# MISSISSIPPI WHEAT \& OAT VARIETY TRIALS, 2022 

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MISSISSIPPI'S OFFICIAL VARIETY TRIALS

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MS AGRICULTURAL AND
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This report contains data generated as part of the Mississippi Agricultural and Forestry Experiment Station research program. Joint sponsorship by the organizations listed on pages $4-5$ is gratefully acknowledged.
Trade names of commercial products used in this report are included only for clarity and understanding. All available names (i.e., trade names, code numbers, chemical names, etc.) of varieties or products used in this research project are listed on pages 4-5.


# Mississippi Wheat and Oat Variety Trials, 2022 

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


# Mississippi Wheat and Oat Variety Trials, 2022 

## INTRODUCTION

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

## Procedures

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

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

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

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

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

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

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

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

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

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

## Important Factors for Producers

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

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

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

Cold Requirements. Winter varieties of small grains require a certain amount of cold weather (less than $40^{\circ} \mathrm{F}$ ) before the plants will form seed heads. This process is called vernalization. Most of the wheat varieties planted in Mississippi require low temperatures to reproduce; oats do
not. In some years, there is not enough cold weather in south Mississippi for some northern-adapted wheat varieties, resulting in little or no seed-head production. Normally, these varieties have late heading dates at south Mississippi locations. Check adaptation of unfamiliar varieties with an MSU Extension Service agent or seed company representative.

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

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

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

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

Weed Control. Mississippi State University Extension Service Publication 1532, Weed Control Guidelines for Mississippi, provides detailed information for controlling weeds in wheat and oats. For more specific information, refer to MSU Extension Information Sheet 961, Small Grains Production.

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

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

Plant Variety Protection Act
http://151.121.3.150/science/PVPO/PVPO_Act/whole2.pdf
Plant Variety Protection Office PVP Database
http://www.ars-grin.gov/cgi-bin/npgs/html/pvplist.pl
United States Patent Database
http://www.uspto.gov/patft/index.html

## Use of Data Tables and Summary Statistics

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

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

| Variety | Yield |
| :--- | :---: |
| Abe | $60 \mathrm{bu} / \mathrm{A}$ |
| Bill | $55 \mathrm{bu} / \mathrm{A}$ |
| Charlie | $51 \mathrm{bu} / \mathrm{A}$ |
| LSD | $7 \mathrm{bu} / \mathrm{A}$ |

The difference between variety Abe and variety Bill is 5 bushels per acre (60-55=5). This difference is smaller than the LSD (7 bushels per acre). Consequently, it is concluded
that variety Abe and variety Bill have the same yield potential since the observed difference occurred purely due to chance.

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

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

The coefficient of determination $\left(\mathrm{R}^{2}\right)$ is another measure of the level of precision in a trial and is also used to compare the relative precision of different trials. The $\mathrm{R}^{2}$ is a measure of the amount of variation that is explained, or accounted for, in a given trial. For example, an $\mathrm{R}^{2}$ 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 $\mathrm{R}^{2}$ value is, the more precise the trial. The $\mathrm{R}^{2}$ is generally considered to be a better measure of precision than is the CV for comparison of different trials.

## Wheat and Oat Seed Sources

| Table 1. 2021-2022 MSU wheat and oat planting dates. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Location | Soil type | Planting date | Harvest date | Crop tested |
| Beaumont | McLaurin sandy loam | 11/5/21 | 6/3/22 | Wheat \& Oat |
| Bolton | Loring silt loam | 11/9/21 | 6/8/22 | Wheat |
| Coldwater | Loring-Grenada silt loam | 11/10/21 | 6/14/22 | Wheat |
| Starkville | Marietta fine sandy loam | 11/3/21 | 6/6/22 | Wheat \& Oat |
| Stoneville | Bosket very fine sandy loam | 11/8/21 | 6/13/22 | Wheat \& Oat |
| Verona | Leeper silty clay | 11/2/21 | 6/7/22 | Wheat \& Oat |

Table 2. Companies supplying wheat brands/varieties entered.

| Company | Brand | Variety |
| :---: | :---: | :---: |
| AgriMAXX Wheat Co. 7167 Highbanks Rd. Mascoutah, IL 62258 | AgriMAXX <br> AgriMAXX <br> AgriMAXX <br> AgriMAXX <br> AgriMAXX <br> AgriMAXX | $\begin{aligned} & 514 \\ & 503 \\ & \text { EXP } 2105 \\ & 516 \\ & 473 \\ & 513 \end{aligned}$ |
| AgSouth Genetics | AgSouth Genetics AgSouth Genetics | $\begin{aligned} & \text { AGS } 2055 \\ & \text { AGS } 3022 \end{aligned}$ |
| Delta Grow Seed P.O. Box 219 England, AR 72406 | Delta Grow Delta Grow Delta Grow Delta Grow | $\begin{aligned} & 1200 \\ & 3500 \\ & 1000 \\ & 1800 \end{aligned}$ |
| Dixie Bell | Dixie Bell Dixie Bell | $\begin{aligned} & \text { DB918 } \\ & \text { DB702 } \end{aligned}$ |
| Dyna-Gro Seed 6221 Riverside Dr., Suite One Dublin, OH 43017 | Dyna-Gro <br> Dyna-Gro <br> Dyna-Gro <br> Dyna-Gro <br> Dyna-Gro <br> Dyna-Gro <br> Dyna-Gro | $\begin{aligned} & 9701 \\ & \text { WX20738 } \\ & 9393 \\ & 9811 \\ & 9002 \\ & 9120 \\ & 9172 \end{aligned}$ |
| Pioneer | Pioneer Pioneer Pioneer | $\begin{aligned} & \text { 26R41 } \\ & \text { 26R59 } \\ & 26 R 36 \end{aligned}$ |
| Progeny Ag Products 1529 Hwy. 193 S. Wynne, AR 72396 | Progeny Ag <br> Progeny Ag <br> Progeny Ag <br> Progeny Ag <br> Progeny Ag <br> Progeny Ag <br> Progeny Ag <br> Progeny Ag <br> Progeny Ag <br> Progeny Ag | \#CHAD <br> 21-2 <br> \#BINGO <br> \#TURBO <br> 21-1 <br> \#BUSTER <br> 21-4 <br> 20-2 <br> \#BULLET <br> 21-3 |
| UniSouth Genetics, Inc. 3205 C Hwy. 46 S. Dickson, TN 37055 | $\begin{aligned} & \text { USG } \\ & \text { USG } \\ & \text { USG } \end{aligned}$ | $\begin{aligned} & 3472 \\ & 3352 \\ & 3783 \end{aligned}$ |
| Revere Seed | Revere Seed Revere Seed Revere Seed | $\begin{array}{r} 2169 \\ 2266 \\ \text { X22A } \end{array}$ |
| Continued. |  |  |

4 Mississippi Wheat and Oat Variety Trials, 2022

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

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

Table 3. Companies supplying oat brands/varieties entered.

| Company | Brand | Variety |
| :--- | :--- | :--- |
| SunGrains | SunGrains | LA15015SB-S50 * |
|  | SunGrains | LA14105SBS56-1 * * |
|  | SunGrains | LA14032SBS-163-2 * |
| Angelina Grain Co. | Sweet Caroline | FL 0720 |
| 16371 Hwy. 15 S. |  |  |
| Vidalia, LA 71373 | GoWild | Savage |
| GoWild |  |  |

## Summaries of Wheat Yields

| Table 4. 2021-2022 yield summary of wheat variety trials in Mississippi. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Brand | Variety ${ }^{1}$ | Coldwater | Starkville | Verona | North avg. | Beaumont | Bolton | South avg. | Stoneville (Delta) | Overall avg. |
|  |  | bu/A | bu/A | bu/A | bu/A | bu/A | bu/A | bu/A | bu/A | bu/A |
| AgriMAXX | 473 | 61.1 | 67.9 | 87.4 | 72.1 | 57.8 | 62.9 | 60.3 | 79.7 | 69.5 |
| AgriMAXX | 503 | 72.4 | 71.5 | 102.9 | 82.3 | 44.2 | 38.6 | 41.4 | 71.3 | 66.8 |
| AgriMAXX | 513 | 66.2 | 66.2 | 91.7 | 74.7 | 41.6 | 51.2 | 46.4 | 69.7 | 64.4 |
| AgriMAXX | 514 | 66.3 | 82.2 | 94.0 | 80.8 | 64.6 | 51.4 | 58.0 | 71.9 | 71.7 |
| AgriMAXX | 516 | 66.6 | 70.5 | 100.4 | 79.2 | 59.9 | 58.8 | 59.4 | 84.8 | 73.5 |
| AgriMAXX | EXP 2105 | 70.2 | 71.3 | 91.1 | 77.5 | 47.7 | 42.2 | 44.9 | 83.5 | 67.6 |
| AgSouth Genetics | AGS 2055 | 68.0 | 67.5 | 98.1 | 77.8 | 65.4 | 53.6 | 59.5 | 69.6 | 70.4 |
| AgSouth Genetics | AGS 3022 | 72.4 | 63.8 | 93.2 | 76.5 | 68.5 | 51.9 | 60.2 | 68.5 | 69.7 |
| Delta Grow | 1000 | 62.4 | 66.2 | 97.9 | 75.5 | 60.9 | 60.0 | 60.5 | 81.5 | 71.5 |
| Delta Grow | 3500 | 60.9 | 73.5 | 97.6 | 77.3 | 72.6 | 58.5 | 65.6 | 71.3 | 72.4 |
| Delta Grow | 1200 | 67.7 | 82.0 | 96.3 | 82.0 | 61.0 | 64.0 | 62.5 | 78.7 | 74.9 |
| Delta Grow | 1800 | 70.3 | 57.7 | 91.1 | 73.0 | 67.5 | 56.7 | 62.1 | 72.6 | 69.3 |
| Dixie Bell | DB702 | 70.9 | 63.2 | 101.2 | 78.4 | 61.5 | 46.9 | 54.2 | 82.5 | 71.0 |
| Dixie Bell | DB918 | 65.1 | 66.7 | 102.6 | 78.1 | 58.1 | 56.6 | 57.4 | 75.4 | 70.7 |
| Dyna-Gro | 9002 | 66.0 | 67.2 | 94.0 | 75.7 | 55.6 | 62.2 | 58.9 | 76.8 | 70.3 |
| Dyna-Gro | 9120 | 67.0 | 64.6 | 94.6 | 75.4 | 55.5 | 54.8 | 55.2 | 68.9 | 67.6 |
| Dyna-Gro | 9172 | 60.7 | 64.2 | 102.5 | 75.8 | 56.6 | 58.1 | 57.4 | 77.2 | 69.9 |
| Dyna-Gro | 9393 | 61.6 | 69.7 | 92.5 | 74.6 | 57.0 | 57.7 | 57.3 | 67.6 | 67.7 |
| Dyna-Gro | 9701 | 64.1 | 75.7 | 94.8 | 78.2 | 52.2 | 62.4 | 57.3 | 73.2 | 70.4 |
| Dyna-Gro | 9811 | 65.6 | 69.5 | 99.1 | 78.0 | 68.1 | 54.6 | 61.4 | 72.6 | 71.6 |
| Dyna-Gro | WX20738 | 80.1 | 74.9 | 98.3 | 84.4 | 63.7 | 55.4 | 59.6 | 62.2 | 72.4 |
| GoWheat | 2032 | 63.6 | 56.5 | 95.5 | 71.8 | 27.8 | 46.5 | 37.1 | 81.8 | 61.9 |
| GoWheat | 2058 | 72.3 | 65.4 | 97.8 | 78.5 | 65.6 | 60.8 | 63.2 | 75.4 | 72.9 |
| GoWheat | 6000 | 67.0 | 64.6 | 95.0 | 75.5 | 42.2 | 47.2 | 44.7 | 78.9 | 65.8 |
| GoWheat | 6056 | 67.6 | 69.4 | 93.8 | 76.9 | 55.4 | 58.3 | 56.8 | 78.8 | 70.5 |
| GoWheat | LA754 | 75.3 | 63.0 | 92.2 | 76.8 | 66.6 | 51.9 | 59.2 | 69.1 | 69.7 |
| Pioneer | 26R36 | 67.9 | 60.7 | 103.4 | 77.3 | 51.8 | 56.2 | 54.0 | 78.2 | 69.7 |
| Pioneer | 26R41 | 69.8 | 63.9 | 106.2 | 80.0 | 72.8 | 59.5 | 66.2 | 70.7 | 73.8 |
| Pioneer | 26R59 | 66.8 | 63.0 | 98.8 | 76.2 | 53.6 | 47.5 | 50.5 | 73.4 | 67.2 |
| Progeny Ag | \#BULLET | 61.3 | 67.6 | 93.4 | 74.1 | 55.0 | 59.5 | 57.3 | 79.7 | 69.4 |
| Progeny Ag | \#BUSTER | 68.0 | 71.7 | 106.5 | 82.1 | 67.2 | 49.1 | 58.2 | 71.2 | 72.3 |
| Progeny Ag | \#CHAD | 72.4 | 79.8 | 87.6 | 79.9 | 72.1 | 55.6 | 63.9 | 63.6 | 71.8 |
| Progeny Ag | \#TURBO | 66.5 | 72.3 | 97.6 | 78.8 | 69.5 | 38.5 | 54.0 | 75.8 | 70.0 |
| Progeny Ag | \#BINGO | 69.1 | 76.2 | 97.3 | 80.9 | 62.2 | 48.2 | 55.2 | 67.2 | 70.0 |
| Progeny Ag | 20-2 | 69.9 | 67.7 | 101.0 | 79.5 | 43.5 | 39.4 | 41.5 | 71.2 | 65.5 |
| Progeny Ag | 21-1 | 77.7 | 72.1 | 97.0 | 82.3 | 67.6 | 54.0 | 60.8 | 62.1 | 71.8 |
| Progeny Ag | 21-2 | 66.9 | 79.4 | 94.5 | 80.3 | 68.0 | 52.8 | 60.4 | 81.7 | 73.9 |
| Progeny Ag | 21-3 | 59.8 | 63.5 | 95.4 | 72.9 | 50.8 | 42.4 | 46.6 | 71.4 | 63.9 |
| Progeny Ag | 21-4 | 69.8 | 70.4 | 97.8 | 79.3 | 55.4 | 44.5 | 49.9 | 76.7 | 69.1 |
| Revere Seed | 2169 | 65.6 | 76.7 | 102.3 | 81.5 | 50.4 | 60.6 | 55.5 | 71.7 | 71.2 |
| Revere Seed | 2266 | 61.7 | 74.4 | 93.2 | 76.5 | 48.5 | 34.9 | 41.7 | 73.2 | 64.3 |
| Revere Seed | X22A | 69.8 | 71.5 | 90.3 | 77.2 | 67.0 | 59.2 | 63.1 | 72.3 | 71.7 |
| SunGrains | AR09137UC-17-2 * | 57.8 | 66.9 | 97.2 | 74.0 | 59.9 | 51.5 | 55.7 | 71.6 | 67.5 |
| SunGrains | AR11051-15-3* | 64.2 | 73.7 | 95.5 | 77.8 | 62.2 | 52.1 | 57.2 | 63.9 | 68.6 |
| SunGrains | GA 11052-19LE15 * | 61.5 | 53.8 | 93.8 | 69.7 | 51.3 | 43.6 | 47.5 | 67.9 | 62.0 |
| SunGrains | GA 111055-19LE12 * | 60.8 | 67.4 | 92.2 | 73.5 | 63.3 | 52.5 | 57.9 | 73.7 | 68.3 |
| SunGrains | GA 121012-19LE8* | 59.2 | 61.3 | 98.6 | 73.0 | 68.6 | 46.8 | 57.7 | 81.1 | 69.3 |
| SunGrains | GA 151313-LDH224-19E38 * | 67.7 | 57.6 | 92.3 | 72.5 | 63.3 | 56.0 | 59.7 | 65.8 | 67.1 |
| SunGrains | LA12275LDH-56 * | 70.4 | 69.2 | 95.6 | 78.4 | 59.7 | 50.9 | 55.3 | 63.5 | 68.2 |
| SunGrains | LA13154D-WN1* | 64.3 | 58.6 | 93.0 | 72.0 | 61.6 | 46.1 | 53.9 | 70.8 | 65.7 |
| SunGrains | LA15203-LDH112 * | 65.8 | 64.1 | 94.7 | 74.9 | 63.0 | 60.6 | 61.8 | 69.3 | 69.6 |
| SunGrains | LA15203-LDH274* | 62.8 | 62.2 | 92.7 | 72.5 | 17.4 | 38.2 | 27.8 | 51.4 | 54.1 |
| SunGrains | LANC11558-33 * | 59.4 | 57.3 | 87.0 | 67.9 | 62.1 | 48.1 | 55.1 | 66.0 | 63.3 |
| USG | 3352 | 74.2 | 69.0 | 94.9 | 79.4 | 47.0 | 39.3 | 43.1 | 79.9 | 67.4 |
| USG | 3472 | 70.6 | 74.8 | 96.7 | 80.7 | 61.6 | 56.6 | 59.1 | 71.1 | 71.9 |
| USG | 3783 | 68.8 | 66.1 | 101.2 | 78.7 | 56.3 | 57.1 | 56.7 | 76.9 | 71.1 |
| VCIA | Liberty 5658 | 60.6 | 49.6 | 91.6 | 67.3 | 70.5 | 47.7 | 59.1 | 80.2 | 66.7 |
| VCIA | VA17W-75 | 67.8 | 61.8 | 91.1 | 73.6 | 52.1 | 35.6 | 43.8 | 65.6 | 62.3 |
| Mean |  | 66.7 | 67.6 | 96.0 | 76.8 | 58.2 | 51.9 | 55.0 | 72.8 | 68.8 |
| CV |  | 8.8 | 16.1 | 9.8 |  | 11.5 | 12.0 |  | 9.7 |  |
| LSD (0.05) |  | 8.2 | 15.2 | 13.2 |  | 9.3 | 8.7 |  | 9.8 |  |
| $\mathrm{R}^{2}$ |  | 52.0 | 56.3 | 22.8 |  | 76.0 | 69.0 |  | 63.5 |  |
| Error DF |  | 171 | 171 | 171 |  | 171 | 171 |  | 171 |  |

6 Mississippi Wheat and Oat Variety Trials, 2022

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

| Brand | Variety ${ }^{1}$ | Coldwater | Starkville | Verona | Beaumont | Bolton | Stoneville | Overall avg. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | bu/A | bu/A | bu/A | bu/A | bu/A | bu/A | bu/A |
| AgriMAXX | 473 | 72.1 | 82.8 | 90.7 | 68.7 | 73.8 | 87.6 | 79.3 |
| AgriMAXX | 503 | 86.8 | 88.6 | 104.6 | 58.1 | 57.2 | 87.2 | 80.4 |
| AgriMAXX | 513 | 77.2 | 82.7 | 93.6 | 53.8 | 68.8 | 79.5 | 75.9 |
| AgriMAXX | 514 | 83.1 | 95.7 | 93.9 | 67.4 | 65.8 | 88.0 | 82.3 |
| AgriMAXX | 516 | 79.2 | 87.6 | 94.5 | 69.5 | 71.1 | 91.8 | 82.3 |
| AgSouth Genetics | AGS 2055 | 79.0 | 78.1 | 98.9 | 75.6 | 71.7 | 80.7 | 80.7 |
| Delta Grow | 1000 | 67.1 | 76.5 | 96.7 | 69.8 | 70.0 | 85.7 | 77.6 |
| Delta Grow | 3500 | 73.8 | 85.0 | 96.7 | 74.0 | 72.6 | 76.8 | 79.8 |
| Delta Grow | 1200 | 75.9 | 90.4 | 98.1 | 68.8 | 75.4 | 92.8 | 83.6 |
| Dyna-Gro | 9002 | 77.3 | 84.8 | 96.8 | 60.9 | 76.0 | 86.1 | 80.3 |
| Dyna-Gro | 9120 | 75.0 | 83.2 | 96.1 | 67.1 | 70.2 | 83.3 | 79.1 |
| Dyna-Gro | 9172 | 71.3 | 83.9 | 103.9 | 71.2 | 75.3 | 90.0 | 82.6 |
| Dyna-Gro | 9701 | 75.3 | 86.0 | 90.6 | 66.6 | 75.0 | 82.3 | 79.3 |
| Dyna-Gro | 9811 | 75.7 | 79.7 | 93.9 | 80.7 | 72.3 | 79.9 | 80.4 |
| Dyna-Gro | WX20738 | 78.1 | 90.4 | 92.2 | 74.4 | 65.2 | 72.2 | 78.8 |
| GoWheat | 2032 | 73.7 | 76.7 | 98.0 | 51.8 | 61.3 | 82.4 | 74.0 |
| GoWheat | 2058 | 79.3 | 82.2 | 96.1 | 76.9 | 74.3 | 81.2 | 81.6 |
| GoWheat | 6000 | 80.0 | 80.3 | 99.2 | 60.5 | 63.6 | 83.2 | 77.8 |
| GoWheat | LA754 | 77.3 | 76.5 | 89.9 | 73.5 | 61.8 | 67.4 | 74.4 |
| Progeny Ag | \#BULLET | 68.2 | 79.2 | 94.2 | 63.8 | 70.0 | 88.5 | 77.3 |
| Progeny Ag | \#TURBO | 75.3 | 82.5 | 89.8 | 77.8 | 59.8 | 80.8 | 77.7 |
| Progeny Ag | \#BINGO | 79.0 | 90.7 | 96.1 | 69.3 | 69.1 | 87.2 | 81.9 |
| Revere Seed | 2169 | 78.2 | 88.8 | 101.5 | 68.5 | 78.1 | 84.6 | 83.3 |
| SunGrains | AR09137UC-17-2 * | 70.1 | 82.0 | 93.6 | 66.2 | 65.6 | 79.2 | 76.1 |
| SunGrains | AR11051-15-3 * | 73.0 | 85.9 | 95.9 | 64.9 | 65.8 | 73.5 | 76.5 |
| SunGrains | LA12275LDH-56 * | 77.3 | 79.0 | 91.3 | 69.9 | 63.0 | 75.5 | 76.0 |
| SunGrains | LA15203-LDH112 * | 73.4 | 79.4 | 91.0 | 69.0 | 73.4 | 74.8 | 76.8 |
| SunGrains | LA15203-LDH274 * | 73.3 | 76.2 | 88.2 | 38.6 | 57.3 | 66.0 | 66.6 |
| USG | 3472 | 78.3 | 88.8 | 95.2 | 63.9 | 72.0 | 86.8 | 80.8 |
| VCIA | Liberty 5658 | 72.5 | 66.1 | 89.2 | 86.6 | 61.1 | 83.4 | 76.5 |
| Overall Mean |  | 75.9 | 83.0 | 95.0 | 67.6 | 68.6 | 82.0 | 78.7 |

'Variety followed by an asterisk indicates an experimental entry.

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

| Brand | Variety ${ }^{1}$ | Coldwater | Verona | Beaumont | Bolton | Stoneville | Overall avg. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | bu/A | bu/A | bu/A | bu/A | bu/A | bu/A |
| AgriMAXX | 473 | 72.0 | 85.1 | 70.0 | 73.2 | 84.7 | 77.0 |
| AgriMAXX | 503 | 67.9 | 94.5 | 55.9 | 58.8 | 81.4 | 71.7 |
| AgSouth Genetics | AGS 2055 | 77.8 | 91.4 | 73.5 | 68.0 | 75.5 | 77.2 |
| Delta Grow | 1000 | 69.1 | 88.8 | 72.1 | 72.0 | 86.4 | 77.7 |
| Delta Grow | 3500 | 68.0 | 84.5 | 68.7 | 71.0 | 62.9 | 71.0 |
| Dyna-Gro | 9002 | 77.7 | 89.3 | 61.9 | 73.7 | 81.3 | 76.8 |
| Dyna-Gro | 9120 | 73.4 | 90.7 | 65.3 | 72.5 | 76.9 | 75.7 |
| Dyna-Gro | 9701 | 75.0 | 86.4 | 69.1 | 71.8 | 82.3 | 76.9 |
| Dyna-Gro | 9811 | 75.7 | 88.1 | 76.9 | 75.0 | 78.3 | 78.8 |
| GoWheat | 2032 | 67.9 | 88.5 | 49.4 | 62.6 | 71.2 | 67.9 |
| GoWheat | 2058 | 78.2 | 90.0 | 78.6 | 74.1 | 80.6 | 80.3 |
| GoWheat | 6000 | 74.0 | 90.8 | 58.9 | 61.4 | 70.2 | 71.1 |
| GoWheat | LA754 | 71.7 | 84.4 | 69.4 | 52.6 | 55.8 | 66.8 |
| Progeny Ag | \#BULLET | 69.4 | 86.9 | 67.6 | 73.8 | 85.6 | 76.7 |
| Progeny Ag | \#TURB0 | 71.8 | 82.4 | 75.4 | 63.8 | 73.1 | 73.3 |
| Progeny Ag | \#BINGO | 79.1 | 91.0 | 70.8 | 69.0 | 81.0 | 78.2 |
| SunGrains | AR09137UC-17-2 * | 67.1 | 87.1 | 61.7 | 71.3 | 68.7 | 71.2 |
| VCIA | Liberty 5658 | 70.3 | 86.5 | 82.5 | 60.5 | 76.3 | 75.2 |
| Overall Mean |  | 72.6 | 88.1 | 68.2 | 68.1 | 76.2 | 74.6 |

## MSU Coastal R\&E Center, Beaumont

## Crop Summary

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

Planting date .... November 5
Harvest date ....June 3
Soil type . ....... .McLaurin sandy loam
Soil pH .......... 6.2
Soil fertility .....P=M; K=M
Previous crop ...Grain Sorghum (2021 growing season)
Fertilizer ........ Preplant - 13-13-13 @ $250 \mathrm{lb} / \mathrm{A}$
Topdress — N @ $33 \mathrm{lb} / \mathrm{A}(33-0-0-12 \mathrm{~S})$, P\&K @ 25 lb
(0-20-20) on January 31; N @ $66 \mathrm{lb} / \mathrm{A}(33-0-0-12 \mathrm{~S})$
on March 11
Herbicide . . . . . . Preemergence - Gramoxone SL 2.0 @ 32 oz/A on November 5

Table 7. Yields of 57 wheat varieties at MSU Coastal R\&E Center, Beaumont (McLaurin sandy loam soil).

| Brand | Variety ${ }^{1}$ | $\begin{gathered} \text { 2021-2022 } \\ \text { yield } \end{gathered}$ | 2-year avg. | 3-year avg. | Plant height | Lodging score | Date headed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | bu/A | bu/A | bu/A | in | (1-5) |  |
| Pioneer | 26 R 41 | 72.8 | - | - | 30 | 1 | 4/6 |
| Delta Grow | 3500 | 72.6 | 74.0 | 68.7 | 40 | 4 | 4/4 |
| Progeny Ag | \#CHAD | 72.1 | - | - | 35 | 1 | 4/3 |
| VCIA | Liberty 5658 | 70.5 | 86.6 | 82.5 | 37 | 1 | 4/5 |
| Progeny Ag | \#TURB0 | 69.5 | 77.8 | 75.4 | 35 | 1 | 4/3 |
| SunGrains | GA 121012-19LE8 * | 68.6 | - | - | 34 | 2 | 3/29 |
| AgSouth Genetics | AGS 3022 | 68.5 | - | - | 36 | 2 | 3/28 |
| Dyna-Gro | 9811 | 68.1 | 80.7 | 76.9 | 34 | 2 | 4/5 |
| Progeny Ag | 21-2 | 68.0 | - | - | 33 | 1 | 4/6 |
| Progeny Ag | 21-1 | 67.6 | - | - | 36 | 1 | 4/6 |
| Delta Grow | 1800 | 67.5 | - | - | 35 | 4 | 4/10 |
| Progeny Ag | \#BUSTER | 67.2 | - | - | 37 | 1 | 4/8 |
| Revere Seed | X22A | 67.0 | - | - | 34 | 1 | 4/7 |
| GoWheat | LA754 | 66.6 | 73.5 | 69.4 | 34 | 1 | 4/4 |
| GoWheat | 2058 | 65.6 | 76.9 | 78.6 | 28 | 1 | 4/9 |
| AgSouth Genetics | AGS 2055 | 65.4 | 75.6 | 73.5 | 38 | 1 | 4/6 |
| AgriMAXX | 514 | 64.6 | 67.4 | - | 36 | 4 | 4/8 |
| Dyna-Gro | WX20738 | 63.7 | 74.4 | - | 35 | 3 | 4/6 |
| SunGrains | GA 111055-19LE12 * | 63.3 | - | - | 37 | 2 | 4/9 |
| SunGrains | GA 151313-LDH224-19E38 * | 63.3 | - | - | 37 | 3 | 4/3 |
| SunGrains | LA15203-LDH112* | 63.0 | 69.0 | - | 31 | 2 | 4/6 |
| SunGrains | AR11051-15-3 * | 62.2 | 64.9 | - | 36 | 1 | 4/5 |
| Progeny Ag | \#BINGO | 62.2 | 69.3 | 70.8 | 34 | 1 | 4/7 |
| SunGrains | LANC11558-33* | 62.1 | - | - | 34 | 3 | 4/4 |
| SunGrains | LA13154D-WN1 * | 61.6 | - | - | 37 | 1 | 3/21 |
| USG | 3472 | 61.6 | 63.9 | - | 36 | 1 | 4/8 |
| Dixie Bell | DB702 | 61.5 | - | - | 34 | 1 | 4/7 |
| Delta Grow | 1200 | 61.0 | 68.8 | - | 38 | 4 | 4/9 |
| Delta Grow | 1000 | 60.9 | 69.8 | 72.1 | 38 | 4 | 4/8 |
| AgriMAXX | 516 | 59.9 | 69.5 | - | 38 | 3 | 4/9 |
| SunGrains | AR09137UC-17-2 * | 59.9 | 66.2 | 61.7 | 39 | 1 | 4/4 |
| SunGrains | LA12275LDH-56 * | 59.7 | 69.9 | - | 39 | 3 | 4/5 |
| Dixie Bell | DB918 | 58.1 | - | - | 34 | 1 | 4/7 |
| AgriMAXX | 473 | 57.8 | 68.7 | 70.0 | 38 | 4 | 4/10 |
| Dyna-Gro | 9393 | 57.0 | - | - | 31 | 3 | 4/7 |
| Dyna-Gro | 9172 | 56.6 | 71.2 | - | 35 | 3 | 4/6 |
| USG | 3783 | 56.3 | - | - | 34 | 1 | 4/9 |
| Dyna-Gro | 9002 | 55.6 | 60.9 | 61.9 | 34 | 3 | 4/8 |
| Dyna-Gro | 9120 | 55.5 | 67.1 | 65.3 | 30 | 3 | 4/10 |
| GoWheat | 6056 | 55.4 | - | - | 32 | 1 | 4/6 |
| Progeny Ag | 21-4 | 55.4 | - | - | 29 | 1 | 4/12 |
| Progeny Ag | \#BULLET | 55.0 | 63.8 | 67.6 | 40 | 2 | 4/3 |
| Pioneer | 26R59 | 53.6 | - | - | 32 | 1 | 4/8 |
| Dyna-Gro | 9701 | 52.2 | 66.6 | 69.1 | 34 | 2 | 4/8 |
| VCIA | VA17W-75 | 52.1 | - | - | 29 | 1 | 3/28 |
| Pioneer | 26R36 | 51.8 | - | - | 30 | 1 | 4/12 |

Continued.

8 Mississippi Wheat and Oat Variety Trials, 2022

Table 7 (continued). Yields of 57 wheat varieties at MSU Coastal R\&E Center, Beaumont (McLaurin sandy loam soil).
$\left.\begin{array}{|llcccccc}\hline \text { Brand } & \text { Variety }{ }^{1} & \begin{array}{c}\text { 2021-2022 } \\ \text { yield }\end{array} & \begin{array}{c}\text { 2-year } \\ \text { avg. }\end{array} & \begin{array}{c}\text { 3-year } \\ \text { avg. }\end{array} & \begin{array}{c}\text { Plant } \\ \text { height }\end{array} & \begin{array}{c}\text { Lodging } \\ \text { score }\end{array} \\ \text { headed }\end{array}\right]$

## Triple R Farms, Bolton

## Crop Summary

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

Planting date . . . . November 9
Harvest date .... June 8
Soil type . . . . . . . . . Loring silt loam
Soil pH . . . . . . . . . 6.5
Soil fertility .....P=M; K=M
Previous crop ...Soybean
Fertilizer . . . . . . .Preplant - 13-13-13 @ $250 \mathrm{lb} / \mathrm{A}$ on November 9 Topdress - N @ $130 \mathrm{lb} / \mathrm{A}(33-0-0-12 \mathrm{~S})$ on March 1
Herbicide . . . . . . Preemergence - Gramoxone SL 2.0 @ 32 oz/A
Postemergence - Harmony Extra SG @ $0.9 \mathrm{oz} / \mathrm{A}$, Axial XL @ 16.5 oz/A on March 1

Table 8. Yields of 57 wheat varieties at Triple R Farms, Bolton (Loring silt loam).

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

10 Mississippi Wheat and Oat Variety Trials, 2022

|  | Table $\mathbf{8}$ (continued). Yields of $\mathbf{5 7}$ wheat varieties at Triple R Farms, Bolton (Loring silt loam). |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |

## Jerry Slocum Farms, Coldwater

## Crop Summary

The wheat plots were planted no-till into soybean residue following the previous season's crop. The plots were planted in early November into soil with adequate moisture for germination. All plots quickly emerged to a good stand. Timely fertilizer applications and rainfall allowed for good yield potential. Harvest was completed in a timely manner, and good yields were observed at this location.

Planting date . . . November 10
Harvest date . . . . June 14
Soil type . . . . . . . Loring-Grenada silt loams
Soil pH ......... 6.3
Soil fertility . . . . .P=M; K=M
Previous crop ...Soybean
Fertilizer . . . . . . .Topdress — N @ $21 \mathrm{Ib} / \mathrm{A}(21-0-0-24 \mathrm{~S}$ ) on February 11; N @ $99 \mathrm{lb} / \mathrm{A}(33-0-0-12 \mathrm{~S})$ on March 23
Herbicide .......Preemergence - Parazone 3SL (Paraquat $3 \mathrm{lb} /$ gal) @ 32 oz/A, Zidua SC @ 2 oz/A
Postemergence - Axial Bold @ 15 oz/A, Quelex @ $0.75 \mathrm{oz} / \mathrm{A}$ on March 4
Insecticide ..... Lambda-cyhalothrin @ 2 oz/A on March 4

| Brand | Variety ${ }^{1}$ | $\begin{gathered} 2021-2022 \\ \text { yield } \end{gathered}$ | 2-year avg. | 3-year avg. | Plant height | Lodging score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | bu/A | bu/A | bu/A | in | (1-5) |
| Dyna-Gro | WX20738 | 80.1 | 78.1 | - | 34 | 1 |
| Progeny Ag | 21-1 | 77.7 | - | - | 33 | 1 |
| GoWheat | LA754 | 75.3 | 77.3 | 71.7 | 34 | 1 |
| USG | 3352 | 74.2 | . |  | 34 | 1 |
| AgSouth Genetics | AGS 3022 | 72.4 | - | - | 34 | 1 |
| AgriMAXX | 503 | 72.4 | 86.8 | 67.9 | 34 | 1 |
| Progeny Ag | \#CHAD | 72.4 | - | , | 28 | 1 |
| GoWheat | 2058 | 72.3 | 79.3 | 78.2 | 32 | 1 |
| Dixie Bell | DB702 | 70.9 | - | - | 32 | 1 |
| USG | 3472 | 70.6 | 78.3 | - | 33 | 1 |
| SunGrains | LA12275LDH-56 * | 70.4 | 77.3 | - | 40 | 1 |
| Delta Grow | 1800 | 70.3 | - | - | 39 | 1 |
| AgriMAXX | EXP 2105 | 70.2 | - | - | 35 | 1 |
| Progeny Ag | 20-2 | 69.9 | - | - | 34 | 1 |
| Progeny Ag | 21-4 | 69.8 | - | - | 35 | 1 |
| Revere Seed | X22A | 69.8 | - | - | 29 | 1 |
| Pioneer | 26R41 | 69.8 | - | - | 34 | 1 |
| Progeny Ag | \#BING0 | 69.1 | 79.0 | 79.1 | 29 | 1 |
| USG | 3783 | 68.8 | - | - | 32 | 1 |
| Progeny Ag | \#BUSTER | 68.0 | - | - | 31 | 1 |
| AgSouth Genetics | AGS 2055 | 68.0 | 79.0 | 77.8 | 35 | 1 |
| Pioneer | 26R36 | 67.9 | - | - | 33 | 1 |
| VCIA | VA17W-75 | 67.8 | - | - | 35 | 1 |
| SunGrains | GA 151313-LDH224-19E38 * | 67.7 | - | - | 32 | 1 |
| Delta Grow | 1200 | 67.7 | 75.9 | - | 32 | 1 |
| GoWheat | 6056 | 67.6 | - | - | 32 | 1 |
| Dyna-Gro | 9120 | 67.0 | 75.0 | 73.4 | 32 | 1 |
| GoWheat | 6000 | 67.0 | 80.0 | 74.0 | 33 | 1 |
| Progeny Ag | 21-2 | 66.9 | - | - | 29 | 1 |
| Pioneer | 26R59 | 66.8 | - | - | 32 | 1 |
| AgriMAXX | 516 | 66.6 | 79.2 | - | 35 | 1 |
| Progeny Ag | \#TURBO | 66.5 | 75.3 | 71.8 | 35 | 1 |
| AgriMAXX | 514 | 66.3 | 83.1 | - | 34 | 1 |
| AgriMAXX | 513 | 66.2 | 77.2 | - | 36 | 1 |
| Dyna-Gro | 9002 | 66.0 | 77.3 | 77.7 | 33 | 1 |
| SunGrains | LA15203-LDH112* | 65.8 | 73.4 | - | 35 | 1 |
| Revere Seed | 2169 | 65.6 | 78.2 | - | 34 | 1 |
| Dyna-Gro | 9811 | 65.6 | 75.7 | 75.7 | 35 | 1 |
| Dixie Bell | DB918 | 65.1 | - | - | 29 | 1 |
| SunGrains | LA13154D-WN1* | 64.3 | - | - | 36 | 1 |
| SunGrains | AR11051-15-3 * | 64.2 | 73.0 | - | 33 | 1 |
| Dyna-Gro | 9701 | 64.1 | 75.3 | 75.0 | 36 | 1 |
| Continued. |  |  |  |  |  |  |

[^0]Table 9 (continued). Yields of 57 wheat varieties at Jerry Slocum Farms, Coldwater (Calloway silt loam soil).

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

## R. R. Foil Plant Science Research Center, Starkville

## Crop Summary

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

Planting date .....November 3
Harvest date .... June 6
Soil type . . . . . . . . .Marietta fine sandy loam
Soil pH ...........6.4
Soil fertility .....P=M; K=M
Previous crop ...Soybean
Fertilizer . . . . . . . .Topdress - N @ $50 \mathrm{lb} / \mathrm{A}(33-0-0-12 \mathrm{~S})$ on February 15; N @ $50 \mathrm{lb} / \mathrm{A}(33-0-0-12 \mathrm{~S})$ on March 24; N @ $50 \mathrm{lb} / \mathrm{A}$ (33-0-0-12S) on April 21
Herbicide ....... Preemergence - Gramoxone SL 2.0 @ 32 oz/A on November 3
Postemergence - Harmony Extra SG @ 0.9 oz/A, Zidua SC @ 1.8 oz/A on February 15

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

[^1]Table 10 (continued). Yields of 57 wheat varieties at R. R. Foil Plant Science Research Center, Starkville (Marietta fine sandy loam).

| Brand | Variety ${ }^{1}$ | $\begin{gathered} 2021-2022 \\ \text { yield } \end{gathered}$ | 2-year avg. | 3-year avg. ${ }^{2}$ | Plant height | Lodging score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | bu/A | bu/A | bu/A | in | (1-5) |
| Pioneer | 26R41 | 63.9 | - | - | 34 | 1 |
| AgSouth Genetics | AGS 3022 | 63.8 | - | - | 31 | 1 |
| Progeny Ag | 21-3 | 63.5 | - | - | 35 | 1 |
| Dixie Bell | DB702 | 63.2 | - | - | 36 | 1 |
| Pioneer | 26R59 | 63.0 | - | - | 32 | 1 |
| GoWheat | LA754 | 63.0 | 76.5 | - | 36 | 1 |
| SunGrains | LA15203-LDH274 * | 62.2 | 76.2 | - | 34 | 1 |
| VCIA | VA17W-75 | 61.8 | - | - | 32 | 1 |
| SunGrains | GA 121012-19LE8 * | 61.3 | - | - | 34 | 1 |
| Pioneer | 26R36 | 60.7 | - | - | 34 | 1 |
| SunGrains | LA13154D-WN1* | 58.6 | - | - | 35 | 1 |
| Delta Grow | 1800 | 57.7 | - | - | 34 | 1 |
| SunGrains | GA 151313-LDH224-19E38 * | 57.6 | - | - | 36 | 1 |
| SunGrains | LANC11558-33 * | 57.3 | - | - | 30 | 1 |
| GoWheat | 2032 | 56.5 | 76.7 | - | 32 | 1 |
| SunGrains | GA 11052-19LE15 * | 53.8 | - | - | 30 | 1 |
| VCIA | Liberty 5658 | 49.6 | 66.1 | - | 34 | 1 |
| Mean |  | 67.1 |  |  |  |  |
| CV |  | 16.1 |  |  |  |  |
| LSD (0.05) |  | 15.2 |  |  |  |  |
| R ${ }^{2}$ |  | 56.3 |  |  |  |  |
| Error DF |  | 171 |  |  |  |  |
| ${ }^{1}$ Variety followed by an asterisk indicates an experimental entry. ${ }^{2}$ No 3-year average. |  |  |  |  |  |  |

## Delta Ranch Eperiment Sation, Stoneville

## Crop Summary

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

Planting date . . .November 8
Harvest date . . . . June 13
Soil type . . . . . . . .Bosket very fine sandy loam
Soil pH .......... 6.2
Soil fertility .... P=H; K=H
Previous crop .. .Soybean
Fertilizer . . . . . . .Preplant — 19-19-19 @ 140 lb/A on November 3
Topdress - N @ $34 \mathrm{lb} / \mathrm{A}(46-0-0)$ on February 24; N @ $48 \mathrm{lb} / \mathrm{A}(46-0-0$ ) on March 31
Herbicide .......Preemergence - Gramoxone SL 2.0 @ 32 oz/A on November 8

Table 11. Yields of 57 wheat varieties at MAFES Delta Branch, Stoneville (Bosket very fine sandy loam soil).

| Brand | Variety ${ }^{1}$ | $\begin{gathered} 2021-2022 \\ y \text { yield } \end{gathered}$ | 2-year avg. | 3-year avg. | Date headed | Plant height | Lodging score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | bu/A | bu/A | bu/A |  | in | (1-5) |
| AgriMAXX | 516 | 84.8 | 91.8 | - | 4/28 | 39 | 1 |
| AgriMAXX | EXP 2105 | 83.5 | - | - | 4/28 | 35 | 1 |
| Dixie Bell | DB702 | 82.5 | - | - | 4/28 | 36 | 1 |
| GoWheat | 2032 | 81.8 | 82.4 | 71.2 | 4/4 | 35 | 1 |
| Progeny Ag | 21-2 | 81.7 | - | - | 4/22 | 30 | 1 |
| Delta Grow | 1000 | 81.5 | 85.7 | 86.4 | 4/28 | 39 | 1 |
| SunGrains | GA 121012-19LE8 * | 81.1 | - | - | 4/22 | 40 | 1 |
| VCIA | Liberty 5658 | 80.2 | 83.4 | 76.3 | 4/19 | 37 | 1 |
| USG | 3352 | 79.9 | - | - | 4/28 | 39 | 1 |
| Progeny Ag | \#BULLET | 79.7 | 88.5 | 85.6 | 4/28 | 38 | 2 |
| AgriMAXX | 473 | 79.7 | 87.6 | 84.7 | 4/28 | 37 | 1 |
| GoWheat | 6000 | 78.9 | 83.2 | 70.2 | 4/28 | 33 | 1 |
| GoWheat | 6056 | 78.8 | - | - | 4/28 | 34 | 1 |
| Delta Grow | 1200 | 78.7 | 92.8 | - | 4/28 | 34 | 1 |
| Pioneer | 26R36 | 78.2 | - | - | 2/24 | 33 | 1 |
| Dyna-Gro | 9172 | 77.2 | 90.0 | - | 4/22 | 35 | 1 |
| USG | 3783 | 76.9 | - | - | 4/28 | 36 | 1 |
| Dyna-Gro | 9002 | 76.8 | 86.1 | 81.3 | 4/28 | 39 | 1 |
| Progeny Ag | 21-4 | 76.7 | - | - | 4/28 | 31 | 1 |
| Progeny Ag | \#TURB0 | 75.8 | 80.8 | 73.1 | 4/20 | 36 | 1 |
| Dixie Bell | DB918 | 75.4 | - | - | 4/25 | 31 | 1 |
| GoWheat | 2058 | 75.4 | 81.2 | 80.6 | 4/19 | 34 | 1 |
| SunGrains | GA 111055-19LE12 * | 73.7 | - | - | 4/24 | 37 | 1 |
| Pioneer | 26R59 | 73.4 | - | - | 4/25 | 32 | 1 |
| Revere Seed | 2266 | 73.2 | - | - | 4/27 | 33 | 1 |
| Dyna-Gro | 9701 | 73.2 | 82.3 | 82.3 | 4/28 | 38 | 2 |
| Delta Grow | 1800 | 72.6 | - | - | 4/20 | 37 | 1 |
| Dyna-Gro | 9811 | 72.6 | 79.9 | 78.3 | 4/20 | 38 | 1 |
| Revere Seed | X22A | 72.3 | - | - | 4/28 | 34 | 1 |
| AgriMAXX | 514 | 71.9 | 88.0 | - | $4 / 5$ | 33 | 1 |
| Revere Seed | 2169 | 71.7 | 84.6 | - | 4/27 | 39 | 1 |
| SunGrains | AR09137UC-17-2 * | 71.6 | 79.2 | 68.7 | 4/22 | 43 | 1 |
| Progeny Ag | 21-3 | 71.4 | - | - | 4/28 | 36 | 1 |
| Delta Grow | 3500 | 71.3 | 76.8 | 62.9 | 4/11 | 35 | 1 |
| AgriMAXX | 503 | 71.3 | 87.2 | 81.4 | 4/28 | 36 | 1 |
| Progeny Ag | 20-2 | 71.2 | - | - | 4/22 | 32 | 1 |
| Progeny Ag | \#BUSTER | 71.2 | - | - | 4/22 | 35 | 1 |
| USG | 3472 | 71.1 | 86.8 | - | 4/28 | 38 | 2 |
| SunGrains | LA13154D-WN1 * | 70.8 | - | - | 4/20 | 41 | 3 |
| Pioneer | 26R41 | 70.7 | - | - | 4/14 | 31 | 1 |
| AgriMAXX | 513 | 69.7 | 79.5 | - | 4/27 | 40 | 1 |
| AgSouth Genetics | AGS 2055 | 69.6 | 80.7 | 75.5 | 4/28 | 37 | 1 |
| SunGrains | LA15203-LDH112* | 69.3 | 74.8 | - | 4/24 | 41 | 1 |
| GoWheat | LA754 | 69.1 | 67.4 | 55.8 | 4/21 | 34 | 3 |
| Dyna-Gro | 9120 | 68.9 | 83.3 | 76.9 | 4/27 | 34 | 1 |

Continued.

16 Mississippi Wheat and Oat Variety Trials, 2022

Table 11 (continued). Yields of 57 wheat varieties at MAFES Delta Branch, Stoneville (Bosket very fine sandy loam soil).

| Brand | Variety ${ }^{1}$ | $\begin{gathered} 2021-2022 \\ \text { yield } \end{gathered}$ | 2-year avg. | 3-year avg. | $\begin{gathered} \text { Date } \\ \text { headed } \end{gathered}$ | Plant height | Lodging score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | bu/A | bu/A | bu/A |  | in | (1-5) |
| AgSouth Genetics | AGS 3022 | 68.5 | - | - | 4/24 | 37 | 1 |
| SunGrains | GA 11052-19LE15 * | 67.9 | - | - | 4/28 | 43 | 1 |
| Dyna-Gro | 9393 | 67.6 | - | - | 4/27 | 32 | 1 |
| Progeny Ag | \#BING0 | 67.2 | 87.2 | 81.0 | 4/28 | 38 | 1 |
| SunGrains | LANC11558-33* | 66.0 | - | - | 4/20 | 32 | 1 |
| SunGrains | GA 151313-LDH224-19E38 * | 65.8 | - | - | 4/19 | 41 | 1 |
| VCIA | VA17W-75 | 65.6 | - | - | 4/14 | 31 | 1 |
| SunGrains | AR11051-15-3 * | 63.9 | 73.5 | - | 4/27 | 40 | 1 |
| Progeny Ag | \#CHAD | 63.6 | - | - | 4/20 | 32 | 1 |
| SunGrains | LA12275LDH-56 * | 63.5 | 75.5 | - | 4/22 | 41 | 1 |
| Dyna-Gro | WX20738 | 62.2 | 72.2 | - | 4/22 | 39 | 1 |
| Progeny Ag | 21-1 | 62.1 | - | - | 4/22 | 32 | 1 |
| SunGrains | LA15203-LDH274 * | 51.4 | 66.0 | - | 4/21 | 40 | 1 |
| Mean |  | 72.8 |  |  |  |  |  |
| CV |  | 9.7 |  |  |  |  |  |
| LSD (0.05) |  | 9.8 |  |  |  |  |  |
| $\mathrm{R}^{2}$ |  | 63.5 |  |  |  |  |  |
| Error DF |  | 171 |  |  |  |  |  |
| ${ }^{1}$ Variety followed by an asterisk indicates an experimental entry. |  |  |  |  |  |  |  |

## Northeast Mississippi Branch, Verona

## Crop Summary

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

| Planting date ...November 2 |  |
| :---: | :---: |
| Harvest date . | .June 7 |
| Soil type | . .Leeper silty clay |
| Soil pH | . .6.4 |
| Soil fertility | . P=M; K=M |
| Previous crop | . .Soybean |
| Fertilizer | . Topdress - N @ $50 \mathrm{lb} / \mathrm{A}(33-0-0-12 \mathrm{~S})$ on February 15; N @ $50 \mathrm{Ib} / \mathrm{A}(33-0-0-12 \mathrm{~S})$ on March 24; N @ $50 \mathrm{lb} / \mathrm{A}(33-0-0-12 \mathrm{~S})$ on April 21 |
| Herbicide | . Preemergence - Gramoxone SL 2.0 @ 32 oz/A on November 4 |
|  | Postemergence - Harmony Extra SG @ 0.9 oz/A, Zidua SC @ 1.8 oz/A on February 15 |

Planting date . . November 2
Soil type .......... Leeper silty clay
Soil pH ............6.4
Soil fertility . . . . . $\mathrm{P}=\mathrm{M} ; \mathrm{K}=\mathrm{M}$
Previous crop ...Soybean
Fertilizer . . . . . . .Topdress - N @ $50 \mathrm{lb} / \mathrm{A}(33-0-0-12 \mathrm{~S})$
on February 15; N @ $50 \mathrm{Ib} / \mathrm{A}(33-0-0-12 \mathrm{~S})$ on March 24; N @ $50 \mathrm{lb} / \mathrm{A}(33-0-0-12 \mathrm{~S})$ on April 21 on November 4 oz/A, Zidua SC @ 1.8 oz/A on February 15

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

18 Mississippi Wheat and Oat Variety Trials, 2022

Table 12 (continued). Yields of 57 wheat varieties at MAFES Northeast Mississippi Branch, Verona.
$\left.\begin{array}{llcccccc}\hline \text { Brand } & \text { Variety } & & \begin{array}{c}\text { 2021-2022 } \\ \text { yield }\end{array} & \begin{array}{c}\text { 2-year } \\ \text { avg. }\end{array} & \begin{array}{c}\text { 3-year } \\ \text { avg. }\end{array} & \begin{array}{c}\text { Plant } \\ \text { height }\end{array} & \begin{array}{c}\text { Lodging } \\ \text { score }\end{array} \\ \text { weight }\end{array}\right]$

## Wheat and Oat Seeds per Pound

| Table 13. Average number of wheat seeds per pound. |  |  |  |
| :---: | :---: | :---: | :---: |
| Brand | Variety | Seeds per pound | Fungicide and/or Insecticide |
| VCIA | VA17W-75 | 14,441 | CruiserMaxx Cereals+Cruiser 5FS |
|  | Liberty 5658 | 13,713 | Foothold Virock+Awaken ST |
| Dyna Gro | 9120 | 13,682 | DynaShield Foothold w/ Awaken |
|  | 9172 | 13,381 | DynaShield Foothold w/ Awaken |
|  | 9701 | 13,407 | DynaShield Foothold w/ Awaken |
|  | 9811 | 12,213 | DynaShield Foothold w/ Awaken |
|  | WX20738 | 11,379 | DynaShield Foothold w/ Awaken |
|  | 9393 | 10,990 | DynaShield Foothold w/ Awaken |
|  | 9002 | 11,478 | DynaShield Foothold w/ Awaken |
| Sungrains | GA 151313-LDH224-19E38 | 14,840 | Vibrance Extreme |
|  | GA 111055-19LE12 | 12,815 | Vibrance Extreme |
|  | GA 121012-19LE8 | 11,140 | Vibrance Extreme |
|  | GA 11052-19LE15 | 10,906 | Vibrance Extreme |
|  | LA12275LDH-56 | 9,743 | CruiserMaxx Vibrance |
|  | LA13154D-WN1 | 11,586 | CruiserMaxx Vibrance |
|  | LA15203-LDH112 | 12,270 | CruiserMaxx Vibrance |
|  | LA15203-LDH274 | 9,998 | CruiserMaxx Vibrance |
|  | LA16020-LDH22 | 10,985 | CruiserMaxx Vibrance |
|  | LANC11558-33 | 11,052 | CruiserMaxx Vibrance |
| Delta Grow | 1000 | 11,845 |  |
|  | 1200 | 13,890 |  |
|  | 1800 | 12,550 |  |
|  | 3500 | 10,407 |  |
| AgriMaxx | 514 | 12,600 | PrimeST |
|  | 513 | 11,500 | PrimeST |
|  | 503 | 11,600 | PrimeST |
|  | 516 | 11,800 | PrimeST |
|  | 473 | 12,400 | PrimeST |
| Uni. Of Arkansas | AR09137UC-17-2 | 12,060 | Gaucho 600 + Vibrance Extreme |
|  | AR11051-15-3 | 10,520 | Gaucho 600 + Vibrance Extreme |
| AgriMaxx | EXP 2105 | 10,600 | PrimeST |
| Revere Seed | 2169 | 12,200 | Radius Premium |
|  | 2266 | 10,600 | Radius Premium |
|  | X22A | 13,000 | Radius Premium |
| USG | 3783 | 11,990 | Ipconazole, metalaxyl, imidicloprid |
| 3352 | 3352 | 10,730 | Ipconazole, metalaxyl, imidicloprid |
| 3472 | 3472 | 12,190 | Ipconazole, metalaxyl, imidicloprid |
| Progeny | \# BULLET | 11,495 | ProServoW |
|  | \#CHAD | 13,270 | ProServoW |
|  | \#BUSTER | 12,420 | ProServoW |
|  | \#BINGO | 12,880 | ProServoW |
|  | \#TURBO | 11,445 | ProServoW |
|  | 21-1 | 10,740 | ProServoW |
|  | 21-2 | 13,800 | ProServoW |
|  | 21-3 | 13,140 | ProServoW |
|  | 20-2 | 11,208 | ProServoW |
| AGS | 2055 | 12,870 | CruiserMaxx, Vibrance Extreme |
| GoWheat | 2058 | 12,034 | CruiserMaxx, Vibrance Extreme |
|  | 2032 | 10,455 | CruiserMaxx, Vibrance Extreme |
|  | LA754 | 9,353 | CruiserMaxx, Vibrance Extreme |
|  | 6000 | 11,603 | CruiserMaxx, Vibrance Extreme |
| Progeny | 21-4 | 13,567 | ProServoW |
| Dixie Bell | DB702 | 13,600 | Foothold Viroc |
|  | DB918 | 10,750 | Cruiser Vibrance Cereals |
| GoWheat | 6056 | 12,420 | CruiserMaxx, Vibrance Extreme |
| Pioneer | 26R36 | 12,500 | LumiGEN |
|  | 26R59 | 10,500 | Lumigen |
|  | 26R41 | 12,000 | LumiGEN |

20 Mississippi Wheat and Oat Variety Trials, 2022

Table 14. Average number of oat seeds per pound.

| Brand | Variety | Treatment | Seeds per pound |
| :--- | :--- | :--- | :--- |
| Sweet Caroline | FL 0720 | Untreated | 15,980 |
| SunGrains | LA14032SBS-163-2 | Untreated | 15,440 |
| SunGrains | LA14105SBS56-1 | Untreated | 14,735 |
| SunGrains | LA15015SB-S50 | Untreated | 14,535 |
| GoWild | Savage | CruiserMaxx, Vibrance Extreme | $11,408$. |

## Summary of Oat Yields

|  |  | Table 15. 2021-2022 yield summary of oat variety trials in Mississippi. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

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

| Brand | Variety | Starkville | Verona | Stoneville | Overall avg. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | bu/A | bu/A | bu/A | bu/A |
| Sweet Caroline | FL 0720 | 119.5 | 68.1 | 90.8 | 92.8 |
| Overall Mean |  | 119.5 | 68.1 | 90.8 | 92.8 |

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

| Brand | Variety | Starkville | Verona | Overall avg. |
| :---: | :---: | :---: | :---: | :---: |
|  |  | bu/A | bu/A | bu/A |
| Sweet Caroline | FL 0720 | 90.6 | 60.1 | 75.4 |
| Overall Mean |  | 90.6 | 60.1 | 75.4 |

## MSU Coastal R\&E Center, Beaumont

## Crop Summary

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

Planting date ...November 5
Harvest date . . . . June 3
Soil type ........McLaurin sandy loam
Soil pH . . . . . . . . . 6.2
Soil fertility . .....P=M; K=M
Previous crop . . .Grain Sorghum (2021 growing season)
Fertilizer ........Preplant - 13-13-13 @ $250 \mathrm{lb} / \mathrm{A}$
Topdress — N @ $33 \mathrm{lb} / \mathrm{A}(33-0-0-12 \mathrm{~S})$, P\&K @ 25 lb
(0-20-20) on January 31; N @ $66 \mathrm{Ib} / \mathrm{A}(33-0-0-12 \mathrm{~S})$ on March 11
Herbicide . . . . . . .Preemergence - Gramoxone SL 2.0 @ 32 oz/A on November 5

|  | Table 18. Yields of five oat varieties at MSU Coastal R\&E Center, Beaumont. |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |

## R. R. Foil Plant Science Research Genter, Starkville

## Crop Summary

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

|  | Table 19. Yield of five oat varieties at R. R. Foil Science Research Center, Starkville. |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Delta Banch Experiment Sation, Stoneville

## Crop Summary

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

Planting date . . .November 8
Harvest date ...June 13
Soil type . . . . . . . Bosket very fine sandy loam
Soil pH .......... 6.2
Soil fertility ....P=H; K=H
Previous crop ...Soybean
Fertilizer ........Preplant - 19-19-19 @ $140 \mathrm{lb} / \mathrm{A}$ on November 3 Topdress — N @ $34 \mathrm{lb} / \mathrm{A}(46-0-0)$ on February 24; N @ $48 \mathrm{Ib} / \mathrm{A}(46-0-0)$ on March 31
Herbicide ...... Preemergence - Gramoxone SL 2.0 @ 32 oz/A on November 8

|  | Table 20. Yield of five oat varieties at Delta Branch Experiment Station, Stoneville. |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |

## Northeast Mississippi Branch, Verona

## Crop Summary

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

| Planting date . . . November 2 |  |
| :---: | :---: |
| Harvest date . . . .June 7 |  |
| Soil type . . . . . . . Leeper silty clay |  |
| Soil pH . ....... . 6.4 |  |
| Soil fertility . . . . .P=M; K=M |  |
| Previous crop . . Soybean |  |
| Fertilizer | .Topdress — N @ $50 \mathrm{lb} / \mathrm{A}$ (33-0-0-12S) <br> on February 15; N @ $50 \mathrm{lb} / \mathrm{A}(33-0-0-12 \mathrm{~S})$ <br> on March 24; N @ $50 \mathrm{lb} / \mathrm{A}(33-0-0-12 \mathrm{~S})$ <br> on April 21 |
| Herbicide | .Preemergence - Gramoxone SL 2.0 @ 32 oz/A on November 4 |
|  | Postemergence - Harmony Extra SG @ 0.9 oz/A on February 15 |


|  | Table 21. Yield of five oat varieties at MAFES Northeast Mississippi Branch, Verona. |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |

## MISSISSIPPI STATE

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MS AGRICULTURAL AND FORESTRY EXPERIMENT STATION

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

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[^0]:    12 Mississippi Wheat and Oat Variety Trials, 2022

[^1]:    14 Mississippi Wheat and Oat Variety Trials, 2022

