VARIETY REPORT

PRELIMINARY PERFORMANCE OF SMALL GRAIN FORAGES IN ALABAMA, 2021-2022

DEPT. SERIES NO. CSES2022: SMALL GRAIN FORAGES
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AUBURN UNIVERSITY, AUBURN AL
JANUARY 13, 2022

THESE TRIALS ARE CONDUCTED THROUGH A COLLABORATION WITH AUBURN UNIVERSITY AND THE UNIVERSITY OF GEORGIA.

MISSION

The mission of the Auburn University Variety Testing Program is to provide research-based, unbiased results on the performance of various crop hybrids, cultivars, and varieties to the agricultural community in our state. We are intent on conducting these trials in a manner that will result in maximum biological yield through methods common to the top-producing farms in Alabama. We are committed to providing this information in a timely manner for its use during the decision-making process. The success of the program rests upon our ability to help Alabama producers provide a safe, dependable source of food and fiber for all families as well as economic sustainability for theirs.

HOW TO INTERPRET RESULTS

The purpose of the variety trial data is to determine whether differences are due to genetic performance. These differences cannot be measured absolutely due to environmental field conditions (rainfall, temperatures, soil fertility, soil type, disease, insects, etc.). Yields may differ between plots of the same entry. This variation is accounted for using experimental design and statistics.

The least significant difference (LSD) is used to determine whether the observed differences between entries are real or are caused by random variation. When using the LSD, two entries may have numerically different values but the values are not statistically different. When two entries are compared and the observed difference is larger than the LSD, the entries are considered statistically different. An alpha level of 0.10 is used, meaning that the differences observed are expected to be real 90% of the time.

The coefficient of variation (CV) is a measure used to compare the amount of random variation within a data set. The lower the CV, the more precise the data set. The model r-square value (0.0-1.0) represents the amount of variation accounted for by the statistical model. As the value increases, the better the variation in the dataset is explained by the model.

Each table is organized in a manner that it is easy to read. The data is sorted from highest yielding to lowest. The bolded values are not statistically different from the highest yielding value.

A dark line in the table visually represents the test average. Any value above the line is equal to or greater than the test average. The numeric value for the test average is at the bottom of the tables.

Test results do not imply recommendation or endorsement by the Auburn University Variety Testing Program.

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AGRICULTURE

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TRIAL MANAGEMENT

Yields are calculated on a dry matter basis. A subsample, taken from each plot, is oven-dried and used to calculate percent dry matter.

TABLE 1 - LOCATION SPECIFIC INFORMATION

Research Center	Chilton	Wiregrass
Location	Clanton	Headland
Plant Date		November 9
Harvest 1		January 7
Harvest 2		
Harvest 3		
Harvest 4		
Tillage		Conventional
Pre-plant Fertilizer		
In Season Fertilizer		
Herbicides		Harmony Extra
Insecticides		
Fungicides		
Test Conducted By	Josh Elmore Mathew Price	Chris Parker

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WHEAT FORAGE

CHILTON RESEARCH AND EXTENSION CENTER

CLANTON, AL

TABLE 2 - DRY MATTER YIELD BY HARVEST TIMING (LB/ACRE)

Variety	Harvest 1	Harvest 2	Harvest 3	Harvest 4	Season Total

Bolded yields are NOT statistically different from the highest yielding entry.
Bolded line in table indicates test average.
N.S. –differences are statistically non-significant.

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OAT FORAGE

CHILTON RESEARCH AND EXTENSION CENTER

CLANTON, AL

TABLE 3 - DRY MATTER YIELD BY HARVEST TIMING (LB/ACRE)

Variety	Harvest 1	Harvest 2	Harvest 3	Harvest 4	Season Total

Bolded yields are NOT statistically different from the highest yielding entry.
Bolded line in table indicates test average.
N.S. –differences are statistically non-significant.

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RYE FORAGE

CHILTON RESEARCH AND EXTENSION CENTER

CLANTON, AL

TABLE 1 - DRY MATTER YIELD BY HARVEST TIMING (LB/ACRE)

Variety	Harvest 1	Harvest 2	Harvest 3	Harvest 4	Season Total

Bolded yields are NOT statistically different from the highest yielding entry.
Bolded line in table indicates test average.
N.S. –differences are statistically non-significant.

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TRITICALE FORAGE

CHILTON RESEARCH AND EXTENSION CENTER

CLANTON, AL

TABLE 5 - DRY MATTER YIELD BY HARVEST TIMING (LB/ACRE)

Variety	Harvest 1	Harvest 2	Harvest 3	Harvest 4	Season Total

Bolded yields are NOT statistically different from the highest yielding entry.
Bolded line in table indicates test average.
N.S. –differences are statistically non-significant.

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WHEAT FORAGE

WIREGRASS RESEARCH AND EXTENSION CENTER

HEADLAND, AL

TABLE 6 - DRY MATTER YIELD BY HARVEST TIMING (LB/ACRE)

Variety	Harvest 1	Harvest 2	Harvest 3	Harvest 4	Season Total
AGS 4023	**781**				
USG 3752	**746**				
AGS 4043	**718**				
SSI30-06	**699**				
AGS 3026	**618**				
GA Gore	215				
Average	629				
LSD at 10% level	308				
CV	43				
Model R-Square	0.65				

Bolded yields are NOT statistically different from the highest yielding entry.
Bolded line in table indicates test average.
N.S. –differences are statistically non-significant.

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OAT FORAGE

WIREGRASS RESEARCH AND EXTENSION CENTER

HEADLAND, AL

TABLE 7 - DRY MATTER YIELD BY HARVEST TIMING (LB/ACRE)

Variety	Harvest 1	Harvest 2	Harvest 3	Harvest 4	Season Total
Intimidator	**1962**				
LA09015SBS-U4	1342				
FL13097-1	1302				
La567	1202				
FL13088-4	884				
FL13084-8	883				
LA99016	496				
Horizon 214	395				
Average	1058				
LSD at 10% level	461				
CV	52				
Model R-Square	0.79				

Bolded yields are NOT statistically different from the highest yielding entry.
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RYE FORAGE

WIREGRASS RESEARCH AND EXTENSION CENTER

HEADLAND, AL

TABLE 8 - DRY MATTER YIELD BY HARVEST TIMING (LB/ACRE)

Variety	Harvest 1	Harvest 2	Harvest 3	Harvest 4	Season Total
FL 405	**2287**				
FL 404 4X	1245				
FL 406	1070				
Swift	975				
Kelly Grazer III	518				
Wrens Abruzzi	483				
SH-05	366				
Aviator	258				
Propower	140				
Average	816				
LSD at 10% level	368				
CV	85				
Model R-Square	0.91				

Bolded yields are NOT statistically different from the highest yielding entry.
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TRITICALE FORAGE

WIREGRASS RESEARCH AND EXTENSION CENTER

HEADLAND, AL

TABLE 9 - DRY MATTER YIELD BY HARVEST TIMING (LB/ACRE)

Variety	Harvest 1	Harvest 2	Harvest 3	Harvest 4	Season Total
FL 08128	586				
20T06	590				
Surge	660				
FL 08110-1	683				
21T01	693				
1143	827				
FL 08094	831				
342	960				
Average	728				
LSD at 10% level	N.S.				
CV	30				
Model R-Square	0.49				

Bolded yields are NOT statistically different from the highest yielding entry.
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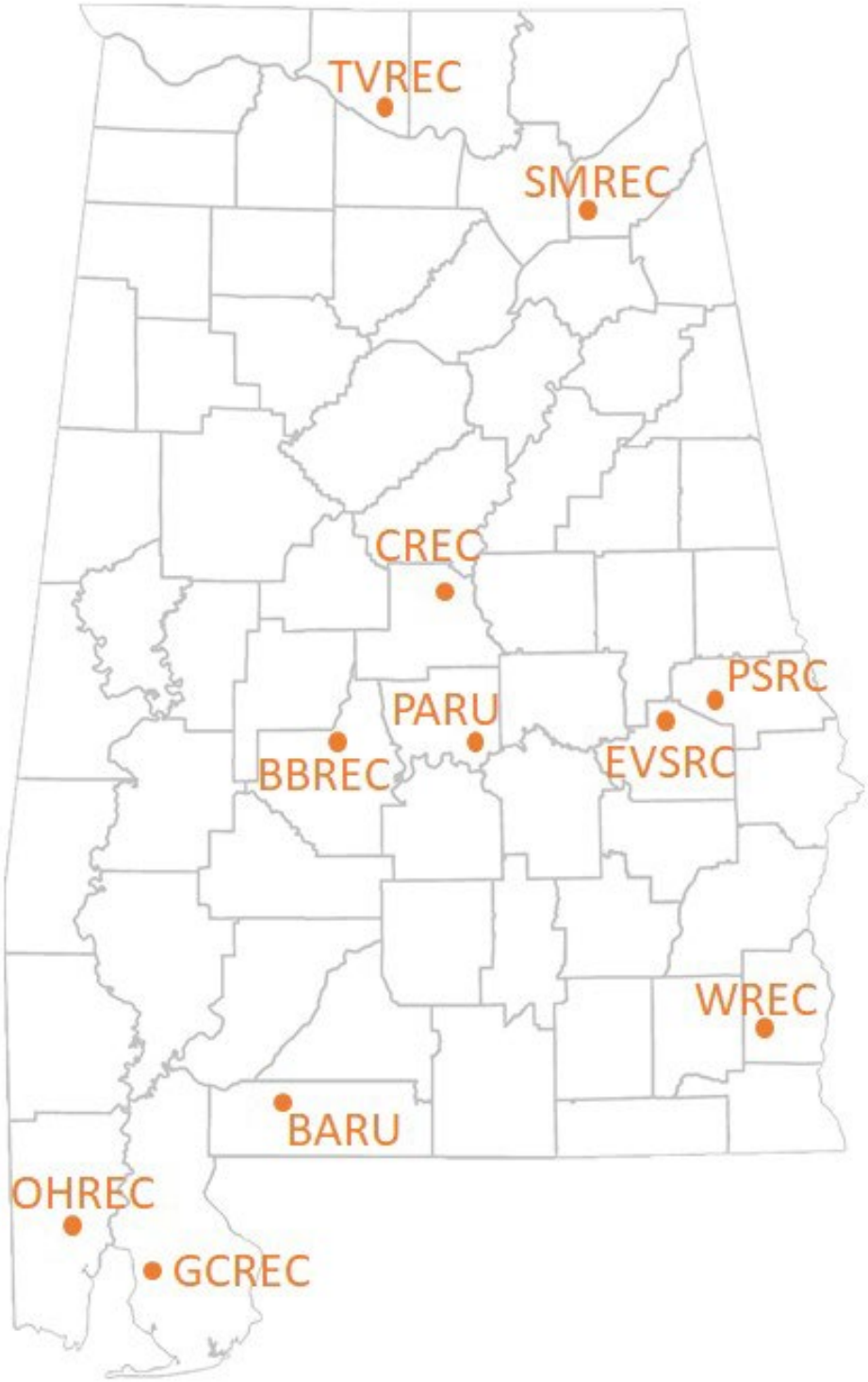

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