04/02 | 31 | 1 |
| DK XTJ730 | 77.8 | _ | _ | 57 | 36 | 04/05 | 30 | 1 |
| AgriPro Coker D02-8486 | 77.8 | _ | _ | 60 | 43 | 03/27 | 25 | 1 |
| DK XTJ724 | 77.7 | — | _ | 59 | 40 | 04/06 | 29 | 1 |
| Pioneer variety 26R87 | 77.1 | _ | _ | 61 | 40 | 04/01 | 33 | 1 |
| GA 951231-4E26 | 77.1 | _ | _ | 60 | 39 | 03/28 | 27 | 1 |
| USG 3209 | 77.0 | 63.7 | _ | 58 | 40 | 04/01 | 27 | 1 |
| AgriPro Coker Panola | 77.0 | 81.1 | _ | 57 | 37 | 04/02 | 27 | 1 |
| HBK 3266 | 76.4 | 81.0 | — | 58 | 36 | 04/01 | 32 | 1 |
| Terral LA841 | 76.3 | 66.7 | _ | 58 | 38 | 03/31 | 32 | 1 |
| DK 7830 | 76.2 | 74.4 | _ | 58 | 37 | 04/02 | 29 | 1 |
| Progeny 166 | 76.1 | 77.0 | — | 58 | 37 | 04/04 | 39 | 1 |
| DK XTJ734 | 75.9 | — | _ | 57 | 36 | 04/03 | 29 | 1 |
| DK 7710 | 75.7 | 82.3 | _ | 57 | 36 | 04/04 | 32 | 1 |
| VA02W-555 | 75.4 | — | — | 58 | 42 | 04/01 | 26 | 1 |
| Terral TV8331 | 75.4 | 83.3 | _ | 61 | 46 | 04/04 | 33 | 1 |
| AGS2060 | 75.3 | 84.0 | _ | 62 | 39 | 03/30 | 32 | 1 |
| Delta Grow 5200 | 74.5 | 71.2 | _ | 59 | 36 | 04/04 | 34 | 1 |
| Dixie 900 | 73.2 | 72.0 | _ | 57 | 38 | 04/04 | 32 | 1 |
| Armor 260Z | 73.2 | 74.4 | _ | 59 | 37 | 04/02 | 26 | 1 |
| Dixie 989 | 73.1 | — | — | 57 | 34 | 04/04 | 30 | 1 |
| Terral TV8466 | 72.7 | 75.6 | _ | 58 | 43 | 04/04 | 30 | 1 |
| Delta Grow 4500 | 72.0 | 68.4 | _ | 58 | 39 | 04/03 | 35 | 1 |
| AgriPro Coker Beretta | 71.8 | 77.9 | _ | 57 | 35 | 04/04 | 29 | 1 |
| Dixie Bell DB3440 | 71.2 | 67.6 | _ | 57 | 37 | 04/05 | 33 | 1 |
| DK XTJ732 | 71.0 | — | _ | 61 | 34 | 04/07 | 36 | 1 |
| LA978UC-36-1-1-B | 71.0 | | _ | 59 | 45 | 04/01 | 28 | 1 |
| LA99005UC-31-3 | 70.9 | | | 59 | 42 | 03/28 | 24 | 1 |
| Delta Grow 4100 | 69.7 | 71.5 | _ | 58 | 34 | 04/04 | 31 | 1 |
| Progeny 145 | 69.7 | 67.9 | _ | 58 | 34 | 04/03 | 35 | 1 |
| USG 3X633 | 69.6 | - | _ | 57 | 41 | 04/03 | 32 | 1 |
| Terral TVX81170 | 69.5 | _ | _ | 57 | 36 | 04/03 | 33 | 1 |
| Delta King 9410 | 68.9 | 67.6 | _ | 58 | 36 | 04/04 | 31 | 1 |
| Continued. | | | | | | | | |

| Table 10 (continued | l). Yields of | 60 wheat va | arieties at MA | FES Delta | Branch, Sto | neville (Tuni | ca silty clay | y soil).¹ |
|---|------------------|------------------------------------|--|------------------|----------------|-----------------|-----------------|-------------------------------|
| Brand/Variety | 2006-07 yield | 2-year avg. yield | 3-year avg. yield² | Test weight | Seed weight | Date headed | Plant height | Lodging score ³ |
| | bu/A | bu/A | bu/A | lb/bu | g/1000 | | in | |
| Delta Grow 1600 | 67.4 | 72.9 | _ | 58 | 33 | 04/04 | 26 | 1 |
| AR Pat | 67.1 | 77.1 | - | 59 | 35 | 04/07 | 32 | 1 |
| Armor ARX 9901 | 65.1 | _ | _ | 59 | 35 | 04/03 | 33 | 1 |
| | | | | | | | | |
| Overall mean | 76.3 | 77.1 | - | | | | | |
| LSD (.10) | 9.8 | 6.5 | _ | | | | | |
| Error degrees of freedom | 177 | 204 | _ | | | | | |
| CV (%) | 11.0 | 10.3 | - | | | | | |
| R ² (%) | 45 | 64 | _ | | | | | |
| ¹ Planted Nov. 21, 2006 Fertilizer added: Topdress - Herbicide: None | - 46-0-0 @ 1 | Harve 00 lb/A on 2-20 Previo | sted June 1, 20 0-07 & 3-5-07. ous crop: Soybe | 007 eans | | Soil fertility: | oH=6.6; P=H; | K=H |

²No 3-year yields. ³See "Procedures" for a description of lodging scores.

| Table 11. Yields of 60 wheat varieties at MAFES Coastal Plain Branch, Newton (Prentiss very fine sandy loam soil). ¹ | | | | | | | | |
|---|------------------|----------------------|----------------------|----------------|----------------|----------------|-----------------|-------------------------------|
| Brand/Variety | 2006-07 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 | |
| GA 96693-4E16 | 71.9 | _ | _ | 60 | 40 | 03/30 | 30 | 1 |
| JGL 703 | 66.9 | _ | _ | 58 | 37 | 04/09 | 35 | 1 |
| AgriPro Coker MAGNOLIA | 66.3 | 78.8 | _ | 59 | 41 | 04/05 | 36 | 1 |
| Progeny 185 | 63.1 | 77.3 | 74.4 | 57 | 32 | 04/09 | 30 | 1 |
| JGL 701 | 62.7 | _ | _ | 59 | 36 | 04/16 | 35 | 1 |
| DK 9577 | 62.3 | 71.9 | 76.3 | 57 | 31 | 04/05 | 32 | 1 |
| LA99005UC-31-3 | 61.9 | _ | _ | 58 | 40 | 03/30 | 25 | 1 |
| VA02W-555 | 61.9 | _ | _ | 57 | 40 | 04/05 | 26 | 1 |
| USG 3592 | 61.9 | 79.5 | 74.5 | 59 | 36 | 04/03 | 33 | 1 |
| AgriPro Coker 9553 | 61.9 | 73.3 | 83.1 | 60 | 36 | 04/03 | 30 | 1 |
| LA978UC-101-1-1-C | 61.7 | _ | _ | 59 | 36 | 04/03 | 27 | 1 |
| DK GR9108 | 61.4 | 75.3 | 80.4 | 58 | 39 | 04/04 | 35 | 1 |
| DK XTJ724 | 61.2 | _ | _ | 58 | 38 | 04/08 | 33 | 1 |
| USG 3209 | 61.1 | 79.1 | 80.4 | 59 | 38 | 04/02 | 27 | 1 |
| Dixie 989 | 60.4 | 74.0 | _ | 58 | 31 | 04/10 | 32 | 1 |
| AGS2060 | 60.3 | 75.5 | _ | 62 | 36 | 03/30 | 35 | 1 |
| Terral TV8558 | 60.2 | 72.6 | 80.2 | 59 | 30 | 04/05 | 30 | 1 |
| DK XTJ730 | 59.9 | _ | _ | 58 | 31 | 04/11 | 34 | 1 |
| Dixie X427 | 59.9 | _ | _ | 57 | 29 | 04/09 | 32 | 1 |
| Terral TVX81170 | 59.8 | _ | _ | 58 | 32 | 04/09 | 31 | 1 |
| Terral LA482 | 59.6 | _ | _ | 59 | 39 | 04/03 | 38 | 1 |
| HBK 3266 | 59.2 | 72.8 | 70.3 | 59 | 34 | 04/05 | 35 | 1 |
| Delta Grow 1600 | 59.0 | 72.1 | _ | 58 | 30 | 04/10 | 30 | 1 |
| Armor 260Z | 59.0 | 74.7 | 80.0 | 59 | 34 | 04/04 | 28 | 1 |
| DK XTJ734 | 58.9 | _ | _ | 59 | 31 | 04/10 | 34 | 1 |
| DK 7830 | 58.5 | 61.4 | 69.4 | 59 | 36 | 04/09 | 35 | 1 |
| GA 951231-4E26 | 58.4 | _ | _ | 59 | 38 | 03/30 | 29 | 1 |
| AgriPro Coker Beretta | 58.1 | 63.7 | 72.8 | 57 | 32 | 04/04 | 25 | 1 |
| LA978UC-36-1-1-B | 57.7 | _ | _ | 59 | 38 | 04/02 | 28 | 1 |
| AgriPro Coker Panola | 57.6 | 71.2 | 80.0 | 58 | 34 | 04/05 | 28 | 1 |
| Progeny 166 | 57.4 | 62.9 | 70.5 | 58 | 37 | 04/10 | 34 | 1 |
| USG 3295 | 57.3 | _ | _ | 60 | 35 | 04/04 | 29 | 1 |
| Dixie Bell DB7440 | 57.3 | _ | _ | 58 | 32 | 04/05 | 33 | 1 |
| Delta Grow 4500 | 57.2 | 57.8 | 64.8 | 59 | 36 | 04/09 | 34 | 1 |
| Pioneer variety 26R22 | 56.8 | 75.5 | 83.9 | 59 | 35 | 04/10 | 29 | 1 |
| Continued. | | | | | | | | |

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| Brand/Variety | 2006-07 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 | |
| Armor 5110 | 56.7 | 58.1 | _ | 57 | 32 | 04/10 | 33 | 1 |
| AR Pat | 56.5 | 66.5 | 74.2 | 53 | 34 | 04/15 | 33 | 1 |
| Progeny 145 | 56.2 | 57.4 | 67.8 | 59 | 34 | 04/09 | 34 | 1 |
| USG 3350 | 55.7 | 60.8 | 70.0 | 58 | 35 | 04/05 | 33 | 1 |
| AgriPro Coker D02-8486 | 55.4 | _ | _ | 60 | 43 | 03/30 | 30 | 1 |
| AGS 2031 | 55.2 | 69.8 | _ | 60 | 40 | 04/02 | 30 | 1 |
| Delta Grow 4100 | 55.1 | 57.6 | 68.1 | 59 | 33 | 04/10 | 32 | 1 |
| Dixie 900 | 54.9 | 60.8 | 70.3 | 58 | 36 | 04/11 | 34 | 1 |
| Delta Grow 5200 | 54.8 | 60.8 | 69.5 | 59 | 33 | 04/10 | 35 | 1 |
| LA98202D-64-1-C | 54.5 | _ | _ | 60 | 43 | 04/02 | 30 | 1 |
| Armor ARX 9901 | 54.2 | _ | _ | 60 | 34 | 04/09 | 30 | 1 |
| Dixie Bell DB3440 | 53.9 | 63.6 | _ | 58 | 34 | 04/11 | 32 | 1 |
| Terral TV8466 | 53.6 | 66.6 | 74.9 | 57 | 35 | 04/10 | 30 | 1 |
| Terral TV8331 | 53.6 | 67.2 | _ | 57 | 39 | 04/13 | 30 | 1 |
| Dixie Bell DB2125 | 53.5 | 59.5 | 66.5 | 57 | 34 | 04/05 | 32 | 1 |
| DK 7710 | 53.0 | 57.2 | 73.6 | 59 | 31 | 04/11 | 32 | 1 |
| USG 3X633 | 52.3 | _ | _ | 59 | 32 | 04/11 | 31 | 1 |
| Pioneer variety 26R87 | 52.2 | _ | _ | 63 | 45 | 04/04 | 29 | 1 |
| Terral LA841 | 51.8 | 63.7 | 77.2 | 58 | 35 | 03/30 | 31 | 1 |
| GA 951231-4E25 | 51.3 | _ | _ | 59 | 38 | 03/30 | 30 | 1 |
| LA98214D-14-1-2-B | 51.0 | _ | _ | 60 | 35 | 04/02 | 28 | 1 |
| Pioneer variety 26R15 | 49.3 | 65.3 | 67.8 | 57 | 31 | 04/16 | 30 | 1 |
| DK XTJ732 | 48.4 | _ | _ | 51 | 35 | 04/18 | 32 | 1 |
| Delta King 9410 | 47.4 | 54.5 | 645 | 58 | 32 | 04/10 | 34 | 1 |
| AGS 2010 | 39.7 | - | - | 60 | 33 | 03/30 | 32 | 1 |
| Overall mean | 57.4 | 67.7 | 73.5 | | | | | |
| LSD (.10) | 6.9 | 4.5 | 4.5 | | | | | |
| Error degrees of freedom | 172 | 204 | 234 | | | | | |
| CV (%) | 10.0 | 8.0 | 9.2 | | | | | |
| R ² (%) | 57 | 90 | 89 | | | | | |
| ¹ Planted Nov. 14, 2006 Fertilizer added: Preplant – Herbicide: None | - 0-20-20 @ 2 | Harve 200 lb/A on 10- Previc | sted May 24, 2 24-06; Topdres | 007 s — 34-0-0 @ t | 2 300 lb/A on 2 | Soil fertility: p 2-6-07 | oH=6.7; P=H | ; K=H |

²See "Procedures" for a description of lodging scores.

| Table 12. Yields of 60 wheat varieties at MAFES Brown Loam Branch, Raymond (Loring silt loam soil). ¹ | | | | | | | | |
|--|------------------|----------------------|----------------------|----------------|----------------|----------------|-----------------|-------------------------------|
| Brand/Variety | 2006-07 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 | |
| LA98202D-64-1-C | 97.5 | _ | _ | 57 | 42 | 04/09 | 37 | 1 |
| AGS2060 | 96.5 | 89.2 | _ | 59 | 38 | 04/03 | 43 | 2 |
| AgriPro Coker MAGNOLIA | 92.0 | 87.3 | _ | 57 | 35 | 04/09 | 36 | 4 |
| HBK 3266 | 91.8 | 88.5 | 85.4 | 58 | 36 | 04/20 | 41 | 4 |
| VA02W-555 | 90.9 | — | _ | 58 | 42 | 04/09 | 41 | 1 |
| LA99005UC-31-3 | 90.4 | - | _ | 55 | 37 | 04/03 | 34 | 1 |
| AgriPro Coker 9553 | 89.9 | 93.3 | 88.0 | 57 | 33 | 04/09 | 38 | 1 |
| Pioneer variety 26R87 | 88.8 | — | _ | 60 | 44 | 04/07 | 35 | 1 |
| AgriPro Coker Panola | 87.1 | 77.7 | 75.9 | 56 | 34 | 04/11 | 35 | 1 |
| Pioneer variety 26R22 | 86.5 | 95.9 | 93.1 | 56 | 34 | 04/20 | 37 | 1 |
| USG 3295 | 86.4 | _ | _ | 57 | 35 | 04/11 | 32 | 1 |
| GA 96693-4E16 | 85.4 | _ | _ | 58 | 41 | 04/20 | 36 | 3 |
| LA978UC-36-1-1-B | 85.2 | _ | _ | 56 | 42 | 04/09 | 36 | 1 |
| Terral LA841 | 82.5 | 80.7 | 79.6 | 54 | 32 | 04/09 | 37 | 1 |
| Continued. | | | | | | | | |

| Brand/Variety | 2006-07 | 2-year | 3-year | Test | Seed | Date | Plant | Lodging |
|--|----------------------------------|---|---|--------|--------|-------------------|--------------|--------------------|
| | yield | avg. yield | avg. yield | weight | weight | headed | height | score ² |
| | bu/A | bu/A | bu/A | lb/bu | g/1000 | | in | |
| USG 3209 | 82.4 | 73.4 | 67.6 | 56 | 36 | 04/09 | 36 | 1 |
| LA978UC-101-1-1-C | 81.5 | _ | _ | 56 | 42 | 04/03 | 38 | 1 |
| AR Pat | 79.6 | 80.1 | 82.4 | 57 | 32 | 04/11 | 39 | 1 |
| Armor 5110 | 78.5 | 70.0 | _ | 58 | 30 | 04/20 | 31 | 1 |
| Terral TV8331 | 77.8 | 79.6 | — | 55 | 39 | 04/20 | 35 | 1 |
| LA98214D-14-1-2-B | 76.4 | _ | _ | 56 | 36 | 04/09 | 34 | 5 |
| USG 3592 | 76.2 | 77.9 | 72.1 | 57 | 34 | 04/11 | 34 | 1 |
| Progeny 185 | 75.7 | 74.8 | 69.4 | 58 | 33 | 04/03 | 39 | 1 |
| Terral TV8558 | 75.6 | 70.3 | 63.8 | 54 | 28 | 04/13 | 35 | 1 |
| USG 3350 | 74.8 | 68.7 | 71.5 | 57 | 34 | 04/11 | 32 | 1 |
| Progeny 166 | 74.2 | 68.7 | -70.0 | 57 | 33 | 04/11 | 39 | 1 |
| Dixie X427 | 73.8 | _ | _ | 57 | 34 | 04/11 | 35 | 3 |
| Armor 260Z | 73.2 | 61.3 | 61.0 | 56 | 28 | 04/09 | 41 | 1 |
| AGS 2031 | 73.1 | 75.8 | _ | 57 | 35 | 04/09 | 37 | 2 |
| Delta Grow 5200 | 72.9 | 67.4 | 67.7 | 58 | 30 | 04/20 | 44 | 1 |
| Terral TVX81170 | 72.7 | _ | _ | 54 | 28 | 04/20 | 33 | 1 |
| AgriPro Coker Beretta | 72.2 | 69.9 | 73.4 | 56 | 29 | 04/09 | 35 | 1 |
| JGL 703 | 71.6 | _ | _ | 56 | 37 | 04/13 | 40 | 1 |
| Armor ARX 9901 | 71.5 | _ | _ | 58 | 33 | 04/20 | 33 | 2 |
| Dixie 900 | 71.3 | 69.2 | 67.8 | 56 | 29 | 04/11 | 44 | 2 |
| Delta Grow 4500 | 71.0 | 60.8 | 61.4 | 57 | 32 | 04/20 | 43 | 4 |
| Delta Grow 4100 | 70.8 | 58.4 | 60.5 | 57 | 29 | 04/20 | 43 | 3 |
| DK 7710 | 70.5 | 71.4 | 72.4 | 58 | 31 | 04/20 | 45 | 2 |
| DK 7830 | 69.3 | 60.5 | 60.4 | 57 | 36 | 04/20 | 35 | 1 |
| Dixie Bell DB7440 | 69.0 | | _ | 56 | 35 | 04/09 | 42 | 1 |
| DK XTJ734 | 68.9 | _ | _ | 57 | 31 | 04/20 | 34 | 2 |
| Delta Grow 1600 | 68.5 | 69.8 | _ | 55 | 27 | 04/13 | 39 | |
| USG 3X633 | 68.0 | | _ | 56 | 36 | 04/11 | 32 | 1 |
| Dixie 989 | 67.9 | 70.0 | | 54 | 27 | 04/09 | 44 | 2 |
| DK GB9108 | 67.3 | 68.5 | 63.5 | 57 | 35 | 04/11 | 39 | 5 |
| DK XT.1732 | 67.3 | | | 55 | 27 | 04/20 | 35 | 3 |
| Delta King 9410 | 66.4 | 58.6 | 60.5 | 56 | 34 | 04/20 | 38 | 1 |
| DK 9577 | 66.4 | 68.2 | 66 1 | 56 | 29 | 04/11 | 42 | 1 |
| Terral TV8466 | 66.3 | 67.6 | 68.3 | 56 | | 04/13 | 31 | 1 |
| | 66.2 | | | 59 | 33 | 04/03 | 31 | 1 |
| Progeny 145 | 65.7 | 60.6 | 63.7 | 56 | 33 | 04/00 | 44 | 1 |
| GA 051221 4E26 | 65.0 | 00.0 | 00.7 | 56 | 30 | 04/00 | 25 | 1 |
| GA 951231-4E25 | 63.5 | | | 57 | 34 | 04/09 | 32 | 2 |
| DK XT 1730 | 63.4 | | | 55 | 28 | 04/03 | 37 | 1 |
| Divio Boll DB2125 | 62.4 | 57.2 | 59.4 | 55 | 20 | 04/11 | 40 | 1 |
| | 61.0 | | | 58 | 37 | 04/20 | 32 | 1 |
| Riopoer variaty 26P15 | 61.7 | 72.7 | 77.0 | 55 | 20 | 04/03 | 34 | 1 |
| | 55.0 | 12.1 | 77.0 | 55 | 29 | 04/11 | 20 | 1 |
| | 55.2 | | | 50 | 21 | 04/11 | 30 | 1 |
| AgriPro Cokor D02 9496 | 49.0 | 57.2 | | 57 | 20 | 04/20 | 25 | <u> </u> |
| Agripto Coker Duz-8486 | 46.2 | | | 57 | 39 | 04/03 | 35 | |
| | 39.0 | | | | 20 | 04/09 | 40 | <u> </u> |
| Overall mean | 74.2 | 72.0 | 70.4 | | | | | |
| LSD (.10) | 12.5 | 10.6 | 9.4 | | | | | |
| Error degrees of freedom | 164 | 168 | 154 | | | | | |
| CV (%) | 13.8 | 16.6 | 17.0 | | | | | |
| R ² (%) | 63 | 62 | 65 | | | | | |
| 1Dianta d Nav. 00, 0000 | | | | | | | | |
| ¹ Planted Nov. 28, 2006 Fertilizer added: Topdress - Herbicide: None ² See "Procedures" for a des | – 34-0-0 @ 3 scription of loc | Harve 00 lb/A on 2-27 Previc Iging scores. | sted June 5, 20 7-07 ous crop: Corn | JU7 | | Soil fertility: p | он=5.3; Р=Н; | K=M |

| | Table 13. Whe | at varietal read | ctions to disease in Mississippi | .1 | |
|-------------------------------|--------------------------------|--------------------------------|----------------------------------|--------------------------------|--------------------------------|
| Brand/Variety | Leaf rust ² 2006 | Leaf rust ² 2007 | Brand/Variety | Leaf rust ² 2006 | Leaf rust ² 2007 |
| AgriPro Coker Beretta | R | R | Dixie Bell DB7440 | MS | _ |
| AgriPro Coker Magnolia | R | R | JGL 701 (Exp.) | R | _ |
| AgriPro Coker Panola | R | R | JGL 703 (Exp.) | R | _ |
| AgriPro Coker 9553 | R | R | GA-951231-4E25 (Exp.) | R | — |
| AgriPro Coker D02-8486 (Exp.) | R | _ | GA-951231-E26 (Exp.) | R | _ |
| AGS 2010 | R | _ | GA-96693-4E16 (Exp.) | R | _ |
| AGS 2031 | R | R | HBK 3266 | R | R |
| AGS 2060 | R | R | LA978UC-36-1-1-B (Exp.) | R | _ |
| AR Pat | R | R | LA978UC-101-1-1-C (Exp.) | R | _ |
| Armor 260Z | MR | MR | LA98202D-64-1-C (Exp.) | MR | _ |
| Armor 5110 | MS | MR | LA98214D-14-1-2-B (Exp.) | R | _ |
| Armor AXR9901 (Exp.) | R | _ | LA99005UC-31-3 (Exp.) | R | _ |
| Delta Grow 1600 | R | R | Pioneer variety 26R15 | R | R |
| Delta Grow 4100 | MR | MR | Pioneer variety 26R22 | MR | R |
| Delta Grow 4500 | S | MS | Pioneer variety 26R87 | R | _ |
| Delta Grow 5200 | MS | MR | Progeny 145 | MR | MS |
| Delta King 7710 | R | R | Progeny 166 | MS | MR |
| Delta King 7830 | MS | MR | Progeny 185 | MS | MR |
| Delta King 9410 | MR | MR | Terral LA841 | R | R |
| Delta King 9577 | MR | R | Terral LA482 (Exp.) | MR | _ |
| Delta King GR9108 | R | R | Terral TV8331 | MR | R |
| Delta King DK XTJ724 (Exp.) | R | _ | Terral TV8466 | MR | R |
| Delta King DK XTJ730 (Exp.) | R | _ | Terral TV8558 | MR | R |
| Delta King DK XTJ732 (Exp.) | R | _ | Terral TVX81170 (Exp.) | MR | _ |
| Delta King DK XTJ734 (Exp.) | MR | _ | USG 3209 | R | R |
| Dixie 989 | R | R | USG 3295 | R | _ |
| Dixie 900 | MS | MR | USG 3350 | MR | MR |
| Dixie X427 (Exp.) | R | — | USG 3592 | R | R |
| Dixie Bell DB2125 | MR | R | USG 3X633 (Exp.) | R | _ |
| Dixie Bell DB3440 | MR | MR | VA02W-555 (Exp.) | R | _ |

¹Prepared by Dr. David Ingram, associate extension/research plant pathologist, Central Mississippi Research and Extension Center, Raymond, Mississippi.

²Values were subjected to analysis of variance and were compared to a set of standard values for R=resistant (<1%); MR=moderately resistant (1-5%); MS=moderately susceptible (5-10%); S=susceptible (10-25%); VS=very susceptible (>25%); and - = no disease symptoms observed. Values reflect varietal disease reaction only and are not intended to be used as the sole criterion for determination of economic losses.

18 Mississippi Wheat and Oat Variety Trials, 2007

| | Table 14. A | verage number | of wheat seeds per pound. | | |
|-------------------------------|--------------------|-------------------|---------------------------|--------------------|-------------------|
| Brand/Variety | 2006-07 average | 2-year average | Brand/Variety | 2006-07 average | 2-year average |
| | seeds/lb | seeds/lb | | seeds/lb | seeds/lb |
| AgriPro Coker Beretta | 14,473 | 14,148 | Dixie Bell DB7440 | 12,391 | _ |
| AgriPro Coker Magnolia | 12,135 | _ | JGL 701 (Exp.) | 14,130 | _ |
| AgriPro Coker Panola | 13,119 | 13,938 | JGL 703 (Exp.) | 11,977 | _ |
| AgriPro Coker 9553 | 11,604 | 11,415 | GA-951231-4E25 (Exp.) | 11,250 | _ |
| AgriPro Coker D02-8486 (Exp.) | 12,099 | _ | GA-951231-E26 (Exp.) | 11,501 | _ |
| AGS 2010 | 11,526 | _ | GA-96693-4E16 (Exp.) | 9,590 | _ |
| AGS 2031 | 11,895 | 11,837 | HBK 3266 | 13,937 | 13,829 |
| AGS 2060 | 13,561 | 11,992 | LA978UC-36-1-1-B (Exp.) | 12,700 | _ |
| AR Pat | 12,839 | 13,051 | LA978UC-101-1-1-C (Exp.) | 11,363 | _ |
| Armor 260Z | 13,985 | 13,661 | LA98202D-64-1-C (Exp.) | 10,807 | _ |
| Armor 5110 | 13,989 | 13,525 | LA98214D-14-1-2-B (Exp.) | 12,952 | _ |
| Armor AXR9901 (Exp.) | 13,063 | _ | LA99005UC-31-3 (Exp.) | 12,046 | _ |
| Delta Grow 1600 | 16,867 | 17,479 | Pioneer variety 26R15 | 11,985 | 12,007 |
| Delta Grow 4100 | 15,361 | 15,368 | Pioneer variety 26R22 | 11,107 | 10,901 |
| Delta Grow 4500 | 16,171 | 14,862 | Pioneer variety 26R87 | 9,894 | _ |
| Delta Grow 5200 | 14,915 | 14,638 | Progeny 145 | 14,226 | 13,778 |
| Delta King 7710 | 15,050 | 15,378 | Progeny 166 | 12,592 | 12,982 |
| Delta King 7830 | 13,226 | 12,792 | Progeny 185 | 12,313 | 13,567 |
| Delta King 9410 | 14,349 | 14,332 | Terral LA841 | 13,443 | 12,661 |
| Delta King 9577 | 13,919 | 15,174 | Terral LA482 (Exp.) | 14,615 | _ |
| Delta King GR9108 | 12,678 | 12,822 | Terral TV8331 | 10,448 | 11,680 |
| Delta King DK XTJ724 (Exp.) | 11,260 | _ | Terral TV8466 | 13,733 | 13,060 |
| Delta King DK XTJ730 (Exp.) | 14,715 | _ | Terral TV8558 | 17,866 | 16,641 |
| Delta King DK XTJ732 (Exp.) | 13,069 | _ | Terral TVX81170 (Exp.) | 13,455 | _ |
| Delta King DK XTJ734 (Exp.) | 11,768 | _ | USG 3209 | 11,717 | 11,652 |
| Dixie 989 | 14,188 | _ | USG 3295 | 11,266 | _ |
| Dixie 900 | 13,793 | 13,272 | USG 3350 | 13,473 | 12,994 |
| Dixie X427 (Exp.) | 14,940 | _ | USG 3592 | 11,742 | 11,754 |
| Dixie Bell DB2125 | 12,255 | 12,488 | USG 3X633 (Exp.) | 12,840 | _ |
| Dixie Bell DB3440 | 11,281 | 12,429 | VA02W-555 (Exp.) | 10,142 | - |

| Table 15. Average number of oat seeds per pound. | | | | | | | | | | |
|--|--------------------|-------------------|--|--------------------------|--------------------|-------------------|--|--|--|--|
| Brand/Variety | 2006-07 average | 2-year average | | Brand/Variety | 2006-07 average | 2-year average | | | | |
| | seeds/lb | seeds/lb | | | seeds/lb | seeds/lb | | | | |
| H-321 | 15,152 | — | | LA966BSB-270-S2-C (Exp.) | 16,999 | 16,059 | | | | |
| LA02030-S-B-171-S2 (Exp.) | 13,235 | _ | | LA99016SBSB-98 (Exp.) | 15,890 | — | | | | |
| LA95033D63-1-C-S3 (Exp.) | 16,349 | - | | Terral Trophy (Exp.) | 12,954 | 12,620 | | | | |

| Table 16. Yield summary of oat variety trials in Mississippi. | | | | | | | | |
|---|-------------|----------|-------|-------|-------|------|--|--|
| Brand/Variety | Brooksville | Location | | | | | | |
| | | | | avg.1 | | avg. | | |
| | bu/A | bu/A | bu/A | bu/A | bu/A | bu/A | | |
| H-321 | 71.8 | 64.8 | 98.0 | 81.4 | 81.4 | 79.0 | | |
| LA02030-S-B-171-S2 (Exp. |) 41.8 | 38.2 | 77.6 | 57.9 | 103.1 | 65.2 | | |
| LA95033D63-1-C-S3 (Exp.) | 77.5 | 51.4 | 79.2 | 65.3 | 90.7 | 74.7 | | |
| LA966BSB-270-S2-C (Exp. |) 83.5 | 59.4 | 119.7 | 89.6 | 88.7 | 87.8 | | |
| LA99016SBSB-98 (Exp.) | 59.1 | 47.7 | 86.9 | 67.3 | 105.2 | 74.7 | | |
| Terral Trophy (Exp.) | 87.3 | 59.4 | 105.4 | 82.4 | 87.9 | 85.0 | | |
| | | | | | | | | |
| Overall mean | 70.2 | 53.5 | 94.4 | 74.0 | 92.8 | 77.7 | | |
| LSD (.10) | 10.0 | 7.3 | 22.7 | 11.6 | 12.6 | 6.9 | | |
| Error degrees of freedom | 15 | 15 | 15 | 30 | 15 | 60 | | |
| CV (%) | 11.5 | 10.9 | 19.4 | 18.4 | 11.0 | 14.9 | | |
| R ² (%) | 90 | 86 | 63 | 85 | 59 | 86 | | |
| ¹ South = average of Newton and Raymond. | | | | | | | | |

| Table 17. Two-year yield summary of oat variety trials in Mississippi. | | | | | | | |
|--|-------------|--------|------------|---------------|--|--|--|
| Brand/Variety | Brooksville | Newton | Stoneville | Location avg. | | | |
| | bu/A | bu/A | bu/A | bu/A | | | |
| LA966BSB-270-S2-C (Exp.) | 77.2 | 84.9 | 112.7 | 89.9 | | | |
| Terral Trophy (Exp.) | 70.5 | 79.9 | 105.7 | 87.0 | | | |
| | | | | | | | |
| Overall mean | 73.8 | 82.4 | 109.2 | 88.5 | | | |
| LSD (.10) | 7.2 | 6.2 | 6.8 | 3.5 | | | |
| Error degrees of freedom | 6 | 6 | 6 | 18 | | | |
| CV (%) | 10.1 | 7.7 | 6.4 | 7.9 | | | |
| R² (%) | 93 | 98 | 96 | 97 | | | |

| Table 18. Three-year yield summary of oat variety trials in Mississippi. | | | | | | | |
|--|-------------|--------|---------------|--|--|--|--|
| Brand/Variety | Brooksville | Newton | Location avg. | | | | |
| | bu/A | bu/A | bu/A | | | | |
| LA966BSB-270-S2-C | 87.2 | 95.6 | 91.4 | | | | |
| Terral Trophy (Exp.) | 83.6 | 100.0 | 91.8 | | | | |
| | | | | | | | |
| Overall mean | 85.4 | 97.8 | 91.6 | | | | |
| LSD (.10) | 9.2 | 8.2 | 5.8 | | | | |
| Error degrees of freedom | 9 | 9 | 18 | | | | |
| CV (%) | 14.4 | 11.1 | 12.7 | | | | |
| R² (%) | 93 | 95 | 95 | | | | |

| Table 19. Yields of six oat varieties at MAFES Black Belt Branch, Brooksville (Brooksville silt clay soil).1 | | | | | | | |
|--|------------------|----------------------|----------------------|----------------|----------------|-----------------|-------------------------------|
| Brand/Variety | 2006-07 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 | |
| Terral Trophy | 87.3 | 70.5 | 83.6 | 37 | 04/11 | 43 | 1 |
| LA966BSB-270-S2-C | 83.5 | 77.2 | 87.2 | 34 | 04/13 | 35 | 1 |
| LA95033D63-1-C-S3 | 77.5 | — | — | 32 | 04/16 | 36 | 1 |
| H-321 | 71.8 | — | _ | 34 | 04/16 | 36 | 1 |
| LA99016SBSB-98 | 59.1 | — | — | 32 | 04/13 | 43 | 1 |
| LA02030-S-B-171-S2 | 41.8 | - | — | 33 | 04/09 | 38 | 1 |
| | | | | | | | |
| Overall mean | 70.2 | 73.8 | 85.4 | | | | |
| LSD (.10) | 10.0 | 7.2 | 9.2 | | | | |
| Error degrees of freedom | 15 | 6 | 9 | | | | |
| CV (%) | 11.6 | 10.1 | 14.4 | | | | |
| R ² (%) | 90 | 93 | 93 | | | | |
| | | | | | | | |

¹Planted Nov. 27, 2006

Soil fertility: pH=6.2; P=M; K=M Previous crop: Soybeans

Fertilizer added: Preplant - 13-13-13 @ 300 lb/A; Topdress - 34-0-0 @ 180 lb/A ²See "Procedures" for a description of lodging scores.

Table 20. Yields of six oat varieties at MAFES Coastal Plain Branch, Newton (Prentiss very fine sandy loam soil).1 **Brand/Variety** 2006-07 2-year 3-year Test Date Plant Lodging avg. yield avg. yield yield weight headed height score² bu/A bu/A bu/A lb/bu in H-321 04/09 64.8 35 30 1 LA966BSB-270-S2-C 59.4 79.9 95.6 31 04/04 27 1 **Terral Trophy** 59.4 84.9 100.0 36 04/05 32 1 LA95033D63-1-C-S3 51.4 32 04/09 30 1 — — LA99016SBSB-98 47.7 33 04/07 37 _ — 1 LA02030-S-B-171-S2 38.2 31 04/04 31 1 — — Overall mean 53.5 82.4 97.8 LSD (.10) 7.3 6.2 8.2 Error degrees of freedom 15 6 9 CV (%) 10.9 7.7 11.1 R²(%) 86 98 95

¹Planted Nov. 14, 2006

Harvested May 24, 2007 Previous crop: Wheat

Soil fertility: pH=6.7; P=H; K=H

Fertilizer added: Preplant - 0-20-20 @ 200 lb/A; Topdress - 34-0-0 @ 235 lb/A on 2-6-07 Herbicide: None

²See "Procedures" for a description of lodging scores.

Harvested May 29, 2007

| Table 21. Yields of six oat varieties at MAFES Brown Loam Branch, Raymond (Loring silt loam soil). ¹ | | | | | | | | |
|---|------------------|-----------------------------------|-----------------------|----------------|----------------|-----------------|-------------------------------|--|
| Brand/Variety | 2006-07 yield | 2-year avg. yield ² | 3-year avg. yield² | Test weight | Date headed | Plant height | Lodging score ³ | |
| | bu/A | bu/A | bu/A | lb/bu | | in | | |
| LA966BSB-270-S2-C | 119.7 | - | — | 36 | 04/13 | 43 | 1 | |
| Terral Trophy | 105.4 | _ | _ | 37 | 04/13 | 47 | 4 | |
| H-321 | 98.0 | _ | _ | 37 | 04/13 | 48 | 5 | |
| LA99016SBSB-98 | 86.9 | _ | | 35 | 04/11 | 48 | 2 | |
| LA95033D63-1-C-S3 | 79.2 | _ | | 33 | 04/11 | 42 | 2 | |
| LA02030-S-B-171-S2 | 77.6 | _ | | 34 | 04/09 | 43 | 1 | |
| | | | | | | | | |
| Overall mean | 94.4 | _ | _ | | | | | |
| LSD (.10) | 22.7 | _ | _ | | | | | |
| Error degrees of freedom | 15 | _ | _ | | | | | |
| CV (%) | 19.4 | _ | _ | | | | | |
| R ² (%) | 63 | _ | _ | | | | | |
| Planted Nov. 28, 2006 Harvested June 5, 2007 Soil fertility: pH=5.3; P=H; K=M Fertilizer added: Topdress - 34-0-0 @ 235 lb/A on 2-27-07 Previous crop: Corn Previous crop: Corn Previous crop: Corn | | | | | K=M | | | |

³See "Procedures" for a description of lodging scores.

| Table 22. Yields of six oat varieties at MAFES Delta Branch, Stoneville (Tunica silty clay soil). ¹ | | | | | | | |
|--|------------------|----------------------|-----------------------|---|----------------|-----------------|-------------------------------|
| Brand/Variety | 2006-07 yield | 2-year avg. yield | 3-year avg. yield² | Test weight | Date headed | Plant height | Lodging score ³ |
| | bu/A | bu/A | bu/A | lb/bu | | in | |
| LA99016SBSB-98 | 105.2 | _ | _ | 35 | 04/01 | 28 | 1 |
| LA02030-S-B-171-S2 | 103.1 | _ | _ | 35 | 03/28 | 32 | 1 |
| LA95033D63-1-C-S3 | 90.7 | _ | — | 35 | 04/04 | 32 | 1 |
| LA966BSB-270-S2-C | 88.7 | 112.7 | _ | 35 | 04/01 | 26 | 1 |
| Terral Trophy | 87.9 | 105.7 | _ | 41 | 04/01 | 32 | 1 |
| H-321 | 81.4 | _ | _ | 37 | 04/03 | 29 | 1 |
| | | | | | | | |
| Overall mean | 92.8 | 109.2 | _ | | | | |
| LSD (.10) | 12.6 | 6.8 | _ | | | | |
| Error degrees of freedom | 15 | 6 | _ | | | | |
| CV (%) | 11.0 | 6.4 | _ | | | | |
| R ² (%) | 59 | 96 | _ | | | | |
| ¹ Planted Nov. 21, 2006 Fertilizer added: Topdress — 46-0-0 @ 100 lb/A on 2-20-07 & 3-5-07 | | | | Soil fertility: pH=6.6; P=H; K=H Previous crop: Soybeans | | | |

²No 3-year yields. ³See "Procedures" for a description of lodging scores.

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