

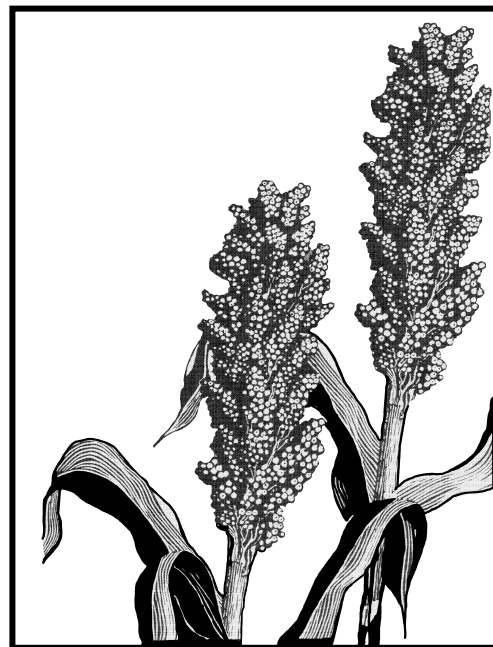
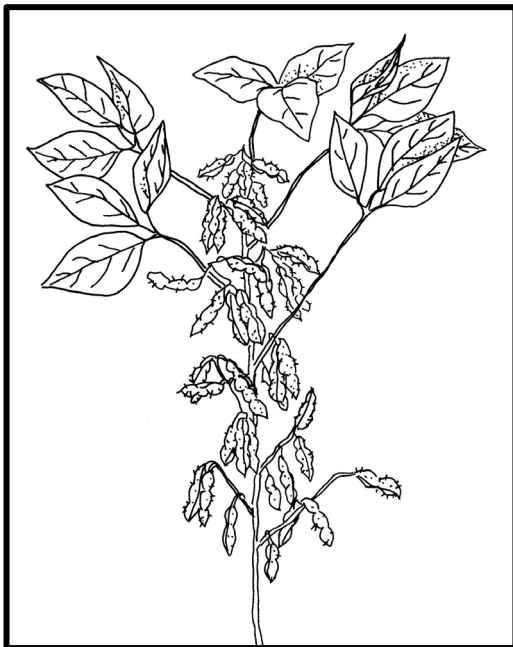
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2018 Soybean, Sorghum Grain and Silage, and Summer Annual Forages Performance Tests

*Daniel J. Mailhot, Dustin G. Dunn, and Henry Jordan Jr.,
Editors*



Conversion Table

U.S. Abbr.	Unit	Approximate Metric Equivalent
Length		
mi	mile	1.609 kilometers
yd	yard	0.9144 meters
ft or ' in or "	foot inch	30.48 centimeters 2.54 centimeters
Area		
sq mi or mi ²	square mile	2.59 square kilometers
acre	acre	0.405 hectares or 4047 square meters
sq ft or ft ²	square foot	0.093 square meters
Volume/Capacity		
gal	gallon	3.785 liters
qt	quart	0.946 liters
pt	pint	0.473 liters
fl oz	fluid ounce	29.573 milliliters or 28.416 cubic centimeters
bu	bushel	35.238 liters
cu ft or ft ³	cubic foot	0.028 cubic meters
Mass/Weight		
ton	ton	0.907 metric ton
lb	pound	0.453 kilogram
oz	ounce	28.349 grams

ACKNOWLEDGMENT

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PREFACE

This research report presents the results of the 2018 statewide performance tests of soybean, sorghum grain and silage, and summer annual forages. The tests for various evaluations were conducted at several or all of the following locations: Tifton, Plains, and Midville in the Coastal Plain region; Griffin and Athens in the Piedmont region; and Calhoun in the Limestone Valley region. For identification of the test site locations, consult the map inside the back cover of this report.

The University of Georgia soybean variety trials are irrigated and conducted at Tifton, Plains, Midville, Griffin, Athens, and Calhoun. In addition, dryland soybean variety trials were conducted at five locations (Midville, Plains, Tifton, Griffin, and Athens), and irrigated ultra-late planted soybean variety trials were conducted at Midville and Attapulgus. All are included in this report.

Agronomic information, such as plant height, lodging, disease occurrence, etc., is listed along with the yield data. Information concerning planting and harvest dates, soil type, and culture and fertilization practices used in each trial is included in footnotes. Since the average yield for several years gives a better indication of a variety's potential than one year's data, multiple-year yield summaries have been included.

In order to have a broad base of information, a number of varieties, including experimental lines, are included in the trials, but this does not imply that all are adapted for Georgia. Varieties best suited to a specific area or for a particular purpose, and agreed upon by College of Agricultural and Environmental Sciences agronomists, are presented in the 2019 Spring Planting Schedule for Georgia (available from your county Extension office). Pesticides used for production practices are included for the benefit of the reader and do not imply any endorsement or preferential treatment by the University of Georgia Agricultural Experiment Stations. For additional information, contact your local county Extension agent or the nearest experiment station.

To aid in comparing hybrids, the least significant difference (LSD) at the 10% level is included in the tables. If the yields of any two hybrids exceed the LSD value, they may be considered different in yield ability. **Bolding** is used in the performance tables to indicate hybrids with yields statistically equal to the highest yielding entry in the test. The standard error (Std. Err.) of an entry mean is included at the bottom of each table to provide a general indicator of the level of precision of each experiment. The lower the value of the standard error of the entry mean, the more precise the experiment.

This report is one of four publications presenting the performance of agronomic crops in Georgia. For more information concerning other crops, refer to one of the following research reports: 2018 Corn Performance Tests (Annual Publication 101-10), 2017-2018 Small Grains Performance Tests (Annual Publication 100-10), and 2017 Peanut, Cotton, and Tobacco Performance Tests (Annual Publication 104-9),

This report, along with performance test information on other crops, is also available online at www.swvt.uga.edu. Additional information may be obtained by writing Daniel J. Mailhot, Crop and Soil Sciences Department, University of Georgia-Griffin, 1109 Experiment Street, Griffin, GA 30223-1797.

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2018 Soybean, Sorghum Grain and Silage, and Summer Annual Forages

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SOYBEAN

Entries in Georgia Soybean Performance Tests, 2018

Brand	Variety	MG Testing Included			Maturity	OVT	Dryland	Ultra-late	Herbicide Tolerance		Seed Treatment
		Dryland	Ultra-late	Tolerance					Tolerance		
AGSouth	AGS 644R2X	6	6	6.4	6	.	.	.	Xtend	Inovate	
AGSouth	AGS 677LL	6	6	6.7	6	.	.	.	LL	Inovate	
AGSouth	AGS 700R2X	7	7	7.0	7	.	.	.	Xtend	Inovate	
AGSouth	AGS 738RR	7	7	7.3	7	Yes	Yes	Yes	RR1	Inovate	
AGSouth	AGS 747LL	7	7	7.4	7	Yes	Yes	Yes	LL	Inovate	
AGSouth	AGS GS48X18	5	5	4.8	5	.	.	.	Xtend	Inovate	
AGSouth	AGS GS51X18S	5	5	5.1	5	.	.	.	Xtend	Inovate	
Armor	X62D60	6	6	6.2	6	.	.	.	Xtend	Defend Extra	
Armor	X65D19	6	6	6.5	6	.	.	.	Xtend	Defend Extra	
Armor	X75D73	7	7	7.5	7	.	.	.	Xtend	Defend Extra	
Asgrow	AG52X9 RR2X/SR	5	5	5.2	5	.	.	.	Xtend	ACC Fung + PV w ACC B-200 SAT	
Asgrow	AG53X9 RR2X	5	5	5.3	5	.	.	.	Xtend	ACC Fung + PV w ACC B-200 SAT	
Asgrow	AG54X9 RR2X	5	5	5.4	5	.	.	.	Xtend	ACC Fung + PV w ACC B-200 SAT	
Asgrow	AG58X9 RR2X	5	5	5.8	5	.	.	.	Xtend	ACC Fung + PV w ACC B-200 SAT	
Asgrow	AG59X9 RR2X	5	5	5.9	5	.	.	.	Xtend	ACC Fung + PV w ACC B-200 SAT	
Asgrow	AG79X9 RR2X/SR	7	7	7.9	7	.	.	.	Xtend	ACC Fung + PV w ACC B-200 SAT	
Clemson	Agustina	7	7	7.5	7	Yes	Yes	Yes	Conv.	None	
Clemson	SC06-306RR	7	7	.	7	.	.	.	RR1	None	
Clemson	SC07-1518RR	7	7	7.5	7	.	.	.	RR1	None	
Clemson	SC10-179	.	.	.	.	Yes	Yes	Yes	Conv.	None
Clemson	SC10-258	.	.	.	.	Yes	Yes	Yes	Conv.	None
Clemson	SC10-406RR	7	7	7.5	7	Yes	Yes	Yes	RR1	None	
Clemson	TN11-5140	5	5	5.0	5	.	.	.	Conv.	None	
Clemson	TN12-5712R2	5	5	5.0	5	.	.	.	RR2	None	
Clemson	TN13-5508R2	5	5	5.0	5	.	.	.	RR2	None	
Credenz	CZ 4820 LL	5	5	4.8	5	.	.	.	LL	Poncho/Votivo, ILeVO, EverGol	
Credenz	CZ 4918 LL	5	5	4.9	5	.	.	.	LL	Poncho/Votivo, ILeVO, EverGol	
Credenz	CZ 4938 LL	5	5	4.9	5	.	.	.	LL	Poncho/Votivo, ILeVO, EverGol	
Credenz	CZ 5147 LL	5	5	5.1	5	Yes	Yes	Yes	LL	Poncho/Votivo, ILeVO, EverGol	
Credenz	CZ 5150 LL	5	5	5.1	5	.	.	.	LL	Poncho/Votivo, ILeVO, EverGol	

Entries in Georgia Soybean Performance Tests, 2018 (Continued)

Brand	Variety	Maturity	MG Testing Included			Herbicide Tolerance	Seed Treatment
			OVT	Dryland	Ultra-late		
Credenz	CZ 5225 LL	5.2	5	.	LL	Poncho/Votivo, ILeVO, EverGol	
Credenz	CZ 5328 LL	5.3	5	.	LL	Poncho/Votivo, ILeVO, EverGol	
Credenz	CZ 5445 LL	5.4	5	.	LL	Poncho/Votivo, ILeVO, EverGol	
Credenz	CZ 5515 LL	5.5	5, 6	.	LL	Poncho/Votivo, ILeVO, EverGol	
Credenz	CZ 5859 LL	5.8	5, 6	.	LL	Poncho/Votivo, ILeVO, EverGol	
Credenz	CZ 5947 LL	5.9	5, 6	.	LL	Poncho/Votivo, ILeVO, EverGol	
Credenz	CZ 6069 LL	6.0	5, 6	.	LL	Poncho/Votivo, ILeVO, EverGol	
Credenz	CZ 6109 LL	6.1	5, 6	Yes	LL	Poncho/Votivo, ILeVO, EverGol	
Credenz	CZ 6316 LL	6.3	5, 6	Yes	LL	Poncho/Votivo, ILeVO, EverGol	
Credenz	CZ 6515 LL	6.5	6, 7	.	LL	Poncho/Votivo, ILeVO, EverGol	
Credenz	CZ 7007 LL	7.0	6, 7	Yes	LL	Poncho/Votivo, ILeVO, EverGol	
Credenz	CZ 7008 LL	7.0	6, 7	.	LL	Poncho/Votivo, ILeVO, EverGol	
Dyna-Gro	S67XT29	6.7	6	.	Xtend	ACC Fung + PV w ACC B-200 SAT	
Dyna-Gro	S69XT57	6.9	6	.	Xtend	Clariva Complete	
Dyna-Gro	S74XT59	7.4	7	.	Xtend	Equity VIP	
Dyna-Gro	S75XT26	7.5	7	Yes	Xtend	Equity VIP	
Dyna-Gro	SX17869XT	6.9	6	.	Xtend	Equity VIP	
GSDC Public Variety	Cook	8.0	7	.	Conv.	None	
Meherrin	SH 5215 LL	5.2	5	Yes	LL	Activa Complete	
Meherrin	SH 5915 LL	5.9	5	Yes	LL	Activa Complete	
Meherrin	SH 6515 LL	6.5	6	Yes	LL	Activa Complete	
Meherrin	SH 6815 LL	6.8	6	Yes	LL	Activa Complete	
Meherrin	SH 7418 LL	7.5	7	Yes	LL	Activa Complete	
MorSoy	MS 5607 RXT	5.6	5	.	Xtend	Activa Complete	
MorSoy	MS 6208 RXT	6.2	6	.	Xtend	Activa Complete	
MorSoy	MS 7057 RXT	7.0	7	.	Xtend	Activa Complete	
MU	MO5201D CONV	5.3	5	.	Conv.	Cruiser + Apron XL + ILEVO + Vibrance + Maxim	
MU	S11-20242C	5.1	5	.	Conv.	Cruiser + Apron XL + ILEVO + Vibrance + Maxim	
MU	S13-1955C	5.5	5	.	Conv.	Cruiser + Apron XL + ILEVO + Vibrance + Maxim	
MU	S14-9017R	5.3	5	.	RR1	Cruiser + Apron XL + ILEVO + Vibrance + Maxim	
MU	S15-10434C	5.5	5	.	Conv.	Cruiser + Apron XL + ILEVO + Vibrance + Maxim	

Entries in Georgia Soybean Performance Tests, 2018 (Continued)

Brand	Variety	Maturity	MG Testing Included			Herbicide Tolerance	Seed Treatment
			OVT	Dryland	Ultra-late		
NK Brand	S57-A7X	5.7	5	5	.	Xtend	Clariva Complete + Mertect
NK Brand	S64-T4X	6.4	6	6	.	Xtend	Clariva Complete + Mertect
NK Brand	S74-M3	7.4	7	7	Yes	RR2	Clariva Complete + Mertect
Pioneer	P55A49X	5.5	5	5	.	Xtend	Apron + Gaucho
Pioneer	P63A47X	6.3	6	6	.	Xtend	Apron + Gaucho
Pioneer	P72A21X	7.2	7	.	.	Xtend	Apron + Gaucho
Pioneer	P76T54R2	7.6	7	7	Yes	RR2	Apron + Gaucho
SCCIA	SC06-306	8.0	7	.	.	RR1	None
SCCIA	SC10-261	8.0	7	.	.	RR1	None
SCCIA Public Variety	Cheraw	8.0	7	.	.	RR1	None
SCCIA Public Variety	Paul	8.0	7	.	.	RR1	None
UGA	G11-1614R2	8.0	7	7	.	RR2	None
UGA	G12-2062R2	7.0	7	.	.	RR2	None
UGA	G12-6543	8.0	7	.	.	LL	None
UGA	G13-2114R2	8.0	7	.	.	RR2	None
UGA	G13-2369R2	8.0	7	.	.	RR2	None
UGA	G13-2454R2	7.0	7	.	.	RR2	None
UGA	G13-2842R2	6.0	6	.	.	RR2	None
UGA	G13-3461R2	8.0	7	.	.	RR2	None
UGA	G13-6241	6.0	6	.	.	Conv.	None
UGA	G14-2478R2	7.0	7	.	.	RR2	None
UGA	G14-2622R2	7.0	7	.	.	RR2	None
UGA	G14-3268R2	8.0	7	.	.	RR2	None
UGA	G14-4316R2	8.0	7	.	.	RR2	None
UGA	G14-4364R2	7.0	7	.	.	RR2	None
UGA	G14-4396R2	8.0	7	.	.	RR2	None
UGA	G14-6063	6.0	6	.	.	Conv.	None
UGA	G15PR-340	6.0	6	.	.	Conv.	None
UGA	G15PRLL-953	8.0	7	.	.	RR1	None
UGA	G15PRLL-989	7.0	7	.	.	LL	None

Entries in Georgia Soybean Performance Tests, 2018 (Continued)

Brand	Variety	Maturity	MG Testing Included		Herbicide Tolerance	Seed Treatment
			OVT	Dryland Ultra-late		
USDA-ARS	N7003CN	7.0	7	7	Yes	Conv.
USDA-ARS	N8002	8.0	7	7	Yes	Conv.
Virginia Tech	V12-1416	5.0	5	.	.	RR1
Virginia Tech	V14-3762	5.0	5	.	.	Rancona Summitt
Virginia Tech	V14-3821	5.0	5	.	.	Rancona Summitt
Virginia Tech	V14-3982	5.0	5	.	.	Rancona Summitt
Virginia Tech	V14-3983	5.0	5	.	.	Rancona Summitt

Summary of Soybean Varietal Characteristics, 2018, Irrigated

Company or Brand Name	Variety	Maturity ¹	Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
<u>Maturity Group V</u>							
AGSouth	AGS GS48X18	4.8	09/25	38	1.8	3323	3.3
AGSouth	AGS GS51X18S	5.1	09/28	39	1.7	3229	3.2
Asgrow	AG52X9 RR2X/SR	5.2	09/29	43	1.4	2770	3.0
Asgrow	AG53X9 RR2X	5.3	10/01	37	1.4	3041	3.3
Asgrow	AG54X9 RR2X	5.4	09/30	31	1.2	2879	2.8
Asgrow	AG58X9 RR2X	5.8	10/10	38	1.8	3209	2.2
Asgrow	AG59X9 RR2X	5.9	10/09	33	1.2	3594	2.3
Clemson	TN11-5140	5.0	10/09	36	1.6	3029	2.5
Clemson	TN12-5712R2	5.0	10/10	30	1.1	3463	2.8
Clemson	TN13-5508R2	5.0	10/04	33	1.6	2837	2.8
Credenz	CZ 4820 LL	4.8	09/26	37	1.9	2777	3.4
Credenz	CZ 4918 LL	4.9	09/27	33	1.5	3093	3.7
Credenz	CZ 4938 LL	4.9	09/30	40	2.2	3295	2.4
Credenz	CZ 5147 LL	5.1	09/26	29	1.3	2958	2.4
Credenz	CZ 5150 LL	5.1	09/30	38	1.9	3381	3.3
Credenz	CZ 5225 LL	5.2	09/30	31	1.8	2991	2.4
Credenz	CZ 5328 LL	5.3	09/28	30	1.6	2393	2.8
Credenz	CZ 5445 LL	5.4	09/29	28	1.6	3004	2.5
Credenz	CZ 5515 LL	5.5	10/02	47	3.6	2905	2.8
Credenz	CZ 5859 LL	5.8	10/04	31	1.4	2713	2.7
Credenz	CZ 5947 LL	5.9	10/10	34	2.3	3335	2.3
Credenz	CZ 6069 LL	6.0	10/08	30	1.4	2488	2.6
Credenz	CZ 6109 LL	6.1	10/10	35	1.4	2795	2.2
Credenz	CZ 6316 LL	6.3	10/10	34	1.3	3338	2.5
Meherrin	SH 5215 LL	5.2	09/28	39	1.6	3435	3.0
Meherrin	SH 5915 LL	5.9	10/01	36	2.7	2857	2.7
MorSoy	MS 5607 RXT	5.6	10/02	33	1.5	2713	2.8
MU	MO5201D CONV	5.3	10/04	25	1.1	2696	3.3
MU	S11-20242C	5.1	09/28	36	3.3	3318	2.4
MU	S13-1955C	5.5	09/30	30	1.7	2997	3.4
MU	S14-9017R	5.3	09/29	32	1.4	3030	3.5
MU	S15-10434C	5.5	10/02	28	1.9	3234	2.9
NK Brand	S57-A7X	5.7	10/08	32	1.0	2872	2.5
Pioneer	P55A49X	5.5	10/01	25	1.0	3293	2.6
Virginia Tech	V12-1416	5.0	10/03	30	1.0	3075	2.0
Virginia Tech	V14-3762	5.0	10/02	27	1.0	2372	3.4
Virginia Tech	V14-3821	5.0	10/10	30	1.3	2114	3.5
Virginia Tech	V14-3982	5.0	10/01	25	1.0	2379	3.1
Virginia Tech	V14-3983	5.0	09/29	24	1.1	2667	2.8
Average			10/02	33	1.6	2972	2.8
LSD at 10% Level			2	2	0.3	174	0.3

Summary of Soybean Varietal Characteristics, 2018, Irrigated (Continued)

Company or Brand Name	Variety	Maturity ¹	Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
<u>Maturity Group VI</u>							
AGSouth	AGS 644R2X	6.4	10/14	34	1.7	3540	2.7
AGSouth	AGS 677LL	6.7	10/11	35	1.7	2983	1.9
Armor	X62D60	6.2	10/13	36	2.0	3095	2.5
Armor	X65D19	6.5	10/14	35	2.5	3108	2.6
Credenz	CZ 5515 LL	5.5	10/05	47	3.9	3067	3.1
Credenz	CZ 5859 LL	5.8	10/07	30	1.5	2843	2.8
Credenz	CZ 5947 LL	5.9	10/12	34	2.7	3296	2.3
Credenz	CZ 6069 LL	6.0	10/10	30	1.3	2544	2.8
Credenz	CZ 6109 LL	6.1	10/11	35	1.7	2787	2.3
Credenz	CZ 6316 LL	6.3	10/15	34	1.6	3472	2.6
Credenz	CZ 6515 LL	6.5	10/19	38	1.8	3467	2.3
Credenz	CZ 7007 LL	7.0	10/16	36	2.7	2952	2.2
Credenz	CZ 7008 LL	7.0	10/18	38	2.7	3398	2.1
Dyna-Gro	S67XT29	6.7	10/11	37	2.6	3086	2.6
Dyna-Gro	S69XT57	6.9	10/18	39	1.6	3088	2.4
Dyna-Gro	SX17869XT	6.9	10/19	39	1.9	3182	2.6
Meherrin	SH 6515 LL	6.5	10/10	38	1.6	2955	1.8
Meherrin	SH 6815 LL	6.8	10/15	38	1.9	3015	2.2
MorSoy	MS 6208 RXT	6.2	10/15	35	1.8	3052	2.1
NK Brand	S64-T4X	6.4	10/14	36	2.3	2992	2.8
Pioneer	P63A47X	6.3	10/15	37	1.9	3801	2.3
UGA	G13-2842R2	6.0	10/15	36	1.5	3065	2.3
UGA	G13-6241	6.0	10/04	33	2.2	2833	2.7
UGA	G14-6063	6.0	10/12	36	1.9	2589	1.8
UGA	G15PR-340	6.0	10/14	37	2.6	3604	2.3
Average			10/13	36	2.1	3113	2.4
LSD at 10% Level			2	2	0.4	181	0.4
<u>Maturity Groups VII and VIII</u>							
AGSouth	AGS 700R2X	7.0	10/21	33	1.2	2922	3.3
AGSouth	AGS 738RR	7.3	10/15	29	1.7	3273	2.0
AGSouth	AGS 747LL	7.4	10/20	33	1.4	2986	3.5
Armor	X75D73	7.5	10/20	34	1.6	3157	2.8
Asgrow	AG79X9 RR2X/SR	7.9	10/26	36	1.1	2600	3.3
Clemson	Agustina	7.5	10/18	32	3.0	2972	4.0
Clemson	SC07-1518RR	7.5	10/27	36	1.2	2933	2.3
Clemson	SC10-406RR	7.5	10/18	36	1.3	3007	2.5

Summary of Soybean Varietal Characteristics, 2018, Irrigated (Continued)

Company or Brand Name	Variety	Maturity ¹	Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
Maturity Groups VII and VIII - continued							
Credenz	CZ 6515 LL	6.5	10/23	32	1.3	3369	2.5
Credenz	CZ 7007 LL	7.0	10/16	33	2.5	2785	2.0
Credenz	CZ 7008 LL	7.0	10/20	34	2.0	3386	2.2
Dyna-Gro	S74XT59	7.4	10/20	33	1.5	3281	2.7
Dyna-Gro	S75XT26	7.5	10/21	35	1.1	2959	2.8
GSDC Public Variety	Cook	8.0	10/19	32	2.2	2927	2.5
Meherrin	SH 7418 LL	7.5	10/18	32	1.4	2671	2.3
MorSoy	MS 7057 RXT	7.0	10/21	32	1.2	3005	2.7
NK Brand	S74-M3	7.4	10/20	32	1.3	2613	2.7
Pioneer	P72A21X	7.2	10/18	30	1.8	2734	3.0
Pioneer	P76T54R2	7.6	10/21	35	1.6	3365	2.8
SCCIA	SC06-306	8.0	10/25	39	1.5	3763	2.0
SCCIA	SC10-261	8.0	10/23	39	2.3	3298	2.5
SCCIA Public Variety	Cheraw	8.0	10/21	31	1.7	2987	2.5
SCCIA Public Variety	Paul	8.0	10/22	30	1.3	4051	1.7
UGA	G11-1614R2	8.0	10/20	36	1.5	3160	4.0
UGA	G12-2062R2	7.0	10/22	34	1.7	2886	3.3
UGA	G12-6543	8.0	10/21	34	1.5	3463	2.8
UGA	G13-2114R2	8.0	10/20	33	1.3	2613	2.2
UGA	G13-2369R2	8.0	10/21	34	1.4	3622	3.5
UGA	G13-2454R2	7.0	10/19	30	1.5	3225	2.7
UGA	G13-3461R2	8.0	10/15	31	1.5	2729	2.0
UGA	G14-2478R2	7.0	10/17	33	1.8	3035	2.8
UGA	G14-2622R2	7.0	10/21	33	1.7	3177	2.5
UGA	G14-3268R2	8.0	10/23	28	1.3	3312	3.2
UGA	G14-4316R2	8.0	10/23	34	1.4	2534	2.7
UGA	G14-4364R2	7.0	10/20	33	1.4	2700	2.8
UGA	G14-4396R2	8.0	10/17	33	2.3	3183	2.5
UGA	G15PRLL-953	8.0	10/23	33	1.8	2789	2.5
UGA	G15PRLL-989	7.0	10/18	34	1.7	2751	2.3
USDA-ARS	N7003CN	7.0	10/22	29	1.6	2679	3.0
USDA-ARS	N8002	8.0	10/26	32	1.8	3149	2.0
Average			10/20	33	1.6	3051	2.7
LSD at 10% Level			2	3	0.6	160	0.5

1. Maturity grouping.
2. Maturity date indicates when 95% of pods are dried.
3. Lodging rating: 1 (all plants erect) to 5 (over 80% of plants down).
4. Seed quality rating: Rated 1 (very good) to 5 (very poor).

Summary of MG V and MG VI Soybean Variety Performance at Six Locations, 2018

Company/Brand	Variety	Maturity	Yield ¹						Statewide Average	
			Tifton	Midville	Plains	Griffin	Athens	Calhoun	2018	2-Year
----- bu/acre -----										
Maturity Group V										
AGSouth	AGS GS48X18	4.8	59.3	64.3	45.3	60.7	72.2	47.0	58.1	.
AGSouth	AGS GS51X18S	5.1	67.7	71.3	54.7	75.7	73.4	43.7	64.4	.
Asgrow	AG52X9 RR2X/SR	5.2	63.0	73.7	46.7	76.7	80.5	57.3	66.3	.
Asgrow	AG53X9 RR2X	5.3	63.3	76.0	46.3	67.3	74.7	49.7	62.9	.
Asgrow	AG54X9 RR2X	5.4	61.0	71.7	44.7	79.3	74.6	41.0	62.1	.
Asgrow	AG58X9 RR2X	5.8	62.7	73.7	56.0	59.7	56.3	50.0	59.7	.
Asgrow	AG59X9 RR2X	5.9	61.0	73.3	50.0	63.0	51.6	59.7	59.8	.
Clemson	TN11-5140	5.0	65.3	73.0	50.7	70.0	57.8	55.0	62.0	62.2
Clemson	TN12-5712R2	5.0	57.7	70.0	47.7	73.0	59.6	51.3	59.9	.
Clemson	TN13-5508R2	5.0	69.3	74.3	55.7	69.7	72.6	54.7	66.0	64.5
Credenz	CZ 4820 LL	4.8	56.0	73.0	45.0	63.3	63.6	51.0	58.7	59.8
Credenz	CZ 4918 LL	4.9	51.3	61.7	40.0	63.0	75.0	45.7	56.1	.
Credenz	CZ 4938 LL	4.9	57.7	71.3	39.0	68.7	56.2	53.3	57.7	.
Credenz	CZ 5147 LL	5.1	68.7	77.7	43.7	72.3	76.8	42.7	63.6	63.7
Credenz	CZ 5150 LL	5.1	61.7	71.3	48.7	62.0	70.1	35.3	58.2	61.3
Credenz	CZ 5225 LL	5.2	53.3	73.7	47.3	70.7	73.8	34.7	58.9	.
Credenz	CZ 5328 LL	5.3	64.7	72.0	46.0	68.3	79.3	35.7	61.0	.
Credenz	CZ 5445 LL	5.4	54.0	72.0	43.0	70.0	79.2	28.0	57.7	.
Credenz	CZ 5515 LL	5.5	54.7	71.3	41.3	65.0	53.5	37.0	53.8	53.6
Credenz	CZ 5859 LL	5.8	63.0	79.3	52.7	72.7	81.1	52.0	66.8	.
Credenz	CZ 5947 LL	5.9	61.3	76.3	46.7	56.0	53.5	45.7	56.6	58.1
Credenz	CZ 6069 LL	6.0	53.3	76.3	52.7	70.7	71.6	57.7	63.7	.
Credenz	CZ 6109 LL	6.1	60.0	76.7	53.3	68.7	65.9	51.3	62.6	.
Credenz	CZ 6316 LL	6.3	58.7	73.0	51.0	60.3	52.9	45.3	56.9	.
Meherrin	SH 5215 LL	5.2	61.7	76.3	50.0	66.0	63.5	37.0	59.1	61.6
Meherrin	SH 5915 LL	5.9	62.0	68.3	52.0	69.0	63.8	47.0	60.4	60.8
MorSoy	MS 5607 RXT	5.6	65.3	76.7	50.7	81.7	80.5	46.7	66.9	65.2
MU	MO5201D CONV	5.3	37.7	66.7	39.7	68.3	79.6	55.7	57.9	.
MU	S11-20242C	5.1	52.0	69.7	50.7	54.7	68.2	28.3	53.9	.
MU	S13-1955C	5.5	60.7	71.7	44.3	73.0	76.6	41.7	61.3	.
MU	S14-9017R	5.3	57.7	71.7	43.0	68.3	73.9	42.3	59.5	.
MU	S15-10434C	5.5	62.7	65.3	36.0	69.0	64.4	38.0	55.9	.
NK Brand	S57-A7X	5.7	59.0	77.0	56.3	64.3	63.0	61.3	63.5	.
Pioneer	P55A49X	5.5	67.0	83.3	42.7	78.3	81.4	51.3	67.3	69.5
Virginia Tech	V12-1416	5.0	57.0	70.0	51.7	76.7	61.5	48.3	60.9	63.0
Virginia Tech	V14-3762	5.0	52.3	57.3	41.7	60.0	78.2	49.3	56.5	.
Virginia Tech	V14-3821	5.0	58.7	66.3	48.0	61.3	75.1	53.0	60.4	.
Virginia Tech	V14-3982	5.0	54.3	66.0	43.3	61.7	75.0	42.3	57.1	.
Virginia Tech	V14-3983	5.0	57.3	68.0	42.7	60.0	75.9	41.7	57.6	.
Average			59.3	71.8	47.2	67.7	69.4	46.4	60.3	61.9
LSD at 10% Level			8.1	6.8	6.2	10.6	7.1	9.2	4.5	3.7
Std. Err. of Entry Mean			3.4	2.9	2.6	4.5	3.0	3.9	1.9	2.7

Summary of MG V and MG VI Soybean Variety Performance at Six Locations, 2018 (Continued)

Company/Brand	Variety	Maturity	Yield ¹						Statewide Average	
			Tifton	Midville	Plains	Griffin	Athens	Calhoun	2018	2-Year
----- bu/acre -----										
Maturity Group VI										
AGSouth	AGS 644R2X	6.4	61.3	67.0	53.3	.	61.3	58.7	60.3	60.4
AGSouth	AGS 677LL	6.7	60.7	81.7	57.3	.	61.5	65.3	65.3	63.8
Armor	X62D60	6.2	67.3	81.7	58.7	.	63.6	61.7	66.6	.
Armor	X65D19	6.5	46.0	71.7	57.3	.	62.7	57.0	58.9	.
Credenz	CZ 5515 LL	5.5	58.0	65.0	45.3	.	53.3	38.7	52.1	.
Credenz	CZ 5859 LL	5.8	61.7	80.3	56.7	.	72.1	54.0	64.9	.
Credenz	CZ 5947 LL	5.9	63.0	66.0	55.0	.	59.6	48.7	58.5	.
Credenz	CZ 6069 LL	6.0	47.7	78.3	53.3	.	77.4	73.0	65.9	.
Credenz	CZ 6109 LL	6.1	64.3	78.3	53.0	.	66.1	50.0	62.4	62.0
Credenz	CZ 6316 LL	6.3	61.0	74.3	54.7	.	58.7	48.7	59.5	59.4
Credenz	CZ 6515 LL	6.5	55.3	71.7	58.3	.	56.5	59.3	60.2	58.5
Credenz	CZ 7007 LL	7.0	69.7	68.3	57.7	.	51.7	48.7	59.2	.
Credenz	CZ 7008 LL	7.0	54.7	72.3	61.7	.	41.3	42.0	54.4	.
Dyna-Gro	S67XT29	6.7	54.7	71.3	59.3	.	64.1	55.0	60.9	.
Dyna-Gro	S69XT57	6.9	65.3	72.7	60.0	.	47.4	56.7	60.4	60.1
Dyna-Gro	SX17869XT	6.9	71.7	72.3	56.7	.	51.5	47.3	59.9	.
Meherrin	SH 6515 LL	6.5	59.3	77.7	55.3	.	60.6	63.3	63.3	62.9
Meherrin	SH 6815 LL	6.8	60.0	68.3	55.0	.	60.8	64.3	61.7	62.2
MorSoy	MS 6208 RXT	6.2	64.7	77.0	60.3	.	60.6	59.0	64.3	.
NK Brand	S64-T4X	6.4	65.7	72.0	56.3	.	62.9	59.7	63.3	63.4
Pioneer	P63A47X	6.3	66.3	72.3	47.0	.	67.8	60.3	62.8	.
UGA	G13-2842R2	6.0	58.0	74.3	59.0	.	53.2	64.0	61.7	62.2
UGA	G13-6241	6.0	57.3	70.0	55.0	.	66.9	46.3	59.1	.
UGA	G14-6063	6.0	60.3	68.3	48.0	.	55.8	63.7	59.2	.
UGA	G15PR-340	6.0	63.3	66.3	60.3	.	53.3	61.7	61.0	.
Average			60.7	72.8	55.8	-	59.6	56.3	61.0	61.5
LSD at 10% Level			7.3	5.8	5.8	-	7.4	10.6	4.5	3.2
Std. Err. of Entry Mean			3.1	2.5	2.4	-	3.1	4.5	1.9	2.1

1. Yields calculated as 60 pounds per bushel at 13% moisture.

Bolded yields are statistically non-significant (p = 0.10 level) from the highest yielding test entry.

Summary of MG VII and MG VIII Soybean Variety Performance at Six Locations, 2018

Company/Brand	Variety	Maturity	2018 Yield ¹						Statewide Average	
			Early-Planted				Late-Planted		2018	2-Year
			Tifton	Midville	Plains	Athens	Griffin	Plains		
----- bu/acre -----										
Maturity Groups VII and VIII										
AGSouth	AGS 700R2X	7.0	60.7	81.3	64.7	.	.	46.3	63.3	56.4
AGSouth	AGS 738RR	7.3	62.3	74.7	62.0	.	.	40.7	59.9	56.3
AGSouth	AGS 747LL	7.4	59.7	70.7	56.3	.	.	37.3	56.0	53.7
Armor	X75D73	7.5	55.7	70.0	59.0	.	.	46.3	57.8	.
Asgrow	AG79X9 RR2X/SR	7.9	48.3	75.7	65.0	.	.	48.3	59.3	.
Clemson	Agustina	7.5	49.0	57.7	49.7	.	.	41.7	49.5	.
Clemson	SC07-1518RR	7.5	52.7	74.0	61.0	.	.	48.3	59.0	.
Clemson	SC10-406RR	7.5	55.0	60.0	50.3	.	.	.	55.1	.
Credenz	CZ 6515 LL	6.5	58.0	74.7	52.7	.	.	44.3	57.4	.
Credenz	CZ 7007 LL	7.0	71.0	71.3	46.3	.	.	46.7	58.8	53.3
Credenz	CZ 7008 LL	7.0	50.7	62.7	53.0	.	.	44.3	52.7	45.8
Dyna-Gro	S74XT59	7.4	61.0	61.7	59.0	.	.	49.0	57.7	.
Dyna-Gro	S75XT26	7.5	54.7	74.7	64.3	.	.	40.3	58.5	54.6
GSDC Public Variety	Cook	8.0	54.7	69.0	49.0	.	.	34.3	51.8	45.9
Meherrin	SH 7418 LL	7.5	64.0	73.3	65.0	.	.	41.3	60.9	57.2
MorSoy	MS 7057 RXT	7.0	61.0	73.3	56.3	.	.	46.7	59.3	55.3
NK Brand	S74-M3	7.4	59.7	77.3	58.0	.	.	51.3	61.6	57.5
Pioneer	P72A21X	7.2	59.3	69.0	60.0	.	.	50.0	59.6	56.2
Pioneer	P76T54R2	7.6	60.0	74.3	61.7	.	.	50.0	61.5	55.2
SCCIA	SC06-306	8.0	50.0	67.7	53.0	.	.	41.0	52.9	.
SCCIA	SC10-261	8.0	45.7	51.0	54.7	.	.	.	50.4	.
SCCIA Public Variety	Cheraw	8.0	52.0	70.0	55.3	.	.	35.7	53.3	48.1
SCCIA Public Variety	Paul	8.0	47.0	79.0	59.7	.	.	42.3	57.0	49.7
UGA	G11-1614R2	8.0	55.3	71.7	66.7	.	.	50.0	60.9	54.0
UGA	G12-2062R2	7.0	62.3	68.7	62.7	.	.	51.3	61.3	54.4
UGA	G12-6543	8.0	44.3	67.7	54.7	.	.	54.7	55.3	53.4
UGA	G13-2114R2	8.0	63.3	77.3	56.7	.	.	44.7	60.5	56.4
UGA	G13-2369R2	8.0	39.0	67.7	55.3	.	.	55.3	54.3	51.7
UGA	G13-2454R2	7.0	50.0	78.3	50.7	.	.	30.0	52.3	52.3
UGA	G13-3461R2	8.0	57.7	69.3	61.3	.	.	49.0	59.3	51.9
UGA	G14-2478R2	7.0	54.3	70.0	62.3	.	.	44.7	57.8	.
UGA	G14-2622R2	7.0	56.0	68.0	43.7	.	.	43.0	52.7	.
UGA	G14-3268R2	8.0	55.0	79.0	55.3	.	.	45.7	58.8	.
UGA	G14-4316R2	8.0	63.3	81.0	55.3	.	.	48.3	62.0	.
UGA	G14-4364R2	7.0	61.3	77.3	61.7	.	.	52.0	63.1	.
UGA	G14-4396R2	8.0	62.3	78.3	50.0	.	.	46.0	59.2	.
UGA	G15PRLL-953	8.0	63.7	75.0	70.3	.	.	47.3	64.1	.
UGA	G15PRLL-989	7.0	64.7	70.0	62.0	.	.	43.7	60.1	.
USDA-ARS	N7003CN	7.0	58.3	73.3	58.0	.	.	36.7	56.6	51.9
USDA-ARS	N8002	8.0	48.3	61.7	67.0	.	.	38.3	53.8	48.8
Average			56.3	71.2	57.7	-	-	44.9	57.6	53.0
LSD at 10% Level			5.9	8.0	10.0	-	-	10.0	6.0	4.3
Std. Err. of Entry Mean			2.5	3.4	4.2	-	-	4.3	2.6	1.6

1. Yields calculated as 60 pounds per bushel at 13% moisture.

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Tifton, Georgia: Soybean Variety Performance, 2018, Irrigated

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
			2018 ----bu/acre----	2-Yr Avg					
<u>Maturity Group V</u>									
Clemson	TN13-5508R2	5.0	69.3	63.8	09/25	27	1.3	3109	2.8
Credenz	CZ 5147 LL	5.1	68.7	66.7	09/19	23	1.7	3277	2.2
AGSouth	AGS GS51X18S	5.1	67.7	.	09/23	37	1.3	2391	3.5
Pioneer	P55A49X	5.5	67.0	69.8	09/22	24	1.0	2263	2.5
MorSoy	MS 5607 RXT	5.6	65.3	63.3	09/23	28	1.0	3097	3.2
Clemson	TN11-5140	5.0	65.3	61.8	10/03	32	1.0	2711	2.7
Credenz	CZ 5328 LL	5.3	64.7	.	09/22	27	2.3	3303	2.5
Asgrow	AG53X9 RR2X	5.3	63.3	.	09/23	32	1.0	2896	3.3
Asgrow	AG52X9 RR2X/SR	5.2	63.0	.	09/22	37	1.3	2898	3.3
Credenz	CZ 5859 LL	5.8	63.0	.	09/29	27	1.0	3040	3.2
Asgrow	AG58X9 RR2X	5.8	62.7	.	10/07	32	1.0	3395	1.8
MU	S15-10434C	5.5	62.7	.	10/03	23	1.3	2762	3.3
Meherrin	SH 5915 LL	5.9	62.0	57.7	09/24	30	4.0	3019	2.8
Credenz	CZ 5150 LL	5.1	61.7	57.8	09/24	36	1.0	3146	3.8
Meherrin	SH 5215 LL	5.2	61.7	62.2	09/20	35	2.3	2907	3.3
Credenz	CZ 5947 LL	5.9	61.3	55.7	10/07	31	1.0	3500	2.3
Asgrow	AG54X9 RR2X	5.4	61.0	.	09/21	25	1.7	3385	3.3
Asgrow	AG59X9 RR2X	5.9	61.0	.	10/08	29	1.7	2670	3.2
MU	S13-1955C	5.5	60.7	.	09/24	25	1.0	3115	3.7
Credenz	CZ 6109 LL	6.1	60.0	.	10/10	25	1.0	2593	2.3
AGSouth	AGS GS48X18	4.8	59.3	.	09/16	35	1.0	3116	3.3
NK Brand	S57-A7X	5.7	59.0	.	10/08	26	1.0	3038	2.7
Credenz	CZ 6316 LL	6.3	58.7	.	10/09	26	1.7	3440	2.7
Virginia Tech	V14-3821	5.0	58.7	.	10/03	28	2.3	3516	3.8
Credenz	CZ 4938 LL	4.9	57.7	.	09/20	37	1.0	2793	2.5
MU	S14-9017R	5.3	57.7	.	09/26	26	1.0	3566	3.8
Clemson	TN12-5712R2	5.0	57.7	.	10/08	26	1.0	3025	3.3
Virginia Tech	V14-3983	5.0	57.3	.	09/19	21	1.0	2840	2.7
Virginia Tech	V12-1416	5.0	57.0	60.5	09/26	26	1.0	2563	1.5
Credenz	CZ 4820 LL	4.8	56.0	54.7	09/15	35	1.3	3173	3.5
Credenz	CZ 5515 LL	5.5	54.7	47.3	09/26	43	1.3	3246	2.8
Virginia Tech	V14-3982	5.0	54.3	.	09/20	20	1.7	3386	2.8
Credenz	CZ 5445 LL	5.4	54.0	.	09/22	25	1.7	3536	2.2
Credenz	CZ 5225 LL	5.2	53.3	.	09/21	27	1.7	2722	2.2
Credenz	CZ 6069 LL	6.0	53.3	.	10/01	28	1.0	2930	2.5
Virginia Tech	V14-3762	5.0	52.3	.	09/23	26	1.0	2587	3.7
MU	S11-20242C	5.1	52.0	.	09/19	29	2.3	3414	1.7
Credenz	CZ 4918 LL	4.9	51.3	.	09/15	30	1.0	2996	4.0
MU	MO5201D CONV	5.3	37.7	.	09/26	18	1.0	2915	3.7
Average			59.3 ⁵	60.1	09/25	29	1.4	3033	2.9
LSD at 10% Level			8.1	7.5	1	2	0.6	189	0.8
Std. Err. of Entry Mean			3.4	3.2	1	1	0.2	80	0.3

Tifton, Georgia: Soybean Variety Performance, 2018, Irrigated (Continued)

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
			2018 ----bu/acre----	2-Yr Avg					
<u>Maturity Group VI</u>									
Dyna-Gro	SX17869XT	6.9	71.7	.	10/14	32	1.3	3093	2.5
Credenz	CZ 7007 LL	7.0	69.7	.	10/10	31	1.3	3056	2.3
Armor	X62D60	6.2	67.3	.	10/10	30	1.0	2656	3.2
Pioneer	P63A47X	6.3	66.3	.	10/08	29	1.0	2914	2.2
NK Brand	S64-T4X	6.4	65.7	.	10/08	32	4.0	2824	3.7
Dyna-Gro	S69XT57	6.9	65.3	60.7	10/11	32	1.3	2933	2.8
MorSoy	MS 6208 RXT	6.2	64.7	.	10/10	30	1.0	2920	2.0
Credenz	CZ 6109 LL	6.1	64.3	61.3	10/06	24	1.0	2934	2.0
UGA	G15PR-340	6.0	63.3	.	10/12	29	1.0	2386	2.5
Credenz	CZ 5947 LL	5.9	63.0	.	10/07	28	1.0	2916	2.7
Credenz	CZ 5859 LL	5.8	61.7	.	09/28	25	1.0	3665	3.5
AGSouth	AGS 644R2X	6.4	61.3	58.3	10/09	25	1.0	3035	3.8
Credenz	CZ 6316 LL	6.3	61.0	59.7	10/10	26	1.0	2635	2.7
AGSouth	AGS 677LL	6.7	60.7	63.2	10/03	24	1.0	2842	1.8
UGA	G14-6063	6.0	60.3	.	10/04	29	1.0	2921	1.8
Meherrin	SH 6815 LL	6.8	60.0	60.0	10/08	31	1.0	3323	2.2
Meherrin	SH 6515 LL	6.5	59.3	59.5	10/04	29	1.0	3509	2.0
Credenz	CZ 5515 LL	5.5	58.0	.	09/27	43	1.0	2956	2.7
UGA	G13-2842R2	6.0	58.0	60.0	10/11	28	1.0	3526	2.0
UGA	G13-6241	6.0	57.3	.	09/22	25	1.0	3136	2.2
Credenz	CZ 6515 LL	6.5	55.3	56.2	10/15	31	1.0	3567	2.5
Credenz	CZ 7008 LL	7.0	54.7	.	10/12	33	1.0	2871	1.7
Dyna-Gro	S67XT29	6.7	54.7	.	10/06	31	1.0	3033	3.2
Credenz	CZ 6069 LL	6.0	47.7	.	10/03	26	1.0	3063	3.0
Armor	X65D19	6.5	46.0	.	10/09	30	1.0	3219	3.2
Average			60.7 ⁶	59.9	10/07	29	1.2	3037	2.6
LSD at 10% Level			7.3	NS	1	2	0.3	189	0.8
Std. Err. of Entry Mean			3.1	2.0	1	1	0.1	80	0.3
<u>Maturity Groups VII and VIII</u>									
Credenz	CZ 7007 LL	7.0	71.0	51.3	10/12	33	2.0	2785	2.0
UGA	G15PRLL-989	7.0	64.7	.	10/11	33	1.0	2751	2.3
Meherrin	SH 7418 LL	7.5	64.0	57.7	10/11	29	1.0	2671	2.3
UGA	G15PRLL-953	8.0	63.7	.	10/18	33	1.3	2789	2.5
UGA	G13-2114R2	8.0	63.3	57.8	10/16	31	1.0	2613	2.2
UGA	G14-4316R2	8.0	63.3	.	10/17	33	1.0	2534	2.7
AGSouth	AGS 738RR	7.3	62.3	58.0	10/09	29	1.0	3273	2.0
UGA	G12-2062R2	7.0	62.3	55.8	10/15	32	1.0	2886	3.3
UGA	G14-4396R2	8.0	62.3	.	10/09	32	1.7	3183	2.5
UGA	G14-4364R2	7.0	61.3	.	10/16	31	1.0	2700	2.8

Tifton, Georgia:
Soybean Variety Performance, 2018, Irrigated (Continued)

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
			2018 ----bu/acre----	2-Yr Avg					
Maturity Groups VII and VIII - continued									
MorSoy	MS 7057 RXT	7.0	61.0	57.8	10/16	33	1.0	3005	2.7
Dyna-Gro	S74XT59	7.4	61.0	.	10/13	35	1.0	3281	2.7
AGSouth	AGS 700R2X	7.0	60.7	55.3	10/15	32	1.0	2922	3.3
Pioneer	P76T54R2	7.6	60.0	55.0	10/15	36	1.0	3365	2.8
AGSouth	AGS 747LL	7.0	59.7	55.5	10/13	33	1.0	2986	3.5
NK Brand	S74-M3	7.4	59.7	56.7	10/14	31	1.0	2613	2.7
Pioneer	P72A21X	7.2	59.3	55.3	10/15	29	1.0	2734	3.0
USDA-ARS	N7003CN	7.0	58.3	52.3	10/16	31	1.0	2679	3.0
Credenz	CZ 6515 LL	6.5	58.0	45.8	10/15	32	1.0	3369	2.5
UGA	G13-3461R2	8.0	57.7	51.3	10/12	29	1.0	2729	2.0
UGA	G14-2622R2	7.0	56.0	.	10/16	34	1.0	3177	2.5
Armor	X75D73	7.5	55.7	.	10/17	34	1.0	3157	2.8
UGA	G11-1614R2	8.0	55.3	51.0	10/14	35	1.0	3160	4.0
UGA	G14-3268R2	8.0	55.0	.	10/17	26	1.0	3312	3.2
Clemson	SC10-406RR	7.5	55.0	.	10/15	36	1.7	3007	2.5
GSDC Public Variety	Cook	8.0	54.7	61.3	10/10	35	2.0	2927	2.5
Dyna-Gro	S75XT26	7.5	54.7	51.3	10/16	37	1.0	2959	2.8
UGA	G14-2478R2	7.0	54.3	.	10/11	29	1.0	3035	2.8
Clemson	SC07-1518RR	7.5	52.7	.	10/18	38	1.0	2933	2.3
SCCIA Public Variety	Cheraw	8.0	52.0	.	10/16	34	1.0	2987	2.5
Credenz	CZ 7008 LL	7.0	50.7	47.7	10/13	32	1.3	3386	2.2
UGA	G13-2454R2	7.0	50.0	50.2	10/10	29	1.0	3225	2.7
SCCIA	SC06-306	8.0	50.0	.	10/16	40	1.7	3763	2.0
Clemson	Agustina	7.5	49.0	.	10/07	31	3.7	2972	4.0
Asgrow	AG79X9 RR2X/SR	7.9	48.3	.	10/20	35	1.0	2600	3.3
USDA-ARS	N8002	8.0	48.3	46.0	10/17	30	1.7	3149	2.0
SCCIA Public Variety	Paul	8.0	47.0	40.2	10/12	31	1.0	4051	1.7
SCCIA	SC10-261	8.0	45.7	.	10/15	39	3.3	3298	2.5
UGA	G12-6543	8.0	44.3	47.3	10/10	34	1.0	3463	2.8
UGA	G13-2369R2	8.0	39.0	39.7	10/10	35	1.7	3622	3.5
Average			56.3 ⁷	52.0	10/13	33	1.3	3051	2.7
LSD at 10% Level			5.9	4.8	1	2	0.6	160	0.5
Std. Err. of Entry Mean			2.5	2.0	1	1	0.3	68	0.2

Tifton, Georgia:
Soybean Variety Performance, 2018, Irrigated (Continued)

1. Yields calculated as 60 pounds per bushel at 13% moisture.
2. Maturity date indicates when 95% of pods are dried.
3. Lodging rating: 1 (all plants erect) to 5 (over 80% of plants down).
4. Seed quality rating: Rated 1 (very good) to 5 (very poor).
5. CV = 10.0% and df for EMS = 76.
6. CV = 8.8% and df for EMS = 48.
7. CV = 7.7% and df for EMS = 78.

"NS" indicates differences are statistically non-significant ($p = 0.10$ probability level).

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Planted: May 18, 2018.
Harvested: MG V and VI - October 19, 2018.
MG VII and VIII - October 23, 2018.
Seeding Rate: 140,000 seeds per acre in 36" rows.
Soil Type: Tifton loamy sand.
Soil Test: P = Very High, K = High, and pH = 6.5.
Fertilization: 0 lb N, 70 lb P₂O₅, and 130 lb K₂O/acre.
Previous Crop: Corn.
Management: Conventional tillage; Warrant, Select Max, Basagran, and Ultra Blazer used for weed control;
Doubletake, Intrepid Edge, and Tombstone used for insect control; Telone II used for nematode control; irrigated 5.5 inches.

Test conducted by D. Dunn, R. Brooke, M. Cofield, and K. Cawley.

Midville, Georgia: Soybean Variety Performance, 2018, Irrigated

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ²	Plant Height	Lodg. ³	Seed no./lb	Seed Quality ⁴
			2018	2-Yr Avg					
			-----bu/acre-----		date	in	rating		
<u>Maturity Group V</u>									
Pioneer	P55A49X	5.5	83.3	81.2	10/12	27	1.0	.	.
Credenz	CZ 5859 LL	5.8	79.3	.	10/09	31	1.0	.	.
Credenz	CZ 5147 LL	5.1	77.7	66.3	10/07	29	1.0	.	.
NK Brand	S57-A7X	5.7	77.0	.	10/12	31	1.0	.	.
Credenz	CZ 6109 LL	6.1	76.7	.	10/13	37	1.0	.	.
MorSoy	MS 5607 RXT	5.6	76.7	69.8	10/05	33	1.0	.	.
Credenz	CZ 5947 LL	5.9	76.3	68.5	10/13	35	1.3	.	.
Credenz	CZ 6069 LL	6.0	76.3	.	10/12	31	1.3	.	.
Meherrin	SH 5215 LL	5.2	76.3	74.0	10/07	37	1.0	.	.
Asgrow	AG53X9 RR2X	5.3	76.0	.	10/12	36	1.0	.	.
Clemson	TN13-5508R2	5.0	74.3	72.2	10/11	34	1.0	.	.
Asgrow	AG52X9 RR2X/SR	5.2	73.7	.	10/09	42	1.0	.	.
Asgrow	AG58X9 RR2X	5.8	73.7	.	10/13	41	1.3	.	.
Credenz	CZ 5225 LL	5.2	73.7	.	10/04	31	2.7	.	.
Asgrow	AG59X9 RR2X	5.9	73.3	.	10/14	36	1.0	.	.
Credenz	CZ 4820 LL	4.8	73.0	61.7	10/06	35	1.0	.	.
Credenz	CZ 6316 LL	6.3	73.0	.	10/16	38	1.0	.	.
Clemson	TN11-5140	5.0	73.0	69.2	10/13	36	1.0	.	.
Credenz	CZ 5328 LL	5.3	72.0	.	10/06	33	1.7	.	.
Credenz	CZ 5445 LL	5.4	72.0	.	10/06	32	2.3	.	.
Asgrow	AG54X9 RR2X	5.4	71.7	.	10/04	31	1.0	.	.
MU	S13-1955C	5.5	71.7	.	10/05	32	1.7	.	.
MU	S14-9017R	5.3	71.7	.	10/07	30	1.0	.	.
AGSouth	AGS GS51X18S	5.1	71.3	.	10/06	38	1.0	.	.
Credenz	CZ 4938 LL	4.9	71.3	.	10/08	37	1.7	.	.
Credenz	CZ 5150 LL	5.1	71.3	64.0	10/08	38	1.3	.	.
Credenz	CZ 5515 LL	5.5	71.3	61.7	10/08	43	4.0	.	.
Clemson	TN12-5712R2	5.0	70.0	.	10/14	30	1.0	.	.
Virginia Tech	V12-1416	5.0	70.0	67.2	10/12	32	1.0	.	.
MU	S11-20242C	5.1	69.7	.	10/03	33	3.0	.	.
Meherrin	SH 5915 LL	5.9	68.3	66.2	10/11	36	2.0	.	.
Virginia Tech	V14-3983	5.0	68.0	.	10/09	23	1.0	.	.
MU	MO5201D CONV	5.3	66.7	.	10/12	21	1.3	.	.
Virginia Tech	V14-3821	5.0	66.3	.	10/16	27	1.3	.	.
Virginia Tech	V14-3982	5.0	66.0	.	10/06	25	1.0	.	.
MU	S15-10434C	5.5	65.3	.	10/07	28	1.0	.	.
AGSouth	AGS GS48X18	4.8	64.3	.	10/07	38	1.3	.	.
Credenz	CZ 4918 LL	4.9	61.7	.	10/04	35	1.3	.	.
Virginia Tech	V14-3762	5.0	57.3	.	10/09	25	1.0	.	.
Average			71.8 ⁵	68.5	10/09	33	1.4		
LSD at 10% Level			6.8	6.5	1	2	0.5		
Std. Err. of Entry Mean			2.9	2.7	1	1	0.2		

Midville, Georgia: Soybean Variety Performance, 2018, Irrigated (Continued)

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
			2018	2-Yr Avg					
			-----bu/acre-----						
<u>Maturity Group VI</u>									
AGSouth	AGS 677LL	6.7	81.7	70.8	10/14	38	1.0	.	.
Armor	X62D60	6.2	81.7	.	10/13	37	1.3	.	.
Credenz	CZ 5859 LL	5.8	80.3	.	10/11	34	1.0	.	.
Credenz	CZ 6069 LL	6.0	78.3	.	10/13	33	1.0	.	.
Credenz	CZ 6109 LL	6.1	78.3	69.2	10/12	39	1.0	.	.
Meherrin	SH 6515 LL	6.5	77.7	69.8	10/11	40	1.0	.	.
MorSoy	MS 6208 RXT	6.2	77.0	.	10/13	37	1.3	.	.
Credenz	CZ 6316 LL	6.3	74.3	63.3	10/17	37	1.3	.	.
UGA	G13-2842R2	6.0	74.3	67.8	10/16	39	1.0	.	.
Dyna-Gro	S69XT57	6.9	72.7	63.2	10/18	41	1.0	.	.
Credenz	CZ 7008 LL	7.0	72.3	.	10/20	39	2.7	.	.
Pioneer	P63A47X	6.3	72.3	.	10/14	39	1.7	.	.
Dyna-Gro	SX17869XT	6.9	72.3	.	10/21	41	1.3	.	.
NK Brand	S64-T4X	6.4	72.0	62.7	10/15	37	1.7	.	.
Credenz	CZ 6515 LL	6.5	71.7	62.7	10/21	41	1.0	.	.
Armor	X65D19	6.5	71.7	.	10/14	38	2.7	.	.
Dyna-Gro	S67XT29	6.7	71.3	.	10/15	38	2.0	.	.
UGA	G13-6241	6.0	70.0	.	10/10	35	2.7	.	.
Credenz	CZ 7007 LL	7.0	68.3	.	10/14	37	2.7	.	.
UGA	G14-6063	6.0	68.3	.	10/12	38	1.7	.	.
Meherrin	SH 6815 LL	6.8	68.3	64.7	10/15	39	1.3	.	.
AGSouth	AGS 644R2X	6.4	67.0	62.2	10/15	35	1.3	.	.
UGA	G15PR-340	6.0	66.3	.	10/14	38	1.3	.	.
Credenz	CZ 5947 LL	5.9	66.0	.	10/12	33	1.3	.	.
Credenz	CZ 5515 LL	5.5	65.0	.	10/10	45	4.0	.	.
Average			72.8 ⁶	65.6	10/14	38	1.6		
LSD at 10% Level			5.8	4.4	1	2	0.6		
Std. Err. of Entry Mean			2.5	1.9	1	1	0.3		
<u>Maturity Groups VII and VIII</u>									
AGSouth	AGS 700R2X	7.0	81.3	67.7	10/19	41	1.3	.	.
UGA	G14-4316R2	8.0	81.0	.	10/28	39	1.0	.	.
UGA	G14-3268R2	8.0	79.0	.	10/22	35	1.3	.	.
SCCIA Public Variety	Paul	8.0	79.0	66.7	10/20	35	1.3	.	.
UGA	G13-2454R2	7.0	78.3	66.8	10/21	38	1.0	.	.
UGA	G14-4396R2	8.0	78.3	.	10/19	39	2.7	.	.
UGA	G13-2114R2	8.0	77.3	65.3	10/17	37	1.0	.	.
UGA	G14-4364R2	7.0	77.3	.	10/20	39	1.0	.	.
NK Brand	S74-M3	7.4	77.3	71.0	10/20	39	1.0	.	.
Asgrow	AG79X9 RR2X/SR	7.9	75.7	.	10/27	42	1.0	.	.

**Midville, Georgia:
Soybean Variety Performance, 2018, Irrigated (Continued)**

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
			2018	2-Yr Avg					
			-----bu/acre-----						
Maturity Groups VII and VIII - continued									
UGA	G15PRL-953	8.0	75.0	.	10/22	37	2.3	.	.
AGSouth	AGS 738RR	7.3	74.7	65.5	10/17	34	1.0	.	.
Credenz	CZ 6515 LL	6.5	74.7	53.5	10/22	41	1.0	.	.
Dyna-Gro	S75XT26	7.5	74.7	66.8	10/20	39	1.0	.	.
Pioneer	P76T54R2	7.6	74.3	65.2	10/18	41	1.3	.	.
Clemson	SC07-1518RR	7.5	74.0	.	10/29	41	1.0	.	.
MorSoy	MS 7057 RXT	7.0	73.3	65.2	10/25	38	1.0	.	.
USDA-ARS	N7003CN	7.0	73.3	62.3	10/22	29	1.7	.	.
Meherrin	SH 7418 LL	7.5	73.3	67.8	10/19	39	1.0	.	.
UGA	G11-1614R2	8.0	71.7	59.2	10/17	40	1.3	.	.
Credenz	CZ 7007 LL	7.0	71.3	62.8	10/14	39	3.3	.	.
AGSouth	AGS 747LL	7.4	70.7	65.8	10/20	39	1.3	.	.
SCCIA Public Variety	Cheraw	8.0	70.0	.	10/21	34	2.0	.	.
UGA	G14-2478R2	7.0	70.0	.	10/18	39	1.0	.	.
UGA	G15PRL-989	7.0	70.0	.	10/22	37	1.3	.	.
Armor	X75D73	7.5	70.0	.	10/19	39	1.7	.	.
UGA	G13-3461R2	8.0	69.3	58.8	10/17	37	1.0	.	.
GSDC Public Variety	Cook	8.0	69.0	59.5	10/18	35	2.3	.	.
Pioneer	P72A21X	7.2	69.0	62.8	10/16	36	2.0	.	.
UGA	G12-2062R2	7.0	68.7	60.3	10/22	40	1.7	.	.
UGA	G14-2622R2	7.0	68.0	.	10/22	39	1.3	.	.
UGA	G12-6543	8.0	67.7	59.3	10/25	39	1.0	.	.
UGA	G13-2369R2	8.0	67.7	63.0	10/20	37	1.0	.	.
SCCIA	SC06-306	8.0	67.7	.	10/25	45	1.3	.	.
Credenz	CZ 7008 LL	7.0	62.7	59.7	10/20	41	2.0	.	.
USDA-ARS	N8002	8.0	61.7	53.5	10/25	38	2.0	.	.
Dyna-Gro	S74XT59	7.4	61.7	.	10/19	39	1.7	.	.
Clemson	SC10-406RR	7.5	60.0	.	10/21	39	1.0	.	.
Clemson	Agustina	7.5	57.7	.	10/18	35	3.7	.	.
SCCIA	SC10-261	8.0	51.0	.	10/25	43	2.7	.	.
Average			71.2 ⁷	62.9	10/20	38	1.5		
LSD at 10% Level			8.0	5.1	1	2	0.8		
Std. Err. of Entry Mean			3.4	2.2	1	1	0.3		

Midville, Georgia: Soybean Variety Performance, 2018, Irrigated (Continued)

1. Yields calculated as 60 pounds per bushel at 13% moisture.
2. Maturity date indicates when 95% of pods are dried.
3. Lodging rating: 1 (all plants erect) to 5 (over 80% of plants down).
4. Seed quality rating: Rated 1 (very good) to 5 (very poor).
5. CV = 6.9% and df for EMS = 76.
6. CV = 5.9% and df for EMS = 48.
7. CV = 8.3% and df for EMS = 78.

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Planted: June 7, 2018.
Harvested: October 31, 2018.
Seeding Rate: 140,000 seeds per acre in 36" rows.
Soil Type: Dothan sandy loam.
Soil Test: P = Medium, K = Medium, and pH = 6.0.
Fertilization: 30 lb N, 60 lb P₂O₅, and 110 lb K₂O/acre.
Previous Crop: Cotton.
Management: Conventional tillage; Pendimethalin, Choice Trio, Valor, Gramoxone, Reflex, and Select used for weed control; Orthene, Bifenthrin, Double Take, and Radiant used for insect control; COC and Alto used for foliar disease control; Telone II used for nematode control; irrigated 9.25 inches.

Test conducted by R. Brooke, K. Cawley, M. Cofield, D. Dunn, J. Lanier, R. Milton, and T. Woodward.

Plains, Georgia: Soybean Variety Performance, 2018, Irrigated

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
			2018 -----bu/acre-----	2-Yr Avg					
<u>Maturity Group V</u>									
NK Brand	S57-A7X	5.7	56.3	.	10/10	29	1.0	.	.
Asgrow	AG58X9 RR2X	5.8	56.0	.	10/11	33	2.0	.	.
Clemson	TN13-5508R2	5.0	55.7	58.5	10/06	30	2.0	.	.
AGSouth	AGS GS51X18S	5.1	54.7	.	10/01	31	1.0	.	.
Credenz	CZ 6109 LL	6.1	53.3	.	10/10	29	1.0	.	.
Credenz	CZ 5859 LL	5.8	52.7	.	10/09	29	1.3	.	.
Credenz	CZ 6069 LL	6.0	52.7	.	10/07	26	2.0	.	.
Meherrin	SH 5915 LL	5.9	52.0	55.7	09/30	35	3.3	.	.
Virginia Tech	V12-1416	5.0	51.7	54.8	10/03	27	1.0	.	.
Credenz	CZ 6316 LL	6.3	51.0	.	10/12	28	1.0	.	.
MorSoy	MS 5607 RXT	5.6	50.7	56.7	10/05	31	2.3	.	.
MU	S11-20242C	5.1	50.7	.	10/03	34	4.0	.	.
Clemson	TN11-5140	5.0	50.7	57.3	10/09	34	2.0	.	.
Asgrow	AG59X9 RR2X	5.9	50.0	.	10/12	29	1.0	.	.
Meherrin	SH 5215 LL	5.2	50.0	51.7	10/02	30	1.3	.	.
Credenz	CZ 5150 LL	5.1	48.7	54.2	09/28	29	1.7	.	.
Virginia Tech	V14-3821	5.0	48.0	.	10/12	29	1.7	.	.
Clemson	TN12-5712R2	5.0	47.7	.	10/11	31	1.7	.	.
Credenz	CZ 5225 LL	5.2	47.3	.	09/29	28	2.7	.	.
Asgrow	AG52X9 RR2X/SR	5.2	46.7	.	09/30	33	1.0	.	.
Credenz	CZ 5947 LL	5.9	46.7	53.5	10/12	30	2.7	.	.
Asgrow	AG53X9 RR2X	5.3	46.3	.	10/01	31	1.0	.	.
Credenz	CZ 5328 LL	5.3	46.0	.	09/29	27	2.7	.	.
AGSouth	AGS GS48X18	4.8	45.3	.	09/28	33	1.3	.	.
Credenz	CZ 4820 LL	4.8	45.0	47.8	10/02	29	1.7	.	.
Asgrow	AG54X9 RR2X	5.4	44.7	.	10/05	27	1.3	.	.
MU	S13-1955C	5.5	44.3	.	10/01	26	1.3	.	.
Credenz	CZ 5147 LL	5.1	43.7	50.3	09/27	27	2.7	.	.
Virginia Tech	V14-3982	5.0	43.3	.	09/30	23	1.0	.	.
Credenz	CZ 5445 LL	5.4	43.0	.	09/30	28	2.7	.	.
MU	S14-9017R	5.3	43.0	.	10/02	29	1.7	.	.
Pioneer	P55A49X	5.5	42.7	53.2	10/02	21	1.0	.	.
Virginia Tech	V14-3983	5.0	42.7	.	10/02	21	1.0	.	.
Virginia Tech	V14-3762	5.0	41.7	.	10/07	23	1.0	.	.
Credenz	CZ 5515 LL	5.5	41.3	49.0	09/29	38	3.7	.	.
Credenz	CZ 4918 LL	4.9	40.0	.	09/30	26	1.0	.	.
MU	MO5201D CONV	5.3	39.7	.	10/02	23	1.0	.	.
Credenz	CZ 4938 LL	4.9	39.0	.	10/02	29	2.0	.	.
MU	S15-10434C	5.5	36.0	.	09/30	27	4.0	.	.
Average			47.2 ⁵	53.6	10/03	29	1.8		
LSD at 10% Level			6.2	4.5	1	2	0.7		
Std. Err. of Entry Mean			2.6	1.9	1	1	0.3		

**Plains, Georgia:
Soybean Variety Performance, 2018, Irrigated (Continued)**

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
			2018	2-Yr Avg					
			-----bu/acre-----						
<u>Maturity Group VI</u>									
Credenz	CZ 7008 LL	7.0	61.7	.	10/19	37	2.7	.	.
UGA	G15PR-340	6.0	60.3	.	10/13	37	3.7	.	.
MorSoy	MS 6208 RXT	6.2	60.3	.	10/14	33	2.0	.	.
Dyna-Gro	S69XT57	6.9	60.0	64.8	10/19	34	1.7	.	.
Dyna-Gro	S67XT29	6.7	59.3	.	10/13	33	3.7	.	.
UGA	G13-2842R2	6.0	59.0	58.8	10/16	33	1.3	.	.
Armor	X62D60	6.2	58.7	.	10/11	33	2.7	.	.
Credenz	CZ 6515 LL	6.5	58.3	53.8	10/22	37	2.3	.	.
Credenz	CZ 7007 LL	7.0	57.7	.	10/17	35	3.3	.	.
AGSouth	AGS 677LL	6.7	57.3	56.7	10/09	32	1.7	.	.
Armor	X65D19	6.5	57.3	.	10/13	32	3.3	.	.
Credenz	CZ 5859 LL	5.8	56.7	.	10/07	29	2.3	.	.
Dyna-Gro	SX17869XT	6.9	56.7	.	10/18	35	2.3	.	.
NK Brand	S64-T4X	6.4	56.3	55.8	10/13	33	3.7	.	.
Meherrin	SH 6515 LL	6.5	55.3	58.5	10/07	35	1.3	.	.
Credenz	CZ 5947 LL	5.9	55.0	.	10/12	31	3.7	.	.
UGA	G13-6241	6.0	55.0	.	10/04	34	3.7	.	.
Meherrin	SH 6815 LL	6.8	55.0	57.8	10/13	37	2.0	.	.
Credenz	CZ 6316 LL	6.3	54.7	56.8	10/13	28	1.7	.	.
AGSouth	AGS 644R2X	6.4	53.3	58.5	10/15	32	2.0	.	.
Credenz	CZ 6069 LL	6.0	53.3	.	10/11	27	2.0	.	.
Credenz	CZ 6109 LL	6.1	53.0	56.3	10/07	29	1.7	.	.
UGA	G14-6063	6.0	48.0	.	10/13	35	3.3	.	.
Pioneer	P63A47X	6.3	47.0	.	10/14	30	1.7	.	.
Credenz	CZ 5515 LL	5.5	45.3	.	10/01	39	4.0	.	.
Average			55.8 ⁶	57.8	10/12	33	2.5		
LSD at 10% Level			5.8	5.2	1	3	0.7		
Std. Err. of Entry Mean			2.4	2.2	1	1	0.3		
<u>Maturity Groups VII and VIII</u>									
UGA	G15PRLL-953	8.0	70.3	.	10/24	37	2.3	.	.
USDA-ARS	N8002	8.0	67.0	59.0	10/30	32	2.3	.	.
UGA	G11-1614R2	8.0	66.7	59.8	10/19	39	2.7	.	.
Asgrow	AG79X9 RR2X/SR	7.9	65.0	.	10/29	40	1.3	.	.
Meherrin	SH 7418 LL	7.5	65.0	60.7	10/18	36	2.7	.	.
AGSouth	AGS 700R2X	7.0	64.7	57.3	10/23	33	1.3	.	.
Dyna-Gro	S75XT26	7.5	64.3	57.5	10/22	37	1.3	.	.
UGA	G12-2062R2	7.0	62.7	57.3	10/21	36	3.0	.	.
UGA	G14-2478R2	7.0	62.3	.	10/16	35	4.0	.	.
AGSouth	AGS 738RR	7.3	62.0	59.3	10/16	32	3.7	.	.
UGA	G15PRLL-989	7.0	62.0	.	10/18	38	3.3	.	.
UGA	G14-4364R2	7.0	61.7	.	10/19	37	2.7	.	.
Pioneer	P76T54R2	7.6	61.7	54.8	10/23	37	3.0	.	.
UGA	G13-3461R2	8.0	61.3	53.5	10/15	34	3.0	.	.
Clemson	SC07-1518RR	7.5	61.0	.	10/30	38	1.7	.	.

Plains, Georgia: Soybean Variety Performance, 2018, Irrigated (Continued)

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
			2018	2-Yr Avg					
			-----bu/acre-----						
Maturity Groups VII and VIII - continued									
Pioneer	P72A21X	7.2	60.0	58.2	10/17	31	3.0	.	.
SCCIA Public Variety	Paul	8.0	59.7	51.2	10/27	32	1.7	.	.
Dyna-Gro	S74XT59	7.4	59.0	.	10/21	32	2.3	.	.
Armor	X75D73	7.5	59.0	.	10/21	36	2.7	.	.
USDA-ARS	N7003CN	7.0	58.0	55.7	10/24	31	2.7	.	.
NK Brand	S74-M3	7.4	58.0	54.5	10/20	34	2.0	.	.
UGA	G13-2114R2	8.0	56.7	57.7	10/23	37	2.0	.	.
AGSouth	AGS 747LL	7.4	56.3	57.2	10/19	35	2.3	.	.
MorSoy	MS 7057 RXT	7.0	56.3	54.8	10/19	31	1.7	.	.
SCCIA Public Variety	Cheraw	8.0	55.3	49.5	10/20	33	2.7	.	.
UGA	G13-2369R2	8.0	55.3	54.8	10/25	36	2.0	.	.
UGA	G14-3268R2	8.0	55.3	.	10/24	31	2.0	.	.
UGA	G14-4316R2	8.0	55.3	.	10/19	35	2.7	.	.
UGA	G12-6543	8.0	54.7	56.0	10/20	37	3.0	.	.
SCCIA	SC10-261	8.0	54.7	.	10/31	39	2.0	.	.
Credenz	CZ 7008 LL	7.0	53.0	48.5	10/21	34	3.7	.	.
SCCIA	SC06-306	8.0	53.0	.	10/30	39	2.0	.	.
Credenz	CZ 6515 LL	6.5	52.7	.	10/26	34	2.3	.	.
UGA	G13-2454R2	7.0	50.7	54.0	10/20	31	3.0	.	.
Clemson	SC10-406RR	7.5	50.3	.	10/20	35	1.7	.	.
UGA	G14-4396R2	8.0	50.0	.	10/17	35	4.0	.	.
Clemson	Agustina	7.5	49.7	.	10/24	31	3.7	.	.
GSDC Public Variety	Cook	8.0	49.0	42.8	10/21	33	3.3	.	.
Credenz	CZ 7007 LL	7.0	46.3	50.2	10/16	37	3.7	.	.
UGA	G14-2622R2	7.0	43.7	.	10/20	33	3.3	.	.
Average			57.7 ⁷	55.0	10/21	35	2.6		
LSD at 10% Level			10.0	7.7	1	1	0.8		
Std. Err. of Entry Mean			4.2	3.3	1	1	0.4		

1. Yields calculated as 60 pounds per bushel at 13% moisture.

2. Maturity date indicates when 95% of pods are dried.

3. Lodging rating: 1 (all plants erect) to 5 (over 80% of plants down).

4. Seed quality rating: Rated 1 (very good) to 5 (very poor).

5. CV = 9.7% and df for EMS = 76.

6. CV = 7.6% and df for EMS = 48.

7. CV = 12.7% and df for EMS = 78.

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Planted: June 11, 2018.

Harvested: MG V and VI: October 29, 2018.
MG VII and VIII: November 28, 2018.

Seeding Rate: 140,000 seeds per acre in 36" rows.

Soil Type: Greenville sandy loam.

Soil Test: P = Medium, K = High, and pH = 5.9.

Fertilization: 0 lb N, 50 lb P₂O₅, and 70 lb K₂O/acre.

Previous Crop: Peanuts.

Management: Conventional tillage; Valor, Prowl, and Classic used for weed control; Dimilin, Bifenthrin, and Tracer used for insect control; irrigated 5.6 inches.

Test conducted by R. Brooke, K. Cawley, M. Cofield, D. Dunn, W. Jones, and D. Pearce.

Plains, Georgia: Late-Planted Soybean Variety Performance, 2018, Irrigated

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
			2018 ----bu/acre----	2-Yr Avg					
<u>Maturity Groups VII and VIII</u>									
UGA	G13-2369R2	8.0	55.3	49.2	10/31	27	1.0	.	.
UGA	G12-6543	8.0	54.7	50.8	10/29	25	1.0	.	.
UGA	G14-4364R2	7.0	52.0	.	10/25	27	1.0	.	.
UGA	G12-2062R2	7.0	51.3	44.2	10/31	27	1.0	.	.
NK Brand	S74-M3	7.4	51.3	47.7	10/27	23	1.0	.	.
UGA	G11-1614R2	8.0	50.0	45.8	10/30	30	1.0	.	.
Pioneer	P72A21X	7.2	50.0	48.5	10/26	24	1.0	.	.
Pioneer	P76T54R2	7.6	50.0	45.8	10/30	26	1.0	.	.
UGA	G13-3461R2	8.0	49.0	43.8	10/18	25	1.0	.	.
Dyna-Gro	S74XT59	7.4	49.0	.	10/27	25	1.0	.	.
Asgrow	AG79X9 RR2X/SR	7.9	48.3	.	10/30	27	1.0	.	.
UGA	G14-4316R2	8.0	48.3	.	10/28	27	1.0	.	.
Clemson	SC07-1518RR	7.5	48.3	.	11/03	27	1.0	.	.
UGA	G15PRLL-953	8.0	47.3	.	10/31	27	1.0	.	.
Credenz	CZ 7007 LL	7.0	46.7	42.3	10/25	24	1.0	.	.
MorSoy	MS 7057 RXT	7.0	46.7	43.2	10/26	25	1.0	.	.
AGSouth	AGS 700R2X	7.0	46.3	45.3	10/29	25	1.0	.	.
Aarmor	X75D73	7.5	46.3	.	10/26	29	1.0	.	.
UGA	G14-4396R2	8.0	46.0	.	10/25	27	1.0	.	.
UGA	G14-3268R2	8.0	45.7	.	10/29	21	1.0	.	.
UGA	G13-2114R2	8.0	44.7	44.8	10/25	27	1.0	.	.
UGA	G14-2478R2	7.0	44.7	.	10/26	27	1.0	.	.
Credenz	CZ 6515 LL	6.5	44.3	.	10/30	22	1.0	.	.
Credenz	CZ 7008 LL	7.0	44.3	35.3	10/27	28	1.0	.	.
UGA	G15PRLL-989	7.0	43.7	.	10/24	26	1.0	.	.
UGA	G14-2622R2	7.0	43.0	.	10/29	27	1.0	.	.
SCCIA Public Variety	Paul	8.0	42.3	40.8	10/30	21	1.0	.	.
Clemson	Agustina	7.5	41.7	.	10/25	29	1.0	.	.
Meherrin	SH 7418 LL	7.5	41.3	42.7	10/27	25	1.0	.	.
SCCIA	SC06-306	8.0	41.0	.	07/24	31	1.0	.	.
AGSouth	AGS 738RR	7.3	40.7	42.5	10/20	21	1.0	.	.
Dyna-Gro	S75XT26	7.5	40.3	42.7	10/28	26	1.0	.	.
USDA-ARS	N8002	8.0	38.3	36.5	11/04	27	1.0	.	.
AGSouth	AGS 747LL	7.4	37.3	36.3	10/28	25	1.0	.	.
USDA-ARS	N7003CN	7.0	36.7	37.2	10/29	26	1.0	.	.
SCCIA Public Variety	Cheraw	8.0	35.7	28.7	10/27	25	1.0	.	.
GSDC Public Variety	Cook	8.0	34.3	33.3	10/27	25	1.0	.	.
UGA	G13-2454R2	7.0	30.0	38.2	10/26	21	1.0	.	.
SCCIA	SC10-261	8.0	§	.	.	34	1.0	.	.
Clemson	SC10-406RR	7.5	§	.	.	32	1.0	.	.
Average			44.9 ⁵	42.0	10/25	26	1.0		
LSD at 10% Level			10.0	7.1	1	1	-		
Std. Err. of Entry Mean			4.3	3.0	1	1	-		

Plains, Georgia: Late-Planted Soybean Variety Performance, 2018, Irrigated (Continued)

§ Maturity and yields could not be assessed due to excessive green stem.

1. Yields calculated as 60 pounds per bushel at 13% moisture.
2. Maturity date indicates when 95% of pods are dried.
3. Lodging rating: 1 (all plants erect) to 5 (over 80% of plants down).
4. Seed quality rating: Rated 1 (very good) to 5 (very poor).
5. CV = 16.4% and df for EMS = 74.

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Planted: July 10, 2018.

Harvested: November 28, 2018.

Seeding Rate: 140,000 seeds per acre in 36" rows.

Soil Type: Greenville sandy loam.

Soil Test: P = Medium, K = High, and pH = 5.9.

Fertilization: 0 lb N, 50 lb P₂O₅, and 70 lb K₂O/acre.

Previous Crop: Peanuts.

Management: Conventional tillage; Valor, Prowl, and Classic used for weed control; Dimilin, Bifenthrin, and Tracer used for insect control; irrigated 5.6 inches.

Test conducted by R. Brooke, K. Cawley, M. Cofield, D. Dunn, W. Jones, and D. Pearce.

Griffin, Georgia: Soybean Variety Performance, 2018, Irrigated

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
			2018 -----bu/acre-----	2-Yr Avg					
<u>Maturity Group V</u>									
MorSoy	MS 5607 RXT	5.6	81.7	68.5	09/28	37	1.2	2813	3.0
Asgrow	AG54X9 RR2X	5.4	79.3	.	09/27	36	1.0	2961	3.0
Pioneer	P55A49X	5.5	78.3	73.3	09/29	26	1.2	3224	3.3
Asgrow	AG52X9 RR2X/SR	5.2	76.7	.	09/22	41	1.2	2458	3.2
Virginia Tech	V12-1416	5.0	76.7	69.8	09/28	33	1.0	2297	2.3
AGSouth	AGS GS51X18S	5.1	75.7	.	09/25	40	1.0	2804	3.8
MU	S13-1955C	5.5	73.0	.	09/26	31	1.0	2847	3.7
Clemson	TN12-5712R2	5.0	73.0	.	10/04	33	1.3	3234	3.2
Credenz	CZ 5859 LL	5.8	72.7	.	09/27	30	3.3	2733	2.7
Credenz	CZ 5147 LL	5.1	72.3	65.7	09/24	31	1.2	2942	2.5
Credenz	CZ 5225 LL	5.2	70.7	.	09/24	33	1.0	2756	2.5
Credenz	CZ 6069 LL	6.0	70.7	.	10/03	31	1.2	2818	3.0
Credenz	CZ 5445 LL	5.4	70.0	.	09/23	27	1.5	2736	2.8
Clemson	TN11-5140	5.0	70.0	61.7	10/05	36	1.0	2086	2.8
Clemson	TN13-5508R2	5.0	69.7	64.5	09/30	36	1.2	3283	3.3
MU	S15-10434C	5.5	69.0	.	09/27	30	1.0	3655	2.8
Meherrin	SH 5915 LL	5.9	69.0	66.7	09/29	38	1.0	2276	2.7
Credenz	CZ 4938 LL	4.9	68.7	.	09/28	42	1.0	2835	2.3
Credenz	CZ 6109 LL	6.1	68.7	.	10/04	36	1.0	2220	2.2
Credenz	CZ 5328 LL	5.3	68.3	.	09/25	28	1.3	2916	3.2
MU	MO5201D CONV	5.3	68.3	.	10/03	26	1.3	2666	3.5
MU	S14-9017R	5.3	68.3	.	09/27	33	1.5	2737	3.8
Asgrow	AG53X9 RR2X	5.3	67.3	.	09/29	34	1.0	2563	3.7
Meherrin	SH 5215 LL	5.2	66.0	69.7	09/23	44	1.2	3278	3.0
Credenz	CZ 5515 LL	5.5	65.0	59.2	09/29	53	1.2	3162	3.0
NK Brand	S57-A7X	5.7	64.3	.	10/04	36	1.2	2768	2.8
Credenz	CZ 4820 LL	4.8	63.3	64.7	09/20	34	1.0	3254	4.0
Asgrow	AG59X9 RR2X	5.9	63.0	.	10/03	34	1.0	2685	2.2
Credenz	CZ 4918 LL	4.9	63.0	.	09/23	32	1.0	2693	4.2
Credenz	CZ 5150 LL	5.1	62.0	64.7	09/26	39	1.0	2486	3.3
Virginia Tech	V14-3982	5.0	61.7	.	09/29	25	1.8	3366	3.8
Virginia Tech	V14-3821	5.0	61.3	.	10/04	27	1.5	3242	4.3
AGSouth	AGS GS48X18	4.8	60.7	.	09/22	34	1.3	3086	4.0
Credenz	CZ 6316 LL	6.3	60.3	.	10/06	35	1.0	2417	2.7
Virginia Tech	V14-3762	5.0	60.0	.	10/01	30	1.0	2533	4.0
Virginia Tech	V14-3983	5.0	60.0	.	09/25	24	2.3	2926	3.5
Asgrow	AG58X9 RR2X	5.8	59.7	.	10/04	39	1.2	2566	2.5
Credenz	CZ 5947 LL	5.9	56.0	56.2	10/03	33	1.7	3015	2.7
MU	S11-20242C	5.1	54.7	.	09/24	39	2.7	2649	2.5
Average			67.7 ⁵	65.4	09/28	34	1.3	2820	3.1
LSD at 10% Level			10.6	7.2	5	4	0.5	234	0.6
Std. Err. of Entry Mean			4.5	3.0	2	2	0.2	99	0.3

Griffin, Georgia: Soybean Variety Performance, 2018, Irrigated (Continued)

1. Yields calculated as 60 pounds per bushel at 13% moisture.
2. Maturity date indicates when 95% of pods are dried.
3. Lodging rating: 1 (all plants erect) to 5 (over 80% of plants down).
4. Seed quality rating: Rated 1 (very good) to 5 (very poor).
5. CV = 11.6% and df for EMS = 76.

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Planted: May 14, 2018.
Harvested: October 30, 2017.
Seeding Rate: 140,000 seeds per acre in 36" rows.
Soil Type: Cecil sandy loam.
Soil Test: P = Low, K = High, and pH = 6.1.
Fertilization: 0 lb N, 120 lb P₂O₅, and 130 lb K₂O/acre.
Previous Crop: Sorghum.
Management: Conventional tillage; Warrant, Basagran, Ultra Blazer, Classic, and Poast used for weed control; Irrigated 6.9 inches.

Test conducted by H. Jordan, G. Ware, S. Brannon, and H. Jackson.

Trials to evaluate Maturity Groups VI, VII, and VIII were planted at Griffin. However, off-target herbicide drift from an adjoining field severely impacted the plots. The damage was not uniform, and we could not be certain that all varieties were equally harmed. It is the opinion of the editors that the results of this trial may not accurately reflect the genetic performance potential of all the test entries. Since this data is not useful for making decisions and could be misleading if used in making variety selections, it will not be presented in the publication.

Athens, Georgia: Soybean Variety Performance, 2018, Irrigated

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed Size no./lb	Seed Quality ⁴ rating
			2018 ----bu/acre----	2-Yr Avg					
Maturity Group V									
Pioneer	P55A49X	5.5	81.4	77.4	09/28	29	1.0	3265	1.2
Credenz	CZ 5859 LL	5.8	81.1	.	10/06	34	1.7	2440	1.7
MorSoy	MS 5607 RXT	5.6	80.5	76.6	10/01	37	1.3	2602	1.7
Asgrow	AG52X9 RR2X/SR	5.2	80.5	.	09/28	55	2.0	2525	1.8
MU	MO5201D CONV	5.3	79.6	.	10/05	30	1.0	2643	1.8
Credenz	CZ 5328 LL	5.3	79.3	.	09/30	36	1.3	2191	1.7
Credenz	CZ 5445 LL	5.4	79.2	.	09/29	30	1.0	2841	1.3
Virginia Tech	V14-3762	5.0	78.2	.	09/28	33	1.0	2221	1.7
Credenz	CZ 5147 LL	5.1	76.8	77.1	09/29	32	1.0	3006	1.5
MU	S13-1955C	5.5	76.6	.	10/03	35	2.3	2778	2.0
Virginia Tech	V14-3983	5.0	75.9	.	10/01	28	1.0	2607	1.3
Virginia Tech	V14-3821	5.0	75.1	.	10/07	33	1.7	2032	1.7
Credenz	CZ 4918 LL	4.9	75.0	.	09/22	41	2.0	2945	2.2
Virginia Tech	V14-3982	5.0	75.0	.	10/05	29	1.0	2211	1.5
Asgrow	AG53X9 RR2X	5.3	74.7	.	09/27	48	1.7	2928	2.0
Asgrow	AG54X9 RR2X	5.4	74.6	.	10/02	34	1.0	2788	1.3
MU	S14-9017R	5.3	73.9	.	09/22	41	2.0	2921	2.2
Credenz	CZ 5225 LL	5.2	73.8	.	10/06	33	1.0	2711	1.3
AGSouth	AGS GS51X18S	5.1	73.4	.	09/28	49	2.3	2989	1.8
Clemson	TN13-5508R2	5.0	72.6	68.8	10/04	37	2.3	2722	1.5
AGSouth	AGS GS48X18	4.8	72.2	.	09/25	52	3.0	3176	1.8
Credenz	CZ 6069 LL	6.0	71.6	.	10/09	34	2.0	2428	1.5
Credenz	CZ 5150 LL	5.1	70.1	73.0	09/29	47	2.7	3005	1.8
MU	S11-20242C	5.1	68.2	.	10/05	42	4.0	2869	1.3
Credenz	CZ 6109 LL	6.1	65.9	.	10/05	39	2.0	2877	1.2
MU	S15-10434C	5.5	64.4	.	09/30	28	1.7	3065	1.7
Meherrin	SH 5915 LL	5.9	63.8	64.0	10/01	41	3.0	2920	1.7
Credenz	CZ 4820 LL	4.8	63.6	67.8	09/18	48	2.7	2768	1.8
Meherrin	SH 5215 LL	5.2	63.5	60.4	09/28	50	2.7	3176	1.5
NK Brand	S57-A7X	5.7	63.0	.	10/07	36	1.0	2915	1.2
Virginia Tech	V12-1416	5.0	61.5	66.6	09/30	32	1.0	3258	1.0
Clemson	TN12-5712R2	5.0	59.6	.	10/13	32	1.0	3821	1.2
Clemson	TN11-5140	5.0	57.8	63.3	10/08	37	2.0	3209	1.3
Asgrow	AG58X9 RR2X	5.8	56.3	.	10/08	38	1.7	3423	1.5
Credenz	CZ 4938 LL	4.9	56.2	.	09/29	49	2.7	3260	1.5
Credenz	CZ 5947 LL	5.9	53.5	59.8	10/09	33	2.7	3603	1.2
Credenz	CZ 5515 LL	5.5	53.5	55.6	10/05	60	3.3	2877	1.8
Credenz	CZ 6316 LL	6.3	52.9	.	10/07	38	1.3	3530	1.3
Asgrow	AG59X9 RR2X	5.9	51.6	.	10/05	32	1.3	4220	1.0
Average			69.4 ⁵	67.5	10/02	38	1.8	2917	1.6
LSD at 10% Level			7.1	6.9	2	3	0.6	225	0.3
Std. Err. of Entry Mean			3.0	2.9	1	1	0.2	95	0.1

Athens, Georgia:
Soybean Variety Performance, 2018, Irrigated (Continued)

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ²	Plant Height	Lodg. ³	Seed Size	Seed Quality ⁴
			----bu/acre----							date	in	rating	no./lb	rating
<u>Maturity Group VI</u>									
Credenz	CZ 6069 LL	6.0	77.4	.	10/10	32	1.0	2616	1.7
Credenz	CZ 5859 LL	5.8	72.1	.	10/06	31	1.0	2836	1.3
Pioneer	P63A47X	6.3	67.8	.	10/13	42	2.0	4222	1.7
UGA	G13-6241	6.0	66.9	.	10/03	35	1.0	2875	1.5
Credenz	CZ 6109 LL	6.1	66.1	66.7	10/10	40	2.0	2887	1.5
Dyna-Gro	S67XT29	6.7	64.1	.	10/09	44	3.0	3249	1.3
Armor	X62D60	6.2	63.6	.	10/11	39	2.0	3551	1.5
NK Brand	S64-T4X	6.4	62.9	71.7	10/12	40	2.0	3320	1.3
Armor	X65D19	6.5	62.7	.	10/11	41	2.3	3284	1.5
AGSouth	AGS 677LL	6.7	61.5	64.0	10/07	40	2.0	3339	1.3
AGSouth	AGS 644R2X	6.4	61.3	63.6	10/06	36	2.0	4014	1.3
Meherrin	SH 6815 LL	6.8	60.8	65.4	10/09	42	2.0	3388	1.7
MorSoy	MS 6208 RXT	6.2	60.6	.	10/12	38	2.0	3554	1.5
Meherrin	SH 6515 LL	6.5	60.6	62.7	10/09	41	1.7	3283	1.0
Credenz	CZ 5947 LL	5.9	59.6	.	10/12	36	3.0	3640	1.2
Credenz	CZ 6316 LL	6.3	58.7	61.1	10/12	39	1.3	3713	1.5
Credenz	CZ 6515 LL	6.5	56.5	58.8	10/11	41	2.0	3856	1.7
UGA	G14-6063	6.0	55.8	.	10/09	37	1.7	2875	1.2
Credenz	CZ 5515 LL	5.5	53.3	.	10/09	61	3.3	3027	2.2
UGA	G15PR-340	6.0	53.3	.	10/12	39	3.0	4063	1.2
UGA	G13-2842R2	6.0	53.2	62.0	10/09	39	1.7	3419	1.7
Credenz	CZ 7007 LL	7.0	51.7	.	10/12	42	3.0	3138	1.5
Dyna-Gro	SX17869XT	6.9	51.5	.	10/13	41	2.3	3635	1.8
Dyna-Gro	S69XT57	6.9	47.4	52.1	10/14	42	2.3	3510	1.7
Credenz	CZ 7008 LL	7.0	41.3	.	10/11	39	3.3	3961	1.5
Average			59.6 ⁶	62.8	10/10	40	2.1	3410	1.5
LSD at 10% Level			7.4	4.6	1	4	0.5	254	0.4
Std. Err. of Entry Mean			3.1	1.9	1	2	0.2	107	0.2

Athens, Georgia: Soybean Variety Performance, 2018, Irrigated (Continued)

1. Yields calculated as 60 pounds per bushel at 13% moisture.
2. Maturity date indicates when 95% of pods are dried.
3. Lodging rating: 1 (all plants erect) to 5 (over 80% of plants down).
4. Seed quality rating: Rated 1 (very good) to 5 (very poor).
5. CV = 7.5% and df for EMS = 76.
6. CV = 9.0% and df for EMS = 48.

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Planted: May 22, 2018.

Harvested: MG V: October 15, 2018.

MG VI: October 18, 2018.

MG VII and VIII: October 30, 2018.

Seeding Rate: 140,000 seeds per acre in 36" rows.

Soil Type: Wickham sandy loam.

Soil Test: P = Very high, K = Very High, and pH = 6.1.

Fertilization: None.

Previous Crop: Corn and small grain forages.

Management: Conventional tillage; Valor XLT, Prowl, Classic, Reflex, and one cultivation used for weed control; Endigo ZC used for insect control; Andiamo 230 used for disease control; irrigated 4 inches.

Test conducted by Z. Li, E.D. Wood, S.L. Finnerty, W.E. Baxter, B.F. Wilson, G.T. Gokalp, K.L. Yeargin, E.A. Eleruja, B.A. Little, T.O. Bouswma, S.D. Strickland, J.D. Gassett, J.J. Griffin, P.K. Roach, and J.M. Cartey.

A trial to evaluate Maturity Groups VII and VII was planted at Athens. However, yields were inconsistent, and it is the opinion of the editors that the results of this trial may not accurately reflect the genetic performance potential of all the test entries. Since this data is not useful for making decisions and could be misleading if used in making variety selections, it will not be presented in the publication.

Calhoun, Georgia: Soybean Variety Performance, 2018, Irrigated

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
			2018 ----bu/acre----	2-Yr Avg					
<u>Maturity Group V</u>									
NK Brand	S57-A7X	5.7	61.3	.	10/12	35	1.0	2810	3.2
Asgrow	AG59X9 RR2X	5.9	59.7	.	10/16	35	1.7	2999	2.7
Credenz	CZ 6069 LL	6.0	57.7	.	10/16	33	1.0	2475	3.3
Asgrow	AG52X9 RR2X/SR	5.2	57.3	.	10/01	47	2.0	2994	3.8
MU	MO5201D CONV	5.3	55.7	.	10/07	30	1.3	2886	4.0
Clemson	TN11-5140	5.0	55.0	59.8	10/16	41	2.3	2875	3.2
Clemson	TN13-5508R2	5.0	54.7	59.2	10/07	32	1.7	2992	3.5
Credenz	CZ 4938 LL	4.9	53.3	.	10/02	44	3.0	3492	3.3
Virginia Tech	V14-3821	5.0	53.0	.	10/17	33	1.3	2123	4.2
Credenz	CZ 5859 LL	5.8	52.0	.	10/06	32	2.3	2926	3.3
Credenz	CZ 6109 LL	6.1	51.3	.	10/17	43	2.3	2889	3.2
Pioneer	P55A49X	5.5	51.3	61.8	10/03	25	1.0	3552	3.5
Clemson	TN12-5712R2	5.0	51.3	.	10/14	26	1.0	3210	3.3
Credenz	CZ 4820 LL	4.8	51.0	62.3	10/07	38	2.0	2697	4.3
Asgrow	AG58X9 RR2X	5.8	50.0	.	10/18	42	2.3	2893	3.0
Asgrow	AG53X9 RR2X	5.3	49.7	.	10/06	39	2.3	3248	4.2
Virginia Tech	V14-3762	5.0	49.3	.	10/05	27	1.0	2383	4.3
Virginia Tech	V12-1416	5.0	48.3	59.2	10/13	26	1.0	3318	3.2
AGSouth	AGS GS48X18	4.8	47.0	.	09/24	35	2.3	3440	4.2
Meherrin	SH 5915 LL	5.9	47.0	54.7	10/06	37	3.0	3052	3.7
MorSoy	MS 5607 RXT	5.6	46.7	56.3	10/09	34	1.7	3122	3.5
Credenz	CZ 4918 LL	4.9	45.7	.	10/10	36	2.0	3275	4.5
Credenz	CZ 5947 LL	5.9	45.7	54.7	10/16	41	4.0	3126	2.8
Credenz	CZ 6316 LL	6.3	45.3	.	10/13	39	2.3	3443	3.5
AGSouth	AGS GS51X18S	5.1	43.7	.	09/28	40	3.0	3455	3.7
Credenz	CZ 5147 LL	5.1	42.7	56.2	09/24	30	1.0	3096	3.5
MU	S14-9017R	5.3	42.3	.	10/02	35	1.3	3419	4.0
Virginia Tech	V14-3982	5.0	42.3	.	10/10	25	1.0	2318	4.2
MU	S13-1955C	5.5	41.7	.	09/30	33	2.7	3476	4.3
Virginia Tech	V14-3983	5.0	41.7	.	10/03	25	1.0	2767	3.5
Asgrow	AG54X9 RR2X	5.4	41.0	.	10/04	32	2.0	3125	3.5
MU	S15-10434C	5.5	38.0	.	10/08	30	2.7	3563	3.8
Credenz	CZ 5515 LL	5.5	37.0	48.7	10/10	47	3.7	3074	3.7
Meherrin	SH 5215 LL	5.2	37.0	51.8	09/30	38	2.0	3802	4.0
Credenz	CZ 5328 LL	5.3	35.7	.	09/29	30	1.3	2772	3.8
Credenz	CZ 5150 LL	5.1	35.3	54.3	10/04	38	2.0	3936	4.0
Credenz	CZ 5225 LL	5.2	34.7	.	10/07	31	1.7	3203	3.7
MU	S11-20242C	5.1	28.3	.	09/27	38	4.3	3962	4.2
Credenz	CZ 5445 LL	5.4	28.0	.	10/03	27	1.7	3395	3.5
Average			46.4 ⁵	56.6	10/07	35	2.0	3118	3.7
LSD at 10% Level			9.2	6.7	9	5	0.9	253	0.5
Std. Err. of Entry Mean			3.9	2.8	4	2	0.4	107	0.2

Calhoun, Georgia: Soybean Variety Performance, 2018, Irrigated (Continued)

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
			2018 ----bu/acre----	2-Yr Avg					
Maturity Group VI									
Credenz	CZ 6069 LL	6.0	73.0	.	10/16	34	1.7	2359	3.7
AGSouth	AGS 677LL	6.7	65.3	64.5	10/22	40	3.0	2691	2.7
Meherrin	SH 6815 LL	6.8	64.3	62.8	10/30	42	3.0	2738	2.8
UGA	G13-2842R2	6.0	64.0	62.5	10/27	41	2.7	2742	3.3
UGA	G14-6063	6.0	63.7	.	10/22	41	2.0	2507	2.5
Meherrin	SH 6515 LL	6.5	63.3	63.8	10/23	44	3.0	2669	2.3
UGA	G15PR-340	6.0	61.7	.	10/20	43	4.0	3181	3.3
Armor	X62D60	6.2	61.7	.	10/22	40	3.0	2777	2.8
Pioneer	P63A47X	6.3	60.3	.	10/27	43	3.0	3517	3.0
NK Brand	S64-T4X	6.4	59.7	62.2	10/25	40	3.3	2739	3.5
Credenz	CZ 6515 LL	6.5	59.3	60.8	10/29	42	2.7	3035	2.8
MorSoy	MS 6208 RXT	6.2	59.0	.	10/29	38	2.7	2669	2.8
AGSouth	AGS 644R2X	6.4	58.7	59.5	10/25	40	2.0	3080	2.8
Armor	X65D19	6.5	57.0	.	10/22	34	3.0	2820	3.0
Dyna-Gro	S69XT57	6.9	56.7	59.7	11/01	46	2.0	2691	2.8
Dyna-Gro	S67XT29	6.7	55.0	.	10/16	38	3.0	2918	3.2
Credenz	CZ 5859 LL	5.8	54.0	.	10/13	33	2.3	2822	3.7
Credenz	CZ 6109 LL	6.1	50.0	56.5	10/21	43	3.0	2838	3.3
Credenz	CZ 5947 LL	5.9	48.7	.	10/18	40	4.3	3141	3.3
Credenz	CZ 6316 LL	6.3	48.7	56.2	10/25	40	2.7	3567	3.7
Credenz	CZ 7007 LL	7.0	48.7	.	10/30	37	3.3	2877	2.8
Dyna-Gro	SX17869XT	6.9	47.3	.	11/01	45	2.3	2877	3.3
UGA	G13-6241	6.0	46.3	.	10/11	35	2.3	2689	4.5
Credenz	CZ 7008 LL	7.0	42.0	.	10/29	44	4.0	2911	3.0
Credenz	CZ 5515 LL	5.5	38.7	.	10/10	48	4.0	3349	4.5
Average		0.0	56.3 ⁶	60.9	10/23	40	2.9	2888	3.2
LSD at 10% Level			10.6	NS	7	4	0.9	233	0.7
Std. Err. of Entry Mean			4.5	3.1	3	2	0.4	97	0.3

1. Yields calculated as 60 pounds per bushel at 13% moisture.

2. Maturity date indicates when 95% of pods are dried.

3. Lodging rating: 1 (all plants erect) to 5 (over 80% of plants down).

4. Seed quality rating: Rated 1 (very good) to 5 (very poor).

5. CV = 14.6% and df for EMS = 76.

6. CV = 13.7% and df for EMS = 48.

"NS" indicates differences are statistically non-significant ($p = 0.10$ probability level).

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Planted: May 22, 2018.

Harvested: November 28, 2018.

Seeding Rate: 140,000 seeds per acre in 36" rows.

Soil Type: Etowah and Wax loams.

Soil Test: MG V: P = Medium, K = High, and pH = 6.4.

MG VI: P = High, K = High, and pH = 6.6.

Fertilization: MG V and MG VI: 36 lb N, 92 lb P₂O₅, and 120 lb K₂O/acre.

Previous Crop: Fallow.

Management: Conventional tillage; Treflan, Classic, Basagran, Ultra Blazer, and Select Max for weed control; irrigated 3 inches.

Test conducted by H. Jordan, G. Ware, M. Tucker, and T. Turnquist.

Summary of Ultra-Late Planted Soybean Variety Performance at Two Locations, 2016-2018

Company or Brand Name	Variety	Yields ¹					
		Attapulugus			Midville		
		2016	2017	2018	2016	2017	2018
----- bu/acre -----							
AGSouth	AGS 568RR	.	.	.	32.0	.	.
AGSouth	AGS 738RR	.	§	.	27.9	24.6	12.0
AGSouth	AGS 747LL	.	.	.	.	.	12.2
AGSouth	AGS 828RR	.	.	.	11.5	.	.
Clemson	Agustina	.	.	.	.	.	§
Clemson	Santee	.	10.4	.	21.3	28.6	.
Clemson	SC10-07	.	§	.	.	§	.
Clemson	SC10-179	.	.	.	55.2	.	§
Clemson	SC10-258	.	.	.	.	.	§
Clemson	SC10-397RR	.	0.5	.	50.6	§	.
Clemson	SC10-406RR	.	.	.	58.8	.	§
Clemson	SC10-455RR	.	§	.	.	§	.
Credenz	CZ 5147 LL	.	.	.	.	.	21.6
Credenz	CZ 6060 RY	.	9.0	.	46.4	32.8	.
Credenz	CZ 6109 LL	.	§	.	16.4	22.4	6.0
Credenz	CZ 6316 LL	.	§	.	.	6.1	8.6
Credenz	CZ 7007 LL	.	6.8	.	.	22.9	21.6
Credenz	CZ 7070 RY	.	7.7	.	.	23.1	.
Dyna-Gro	39RY57	.	6.7	.	.	41.1	.
Dyna-Gro	S65RY73	.	§	.	3.9	23.1	.
Dyna-Gro	S72RS36	.	17.5	.	.	38.5	.
Dyna-Gro	S75XT26	.	.	.	.	.	21.4
Dyna-Gro	S77RY85	.	11.9	.	.	31.1	.
Meherrin	SH 5215 LL	.	.	.	.	.	23.4
Meherrin	SH 5915 LL	.	.	.	.	.	32.8
Meherrin	SH 6515 LL	.	§	.	6.2	27.5	17.1
Meherrin	SH 6815 LL	.	.	.	.	.	21.5
Meherrin	SH 7418 LL	.	.	.	.	.	13.6
NK_Brand	S58-Z4	.	25.0	.	51.7	43.3	.
NK_Brand	S74-M3	.	16.3	.	16.2	35.6	22.3
Pioneer	P55T81R	.	.	.	44.1	.	.
Pioneer	P67T25R2	.	.	.	22.1	.	.
Pioneer	P76T54R2	.	6.7	.	12.0	33.8	20.2
SS	LL 6314S	.	.	.	16.3	.	.
Terral Seed	G94-1559	.	22.3	.	.	43.1	.
Terral Seed	REV56R63	.	.	.	41.0	.	.
Terral Seed	REV57R21	.	.	.	51.8	.	.
UARK	Osage	.	§	.	41.0	28.5	.
USDA-ARS	N7003CN	.	.	.	.	.	18.7

Summary of Ultra-Late Planted Soybean Variety Performance at Two Locations, 2016-2018 (Continued)

Company or Brand Name	Variety	Yields ¹					
		Attapulgus			Midville		
		2016	2017	2018	2016	2017	2018
		----- bu/acre -----					
USDA-ARS	N8002	.	.	.	.	.	20.9
USG	77J25RS	.	4.4	.	.	22.6	.
Average		-	11.2	-	31.3	29.4	18.4
LSD at 10% Level		-	5.4	-	8.1	6.8	4.5
Planting date		8/4	8/7	8/13	8/8	8/3	8/14
First frost		11/21	12/10	11/16	11/20	11/20	11/28
Harvest date		11/22	11/29	-	1/12	11/30	12/6
Harvestable varieties		-	62%	-	100%	86%	80%

§ Variety was slow to mature and severely damaged by frost. In order to ensure quality data for the test as a whole, harvest occurred without these entries.

1. Yields calculated as 60 pounds per bushel at 13% moisture.

Bolded yields are statistically non-significant (p = 0.10 level) from the highest yielding test entry.

Midville, Georgia: Ultra-Late Planted Soybean Variety Performance, 2018, Irrigated

Company or Brand Name	Variety	Maturity	Yield ¹ bu/acre	Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
Meherrin	SH 5915 LL	5.9	32.8	11/23	18	1.0	.	.
Meherrin	SH 5215 LL	5.2	23.4	11/24	19	1.0	.	.
NK_Brand	S74-M3	7.4	22.3	11/22	14	1.0	.	.
Credenz	CZ 5147 LL	5.1	21.6	11/20	13	1.0	.	.
Credenz	CZ 7007 LL	7.0	21.6	11/19	14	1.0	.	.
Meherrin	SH 6815 LL	6.8	21.5	11/20	14	1.0	.	.
Dyna-Gro	S75XT26	7.5	21.4	11/19	15	1.0	.	.
USDA-ARS	N8002	8.0	20.9	11/22	14	1.0	.	.
Pioneer	P76T54R2	7.6	20.2	11/21	15	1.0	.	.
USDA-ARS	N7003CN	7.0	18.7	11/23	13	1.0	.	.
Meherrin	SH 6515 LL	6.5	17.1	11/20	12	1.0	.	.
Meherrin	SH 7418 LL	7.5	13.6	11/21	13	1.0	.	.
AGSouth	AGS 747LL	7.4	12.2	11/19	11	1.0	.	.
AGSouth	AGS 738 RR	7.3	12.0	11/20	12	1.0	.	.
Credenz	CZ 6316 LL	6.3	8.6	11/20	9	1.0	.	.
Credenz	CZ 6109 LL	6.1	6.0	11/20	10	1.0	.	.
Clemson	Agustina	7.5	§	.	.	.	.	.
Clemson	SC10-179	6.0	§	.	.	.	.	.
Clemson	SC10-258	.	§	.	.	.	.	.
Clemson	SC10-406RR	7.5	§	.	.	.	.	.
Average			18.4 ⁴	11/21	13	1.0	-	-
LSD at 10% Level			4.5	1	2	-	-	-
Std. Err. of Entry Mean			1.9	1	1	-	-	-

§ Four varieties were slow to mature and severely damaged by an early frost. In order to ensure quality data for the test as a whole, harvest occurred without these entries.

1. Yields calculated as 60 pounds per bushel at 13% moisture.
2. Maturity date indicates when 95% of pods are dried.
3. Lodging rating: 1 (all plants erect) to 5 (over 80% of plants down).
4. CV = 20.6% and df for EMS = 45.

Bolded yields are statistically non-significant (p = 0.10 level) from the highest yielding test entry.

Planted: August 14, 2018.

Harvested: December 6, 2018.

Seeding Rate: 225,000 seeds per acre in 7" rows.

Soil Type: Dothan sandy loam.

Fertilization: 30 lb N and 0.25 lb B/acre.

Previous Crop: Corn.

Management: Conventional tillage; Pendimethalin, Valor, Gramoxone, and Basagran used for weed control; Orthene, Bifenthrin, and Double Take used for insect control; irrigated 8.7 inches.

Test conducted by R. Brooke, K. Cawley, M. Cofield, D. Dunn, J. Lanier, R. Milton, and T. Woodward.

Attapulgus, Georgia:
Ultra-Late Planted Soybean Variety Performance, 2018 Irrigated

An ultra-late soybean test was planted at this location on August 13, 2018. However, very frequent rainfall events in November and December prevented harvest. Multiple attempts were made, but soil conditions would not support the weight of a combine. By January, most varieties had shattered, with some worse than others. This data would not reflect the genetic performance potential of all the test entries. As a result, we have no data to present in this publication.

Summary of Dryland Soybean Variety Performance at Four Locations, 2018

Company or Brand Name Variety		Yields ¹										
		Griffin		Midville		Plains		Tifton		Statewide Avg		
		2018	2-Yr Avg	2018	2-Yr Avg	2018	2-Yr Avg	2018	2-Yr Avg	2018	2-Yr Avg	
----- bu/acre -----												
Maturity Group V												
Asgrow	AG58X9 RR2X	5.0	57.3	.	18.7	.	36.0	.	63.0	.	43.8	.
Asgrow	AG59X9 RR2X	5.0	51.7	.	17.3	.	22.7	.	56.7	.	37.1	.
Credenz	CZ 4820 LL	4.8	66.7	.	27.7	.	33.7	.	49.7	.	44.4	.
Credenz	CZ 5147 LL	5.1	72.0	65.0	30.3	23.8	37.7	29.8	62.3	58.2	50.6	44.2
Credenz	CZ 5150 LL	5.1	69.0	.	26.7	.	37.0	.	66.7	.	49.8	.
Meherrin	SH 5215 LL	5.2	71.3	65.7	25.3	21.0	40.0	27.3	66.3	57.5	50.7	42.9
Meherrin	SH 5915 LL	5.9	58.7	59.3	25.0	24.0	39.7	32.0	67.0	59.2	47.6	43.6
MorSoy	MS 5607 RXT	5.6	79.0	.	23.3	.	39.7	.	72.3	.	53.6	.
NK Brand	S57-A7X	5.7	71.3	.	16.0	.	29.3	.	70.0	.	46.7	.
Pioneer	P55A49X	5.5	85.3	.	25.3	.	41.0	.	72.0	.	55.9	.
Average			68.2	63.3	23.6	22.9	35.7	29.7	64.6	58.3	48.5	43.6
LSD at 10% Level			8.3	NS	NS	NS	6.4	NS	7.3	NS	5.2	NS
Std. Err. of Entry Mean			3.4	3.1	4.0	3.1	2.6	4.8	3.0	4.1	2.2	3.9
Maturity Group VI												
AGSouth	AGS 644R2X	6.0	57.3	.	20.7	.	20.0	.	59.0	.	39.3	.
AGSouth	AGS 677LL	6.0	66.0	64.5	21.3	25.8	34.0	31.2	70.7	65.5	48.0	46.8
Credenz	CZ 6069 LL	6.0	67.3	.	20.7	.	36.0	.	63.0	.	46.8	.
Credenz	CZ 6109 LL	6.1	63.3	65.3	24.3	28.8	32.3	34.2	69.7	66.8	47.4	48.8
Credenz	CZ 6316 LL	6.3	63.0	59.3	21.7	32.3	32.0	29.5	59.3	58.2	44.0	44.8
Meherrin	SH 6515 LL	6.5	63.3	65.8	25.0	32.0	33.7	34.2	72.0	67.2	48.5	49.8
Meherrin	SH 6815 LL	6.8	58.3	.	33.0	.	33.3	.	69.7	.	48.6	.
MorSoy	MS 6208 RXT	6.2	69.0	.	21.7	.	30.7	.	69.7	.	47.8	.
NK Brand	S64-T4X	6.4	69.0	.	15.3	.	29.0	.	71.7	.	46.3	.
Pioneer	P63A47X	6.3	61.0	.	23.3	.	31.0	.	64.0	.	44.8	.
Average			63.8	63.8	22.7	29.8	31.2	32.3	66.9	64.4	46.9	47.5
LSD at 10% Level			NS	NS	7.7	NS	3.1	NS	6.4	5.6	3.8	NS
Std. Err. of Entry Mean			3.3	2.1	3.2	3.9	1.3	1.7	2.6	2.3	1.6	3.7
Maturity Groups VII & VIII												
AGSouth	AGS 738RR	7.0	32.0	36.5	21.0	32.7	29.3	33.2	62.7	58.3	36.3	40.2
AGSouth	AGS 747LL	7.0	39.7	41.7	21.3	28.8	27.3	34.2	63.3	58.0	37.9	40.7
Credenz	CZ 7007 LL	7.0	29.0	37.2	25.0	32.0	25.0	28.7	64.7	61.2	35.9	39.8
Dyna-Gro	S75XT26	7.5	33.0	.	17.7	.	24.7	.	59.3	.	33.7	.
Meherrin	SH 7418 LL	7.5	36.3	.	20.3	.	30.3	.	62.7	.	37.4	.
NK Brand	S74-M3	7.4	39.0	37.7	21.0	29.5	28.3	36.8	66.0	57.0	38.6	40.3
Pioneer	P76T54R2	7.6	38.0	41.5	23.3	34.5	25.0	29.0	62.3	54.8	37.2	40.0
UGA	G11-1614R2	8.0	34.3	.	22.0	.	24.7	.	59.7	.	35.2	.
USDA-ARS	N7003CN	7.0	35.0	.	28.3	.	28.0	.	62.0	.	38.3	.
USDA-ARS	N8002	8.0	41.0	.	21.0	.	24.0	.	55.0	.	35.3	.
Average			36.1	38.9	22.1	31.5	26.7	32.4	61.8	57.9	36.6	40.2
LSD at 10% Level			6.0	NS	4.5	NS	2.4	NS	4.7	NS	NS	NS
Std. Err. of Entry Mean			2.5	3.2	1.8	4.7	1.0	3.5	1.9	3.2	1.3	2.8

1. Yields calculated as 60 pounds per bushel at 13% moisture.

"NS" indicates differences are statistically non-significant ($p = 0.10$ probability level).

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Tifton, Georgia:
Soybean Variety Performance, 2018, Dryland

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
			2018 ----bu/acre----	2-Yr Avg					
<u>Maturity Group V</u>									
MorSoy	MS 5607 RXT	5.6	72.3	.	09/23	29	1.0	2596	3.0
Pioneer	P55A49X	5.5	72.0	.	09/26	23	1.0	3381	3.7
NK Brand	S57-A7X	5.7	70.0	.	10/01	27	1.0	2964	3.0
Meherrin	SH 5915 LL	5.9	67.0	59.2	09/27	31	1.0	2848	3.0
Credenz	CZ 5150 LL	5.1	66.7	.	09/23	35	1.3	3230	3.0
Meherrin	SH 5215 LL	5.2	66.3	57.5	09/22	35	1.3	3410	3.3
Asgrow	AG58X9 RR2X	5.0	63.0	.	09/29	32	1.0	3794	2.7
Credenz	CZ 5147 LL	5.1	62.3	58.2	09/19	25	1.0	3116	2.7
Asgrow	AG59X9 RR2X	5.0	56.7	.	10/04	27	1.0	4151	2.7
Credenz	CZ 4820 LL	4.8	49.7	.	09/28	35	1.3	3002	4.5
Average			64.6 ⁵	58.3	09/26	30	1.1	3249	3.2
LSD at 10% Level			7.3	NS	1	2	NS	343	0.5
Std. Err. of Entry Mean			3.0	4.1	1	1	0.2	140	0.2
<u>Maturity Group VI</u>									
Meherrin	SH 6515 LL	6.5	72.0	67.2	10/05	29	1.0	2835	2.2
NK Brand	S64-T4X	6.4	71.7	.	10/07	31	1.0	2922	3.7
AGSouth	AGS 677LL	6.0	70.7	65.5	10/04	27	1.0	2650	2.0
Credenz	CZ 6109 LL	6.1	69.7	66.8	10/05	25	1.0	2588	2.2
MorSoy	MS 6208 RXT	6.2	69.7	.	10/06	29	1.0	3268	2.5
Meherrin	SH 6815 LL	6.8	69.7	.	10/11	31	1.0	2986	2.2
Pioneer	P63A47X	6.3	64.0	.	10/08	27	1.0	4127	2.0
Credenz	CZ 6069 LL	6.0	63.0	.	10/05	25	1.0	2488	2.8
Credenz	CZ 6316 LL	6.3	59.3	58.2	10/09	23	1.0	3226	2.0
AGSouth	AGS 644R2X	6.0	59.0	.	10/05	27	1.0	3957	3.3
Average			66.9 ⁶	64.4	10/06	27	1.0	3105	2.5
LSD at 10% Level			6.4	5.6	1	3	-	176	0.4
Std. Err. of Entry Mean			2.6	2.3	1	1	-	70	0.1
<u>Maturity Groups VII and VIII</u>									
NK Brand	S74-M3	7.4	66.0	57.0	10/12	31	1.0	2983	2.2
Credenz	CZ 7007 LL	7.0	64.7	61.2	10/11	32	1.0	2961	1.8
AGSouth	AGS 747LL	7.0	63.3	58.0	10/14	31	1.0	3248	2.5
AGSouth	AGS 738RR	7.0	62.7	58.3	10/10	29	1.0	3551	2.0
Meherrin	SH 7418 LL	7.5	62.7	.	10/12	31	1.0	2926	2.3
Pioneer	P76T54R2	7.6	62.3	54.8	10/11	33	1.0	3823	3.2
USDA-ARS	N7003CN	7.0	62.0	.	10/13	29	1.0	2985	2.8
UGA	G11-1614R2	8.0	59.7	.	10/10	33	1.0	3479	4.5
Dyna-Gro	S75XT26	7.5	59.3	.	10/11	33	1.0	3528	2.2
USDA-ARS	N8002	8.0	55.0	.	10/19	29	1.0	3691	2.3
Average			61.8 ⁷	57.9	10/12	31	1.0	3317	2.6
LSD at 10% Level			4.7	NS	1	2	-	193	0.7
Std. Err. of Entry Mean			1.9	3.2	1	1	-	79	0.3

Tifton, Georgia: Soybean Variety Performance, 2018, Dryland (Continued)

1. Yields calculated as 60 pounds per bushel at 13% moisture.
2. Maturity date indicates when 95% of pods are dried.
3. Lodging rating: 1 (all plants erect) to 5 (over 80% of plants down).
4. Seed quality rating: Rated 1 (very good) to 5 (very poor).
5. CV = 8.0% and df for EMS = 18.
6. CV = 6.7% and df for EMS = 18.
7. CV = 5.3% and df for EMS = 18.

"NS" indicates differences are statistically non-significant ($p = 0.10$ probability level).

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Planted: May 18, 2018.

Harvested: October 18, 2018.

Seeding Rate: 140,000 seeds per acre in 36" rows.

Soil Type: Tifton loamy sand.

Soil Test: P = High, K = High, and pH = 6.7.

Fertilization: 0 lb N, 70 lb P₂O₅, and 130 lb K₂O/acre.

Previous Crop: Summer annuals.

Management: Conventional tillage; Warrant, Basagran, Select, and Ultra Blazer for weed control; Double Take, Intrepid Edge, and Tombstone used for insect control; Telone II used for nematode control.

Test conducted by R. Brooke, K. Cawley, M. Cofield, and D. Dunn.

Plains, Georgia: Soybean Variety Performance, 2018, Dryland

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
			2018 ----bu/acre----	2-Yr Avg					
<u>Maturity Group V</u>									
Pioneer	P55A49X	5.5	41.0	.	09/22	23	1.0	4059	2.8
Meherrin	SH 5215 LL	5.2	40.0	27.3	09/24	30	1.7	3413	3.3
MorSoy	MS 5607 RXT	5.6	39.7	.	09/24	30	2.0	3666	3.2
Meherrin	SH 5915 LL	5.9	39.7	32.0	09/25	33	2.7	3651	3.0
Credenz	CZ 5147 LL	5.1	37.7	29.8	09/24	24	1.3	3863	2.5
Credenz	CZ 5150 LL	5.1	37.0	.	09/22	29	2.7	3662	3.3
Asgrow	AG58X9 RR2X	5.0	36.0	.	09/30	34	1.3	4499	2.7
Credenz	CZ 4820 LL	4.8	33.7	.	09/28	30	1.3	2818	3.8
NK Brand	S57-A7X	5.7	29.3	.	09/27	27	1.0	4339	3.8
Asgrow	AG59X9 RR2X	5.0	22.7	.	10/01	30	1.0	5985	4.0
Average			35.7 ⁵	29.7	09/25	29	1.6	3995	3.2
LSD at 10% Level			6.4	NS	1	3	0.7	330	0.5
Std. Err. of Entry Mean			2.6	4.8	1	1	0.3	127	0.2
<u>Maturity Group VI</u>									
Credenz	CZ 6069 LL	6.0	36.0	.	09/28	26	1.0	4039	2.7
AGSouth	AGS 677LL	6.0	34.0	31.2	09/30	30	1.0	4643	2.5
Meherrin	SH 6515 LL	6.5	33.7	34.2	09/28	31	1.0	4422	2.7
Meherrin	SH 6815 LL	6.8	33.3	.	10/01	32	1.3	4181	2.5
Credenz	CZ 6109 LL	6.1	32.3	34.2	09/29	27	1.0	4068	2.5
Credenz	CZ 6316 LL	6.3	32.0	29.5	09/29	29	1.0	5042	2.7
Pioneer	P63A47X	6.3	31.0	.	10/06	29	1.3	5985	2.8
MorSoy	MS 6208 RXT	6.2	30.7	.	10/05	29	1.0	5002	3.5
NK Brand	S64-T4X	6.4	29.0	.	09/28	30	1.0	4796	3.5
AGSouth	AGS 644R2X	6.0	20.0	.	10/02	30	1.0	6079	3.8
Average			31.2 ⁶	32.3	09/30	29	1.1	4826	2.9
LSD at 10% Level			3.1	NS	1	2	NS	421	0.5
Std. Err. of Entry Mean			1.3	1.7	1	1	0.1	162	0.2
<u>Maturity Groups VII and VIII</u>									
Meherrin	SH 7418 LL	7.5	30.3	.	10/04	33	1.0	4361	2.7
AGSouth	AGS 738RR	7.0	29.3	33.2	10/05	27	1.0	5623	3.2
NK Brand	S74-M3	7.4	28.3	36.8	10/09	33	1.0	4360	2.8
USDA-ARS	N7003CN	7.0	28.0	.	10/04	29	1.0	4421	3.3
AGSouth	AGS 747LL	7.0	27.3	34.2	10/04	33	1.0	4621	3.5
Credenz	CZ 7007 LL	7.0	25.0	28.7	10/02	35	1.7	4919	2.8
Pioneer	P76T54R2	7.6	25.0	29.0	10/09	33	1.0	5915	4.0
UGA	G11-1614R2	8.0	24.7	.	10/09	33	1.0	4959	3.8
Dyna-Gro	S75XT26	7.5	24.7	.	10/09	35	1.0	4844	3.7
USDA-ARS	N8002	8.0	24.0	.	10/12	31	1.0	4513	4.2
Average			26.7 ⁷	32.4	10/06	32	1.1	4854	3.4
LSD at 10% Level			2.4	NS	1	1	0.3	332	0.4
Std. Err. of Entry Mean			1.0	3.5	1	1	0.1	136	0.2

Plains, Georgia: Soybean Variety Performance, 2018, Dryland (Continued)

1. Yields calculated as 60 pounds per bushel at 13% moisture.
2. Maturity date indicates when 95% of pods are dried.
3. Lodging rating: Rated 1 (all plants erect) to 5 (over 80% of plants down).
4. Seed quality rating: Rated 1 (very good) to 5 (very poor).
5. CV = 12.6% and df for EMS = 18.
6. CV = 7.0% and df for EMS = 18.
7. CV = 6.4% and df for EMS = 18.

"NS" indicates differences are statistically non-significant ($p = 0.10$ probability level).

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Planted: June 11, 2018.

Harvested: October 29, 2018.

Seeding Rate: 140,000 seeds per acre in 36" rows.

Soil Type: Greenville sandy loam.

Soil Test: P = Medium, K = High, and pH = 5.9.

Fertilization: 0 lb N, 50 lb P₂O₅, and 70 lb K₂O/acre.

Previous Crop: Peanuts.

Management: Conventional tillage; Valor, Prowl, and Classic used for weed control; Dimilin, Bifenthrin, and Tracer used for insect control.

Test conducted by R. Brooke, K. Cawley, M. Cofield, D. Dunn, W. Jones, and D. Pearce.

Midville, Georgia:
Soybean Variety Performance, 2018, Dryland

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
			2018 ----bu/acre----	2-Yr Avg					
<u>Maturity Group V</u>									
Credenz	CZ 5147 LL	5.1	30.3	23.8	09/25	29	1.0	4083	1.8
Credenz	CZ 4820 LL	4.8	27.7	.	09/25	31	1.0	3766	3.0
Credenz	CZ 5150 LL	5.1	26.7	.	09/23	29	1.0	4021	2.2
Pioneer	P55A49X	5.5	25.3	.	09/25	25	1.0	4299	2.8
Meherrin	SH 5215 LL	5.2	25.3	21.0	09/23	30	1.0	3891	2.3
Meherrin	SH 5915 LL	5.9	25.0	24.0	09/29	36	2.7	4121	1.7
MorSoy	MS 5607 RXT	5.6	23.3	.	09/28	33	1.0	3473	2.2
Asgrow	AG58X9 RR2X	5.0	18.7	.	10/06	35	1.0	4314	2.5
Asgrow	AG59X9 RR2X	5.0	17.3	.	10/09	31	1.0	3772	3.8
NK Brand	S57-A7X	5.7	16.0	.	10/01	29	1.0	3958	2.5
Average			23.6 ⁵	22.9	09/28	31	1.2	3970	2.5
LSD at 10% Level			NS	NS	1	3	0.3	NS	0.8
Std. Err. of Entry Mean			4.0	3.1	1	1	0.1	239	0.3
<u>Maturity Group VI</u>									
Meherrin	SH 6815 LL	6.8	33.0	.	10/07	39	1.0	3186	2.0
Meherrin	SH 6515 LL	6.5	25.0	32.0	10/05	34	1.0	3522	2.0
Credenz	CZ 6109 LL	6.1	24.3	28.8	10/07	31	1.0	3218	2.3
Pioneer	P63A47X	6.3	23.3	.	10/09	33	1.0	4189	3.3
Credenz	CZ 6316 LL	6.3	21.7	32.3	10/05	28	1.0	3979	2.2
MorSoy	MS 6208 RXT	6.2	21.7	.	10/12	33	1.0	3546	3.0
AGSouth	AGS 677LL	6.0	21.3	25.8	10/08	33	1.0	3235	2.5
AGSouth	AGS 644R2X	6.0	20.7	.	10/12	32	1.0	3632	3.0
Credenz	CZ 6069 LL	6.0	20.7	.	09/29	26	1.3	3347	2.7
NK Brand	S64-T4X	6.4	15.3	.	10/05	33	1.7	3387	3.2
Average			22.7 ⁶	29.8	10/06	32	1.1	3524	2.6
LSD at 10% Level			7.7	NS	1	2	NS	223	0.4
Std. Err. of Entry Mean			3.2	3.9	1	1	0.2	88	0.2
<u>Maturity Groups VII and VIII</u>									
USDA-ARS	N7003CN	7.0	28.3	.	10/18	31	1.0	3312	2.3
Credenz	CZ 7007 LL	7.0	25.0	32.0	10/11	35	1.0	3270	2.3
Pioneer	P76T54R2	7.6	23.3	34.5	10/19	33	1.0	3991	2.8
UGA	G11-1614R2	8.0	22.0	.	10/16	31	1.0	2839	3.0
AGSouth	AGS 747LL	7.0	21.3	28.8	10/17	35	1.0	3701	2.8
AGSouth	AGS 738RR	7.0	21.0	32.7	10/16	29	1.0	4118	2.0
USDA-ARS	N8002	8.0	21.0	.	10/23	29	2.3	2968	4.5
NK Brand	S74-M3	7.4	21.0	29.5	10/19	28	1.0	3149	2.2
Meherrin	SH 7418 LL	7.5	20.3	.	10/18	33	1.0	2743	3.2
Dyna-Gro	S75XT26	7.5	17.7	.	10/20	35	1.0	3591	2.8
Average			22.1 ⁷	31.5	10/17	32	1.1	3368	2.8
LSD at 10% Level			4.5	NS	1	2	0.3	268	0.7
Std. Err. of Entry Mean			1.8	4.7	1	1	0.1	109	0.3

Midville, Georgia: Soybean Variety Performance, 2018, Dryland (Continued)

1. Yields calculated as 60 pounds per bushel at 13% moisture.
2. Maturity date indicates when 95% of pods are dried.
3. Lodging rating: Rated 1 (all plants erect) to 5 (over 80% of plants down).
4. Seed quality rating: Rated 1 (very good) to 5 (very poor).
5. CV = 29.0% and df for EMS = 18.
6. CV = 24.1% and df for EMS = 18.
7. CV = 14.3% and df for EMS = 18.

"NS" indicates differences are statistically non-significant ($p = 0.10$ probability level).

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Planted: June 7, 2018.

Harvested: October 31, 2018.

Seeding Rate: 140,000 seeds per acre in 36" rows.

Soil Type: Dothan sandy loam.

Soil Test: P = High, K = High, and pH = 6.0.

Fertilization: 30 lb N, 60 lb P₂O₅, and 110 lb K₂O/acre.

Previous Crop: Cotton.

Management: Conventional tillage; Pendimethalin, Valor, Gramoxone, Reflex used for weed control; Orthene, Bifenthrin, Double Take, and Radiant used for insect control; Telone II used for nematode control.

Test conducted by R. Brooke, K. Cawley, M. Cofield, D. Dunn, J. Lanier, R. Milton, and T. Woodward.

Griffin, Georgia: Soybean Variety Performance, 2018, Dryland

Company or Brand Name	Variety	Maturity	Yield ¹		Maturity ² date	Plant Height in	Lodg. ³ rating	Seed no./lb	Seed Quality ⁴ rating
			2018 ----bu/acre----	2-Yr Avg					
<u>Maturity Group V</u>									
Pioneer	P55A49X	5.5	85.3	.	09/28	31	1.0	2974	3.7
MorSoy	MS 5607 RXT	5.6	79.0	.	09/24	36	1.0	2690	3.7
Credenz	CZ 5147 LL	5.1	72.0	65.0	09/19	32	1.0	3075	3.0
NK Brand	S57-A7X	5.7	71.3	.	09/29	34	1.0	2778	3.2
Meherrin	SH 5215 LL	5.2	71.3	65.7	09/22	44	1.7	3439	3.7
Credenz	CZ 5150 LL	5.1	69.0	.	09/20	48	2.5	3326	3.3
Credenz	CZ 4820 LL	4.8	66.7	.	09/25	40	1.2	2402	4.2
Meherrin	SH 5915 LL	5.9	58.7	59.3	09/26	40	2.8	3121	3.3
Asgrow	AG58X9 RR2X	5.0	57.3	.	10/01	36	2.5	3417	3.5
Asgrow	AG59X9 RR2X	5.0	51.7	.	09/30	34	1.3	4098	3.0
Average			68.2 ⁵	63.3	09/25	37	1.6	3132	3.5
LSD at 10% Level			8.3	NS	4	4	0.4	295	0.4
Std. Err. of Entry Mean			3.4	3.1	2	2	0.2	120	0.2
<u>Maturity Group VI</u>									
MorSoy	MS 6208 RXT	6.2	69.0	.	10/03	38	1.3	3237	2.8
NK Brand	S64-T4X	6.4	69.0	.	09/30	40	2.3	3017	3.7
Credenz	CZ 6069 LL	6.0	67.3	.	10/01	36	1.2	2413	3.2
AGSouth	AGS 677LL	6.0	66.0	64.5	09/29	42	1.2	2842	2.5
Credenz	CZ 6109 LL	6.1	63.3	65.3	09/30	38	1.5	2820	2.8
Meherrin	SH 6515 LL	6.5	63.3	65.8	10/01	38	1.3	2862	2.5
Credenz	CZ 6316 LL	6.3	63.0	59.3	10/02	38	1.2	2997	2.8
Pioneer	P63A47X	6.3	61.0	.	10/02	37	1.5	4216	3.2
Meherrin	SH 6815 LL	6.8	58.3	.	10/05	43	2.5	3123	2.5
AGSouth	AGS 644R2X	6.0	57.3	.	10/02	35	1.7	3661	3.0
Average			63.8 ⁶	63.8	10/01	38	1.6	3119	2.9
LSD at 10% Level			NS	NS	NS	4	0.7	269	0.6
Std. Err. of Entry Mean			3.3	2.1	1	1	0.3	110	0.2
<u>Maturity Groups VII and VIII</u>									
USDA-ARS	N8002	8.0	41.0	.	11/07	37	2.0	2911	3.5
AGSouth	AGS 747LL	7.0	39.7	41.7	11/21	39	2.2	3624	3.8
NK Brand	S74-M3	7.4	39.0	37.7	11/16	37	1.3	3269	3.7
Pioneer	P76T54R2	7.6	38.0	41.5	11/10	43	1.2	3667	3.5
Meherrin	SH 7418 LL	7.5	36.3	.	11/20	41	1.7	3206	3.8
USDA-ARS	N7003CN	7.0	35.0	.	11/11	37	3.0	3457	4.3
UGA	G11-1614R2	8.0	34.3	.	11/12	41	1.7	2858	4.5
Dyna-Gro	S75XT26	7.5	33.0	.	11/17	40	1.5	3489	3.8
AGSouth	AGS 738RR	7.0	32.0	36.5	11/17	35	2.0	5482	4.2
Credenz	CZ 7007 LL	7.0	29.0	37.2	11/19	40	3.3	3440	3.8
Average			35.7 ⁷	38.9	11/15	39	2.0	3540	3.9
LSD at 10% Level			6.0	NS	NS	2	0.7	465	0.4
Std. Err. of Entry Mean			2.5	3.2	6	1	0.3	190	0.2

Griffin, Georgia: Soybean Variety Performance, 2018, Dryland (Continued)

1. Yields calculated as 60 pounds per bushel at 13% moisture.
2. Maturity date indicates when 95% of pods are dried.
3. Lodging rating: Rated 1 (all plants erect) to 5 (over 80% of plants down).
4. Seed quality rating: Rated 1 (very good) to 5 (very poor).
5. CV = 8.5% and df for EMS = 18.
6. CV = 9.0% and df for EMS = 18.
7. CV = 11.9% and df for EMS = 18.

"NS" indicates differences are statistically non-significant ($p = 0.10$ probability level).

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Planted: May 14, 2018.

Harvested: MG V and VI = October 30, 2018; MG VII and VIII = November 19, 2018.

Seeding Rate: 140,000 seeds per acre in 30" rows.

Soil Type: Cecil sandy loam.

Soil Test: P = High, K = High, and pH = 6.4.

Fertilization: 0 lb N, 0 lb P₂O₅, and 80 lb K₂O/acre.

Previous Crop: Sorghum.

Management: Conventional tillage; Warrant, Basagran, Ultra Blazer, Classic, and Poast used for weed control.

Test conducted by H. Jordan, G. Ware, S. Brannon, and H. Jackson.

Greenhouse Ratings for Resistance to Three Species of Root-knot Nematode and Soybean Cyst Nematode, 2018

Company or Brand Name	Variety	Seed Treatment	Root-knot nematode		Cyst nematode	
			Southern ¹	Peanut ²	Race 3 ³	Race 9 ⁴
			----- rating ⁵ -----			
AgSouth	644R2X	Inovate	1.0	1.0	3.0	3.8
AgSouth	677LL	Inovate	4.8	4.0	5.0	5.0
AgSouth	700R2X	Inovate	1.0	1.5	4.0	5.0
AgSouth	738RR	Inovate	1.0	1.5	1.0	2.0
AgSouth	747LL	Inovate	1.0	3.0	1.0	3.0
AgSouth	GS48X18	Inovate	4.3	5.0	1.0	2.0
AgSouth	GS51X18S	Inovate	2.3	5.0	5.0	5.0
Armor Seed	X62D60	Defend Extra	1.0	1.8	5.0	4.8
Armor Seed	X65D19	Defend Extra	3.5	4.0	1.0	3.0
Armor Seed	X75D73	Defend Extra	4.0	1.8	5.0	5.0
Asgrow	AG52X9 RR2X/SR	ACC Fung + PV w ACC B-200 SAT	4.8	5.0	1.0	1.3
Asgrow	AG53X9 RR2X	ACC Fung + PV w ACC B-200 SAT	3.0	4.5	1.0	1.8
Asgrow	AG54X9 RR2X	ACC Fung + PV w ACC B-200 SAT	1.3	3.3	1.0	1.0
Asgrow	AG58X9 RR2X	ACC Fung + PV w ACC B-200 SAT	1.0	3.8	2.0	5.0
Asgrow	AG59X9 RR2X	ACC Fung + PV w ACC B-200 SAT	1.0	2.5	4.0	5.0
Asgrow	AG79X9 RR2X/SR	ACC Fung + PV w ACC B-200 SAT	1.0	2.0	1.0	1.0
Clemson	Agustina	None	2.3	2.3	1.0	4.8
Clemson	SC07-1518RR	None	1.3	3.3	1.0	4.8
Clemson	SC10-179	None	1.0	4.8	1.0	1.0
Clemson	SC10-258	None	3.0	3.5	1.0	4.0
Clemson	SC10-406RR	None	3.5	5.0	1.0	1.3
Clemson	TN11-5140	None	1.0	3.5	4.0	3.5
Clemson	TN12-5712R2	None	5.0	5.0	3.0	4.5
Clemson	TN13-5508R2	None	4.8	4.5	3.0	2.5
Credenz	CZ 4820 LL	Poncho/Votivo, ILeVO, EverGol	1.0	1.3	1.0	1.0
Credenz	CZ 4918 LL	Poncho/Votivo, ILeVO, EverGol	1.0	1.5	1.0	1.0
Credenz	CZ 4938 LL	Poncho/Votivo, ILeVO, EverGol	1.0	2.8	1.0	1.0
Credenz	CZ 5147 LL	Poncho/Votivo, ILeVO, EverGol	1.0	1.0	1.0	1.0
Credenz	CZ 5150 LL	Poncho/Votivo, ILeVO, EverGol	1.0	1.8	1.0	1.0
Credenz	CZ 5225 LL	Poncho/Votivo, ILeVO, EverGol	1.0	1.0	1.0	1.0
Credenz	CZ 5328 LL	Poncho/Votivo, ILeVO, EverGol	1.0	1.3	1.0	1.0
Credenz	CZ 5445 LL	Poncho/Votivo, ILeVO, EverGol	1.0	1.3	1.0	1.0
Credenz	CZ 5515 LL	Poncho/Votivo, ILeVO, EverGol	1.0	2.3	1.0	1.0
Credenz	CZ 5859 LL	Poncho/Votivo, ILeVO, EverGol	1.0	1.0	1.0	1.0
Credenz	CZ 5947 LL	Poncho/Votivo, ILeVO, EverGol	1.0	1.0	1.0	1.0
Credenz	CZ 6069 LL	Poncho/Votivo, ILeVO, EverGol	1.0	1.8	1.0	1.0
Credenz	CZ 6109 LL	Poncho/Votivo, ILeVO, EverGol	1.0	1.3	1.0	1.0
Credenz	CZ 6316 LL	Poncho/Votivo, ILeVO, EverGol	1.0	1.0	1.0	1.0
Credenz	CZ 6515 LL	Poncho/Votivo, ILeVO, EverGol	1.0	1.0	1.0	1.0
Credenz	CZ 7007 LL	Poncho/Votivo, ILeVO, EverGol	1.0	1.0	1.0	1.0
Credenz	CZ 7008 LL	Poncho/Votivo, ILeVO, EverGol	2.3	1.0	1.0	1.0
Dyna-Gro	S67XT29	Clariva Complete	4.8	4.8	1.0	2.5
Dyna-Gro	S69XT57	Equity VIP	1.0	1.3	3.0	4.8
Dyna-Gro	S74XT59	Equity VIP	1.0	2.5	3.0	5.0
Dyna-Gro	S75XT26	Equity VIP	1.0	3.3	4.0	4.8

Greenhouse Ratings for Resistance to Three Species of Root-knot Nematode and Soybean Cyst Nematode, 2018 (Continued)

Company or Brand Name	Variety	Seed Treatment	Root-knot nematode		Cyst nematode	
			Southern ¹	Peanut ²	Race 3 ³	Race 9 ⁴
----- rating ⁵ -----						
Dyna-Gro	SX17869XT	Equity VIP	1.0	2.0	5.0	4.5
GSDC Public Variety	Cook	None	1.0	3.3	5.0	4.8
Meherrin	SH 5215 LL	Activa Complete	4.3	1.5	3.0	5.0
Meherrin	SH 5915 LL	Activa Complete	3.3	4.5	1.0	1.0
Meherrin	SH 6515 LL	Activa Complete	4.8	1.3	5.0	5.0
Meherrin	SH 6815 LL	Activa Complete	3.0	1.3	2.0	5.0
Meherrin	SH 7418 LL	Activa Complete	1.0	2.5	1.0	3.8
MorSoy	MS 5607 RXT	Activa Complete	1.0	1.3	1.0	1.8
MorSoy	MS 6208 RXT	Activa Complete	1.0	1.3	5.0	1.5
MorSoy	MS 7057 RXT	Activa Complete	1.0	1.0	1.0	1.0
MU	MO5201D CONV	Cruiser + Apron XL + ILEVO + Vibrance + Maxim	1.0	1.0	1.0	3.3
MU	S11-20242C	Cruiser + Apron XL + ILEVO + Vibrance + Maxim	1.0	1.0	1.0	1.0
MU	S13-1955C	Cruiser + Apron XL + ILEVO + Vibrance + Maxim	1.0	1.0	1.0	1.0
MU	S14-9017R	Cruiser + Apron XL + ILEVO + Vibrance + Maxim	1.0	1.8	1.0	1.0
MU	S15-10434C	Cruiser + Apron XL + ILEVO + Vibrance + Maxim	1.0	1.0	1.0	1.0
NK Brand	S57-A7X	Clariva Complete + Mertect	3.5	5.0	1.0	1.0
NK Brand	S64-T4X	Clariva Complete + Mertect	5.0	4.8	1.0	1.8
NK Brand	S74-M3	Clariva Complete + Mertect	1.0	1.5	4.0	3.5
Pioneer	P55A49X	Apron + Gaucho	1.1	4.0	1.0	1.0
Pioneer	P63A47X	Apron + Gaucho	1.0	3.0	5.0	2.5
Pioneer	P72A21X	Apron + Gaucho	1.3	3.5	1.0	1.0
Pioneer	P76T54R2	Apron + Gaucho	1.0	3.8	5.0	3.3
SCCIA	SC06-306	None	1.0	3.0	5.0	3.5
SCCIA	SC10-261	None	4.0	5.0	2.0	4.3
SCCIA Public Variety	Cheraw	None	1.0	4.0	1.0	2.8
SCCIA Public Variety	Paul	None	1.0	3.8	5.0	3.8
UGA	G11-1614R2	None	1.3	3.0	1.0	3.8
UGA	G12-2062R2	None	1.3	3.3	2.0	1.0
UGA	G12-6543	None	1.0	1.3	2.0	2.5
UGA	G13-2114R2	None	1.0	2.5	1.0	1.3
UGA	G13-2369R2	None	1.3	2.5	1.0	3.0
UGA	G13-2454R2	None	1.0	2.3	1.0	3.0
UGA	G13-2842R2	None	1.0	3.0	1.0	2.3
UGA	G13-3461R2	None	1.0	3.3	1.0	2.5
UGA	G13-6241	None	2.8	4.8	4.0	5.0
UGA	G14-2478R2	None	1.0	2.8	1.0	1.8
UGA	G14-2622R2	None	1.0	2.0	1.0	1.0
UGA	G14-3268R2	None	1.0	1.5	3.0	4.0
UGA	G14-4316R2	None	1.0	1.3	2.0	1.8
UGA	G14-4364R2	None	1.0	1.5	1.0	1.3
UGA	G14-4396R2	None	1.3	3.0	3.0	5.0
UGA	G14-6063	None	4.0	2.8	3.0	3.3
UGA	G15PR-340	None	1.0	1.5	1.0	4.5
UGA	G15PRLL-953	None	1.0	3.0	1.0	2.5
UGA	G15PRLL-989	None	1.0	2.8	5.0	4.8

Greenhouse Ratings for Resistance to Three Species of Root-knot Nematode and Soybean Cyst Nematode, 2018 (Continued)

Company or Brand Name	Variety	Seed Treatment	Root-knot nematode		Cyst nematode	
			Southern ¹	Peanut ²	Race 3 ³	Race 9 ⁴
			----- rating ⁵ -----			
USDA-ARS	N7003CN	.	1.3	3.0	1.0	1.0
USDA-ARS	N8002	.	3.3	4.0	4.0	5.0
Virginia Tech	V12-1416	Rancona Summitt	2.5	4.8	5.0	3.3
Virginia Tech	V14-3762	Rancona Summitt	4.5	4.8	5.0	4.0
Virginia Tech	V14-3821	Rancona Summitt	1.2	1.8	5.0	5.0
Virginia Tech	V14-3982	Rancona Summitt	3.3	4.3	4.0	4.5
Virginia Tech	V14-3983	Rancona Summitt	4.3	4.0	5.0	4.8
Check Varieties	Benning		1.0	1.3	1.0	4.5
	BOGGS		1.0	3.0	1.0	2.3
	Bossier		4.5	5.0	5.0	4.8
	CNS		4.8	4.3	3.0	5.0
	G93-9009		1.0	1.3	1.0	1.0
	G93-9106		1.0	1.0	1.0	1.0
	GaSoy17		5.0	4.5	3.0	4.5
	Hagood		1.0	3.3	1.0	3.8
	Hartwig		1.0	3.8	1.0	1.0
	Haskell		1.0	2.0	5.0	5.0
	Prichard		1.0	3.8	2.0	1.3
	LSD (0.10)		0.4	0.9	0.2	0.2

1. *Meloidogyne incognita*.

2. *Meloidogyne arenaria*.

3. The cyst indices on the differentials were: Peking = 0 (-), Pickett = 0 (-), PI88788 = 0 (-), PI90763 = 0 (-).

4. The cyst indices on the differentials were: Peking = 14 (+), Pickett = 40 (+), PI88788 = 3 (-), PI90763 = 4 (-).

5. Rating: 1 = (few cysts/galls) to 5 = (many cysts/galls).

Ratings for Soybean Cyst Nematode and Root-knot Nematode provided by B.J. Averitt, S.L. Finnerty, J.P. Noe, W.E. Baxter, E.D. Wood, and Zenglu Li.

Sources of Seed for the 2018 Soybean Variety Tests

Brand or Variety Name	Company and Address
AGSouth	AGSouth Genetics, LLC, PO Box 72246, Albany, GA 31708-2246
Armor	Armor Seed LLC, 2532 Alexander Dr., Suite B, Jonesboro, AR 72401
Asgrow	Monsanto Company, 800 North Lindbergh Blvd., St. Louis, MO 63167
Clemson	Clemson University, Pee Dee REC, 2200 Pocket Road, Florence, SC 29506
Credenz	Bayer CropScience, 5569 Liberty Drive, Spring Hope, NC 37882
Dyna-Gro	CPS Dyna-Gro Seed, 100 Industrial Court, Colquitt, GA 39837
Meherrin	Meherrin Ag, PO Box 1076, Hawkinsville, GA 31036
MorSoy	SeedKoz, 1725 Windward Concourse, Suite 410, Alpharetta, GA 30005
MU	University of Missouri, PO Box 160, Portageville, MO 63873
NK Brand	Syngenta Seeds, Inc., 4013 Fairmount Pike, Signal Mountain, TN 37377
Pioneer	Dow Dupont, 425 Abbeyle Way, Columbia, SC 29229
SCCIA	South Carolina Crop Improvement Association, 1162 Old Cherry Road, Clemson, SC 29634
UGA	University of Georgia, CAGT, 111 Riverbend Road, Athens, GA 30602
USDA-ARS	USDA-ARS, 605 Airways Blvd., Jackson, TN 38301
Virginia Tech	Virginia Tech, 220 Ag Quad Lane, Blacksburg, VA 24060
<u>Public Varieties</u>	
GSDC - Cook	Georgia Seed Development Commission, 2420 S. Milledge Ave., Athens, GA 30605
SCCIA - Cheraw & Paul	South Carolina Crop Improvement Association, 1162 Old Cherry Road, Clemson, SC 29634

SORGHUM GRAIN

Statewide Summary: Sorghum Grain Performance, Georgia, 2018

Company or Brand Name	Hybrid or Variety Name	Early Plantings				Late Plantings			Statewide Average
		Tifton	Plains	Athens	Early Average	Tifton	Athens	Late Average	
----- bu/acre -----									
Alta Seeds	ADV G2275	50	79	108	79	.	.	.	.
Alta Seeds	ADV G3247	54	77	119	83	.	.	.	.
Alta Seeds	AG1203	31	63	122	72	18	53	36	54
Alta Seeds	AG1301	49	65	108	74	22	55	39	56
DEKALB	DKS33-07	62	66	111	79	25	39	32	56
DEKALB	DKS37-07	67	75	117	86	33	42	37	62
DEKALB	DKS38-16	86	91	124	100	50	43	46	73
DEKALB	DKS47-07	96	104	126	109	51	65	58	83
DEKALB	DKS51-01	106	78	119	101	46	47	46	73
DEKALB	DKS53-53	50	70	115	79	21	41	31	55
Dyna-Gro	GX16833	72	79	.	.	.	.	.	.
Dyna-Gro	GX17227	56	75	.	.	.	.	.	.
Dyna-Gro	GX17379	80	109	.	.	.	.	.	.
Dyna-Gro	GX17948	59	63	.	.	.	.	.	.
Dyna-Gro	GX17962	73	100	.	.	.	.	.	.
Dyna-Gro	GX17968	54	61	.	.	.	.	.	.
Dyna-Gro	M69GR88	19	46	.	.	.	.	.	.
Dyna-Gro	M73GR55	89	90	.	.	.	.	.	.
Dyna-Gro	M74GB17	54	89	.	.	.	.	.	.
Gayland Ward	EXP-9097	95	94	.	.	48	.	.	.
Gayland Ward	EXP-9098	104	76	.	.	56	.	.	.
Gayland Ward	EXP-9134	52	47	107	69	19	43	31	50
Gayland Ward	EXP-9135	59	84	104	82	28	50	39	60
Gayland Ward	EXP-9138	10	8	95	37	3	31	17	27
Gayland Ward	EXP-9139	16	22	86	41	4	27	15	28
Gayland Ward	GW-1160	63	84	104	84	12	51	32	58
Meherrin	SH 65G6	.	.	.	.	55	.	.	.
Meherrin	SH 80G4	.	.	.	.	45	.	.	.
Meherrin	SH 90G6	82	91	.	.	.	.	.	.
Meherrin	SH X1922	73	68	.	.	.	.	.	.
Pioneer	83P17	97	105	110	104	61	58	60	82
Pioneer	84P80	79	70	125	91	25	42	33	62
Scott Seed	X50215	33	93	115	80	27	57	42	61
Scott Seed	X50415	64	93	119	92	46	51	49	70
Scott Seed	X5055	75	85	100	87	14	29	21	54
Scott Seed	X54515	40	72	115	75	27	58	43	59
Sorghum Partners	SP 68M57	53	88	.	.	.	.	.	.
Sorghum Partners	SP 74C40	55	77	.	.	.	.	.	.
Sorghum Partners	SP7715	91	100	111	101	.	.	.	.
Average		63	77	112	82	32	46	37	59
LSD at 10% Level		21	17	10	21	7	9	11	18
Std. Err. of Entry Mean		9	4	4	9	3	4	4	7

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Note: Sugarcane aphid pressure was a major influence on yield across sites, with more damage occurring in late than early plantings.

Tifton, Georgia: Sorghum Grain Performance, 2018, Dryland

Company or Brand Name	Hybrid	Yield ¹ bu/acre	2-Year	Test Wt. lb/bu	50% Bloom ² days	Plant Ht. in	Lodging %	Bird Damage ³ %
			Average Yield bu/acre					
DEKALB	DKS51-01	105.8	111.0	52.0	56	55	0	26
Gayland Ward	EXP-9098	103.8	.	51.1	55	48	0	14
Pioneer	83P17	97.3	98.9	49.2	58	50	0	26
DEKALB	DKS47-07	96.3	.	47.1	55	53	0	29
Gayland Ward	EXP-9097	94.5	.	47.5	57	55	0	39
Sorghum Partners	SP7715	90.8	108.6	55.5	58	52	0	34
Dyna-Gro	M73GR55	88.5	98.6	51.4	62	49	0	27
DEKALB	DKS38-16	85.5	.	51.4	55	55	0	19
Meherrin	SH 90G6	82.0	103.1	50.1	57	56	1	26
Dyna-Gro	GX17379	80.0	.	49.9	57	49	0	26
Pioneer	84P80	79.0	102.4	45.5	56	55	8	28
Scott Seed	X5055	74.5	.	48.9	45	49	0	18
Dyna-Gro	GX17962	72.8	.	50.1	56	50	0	11
Meherrin	SH X1922	72.8	.	54.2	55	55	0	26
Dyna-Gro	GX16833	72.0	90.0	48.8	55	50	4	28
DEKALB	DKS37-07	67.0	95.6	48.2	54	46	0	20
Scott Seed	X50415	64.3	.	50.3	55	53	3	10
Gayland Ward	GW-1160	62.8	82.0	46.3	54	47	5	25
DEKALB	DKS33-07	62.0	.	48.7	48	47	11	13
Dyna-Gro	GX17948	59.0	.	47.8	57	51	3	16
Gayland Ward	EXP-9135	58.5	68.3	44.7	55	50	10	13
Dyna-Gro	GX17227	56.0	.	43.0	60	54	3	16
Sorghum Partners	SP 74C40	55.3	.	45.4	55	46	0	19
Dyna-Gro	GX17968	54.0	.	45.5	56	54	3	16
Dyna-Gro	M74GB17	53.8	87.9	45.0	61	49	1	22
Alta Seeds	ADV G3247	53.5	.	46.7	56	49	0	14
Sorghum Partners	SP 68M57	52.5	.	47.0	56	45	0	10
Gayland Ward	EXP-9134	51.5	73.1	45.9	61	52	10	27
DEKALB	DKS53-53	50.3	90.9	41.9	58	53	3	25
Alta Seeds	ADV G2275	50.0	.	47.3	56	50	0	14
Alta Seeds	AG1301	49.0	.	40.6	53	46	0	0
Scott Seed	X54515	39.5	.	44.2	64	43	0	14
Scott Seed	X50215	32.8	.	46.0	54	45	10	7
Alta Seeds	AG1203	31.3	.	35.4	54	42	0	3
Dyna-Gro	M69GR88	19.0	.	38.4	56	47	0	0
Gayland Ward	EXP-9139	16.0	51.1	39.9	56	44	4	0
Gayland Ward	EXP-9138	10.3	41.1	47.3	61	44	0	7
Average		63.3 ⁴	86.8	47.0	56	50	2	18
LSD at 10% Level		20.5	16.9	2.2	1	5	-	-
Std. Err. of Entry Mean		8.8	7.2	0.9	0	2	3	5

Tifton, Georgia: Sorghum Grain Performance, 2018, Dryland (Continued)

NOTE: Very low yields for some hybrids resulted primarily from sugarcane aphids. Heavy infestations disrupted head development, and this can also be observed from the low test weights.

1. Yields calculated as 56 lbs/bushel at 14% moisture and adjusted to remove impact of bird damage.
2. Days from planting to 50% bloom.
3. Percent of grain head damaged.
4. CV = 27.6% and df for EMS = 108.

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Planted: April 24, 2018.

Harvested: July 27, 2018.

Seeding Rate: 100,000 seed/acre in 36" rows.

Soil Type: Tifton sandy loam.

Soil Test: P = Medium, K = Medium, and pH = 6.9.

Fertilization: Preplant: 50 lb N, 50 lb P₂O₅, and 100 lb K₂O/acre. Sidedress: 60 lb N/acre.

Previous Crop: Summer annuals.

Management: Conventional tillage; Dual Magnum and Atrazine used for weed control; Telone II used for nematode control; Sivanto used for insect control.

Test conducted by R. Brooke, K. Cawley, M. Cofield, and D. Dunn.

Plains, Georgia: Sorghum Grain Performance, 2018, Dryland

Company or Brand Name	Hybrid	Yield ¹ bu/acre	2-Year		50% Bloom ² days	Plant Ht. in	Lodging %	Bird Damage ³ %
			Average Yield bu/acre	Test Wt. lb/bu				
Dyna-Gro	GX17379	108.8	.	49.1	59	60	0	35
Pioneer	83P17	104.8	111.9	42.7	60	60	0	33
DEKALB	DKS47-07	104.0	.	41.3	58	61	7	42
Dyna-Gro	GX17962	100.3	.	46.9	58	55	5	35
Sorghum Partners	SP7715	99.7	118.7	53.4	58	61	10	37
Gayland Ward	EXP-9097	93.7	.	43.4	57	59	0	41
Scott Seed	X50215	93.0	.	50.7	57	56	8	32
Scott Seed	X50415	92.7	.	47.7	58	60	25	52
Meherrin	SH 90G6	91.0	101.9	48.4	59	62	1	33
DEKALB	DKS38-16	90.7	.	49.0	58	57	17	27
Dyna-Gro	M73GR55	90.0	104.4	46.8	62	59	2	33
Dyna-Gro	M74GB17	88.8	95.9	45.2	63	59	0	25
Sorghum Partners	SP 68M57	88.0	.	45.1	57	53	10	17
Scott Seed	X5055	85.3	.	47.9	47	49	2	25
Gayland Ward	GW-1160	83.8	88.5	43.5	56	52	3	33
Gayland Ward	EXP-9135	83.5	95.6	45.6	57	60	6	44
Dyna-Gro	GX16833	79.3	97.9	47.6	58	59	42	42
Alta Seeds	ADV G2275	79.0	.	49.6	58	55	0	28
DEKALB	DKS51-01	77.7	88.9	44.0	58	63	3	52
Sorghum Partners	SP 74C40	77.3	.	45.5	56	55	3	29
Alta Seeds	ADV G3247	77.3	.	45.6	58	58	0	41
Gayland Ward	EXP-9098	75.7	.	38.9	58	59	17	34
DEKALB	DKS37-07	75.0	88.9	41.4	56	55	0	36
Dyna-Gro	GX17227	75.0	.	44.9	62	61	2	37
Scott Seed	X54515	72.3	.	46.8	65	57	5	44
DEKALB	DKS53-53	70.3	81.0	45.6	56	56	3	34
Pioneer	84P80	69.7	85.4	44.3	58	59	43	38
Meherrin	SH X1922	68.0	.	46.1	57	70	11	42
DEKALB	DKS33-07	65.7	.	46.9	52	47	7	26
Alta Seeds	AG1301	65.3	.	44.8	55	48	9	13
Dyna-Gro	GX17948	63.0	.	46.6	59	55	5	22
Alta Seeds	AG1203	62.7	.	35.8	55	51	2	29
Dyna-Gro	GX17968	60.7	.	44.4	56	59	8	21
Gayland Ward	EXP-9134	47.3	65.4	38.4	63	63	19	35
Dyna-Gro	M69GR88	45.8	.	38.1	58	53	15	25
Gayland Ward	EXP-9139	22.3	42.3	41.4	58	49	6	7
Gayland Ward	EXP-9138	7.5	29.1	44.8	63	56	60	0
Average		76.6 ⁴	86.4	45.1	58	57	10	32
LSD at 10% Level		17.3	10.4	3.6	1	2	-	-
Std. Err. of Entry Mean		3.8	4.3	1.4	0	1	6	4

Plains, Georgia: Sorghum Grain Performance, 2018, Dryland (Continued)

NOTE: Very low yields for some hybrids resulted primarily from sugarcane aphids. Heavy infestations disrupted head development, and this can also be observed from the low test weights.

1. Yields calculated as 56 lbs/bushel at 14% moisture and adjusted to remove impact of bird damage.
2. Days from planting to 50% bloom.
3. Percent of grain head damaged.
4. CV = 17.5% and df for EMS = 84.

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Planted: May 2, 2018.

Harvested: August 10, 2018.

Seeding Rate: 100,000 seed/acre in 36" rows.

Soil Type: Greenville sandy clay loam.

Soil Test: P = Medium, K = Very High, and pH = 6.0.

Fertilization: Preplant: 27 lb N, 70 lb P₂O₅, and 0 lb K₂O/acre. Sidedress: 60 lb N/acre.

Previous Crop: Cotton.

Management: Conventional tillage; Dual Magnum used for weed control.

Test conducted by R. Brooke, K. Cawley, M. Cofield, D. Dunn, W. Jones, and D. Pearce.

Athens, Georgia: Sorghum Grain Performance, 2018, Dryland

Company or Brand Name	Hybrid	Yield ¹ bu/acre	2-Year		50% Bloom ² days	Plant Ht. in	Lodging %	Bird Damage ³ %
			Average Yield bu/acre	Test Wt. lb/bu				
DEKALB	DKS47-07	126.0	.	55.2	63	62	0	.
Pioneer	84P80	124.8	90.0	59.2	61	56	0	.
DEKALB	DKS38-16	124.3	.	59.7	62	58	0	.
Alta Seeds	AG1203	122.3	.	56.5	64	51	0	.
Alta Seeds	ADV G3247	119.3	.	58.9	65	56	0	.
Scott Seed	X50415	119.0	.	61.4	66	56	0	.
DEKALB	DKS51-01	118.8	91.3	59.4	64	59	0	.
DEKALB	DKS37-07	117.0	100.9	56.4	63	54	0	.
DEKALB	DKS53-53	115.0	72.5	57.9	65	52	0	.
Scott Seed	X50215	115.0	.	58.8	64	54	0	.
Scott Seed	X54515	114.5	.	58.5	68	51	0	.
Sorghum Partners	SP7715	111.3	.	59.8	66	55	0	.
DEKALB	DKS33-07	110.8	.	54.8	56	48	0	.
Pioneer	83P17	110.0	89.8	55.5	67	55	0	.
Alta Seeds	ADV G2275	108.3	.	58.9	64	56	0	.
Alta Seeds	AG1301	108.0	.	51.1	61	44	0	.
Gayland Ward	EXP-9134	106.8	76.8	56.1	65	60	0	.
Gayland Ward	GW-1160	104.3	79.9	55.4	63	52	0	.
Gayland Ward	EXP-9135	104.0	76.0	53.3	64	53	0	.
Scott Seed	X5055	100.0	.	51.5	56	48	0	.
Gayland Ward	EXP-9138	94.5	67.1	58.9	65	59	0	.
Gayland Ward	EXP-9139	86.0	62.0	55.8	64	50	0	.
Average		111.8 ⁴	80.6	57.0	63	54	0	-
LSD at 10% Level		10.0	13.0	1.6	2	2	-	-
Std. Err. of Entry Mean		4.2	7.0	0.7	1	1	-	-

1. Yields calculated as 56 lbs/bushel at 14% moisture.

2. Days from planting to 50% bloom.

3. Percent of grain head damaged.

4. CV = 7.6% and df for EMS = 63.

Bolded yields are statistically non-significant (p = 0.10 level) from the highest yielding test entry.

Planted: May 11, 2018.

Harvested: September 7, 2018.

Seeding Rate: 100,000 seed/acre in 30" rows.

Soil Type: Wickham sandy loam.

Soil Test: P = Low, K = Low, and pH = 6.2.

Fertilization: Preplant: 22 lb N, 104 lb P₂O₅, and 120 lb K₂O/acre. Sidedress: 100 lb N/acre.

Previous Crop: Clover.

Management: Strip-tilled; Dual Magnum used for weed control; Lorsban and Sivanto used for insect control.

Test conducted by H. Jordan, G. Ware, J. Cartey, C. Fox, J. Griffin, and K. Roach.

Tifton, Georgia: Late-Planted Sorghum Grain Performance, 2018, Dryland

Company or Brand Name	Hybrid	Yield ¹ bu/acre	2-Year		50% Bloom ² days	Plant Ht. in	Lodging %	Bird Damage ³ %
			Average Yield bu/acre	Test Wt. lb/bu				
Pioneer	83P17	60.8	69.1	40.8	56	58	0	17
Gayland Ward	EXP-9098	56.3	.	42.5	56	54	0	11
Meherrin	SH 65G6	55.3	65.6	52.1	51	50	1	25
DEKALB	DKS47-07	51.0	.	34.7	53	58	1	27
DEKALB	DKS38-16	49.5	61.0	44.8	53	56	0	20
Gayland Ward	EXP-9097	47.8	.	40.5	54	56	1	23
Scott Seed	X50415	46.3	.	47.2	54	58	7	20
DEKALB	DKS51-01	45.5	.	48.7	55	55	0	16
Meherrin	SH 80G4	44.5	46.8	43.3	55	57	0	16
DEKALB	DKS37-07	32.5	36.3	33.0	51	52	0	23
Gayland Ward	EXP-9135	27.5	.	35.1	55	50	0	16
Scott Seed	X54515	27.3	.	42.0	60	50	0	19
Scott Seed	X50215	26.5	.	37.6	53	49	11	33
Pioneer	84P80	24.5	46.1	39.9	57	52	3	25
DEKALB	DKS33-07	24.5	.	29.1	49	45	2	23
Alta Seeds	AG1301	21.8	.	27.3	52	45	0	0
DEKALB	DKS53-53	21.3	.	26.3	57	52	1	31
Gayland Ward	EXP-9134	19.0	.	36.4	60	61	10	10
Alta Seeds	AG1203	18.0	.	24.7	54	51	0	13
Scott Seed	X5055	13.5	.	.	50	40	0	21
Gayland Ward	GW-1160	12.3	40.9	25.0	52	45	0	16
Gayland Ward	EXP-9139	4.0	.	.	56	40	0	0
Gayland Ward	EXP-9138	2.5	.	.	57	49	0	0
Average		31.8 ⁴	52.3	37.6	54	51	2	18
LSD at 10% Level		7.1	11.9	4.1	1	3	-	-
Std. Err. of Entry Mean		3.0	5.0	1.4	1	1	1	3

NOTE: Very low yields for some hybrids resulted primarily from sugarcane aphids. Heavy infestations disrupted head development, and this can also be observed from the low test weights.

1. Yields calculated as 56 lbs/bushel at 14% moisture and adjusted to remove impact of bird damage.
2. Days from planting to 50% bloom.
3. Percent of grain head damaged.
4. CV = 18.9% and df for EMS = 66.

Bolded yields are statistically non-significant (p = 0.10 level) from the highest yielding test entry.

Planted: June 22, 2018.

Harvested: September 21, 2018.

Seeding Rate: 100,000 seed/acre in 36" rows.

Soil Type: Tifton sandy loam.

Soil Test: P = Medium, K = Medium, and pH = 6.6.

Fertilization: Preplant: 50 lb N, 60 lb P₂O₅, and 60 lb K₂O/acre. Sidedress: 50 lb N/acre.

Previous Crop: Forage sorghum.

Management: Conventional tillage; Dual Magnum and Atrazine used for weed control; Lorsban at planting used for insect control.

Test conducted by R. Brooke, K. Cawley, M. Cofield, and D. Dunn.

**Plains, Georgia:
Late-Planted Sorghum Grain Performance, 2018, Dryland**

Company or Brand Name	Hybrid	2-Year		Test Wt. lb/bu	50% Bloom ² days	Plant Ht. in	Lodging %	Bird Damage ³ %
		Yield ¹ bu/acre	Average Yield bu/acre					

A test was planted at this location on July 10, 2018. However, sugarcane aphid damage was severe and delayed maturity. The location was then impacted by Hurricane Michael and the trial was not harvestable.

Athens, Georgia: Late-Planted Sorghum Grain Performance, 2018, Dryland

Company or Brand Name	Hybrid	Yield ¹ bu/acre	2-Year	Test Wt. lb/bu	50% Bloom ² days	Plant Ht. in	Lodging %	Bird Damage ³ %
			Average Yield bu/acre					
DEKALB	DKS47-07	65.0	.	55.3	60	59	8	.
Pioneer	83P17	58.3	64.1	53.4	62	57	5	.
Scott Seed	X54515	57.8	.	57.9	61	48	85	.
Scott Seed	X50215	56.8	.	52.5	58	50	95	.
Alta Seeds	AG1301	55.3	.	54.2	55	49	9	.
Alta Seeds	AG1203	53.0	.	42.1	57	51	56	.
Scott Seed	X50415	51.0	.	53.8	58	54	73	.
Gayland Ward	GW-1160	50.8	54.8	49.8	59	51	0	.
Gayland Ward	EXP-9135	50.0	.	49.4	61	47	92	.
DEKALB	DKS51-01	46.5	.	38.7	63	54	5	.
DEKALB	DKS38-16	43.0	50.4	54.6	57	58	23	.
Gayland Ward	EXP-9134	42.5	.	51.3	62	47	95	.
Pioneer	84P80	42.3	49.9	53.0	59	49	71	.
DEKALB	DKS37-07	41.8	61.8	54.0	57	55	4	.
DEKALB	DKS53-53	40.8	.	50.7	60	49	61	.
DEKALB	DKS33-07	39.0	.	48.0	51	48	24	.
Gayland Ward	EXP-9138	31.3	.	38.4	62	53	71	.
Scott Seed	X5055	28.5	.	32.0	52	44	14	.
Gayland Ward	EXP-9139	26.5	.	30.9	60	46	49	.
Average		46.3 ⁴	56.2	48.4	59	51	44	-
LSD at 10% Level		8.8	11.3	10.8	2	4	-	-
Std. Err. of Entry Mean		3.6	4.6	4.5	1	2	6	-

NOTE: Low yields for some hybrids resulted primarily from sugarcane aphids. Heavy infestations disrupted head development, and this can also be observed from the low test weights.

1. Yields calculated as 56 lbs/bushel at 14% moisture.

2. Days from planting to 50% bloom.

3. Percent of grain head damaged.

4. CV = 15.6% and df for EMS = 50.

Bolded yields are statistically non-significant (p = 0.10 level) from the highest yielding test entry.

Planted: July 2, 2018.

Harvested: October 17, 2018.

Seeding Rate: 100,000 seed/acre in 30" rows.

Soil Type: Wickham sandy loam.

Soil Test: P = Low, K = Low, and pH = 6.2.

Fertilization: Preplant: 22 lb N, 104 lb P₂O₅, and 120 lb K₂O/acre. Sidedress: 100 lb N/acre.

Previous Crop: Clover.

Management: Strip-tilled; Dual Magnum used for weed control; Lorsban and Sivanto used for insect control.

Test conducted by H. Jordan, G. Ware, J. Cartey, C. Fox, J. Griffin, and K. Roach.

SORGHUM FOR SILAGE

Statewide Summary: Sorghum Silage Performance, Georgia, 2018

Company or Brand Name	Hybrid or Variety Name	Tifton			Athens			Statewide		
		Primary	Ratoon	Total	Primary	Ratoon	Total	Primary	Ratoon	Total
----- dry matter yield - tons per acre -----										
Alta Seeds	ADV XF033	5.8	4.3	10.0	7.4	1.0	8.4	6.6	2.6	9.2
Alta Seeds	ADV XF372	4.2	2.7	7.0	6.1	1.0	7.0	5.1	1.9	7.0
Alta Seeds	AF7401	4.5	3.4	7.9	6.0	0.8	6.8	5.2	2.1	7.3
Alta Seeds	AF8301	5.1	2.2	7.2	6.7	0.7	7.4	5.7	1.5	7.3
Desert Sun	Sweet Caroline	4.6	2.8	7.4	6.5	0.7	7.2	5.5	1.8	7.3
Dyna-Gro	705F	5.0	3.1	8.1	.	.	.	.	.	.
Dyna-Gro	F73FS10	5.2	4.4	9.6	.	.	.	.	.	.
Dyna-Gro	F74FS23 BMR	4.2	2.9	7.1	.	.	.	.	.	.
Dyna-Gro	F76FS77 BMR	3.3	0.4	3.7	.	.	.	.	.	.
Dyna-Gro	FX18811	6.4	4.3	10.7	7.8	0.6	8.4	7.0	2.4	9.7
Dyna-Gro	FX18851 BMR	3.2	0.6	3.7	6.0	0.6	6.6	4.6	0.6	5.2
Gayland Ward	Super Sugar (DM)	5.0	3.2	8.2	7.2	1.0	8.2	6.1	2.1	8.2
Gayland Ward	Sweet Forever BMR	4.4	1.5	5.9	5.7	0.9	6.6	5.1	1.2	6.3
Gayland Ward	Sweet Six	4.5	2.1	6.6	5.8	0.8	6.5	5.1	1.4	6.6
Moss Seed	4Ever Green	3.8	0.1	3.9	7.3	0.6	7.9	5.5	0.3	5.9
Scott Seed	X50610	3.2	0.6	3.8	5.6	0.6	6.2	4.4	0.6	5.0
Scott Seed	X5063	3.4	0.8	4.1	4.9	0.9	5.7	4.1	0.8	4.9
Scott Seed	X50644	2.2	0.0	2.2	4.5	0.5	5.0	3.3	0.2	3.6
Scott Seed	X51423	3.9	2.4	6.3	6.5	1.0	7.5	5.2	1.7	6.9
Sorghum Partners	NK300	5.1	3.5	8.6	.	.	.	.	.	.
Sorghum Partners	SP4555 (SGxS)	3.6	1.4	5.0	.	.	.	.	.	.
Sorghum Partners	SS304 (FS)	6.2	3.4	9.7	.	.	.	.	.	.
Average		4.4	2.3	6.7	6.3	0.8	7.0	5.2	1.4	6.6
LSD at 10% Level		0.6	0.7	1.0	1.0	0.3	1.1	1.1	0.9	1.1
Std. Err. of Entry Mean		0.2	0.3	0.4	0.4	0.1	0.5	0.5	0.4	0.5

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Tifton, Georgia:
Sorghum Silage Performance, 2018, Dryland

Company or Brand Name	Hybrid or Variety Name	Forage Yields		Plant Height	Dry Matter	2-Yr. Avg Dry Yield
		Dry	Green			
		----- tons/acre -----		in	%	tons/acre
Primary Crop						
Dyna-Gro	FX18811	6.4	18.4	123	21	.
Sorghum Partners	SS304 (FS)	6.2	17.8	113	23	.
Alta Seeds	ADV XF033	5.8	16.5	92	23	.
Dyna-Gro	F73FS10	5.2	14.9	101	26	5.8
Sorghum Partners	NK300	5.1	14.5	87	22	4.6
Alta Seeds	AF8301	5.1	14.4	88	23	.
Dyna-Gro	705F	5.0	14.4	88	23	5.0
Gayland Ward	Super Sugar (DM)	5.0	14.2	115	22	.
Desert Sun	Sweet Caroline	4.6	13.0	90	20	.
Alta Seeds	AF7401	4.5	12.8	75	20	4.6
Gayland Ward	Sweet Six	4.5	12.8	111	33	.
Gayland Ward	Sweet Forever BMR	4.4	12.6	114	28	.
Alta Seeds	ADV XF372	4.2	12.0	69	20	.
Dyna-Gro	F74FS23 BMR	4.2	12.1	111	16	4.5
Scott Seed	X51423	3.9	11.1	101	17	.
Moss Seed	4Ever Green	3.8	10.7	80	19	3.7
Sorghum Partners	SP4555 (SGxS)	3.6	10.2	111	24	3.8
Scott Seed	X5063	3.4	9.7	90	23	.
Dyna-Gro	F76FS77 BMR	3.3	9.6	66	20	3.3
Scott Seed	X50610	3.2	9.0	58	20	.
Dyna-Gro	FX18851 BMR	3.2	9.0	70	21	.
Scott Seed	X50644	2.2	6.2	56	18	.
Average		4.4 ¹	12.5	91	22	4.4
LSD at 10% Level		0.6	1.6	8	1	0.5
Std. Err. of Entry Mean		0.2	0.7	3	1	0.2
						Percent Regrowth
Ratoon Crop						
Dyna-Gro	F73FS10	4.4	12.6	92	19	100
Dyna-Gro	FX18811	4.3	12.2	80	15	100
Alta Seeds	ADV XF033	4.3	12.1	71	18	100
Sorghum Partners	NK300	3.5	9.9	59	18	100
Sorghum Partners	SS304 (FS)	3.4	9.8	82	14	100
Alta Seeds	AF7401	3.4	9.6	50	17	100
Gayland Ward	Super Sugar (DM)	3.2	9.2	84	16	100
Dyna-Gro	705F	3.1	8.7	62	18	93
Dyna-Gro	F74FS23 BMR	2.9	8.2	70	13	95
Desert Sun	Sweet Caroline	2.8	8.1	56	18	93
Alta Seeds	ADV XF372	2.7	7.8	47	18	91
Scott Seed	X51423	2.4	7.0	66	14	95
Alta Seeds	AF8301	2.2	6.3	58	18	63
Gayland Ward	Sweet Six	2.1	6.0	85	18	70
Gayland Ward	Sweet Forever BMR	1.5	4.3	74	18	45

**Tifton, Georgia:
Sorghum Silage Performance, 2018, Dryland
(Continued)**

Company or Brand Name	Hybrid or Variety Name	Forage Yields		Plant Height	Dry Matter	Percent Regrowth
		Dry	Green			
		----- tons/acre -----		in	%	%
Ratoon Crop - continued						
Sorghum Partners	SP4555 (SGxS)	1.4	4.0	65	16	40
Scott Seed	X5063	0.8	2.1	66	17	18
Scott Seed	X50610	0.6	1.8	43	17	19
Dyna-Gro	FX18851 BMR	0.6	1.6	46	17	21
Dyna-Gro	F76FS77 BMR	0.4	1.1	48	16	8
Moss Seed	4Ever Green	0.1	0.3	42	16	1
Scott Seed	X50644	0.0	0.0	.	.	0
Average		2.3 ²	6.5	64.0	16	66
LSD at 10% Level		0.7	2.0	9	1	-
Std. Err. of Entry Means		0.3	0.9	3	1	7.2

1. CV = 11.2% and df for EMS = 63.

2. CV = 26.4% and df for EMS = 63.

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

Planted: April 24, 2018.

Harvested: July 13, 2018, with 2,104 Growing Degree Units since planting. Test harvested early due to SCA infestation.

August 28, 2018, with 1,332 GDUs since prior cutting.

Seeding Rate: 100,000 seed/acre in 30" rows.

Soil Type: Tifton loamy sand.

Soil Test: P = Medium, K = Medium, and pH = 6.9.

Fertilization: Preplant: 50 lb N, 50 lb P₂O₅, and 100 lb K₂O/acre. Sidedress: 60 lb N/acre.

Previous Crop: Corn.

Management: Conventional tillage; Atrazine and Dual Magnum used for weed control; Telone II used for nematode control.

Test conducted by R. Brooke, K. Cawley, M. Cofield and D. Dunn.

Athens, Georgia: Sorghum Silage Performance, 2018, Dryland

Company or Brand Name	Hybrid or Variety Name	Forage Yields		Plant Height in	Dry Matter %	2-Yr. Avg Dry Yield ¹ tons/acre
		Dry ----- tons/acre -----	Green			
Primary Crop						
Dyna-Gro	FX18811	7.8	22.3	140	22	.
Alta Seeds	ADV XF033	7.4	21.3	86	25	.
Moss Seed	4Ever Green	7.3	20.7	120	19	6.0
Gayland Ward	Super Sugar (DM)	7.2	20.7	116	26	.
Alta Seeds	AF8301	6.7	19.0	82	26	.
Scott Seed	X51423	6.5	18.6	114	23	.
Desert Sun	Sweet Caroline	6.5	18.6	93	24	.
Alta Seeds	ADV XF372	6.1	17.3	77	22	.
Alta Seeds	AF7401	6.0	17.1	80	22	5.4
Dyna-Gro	FX18851 BMR	6.0	17.1	87	22	.
Gayland Ward	Sweet Six	5.8	16.6	122	30	.
Gayland Ward	Sweet Forever BMR	5.7	16.4	110	29	.
Scott Seed	X50610	5.6	16.0	79	22	.
Scott Seed	X5063	4.9	13.9	90	24	.
Scott Seed	X50644	4.5	12.9	96	17	.
Average		6.3 ¹	17.9	99	23	5.7
LSD at 10% Level		1.0	2.9	10	2	NS
Std. Err. Of Entry Mean		0.4	1.2	4	1	0.5
						Percent Regrowth
Ratoon Crop						
Alta Seeds	ADV XF372	1.0	2.8	.	21	86
Scott Seed	X51423	1.0	2.8	.	22	79
Alta Seeds	ADV XF033	1.0	2.7	.	22	85
Gayland Ward	Super Sugar (DM)	1.0	2.7	.	22	85
Gayland Ward	Sweet Forever BMR	0.9	2.6	.	23	90
Scott Seed	X5063	0.9	2.6	.	22	80
Alta Seeds	AF7401	0.8	2.3	.	24	83
Gayland Ward	Sweet Six	0.8	2.1	.	22	78
Alta Seeds	AF8301	0.7	2.1	.	24	79
Desert Sun	Sweet Caroline	0.7	2.0	.	22	79
Dyna-Gro	FX18851 BMR	0.6	1.8	.	21	80
Dyna-Gro	FX18811	0.6	1.7	.	23	76
Moss Seed	4Ever Green	0.6	1.7	.	20	63
Scott Seed	X50610	0.6	1.7	.	23	80
Scott Seed	X50644	0.5	1.4	.	21	61
Average		0.8 ²	2.2	-	22	79
LSD at 10% Level		0.3	0.8	-	NS	11
Std. Err. Of Entry Mean		0.1	0.3	-	1	5

**Athens, Georgia:
Sorghum Silage Performance, 2018, Dryland
(Continued)**

1. CV = 13.5% and df for EMS = 40.

2. CV = 31.6% and df for EMS = 42.

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

"NS" indicates differences are statistically non-significant ($p = 0.10$ probability level).

Planted: May 10, 2018.

Harvested: August 20, 2018, with 2,697 Growing Degree Units since planting.
October 3, 2018, with 1,149 GDUs since prior cutting.

Seeding Rate: 100,000 seed/acre in 30" rows.

Soil Type: Wickham sandy loam.

Soil Test: P = Low, K = Low, and pH = 6.2.

Fertilization: Preplant: 22 lb N, 104 lb P₂O₅, and 120 lb K₂O/acre. Sidedress: 100 lb N/acre.

Previous Crop: Clover.

Management: Strip-tilled; Dual Magnum used for weed control; Lorsban and Sivanto used for insect control.

Test conducted by H. Jordan, G. Ware, B. Weldy, J. Cartey, C. Fox, J. Griffin, and K. Roach.

SUMMER ANNUAL FORAGES

Statewide Summary: Summer Annual Forages Performance, Georgia, 2018

Company or Brand Name	Hybrid or Variety Name	Tifton Total	Athens Total	Statewide Total
dry matter yield - lbs per acre				
<u>Sorghum and Sorghum x Sudangrass</u>				
Alta Seeds	ADV S6504 (SGxS)	13853	11645	12749
Coffey Forage	Surpass BMR dw (SGxS)	12666	8640	10653
Coffey Forage	Xtragraze ATxL BMR	14807	10829	12818
Coffey Forage	Xtragraze BMR	15137	8005	11571
Desert Sun	Latte (SGxS)	16536	12989	14763
Dyna-Gro	DannyBoy BMR	13346	.	.
Dyna-Gro	Fullgraze BMR	12445	.	.
Dyna-Gro	FX18835SS	15988	12767	14378
Dyna-Gro	FX18843SS BMR	12956	10060	11508
Gayland Ward	10218	12292	7785	10039
Moss Seed	Mega Green BMR SGxS	10828	8152	9490
Moss Seed	Mega Green SGxS	16107	7116	11611
Scott Seed	X5062 (SGxS)	13571	11318	12445
Scott Seed	X50643 (SGxS)	14575	10987	12781
Scott Seed	X50651 (SGxS) (df)	11556	8378	9967
Scott Seed	X50652 (SGxS) (df)	11773	10199	10986
Scott Seed	X53543 (SGxS)	15028	12540	13784
Sorghum Partners	Sordan79 (SGxS)	14025	.	.
Sorghum Partners	SP4555 (SGxS)	15927	.	.
Average		13864	10094	11969
LSD at 10% Level		2011	2720	1845
Std. Err. of Entry Means		850	1144	786
<u>Pearl Millet</u>				
Coffey Forage	Epic BMR	18786	6190	12488
Coffey Forage	ExCeed II BMR	17111	5326	11218
Dyna-Gro	PearlMil	21171	5530	13351
Sorghum Partners	Millex 32	20998	6550	13774
Average		19516	5898	12708
LSD at 10% Level		791	658	NS
Std. Err. of Entry Mean		305	254	2746

Bolded yields are statistically non-significant ($p = 0.10$ level) from the highest yielding test entry.

"NS" indicates differences are statistically non-significant ($p = 0.10$ probability level).

Tifton, Georgia: Summer Annual Forages Performance, 2018, Dryland

Company or Brand Name	Hybrid Name or Number	Clipping Dates		Season Total	2-Year Average
		6-21-2018	8-9-2018		
----- dry matter yield - pounds per acre -----					
<u>Sorghum x Sudangrass</u>					
Desert Sun	Latte (SGxS)	8007	8529	16536	.
Moss Seed	Mega Green SGxS	5967	10140	16107	18722
Dyna-Gro	FX18835SS	8302	7687	15988	.
Sorghum Partners	SP4555 (SGxS)	8049	7879	15927	16369
Coffey Forage	Xtragraze BMR	8958	6179	15137	16796
Scott Seed	X53543 (SGxS)	7690	7339	15028	.
Coffey Forage	Xtragraze ATxL BMR	8379	6429	14807	.
Scott Seed	X50643 (SGxS)	6898	7677	14575	.
Sorghum Partners	Sordan79 (SGxS)	8447	5579	14025	15592
Alta Seeds	ADV S6504 (SGxS)	6872	6981	13853	.
Scott Seed	X5062 (SGxS)	8058	5514	13571	.
Dyna-Gro	DannyBoy BMR	8380	4967	13346	14076
Dyna-Gro	FX18843SS BMR	7380	5576	12956	.
Coffey Forage	Surpass BMR dw (SGxS)	7269	5397	12666	11967
Dyna-Gro	Fullgraze BMR	6210	6236	12445	14666
Gayland Ward	10218	6627	5665	12292	.
Scott Seed	X50652 (SGxS) (df)	5823	5950	11773	.
Scott Seed	X50651 (SGxS) (df)	5861	5696	11556	.
Moss Seed	Mega Green BMR SGxS	5991	4837	10828	10657
Average		7324	6540	13864 ¹	14856
LSD at 10% Level		1021	1942	2011	2634
Std. Err. of Entry Means		431	820	850	1112
<u>Pearl Millet</u>					
Dyna-Gro	PearlMil	11129	10043	21171	.
Sorghum Partners	Millex 32	10615	10383	20998	16969
Coffey Forage	Epic BMR	9120	9666	18786	14942
Coffey Forage	ExCeed II BMR	8566	8546	17111	.
Average		9857	9659	19516 ²	15956
LSD at 10% Level		738	490	791	835
Std. Err. of Entry Mean		285	189	305	311

1. CV = 112.3% and df for EMS = 54.

2. CV = 3.1% and df for EMS = 9.

Bolding indicates entries yielding equal to highest yielding entry within a column based on Fisher's protected LSD (P = 0.10).

Planted: April 24, 2018.

Seeding Rate: Sorghum x Sudangrass: 150,000 seed/acre in 30" rows.
Millet: 500,000 seed/acre in 30" rows.

Soil Type: Tifton loamy sand.

Soil Test: P = Medium, K = Medium, and pH = 6.9.

Fertilization: Preplant: 50 lb N, 50 lb P₂O₅, and 100 lb K₂O/acre.

Sidedress: 60 lb N/acre, plus 50 lb N/acre after first harvest.

Previous Crop: Corn.

Management: Conventional tillage; Dual Magnum and Atrazine used for weed control;
Telone II used for nematode control.

Test conducted by R. Brooke, K. Cawley, M. Cofield, and D. Dunn.

Athens, Georgia: Summer Annual Forages Performance, 2018, Dryland

Company or Brand Name	Hybrid or Variety Name	Harvest Date			Season Total	2-Year Average
		6/26/2018	7/23/2018	10/3/2018		
----- dry matter yield - pounds per acre -----						
<u>Sorghum and Sorghum x Sudangrass</u>						
Desert Sun	Latte (SGxS)	3332	3400	6258	12989	.
Dyna-Gro	FX18835SS	3049	3305	6413	12767	.
Scott Seed	X53543 (SGxS)	3188	3049	6303	12540	.
Alta Seeds	ADV S6504 (SGxS)	3165	3171	5310	11645	.
Scott Seed	X5062 (SGxS)	3196	3480	4641	11318	.
Scott Seed	X50643 (SGxS)	2856	3182	4950	10987	.
Coffey Forage	Xtragraze ATxL BMR	3003	2989	4837	10829	.
Scott Seed	X50652 (SGxS) (df)	1877	3285	5038	10199	.
Dyna-Gro	FX18843SS BMR	3305	3201	3553	10060	.
Coffey Forage	Surpass BMR dw (SGxS)	2910	2322	3408	8640	7718
Scott Seed	X50651 (SGxS) (df)	2193	2770	3416	8378	.
Moss Seed	Mega Green BMR SGxS	2377	3252	2523	8152	7162
Coffey Forage	Xtragraze BMR	3213	2627	2166	8005	8168
Gayland Ward	10218	2410	2557	2818	7785	.
Moss Seed	Mega Green SGxS	1587	3101	2428	7116	7419
Average		2777	3046	4271	10094 ¹	7617
LSD at 10% Level		374	405	2466	596	NS
Std. Err. of Entry Mean		157	170	1037	1144	936
<u>Pearl Millet</u>						
Sorghum Partners	Millex 32	4064	2486	-	6550	.
Coffey Forage	Epic BMR	3139	3051	-	6190	7900
Dyna-Gro	PearlMil	2876	2654	-	5530	.
Coffey Forage	ExCeed II BMR	2673	2653	-	5326	.
Average		3188	2711	-	5898 ²	-
LSD at 10% Level		516	256	-	658	-
Std. Err. of Entry Mean		199	99	-	254	-

1. CV = 22.7% and df for EMS = 42.

2. CV = 8.6% and df for EMS = 9.

Bolded yields are statistically non-significant (p = 0.10 level) from the highest yielding test entry.

"NS" indicates differences are statistically non-significant (p = 0.10 probability level).

Planted: May 11, 2018

Harvested: June 26, 2018, with 1,179 Growing Degree Units since planting.

July 23, 2018, with 741 GDUs since prior cutting.

October 3, 2018, with 1,149 GDUs since prior cutting.

Seeding Rate: Sorghum x Sudangrass: 150,000 seed/acre in 30" rows.

Pearl Millet: 500,000 seed/acre in 30" rows.

Soil Type: Wickham sandy loam.

Soil Test: P = Low, K = Low, and pH = 6.2.

Fertilization: Preplant: 22 lb N, 104 lb P₂O₅, and 120 lb K₂O/acre.

Sidedress: 50 lb N/acre, plus 50 lb N/acre after first and second harvests.

Previous Crop: Clover.

Management: Strip tilled for planting.

Sorghum x Sudangrass: Dual Magnum used for weed control, Sivanto and Lorsban for insect control.

Pearl Millet: Lorsban used for insect control

Note: Pearl millet did not produce any regrowth following the second cutting.

Test conducted by H. Jordan and G. Ware.

Grain, Silage, and Forage Sorghum Hybrid Resistance to Insect, Disease, and Bird Damage, 2018

G. David Buntin, Xinzhi Ni, Karen R. Harris-Shultz, Joseph E. Knoll, Michael D. Toews, and Dustin Dunn

A total of 37 grain sorghum hybrids (Table 1) were evaluated for resistance to insect and bird damage in Tifton and Griffin, Georgia. In both locations, plots were two rows by 20 feet and entries were planted in a randomized complete block design with three replications at Griffin and four replications at Tifton. The Griffin trial was planted on June 21, 2018 and at Tifton on June 12, 2018. The Griffin location was evaluated only for sugarcane aphid infestation and damage. At Tifton, a total of 10 insect pests were observed (in order of importance): sugarcane aphid, sorghum webworm, sorghum midge, leaf-footed bug, fall armyworm, corn earworm, corn leaf aphid, stink bugs (southern green and brown stink bugs), and chinch bug. In comparison with the sugarcane aphid population and its damage, sorghum webworm, midge and bird damage, and anthracnose infection were variable, but commonly observed among the entries in 2018. Due to low populations, fall armyworm, leaf-footed bug, stink bug, and chinch bug damage data were not included in this report.

In 2018 at Tifton, the number of sugarcane aphids was not sampled and only sugarcane aphid damage at pre-harvest of the grain sorghum was rated on September 6, 2018. A simple binomial rating for panicle development was used: 0 = no panicle or aborted panicle development, and 1 = fully developed panicles. Aphid damage on sorghum leaves was rated using a 1-9 scale: 1 = no damage, 2 = 1-20%; 3 = 21-30%, 4 = 31-40%, 5 = 41-50%, 6 = 51-60%, 7 = 61-70%, 8 = 71-80%, and 9 = greater than 81% of the leaves are dying, which also included aphid-killed plants. Sorghum webworm, corn earworm, and sorghum midge damage were assessed in combination with grain loss according to the following rating scale: very good (VG) = 0-15% empty glumes on any of the sorghum panicles in an experimental plot; good (G) = a few empty glumes (16-30%) observed on a panicle; fair (F) = 31-75% empty glumes on a sorghum panicle; and poor (P) = majority of sorghum panicles with more than three quarters (> 75%) empty glumes. Bird feeding damage on developing kernels was determined by the presence of partial kernels on panicles and evidence of splattering of broken developing kernels falling on the top leaves of a plant. Bird damage was rated with the following scale: very good (VG) = less than 10% grain loss; good (G) = 11-25% loss; fair (F) = 26-50% loss; and poor (P) = >50% loss of grains per panicle. Lastly, anthracnose leaf disease was rated on a 1-5 scale: 1 = no disease symptoms, 2 = colored spots or necrotic flecks, but no fungal sporulation, 3 = some sporulation on lower leaves (<25%), 4 = moderate sporulation on lower and middle leaves (<75%), and 5 = heavy sporulation, including the flag leaf. A principal component analysis was used for the Tifton results of all assessed parameters (i.e., lodging, aphid number, aphid damage rating, and anthracnose infection rating) to determine an overall hybrid rating. Sugarcane aphid damage is only one component of the overall variety ratings at Tifton.

At Griffin, the number of sugarcane aphids was counted at peak infestation on August 8, 2018, by averaging the number of aphids on six mid-canopy leaves per plot. Aphid plant damage was rated using the 1-9 scale on August 16 and 24 and September 14, 2018. The percentage of plants with grain panicles (heads) with viable grain was rated near crop maturity on September 14, 2018. An overall rating of sugarcane aphid resistance/tolerance was determined from results at both locations.

Results of the grain sorghum trials are shown in Table 1. Heavy sugarcane aphid infestation at the seedling stage in the grain trial at Tifton was observed in plots that were planted on June 12, 2018. In fact, the severe sugarcane aphid infestation halted normal plant development before flowering, resulting in seven hybrids that did not produce panicles in all four replications. At Griffin, a total of 13 sorghum grain hybrids were rated as having good (G) sugarcane aphid resistance/tolerance. Hybrids with good sugarcane aphid ratings had damage ratings less than 5.0 and a large percentage (>85%) of plants producing panicles. Good hybrids also had fewer than 215 aphids per leaf at peak infestation, but this level still exceeds the aphid treatment threshold of 50 aphids per leaf, indicating that hybrids with good ratings may still have aphid infestations that exceed the threshold and require an insecticide treatment. An additional seven hybrids were rated as fair (F). Headworm and midge damage were low in 2018 and not substantially different among entries. Bird damage and anthracnose infection were moderate to severe in some hybrids. Indeed, some entries had the highest anthracnose rating possible, 5.0. The principal component analysis at Tifton also found that 16 entries were rated very good (VG) and 12 entries were rated poor (P).

For the silage sorghum trial, a total of 22 commercial hybrids were evaluated at pre-harvest on July 11, 2018 at Tifton and August 8, 2018 at Griffin (Table 2). At Griffin, none of the silage entries had a good (G) rating for resistance/tolerance to sugarcane aphid and only four hybrids received a fair (F) rating. The rankings at Tifton based on the principal component analysis using four assessed parameters found that eight entries were rated as very good (VG) and five hybrids were rated as poor (P).

For the forage sorghum trial, a total of 19 commercial hybrids were evaluated at both locations in Table 3. At Griffin, none of the sorghum forage entries were rated as having good (G) resistance/tolerance to sugarcane aphid and only four hybrids received a fair (F) rating. Scott Seed X50643 had the fewest aphids of any forage sorghum entry and was rated as good (G) compared with other forage sorghums. The rankings at Tifton based on the principal component analysis found that six entries were rated as very good (VG) and seven hybrids were rated as poor (P). Five forage millet varieties also were evaluated at Griffin. Four millet entries were highly resistant to sugarcane aphid and had virtually no damage.

Growers should select insect- and disease-resistant hybrids, the most economical pest management strategy for sorghum production in our region. Producers should be aware that later plantings tend to have increased insect pest and disease pressure. In addition, the bird damage can generally be minimized by timely harvest. For further integrated insect management information, please consult with your local county agents and/or Extension entomologists.

The grain sorghum trial at Tifton was maintained and flowering-date data were collected by Penny Tapp (Crop Genetics and Breeding Research Unit, USDA-ARS), Ashleigh Burgess, Hannah Barry, and Maribeth Tumberlin (University of Georgia, Tifton). Aphid damage and insect damage data collection was also assisted by Kalyn Potts (Crop Genetics and Breeding Research Unit, USDA-ARS). The silage and forage sorghum trials at Tifton were planted, maintained and harvested by Dustin Dunn's team at the University of Georgia-Tifton campus. At Griffin, Brett Byous, Colby Nordstrom, Katie Cassell, and Phillip Haar assisted in plot maintenance, data collection, and harvest.

Table 1. Evaluation of Grain Sorghum Hybrids for Resistance to Sugarcane Aphid (SCA), Headworm, Bird, and Anthracnose Damage at Tifton and Griffin, Georgia¹

Brand	Hybrid	Maturity ² rating ³	Tifton panicle rating ³	Griffin panicle rating ³ (%)	Overall SCA resistance rating ⁴	Insect damage ratings						Anthracnose rating ⁹	2018 overall rating ¹⁰
						Griffin			Tifton				
						Aphids per leaf ⁵	SCA final damage rating ⁶	SCA mean damage rating ⁶	SCA damage rating ⁶	Headworm and midge ⁷ damage ⁷	Bird damage ⁸		
Dyna-Gro	M73GR55	ML	1	100	G	56 \$	3.00	3.22 \$	2.50	0.10	0.21	2.50	VG
Dyna-Gro	M74GB17	ML	1	100	G	84 \$	4.00	2.67 \$	3.50	0.14	0.35	4.00	VG
Meherrin	SH X1922	ML	1	100	G	214 \$	2.00	3.22 \$	2.00	0.10	0.42	1.50	VG
Scott Seed	X54515	ML	1	100	G	125 \$	4.33	3.00 \$	3.00	0.10	0.23	3.50	VG
Dyna-Gro	GX17379	MF	1	100	G	86 \$	3.00	2.67 \$	3.25	0.10	0.20	2.75	VG
Dyna-Gro	GX17962	MF	1	85	G	126 \$	4.00	3.67 \$	3.50	0.13	0.29	3.00	VG
Alta Seeds	ADV G3247	NL	1	100	G	87 \$	5.25	3.67 \$	3.00	0.13	0.28	3.50	VG
Sorghum Partners	SP 74C40	MF	1	100	F	25 \$	5.00	4.00	3.50	0.14	0.21	3.75	VG
Meherrin	SH 90G6	ML	1	68	P	288	3.67	3.67 \$	3.25	0.10	0.27	2.75	VG
Meherrin	SH 65G6	ME	1	60	P	347	4.00	4.56	3.50	0.13	0.42	2.25	VG
Meherrin	SH 80G4	M	1	100	G	58 \$	4.00	3.44 \$	3.00	0.10	0.37	3.50	G
Sorghum Partners	SP7715	MF	1	100	G	120 \$	2.33	2.89 \$	3.00	0.10	0.35	2.75	G
DeKalb	DKS37-07	ML	1	100	G	216 \$	4.25	3.58 \$	3.50	0.10	0.56	3.75	G
Dyna-Gro	GX16833	MF	1	100	G	142 \$	4.33	3.56 \$	3.00	0.10	0.4	3.25	G
Scott Seed	X50415	ML	1	100	G	182 \$	3.33	3.00 \$	3.00	0.10	0.35	3.00	G
DeKalb	DKS47-07	ML	1	100	G	97 \$	4.00	3.22 \$	3.00	0.10	0.35	3.50	G
GaylandWard	EXP-9134	ME	0.75	30	P	281	4.67	4.56	4.25	0.13	0.26	3.50	G
GaylandWard	GW-1160	ME	1	83	F	145 \$	4.00	4.25	3.75	0.10	0.63	3.00	G
Scott Seed	X50215	ML	0.5	100	F	94 \$	7.67	5.11	4.00	0.10	0.52	5.00	G
DeKalb	DKS51-01	L	0.5	46	P	392	5.00	4.08	5.50	0.13	0.28	2.75	F
GaylandWard	EXP-9138	ME	0	55	P	153 \$	9.00	6.44	7.25	0.16	0.18	5.00	F
Dyna-Gro	M69GR88	ML	0	68	P	208 \$	8.67	6.44	8.00	0.15	0.18	5.00	F
Dyna-Gro	GX17948	M	0.25	13	P	690	6.67	5.44	5.25	0.13	0.29	4.50	F
Alta Seeds	AG1301	ME	0.5	97	F	143 \$	7.67	4.78	5.50	0.16	0.28	5.00	F
Sorghum Partners	SP 68M57	M	0.5	50	P	271	6.33	4.89	5.00	0.15	0.44	4.25	F

Table 1. Evaluation of Grain Sorghum Hybrids for Resistance to Sugarcane Aphid (SCA), Headworm, Bird, Anthracnose Damage at Tifton and Griffin, Georgia¹ (Continued)

Brand	Hybrid	Maturity ²	Tifton panicle rating ³	Griffin panicle rating ³ (%)	Overall SCA resistance rating ⁴	Insect damage ratings							
						Griffin			Tifton				
						Aphids per leaf ⁵	SCA final damage rating ⁶	SCA mean damage rating ⁶	SCA damage rating ⁶	Headworm and midge ⁷	Bird damage ⁸	Anthracnose rating ⁹	2018 overall rating ¹⁰
Alta Seeds	ADV G2275	M	0.5	95	F	162 \$	6.67	5.33	4.75	0.10	0.31	4.50	P
Pioneer	83P17	ML	0.5	87	F	182 \$	3.00	3.89	5.25	0.10	0.33	4.50	P
Pioneer	84P80	ML	0	24	P	244	6.50	5.58	7.25	0.10	0.28	5.00	P
DeKalb	DKS53-53	L	0	25	P	326	8.00	5.89	8.00	0.10	0.18	5.00	P
DeKalb	DKS38-16	M	0.5	93	F	256	5.33	4.11	5.25	0.10	0.50	4.50	P
GaylandWard	EXP-9135	ME	0.5	33	P	332	5.33	5.00	5.00	0.10	0.31	3.25	P
GaylandWard	EXP-9139	ME	0	27	P	421	9.00	6.44	6.50	0.10	0.16	5.00	P
Dyna-Gro	GX17227	M	0.25	75	P	279	6.33	5.22	5.25	0.10	0.25	4.50	P
Dyna-Gro	GX17968	MF	0	22	P	337	6.67	5.44	6.00	0.10	0.37	5.00	P
Scott Seed	X5055	ME	0.25	67	P	517	9.00	7.33	5.50	0.13	0.42	4.75	P
Alta Seeds	AG1203	ME	0.25	100	P	27 \$	7.67	4.67	3.75	0.10	0.40	5.00	P
DeKalb	DKS33-07	E	0	100	P	68 \$	8.67	6.00	7.75	0.14	0.31	5.00	P

1. The test plots were maintained with irrigation, and the plots were rated on September 6, 2018 at Tifton.

2. Maturity denotes early (E), moderately early (ME), moderately late (ML), and late (L) flowering, which was provided by the company.

3. Panicle (grain head) rating at Tifton was a binomial rating where 0 = no panicles produced due to severe aphid damage; 1 = the entry produced panicles. At Griffin, plants produced grain panicles with viable grain expressed as a percentage, where 0 = no plants with panicles and 100 = all plant with viable panicles.

4. Overall sugarcane aphid resistance/tolerance rating where G = good, F = fair, and P = poor. A poor variety has little or no resistance and/or tolerance to SCA.

5. At Griffin, average number of aphids per leaf was rated at peak infestation on Aug. 8, 2018. Average of a sample of six mid-canopy leaves per plot. \$ indicates number of aphids per leaf were not significantly different than the variety with the lowest number of aphids. (α = 0.05).

6. Plant aphid damage rating ratings using a 1-9 scale; where 1 = no damage, 2 = 1-20%, 3 = 21-30%, 4 = 31-40%, 5 = 41-50%, 6 = 51-60%, 7 = 61-70%, 8 = 71-80%, and 9 = greater than 81% of the leaves are dying, which also included aphid-killed plants. Ratings at Tifton were taken once and at Griffin were taken three times with the final rating and average rating presented. \$ indicates average rating for a hybrid is not significantly different than the lowest rating in the Griffin test.

7. Headworm (mainly corn earworm and sorghum midge damage at Tifton rated as proportion of plant showing damage).

8. Bird damage to grain rated as proportion of grain panicles showing damage to seed.

9. Anthracnose infection on leaves was rated using a 1-5 scale, where 1 = no symptoms, and 5 = heavy infection;

10. Overall rating was based principal component analysis of all 19 hybrid entries at Tifton. Four parameters (i.e., lodging, aphid number, aphid damage, anthracnose rating) were used in the principal component analysis.

Table 2. Evaluation of 23 Silage Sorghum Hybrids for Resistance to Sugarcane Aphid (SCA) and Anthracnose Damage, 2018, Tifton and Griffin, Georgia¹

Brand	Hybrid	Maturity ²	Lodging ²	Griffin panicle rating ³ (%)	Overall SCA resistance rating ³	Griffin			Tifton			
						Aphids per leaf ⁴	SCA final damage rating ⁵	SCA mean damage rating ⁵	Aphid damage rating ⁵	Anthracnose rating ⁶	2018 overall rating ⁷	
Sorghum Partners	NK300	3.25	0.0	100	F	362 \$	4.67	4.67 \$	626	5.6	3.3	VG
Alta Seeds	ADV XF372	3	0.0	90	F	316 \$	6.33	6.00	495	4.4	2.5	VG
Alta Seeds	AF7401	3	0.0	100	P	506 \$	6.00	5.67	474	4.9	2.8	VG
Gayland Ward	Super Sugar (DM)	1.25	0.0	100	P	304 \$	4.00	4.11 \$	667	4.5	3.5	VG
Dyna-Gro	F74FS23 BMR	2.5	0.0	100	P	486 \$	5.33	5.11	832	5.0	3.3	VG
Alta Seeds	ADV XF033	3	0.0	100	P	584 \$	4.67	5.22	681	4.3	3.0	VG
Dyna-Gro	705F (SGxS)	4	0.0	100	P	337 \$	5.33	5.11	874	5.4	3.0	VG
Desert Sun	Sweet Caroline	2.75	0.0	100	P	626 \$	5.33	5.11	848	5.6	3.0	VG
Moss Seed	4Ever Green	1	0.3	0	P	667 \$	5.00	5.89	847	7.5	3.8	G
Alta Seeds	AF8301	4	0.0	100	P	427 \$	6.00	5.33	819	7.3	3.3	G
Dyna-Gro	F76FS77 BMR	2.75	0.0	100	P	339 \$	4.00	4.67 \$	1046	6.8	3.0	G
Dyna-Gro	FX18851 BMR	1.75	0.0	68	P	684 \$	6.67	6.56	717	7.6	3.0	G
Scott Seed	X50610	2	0.0	83	P	851	5.00	5.44	820	7.0	3.0	G
Scott Seed	X51423	2.5	0.3	100	P	802	5.00	5.33	846	6.9	3.8	G
Sorghum Partners	SS304 (FS)	3	0.3	97	P	245 \$	3.33	3.33 \$	503	3.1	3.3	F
Dyna-Gro	F73FS10	4	1.0	100	F	222 \$	3.67	3.78 \$	405	3.0	2.5	F
Dyna-Gro	FX18811	2.5	0.5	100	F	484 \$	4.67	4.33 \$	374	3.5	3.3	F
Gayland Ward	Sweet Forever BMR	4	0.8	100	P	306 \$	6.00	5.56	490	6.1	3.8	P
Gayland Ward	Sweet Six	4	1.0	90	P	234 \$	7.33	6.00	348	5.4	4.6	P
Sorghum Partners	SP4555 (SGxS)	4	1.0	.	.	.	.	.	544	6.7	4.0	P
Alta Seeds	AF7401	.	.	100	P	427 \$	6.00	5.33	.	.	.	.
Scott Seed	X50644	1	0.0	0	P	881	6.67	7.00	401	8.8	4.5	P
Scott Seed	X5063	4	1.0	27	P	976	6.67	6.56	307	7.8	3.8	P

Table 2. Evaluation of 23 Silage Sorghum Hybrids for Resistance to Sugarcane Aphid (SCA) and Anthracnose Damage, 2018, Tifton and Griffin, Georgia¹ (Continued)

1. The test plots were maintained with irrigation; insect and disease damage, as well as lodging, was rated on July 11, 2018. There were 23 entries at Griffin, and 22 entries at Tifton for this test.
2. Maturity was assessed by growth stages using a scale of 1-5; 1 = vegetative, 2 = boot stage; 3 = heading; 4 = flowering; and 5 = seeding. Lodging rating was based on a 0 to 1 scale, where 0 = no lodging and 1 = entire plot lodged.
3. Overall sugarcane aphid resistance/tolerance rating where G = good, F = fair, and P = poor. A poor variety has little or no resistance and/or tolerance to SCA.
4. At Griffin, aphid mean number per leaf was taken from six-leaf sample on Aug. 8, 2018, at peak infestation. At Tifton, aphid number was recorded as 0 = no aphid, and then estimated as 1 = 1-25 aphids, 2 = 26-50, 3 = 51-100, 4 = 101-500, 5 = 501-1000, and 6 = over 1000 aphids. § indicates number of aphids per leaf at Griffin were not significantly different from the variety with the lowest number of aphids. ($\alpha = 0.05$).
5. Aphid resistance rated using 1-9 scale; where 1 = no damage, 2 = 1-20%, 3 = 21-30%, 4 = 31-40%, 5 = 41-50%, 6 = 51-60%, 7 = 61-70%, 8 = 71-80%, and 9 = greater than 81% of the leaves are dying, which also included aphid-killed plants. Ratings at Tifton were taken once and ratings at Griffin were taken three times with the final rating and average rating presented. § indicates average rating for a hybrid is not significantly different from the lowest rating in the Griffin test.
6. Anthracnose infection on leaves was rated using a 1-5 scale, where 1 = no symptoms and 5 = heavy infection.
7. Overall rating was based a principal component analysis of all 22 hybrid entries at Tifton. Four parameters (i.e., lodging, aphid number, aphid damage, anthracnose rating) were used in the principal component analysis.

Table 3. Evaluation of 24 Forage Sorghum Hybrids and Millet Varieties for Resistance to Sugarcane Aphid (SCA) and Anthracnose Damage, 2018, Tifton and Griffin, Georgia¹

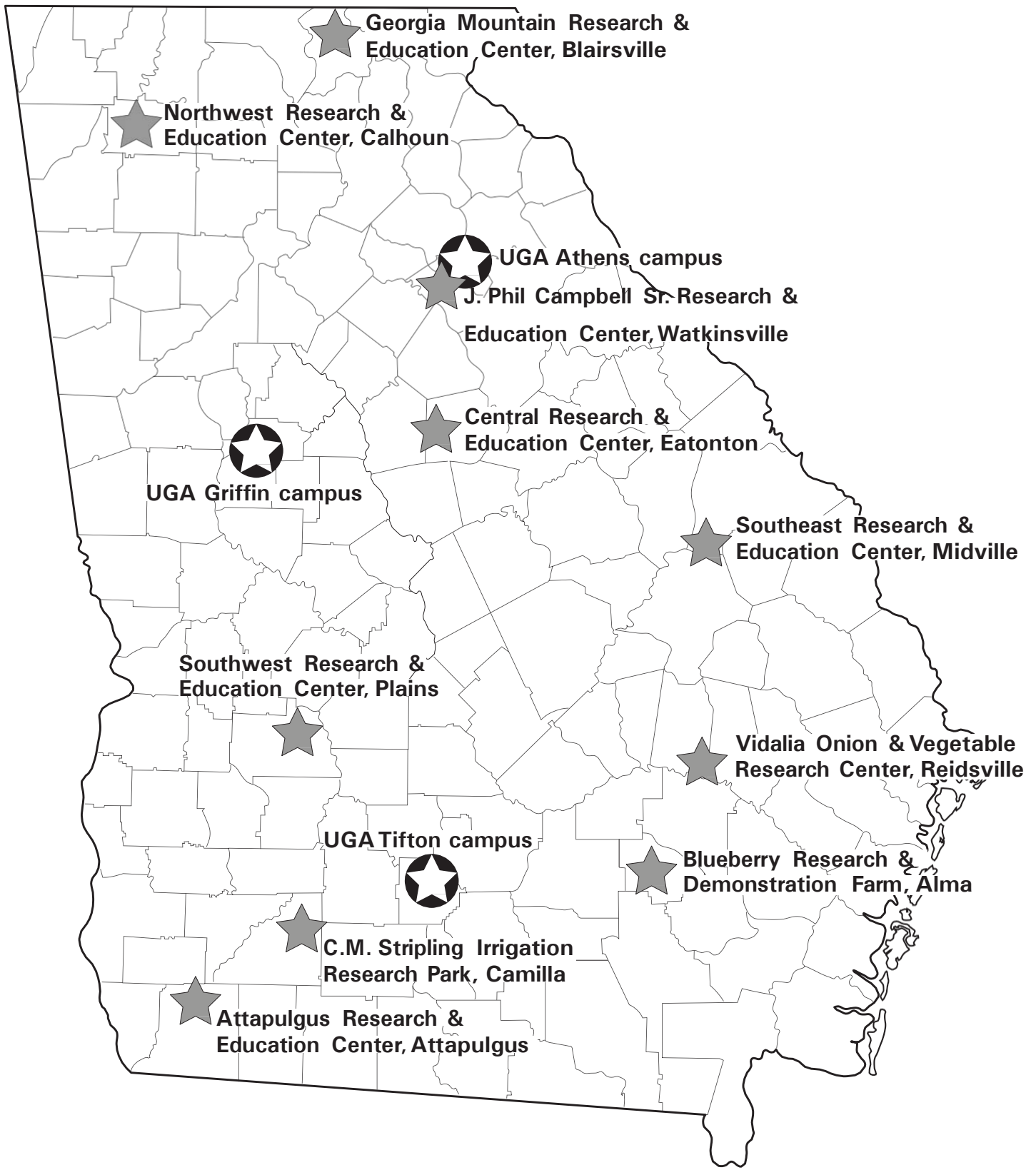
Brand	Hybrid	Maturity ²	Lodging ²	Griffin panicle rating ³ (%)	Overall SCA resistance rating ³	Griffin			Tifton			
						Aphids per leaf ⁴	SCA final damage rating ⁵	SCA mean damage rating ⁵	Aphid number ⁴	Aphid damage rating ⁵	Anthracnose rating ⁶	2018 overall rating ⁷
Forage Sorghum												
Moss Seed	Mega Green SGxS	1	0.25	7	P	730 \$	3.00	4.22 \$	0.54	2.50	2.75	VG
Coffee Forage	Surpass BMR dw (SGxS)	3.5	0	100	F	272 \$	5.00	4.67 \$	16.75	4.00	3.00	VG
Dyna-Gro	FX18835SS	1.75	0	100	P	579 \$	5.00	4.33 \$	0.54	2.00	3.25	VG
Scott Seed	X53543 (SGxS)	1.5	0.5	90	P	843 \$	5.33	4.56	7.98	2.50	3.50	VG
Desert Sun	Latte (SGxS)	1	0	100	F	458 \$	3.33	3.56 \$	0.54	1.25	2.75	VG
Gayland Ward	10218	1	0	90	F	261 \$	6.00	5.22 \$	7.48	2.00	3.50	VG
Coffee Forage	Xtragraze BMR	3	1	33	P	594 \$	8.00	5.56	0.54	3.25	3.00	G
Dyna-Gro	FX18843SS BMR	1.25	1	37	P	1055 \$	7.00	6.11	5.31	2.75	3.50	G
Scott Seed	X50643 (SGxS)	1	1	.	G	59	3.00	3.33 \$	4.23	2.00	4.00	G
Coffee Forage	Xtragraze ATxL BMR	2	1	80	F	264 \$	6.00	4.67 \$	15.67	2.50	3.25	G
Dyna-Gro	DannyBoy BMR	1.25	0.75	40	P	618 \$	7.00	5.89	43.86	5.25	3.50	F
Moss Seed	Mega Green BMR SGxS	1	0.75	0	P	1924	4.67	5.67 \$	22.02	4.50	3.50	F
Sorghum Partners	Sordan79 (SGxS)	2	1	27	P	267 \$	7.67	5.56	11.13	3.75	3.75	P
Dyna-Gro	Fullgraze BMR	1	0.75	83	P	350 \$	5.67	5.11 \$	3.25	3.75	4.25	P
Sorghum Partners	SP4555 (SGxS)	2	1	67	P	234 \$	6.67	5.56	14.69	3.50	3.75	P
Scott Seed	X5062 (SGxS)	2	1	7	P	829 \$	8.33	6.67	2.71	3.25	3.50	P
Scott Seed	X50652 (SGxS) (df)	1	0.25	0	P	1096 \$	6.67	7.11	2.13	3.50	4.75	P
Scott Seed	X50651 (SGxS) (df)	1	0.25	100	P	1068 \$	5.67	6.00	4.77	4.25	4.25	P
Alta Seeds	ADV S6504 (SGxS)	1	1	0	P	252 \$	7.00	6.00	3.69	4.00	4.50	P
Forage Millet¹												
Sorghum Partners	Millex 32	.	.	.	VG	4.08 \$	1.25	1.25 \$	.	.	.	.
Coffee Forage	Epic BMR	.	.	.	VG	0.28 \$	1.67	1.67 \$	.	.	.	.
Coffee Forage	ExCeed II BMR	.	.	.	VG	2.17 \$	1.75	1.50 \$	.	.	.	.
Dyna-Gro	PearlMil	.	.	.	VG	1.17 \$	2.00	2.00 \$	.	.	.	.

Table 3. Evaluation of 24 Forage Sorghum Hybrids and Millet Varieties for Resistance to Sugarcane Aphid (SCA) and Anthracnose Damage, 2018, Tifton and Griffin, Georgia¹ (Continued)

1. The test plots were maintained with irrigation, and the plots were rated in Tifton on August 9, 2018, for the second cutting. There were no forage millet entries tested in Tifton.
2. Because of no maturity data provided for this set of hybrids, maturity was assessed by growth stages using a scale of 1-5: 1 = vegetative, 2 = boot stage; 3 = heading; 4 = flowering; and 5 = seeding. Lodging rating was based on a 0 to 1 scale, where 0 = no lodging and 1 = entire plot lodged.
3. Overall sugarcane aphid resistance/tolerance rating where G = good, F = fair, and P = poor. A poor variety has little or no resistance and/or tolerance to SCA. VG = very good for millet entries.
4. At Griffin, aphid mean number per leaf was taken from six-leaf sample on Aug. 8, 2018 at peak infestation. At Tifton, aphid number was recorded as 0 = no aphid, and then estimated as 1 = 1-25 aphids, 2 = 26-50, 3 = 51-100, 4 = 101-500, 5 = 501-1000, and 6 = over 1000 aphids. § indicates number of aphids per leaf at Griffin were not significantly different from the variety with the lowest number of aphids. ($\alpha = 0.05$). The ratings were conducted at the 2nd harvest at Tifton, which was approximately a month after the first harvest of these plots.
5. Aphid damage on sorghum was rated using a 1-9 scale; where 1 = no damage, 2 = 1-20%; 3 = 21-30%, 4 = 31-40%, 5 = 41-50%, 6 = 51-60%, 7 = 61-70%, 8 = 71-80%, and 9 = greater than 81% of the leaves are dying, which also included aphid-killed plants. Ratings at Tifton were taken once and ratings at Griffin were taken 3 times with the final rating and average rating presented. § indicates average rating for a hybrid is not significantly different from the lowest rating in the Griffin test.
6. Anthracnose infection on leaves was rated using a 1-5 scale, where 1 = no symptoms and 5 = heavy infection.
7. Overall rating was based on principal component analysis of the 19 sorghum hybrid entries at Tifton. Four parameters (i.e., lodging, aphid number, aphid damage, anthracnose rating) were used in the principal component analysis.

Sources of Seed for the 2018 Grain Sorghum, Silage Sorghum, and Summer Annual Forages Tests

Brand or Variety Name	Company and Address
Alta Seeds	Advanta Seeds, 201 E. John Carpernter Freeway, Suite 660, Irving, TX 75062
Coffey Forage	Coffey Forage Seeds Inc., 2106 South Date Street, Plainview, TX 79072
DEKALB	Monsanto Company, 800 N. Lindbergh Blvd., St. Louis, MO 63167
Desert Sun	Desert Sun Marketing Co., PO Box 50817, Phoenix, AZ 85076
Dyna-Gro	Dyna-Cro Seed, 100 Industrial Court, Colquitt, GA 39837
Gayland Ward	Gayland Ward Seed Co. Inc., 4395 US Hwy 60, Hereford, TX 79045
Meherrin	Meherrin Ag, PO Box 1076, Hawkinsville, GA 31036
Moss Seed	Walter Moss Seed Co., 1516 Squaw Mountain Road, Jackson, TX 75458
Pioneer	Dow DuPont, 425 Abbeydale Way, Columbia, SC 29229
Scott Seed	Scott Seed Co., 114 New York Avenue, Hereford, TX 79045
Sorghum Partners	Chromatin Inc., 1301 E. 50 th St., Lubbock, TX 79404



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“CERTIFIED SEED DOESN’T COST ... IT PAYS”

HERE’S WHY:

- Known performance of varieties adapted to your area.
- A pedigree record that begins with the release of breeder seed and continues until it reaches the consumer as certified (blue tag) seed.
- Field inspected for trueness to variety and inseparable from other crop and weed seed.
- Certified seed can only be conditioned in an approved facility.
- Certified seed must meet high quality standards as to germination and purity.
- Free of noxious weeds.

The planting of CERTIFIED SEED eliminates many of the risks associated with crop production. For sources of certified seed, contact your local county Extension agent or the Georgia Crop Improvement Association, Inc. at 706-542-2351.

