UNIFORM SOYBEAN TESTS

SOUTHERN STATES

2018

COORDINATED, ANALYZED AND EDITED BY:

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Annual reports are available online at http://www.ars.usda.gov/Main/docs.htm?docid=23815
Uniform Soybean Test Parentage Information Database is available at:
https://soybase.org/uniformtrial/index.php?page=lines

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INTRODUCTION

The Uniform Soybean Testing Program has been directed toward the testing of elite breeding lines that ultimately leads to the release of varieties. Breeding lines are developed and evaluated in several participating federal and state research programs. As breeding lines demonstrate specific qualities in the individual programs, they are advanced to the preliminary and uniform regional tests conducted in cooperation with research workers in the southern states. This testing program enables breeders to evaluate new strains under a wide variety of conditions, and permits new strains to be put into production in a minimum amount of time. Lines are usually entered only once in the Preliminary Test and then are either dropped or advanced to the Uniform Test for a maximum of three years if performance warrants further testing.

Eleven uniform test groups have been established to evaluate the best strains developed in the breeding programs. The groups 00 through IV are adapted in the northern part of the United States, and the groups IV-S through VIII are grown in the southern part. Within their area of adaptation, there is a maturity range of 12 to 18 days within each maturity class. The best varieties available in each maturity class are used as check varieties with which to compare new strains as to seed yield, chemical composition, maturity, height, lodging, seed quality, and reaction to diseases and nematodes. For the groups grown in the southern area, the check varieties are:
AG4232RR2Y, AG4135, LD06-7620, AG43X7, AG4632RR2Y, AG4835(RR2), Ellis, AG46X7, JTN-5203, AG53X6, UA5612, AG5335(RR2), GoSoy54G16, TN11-5140, AG55X7, AG64X8, NC-Dunphy (release of NCC07-8138), NC-Roy, NC-Dilday (release of NCC06-1090), AGS738RR, AG74X8, N7003CN, NC-Wilder (release of NCC06-899), AGS828RR, AG798R2, N8002, and, N8001.

A wide range of soil and climatic conditions exists in the regions. As an aid in recognizing regional adaptation, the region has been subdivided into five rather broad areas which still represent a wide range of soil types. These are: (1) the East Coast, consisting of the Coastal Plain and Tidewater areas of the eastern shore of Maryland, Virginia, North Carolina, and the upper half of South Carolina; (2) the Southeast, consisting primarily of the Coastal Plain soils of the Gulf Coast area, but also including similar soil from South Carolina, southward; (3) the Upper and Central South, including the Piedmont and loessial hill soils east of the Mississippi River; (4) the Delta area, composed of the alluvial soils along the Mississippi River from southern Missouri, southward; and (5) the West, comprising Arkansas and Louisiana (outside the Delta), Kansas, Oklahoma, and Texas. In the West, the potential soybean-growing areas would include alluvial soils, and the Gulf Coast of Louisiana.

POLICY ON EVALUATION AND RELEASE OF STRAINS

Germplasm exchange among breeding programs is the foundation of breeding progress. The purpose of the Uniform Soybean Test is to facilitate the free exchange of germplasm in an effort to maximize genetic diversity and provide well-adapted, stable breeding lines and varieties in the pursuit of breeding progress. Participants are encouraged to exchange germplasm within the legal guidelines pertaining to transgenic strains.

Qualifications for Participation in the Uniform Soybean Tests

Participants must be willing and able to conduct unified tests with conventional strains and strains containing proprietary and/or transgenic traits.

Participants, upon submission of entries, must disclose pedigrees to the Uniform Soybean Test Coordinator for publication with performance data in the Uniform Soybean Test Report.

Participants are individually responsible to ensure that any transgenic entries that they submit are cleared for sale as commodity seed.

Use of Uniform Soybean Test Entries in Soybean Breeding and Research

Seed of Uniform Soybean Test entries is for evaluation in the Uniform Soybean Tests only and may not be distributed to non-participants in these tests without prior approval by the originator of the entry.

Trueness-to-type or purity of seed produced by the entries in the Uniform Soybean Tests cannot be guaranteed by the USDA. Therefore, seed produced by lines in the Uniform Test trials will not be distributed by the USDA to anyone, including the developer, except for trait analyses in connection with the Uniform Test program.

Non-transgenic entries in the Uniform Soybean Test may be used by Uniform Soybean Test participants as parents only in biparental crosses or for developing recurrent selection populations. Transgenic entries may be used in crossing subject to similar rules unless licensing or patenting restrictions regarding ownership of the transgenic trait limit this use.

Uniform Soybean Test participants must obtain prior approval before using any entry, other than their own, as recurrent parent in backcrossing, molecular research, genetic studies, or any other research.

Seed of any transgenic entry must not be used for further evaluation without written permission from the originator of the entry, and must be discarded at the end of the season, except for crossing purposes, subject to the restrictions outlined in the preceding sections two and three.

All published results from the USDA-ARS Uniform Soybean Tests Southern States may be used as a data base for statistical research and publication related to soybean breeding.

Release of Uniform Soybean Test Entries

Entries in the Uniform Soybean Tests are released according to USDA-ARS and State Agricultural Experiment Station policies.

ACKNOWLEDGEMENTS

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STRAIN DESIGNATION

The strains designated by number carry a letter prefix. This letter identifies where each strain was selected:

DA	-	Delta Branch Experiment Station and USDA-ARS, Stoneville, MS
DS	-	Delta Branch Experiment Station and USDA-ARS, Stoneville, MS
G	-	Georgia Agricultural Experiment Station
JTN	-	Tennessee Agricultural Experiment Station, Jackson and USDA-ARS
K	-	Kansas Agricultural Experiment Station
LG	-	Delta Branch Experiment Station and USDA-ARS, Stoneville, MS
LW	-	South Carolina Agricultural Experiment Station
N	-	North Carolina Agricultural Experiment Station and USDA-ARS
Pro5	-	North Carolina Agricultural Experiment Station and USDA-ARS
R	-	Arkansas Agricultural Experiment Station
S	-	Missouri Agricultural Experiment Station
SA	-	Missouri Agricultural Experiment Station
SC	-	South Carolina Agricultural Experiment Station, Clemson
STPR	-	North Carolina Agricultural Experiment Station and USDA-ARS
TN	-	Tennessee Agricultural Experiment Station
UARK	-	Arkansas Agricultural Experiment Station
V	-	Virginia Agricultural Experiment Station, Virginia Tech

UNIFORM SOYBEAN TESTS PARENTAGE INFORMATION DATABASE

Historical Uniform Soybean Test parentage Information can be found at the following:
https://soybase.org/uniformtrial/index.php?page=lines

SOYBEAN NURSERY INFORMATION

A. LOCATION CONTACT AND TESTS- 2018

2018 Locations	Location Contact	IV-S-E*	IV-S-E	IV-S-L	IV-S-L	V-E	V-L	V	VI	VI	VII	VII	VIII	VIII
Belle Mina,AL	Jenny Koebernick		U		U			U						
Fairhope,AL	Jenny Koebernick									U		U		U
Tallassee,AL	Jenny Koebernick				U	P	P	U	P	U				
Keiser,AR	Leandro Mozzoni	P	U	P	U	P	P	U						
Stuttgart,AR	Leandro Mozzoni	P		P	U	P	P	U	P	U				
Athens,GA(A)	Zenglu Li									U	P	U	P	U
Athens,GA(B)	Zenglu Li											U		U
Calhoun,GA	Daniel Mailhot									U		U		
Plains,GA	Zenglu Li										P	U	P	U
Tifton,GA	Daniel Mailhot									U		U		U
McCune,KS	W. T. Schapaugh, Jr.			P	U	P	P	U						
Pittsburg,KS	W. T. Schapaugh, Jr.			P	U	P	P	U						
Bossier City,LA	Blair Buckley				U			U		U		U		
Portageville,MO(A)	Pengyin Chen		U		U			U						
Portageville,MO(B)	Pengyin Chen	P	U	P	U	P		U						
Columbia,MO	Andrew Scaboo	P	U											
Stoneville,MS	Gary Shelton	P	U	P	U	P	P	U						
Clayton,NC	Tommy Carter											U	P	U
Kinston,NC	Tommy Carter					P	P		P	U	P	U	P	U
Plymouth,NC	Rouf Mian							U	P		P	U		
Clemson,SC	Ben Fallen								P	U		U		U
Florence,SC	Ben Fallen									U	P	U	P	U
Jackson,TN	Prakash Arelli	P	U	P	U	P		U						
Knoxville,TN	Vincent Pantalone	P	U	P	U	P	P	U						
Springfield,TN	Vincent Pantalone		U		U			U						
Orange,VA	Gregory Lillard	P			U			U						
Suffolk,VA	David Holshouser							U						
Warsaw,VA	Bo Zhang				U	P	P	U						
Total Location Planted		8	9	8	15	11	9	17	5	10	5	12	5	9
TOTAL LOCATIONS REPORTING DATA		7	9	7	14	9	8	16	4	9	5	11	5	9

* U = Uniform Test; P = Preliminary Test

B. PLANTING DATES – 2018

2018 Location	PIV-S-E	PIV-S-L	PV-E	PV-L	PVI	PVII	PVIII	UIV-S-E	UIV-S-L	UV	UVI	UVII	UVIII
Belle Mina,AL								5/1	5/1	5/22			
Fairhope,AL											6/18	6/18	6/18
Tallassee,AL			5/10	6/11	6/11				5/10	5/10	6/11		
Keiser,AR	5/9	5/9	5/9	5/9				5/9	5/9	5/9			
Stuttgart,AR	NA	NA	NA	NA	NA				NA	NA	NA		
Athens,GA(A)						5/22	5/22				5/22	5/22	5/22
Athens,GA(B)												6/20	6/20
Calhoun,GA											5/22	5/22	
Plains,GA						6/8	6/8					6/8	6/8
Tifton,GA											6/13	6/13	6/13
McCune,KS		6/6	6/6	6/6					6/6	6/6			
Pittsburg,KS		6/5	6/5	6/5					6/5	6/5			
Bossier City,LA									4/27	4/27	4/27	4/27	
Portageville,MO(A)								6/5	6/5	6/5			
Portageville,MO(B)	6/14	6/14	6/14					5/28	5/28	6/14			
Columbia,MO	4/28							4/28					
Stoneville,MS	4/30	4/30	4/30	4/30				4/30	4/30	4/30			
Clayton,NC							5/30					5/30	5/30
Kinston,NC			6/8	6/8	6/8	6/8	6/8				6/8	6/8	6/8
Plymouth,NC					5/17	5/17				5/17		5/17	
Clemson,SC					6/25						6/25	6/25	6/25
Florence,SC						6/19	6/8				6/19	6/8	6/8
Jackson,TN	5/15	5/15	5/15					5/15	5/15	5/15			
Knoxville,TN	5/9	5/9	5/9	5/9				5/9	5/9	6/5			
Springfield,TN								5/25	5/25	5/25			
Orange,VA	6/5								6/5	6/5			
Suffolk,VA										5/14			
Warsaw,VA			6/14	6/14					6/14	6/14			

* NA = Data not available.

C. HARVEST DATES – 2018

2018 Location	PIV-S-E	PIV-S-L	PV-E	PV-L	PVI	PVII	PVIII	UIV-S-E	UIV-S-L	UV	UVI	UVII	UVIII
Belle Mina,AL								9/19	9/19	10/9			
Fairhope,AL											11/21	11/21	11/21
Tallassee,AL			10/8	10/24	10/24				10/8	10/8	10/24		
Keiser,AR	10/8	10/8	10/9	10/9				10/8	10/8	10/9			
Stuttgart,AR	NH	NH	NH	NH	NH				NH	NH	NH		
Athens,GA(A)						10/30	11/20				10/18	10/22	11/20
Athens,GA(B)												11/20	11/20
Calhoun,GA											11/28	11/28	
Plains,GA						11/19	11/19					11/19	11/19
Tifton,GA											10/22	10/22	10/22
McCune,KS		11/29	11/29	11/29					11/29	11/29			
Pittsburg,KS		11/15	11/15	11/15					11/15	11/15			
Bossier City,LA									9/28	10/4	10/30	10/30	
Portageville,MO(A)								11/8	11/8	11/8			
Portageville,MO(B)	11/10	11/10	11/10					10/9	10/30	11/10			
Columbia,MO	10/22							10/22					
Stoneville,MS	9/14	10/2	10/9	10/9				9/14	10/2	10/9			
Clayton,NC							NA					NH	NA
Kinston,NC			NH	NA	NA	NA	NA				NA	NA	NA
Plymouth,NC					NA	NA				NA		NA	
Clemson,SC					12/5						12/5	12/5	12/5
Florence,SC						11/21	11/20				11/7	11/20	11/19
Jackson,TN	10/5	10/9	10/12					10/5	10/9	10/12			
Knoxville,TN	10/19	10/22	10/31	10/31				10/19	10/19	11/19			
Springfield,TN								10/4	10/4	10/23			
Orange,VA	10/30								10/30	10/30			
Suffolk,VA										11/1			
Warsaw,VA			11/19	11/19					11/19	11/19			

Location Notes	
Stuttgart,AR	Location was abandoned due to constant rain during harvest season.
McCune,KS	The plots experienced a lot of wet conditions at they matured.
Portageville,MO(A)	UTV, PIVSE, PIVSL, PVE replanted on Dundee silt loam
Portageville,MO(B)	Due to a sprayer issue, UTV, PIVSE, PIVSL, and PVE were replanted late.
Columbia,MO	UIVSE dropped due to poor yield
Clayton,NC	U7 issues with flood and disease.
Kinston,NC	P5 flooded.

* NH= Not harvested
* NA= Data not available

D. AGRONOMIC CHARACTERISTICS OF LOCATIONS – 2018

2018 Location	SOIL TYPE	Row Spacing	Planted Length	Harvested Length	Trial Bordered	End Trim-med	# Rows Planted	# Rows Harvested	Prior Crop	Irri-gated
Belle Mina,AL	Decatur silt loan	36	20	20	Yes	No	4	2	Fallow	Yes
Fairhope,AL	Malbis fine sandy loan	38	20	20	Yes	No	4	2	Cotton	Yes
Tallassee,AL	Cahaba fine sandy loam	36	20	20	Yes	No	4	2	Fallow	Yes
Keiser,AR	Sharkey silty clay	38	15	15	Yes	No	4	2	Corn	Yes
Stuttgart,AR	Crowley silt loam	30	15	15	Yes	No	4	2	Rice	Yes
Athens,GA(A)	Wickham sandy loam	30	16	12	Yes	Yes	4	2	Corn/Small Grains	Yes
Athens,GA(B)	Cecil coarse sandy loam	30	16	12	Yes	Yes	4	2	Grain sorghum	Yes
Calhoun,GA	Etowah loam, Wax loam	30	21	18	Yes	Yes	4	2	Small Grains	Yes
Plains,GA	Greenville sandy loam	30	16	12	Yes	Yes	4	2	Soybeans	Yes
Tifton,GA	Tifton sandy loam	36	21	18	Yes	Yes	4	2	Cotton	Yes
McCune,KS	Parsons silt loam	30	12	12	Yes	No	4	2	Corn	No
Pittsburg,KS	Parsons silt loam	30	12	12	Yes	No	4	2	Soybeans	No
Bossier City,LA	Caplis very fine sandy loam	40	28	20	Yes	Yes	4	2	Soybeans	Yes
Portageville,MO(A)	Dundee silt loam	30	12	12	Yes	No	4	2	Soybean	Yes
Portageville,MO(B)	Sharkey clay	30	12	12	Yes	No	4	2	Soybean	Yes
Columbia,MO	Mexico-silt loam	30	12	12	Yes	No	4	2	Corn	Yes
Stoneville,MS	Sharkey clay	26	18.5	16	Yes	Yes	5	3	Soybean	Yes
Clayton,NC	Norfolk sandy loam	38	18	15	Yes	Yes	3	1	Cotton	Yes
Kinston,NC	Stallings loamy sand	38	18	15	Yes	Yes	3	1	Corn	No
Plymouth,NC	Portsmouth silt loam	38	19	15	Yes	Yes	3	1	Corn	No
Clemson,SC	Cartecay fine sandy loam	30	30	22	Yes	Yes	4	2	Corn	No
Florence,SC	Sandy Loam	30	20	18	Yes	Yes	4	2	Corn	Yes
Jackson,TN	Vicksburg silt loam/ Vicksburg fine sandy loam	30	12	12	Yes	No	4	2	Soybeans	No
Knoxville,TN	Sequatchie silt loam	30	20	16	Yes	Yes	4	2	Corn	NO
Springfield,TN	Staser silt loam	30	25	16	Yes	Yes	4	2	N/A	Yes
Orange,VA	Davidson	14	16	12	Yes	Yes	4	4	Small Grains	No
Suffolk,VA	Eunola	15	24	17	Yes	Yes	5	4	Corn	No
Warsaw,VA	Kempsville loam	30	18	12	Yes	Yes	4	2	Small Grains	No

E. WEATHER STATION INFORMATION

Location	Weather Station URL	Notes
Belle Mina, AL	national weather sevice	
Fairhope, AL	national weather sevice	
Tallassee, AL(A)	not reported	
Tallassee, AL(B)	not reported	
Pine Tree, AR	N/A	
Rohwer, AR	http://www.aragriculture.org/weather/default.asp	
Georgetown, DE	http://www.rec.udel.edu/TopLevel/Weather.htm	
Athens, GA (A)	http://www.griffin.uga.edu/aemn/cgi-bin/AEMN.pl?site=GAWP	
Athens, GA (B)	http://www.griffin.uga.edu/aemn/cgi-bin/AEMN.pl?site=GAWP	
Calhoun, GA	http://www.griffin.uga.edu/aemn/cgi-bin/AEMN.pl?site=GACA	
Plains, GA	http://www.griffin.uga.edu/aemn/cgi-bin/AEMN.pl?site=GAPL	
Tifton, GA	http://www.griffin.uga.edu/aemn/cgi-bin/AEMN.pl?site=GATI	
Ullin, IL	none	
McCune, KS	http://www.oznet.ksu.edu/wdl/	
Pittsburg, KS	http://www.oznet.ksu.edu/wdl/	
Princeton, KY	http://www.nass.usda.gov/Statistics_by_State/Kentucky/Publications/Agri-News/oct226.pdf	
Alexandria, LA	www.lsuagcenter.com/weather	
Bossier City, LA	www.lsuagcenter.com/weather/tabledata.asp	
Queenstown, MD	none	
Portageville, MO(A)	http://agebb.missouri.edu/weather/realtime/portageville.asp	
Portageville, MO(B)	http://agebb.missouri.edu/weather/realtime/portageville.asp	
Starkville, MS	http://www.deltaweather.msstate.edu/	
Stoneville, MS	http://www.deltaweather.msstate.edu/	Stoneville is at the end of the list of weather stations.
Jackson Springs, NC	http://www.nc-climate.ncsu.edu/cronos/index.php?station=JACK&temporal=daily	Sandhills Station, NC (Jackson Springs)
Kinston, NC	http://www.nc-climate.ncsu.edu/cronos/index.php?station=314689&temporal=D	Kinston, NC
Plymouth, NC(A)	http://www.nc-climate.ncsu.edu/cronos/?station=PLYM	Tidewater Research Station
Plymouth, NC(B)	http://www.nc-climate.ncsu.edu/cronos/?station=PLYM	Tidewater Research Station
Bixby, OK	www.mesonet.ou.edu	
Stillwater, OK	www.mesonet.ou.edu	
Blackville, SC(A)	http://www.ncdc.noaa.gov/crn/	
Blackville, SC(B)	http://www.ncdc.noaa.gov/crn/	
Clemson, SC	http://www.wunderground.com/weatherstation/WXDailyHistory.asp?ID=KSCCLEMS1&graphspan=month&month=6&day=1&year=2007	
Florence, SC	not reported	
Jackson, TN	None on the web	
Knoxville, TN	www.ncdc.noaa.gov	Look on left menu for "Find a Station" for Knoxville Experiment Station
Springfield, TN	not reported	
Bardwell, TX	not reported	
Cooper, TX	not reported	
Orange, VA	not reported	
Petersburg, VA	http://www.accuweather.com/forecast-climo.asp?partner=30371&traveler=0&zipChg=1&zipcode=23841&metric=0	This only has the past two months of data
Suffolk, VA	not reported	
Warsaw, VA	http://www.ext.vt.edu/cgi-bin/WebObjects/Mesonet.woa/wa/lookupCoordinate?472,102	EVAREC is location name

METHODS

CULTURAL PRACTICES

Please see Soybean Nursery Information – Tables A, B, C, D, and E for details on locations including contacts, row spacing, plot dimensions, end trimming, planting dates, harvest dates, crop rotation, and weather station URLs. Cultural practices, including fertilization, chemical application and irrigation practices, varied at each location to conform to the normal practices of each collaborator. The uniform tests were planted with three (3) replications and the preliminary tests were planted with two (2) replications except three (3) replications were planted for PVII and PVIII.

AGRONOMIC CHARACTERISTICS

Height. Height (HT) in a plot was measured as the average length of plants in inches from the ground to the top extremity at maturity.

Lodging. Lodging (LOD) notes were recorded on a scale of 1 to 5 according to the following criteria:

1 - almost all plants erect
2 - either all plants leaning slightly, or a few plants down
3 - either all plants leaning moderately, or 25 to 50% of the plants down
4 - either all plants leaning considerably, or 50 to 80% of the plants down
5 - all plants down

Maturity. Maturity (MAT) was recorded as the date when 95% of the pods had reached mature pod color (Fehr and Caviness, 1977). Maturity in all summaries is expressed as days earlier (-) or later (+) than the reference variety. Reference varieties used in the different maturity groups were as follows: UIV-S (E) and PIV-S (E) - AG 4232; UIV-S (L) and PIV-S (L) - Ellis; UV and PV-E – Ellis; PV-L – UA5612; UVI and PVI – AG64X8; UVII and PVII – AGS-738RR; and UVIII and PVIII – AGS828RR.

Yield. Please see Agronomic Characteristics of Locations for information on end trimming and which rows were harvested for yield data at each location. Actual seed weights were recorded after the seed of the strains had reached uniform moisture content or seed weight at harvest was adjusted to 13% moisture content. Seed weights were converted to bushels per acre (60 lbs/bu.) by using the appropriate conversion factor for each location with respect to harvested plot size.

Seed Quality. Seed quality was rated from 1 to 5 according to the following scale:

1 - very good; 2 - good; 3 - fair; 4 - poor; 5 - very poor

Factors considered in estimating seed quality were development of seed, wrinkling damage, and brightness. While the seed quality score indicates relative appearance of seed for strains at one location, considerable differences can exist among factors responsible for the poorer grades at different locations. Seed size for each strain was determined from a composite sample from all replications at a location. Seed size is reported as grams per 100 seed.

SEED COMPOSITION

Oil and Protein. Oil and protein (PRO) percentages were determined from representative locations of the uniform and preliminary tests. A 50 ml composite sample all replications of a strain in trial was sent to the USDA-ARS, National Center for Agricultural Utilization Research, Bio-Oils Research Unit at Peoria, Illinois for analysis. One sample of 20ml of whole seed was analyzed for protein and oil composition by near infrared transmittance analysis (NIT) using an IM 9500 Grain Analyzer (Perten Instruments AB, Sweden). Analysis of the seed was conducted on an 'as is' basis and then mathematically converted to a 13% moisture basis (13%) beginning in 2015. Prior to 2015 protein and oil percentages were reported on a dry weight basis (DWB). The conversion factor is 1.1494252 to convert from 13% to DW. The conversion factor is 0.87 to convert DW to 13%.

Validation of the protein and oil percentages are done with combustion method and pulsed Nuclear Magnetic Resonance and AOCS method Ac 2-41 respectively. Lines that were expected to have high oleic (HO) acid percentage, over 75% oleic fatty acid, were analyzed using a CHN 628 (Leco, MI, USA) combustion analysis to verify the protein content; random samples of non-HO beans were also analyzed for comparison. Seed samples are ground in a coffee mill then dried at 85 °C for one hour then analyzed with data compared on a DWB. Pulsed Nuclear Magnetic Resonance, Bruker mq20 (Bruker Corporation, The Woodlands, TX) calibrated to report grams of oil in known grams of seed weight while the AOCS method obtains the moisture content for a DWB oil percentage. Protein values on a 13% moisture basis based on this method are reported only for lines designated at having high oleic acid in the parentage table.

Amino Acids. Seed amino acid percentages were determined for strains known to have modified amino acid percentages and normal checks from representative locations of the uniform and preliminary tests. A composite sample from all replications of a strain in a trial was sent to the University of Missouri Experiment Station Chemical Laboratories (ESCL) for analysis of crude protein and amino acids using the "Cysteine, Methionine, Lysine +9" analysis.

Fatty Acids. Fatty acid analysis of strains known to have oleic acid levels over 75% and normal checks were determined from representative locations of the uniform and preliminary tests. Percent palmitic, stearic, oleic, linoleic and linolenic acid content in the oil were determined. A 30-gram composite seed sample of all replications of a strain in a trial was sent to Dr. Pengyin Chen, University of Missouri, Delta Center, Portageville, MO for analysis.

Mr. Stewart Selves at University of Missouri – Delta Center conducted the fatty acid analysis using a five-seed sample placed in an envelope and manually crushed with a hammer. Crushed seeds were extracted in 5mL chloroform:hexane:methanol (8:5:2, v/v/v) overnight. Derivatization was done by transferring 100 µL of extract to vial and adding 75 µL of methylating reagent (0.25 M methanolic sodium methoxide:petroleum ether:ethyl ether, 1:5:2 v/v/v). Hexane was added to dilute samples to approximately 1 mL. An Agilent (Palo Alto, CA) series 7890 capillary gas chromatograph fitted with a flame ionization detector (275°C) was used with an AT-Silar capillary column (Alltech Associates, Deerfield, IL). Standard fatty acid mixtures (Animal and Vegetable Oil Reference Mixture 6, AOACS) were used as calibration reference standards.

Oligosaccharides (Sugars). Seed sugar percentages were determined for strains known to have a modified sugar profile and normal checks from representative locations of the uniform and preliminary tests. Composite seed samples of all replications of a strain in a trial were sent to Dr. Bo Zhang, Virginia Polytechnic Institute and State University for analysis. A 0.1 gram of ground sample was used to extract sucrose, raffinose and stachyose and analyzed by High Performance Liquid Chromatography (HPLC). Four calibration standards are used: Standard Level 1: 75,7.5,18.75 ug/mL for sucrose, raffinose and stachyose, Standard Level 2: 150, 15, and 37.5 ug/mL for sucrose, raffinose and stachyose, Standard Level 3: 500, 50 and 125 ug/mL for sucrose, raffinose and stachyose and

Standard Level 4: 1000, 100, and 250 ug/mL for sucrose, raffinose and stachyose. A reference standard is used as well: 4.90, 0.70 and 1.40 mg/mL of sucrose, raffinose and stachyose. Data is converted to percentage of sugars.

PEST ASSESSMENT

Root-knot Nematode. Screenings of strains of UIV-S - UVIII for reaction to southern root-knot nematode (*Meloidogyne incognita* (Kofoid and White) Chitwood) (SRK) and to peanut root-knot nematode (*Meloidogyne arenaria* (Neal) Chitwood) (PRK) were conducted in a greenhouse at the University of Georgia.

Three seeds of each genotype were planted in Ray Leach Cone-tainers (20.6 cm long) filled with fumigated sandy loam soil to within 5 cm of the top and then covered with 2.5 cm of fumigated sand. Ten Cone-tainers each of a susceptible and resistant standard cultivar were included in each test. Forty-nine Cone-tainers were placed in a RL-98 tray, filling every other row of the tray. The trays (45) were placed on a greenhouse bench under supplemental light provided by 400-watt metal halide lamps and under an automatic irrigation system. Seven to 10 days after planting, plants were thinned to one seedling per Cone-tainer and inoculated with 3000 root-knot nematode eggs collected with 0.5% NaOCL (10% Clorox). The inoculum (3-5 ml depending on egg concentration) was placed with a digital dispensing pump in a soil at a depth of 2-3 cm. Plants were watered manually for 1-2 days following inoculation before turning on the automatic irrigation system. All plants were fertilized weekly with 20-20-20 (N = 20%, P = 8.7%, K = 16.6%) fertilizer solution.

Thirty days after inoculation, roots of two of the standard check plants were examined for galls to assess whether to begin the process of evaluating the entire test. For evaluation, shoots were excised and root systems removed from the Cone-tainers and washed free of soil. For screening genotypes in the Uniform Tests, the total number of galls per root system was counted. The number of galls on the remainder of the susceptible and resistant check plants was used to develop a gall index for evaluating the genotypes. The gall indexes (based on the number of galls/plant) were as follows: *Meloidogyne incognita* (SRK): 1 = 0-10, 2 = 11-20, 3 = 21-30, 4 = 31-40, and 5 = 41+ galls; *M. arenaria* (PRK): 1 = 0-30, 2 = 31-60, 3 = 61-90, 4 = 91-120, and 5 = 121+ galls.

Soybean Cyst Nematode (SCN). Screening for plant reaction to soybean cyst nematode (*Heterodera glycines* Ichinohe) (SCN) populations was conducted in the greenhouse at the ARS-Crop Genetics Research Unit in Jackson, TN in 2018. Screening for SCN was done with HG Type 2.5.7 (race 1), HG Type 5.7 (race 3), and HG Type 2.5.7 (race 5). The distinction between the two HG Types 2.5.7 (races 1 and 5) that were used to screen the lines in the uniform test was demonstrated by including additional differential cv. Pickett. Pickett is resistant to Race 1 and susceptible to Race 5. One seed of each soybean entry (UIVS-UVIII and PIV-S-PVIII) was planted in sterile soil mix with 7 replications per each SCN population. At the time of planting, approximately 2500 eggs of the population being evaluated were added to each pot. Approximately four weeks after planting, plants were rated based on the number of cysts on the roots. The ratings were as follows: 1 = 0-5 cysts on the root, 2=6-10 cysts on the root, 3=11-20 cysts on the root, 4=21-40 cysts on the root, and 5=> 40 cysts on the root. The 7 replications were averaged and if there were less than 4 plants to rate, the screening was repeated and the data was not shown if there were less than 4 plants for the rating. The mean rating = (rating category x number of plants receiving rating)/total number of plants in that comparison.

In 2018 the HG Types of the populations were as follows: HG Type 2.5.7 (race 1), HG Type 5.7 (race 3), and HG Type 2.5.7 (race 5). 5601T was used as the standard susceptible. The standard index lines were included in every test to confirm characterization. For race 1, 5601T had an average of 262 cysts per test. The female index for the cultures were as follows: Pickett FI 2(%), PI 548402 FI 0(%), PI 88788 FI 60(%), PI 90763 FI 0(%), PI 437654 FI 0(%), PI 209332 FI 62(%), PI 89772 FI 0(%), and PI 548316 FI 58(%). For race 3, 5601T had an average of 165 cysts per test. The female index for the cultures were as follows: Pickett FI 0(%), PI 548402 FI 0(%), PI 88788 FI 5(%), PI 90763 FI 0(%), PI 437654 FI 0(%), PI 209332 FI 35(%), PI 89772 FI 0(%), and PI 548316 FI 20(%). For race 5, 5601T

had an average of 252 cysts per test. The female index for the cultures were as follows: Pickett FI 31(%), PI 548402 FI 4(%), PI 88788 FI 43(%), PI 90763 FI 0(%), PI 437654 FI 0(%), PI 209332 FI 45(%), PI 89772 FI 0(%), and PI 548316 FI 33(%).

Stem Canker (SC). Soybean strains from all tests were evaluated at the Delta Research and Extension Center, Stoneville, Mississippi for their reaction to *Diaporthe aspalathi* (≡ D. *phaseolorum* var *meridionalis*) (SC), the fungus that causes southern stem canker. Strains were planted in non-replicated single-row plots 1.8 m long. Inoculum was produced by aseptically culturing isolates. Autoclaved, flat toothpicks containing a single isolate from Mississippi known as MS-SSC91 were provided by Dr. Shuxian Li, USDA-ARS. Twelve plants per plot were inoculated by forcing a toothpick through the stem in the upper one-third of a young plant. Lesion development on the stem at the inoculation site was observed and noted every 2 weeks beginning with initial signs of disease on the susceptible checks. Final scores were determined when the susceptible checks had been killed by the disease, or the plot was near maturity. Plants having any external lesion were considered as susceptible. The final score was based on the overall appearance of all inoculated plants in a plot.

A rating of R = resistant, MR = moderately resistant, SS = segregating or somewhat susceptible, MS = moderately susceptible or S = susceptible was applied to each strain and derived based on a comparison of the final score with the disease level of the susceptible checks. Leaf symptoms were based on the presence or absence of interveinal chlorosis as observed on inoculated plants. The presence of main stem lesions was observed at or around the point of inoculation based on the presence of a toothpick. Individual soybean strains were rated as follows:

1. No plants exhibited external lesions, no leaf damage and no dead plants (R).
2. No plants exhibited external lesions. A few plants showed minor leaf symptoms (MR).
3. Segregating for susceptible and resistant plants based on stem lesion; **or** minor external lesions and minor leaf symptoms, but no dead plants (SS).
4. All plants exhibited external lesions, all plant have leaf symptoms, some plants are not dead (MS).
5. All plants exhibited external lesion and all plants dead (S).

The score for susceptible checks AG4403 and Dixie4866, and resistant checks Ellis and AG4632 were 5, 5, 1 and 2, respectively.

Sudden Death Syndrome (SDS). SDS, which is caused by the fungus *Fusarium virguliforme*. SDS screening was not performed in 2017 or 2018 due to a lack of funding.

STATISTICAL ANALYSES

Yield, maturity, height, lodging and quality data for each test were analyzed by location by analysis of variance using a mixed model (Proc Mixed in SAS) with variety as the fixed effect and replication as random. Coefficient of variation (CV) and LSD ($\alpha = 0.05$) were calculated from the Proc Mixed output for yield. LSmeans are presented when multiple replications of data were available. Any location that does not have at least two replications of yield data is not included in the yield analysis. In the cases when only I replication of data was provided for variables other than yield, the actual values for that replication were presented.

Yield, maturity, height, lodging and quality for each test were analyzed by area for the uniform tests by analysis of variance using a mixed model (Proc Mixed in SAS) with variety as a fixed effect and location replication(location) location*variety; as random effects. Coefficient of variation (CV) and LSD ($\alpha = 0.05$) were calculated from the Proc Mixed output. The absolute value of CV is presented when a negative CV is produced. The location means are presented for areas that only have data from one location. Yield data from locations with a yield CV of over 15 were omitted from area means.

Yield, maturity, height, lodging and quality for each test were analyzed over all locations for the uniform tests and the preliminary tests by analysis of variance using a mixed model (Proc Mixed in SAS) with variety as a fixed effect and location replication(location) location*variety as random effects. Coefficient of variation (CV) and LSD (α = 0.05) were calculated from the Proc Mixed output. **Yield data from locations with a yield CV of over 15 were omitted from test means and ranks.**

The protein and oil data for a variety/strain at a location is the NIR analysis results from one composite sample of all replications for each entry at the location. Size data is collected either for all replications, or as a composite sample. Arithmetic means are presented for composite samples and LSmeans are presented for replicated data. Protein, oil and size were analyzed by test by analysis of variance using a mixed model (Proc Mixed in SAS) with variety as a fixed effect and location; as a random effect. Coefficient of variation (CV) and average LSD (α = 0.05) were calculated from the Proc Mixed output. LSmeans are presented for the test means.

The Rank column in the general summary tables indicated the relative ranking of the yield based on the average performance of a line across locations. Locations with a high yield CV value are not included in Rank calculations.

The Average Rank column in the general summary tables indicates the yield rank of a line based on the average of a line's rank at each individual location. Locations with a high yield CV value are not included in Average Rank calculations.

When a 2-year mean is missing from the general summary table for a Uniform Test, the strain/variety was not in the test for the prior year. In this case the 3-year mean is the average of two years.

TABLE 1 - PARENTAGE OF ENTRIES
UNIFORM GROUP IV-S-EARLY 2018

Ent	Strain/Variety	Parentage	Source	Fn	Trans-genic†	Special Traits‡
1	AG 4232RR2Y	Commercial check	Commercial		RR2	
2	AG 43X7	Commercial check	Commercial		RRX	
3	LD06-7620	IA3023 x LD00-3309	Commercial			
4	AG 4135	Commercial check	Commercial		RR2	
5	DS31-243	LG04-1459 x (DT97-4290(2) x PI 587982A)	Smith	F5		25% Exotic, High Germ
6	DS3H-211	LG04-1459-6 x S07-5049	Smith	F4		12.5% Exotic
7	LG11-8169-007F	LG06-2354 x LG05-4354	Gillen			Diversity
8	S13-2743C	LS07-3125 x S05-11400	Chen			
9	S13-3851C	S09-9838 x LD05-13265	Chen			
10	S13-10590C	S08-17361 x S05-11482	Chen			
11	S13-10592C	S08-17361 x S05-11482	Chen			
12	S14-15146R	S09-10871 x S08-9727RR1	Chen		RR1	
13	SA14-5754	LD07-3419 x LD04-13265	Scaboo	F4		
14	V11-2187	LG04-6000 x V03-7833	Zhang	F4		
15	V11-2263	LG04-6000 x V03-7833	Zhang	F4		8% sucrose.

†Conv= Conventional(non-transgenic),LL= Liberty Link®,RR1= Roundup Ready®,and RR2=Roundup Ready 2 Yield®
RRX= Roundup Ready 2 Xtend®

‡AA= modified amino acids, DNC= Do not cross with this, FLS= Frogeye leaf spot resistance, LJ= Long juvenile,
LN= low linolenic acid, LP= low phytate, HO= high olelic acid, HOLN= high oleic acid/low linolenic acid,
SCN= Soybean cyst nematode resistance, SR= Soybean rust resistance,
and STS= sulfonylurea tolerant

TABLE 2 - GENERAL SUMMARY OF PERFORMANCE
UNIFORM TEST IV-S-EARLY 2018

STRAIN/		AVG.	YIELD†			PROTEIN‡			OIL‡		
VARIETY	RANK	RANK	2018	17-18	16-18	2018	17-18	16-18	2018	17-19	16-18
AG 4232RR2Y	4	6	66.9	63.2	64.9	33.6	34.1	34.3	20.3	19.9	19.8
AG 43X7	1	3	72.5	.	.	33.6	.	.	20.2	.	.
LD06-7620	15	13	47.8	51.8	54.3	36.6	36.3	36.4	20.2	19.8	19.7
AG 4135	6	5	64.5	64.5	67.0	33.9	34.5	34.9	20.9	20.5	20.3
DS31-243	13	12	55.7	.	.	34.7	.	.	19.9	.	.
DS3H-211	7	8	63.2	.	.	33.3	.	.	21.6	.	.
LG11-8169-007F	10	9	61.2	.	.	35.8	.	.	19.7	.	.
S13-2743C	11	9	61.1	63.1	.	33.8	34.3	.	21.3	20.7	.
S13-3851C	2	4	69.8	65.8	.	33.9	34.4	.	21.1	20.4	.
S13-10590C	8	7	62.9	62.7	.	34.5	34.7	.	20.9	20.5	.
S13-10592C	9	9	61.6	62.7	.	34.8	34.8	.	21.0	20.5	.
S14-15146R	3	5	67.0	.	.	33.4	.	.	20.9	.	.
SA14-5754	14	12	52.5	.	.	34.0	.	.	21.7	.	.
V11-2187	5	6	66.7	62.1	64.4	34.9	35.2	35.5	20.2	19.8	19.8
V11-2263	12	11	57.5	.	.	34.7	.	.	21.0	.	.
Mean	.	.	62.1	.	.	34.4	.	.	20.7	.	.
LSD(0.05)	.	.	7.3	.	.	1.0	.	.	0.5	.	.
CV(%)	.	.	12.7	.	.	2.6	.	.	2.1	.	.

† Data not included in mean: 2018 - Portageville,MO(A) and Springfield,TN
2017 - Not applicable
2016 - Orange, VA; Warsau, VA

‡ Protein percentage and oil percentage reported on a 13% moisture basis beginning in 2015.

TABLE 3 - GENERAL SUMMARY OF PERFORMANCE -Part 2
UNIFORM TEST IV-S-EARLY 2018

STRAIN/ VARIETY	MEAL PRO %	MAT INDEX	LOD	HT	SEED QUALITY	SEED SIZE	FL. COLOR	PUB. COLOR	POD COLOR
AG 4232RR2Y	45.9	0	2	36	2.3	14.3	P	Lt	T
AG 43X7	45.8	2	2	38	2.9	14.7			
LD06-7620	49.9	-7	2	27	3.1	14.3	P	G	Br
AG 4135	47.0	-4	2	33	2.2	15.3	W	G	Br
DS31-243	47.1	-6	3	38	2.2	13	W	G	Br
DS3H-211	46.1	-2	3	37	2.5	13.8	P	Lt/G	T
LG11-8169-007F	48.4	-2	2	33	2.8	14.7	P	T	Br
S13-2743C	46.7	-2	2	36	2.2	13.5	W	G	T/Bl
S13-3851C	46.7	2	2	35	2.7	14.9	P	Lt	T
S13-10590C	47.5	0	2	33	2.7	15.9	W	T	T
S13-10592C	47.9	3	4	33	3.2	15.9	W	T	T
S14-15146R	46.0	3	2	34	2.3	14.8	W	T	T
SA14-5754	47.2	-3	2	28	3.1	14.8	P	G	T
V11-2187	47.5	0	2	35	2.0	14.3	P	G	
V11-2263	47.7	-2	2	32	2.5	14.3	W	T	
Mean	47.2	-1	2	34	2.6	14.6			
LSD(0.05)	1.2	3	0	2	0.6	0.8			
CV(%)	2.5	254	22	8	28.0	6.3			

TABLE 4 - GENERAL SUMMARY OF PEST REACTION
UNIFORM TEST IV-S-EARLY 2018

STRAIN/ VARIETY	SCN Cyst Score (1-5 Scale)†			PRK	SRK	SC	SC
	Race 1	Race 3	Race 5	GA	GA	RATING	SCORE
AG 4232RR2Y	.	2	3	3.0	4.8	MR	2.0
AG 43X7	.	2	5	4.0	4.3	R	1.0
LD06-7620	.	3	5	5.0	4.5	SS	3.0
AG 4135	.	.	.	1.5	1.5	MR	2.0
DS31-243	.	4	5	4.3	2.8	R	1.0
DS3H-211	.	5	4	2.8	3.3	R	1.0
LG11-8169-007F	.	4	4	5.0	3.8	R	1.0
S13-2743C	.	5	3	4.3	3.3	R	1.0
S13-3851C	.	2	4	4.3	3.3	R	1.0
S13-10590C	.	3	2	2.8	2.3	R	1.0
S13-10592C	.	4	4	1.8	4.8	R	1.0
S14-15146R	.	5	4	2.3	2.3	R	1.0
SA14-5754	.	3	4	3.8	4.5	R	1.0
V11-2187	.	4	4	2.3	3.0	R	1.0
V11-2263	.	5	2	3.8	2.5	R	1.0

†The race 1, 3, and 5 SCN populations used in these tests were typed as HG (*Heterodera glycines*) Type 2.5.7, HG Type 5.7, and HG Type 2.5.7, respectively. Reaction to the cultivar Pickett was used to distinguish between race 1 and race 5 SCN populations.

TABLE 5 - SEED YIELD (BUSHELS PER ACRE)
UNIFORM TEST IV-S-EARLY 2018 †

STRAIN/ VARIETY	Belle Mina, AL	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Test Mean
AG 4232RR2Y	59.4	68.2	90.0	68.4	54.4	43.4	29.6	72.0	66.9
AG 43X7	67.4	69.3	85.0	70.9	49.8	52.5	30.4	90.0	72.5
LD06-7620	32.7	58.7	64.0	45.4	46.4	46.3	19.8	39.7	47.8
AG 4135	49.8	.	.	72.0	41.2	53.7	30.3	66.2	64.5
DS31-243	51.4	55.9	73.1	50.8	28.0	39.6	24.1	63.4	55.7
DS3H-211	58.2	51.2	82.0	69.2	22.8	42.5	23.5	76.5	63.2
LG11-8169-007F	61.6	59.3	76.9	62.6	45.2	45.6	22.0	61.3	61.2
S13-2743C	46.1	68.1	77.4	60.3	53.4	49.2	31.3	65.4	61.1
S13-3851C	57.2	63.4	89.3	65.8	52.7	51.6	30.9	91.3	69.8
S13-10590C	52.0	70.1	78.3	65.9	44.2	49.5	33.2	61.9	62.9
S13-10592C	52.1	56.2	75.3	59.2	45.8	48.5	31.3	77.7	61.6
S14-15146R	60.8	70.1	89.2	63.0	58.9	49.0	26.6	70.0	67.0
SA14-5754	38.0	55.9	58.0	61.1	20.2	46.4	24.6	58.3	52.5
V11-2187	59.6	63.1	83.8	71.2	44.4	45.4	25.2	77.3	66.7
V11-2263	43.6	59.2	76.5	61.7	48.5	40.9	28.0	63.5	57.5
Mean	52.7	62.1	78.5	63.2	43.7	46.9	27.4	69.0	62.1
LSD(0.05)	7.4	8.3	10.6	15.9	13.8	5.9	8.9	9.9	7.3
CV(%)	8.4	8.0	8.0	13.6	18.9	7.6	19.1	8.6	12.7

† Data not included in mean: 2018 - Portageville,MO(A) and Springfield,TN

TABLE 6 - RELATIVE MATURITY (DAYS EARLIER (-) OR LATER (+) THAN ENTRY 1)
UNIFORM GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Belle Mina, AL	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Test Mean
AG 4232RR2Y	8/31	9/18	9/19	9/20	10/4	9/29	9/21	9/1	9/18
AG 43X7	5	0	6	1	0	1	-1	6	2
LD06-7620	-15	-8	-4	-1	-9	-5	-3	-14	-7
AG 4135	-11	.	.	-1	-12	-5	-3	8	-4
DS31-243	-7	-8	-5	-2	-9	-8	-5	-3	-6
DS3H-211	-2	0	-4	-1	-8	-4	-2	2	-2
LG11-8169-007F	-3	0	-2	0	-4	-2	-3	-3	-2
S13-2743C	-3	0	-1	1	-3	-5	-3	-3	-2
S13-3851C	1	1	2	2	0	4	0	8	2
S13-10590C	-3	2	3	1	-2	0	-1	3	0
S13-10592C	4	0	9	1	1	2	-1	5	3
S14-15146R	4	2	12	2	2	0	0	5	3
SA14-5754	-4	-2	-4	1	-8	-5	-3	-2	-3
V11-2187	1	0	-1	4	-3	-4	-2	1	0
V11-2263	-2	0	-1	1	-2	-3	-2	-3	-2
Mean	-2	-1	1	0	-4	-2	-2	1	-1
LSD(0.05)	1	2	3	2	5	3	2	2	3
CV(%)	30	117	306	206	72	71	69	151	254

TABLE 7 - PLANT HEIGHT (INCHES)
UNIFORM GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Belle Mina, AL	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Test Mean
AG 4232RR2Y	30	46	31	32	45	38	28	39	36
AG 43X7	35	48	37	35	41	38	30	41	38
LD06-7620	20	37	25	25	33	29	23	27	27
AG 4135	25	.	.	28	41	37	26	36	33
DS31-243	37	47	31	34	45	39	30	39	38
DS3H-211	35	44	32	37	42	41	30	36	37
LG11-8169-007F	33	44	31	31	36	36	24	33	33
S13-2743C	30	49	31	38	38	35	28	38	36
S13-3851C	32	47	34	32	36	35	24	39	35
S13-10590C	31	44	29	29	38	35	26	34	33
S13-10592C	26	44	31	32	38	34	27	35	33
S14-15146R	27	46	33	32	39	35	25	37	34
SA14-5754	22	41	23	26	32	30	25	28	28
V11-2187	30	48	32	31	41	37	28	36	36
V11-2263	25	42	29	30	37	34	27	36	33
Mean	29	45	31	31	39	36	27	36	34
LSD(0.05)	3	5	4	4	4	4	3	5	2
CV(%)	5	6	9	8	7	6	7	8	8

TABLE 8 - PLANT LODGING (1-5)
UNIFORM GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Belle Mina, AL	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Test Mean
AG 4232RR2Y	1.0	3.3	1.7	2.0	3.0	3.0	1.0	3.0	2.2
AG 43X7	1.0	3.7	1.7	1.8	3.3	3.0	1.0	3.3	2.4
LD06-7620	1.0	2.7	1.0	1.7	3.0	2.7	1.0	2.3	1.9
AG 4135	1.0	.	.	1.7	3.3	2.7	1.0	2.7	2.1
DS31-243	2.0	4.0	2.7	2.7	4.0	3.0	1.0	3.3	2.8
DS3H-211	2.0	4.7	2.3	3.0	4.0	3.0	1.0	4.0	3.0
LG11-8169-007F	1.0	3.7	1.0	2.0	3.0	2.7	1.0	2.3	2.1
S13-2743C	1.0	3.3	1.3	1.8	3.0	2.7	1.0	2.3	2.1
S13-3851C	1.0	4.0	2.3	1.8	3.0	3.0	1.0	3.0	2.4
S13-10590C	1.0	3.0	1.3	1.8	3.0	3.0	1.0	2.7	2.1
S13-10592C	3.0	5.0	4.3	3.8	4.3	3.0	1.0	5.0	3.7
S14-15146R	1.0	3.0	1.0	1.8	3.3	3.0	1.0	3.3	2.2
SA14-5754	1.0	4.0	1.3	1.7	3.3	2.0	1.0	2.3	2.1
V11-2187	1.0	2.7	1.0	1.5	4.0	2.3	1.0	2.7	2.0
V11-2263	1.0	2.0	1.0	1.3	3.0	2.7	1.0	2.7	1.8
Mean	1.3	3.5	1.7	2.0	3.4	2.8	1.0	3.0	2.3
LSD(0.05)	.	0.7	0.8	0.6	0.5	0.6	.	0.9	0.4
CV(%)	0.0	11.3	28.7	18.4	9.7	12.6	0.0	18.6	21.8

TABLE 9 - SEED QUALITY (1-5)
UNIFORM GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Belle Mina, AL	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Test Mean
AG 4232RR2Y	2.0	2.3	1.7	2.0	3.0	2.0	.	3.0	2.3
AG 43X7	2.0	2.7	2.0	3.0	4.0	3.7	.	3.0	2.9
LD06-7620	3.3	3.7	4.0	3.0	2.0	2.0	.	4.0	3.1
AG 4135	2.3	.	.	2.0	3.0	1.3	.	2.0	2.2
DS31-243	1.0	2.3	1.7	3.0	2.7	1.7	.	3.0	2.2
DS3H-211	2.0	3.0	1.7	2.0	3.3	2.3	.	3.0	2.5
LG11-8169-007F	2.0	3.0	2.7	2.0	3.7	3.0	.	3.0	2.8
S13-2743C	1.7	2.0	3.0	2.0	2.7	1.3	.	3.0	2.2
S13-3851C	1.7	2.7	1.0	3.0	3.3	4.0	.	3.0	2.7
S13-10590C	2.0	3.0	2.7	2.0	3.3	2.0	.	4.0	2.7
S13-10592C	2.3	4.0	2.7	3.0	3.7	3.0	.	4.0	3.2
S14-15146R	2.0	2.3	1.7	2.0	3.0	2.3	.	3.0	2.3
SA14-5754	2.0	4.0	4.0	2.0	3.7	2.0	.	4.0	3.1
V11-2187	1.0	2.3	1.0	2.0	3.3	1.3	.	3.0	2.0
V11-2263	1.7	2.3	2.0	3.0	3.0	2.3	.	3.0	2.5
Mean	1.9	2.8	2.3	2.4	3.2	2.3	.	3.2	2.6
LSD(0.05)	0.6	0.7	0.7	.	1.1	1.2	.	.	0.6
CV(%)	18.9	15.4	18.0	0.0	21.5	32.4	.	.	27.8

TABLE 10 - SEED SIZE (GRAMS PER 100 SEED)
UNIFORM GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Belle Mina, AL	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Test Mean
AG 4232RR2Y	14.6	14.0	15.9	15.9	13.3	11.2	.	15.6	14.3
AG 43X7	14.4	13.5	15.7	16.0	14.5	12.4	.	16.7	14.7
LD06-7620	14.3	12.7	14.9	16.4	13.6	13.8	.	13.6	14.3
AG 4135	13.6	.	.	17.6	15.8	13.9	.	14.4	15.3
DS31-243	11.0	12.4	14.3	14.9	13.4	10.7	.	14.6	13.0
DS3H-211	12.5	14.1	14.8	15.2	14.2	11.2	.	14.4	13.8
LG11-8169-007F	14.0	14.2	15.2	15.8	14.7	13.1	.	15.9	14.7
S13-2743C	12.6	13.0	14.6	14.6	12.7	12.6	.	14.4	13.5
S13-3851C	12.6	14.1	16.3	14.9	15.5	15.1	.	16.1	14.9
S13-10590C	15.9	15.7	16.5	18.3	14.3	14.4	.	15.6	15.9
S13-10592C	14.1	15.2	16.9	18.5	15.4	13.9	.	17.7	15.9
S14-15146R	14.6	14.5	16.5	16.2	14.5	12.7	.	14.6	14.8
SA14-5754	14.1	14.1	15.5	17.2	14.2	13.3	.	15.2	14.8
V11-2187	14.3	14.1	15.3	15.7	14.3	11.5	.	15.2	14.3
V11-2263	13.8	13.6	15.7	15.8	14.1	11.8	.	15.2	14.3
Mean	13.8	14.0	15.6	16.2	14.3	12.8	.	15.3	14.6
LSD(0.05)	1.7	1.0	0.7	.	1.7	0.6	.	.	0.8
CV(%)	7.2	4.3	2.6	0.0	7.2	3.0	.	.	6.3

TABLE 11 - OIL (%)†
UNIFORM GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Belle Mina, AL	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Test Mean
AG 4232RR2Y	20.9	20.0	19.5	20.3	20.1	20.7	.	20.5	20.3
AG 43X7	21.4	20.1	18.9	20.0	20.2	20.0	.	20.5	20.2
LD06-7620	20.6	20.4	18.8	20.0	19.9	20.2	.	21.6	20.2
AG 4135	21.7	.	20.7	20.5	20.5	20.7	.	21.1	20.9
DS31-243	20.7	19.8	19.4	20.1	19.8	20.0	.	19.5	19.9
DS3H-211	21.9	21.0	21.0	21.8	21.8	22.3	.	21.2	21.6
LG11-8169-007F	20.5	19.4	18.8	20.4	19.9	19.1	.	19.8	19.7
S13-2743C	22.4	20.8	20.1	21.3	21.3	21.0	.	22.1	21.3
S13-3851C	22.6	20.9	20.6	21.1	20.4	20.4	.	21.6	21.1
S13-10590C	21.5	21.0	20.3	21.0	21.0	20.1	.	21.7	20.9
S13-10592C	21.9	21.5	20.0	21.4	19.8	21.0	.	21.3	21.0
S14-15146R	21.8	20.7	20.7	20.9	20.7	21.5	.	20.3	20.9
SA14-5754	22.1	22.5	20.3	21.6	21.6	21.2	.	22.7	21.7
V11-2187	20.8	20.0	20.1	20.0	19.6	20.5	.	20.2	20.2
V11-2263	22.0	20.3	20.7	20.9	20.6	21.1	.	21.7	21.0
Mean	21.5	20.6	20.0	20.8	20.5	20.7	.	21.0	20.7
LSD(0.05)	.	.	.	.	.	.	.	.	0.5
CV(%)	.	.	.	.	.	.	.	.	2.1

†Oil percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 12 - PROTEIN (%)†
UNIFORM GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Belle Mina, AL	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Test Mean
AG 4232RR2Y	31.4	34.6	35.0	34.7	33.4	32.4	.	34.1	33.6
AG 43X7	30.0	34.5	35.0	35.1	33.8	33.1	.	34.0	33.6
LD06-7620	33.9	36.8	36.7	40.8	35.1	35.3	.	37.7	36.6
AG 4135	31.7		34.2	36.0	35.6	32.9	.	33.2	34.2
DS31-243	31.3	36.3	35.5	36.0	35.5	33.2	.	35.0	34.7
DS3H-211	30.4	35.3	34.4	35.3	33.4	30.5	.	33.7	33.3
LG11-8169-007F	32.4	37.5	36.5	36.0	36.5	35.4	.	36.0	35.8
S13-2743C	31.1	35.2	35.4	34.8	33.2	33.6	.	33.4	33.8
S13-3851C	29.2	36.9	33.9	34.8	35.3	34.2	.	33.4	33.9
S13-10590C	32.0	35.9	35.2	35.2	34.0	34.6	.	34.9	34.5
S13-10592C	30.7	36.0	36.3	36.3	36.7	33.3	.	34.6	34.8
S14-15146R	29.7	35.2	34.4	34.6	33.8	31.6	.	34.7	33.4
SA14-5754	30.8	36.9	34.2	34.7	34.2	32.6	.	34.7	34.0
V11-2187	33.3	35.0	33.9	36.4	37.2	33.4	.	35.2	34.9
V11-2263	30.4	37.4	35.1	36.6	35.9	33.4	.	34.0	34.7
Mean	31.2	36.0	35.0	35.8	34.9	33.3	.	34.6	34.4
LSD(0.05)	.	.	.	.	.	.	.	.	1.0
CV(%)	.	.	.	.	.	.	.	.	2.6

†Protein percentage reported on a 13% moisture basis beginning in 2015.

TABLE 13 - ESTIMATED MEAL PROTEIN (%)
UNIFORM GROUP IV-S-EARLY 2017

STRAIN/ VARIETY	Belle Mina, AL	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Test Mean
AG 4232RR2Y	43.1	47.0	47.2	47.3	45.4	44.4	.	46.6	45.9
AG 43X7	41.4	47.0	46.9	47.7	46.0	44.9	.	46.4	45.8
LD06-7620	46.4	50.3	49.2	55.4	47.7	48.1	.	52.2	49.9
AG 4135	43.9		46.9	49.2	48.7	45.1	.	45.8	47.0
DS31-243	42.9	49.2	47.9	49.0	48.1	45.1	.	47.2	47.1
DS3H-211	42.2	48.6	47.3	49.1	46.4	42.7	.	46.5	46.1
LG11-8169-007F	44.3	50.5	48.9	49.2	49.5	47.5	.	48.8	48.4
S13-2743C	43.5	48.3	48.2	48.1	45.8	46.3	.	46.6	46.7
S13-3851C	41.0	50.6	46.4	47.9	48.2	46.8	.	46.2	46.7
S13-10590C	44.3	49.4	47.9	48.4	46.8	47.0	.	48.5	47.5
S13-10592C	42.7	49.8	49.3	50.1	49.8	45.8	.	47.8	47.9
S14-15146R	41.3	48.3	47.2	47.5	46.3	43.8	.	47.4	46.0
SA14-5754	43.0	51.7	46.7	48.1	47.3	45.0	.	48.8	47.2
V11-2187	45.7	47.6	46.1	49.5	50.3	45.6	.	47.9	47.5
V11-2263	42.3	51.1	48.1	50.3	49.2	46.0	.	47.2	47.7
Mean	43.2	49.2	47.6	49.1	47.7	45.6	.	47.6	47.2
LSD(0.05)	.	.	.	.	.	.	.	.	1.2
CV(%)	.	.	.	.	.	.	.	.	2.5

SUMMARY OF SEED SUGARS(%)
UNIFORM TEST IV-S-EARLY 2018 †

STRAIN/ VARIETY	*Sucrose*	*Raffinose*	*Stachyose*	*Total Sugar*
AG 4232RR2Y	4.0	1.2	3.7	8.9
AG 43X7	3.3	0.7	2.9	6.9
LD06-7620	2.6	0.8	3.5	6.8
AG 4135	3.2	1.1	4.1	8.3
V11-2263	2.2	0.8	2.5	5.5
Mean	3.1	0.9	3.3	7.3
LSD(0.05)	1.6	0.4	1.3	3.1
CV(%)	44.0	42.0	33.0	36.0

†Fatty acid percentage in seed oil reported beginning in 2017.

SEED SUCROSE(%)
UNIFORM GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	*Jackson, TN*	*Keiser, AR*	*Knoxville, TN*	*Portageville, MO (A)*	*Portageville, MO (B)*	*Stoneville, MS*	*Tallassee, AL*	*Test Mean*
AG 4232RR2Y	3.2	4.3	3.2	2.9	4.3	2.5	7.5	4.0
AG 43X7	4.2	5.0	1.4	.	5.2	0.8	3.2	3.3
LD06-7620	1.9	3.9	0.1	3.4	3.9	0.1	4.9	2.6
AG 4135	.	4.8	0.4	2.7	3.7	2.0	5.8	3.2
V11-2263	.	4.6	2.8	2.7	2.8	0.5	0.1	2.2
	.							
Mean	3.1	4.5	1.6	2.9	4.0	1.2	4.3	3.1
LSD(0.05)	.	.	.	.	.	.	.	1.6
CV(%)	.	.	.	.	.	.	.	44.3

SEED RAFFINOSE(%)
UNIFORM GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	*Jackson, TN*	*Keiser, AR*	*Knoxville, TN*	*Portageville, MO (A)*	*Portageville, MO (B)*	*Stoneville, MS*	*Tallassee, AL*	*Test Mean*
AG 4232RR2Y	1.0	1.2	1.1	0.7	1.0	1.2	2.0	1.2
AG 43X7	0.2	0.6	0.7	.	0.9	0.9	1.2	0.7
LD06-7620	0.9	1.1	0.4	0.7	0.9	0.2	1.3	0.8
AG 4135	.	0.8	0.7	1.3	0.7	1.2	2.0	1.1
V11-2263	.	1.4	0.7	0.8	0.6	0.9	0.2	0.8
Mean	0.7	1.0	0.7	0.9	0.8	0.9	1.4	0.9
LSD(0.05)	.	.	.	.	.	.	.	0.4
CV(%)	.	.	.	.	.	.	.	41.6

SEED STACHYOSE(%)
UNIFORM GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO (A)	Portageville, MO (B)	Stoneville, MS	Tallassee, AL	Test Mean
AG 4232RR2Y	3.1	3.4	3.3	2.9	3.5	3.7	6.0	3.7
AG 43X7	1.5	3.1	2.6	.	3.7	2.8	3.9	2.9
LD06-7620	2.4	4.5	1.9	3.0	4.7	2.0	5.8	3.5
AG 4135	.	5.1	3.0	4.2	2.9	3.3	6.3	4.1
V11-2263	.	3.5	3.1	2.7	2.6	3.1	0.4	2.5
Mean	2.4	3.9	2.8	3.2	3.5	3.0	4.5	3.3
LSD(0.05)	.	.	.	.	.	.	.	1.3
CV(%)	.	.	.	.	.	.	.	33.1

SEED TOTAL SUGARS (%)
UNIFORM GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO (A)	Portageville, MO (B)	Stoneville, MS	Tallassee, AL	Test Mean
AG 4232RR2Y	7.4	8.9	7.6	6.6	8.8	7.4	15.5	8.9
AG 43X7	5.9	8.6	4.6	.	9.8	4.4	8.4	6.9
LD06-7620	5.2	9.5	2.4	7.1	9.5	2.2	12.0	6.8
AG 4135	.	10.7	4.0	8.2	7.3	6.6	14.2	8.3
V11-2263	.	9.5	6.6	6.2	6.0	4.5	0.7	5.5
Mean	6.2	9.5	5.0	7.0	8.3	5.0	10.2	7.3
LSD(0.05)	.	.	.	.	.	.	.	3.1
CV(%)	.	.	.	.	.	.	.	35.8

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TABLE 14 - PARENTAGE OF ENTRIES
UNIFORM GROUP IV-S-LATE 2018

Ent	Strain/Variety	Parentage	Source	Fn	Trans-genic†	Special Traits‡
1	Ellis	5002T x 5601T	Commercial			
2	AG 4632RR2Y	Commercial check	Commercial		RR2	
3	AG 4835	Commercial check	Commercial		RR2	
4	AG 46X7	Commercial check	Commercial		RRX	
5	DA10x30-09F	Jake x DB04-10997	Gillen			
6	DA10x30-48F	Jake x DB04-10997	Gillen			
7	K15-1681	KS5004N x 435.TCS	Schapaugh	F5		STS
8	K15-1874	KS5004N x 435.TCS	Schapaugh	F5		STS
9	S14-9051R	LD07-3419 x S08-9727RR1	Chen		RR1	
10	S14-15138R	S09-10871 x S08-9727RR1	Chen		RR1	
11	S15-3772RY	S08-17361 x S11-9618RR	Chen		RR2	
12	S15-3847RY	S05-11400 x S10-6401	Chen		RR2	
13	S15-5904RY	S09-9943 x S11-9618RR	Chen		RR2	
14	TN14-5021	Caviness x Anand	Pantalone			
15	TN15-4009	TN09-016 x S05-11482	Pantalone			
16	TN15-5007	Osage x TN10-4409	Pantalone			Meal Protein 48%
17	TN16-520R1	Ellis[5] x TN13-4730R1	Pantalone		RR1	
18	V13-0116	V02-8659 x Schillinger 495	Zhang	F4	RR1	
19	V14-4140	(Glenn x R02-3369) x (V03-4660 x R02-3369)	Zhang	F4		

†Conv= Conventional(non-transgenic), LL= Liberty Link®, RR1= Roundup Ready®, and RR2=Roundup Ready 2 Yield®
RRX= Roundup Ready 2 Xtend®
‡AA= modified amino acids, DNC= Do not cross with this, FLS= Frogeye leaf spot resistance, LJ= Long juvenile,
LN= low linolenic acid, LP= low phytate, HO= high olelic acid, HOLN= high oleic acid/low linolenic acid,
SCN= Soybean cyst nematode resistance, SR= Soybean rust resistance,
and STS= sulfonylurea tolerant

TABLE 15 - GENERAL SUMMARY OF PERFORMANCE
UNIFORM TEST IV-S-LATE 2018

STRAIN/ VARIETY	RANK	AVG. RANK	YIELD† 2018	YIELD† 17-18	YIELD† 16-18	PROTEIN‡ 2018	PROTEIN‡ 17-18	PROTEIN‡ 16-18	OIL‡ 2018	OIL‡ 17-19	OIL‡ 16-18
Ellis	2	7	58.7	59.6	59.5	34.6	34.7	34.9	19.5	19.0	19.0
AG 4632RR2Y	14	12	54.1	58.8	58.2	33.1	33.1	33.4	20.6	20.2	20.1
AG 4835	17	12	52.5	56.7	57.5	34.0	34.4	34.7	19.5	19.2	19.1
AG 46X7	15	11	53.7	.	.	33.5	.	.	20.4	.	.
DA10x30-09F	4	7	58.5	58.6	.	36.4	36.1	.	18.4	18.2	.
DA10x30-48F	1	6	59.1	58.1	.	36.5	36.4	.	19.1	18.7	.
K15-1681	18	14	50.7	.	.	36.0	.	.	20.4	.	.
K15-1874	12	10	54.9	.	.	35.1	.	.	19.8	.	.
S14-9051R	5	7	57.6	.	.	33.1	.	.	21.6	.	.
S14-15138R	10	9	56.3	58.9	.	34.7	35.0	.	20.3	19.8	.
S15-3772RY	3	10	58.5	.	.	34.5	.	.	20.9	.	.
S15-3847RY	6	9	57.4	.	.	33.7	.	.	20.2	.	.
S15-5904RY	8	9	57.0	.	.	35.3	.	.	20.2	.	.
TN14-5021	7	8	57.1	58.4	.	34.8	34.9	.	20.0	19.6	.
TN15-4009	13	9	54.7	.	.	33.5	.	.	20.7	.	.
TN15-5007	9	9	56.8	.	.	37.9	.	.	18.5	.	.
TN16-520R1	11	10	55.7	.	.	35.0	.	.	19.5	.	.
V13-0116	19	14	48.3	.	.	35.7	.	.	19.8	.	.
V14-4140	16	13	53.2	.	.	35.4	.	.	20.0	.	.
Mean	.	.	55.5	.	.	34.9	.	.	20.0	.	.
LSD(0.05)	.	.	5.6	.	.	0.8	.	.	0.4	.	.
CV(%)	.	.	14.3	.	.	2.6	.	.	2.1	.	.

† Data not included in mean: 2018 - Bossier City,LA; Knoxville,TN; and Tallassee,AL
2017 - Not applicable
2016 - Orange, VA; Warsau, VA

‡ Protein percentage and oil percentage reported on a 13% moisture basis beginning in 2015.

TABLE 16 - GENERAL SUMMARY OF PERFORMANCE -Part 2
UNIFORM TEST IV-S-LATE 2018

STRAIN/ VARIETY	MEAL PRO %	MAT INDEX	LOD	HT	SEED QUALITY	SEED SIZE	FL. COLOR	PUB. COLOR	POD COLOR
Ellis	46.7	0	2	27	2.0	12.7	W	G	T
AG 4632RR2Y	45.3	-3	2	36	2.7	14.6	P	G	Br
AG 4835	46.0	-1	2	38	2.5	12.9	P	G	Br
AG 46X7	45.7	-2	2	36	2.7	13.9			
DA10x30-09F	48.5	0	2	34	2.4	11.5	P	T	T
DA10x30-48F	49.0	0	2	33	2.0	11.8	P	T	T
K15-1681	49.1	-7	2	24	2.6	13.9	P	G	Br
K15-1874	47.6	-1	2	26	2.1	12.9	W	G	Br
S14-9051R	45.8	-4	2	33	3.4	14.5	W	G	T
S14-15138R	47.4	-1	2	33	2.9	15.7	W	T	T
S15-3772RY	47.4	1	2	39	3.0	16	P	G	T
S15-3847RY	45.9	-5	2	40	2.5	13.3	W	G	Bl
S15-5904RY	48.0	-3	2	36	2.8	15.5	W	G	T
TN14-5021	47.2	1	2	27	2.3	12.8	W	G	T
TN15-4009	46.0	-1	2	28	2.8	13.6	W	T	T
TN15-5007	50.5	-2	2	29	2.0	12.7	W	G	T
TN16-520R1	47.3	2	2	28	1.7	11.5	W	G	
V13-0116	48.6	-6	2	38	2.9	13.6	P	T	
V14-4140	48.1	1	2	29	2.4	13.5	W	T	
Mean	47.4	-2	2	32	2.5	13.5			
LSD(0.05)	1.0	2	0	2	0.5	0.9			
CV(%)	2.3	243	27	10	26.0	9.4			

TABLE 17 - GENERAL SUMMARY OF PEST REACTION
UNIFORM TEST IV-S-LATE 2018

STRAIN/ VARIETY	SCN Cyst Score (1-5 Scale)†			PRK GA	SRK GA	SC RATING	SC SCORE
	Race 1	Race 3	Race 5				
Ellis	.	4	4	1.0	1.0	R	1.0
AG 4632RR2Y	.	2	4	3.3	4.5	MR	2.0
AG 4835	.	2	.	4.0	3.8	R	1.0
AG 46X7	.	3	5	3.8	4.5	R	1.0
DA10x30-09F	.	1	3	1.5	1.3	R	1.0
DA10x30-48F	.	1	3	1.0	1.0	R	1.0
K15-1681	.	4	5	1.0	1.0	R	1.0
K15-1874	.	2	1	3.8	2.3	R	1.0
S14-9051R	.	4	1	4.8	4.3	R	1.0
S14-15138R	.	4	5	3.5	3.8	R	1.0
S15-3772RY	.	4	5	4.5	2.8	R	1.0
S15-3847RY	.	4	4	4.0	4.3	S	5.0
S15-5904RY	.	4	4	3.8	2.3	R	1.0
TN14-5021	.	2	1	3.5	4.8	R	1.0
TN15-4009	.	1	1	1.3	1.0	S	5.0
TN15-5007	.	4	5	5.0	4.5	R	1.0
TN16-520R1	.	4	5	1.0	1.0	R	1.0
V13-0116	.	4	3	4.5	4.5	R	1.0
V14-4140	.	4	5	5.0	4.8	SS	3.0

†The race 1, 3, and 5 SCN populations used in these tests were typed as HG (*Heterodera glycines*) Type 2.5.7, HG Type 5.7, and HG Type 2.5.7, respectively. Reaction to the cultivar Pickett was used to distinguish between race 1 and race 5 SCN populations.

TABLE 18 - SEED YIELD (BUSHELS PER ACRE)
UNIFORM TEST IV-S-LATE 2018 †

STRAIN/ VARIETY	Belle Mina, AL	Bossier City, LA	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Orange, VA
Ellis	53.3	47.8	62.8	75.6	79.2	57.5	58.6
AG 4632RR2Y	46.6	35.7	52.4	88.4	73.0	.	36.2
AG 4835	48.1	46.2	54.6	84.3	76.2	.	37.1
AG 46X7	54.2	49.8	65.8	82.9	76.9	.	29.7
DA10x30-09F	62.7	66.3	63.3	81.4	80.7	60.6	44.8
DA10x30-48F	57.1	61.5	62.4	87.9	78.6	60.2	41.5
K15-1681	44.2	48.7	45.7	63.3	64.9	51.9	50.4
K15-1874	48.5	56.0	48.4	70.9	64.7	61.2	47.8
S14-9051R	57.2	34.4	43.4	85.1	61.4	57.4	49.2
S14-15138R	53.4	52.8	54.3	85.9	67.3	50.9	43.8
S15-3772RY	63.4	87.2	55.8	102.9	71.1	60.1	51.6
S15-3847RY	55.4	43.5	48.4	89.6	77.2	56.8	52.8
S15-5904RY	59.3	49.0	58.5	94.7	72.6	53.9	44.8
TN14-5021	50.7	47.9	55.7	74.0	60.6	61.9	60.9
TN15-4009	54.7	55.4	51.8	78.1	62.6	59.0	41.8
TN15-5007	50.7	36.0	50.8	75.5	61.0	57.3	57.1
TN16-520R1	45.3	50.7	56.9	69.5	55.8	57.6	55.2
V13-0116	44.3	27.0	60.3	82.7	65.2	53.9	37.4
V14-4140	41.8	47.5	59.5	77.6	73.8	55.3	48.0
Mean	52.2	49.6	55.3	81.6	69.6	57.2	46.8
LSD(0.05)	12.8	20.7	8.8	8.1	18.8	7.4	11.9
CV(%)	14.8	22.8	9.7	6.0	16.3	7.8	15.3

† Data not included in mean: 2018 - Bossier City,LA; Knoxville,TN; and Tallassee,AL

TABLE 18 - SEED YIELD (BUSHELS PER ACRE) (continued)
UNIFORM TEST IV-S-LATE 2018 †

STRAIN/ VARIETY	Pittsburg, KS	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	54.4	59.5	53.0	34.7	64.9	35.2	71.9	58.7
AG 4632RR2Y	.	48.4	51.1	29.0	72.0	16.7	63.2	54.1
AG 4835	.	31.1	47.8	36.7	70.0	12.3	63.3	52.5
AG 46X7	.	38.5	53.8	31.9	64.5	18.0	62.7	53.7
DA10x30-09F	60.1	48.9	49.1	37.5	71.0	44.4	63.5	58.5
DA10x30-48F	60.6	52.8	49.6	40.3	73.3	42.1	64.0	59.1
K15-1681	52.6	52.2	49.8	33.0	51.5	33.3	63.1	50.7
K15-1874	58.8	57.9	42.3	38.9	63.4	33.4	65.9	54.9
S14-9051R	54.4	62.4	51.9	42.4	64.5	13.5	65.2	57.6
S14-15138R	53.1	53.2	51.8	37.5	67.2	20.0	68.3	56.3
S15-3772RY	51.1	54.3	45.9	31.8	64.2	35.0	62.1	58.5
S15-3847RY	54.9	60.8	46.2	37.2	64.3	5.5	65.1	57.4
S15-5904RY	49.7	56.5	54.2	31.8	66.2	29.9	57.7	57.0
TN14-5021	58.2	57.5	46.3	43.0	49.2	14.6	71.1	57.1
TN15-4009	65.3	61.5	52.3	41.5	50.6	36.8	45.0	54.7
TN15-5007	49.8	59.6	52.4	32.5	70.6	8.9	68.1	56.8
TN16-520R1	49.6	59.3	47.4	36.1	68.0	36.5	67.6	55.7
V13-0116	41.6	27.3	37.6	35.6	46.8	3.7	63.5	48.3
V14-4140	51.0	46.3	49.0	31.5	64.9	14.7	60.3	53.2
Mean	54.1	52.0	49.0	35.9	63.5	23.9	63.8	55.5
LSD(0.05)	4.8	9.3	5.6	8.4	11.5	10.3	6.7	5.6
CV(%)	5.4	10.8	6.9	13.9	10.9	25.7	6.3	14.3

† Data not included in mean: 2018 - Bossier City,LA; Knoxville,TN; and Tallassee,AL

TABLE 19 - RELATIVE MATURITY (DAYS EARLIER (-) OR LATER (+) THAN ENTRY 1)
UNIFORM GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Belle Mina, AL	Bossier City, LA	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS
Ellis	9/3	9/11	10/1	9/1	10/5	10/21	10/15
AG 4632RR2Y	4	1	-9	1	-8	-3	-7
AG 4835	6	1	0	2	-9	-4	-6
AG 46X7	8	0	0	3	-8	-6	-7
DA10x30-09F	10	1	0	4	-9	-1	-1
DA10x30-48F	8	1	-4	5	-6	-1	-2
K15-1681	0	-13	-13	6	-6	-5	-9
K15-1874	9	-8	-4	7	0	-1	-6
S14-9051R	1	-6	-13	8	-3	-10	-3
S14-15138R	7	1	0	9	-2	-4	-5
S15-3772RY	9	3	0	10	-2	-2	-1
S15-3847RY	4	-13	-9	11	-4	-13	-9
S15-5904RY	6	-3	-4	12	-5	-10	-5
TN14-5021	10	1	0	13	-1	0	-3
TN15-4009	10	-7	-7	14	-1	-1	-2
TN15-5007	6	-11	-9	15	-2	0	-7
TN16-520R1	9	-1	0	16	0	-2	0
V13-0116	-2	-14	-9	17	-10	-12	-10
V14-4140	10	-2	0	18	0	1	-3
Mean	6	-4	-4	9	-4	-4	-5
LSD(0.05)	7	5	8	.	3	4	3
CV(%)	71	75	112	0	40	-64	36

TABLE 19 - RELATIVE MATURITY (continued)
UNIFORM GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	10/10	10/8	9/26	9/22	9/16	10/19	9/28
AG 4632RR2Y	-4	-2	0	-8	-1	-5	-3
AG 4835	-3	0	1	-6	3	-4	-1
AG 46X7	-4	-2	0	-2	-2	-5	-2
DA10x30-09F	0	-1	3	-5	-1	-2	0
DA10x30-48F	-1	0	2	-5	8	-2	0
K15-1681	-8	-11	-5	-13	.	-8	-7
K15-1874	-1	-1	-1	-3	.	-1	-1
S14-9051R	-4	-5	1	-12	0	-2	-4
S14-15138R	-1	0	0	-12	0	-1	-1
S15-3772RY	0	-5	3	-2	.	0	1
S15-3847RY	-5	-7	-1	-7	-2	-5	-5
S15-5904RY	-4	-3	-2	-8	.	-6	-3
TN14-5021	0	0	-1	-3	-2	1	1
TN15-4009	-1	-1	-2	-4	.	-6	-1
TN15-5007	-3	-1	-3	-13	-2	-3	-2
TN16-520R1	1	-2	1	-3	.	0	2
V13-0116	-2	-9	-4	-14	-2	-6	-6
V14-4140	-1	0	-1	-2	0	-1	1
Mean	-2	-3	0	-6	0	-3	-2
LSD(0.05)	2	2	2	2	8	3	2
CV(%)	51	55	341	16	1434	52	243

TABLE 20 - PLANT HEIGHT (INCHES)
UNIFORM GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Belle Mina, AL	Bossier City, LA	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Orange, VA
Ellis	21	18	32	20	25	41	.
AG 4632RR2Y	31	27	42	34	33	43	.
AG 4835	33	31	44	38	39	43	.
AG 46X7	32	24	45	37	34	38	.
DA10x30-09F	31	22	38	28	31	39	.
DA10x30-48F	28	19	36	28	32	45	.
K15-1681	20	18	24	17	22	28	.
K15-1874	21	18	27	17	23	36	.
S14-9051R	27	19	44	30	27	39	.
S14-15138R	27	24	40	29	30	38	.
S15-3772RY	32	26	51	39	29	43	.
S15-3847RY	36	27	55	41	39	45	.
S15-5904RY	34	25	49	32	35	39	.
TN14-5021	23	21	29	18	24	39	.
TN15-4009	22	19	30	18	24	40	.
TN15-5007	23	18	32	21	25	38	.
TN16-520R1	22	19	33	18	23	42	.
V13-0116	32	27	46	35	37	42	.
V14-4140	21	18	34	23	23	33	.
Mean	27	22	39	28	29	40	.
LSD(0.05)	3	4	4	3	4	.	.
CV(%)	7	11	6	7	9	.	.

TABLE 20 - PLANT HEIGHT (INCHES) (continued)
UNIFORM GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Pittsburg, KS	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	30	35	34	23	25	20	33	27
AG 4632RR2Y	34	41	39	28	38	33	41	36
AG 4835	33	42	41	31	43	30	42	38
AG 46X7	33	42	39	28	40	29	40	36
DA10x30-09F	33	41	39	27	39	31	41	34
DA10x30-48F	38	39	38	29	35	26	38	33
K15-1681	25	32	28	21	23	20	33	24
K15-1874	28	36	32	25	22	22	36	26
S14-9051R	33	40	39	24	34	29	38	33
S14-15138R	33	45	36	27	36	29	39	33
S15-3772RY	33	46	46	29	47	34	50	39
S15-3847RY	36	48	40	30	44	30	45	40
S15-5904RY	33	44	38	29	39	33	40	36
TN14-5021	30	36	31	23	24	25	33	27
TN15-4009	33	38	36	25	22	25	34	28
TN15-5007	30	36	35	24	31	23	38	29
TN16-520R1	33	38	33	24	26	24	37	28
V13-0116	39	42	40	34	37	31	46	38
V14-4140	35	36	38	24	31	22	36	29
Mean	33	40	37	27	33	27	39	32
LSD(0.05)	.	4	5	2	3	4	3	2
CV(%)	.	5	8	5	5	8	4	10

TABLE 21 - PLANT LODGING (1-5)
UNIFORM GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Belle Mina, AL	Bossier City, LA	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Orange, VA
Ellis	1.0	1.0	1.3	1.0	2.0	1.0	.
AG 4632RR2Y	1.0	1.0	3.3	1.0	1.7	1.0	.
AG 4835	1.0	1.0	3.3	1.3	1.8	1.0	.
AG 46X7	1.0	1.0	3.0	1.0	2.2	1.0	.
DA10x30-09F	1.0	1.0	3.3	1.0	2.7	1.0	.
DA10x30-48F	1.0	1.0	3.0	1.0	2.7	1.0	.
K15-1681	1.0	1.0	2.0	1.0	1.3	1.0	.
K15-1874	1.0	1.0	1.7	1.0	1.7	1.0	.
S14-9051R	1.3	1.0	4.7	2.0	1.7	1.0	.
S14-15138R	1.0	1.0	4.3	1.0	2.0	1.0	.
S15-3772RY	1.7	1.3	4.0	1.3	2.0	1.0	.
S15-3847RY	1.7	1.0	4.7	1.0	2.3	1.0	.
S15-5904RY	1.0	1.3	3.0	1.0	2.0	1.3	.
TN14-5021	1.0	1.0	1.7	1.0	1.5	1.0	.
TN15-4009	1.0	1.0	2.3	1.0	1.8	1.0	.
TN15-5007	1.0	1.0	1.0	1.0	1.3	1.0	.
TN16-520R1	1.0	1.0	2.0	1.0	1.7	1.0	.
V13-0116	1.0	1.3	4.0	1.7	2.3	1.0	.
V14-4140	1.0	1.0	2.0	1.0	2.0	1.0	.
Mean	1.1	1.1	2.9	1.1	1.9	1.0	.
LSD(0.05)	0.4	0.4	0.8	0.4	0.5	0.2	.
CV(%)	21.1	21.8	17.4	20.4	15.0	13.0	.

TABLE 21 - PLANT LODGING (1-5) (continued)
UNIFORM GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Pittsburg, KS	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	1.0	3.3	3.0	1.0	2.0	1.0	2.1	1.6
AG 4632RR2Y	1.0	3.3	3.0	1.0	3.0	1.0	2.0	1.8
AG 4835	1.0	3.3	3.0	1.0	2.7	1.0	1.9	1.8
AG 46X7	1.0	3.0	2.7	1.0	3.0	1.0	1.9	1.8
DA10x30-09F	1.3	4.0	3.3	1.0	2.7	1.0	2.5	2.0
DA10x30-48F	1.0	4.0	3.0	1.0	2.3	1.0	2.8	1.9
K15-1681	1.0	3.7	3.0	1.0	1.0	1.0	3.2	1.6
K15-1874	1.0	3.0	2.3	1.0	2.0	1.0	1.9	1.5
S14-9051R	1.0	3.0	3.3	1.0	3.0	1.0	2.3	2.0
S14-15138R	1.0	3.0	3.0	1.0	3.0	1.0	1.9	1.9
S15-3772RY	1.0	3.7	3.0	1.0	4.3	1.0	2.2	2.1
S15-3847RY	1.0	3.0	2.7	1.0	4.0	1.0	2.6	2.1
S15-5904RY	1.3	3.7	3.0	1.0	3.3	1.0	2.2	1.9
TN14-5021	1.0	4.0	2.7	1.0	2.0	1.0	2.1	1.6
TN15-4009	1.0	3.0	3.3	1.0	2.0	1.0	3.7	1.8
TN15-5007	1.0	3.0	3.3	1.0	2.3	1.0	1.7	1.5
TN16-520R1	1.0	3.0	3.0	1.0	2.0	1.0	2.1	1.6
V13-0116	1.0	4.0	3.3	1.0	3.0	1.0	2.3	2.1
V14-4140	1.0	4.0	3.0	1.0	2.0	1.0	2.5	1.7
Mean	1.0	3.4	3.0	1.0	2.6	1.0	2.3	1.8
LSD(0.05)	0.3	0.5	0.7	.	0.5	.	0.5	0.3
CV(%)	17.6	9.2	13.2	0.0	12.4	0.0	12.2	26.9

TABLE 22 - SEED QUALITY (1-5)
UNIFORM GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Belle Mina, AL	Bossier City, LA	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Orange, VA
Ellis	1.0	3.0	2.0	1.3	2.0	.	1.3
AG 4632RR2Y	2.0	3.0	3.0	2.0	2.0	.	1.7
AG 4835	2.0	3.0	2.0	2.0	2.0	.	1.3
AG 46X7	1.7	4.0	2.0	2.0	3.0	.	1.3
DA10x30-09F	1.0	3.0	2.0	2.0	3.0	.	1.0
DA10x30-48F	1.0	2.0	2.0	1.7	2.0	.	1.0
K15-1681	1.0	4.0	3.0	1.3	3.0	.	1.7
K15-1874	1.0	4.0	2.0	2.3	1.0	.	2.0
S14-9051R	2.0	4.0	4.0	2.0	3.0	.	3.0
S14-15138R	2.3	4.0	3.0	2.3	2.0	.	1.3
S15-3772RY	2.7	4.0	3.0	2.3	2.0	.	1.3
S15-3847RY	2.0	2.0	3.0	1.7	2.0	.	1.3
S15-5904RY	2.0	4.0	2.0	2.0	3.0	.	1.0
TN14-5021	2.0	3.0	2.0	2.3	1.0	.	1.7
TN15-4009	1.7	4.0	3.0	2.3	3.0	.	1.0
TN15-5007	1.0	2.0	3.0	1.7	1.0	.	1.3
TN16-520R1	1.0	2.0	2.0	1.3	1.0	.	1.0
V13-0116	2.0	4.0	2.0	2.0	3.0	.	1.3
V14-4140	2.0	2.0	2.0	1.0	3.0	.	1.0
Mean	1.6	3.2	2.5	1.9	2.2	.	1.4
LSD(0.05)	0.4	.	.	1.2	.	.	0.7
CV(%)	16.1	0.0	.	38.0	0.0	.	31.3

TABLE 22 - SEED QUALITY (1-5) (continued)
UNIFORM GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Pittsburg, KS	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	.	1.3	2.0	.	3.0	3.3	2.3	2.0
AG 4632RR2Y	.	3.7	3.0	.	3.0	4.0	2.3	2.7
AG 4835	.	2.3	3.0	.	3.0	4.3	2.0	2.5
AG 46X7	.	3.0	3.3	.	3.0	4.3	1.9	2.7
DA10x30-09F	.	2.7	4.0	.	3.0	2.3	2.4	2.4
DA10x30-48F	.	2.0	3.3	.	3.0	2.0	2.2	2.0
K15-1681	.	2.3	2.0	.	4.0	4.7	2.0	2.6
K15-1874	.	1.0	2.0	.	3.0	3.3	1.8	2.1
S14-9051R	.	3.7	3.3	.	4.0	5.0	3.8	3.4
S14-15138R	.	2.3	3.7	.	4.0	4.3	2.7	2.9
S15-3772RY	.	3.0	3.3	.	3.0	4.7	3.1	3.0
S15-3847RY	.	3.0	2.7	.	3.0	5.0	2.2	2.5
S15-5904RY	.	3.0	3.3	.	3.0	5.0	2.5	2.8
TN14-5021	.	2.0	2.0	.	3.0	4.3	2.0	2.3
TN15-4009	.	2.3	2.7	.	4.0	3.7	3.3	2.8
TN15-5007	.	2.0	2.0	.	3.0	3.7	2.0	2.0
TN16-520R1	.	1.0	1.3	.	3.0	3.0	2.1	1.7
V13-0116	.	3.7	3.7	.	3.0	5.0	2.2	2.9
V14-4140	.	2.7	3.3	.	3.0	4.0	2.2	2.4
Mean	.	2.5	2.8	.	3.2	4.0	2.4	2.5
LSD(0.05)	.	0.8	0.9	.	.	1.0	0.3	0.5
CV(%)	.	19.0	19.2	.	.	14.9	8.1	25.6

TABLE 23 - SEED SIZE (GRAMS PER 100 SEED)
UNIFORM GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Belle Mina, AL	Bossier City, LA	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Orange, VA
Ellis	12.0	12.4	13.5	13.9	14.2	.	12.7
AG 4632RR2Y	14.2	14.2	13.9	13.9	18.7	.	15.0
AG 4835	11.5	14.7	13.1	14.4	14.6	.	14.0
AG 46X7	14.0	14.9	14.8	15.7	15.7	.	14.0
DA10x30-09F	10.2	13.2	11.1	12.7	11.9	.	12.0
DA10x30-48F	9.6	13.2	11.5	15.0	12.2	.	11.7
K15-1681	13.9	14.7	13.8	14.6	15.9	.	11.7
K15-1874	12.2	15.3	13.0	13.9	14.0	.	11.3
S14-9051R	14.3	14.5	13.8	14.6	16.3	.	13.7
S14-15138R	14.4	17.5	13.7	16.1	16.6	.	15.7
S15-3772RY	17.0	19.1	15.4	16.0	16.6	.	16.0
S15-3847RY	11.1	13.2	11.6	13.5	13.3	.	13.7
S15-5904RY	13.7	17.7	14.3	15.5	18.5	.	14.7
TN14-5021	11.9	13.3	12.9	14.5	13.4	.	12.7
TN15-4009	13.6	14.9	12.6	15.1	16.0	.	12.0
TN15-5007	11.4	13.0	12.3	13.6	14.4	.	12.7
TN16-520R1	11.1	12.3	11.7	13.9	12.8	.	10.7
V13-0116	12.5	12.6	15.6	15.2	15.8	.	13.7
V14-4140	12.4	15.1	14.4	12.6	15.6	.	14.3
Mean	12.7	14.5	13.3	14.5	15.1	.	13.3
LSD(0.05)	1.4	.	.	2.9	.	.	1.0
CV(%)	6.6	.	.	12.1	0.0	.	4.7

TABLE 23 - SEED SIZE (GRAMS PER 100 SEED) (continued)
UNIFORM GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Pittsburg, KS	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	.	10.8	10.2	.	14.4	14.2	11.4	12.7
AG 4632RR2Y	.	14.4	13.3	.	15.8	13.4	13.6	14.6
AG 4835	.	13.1	11.3	.	12.4	10.3	12.6	12.9
AG 46X7	.	12.8	12.2	.	12.0	14.4	12.2	13.9
DA10x30-09F	.	10.9	10.3	.	10.8	11.9	11.5	11.5
DA10x30-48F	.	11.7	10.3	.	11.2	11.8	11.2	11.8
K15-1681	.	12.7	11.6	.	13.3	17.8	12.5	13.9
K15-1874	.	11.2	11.0	.	13.8	15.3	11.8	12.9
S14-9051R	.	14.5	12.8	.	15.5	15.8	13.4	14.5
S14-15138R	.	14.9	14.3	.	17.4	17.0	15.4	15.7
S15-3772RY	.	15.1	12.3	.	16.1	17.7	15.2	16.0
S15-3847RY	.	13.0	12.1	.	14.0	16.3	13.8	13.3
S15-5904RY	.	15.2	14.6	.	13.7	17.5	14.3	15.5
TN14-5021	.	12.1	11.2	.	13.9	12.8	12.7	12.8
TN15-4009	.	12.4	11.2	.	13.8	16.1	11.7	13.6
TN15-5007	.	12.8	12.0	.	13.5	11.4	12.4	12.7
TN16-520R1	.	9.8	9.1	.	13.7	11.9	10.0	11.5
V13-0116	.	13.3	11.3	.	12.9	12.5	13.8	13.6
V14-4140	.	13.9	12.0	.	13.5	12.5	13.0	13.5
Mean	.	12.9	11.7	.	13.8	14.2	12.8	13.5
LSD(0.05)	.	1.0	1.1	.	.	2.3	0.6	0.9
CV(%)	.	4.5	5.6	.	.	9.9	2.8	9.4

TABLE 24 - OIL (%)†
UNIFORM GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Belle Mina, AL	Bossier City, LA	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Orange, VA
Ellis	20.6	.	19.6	18.8	19.3	.	19.4
AG 4632RR2Y	21.7	.	20.7	20.0	21.2	.	19.9
AG 4835	20.8	.	19.3	18.8	19.8	.	19.2
AG 46X7	21.7	.	20.5	19.3	20.3	.	18.9
DA10x30-09F	19.7	.	18.1	17.5	18.6	.	18.0
DA10x30-48F	19.5	.	18.9	18.6	19.6	.	18.9
K15-1681	21.9	.	20.4	19.9	20.7	.	19.2
K15-1874	20.8	.	19.5	19.3	19.7	.	19.1
S14-9051R	22.0	.	21.7	21.0	21.6	.	19.8
S14-15138R	21.2	.	20.1	19.8	20.4	.	19.7
S15-3772RY	22.1	.	20.8	20.2	21.8	.	19.8
S15-3847RY	21.1	.	20.0	19.5	19.9	.	19.8
S15-5904RY	21.4	.	19.3	19.8	20.4	.	19.5
TN14-5021	20.6	.	19.7	19.9	20.0	.	19.4
TN15-4009	21.1	.	20.6	20.3	20.7	.	20.4
TN15-5007	19.8	.	18.0	17.8	18.2	.	19.5
TN16-520R1	20.2	.	19.4	19.0	19.7	.	19.0
V13-0116	21.0	.	19.7	19.0	20.5	.	19.2
V14-4140	20.3	.	19.7	19.6	20.1	.	19.6
Mean	20.9	.	19.8	19.4	20.1	.	19.4
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

†Oil percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 24 - OIL (%)† (continued)
UNIFORM GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Pittsburg, KS	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	.	19.5	19.7	.	19.5	20.3	18.7	19.5
AG 4632RR2Y	.	20.9	19.9	.	20.1	22.4	19.8	20.6
AG 4835	.	19.8	19.1	.	19.2	20.2	18.7	19.5
AG 46X7	.	20.5	20.6	.	20.1	22.2	19.7	20.4
DA10x30-09F	.	18.4	18.2	.	18.9	19.1	17.8	18.4
DA10x30-48F	.	19.1	18.4	.	19.3	19.8	18.7	19.1
K15-1681	.	20.6	20.4	.	20.9	20.1	19.6	20.4
K15-1874	.	19.6	20.4	.	20.2	20.0	19.3	19.8
S14-9051R	.	21.1	21.8	.	22.5	23.4	20.7	21.6
S14-15138R	.	20.3	19.9	.	21.2	20.7	19.6	20.3
S15-3772RY	.	20.6	21.3	.	20.9	21.2	20.6	20.9
S15-3847RY	.	20.6	20.1	.	20.4	20.8	19.6	20.2
S15-5904RY	.	20.5	19.6	.	20.3	21.0	19.9	20.2
TN14-5021	.	19.6	20.0	.	20.0	20.8	19.6	20.0
TN15-4009	.	20.9	21.0	.	21.2	20.9	20.2	20.7
TN15-5007	.	17.7	18.3	.	18.0	20.3	17.5	18.5
TN16-520R1	.	19.4	19.9	.	19.7	20.2	18.2	19.5
V13-0116	.	19.7	19.9	.	19.9	.	19.0	19.9
V14-4140	.	20.1	19.9	.	19.9	20.7	20.1	20.0
Mean	.	19.9	19.9	.	20.1	20.8	19.3	20.0
LSD(0.05)	.	.	.	.	.	.	.	0.4
CV(%)	.	.	.	.	.	.	.	2.1

TABLE 25 - PROTEIN (%)†
UNIFORM GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Belle Mina, AL	Bossier City, LA	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Orange, VA
Ellis	32.6	.	35.3	35.0	34.5	.	33.2
AG 4632RR2Y	30.3	.	33.2	34.4	34.5	.	33.7
AG 4835	31.2	.	35.2	35.8	34.4	.	33.1
AG 46X7	30.4	.	33.9	34.6	35.1	.	34.2
DA10x30-09F	32.9	.	37.6	37.9	36.9	.	35.8
DA10x30-48F	34.5	.	37.4	37.2	37.2	.	34.5
K15-1681	33.0	.	37.6	36.0	36.4	.	34.1
K15-1874	33.3	.	36.6	35.3	35.5	.	33.9
S14-9051R	30.2	.	34.2	33.5	35.0	.	34.1
S14-15138R	32.2	.	35.4	34.4	36.0	.	32.9
S15-3772RY	32.1	.	36.7	34.9	33.8	.	34.7
S15-3847RY	31.1	.	35.5	34.0	33.8	.	33.1
S15-5904RY	31.5	.	37.0	35.7	37.0	.	33.6
TN14-5021	33.5	.	35.7	34.5	35.5	.	33.4
TN15-4009	32.6	.	34.4	34.0	34.0	.	33.2
TN15-5007	35.4	.	39.7	38.4	39.7	.	34.6
TN16-520R1	33.7	.	35.6	36.1	35.2	.	34.5
V13-0116	32.2	.	37.8	36.7	36.5	.	33.9
V14-4140	34.1	.	37.3	35.9	35.8	.	34.5
Mean	32.5	.	36.1	35.5	35.6	.	33.9
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

†Protein percentage reported on a 13% moisture basis beginning in 2015.

TABLE 25 - PROTEIN (%)† (continued)
UNIFORM GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Pittsburg, KS	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	.	34.3	33.9	.	35.5	35.3	36.2	34.6
AG 4632RR2Y	.	32.3	33.2	.	33.9	32.2	33.2	33.1
AG 4835	.	32.7	34.5	.	34.0	35.0	34.5	34.0
AG 46X7	.	33.0	32.7	.	33.8	32.9	34.1	33.5
DA10x30-09F	.	36.7	36.1	.	35.8	36.9	37.2	36.4
DA10x30-48F	.	37.2	37.5	.	36.0	36.8	36.6	36.5
K15-1681	.	35.2	34.3	.	37.9	39.5	35.8	36.0
K15-1874	.	35.5	33.6	.	35.1	36.3	36.1	35.1
S14-9051R	.	32.7	30.9	.	34.7	32.6	32.6	33.1
S14-15138R	.	34.4	34.9	.	34.5	37.3	35.6	34.7
S15-3772RY	.	35.4	32.7	.	34.2	35.9	34.2	34.5
S15-3847RY	.	32.7	33.5	.	34.4	34.5	34.4	33.7
S15-5904RY	.	35.6	36.0	.	36.0	35.3	35.1	35.3
TN14-5021	.	36.0	33.9	.	35.3	35.1	34.7	34.8
TN15-4009	.	32.6	31.3	.	34.2	35.6	33.5	33.5
TN15-5007	.	39.0	37.7	.	39.2	36.4	38.9	37.9
TN16-520R1	.	34.9	33.7	.	35.4	35.4	36.1	35.0
V13-0116	.	37.0	34.7	.	35.3	.	37.6	35.8
V14-4140	.	36.0	34.6	.	34.6	36.3	34.5	35.4
Mean	.	34.9	34.2	.	35.2	35.5	35.3	34.9
LSD(0.05)	.	.	.	.	.	.	.	0.8
CV(%)	.	.	.	.	.	.	.	2.6

TABLE 26 - ESTIMATED MEAL PROTEIN (%)
UNIFORM GROUP IV-S-LATE 2017

STRAIN/ VARIETY	Belle Mina, AL	Bossier City, LA	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Orange, VA
Ellis	44.7	.	47.7	46.9	46.4	.	44.8
AG 4632RR2Y	42.0	.	45.5	46.7	47.6	.	45.7
AG 4835	42.8	.	47.4	48.0	46.6	.	44.5
AG 46X7	42.1	.	46.4	46.5	47.8	.	45.9
DA10x30-09F	44.6	.	49.8	49.9	49.3	.	47.4
DA10x30-48F	46.6	.	50.1	49.7	50.3	.	46.3
K15-1681	46.0	.	51.4	48.8	49.9	.	45.9
K15-1874	45.7	.	49.4	47.6	48.1	.	45.5
S14-9051R	42.1	.	47.5	46.1	48.5	.	46.2
S14-15138R	44.4	.	48.1	46.6	49.1	.	44.5
S15-3772RY	44.7	.	50.3	47.6	47.0	.	47.0
S15-3847RY	42.9	.	48.2	45.8	45.9	.	44.9
S15-5904RY	43.5	.	49.8	48.4	50.6	.	45.4
TN14-5021	45.9	.	48.4	46.8	48.2	.	45.0
TN15-4009	44.9	.	47.2	46.4	46.6	.	45.3
TN15-5007	47.9	.	52.7	50.8	52.8	.	46.7
TN16-520R1	45.8	.	48.0	48.4	47.6	.	46.2
V13-0116	44.3	.	51.2	49.3	49.9	.	45.5
V14-4140	46.5	.	50.5	48.5	48.7	.	46.6
Mean	44.6	.	48.9	47.8	48.5	.	45.8
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

TABLE 26 - ESTIMATED MEAL PROTEIN (%) (continued)
UNIFORM GROUP IV-S-LATE 2017

STRAIN/ VARIETY	Pittsburg, KS	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	.	46.4	45.9	.	47.9	48.1	48.4	46.7
AG 4632RR2Y	.	44.3	45.1	.	46.1	45.1	44.9	45.3
AG 4835	.	44.3	46.4	.	45.8	47.6	46.2	46.0
AG 46X7	.	45.1	44.8	.	45.9	45.9	46.1	45.7
DA10x30-09F	.	48.9	48.0	.	47.9	49.5	49.2	48.5
DA10x30-48F	.	50.0	50.0	.	48.4	49.8	49.0	49.0
K15-1681	.	48.2	46.9	.	52.1	53.7	48.4	49.1
K15-1874	.	48.0	45.8	.	47.7	49.4	48.7	47.6
S14-9051R	.	45.0	43.0	.	48.7	46.2	44.7	45.8
S14-15138R	.	47.0	47.4	.	47.6	51.1	48.1	47.4
S15-3772RY	.	48.5	45.1	.	47.0	49.5	46.8	47.4
S15-3847RY	.	44.7	45.6	.	47.0	47.3	46.5	45.9
S15-5904RY	.	48.7	48.7	.	49.1	48.6	47.6	48.0
TN14-5021	.	48.7	46.1	.	48.0	48.3	47.0	47.2
TN15-4009	.	44.7	43.1	.	47.1	48.8	45.7	46.0
TN15-5007	.	51.5	50.1	.	52.0	49.6	51.3	50.5
TN16-520R1	.	47.0	45.7	.	47.9	48.2	48.0	47.3
V13-0116	.	50.1	47.1	.	47.9	.	50.4	48.6
V14-4140	.	49.0	47.0	.	47.0	49.8	46.9	48.1
Mean	.	47.4	46.4	.	47.9	48.7	47.6	47.4
LSD(0.05)	.	.	.	.	.	.	.	1.0
CV(%)	.	.	.	.	.	.	.	2.3

TABLE 27 - PARENTAGE OF ENTRIES
PRELIMINARY GROUP IV-S-EARLY 2018

Ent	Strain/Variety	Parentage	Source	Fn	Trans-genic†	Special Traits‡
1	AG 4232RR2Y	Commercial check	Commercial		RR2	
2	AG 43X7	Commercial check	Commercial		RRX	
3	LD06-7620	IA3023 x LD00-3309	Commercial			
4	AG 4135	Commercial check	Commercial		RR2	
5	DS61-236	(5601T x PI 587982A) x LG03-4561-14	Smith	F5		34% Exotic, High Germ
6	DS76-121	(DT97-4290(2) x PI 587982A) x Osage	Smith	F5		12.5% Exotic, High Germ
7	LW13-4302	LD00-2817 x PI 567189A	Fallen			
8	S15-10879C	S09-13635 x S11-17025	Chen			
9	S16-8156C	S11-16653 x S09-9943	Chen			
10	S16-14558	S08-17361 x LG06-5920	Chen			
11	S16-14687	S08-17361 x K10-8556	Chen			
12	S16-14730C	S08-17361 x K10-8556	Chen			
13	S16-16641R	S12-11694RR1 x S11-20337RR1	Chen		RR1	
14	SA15-507F	SA13-6094 x A12-961004	Scaboo	F4		HOLN
15	SA17-742PR	S11-9446 (4) x KB11-1#590A	Scaboo	F3	RR2	HOLN
16	SA17-746PR	S11-9446 (4) x KB11-1#590A	Scaboo	F3	RR2	HOLN
17	TN11-4506R2	TN02-226 x MON RR2Y	Pantalone		RR2	
18	TN15-4307	TN11-5028 x LD06-7620	Pantalone			
19	TN16-4017	TN09-029 x (17D × S08-14788 #7)	Pantalone			HO
20	TN16-4503R2	TN09-46,128 x TN11-20,133	Pantalone		RR2	12.5% Exotic, Meal Protein 48%
21	TN16-4657R2	TN09-46,128 x TN11-20,133	Pantalone		RR2	12.5% Exotic, Meal Protein 48%
22	TN17-4557R2	TN09-46,128 x TN11-20,133	Pantalone		RR2	12.5% Exotic, Meal Protein 48%
23	V14-1219	B05-8046 x S04-12996	Zhang	F4		
24	V14-1235	B05-8046 x S04-12996	Zhang	F4		

†Conv= Conventional(non-transgenic),LL= Liberty Link®, RR1= Roundup Ready®,RR2= Roundup Ready 2 Yield®
RRX= Roundup Ready 2 Xtend®
‡AA= modified amino acids, DNC= Do not cross with this, FLS= Frogeye leaf spot resistance, LJ= Long juvenile,
LN= low linolenic acid, LP= low phytate, HO= high oleic acid, HOLN= high oleic acid/low linolenic acid,
SCN= Soybean cyst nematode resistance, SR= Soybean rust resistance,
and STS= sulfonylurea tolerant

TABLE 28 - GENERAL SUMMARY OF PERFORMANCE
PRELIMINARY TEST IV-S-EARLY 2018

STRAIN/ VARIETY	SEED YIELD†	RANK	AVG. RANK	MAT. INDEX	LOD	HT	SCN Cyst Score (1-5)‡ Race 1	Race 3	Race 5	SC RATING	SC SCORE
AG 4232RR2Y	62.7	6	9	0	2.8	36	3	3	4	MR	2
AG 43X7	71.2	1	5	1	2.6	40	2	3	4	R	1
LD06-7620	48.4	19	18	-5	2.0	29	4	2	4	SS	3
AG 4135	.	.	.	.	.	.	.	.	.	MR	2
DS61-236	44.1	22	21	-5	3.4	42	2	3	4	R	1
DS76-121	44.8	20	20	-2	3.9	44	2	3	4	SS	3
LW13-4302	40.8	23	21	-2	2.9	41	3	3	5	S	5
S15-10879C	63.4	5	7	-2	2.3	36	2	1	1	S	5
S16-8156C	59.9	10	10	5	2.7	37	2	1	2	R	1
S16-14558	61.3	7	9	1	2.3	40	3	3	5	R	1
S16-14687	57.1	13	12	1	2.4	36	2	2	5	R	1
S16-14730C	65.0	2	6	6	2.8	39	2	1	4	R	1
S16-16641R	63.4	4	6	7	2.9	31	1	1	1	R	1
SA15-507F	44.6	21	20	-3	2.2	32	4	2	5	MS	4
SA17-742PR	54.3	16	15	-3	2.3	34	4	3	5	R	1
SA17-746PR	61.2	9	9	-1	2.9	34	5	2	5	R	1
TN11-4506R2	63.5	3	7	2	2.5	36	3	4	5	R	1
TN15-4307	54.1	17	15	-4	2.6	37	3	3	3	R	1
TN16-4017	53.4	18	14	5	1.6	25	2	2	4	SS	3
TN16-4503R2	59.1	11	9	6	1.7	29	4	3	5	R	1
TN16-4657R2	56.2	14	12	8	1.7	28	4	3	4	R	1
TN17-4557R2	56.1	15	12	6	1.5	22	3	3	5	R	1
V14-1219	61.2	8	9	-1	1.8	38	2	3	4	R	1
V14-1235	57.7	12	12	-3	2.3	36	4	3	5	SS	3
Mean	56.7	.	.	1	2.4	35	.	.	.		.
LSD(0.05)	8.7	.	.	3	0.7	4	.	.	.		.
CV(%)	13.9	.	.	399	26.2	10	.	.	.		.

† Data not included in mean: Keiser,AR and Orange,VA

‡The race 1, 3, and 5 SCN populations used in these tests were typed as HG (Heterodera glycines) Type 2.5.7, Reaction to the cultivar Pickett was used to distinguish between race 1 and race 5 SCN populations.

TABLE 29 - GENERAL SUMMARY OF PERFORMANCE (continued)
PRELIMINARY TEST IV-S-EARLY 2018

STRAIN/ VARIETY	SEED QUALITY	SEED SIZE	PROTEIN§ %	OIL§ %	MEAL PRO%	FL COLOR	PUB. COLOR	POD COLOR
AG 4232RR2Y	2.4	14.6	34.6	20.0	46.9	P	Lt	T
AG 43X7	2.4	14.6	34.0	19.9	46.1			
LD06-7620	3.4	14.2	37.1	20.3	50.6	P	G	Br
AG 4135	.	.	.	.	.	W	G	Br
DS61-236	2.5	12.2	35.3	19.5	47.6	W	G	T
DS76-121	2.3	13.3	37.2	19.5	50.1	W	G	T
LW13-4302	2.3	14.1	37.1	18.1	49.2	W	G	T
S15-10879C	2.8	14.5	36.1	18.8	48.3	W	G	
S16-8156C	2.8	17.9	35.5	19.5	47.9	W	Lt	
S16-14558	2.1	13.9	33.0	20.8	45.3	P	T	
S16-14687	3.1	17.9	34.4	20.8	47.2	P	T	
S16-14730C	2.2	14.2	34.9	19.6	47.1	P	T	
S16-16641R	2.4	12.4	36.7	20.0	49.9	W	T	
SA15-507F	3.2	15.8	37.2	20.8	51	P	T	
SA17-742PR	2.9	12.2	36.2	20.3	49.4	P	T	
SA17-746PR	2.5	12.9	35.9	20.2	48.9	P	T	
TN11-4506R2	2.1	14.8	36.3	19.2	48.8	P	Lt	
TN15-4307	3.1	14.9	36.0	19.9	48.9	P	Lt	T
TN16-4017	2.2	13.7	36.7	20.5	50.2	P	T	
TN16-4503R2	1.9	11.5	38.7	17.3	50.9	P	T	
TN16-4657R2	2.1	15.1	36.7	19.3	49.4	P	T	
TN17-4557R2	2.2	14.3	35.3	20.5	48.3	P	G	
V14-1219	2.1	11.9	34.9	20.2	47.6	P	T	
V14-1235	2.8	12.3	33.3	21.0	45.8	P	T	
Mean	2.5	14.1	35.8	19.8	48.5			
LSD(0.05)	0.6	1.1	1.1	0.6	1.4			
CV(%)	25.0	7.8	2.8	2.8	2.7			

§Protein percentage and oil percentage are reported on a 13% moisture basis beginning in 2015.
, HG Type 5.7, and HG Type 2.5.7, respectively.

TABLE 30 - SEED YIELD (BUSHELS PER ACRE)
PRELIMINARY GROUP IV-S-EARLY 2018 †

STRAIN/ VARIETY	Columbia, MO	Jackson, TN	Keiser, AR	Knoxville, TN	Orange, VA	Portageville, MO(B)	Stoneville, MS	Test Mean
AG 4232RR2Y	75.4	69.3	81.5	56.0	28.6	40.0	72.6	62.7
AG 43X7	72.3	77.3	77.7	78.8	27.6	39.7	87.8	71.2
LD06-7620	55.4	59.0	56.8	42.8	15.4	35.7	49.1	48.4
DS61-236	35.9	44.1	67.6	54.2	25.6	36.2	49.9	44.1
DS76-121	51.8	53.6	42.2	47.2	19.2	29.5	41.7	44.8
LW13-4302	44.1	23.6	72.3	41.1	29.5	38.3	56.5	40.8
S15-10879C	70.1	69.4	64.2	54.6	36.9	52.9	69.9	63.4
S16-8156C	69.0	58.2	81.1	54.7	34.8	44.7	72.9	59.9
S16-14558	53.5	65.1	85.5	56.5	40.8	54.9	76.8	61.3
S16-14687	59.6	56.3	78.1	65.5	25.2	43.5	60.6	57.1
S16-14730C	58.1	70.4	70.7	62.2	34.6	51.3	82.9	65.0
S16-16641R	68.8	63.9	85.5	58.0	31.6	47.4	78.9	63.4
SA15-507F	55.2	53.8	62.2	40.6	38.9	28.8	44.7	44.6
SA17-742PR	49.5	53.1	79.7	61.2	44.5	42.2	65.4	54.3
SA17-746PR	64.1	50.2	91.3	70.0	33.5	47.1	74.4	61.2
TN11-4506R2	69.9	61.3	91.4	67.0	19.7	42.2	77.3	63.5
TN15-4307	61.0	54.9	78.3	55.0	12.3	42.0	57.4	54.1
TN16-4017	61.2	56.8	46.9	51.4	32.7	43.8	54.0	53.4
TN16-4503R2	61.3	61.6	67.5	59.7	43.9	47.0	65.6	59.1
TN16-4657R2	47.4	59.0	74.0	62.8	29.0	43.6	68.5	56.2
TN17-4557R2	55.6	53.4	56.8	66.4	41.0	44.2	60.7	56.1
V14-1219	63.2	57.4	77.1	63.9	37.1	42.5	78.9	61.2
V14-1235	58.4	52.6	82.4	59.1	36.9	43.8	74.7	57.7
Mean	59.1	57.6	72.6	57.8	31.3	42.6	66.1	56.7
LSD(0.05)	15.1	8.1	25.6	11.1	21.3	9.1	10.1	8.7
CV(%)	12.0	6.8	17.0	9.0	32.9	10.4	7.4	13.9

† Data not included in mean: Keiser,AR and Orange,VA

TABLE 31 - RELATIVE MATURITY (DAYS EARLIER (-) OR LATER (+) THAN ENTRY 1)
PRELIMINARY GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Columbia, MO	Jackson, TN	Keiser, AR	Knoxville, TN	Orange, VA	Portageville, MO(B)	Stoneville, MS	Test Mean
AG 4232RR2Y	9/28	9/18	9/20	9/20	.	10/5	9/1	9/21
AG 43X7	-3	0	2	3	.	1	5	1
LD06-7620	-5	-3	-7	-1	.	-3	-12	-5
DS61-236	-5	-5	-7	-3	.	-7	-4	-5
DS76-121	-3	0	-5	-3	.	-1	-3	-2
LW13-4302	2	-8	-3	-1	.	1	-2	-2
S15-10879C	-2	0	-4	-1	.	-2	-1	-2
S16-8156C	2	16	2	0	.	3	6	5
S16-14558	-1	0	1	0	.	2	5	1
S16-14687	3	0	-2	0	.	0	2	1
S16-14730C	5	10	6	5	.	4	7	6
S16-16641R	7	4	8	7	.	3	10	7
SA15-507F	-5	0	-5	-2	.	-5	-2	-3
SA17-742PR	-4	0	-3	-2	.	-2	-4	-3
SA17-746PR	-5	0	-3	-1	.	0	0	-1
TN11-4506R2	1	3	2	1	.	1	5	2
TN15-4307	-5	0	-4	-1	.	0	-13	-4
TN16-4017	4	4	9	7	.	1	8	5
TN16-4503R2	2	5	11	7	.	3	8	6
TN16-4657R2	7	5	10	8	.	8	11	8
TN17-4557R2	4	0	8	8	.	5	12	6
V14-1219	-2	0	-3	-2	.	0	2	-1
V14-1235	-5	0	-7	-2	.	-3	-3	-3
Mean	0	1	0	1	.	0	2	1
LSD(0.05)	5	6	4	3	.	2	2	3
CV(%)	856	210	1190	109	.	195	57	399

TABLE 32- PLANT HEIGHT (INCHES)
PRELIMINARY GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Columbia, MO	Jackson, TN	Keiser, AR	Knoxville, TN	Orange, VA	Portageville, MO(B)	Stoneville, MS	Test Mean
AG 4232RR2Y	41	48	30	31	.	32	35	36
AG 43X7	41	49	35	37	.	35	42	40
LD06-7620	33	38	24	26	.	26	26	29
DS61-236	43	50	41	40	.	35	44	42
DS76-121	43	57	43	42	.	36	46	44
LW13-4302	39	44	41	40	.	37	44	41
S15-10879C	38	49	28	33	.	33	37	36
S16-8156C	39	48	34	33	.	33	36	37
S16-14558	39	50	38	36	.	36	45	40
S16-14687	35	48	34	34	.	29	35	36
S16-14730C	34	51	37	38	.	32	42	39
S16-16641R	37	40	23	29	.	35	25	31
SA15-507F	35	44	25	30	.	30	30	32
SA17-742PR	37	46	26	30	.	33	32	34
SA17-746PR	35	45	27	28	.	36	34	34
TN11-4506R2	40	46	30	32	.	36	32	36
TN15-4307	41	46	28	34	.	39	34	37
TN16-4017	28	30	18	27	.	28	23	25
TN16-4503R2	33	36	21	26	.	31	29	29
TN16-4657R2	29	38	20	25	.	28	28	28
TN17-4557R2	26	28	12	21	.	27	20	22
V14-1219	38	50	37	36	.	31	36	38
V14-1235	39	44	31	34	.	29	39	36
Mean	37	44	29	32	.	32	34	35
LSD(0.05)	5	6	5	5	.	4	5	4
CV(%)	6	6	7	7	.	7	7	10

TABLE 33 - PLANT LODGING (1-5)
PRELIMINARY GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Columbia, MO	Jackson, TN	Keiser, AR	Knoxville, TN	Orange, VA	Portageville, MO(B)	Stoneville, MS	Test Mean
AG 4232RR2Y	3.0	3.0	2.0	2.5	.	3.0	3.0	2.8
AG 43X7	2.3	3.5	1.0	2.3	.	3.0	3.5	2.6
LD06-7620	1.8	3.0	1.0	1.8	.	2.0	2.5	2.0
DS61-236	2.5	4.0	4.0	3.5	.	2.5	4.0	3.4
DS76-121	3.5	4.0	4.0	3.8	.	3.0	5.0	3.9
LW13-4302	2.3	4.5	1.5	2.5	.	2.5	4.0	2.9
S15-10879C	2.3	3.5	1.0	1.8	.	2.0	3.0	2.3
S16-8156C	3.0	4.0	1.0	2.0	.	3.0	3.0	2.7
S16-14558	1.5	3.0	1.5	1.8	.	3.0	3.0	2.3
S16-14687	2.5	3.0	1.0	2.3	.	3.0	2.5	2.4
S16-14730C	2.8	4.0	1.0	3.0	.	3.0	3.0	2.8
S16-16641R	3.5	4.0	1.0	3.8	.	3.0	2.0	2.9
SA15-507F	2.5	4.0	1.0	1.8	.	2.0	2.0	2.2
SA17-742PR	2.5	3.5	1.0	2.0	.	2.0	2.5	2.3
SA17-746PR	4.3	3.5	1.0	3.0	.	3.0	2.5	2.9
TN11-4506R2	2.5	4.0	1.0	1.8	.	2.5	3.0	2.5
TN15-4307	2.8	4.5	1.0	1.8	.	2.5	3.0	2.6
TN16-4017	1.8	1.0	1.0	1.8	.	2.0	2.0	1.6
TN16-4503R2	1.5	2.0	1.0	1.8	.	2.0	2.0	1.7
TN16-4657R2	1.3	2.0	1.0	2.0	.	2.0	2.0	1.7
TN17-4557R2	1.3	1.0	1.0	2.0	.	2.0	2.0	1.5
V14-1219	1.8	2.0	1.0	1.8	.	2.0	2.5	1.8
V14-1235	2.8	3.5	1.0	1.7	.	2.0	3.0	2.3
Mean	2.4	3.2	1.3	2.3	.	2.5	2.8	2.4
LSD(0.05)	0.9	1.2	0.4	0.8	.	0.6	0.7	0.7
CV(%)	17.6	17.6	15.1	16.6	.	11.9	12.8	26.2

TABLE 34 - SEED QUALITY (1-5)
PRELIMINARY GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Columbia, MO	Jackson, TN	Keiser, AR	Knoxville, TN	Orange, VA	Portageville, MO(B)	Stoneville, MS	Test Mean
AG 4232RR2Y	2.0	2.0	2.0	2.0	2.5	3.0	3.0	2.4
AG 43X7	2.0	2.5	2.0	3.0	1.5	3.0	3.0	2.4
LD06-7620	2.0	3.5	4.5	3.0	3.5	3.0	4.0	3.4
DS61-236	1.0	3.0	2.0	3.0	2.0	3.0	3.0	2.5
DS76-121	1.5	3.0	2.0	2.0	1.5	3.0	3.0	2.3
LW13-4302	1.5	3.0	1.5	3.0	1.0	2.0	4.0	2.3
S15-10879C	2.0	3.0	3.0	2.0	2.0	3.5	4.0	2.8
S16-8156C	1.5	3.5	2.0	4.0	2.0	3.0	3.0	2.8
S16-14558	2.5	2.0	1.0	2.0	1.5	3.0	3.0	2.1
S16-14687	3.0	3.5	2.0	4.0	3.0	3.0	3.0	3.1
S16-14730C	2.0	3.2	1.5	2.0	1.5	2.5	3.0	2.2
S16-16641R	1.5	2.5	1.0	3.0	2.0	3.0	4.0	2.4
SA15-507F	2.0	3.5	3.5	2.0	3.0	4.0	4.0	3.2
SA17-742PR	2.0	3.0	2.5	3.0	2.5	3.0	4.0	2.9
SA17-746PR	2.0	2.5	2.0	2.0	2.0	3.0	4.0	2.5
TN11-4506R2	1.5	2.0	1.5	2.0	2.0	3.0	3.0	2.1
TN15-4307	1.5	3.0	3.5	3.0	3.5	3.0	4.0	3.1
TN16-4017	1.0	2.5	1.0	2.0	3.0	2.0	4.0	2.2
TN16-4503R2	1.5	2.5	1.0	1.0	1.5	3.0	3.0	1.9
TN16-4657R2	2.0	2.5	2.0	2.0	1.5	2.0	3.0	2.1
TN17-4557R2	1.5	2.5	2.0	2.0	1.0	2.5	4.0	2.2
V14-1219	1.5	2.0	1.5	3.0	1.5	3.0	2.0	2.1
V14-1235	1.5	2.5	3.0	3.0	2.5	4.0	3.0	2.8
Mean	1.8	2.7	2.1	2.5	2.1	2.9	3.4	2.5
LSD(0.05)	.	1.0	0.9		1.6	0.5	.	0.6
CV(%)	.	16.9	19.9	0.0	37.1	8.7	.	25.0

TABLE 35 - SEED SIZE (GRAMS PER 100 SEED)
PRELIMINARY GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Columbia, MO	Jackson, TN	Keiser, AR	Knoxville, TN	Orange, VA	Portageville, MO(B)	Stoneville, MS	Test Mean
AG 4232RR2Y	14.9	13.8	15.6	15.8	14.5	13.3	14.1	14.6
AG 43X7	13.7	14.4	15.2	15.4	14.5	13.2	15.9	14.6
LD06-7620	15.1	13.0	15.3	16.5	13.0	13.2	13.6	14.2
DS61-236	11.7	11.7	13.1	13.0	13.0	11.2	11.2	12.2
DS76-121	12.2	13.5	14.4	14.7	12.5	12.6	13.1	13.3
LW13-4302	14.7	11.3	15.2	14.8	15.5	14.4	12.2	14.1
S15-10879C	15.3	14.2	15.1	15.2	13.5	13.4	14.9	14.5
S16-8156C	19.8	19.3	18.4	19.9	18.0	13.9	15.9	17.9
S16-14558	12.7	13.6	14.6	14.2	13.5	13.6	15.1	13.9
S16-14687	18.7	17.5	16.1	21.3	18.0	16.4	17.4	17.9
S16-14730C	14.3	15.6	14.8	16.0	14.0	13.2	11.6	14.2
S16-16641R	13.8	11.9	13.0	12.3	11.0	11.0	14.6	12.4
SA15-507F	15.6	15.3	16.6	17.8	15.0	14.3	15.6	15.8
SA17-742PR	13.2	11.1	13.2	12.7	11.5	11.1	12.6	12.2
SA17-746PR	12.8	10.5	14.2	13.8	12.5	12.4	14.2	12.9
TN11-4506R2	15.7	13.7	15.5	16.6	14.0	13.3	14.7	14.8
TN15-4307	15.2	13.1	15.4	17.1	16.0	12.9	14.9	14.9
TN16-4017	13.6	14.3	15.0	15.2	12.0	11.4	14.8	13.7
TN16-4503R2	9.7	11.4	12.5	11.8	11.5	10.9	12.5	11.5
TN16-4657R2	13.8	14.6	16.5	15.5	15.0	14.0	16.5	15.1
TN17-4557R2	13.6	12.5	15.8	17.0	13.0	13.0	15.6	14.3
V14-1219	11.9	10.1	12.8	11.8	11.5	12.0	13.3	11.9
V14-1235	9.9	11.5	13.8	13.1	12.5	11.6	13.4	12.3
Mean	14.0	13.4	14.9	15.3	13.7	12.9	14.2	14.1
LSD(0.05)	.	1.2	1.4	0.0	1.7	2.0	.	1.1
CV(%)	.	4.4	4.4	0.1	5.9	7.4	.	7.8

TABLE 36 - OIL (%)†
PRELIMINARY GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Columbia, MO	Jackson, TN	Keiser, AR	Knoxville, TN	Orange, VA	Portageville, MO(B)	Stoneville, MS	Test Mean
AG 4232RR2Y	19.6	20.4	19.8	20.2	19.9	19.5	20.5	20.0
AG 43X7	19.6	20.6	19.6	20.2	19.3	19.6	20.3	19.9
LD06-7620	19.7	.	19.5	19.8	20.1	19.4	22.7	20.3
DS61-236	18.8	20.5	18.7	20.3	18.9	19.6	20.0	19.5
DS76-121	18.9	19.6	19.0	19.8	19.7	19.3	20.0	19.5
LW13-4302	16.4	19.3	17.6	18.4	19.0	17.4	18.4	18.1
S15-10879C	18.0	19.4	17.9	19.3	18.4	18.7	19.8	18.8
S16-8156C	19.0	20.3	19.1	20.3	18.9	19.3	19.9	19.5
S16-14558	20.6	20.9	20.9	21.2	19.7	20.6	21.5	20.8
S16-14687	20.6	21.6	19.4	21.7	20.2	20.4	22.1	20.8
S16-14730C	19.3	20.1	19.3	19.9	19.0	19.2	20.1	19.6
S16-16641R	18.8	20.2	19.4	20.8	19.2	20.6	20.8	20.0
SA15-507F	20.6	20.6	20.3	20.4	20.0	21.5	22.2	20.8
SA17-742PR	19.4	20.4	19.6	20.9	19.0	20.9	22.0	20.3
SA17-746PR	19.7	20.4	19.3	21.1	19.8	20.3	21.1	20.2
TN11-4506R2	18.2	19.5	19.0	19.9	18.9	18.8	20.0	19.2
TN15-4307	19.3	20.1	19.5	19.6	18.8	20.0	22.2	19.9
TN16-4017	19.7	20.7	19.9	20.7	19.8	20.9	21.7	20.5
TN16-4503R2	17.3	16.9	16.7	17.5	19.0	17.1	17.0	17.3
TN16-4657R2	18.7	18.9	19.3	20.3	18.8	19.6	19.7	19.3
TN17-4557R2	19.3	20.2	21.6	20.9	19.1	20.6	21.7	20.5
V14-1219	19.5	21.2	20.3	21.0	19.3	19.5	21.0	20.2
V14-1235	20.4	21.5	20.4	21.7	19.5	21.1	22.2	21.0
Mean	19.2	20.1	19.4	20.3	19.3	19.7	20.7	19.8
LSD(0.05)	.	.	.	.	.	.	.	0.6
CV(%)	.	.	.	.	.	.	.	2.8

†Oil percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 37 - PROTEIN (%)†
PRELIMINARY GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Columbia, MO	Jackson, TN	Keiser, AR	Knoxville, TN	Orange, VA	Portageville, MO(B)	Stoneville, MS	Test Mean
AG 4232RR2Y	34.3	34.2	34.5	35.5	33.4	34.9	35.0	34.6
AG 43X7	33.5	32.9	33.9	35.1	34.4	34.3	34.1	34.0
LD06-7620	35.5	.	36.6	38.6	35.9	35.8	39.3	37.1
DS61-236	35.4	36.3	36.3	35.2	35.3	35.0	33.5	35.3
DS76-121	36.3	39.6	38.1	38.3	34.0	37.1	36.8	37.2
LW13-4302	38.6	37.4	37.1	37.4	35.7	38.1	35.3	37.1
S15-10879C	36.6	36.7	36.3	36.1	35.3	35.7	35.9	36.1
S16-8156C	35.3	36.5	35.3	36.1	36.0	35.1	33.9	35.5
S16-14558	32.7	33.9	32.6	33.5	33.2	33.1	32.3	33.0
S16-14687	33.1	35.1	35.1	35.0	34.9	34.2	33.6	34.4
S16-14730C	35.0	36.1	35.6	34.8	34.1	35.0	33.6	34.9
S16-16641R	38.4	36.9	38.1	36.8	35.7	35.2	36.1	36.7
SA15-507F	36.0	39.2	37.7	39.7	33.9	36.5	37.3	37.2
SA17-742PR	36.7	37.3	37.0	37.1	35.1	34.5	35.8	36.2
SA17-746PR	36.1	36.8	36.0	36.5	34.1	35.2	36.4	35.9
TN11-4506R2	36.9	36.9	36.4	36.6	35.8	36.3	34.9	36.3
TN15-4307	34.9	37.5	37.0	37.2	34.9	33.8	36.8	36.0
TN16-4017	36.8	37.0	37.6	36.7	34.6	35.0	39.1	36.7
TN16-4503R2	37.8	40.7	39.7	39.1	36.2	38.6	39.0	38.7
TN16-4657R2	37.3	38.4	36.8	35.9	35.4	35.8	37.1	36.7
TN17-4557R2	35.8	36.2	33.4	35.1	34.0	34.1	38.6	35.3
V14-1219	34.6	34.2	34.3	35.7	35.2	36.4	34.0	34.9
V14-1235	32.5	33.6	34.2	33.6	33.1	33.4	32.6	33.3
Mean	35.7	36.5	36.1	36.3	34.8	35.3	35.7	35.8
LSD(0.05)	.	.	.	.	.	.	.	1.1
CV(%)	.	.	.	.	.	.	.	2.8

†Protein percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 38 - ESTIMATED MEAL PROTEIN (%)
PRELIMINARY GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Columbia, MO	Jackson, TN	Keiser, AR	Knoxville, TN	Orange, VA	Portageville, MO(B)	Stoneville, MS	Test Mean
AG 4232RR2Y	46.4	46.7	46.8	48.4	45.4	47.1	47.8	46.9
AG 43X7	45.3	45.0	45.9	47.7	46.4	46.3	46.5	46.1
LD06-7620	48.1	.	49.4	52.3	48.8	48.3	55.3	50.6
DS61-236	47.3	49.6	48.5	48.0	47.3	47.2	45.5	47.6
DS76-121	48.6	53.5	51.1	52.0	46.0	50.0	49.9	50.1
LW13-4302	50.2	50.3	49.0	49.8	48.0	50.1	47.0	49.2
S15-10879C	48.6	49.4	48.1	48.6	47.0	47.8	48.7	48.3
S16-8156C	47.3	49.8	47.4	49.3	48.2	47.3	46.0	47.9
S16-14558	44.8	46.7	44.7	46.3	44.9	45.3	44.7	45.3
S16-14687	45.3	48.6	47.3	48.6	47.5	46.6	46.8	47.2
S16-14730C	47.2	49.2	47.9	47.2	45.7	47.1	45.8	47.1
S16-16641R	51.4	50.3	51.3	50.5	48.1	48.2	49.6	49.9
SA15-507F	49.2	53.7	51.5	54.2	46.0	50.5	52.1	51.0
SA17-742PR	49.5	50.9	50.0	51.0	47.1	47.4	49.9	49.4
SA17-746PR	48.9	50.3	48.4	50.2	46.2	48.0	50.0	48.9
TN11-4506R2	49.0	49.9	48.9	49.7	47.9	48.6	47.4	48.8
TN15-4307	47.0	51.0	50.0	50.2	46.7	46.0	51.4	48.9
TN16-4017	49.7	50.7	51.0	50.3	46.9	48.1	54.3	50.2
TN16-4503R2	49.6	53.2	51.8	51.5	48.5	50.6	51.1	50.9
TN16-4657R2	49.9	51.4	49.6	48.9	47.4	48.4	50.2	49.4
TN17-4557R2	48.2	49.3	46.3	48.2	45.7	46.7	53.5	48.3
V14-1219	46.7	47.2	46.8	49.1	47.4	49.1	46.7	47.6
V14-1235	44.3	46.5	46.7	46.6	44.7	45.9	45.6	45.8
Mean	47.9	49.7	48.6	49.5	46.9	47.9	49.0	48.5
LSD(0.05)	.	.	.	.	.	.	.	1.4
CV(%)	.	.	.	.	.	.	.	2.7

SUMMARY OF SEED FATTY ACIDS (%)
PRELIMINARY TEST IV-S-EARLY 2018

STRAIN/ VARIETY	Palmitic Acid	Stearic Acid	Oleic Acid	Linoleic Acid	Linolenic Acid
AG 4232RR2Y	11.0	3.6	21.0	57.0	7.1
AG 43X7	11.0	3.9	24.0	54.0	6.9
LD06-7620	12.0	4.4	22.0	55.0	7.0
AG 4135	11.0	4.4	25.0	53.0	6.3
S16-16641R	7.7	3.0	80.0	4.4	4.5
SA15-507F	7.4	3.4	84.0	3.3	1.8
SA17-742PR	7.9	3.7	81.0	5.0	2.2
SA17-746PR	7.9	3.3	79.0	7.0	2.3
TN16-4017	7.5	2.9	83.0	2.4	4.0
Mean	9.4	3.6	56.0	27.0	4.6
LSD(0.05)	0.4	0.3	2.9	2.4	0.5
CV(%)	3.4	6.3	4.3	7.3	8.7

†Fatty acid percentage in seed oil reported beginning in 2017.

SEED PALMITIC ACID (%)
PRELIMINARY GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Columbia, MO	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(B)	Stoneville, MS	Test Mean
AG 4232RR2Y	11.4	11.2	11.4	11.6	11.6	11.3	11.4
AG 43X7	11.5	11.3	11.1	11.6	11.1	10.8	11.2
LD06-7620	11.6	12.3	11.7	11.9	12.1	12.6	12.0
AG 4135	.	.	11.3	.	11.4	11.6	11.4
S16-16641R	7.5	7.7	7.9	7.9	7.6	7.6	7.7
SA15-507F	7.5	7.6	7.4	7.6	7.3	7.1	7.4
SA17-742PR	7.8	7.3	8.3	8.4	8.1	7.5	7.9
SA17-746PR	7.6	7.0	8.9	8.0	7.7	8.2	7.9
TN16-4017	7.6	7.4	7.6	7.4	7.4	7.6	7.5
Mean	9.1	9.0	9.5	9.3	9.4	9.4	9.4
LSD(0.05)	.	.	.	.	.	.	0.4
CV(%)	.	.	.	.	.	.	3.4

SEED STEARIC ACID (%)
PRELIMINARY GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Columbia, MO	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(B)	Stoneville, MS	Test Mean
AG 4232RR2Y	3.6	3.3	3.5	3.7	3.7	3.6	3.6
AG 43X7	3.7	3.8	3.8	4.0	4.1	4.0	3.9
LD06-7620	4.1	4.3	4.1	4.1	4.4	5.2	4.4
AG 4135	.	.	4.2	.	4.8	4.2	4.4
S16-16641R	3.2	2.9	2.8	3.0	3.0	3.0	3.0
SA15-507F	3.5	3.2	3.2	3.4	3.3	4.1	3.4
SA17-742PR	3.8	3.4	3.5	3.5	3.6	4.3	3.7
SA17-746PR	3.3	3.3	3.3	3.1	3.5	3.4	3.3
TN16-4017	3.0	3.0	2.7	2.8	3.0	2.7	2.9
Mean	3.5	3.4	3.5	3.5	3.7	3.8	3.6
LSD(0.05)	.	.	.	.	.	.	0.3
CV(%)	.	.	.	.	.	.	6.3

SEED OLEIC ACID (%)
PRELIMINARY GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Columbia, MO	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(B)	Stoneville, MS	Test Mean
AG 4232RR2Y	21.1	19.9	20.6	20.5	24.8	19.9	21.1
AG 43X7	22.9	22.8	22.1	22.5	26.7	29.3	24.4
LD06-7620	24.0	21.6	21.3	19.6	20.0	22.7	21.5
AG 4135	.	.	23.0	.	23.8	28.0	24.9
S16-16641R	79.4	81.2	81.0	77.7	81.1	82.5	80.5
SA15-507F	82.6	84.0	84.4	84.1	84.3	84.5	84.0
SA17-742PR	80.2	82.4	81.5	81.0	80.7	81.9	81.3
SA17-746PR	82.0	84.1	70.8	81.7	82.7	75.7	79.5
TN16-4017	81.0	83.6	82.9	84.2	83.6	84.3	83.3
Mean	59.2	59.9	54.2	58.9	56.4	56.5	55.6
LSD(0.05)	.	.	.	.	.	.	2.9
CV(%)	.	.	.	.	.	.	4.3

SEED LINOLEIC ACID (%)
PRELIMINARY GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Columbia, MO	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(B)	Stoneville, MS	Test Mean
AG 4232RR2Y	56.2	58.5	57.4	57.0	52.9	58.8	56.8
AG 43X7	54.6	55.5	55.6	54.6	51.2	50.3	53.6
LD06-7620	53.3	54.8	55.5	57.1	55.8	54.1	55.1
AG 4135	.	.	55.4	.	53.2	50.4	53.0
S16-16641R	5.0	3.8	3.8	6.5	4.0	3.0	4.4
SA15-507F	4.2	3.4	3.1	3.1	3.4	2.7	3.3
SA17-742PR	6.0	5.0	4.6	5.0	5.4	4.0	5.0
SA17-746PR	5.0	3.9	13.9	5.0	4.2	10.2	7.0
TN16-4017	3.8	2.3	2.5	1.9	2.3	1.8	2.4
Mean	23.5	23.4	28.0	23.8	25.8	26.1	26.7
LSD(0.05)	.	.	.	.	.	.	2.4
CV(%)	.	.	.	.	.	.	7.3

SEED LINOLENIC ACID (%)
PRELIMINARY GROUP IV-S-EARLY 2018

STRAIN/ VARIETY	Columbia, MO	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(B)	Stoneville, MS	Test Mean
AG 4232RR2Y	7.6	7.1	7.1	7.2	7.0	6.3	7.1
AG 43X7	7.2	6.7	7.4	7.3	7.0	5.7	6.9
LD06-7620	6.8	7.1	7.3	7.3	7.8	5.4	7.0
AG 4135	.	.	6.0	.	6.8	5.8	6.3
S16-16641R	4.9	4.3	4.6	4.9	4.3	3.8	4.5
SA15-507F	2.1	1.9	1.9	1.8	1.7	1.7	1.8
SA17-742PR	2.2	2.0	2.2	2.1	2.2	2.3	2.2
SA17-746PR	2.1	1.8	3.1	2.2	1.9	2.5	2.3
TN16-4017	4.7	3.7	4.3	3.7	3.7	3.5	4.0
Mean	4.7	4.3	4.9	4.6	4.7	4.1	4.6
LSD(0.05)	.	.	.	.	.	.	0.5
CV(%)	.	.	.	.	.	.	8.7

TABLE 39 - PARENTAGE OF ENTRIES
PRELIMINARY GROUP IV-S-LATE 2018

Ent	Strain/Variety	Parentage	Source	Fn	Trans-genic†	Special Traits‡
1	Ellis	5002T x 5601T	Commercial			
2	AG 4632RR2Y	Commercial check	Commercial		RR2	
3	AG 4835	Commercial check	Commercial		RR2	
4	AG 46X7	Commercial check	Commercial		RRX	
5	DA1221-01-597	DB04-10836 x DA10c53-F2-B5-066	Gillen			HO
6	DA1241-01	DB06c037-23 x DB03-8416	Gillen			25% PI 398399
7	DA1241-34	DB06c037-23 x DB03-8416	Gillen			25% PI 398399
8	DA1245-01-29	DB06-2257 x DB03-8416	Gillen			25% Northern germplasm
9	DA1245-01-60	DB06-2257 x DB03-8416	Gillen			25% Northern germplasm
10	K16-2167	S08-17361 x K10-8556	Schapaugh	F5		
11	K16-2185	S08-17361 x LS07-3125	Schapaugh	F5		
12	R15-1150	R08-527 x R07-1685	Mozzoni	F2:3		
13	R15-1587	S05-11482 x R07-1685	Mozzoni	F2:3		
14	R15-2422	LEO 2939-04S809 x UA5612	Mozzoni	F4:5		
15	R15-818	R07-10244 x R05-4114	Mozzoni	F4:5		
16	S15-5909R	S09-9943 x S11-9618RR	Chen		RR2	
17	S16-7875C	S11-16653 x S11-20124	Chen			
18	S16-8189C	S11-16653 x S09-9943	Chen			
19	S16-11644C	S09-13185 x S11-20124	Chen			
20	S16-13340C	S11-16653 x LD10-9168	Chen			
21	S16-14379C	S08-17361 x LG09-7163	Chen			
22	S16-15170C	S11-16653 x S08-17361	Chen			
23	S16-15926C	R10-230 x S11-20124	Chen			
24	TN16-4101	TN11-5037 x JTN-5203	Pantalone			
25	TN16-4901R1	USG 75T40 x JTN-4607	Pantalone		RR1	
26	TN17-4412	NCC07-7714 x TN05-5018	Pantalone			
27	TN17-4414	TN11-5037 x JTN-5203	Pantalone			
28	TN17-4474	TN09-029 x NCC05-1168	Pantalone			
29	V13-0113	V02-8659 x Schillinger 495	Zhang	F4	RR1	
30	V14-3508	(R04-198 x Glenn) x V03-4705	Zhang	F4		Meal Protein 50%
31	Ellis-HOLL	Ellis-HO x Ellis-LL	Pantalone			HOLN

†Conv= Conventional(non-transgenic),LL= Liberty Link®, RR1= Roundup Ready®,RR2= Roundup Ready 2 Yield®
RRX= Roundup Ready 2 Xtend®
‡AA= modified amino acids, DNC= Do not cross with this, FLS= Frogeye leaf spot resistance, LJ= Long juvenile,
LN= low linolenic acid, LP= low phytate, HO= high oleic acid, HOLN= high oleic acid/low linolenic acid,
SCN= Soybean cyst nematode resistance, SR= Soybean rust resistance,
and STS= sulfonylurea tolerant

TABLE 40 - GENERAL SUMMARY OF PERFORMANCE
PRELIMINARY TEST IV-S-LATE 2018

STRAIN/ VARIETY	SEED YIELD†	RANK	AVG. RANK	MAT. INDEX	LOD	HT	SCN Cyst Score (1-5)‡ Race 1	Race 3	Race 5	SC RATING	SC SCORE
Ellis	62.0	13	12	0	1.6	28	3	3	5	R	1
AG 4632RR2Y	64.8	5	11	-7	2.1	39	3	1	5	MR	2
AG 4835	57.8	22	21	-4	2.0	39	2	3	5	R	1
AG 46X7	63.8	8	14	-6	2.0	37	1	1	4	R	1
DA1221-01-597	58.3	20	19	-1	2.1	38	3	1	5	R	1
DA1241-01	59.8	15	18	-5	1.8	32	4	2	5	R	1
DA1241-34	60.4	14	16	-4	2.1	31	4	3	5	R	1
DA1245-01-29	59.3	18	18	0	1.9	31	4	4	5	R	1
DA1245-01-60	59.6	17	17	-3	2.1	30	5	3	5	R	1
K16-2167	63.2	11	10	-11	2.6	34	4	3	5	R	1
K16-2185	63.8	9	12	-7	2.1	37	4	2	5	R	1
R15-1150	59.8	16	17	-7	2.1	35	5	2	5	R	1
R15-1587	66.8	2	7	0	1.7	30	5	2	5	R	1
R15-2422	57.0	24	18	-8	3.0	43	4	1	5	S	5
R15-818	56.6	25	17	-7	2.0	30	2	1	5	S	5
S15-5909R	59.2	19	19	-10	2.4	43	4	2	5	R	1
S16-7875C	63.6	10	14	0	2.5	33	4	1	3	MS	4
S16-8189C	58.0	21	19	5	2.9	49	4	.	4	MS	4
S16-11644C	64.0	7	12	-3	2.8	34	3	1	4	SS	3
S16-13340C	64.6	6	10	-1	3.4	48	4	1	4	R	1
S16-14379C	65.1	4	10	-5	2.1	43	4	2	5	R	1
S16-15170C	65.9	3	8	3	1.9	41	3	2	5	R	1
S16-15926C	63.0	12	12	-4	2.4	34	4	2	5	MS	4
TN16-4101	57.6	23	18	-3	1.4	24	4	2	4	R	1
TN16-4901R1	51.6	30	23	-9	1.5	27	1	1	1	MS	4
TN17-4412	55.5	27	20	-4	1.8	30	4	2	5	R	1
TN17-4414	67.0	1	7	-5	1.7	28	2	1	1	R	1
TN17-4474	51.1	31	23	-5	1.7	29	1	1	1	MS	4
V13-0113	54.7	29	24	-11	2.3	39	4	3	5	R	1
V14-3508	55.6	26	22	-7	1.5	27	5	3	5	R	1
Ellis-HOLL	55.4	28	18	-1	1.6	26	5	1	5	R	1
Mean	60.2	.	.	-4	2.1	34	.	.	.		.
LSD(0.05)	9.1	.	.	4	0.6	5	.	.	.		.
CV(%)	14.0	.	.	93	29.1	14	.	.	.		.

† Data not included in mean: Knoxville,TN

‡The race 1, 3, and 5 SCN populations used in these tests were typed as HG (Heterodera glycines) Type 2.5.7, HG Type 5.7, and HG Type 2.5.7, respectively.

Reaction to the cultivar Pickett was used to distinguish between race 1 and race 5 SCN populations.

TABLE 41 - GENERAL SUMMARY OF PERFORMANCE (continued)
PRELIMINARY TEST IV-S-LATE 2018

STRAIN/ VARIETY	SEED QUALITY	SEED SIZE	PROTEIN§ %	OIL§ %	MEAL PRO%	FL COLOR	PUB. COLOR	POD COLOR
Ellis	2.3	13.8	34.8	19.2	46.7	W	G	T
AG 4632RR2Y	2.8	15.4	33.2	20.6	45.4	P	G	Br
AG 4835	2.2	13.0	34.8	19.5	47.1	P	G	Br
AG 46X7	2.5	14.1	34.3	20.2	46.7			
DA1221-01-597	2.5	12.9	36.1	20.1	49.1	P	T	T
DA1241-01	2.8	13.3	36.0	20.3	49.1	W	G	T
DA1241-34	2.7	14.9	34.4	20.5	47	P	G	T
DA1245-01-29	2.4	15.7	34.9	20.1	47.5	P	G	T
DA1245-01-60	2.3	14.4	35.3	20.0	48	P	T	T
K16-2167	2.6	14.3	33.0	20.4	45.1			
K16-2185	3.0	15.6	33.2	21.3	45.8			
R15-1150	2.0	12.0	35.9	19.3	48.4	P	G	T
R15-1587	1.9	14.0	36.0	19.5	48.6	P	T	T
R15-2422	2.8	12.5	36.9	19.6	49.9	P	G	T
R15-818	2.3	12.6	34.7	20.1	47.2	W	G	T
S15-5909R	2.4	16.3	36.6	18.8	49		Lt	
S16-7875C	2.4	14.9	34.8	20.4	47.5	W	T	
S16-8189C	2.5	16.2	37.6	18.9	50.3	W	G	
S16-11644C	2.1	13.1	35.6	19.7	48.3	W	T	
S16-13340C	3.0	15.6	35.3	20.1	48	P	G	
S16-14379C	2.4	14.7	34.6	20.3	47.2	P	Lt	
S16-15170C	2.2	16.1	35.7	19.7	48.3	W	G	
S16-15926C	2.1	14.3	34.6	19.7	46.9	W	G	
TN16-4101	2.4	14.8	36.1	19.1	48.5	W	G	
TN16-4901R1	2.5	13.2	34.1	20.6	46.7	W	T	
TN17-4412	2.3	14.8	36.1	19.9	49	W	G	
TN17-4414	2.4	14.1	36.8	19.1	49.4	W	T	
TN17-4474	2.4	12.5	35.2	18.8	47.1	P	G	
V13-0113	3.2	14.8	36.7	19.6	49.6	P	T	
V14-3508	2.5	14.8	37.2	18.4	49.6	W	T	
Ellis-HOLL	2.3	13.7	35.6	19.4	48	W	G	
Mean	2.5	14.3	35.4	19.8	47.9			
LSD(0.05)	0.7	1.2	1.0	0.5	1.2			
CV(%)	23.2	7.6	2.2	2.0	2.1			

§Protein percentage and oil percentage are reported on a 13% moisture basis beginning in 2015.

TABLE 42 - SEED YIELD (BUSHELS PER ACRE)
PRELIMINARY GROUP IV-S-LATE 2018 †

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS	Test Mean
Ellis	62.8	69.9	53.5	64.0	54.8	49.6	70.9	62.0
AG 4632RR2Y	64.3	93.7	75.9	.	62.0	39.3	66.5	64.8
AG 4835	61.5	83.0	62.7	.	.	38.2	59.2	57.8
AG 46X7	63.3	96.7	76.5	.	.	42.6	63.8	63.8
DA1221-01-597	59.4	78.2	69.2	57.3	55.5	39.1	60.5	58.3
DA1241-01	63.0	77.2	72.9	53.7	43.6	47.7	73.8	59.8
DA1241-34	60.9	81.7	61.4	63.2	43.8	48.2	64.6	60.4
DA1245-01-29	58.2	84.1	77.3	57.2	50.8	42.3	63.2	59.3
DA1245-01-60	58.5	86.3	71.5	57.1	45.4	52.1	58.4	59.6
K16-2167	65.0	85.0	67.9	64.7	49.1	51.8	63.8	63.2
K16-2185	67.8	94.9	76.0	56.7	50.7	55.0	57.8	63.8
R15-1150	57.7	84.4	65.8	58.1	46.7	48.4	63.5	59.8
R15-1587	68.6	81.6	77.1	58.3	57.2	57.0	78.4	66.8
R15-2422	36.3	83.1	40.6	50.2	47.3	50.6	74.7	57.0
R15-818	43.5	68.3	73.4	61.7	55.1	56.4	54.5	56.6
S15-5909R	61.5	89.9	64.2	57.5	41.9	47.0	57.3	59.2
S16-7875C	50.8	81.7	81.0	54.8	67.8	54.4	72.3	63.6
S16-8189C	59.4	81.8	45.1	56.4	48.8	50.0	51.5	58.0
S16-11644C	52.5	84.3	56.3	62.1	63.8	49.5	72.1	64.0
S16-13340C	51.8	96.5	52.6	66.1	52.5	56.1	64.5	64.6
S16-14379C	62.9	99.9	69.1	61.1	46.2	55.3	65.2	65.1
S16-15170C	68.0	91.3	65.9	62.0	53.9	54.6	65.7	65.9
S16-15926C	53.1	89.4	77.0	61.7	46.1	60.4	67.1	63.0
TN16-4101	66.4	66.2	43.0	55.4	49.9	53.7	53.8	57.6
TN16-4901R1	49.8	46.8	43.0	56.0	55.3	44.3	57.6	51.6
TN17-4412	56.5	68.5	76.2	47.5	39.6	54.9	65.8	55.5
TN17-4414	69.6	72.2	74.5	63.2	59.9	53.9	83.1	67.0
TN17-4474	27.4	68.3	64.7	51.7	57.2	49.0	53.2	51.1
V13-0113	54.4	83.5	61.9	48.7	42.9	48.8	49.7	54.7
V14-3508	61.5	64.2	61.2	56.6	42.0	47.4	62.1	55.6
Ellis-HOLL	63.7	53.5	53.2	63.1	45.4	50.0	56.6	55.4
Mean	58.1	80.2	64.9	58.1	50.9	49.9	63.6	60.2
LSD(0.05)	8.3	7.8	21.6	5.5	6.4	8.8	14.5	9.1
CV(%)	7.0	4.7	15.6	4.7	6.2	8.6	11.2	14.0

† Data not included in mean: Knoxville,TN

TABLE 43- RELATIVE MATURITY (DAYS EARLIER (-) OR LATER (+) THAN ENTRY 1)
PRELIMINARY GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS	Test Mean
Ellis	10/2	.	10/11	10/20	10/10	10/14	9/20	10/8
AG 4632RR2Y	-8	.	-13	-7	-1	-8	-5	-7
AG 4835	-2	.	-8	-2	0	-6	-5	-4
AG 46X7	-8	.	-15	-3	-3	-4	-4	-6
DA1221-01-597	-2	.	-10	0	6	2	-2	-1
DA1241-01	-2	.	-12	-4	-2	-2	-10	-5
DA1241-34	-7	.	-10	-2	4	-5	-4	-4
DA1245-01-29	0	.	-5	0	6	1	-2	0
DA1245-01-60	-2	.	-10	-1	1	-5	-3	-3
K16-2167	-15	.	-15	-12	1	-6	-16	-11
K16-2185	-7	.	-16	-9	-3	-3	-5	-7
R15-1150	-14	.	-11	-5	0	-4	-6	-7
R15-1587	0	.	-3	1	5	1	-3	0
R15-2422	-15	.	-15	-7	-2	-7	-2	-8
R15-818	-15	.	-9	0	2	-5	-12	-7
S15-5909R	-14	.	-15	-11	-2	-6	-14	-10
S16-7875C	-2	.	-5	0	9	1	-3	0
S16-8189C	1	.	-1	11	12	4	3	5
S16-11644C	-7	.	-9	0	3	0	-2	-3
S16-13340C	0	.	-2	-7	5	2	-2	-1
S16-14379C	-2	.	-11	-9	-2	-1	-4	-5
S16-15170C	1	.	-1	7	9	3	-1	3
S16-15926C	-15	.	-9	-2	4	2	-2	-4
TN16-4101	0	.	-8	-4	-3	-4	0	-3
TN16-4901R1	-8	.	-15	-4	-3	-7	-17	-9
TN17-4412	-7	.	-7	-3	-3	-2	-1	-4
TN17-4414	-7	.	-14	-4	2	0	-7	-5
TN17-4474	-15	.	-15	10	5	-2	-12	-5
V13-0113	-14	.	-15	-14	-6	-6	-12	-11
V14-3508	-15	.	-11	-1	-4	-2	-12	-7
Ellis-HOLL	-2	.	-4	-2	0	1	2	-1
Mean	-6	.	-9	-3	1	-2	-5	-4
LSD(0.05)	9	.	5	7	3	3	3	4
CV(%)	68	.	27	125	140	82	25	93

TABLE 44 - PLANT HEIGHT (INCHES)
PRELIMINARY GROUP IV-S-LATE 2018

STRAIN/ VARIETY	*Jackson, TN*	*Keiser, AR*	*Knoxville, TN*	*McCune, KS*	*Pittsburg, KS*	*Portageville, MO(B)*	*Stoneville, MS*	*Test Mean*
Ellis	33	20	24	34	33	26	26	28
AG 4632RR2Y	46	35	34	44	33	32	49	39
AG 4835	49	35	36	35	33	36	45	39
AG 46X7	47	36	34	38	33	33	41	37
DA1221-01-597	41	30	33	46	40	34	42	38
DA1241-01	40	23	28	36	31	32	35	32
DA1241-34	35	24	26	36	33	31	31	31
DA1245-01-29	36	22	26	39	35	32	27	31
DA1245-01-60	34	25	28	35	29	26	31	30
K16-2167	42	30	31	36	25	30	43	34
K16-2185	48	36	38	41	31	33	30	37
R15-1150	37	26	31	42	36	32	45	35
R15-1587	35	22	25	39	31	29	32	30
R15-2422	50	40	40	45	35	38	53	43
R15-818	32	22	26	43	32	30	29	30
S15-5909R	53	42	39	46	31	39	52	43
S16-7875C	34	23	30	41	38	32	34	33
S16-8189C	57	47	49	41	44	42	65	49
S16-11644C	38	25	28	41	37	34	35	34
S16-13340C	54	47	49	37	41	37	67	48
S16-14379C	53	42	38	46	35	36	51	43
S16-15170C	46	40	41	38	33	36	55	41
S16-15926C	35	23	28	46	35	36	34	34
TN16-4101	28	16	21	33	27	25	22	24
TN16-4901R1	34	17	20	38	35	26	24	27
TN17-4412	32	22	25	43	32	31	25	30
TN17-4414	33	17	26	38	32	27	26	28
TN17-4474	35	18	29	38	31	29	27	29
V13-0113	45	31	33	45	37	36	44	39
V14-3508	33	19	25	34	30	22	30	27
Ellis-HOLL	32	16	23	37	28	26	23	26
Mean	40	28	31	40	33	32	38	34
LSD(0.05)	6	4	4	.	.	4	3	5
CV(%)	7	8	7	.	.	6	4	14

TABLE 45 - PLANT LODGING (1-5)
PRELIMINARY GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS	Test Mean
Ellis	2.0	1.0	1.5	1.0	1.0	2.5	2.0	1.6
AG 4632RR2Y	4.0	1.0	1.8	1.0	1.0	3.0	3.0	2.1
AG 4835	3.0	1.0	2.5	1.0	1.0	2.5	3.0	2.0
AG 46X7	3.0	1.0	2.0	1.0	1.0	3.0	3.0	2.0
DA1221-01-597	3.5	1.0	2.0	1.5	1.0	3.0	3.0	2.1
DA1241-01	2.5	1.0	1.8	1.0	1.0	3.0	2.5	1.8
DA1241-34	3.5	1.0	2.0	1.0	1.0	3.5	2.5	2.1
DA1245-01-29	3.0	1.0	2.0	1.0	1.0	3.0	2.5	1.9
DA1245-01-60	4.5	1.0	2.0	1.0	1.0	3.0	2.5	2.1
K16-2167	4.5	2.0	2.5	1.0	1.0	3.0	4.5	2.6
K16-2185	3.5	1.0	1.8	1.0	1.0	3.0	3.5	2.1
R15-1150	3.5	1.0	1.8	2.0	1.0	3.0	2.5	2.1
R15-1587	2.0	1.0	1.8	1.0	1.0	2.5	2.5	1.7
R15-2422	5.0	2.5	4.3	1.0	1.0	2.5	5.0	3.0
R15-818	4.0	1.0	2.3	1.5	1.0	2.5	2.0	2.0
S15-5909R	3.5	1.0	2.8	1.0	1.0	3.0	4.5	2.4
S16-7875C	3.5	1.0	2.3	2.0	2.5	3.0	3.5	2.5
S16-8189C	3.5	2.5	3.5	1.5	2.0	3.0	4.5	2.9
S16-11644C	3.5	1.0	1.5	2.5	2.5	4.0	4.5	2.8
S16-13340C	5.0	3.5	4.5	1.0	1.5	3.0	5.0	3.4
S16-14379C	4.0	1.0	2.0	1.0	1.0	2.5	3.5	2.1
S16-15170C	3.5	1.0	2.0	1.0	1.0	2.0	3.0	1.9
S16-15926C	4.0	1.0	2.5	2.0	1.5	3.0	3.0	2.4
TN16-4101	1.0	1.0	1.5	1.0	1.0	2.0	2.5	1.4
TN16-4901R1	2.5	1.0	1.3	1.0	1.0	2.0	2.0	1.5
TN17-4412	2.5	1.0	2.0	1.0	1.0	3.0	2.0	1.8
TN17-4414	2.0	1.0	1.5	1.0	1.0	3.0	2.5	1.7
TN17-4474	3.0	1.0	1.8	1.0	1.0	2.0	2.0	1.7
V13-0113	5.0	1.0	1.8	1.0	1.0	3.0	3.5	2.3
V14-3508	1.5	1.0	1.5	1.0	1.0	2.0	2.5	1.5
Ellis-HOLL	2.0	1.0	1.5	1.0	1.0	2.5	2.0	1.6
Mean	3.3	1.2	2.1	1.2	1.2	2.8	3.0	2.1
LSD(0.05)	1.1	0.4	0.7	0.7	0.7	0.7	1.1	0.6
CV(%)	16.0	18.2	15.5	28.3	30.4	12.9	17.2	29.1

TABLE 46 - SEED QUALITY (1-5)
PRELIMINARY GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS	Test Mean
Ellis	2.0	2.5	2.0	.	.	2.0	3.0	2.3
AG 4632RR2Y	2.5	1.5	3.0	.	.	3.0	4.0	2.8
AG 4835	2.0	1.0	2.0	.	.	2.0	4.0	2.2
AG 46X7	2.0	1.5	3.0	.	.	3.0	3.0	2.5
DA1221-01-597	2.0	1.5	3.0	.	.	3.0	3.0	2.5
DA1241-01	2.5	2.0	4.0	.	.	2.5	3.0	2.8
DA1241-34	3.0	2.0	3.0	.	.	2.5	3.0	2.7
DA1245-01-29	2.5	1.5	2.0	.	.	3.0	3.0	2.4
DA1245-01-60	3.0	1.5	2.0	.	.	2.0	3.0	2.3
K16-2167	2.0	2.0	3.0	.	.	3.0	3.0	2.6
K16-2185	2.5	1.5	4.0	.	.	3.0	4.0	3.0
R15-1150	2.0	1.5	2.0	.	.	1.0	4.0	2.0
R15-1587	2.0	1.0	1.0	.	.	2.5	3.0	1.9
R15-2422	3.0	2.0	3.0	.	.	3.0	3.0	2.8
R15-818	2.5	2.0	2.0	.	.	2.0	3.0	2.3
S15-5909R	2.0	2.0	2.0	.	.	3.0	3.0	2.4
S16-7875C	3.0	1.5	2.0	.	.	2.5	3.0	2.4
S16-8189C	2.5	2.0	2.0	.	.	3.0	3.0	2.5
S16-11644C	2.0	1.5	1.0	.	.	3.0	3.0	2.1
S16-13340C	3.5	2.5	3.0	.	.	3.0	3.0	3.0
S16-14379C	3.0	2.0	2.0	.	.	2.0	3.0	2.4
S16-15170C	2.5	1.5	2.0	.	.	2.0	3.0	2.2
S16-15926C	2.0	1.5	2.0	.	.	2.0	3.0	2.1
TN16-4101	2.0	2.0	3.0	.	.	1.0	4.0	2.4
TN16-4901R1	3.0	1.5	3.0	.	.	2.0	3.0	2.5
TN17-4412	2.0	2.0	2.0	.	.	2.5	3.0	2.3
TN17-4414	2.0	1.0	3.0	.	.	3.0	3.0	2.4
TN17-4474	3.0	1.5	2.0	.	.	2.5	3.0	2.4
V13-0113	4.0	2.5	4.0	.	.	2.5	3.0	3.2
V14-3508	2.0	2.0	3.0	.	.	2.5	3.0	2.5
Ellis-HOLL	2.0	2.0	2.0	.	.	2.5	3.0	2.3
Mean	2.5	1.7	2.5	.	.	2.5	3.2	2.5
LSD(0.05)	0.7	1.0	.	.	.	0.8	.	0.7
CV(%)	13.8	29.2	0.0	.	.	15.4	.	23.2

TABLE 47 - SEED SIZE (GRAMS PER 100 SEED)
PRELIMINARY GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS	Test Mean
Ellis	14.1	14.7	15.6	.	.	10.6	13.7	13.8
AG 4632RR2Y	15.5	14.9	17.7	.	.	13.6	15.1	15.4
AG 4835	13.2	13.2	15.2	.	.	11.5	11.4	13.0
AG 46X7	13.9	13.9	16.0	.	.	12.6	14.3	14.1
DA1221-01-597	12.4	15.1	12.3	.	.	12.3	12.1	12.9
DA1241-01	13.3	14.1	13.9	.	.	11.3	14.3	13.3
DA1241-34	15.3	15.2	15.4	.	.	13.8	14.8	14.9
DA1245-01-29	15.6	16.0	16.1	.	.	14.1	17.0	15.7
DA1245-01-60	14.3	15.1	14.7	.	.	11.7	17.0	14.4
K16-2167	13.8	14.5	15.5	.	.	13.5	13.9	14.3
K16-2185	15.5	15.5	17.1	.	.	14.0	15.8	15.6
R15-1150	11.2	14.5	12.1	.	.	10.1	12.3	12.0
R15-1587	13.6	14.8	14.1	.	.	12.6	15.1	14.0
R15-2422	12.1	13.4	12.1	.	.	11.0	14.2	12.5
R15-818	11.1	14.7	12.8	.	.	11.5	12.6	12.6
S15-5909R	16.2	17.8	17.3	.	.	14.9	14.4	16.3
S16-7875C	13.9	14.7	16.2	.	.	14.4	15.2	14.9
S16-8189C	17.4	15.6	17.6	.	.	14.5	15.7	16.2
S16-11644C	11.9	14.1	13.5	.	.	12.0	14.2	13.1
S16-13340C	15.1	16.5	15.7	.	.	15.4	14.8	15.6
S16-14379C	15.2	14.9	14.6	.	.	13.7	15.3	14.7
S16-15170C	17.0	15.8	16.7	.	.	15.0	15.7	16.1
S16-15926C	12.0	16.6	14.8	.	.	12.9	15.3	14.3
TN16-4101	14.6	14.5	15.7	.	.	12.2	17.7	14.8
TN16-4901R1	13.4	14.9	13.6	.	.	11.3	12.8	13.2
TN17-4412	14.5	14.8	15.4	.	.	12.6	17.1	14.8
TN17-4414	14.2	14.1	14.8	.	.	12.7	15.1	14.1
TN17-4474	11.1	14.4	13.4	.	.	11.6	11.9	12.5
V13-0113	14.6	15.9	15.1	.	.	13.5	14.7	14.8
V14-3508	14.2	16.0	16.5	.	.	11.6	15.9	14.8
Ellis-HOLL	13.8	14.8	14.7	.	.	10.5	14.9	13.7
Mean	14.0	15.0	15.0	.	.	12.7	14.7	14.3
LSD(0.05)	1.3	2.9	.	.	.	1.4	.	1.2
CV(%)	4.7	9.4	0.0	.	.	5.3	.	7.6

TABLE 48 - OIL (%)†
PRELIMINARY GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS	Test Mean
Ellis	19.2	18.7	18.7	.	.	20.1	19.4	19.2
AG 4632RR2Y	21.2	19.7	20.5	.	.	21.1	20.4	20.6
AG 4835	19.4	19.3	20.3	.	.	19.6	19.1	19.5
AG 46X7	20.7	19.2	20.8	.	.	20.0	20.3	20.2
DA1221-01-597	19.6	19.7	20.4	.	.	20.7	20.3	20.1
DA1241-01	20.5	19.6	21.0	.	.	20.0	20.3	20.3
DA1241-34	20.5	20.2	20.8	.	.	20.1	20.8	20.5
DA1245-01-29	19.9	20.3	20.5	.	.	19.5	20.3	20.1
DA1245-01-60	20.1	19.6	20.5	.	.	19.8	20.1	20.0
K16-2167	20.4	20.2	20.1	.	.	20.2	20.9	20.4
K16-2185	21.9	21.2	22.2	.	.	20.4	20.9	21.3
R15-1150	19.3	19.1	19.5	.	.	18.9	19.9	19.3
R15-1587	19.4	19.2	19.7	.	.	19.3	19.8	19.5
R15-2422	20.4	18.3	19.8	.	.	19.6	20.0	19.6
R15-818	20.1	19.5	20.5	.	.	19.7	20.5	20.1
S15-5909R	18.8	18.0	19.3	.	.	18.6	19.4	18.8
S16-7875C	20.4	20.2	20.7	.	.	20.2	20.5	20.4
S16-8189C	19.4	18.6	19.2	.	.	18.1	18.9	18.9
S16-11644C	19.8	19.1	20.0	.	.	19.9	19.9	19.7
S16-13340C	20.5	19.4	20.2	.	.	19.8	20.4	20.1
S16-14379C	20.5	19.4	20.5	.	.	20.3	20.7	20.3
S16-15170C	19.5	19.4	19.9	.	.	19.2	20.5	19.7
S16-15926C	20.3	19.5	19.9	.	.	19.0	19.9	19.7
TN16-4101	19.0	19.0	19.5	.	.	18.8	19.2	19.1
TN16-4901R1	21.3	19.6	20.9	.	.	20.2	20.7	20.6
TN17-4412	20.3	19.6	20.4	.	.	19.3	19.8	19.9
TN17-4414	18.7	19.0	19.8	.	.	18.9	19.4	19.1
TN17-4474	19.3	18.0	19.2	.	.	17.7	19.9	18.8
V13-0113	20.3	18.1	20.5	.	.	19.1	20.0	19.6
V14-3508	18.1	18.0	18.7	.	.	17.9	19.2	18.4
Ellis-HOLL	.	19.1	19.3	.	.	19.6	19.3	19.4
Mean	20.0	19.3	20.1	.	.	19.5	20.0	19.8
LSD(0.05)	.	.	.	.	.	.	.	0.5
CV(%)	.	.	.	.	.	.	.	2.0

†Oil percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 49 - PROTEIN (%)†
PRELIMINARY GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS	Test Mean
Ellis	35.9	35.3	35.4	.	.	32.9	34.2	34.8
AG 4632RR2Y	33.2	33.8	33.8	.	.	31.5	33.6	33.2
AG 4835	36.0	35.0	35.4	.	.	33.6	34.2	34.8
AG 46X7	34.6	35.3	34.0	.	.	33.8	33.7	34.3
DA1221-01-597	36.9	37.0	36.5	.	.	33.8	36.1	36.1
DA1241-01	35.7	36.6	35.9	.	.	36.3	35.6	36.0
DA1241-34	34.9	34.7	34.1	.	.	34.8	33.5	34.4
DA1245-01-29	35.6	34.9	35.2	.	.	34.9	34.1	34.9
DA1245-01-60	35.6	36.0	35.3	.	.	34.8	35.0	35.3
K16-2167	34.3	31.7	34.8	.	.	33.1	31.4	33.0
K16-2185	34.5	32.1	32.3	.	.	33.6	33.5	33.2
R15-1150	36.9	36.1	36.0	.	.	35.6	34.9	35.9
R15-1587	36.9	36.4	35.5	.	.	36.1	35.2	36.0
R15-2422	38.6	37.9	37.3	.	.	35.5	35.1	36.9
R15-818	35.2	35.7	34.6	.	.	34.2	33.9	34.7
S15-5909R	36.5	37.0	36.3	.	.	36.7	36.4	36.6
S16-7875C	35.6	35.0	35.3	.	.	33.8	34.3	34.8
S16-8189C	38.0	37.4	37.6	.	.	38.9	36.1	37.6
S16-11644C	35.8	36.6	35.0	.	.	34.6	36.1	35.6
S16-13340C	36.2	36.1	35.7	.	.	34.6	34.0	35.3
S16-14379C	36.0	35.6	34.9	.	.	34.1	32.5	34.6
S16-15170C	37.8	35.0	35.7	.	.	36.0	34.2	35.7
S16-15926C	33.9	34.9	34.6	.	.	35.1	34.6	34.6
TN16-4101	36.7	35.9	36.3	.	.	35.3	36.3	36.1
TN16-4901R1	36.9	34.6	33.4	.	.	32.8	33.0	34.1
TN17-4412	37.3	35.5	35.6	.	.	36.1	36.2	36.1
TN17-4414	38.3	36.3	37.0	.	.	36.2	36.0	36.8
TN17-4474	35.5	36.1	35.3	.	.	35.7	33.4	35.2
V13-0113	38.7	37.0	36.1	.	.	36.8	34.7	36.7
V14-3508	37.7	37.7	36.6	.	.	37.0	37.2	37.2
Ellis-HOLL	.	36.6	36.0	.	.	34.0	35.0	35.6
Mean	36.2	35.7	35.4	.	.	34.9	34.6	35.4
LSD(0.05)	.	.	.	.	.	.	.	1.0
CV(%)	.	.	.	.	.	.	.	2.2

†Protein percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 50 - ESTIMATED MEAL PROTEIN (%)
PRELIMINARY GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS	Test Mean
Ellis	48.3	47.2	47.4	.	.	44.7	46.2	46.7
AG 4632RR2Y	45.8	45.7	46.3	.	.	43.4	45.8	45.4
AG 4835	48.6	47.1	48.2	.	.	45.4	46.0	47.1
AG 46X7	47.4	47.5	46.6	.	.	45.9	45.9	46.7
DA1221-01-597	49.9	50.1	49.8	.	.	46.4	49.2	49.1
DA1241-01	48.7	49.5	49.4	.	.	49.3	48.6	49.1
DA1241-34	47.7	47.2	46.8	.	.	47.4	46.0	47.0
DA1245-01-29	48.2	47.6	48.2	.	.	47.1	46.6	47.5
DA1245-01-60	48.4	48.6	48.3	.	.	47.2	47.6	48.0
K16-2167	46.8	43.1	47.4	.	.	45.1	43.1	45.1
K16-2185	47.9	44.3	45.0	.	.	45.9	46.1	45.8
R15-1150	49.7	48.5	48.6	.	.	47.7	47.3	48.4
R15-1587	49.8	49.0	48.0	.	.	48.6	47.7	48.6
R15-2422	52.7	50.5	50.6	.	.	48.1	47.6	49.9
R15-818	47.9	48.1	47.3	.	.	46.3	46.4	47.2
S15-5909R	48.8	49.1	48.9	.	.	49.0	49.0	49.0
S16-7875C	48.6	47.7	48.3	.	.	46.0	46.9	47.5
S16-8189C	51.2	49.9	50.5	.	.	51.7	48.4	50.3
S16-11644C	48.5	49.2	47.6	.	.	47.0	49.0	48.3
S16-13340C	49.5	48.6	48.7	.	.	46.9	46.5	48.0
S16-14379C	49.2	47.9	47.7	.	.	46.5	44.5	47.2
S16-15170C	51.0	47.1	48.5	.	.	48.4	46.7	48.3
S16-15926C	46.2	47.1	47.0	.	.	47.1	47.0	46.9
TN16-4101	49.3	48.2	49.1	.	.	47.2	48.9	48.5
TN16-4901R1	51.0	46.7	45.9	.	.	44.7	45.2	46.7
TN17-4412	50.9	48.0	48.5	.	.	48.6	49.0	49.0
TN17-4414	51.3	48.7	50.1	.	.	48.5	48.6	49.4
TN17-4474	47.8	47.9	47.5	.	.	47.1	45.4	47.1
V13-0113	52.9	49.1	49.4	.	.	49.5	47.2	49.6
V14-3508	50.0	49.9	48.9	.	.	48.9	50.1	49.6
Ellis-HOLL	.	49.2	48.5	.	.	46.0	47.1	48.0
Mean	49.1	48.0	48.2	.	.	47.1	47.1	47.9
LSD(0.05)	.	.	.	.	.	.	.	1.2
CV(%)	.	.	.	.	.	.	.	2.1

SUMMARY OF SEED FATTY ACIDS (%)†
PRELIMINARY TEST IV-S-LATE 2018

STRAIN/ VARIETY	Palmitic Acid	Stearic Acid	Oleic Acid	Linoleic Acid	Linolenic Acid
Ellis	12.0	3.6	19.0	58.0	7.8
AG 4632RR2Y	11.0	3.8	23.0	55.0	7.1
AG 4835	11.0	4.4	19.0	57.0	7.9
AG 46X7	12.0	4.0	21.0	55.0	7.2
DA1221-01-597	7.6	3.0	82.0	3.3	3.9
Ellis-HOLL	7.7	2.8	82.0	5.1	2.3
Mean	10.0	3.6	41.0	39.0	6.1
LSD(0.05)	0.4	0.2	3.7	2.9	0.6
CV(%)	2.6	4.3	6.8	5.6	7.0

†Fatty acid percentage in seed oil reported beginning in 2017.

SEED PALMITIC ACID (%)
PRELIMINARY GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(B)	Stoneville, MS	Test Mean
Ellis	11.5	11.3	11.7	11.6	11.6	11.5
AG 4632RR2Y	10.4	11.1	10.8	11.1	11.1	10.9
AG 4835	11.4	11.4	11.4	11.8	11.5	11.5
AG 46X7	11.3	11.9	12.1	12.1	11.9	11.9
DA1221-01-597	7.5	7.6	7.8	7.6	7.4	7.6
Ellis-HOLL	7.6	7.5	7.6	7.2	8.4	7.7
Mean	10.0	10.1	10.2	10.2	10.3	10.2
LSD(0.05)	.	.	.	.	.	0.4
CV(%)						2.6

SEED STEARIC ACID (%)
PRELIMINARY GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(B)	Stoneville, MS	Test Mean
Ellis	3.8	3.5	3.6	3.6	3.5	3.6
AG 4632RR2Y	4.0	3.7	4.1	3.9	3.5	3.8
AG 4835	4.4	4.4	4.4	4.5	4.2	4.4
AG 46X7	3.8	4.0	4.1	4.3	3.9	4.0
DA1221-01-597	2.9	2.8	3.0	3.0	3.1	3.0
Ellis-HOLL	2.6	2.7	2.8	2.9	3.0	2.8
Mean	3.6	3.5	3.7	3.7	3.5	3.6
LSD(0.05)	.	.	.	.	.	0.2
CV(%)						4.3

SEED OLEIC ACID (%)
PRELIMINARY GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(B)	Stoneville, MS	Test Mean
Ellis	19.4	18.6	18.1	17.5	20.0	18.8
AG 4632RR2Y	28.7	20.7	23.3	21.1	21.1	23.0
AG 4835	19.4	17.6	19.9	18.4	19.5	19.0
AG 46X7	24.7	19.4	20.3	21.9	20.9	21.5
DA1221-01-597	81.8	82.4	82.6	81.1	83.1	82.2
Ellis-HOLL	84.7	84.4	84.5	85.1	71.9	82.1
Mean	43.1	40.5	41.5	40.9	39.4	41.1
LSD(0.05)	.	.	.	.	.	3.7
CV(%)						6.8

SEED LINOLEIC ACID (%)
PRELIMINARY GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(B)	Stoneville, MS	Test Mean
Ellis	57.5	58.4	58.4	59.0	58.0	58.3
AG 4632RR2Y	50.7	57.0	54.7	55.9	57.5	55.2
AG 4835	57.1	58.2	56.4	57.1	57.3	57.2
AG 46X7	53.7	56.9	55.8	54.2	56.7	55.5
DA1221-01-597	3.9	3.3	2.5	4.0	3.0	3.3
Ellis-HOLL	3.0	3.0	3.0	2.9	13.7	5.1
Mean	37.6	39.5	38.5	38.8	41.0	39.1
LSD(0.05)	.	.	.	.	.	2.9
CV(%)						5.6

SEED LINOLENIC ACID (%)
PRELIMINARY GROUP IV-S-LATE 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(B)	Stoneville, MS	Test Mean
Ellis	7.7	8.1	8.2	8.3	6.9	7.8
AG 4632RR2Y	6.2	7.5	7.1	7.9	6.8	7.1
AG 4835	7.7	8.4	7.9	8.2	7.4	7.9
AG 46X7	6.5	7.9	7.6	7.5	6.6	7.2
DA1221-01-597	3.9	3.9	4.1	4.3	3.5	3.9
Ellis-HOLL	2.0	2.4	2.2	2.0	3.1	2.3
Mean	5.7	6.4	6.2	6.4	5.7	6.1
LSD(0.05)	.	.	.	.	.	0.6
CV(%)						7.0

TABLE 51 - PARENTAGE OF ENTRIES
UNIFORM GROUP V 2018

Ent	Strain/Variety	Parentage	Source	Fn	Trans-genic†	Special Traits‡
1	Ellis	5002T x 5601T	Commercial			
2	JTN-5203	R93-171 x Anand	Arelli	F17		SCN, FLS
4	GoSoy 54G16	Commercial check	Pantalone		RR1	
5	UA 5612	Commercial check	Commercial			
6	TN11-5140	Hutcheson x TN89-39	Pantalone			High Protein
7	DA0912-07F	DT99-17483 x PI340023	Gillen			50% PI 340023
8	DA1037-25F	DB03-1381 x DB03-8416	Gillen			
9	DA1134-015F	DB03-1381 x S05-11482	Gillen			
10	K14-1686	S05-11482 x DS-880	Schapaugh	F5		
11	K15-1788	NCC05-1261 x 435.TCS	Schapaugh	F5		
12	K15-1800	NCC05-1261 x 435.TCS	Schapaugh	F5		
13	K15-1809	NCC05-1261 x 435.TCS	Schapaugh	F5		
14	R12-6751RR	R04-1276RR x 5002T	Mozzoni	F4:5	RR1	
15	R14-356	NCC05-1261 x R04-357	Mozzoni	F4:5		
16	R14-14797RR	C1176 x R04-1250RR	Mozzoni	F3:4	RR1	
17	S13-1955C	LD07-3419 x S05-11482	Chen			
18	S14-9017R	LD07-3419 x S08-9727RR1	Chen		RR1	
19	S15-10434C	S11-17025 x S11-14954	Chen			
20	S15-16886C	R09-430 x V08-1924	Chen			
21	S15-17812C	S05-11482 x cr12-739TP	Chen			
22	TN11-5104	Reselection of 5601T	Pantalone			Meal Protein 48%
23	TN12-5523R2	TN02-226 x MON RR2Y	Fallen		RR2	
24	TN12-5712R2	TN02-226 x MON RR2Y	Fallen		RR2	
25	TN13-4304	Reselection of AVRDC AGS 292	Pantalone			Meal Protein 48%
26	TN16-510R1	Ellis[5] x TN13-4730R1	Pantalone		RR1	
27	TN16-630R1	Ellis[5] x TN13-4730R1	Pantalone		RR1	
28	TN16-5858R1	Ellis[2] x TN13-5535R1	Pantalone		RR1	
29	TN-5601T	5601T	Pantalone			Meal Protein 48%
30	V12-1416	Allen x LG05-2887	Zhang	F4	RR1	
31	AG 55X7	Commercial check	Commercial		RRX	

†Conv= Conventional(non-transgenic), LL= Liberty Link®, RR1= Roundup Ready®, and RR2=Roundup Ready 2 Yield®
RRX= Roundup Ready 2 Xtend®
‡AA= modified amino acids, DNC= Do not cross with this, FLS= Frogeye leaf spot resistance, LJ= Long juvenile,
LN= low linolenic acid, LP= low phytate, HO= high olelic acid, HOLN= high oleic acid/low linolenic acid,
SCN= Soybean cyst nematode resistance, SR= Soybean rust resistance,
and STS= sulfonylurea tolerant

TABLE 52 - GENERAL SUMMARY OF PERFORMANCE
UNIFORM TEST V 2018

STRAIN/		AVG.	YIELD†			PROTEIN‡			OIL‡		
VARIETY	RANK	RANK	2018	17-18	16-18	2018	17-18	16-18	2018	17-19	16-18
Ellis	20	15	55.9	58.8	59.3	34.9	34.8	34.9	19.2	18.9	19.0
JTN-5203	26	19	53.4	56.0	56.5	34.6	34.8	34.9	19.8	19.5	19.5
GoSoy 54G16	29	20	52.9	55.6	.	32.8	32.8	.	20.2	19.8	.
UA 5612	4	12	59.3	61.0	61.2	34.8	34.8	35.0	19.7	19.3	19.3
TN11-5140	2	14	60.1	61.5	.	35.2	35.3	.	20.0	19.6	.
DA0912-07F	18	15	56.5	.	.	35.1	.	.	19.7	.	.
DA1037-25F	6	14	59.0	.	.	34.9	.	.	19.6	.	.
DA1134-015F	1	10	60.9	.	.	34.4	.	.	19.8	.	.
K14-1686	28	22	53.2	58.2	.	34.8	34.7	.	19.7	19.5	.
K15-1788	30	20	51.8	.	.	36.2	.	.	19.4	.	.
K15-1800	21	18	55.9	.	.	36.3	.	.	19.3	.	.
K15-1809	16	13	57.2	.	.	35.8	.	.	19.3	.	.
R12-6751RR	22	19	55.6	.	.	34.8	.	.	19.6	.	.
R14-356	9	14	58.5	.	.	34.6	.	.	19.8	.	.
R14-14797RR	5	13	59.1	.	.	36.0	.	.	19.1	.	.
S13-1955C	8	14	58.9	61.2	.	33.8	33.9	.	20.1	19.8	.
S14-9017R	14	15	57.5	60.8	.	32.7	32.3	.	21.7	21.6	.
S15-10434C	3	15	59.6	62.1	.	35.2	35.4	.	19.3	18.9	.
S15-16886C	7	15	59.0	.	.	34.7	.	.	20.0	.	.
S15-17812C	12	13	58.2	.	.	36.7	.	.	20.2	.	.
TN11-5104	24	19	54.7	.	.	36.1	.	.	19.4	.	.
TN12-5523R2	25	17	53.9	.	.	34.7	.	.	19.2	.	.
TN12-5712R2	17	14	57.0	.	.	34.8	.	.	19.2	.	.
TN13-4304	19	17	56.2	.	.	36.1	.	.	19.2	.	.
TN16-510R1	10	14	58.4	.	.	34.7	.	.	19.5	.	.
TN16-630R1	11	13	58.4	.	.	34.4	.	.	19.5	.	.
TN16-5858R1	15	14	57.4	.	.	33.6	.	.	20.2	.	.
TN-5601T	23	18	54.9	.	.	35.8	.	.	19.4	.	.
V12-1416	27	17	53.4	55.7	.	34.0	33.8	.	20.2	19.8	.
AG 55X7	13	14	57.6	.	.	35.0	.	.	19.7	.	.
Mean	.	.	56.8	.	.	34.9	.	.	19.7	.	.
LSD(0.05)	.	.	5.4	.	.	0.8	.	.	0.4	.	.
CV(%)	.	.	14.2	.	.	2.6	.	.	2.2	.	.

† Data not included in mean: 2018 - Orange,VA; Springfield,TN; Suffolk,VA; and Tallassee,AL
2017 - Tallassee, AL
2016 - Kinston, VA; Knoxville, TN; Warsau, VA

‡ Protein percentage and oil percentage reported on a 13% moisture basis beginning in 2015.

TABLE 53 - GENERAL SUMMARY OF PERFORMANCE -Part 2
UNIFORM TEST V 2018

STRAIN/ VARIETY	MEAL PRO %	MAT INDEX	LOD	HT	SEED QUALITY	SEED SIZE	FL. COLOR	PUB. COLOR	POD COLOR
Ellis	47.0	0	1	26	2.0	12.3	W	G	T
JTN-5203	46.9	-1	2	26	2.1	12.4	W	G	T
GoSoy 54G16	44.7	0	2	30	1.8	13.4	W	G	T
UA 5612	47.0	4	2	33	2.1	12.6	P	G	T
TN11-5140	47.8	7	2	35	1.8	13.7	W	G	T
DA0912-07F	47.5	4	2	30	2.2	13.4	P	G	T
DA1037-25F	47.2	1	2	26	2.2	13.5	P	G	T
DA1134-015F	46.6	1	2	31	2.3	13.2	P	T	T
K14-1686	47.1	0	2	27	2.4	12.9	W	T	T
K15-1788	48.8	1	2	24	2.0	13	S	G	T
K15-1800	48.9	1	2	24	1.9	12.2	W	G	T
K15-1809	48.2	2	2	25	2.0	12.9	S	G	T
R12-6751RR	47.1	2	2	32	2.0	14.9	W	G	T
R14-356	46.9	0	2	30	2.2	12	W	G	T
R14-14797RR	48.3	4	2	34	2.2	15.7	P	T	T
S13-1955C	46.0	3	2	31	2.7	13.2	W	T	T
S14-9017R	45.4	2	2	33	3.4	14.6	W	Lt	T
S15-10434C	47.4	4	2	30	2.3	12.6	P	T	T
S15-16886C	47.2	-1	2	33	2.0	11.8	W	G	T
S15-17812C	49.9	-1	2	30	2.6	13.5	W	G	T
TN11-5104	48.7	0	2	30	2.0	13.1	W	G	
TN12-5523R2	46.7	4	2	32	2.1	11.6	P	T	T
TN12-5712R2	46.8	6	2	33	1.9	12.4	P	T	T
TN13-4304	48.6	0	2	30	2.3	14	W	G	T
TN16-510R1	46.8	0	1	28	1.9	11.2	W	G	
TN16-630R1	46.4	0	2	30	2.1	11.1	W	G	
TN16-5858R1	45.7	1	2	29	2.0	11.5	W	G	
TN-5601T	48.2	3	2	33	1.9	13.3	W	G	
V12-1416	46.3	2	2	28	1.8	12.9	W	G	
AG 55X7	47.4	1	1	28	2.5	13.2			
Mean	47.2	2	2	30	2.2	12.9			
LSD(0.05)	0.9	2	0	2	0.4	0.7			
CV(%)	2.3	171	24	9	28.0	8.4			

TABLE 54 - GENERAL SUMMARY OF PEST REACTION
UNIFORM TEST V 2018

STRAIN/ VARIETY	SCN Cyst Score (1-5 Scale)†			PRK GA	SRK GA	SC RATING	SC SCORE
	Race 1	Race 3	Race 5				
Ellis	.	3	3	1.0	1.0	R	1.0
JTN-5203	.	1	1	3.3	4.8	SS	3.0
GoSoy 54G16	.	1	2	1.0	3.5	S	5.0
UA 5612	.	2	4	4.3	4.8	MR	2.0
TN11-5140	.	4	5	1.0	1.0	R	1.0
DA0912-07F	.	3	5	1.3	4.5	R	1.0
DA1037-25F	.	3	5	2.0	3.5	R	1.0
DA1134-015F	.	3	4	2.8	4.3	R	1.0
K14-1686	.	2	1	2.5	3.5	S	5.0
K15-1788	.	3	5	1.0	1.0	R	1.0
K15-1800	.	3	5	1.0	1.0	R	1.0
K15-1809	.	2	5	3.3	4.5	R	1.0
R12-6751RR	.	3	5	5.0	4.8	R	1.0
R14-356	.	3	5	4.5	4.8	R	1.0
R14-14797RR	.	3	4	1.0	1.0	R	1.0
S13-1955C	.	1	1	1.0	1.0	SS	3.0
S14-9017R	.	1	1	4.3	4.8	R	1.0
S15-10434C	.	2	1	1.5	1.5	S	5.0
S15-16886C	.	2	1	1.5	2.3	MS	4.0
S15-17812C	.	4	2	1.0	1.0	R	1.0
TN11-5104	.	5	5	1.3	1.0	R	1.0
TN12-5523R2	.	3	1	4.0	4.5	S	5.0
TN12-5712R2	.	2	1	4.5	3.8	SS	3.0
TN13-4304	.	4	5	1.0	1.0	R	1.0
TN16-510R1	.	5	4	1.0	1.0	R	1.0
TN16-630R1	.	3	5	1.0	1.3	R	1.0
TN16-5858R1	.	2	2	1.0	1.0	R	1.0
TN-5601T	.	3	4	1.0	1.0	R	1.0
V12-1416	.	4	5	3.0	4.0	SS	3.0
AG 55X7	.	3	5	1.8	1.0	R	1.0

†The race 1, 3, and 5 SCN populations used in these tests were typed as HG (*Heterodera glycines*) Type 2.5.7, HG Type 5.7, and HG Type 2.5.7, respectively. Reaction to the cultivar Pickett was used to distinguish between race 1 and race 5 SCN populations.

TABLE 55 - SEED YIELD (BUSHELS PER ACRE)
UNIFORM TEST V 2018 †

STRAIN/ VARIETY	Belle Mina, AL	Bossier City, LA	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Orange, VA
Ellis	59.8	32.9	62.3	75.0	41.8	60.5	36.8
JTN-5203	51.7	37.9	63.5	71.8	45.8	59.5	43.6
GoSoy 54G16	60.2	36.8	57.8	66.1	55.1	59.2	35.7
UA 5612	61.3	64.6	62.5	88.1	55.8	60.4	46.1
TN11-5140	56.2	78.3	61.3	84.7	62.8	52.7	53.4
DA0912-07F	63.6	53.3	56.8	68.4	52.9	63.4	38.1
DA1037-25F	57.4	62.8	66.0	81.6	52.5	60.1	36.4
DA1134-015F	60.1	53.0	65.0	95.0	54.0	58.2	37.4
K14-1686	53.6	39.0	53.6	81.4	44.4	52.7	27.1
K15-1788	48.7	23.5	50.9	76.1	51.3	60.4	35.4
K15-1800	51.6	45.0	53.1	78.2	53.7	57.5	39.7
K15-1809	45.6	39.7	55.1	82.1	50.5	61.9	46.0
R12-6751RR	58.4	59.0	55.4	84.4	47.2	60.8	54.3
R14-356	52.5	56.5	59.8	85.8	51.0	62.5	46.8
R14-14797RR	56.4	64.1	57.8	87.2	57.3	58.3	39.1
S13-1955C	62.8	60.8	56.6	83.6	57.9	57.4	48.6
S14-9017R	54.7	34.4	55.1	101.6	48.9	58.7	29.4
S15-10434C	54.4	74.8	54.9	96.0	46.4	54.7	44.1
S15-16886C	57.9	75.1	53.5	87.1	45.1	60.0	32.0
S15-17812C	58.9	37.6	71.1	89.7	46.1	53.7	49.7
TN11-5104	57.0	51.7	58.6	78.8	47.8	53.8	40.8
TN12-5523R2	50.5	60.2	36.8	78.0	52.7	57.3	33.6
TN12-5712R2	51.6	57.0	54.9	76.2	57.3	55.8	43.0
TN13-4304	57.8	53.3	59.8	78.9	49.2	58.0	25.2
TN16-510R1	60.4	48.8	59.6	85.0	48.1	60.5	41.5
TN16-630R1	53.7	53.1	62.8	75.9	57.8	63.1	45.3
TN16-5858R1	54.6	49.9	56.7	76.3	50.5	62.7	46.6
TN-5601T	54.8	49.3	51.9	81.2	48.4	60.2	43.1
V12-1416	50.0	53.5	45.9	60.4	53.4	65.2	54.3
AG 55X7	56.8	50.9	61.4	83.8	43.2	58.5	45.0
Mean	55.8	51.9	57.3	81.3	51.0	58.9	41.3
LSD(0.05)	10.5	11.5	10.8	8.2	9.2	5.5	12.8
CV(%)	11.6	13.6	11.5	6.2	10.8	5.7	19.0

† Data not included in mean: 2018 - Orange,VA; Springfield,TN; Suffolk,VA; and Tallassee,AL

TABLE 55 - SEED YIELD (BUSHELS PER ACRE) (continued)
UNIFORM TEST V 2018 †

STRAIN/ VARIETY	Pittsburg, KS	Plymouth, NC	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Suffolk, VA
Ellis	52.1	30.9	62.8	48.9	31.3	71.6	37.1
JTN-5203	62.3	28.8	52.2	45.9	38.7	50.4	26.9
GoSoy 54G16	50.5	28.7	50.7		34.6	66.1	47.8
UA 5612	48.1	40.5	52.5	42.7	33.0	71.8	61.5
TN11-5140	49.3	37.6	58.7	47.1	31.7	63.1	48.6
DA0912-07F	53.0	28.9	46.4	44.4	28.7	71.4	36.6
DA1037-25F	48.4	36.0	49.9	45.5	26.0	75.8	41.0
DA1134-015F	56.0	41.3	57.8	48.9	38.8	74.5	55.4
K14-1686	56.9	36.8	55.8	40.9	42.6	63.8	34.8
K15-1788	55.1	39.3	58.4	41.4	32.6	53.5	55.1
K15-1800	58.4	31.0	59.5	43.6	35.0	71.5	61.3
K15-1809	59.2	38.9	60.4	55.7	32.1	67.4	71.8
R12-6751RR	47.5	35.1	50.1	41.7	33.8	63.8	39.1
R14-356	52.8	35.4	50.6	53.0	32.2	85.0	54.9
R14-14797RR	52.8	39.1	55.1	48.0	38.6	66.7	66.0
S13-1955C	61.3	36.2	56.0	43.1	50.5	68.7	58.1
S14-9017R	58.2	35.9	56.8	48.4	48.7	63.3	50.1
S15-10434C	63.5	29.2	57.6	47.8	47.4	73.5	52.0
S15-16886C	61.8	36.3	48.8	44.9	36.7	77.3	43.3
S15-17812C	61.7	30.7	60.2	51.3	45.2	69.0	53.9
TN11-5104	49.9	37.5	58.7	39.4	38.0	70.3	41.4
TN12-5523R2	61.3	39.4	57.5	50.3	38.7	43.1	57.8
TN12-5712R2	61.0	42.3	61.4	48.2	47.8	48.9	74.1
TN13-4304	49.7	36.3	56.2	45.6	35.6	64.3	37.8
TN16-510R1	53.1	32.8	59.4	38.8	38.2	83.9	37.8
TN16-630R1	51.0	30.3	62.8	53.4	34.9	66.7	45.8
TN16-5858R1	59.5	40.0	52.6	49.3	44.2	67.4	46.7
TN-5601T	48.5	42.0	52.6	45.6	38.8	55.7	47.9
V12-1416	50.3	47.4	55.5	45.6	36.3	43.3	46.7
AG 55X7	49.8	37.7	63.6	55.4	36.7	57.7	60.2
Mean	54.8	36.1	56.0	46.7	37.6	65.7	49.7
LSD(0.05)	5.0	12.0	7.3	9.1	11.2	11.9	12.7
CV(%)	5.6	15.3	7.9	11.9	18.2	11.1	15.6

† Data not included in mean: 2018 - Orange,VA; Springfield,TN; Suffolk,VA; and Tallassee,AL

TABLE 55 - SEED YIELD (BUSHELS PER ACRE) (continued)
UNIFORM TEST V 2018 †

STRAIN/ VARIETY	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	36.5	71.9	55.9
JTN-5203	11.7	70.7	53.4
GoSoy 54G16	26.4	59.5	52.9
UA 5612	12.6	63.1	59.3
TN11-5140	48.2	69.3	60.1
DA0912-07F	18.7	75.0	56.5
DA1037-25F	30.9	71.9	59.0
DA1134-015F	21.5	66.6	60.9
K14-1686	16.7	60.4	53.2
K15-1788	18.3	63.5	51.8
K15-1800	29.5	66.8	55.9
K15-1809	5.2	69.6	57.2
R12-6751RR	28.1	62.9	55.6
R14-356	7.8	56.6	58.5
R14-14797RR	29.3	66.1	59.1
S13-1955C	30.0	61.9	58.9
S14-9017R	9.2	72.2	57.5
S15-10434C	28.9	61.3	59.6
S15-16886C	37.8	59.2	59.0
S15-17812C	36.1	67.2	58.2
TN11-5104	29.4	52.7	54.7
TN12-5523R2	9.0	60.6	53.9
TN12-5712R2	9.4	69.8	57.0
TN13-4304	32.7	65.0	56.2
TN16-510R1	35.5	68.2	58.4
TN16-630R1	33.6	69.4	58.4
TN16-5858R1	34.7	69.9	57.4
TN-5601T	31.4	68.5	54.9
V12-1416	23.1	71.7	53.4
AG 55X7	19.8	72.1	57.6
Mean	24.7	66.1	56.8
LSD(0.05)	10.5	4.5	5.4
CV(%)	25.9	4.2	14.2

† Data not included in mean: 2018 - Orange,VA; Springfield,TN; Suffolk,VA; and Tallassee,AL

TABLE 56 - RELATIVE MATURITY (DAYS EARLIER (-) OR LATER (+) THAN ENTRY 1)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	*Belle Mina, AL*	*Bossier City, LA*	*Jackson, TN*	*Keiser, AR*	*Knoxville, TN*	*McCune, KS*	*Pittsburg, KS*
Ellis	9/26	9/18	10/1	10/3	10/15	10/18	10/13
JTN-5203	-1	-3	1	-3	-1	1	2
GoSoy 54G16	1	-2	-2	-2	1	3	3
UA 5612	5	2	5	1	1	2	7
TN11-5140	9	3	8	1	4	8	10
DA0912-07F	6	3	8	1	2	6	9
DA1037-25F	2	0	2	-1	-1	2	3
DA1134-015F	-4	0	2	1	-1	2	4
K14-1686	-1	0	-2	1	-1	3	3
K15-1788	1	0	1	0	0	1	1
K15-1800	-1	-1	1	0	-1	2	3
K15-1809	3	-1	2	0	-1	7	7
R12-6751RR	2	2	3	-1	-1	8	7
R14-356	-3	1	0	-2	0	1	1
R14-14797RR	5	3	8	0	0	5	10
S13-1955C	5	1	3	2	2	2	5
S14-9017R	-1	-3	6	0	0	-1	3
S15-10434C	3	3	5	-1	0	3	4
S15-16886C	-5	1	-3	-4	-1	2	-1
S15-17812C	-1	-15	-2	-2	-1	5	-3
TN11-5104	0	-1	0	-3	-1	1	3
TN12-5523R2	6	3	4	0	1	7	11
TN12-5712R2	8	3	8	-9	3	11	12
TN13-4304	-1	-1	1	-2	-1	1	0
TN16-510R1	-3	-1	0	-1	-1	0	0
TN16-630R1	-3	-1	0	-1	-1	2	-1
TN16-5858R1	-1	1	3	0	-1	3	4
TN-5601T	8	3	5	-1	0	2	6
V12-1416	4	1	2	-2	1	6	8
AG 55X7	-1	1	0	1	-1	0	2
Mean	1	0	2	-1	0	3	4
LSD(0.05)	3	2	5	6	1	5	4
CV(%)	120	932	128	398	1765	102	54

TABLE 56 - RELATIVE MATURITY (continued)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Plymouth, NC	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Tallassee, AL	Warsaw, VA
Ellis	10/4	10/11	10/20	9/29	9/22	10/6	10/19
JTN-5203	0	0	-1	0	0	-3	1
GoSoy 54G16	3	1	.	4	-2	-1	0
UA 5612	7	3	4	5	9	-2	1
TN11-5140	10	8	11	8	-2	2	12
DA0912-07F	9	6	7	7	-1	-3	3
DA1037-25F	5	1	2	6	-2	0	1
DA1134-015F	6	0	2	3	-3	-2	0
K14-1686	4	-1	1	3	-1	-2	-1
K15-1788	5	2	1	3	-2	-1	-2
K15-1800	5	3	2	3	-1	0	0
K15-1809	8	4	4	3	-2	-3	0
R12-6751RR	1	2	4	4	-5	-1	1
R14-356	1	-1	0	2	-2	-2	0
R14-14797RR	12	5	7	6	-2	-1	1
S13-1955C	6	2	5	4	5	2	0
S14-9017R	8	3	2	4	8	-1	0
S15-10434C	7	6	6	6	8	1	0
S15-16886C	1	-1	-1	4	-3	2	-3
S15-17812C	0	-1	-2	1	-1	2	0
TN11-5104	2	0	4	3	-3	1	-7
TN12-5523R2	7	4	4	8	1	-1	1
TN12-5712R2	14	7	7	9	2	-1	9
TN13-4304	1	0	-1	3	-4	0	0
TN16-510R1	-1	3	2	1	-2	1	0
TN16-630R1	0	1	2	2	-2	-1	0
TN16-5858R1	6	3	1	3	-3	-3	1
TN-5601T	10	2	4	6	-1	-1	2
V12-1416	11	2	6	6	-12	-2	3
AG 55X7	5	5	3	3	-2	1	0
Mean	5	2	3	4	-1	-1	1
LSD(0.05)	6	3	3	2	3	2	1
CV(%)	59	67	56	32	210	226	99

TABLE 56 - RELATIVE MATURITY (continued)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	*Test Mean*
Ellis	10/6
JTN-5203	-1
GoSoy 54G16	0
UA 5612	4
TN11-5140	7
DA0912-07F	4
DA1037-25F	1
DA1134-015F	1
K14-1686	0
K15-1788	1
K15-1800	1
K15-1809	2
R12-6751RR	2
R14-356	0
R14-14797RR	4
S13-1955C	3
S14-9017R	2
S15-10434C	4
S15-16886C	-1
S15-17812C	-1
TN11-5104	0
TN12-5523R2	4
TN12-5712R2	6
TN13-4304	0
TN16-510R1	0
TN16-630R1	0
TN16-5858R1	1
TN-5601T	3
V12-1416	2
AG 55X7	1
Mean	2
LSD(0.05)	2
CV(%)	171

TABLE 57 - PLANT HEIGHT (INCHES)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Belle Mina, AL	Bossier City, LA	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Orange, VA
Ellis	26	17	33	20	21	31	.
JTN-5203	29	15	32	19	23	37	.
GoSoy 54G16	28	17	36	23	25	40	.
UA 5612	34	21	37	26	28	40	.
TN11-5140	37	23	38	30	30	45	.
DA0912-07F	34	18	39	23	26	39	.
DA1037-25F	26	17	34	21	21	32	.
DA1134-015F	35	20	33	25	29	43	.
K14-1686	25	15	33	23	26	32	.
K15-1788	24	13	29	20	23	25	.
K15-1800	25	15	29	20	23	29	.
K15-1809	24	16	29	22	23	27	.
R12-6751RR	30	22	37	28	28	42	.
R14-356	31	20	34	24	26	35	.
R14-14797RR	35	21	42	28	30	39	.
S13-1955C	32	20	31	25	28	42	.
S14-9017R	34	19	38	28	28	37	.
S15-10434C	31	19	33	26	30	37	.
S15-16886C	31	22	39	27	30	44	.
S15-17812C	30	18	33	26	27	35	.
TN11-5104	33	19	38	25	27	40	.
TN12-5523R2	33	18	41	27	27	34	.
TN12-5712R2	33	21	41	26	29	35	.
TN13-4304	33	20	38	21	27	37	.
TN16-510R1	29	18	35	21	23	40	.
TN16-630R1	29	21	37	21	25	40	.
TN16-5858R1	28	18	36	21	24	35	.
TN-5601T	34	17	38	28	29	46	.
V12-1416	30	19	33	24	24	36	.
AG 55X7	27	16	37	21	24	37	.
							.
Mean	30	19	35	24	26	37	.
LSD(0.05)	3	3	4	3	4	.	.
CV(%)	6	11	7	8	9	.	.

TABLE 57 - PLANT HEIGHT (INCHES) (continued)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	*Pittsburg, KS*	*Plymouth, NC*	*Portageville, MO(A)*	*Portageville, MO(B)*	*Springfield, TN*	*Stoneville, MS*	*Suffolk, VA*
Ellis	28	28	37	25	23	23	21
JTN-5203	32	31	35	24	23	25	20
GoSoy 54G16	36	35	40		26	31	23
UA 5612	38	40	41	33	29	38	35
TN11-5140	35	40	41	39	28	38	28
DA0912-07F	35	37	36	33	24	31	21
DA1037-25F	32	30	34	23	23	25	24
DA1134-015F	36	36	38	33	29	29	26
K14-1686	32	32	36	29	25	27	23
K15-1788	26	27	30	22	21	26	25
K15-1800	28	26	31	24	22	24	23
K15-1809	29	30	33	24	21	26	26
R12-6751RR	36	34	39	36	24	31	26
R14-356	35	34	36	31	26	35	27
R14-14797RR	39	34	41	37	29	42	30
S13-1955C	35	34	36	33	30	31	32
S14-9017R	32	36	42	33	28	40	30
S15-10434C	35	34	36	32	28	34	23
S15-16886C	37	37	38	35	31	36	24
S15-17812C	35	33	36	30	27	33	29
TN11-5104	32	36	41	29	26	29	20
TN12-5523R2	37	40	40	34	26	31	30
TN12-5712R2	35	36	41	33	30	39	34
TN13-4304	30	32	40	33	26	28	22
TN16-510R1	32	34	36	30	24	34	17
TN16-630R1	38	34	39	31	25	28	22
TN16-5858R1	30	36	40	29	25	31	21
TN-5601T	35	42	42	33	30	34	29
V12-1416	30	34	37	30	23	30	19
AG 55X7	30	32	38	28	24	25	20
Mean	33	34	38	31	26	31	25
LSD(0.05)	.	.	3	5	4	3	5
CV(%)	.	.	5	10	8	5	13

TABLE 57 - PLANT HEIGHT (INCHES) (continued)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	19	34	26
JTN-5203	20	33	26
GoSoy 54G16	23	37	30
UA 5612	23	37	33
TN11-5140	30	40	35
DA0912-07F	24	36	30
DA1037-25F	19	32	26
DA1134-015F	25	35	31
K14-1686	18	33	27
K15-1788	16	29	24
K15-1800	17	28	24
K15-1809	17	28	25
R12-6751RR	25	38	32
R14-356	18	34	30
R14-14797RR	26	37	34
S13-1955C	26	36	31
S14-9017R	22	37	33
S15-10434C	22	34	30
S15-16886C	28	37	33
S15-17812C	21	36	30
TN11-5104	24	34	30
TN12-5523R2	22	35	32
TN12-5712R2	24	37	33
TN13-4304	23	35	30
TN16-510R1	20	36	28
TN16-630R1	22	36	30
TN16-5858R1	22	38	29
TN-5601T	22	38	33
V12-1416	21	36	28
AG 55X7	22	34	28
Mean	22	35	30
LSD(0.05)	4	2	2
CV(%)	10	4	9

TABLE 58 - PLANT LODGING (1-5)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Belle Mina, AL	Bossier City, LA	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Orange, VA
Ellis	1.0	1.0	1.0	1.0	1.7	1.0	.
JTN-5203	1.0	1.0	1.0	1.0	1.7	1.0	.
GoSoy 54G16	1.0	1.0	2.0	1.0	1.8	1.0	.
UA 5612	2.0	1.0	3.7	1.0	2.8	2.3	.
TN11-5140	1.0	1.0	3.0	1.0	2.3	2.0	.
DA0912-07F	1.0	1.0	3.3	1.0	1.8	2.7	.
DA1037-25F	1.0	1.0	3.0	1.0	1.5	1.0	.
DA1134-015F	1.7	1.0	3.7	1.0	3.0	2.7	.
K14-1686	1.0	1.0	2.0	1.0	2.0	1.0	.
K15-1788	1.0	1.0	1.3	1.0	1.8	1.0	.
K15-1800	1.0	1.0	1.7	1.0	2.0	1.0	.
K15-1809	1.0	1.0	2.0	1.0	2.0	1.0	.
R12-6751RR	1.0	1.0	1.7	1.0	2.0	1.0	.
R14-356	1.3	1.0	3.7	1.0	2.7	2.0	.
R14-14797RR	1.7	1.0	3.0	1.0	2.7	1.7	.
S13-1955C	1.3	1.0	3.7	1.0	2.8	3.0	.
S14-9017R	1.0	1.0	2.7	1.3	1.5	1.0	.
S15-10434C	1.7	1.0	3.0	1.0	2.8	2.0	.
S15-16886C	1.7	1.0	2.7	1.0	2.8	1.7	.
S15-17812C	1.0	1.0	2.3	1.0	2.5	1.7	.
TN11-5104	1.0	1.0	2.0	1.0	2.0	1.3	.
TN12-5523R2	1.0	1.0	2.7	1.0	2.2	1.3	.
TN12-5712R2	1.0	1.0	2.7	1.0	1.8	1.3	.
TN13-4304	1.0	1.0	2.3	1.0	1.7	1.3	.
TN16-510R1	1.0	1.0	1.0	1.0	1.5	1.0	.
TN16-630R1	1.0	1.0	2.0	1.0	1.8	1.3	.
TN16-5858R1	1.0	1.0	1.7	1.0	1.5	1.0	.
TN-5601T	1.0	1.0	2.7	1.0	2.0	2.0	.
V12-1416	1.0	1.0	1.7	1.0	1.7	1.0	.
AG 55X7	1.0	1.0	1.3	1.0	1.7	1.0	.
							.
Mean	1.1	1.0	2.3	1.0	2.1	1.5	.
LSD(0.05)	0.4	.	0.9	0.2	0.5	0.7	.
CV(%)	21.1	0.0	22.6	10.4	15.7	29.1	.

TABLE 58 - PLANT LODGING (1-5) (continued)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Pittsburg, KS	Plymouth, NC	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Suffolk, VA
Ellis	1.0	1.5	3.0	2.0	1.0	2.0	1.0
JTN-5203	1.0	1.2	3.7	2.0	1.0	2.7	1.0
GoSoy 54G16	1.0	1.0	3.0		1.0	2.3	1.0
UA 5612	1.3	2.0	4.0	2.7	1.0	3.0	1.2
TN11-5140	1.0	1.8	3.3	3.0	1.0	3.0	1.0
DA0912-07F	1.0	1.2	4.0	3.0	1.0	2.7	1.2
DA1037-25F	1.0	1.2	4.0	2.7	1.0	2.0	1.0
DA1134-015F	1.3	2.0	3.7	3.0	1.0	2.3	1.0
K14-1686	1.0	1.5	3.0	3.0	1.0	2.3	1.2
K15-1788	1.0	1.5	3.0	3.0	1.0	2.0	1.0
K15-1800	1.0	1.0	3.0	2.3	1.0	2.0	1.0
K15-1809	1.0	1.2	3.0	2.3	1.0	2.0	1.0
R12-6751RR	1.0	1.5	4.0	3.0	1.0	2.3	1.0
R14-356	1.0	1.5	4.3	3.0	1.0	3.0	1.2
R14-14797RR	1.0	1.5	3.0	3.0	1.0	3.3	1.0
S13-1955C	2.0	1.5	4.0	3.0	1.0	2.7	1.0
S14-9017R	1.0	1.5	3.0	2.3	1.0	3.3	1.0
S15-10434C	1.0	2.5	4.0	3.3	1.0	3.3	1.0
S15-16886C	1.7	2.0	4.0	3.0	1.0	3.0	1.0
S15-17812C	1.3	2.0	3.3	2.7	1.0	2.3	1.0
TN11-5104	1.0	1.3	3.0	2.0	1.0	2.0	1.0
TN12-5523R2	1.3	2.5	3.0	2.7	1.0	2.0	1.2
TN12-5712R2	1.0	1.2	3.0	3.0	1.0	3.0	1.0
TN13-4304	1.0	1.5	3.0	2.3	1.0	2.0	1.0
TN16-510R1	1.0	1.0	3.0	2.3	1.0	2.7	1.0
TN16-630R1	1.0	1.0	3.7	2.0	1.0	2.0	1.0
TN16-5858R1	1.0	1.2	3.7	2.0	1.0	2.3	1.0
TN-5601T	1.0	1.5	3.7	2.7	1.0	2.7	1.0
V12-1416	1.0	1.0	3.0	3.0	1.0	2.0	1.0
AG 55X7	1.0	1.2	3.3	2.3	1.0	2.0	1.0
Mean	1.1	1.5	3.4	2.6	1.0	2.5	1.0
LSD(0.05)	0.4	1.0	0.5	0.6	.	0.6	0.2
CV(%)	20.9	29.8	9.1	14.0	0.0	15.9	11.4

TABLE 58 - PLANT LODGING (1-5) (continued)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	1.0	1.9	1.4
JTN-5203	1.0	2.1	1.5
GoSoy 54G16	1.0	2.1	1.5
UA 5612	1.0	2.4	2.1
TN11-5140	1.0	2.3	1.8
DA0912-07F	1.0	2.4	1.9
DA1037-25F	1.0	2.0	1.6
DA1134-015F	1.0	2.2	2.0
K14-1686	1.0	2.3	1.6
K15-1788	1.0	1.9	1.5
K15-1800	1.0	1.8	1.5
K15-1809	1.0	2.0	1.5
R12-6751RR	1.0	2.1	1.6
R14-356	1.0	2.8	2.0
R14-14797RR	1.0	2.4	1.9
S13-1955C	1.0	2.6	2.1
S14-9017R	1.0	1.9	1.6
S15-10434C	1.0	2.6	2.1
S15-16886C	1.0	2.5	2.0
S15-17812C	1.0	2.3	1.8
TN11-5104	1.0	3.0	1.6
TN12-5523R2	1.0	2.5	1.7
TN12-5712R2	1.0	2.4	1.7
TN13-4304	1.0	2.1	1.6
TN16-510R1	1.0	2.0	1.4
TN16-630R1	1.0	2.1	1.5
TN16-5858R1	1.0	1.9	1.5
TN-5601T	1.0	2.4	1.8
V12-1416	1.0	2.0	1.5
AG 55X7	1.0	1.8	1.4
Mean	1.0	2.2	1.7
LSD(0.05)	.	0.3	0.2
CV(%)	0.0	8.6	23.8

TABLE 59 - SEED QUALITY (1-5)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Belle Mina, AL	Bossier City, LA	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Orange, VA
Ellis	1.0	2.0	2.0	1.7	1.0	.	1.0
JTN-5203	1.0	3.0	2.0	1.0	1.0	.	1.0
GoSoy 54G16	1.0	1.0	2.0	1.0	2.0	.	1.0
UA 5612	1.7	3.0	2.0	2.0	1.0	.	1.0
TN11-5140	2.7	1.0	2.0	1.0	1.0	.	1.0
DA0912-07F	2.0	1.0	2.0	1.7	2.0	.	1.0
DA1037-25F	2.3	2.0	2.0	1.7	1.0	.	1.0
DA1134-015F	3.3	2.0	3.0	2.0	1.0	.	1.3
K14-1686	3.3	1.0	2.0	2.3	2.0	.	1.3
K15-1788	2.0	3.0	2.0	1.7	1.0	.	1.0
K15-1800	1.3	3.0	2.0	1.3	1.0	.	1.3
K15-1809	2.7	2.0	2.0	1.3	2.0	.	1.0
R12-6751RR	1.7	2.0	2.0	1.7	2.0	.	1.0
R14-356	2.0	2.0	2.0	1.7	2.0	.	1.0
R14-14797RR	2.0	1.0	3.0	1.7	2.0	.	1.3
S13-1955C	2.7	3.0	3.0	3.0	2.0	.	1.0
S14-9017R	3.7	4.0	4.0	3.0	2.0	.	1.7
S15-10434C	2.0	2.0	3.0	1.0	2.0	.	1.0
S15-16886C	1.0	2.0	2.0	1.3	1.0	.	1.0
S15-17812C	2.0	3.0	3.0	2.6	2.0	.	1.3
TN11-5104	1.0	2.0	2.0	1.0	1.0	.	1.0
TN12-5523R2	2.0	2.0	2.0	2.0	1.0	.	1.0
TN12-5712R2	2.0	1.0	2.0	1.3	1.0	.	1.0
TN13-4304	1.0	3.0	2.0	1.7	2.0	.	1.7
TN16-510R1	1.0	3.0	1.0	1.1	1.0	.	1.0
TN16-630R1	1.0	3.0	2.0	1.7	1.0	.	1.0
TN16-5858R1	1.0	2.0	2.0	1.7	1.0	.	1.0
TN-5601T	1.0	2.0	2.0	1.7	1.0	.	1.0
V12-1416	1.0	2.0	2.0	1.7	1.0	.	1.0
AG 55X7	2.0	4.0	2.0	1.7	2.0	.	1.0
						.	
Mean	1.8	2.2	2.2	1.7	1.4	.	1.1
LSD(0.05)	0.6	.	.	0.8	.	.	0.5
CV(%)	20.9	0.0	.	29.2	0.0	.	30.3

TABLE 59 - SEED QUALITY (1-5) (continued)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Pittsburg, KS	Plymouth, NC	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Suffolk, VA
Ellis	.	2.0	1.7	3.0	.	3.0	4.0
JTN-5203	.	1.5	1.7	3.0	.	3.0	3.7
GoSoy 54G16	.	2.0	2.0		.	3.0	3.0
UA 5612	.	1.5	1.7	3.3	.	3.0	3.0
TN11-5140	.	1.5	1.3	2.7	.	3.0	3.0
DA0912-07F	.	1.8	1.7	3.0	.	3.0	4.0
DA1037-25F	.	2.5	1.3	3.0	.	3.0	4.0
DA1134-015F	.	2.0	1.7	3.3	.	3.0	3.0
K14-1686	.	1.5	1.7	2.7	.	3.0	3.3
K15-1788	.	1.5	1.3	3.0	.	3.0	3.0
K15-1800	.	1.5	1.0	2.0	.	3.0	3.0
K15-1809	.	1.5	1.0	2.3	.	3.0	3.3
R12-6751RR	.	1.5	1.0	3.0	.	3.0	3.7
R14-356	.	1.5	1.0	2.0	.	3.0	3.7
R14-14797RR	.	2.0	2.3	3.0	.	3.0	4.0
S13-1955C	.	2.3	1.7	3.0	.	3.0	4.0
S14-9017R	.	2.5	3.3	4.0	.	4.0	5.0
S15-10434C	.	1.5	1.7	3.0	.	3.0	4.3
S15-16886C	.	1.5	2.3	2.7	.	3.0	4.3
S15-17812C	.	2.8	1.7	2.0	.	3.0	5.0
TN11-5104	.	1.8	1.7	2.7	.	3.0	3.7
TN12-5523R2	.	1.8	1.3	3.0	.	3.0	3.0
TN12-5712R2	.	2.0	1.3	3.0	.	3.0	3.0
TN13-4304	.	2.3	2.0	2.3	.	3.0	5.0
TN16-510R1	.	1.5	1.3	2.3	.	3.0	4.7
TN16-630R1	.	1.5	1.3	3.0	.	3.0	4.3
TN16-5858R1	.	1.5	1.3	2.7	.	3.0	4.0
TN-5601T	.	1.8	1.3	2.7	.	3.0	3.3
V12-1416	.	1.7	1.0	3.0	.	3.0	3.0
AG 55X7	.	2.8	2.3	2.7	.	3.0	4.3
	.				.		
Mean	.	1.8	1.6	2.8	.	3.0	3.8
LSD(0.05)	.	0.5	0.9	0.6	.	.	0.8
CV(%)	.	13.7	35.5	13.2	.	.	12.9

TABLE 59 - SEED QUALITY (1-5) (continued)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	1.3	2.2	2.0
JTN-5203	3.3	2.1	2.1
GoSoy 54G16	1.7	1.8	1.8
UA 5612	2.3	2.0	2.1
TN11-5140	2.0	1.9	1.8
DA0912-07F	3.7	2.0	2.2
DA1037-25F	2.7	1.9	2.2
DA1134-015F	3.0	1.9	2.3
K14-1686	4.0	2.3	2.4
K15-1788	2.0	1.7	2.0
K15-1800	2.0	1.8	1.9
K15-1809	2.7	1.6	2.0
R12-6751RR	1.3	2.3	2.0
R14-356	4.7	2.3	2.2
R14-14797RR	1.0	2.0	2.2
S13-1955C	4.0	2.4	2.7
S14-9017R	4.7	2.1	3.4
S15-10434C	3.3	1.8	2.3
S15-16886C	2.0	2.1	2.0
S15-17812C	3.7	2.1	2.6
TN11-5104	2.3	2.5	2.0
TN12-5523R2	3.7	1.6	2.1
TN12-5712R2	3.0	1.7	1.9
TN13-4304	1.7	2.4	2.3
TN16-510R1	1.7	2.3	1.9
TN16-630R1	2.3	2.2	2.1
TN16-5858R1	2.7	2.1	2.0
TN-5601T	2.0	2.2	1.9
V12-1416	1.3	1.5	1.8
AG 55X7	3.3	1.6	2.5
Mean	2.6	2.0	2.2
LSD(0.05)	1.3	0.2	0.4
CV(%)	30.7	6.5	28.5

TABLE 60 - SEED SIZE (GRAMS PER 100 SEED)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	*Belle Mina, AL*	*Bossier City, LA*	*Jackson, TN*	*Keiser, AR*	*Knoxville, TN*	*McCune, KS*	*Orange, VA*
Ellis	11.8	14.9	11.8	13.6	10.9	.	12.0
JTN-5203	13.3	13.9	13.7	13.7	9.8	.	12.0
GoSoy 54G16	12.3	14.0	13.4	14.6	12.3	.	14.3
UA 5612	11.6	17.9	12.7	12.5	11.1	.	12.7
TN11-5140	11.8	16.9	13.4	13.5	12.2	.	14.0
DA0912-07F	11.6	15.8	13.1	14.1	12.3	.	13.3
DA1037-25F	12.3	16.2	13.6	14.5	10.7	.	13.3
DA1134-015F	11.2	15.2	13.4	13.7	11.5	.	13.7
K14-1686	11.3	14.9	12.0	13.9	10.8	.	14.0
K15-1788	12.6	14.0	11.3	14.0	10.5	.	13.3
K15-1800	10.8	14.3	10.6	13.5	10.4	.	12.3
K15-1809	10.9	12.9	12.0	13.5	10.6	.	13.3
R12-6751RR	12.5	18.1	15.0	15.8	13.3	.	15.7
R14-356	10.4	15.0	11.0	12.9	9.9	.	13.7
R14-14797RR	12.5	17.1	15.3	14.8	14.5	.	14.7
S13-1955C	12.9	15.1	11.7	14.2	12.2	.	13.7
S14-9017R	13.2	14.9	15.6	16.5	13.0	.	13.7
S15-10434C	12.2	16.4	11.6	12.7	10.3	.	13.7
S15-16886C	11.1	15.6	11.2	12.3	10.1	.	12.3
S15-17812C	13.2	14.6	13.2	14.5	10.2	.	11.7
TN11-5104	13.1	16.0	12.7	13.7	12.0	.	13.7
TN12-5523R2	11.4	15.2	10.3	11.7	10.3	.	12.7
TN12-5712R2	11.2	13.8	11.3	11.3	11.7	.	13.7
TN13-4304	13.3	16.8	13.5	14.8	11.9	.	13.7
TN16-510R1	11.2	14.1	10.6	12.3	8.6	.	11.0
TN16-630R1	11.4	13.5	11.1	12.2	9.1	.	10.7
TN16-5858R1	11.4	14.8	11.2	12.2	9.2	.	11.3
TN-5601T	11.6	16.1	12.8	13.9	11.1	.	13.7
V12-1416	10.6	15.5	12.4	12.2	11.8	.	14.0
AG 55X7	11.9	16.3	11.1	14.7	10.7	.	13.0
						.	
Mean	11.9	15.3	12.4	13.6	11.1	.	13.2
LSD(0.05)	1.9	.	.	1.0	.	.	1.6
CV(%)	9.7	.	.	4.3	0.0	.	7.3

TABLE 60 - SEED SIZE (GRAMS PER 100 SEED) (continued)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Pittsburg, KS	Plymouth, NC	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Suffolk, VA
Ellis	.	10.4	11.2	11.4	.	14.3	.
JTN-5203	.	10.4	11.4	11.9	.	14.1	.
GoSoy 54G16	.	11.5	12.6	.	.	14.5	.
UA 5612	.	11.3	11.4	12.6	.	13.4	.
TN11-5140	.	13.0	13.0	14.2	.	11.8	.
DA0912-07F	.	10.7	13.0	14.6	.	12.5	.
DA1037-25F	.	12.0	12.9	13.5	.	14.3	.
DA1134-015F	.	12.6	12.4	13.5	.	13.2	.
K14-1686	.	11.0	12.6	13.1	.	13.6	.
K15-1788	.	11.3	12.3	13.8	.	13.4	.
K15-1800	.	11.6	11.8	12.4	.	13.1	.
K15-1809	.	12.7	12.6	13.6	.	15.1	.
R12-6751RR	.	12.0	14.3	15.4	.	15.5	.
R14-356	.	9.9	10.8	11.1	.	13.1	.
R14-14797RR	.	15.6	14.8	17.1	.	15.0	.
S13-1955C	.	11.8	12.4	13.1	.	13.1	.
S14-9017R	.	13.4	14.2	13.9	.	16.0	.
S15-10434C	.	11.6	10.9	12.1	.	12.7	.
S15-16886C	.	10.8	11.1	11.5	.	12.2	.
S15-17812C	.	13.3	11.7	12.1	.	16.5	.
TN11-5104	.	12.2	12.6	12.3	.	13.8	.
TN12-5523R2	.	11.7	10.8	12.2	.	9.1	.
TN12-5712R2	.	12.3	11.6	13.6	.	10.6	.
TN13-4304	.	12.6	13.8	12.3	.	14.8	.
TN16-510R1	.	8.5	10.2	10.5	.	12.1	.
TN16-630R1	.	8.8	10.7	10.3	.	13.3	.
TN16-5858R1	.	9.7	10.9	11.0	.	13.2	.
TN-5601T	.	12.3	12.5	13.3	.	13.6	.
V12-1416	.	12.6	12.1	13.9	.	11.3	.
AG 55X7	.	11.4	13.1	13.3	.	14.6	.
	.				.		.
Mean	.	11.6	12.2	12.9	.	13.5	.
LSD(0.05)	.	1.6	0.9	0.8	.	.	.
CV(%)	.	6.2	4.3	4.0	.	.	.

TABLE 60 - SEED SIZE (GRAMS PER 100 SEED) (continued)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	*Tallassee, AL*	*Warsaw, VA*	*Test Mean*
Ellis	14.3	11.6	12.3
JTN-5203	12.5	13.1	12.4
GoSoy 54G16	14.8	12.9	13.4
UA 5612	12.7	12.5	12.6
TN11-5140	15.6	14.3	13.7
DA0912-07F	13.5	15.0	13.4
DA1037-25F	15.9	13.4	13.5
DA1134-015F	15.3	13.1	13.2
K14-1686	14.5	12.5	12.9
K15-1788	15.8	12.3	13.0
K15-1800	14.1	11.5	12.2
K15-1809	14.2	12.6	12.9
R12-6751RR	16.7	14.5	14.9
R14-356	15.4	10.7	12.0
R14-14797RR	20.8	16.1	15.7
S13-1955C	14.3	13.1	13.2
S14-9017R	15.8	14.8	14.6
S15-10434C	14.8	12.6	12.6
S15-16886C	13.2	11.1	11.8
S15-17812C	17.7	13.6	13.5
TN11-5104	14.0	12.0	13.1
TN12-5523R2	11.4	12.0	11.6
TN12-5712R2	12.2	13.6	12.4
TN13-4304	16.9	13.6	14.0
TN16-510R1	14.2	10.6	11.2
TN16-630R1	12.8	10.4	11.1
TN16-5858R1	12.8	11.0	11.5
TN-5601T	15.9	13.2	13.3
V12-1416	14.7	13.6	12.9
AG 55X7	14.4	13.3	13.2
Mean	14.7	12.8	12.9
LSD(0.05)	2.7	0.6	0.7
CV(%)	11.0	3.0	8.4

TABLE 61 - OIL (%)†
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Belle Mina, AL	Bossier City, LA	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Orange, VA
Ellis	19.2	.	19.3	18.7	20.1	.	19.5
JTN-5203	20.2	.	19.2	19.4	20.1	.	19.7
GoSoy 54G16	19.7	.	19.9	19.7	20.8	.	19.7
UA 5612	19.4	.	19.4	19.5	20.4	.	19.2
TN11-5140	21.0	.	19.8	19.9	20.9	.	19.2
DA0912-07F	19.5	.	19.6	19.3	20.1	.	19.2
DA1037-25F	20.1	.	19.8	19.4	20.6	.	19.2
DA1134-015F	19.8	.	19.7	19.6	20.2	.	19.4
K14-1686	19.2	.	19.8	19.6	20.1	.	18.6
K15-1788	19.9	.	18.6	19.2	20.0	.	19.0
K15-1800	19.4	.	18.8	19.1	19.9	.	19.2
K15-1809	19.7	.	19.0	19.0	19.6	.	18.9
R12-6751RR	20.2	.	19.5	19.5	20.0	.	18.9
R14-356	19.9	.	19.9	19.6	20.0	.	19.2
R14-14797RR	19.3	.	19.3	19.0	19.7	.	18.9
S13-1955C	20.2	.	20.8	19.4	20.7	.	19.6
S14-9017R	22.0	.	22.8	20.9	23.0	.	19.1
S15-10434C	19.5	.	19.2	18.9	19.7	.	19.2
S15-16886C	19.6	.	19.9	19.3	20.8	.	19.3
S15-17812C	20.3	.	19.6	20.2	20.9	.	20.0
TN11-5104	19.7	.	18.9	18.5	19.9	.	19.3
TN12-5523R2	19.0	.	20.0	19.4	19.8	.	18.9
TN12-5712R2	19.4	.	19.3	19.1	20.1	.	18.8
TN13-4304	19.9	.	18.7	18.9	19.9	.	19.0
TN16-510R1	19.3	.	20.0	18.7	20.0	.	18.9
TN16-630R1	20.2	.	19.7	19.0	20.2	.	19.3
TN16-5858R1	20.1	.	20.6	19.7	21.2	.	19.2
TN-5601T	20.5	.	19.3	18.7	20.1	.	18.6
V12-1416	20.1	.	19.8	19.7	21.3	.	19.6
AG 55X7	20.2	.	19.9	19.7	20.6	.	19.0
Mean	19.9	.	19.7	19.3	20.4	.	19.2
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

†Oil percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 61 - OIL (%)† (continued)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Pittsburg, KS	Plymouth, NC	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Suffolk, VA
Ellis	.	19.2	19.1	19.0	.	19.0	.
JTN-5203	.	20.2	19.8	19.2	.	20.1	.
GoSoy 54G16	.	21.1	19.6	.	.	20.4	.
UA 5612	.	19.5	19.7	18.4	.	20.0	.
TN11-5140	.	19.9	19.7	18.7	.	20.2	.
DA0912-07F	.	21.0	18.9	19.0	.	20.2	.
DA1037-25F	.	20.0	19.7	18.6	.	19.7	.
DA1134-015F	.	19.4	19.5	19.9	.	20.2	.
K14-1686	.	20.6	19.4	19.1	.	19.8	.
K15-1788	.	19.8	19.6	18.2	.	19.9	.
K15-1800	.	19.4	18.4	18.8	.	20.0	.
K15-1809	.	19.5	18.8	18.8	.	19.7	.
R12-6751RR	.	20.5	19.8	18.5	.	20.0	.
R14-356	.	21.1	19.7	19.4	.	20.2	.
R14-14797RR	.	20.0	18.1	17.4	.	19.5	.
S13-1955C	.	21.5	19.3	19.5	.	20.3	.
S14-9017R	.	22.3	22.4	21.1	.	21.1	.
S15-10434C	.	19.6	18.9	18.9	.	19.7	.
S15-16886C	.	20.5	19.8	19.5	.	20.3	.
S15-17812C	.	19.7	20.6	20.1	.	20.7	.
TN11-5104	.	18.9	19.4	18.7	.	19.4	.
TN12-5523R2	.	19.3	18.0	18.6	.	19.0	.
TN12-5712R2	.	18.8	19.2	18.1	.	19.1	.
TN13-4304	.	18.9	18.8	19.1	.	19.2	.
TN16-510R1	.	19.6	19.5	19.3	.	19.4	.
TN16-630R1	.	19.8	19.2	18.8	.	19.4	.
TN16-5858R1	.	20.3	19.8	19.8	.	20.3	.
TN-5601T	.	19.2	18.9	18.7	.	19.7	.
V12-1416	.	20.4	20.0	19.5	.	20.2	.
AG 55X7	.	20.1	19.5	19.3	.	19.2	.
Mean	.	20.0	19.4	19.0	.	19.9	.
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

TABLE 61 - OIL (%)† (continued)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	19.9	18.4	19.2
JTN-5203	21.1	19.3	19.8
GoSoy 54G16	21.1	19.6	20.1
UA 5612	21.5	19.1	19.7
TN11-5140	21.0	19.4	20.0
DA0912-07F	20.5	18.8	19.7
DA1037-25F	20.1	18.8	19.6
DA1134-015F	21.2	19.1	19.8
K14-1686	21.0	20.0	19.7
K15-1788	20.1	18.7	19.4
K15-1800	19.9	19.1	19.3
K15-1809	21.0	18.8	19.3
R12-6751RR	20.2	19.0	19.6
R14-356	20.8	18.6	19.8
R14-14797RR	20.6	18.5	19.1
S13-1955C	21.0	19.1	20.1
S14-9017R	21.8	21.8	21.7
S15-10434C	19.6	18.8	19.3
S15-16886C	21.1	19.5	20.0
S15-17812C	21.2	18.6	20.2
TN11-5104	21.0	19.9	19.4
TN12-5523R2	20.5	19.2	19.2
TN12-5712R2	20.6	18.7	19.2
TN13-4304	20.0	19.2	19.2
TN16-510R1	20.7	18.7	19.5
TN16-630R1	20.4	18.4	19.5
TN16-5858R1	21.7	19.3	20.2
TN-5601T	20.5	18.8	19.4
V12-1416	21.3	20.1	20.2
AG 55X7	20.4	19.3	19.7
Mean	20.7	19.2	19.7
LSD(0.05)	.	.	0.4
CV(%)	.	.	2.2

TABLE 62 - PROTEIN (%)†
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Belle Mina, AL	Bossier City, LA	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Orange, VA
Ellis	34.9	.	35.5	35.5	33.3	.	33.7
JTN-5203	34.3	.	36.0	35.4	34.3	.	32.9
GoSoy 54G16	33.1	.	33.6	34.1	31.2	.	33.4
UA 5612	34.7	.	36.5	34.8	34.0	.	33.1
TN11-5140	32.4	.	36.8	35.6	34.2	.	34.4
DA0912-07F	35.7	.	36.3	36.0	33.9	.	33.9
DA1037-25F	33.9	.	37.5	35.0	33.9	.	33.9
DA1134-015F	34.0	.	36.1	33.8	33.8	.	33.6
K14-1686	34.4	.	35.5	35.8	34.1	.	35.3
K15-1788	35.8	.	37.8	37.9	35.2	.	34.3
K15-1800	36.0	.	37.4	37.5	35.4	.	35.0
K15-1809	34.8	.	37.3	37.4	35.7	.	33.7
R12-6751RR	33.2	.	36.4	35.2	34.4	.	34.3
R14-356	34.1	.	36.4	35.0	34.6	.	34.6
R14-14797RR	35.7	.	37.8	36.4	35.0	.	35.1
S13-1955C	33.8	.	33.7	35.3	32.8	.	31.8
S14-9017R	31.5	.	32.6	33.6	30.4	.	35.4
S15-10434C	34.6	.	36.7	35.6	34.9	.	34.0
S15-16886C	34.9	.	36.1	36.0	33.2	.	34.2
S15-17812C	37.1	.	38.4	37.0	35.7	.	33.9
TN11-5104	35.4	.	37.8	37.3	35.2	.	34.5
TN12-5523R2	35.0	.	34.5	34.5	33.7	.	34.2
TN12-5712R2	34.3	.	35.7	35.4	33.7	.	34.3
TN13-4304	34.8	.	35.1	37.2	35.6	.	33.6
TN16-510R1	35.5	.	34.5	35.8	33.7	.	34.5
TN16-630R1	32.4	.	34.6	35.1	33.1	.	33.9
TN16-5858R1	33.7	.	34.1	34.0	31.9	.	33.3
TN-5601T	33.4	.	36.6	37.1	35.0	.	34.7
V12-1416	33.3	.	35.1	35.5	31.7	.	33.6
AG 55X7	34.0	.	35.4	35.7	34.0	.	34.3
Mean	34.3	.	35.9	35.7	33.9	.	34.0
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

†Protein percentage reported on a 13% moisture basis beginning in 2015.

TABLE 62 - PROTEIN (%)† (continued)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Pittsburg, KS	Plymouth, NC	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Suffolk, VA
Ellis	.	34.5	35.5	34.9	.	34.7	.
JTN-5203	.	32.8	34.7	34.8	.	35.9	.
GoSoy 54G16	.	29.3	33.3	.	.	33.3	.
UA 5612	.	33.6	35.2	36.9	.	34.7	.
TN11-5140	.	35.3	35.9	37.1	.	34.7	.
DA0912-07F	.	31.4	36.5	36.2	.	34.8	.
DA1037-25F	.	32.7	34.9	35.7	.	35.1	.
DA1134-015F	.	34.6	35.0	34.5	.	34.0	.
K14-1686	.	31.9	35.4	35.7	.	35.5	.
K15-1788	.	35.3	35.4	37.7	.	36.2	.
K15-1800	.	36.1	38.6	36.2	.	35.8	.
K15-1809	.	35.1	36.5	36.1	.	35.9	.
R12-6751RR	.	32.5	35.0	36.7	.	34.5	.
R14-356	.	31.1	35.3	34.7	.	35.0	.
R14-14797RR	.	33.7	37.8	38.5	.	35.3	.
S13-1955C	.	31.1	35.0	34.1	.	34.9	.
S14-9017R	.	31.6	31.1	34.9	.	34.2	.
S15-10434C	.	35.2	36.7	36.7	.	34.6	.
S15-16886C	.	33.2	35.6	35.4	.	34.5	.
S15-17812C	.	37.7	35.6	36.0	.	36.9	.
TN11-5104	.	36.5	36.1	36.5	.	36.7	.
TN12-5523R2	.	34.1	36.7	36.0	.	34.6	.
TN12-5712R2	.	35.6	34.8	36.3	.	34.6	.
TN13-4304	.	37.6	38.0	35.7	.	36.6	.
TN16-510R1	.	33.5	34.6	34.4	.	34.4	.
TN16-630R1	.	33.3	35.4	34.5	.	34.4	.
TN16-5858R1	.	32.8	34.5	33.4	.	34.0	.
TN-5601T	.	36.5	36.7	36.0	.	36.2	.
V12-1416	.	33.7	34.4	35.0	.	34.5	.
AG 55X7	.	33.8	36.3	34.8	.	35.8	.
Mean	.	33.9	35.6	35.7	.	35.1	.
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

TABLE 62 - PROTEIN (%)† (continued)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	35.5	36.0	34.9
JTN-5203	34.2	35.0	34.6
GoSoy 54G16	33.6	33.1	32.9
UA 5612	33.8	35.1	34.8
TN11-5140	35.1	35.5	35.2
DA0912-07F	35.8	35.7	35.1
DA1037-25F	35.2	36.2	34.9
DA1134-015F	35.2	33.6	34.4
K14-1686	35.0	33.9	34.8
K15-1788	37.1	35.7	36.2
K15-1800	35.8	35.8	36.3
K15-1809	35.4	35.5	35.8
R12-6751RR	35.1	35.6	34.8
R14-356	36.2	33.6	34.6
R14-14797RR	34.6	35.5	36.0
S13-1955C	35.0	34.3	33.8
S14-9017R	32.8	32.1	32.7
S15-10434C	32.6	35.5	35.2
S15-16886C	34.0	35.1	34.7
S15-17812C	38.4	36.5	36.7
TN11-5104	34.9	36.3	36.1
TN12-5523R2	34.5	33.4	34.7
TN12-5712R2	33.8	34.7	34.8
TN13-4304	36.9	36.3	36.1
TN16-510R1	34.7	35.6	34.7
TN16-630R1	35.2	36.3	34.4
TN16-5858R1	33.4	34.2	33.6
TN-5601T	35.2	36.3	35.8
V12-1416	33.7	33.6	34.0
AG 55X7	36.2	35.0	35.0
Mean	35.0	35.0	34.9
LSD(0.05)	.	.	0.8
CV(%)	.	.	2.6

TABLE 63 - ESTIMATED MEAL PROTEIN (%)
UNIFORM GROUP V 2017

STRAIN/ VARIETY	*Belle Mina, AL*	*Bossier City, LA*	*Jackson, TN*	*Keiser, AR*	*Knoxville, TN*	*McCune, KS*	*Orange, VA*
Ellis	47.0	.	47.8	47.5	45.4	.	45.5
JTN-5203	46.6	.	48.4	47.8	46.7	.	44.5
GoSoy 54G16	44.8	.	45.6	46.2	42.9	.	45.2
UA 5612	46.7	.	49.2	47.0	46.4	.	44.5
TN11-5140	44.6	.	49.9	48.3	47.0	.	46.3
DA0912-07F	48.1	.	49.0	48.4	46.1	.	45.7
DA1037-25F	46.1	.	50.9	47.1	46.4	.	45.6
DA1134-015F	46.1	.	48.9	45.6	46.0	.	45.2
K14-1686	46.2	.	48.1	48.4	46.4	.	47.1
K15-1788	48.5	.	50.5	51.0	47.8	.	46.1
K15-1800	48.5	.	50.1	50.4	48.0	.	47.1
K15-1809	47.1	.	50.1	50.2	48.3	.	45.1
R12-6751RR	45.2	.	49.2	47.5	46.7	.	46.0
R14-356	46.3	.	49.4	47.3	47.0	.	46.5
R14-14797RR	48.1	.	50.9	48.8	47.4	.	47.0
S13-1955C	46.0	.	46.3	47.5	45.0	.	43.0
S14-9017R	43.9	.	46.0	46.1	42.9	.	47.5
S15-10434C	46.7	.	49.4	47.7	47.2	.	45.8
S15-16886C	47.1	.	49.0	48.5	45.6	.	46.1
S15-17812C	50.6	.	51.9	50.5	49.0	.	46.0
TN11-5104	47.9	.	50.6	49.8	47.7	.	46.5
TN12-5523R2	46.9	.	46.9	46.5	45.7	.	45.8
TN12-5712R2	46.2	.	48.1	47.6	45.8	.	45.9
TN13-4304	47.2	.	46.9	49.8	48.3	.	45.1
TN16-510R1	47.8	.	46.9	47.8	45.9	.	46.2
TN16-630R1	44.0	.	46.9	47.1	45.1	.	45.6
TN16-5858R1	45.8	.	46.6	46.0	44.1	.	44.9
TN-5601T	45.7	.	49.3	49.5	47.6	.	46.4
V12-1416	45.3	.	47.5	48.0	43.8	.	45.5
AG 55X7	46.3	.	48.0	48.3	46.5	.	46.0
Mean	46.6	.	48.6	48.1	46.3	.	45.8
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

TABLE 63 - ESTIMATED MEAL PROTEIN (%) (continued)
UNIFORM GROUP V 2017

STRAIN/ VARIETY	Pittsburg, KS	Plymouth, NC	Portageville, MO(A)	Portageville, MO(B)	Springfield, TN	Stoneville, MS	Suffolk, VA
Ellis	.	46.4	47.7	46.8	.	46.5	
JTN-5203	.	44.6	47.1	46.9	.	48.9	
GoSoy 54G16	.	40.3	44.9	.	.	45.5	
UA 5612	.	45.4	47.7	49.2	.	47.1	
TN11-5140	.	47.9	48.6	49.6	.	47.3	
DA0912-07F	.	43.2	48.9	48.5	.	47.4	
DA1037-25F	.	44.4	47.2	47.7	.	47.6	
DA1134-015F	.	46.7	47.2	46.8	.	46.3	
K14-1686	.	43.6	47.7	48.0	.	48.1	
K15-1788	.	47.8	47.9	50.1	.	49.1	
K15-1800	.	48.7	51.4	48.5	.	48.6	
K15-1809	.	47.4	48.9	48.3	.	48.5	
R12-6751RR	.	44.5	47.4	48.9	.	46.9	
R14-356	.	42.9	47.8	46.8	.	47.7	
R14-14797RR	.	45.8	50.2	50.6	.	47.7	
S13-1955C	.	43.1	47.2	46.0	.	47.6	
S14-9017R	.	44.3	43.6	48.1	.	47.1	
S15-10434C	.	47.5	49.3	49.1	.	46.8	
S15-16886C	.	45.5	48.2	47.8	.	47.0	
S15-17812C	.	51.0	48.8	49.0	.	50.6	
TN11-5104	.	48.8	48.8	48.8	.	49.5	
TN12-5523R2	.	46.0	48.6	48.0	.	46.5	
TN12-5712R2	.	47.7	46.7	48.2	.	46.4	
TN13-4304	.	50.4	50.9	48.0	.	49.2	
TN16-510R1	.	45.3	46.6	46.4	.	46.4	
TN16-630R1	.	45.1	47.6	46.1	.	46.4	
TN16-5858R1	.	44.7	46.7	45.3	.	46.3	
TN-5601T	.	49.1	49.2	48.1	.	49.0	
V12-1416	.	46.0	46.8	47.2	.	46.9	
AG 55X7	.	45.9	49.0	46.8	.	48.2	
Mean	.	46.0	48.0	47.9	.	47.6	
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

TABLE 63 - ESTIMATED MEAL PROTEIN (%) (continued)
UNIFORM GROUP V 2017

STRAIN/ VARIETY	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	48.1	48.0	47.0
JTN-5203	47.1	47.2	46.9
GoSoy 54G16	46.2	44.7	44.7
UA 5612	46.9	47.2	47.0
TN11-5140	48.3	47.8	47.8
DA0912-07F	48.9	47.8	47.5
DA1037-25F	47.9	48.5	47.2
DA1134-015F	48.5	45.2	46.6
K14-1686	48.1	46.1	47.1
K15-1788	50.4	47.8	48.8
K15-1800	48.6	48.1	48.9
K15-1809	48.7	47.5	48.2
R12-6751RR	47.8	47.8	47.1
R14-356	49.6	44.9	46.9
R14-14797RR	47.4	47.4	48.3
S13-1955C	48.2	46.0	46.0
S14-9017R	45.5	44.6	45.4
S15-10434C	44.1	47.6	47.4
S15-16886C	46.9	47.5	47.2
S15-17812C	52.9	48.7	49.9
TN11-5104	47.9	49.3	48.7
TN12-5523R2	47.2	45.0	46.7
TN12-5712R2	46.2	46.4	46.8
TN13-4304	50.0	48.8	48.6
TN16-510R1	47.5	47.6	46.8
TN16-630R1	48.0	48.4	46.4
TN16-5858R1	46.3	46.1	45.7
TN-5601T	48.1	48.6	48.2
V12-1416	46.5	45.7	46.3
AG 55X7	49.4	47.1	47.4
Mean	47.9	47.1	47.2
LSD(0.05)	.	.	0.9
CV(%)	.	.	2.3

SUMMARY OF SEED FATTY ACIDS (%)
UNIFORM TEST V 2018 †

STRAIN/ VARIETY	Palmitic Acid	Stearic Acid	Oleic Acid	Linoleic Acid	Linolenic Acid
Ellis	11.0	3.9	22.0	56.0	7.0
JTN-5203	13.0	3.5	21.0	55.0	7.3
AG 5335	11.0	4.1	26.0	53.0	6.1
GoSoy 54G16	11.0	3.2	25.0	54.0	6.8
S15-17812C	7.1	3.3	84.0	2.4	3.0
Mean	11.0	3.6	36.0	44.0	6.0
LSD(0.05)	0.4	0.2	2.8	2.5	0.4
CV(%)	3.9	5.6	7.8	5.5	6.7

†Fatty acid percentage in seed oil reported beginning in 2017.

SEED PALMITIC ACID (%)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Belle Mina, AL	Jackson, TN	Keiser, AR	Knoxville, TN	Plymouth, NC	Portageville, MO(B)	Stoneville, MS	Tallassee, AL	Test Mean
Ellis	12.7	11.1	11.6	11.5	11.1	11.0	11.4	11.3	11.5
JTN-5203	11.4	13.0	12.8	12.4	13.0	12.6	12.8	12.6	12.6
AG 5335	11.6	10.9	11.6	11.7	11.0	11.0	11.3	10.9	11.3
GoSoy 54G16	11.0	11.5	11.7	11.8	10.8	11.8	11.8	11.6	11.5
S15-17812C	7.1	7.0	7.3	7.2	7.1	6.9	7.5	6.9	7.1
Mean	10.8	10.7	11.0	10.9	10.6	10.6	11.0	10.6	10.8
LSD(0.05)	.	.	.	.	.	.	.	.	0.4
CV(%)	.	.	.	.	.	.	.	.	3.9

SEED STEARIC ACID (%)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Belle Mina, AL	Jackson, TN	Keiser, AR	Knoxville, TN	Plymouth, NC	Portageville, MO(B)	Stoneville, MS	Tallassee, AL	Test Mean
Ellis	3.7	3.7	3.7	4.0	4.5	3.7	3.6	4.3	3.9
JTN-5203	4.0	3.2	3.1	3.6	3.6	3.5	3.2	3.5	3.5
AG 5335	4.2	4.0	3.7	4.0	4.3	4.1	4.2	3.9	4.1
GoSoy 54G16	3.5	3.3	3.1	3.4	3.1	3.2	3.0	3.2	3.2
S15-17812C	3.5	3.2	3.0	3.3	3.5	3.2	3.1	3.3	3.3
Mean	3.8	3.5	3.3	3.7	3.8	3.6	3.4	3.6	3.6
LSD(0.05)	.	.	.	.	.	.	.	.	0.2
CV(%)	.	.	.	.	.	.	.	.	5.6

SEED OLEIC ACID (%)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Belle Mina, AL	Jackson, TN	Keiser, AR	Knoxville, TN	Plymouth, NC	Portageville, MO(B)	Stoneville, MS	Tallassee, AL	Test Mean
Ellis	24.5	17.6	19.5	21.8	22.0	22.2	21.5	23.0	21.5
JTN-5203	18.7	20.0	20.9	18.2	21.5	22.2	22.9	26.0	21.3
AG 5335	21.3	25.9	21.4	19.8	27.2	27.6	27.5	35.0	25.7
GoSoy 54G16	29.3	22.8	22.3	20.8	32.4	22.3	23.4	25.4	24.8
S15-17812C	84.0	84.4	84.3	83.2	84.4	83.6	83.8	85.7	84.2
Mean	35.5	34.1	33.7	32.8	37.5	35.6	35.8	39.0	35.5
LSD(0.05)	.	.	.	.	.	.	.	.	2.8
CV(%)	.	.	.	.	.	.	.	.	7.8

SEED LINOLEIC ACID (%)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Belle Mina, AL	Jackson, TN	Keiser, AR	Knoxville, TN	Plymouth, NC	Portageville, MO(B)	Stoneville, MS	Tallassee, AL	Test Mean
Ellis	52.0	60.0	57.5	55.6	55.6	55.9	56.8	55.7	56.1
JTN-5203	58.3	55.9	55.4	57.4	54.7	54.1	54.4	52.4	55.3
AG 5335	56.0	53.0	56.7	57.6	51.9	51.1	51.6	45.0	52.9
GoSoy 54G16	50.0	55.6	55.3	56.0	48.2	55.1	55.2	54.2	53.7
S15-17812C	2.3	2.3	2.4	2.7	2.4	2.9	2.5	1.9	2.4
Mean	43.7	45.3	45.5	45.9	42.6	43.8	44.1	41.8	44.1
LSD(0.05)	.	.	.	.	.	.	.	.	2.5
CV(%)	.	.	.	.	.	.	.	.	5.5

SEED LINOLENIC ACID (%)
UNIFORM GROUP V 2018

STRAIN/ VARIETY	Belle Mina, AL	Jackson, TN	Keiser, AR	Knoxville, TN	Plymouth, NC	Portageville, MO(B)	Stoneville, MS	Tallassee, AL	Test Mean
Ellis	7.2	7.6	7.7	7.1	6.8	7.2	6.8	5.7	7.0
JTN-5203	7.5	7.9	7.8	8.4	7.2	7.7	6.6	5.5	7.3
AG 5335	6.8	6.2	6.6	6.8	5.6	6.3	5.4	5.3	6.1
GoSoy 54G16	6.2	6.8	7.6	8.0	5.5	7.7	6.6	5.7	6.8
S15-17812C	3.2	3.0	3.1	3.6	2.5	3.4	3.0	2.2	3.0
Mean	6.2	6.3	6.6	6.8	5.5	6.4	5.7	4.9	6.0
LSD(0.05)	.	.	.	.	.	.	.	.	0.4
CV(%)	.	.	.	.	.	.	.	.	6.7

INTENTIONALLY BLANK

TABLE 64 - PARENTAGE OF ENTRIES
PRELIMINARY GROUP V-EARLY 2018

Ent*	Strain/Variety	Parentage	Source	Fn	Trans-genic†	Special Traits‡
1	Ellis	5002T x 5601T	Commercial			
2	JTN-5203	R93-171 x Anand	Arelli	F17		SCN, FLS
4	GoSoy 54G16	Commercial check	Pantalone		RR1	
5	DA1239-09	DB05c029-117F x DB06-2257	Gillen			Diversity
6	DA1239-23	DB05c029-117F x DB06-2257	Gillen			Diversity
7	K16-1785	KS5004N x R05-374	Schapaugh	F5		
8	R13-818	R04-357 x R05-3239	Mozzoni	F3:4		
9	R13-1409	S05-11482 x R04-357	Mozzoni	F3:4		
10	R14-898	R05-235 x S021431C	Mozzoni	F4:5		
11	R15-1194	R09-1822 x R09-1589	Mozzoni	F4:5		
12	R15-1687	V05-2592 x R08-2776	Mozzoni	F2:3		
13	R15-2465RR	C1176 x R04-1250RR	Mozzoni	F4:5	RR1	
14	S16-3739R	S11-16653 x S11-5727RR2	Chen		RR2	
15	S16-3747R	S11-16653 x S11-5727RR2	Chen		RR2	
16	S16-7922C	S11-16653 x S11-20124	Chen			
17	S16-11222C	S11-16653 x S08-17361	Chen			
18	S16-11651C	S09-13185 x S11-20124	Chen			
19	S16-15809C	R10-230 x S11-20124	Chen			
20	S16-16720R	S08-17361 x S12-11694RR1	Chen		RR1	
21	S16-16814R	R09-430 x S12-11694RR1	Chen		RR1	
22	TN16-554R1	Ellis[5] x TN13-4730R1	Pantalone		RR1	
23	TN16-5024	TN09-008 x Ellis	Pantalone			
24	TN16-5027	TN09-008 x Ellis	Pantalone			
25	TN17-5019	TN09-008 x Ellis	Pantalone			
26	TN17-5020	TN09-008 x Ellis	Pantalone			
27	V11-0119	V01-2245 x R04-198	Zhang	F4		
28	V12-4590	V03-5901 x V98-9005	Zhang	F4		Meal Protein 50%, 8% sucrose.
29	V13-3833	Glenn x V07-0873	Zhang	F4		
30	V14-0079	Glenn x V05-2436	Zhang	F4		Meal Protein 50%
31	V14-0153	V07-0873 x S07-6489	Zhang	F4		Meal Protein 50%
32	V14-2421	TN04-5321 x V07-0873	Zhang	F4		Meal Protein 50%
33	V14-3762	Glenn x R05-235	Zhang	F4		
34	V14-3982	(Glenn x V03-4660) x Glenn	Zhang	F4		
35	V15-2178	04-05-N41 x 09-0673	Zhang	F4		Meal Protein 50%
36	AG 53X6	Commercial check	Commercial			

* Entry 3 was removed due to poor seed quality.
†Conv= Conventional(non-transgenic),LL= Liberty Link®, RR1= Roundup Ready®,RR2= Roundup Ready 2 Yield®
RRX= Roundup Ready 2 Xtend®
‡AA= modified amino acids, DNC= Do not cross with this, FLS= Frogeye leaf spot resistance, LJ= Long juvenile,
LN= low linolenic acid, LP= low phytate, HO= high oleic acid, HOLN= high oleic acid/low linolenic acid,
SCN= Soybean cyst nematode resistance, SR= Soybean rust resistance,
and STS= sulfonylurea tolerant

TABLE 65 - GENERAL SUMMARY OF PERFORMANCE
PRELIMINARY TEST V-EARLY 2018

STRAIN/ VARIETY	SEED YIELD†	RANK	AVG. RANK	MAT. INDEX	LOD	HT	SCN Cyst Score (1-5)‡ Race 1	Race 3	Race 5	SC RATING	SC SCORE
Ellis	61.2	12	15	0	1.5	28	5	2	5	R	1
JTN-5203	58.4	22	19	0	1.5	26	3	1	1	SS	3
GoSoy 54G16	53.9	31	24	-1	1.6	29	2	1	1	S	5
DA1239-09	60.5	14	17	-2	2.1	30	5	2	5	R	1
DA1239-23	60.1	15	19	-1	2.2	35	4	1	4	R	1
K16-1785	59.7	17	17	-2	1.8	31	2	1	5	SS	3
R13-818	63.4	6	13	0	2.1	32	5	2	4	R	1
R13-1409	63.8	5	13	0	2.2	36	5	3	5	R	1
R14-898	66.2	3	8	2	2.2	35	5	3	4	R	1
R15-1194	58.0	23	20	-1	1.9	29	5	3	5	S	5
R15-1687	59.1	19	17	2	2.0	30	4	2	5	R	1
R15-2465RR	56.5	24	24	-1	2.2	36	5	2	5	R	1
S16-3739R	64.2	4	11	2	2.1	33	1	1	1	R	1
S16-3747R	67.9	1	7	2	1.9	31	1	1	3	R	1
S16-7922C	63.1	7	13	1	2.3	34	5	2	4	R	1
S16-11222C	62.3	9	14	3	2.3	43	4	2	4	R	1
S16-11651C	66.9	2	8	3	2.3	35	1	2	1	MS	4
S16-15809C	59.9	16	18	1	2.2	37	4	3	5	S	5
S16-16720R	55.0	30	22	4	2.1	33	4	2	4	R	1
S16-16814R	59.6	18	20	0	1.7	29	3	2	1	MS	4
TN16-554R1	62.5	8	11	0	1.5	29	5	2	5	R	1
TN16-5024	61.5	11	13	2	1.7	28	4	2	1	R	1
TN16-5027	61.8	10	13	5	1.4	30	5	3	5	R	1
TN17-5019	59.1	20	18	0	1.3	24	4	1	1	R	1
TN17-5020	55.4	28	21	0	1.3	24	2	1	1	R	1
V11-0119	53.7	32	24	-3	1.4	26	5	3	5	MS	4
V12-4590	51.0	35	29	-2	1.7	28	5	4	5	MS	4
V13-3833	55.6	27	23	-5	1.4	25	4	4	5	R	1
V14-0079	55.2	29	24	0	1.4	25	4	3	5	S	5
V14-0153	56.2	26	24	0	1.7	27	4	4	4	MS	4
V14-2421	58.9	21	19	-1	1.7	30	3	4	4	R	1
V14-3762	56.5	25	23	2	1.6	28	4	5	3	R	1
V14-3982	53.5	33	24	0	1.3	24	5	3	5	R	1
V15-2178	52.7	34	27	3	1.7	31	5	4	5	R	1
AG 53X6	60.6	13	16	-2	1.8	31	1	1	1	R	1
Mean	59.3	.	.	0	1.8	30	.	.	.		.
LSD(0.05)	7.4	.	.	2	0.4	3	.	.	.		.
CV(%)	13.0	.	.	821	27.6	11	.	.	.		.

† Data not included in mean: Stoneville,MS and Tallassee,AL

‡The race 1, 3, and 5 SCN populations used in these tests were typed as HG (Heterodera glycines) Type 2.5.7, HG Type 5.7, and HG Type 2.5.7, respectively.

Reaction to the cultivar Pickett was used to distinguish between race 1 and race 5 SCN populations.

TABLE 66 - GENERAL SUMMARY OF PERFORMANCE (continued)
PRELIMINARY TEST V-EARLY 2018

STRAIN/ VARIETY	SEED QUALITY	SEED SIZE	PROTEIN§ %	OIL§ %	MEAL PRO%	FL COLOR	PUB. COLOR	POD COLOR
Ellis	1.8	13.0	35.2	19.3	47.4	W	G	T
JTN-5203	2.2	12.5	35.2	19.9	47.7	W	G	T
GoSoy 54G16	2.1	13.8	33.7	20.2	46	W	G	T
DA1239-09	2.0	15.0	35.9	19.6	48.5	W	G	T
DA1239-23	2.4	13.0	35.4	20.0	48	P	T	T
K16-1785	2.2	13.5	35.9	20.9	49.2			
R13-818	2.6	13.4	34.1	20.4	46.6	P	T	T
R13-1409	2.5	13.1	34.3	19.8	46.6	W	T	T
R14-898	2.2	15.9	34.3	20.1	46.7	W	G	T
R15-1194	2.9	14.2	33.6	20.6	46.1	P	T	T
R15-1687	2.4	12.7	35.0	19.2	47.1	W	T	T
R15-2465RR	2.7	14.6	35.7	19.4	48.2	W	G	T
S16-3739R	2.7	13.5	34.8	20.4	47.4		Lt	
S16-3747R	2.5	15.1	34.0	19.9	46.2		Lt	
S16-7922C	2.2	14.3	34.7	20.5	47.4	W	T	
S16-11222C	2.0	15.3	33.8	20.7	46.4	W	G	
S16-11651C	2.3	13.6	36.0	19.5	48.6	W	T	
S16-15809C	2.3	15.3	34.5	20.8	47.3	W	T	
S16-16720R	2.5	13.4	35.2	19.4	47.5	W	T	
S16-16814R	2.7	13.5	36.7	20.4	50.1	W	G	
TN16-554R1	2.4	11.5	34.5	19.4	46.5	W	G	
TN16-5024	2.6	13.1	34.5	18.9	46.2	W	G	
TN16-5027	2.7	14.9	34.4	19.2	46.3	P	G	
TN17-5019	2.5	14.0	33.9	19.7	45.8	P	G	
TN17-5020	2.2	13.4	34.6	19.6	46.8	P	G	
V11-0119	2.6	12.9	36.8	19.2	49.6	W	G	
V12-4590	2.2	15.8	38.3	20.0	52.1	P	G	
V13-3833	2.4	13.3	35.1	19.5	47.4	P	G	
V14-0079	2.6	13.6	36.5	20.3	49.8	P	G	
V14-0153	1.7	16.9	38.0	19.1	51	P	G	
V14-2421	2.0	15.2	38.8	19.0	52.1	P	G	
V14-3762	2.5	15.9	36.0	19.7	48.8	P	T	
V14-3982	2.4	15.2	36.9	19.7	49.9	P	T	
V15-2178	2.0	13.1	36.2	18.7	48.4	P	G	
AG 53X6	2.0	15.6	34.1	20.1	46.4			
Mean	2.3	14.1	35.3	19.8	47.9			
LSD(0.05)	0.5	1.1	0.8	0.4	1.1			
CV(%)	22.8	8.7	2.2	1.8	2.1			

§Protein percentage and oil percentage are reported on a 13% moisture basis beginning in 2015.

TABLE 67 - SEED YIELD (BUSHELS PER ACRE)
PRELIMINARY GROUP V-EARLY 2018 †

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS
Ellis	64.4	81.5	53.2	57.7	51.8	49.2	73.1
JTN-5203	46.9	79.4	48.3	59.8	61.4	41.0	55.6
GoSoy 54G16	50.7	61.3	53.4	56.0	52.7	.	51.9
DA1239-09	60.7	91.6	63.4	56.8	48.0	39.6	57.4
DA1239-23	65.6	87.1	59.7	55.1	47.5	43.3	50.9
K16-1785	60.0	70.4	64.1	58.7	57.6	42.0	42.0
R13-818	62.7	95.4	70.2	58.8	52.5	38.9	45.7
R13-1409	67.6	95.3	68.2	56.6	47.8	47.1	65.4
R14-898	64.7	100.3	71.4	60.4	46.5	48.5	61.6
R15-1194	54.2	87.0	59.2	56.8	38.1	50.6	55.3
R15-1687	49.5	84.8	69.7	57.3	41.9	51.8	46.1
R15-2465RR	46.9	85.1	66.8	53.3	40.9	44.2	28.3
S16-3739R	70.1	78.3	68.4	62.6	58.6	51.5	58.0
S16-3747R	75.5	85.3	76.0	63.2	62.0	51.2	43.3
S16-7922C	61.2	86.2	58.2	65.0	56.5	47.5	66.1
S16-11222C	73.7	85.3	51.0	63.1	45.7	45.2	54.3
S16-11651C	66.7	91.5	61.6	62.8	67.7	47.8	61.5
S16-15809C	59.0	88.2	57.4	55.3	47.1	51.6	50.3
S16-16720R	58.4	76.4	36.6	52.8	45.8	50.6	45.4
S16-16814R	58.9	84.6	62.3	53.3	57.7	46.1	58.1
TN16-554R1	52.7	82.0	66.5	65.9	50.6	50.9	68.9
TN16-5024	50.5	70.4	64.1	63.9	61.9	52.6	39.7
TN16-5027	57.4	78.5	66.8	59.8	46.2	48.8	46.2
TN17-5019	48.0	68.1	58.0	57.1	62.7	50.4	58.7
TN17-5020	48.7	53.5	54.9	57.9	57.4	43.2	43.1
V11-0119	48.7	56.5	61.3	56.3	43.6	45.3	41.1
V12-4590	31.7	82.7	49.5	49.8	41.1	41.8	46.7
V13-3833	46.8	78.0	60.4	59.2	41.0	34.3	64.5
V14-0079	50.1	73.0	64.1	55.9	43.8	45.7	62.7
V14-0153	47.3	76.3	65.7	53.1	39.8	46.5	58.2
V14-2421	52.4	86.1	69.6	50.0	40.8		61.6
V14-3762	45.1	77.6	58.5	57.6	41.2	45.1	61.3
V14-3982	49.2	59.8	58.5	48.2	40.6	49.4	31.8
V15-2178	39.8	69.3	63.0	49.2	36.2	47.1	40.5
AG 53X6	50.9	89.7	60.5	59.6	54.3	48.3	55.9
Mean	55.3	79.9	61.2	57.4	49.4	46.6	52.9
LSD(0.05)	11.0	9.4	14.8	5.8	5.6	7.6	17.2
CV(%)	9.8	5.8	11.9	5.0	5.6	8.0	16.0

† Data not included in mean: Stoneville,MS and Tallassee,AL

TABLE 67 - SEED YIELD (BUSHELS PER ACRE) (continued)
PRELIMINARY GROUP V-EARLY 2018 †

STRAIN/ VARIETY	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	30.1	70.6	61.2
JTN-5203	13.2	72.1	58.4
GoSoy 54G16	24.2	61.6	53.9
DA1239-09	38.7	63.5	60.5
DA1239-23	40.1	62.2	60.1
K16-1785	42.3	65.2	59.7
R13-818	17.6	65.2	63.4
R13-1409	11.6	64.1	63.8
R14-898	45.4	71.4	66.2
R15-1194	26.3	59.9	58.0
R15-1687	17.6	58.7	59.1
R15-2465RR	33.0	58.7	56.5
S16-3739R	40.7	60.1	64.2
S16-3747R	46.9	61.8	67.9
S16-7922C	39.1	67.4	63.1
S16-11222C	31.7	72.1	62.3
S16-11651C	34.9	70.1	66.9
S16-15809C	16.8	60.5	59.9
S16-16720R	37.7	64.5	55.0
S16-16814R	27.0	54.3	59.6
TN16-554R1	39.2	68.7	62.5
TN16-5024	21.7	67.1	61.5
TN16-5027	42.3	75.4	61.8
TN17-5019	10.3	69.2	59.1
TN17-5020	8.3	72.1	55.4
V11-0119	16.4	64.2	53.7
V12-4590	21.6	60.7	51.0
V13-3833	7.8	69.6	55.6
V14-0079	15.2	53.7	55.2
V14-0153	22.7	64.6	56.2
V14-2421	21.0	67.5	58.9
V14-3762	12.8	70.1	56.5
V14-3982	24.9	68.8	53.5
V15-2178	9.2	64.3	52.7
AG 53X6	33.4	60.9	60.6
Mean	26.3	65.2	59.3
LSD(0.05)	20.1	8.8	7.4
CV(%)	37.1	6.6	13.0

† Data not included in mean: Stoneville,MS and Tallassee,AL

TABLE 68 - RELATIVE MATURITY (DAYS EARLIER (-) OR LATER (+) THAN ENTRY 1)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS
Ellis	10/2	10/4	10/3	10/17	10/15	10/19	9/22
JTN-5203	0	-5	-2	7	0	-2	0
GoSoy 54G16	-1	-4	1	3	1	.	-3
DA1239-09	-1	-5	-2	2	3	-4	-4
DA1239-23	-1	-1	-1	2	2	-4	-4
K16-1785	-1	-3	3	5	-4	-2	-14
R13-818	-1	-1	0	3	2	0	-2
R13-1409	-1	-2	0	4	3	2	-2
R14-898	0	1	5	5	2	0	2
R15-1194	0	0	2	2	-1	-1	-3
R15-1687	4	0	6	6	2	2	-1
R15-2465RR	0	-2	-1	4	-4	-2	-3
S16-3739R	4	0	5	4	5	2	-1
S16-3747R	7	-1	3	3	5	2	-1
S16-7922C	1	0	5	3	6	0	-2
S16-11222C	6	-3	3	4	4	1	8
S16-11651C	6	-1	1	6	6	3	8
S16-15809C	1	0	1	5	4	2	-2
S16-16720R	7	0	10	8	7	4	0
S16-16814R	4	-1	1	3	-2	2	-2
TN16-554R1	-2	0	6	2	-4	2	-3
TN16-5024	2	0	6	1	-2	1	8
TN16-5027	4	-1	7	10	3	3	8
TN17-5019	-2	1	3	3	1	1	-1
TN17-5020	0	1	1	3	-2	1	-1
V11-0119	-2	-5	-2	3	-5	-4	-2
V12-4590	-15	-3	-1	13	-6	0	-6
V13-3833	-15	-4	-2	1	-8	-3	-4
V14-0079	-2	0	4	4	4	-1	-1
V14-0153	-2	-4	0	6	-1	0	-4
V14-2421	0	-4	0	3	-2		-5
V14-3762	0	0	9	7	2	1	0
V14-3982	-2	1	3	9	-4	1	-3
V15-2178	2	0	6	3	1	2	8
AG 53X6	-1	-2	-1	1	-1	-1	-6
Mean	0	-1	2	4	0	0	-1
LSD(0.05)	3	3	5	4	3	2	2
CV(%)	10829	92	116	54	382	308	95

TABLE 68 - RELATIVE MATURITY (continued)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	10/5	10/19	10/9
JTN-5203	-3	1	0
GoSoy 54G16	0	0	-1
DA1239-09	-3	-1	-2
DA1239-23	0	-3	-1
K16-1785	2	-6	-2
R13-818	0	0	0
R13-1409	-3	0	0
R14-898	-1	0	2
R15-1194	-3	-2	-1
R15-1687	0	0	2
R15-2465RR	-3	0	-1
S16-3739R	3	0	2
S16-3747R	1	1	2
S16-7922C	-3	0	1
S16-11222C	1	2	3
S16-11651C	0	1	3
S16-15809C	-2	0	1
S16-16720R	-2	8	4
S16-16814R	-1	-4	0
TN16-554R1	-1	0	0
TN16-5024	0	0	2
TN16-5027	3	6	5
TN17-5019	-1	-1	0
TN17-5020	-2	0	0
V11-0119	-1	-7	-3
V12-4590	-1	-3	-2
V13-3833	-2	-6	-5
V14-0079	2	-5	0
V14-0153	0	0	0
V14-2421	-2	0	-1
V14-3762	-1	0	2
V14-3982	-2	-2	0
V15-2178	1	0	3
AG 53X6	-1	-4	-2
Mean	-1	-1	0
LSD(0.05)	4	3	2
CV(%)	251	205	821

TABLE 69 - PLANT HEIGHT (INCHES)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS
Ellis	28	22	21	37	29	26	28
JTN-5203	27	19	21	36	29	25	29
GoSoy 54G16	33	19	22	43	33	.	28
DA1239-09	35	26	27	37	28	31	32
DA1239-23	36	28	29	44	36	34	42
K16-1785	33	22	23	42	32	30	29
R13-818	33	27	31	44	37	32	33
R13-1409	39	31	29	46	34	36	43
R14-898	39	33	26	42	34	29	45
R15-1194	30	23	24	39	29	27	37
R15-1687	33	25	26	39	30	30	33
R15-2465RR	36	28	34	47	39	34	43
S16-3739R	31	21	29	47	35	30	41
S16-3747R	31	21	27	45	37	31	32
S16-7922C	31	24	27	51	44	38	39
S16-11222C	50	44	41	42	35	40	59
S16-11651C	34	27	27	45	39	34	41
S16-15809C	38	29	34	48	38	38	47
S16-16720R	34	27	27	39	37	32	39
S16-16814R	26	26	25	37	32	26	34
TN16-554R1	31	22	20	43	34	29	32
TN16-5024	28	23	24	41	32	30	25
TN16-5027	32	24	24	42	31	32	29
TN17-5019	24	17	20	34	28	23	26
TN17-5020	25	16	21	33	28	23	25
V11-0119	27	17	24	34	33	23	24
V12-4590	29	22	27	35	29	27	26
V13-3833	26	18	24	37	26	23	26
V14-0079	28	19	21	35	26	24	24
V14-0153	31	19	27	35	29	25	26
V14-2421	34	24	25	39	32		31
V14-3762	28	20	26	36	30	30	29
V14-3982	23	17	21	29	25	24	25
V15-2178	31	27	25	44	32	35	27
AG 53X6	30	24	28	39	33	32	32
Mean	31	23	26	40	32	30	33
LSD(0.05)	5	4	5	.	.	4	3
CV(%)	8	9	9	.	.	7	4

TABLE 69 - PLANT HEIGHT (INCHES) (continued)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	29	34	28
JTN-5203	19	35	26
GoSoy 54G16	22	37	29
DA1239-09	20	35	30
DA1239-23	26	39	35
K16-1785	27	40	31
R13-818	24	34	32
R13-1409	24	38	36
R14-898	27	41	35
R15-1194	19	36	29
R15-1687	19	36	30
R15-2465RR	25	39	36
S16-3739R	25	37	33
S16-3747R	22	36	31
S16-7922C	22	38	34
S16-11222C	27	47	43
S16-11651C	28	37	35
S16-15809C	24	41	37
S16-16720R	27	38	33
S16-16814R	21	33	29
TN16-554R1	22	36	29
TN16-5024	20	34	28
TN16-5027	24	34	30
TN17-5019	17	29	24
TN17-5020	15	30	24
V11-0119	20	36	26
V12-4590	20	34	28
V13-3833	16	32	25
V14-0079	19	34	25
V14-0153	19	34	27
V14-2421	22	35	30
V14-3762	19	34	28
V14-3982	22	30	24
V15-2178	19	41	31
AG 53X6	22	39	31
Mean	22	36	30
LSD(0.05)	8	3	3
CV(%)	19	4	11

TABLE 70 - PLANT LODGING (1-5)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS
Ellis	1.5	1.0	1.3	1.0	1.0	2.5	2.0
JTN-5203	2.0	1.0	1.5	1.0	1.0	2.0	2.0
GoSoy 54G16	2.0	1.0	2.0	1.0	1.0	.	2.0
DA1239-09	3.5	1.0	2.0	1.0	1.0	3.0	3.5
DA1239-23	4.0	1.0	2.3	1.0	1.0	3.0	3.5
K16-1785	2.5	1.0	1.8	1.5	1.0	2.5	2.0
R13-818	3.0	1.0	2.5	2.0	1.0	3.0	2.5
R13-1409	3.0	1.0	2.5	2.0	1.0	3.0	3.5
R14-898	3.5	1.0	1.8	1.5	1.0	3.5	4.0
R15-1194	3.0	1.0	1.8	1.0	1.0	3.0	2.5
R15-1687	3.5	1.0	2.0	1.0	1.0	3.0	3.0
R15-2465RR	3.5	1.0	2.8	2.0	1.0	3.0	3.0
S16-3739R	3.0	1.0	2.0	2.0	1.0	3.0	3.0
S16-3747R	2.5	1.0	1.8	2.0	1.0	3.0	2.5
S16-7922C	3.5	1.0	2.0	3.0	2.0	3.0	3.0
S16-11222C	4.0	1.0	2.8	1.0	1.0	3.0	4.5
S16-11651C	4.0	1.0	2.3	2.0	2.0	3.0	3.5
S16-15809C	3.0	1.0	3.0	2.5	1.0	3.0	3.0
S16-16720R	3.5	1.0	1.8	2.0	1.0	3.0	3.5
S16-16814R	2.0	1.0	2.0	1.0	1.0	2.0	2.5
TN16-554R1	1.0	1.0	1.5	1.5	1.0	2.5	2.0
TN16-5024	1.5	1.0	1.5	2.5	1.0	2.5	2.0
TN16-5027	1.0	1.0	1.5	1.0	1.0	2.5	2.0
TN17-5019	1.0	1.0	1.5	1.0	1.0	2.0	2.0
TN17-5020	1.0	1.0	1.5	1.0	1.0	2.0	2.0
V11-0119	1.5	1.0	1.8	1.0	1.0	2.0	2.0
V12-4590	3.5	1.0	2.0	1.0	1.0	2.0	2.0
V13-3833	1.5	1.0	1.5	1.0	1.0	2.0	2.0
V14-0079	1.0	1.0	1.5	1.0	1.0	2.0	2.0
V14-0153	3.0	1.0	2.0	1.5	1.0	2.5	2.0
V14-2421	3.0	1.0	1.8	1.0	1.0		2.0
V14-3762	1.5	1.0	2.0	1.0	1.0	3.0	2.0
V14-3982	1.0	1.0	1.5	1.0	1.0	2.0	2.0
V15-2178	3.5	1.0	1.5	1.0	1.0	2.0	2.5
AG 53X6	2.5	1.0	2.0	1.0	1.0	2.5	2.5
Mean	2.5	1.0	1.9	1.4	1.1	2.6	2.6
LSD(0.05)	1.1	.	0.5	0.8	.	0.7	0.8
CV(%)	21.0	0.0	12.6	28.9	0.0	13.4	16.0

TABLE 70 - PLANT LODGING (1-5) (continued)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	1.0	2.0	1.5
JTN-5203	1.0	2.3	1.5
GoSoy 54G16	1.0	2.4	1.6
DA1239-09	1.0	3.0	2.1
DA1239-23	1.0	3.4	2.2
K16-1785	1.0	2.8	1.8
R13-818	1.0	2.5	2.1
R13-1409	1.0	2.5	2.2
R14-898	1.0	2.4	2.2
R15-1194	1.0	3.0	1.9
R15-1687	1.0	2.2	2.0
R15-2465RR	1.0	2.6	2.2
S16-3739R	1.0	2.6	2.1
S16-3747R	1.0	2.5	1.9
S16-7922C	1.0	2.4	2.3
S16-11222C	1.0	2.0	2.3
S16-11651C	1.0	2.1	2.3
S16-15809C	1.0	2.1	2.2
S16-16720R	1.0	2.4	2.1
S16-16814R	1.0	2.5	1.7
TN16-554R1	1.0	2.1	1.5
TN16-5024	1.0	1.9	1.7
TN16-5027	1.0	1.8	1.4
TN17-5019	1.0	1.2	1.3
TN17-5020	1.0	1.2	1.3
V11-0119	1.0	1.8	1.4
V12-4590	1.0	2.1	1.7
V13-3833	1.0	1.5	1.4
V14-0079	1.0	1.8	1.4
V14-0153	1.0	1.6	1.7
V14-2421	1.0	2.0	1.7
V14-3762	1.0	2.1	1.6
V14-3982	1.0	1.3	1.3
V15-2178	1.0	1.9	1.7
AG 53X6	1.0	2.3	1.8
Mean	1.0	2.2	1.8
LSD(0.05)	.	0.7	0.4
CV(%)	0.0	15.5	27.6

TABLE 71 - SEED QUALITY (1-5)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS
Ellis	2.0	1.5	1.0	.	.	1.0	3.0
JTN-5203	2.0	1.5	2.0	.	.	1.5	3.0
GoSoy 54G16	2.0	2.0	2.0	.	.	.	3.0
DA1239-09	2.0	1.5	3.0	.	.	1.0	3.0
DA1239-23	3.0	1.5	2.0	.	.	3.0	3.0
K16-1785	2.0	1.5	2.0	.	.	2.0	3.0
R13-818	3.0	1.5	3.0	.	.	3.0	3.0
R13-1409	3.0	2.0	2.0	.	.	2.5	3.0
R14-898	2.0	1.5	2.0	.	.	2.0	3.0
R15-1194	3.0	2.0	3.0	.	.	3.0	3.0
R15-1687	3.0	1.5	2.0	.	.	2.5	3.0
R15-2465RR	3.0	2.0	3.0	.	.	3.0	3.0
S16-3739R	3.0	2.0	2.0	.	.	3.0	3.0
S16-3747R	3.0	1.5	2.0	.	.	2.0	3.0
S16-7922C	2.0	1.5	3.0	.	.	2.0	3.0
S16-11222C	2.0	1.5	2.0	.	.	2.0	3.0
S16-11651C	2.0	1.5	2.0	.	.	3.0	3.0
S16-15809C	3.0	1.5	2.0	.	.	2.5	3.0
S16-16720R	2.0	1.5	3.0	.	.	3.0	3.0
S16-16814R	2.0	2.0	3.0	.	.	3.0	3.0
TN16-554R1	2.0	2.0	2.0	.	.	2.0	3.0
TN16-5024	3.0	2.0	3.0	.	.	2.0	3.0
TN16-5027	2.0	2.0	2.0	.	.	3.0	3.0
TN17-5019	3.0	2.0	2.0	.	.	2.5	3.0
TN17-5020	3.0	2.0	2.0	.	.	2.0	3.0
V11-0119	2.0	2.0	3.0	.	.	3.0	3.0
V12-4590	3.0	1.5	2.0	.	.	3.0	3.0
V13-3833	3.0	1.0	2.0	.	.	2.5	3.0
V14-0079	3.0	2.0	2.0	.	.	3.0	3.0
V14-0153	2.0	1.0	1.0	.	.	2.0	3.0
V14-2421	2.0	1.5	2.0	.	.		3.0
V14-3762	2.0	1.5	3.0	.	.	3.0	3.0
V14-3982	2.0	2.0	3.0	.	.	3.0	3.0
V15-2178	2.0	1.5	1.0	.	.	2.0	3.0
AG 53X6	3.0	1.5	2.0	.	.	2.0	3.0
Mean	2.5	1.7	2.2	.	.	2.4	3.0
LSD(0.05)	.	1.1		.	.	0.6	.
CV(%)	.	31.9	0.0	.	.	12.4	.

TABLE 71 - SEED QUALITY (1-5) (continued)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	2.0	2.2	1.8
JTN-5203	3.5	2.1	2.2
GoSoy 54G16	2.0	1.8	2.1
DA1239-09	1.5	1.8	2.0
DA1239-23	2.5	1.8	2.4
K16-1785	3.2	2.1	2.2
R13-818	3.0	2.0	2.6
R13-1409	3.0	1.9	2.5
R14-898	2.5	2.5	2.2
R15-1194	3.5	2.5	2.9
R15-1687	3.0	2.1	2.4
R15-2465RR	2.5	2.4	2.7
S16-3739R	3.5	2.1	2.7
S16-3747R	4.0	2.2	2.5
S16-7922C	2.0	1.9	2.2
S16-11222C	2.0	1.9	2.0
S16-11651C	2.5	1.9	2.3
S16-15809C	2.5	1.9	2.3
S16-16720R	3.5	1.7	2.5
S16-16814R	3.0	2.4	2.7
TN16-554R1	3.5	2.2	2.4
TN16-5024	3.0	2.3	2.6
TN16-5027	4.2	2.5	2.7
TN17-5019	3.0	2.0	2.5
TN17-5020	2.0	2.1	2.2
V11-0119	3.0	1.8	2.6
V12-4590	1.2	1.7	2.2
V13-3833	3.5	2.0	2.4
V14-0079	2.5	2.5	2.6
V14-0153	1.0	2.0	1.7
V14-2421	1.5	2.3	2.0
V14-3762	2.5	2.2	2.5
V14-3982	2.0	1.8	2.4
V15-2178	3.0	1.8	2.0
AG 53X6	1.0	2.2	2.0
Mean	2.6	2.1	2.3
LSD(0.05)	1.4	0.3	0.5
CV(%)	24.7	7.3	22.8

TABLE 72 - SEED SIZE (GRAMS PER 100 SEED)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS
Ellis	13.4	13.2	12.4	.	.	10.4	14.3
JTN-5203	12.9	13.7	11.8	.	.	11.7	12.5
GoSoy 54G16	13.8	15.6	13.6	.	.	.	14.4
DA1239-09	15.9	15.6	14.5	.	.	14.1	14.4
DA1239-23	13.0	13.9	11.9	.	.	11.9	12.6
K16-1785	13.1	14.5	14.2	.	.	11.7	13.8
R13-818	14.3	14.8	12.5	.	.	12.5	12.3
R13-1409	14.5	15.7	12.6	.	.	12.5	12.1
R14-898	16.2	16.6	15.4	.	.	14.7	14.4
R15-1194	15.1	14.2	14.1	.	.	14.3	13.4
R15-1687	11.8	14.9	12.9	.	.	12.9	12.0
R15-2465RR	14.6	15.9	13.2	.	.	13.1	15.0
S16-3739R	13.6	14.9	12.6	.	.	12.5	12.8
S16-3747R	15.0	14.4	14.7	.	.	14.0	13.6
S16-7922C	13.5	16.4	12.9	.	.	13.6	14.3
S16-11222C	17.6	14.8	13.1	.	.	15.7	15.2
S16-11651C	14.1	13.5	13.7	.	.	13.4	13.5
S16-15809C	16.0	15.2	15.5	.	.	15.8	14.5
S16-16720R	13.2	12.7	11.9	.	.	14.0	11.9
S16-16814R	14.4	15.1	13.0	.	.	12.2	12.9
TN16-554R1	11.2	13.3	10.7	.	.	10.1	12.0
TN16-5024	13.6	13.5	13.9	.	.	11.9	12.4
TN16-5027	15.9	16.1	15.1	.	.	13.2	13.3
TN17-5019	13.7	14.3	13.8	.	.	13.8	14.5
TN17-5020	13.3	14.7	14.1	.	.	12.9	13.6
V11-0119	11.7	15.4	12.5	.	.	11.3	14.9
V12-4590	15.3	16.1	15.4	.	.	17.0	15.7
V13-3833	13.0	14.3	13.6	.	.	13.2	16.2
V14-0079	15.0	15.5	14.2	.	.	12.1	15.1
V14-0153	17.5	17.4	16.0	.	.	16.3	17.4
V14-2421	16.4	15.9	14.3	.	.		15.1
V14-3762	16.9	16.0	16.4	.	.	14.3	18.0
V14-3982	15.8	15.3	15.3	.	.	14.0	17.2
V15-2178	12.5	14.4	11.9	.	.	13.1	17.0
AG 53X6	16.2	16.5	14.7	.	.	14.5	15.0
Mean	14.4	15.0	13.7	.	.	13.3	14.2
LSD(0.05)	.	3.2		.	.	0.9	.
CV(%)	.	10.4	0.0	.	.	3.5	.

TABLE 72 - SEED SIZE (GRAMS PER 100 SEED) (continued)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	16.3	11.5	13.0
JTN-5203	12.9	12.4	12.5
GoSoy 54G16	13.3	13.2	13.8
DA1239-09	16.5	13.9	15.0
DA1239-23	15.0	12.7	13.0
K16-1785	15.3	12.1	13.5
R13-818	13.5	13.7	13.4
R13-1409	12.4	12.2	13.1
R14-898	18.1	15.8	15.9
R15-1194	14.0	14.0	14.2
R15-1687	11.6	12.5	12.7
R15-2465RR	15.4	15.3	14.6
S16-3739R	15.1	13.1	13.5
S16-3747R	18.3	15.3	15.1
S16-7922C	15.1	14.0	14.3
S16-11222C	15.3	16.1	15.3
S16-11651C	13.6	13.6	13.6
S16-15809C	15.1	15.0	15.3
S16-16720R	14.3	15.2	13.4
S16-16814R	14.8	12.2	13.5
TN16-554R1	12.9	10.7	11.5
TN16-5024	14.0	11.8	13.1
TN16-5027	16.5	14.3	14.9
TN17-5019	13.2	14.5	14.0
TN17-5020	11.4	13.8	13.4
V11-0119	13.9	10.8	12.9
V12-4590	15.2	15.5	15.8
V13-3833	11.3	12.3	13.3
V14-0079	13.4	11.1	13.6
V14-0153	17.1	16.9	16.9
V14-2421	15.3	15.0	15.2
V14-3762	14.7	15.8	15.9
V14-3982	14.5	15.2	15.2
V15-2178	11.0	12.8	13.1
AG 53X6	16.5	15.7	15.6
Mean	14.5	13.7	14.1
LSD(0.05)	3.2	0.6	1.1
CV(%)	10.7	2.1	8.7

TABLE 73 - OIL (%)†
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS
Ellis	19.3	18.4	19.5	.	.	19.5	19.3
JTN-5203	19.4	19.3	20.1	.	.	19.7	19.9
GoSoy 54G16	20.5	20.0	20.7	.	.	.	20.2
DA1239-09	19.6	19.6	20.3	.	.	18.7	19.9
DA1239-23	19.7	19.9	20.1	.	.	19.5	19.7
K16-1785	20.8	21.0	20.6	.	.	20.4	21.4
R13-818	20.7	19.7	20.4	.	.	20.3	20.7
R13-1409	20.0	19.6	19.9	.	.	19.3	19.8
R14-898	20.7	19.7	19.8	.	.	19.4	20.7
R15-1194	20.6	20.4	21.0	.	.	20.2	20.7
R15-1687	18.9	18.9	19.0	.	.	18.2	19.3
R15-2465RR	19.5	19.2	19.4	.	.	19.2	19.4
S16-3739R	20.5	20.2	20.7	.	.	19.8	20.5
S16-3747R	20.1	19.6	19.6	.	.	19.7	20.1
S16-7922C	20.8	19.9	20.9	.	.	19.9	20.5
S16-11222C	20.7	20.8	20.7	.	.	19.9	20.9
S16-11651C	19.3	18.8	19.7	.	.	20.4	18.7
S16-15809C	21.0	20.9	20.9	.	.	19.8	20.8
S16-16720R	19.7	19.3	19.0	.	.	18.9	19.6
S16-16814R	20.3	20.3	20.4	.	.	19.6	20.7
TN16-554R1	19.2	19.0	19.3	.	.	19.1	19.4
TN16-5024	19.2	18.3	18.6	.	.	18.3	19.0
TN16-5027	19.6	19.1	19.1	.	.	18.6	19.8
TN17-5019	20.0	19.0	19.5	.	.	18.8	19.6
TN17-5020	19.5	19.0	19.5	.	.	18.9	19.9
V11-0119	19.3	18.9	19.4	.	.	17.8	19.6
V12-4590	20.4	19.5	19.8	.	.	18.8	20.5
V13-3833	19.4	19.1	19.7	.	.	19.0	19.1
V14-0079	20.8	19.9	20.3	.	.	20.0	20.0
V14-0153	19.6	18.8	19.2	.	.	18.1	19.0
V14-2421	19.1	18.4	19.1	.	.	.	19.5
V14-3762	19.5	19.4	19.5	.	.	20.0	19.8
V14-3982	20.1	19.3	19.4	.	.	19.0	19.6
V15-2178	19.5	18.2	18.6	.	.	17.2	19.0
AG 53X6	19.7	20.1	20.5	.	.	19.3	20.3
Mean	19.9	19.5	19.8	.	.	19.2	19.9
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

†Oil percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 73 - OIL (%)† (continued)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	20.8	18.5	19.3
JTN-5203	21.5	19.2	19.9
GoSoy 54G16	20.9	19.5	20.2
DA1239-09	20.4	18.7	19.6
DA1239-23	21.4	19.4	20.0
K16-1785	21.4	20.5	20.9
R13-818	21.5	20.0	20.4
R13-1409	20.9	19.2	19.8
R14-898	21.0	19.2	20.1
R15-1194	21.4	20.0	20.6
R15-1687	21.6	18.3	19.2
R15-2465RR	20.8	18.5	19.4
S16-3739R	21.3	19.7	20.4
S16-3747R	20.9	19.6	19.9
S16-7922C	21.4	20.1	20.5
S16-11222C	22.1	19.7	20.7
S16-11651C	20.9	18.9	19.5
S16-15809C	22.0	20.4	20.8
S16-16720R	20.7	19.0	19.4
S16-16814R	21.5	19.9	20.4
TN16-554R1	20.9	18.7	19.4
TN16-5024	20.4	18.6	18.9
TN16-5027	19.8	18.5	19.2
TN17-5019	22.0	19.3	19.7
TN17-5020	21.4	19.2	19.6
V11-0119	20.9	18.7	19.2
V12-4590	21.7	19.6	20.0
V13-3833	20.9	19.2	19.5
V14-0079	21.2	19.7	20.3
V14-0153	20.3	18.5	19.1
V14-2421	20.2	18.1	19.0
V14-3762	20.9	18.8	19.7
V14-3982	20.9	19.3	19.7
V15-2178	20.6	18.1	18.7
AG 53X6	21.1	19.7	20.1
Mean	21.1	19.2	19.8
LSD(0.05)	.	.	0.4
CV(%)	.	.	1.8

TABLE 74 - PROTEIN (%)†
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS
Ellis	35.9	36.3	35.1	.	.	33.4	35.6
JTN-5203	35.5	35.2	36.1	.	.	34.8	35.6
GoSoy 54G16	33.0	33.7	33.4	.	.	.	34.5
DA1239-09	36.2	35.6	35.5	.	.	37.0	34.6
DA1239-23	36.6	35.2	35.5	.	.	35.4	35.2
K16-1785	36.0	35.6	36.6	.	.	35.6	35.1
R13-818	34.9	34.7	34.5	.	.	33.6	33.4
R13-1409	34.7	34.8	34.3	.	.	34.8	33.5
R14-898	35.1	35.1	35.3	.	.	34.0	33.1
R15-1194	34.3	34.7	34.0	.	.	32.7	32.4
R15-1687	35.9	35.8	35.8	.	.	35.7	34.7
R15-2465RR	36.9	36.4	36.6	.	.	34.1	35.5
S16-3739R	35.1	34.8	34.7	.	.	34.5	34.2
S16-3747R	34.1	34.2	34.7	.	.	34.1	34.1
S16-7922C	35.2	34.1	35.0	.	.	34.8	34.6
S16-11222C	34.2	34.6	34.1	.	.	34.1	33.1
S16-11651C	36.3	36.5	35.2	.	.	38.2	35.5
S16-15809C	35.4	35.0	35.2	.	.	36.1	32.2
S16-16720R	34.3	36.0	35.8	.	.	35.1	35.0
S16-16814R	36.2	36.7	37.1	.	.	37.7	35.6
TN16-554R1	34.9	35.5	34.3	.	.	33.9	34.2
TN16-5024	34.9	35.3	34.9	.	.	34.5	34.9
TN16-5027	34.4	34.7	35.0	.	.	34.7	33.4
TN17-5019	34.8	34.2	33.9	.	.	34.2	34.2
TN17-5020	35.4	35.9	34.9	.	.	34.8	34.2
V11-0119	36.2	37.4	36.6	.	.	38.2	37.0
V12-4590	40.3	38.3	40.0	.	.	39.0	35.5
V13-3833	34.9	35.2	35.3	.	.	35.0	36.6
V14-0079	37.6	37.7	36.8	.	.	35.3	36.4
V14-0153	38.9	38.1	39.1	.	.	38.6	36.7
V14-2421	38.0	39.1	39.0	.	.	.	41.2
V14-3762	36.6	37.2	36.2	.	.	34.1	36.6
V14-3982	36.7	35.5	37.3	.	.	37.5	38.3
V15-2178	35.4	37.0	37.2	.	.	38.3	35.2
AG 53X6	35.3	34.5	34.4	.	.	34.3	33.4
Mean	35.7	35.7	35.7	.	.	35.4	35.0
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

†Protein percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 74 - PROTEIN (%)† (continued)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	34.2	35.8	35.2
JTN-5203	33.6	35.3	35.2
GoSoy 54G16	34.1	33.6	33.7
DA1239-09	35.5	36.6	35.9
DA1239-23	34.0	35.6	35.4
K16-1785	35.8	36.3	35.9
R13-818	33.3	34.3	34.1
R13-1409	33.4	34.8	34.3
R14-898	33.6	34.1	34.3
R15-1194	32.9	34.6	33.6
R15-1687	31.7	35.6	35.0
R15-2465RR	34.4	36.0	35.7
S16-3739R	35.2	34.9	34.8
S16-3747R	33.6	33.3	34.0
S16-7922C	34.5	34.3	34.7
S16-11222C	32.6	34.1	33.8
S16-11651C	34.3	35.8	36.0
S16-15809C	33.5	34.1	34.5
S16-16720R	35.1	35.3	35.2
S16-16814R	36.8	36.6	36.7
TN16-554R1	33.5	35.2	34.5
TN16-5024	32.7	34.4	34.5
TN16-5027	34.1	34.6	34.4
TN17-5019	32.2	33.5	33.9
TN17-5020	33.1	34.1	34.6
V11-0119	36.2	36.5	36.8
V12-4590	37.0	38.2	38.3
V13-3833	33.9	34.8	35.1
V14-0079	35.6	36.1	36.5
V14-0153	35.9	38.6	38.0
V14-2421	37.0	38.7	38.8
V14-3762	35.3	36.3	36.0
V14-3982	36.6	36.3	36.9
V15-2178	33.8	36.5	36.2
AG 53X6	33.0	34.0	34.1
Mean	34.3	35.4	35.3
LSD(0.05)	.	.	0.8
CV(%)	.	.	2.2

TABLE 75 - ESTIMATED MEAL PROTEIN (%)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	McCune, KS	Pittsburg, KS	Portageville, MO(B)	Stoneville, MS
Ellis	48.3	48.4	47.4	.	.	45.1	48.0
JTN-5203	47.9	47.4	49.2	.	.	47.1	48.4
GoSoy 54G16	45.0	45.7	45.8	.	.	.	47.0
DA1239-09	49.0	48.2	48.4	.	.	49.4	47.0
DA1239-23	49.6	47.7	48.3	.	.	47.9	47.7
K16-1785	49.4	49.0	50.0	.	.	48.5	48.6
R13-818	47.8	46.9	47.1	.	.	45.8	45.7
R13-1409	47.2	47.1	46.6	.	.	46.9	45.5
R14-898	48.1	47.5	47.9	.	.	45.8	45.4
R15-1194	46.9	47.4	46.7	.	.	44.5	44.4
R15-1687	48.1	48.0	48.1	.	.	47.3	46.7
R15-2465RR	49.8	49.0	49.3	.	.	45.9	47.9
S16-3739R	48.0	47.4	47.5	.	.	46.7	46.8
S16-3747R	46.4	46.3	46.9	.	.	46.1	46.3
S16-7922C	48.2	46.3	48.2	.	.	47.3	47.3
S16-11222C	46.9	47.5	46.7	.	.	46.3	45.5
S16-11651C	48.9	48.8	47.6	.	.	52.1	47.5
S16-15809C	48.7	48.0	48.4	.	.	48.9	44.2
S16-16720R	46.5	48.4	48.1	.	.	47.0	47.3
S16-16814R	49.4	50.1	50.7	.	.	50.9	48.7
TN16-554R1	47.0	47.6	46.2	.	.	45.5	46.1
TN16-5024	46.9	47.0	46.6	.	.	45.9	46.8
TN16-5027	46.4	46.6	47.0	.	.	46.4	45.3
TN17-5019	47.2	45.9	45.8	.	.	45.8	46.3
TN17-5020	47.7	48.2	47.1	.	.	46.6	46.4
V11-0119	48.7	50.1	49.3	.	.	50.5	50.0
V12-4590	55.0	51.8	54.2	.	.	52.2	48.5
V13-3833	47.0	47.3	47.8	.	.	46.9	49.2
V14-0079	51.6	51.1	50.2	.	.	48.0	49.5
V14-0153	52.6	50.9	52.6	.	.	51.2	49.2
V14-2421	51.0	52.1	52.4	.	.	.	55.6
V14-3762	49.4	50.1	48.9	.	.	46.4	49.6
V14-3982	49.9	47.8	50.3	.	.	50.3	51.8
V15-2178	47.8	49.1	49.7	.	.	50.3	47.2
AG 53X6	47.8	47.0	47.1	.	.	46.1	45.5
Mean	48.5	48.2	48.4	.	.	47.6	47.5
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

TABLE 75 - ESTIMATED MEAL PROTEIN (%) (continued)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	46.9	47.8	47.4
JTN-5203	46.5	47.5	47.7
GoSoy 54G16	46.9	45.4	46.0
DA1239-09	48.4	48.9	48.5
DA1239-23	46.9	48.1	48.0
K16-1785	49.5	49.6	49.2
R13-818	46.2	46.5	46.6
R13-1409	46.0	46.7	46.6
R14-898	46.2	45.9	46.7
R15-1194	45.5	47.0	46.1
R15-1687	44.0	47.4	47.1
R15-2465RR	47.2	48.0	48.2
S16-3739R	48.5	47.2	47.4
S16-3747R	46.2	45.1	46.2
S16-7922C	47.7	46.7	47.4
S16-11222C	45.6	46.1	46.4
S16-11651C	47.1	48.0	48.6
S16-15809C	46.7	46.5	47.3
S16-16720R	48.1	47.4	47.5
S16-16814R	51.0	49.6	50.1
TN16-554R1	46.1	47.0	46.5
TN16-5024	44.6	46.0	46.2
TN16-5027	46.1	46.1	46.3
TN17-5019	44.9	45.1	45.8
TN17-5020	45.7	45.8	46.8
V11-0119	49.7	48.8	49.6
V12-4590	51.4	51.7	52.1
V13-3833	46.6	46.8	47.4
V14-0079	49.0	48.8	49.8
V14-0153	48.9	51.5	51.0
V14-2421	50.4	51.4	52.1
V14-3762	48.4	48.6	48.8
V14-3982	50.3	48.9	49.9
V15-2178	46.3	48.4	48.4
AG 53X6	45.5	46.1	46.4
Mean	47.3	47.6	47.9
LSD(0.05)	.	.	1.1
CV(%)	.	.	2.1

SUMMARY OF SEED FATTY ACIDS (%)†
PRELIMINARY TEST V-EARLY 2018

STRAIN/ VARIETY	Palmitic Acid	Stearic Acid	Oleic Acid	Linoleic Acid	Linolenic Acid
Ellis	12.0	3.8	19.0	58.0	7.7
JTN-5203	13.0	3.3	22.0	55.0	7.2
AG 5335	11.0	4.1	22.0	56.0	6.6
GoSoy 54G16	11.0	3.2	25.0	54.0	6.7
S16-16720R	7.7	3.1	78.0	6.2	4.7
S16-16814R	7.8	2.8	84.0	2.0	3.5
Mean	10.0	3.4	41.0	39.0	6.0
LSD(0.05)	0.4	0.2	3.0	2.6	0.5
CV(%)	2.6	3.7	5.4	5.0	5.8

†Fatty acid percentage in seed oil reported beginning in 2017.

SEED PALMITIC ACID (%)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(B)	Stoneville, MS	Tallassee, AL	Test Mean
Ellis	11.5	11.4	11.6	11.7	11.7	11.3	11.5
JTN-5203	13.4	13.1	12.2	13.3	13.1	12.6	13.0
AG 5335	12.0	11.5	.	.	11.3	10.8	11.4
GoSoy 54G16	11.4	11.5	11.4	.	11.7	11.2	11.5
S16-16720R	7.6	7.5	7.6	7.8	8.2	.	7.7
S16-16814R	7.7	7.7	8.0	8.1	7.7	.	7.8
Mean	10.6	10.5	10.2	10.2	10.6	11.5	10.5
LSD(0.05)	.	.	.	.	.	.	0.4
CV(%)	.	.	.	.	.	.	2.6

SEED STEARIC ACID (%)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(B)	Stoneville, MS	Tallassee, AL	Test Mean
Ellis	3.6	3.6	3.7	3.9	3.6	4.2	3.8
JTN-5203	3.3	3.3	3.5	3.5	3.1	3.5	3.3
AG 5335	3.8	3.9			4.1	4.4	4.1
GoSoy 54G16	3.2	2.9	3.2		2.8	3.6	3.2
S16-16720R	3.0	3.0	3.0	3.3	2.9		3.1
S16-16814R	2.7	2.4	3.0	3.0	2.5		2.8
Mean	3.3	3.2	3.3	3.4	3.1	3.9	3.4
LSD(0.05)	.	.	.	.	.	.	0.2
CV(%)	.	.	.	.	.	.	3.7

SEED OLEIC ACID (%)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(B)	Stoneville, MS	Tallassee, AL	Test Mean
Ellis	18.8	18.3	19.5	18.4	18.0	19.0	18.7
JTN-5203	21.5	18.8	22.3	21.2	22.3	23.3	21.6
AG 5335	23.1	20.8			21.1	23.5	22.1
GoSoy 54G16	24.2	24.1	23.5		24.4	27.3	24.7
S16-16720R	80.9	80.2	80.8	78.8	69.7		78.1
S16-16814R	84.4	84.5	83.0	81.4	85.2		83.7
Mean	42.1	41.1	45.8	50.0	40.1	23.3	41.5
LSD(0.05)	.	.	.	.	.	.	3.0
CV(%)	.	.	.	.	.	.	5.4

SEED LINOLEIC ACID (%)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(B)	Stoneville, MS	Tallassee, AL	Test Mean
Ellis	58.3	58.4	57.7	57.5	59.3	59.2	58.4
JTN-5203	55.2	56.3	54.6	54.0	55.0	54.7	55.0
AG 5335	54.5	57.0	.	.	57.3	55.4	56.0
GoSoy 54G16	54.6	54.6	54.5	.	54.7	52.5	54.1
S16-16720R	3.9	4.5	3.5	4.9	14.4	.	6.2
S16-16814R	1.8	1.6	2.2	3.2	1.5	.	2.0
Mean	38.1	38.8	34.5	29.9	40.4	55.4	38.6
LSD(0.05)	.	.	.	.	.	.	2.6
CV(%)	.	.	.	.	.	.	5.0

SEED LINOLENIC ACID (%)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Jackson, TN	Keiser, AR	Knoxville, TN	Portageville, MO(B)	Stoneville, MS	Tallassee, AL	Test Mean
Ellis	7.9	8.3	7.5	8.5	7.4	6.3	7.7
JTN-5203	6.6	8.4	7.4	8.0	6.5	6.0	7.2
AG 5335	6.6	6.7	.	.	6.3	5.9	6.6
GoSoy 54G16	6.6	6.9	7.3	.	6.4	5.4	6.7
S16-16720R	4.6	4.8	5.1	5.2	4.8	.	4.7
S16-16814R	3.5	3.7	3.8	4.3	3.1	.	3.5
Mean	6.0	6.5	6.2	6.5	5.8	5.9	6.0
LSD(0.05)	.	.	.	.	.	.	0.5
CV(%)	.	.	.	.	.	.	5.8

SUMMARY OF SEED SUGARS(%)†
PRELIMINARY TEST V-EARLY 2018

STRAIN/ VARIETY	Sucrose	Raffinose	Stachyose	Total Sugar
Ellis	4.3	1.1	3.9	9.2
JTN-5203	3.4	1.0	3.4	7.8
AG 5335	3.5	1.0	3.9	8.4
GoSoy54G16	5.3	0.8	1.9	8.0
V12-4590	4.2	0.8	2.7	7.6
AG 53X6	3.9	1.3	4.1	9.2
Mean	4.1	1.0	3.3	8.4
LSD(0.05)	1.9	0.3	1.5	2.7
CV(%)	38.0	28.0	38.0	28.0

†Seed sugars percentages reported beginning in 2017.

SEED SUCROSE(%)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Keiser, AR	Knoxville, TN	Portageville, MO (B)	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	3.8	4.0	5.3	5.9	3.1	5.2	4.3
JTN-5203	2.0	6.6	3.1	2.6	2.5	2.0	5.0
AG 5335	0.9	4.2	.	4.7	0.7	5.2	5.9
GoSoy54G16	2.8	3.8	4.6	.	4.1	9.0	7.3
V12-4590	0.1	3.9	3.4	5.8	5.8	5.9	4.2
AG 53X6	3.2	3.6	3.1	.	4.0	5.6	3.3
Mean	4.3	3.6	4.2	3.8	5.1	5.4	4.1
LSD(0.05)	.	.	.	.	.	.	1.9
CV(%)	.	.	.	.	.	.	38.4

SEED RAFFINOSE(%)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Keiser, AR	Knoxville, TN	Portageville, MO (B)	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	0.9	1.0	1.0	1.5	1.2	0.9	1.1
JTN-5203	0.8	1.3	1.2	0.5	1.0	1.3	0.6
AG 5335	0.9	0.9	.	0.6	0.9	1.9	0.9
GoSoy54G16	1.0	0.4	0.9	.	1.1	1.3	0.4
V12-4590	0.3	0.7	0.6	0.9	1.7	0.8	0.8
AG 53X6	1.1	1.2	1.4	.	0.9	2.1	1.3
Mean	0.9	1.0	0.7	1.0	1.6	0.8	1.0
LSD(0.05)	.	.	.	.	.	.	0.3
CV(%)	.	.	.	.	.	.	28.1

SEED STACHYOSE(%)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Keiser, AR	Knoxville, TN	Portageville, MO (B)	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	4.0	2.7	3.7	3.4	5.0	4.7	3.9
JTN-5203	3.1	4.7	4.5	2.1	3.3	3.7	2.7
AG 5335	3.0	4.2	.	3.6	2.8	4.9	5.0
GoSoy54G16	3.1	0.4	3.3	.	3.3	0.9	0.5
V12-4590	0.5	4.1	1.1	0.7	4.8	4.9	2.7
AG 53X6	3.6	4.0	4.4	.	3.4	5.4	3.9
Mean	3.6	3.2	3.1	2.8	4.1	3.6	3.3
LSD(0.05)	.	.	.	.	.	.	1.5
CV(%)	.	.	.	.	.	.	37.9

SEED TOTAL SUGARS (%)
PRELIMINARY GROUP V-EARLY 2018

STRAIN/ VARIETY	Keiser, AR	Knoxville, TN	Portageville, MO (B)	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
Ellis	8.8	7.8	10.0	10.7	9.3	10.8	9.2
JTN-5203	6.0	12.6	8.7	5.2	6.9	6.9	8.3
AG 5335	4.8	9.3	.	8.9	4.4	12.0	11.7
GoSoy54G16	7.0	4.6	8.8	.	8.6	11.2	8.2
V12-4590	0.9	8.7	5.1	7.3	12.3	11.6	7.6
AG 53X6	7.9	8.8	9.0	.	8.3	13.2	8.5
Mean	8.8	7.9	8.0	7.7	10.8	9.8	8.4
LSD(0.05)	.	.	.	.	.	.	2.7
CV(%)	.	.	.	.	.	.	27.6

INTENTIONALLY BLANK

TABLE 76 - PARENTAGE OF ENTRIES
PRELIMINARY GROUP V-LATE 2018

Ent	Strain/Variety	Parentage	Source	Fn	Trans-genic†	Special Traits‡
1	UA 5612	Commercial check	Commercial			
2	TN11-5140	Hutcheson x TN89-39	Pantalone			High Protein
3	JTN-5203	R93-171 x Anand	Arelli	F17		SCN, FLS
4	AG 5335	Commercial check	Commercial			
5	16UARK-52	R07-6614RR(4) x Ole 23-3HOxR07-6614RR(4) x R09-1237LL	Mozzoni		RR1	HOLN
6	N16-8531	Osage x Holiday	Carter	F4		
7	N16-8564	Osage x Holiday	Carter	F4		
8	R14-1422	R06-4433 x S05-11482	Mozzoni	F4:5		
9	R14-10150	Ole42-4-54	Mozzoni			HO
10	R15-489	R07-1857 x Ozark	Mozzoni	F4:5		
11	R15-5695	V06-3392 x N02-417	Mozzoni	F4:5		Oil > 20%
12	SC10-179	SC98-1850 x MANOKIN	Fallen			
13	TN16-5004	JTN-5203 x S09-13740	Pantalone			
14	TN16-5902	TN02-226 x MON RR2Y	Fallen		RR1	
15	TN17-5753R1	TN13-4730 x (JTN-5203 X (G03-3101 x LD00-2817P)	Pantalone		RR1	
16	V14-3821	Glenn x R05-235	Zhang	F4		
17	V14-3983	(Glenn x V03-4660) x Glenn	Zhang	F4		
18	AG 55X7	Commercial check	Commercial		RRX	

†Conv= Conventional(non-transgenic),LL= Liberty Link®, RR1= Roundup Ready®,RR2= Roundup Ready 2 Yield®
RRX= Roundup Ready 2 Xtend®
‡AA= modified amino acids, DNC= Do not cross with this, FLS= Frogeye leaf spot resistance, LJ= Long juvenile,
LN= low linolenic acid, LP= low phytate, HO= high oleic acid, HOLN= high oleic acid/low linolenic acid,
SCN= Soybean cyst nematode resistance, SR= Soybean rust resistance,
and STS= sulfonylurea tolerant

TABLE 77 - GENERAL SUMMARY OF PERFORMANCE
PRELIMINARY TEST V-LATE 2018

STRAIN/ VARIETY	SEED YIELD†	RANK	AVG. RANK	MAT. INDEX	LOD	HT	SCN Cyst Score (1-5)‡ Race 1	Race 3	Race 5	SC RATING	SC SCORE
UA 5612	61.2	2	7	0	1.9	36	5	2	4	R	1
TN11-5140	61.7	1	6	2	1.7	36	5	3	4	R	1
JTN-5203	57.3	12	10	-2	1.4	29	1	1	1	SS	3
AG 5335	.	.	.	.	.	.	.	.	5	R	1
16UARK-52	57.1	13	9	6	1.7	35	3	2	5	R	1
N16-8531	60.5	3	6	-3	1.4	28	4	3	5	R	1
N16-8564	58.9	7	8	-2	1.6	29	5	3	5	MS	4
R14-1422	59.1	6	8	-2	2.1	34	5	3	5	MS	4
R14-10150	56.1	15	11	-3	2.2	33	5	4	5	S	5
R15-489	59.7	5	9	-2	1.7	34	4	3	5	R	1
R15-5695	60.2	4	7	0	1.5	31	5	4	5	R	1
SC10-179	52.3	17	12	6	1.9	35	2	1	5	R	1
TN16-5004	57.7	10	9	4	2.0	34	4	2	5	R	1
TN16-5902	53.3	16	12	9	1.8	38	5	3	4	R	1
TN17-5753R1	57.4	11	10	0	1.7	33	5	2	5	R	1
V14-3821	57.8	9	9	0	1.6	32	4	2	5	S	5
V14-3983	56.1	14	9	-2	1.4	26	5	2	5	R	1
AG 55X7	58.1	8	8	-2	1.4	28	4	4	5	R	1
Mean	57.9	.	.	1	1.7	32	.	.	.		.
LSD(0.05)	7.2	.	.	3	0.3	2	.	.	.		.
CV(%)	13.2	.	.	593	21.0	8	.	.	.		.

† Data not included in mean: Tallassee,AL

‡The race 1, 3, and 5 SCN populations used in these tests were typed as HG (Heterodera glycines) Type 2.5.7, HG Type 5.7, and HG Type 2.5.7, respectively.

Reaction to the cultivar Pickett was used to distinguish between race 1 and race 5 SCN populations.

TABLE 78 - GENERAL SUMMARY OF PERFORMANCE (continued)
PRELIMINARY TEST V-LATE 2018

STRAIN/ VARIETY	SEED QUALITY	SEED SIZE	PROTEIN§ %	OIL§ %	MEAL PRO%	FL COLOR	PUB. COLOR	POD COLOR
UA 5612	2.1	12.5	35.1	19.8	47.5	P	G	T
TN11-5140	2.1	14.1	35.2	20.1	48	W	G	T
JTN-5203	2.3	13.4	35.4	19.7	47.9	W	G	T
AG 5335	.	.	.	.	.	W	G	T
16UARK-52	2.1	13.9	35.4	20.3	48.2		G	T
N16-8531	2.1	12.8	37.2	18.7	49.8	P	G	T
N16-8564	1.9	13.2	36.5	19.8	49.4	P	G	T
R14-1422	2.2	13.5	36.1	19.6	48.8	W	G	T
R14-10150	2.5	12.2	37.7	19.6	51	P	G	Br
R15-489	2.3	14.5	36.2	19.1	48.7	W	G	T
R15-5695	2.2	16.1	34.3	21.2	47.2	P	T	T
SC10-179	2.0	14.4	35.6	19.9	48.2	W	G	
TN16-5004	2.1	13.1	36.4	19.0	48.8	W	G	
TN16-5902	2.0	13.5	34.8	18.9	46.6	P	T	
TN17-5753R1	1.7	12.4	34.1	20.7	46.7	P	G	
V14-3821	2.3	18.3	36.7	19.6	49.7	W	T	
V14-3983	2.2	14.5	35.8	19.6	48.5	P	T	
AG 55X7	2.8	14.0	35.7	19.6	48.3			
Mean	2.2	13.9	35.8	19.7	48.4			
LSD(0.05)	0.7	1.3	0.9	0.5	1			
CV(%)	26.4	8.6	2.1	2.0	1.8			

§Protein percentage and oil percentage are reported on a 13% moisture basis beginning in 2015.

TABLE 79 - SEED YIELD (BUSHELS PER ACRE)
PRELIMINARY GROUP V-LATE 2018 †

STRAIN/ VARIETY	Keiser, AR	Kinston, NC	Knoxville, TN	McCune, KS	Pittsburg, KS	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
UA 5612	90.1	40.3	58.4	61.6	50.0	72.3	33.8	55.3	61.2
TN11-5140	90.8	41.5	65.1	58.1	49.0	59.8	58.0	67.3	61.7
JTN-5203	74.7	35.5	56.9	58.3	60.4	47.5	46.7	67.8	57.3
16UARK-52	74.5	38.2	65.8	49.7	50.6	52.2	45.1	68.5	57.1
N16-8531	66.2	43.6	61.3	60.3	46.7	73.3	29.2	72.3	60.5
N16-8564	81.1	42.8	64.3	57.9	45.5	57.5	53.2	63.1	58.9
R14-1422	86.5	34.8	57.3	62.3	50.8	70.7	51.5	51.5	59.1
R14-10150	88.0	33.5	47.7	54.8	47.9	62.9	32.2	55.6	56.1
R15-489	90.0	36.8	68.0	55.5	41.6	63.8	52.6	62.1	59.7
R15-5695	82.6	44.6	68.5	54.5	41.9	64.1	56.1	65.2	60.2
SC10-179	67.5	40.6	60.1	50.7	47.3	36.7	39.5	63.0	52.3
TN16-5004	83.8	42.1	59.2	62.5	47.0	54.6	24.7	54.9	57.7
TN16-5902	.	46.6	56.9	55.4	37.8	39.0	61.9	62.4	53.3
TN17-5753R1	75.8	40.0	63.9	54.0	49.2	58.4	44.4	60.7	57.4
V14-3821	80.6	41.3	61.9	56.9	49.7	54.5	50.4	60.1	57.8
V14-3983	62.5	44.0	59.9	56.3	41.6	60.6	43.3	68.1	56.1
AG 55X7	91.6	48.3	52.7	58.6	40.7	47.8	51.8	67.0	58.1
Mean	80.4	40.9	60.5	56.9	46.9	57.4	45.6	62.6	57.9
LSD(0.05)	7.6	8.3	17.9	9.1	4.7	12.1	18.4	10.3	7.2
CV(%)	4.5	9.6	13.6	7.5	4.8	10.0	19.1	7.8	13.2

† Data not included in mean: Tallassee,AL

TABLE 80 - RELATIVE MATURITY (DAYS EARLIER (-) OR LATER (+) THAN ENTRY 1)
PRELIMINARY GROUP V-LATE 2018

STRAIN/ VARIETY	Keiser, AR	Kinston, NC	Knoxville, TN	McCune, KS	Pittsburg, KS	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
UA 5612	10/5	10/18	10/10	10/20	10/20	10/1	10/22	10/19	10/15
TN11-5140	-2	8	2	6	4	-10	0	10	2
JTN-5203	-5	0	-1	5	-7	-12	0	1	-2
16UARK-52	-2	8	6	15	9	0	0	9	6
N16-8531	-4	0	0	-1	-5	-12	0	0	-3
N16-8564	-4	1	0	3	-3	-11	0	0	-2
R14-1422	-4	1	0	0	0	-13	0	0	-2
R14-10150	-4	-1	-1	0	-6	-13	0	-1	-3
R15-489	-2	2	1	0	-4	-13	0	2	-2
R15-5695	-3	2	1	6	-2	0	0	0	0
SC10-179	-2	6	2	17	11	0	0	13	6
TN16-5004	0	15	-1	12	4	-14	2	14	4
TN16-5902	.	15	7	13	10	5	0	14	9
TN17-5753R1	-3	1	-1	6	-1	1	0	0	0
V14-3821	-2	6	1	10	-1	-11	0	0	0
V14-3983	-3	1	-1	3	-5	-13	0	0	-2
AG 55X7	-3	1	-1	3	-6	-14	0	0	-2
Mean	-3	4	1	6	0	-7	0	4	1
LSD(0.05)	4	2	2	7	5	2	1	2	3
CV(%)	67	22	106	55	1839	12	583	24	593

TABLE 81 - PLANT HEIGHT (INCHES)
PRELIMINARY GROUP V-LATE 2018

STRAIN/ VARIETY	Keiser, AR	Kinston, NC	Knoxville, TN	McCune, KS	Pittsburg, KS	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
UA 5612	28	35	28	45	43	43	28	37	36
TN11-5140	28	37	33	48	38	34	33	38	36
JTN-5203	19	30	21	40	29	29	27	35	29
16UARK-52	29	35	31	41	39	36	33	37	35
N16-8531	21	27	22	35	33	27	24	32	28
N16-8564	22	33	24	34	30	29	25	32	29
R14-1422	24	35	32	44	36	39	30	36	34
R14-10150	24	34	29	44	36	32	30	35	33
R15-489	26	37	27	41	38	34	29	39	34
R15-5695	24	36	26	39	37	30	26	36	31
SC10-179	27	38	28	41	37	39	34	38	35
TN16-5004	28	36	32	38	35	34	29	38	34
TN16-5902		37	30	45	39	43	36	41	38
TN17-5753R1	26	35	28	41	35	32	30	37	33
V14-3821	24	34	27	38	37	34	26	39	32
V14-3983	17	26	21	32	30	26	23	34	26
AG 55X7	20	28	25	33	29	24	25	36	28
Mean	24	34	27	40	35	33	29	36	32
LSD(0.05)	3	.	6	.	.	3	3	4	2
CV(%)	6	.	10	.	.	5	5	5	8

TABLE 82 - PLANT LODGING (1-5)
PRELIMINARY GROUP V-LATE 2018

STRAIN/ VARIETY	Keiser, AR	Kinston, NC	Knoxville, TN	McCune, KS	Pittsburg, KS	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
UA 5612	1.0	2.5	2.0	2.0	1.5	3.0	1.0	2.5	1.9
TN11-5140	1.0	2.3	2.0	2.0	1.0	2.5	1.0	2.2	1.7
JTN-5203	1.0	2.0	1.5	1.0	1.0	2.0	1.0	2.1	1.4
16UARK-52	1.0	2.2	1.8	1.0	1.0	3.0	1.0	2.4	1.7
N16-8531	1.0	1.8	1.5	1.0	1.0	2.0	1.0	1.8	1.4
N16-8564	1.0	2.2	1.5	1.0	1.0	2.0	1.0	3.0	1.6
R14-1422	1.0	2.3	2.0	2.0	1.5	3.0	1.0	3.9	2.1
R14-10150	1.0	2.7	2.5	2.0	1.5	3.0	1.0	3.6	2.2
R15-489	1.0	2.5	1.8	1.0	1.0	3.0	1.0	2.4	1.7
R15-5695	1.0	2.0	1.8	1.5	1.0	2.0	1.0	2.0	1.5
SC10-179	1.0	2.5	2.0	1.5	1.5	3.5	1.0	2.4	1.9
TN16-5004	1.0	2.8	2.0	1.5	1.0	4.0	1.0	2.6	2.0
TN16-5902		2.3	2.0	2.0	1.0	2.5	1.0	2.4	1.8
TN17-5753R1	1.0	2.8	1.8	1.0	1.0	2.5	1.0	2.4	1.7
V14-3821	1.0	2.3	1.8	1.0	1.0	2.5	1.0	2.2	1.6
V14-3983	1.0	1.7	1.5	1.0	1.0	2.0	1.0	2.1	1.4
AG 55X7	1.0	2.0	1.5	1.0	1.0	2.0	1.0	1.9	1.4
Mean	1.0	2.3	1.8	1.4	1.1	2.6	1.0	2.5	1.7
LSD(0.05)	.	0.6	0.6	0.6	0.7	0.8	.	0.4	0.3
CV(%)	0.0	12.0	15.5	21.5	30.7	14.6	0.0	8.1	21.0

TABLE 83 - SEED QUALITY (1-5)
PRELIMINARY GROUP V-LATE 2018

STRAIN/ VARIETY	Keiser, AR	Kinston, NC	Knoxville, TN	McCune, KS	Pittsburg, KS	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
UA 5612	1.5	.	2.0	.	.	3.0	2.0	2.2	2.1
TN11-5140	1.5	.	2.0	.	.	3.0	2.0	2.0	2.1
JTN-5203	1.5	.	2.0	.	.	3.0	3.0	2.1	2.3
16UARK-52	2.0	.	1.0	.	.	3.0	3.0	1.7	2.1
N16-8531	1.0	.	2.0	.	.	3.0	3.0	1.5	2.1
N16-8564	2.1	.	1.0	.	.	3.0	2.0	1.8	1.9
R14-1422	1.0	.	2.0	.	.	3.0	3.0	1.9	2.2
R14-10150	1.0	.	3.0	.	.	3.0	3.0	2.7	2.5
R15-489	1.5	.	2.0	.	.	3.0	3.0	2.0	2.3
R15-5695	2.0	.	1.0	.	.	3.0	3.0	1.9	2.2
SC10-179	1.5	.	1.0	.	.	3.0	3.0	1.5	2.0
TN16-5004	0.9	.	1.0	.	.	3.0	3.0	2.3	2.1
TN16-5902	.	.	1.0	.	.	3.0	3.0	1.8	2.0
TN17-5753R1	1.0	.	1.0	.	.	3.0	2.5	1.4	1.7
V14-3821	2.1	.	2.0	.	.	3.0	2.5	2.2	2.3
V14-3983	1.5	.	3.0	.	.	3.0	2.0	1.5	2.2
AG 55X7	2.0	.	4.0	.	.	3.0	3.5	1.5	2.8
Mean	1.5	.	1.8	.	.	3.0	2.7	1.9	2.2
LSD(0.05)	1.4	.		.	.	.	1.0	0.4	0.7
CV(%)	40.2	.	0.0	.	.	.	17.1	10.7	26.4

TABLE 84 - SEED SIZE (GRAMS PER 100 SEED)
PRELIMINARY GROUP V-LATE 2018

STRAIN/ VARIETY	Keiser, AR	Kinston, NC	Knoxville, TN	McCune, KS	Pittsburg, KS	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
UA 5612	12.6	12.4	12.5	.	.	12.8	12.6	12.2	12.5
TN11-5140	12.6	14.8	15.2	.	.	12.6	15.3	14.0	14.1
JTN-5203	14.0	12.4	13.3	.	.	13.9	12.9	13.5	13.4
16UARK-52	13.1	15.9	15.1	.	.	12.3	13.2	14.0	13.9
N16-8531	13.5	12.5	13.0	.	.	13.3	12.1	12.4	12.8
N16-8564	13.8	12.6	13.2	.	.	12.5	14.6	12.3	13.2
R14-1422	12.8	13.0	13.9	.	.	12.8	15.9	12.5	13.5
R14-10150	13.8	11.6	10.9	.	.	11.4	12.5	12.9	12.2
R15-489	14.6	14.7	14.8	.	.	13.6	15.4	13.9	14.5
R15-5695	15.9	16.1	14.9	.	.	14.7	18.9	15.7	16.1
SC10-179	13.5	17.0	15.7	.	.	10.0	14.1	16.1	14.4
TN16-5004	12.3	14.7	13.1	.	.	11.6	12.7	14.0	13.1
TN16-5902	.	14.7	14.6	.	.	10.3	14.4	13.2	13.5
TN17-5753R1	12.6	11.7	12.0	.	.	11.0	14.3	12.5	12.4
V14-3821	18.0	19.1	18.4	.	.	17.4	19.1	17.9	18.3
V14-3983	14.3	14.2	14.9	.	.	15.0	14.1	14.9	14.5
AG 55X7	16.2	13.9	11.8	.	.	12.9	15.6	13.4	14.0
Mean	14.0	14.2	14.0	.	.	12.8	14.6	13.8	13.9
LSD(0.05)	2.3	.		.	.	.	2.9	0.8	1.3
CV(%)	6.9	.	0.0	.	.	.	9.0	2.6	8.6

TABLE 85 - OIL (%)†
PRELIMINARY GROUP V-LATE 2018

STRAIN/ VARIETY	Keiser, AR	Kinston, NC	Knoxville, TN	McCune, KS	Pittsburg, KS	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
UA 5612	19.3	20.0	20.0	.	.	19.3	20.9	19.3	19.8
TN11-5140	19.6	20.1	20.2	.	.	20.0	21.2	19.6	20.1
JTN-5203	19.2	19.4	19.9	.	.	19.7	20.0	19.7	19.7
16UARK-52	20.4	19.4	20.2	.	.	20.5	21.5	19.9	20.3
N16-8531	18.6	18.8	19.0	.	.	18.5	19.4	18.0	18.7
N16-8564	19.8	19.2	20.2	.	.	19.9	20.6	19.0	19.8
R14-1422	19.2	19.7	19.9	.	.	19.9	19.8	19.1	19.6
R14-10150	19.3	19.2	19.7	.	.	19.1	20.9	19.6	19.6
R15-489	19.0	18.7	19.2	.	.	19.5	20.1	18.4	19.1
R15-5695	21.4	20.7	20.7	.	.	21.6	22.1	20.6	21.2
SC10-179	19.4	19.2	20.1	.	.	19.6	21.6	19.2	19.9
TN16-5004	18.7	18.4	17.8	.	.	19.0	21.3	18.6	19.0
TN16-5902	.	18.3	19.5	.	.	18.7	19.8	18.5	18.9
TN17-5753R1	20.3	20.4	20.4	.	.	20.9	21.6	20.4	20.7
V14-3821	19.4	18.7	19.6	.	.	19.9	20.5	19.6	19.6
V14-3983	19.5	19.7	19.5	.	.	19.5	20.1	19.4	19.6
AG 55X7	19.5	20.1	19.8	.	.	18.9	20.4	19.1	19.6
Mean	19.5	19.4	19.7	.	.	19.7	20.7	19.3	19.7
LSD(0.05)	.	.	.	.	.	.	.	.	0.5
CV(%)	.	.	.	.	.	.	.	.	2.0

†Oil percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 86 - PROTEIN (%)†
PRELIMINARY GROUP V-LATE 2018

STRAIN/ VARIETY	Keiser, AR	Kinston, NC	Knoxville, TN	McCune, KS	Pittsburg, KS	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
UA 5612	35.2	35.6	34.8	.	.	35.4	34.6	34.7	35.1
TN11-5140	36.0	35.5	34.9	.	.	34.6	35.3	35.1	35.2
JTN-5203	35.6	35.0	35.4	.	.	35.8	36.5	34.3	35.4
16UARK-52	35.3	37.1	35.2	.	.	34.3	34.9	35.3	35.4
N16-8531	37.9	37.2	36.9	.	.	36.6	37.7	36.9	37.2
N16-8564	36.4	37.7	36.5	.	.	35.5	36.6	36.1	36.5
R14-1422	36.5	36.2	35.6	.	.	35.2	38.0	35.3	36.1
R14-10150	38.1	38.7	38.1	.	.	37.7	36.7	37.1	37.7
R15-489	36.6	37.1	36.1	.	.	34.5	36.8	36.2	36.2
R15-5695	34.6	35.4	35.2	.	.	32.6	33.8	34.0	34.3
SC10-179	36.2	37.0	34.3	.	.	35.8	34.8	35.3	35.6
TN16-5004	35.5	37.6	38.4	.	.	35.4	35.3	35.9	36.4
TN16-5902	.	35.9	33.7	.	.	35.0	34.8	34.4	34.8
TN17-5753R1	34.1	34.7	35.3	.	.	33.1	34.1	33.1	34.1
V14-3821	37.2	38.9	36.2	.	.	34.8	36.7	36.6	36.7
V14-3983	35.3	35.9	36.5	.	.	36.3	36.3	34.8	35.8
AG 55X7	35.1	35.3	35.5	.	.	36.5	36.6	35.4	35.7
Mean	36.0	36.5	35.8	.	.	35.2	35.9	35.3	35.8
LSD(0.05)	.	.	.	.	.	.	.	.	0.9
CV(%)	.	.	.	.	.	.	.	.	2.1

†Protein percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 87 - ESTIMATED MEAL PROTEIN (%)
PRELIMINARY GROUP V-LATE 2018

STRAIN/ VARIETY	Keiser, AR	Kinston, NC	Knoxville, TN	McCune, KS	Pittsburg, KS	Stoneville, MS	Tallassee, AL	Warsaw, VA	Test Mean
UA 5612	47.3	48.4	47.3	.	.	47.7	47.5	46.7	47.5
TN11-5140	48.7	48.3	47.5	.	.	47.0	48.7	47.5	48.0
JTN-5203	47.9	47.1	48.1	.	.	48.5	49.6	46.4	47.9
16UARK-52	48.2	50.0	48.0	.	.	46.9	48.3	47.9	48.2
N16-8531	50.6	49.7	49.6	.	.	48.8	50.9	49.0	49.8
N16-8564	49.3	50.7	49.6	.	.	48.2	50.1	48.5	49.4
R14-1422	49.1	48.9	48.3	.	.	47.8	51.5	47.4	48.8
R14-10150	51.3	52.1	51.5	.	.	50.6	50.4	50.1	51.0
R15-489	49.1	49.6	48.6	.	.	46.6	50.0	48.2	48.7
R15-5695	47.8	48.5	48.2	.	.	45.2	47.2	46.5	47.2
SC10-179	48.9	49.8	46.7	.	.	48.4	48.3	47.5	48.2
TN16-5004	47.5	50.1	50.8	.	.	47.5	48.7	48.0	48.8
TN16-5902	.	47.8	45.6	.	.	46.8	47.2	45.9	46.6
TN17-5753R1	46.5	47.4	48.1	.	.	45.5	47.3	45.1	46.7
V14-3821	50.2	52.0	49.0	.	.	47.2	50.2	49.4	49.7
V14-3983	47.7	48.6	49.3	.	.	49.0	49.3	46.9	48.5
AG 55X7	47.3	48.0	48.1	.	.	48.9	50.0	47.6	48.3
Mean	48.6	49.2	48.5	.	.	47.7	49.1	47.6	48.4
LSD(0.05)	.	.	.	.	.	.	.	.	1.0
CV(%)	.	.	.	.	.	.	.	.	1.8

SUMMARY OF SEED FATTY ACIDS (%)†
PRELIMINARY TEST V-LATE 2018

STRAIN/ VARIETY	Palmitic Acid	Stearic Acid	Oleic Acid	Linoleic Acid	Linolenic Acid
UA 5612	12.0	3.4	20.0	58.0	7.0
TN11-5140	11.0	3.4	21.0	58.0	6.8
JTN-5203	13.0	3.3	22.0	55.0	7.3
AG 5335	11.0	4.0	26.0	52.0	6.0
16UARK-52	7.6	3.4	80.0	6.8	2.1
R14-10150	7.2	2.8	85.0	1.7	3.3
Mean	10.0	3.4	42.0	39.0	5.4
LSD(0.05)	0.5	0.2	5.2	4.4	0.7
CV(%)	3.8	4.5	9.1	8.4	9.3

†Fatty acid percentage in seed oil reported beginning in 2017.

SEED PALMITIC ACID (%)
PRELIMINARY GROUP V-LATE 2018

STRAIN/ VARIETY	Keiser, AR	Kinston, NC	Knoxville, TN	Stoneville, MS	Tallassee, AL	Test Mean
UA 5612	11.2	10.8	11.5	12.3	11.7	11.5
TN11-5140	11.3	11.5	11.5	11.5	10.6	11.3
JTN-5203	12.8	13.2	12.2	12.9	13.2	12.9
AG 5335	11.3		10.9	11.6	11.9	11.4
16UARK-52	7.2	7.5	7.4	8.5	7.2	7.6
R14-10150	7.2	7.1	7.1	7.2	7.2	7.2
Mean	10.2	10.0	10.1	10.7	10.3	10.3
LSD(0.05)	.	.	.	.	.	0.5
CV(%)	.	.	.	.	.	3.8

SEED STEARIC ACID (%)
PRELIMINARY GROUP V-LATE 2018

STRAIN/ VARIETY	Keiser, AR	Kinston, NC	Knoxville, TN	Stoneville, MS	Tallassee, AL	Test Mean
UA 5612	3.4	3.4	3.5	3.2	3.5	3.4
TN11-5140	3.5	3.2	3.4	3.2	3.9	3.4
JTN-5203	3.1	3.3	3.6	3.1	3.7	3.3
AG 5335	4.2		3.8	3.8	4.1	4.0
16UARK-52	3.4	3.4	3.6	3.1	3.5	3.4
R14-10150	2.7	2.7	2.8	2.7	3.0	2.8
Mean	3.4	3.2	3.5	3.2	3.6	3.4
LSD(0.05)	.	.	.	.	.	0.2
CV(%)	.	.	.	.	.	4.5

SEED OLEIC ACID (%)
PRELIMINARY GROUP V-LATE 2018

STRAIN/ VARIETY	Keiser, AR	Kinston, NC	Knoxville, TN	Stoneville, MS	Tallassee, AL	Test Mean
UA 5612	17.7	22.3	20.8	18.0	22.1	20.2
TN11-5140	17.5	19.4	18.0	17.9	30.5	20.6
JTN-5203	18.5	19.4	21.3	24.1	24.2	21.5
AG 5335	22.7		31.5	22.7	27.5	26.1
16UARK-52	83.1	83.8	82.4	67.4	84.0	80.1
R14-10150	85.2	84.9	84.7	84.8	85.6	85.0
Mean	40.8	45.9	43.1	39.1	45.7	42.3
LSD(0.05)	.	.	.	.	.	5.2
CV(%)	.	.	.	.	.	9.1

SEED LINOLEIC ACID (%)
PRELIMINARY GROUP V-LATE 2018

STRAIN/ VARIETY	Keiser, AR	Kinston, NC	Knoxville, TN	Stoneville, MS	Tallassee, AL	Test Mean
UA 5612	60.0	57.1	56.7	60.1	55.9	58.0
TN11-5140	60.1	59.2	59.6	60.3	50.1	57.9
JTN-5203	57.3	56.8	55.1	53.4	52.6	55.0
AG 5335	55.2		47.4	56.1	51.2	52.4
16UARK-52	4.3	3.5	4.6	18.2	3.4	6.8
R14-10150	1.5	1.9	1.6	2.0	1.3	1.7
Mean	39.7	35.7	37.5	41.7	35.7	38.6
LSD(0.05)	.	.	.	.	.	4.4
CV(%)	.	.	.	.	.	8.4

SEED LINOLENIC ACID (%)
PRELIMINARY GROUP V-LATE 2018

STRAIN/ VARIETY	Keiser, AR	Kinston, NC	Knoxville, TN	Stoneville, MS	Tallassee, AL	Test Mean
UA 5612	7.8	6.4	7.5	6.4	6.7	7.0
TN11-5140	7.6	6.7	7.5	7.2	4.9	6.8
JTN-5203	8.4	7.4	7.7	6.6	6.3	7.3
AG 5335	6.7		6.4	5.9	5.3	6.0
16UARK-52	2.0	1.8	2.0	2.7	1.8	2.1
R14-10150	3.4	3.4	3.7	3.3	2.9	3.3
Mean	6.0	5.1	5.8	5.3	4.7	5.4
LSD(0.05)	.	.	.	.	.	0.7
CV(%)	.	.	.	.	.	9.3

TABLE 88 - PARENTAGE OF ENTRIES
UNIFORM GROUP VI 2018

Ent	Strain/Variety	Parentage	Source	Fn	Trans-genic†	Special Traits‡
1	AG64X8 RR2X	Commercial check	Commercial		RRX	
2	NC-Dunphy	MD99-6226 x N97-9677	Carter			12.5% PI 416937
3	NC-Roy	Holladay x Brim	Carter			
4	NC-Dilday	N99-8137 x TN99-117	Carter			12.5% PI 416937
5	DS99-522-11	LG01-5087-5 x Osage	Smith	F5		19% Exotic
6	G13-2842R2	R01-2346 x [G00-3880 x RR2Y]	Zenglu Li	F7d	RR2	
7	G13-6241	G00-3213 x LG04-6000	Zenglu Li	F5d		19% Exotic
8	G14-6063	G08PR-394 x G09PR-25	Zenglu Li	F5d		25% Exotic
9	G15PR-340	{G00-3880 (4) x [Benning low lin/low palm]} x {G00-3880(4) x [G00-3213 x (17D x S08-14788)]}	Zenglu Li	BC4F3d		
10	N07-14718	Young x N94-7350	Carter	F4		25% Suzuyataka
11	N08-105	N99-186 x TN99-117	Mian	F4		
12	N09-209	N02-205 x MD97-6065	Mian	F4		
13	N09-12273	NC-Roy x BLUE SIDE-BB	Carter	F4		50% Blue Side
14	N10-687	NTCPR01-163 x N03-832	Mian	F4		25% Tamahikari
15	N11-339	N05-741 x N05-196	Mian	F4		
16	N11-340	N05-741 x N05-196	Mian	F4		
17	N11-352	N05-741 x N05-196	Mian	F4		
18	N11-9228	N03-12249 x N03-11895	Carter	F4		50% PI 437726
19	N11-9298	N03-12249 x N03-11895	Carter	F4		
20	N11-9519	Young x N02-8718	Carter	F4		25% Fukuyataka
21	R14-14648	R09-1822 x R09-1589	Mozzoni	F3:4		
22	STPR14-358	N6001 x Young	Carter	F4		12.5% Suzuyataka, High Protein
23	STPR14-446	N6001 x Young	Carter	F4		12.5% Suzuyataka, High Protein

†Conv= Conventional(non-transgenic), LL= Liberty Link®, RR1= Roundup Ready®, and RR2=Roundup Ready 2 Yield®
RRX= Roundup Ready 2 Xtend®
‡AA= modified amino acids, DNC= Do not cross with this, FLS= Frogeye leaf spot resistance, LJ= Long juvenile,
LN= low linolenic acid, LP= low phytate, HO= high olelic acid, HOLN= high oleic acid/low linolenic acid,
SCN= Soybean cyst nematode resistance, SR= Soybean rust resistance,
and STS= sulfonylurea tolerant

TABLE 89 - GENERAL SUMMARY OF PERFORMANCE
UNIFORM TEST VI 2018

STRAIN/		AVG.	YIELD†			PROTEIN‡			OIL‡		
VARIETY	RANK	RANK	2018	17-18	16-18	2018	17-18	16-18	2018	17-19	16-18
AG64X8 RR2X	14	12	48.4	.	.	35.9	.	.	19.5	.	.
NC-Dunphy	8	11	50.9	52.2	.	34.4	34.1	.	20.3	19.9	.
NC-Roy	2	7	54.1	52.6	53.2	37.2	36.8	37.0	18.9	18.7	18.6
NC-Dilday	3	9	52.5	52.2	.	33.4	33.3	.	21.1	20.5	.
DS99-522-11	19	13	46.8	.	.	36.3	.	.	19.4	.	.
G13-2842R2	1	4	56.6	57.7	.	36.1	35.9	.	19.4	19.0	.
G13-6241	21	16	45.8	.	.	35.3	.	.	19.9	.	.
G14-6063	15	13	48.2	.	.	34.8	.	.	20.9	.	.
G15PR-340	4	9	51.9	.	.	35.9	.	.	20.7	.	.
N07-14718	13	14	48.7	.	.	38.1	.	.	19.6	.	.
N08-105	10	10	49.6	.	.	35.2	.	.	20.6	.	.
N09-209	7	11	50.9	.	.	33.6	.	.	21.2	.	.
N09-12273	9	11	50.8	.	51.2	35.3	.	35.8	21.0	.	20.6
N10-687	5	9	51.8	53.5	.	37.2	36.9	.	18.3	18.2	.
N11-339	6	10	51.5	.	.	35.5	.	.	19.9	.	.
N11-340	16	11	48.0	50.4	51.1	34.2	34.3	34.5	20.6	20.2	20.3
N11-352	12	10	48.8	52.1	53.0	34.1	33.9	34.3	21.0	20.6	20.5
N11-9228	23	18	41.3	.	.	34.9	.	.	20.7	.	.
N11-9298	20	16	45.9	.	.	34.7	.	.	21.3	.	.
N11-9519	17	15	47.3	48.2	.	38.3	37.6	.	19.0	19.0	.
R14-14648	11	13	49.5	.	.	34.9	.	.	19.7	.	.
STPR14-358	18	16	47.1	.	.	37.0	.	.	20.2	.	.
STPR14-446	22	18	45.2	.	.	38.8	.	.	19.3	.	.
Mean	.	.	49.2	.	.	35.7	.	.	20.1	.	.
LSD(0.05)	.	.	6.9	.	.	1.2	.	.	0.6	.	.
CV(%)	.	.	16.2	.	.	2.8	.	.	2.3	.	.

† Data not included in mean: 2018 - Tallassee,AL
2017 - Stoneville, MS
2016 - Belle Mina, AL; Bossier City, LA; Stoneville, MS; Tallassee, AL(A)

‡ Protein percentage and oil percentage reported on a 13% moisture basis beginning in 2015.

TABLE 90 - GENERAL SUMMARY OF PERFORMANCE -Part 2
UNIFORM TEST VI 2018

STRAIN/ VARIETY	MEAL PRO %	MAT INDEX	LOD	HT	SEED QUALITY	SEED SIZE	FL. COLOR	PUB. COLOR	POD COLOR
AG64X8 RR2X	48.4	0	2	31	2.1	13.9			
NC-Dunphy	47.0	-2	2	25	2.5	17.3	P	G	T
NC-Roy	49.8	2	3	30	2.0	14.8	W	G	Br
NC-Dilday	46.0	1	3	29	2.2	18.2	P	G	Br
DS99-522-11	49.0	1	3	34	2.5	14.5	P	G	T
G13-2842R2	48.7	4	2	31	2.1	16.2	W	T	T
G13-6241	47.9	-8	2	29	2.7	16.7	W	T	T
G14-6063	47.8	-2	2	30	2.3	17.8	W	G	T
G15PR-340	49.1	1	3	32	2.4	14.3	P	T	T
N07-14718	51.5	0	3	29	2.0	15.5	P	G	
N08-105	48.3	-2	3	29	2.6	16.5	P	T	T
N09-209	46.4	2	2	28	2.3	16	P	G	T
N09-12273	48.6	3	3	30	2.5	18.3	P	G	Br
N10-687	49.5	0	2	28	1.8	13.4	P	T	Br
N11-339	48.1	-5	3	28	2.8	16.4	W	G	T
N11-340	46.8	-3	2	24	1.9	14.3	W	G	Br
N11-352	46.9	0	2	24	1.8	13.7	W	G	Br
N11-9228	47.9	-5	3	26	2.6	16	P	T	
N11-9298	47.8	-1	2	31	2.5	16.2	P	G	T
N11-9519	51.3	2	3	34	1.9	18.6	W	G	T
R14-14648	47.3	-4	2	30	2.9	15.2	P	G	T/Br
STPR14-358	50.4	-1	2	30	2.3	15.9	W	G	
STPR14-446	52.3	0	3	31	2.4	15.3	P	G	
Mean	48.6	-1	2	29	2.3	15.9			
LSD(0.05)	1.4	3	1	2	0.5	1.1			
CV(%)	2.3	602	29	11	27.0	8.3			

TABLE 91 - GENERAL SUMMARY OF PEST REACTION
UNIFORM TEST VI 2018

STRAIN/	SCN Cyst Score (1-5 Scale)†			PRK	SRK	SC	SC
VARIETY	Race 1	Race 3	Race 5	GA	GA	RATING	SCORE
AG64X8 RR2X	.	3	5	1.0	1.0	R	1.0
NC-Dunphy	.	3	2	4.3	4.0	R	1.0
NC-Roy	.	3	5	2.0	3.8	SS	3.0
NC-Dilday	.	4	5	2.3	4.0	R	1.0
DS99-522-11	.	2	5	4.5	4.0	R	1.0
G13-2842R2	.	3	5	1.0	1.0	MS	4.0
G13-6241	.	4	5	3.5	5.0	SS	3.0
G14-6063	.	3	3	3.5	2.8	SS	3.0
G15PR-340	.	2	3	1.0	1.0	MS	4.0
N07-14718	.	3	3	2.5	2.3	S	5.0
N08-105	.	2	5	2.8	4.0	R	1.0
N09-209	.	2	5	4.8	4.5	S	5.0
N09-12273	.	3	5	1.8	3.0	MS	4.0
N10-687	.	3	5	2.5	3.5	S	5.0
N11-339	.	4	5	3.3	3.8	R	1.0
N11-340	.	4	5	3.5	3.8	R	1.0
N11-352	.	3	3	3.0	3.3	R	1.0
N11-9228	.	2	4	3.8	3.5	S	5.0
N11-9298	.	3	5	3.5	4.5	SS	3.0
N11-9519	.	4	4	1.0	1.3	R	1.0
R14-14648	.	3	5	4.8	4.5	MS	4.0
STPR14-358	.	4	5	3.5	4.3	S	5.0
STPR14-446	.	3	5	1.5	2.3	S	5.0

†The race 1, 3, and 5 SCN populations used in these tests were typed as HG (*Heterodera glycines*) Type 2.5.7, HG Type 5.7, and HG Type 2.5.7, respectively. Reaction to the cultivar Pickett was used to distinguish between race 1 and race 5 SCN populations.

TABLE 92 - SEED YIELD (BUSHELS PER ACRE)
UNIFORM TEST VI 2018 †

STRAIN/ VARIETY	Athens, GA(A)	Bossier City, LA	Calhoun, GA	Clemson, SC	Fairhope, AL	Florence, SC	Kinston, NC
AG64X8 RR2X	54.6	46.9	48.8	63.4	66.4	26.2	29.2
NC-Dunphy	71.3	58.2	49.6	51.6	67.1	36.7	28.3
NC-Roy	57.7	71.0	46.7	55.8	68.6	45.4	29.6
NC-Dilday	68.2	72.2	40.7	41.0	65.7	49.3	28.1
DS99-522-11	59.9	38.1	51.6	36.6	66.0	43.7	26.8
G13-2842R2	63.7	68.6	56.5	59.3	72.2	47.7	32.3
G13-6241	67.1	52.1	31.8	46.7	60.9	42.7	23.4
G14-6063	60.7	53.1	47.7	38.4	68.0	42.0	30.7
G15PR-340	63.6	67.1	49.8	47.4	59.6	44.6	32.6
N07-14718	65.0	64.7	43.1	46.5	57.2	38.1	24.5
N08-105	69.9	61.2	29.0	39.6	67.2	47.0	32.7
N09-209	71.7	58.2	44.3	52.8	69.3	39.7	27.2
N09-12273	58.1	64.6	49.4	43.8	65.4	47.4	27.5
N10-687	62.2	65.3	42.7	48.5	67.2	43.6	29.3
N11-339	72.7	66.9	41.1	42.5	71.5	46.5	23.2
N11-340	67.1	23.9	60.9	39.2	63.6	52.9	29.8
N11-352	72.2	40.7	51.7	34.7	58.7	49.8	29.9
N11-9228	64.0	32.7	27.0	32.7	64.4	45.8	22.2
N11-9298	66.4	45.6	36.1	47.8	63.7	41.6	19.7
N11-9519	60.3	65.3	43.5	33.6	56.7	42.2	23.4
R14-14648	74.6	54.1	42.6	48.8	59.5	48.3	23.0
STPR14-358	59.3	58.0	43.6	48.8	55.1	42.0	24.4
STPR14-446	53.6	62.0	42.0	39.3	54.6	36.4	27.6
Mean	64.5	56.1	44.4	45.2	63.8	43.5	27.2
LSD(0.05)	9.9	10.4	10.0	4.5	6.0	5.0	5.6
CV(%)	9.3	11.2	13.7	6.1	5.7	7.0	11.7

† Data not included in mean: 2018 - Tallassee,AL

TABLE 92 - SEED YIELD (BUSHELS PER ACRE) (continued)
UNIFORM TEST VI 2018 †

STRAIN/ VARIETY	Tallassee, AL	Tifton, GA	Test Mean
AG64X8 RR2X	46.8	51.7	48.4
NC-Dunphy	38.1	44.4	50.9
NC-Roy	33.6	58.2	54.1
NC-Dilday	40.7	54.6	52.5
DS99-522-11	16.1	51.9	46.8
G13-2842R2	44.8	52.2	56.6
G13-6241	19.3	41.9	45.8
G14-6063	36.3	45.6	48.2
G15PR-340	47.3	50.8	51.9
N07-14718	28.8	50.9	48.7
N08-105	37.8	50.3	49.6
N09-209	35.3	44.1	50.9
N09-12273	39.4	50.4	50.8
N10-687	38.6	55.8	51.8
N11-339	34.7	47.2	51.5
N11-340	41.0	46.9	48.0
N11-352	38.7	52.5	48.8
N11-9228	18.0	41.3	41.3
N11-9298	15.5	46.9	45.9
N11-9519	36.8	53.8	47.3
R14-14648	22.0	45.2	49.5
STPR14-358	23.9	46.0	47.1
STPR14-446	30.0	46.0	45.2
Mean	33.2	49.1	49.2
LSD(0.05)	11.2	7.9	6.9
CV(%)	20.4	9.8	16.2

† Data not included in mean: 2018 - Tallassee,AL

TABLE 93 - RELATIVE MATURITY (DAYS EARLIER (-) OR LATER (+) THAN ENTRY 1)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	*Athens, GA(A)*	*Bossier City, LA*	*Calhoun, GA*	*Clemson, SC*	*Fairhope, AL*	*Florence, SC*	*Kinston, NC*
AG64X8 RR2X	10/6	10/7	10/23	10/31	10/21	10/24	11/3
NC-Dunphy	7	-1	-8	0	1	-7	-1
NC-Roy	5	2	0	-3	-3	9	2
NC-Dilday	6	2	-5	1	1	0	2
DS99-522-11	2	-6	2	5	3	2	2
G13-2842R2	4	3	6	2	2	14	0
G13-6241	-8	-9	-14	-6	-2	-5	-10
G14-6063	5	-6	-12	-4	-1	1	2
G15PR-340	4	3	-3	-2	2	11	-6
N07-14718	7	-1	-2	5	1	-1	-7
N08-105	4	-6	-12	0	-1	0	0
N09-209	6	-3	-5	6	2	12	0
N09-12273	7	3	4	-3	-2	11	0
N10-687	4	3	-5	-4	-2	7	0
N11-339	2	-7	-11	-3	-3	-4	-7
N11-340	1	0	-8	-5	-2	1	-4
N11-352	5	2	-5	-8	-1	8	0
N11-9228	6	-6	-11	-2	-2	-4	-13
N11-9298	8	-5	-5	0	3	2	-8
N11-9519	7	-5	6	5	-1	10	-1
R14-14648	5	-9	-8	0	-3	-5	-9
STPR14-358	6	-6	-3	3	-3	1	-7
STPR14-446	4	-2	-5	0	0	1	2
Mean	4	-2	-4	0	0	3	-3
LSD(0.05)	1	4	6	8	3	4	4
CV(%)	18	102	79	987	401	90	60

TABLE 93 - RELATIVE MATURITY (continued)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	*Tifton, GA*	*Test Mean*
AG64X8 RR2X	10/11	10/20
NC-Dunphy	-4	-2
NC-Roy	1	2
NC-Dilday	1	1
DS99-522-11	1	1
G13-2842R2	0	4
G13-6241	-10	-8
G14-6063	-1	-2
G15PR-340	-1	1
N07-14718	-2	0
N08-105	-2	-2
N09-209	0	2
N09-12273	4	3
N10-687	-1	0
N11-339	-5	-5
N11-340	-5	-3
N11-352	-2	0
N11-9228	-5	-5
N11-9298	0	-1
N11-9519	-1	2
R14-14648	-4	-4
STPR14-358	-3	-1
STPR14-446	-1	0
Mean	-2	-1
LSD(0.05)	.	3
CV(%)	0	602

TABLE 94 - PLANT HEIGHT (INCHES)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	Athens, GA(A)	Bossier City, LA	Calhoun, GA	Clemson, SC	Fairhope, AL	Florence, SC	Kinston, NC
AG64X8 RR2X	39	21	39	35	29	25	24
NC-Dunphy	30	15	36	28	22	25	25
NC-Roy	33	23	38	30	31	27	.
NC-Dilday	35	21	32	30	30	29	27
DS99-522-11	42	25	37	33	35	40	29
G13-2842R2	37	21	39	30	31	31	31
G13-6241	34	19	32	30	26	36	.
G14-6063	39	19	34	31	32	31	30
G15PR-340	37	24	35	31	35	35	30
N07-14718	33	19	32	30	28	36	22
N08-105	34	18	35	30	28	34	.
N09-209	35	15	37	32	25	28	25
N09-12273	32	21	36	31	30	35	32
N10-687	36	16	35	29	27	31	.
N11-339	36	18	35	29	25	34	23
N11-340	31	12	28	28	25	25	.
N11-352	32	14	27	28	21	25	18
N11-9228	31	15	32	29	26	34	19
N11-9298	41	19	38	33	31	34	25
N11-9519	37	27	43	30	34	36	29
R14-14648	35	20	33	29	31	36	23
STPR14-358	34	21	37	29	27	34	30
STPR14-446	34	23	37	30	30	36	29
Mean	35	19	35	30	29	32	26
LSD(0.05)	5	4	7	4	4	4	.
CV(%)	9	11	12	8	8	7	.

TABLE 94 - PLANT HEIGHT (INCHES) (continued)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	Tallassee, AL	Tifton, GA	Test Mean
AG64X8 RR2X	30	32	31
NC-Dunphy	23	24	25
NC-Roy	29	32	30
NC-Dilday	29	30	29
DS99-522-11	30	31	34
G13-2842R2	30	31	31
G13-6241	27	27	29
G14-6063	28	31	30
G15PR-340	34	31	32
N07-14718	28	29	29
N08-105	28	28	29
N09-209	27	25	28
N09-12273	31	29	31
N10-687	23	29	28
N11-339	25	24	28
N11-340	22	23	24
N11-352	21	25	24
N11-9228	25	25	27
N11-9298	27	29	31
N11-9519	36	35	34
R14-14648	30	28	30
STPR14-358	28	30	30
STPR14-446	28	29	31
Mean	28	29	29
LSD(0.05)	3	3	2
CV(%)	6	6	11

TABLE 95 - PLANT LODGING (1-5)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	Athens, GA(A)	Bossier City, LA	Calhoun, GA	Clemson, SC	Fairhope, AL	Florence, SC	Kinston, NC
AG64X8 RR2X	1.7	1.0	1.7	3.3	2.3	1.3	2.3
NC-Dunphy	1.7	1.0	1.6	3.3	2.7	2.3	2.0
NC-Roy	3.3	1.0	2.4	4.0	3.7	3.7	2.5
NC-Dilday	3.7	1.0	1.7	4.0	3.3	3.3	2.0
DS99-522-11	2.0	1.0	1.7	4.0	3.3	4.7	2.3
G13-2842R2	2.7	1.0	1.0	2.7	2.0	2.7	2.0
G13-6241	1.7	1.0	2.0	3.3	2.7	4.0	2.5
G14-6063	1.7	1.0	1.3	4.0	2.3	4.7	2.0
G15PR-340	3.3	1.0	2.3	4.0	3.7	4.0	2.0
N07-14718	2.0	1.0	2.0	4.0	3.3	4.7	2.3
N08-105	2.3	1.0	3.0	4.0	3.3	4.0	2.5
N09-209	2.3	1.0	1.3	4.0	2.7	4.3	2.0
N09-12273	3.0	1.0	2.5	4.0	3.7	4.3	2.3
N10-687	1.0	1.0	1.0	3.0	1.0	3.3	1.5
N11-339	2.3	1.0	2.3	4.0	3.0	4.3	1.8
N11-340	1.0	1.0	1.3	3.3	1.7	3.3	1.5
N11-352	1.7	1.0	1.0	3.7	1.7	3.3	1.8
N11-9228	2.3	1.0	2.3	4.0	3.3	4.3	2.5
N11-9298	2.0	1.0	1.7	3.7	2.3	3.3	2.0
N11-9519	3.3	1.3	2.0	4.0	4.0	4.7	2.0
R14-14648	2.3	1.0	2.0	3.7	4.0	2.7	2.0
STPR14-358	2.3	1.0	2.0	4.0	3.7	2.3	2.0
STPR14-446	2.7	1.0	2.0	4.0	3.7	3.3	2.3
Mean	2.3	1.0	1.8	3.7	2.9	3.6	2.1
LSD(0.05)	1.0	0.2	1.2	0.8	0.8	0.9	0.5
CV(%)	27.3	11.9	39.0	13.3	16.7	14.8	10.6

TABLE 95 - PLANT LODGING (1-5) (continued)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	Tallassee, AL	Tifton, GA	Test Mean
AG64X8 RR2X	1.0	2.0	1.8
NC-Dunphy	1.0	1.0	1.8
NC-Roy	1.0	2.0	2.6
NC-Dilday	1.0	4.0	2.7
DS99-522-11	1.0	3.7	2.6
G13-2842R2	1.0	1.0	1.8
G13-6241	1.0	2.7	2.3
G14-6063	1.0	2.3	2.3
G15PR-340	1.0	1.7	2.6
N07-14718	1.0	3.3	2.6
N08-105	1.0	3.0	2.7
N09-209	1.0	1.7	2.3
N09-12273	1.0	3.3	2.8
N10-687	1.0	1.0	1.5
N11-339	1.0	4.0	2.6
N11-340	1.0	1.0	1.7
N11-352	1.0	1.0	1.8
N11-9228	1.0	1.7	2.5
N11-9298	1.0	1.3	2.0
N11-9519	1.0	3.7	2.9
R14-14648	1.0	2.7	2.4
STPR14-358	1.0	2.0	2.3
STPR14-446	1.0	3.0	2.5
Mean	1.0	2.3	2.3
LSD(0.05)	.	0.9	0.5
CV(%)	0.0	24.4	28.5

TABLE 96 - SEED QUALITY (1-5)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	Athens, GA(A)	Bossier City, LA	Calhoun, GA	Clemson, SC	Fairhope, AL	Florence, SC	Kinston, NC
AG64X8 RR2X	1.0	1.0	2.5	.	3.3	1.0	.
NC-Dunphy	1.7	2.0	3.5	.	3.3	1.0	.
NC-Roy	1.5	1.0	2.3	.	2.7	1.0	.
NC-Dilday	1.8	2.0	3.7	.	2.0	1.0	.
DS99-522-11	1.2	3.0	2.8	.	3.3	1.0	.
G13-2842R2	1.8	1.0	2.5	.	2.0	1.0	.
G13-6241	1.5	3.0	4.3	.	4.0	1.0	.
G14-6063	1.5	2.0	3.0	.	4.0	1.0	.
G15PR-340	1.3	1.0	3.7	.	4.0	1.0	.
N07-14718	1.5	1.0	2.7	.	3.3	1.0	.
N08-105	1.5	3.0	4.3	.	2.7	1.0	.
N09-209	1.3	2.0	2.8	.	2.7	1.0	.
N09-12273	1.7	2.0	3.3	.	3.7	1.0	.
N10-687	1.2	1.0	2.2	.	2.3	1.0	.
N11-339	1.7	3.0	4.3	.	4.0	1.0	.
N11-340	1.2	2.0	2.7	.	2.7	1.0	.
N11-352	1.3	1.0	2.2	.	3.0	1.0	.
N11-9228	1.5	3.0	4.3	.	4.0	1.0	.
N11-9298	1.7	2.0	3.7	.	4.0	1.0	.
N11-9519	1.0	2.0	2.3	.	3.5	1.0	.
R14-14648	1.7	3.0	4.0	.	4.7	1.0	.
STPR14-358	1.5	2.0	2.3	.	3.7	1.0	.
STPR14-446	1.7	2.0	2.8	.	4.3	1.0	.
Mean	1.5	2.0	3.1	.	3.4	1.0	.
LSD(0.05)	0.4	.	0.8	.	0.9	.	.
CV(%)	18.2	0.0	16.3	.	16.1	0.0	.

TABLE 96 - SEED QUALITY (1-5) (continued)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	Tallassee, AL	Tifton, GA	Test Mean
AG64X8 RR2X	2.5	3.3	2.1
NC-Dunphy	2.7	3.0	2.5
NC-Roy	2.3	3.3	2.0
NC-Dilday	2.0	2.7	2.2
DS99-522-11	3.7	2.7	2.5
G13-2842R2	3.0	3.2	2.1
G13-6241	3.0	2.0	2.7
G14-6063	2.0	2.7	2.3
G15PR-340	2.3	3.3	2.4
N07-14718	2.3	2.2	2.0
N08-105	2.7	2.8	2.6
N09-209	2.7	3.5	2.3
N09-12273	2.3	3.5	2.5
N10-687	2.0	2.8	1.8
N11-339	2.7	3.2	2.8
N11-340	2.0	2.0	1.9
N11-352	2.0	2.2	1.8
N11-9228	2.0	2.3	2.6
N11-9298	2.7	2.8	2.5
N11-9519	2.0	1.8	1.9
R14-14648	2.3	3.3	2.9
STPR14-358	2.7	3.0	2.3
STPR14-446	2.3	2.7	2.4
Mean	2.4	2.8	2.3
LSD(0.05)	0.8	1.1	0.5
CV(%)	20.2	23.3	26.7

TABLE 97 - SEED SIZE (GRAMS PER 100 SEED)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	*Athens, GA(A)*	*Bossier City, LA*	*Calhoun, GA*	*Clemson, SC*	*Fairhope, AL*	*Florence, SC*	*Kinston, NC*
AG64X8 RR2X	10.7	13.3	13.9	.	16.3	11.9	15.3
NC-Dunphy	16.9	17.5	16.3	.	19.5	15.0	20.1
NC-Roy	13.2	14.3	13.2	.	16.8	14.4	.
NC-Dilday	17.2	17.7	15.9	.	21.9	16.4	20.4
DS99-522-11	13.6	14.2	14.5	.	17.0	12.9	15.2
G13-2842R2	14.0	18.1	16.0	.	18.2	15.4	16.7
G13-6241	16.4	16.4	15.0	.	20.6	15.7	.
G14-6063	15.9	18.7	15.7	.	23.2	16.0	20.2
G15PR-340	11.6	13.9	13.9	.	16.3	13.4	14.6
N07-14718	14.9	16.4	14.6	.	16.8	14.9	16.4
N08-105	15.9	18.0	13.0	.	20.2	15.6	.
N09-209	15.1	15.4	14.8	.	19.3	15.1	17.0
N09-12273	16.6	16.5	19.4	.	18.3	18.1	21.6
N10-687	12.0	13.3	12.2	.	15.3	12.8	.
N11-339	15.2	16.6	14.3	.	19.8	15.2	18.9
N11-340	13.4	13.6	13.5	.	14.8	13.3	.
N11-352	12.4	13.2	12.8	.	14.5	12.6	14.3
N11-9228	17.2	14.3	12.7	.	19.3	14.1	18.8
N11-9298	16.8	15.0	14.2	.	20.2	14.2	16.4
N11-9519	17.3	19.4	18.4	.	20.7	17.3	18.7
R14-14648	15.2	13.4	13.9	.	16.6	13.8	16.6
STPR14-358	14.9	16.1	14.9	.	17.7	14.9	18.5
STPR14-446	13.5	18.5	13.8	.	16.4	14.0	17.4
Mean	14.8	15.8	14.6	.	18.3	14.7	17.6
LSD(0.05)	1.4	.	1.8	.	1.9	0.9	.
CV(%)	5.8	.	7.5	.	6.2	3.5	.

TABLE 97 - SEED SIZE (GRAMS PER 100 SEED) (continued)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	Tallassee, AL	Tifton, GA	Test Mean
AG64X8 RR2X	17.2	12.5	13.9
NC-Dunphy	18.4	15.6	17.3
NC-Roy	16.0	13.9	14.8
NC-Dilday	18.8	17.5	18.2
DS99-522-11	15.6	12.3	14.5
G13-2842R2	17.7	14.2	16.2
G13-6241	17.4	14.0	16.7
G14-6063	18.8	15.0	17.8
G15PR-340	17.2	12.5	14.3
N07-14718	15.8	14.6	15.5
N08-105	17.1	14.6	16.5
N09-209	17.4	13.7	16.0
N09-12273	18.8	17.0	18.3
N10-687	15.1	11.7	13.4
N11-339	17.1	14.4	16.4
N11-340	17.8	11.8	14.3
N11-352	16.3	12.9	13.7
N11-9228	17.8	13.4	16.0
N11-9298	17.7	14.1	16.2
N11-9519	19.4	17.2	18.6
R14-14648	16.8	14.3	15.2
STPR14-358	16.5	14.5	15.9
STPR14-446	16.2	14.3	15.3
Mean	17.3	14.2	15.9
LSD(0.05)	2.6	1.3	1.1
CV(%)	9.1	5.8	8.3

TABLE 98 - OIL (%)†
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	Athens, GA(A)	Bossier City, LA	Calhoun, GA	Clemson, SC	Fairhope, AL	Florence, SC	Kinston, NC
AG64X8 RR2X	18.9	.	.	.	19.7	18.8	19.6
NC-Dunphy	20.0	.	.	.	20.7	20.6	19.4
NC-Roy	19.4	.	.	.	19.1	18.1	18.1
NC-Dilday	21.1	.	.	.	21.3	21.0	19.7
DS99-522-11	19.2	.	.	.	19.4	18.6	19.4
G13-2842R2	19.6	.	.	.	19.4	18.5	19.1
G13-6241	18.8	.	.	.	19.9	19.5	20.1
G14-6063	20.5	.	.	.	20.8	20.5	20.3
G15PR-340	21.0	.	.	.	21.0	20.2	20.4
N07-14718	19.9	.	.	.	19.8	19.0	18.6
N08-105	20.6	.	.	.	21.6	20.3	20.0
N09-209	21.1	.	.	.	21.4	20.9	20.4
N09-12273	20.8	.	.	.	21.8	20.4	20.1
N10-687	18.5	.	.	.	18.2	17.2	18.6
N11-339	20.0	.	.	.	19.7	19.7	20.2
N11-340	20.3	.	.	.	20.8	20.6	19.7
N11-352	20.7	.	.	.	21.4	20.7	20.7
N11-9228	21.5	.	.	.	21.1	20.2	20.1
N11-9298	20.6	.	.	.	21.5	20.9	20.9
N11-9519	19.6	.	.	.	19.5	17.8	18.3
R14-14648	19.8	.	.	.	19.9	19.1	19.2
STPR14-358	20.6	.	.	.	20.4	19.3	18.8
STPR14-446	19.7	.	.	.	19.4	19.0	19.0
Mean	20.1	.	.	.	20.3	19.6	19.6
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

†Oil percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 98 - OIL (%)† (continued)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	Tallassee, AL	Tifton, GA	Test Mean
AG64X8 RR2X	20.6	.	19.5
NC-Dunphy	20.8	.	20.3
NC-Roy	19.8	.	18.9
NC-Dilday	22.2	.	21.1
DS99-522-11	20.5	.	19.4
G13-2842R2	20.5	.	19.4
G13-6241	21.2	.	19.9
G14-6063	22.4	.	20.9
G15PR-340	20.8	.	20.7
N07-14718	20.6	.	19.6
N08-105	20.7	.	20.6
N09-209	22.1	.	21.2
N09-12273	22.2	.	21.0
N10-687	19.2	.	18.3
N11-339	19.9	.	19.9
N11-340	21.7	.	20.6
N11-352	21.2	.	21.0
N11-9228	20.8	.	20.7
N11-9298	22.4	.	21.3
N11-9519	19.6	.	19.0
R14-14648	20.5	.	19.7
STPR14-358	21.8	.	20.2
STPR14-446	19.6	.	19.3
		.	
Mean	20.9		20.1
LSD(0.05)	.	.	0.6
CV(%)	.	.	2.3

TABLE 99 - PROTEIN (%)†
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	Athens, GA(A)	Bossier City, LA	Calhoun, GA	Clemson, SC	Fairhope, AL	Florence, SC	Kinston, NC
AG64X8 RR2X	35.2	.	.	.	36.4	36.8	35.8
NC-Dunphy	33.5	.	.	.	34.1	34.3	35.7
NC-Roy	35.2	.	.	.	37.7	37.9	38.8
NC-Dilday	32.9	.	.	.	34.1	32.4	35.3
DS99-522-11	35.9	.	.	.	38.5	37.1	34.9
G13-2842R2	35.0	.	.	.	38.0	37.3	36.1
G13-6241	36.1	.	.	.	35.7	35.7	34.0
G14-6063	35.4	.	.	.	35.7	35.3	34.4
G15PR-340	34.5	.	.	.	36.3	36.2	36.0
N07-14718	36.3	.	.	.	38.9	39.4	39.8
N08-105	34.2	.	.	.	34.4	35.4	36.0
N09-209	33.1	.	.	.	34.6	33.5	33.7
N09-12273	34.1	.	.	.	35.2	36.3	36.8
N10-687	36.5	.	.	.	37.8	38.8	35.7
N11-339	35.2	.	.	.	35.6	35.7	34.8
N11-340	34.0	.	.	.	34.8	33.9	34.2
N11-352	33.9	.	.	.	33.4	34.2	34.3
N11-9228	32.8	.	.	.	34.7	35.6	36.3
N11-9298	35.1	.	.	.	34.5	34.8	34.7
N11-9519	36.1	.	.	.	39.6	39.3	38.8
R14-14648	34.0	.	.	.	34.8	36.0	35.5
STPR14-358	36.7	.	.	.	38.2	38.0	39.1
STPR14-446	36.7	.	.	.	39.6	39.9	39.3
Mean	34.9	.	.	.	36.2	36.3	36.1
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

†Protein percentage reported on a 13% moisture basis beginning in 2015.

TABLE 99 - PROTEIN (%)† (continued)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	Tallassee, AL	Tifton, GA	Test Mean
AG64X8 RR2X	35.1	.	35.9
NC-Dunphy	34.4	.	34.4
NC-Roy	36.4	.	37.2
NC-Dilday	32.2	.	33.4
DS99-522-11	35.0	.	36.3
G13-2842R2	34.4	.	36.1
G13-6241	35.1	.	35.3
G14-6063	33.2	.	34.8
G15PR-340	36.3	.	35.9
N07-14718	36.3	.	38.1
N08-105	36.2	.	35.2
N09-209	33.2	.	33.6
N09-12273	34.2	.	35.3
N10-687	37.1	.	37.2
N11-339	36.1	.	35.5
N11-340	34.0	.	34.2
N11-352	34.9	.	34.1
N11-9228	35.2	.	34.9
N11-9298	34.2	.	34.7
N11-9519	37.6	.	38.3
R14-14648	34.2	.	34.9
STPR14-358	33.0	.	37.0
STPR14-446	38.3	.	38.8
		.	
Mean	35.1		35.7
LSD(0.05)	.	.	1.2
CV(%)	.	.	2.8

TABLE 100 - ESTIMATED MEAL PROTEIN (%)
UNIFORM GROUP VI 2017

STRAIN/ VARIETY	*Athens, GA(A)*	*Bossier City, LA*	*Calhoun, GA*	*Clemson, SC*	*Fairhope, AL*	*Florence, SC*	*Kinston, NC*
AG64X8 RR2X	47.1	.	.	.	49.3	49.2	48.4
NC-Dunphy	45.5	.	.	.	46.8	47.0	48.2
NC-Roy	47.5	.	.	.	50.7	50.3	51.5
NC-Dilday	45.4	.	.	.	47.1	44.6	47.8
DS99-522-11	48.4	.	.	.	52.0	49.6	47.1
G13-2842R2	47.3	.	.	.	51.2	49.7	48.4
G13-6241	48.3	.	.	.	48.5	48.1	46.3
G14-6063	48.4	.	.	.	49.0	48.2	46.9
G15PR-340	47.5	.	.	.	50.0	49.3	49.1
N07-14718	49.3	.	.	.	52.7	52.9	53.1
N08-105	46.8	.	.	.	47.7	48.3	48.9
N09-209	45.5	.	.	.	47.8	46.1	46.0
N09-12273	46.8	.	.	.	48.9	49.6	50.0
N10-687	48.7	.	.	.	50.3	50.8	47.7
N11-339	47.8	.	.	.	48.1	48.3	47.3
N11-340	46.4	.	.	.	47.7	46.4	46.3
N11-352	46.4	.	.	.	46.2	46.8	47.0
N11-9228	45.3	.	.	.	47.8	48.6	49.4
N11-9298	48.1	.	.	.	47.8	47.8	47.7
N11-9519	48.8	.	.	.	53.4	52.0	51.6
R14-14648	46.1	.	.	.	47.2	48.4	47.8
STPR14-358	50.2	.	.	.	52.1	51.2	52.4
STPR14-446	49.7	.	.	.	53.4	53.6	52.7
Mean	47.5	.	.	.	49.4	49.0	48.8
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

TABLE 100 - ESTIMATED MEAL PROTEIN (%) (continued)
UNIFORM GROUP VI 2017

STRAIN/ VARIETY	Tallassee, AL	Tifton, GA	Test Mean
AG64X8 RR2X	48.1	.	48.4
NC-Dunphy	47.2	.	47.0
NC-Roy	49.2	.	49.8
NC-Dilday	44.9	.	46.0
DS99-522-11	47.8	.	49.0
G13-2842R2	47.0	.	48.7
G13-6241	48.4	.	47.9
G14-6063	46.5	.	47.8
G15PR-340	49.8	.	49.1
N07-14718	49.6	.	51.5
N08-105	49.6	.	48.3
N09-209	46.4	.	46.4
N09-12273	47.8	.	48.6
N10-687	49.8	.	49.5
N11-339	48.9	.	48.1
N11-340	47.2	.	46.8
N11-352	48.2	.	46.9
N11-9228	48.3	.	47.9
N11-9298	47.8	.	47.8
N11-9519	50.8	.	51.3
R14-14648	46.8	.	47.3
STPR14-358	45.9	.	50.4
STPR14-446	51.8	.	52.3
		.	
Mean	48.2		48.6
LSD(0.05)	.	.	1.4
CV(%)	.	.	2.3

SUMMARY OF SEED FATTY ACIDS (%)
UNIFORM TEST VI 2018 †

STRAIN/ VARIETY	Palmitic Acid	Stearic Acid	Oleic Acid	Linoleic Acid	Linolenic Acid
AG64X8 RR2X	12.0	4.1	19.0	57.0	6.8
NC-Dunphy	13.0	3.4	22.0	55.0	6.8
NC-Roy	12.0	3.7	22.0	55.0	7.2
NC-Dilday	11.0	3.4	21.0	58.0	6.8
G15PR-340	7.7	3.0	79.0	7.8	2.7
Mean	11.0	3.5	33.0	47.0	6.1
LSD(0.05)	0.7	0.3	4.8	3.5	0.8
CV(%)	4.6	6.1	11.0	5.6	9.7

†Fatty acid percentage in seed oil reported beginning in 2017.

SEED PALMITIC ACID (%)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	Athens, GA(A)	Fairhope, AL	Florence, SC	Kinston, NC	Tallassee, AL	Test Mean
AG64X8 RR2X	12.7	12.6	12.4	12.2	12.4	12.4
NC-Dunphy	13.5	12.2	12.7	12.7	12.7	12.8
NC-Roy	12.6	11.6	12.0	11.5	10.0	11.5
NC-Dilday	11.5	11.1	11.1	11.1	11.5	11.3
G15PR-340	7.7	7.3	7.9	7.3	8.4	7.7
Mean	11.6	11.0	11.2	11.0	11.0	11.1
LSD(0.05)	.	.	.	.	.	0.7
CV(%)	.	.	.	.	.	4.6

SEED STEARIC ACID (%)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	Athens, GA(A)	Fairhope, AL	Florence, SC	Kinston, NC	Tallassee, AL	Test Mean
AG64X8 RR2X	4.2	3.9	4.0	3.6	4.6	4.1
NC-Dunphy	3.4	3.1	3.3	3.3	3.9	3.4
NC-Roy	3.7	3.9	3.8	3.6	3.5	3.7
NC-Dilday	3.8	3.1	3.3	3.2	3.8	3.4
G15PR-340	3.1	3.0	2.8	2.7	3.1	3.0
Mean	3.7	3.4	3.4	3.3	3.8	3.5
LSD(0.05)	.	.	.	.	.	0.3
CV(%)	.	.	.	.	.	6.1

SEED OLEIC ACID (%)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	Athens, GA(A)	Fairhope, AL	Florence, SC	Kinston, NC	Tallassee, AL	Test Mean
AG64X8 RR2X	18.2	19.8	16.1	19.4	23.6	19.4
NC-Dunphy	19.6	28.2	18.5	20.5	21.3	21.6
NC-Roy	19.2	21.2	17.5	22.0	30.7	22.1
NC-Dilday	20.4	21.1	18.1	22.8	21.8	20.8
G15PR-340	81.0	83.9	75.2	81.9	72.0	78.8
Mean	31.7	34.8	29.1	33.3	33.9	32.6
LSD(0.05)	.	.	.	.	.	4.8
CV(%)	.	.	.	.	.	10.9

SEED LINOLEIC ACID (%)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	Athens, GA(A)	Fairhope, AL	Florence, SC	Kinston, NC	Tallassee, AL	Test Mean
AG64X8 RR2X	56.9	57.1	60.3	58.0	54.0	57.2
NC-Dunphy	55.3	51.3	58.3	56.3	56.0	55.4
NC-Roy	56.2	56.4	58.6	55.7	50.4	55.5
NC-Dilday	56.9	58.2	60.6	55.9	56.8	57.7
G15PR-340	5.3	3.6	11.4	5.2	13.4	7.8
Mean	46.1	45.3	49.8	46.2	46.1	46.7
LSD(0.05)						3.5
CV(%)						5.6

SEED LINOLENIC ACID (%)
UNIFORM GROUP VI 2018

STRAIN/ VARIETY	Athens, GA(A)	Fairhope, AL	Florence, SC	Kinston, NC	Tallassee, AL	Test Mean
AG64X8 RR2X	8.0	6.6	7.2	6.9	5.5	6.8
NC-Dunphy	8.2	5.2	7.3	7.2	6.2	6.8
NC-Roy	8.3	6.9	8.2	7.2	5.4	7.2
NC-Dilday	7.4	6.6	6.9	7.0	6.2	6.8
G15PR-340	2.9	2.2	2.7	2.9	3.1	2.7
Mean	7.0	5.5	6.4	6.2	5.3	6.1
LSD(0.05)	.	.	.	.	.	0.8
CV(%)	.	.	.	.	.	9.7

TABLE 101 - PARENTAGE OF ENTRIES
PRELIMINARY GROUP VI 2018

Ent	Strain/Variety	Parentage	Source	Fn	Trans-genic†	Special Traits‡
1	AG64X8 RR2X	Commercial check	Commercial		RR2	
2	NC-Dunphy	MD99-6226 x N97-9677	Carter			12.5% PI 416937
3	NC-Roy	Holladay x Brim	Carter			
4	NC-Dilday	N99-8137 x TN99-117	Carter			12.5% PI 416937
5	G13-1006R2	G93-2225 x G09PR-54329R2	Zenglu Li	F5d	RR2	
6	G14-1776R2	G10PR-10R2 x G10PR-56389R2	Zenglu Li	F5d	RR2	
7	G15-1038R2	G10PR-56248R2 x G10PR-56466R2	Zenglu Li	F5d	RR2	
8	G15-1811R2	R04-342 x G09PR-54457R2	Zenglu Li	F7d	RR2	
9	G15-3361R2	N05-7432 x G09PR-54329R2	Zenglu Li	F7d	RR2	
10	G15-3606R2	G08PR-394 x G09PR-54329R2	Zenglu Li	F7d	RR2	
11	G15-4502R2	N05-888 x G09PR-54457R2	Zenglu Li	F7d	RR2	
12	N06-6	N99-510 x G98-1053	Mian	F4		
13	N10-7412	5157 x 93705-50	Carter	F4		Drought
14	N11-8787	N02-8492 (PG) x N03-7101 (PG)	Carter	F4		25% Aggasiz, 6% Nakasennari, 6% Suzuyataka
15	N11-8790	N02-8492 (PG) x N03-7101 (PG)	Carter	F4		25% Aggasiz, 6% Nakasennari, 6% Suzuyataka
16	N11-9092	N02-8492 (PG) x N03-7191 MG)	Carter	F4		25% RCAT-Persian, 6% Nakasennari, 6% Suzuyataka
17	N13-136	G03-3564 x N06-10011	Mian	F4		
18	N13-273	G03-3401 x N06-10011	Mian	F4		
19	N13-313	G03-3564 x N06-10011	Mian	F4		
20	N16-9211	N7103 x NMS5-48-2-75	Carter	F4		25% Soja PI 366122
21	Pro5-157	G03-3385 x N06-10035	Mian	F4		
22	SC17-5101	Benning (VII) x PI 417125 (VIII)	Fallen			
23	SC17-5505RR1	SC07-1518RR x S11-21072	Fallen		RR1	
24	SC17-6012	5601T(V) x PI605823(IX)	Fallen			
25	SC17-6013	5601T(V) x PI605823(IX)	Fallen			
26	SC17-6513RR1	SC06-676RR x G04-1618RR	Fallen		RR1	
27	SC17-RU05	5601T(V) x PI605823(IX)	Fallen			

†Conv= Conventional(non-transgenic),LL= Liberty Link®, RR1= Roundup Ready®,RR2= Roundup Ready 2 Yield®
RRX= Roundup Ready 2 Xtend®
‡AA= modified amino acids, DNC= Do not cross with this, FLS= Frogeye leaf spot resistance, LJ= Long juvenile,
LN= low linolenic acid, LP= low phytate, HO= high oleic acid, HOLN= high oleic acid/low linolenic acid,
SCN= Soybean cyst nematode resistance, SR= Soybean rust resistance,
and STS= sulfonylurea tolerant

TABLE 102 - GENERAL SUMMARY OF PERFORMANCE
PRELIMINARY TEST VI 2018

STRAIN/ VARIETY	SEED YIELD†	RANK	AVG. RANK	MAT. INDEX	LOD	HT	SCN Cyst Score (1-5)‡ Race 1	Race 3	Race 5	SC RATING	SC SCORE
AG64X8 RR2X	50.0	1	2	0	2.2	33	5	4	5	R	1
NC-Dunphy	47.5	3	6	2	2.0	28	5	4	5	R	1
NC-Roy	43.3	9	13	3	2.3	32	5	4	5	MS	4
NC-Dilday	42.9	11	12	2	2.4	31	5	4	5	R	1
G13-1006R2	39.2	19	13	-1	2.4	32	5	1	5	R	1
G14-1776R2	44.0	8	8	0	2.2	35	1	2	4	R	1
G15-1038R2	47.3	4	5	3	2.1	34	5	4	5	R	1
G15-1811R2	48.7	2	3	2	2.4	34	5	3	5	SS	3
G15-3361R2	47.1	5	7	1	1.9	34	5	3	5	R	1
G15-3606R2	45.8	7	7	2	2.3	33	1	1	3	R	1
G15-4502R2	41.5	12	14	0	2.2	32	5	3	5	R	1
N06-6	39.8	16	17	-1	2.4	32	5	2	5	MS	4
N10-7412	43.1	10	11	-4	2.4	34	5	3	5	R	1
N11-8787	39.6	17	16	-2	2.3	34	5	2	5	MS	4
N11-8790	36.2	21	21	0	2.4	34	5	2	5	SS	3
N11-9092	39.5	18	16	-2	2.2	33	5	2	5	R	1
N13-136	40.3	15	16	-4	2.2	33	5	2	5	SS	3
N13-273	40.8	14	14	-4	2.1	29	4	2	5	SS	3
N13-313	35.9	22	20	-3	2.4	29	5	1	5	S	5
N16-9211	40.9	13	14	-3	1.9	31	5	2	5	SS	3
Pro5-157	36.8	20	20	-4	2.4	30	5	2	5	R	1
SC17-5101	32.0	24	26	-2	2.5	34	5	1	5	R	1
SC17-5505RR1	35.3	23	21	9	2.5	37	4	2	5	SS	3
SC17-6012	31.5	25	26	0	2.5	33	5	2	5	MS	4
SC17-6013	29.8	27	25	8	2.4	38	4	3	5	S	5
SC17-6513RR1	46.7	6	7	8	2.1	30	5	2	4	R	1
SC17-RU05	30.9	26	25	0	2.5	33	5	3	4	S	5
Mean	40.6	.	.	0	2.3	33	.	.	.		.
LSD(0.05)	7.5	.	.	8	0.5	5	.	.	.		.
CV(%)	11.8	.	.	1592	17.0	13	.	.	.		.

† Data not included in mean: Tallassee,AL

‡The race 1, 3, and 5 SCN populations used in these tests were typed as HG (Heterodera glycines) Type 2.5.7, HG Type 5.7, and HG Type 2.5.7, respectively.

Reaction to the cultivar Pickett was used to distinguish between race 1 and race 5 SCN populations.

TABLE 103 - GENERAL SUMMARY OF PERFORMANCE (continued)
PRELIMINARY TEST VI 2018

STRAIN/ VARIETY	SEED QUALITY	SEED SIZE	PROTEIN§ %	OIL§ %	MEAL PRO%	FL COLOR	PUB. COLOR	POD COLOR
AG64X8 RR2X	2.0	13.3	35.8	19.9	48.5			
NC-Dunphy	1.0	16.5	32.7	21.6	45.3	P	G	T
NC-Roy	1.0	13.3	37.3	18.8	50	W	G	Br
NC-Dilday	1.0	17.8	34.4	20.9	47.3	P	G	Br
G13-1006R2	1.0	12.1	37.6	18.6	50.1	W	T	T
G14-1776R2	1.0	12.9	36.8	19.8	49.8	P	T	T
G15-1038R2	2.0	14.9	38.3	19.0	51.4	P	T	T
G15-1811R2	1.0	13.8	35.6	20.1	48.5	P	T	T
G15-3361R2	1.0	11.1	37.7	18.5	50.4	P	T	T
G15-3606R2	1.0	15.9	37.9	19.5	51.2	W	T	T
G15-4502R2	2.0	15.8	35.4	19.9	48.1	P	T	T
N06-6	1.0	13.5	35.6	20.5	48.7	W	T	
N10-7412	1.5	14.3	35.0	20.2	47.6	S	T	
N11-8787	1.0	13.7	34.5	20.7	47.2	P	G	
N11-8790	2.5	15.4	37.6	19.5	50.7	P	G	
N11-9092	1.0	14.0	36.2	19.7	49.1	P	G	
N13-136	1.5	14.8	40.4	18.1	53.5	P	G	
N13-273	1.5	15.1	37.6	19.6	50.8	W	G	
N13-313	1.5	14.5	37.5	19.3	50.5	P	G	
N16-9211	1.0	10.6	38.1	18.3	50.6	W	G	
Pro5-157	2.0	15.8	38.6	19.2	52	W	G	
SC17-5101	2.0	16.8	35.6	20.7	48.8	P	T	
SC17-5505RR1	1.0	14.5	35.5	20.1	48.3	P	T	
SC17-6012	1.5	10.3	38.5	17.9	51	W	T	
SC17-6013	1.5	13.6	40.1	17.8	53	P	T	
SC17-6513RR1	1.5	14.1	35.5	20.3	48.5	W	T	
SC17-RU05	1.5	13.9	38.3	17.7	50.6	P	T	
Mean	1.4	14.2	36.8	19.5	49.7			
LSD(0.05)	1.0	2.3	2.9	1.1	3.5			
CV(%)	35.3	9.0	3.9	2.8	3.4			

§Protein percentage and oil percentage are reported on a 13% moisture basis beginning in 2015.

TABLE 104 - SEED YIELD (BUSHELS PER ACRE)
PRELIMINARY GROUP VI 2018 †

STRAIN/ VARIETY	Clemson, SC	Kinston, NC	Plymouth, NC	Tallassee, AL	Test Mean
AG64X8 RR2X	55.8	44.2	36.0	61.3	45.3
NC-Dunphy	54.0	41.1	39.4	56.9	44.8
NC-Roy	51.3	35.3	35.6	53.9	40.8
NC-Dilday	45.3	40.4	41.9	50.5	42.6
G13-1006R2	36.7	41.6	35.1	36.0	37.8
G14-1776R2	46.5	41.1	34.3	49.0	40.7
G15-1038R2	52.9	41.7	44.4	54.9	46.4
G15-1811R2	53.2	44.3	43.8	50.5	47.1
G15-3361R2	54.2	40.0	44.5	49.2	46.2
G15-3606R2	50.4	41.2	29.5	51.1	40.4
G15-4502R2	45.0	37.8	37.4	43.4	40.1
N06-6	45.9	33.8	35.0	53.1	38.2
N10-7412	46.2	40.1	37.2	57.8	41.2
N11-8787	47.5	31.6	36.3	32.5	38.5
N11-8790	40.0	32.4	26.9	43.1	33.1
N11-9092	42.6	36.4	36.4	42.4	38.5
N13-136	42.5	37.7	34.0	37.6	38.1
N13-273	46.2	35.5	36.4	55.0	39.4
N13-313	35.5	36.3	36.8	45.3	36.2
N16-9211	46.3	35.4	40.8	47.6	40.8
Pro5-157	40.1	33.5	35.4	44.6	36.2
SC17-5101	33.7	30.3	31.8	42.1	31.9
SC17-5505RR1	36.0	34.7	25.6	39.0	32.1
SC17-6012	34.6	28.2	32.2	42.3	31.8
SC17-6013	36.4	23.1	27.8	42.8	29.1
SC17-6513RR1	54.3	39.1	41.4	45.7	44.9
SC17-RU05	35.7	26.2	27.2	41.4	29.7
Mean	44.8	36.4	35.7	47.0	39.0
LSD(0.05)	6.3	6.4	6.3	19.3	5.8
CV(%)	8.3	10.8	10.6	20.0	12.1

† Data not included in mean: Tallassee,AL

TABLE 105 - RELATIVE MATURITY (DAYS EARLIER (-) OR LATER (+) THAN ENTRY 1)
PRELIMINARY GROUP VI 2018

STRAIN/ VARIETY	Clemson, SC	Kinston, NC	Plymouth, NC	Tallassee, AL	Test Mean
AG64X8 RR2X	10/26	10/19	10/28	10/22	10/24
NC-Dunphy	10	-5	-6	0	0
NC-Roy	9	-3	-1	0	2
NC-Dilday	8	-2	-6	0	0
G13-1006R2	0	-2	-2	0	-1
G14-1776R2	1	-1	0	0	0
G15-1038R2	7	2	0	0	2
G15-1811R2	6	-1	1	0	2
G15-3361R2	2	1	-1	0	1
G15-3606R2	5	2		0	1
G15-4502R2	6	-10	-10	3	-2
N06-6	5	-10	-3	0	-2
N10-7412	-2	-10	-10	1	-5
N11-8787	3	-9	-10	0	-4
N11-8790	7	-10	-8	2	-2
N11-9092	4	-10	-12	0	-4
N13-136	-3	-9	-11	0	-6
N13-273	-3	-10	-8	1	-5
N13-313	-1	-10	-12	0	-5
N16-9211	1	-10	0	0	-2
Pro5-157	-4	-10	-10	0	-6
SC17-5101	2	-10	-1	0	-2
SC17-5505RR1	10	18		0	8
SC17-6012	8	-10	1	0	0
SC17-6013	10	14	0	0	6
SC17-6513RR1	9	15		1	7
SC17-RU05	7	-10	-12	2	-3
Mean	4	-4	-5	0	-1
LSD(0.05)	6	13	2	2	6
CV(%)	89	176	22	344	704

TABLE 106 - PLANT HEIGHT (INCHES)
PRELIMINARY GROUP VI 2018

STRAIN/ VARIETY	Clemson, SC	Kinston, NC	Plymouth, NC	Tallassee, AL	Test Mean
AG64X8 RR2X	30	32	38	35	34
NC-Dunphy	28	26	27	27	28
NC-Roy	30	34	38	32	34
NC-Dilday	30	35	34	29	32
G13-1006R2	28	36	33	33	33
G14-1776R2	31	38	39	37	36
G15-1038R2	29	42	43	35	37
G15-1811R2	30	40	40	33	36
G15-3361R2	30	43	46	32	38
G15-3606R2	33	41	.	27	34
G15-4502R2	30	24	39	36	33
N06-6	31	34	33	30	32
N10-7412	29	39	34	34	34
N11-8787	30	37	43	35	36
N11-8790	29	36	31	36	33
N11-9092	33	32	34	29	33
N13-136	28	37	31	35	33
N13-273	27	31	31	29	30
N13-313	27	32	31	29	30
N16-9211	29	28	35	33	32
Pro5-157	26	39	30	29	30
SC17-5101	31	42	47	30	37
SC17-5505RR1	31	52	55	34	42
SC17-6012	28	39	41	34	35
SC17-6013	35	41	32	38	36
SC17-6513RR1	24	38	39	31	33
SC17-RU05	28	43	46	32	37
Mean	30	37	37	32	34
LSD(0.05)	5	.	7	11	6
CV(%)	11	.	9	17	14

TABLE 107 - PLANT LODGING (1-5)
PRELIMINARY GROUP VI 2018

STRAIN/ VARIETY	Clemson, SC	Kinston, NC	Plymouth, NC	Tallassee, AL	Test Mean
AG64X8 RR2X	3.3	2.3	2.0	1.0	2.1
NC-Dunphy	3.0	2.0	1.0	1.0	1.7
NC-Roy	3.7	2.3	1.8	1.0	2.2
NC-Dilday	4.0	2.3	1.5	1.0	2.2
G13-1006R2	4.0	2.3	1.5	1.0	2.2
G14-1776R2	3.7	2.0	1.5	1.0	2.1
G15-1038R2	3.0	2.5	2.0	1.0	2.1
G15-1811R2	3.7	2.5	2.0	1.0	2.3
G15-3361R2	2.7	2.3	2.0	1.0	1.9
G15-3606R2	3.7	2.3	1.8	1.0	2.2
G15-4502R2	3.3	2.3	1.5	1.0	2.0
N06-6	4.0	2.0	1.5	1.0	2.2
N10-7412	3.7	2.5	2.0	1.0	2.3
N11-8787	3.7	2.3	1.8	1.0	2.2
N11-8790	4.0	2.0	1.5	1.0	2.2
N11-9092	3.3	2.3	1.8	1.0	2.1
N13-136	3.3	2.3	1.8	1.0	2.1
N13-273	3.0	2.3	1.5	1.0	1.9
N13-313	4.0	2.3	1.5	1.0	2.2
N16-9211	2.7	2.3	2.0	1.0	1.9
Pro5-157	4.0	2.3	2.0	1.0	2.3
SC17-5101	4.0	2.5	2.0	1.0	2.4
SC17-5505RR1	4.0	2.5	1.5	1.0	2.3
SC17-6012	4.0	2.5	2.0	1.0	2.4
SC17-6013	4.0	2.3	2.0	1.0	2.3
SC17-6513RR1	3.0	2.3	1.8	1.0	2.0
SC17-RU05	4.0	2.5	2.0	1.0	2.4
Mean	3.6	2.3	1.7	1.0	2.2
LSD(0.05)	0.8	0.5	0.3	.	0.4
CV(%)	13.0	11.2	9.6	0.0	17.1

TABLE 108 - SEED QUALITY (1-5)
PRELIMINARY GROUP VI 2018

STRAIN/ VARIETY	Clemson, SC	Kinston, NC	Plymouth, NC	Tallassee, AL	Test Mean
AG64X8 RR2X	.	.	.	2.0	2.0
NC-Dunphy	.	.	.	1.0	1.0
NC-Roy	.	.	.	1.0	1.0
NC-Dilday	.	.	.	1.0	1.0
G13-1006R2	.	.	.	1.0	1.0
G14-1776R2	.	.	.	1.0	1.0
G15-1038R2	.	.	.	2.0	2.0
G15-1811R2	.	.	.	1.0	1.0
G15-3361R2	.	.	.	1.0	1.0
G15-3606R2	.	.	.	1.0	1.0
G15-4502R2	.	.	.	2.0	2.0
N06-6	.	.	.	1.0	1.0
N10-7412	.	.	.	1.5	1.5
N11-8787	.	.	.	1.0	1.0
N11-8790	.	.	.	2.5	2.5
N11-9092	.	.	.	1.0	1.0
N13-136	.	.	.	1.5	1.5
N13-273	.	.	.	1.5	1.5
N13-313	.	.	.	1.5	1.5
N16-9211	.	.	.	1.0	1.0
Pro5-157	.	.	.	2.0	2.0
SC17-5101	.	.	.	2.0	2.0
SC17-5505RR1	.	.	.	1.0	1.0
SC17-6012	.	.	.	1.5	1.5
SC17-6013	.	.	.	1.5	1.5
SC17-6513RR1	.	.	.	1.5	1.5
SC17-RU05	.	.	.	1.5	1.5
Mean	.	.	.	1.4	1.4
LSD(0.05)	.	.	.	1.0	1.0
CV(%)	.	.	.	35.3	35.3

TABLE 109 - SEED SIZE (GRAMS PER 100 SEED)
PRELIMINARY GROUP VI 2018

STRAIN/ VARIETY	Clemson, SC	Kinston, NC	Plymouth, NC	Tallassee, AL	Test Mean
AG64X8 RR2X	.	13.4	13.3	13.2	13.3
NC-Dunphy	.	16.3	14.8	16.6	16.0
NC-Roy	.	13.5	13.1	13.1	13.2
NC-Dilday	.	16.9	14.7	18.3	16.9
G13-1006R2	.	12.5	13.1	11.8	12.4
G14-1776R2	.	15.0	14.6	11.8	13.5
G15-1038R2	.	15.2	13.6	14.7	14.5
G15-1811R2	.	15.0	14.1	13.2	13.9
G15-3361R2	.	12.3	11.4	10.5	11.3
G15-3606R2	.	14.4	13.3	16.6	15.1
G15-4502R2	.	16.5	14.9	15.5	15.6
N06-6	.	12.1	11.3	14.2	12.8
N10-7412	.	14.7	14.8	14.1	14.5
N11-8787	.	13.8	13.0	13.7	13.5
N11-8790	.	14.9	15.4	15.7	15.4
N11-9092	.	14.4	14.0	13.7	14.0
N13-136	.	17.3	15.4	13.5	15.1
N13-273	.	13.8	12.0	15.8	14.2
N13-313	.	15.0	14.7	14.2	14.6
N16-9211	.	10.2	10.1	10.8	10.5
Pro5-157	.	16.7	17.0	15.3	16.2
SC17-5101	.	16.8	20.5	16.9	17.9
SC17-5505RR1	.	14.2	12.2	14.7	13.9
SC17-6012	.	10.8	10.2	10.1	10.3
SC17-6013	.	12.7	11.6	14.1	13.0
SC17-6513RR1	.	14.3	12.9	14.0	13.8
SC17-RU05	.	11.5	10.6	15.1	12.8
Mean	.	14.2	13.6	14.1	14.0
LSD(0.05)	.	.	.	2.5	2.0
CV(%)	.	.	.	8.7	9.7

TABLE 110 - OIL (%)†
PRELIMINARY GROUP VI 2018

STRAIN/ VARIETY	Clemson, SC	Kinston, NC	Plymouth, NC	Tallassee, AL	Test Mean
AG64X8 RR2X		19.3	19.1	20.4	19.6
NC-Dunphy	.	21.1	20.9	22.0	21.3
NC-Roy	.	17.9	18.3	19.7	18.6
NC-Dilday	.	20.9	21.5	20.9	21.1
G13-1006R2	.	17.5	18.1	19.6	18.4
G14-1776R2	.	18.9	19.4	20.8	19.7
G15-1038R2	.	17.5	17.4	20.4	18.4
G15-1811R2	.	19.3	19.6	20.9	19.9
G15-3361R2	.	17.9	18.3	19.1	18.5
G15-3606R2	.	19.1	20.5	20.0	19.8
G15-4502R2	.	19.1	19.7	20.7	19.8
N06-6	.	19.7	19.9	21.2	20.3
N10-7412	.	19.3	20.4	21.1	20.3
N11-8787	.	20.2	20.9	21.2	20.8
N11-8790	.	18.5	19.8	20.5	19.6
N11-9092	.	19.2	20.1	20.2	19.8
N13-136	.	17.8	17.7	18.3	17.9
N13-273	.	18.7	19.4	20.4	19.5
N13-313	.	18.3	19.1	20.3	19.2
N16-9211	.	16.9	16.7	19.6	17.7
Pro5-157	.	19.2	18.8	19.3	19.1
SC17-5101	.	19.0	18.3	22.3	19.9
SC17-5505RR1	.	19.4	21.1	20.7	20.4
SC17-6012	.	17.4	17.7	18.4	17.8
SC17-6013	.	16.8	17.2	18.8	17.6
SC17-6513RR1	.	19.7	21.5	20.8	20.7
SC17-RU05	.	17.0	18.3	18.4	17.9
	.				
Mean		18.7	19.2	20.2	19.4
LSD(0.05)	.	.	.	.	1.0
CV(%)	.	.	.	.	3.1

†Oil percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 111 - PROTEIN (%)†
PRELIMINARY GROUP VI 2018

STRAIN/ VARIETY	Clemson, SC	Kinston, NC	Plymouth, NC	Tallassee, AL	Test Mean
AG64X8 RR2X		36.7	36.8	34.9	36.1
NC-Dunphy	.	32.7	34.9	32.7	33.4
NC-Roy	.	38.5	37.3	36.2	37.3
NC-Dilday	.	33.3	33.6	35.6	34.1
G13-1006R2	.	39.1	38.1	36.0	37.8
G14-1776R2	.	38.2	36.9	35.3	36.8
G15-1038R2	.	40.1	40.0	36.6	38.9
G15-1811R2	.	36.6	35.5	34.7	35.6
G15-3361R2	.	38.2	36.9	37.3	37.5
G15-3606R2	.	38.1	34.8	37.6	36.9
G15-4502R2	.	35.5	35.9	35.4	35.6
N06-6	.	36.2	36.4	35.0	35.9
N10-7412	.	35.9	35.2	34.0	35.1
N11-8787	.	35.1	34.1	33.9	34.4
N11-8790	.	40.2	38.5	35.0	37.9
N11-9092	.	35.6	33.7	36.9	35.4
N13-136	.	41.7	42.5	39.0	41.1
N13-273	.	39.1	37.9	36.1	37.7
N13-313	.	40.3	38.4	34.7	37.8
N16-9211	.	40.2	41.2	35.9	39.1
Pro5-157	.	39.5	39.2	37.8	38.8
SC17-5101	.	39.2	39.1	32.1	36.8
SC17-5505RR1	.	36.2	32.4	34.8	34.5
SC17-6012	.	39.3	38.5	37.8	38.5
SC17-6013	.	41.1	39.2	39.1	39.8
SC17-6513RR1	.	35.9	32.1	35.2	34.4
SC17-RU05	.	38.7	34.9	38.0	37.2
	.				
Mean		37.8	36.8	35.8	36.8
LSD(0.05)	.	.	.	.	2.4
CV(%)	.	.	.	.	4.0

†Protein percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 112 - ESTIMATED MEAL PROTEIN (%)
PRELIMINARY GROUP VI 2018

STRAIN/ VARIETY	Clemson, SC	Kinston, NC	Plymouth, NC	Tallassee, AL	Test Mean
AG64X8 RR2X		49.3	49.5	47.7	48.8
NC-Dunphy	.	45.1	47.9	45.5	46.2
NC-Roy	.	50.9	49.7	49.1	49.9
NC-Dilday	.	45.7	46.5	48.8	47.0
G13-1006R2	.	51.6	50.6	48.7	50.3
G14-1776R2	.	51.1	49.8	48.5	49.8
G15-1038R2	.	52.9	52.6	49.9	51.8
G15-1811R2	.	49.3	48.0	47.7	48.3
G15-3361R2	.	50.5	49.1	50.2	49.9
G15-3606R2	.	51.2	47.6	51.1	50.0
G15-4502R2	.	47.7	48.6	48.5	48.3
N06-6	.	49.0	49.4	48.4	48.9
N10-7412	.	48.4	48.1	46.9	47.8
N11-8787	.	47.8	46.9	46.7	47.1
N11-8790	.	53.7	52.1	47.8	51.2
N11-9092	.	47.9	45.8	50.2	48.0
N13-136	.	55.1	56.1	51.9	54.4
N13-273	.	52.3	51.1	49.3	50.9
N13-313	.	53.6	51.6	47.3	50.9
N16-9211	.	52.6	53.7	48.6	51.6
Pro5-157	.	53.1	52.5	50.8	52.2
SC17-5101	.	52.7	52.0	44.9	49.8
SC17-5505RR1	.	48.8	44.6	47.8	47.1
SC17-6012	.	51.7	50.9	50.3	51.0
SC17-6013	.	53.7	51.4	52.3	52.4
SC17-6513RR1	.	48.6	44.4	48.3	47.1
SC17-RU05	.	50.6	46.5	50.6	49.2
	.				
Mean		50.6	49.5	48.8	49.6
LSD(0.05)	.	.	.	.	2.8
CV(%)	.	.	.	.	3.4

TABLE 113 - PARENTAGE OF ENTRIES
UNIFORM GROUP VII 2018

Ent	Strain/Variety	Parentage	Source	Fn	Trans-genic†	Special Traits‡
1	AGS-738RR	G99-4158 x P97M50	Commercial		RR1	
2	AG74X8 RR2X	Commercial check	Commercial		RRX	
3	N7003CN	Cook x Anand	Carter			Resistant to all field races of SCN
4	NC-Wilder	R97-1634 x N97-9693	Carter			12.5% PI 416937
5	G12-2062R2	G00-3880 x G00-3213(3)RR2Y	Zenglu Li	F5d	RR2	
6	G13-2454R2	AU02-3104 x G00-3213(3)RR2Y	Zenglu Li	F6d	RR2	
7	G14-2478R2	G00-3213(3)RR2Y x {[G00-3213(2) x (G00-3209 x G01-PR68)] x [G00-3213(3) x [97M50(3) xL85-2378]]}	Zenglu Li	F5d	RR2	
8	G14-2622R2	R02-3065 x G00-3880(3)RR2Y	Zenglu Li	F6d	RR2	
9	G14-4364R2	N05-7462 x G00-3880(3)RR2Y	Zenglu Li	F6d	RR2	
10	G15PRLL-989	NCC06-899 x [G00-3213(2) x A5547-127 Liberty]	Zenglu Li	F6d	LL	
11	N10-764	N03-893 x G00-3213	Mian	F4		12.5% PI 416937
12	N10-792	N03-893 x G00-3213	Mian	F4		12.5% PI 416937
13	N11-8042	SC97-1821 x MN0302	Carter	F4		50% Midwestern pedigree
14	N11-12528	NC-Roy x PI 603308B	Carter	F4		50% PI 603308B
15	STPR14-459	N6001 x Young	Carter	F4		12.5% Suzuyataka, High Protein

†Conv= Conventional(non-transgenic), LL= Liberty Link®, RR1= Roundup Ready®, and RR2=Roundup Ready 2 Yield®
RRX= Roundup Ready 2 Xtend®
‡AA= modified amino acids, DNC= Do not cross with this, FLS= Frogeye leaf spot resistance, LJ= Long juvenile,
LN= low linolenic acid, LP= low phytate, HO= high olelic acid, HOLN= high oleic acid/low linolenic acid,
SCN= Soybean cyst nematode resistance, SR= Soybean rust resistance,
and STS= sulfonylurea tolerant

TABLE 114 - GENERAL SUMMARY OF PERFORMANCE
UNIFORM TEST VII 2018

STRAIN/ VARIETY	RANK	AVG. RANK	YIELD† 2018	YIELD† 17-18	YIELD† 16-18	PROTEIN‡ 2018	PROTEIN‡ 17-18	PROTEIN‡ 16-18	OIL‡ 2018	OIL‡ 17-19	OIL‡ 16-18
AGS-738RR	10	9	47.3	48.6	49.4	35.3	35.1	35.0	19.5	19.3	19.3
AG74X8 RR2X	3	6	51.7	.	.	36.0	.	.	19.4	.	.
N7003CN	5	8	50.7	50.8	51.0	35.1	35.2	35.4	20.1	19.5	19.4
NC-Wilder	2	6	52.0	52.9	52.9	34.7	34.9	34.8	20.6	20.2	20.2
G12-2062R2	4	5	50.9	51.1	51.5	37.8	37.8	37.4	18.8	18.3	18.4
G13-2454R2	12	8	45.8	48.4	.	35.4	35.1	.	20.3	19.7	.
G14-2478R2	13	11	44.4	.	.	36.5	.	.	19.4	.	.
G14-2622R2	8	8	48.7	.	.	34.8	.	.	19.8	.	.
G14-4364R2	1	5	53.1	.	.	35.1	.	.	19.4	.	.
G15PRLL-989	7	8	49.3	.	.	35.4	.	.	20.5	.	.
N10-764	14	10	42.8	46.9	48.1	36.3	36.2	36.1	20.0	19.5	19.6
N10-792	9	8	47.6	48.3	49.0	37.1	37.0	36.8	20.0	19.4	19.5
N11-8042	15	11	38.4	38.3	41.4	37.3	37.3	37.1	19.8	19.2	19.3
N11-12528	6	8	49.5	.	.	37.2	.	.	18.8	.	.
STPR14-459	11	11	46.2	.	.	37.6	.	.	19.3	.	.
Mean	.	.	47.9	.	.	36.1	.	.	19.7	.	.
LSD(0.05)	.	.	5.7	.	.	1.1	.	.	0.6	.	.
CV(%)	.	.	15.8	.	.	2.8	.	.	2.8	.	.

† Data not included in mean: 2018 - Not applicable
2017 - Clemson, SC
2016 - Kinston, NC; Tallassee, AL(A)

‡ Protein percentage and oil percentage reported on a 13% moisture basis beginning in 2015.

TABLE 115 - GENERAL SUMMARY OF PERFORMANCE -Part 2
UNIFORM TEST VII 2018

STRAIN/ VARIETY	MEAL PRO %	MAT INDEX	LOD	HT	SEED QUALITY	SEED SIZE	FL. COLOR	PUB. COLOR	POD COLOR
AGS-738RR	47.7	0	3	31	2.4	14			
AG74X8 RR2X	48.6	6	2	34	2.3	16.1			
N7003CN	47.8	6	3	33	2.5	16.5	W	T	
NC-Wilder	47.5	5	3	34	2.0	15.8	W	G	
G12-2062R2	50.5	4	3	35	2.4	15.1	P	T	T
G13-2454R2	48.2	1	3	34	2.2	15.3	W	T	T
G14-2478R2	49.3	-1	3	35	2.1	14.9	W	T	T
G14-2622R2	47.2	5	2	37	2.3	14.9	P	T	T
G14-4364R2	47.3	4	3	36	2.0	16.1	W	T	T
G15PRLL-989	48.4	1	3	36	2.0	15.9	W	T	T
N10-764	49.3	-2	2	32	2.1	14.4	W	T	
N10-792	50.4	4	2	34	2.4	15.7	W	T	
N11-8042	50.5	-4	2	32	2.5	15.5	P	T	
N11-12528	49.8	-3	3	34	2.2	14.1	W	G	
STPR14-459	50.7	-1	3	34	2.5	14.7	W	G	
Mean	48.9	2	3	34	2.3	15.3			
LSD(0.05)	1.2	3	0	2	0.3	1.1			
CV(%)	2.3	202	27	8	20.0	9.1			

TABLE 116 - GENERAL SUMMARY OF PEST REACTION
UNIFORM TEST VII 2018

STRAIN/	SCN Cyst Score (1-5 Scale)†			PRK	SRK	SC	SC
VARIETY	Race 1	Race 3	Race 5	GA	GA	RATING	SCORE
AGS-738RR	.	1	2	1.3	1.0	R	1.0
AG74X8 RR2X	.	2	4	1.0	1.0	MR	2.0
N7003CN	.	1	1	1.8	1.0	MS	4.0
NC-Wilder	.	3	5	1.0	1.0	S	5.0
G12-2062R2	.	2	4	1.0	1.3	SS	3.0
G13-2454R2	.	3	3	1.0	1.0	SS	3.0
G14-2478R2	.	1	5	1.0	1.0	MS	4.0
G14-2622R2	.	4	2	1.0	1.0	MS	4.0
G14-4364R2	.	4	5	1.0	1.0	R	1.0
G15PRLL-989	.	4	5	1.0	1.0	MS	4.0
N10-764	.	4	5	3.3	5.0	S	5.0
N10-792	.	4	5	2.3	3.8	MS	4.0
N11-8042	.	3	5	1.0	1.0	SS	3.0
N11-12528	.	2	5	3.8	3.3	MS	4.0
STPR14-459	.	4	5	3.0	4.0	SS	3.0

†The race 1, 3, and 5 SCN populations used in these tests were typed as HG (*Heterodera glycines*) Type 2.5.7, HG Type 5.7, and HG Type 2.5.7, respectively. Reaction to the cultivar Pickett was used to distinguish between race 1 and race 5 SCN populations.

TABLE 117 - SEED YIELD (BUSHELS PER ACRE)
UNIFORM TEST VII 2018 †

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Bossier City, LA	Calhoun, GA	Clemson, SC	Fairhope, AL	Florence, SC
AGS-738RR	44.9	49.1	67.1	53.5	44.0	54.8	37.8
AG74X8 RR2X	54.1	44.5	75.7	47.7	61.1	63.9	45.6
N7003CN	50.1	45.3	77.2	54.5	46.9	62.8	48.9
NC-Wilder	58.1	46.6	78.4	49.6	57.9	70.6	44.1
G12-2062R2	37.8	48.4	62.4	49.7	50.8	67.6	49.6
G13-2454R2	34.6	48.1	50.5	41.6	44.2	60.5	44.5
G14-2478R2	30.5	36.4	59.9	38.6	46.6	65.0	42.1
G14-2622R2	48.9	47.7	66.4	55.1	54.3	61.4	43.7
G14-4364R2	47.7	48.1	77.6	58.0	52.3	62.5	44.4
G15PRLL-989	49.2	40.4	67.2	53.2	53.0	66.7	41.2
N10-764	29.2	45.6	31.7	35.2	45.1	71.6	40.1
N10-792	31.0	42.9	61.7	46.2	56.7	64.8	49.3
N11-8042	14.2	31.3	32.1	32.3	49.1	64.0	49.8
N11-12528	56.5	52.6	66.8	42.2	52.0	60.7	43.0
STPR14-459	56.2	45.1	63.8	35.8	49.4	53.8	41.5
Mean	42.9	44.8	62.6	46.2	50.9	63.4	44.4
LSD(0.05)	8.3	5.9	7.8	7.8	6.3	10.9	5.9
CV(%)	11.5	7.9	7.5	10.0	7.5	10.3	8.0

† Data not included in mean: 2018 - Not applicable

TABLE 117 - SEED YIELD (BUSHELS PER ACRE) (continued)
UNIFORM TEST VII 2018 †

STRAIN/ VARIETY	Kinston, NC	Plains, GA	Plymouth, NC	Tifton, GA	Test Mean
AGS-738RR	28.2	46.2	46.4	48.0	47.3
AG74X8 RR2X	34.6	39.0	44.7	57.7	51.7
N7003CN	24.9	57.2	40.9	49.5	50.7
NC-Wilder	25.3	45.4	45.2	50.4	52.0
G12-2062R2	33.9	55.8	46.0	57.9	50.9
G13-2454R2	32.3	46.3	46.8	54.0	45.8
G14-2478R2	27.3	45.0	44.0	53.4	44.4
G14-2622R2	27.1	47.8	42.3	41.1	48.7
G14-4364R2	28.4	55.3	49.6	59.8	53.1
G15PRLL-989	23.7	43.7	48.6	55.6	49.3
N10-764	31.4	40.6	46.1	54.3	42.8
N10-792	27.7	47.1	46.3	49.9	47.6
N11-8042	29.2	35.2	37.7	47.6	38.4
N11-12528	25.6	42.4	45.4	57.7	49.5
STPR14-459	27.0	44.2	44.6	46.7	46.2
Mean	28.4	46.1	45.0	52.2	47.9
LSD(0.05)	6.2	6.5	4.0	6.5	5.7
CV(%)	12.8	8.4	5.3	7.5	15.8

† Data not included in mean: 2018 - Not applicable

TABLE 118 - RELATIVE MATURITY (DAYS EARLIER (-) OR LATER (+) THAN ENTRY 1)
UNIFORM GROUP VII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Bossier City, LA	Calhoun, GA	Clemson, SC	Fairhope, AL	Florence, SC
AGS-738RR	10/10	10/22	10/18	10/31	10/24	10/21	10/28
AG74X8 RR2X	4	5	5	4	14	2	8
N7003CN	2	4	6	4	15	5	11
NC-Wilder	6	3	6	2	11	3	9
G12-2062R2	1	0	1	1	11	4	8
G13-2454R2	0	-1	1	-11	8	1	6
G14-2478R2	-6	-1	-1	-14	3	1	-1
G14-2622R2	8	5	6	1	14	3	5
G14-4364R2	5	1	4	1	7	5	7
G15PRLL-989	4	-1	0	1	2	1	-1
N10-764	-8	0	0	-14	2	-1	-5
N10-792	-1	2	4	0	10	5	9
N11-8042	-6	-2	-3	-15	-2	-2	-2
N11-12528	0	0	-5	-11	1	-4	-5
STPR14-459	1	4	-5	-5	10	1	-7
Mean	1	1	1	-4	7	2	3
LSD(0.05)	1	1	3	5	5	3	3
CV(%)	63	50	124	80	43	122	69

TABLE 118 - RELATIVE MATURITY (continued)
UNIFORM GROUP VII 2018

STRAIN/ VARIETY	*Kinston, NC*	*Plymouth, NC*	*Tifton, GA*	*Test Mean*
AGS-738RR	11/5	11/26	10/12	10/26
AG74X8 RR2X	2	8	6	6
N7003CN	2	8	8	6
NC-Wilder	1	7	6	5
G12-2062R2	2	7	2	4
G13-2454R2	1	0	2	1
G14-2478R2	1	1	3	-1
G14-2622R2	1	4	6	5
G14-4364R2	1	7	6	4
G15PRLL-989	0	1	1	1
N10-764	1	-4	7	-2
N10-792	2	4	8	4
N11-8042	-2	-5	-1	-4
N11-12528	-5	-2	-1	-3
STPR14-459	-4	-7	1	-1
Mean	0	2	4	2
LSD(0.05)	1	4	.	3
CV(%)	510	106	0	202

TABLE 119 - PLANT HEIGHT (INCHES)
UNIFORM GROUP VII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Bossier City, LA	Calhoun, GA	Clemson, SC	Fairhope, AL	Florence, SC
AGS-738RR	40	31	21	36	28	27	36
AG74X8 RR2X	40	36	22	40	30	28	45
N7003CN	40	34	22	38	29	26	42
NC-Wilder	40	33	25	37	32	29	41
G12-2062R2	43	36	23	38	32	31	41
G13-2454R2	42	35	18	39	32	27	43
G14-2478R2	40	39	23	40	29	32	41
G14-2622R2	45	39	24	45	32	32	44
G14-4364R2	39	37	24	40	29	31	43
G15PRLL-989	39	42	22	40	32	35	41
N10-764	37	37	18	34	32	28	37
N10-792	41	40	23	37	33	32	41
N11-8042	38	37	19	33	30	27	42
N11-12528	36	37	21	39	30	27	44
STPR14-459	38	35	23	39	29	25	40
Mean	40	37	22	38	31	29	42
LSD(0.05)	4	4	3	5	4	6	4
CV(%)	6	7	8	8	8	13	6

TABLE 119 - PLANT HEIGHT (INCHES) (continued)
UNIFORM GROUP VII 2018

STRAIN/ VARIETY	Kinston, NC	Plains, GA	Plymouth, NC	Tifton, GA	Test Mean
AGS-738RR	29	31	37	27	31
AG74X8 RR2X	34	32	41	32	34
N7003CN	33	35	41	28	33
NC-Wilder	32	36	40	30	34
G12-2062R2	32	37	38	30	35
G13-2454R2	33	34	43	30	34
G14-2478R2	30	37	41	31	35
G14-2622R2	34	36	42	32	37
G14-4364R2	38	37	44	35	36
G15PRLL-989	32	40	46	31	36
N10-764	27	33	37	30	32
N10-792	27	31	40	28	34
N11-8042	30	31	36	31	32
N11-12528	23	34	44	33	34
STPR14-459	37	36	41	32	34
Mean	31	35	41	31	34
LSD(0.05)	.	3	5	3	2
CV(%)	.	5	6	6	9

TABLE 120 - PLANT LODGING (1-5)
UNIFORM GROUP VII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Bossier City, LA	Calhoun, GA	Clemson, SC	Fairhope, AL	Florence, SC
AGS-738RR	3.0	2.3	1.0	2.0	4.0	2.0	3.3
AG74X8 RR2X	1.7	2.0	1.0	1.0	1.7	2.0	3.0
N7003CN	3.0	3.3	1.0	2.3	4.0	3.3	4.0
NC-Wilder	3.7	3.3	1.0	2.3	4.0	3.7	4.7
G12-2062R2	3.0	2.7	1.0	2.0	3.0	3.3	4.0
G13-2454R2	2.7	3.0	1.0	2.7	3.7	2.7	3.0
G14-2478R2	2.0	2.3	1.0	2.7	3.7	2.7	4.0
G14-2622R2	2.0	1.7	1.0	2.0	2.0	2.3	3.3
G14-4364R2	2.3	3.3	1.0	2.0	2.7	3.3	3.7
G15PRLL-989	3.0	3.7	1.0	2.0	4.0	3.3	4.0
N10-764	2.3	2.0	1.0	1.7	2.3	1.7	2.7
N10-792	1.0	1.0	1.0	1.0	1.7	2.0	3.3
N11-8042	1.0	2.0	1.0	1.7	2.0	2.0	3.3
N11-12528	3.3	4.0	1.0	2.7	4.0	3.0	3.3
STPR14-459	2.7	3.7	1.0	2.0	4.0	3.3	2.7
Mean	2.4	2.7	1.0	2.0	3.1	2.7	3.5
LSD(0.05)	0.8	0.7	.	1.0	0.8	0.7	0.7
CV(%)	20.7	14.7	0.0	29.7	14.4	16.0	12.3

TABLE 120 - PLANT LODGING (1-5) (continued)
UNIFORM GROUP VII 2018

STRAIN/ VARIETY	Kinston, NC	Plains, GA	Plymouth, NC	Tifton, GA	Test Mean
AGS-738RR	2.0	3.7	1.5	3.0	2.5
AG74X8 RR2X	2.3	2.0	1.3	1.7	1.8
N7003CN	2.3	3.7	1.5	4.7	3.0
NC-Wilder	2.5	3.0	2.3	4.0	3.1
G12-2062R2	2.5	4.0	1.8	2.0	2.7
G13-2454R2	2.8	2.7	1.5	1.7	2.5
G14-2478R2	2.5	4.0	1.8	2.0	2.6
G14-2622R2	2.5	4.0	1.5	2.7	2.3
G14-4364R2	2.0	2.7	1.8	2.3	2.5
G15PRLL-989	2.5	3.3	2.0	2.7	2.9
N10-764	2.0	2.7	1.8	1.3	1.9
N10-792	1.8	3.0	1.5	1.3	1.7
N11-8042	2.3	2.3	1.3	1.0	1.8
N11-12528	2.0	2.3	1.8	2.7	2.7
STPR14-459	2.5	4.0	1.5	4.0	2.9
Mean	2.3	3.2	1.6	2.5	2.5
LSD(0.05)	0.4	0.8	0.5	1.3	0.4
CV(%)	8.9	15.7	13.4	30.9	26.5

TABLE 121 - SEED QUALITY (1-5)
UNIFORM GROUP VII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Bossier City, LA	Calhoun, GA	Clemson, SC	Fairhope, AL	Florence, SC
AGS-738RR	1.5	2.3	2.0	3.7	.	3.7	1.0
AG74X8 RR2X	1.7	2.7	2.0	2.7	.	3.3	1.0
N7003CN	1.7	2.8	1.0	2.5	.	4.3	1.7
NC-Wilder	1.2	2.0	1.0	2.8	.	3.3	1.0
G12-2062R2	1.7	2.3	2.0	2.5	.	4.0	1.0
G13-2454R2	2.0	2.2	1.0	2.5	.	4.3	1.0
G14-2478R2	1.7	2.3	1.0	2.7	.	4.0	1.0
G14-2622R2	1.5	2.7	1.0	3.2	.	3.7	1.0
G14-4364R2	1.3	1.7	1.0	2.3	.	3.3	1.0
G15PRLL-989	1.2	2.3	1.0	2.7	.	3.7	1.0
N10-764	1.3	2.2	1.0	2.7	.	3.7	1.3
N10-792	1.8	2.3	1.0	3.2	.	3.7	1.3
N11-8042	2.0	2.5	2.0	3.5	.	4.0	1.0
N11-12528	1.2	2.2	1.0	2.8	.	4.0	1.0
STPR14-459	1.3	2.5	2.0	3.3	.	4.0	1.7
Mean	1.5	2.3	1.3	2.9	.	3.8	1.1
LSD(0.05)	0.5	0.6	.	0.9	.	1.3	0.5
CV(%)	19.2	14.6	0.0	19.0	.	19.9	26.3

TABLE 121 - SEED QUALITY (1-5) (continued)
UNIFORM GROUP VII 2018

STRAIN/ VARIETY	Kinston, NC	Plains, GA	Plymouth, NC	Tifton, GA	Test Mean
AGS-738RR	.	3.2	1.5	2.7	2.4
AG74X8 RR2X	.	3.2	1.5	3.0	2.3
N7003CN	.	3.5	1.5	3.3	2.5
NC-Wilder	.	2.5	1.3	2.5	2.0
G12-2062R2	.	3.3	1.5	3.0	2.4
G13-2454R2	.	2.7	1.5	2.8	2.2
G14-2478R2	.	2.5	1.3	2.7	2.1
G14-2622R2	.	3.2	1.5	3.3	2.3
G14-4364R2	.	2.8	1.5	2.7	2.0
G15PRLL-989	.	2.5	1.3	2.8	2.0
N10-764	.	2.8	1.5	2.7	2.1
N10-792	.	3.0	1.5	3.7	2.4
N11-8042	.	3.3	1.5	2.7	2.5
N11-12528	.	2.8	1.5	3.2	2.2
STPR14-459	.	3.2	1.7	2.8	2.5
Mean	.	3.0	1.5	2.9	2.3
LSD(0.05)	.	0.5	0.3	0.8	0.3
CV(%)	.	11.0	11.0	15.4	19.8

TABLE 122 - SEED SIZE (GRAMS PER 100 SEED)
UNIFORM GROUP VII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Bossier City, LA	Calhoun, GA	Clemson, SC	Fairhope, AL	Florence, SC
AGS-738RR	12.3	12.5	15.3	17.0	.	17.9	13.1
AG74X8 RR2X	14.0	15.3	19.9	13.4	.	19.1	16.8
N7003CN	15.3	15.0	17.3	15.6	.	18.9	16.8
NC-Wilder	13.7	13.9	20.1	14.9	.	19.0	16.0
G12-2062R2	11.2	14.0	15.0	14.1	.	18.5	16.1
G13-2454R2	12.2	14.0	15.3	16.3	.	18.3	16.1
G14-2478R2	11.0	13.3	14.4	17.1	.	19.5	15.8
G14-2622R2	13.3	14.7	15.5	17.6	.	17.3	14.1
G14-4364R2	14.3	14.5	17.4	15.1	.	19.9	16.7
G15PRLL-989	15.0	14.1	16.2	18.2	.	20.0	15.8
N10-764	10.6	13.4	13.7	12.8	.	18.9	14.5
N10-792	12.9	14.4	15.5	14.9	.	19.1	16.6
N11-8042	11.2	14.0	13.0	19.0	.	18.4	16.7
N11-12528	12.6	12.6	13.0	17.0	.	16.2	13.4
STPR14-459	13.2	13.4	16.1	13.8	.	17.5	13.5
Mean	12.8	13.9	15.8	15.8	.	18.6	15.5
LSD(0.05)	1.5	0.9	.	1.3	.	2.9	1.1
CV(%)	6.8	3.8	.	5.1	.	9.1	4.4

TABLE 122 - SEED SIZE (GRAMS PER 100 SEED) (continued)
UNIFORM GROUP VII 2018

STRAIN/ VARIETY	*Kinston, NC*	*Plains, GA*	*Plymouth, NC*	*Tifton, GA*	*Test Mean*
AGS-738RR	13.8	12.0	12.9	13.0	14.0
AG74X8 RR2X	17.2	15.2	17.2	14.4	16.1
N7003CN	16.7	16.1	16.4	16.8	16.5
NC-Wilder	15.0	14.2	17.0	15.8	15.8
G12-2062R2	15.9	16.0	15.3	14.6	15.1
G13-2454R2	16.3	14.9	14.5	14.6	15.3
G14-2478R2	16.7	13.3	15.0	12.7	14.9
G14-2622R2	14.8	14.5	14.0	12.9	14.9
G14-4364R2	16.4	15.7	16.7	14.9	16.1
G15PRLL-989	14.6	15.0	15.2	14.0	15.9
N10-764	16.8	14.0	15.2	14.4	14.4
N10-792	17.8	16.4	16.3	13.9	15.7
N11-8042	16.7	15.9	15.2	14.3	15.5
N11-12528	15.5	13.8	12.4	13.5	14.1
STPR14-459	17.0	15.4	14.5	13.6	14.7
Mean	16.1	14.8	15.2	14.2	15.3
LSD(0.05)	.	1.4	.	1.2	1.1
CV(%)	.	5.8	.	5.1	9.1

TABLE 123 - OIL (%)†
UNIFORM GROUP VII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Bossier City, LA	Calhoun, GA	Clemson, SC	Fairhope, AL	Florence, SC
AGS-738RR	19.8	19.3	.	.	.	19.0	19.2
AG74X8 RR2X	19.3	19.1	.	.	.	21.1	18.7
N7003CN	20.6	20.0	.	.	.	20.5	19.5
NC-Wilder	20.7	20.1	.	.	.	20.9	20.3
G12-2062R2	18.3	19.0	.	.	.	19.9	17.9
G13-2454R2	20.2	20.4	.	.	.	19.9	19.8
G14-2478R2	18.8	19.5	.	.	.	19.7	18.9
G14-2622R2	19.8	20.3	.	.	.	20.4	19.5
G14-4364R2	19.4	19.5	.	.	.	20.1	18.8
G15PRLL-989	20.4	19.7	.	.	.	20.8	20.3
N10-764	18.7	20.5	.	.	.	20.2	20.1
N10-792	19.7	19.7	.	.	.	20.7	19.3
N11-8042	17.6	18.6	.	.	.	20.3	20.3
N11-12528	19.4	18.9	.	.	.	19.9	18.5
STPR14-459	19.4	19.2	.	.	.	19.6	19.3
Mean	19.5	19.6	.	.	.	20.2	19.3
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

†Oil percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 123 - OIL (%)† (continued)
UNIFORM GROUP VII 2018

STRAIN/ VARIETY	Kinston, NC	Plains, GA	Plymouth, NC	Tifton, GA	Test Mean
AGS-738RR	19.5	20.8	19.2	.	19.5
AG74X8 RR2X	18.7	19.9	19.2	.	19.4
N7003CN	19.1	21.4	19.8	.	20.1
NC-Wilder	20.3	21.7	20.4	.	20.6
G12-2062R2	18.4	20.1	17.8	.	18.8
G13-2454R2	20.2	22.0	19.5	.	20.3
G14-2478R2	19.2	20.9	18.9	.	19.4
G14-2622R2	19.2	21.0	18.8	.	19.8
G14-4364R2	19.0	20.8	18.4	.	19.4
G15PRLL-989	19.9	22.2	20.0	.	20.5
N10-764	19.8	21.4	19.0	.	20.0
N10-792	19.1	21.9	19.5	.	20.0
N11-8042	19.2	23.1	19.9	.	19.8
N11-12528	18.3	19.5	17.5	.	18.8
STPR14-459	18.5	20.5	18.9	.	19.3
Mean	19.2	21.1	19.1	.	19.7
LSD(0.05)	.	.	.	.	0.6
CV(%)	.	.	.	.	2.8

TABLE 124 - PROTEIN (%)†
UNIFORM GROUP VII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Bossier City, LA	Calhoun, GA	Clemson, SC	Fairhope, AL	Florence, SC
AGS-738RR	34.6	35.4	.	.	.	36.7	35.5
AG74X8 RR2X	34.2	35.6	.	.	.	35.6	37.3
N7003CN	33.8	35.3	.	.	.	35.3	35.9
NC-Wilder	33.7	34.5	.	.	.	36.1	34.9
G12-2062R2	37.3	36.8	.	.	.	37.7	39.2
G13-2454R2	34.8	34.2	.	.	.	38.6	35.8
G14-2478R2	37.6	37.1	.	.	.	36.5	38.0
G14-2622R2	35.0	34.2	.	.	.	35.6	35.5
G14-4364R2	33.9	35.0	.	.	.	35.1	35.9
G15PRLL-989	34.6	35.9	.	.	.	36.7	35.3
N10-764	37.1	34.8	.	.	.	37.6	36.2
N10-792	36.9	36.1	.	.	.	36.6	38.7
N11-8042	40.6	38.6	.	.	.	36.6	36.3
N11-12528	35.1	36.5	.	.	.	36.9	38.0
STPR14-459	36.2	36.8	.	.	.	37.7	38.2
Mean	35.7	35.8	.	.	.	36.6	36.7
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

†Protein percentage reported on a 13% moisture basis beginning in 2015.

TABLE 124 - PROTEIN (%)† (continued)
UNIFORM GROUP VII 2018

STRAIN/ VARIETY	Kinston, NC	Plains, GA	Plymouth, NC	Tifton, GA	Test Mean
AGS-738RR	34.7	35.3	35.1	.	35.3
AG74X8 RR2X	36.6	36.7	36.1	.	36.0
N7003CN	35.7	35.1	34.8	.	35.1
NC-Wilder	34.1	34.7	35.0	.	34.7
G12-2062R2	37.6	36.6	39.1	.	37.8
G13-2454R2	34.3	33.4	36.5	.	35.4
G14-2478R2	33.6	35.9	37.3	.	36.5
G14-2622R2	33.6	34.2	35.5	.	34.8
G14-4364R2	34.4	34.5	36.8	.	35.1
G15PRLL-989	35.0	34.7	35.8	.	35.4
N10-764	35.9	35.3	37.6	.	36.3
N10-792	37.8	36.2	37.4	.	37.1
N11-8042	37.8	34.7	36.4	.	37.3
N11-12528	37.6	37.1	38.7	.	37.2
STPR14-459	38.7	37.8	38.1	.	37.6
Mean	35.8	35.5	36.7	.	36.1
LSD(0.05)	.	.	.	.	1.1
CV(%)	.	.	.	.	2.8

TABLE 125 - ESTIMATED MEAL PROTEIN (%)
UNIFORM GROUP VII 2017

STRAIN/ VARIETY	*Athens, GA(A)*	*Athens, GA(B)*	*Bossier City, LA*	*Calhoun, GA*	*Clemson, SC*	*Fairhope, AL*	*Florence, SC*
AGS-738RR	46.8	47.7	.	.	.	49.3	47.7
AG74X8 RR2X	46.1	47.8	.	.	.	49.0	49.9
N7003CN	46.3	47.9	.	.	.	48.3	48.4
NC-Wilder	46.2	46.9	.	.	.	49.6	47.6
G12-2062R2	49.7	49.4	.	.	.	51.2	51.8
G13-2454R2	47.3	46.7	.	.	.	52.4	48.4
G14-2478R2	50.2	50.0	.	.	.	49.4	50.9
G14-2622R2	47.3	46.7	.	.	.	48.6	47.9
G14-4364R2	45.7	47.3	.	.	.	47.7	48.0
G15PRLL-989	47.3	48.6	.	.	.	50.3	48.2
N10-764	49.5	47.5	.	.	.	51.2	49.2
N10-792	50.0	48.8	.	.	.	50.1	52.1
N11-8042	53.6	51.5	.	.	.	49.8	49.4
N11-12528	47.4	49.0	.	.	.	50.1	50.6
STPR14-459	48.8	49.5	.	.	.	50.9	51.4
Mean	48.1	48.4	.	.	.	49.9	49.4
LSD(0.05)	.	.	.	.	.	.	.
CV(%)	.	.	.	.	.	.	.

TABLE 125 - ESTIMATED MEAL PROTEIN (%) (continued)
UNIFORM GROUP VII 2017

STRAIN/ VARIETY	Kinston, NC	Plains, GA	Plymouth, NC	Tifton, GA	Test Mean
AGS-738RR	46.9	48.4	47.2	.	47.7
AG74X8 RR2X	49.0	49.8	48.5	.	48.6
N7003CN	48.0	48.6	47.2	.	47.8
NC-Wilder	46.4	48.1	47.8	.	47.5
G12-2062R2	50.0	49.8	51.7	.	50.5
G13-2454R2	46.8	46.5	49.2	.	48.2
G14-2478R2	45.2	49.3	49.9	.	49.3
G14-2622R2	45.2	47.1	47.5	.	47.2
G14-4364R2	46.2	47.3	49.0	.	47.3
G15PRLL-989	47.5	48.5	48.7	.	48.4
N10-764	48.6	48.9	50.5	.	49.3
N10-792	50.9	50.4	50.5	.	50.4
N11-8042	50.8	49.1	49.3	.	50.5
N11-12528	50.0	50.1	51.0	.	49.8
STPR14-459	51.7	51.7	51.0	.	50.7
Mean	48.2	48.9	49.3	.	48.9
LSD(0.05)	.	.	.	.	1.2
CV(%)	.	.	.	.	2.3

TABLE 126 - PARENTAGE OF ENTRIES
PRELIMINARY GROUP VII 2018

Ent	Strain/Variety	Parentage	Source	Fn	Trans-genic†	Special Traits‡
1	AGS-738RR	G99-4158 x P97M50	Commercial		RR1	
2	AG74X8 RR2X	Commercial check	Commercial		RRX	
3	N7003CN	Cook x Anand	Carter			SCN
4	NC-Wilder	R97-1634 x N97-9693	Carter			12.5% PI 416937
5	G15-1103R2	G10PR-56248R2 x G10PR-56466R2	Zenglu Li	F5d	RR2	
6	G15-2017R2	R04-342 x G09PR-54457R2	Zenglu Li	F7d	RR2	
7	G15-2260R2	NCCO4-619 x G09PR-54329R2	Zenglu Li	F7d	RR2	
8	G15-2284R2	NCCO4-619 x G09PR-54329R2	Zenglu Li	F7d	RR2	
9	G15-2330R2	NCC04-619 x G09PR-54457R2	Zenglu Li	F7d	RR2	
10	G15-2379R2	NCC04-619 x G09PR-54457R2	Zenglu Li	F7d	RR2	
11	G15-4922R2	N02-7084 x G09PR-54457R2	Zenglu Li	F7d	RR2	
12	N02-7834	Cook x Archer (I)	Carter			50% Archer, Diversity
13	N11-8014	SC97-1821 x MN0302	Carter			50% MN0302, Diversity
14	N11-8098	SC97-1821 x MN0302	Carter			50% MN0302, Diversity
15	N11-8975	N02-8492 (PG) x N02-9079 (PG)	Carter			37.5% Exotic (Nakaennari, Suzuyataka, PI 416937)
16	N11-8981	N02-8492 (PG) x N02-9079 (PG)	Carter			37.5% Exotic (Nakaennari, Suzuyataka, PI 416937)
17	N16-9198	N7103 x NMS5-48-2-75	Carter			25% Soja PI 366122
18	SC17-5517RR1	SC06-676RR x G04-1618RR	Fallen		RR1	
19	SC17-5537RR2	N07-14182 x G10PR-224R2	Fallen		RR2	
20	SC17-6515RR1	SC07-1518RR x S11-21072	Fallen		RR1	
21	SC17-RU11	Benning (VII) x PI417125 (VIII)	Fallen			

†Conv= Conventional(non-transgenic),LL= Liberty Link®, RR1= Roundup Ready®,RR2= Roundup Ready 2 Yield®
RRX= Roundup Ready 2 Xtend®
‡AA= modified amino acids, DNC= Do not cross with this, FLS= Frogeye leaf spot resistance, LJ= Long juvenile,
LN= low linolenic acid, LP= low phytate, HO= high oleic acid, HOLN= high oleic acid/low linolenic acid,
SCN= Soybean cyst nematode resistance, SR= Soybean rust resistance,
and STS= sulfonylurea tolerant

TABLE 127 - GENERAL SUMMARY OF PERFORMANCE
PRELIMINARY TEST VII 2018

STRAIN/	*SEED*		*AVG.*	*MAT.*			*SCN Cyst Score (1-5)‡*			*SC*	*SC*
VARIETY	*YIELD†*	*RANK*	*RANK*	*INDEX*	*LOD*	*HT*	*Race 1*	*Race 3*	*Race 5*	*RATING*	*SCORE*
AGS-738RR	46.8	4	7	0	3.1	35	1	1	3	R	1
AG74X8 RR2X	43.7	15	11	6	2.1	36	5	2	4	MR	2
N7003CN	43.9	14	12	7	3.0	36	2	1	1	R	1
NC-Wilder	46.6	5	8	3	3.2	35	4	2	4	SS	3
G15-1103R2	46.4	8	10	3	3.3	40	5	1	4	R	1
G15-2017R2	46.4	9	9	5	2.8	37	4	1	4	S	5
G15-2260R2	47.3	3	7	-1	3.0	35	1	1	4	R	1
G15-2284R2	46.5	7	8	4	3.3	39	3	1	4	R	1
G15-2330R2	47.6	2	6	3	2.4	39	4	2	5	R	1
G15-2379R2	49.4	1	6	0	2.4	40	4	3	5	R	1
G15-4922R2	46.0	11	9	4	2.6	37	2	1	5	R	1
N02-7834	44.3	13	11	4	3.1	35	4	4	5	SS	3
N11-8014	41.4	16	13	2	3.1	42	5	3	4	SS	3
N11-8098	36.0	21	17	1	1.9	36	5	3	3	R	1
N11-8975	38.2	20	18	3	2.7	37	5	2	4	MS	4
N11-8981	38.3	19	18	-2	2.2	37	5	2	3	SS	3
N16-9198	46.1	10	11	6	2.9	35	5	2	4	MR	2
SC17-5517RR1	45.8	12	9	7	2.7	35	4	3	3	R	1
SC17-5537RR2	46.5	6	8	4	2.7	41	4	3	3	R	1
SC17-6515RR1	38.3	18	16	8	2.9	43	4	4	4	R	1
SC17-RU11	41.1	17	16	7	2.7	38	5	4	5	R	1
Mean	44.1	.	.	4	2.8	37	.	.	.		.
LSD(0.05)	6.5	.	.	3	0.6	3	.	.	.		.
CV(%)	13.9	.	.	76	22.7	8	.	.	.		.

† Data not included in mean: Not applicable

‡The race 1, 3, and 5 SCN populations used in these tests were typed as HG (Heterodera glycines) Type 2.5.7, HG Type 5.7, and HG Type 2.5.7, respectively.

Reaction to the cultivar Pickett was used to distinguish between race 1 and race 5 SCN populations.

TABLE 128 - GENERAL SUMMARY OF PERFORMANCE (continued)
PRELIMINARY TEST VII 2018

STRAIN/ VARIETY	SEED QUALITY	SEED SIZE	PROTEIN§ %	OIL§ %	MEAL PRO%	FL COLOR	PUB. COLOR	POD COLOR
AGS-738RR	1.9	12.7	34.6	19.7	46.8			
AG74X8 RR2X	1.9	15.8	36.4	19.3	49.1			
N7003CN	2.3	16.6	35.1	20.1	47.7	W	T	
NC-Wilder	1.6	14.7	35.0	20.5	47.9	W	G	
G15-1103R2	1.8	12.8	36.7	18.8	49.1	P	T	T
G15-2017R2	1.8	14.1	36.7	18.7	49.1	P	T	T
G15-2260R2	1.9	13.3	37.0	19.6	49.9	P	T	T
G15-2284R2	1.7	14.8	37.7	18.9	50.5	P	T	T
G15-2330R2	1.8	13.7	36.3	19.4	49	P	T	T
G15-2379R2	1.8	13.4	35.9	19.2	48.3	P	T	T
G15-4922R2	2.2	14.7	35.2	18.8	47.1	P	T	T
N02-7834	2.0	15.9	37.1	18.8	49.6	P	T	
N11-8014	2.0	15.4	36.3	19.8	49.2	P	T	
N11-8098	2.2	17.3	36.6	20.3	50	P	T	
N11-8975	2.1	19.5	38.4	18.3	51.1	P	G	
N11-8981	2.1	20.5	37.1	19.9	50.4	P	G	
N16-9198	1.5	9.3	38.7	16.9	50.6	W	G	
SC17-5517RR1	1.6	12.9	34.6	20.4	47.2	W	G	
SC17-5537RR2	2.1	15.8	37.3	19.1	50.2	P	G	
SC17-6515RR1	1.9	13.2	35.8	19.8	48.5	W	T	
SC17-RU11	2.0	13.1	37.8	18.7	50.5	W	T	
Mean	1.9	14.7	36.5	19.3	49.1			
LSD(0.05)	0.4	1.0	1.3	0.5	1.6			
CV(%)	19.1	6.0	2.9	2.2	2.7			

§Protein percentage and oil percentage are reported on a 13% moisture basis beginning in 2015.

TABLE 129 - SEED YIELD (BUSHELS PER ACRE)
PRELIMINARY GROUP VII 2018 †

STRAIN/ VARIETY	Athens, GA(A)	Florence, SC	Kinston, NC	Plains, GA	Plymouth, NC	Test Mean
AGS-738RR	60.9	43.7	41.3	49.6	38.6	46.8
AG74X8 RR2X	60.1	34.7	43.6	45.3	34.9	43.7
N7003CN	63.8	41.6	35.0	52.8	26.2	43.9
NC-Wilder	66.0	44.2	31.3	51.9	39.9	46.6
G15-1103R2	52.0	58.1	45.0	42.5	34.6	46.4
G15-2017R2	55.5	48.1	39.6	54.5	34.1	46.4
G15-2260R2	66.0	46.3	39.9	44.3	40.2	47.3
G15-2284R2	56.3	49.0	34.8	53.7	38.6	46.5
G15-2330R2	58.4	51.1	39.6	48.7	40.3	47.6
G15-2379R2	61.3	58.0	43.3	46.9	37.4	49.4
G15-4922R2	59.1	49.7	37.5	48.0	35.6	46.0
N02-7834	53.7	44.2	39.1	49.5	35.0	44.3
N11-8014	49.3	44.4	40.6	37.2	35.6	41.4
N11-8098	47.5	18.5	38.2	42.3	33.6	36.0
N11-8975	53.9	43.2	30.1	34.4	29.2	38.2
N11-8981	53.1	32.9	34.0	41.8	29.9	38.3
N16-9198	65.2	48.5	37.4	46.4	33.0	46.1
SC17-5517RR1	56.2	50.6	40.2	43.4	38.7	45.8
SC17-5537RR2	62.2	46.4	40.8	48.4	34.7	46.5
SC17-6515RR1	52.3	38.7	23.3	49.2	28.1	38.3
SC17-RU11	49.7	37.5	37.3	48.1	33.1	41.1
Mean	57.3	44.3	37.7	46.6	34.8	44.1
LSD(0.05)	8.1	4.5	6.1	8.5	5.3	6.5
CV(%)	8.6	6.1	9.8	11.1	9.2	13.9

† Data not included in mean: Not applicable

TABLE 130- RELATIVE MATURITY (DAYS EARLIER (-) OR LATER (+) THAN ENTRY 1)
PRELIMINARY GROUP VII 2018

STRAIN/ VARIETY	Athens, GA(A)	Florence, SC	Kinston, NC	Plains, GA	Plymouth, NC	Test Mean
AGS-738RR	10/11	11/2	10/26	.	10/24	10/24
AG74X8 RR2X	2	4	11	.	6	6
N7003CN	8	6	5	.	9	7
NC-Wilder	4	5	1	.	2	3
G15-1103R2	0	5	7	.	1	3
G15-2017R2	1	5	9	.	3	5
G15-2260R2	-1	0	0	.	-1	-1
G15-2284R2	3	5	6	.	2	4
G15-2330R2	-1	5	7	.	3	3
G15-2379R2	-1	0	6	.	-5	0
G15-4922R2	0	6	8	.	4	4
N02-7834	0	6	7	.	3	4
N11-8014	1	2	7	.	-1	2
N11-8098	0	-2	5	.	0	1
N11-8975	1	5	6	.	1	3
N11-8981	1	-4	0	.	-4	-2
N16-9198	6	6	7	.	4	6
SC17-5517RR1	7	5	7	.	11	7
SC17-5537RR2	6	2	7	.	1	4
SC17-6515RR1	8	8	7	.	9	8
SC17-RU11	4	6	10	.	9	7
Mean	2	4	6	.	3	4
LSD(0.05)	1	4	3	.	5	3
CV(%)	17	61	28	.	94	76

TABLE 131 - PLANT HEIGHT (INCHES)
PRELIMINARY GROUP VII 2018

STRAIN/ VARIETY	Athens, GA(A)	Florence, SC	Kinston, NC	Plains, GA	Plymouth, NC	Test Mean
AGS-738RR	37	32	34	30	42	35
AG74X8 RR2X	40	26	36	30	47	36
N7003CN	36	32	36	33	42	36
NC-Wilder	36	28	35	35	41	35
G15-1103R2	41	37	43	34	47	40
G15-2017R2	39	31	39	31	44	37
G15-2260R2	37	35	33	27	44	35
G15-2284R2	38	40	39	32	44	39
G15-2330R2	43	35	37	34	45	39
G15-2379R2	42	35	39	34	48	40
G15-4922R2	39	34	35	32	44	37
N02-7834	35	32	35	30	42	35
N11-8014	39	44	44	36	47	42
N11-8098	41	24	38	30	48	36
N11-8975	40	38	36	28	43	37
N11-8981	38	32	38	31	47	37
N16-9198	37	35	37	28	40	35
SC17-5517RR1	39	29	34	31	40	35
SC17-5537RR2	43	38	42	34	50	41
SC17-6515RR1	44	42	42	38	48	43
SC17-RU11	42	32	40	32	43	38
Mean	39	34	38	32	44	37
LSD(0.05)	3	5	.	3	4	3
CV(%)	5	8	.	6	5	8

TABLE 132 - PLANT LODGING (1-5)
PRELIMINARY GROUP VII 2018

STRAIN/ VARIETY	Athens, GA(A)	Florence, SC	Kinston, NC	Plains, GA	Plymouth, NC	Test Mean
AGS-738RR	2.7	4.7	2.3	3.7	2.3	3.1
AG74X8 RR2X	1.7	2.3	2.0	2.7	1.8	2.1
N7003CN	2.0	4.3	2.0	3.7	3.0	3.0
NC-Wilder	3.7	3.0	2.8	3.3	3.5	3.2
G15-1103R2	3.0	4.0	2.3	4.0	3.0	3.3
G15-2017R2	2.3	3.7	2.3	3.0	2.5	2.8
G15-2260R2	2.3	4.3	2.8	3.0	2.8	3.0
G15-2284R2	2.3	5.0	2.5	4.0	2.8	3.3
G15-2330R2	2.0	3.3	2.0	2.7	2.3	2.4
G15-2379R2	2.0	3.3	2.0	3.0	1.8	2.4
G15-4922R2	1.3	3.7	2.3	3.0	2.8	2.6
N02-7834	3.0	4.3	2.3	3.7	2.3	3.1
N11-8014	3.3	4.3	2.0	3.0	3.0	3.1
N11-8098	1.7	2.3	2.0	2.0	1.8	1.9
N11-8975	1.3	4.3	2.3	2.7	3.3	2.7
N11-8981	1.0	2.7	2.0	2.7	2.8	2.2
N16-9198	3.0	4.3	2.5	2.3	2.5	2.9
SC17-5517RR1	3.0	3.3	2.0	3.0	2.0	2.7
SC17-5537RR2	2.3	3.3	2.5	2.3	3.0	2.7
SC17-6515RR1	3.7	3.3	2.3	3.3	2.0	2.9
SC17-RU11	2.3	3.3	2.3	3.0	2.5	2.7
Mean	2.4	3.7	2.2	3.0	2.5	2.8
LSD(0.05)	0.8	0.9	0.4	0.9	1.0	0.6
CV(%)	20.1	14.5	9.3	17.0	18.8	22.7

TABLE 133 - SEED QUALITY (1-5)
PRELIMINARY GROUP VII 2018

STRAIN/ VARIETY	Athens, GA(A)	Florence, SC	Kinston, NC	Plains, GA	Plymouth, NC	Test Mean
AGS-738RR	1.7	1.0	.	3.0	2.0	1.9
AG74X8 RR2X	1.3	1.0	.	3.7	1.5	1.9
N7003CN	2.2	1.0	.	3.8	2.0	2.3
NC-Wilder	1.2	1.0	.	2.5	1.7	1.6
G15-1103R2	1.3	1.0	.	3.2	1.5	1.8
G15-2017R2	1.7	1.0	.	3.0	1.5	1.8
G15-2260R2	1.2	1.0	.	3.3	2.0	1.9
G15-2284R2	1.2	1.0	.	2.8	2.0	1.7
G15-2330R2	1.8	1.0	.	2.7	1.5	1.8
G15-2379R2	1.3	1.0	.	3.5	1.5	1.8
G15-4922R2	2.0	1.0	.	4.0	1.7	2.2
N02-7834	1.5	1.0	.	3.2	2.2	2.0
N11-8014	1.7	1.0	.	3.3	2.0	2.0
N11-8098	1.7	1.0	.	4.0	2.0	2.2
N11-8975	1.7	1.0	.	3.2	2.5	2.1
N11-8981	1.7	1.0	.	3.8	2.0	2.1
N16-9198	1.5	1.0	.	2.2	1.5	1.5
SC17-5517RR1	1.3	1.0	.	2.7	1.5	1.6
SC17-5537RR2	1.3	1.0	.	3.5	2.5	2.1
SC17-6515RR1	1.7	1.0	.	2.8	2.0	1.9
SC17-RU11	2.0	1.0	.	2.7	2.2	2.0
Mean	1.6	1.0	.	3.2	1.9	1.9
LSD(0.05)	0.4	.	.	0.5	0.3	0.4
CV(%)	16.6	0.0	.	10.3	7.6	19.1

TABLE 134 - SEED SIZE (GRAMS PER 100 SEED)
PRELIMINARY GROUP VII 2018

STRAIN/ VARIETY	*Athens, GA(A)*	*Florence, SC*	*Kinston, NC*	*Plains, GA*	*Plymouth, NC*	*Test Mean*
AGS-738RR	13.2	12.4	11.8	13.3	12.6	12.7
AG74X8 RR2X	15.2	15.4	18.6	15.4	15.2	15.8
N7003CN	17.1	16.6	16.4	16.8	15.9	16.6
NC-Wilder	14.5	15.1	14.2	15.9	13.7	14.7
G15-1103R2	11.3	13.5	13.7	12.9	12.8	12.8
G15-2017R2	13.0	15.0	14.3	15.2	13.1	14.1
G15-2260R2	12.1	13.8	13.7	13.3	13.5	13.3
G15-2284R2	13.2	15.8	15.3	14.7	15.1	14.8
G15-2330R2	12.4	14.1	14.9	13.8	13.8	13.7
G15-2379R2	12.7	14.1	14.8	12.2	13.6	13.4
G15-4922R2	14.1	15.4	14.2	14.9	14.8	14.7
N02-7834	14.1	16.5	15.6	16.5	16.7	15.9
N11-8014	14.2	16.7	17.4	15.2	14.1	15.4
N11-8098	15.1	17.5	20.0	17.3	17.0	17.3
N11-8975	18.9	19.6	21.2	19.6	18.6	19.5
N11-8981	19.9	20.0	21.7	20.5	20.7	20.5
N16-9198	9.5	9.5	9.4	10.1	7.9	9.3
SC17-5517RR1	11.5	13.1	14.2	13.7	12.1	12.9
SC17-5537RR2	15.0	15.8	16.2	17.2	14.6	15.8
SC17-6515RR1	12.3	14.9	12.4	14.0	12.1	13.2
SC17-RU11	12.3	13.2	13.2	14.2	12.5	13.1
Mean	13.9	15.1	15.4	15.1	14.3	14.7
LSD(0.05)	1.0	0.7	.	1.0	1.3	1.0
CV(%)	4.4	2.8	.	4.1	4.3	6.0

TABLE 135 - OIL (%)†
PRELIMINARY GROUP VII 2018

STRAIN/ VARIETY	Athens, GA(A)	Florence, SC	Kinston, NC	Plains, GA	Plymouth, NC	Test Mean
AGS-738RR	20.2	19.0	19.6	20.7	19.3	19.7
AG74X8 RR2X	19.9	18.8	18.7	20.0	18.9	19.3
N7003CN	20.3	18.9	19.1	21.8	20.2	20.1
NC-Wilder	20.9	20.2	20.2	21.7	19.7	20.5
G15-1103R2	19.7	18.2	18.6	20.4	17.3	18.8
G15-2017R2	19.2	18.1	18.1	19.7	18.5	18.7
G15-2260R2	20.4	18.6	19.1	21.4	18.4	19.6
G15-2284R2	19.4	18.2	18.5	20.2	18.1	18.9
G15-2330R2	19.7	19.0	19.3	20.5	18.6	19.4
G15-2379R2	18.9	18.5	18.7	20.5	19.4	19.2
G15-4922R2	19.2	17.7	18.5	20.3	18.2	18.8
N02-7834	19.6	18.0	18.9	20.0	17.7	18.8
N11-8014	19.6	19.2	19.0	21.3	20.2	19.8
N11-8098	20.1	19.4	20.2	22.1	19.9	20.3
N11-8975	19.1	18.0	17.3	19.3	17.6	18.3
N11-8981	20.1	18.9	19.6	21.5	19.2	19.9
N16-9198	17.8	15.9	16.3	17.3	17.0	16.9
SC17-5517RR1	21.3	19.8	19.8	22.0	19.2	20.4
SC17-5537RR2	19.6	18.7	18.8	19.8	18.7	19.1
SC17-6515RR1	19.9	18.7	19.6	21.1	19.5	19.8
SC17-RU11	19.0	17.9	18.1	20.9	17.5	18.7
Mean	19.7	18.6	18.8	20.6	18.7	19.3
LSD(0.05)	.	.	.	.	.	0.5
CV(%)	.	.	.	.	.	2.2

†Oil percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 136 - PROTEIN (%)†
PRELIMINARY GROUP VII 2018

STRAIN/ VARIETY	Athens, GA(A)	Florence, SC	Kinston, NC	Plains, GA	Plymouth, NC	Test Mean
AGS-738RR	33.8	35.6	35.6	33.7	34.2	34.6
AG74X8 RR2X	35.2	36.8	38.3	36.8	35.1	36.4
N7003CN	33.9	36.5	36.1	35.5	33.2	35.1
NC-Wilder	34.4	35.1	36.0	34.1	35.4	35.0
G15-1103R2	34.5	37.6	37.4	35.0	38.9	36.7
G15-2017R2	35.7	38.1	38.5	35.8	35.5	36.7
G15-2260R2	34.2	38.3	38.0	35.7	38.6	37.0
G15-2284R2	35.2	38.9	39.7	36.1	38.7	37.7
G15-2330R2	34.4	37.3	37.9	35.3	36.9	36.3
G15-2379R2	36.2	37.2	38.3	34.3	33.6	35.9
G15-4922R2	34.5	33.1	36.9	34.9	36.5	35.2
N02-7834	35.5	38.3	37.3	36.0	38.2	37.1
N11-8014	35.6	37.4	38.2	35.9	34.2	36.3
N11-8098	35.4	38.2	37.9	37.1	34.7	36.6
N11-8975	36.8	38.3	40.4	38.0	38.6	38.4
N11-8981	34.9	39.1	37.8	36.6	37.3	37.1
N16-9198	37.1	40.3	39.8	39.0	37.5	38.7
SC17-5517RR1	32.4	36.2	35.5	33.1	35.7	34.6
SC17-5537RR2	34.4	37.8	37.6	37.2	39.6	37.3
SC17-6515RR1	35.3	37.4	36.7	34.9	34.6	35.8
SC17-RU11	36.9	39.1	38.5	35.6	39.0	37.8
Mean	35.1	37.5	37.7	35.7	36.5	36.5
LSD(0.05)	.	.	.	.	.	1.3
CV(%)	.	.	.	.	.	2.9

†Protein percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 137 - ESTIMATED MEAL PROTEIN (%)
PRELIMINARY GROUP VII 2018

STRAIN/ VARIETY	Athens, GA(A)	Florence, SC	Kinston, NC	Plains, GA	Plymouth, NC	Test Mean
AGS-738RR	46.0	47.8	48.0	46.3	46.0	46.8
AG74X8 RR2X	47.7	49.3	51.2	50.0	47.0	49.1
N7003CN	46.3	48.9	48.5	49.4	45.2	47.7
NC-Wilder	47.3	47.8	49.0	47.3	47.9	47.9
G15-1103R2	46.6	50.0	49.9	47.7	51.1	49.1
G15-2017R2	48.0	50.5	51.1	48.5	47.4	49.1
G15-2260R2	46.7	51.1	51.0	49.4	51.4	49.9
G15-2284R2	47.4	51.8	52.9	49.2	51.4	50.5
G15-2330R2	46.5	50.1	51.0	48.2	49.3	49.0
G15-2379R2	48.5	49.7	51.1	46.8	45.3	48.3
G15-4922R2	46.5	43.6	49.2	47.5	48.6	47.1
N02-7834	48.0	50.8	50.0	49.0	50.5	49.6
N11-8014	48.2	50.3	51.3	49.6	46.6	49.2
N11-8098	48.1	51.5	51.6	51.7	47.0	50.0
N11-8975	49.4	50.8	53.2	51.2	50.9	51.1
N11-8981	47.5	52.4	51.1	50.6	50.2	50.4
N16-9198	49.1	52.0	51.7	51.3	49.1	50.6
SC17-5517RR1	44.7	49.1	48.1	46.2	48.1	47.2
SC17-5537RR2	46.5	50.6	50.4	50.4	52.9	50.2
SC17-6515RR1	47.9	50.0	49.6	48.0	46.8	48.5
SC17-RU11	49.5	51.8	51.1	48.9	51.3	50.5
Mean	47.5	50.0	50.5	48.9	48.8	49.1
LSD(0.05)	.	.	.	.	.	1.6
CV(%)	.	.	.	.	.	2.7

TABLE 138 - PARENTAGE OF ENTRIES
UNIFORM GROUP VIII 2018

Ent	Strain/Variety	Parentage	Source	Fn	Trans-genic†	Special Traits‡
1	AGS828RR	Commercial check	Commercial		RR1	
2	N8001	N7001 x Cook	Carter			25% PI 416937
3	N8002	N7001 x Cook	Carter			25% PI 471938, 12.5% PI 416937
4	AGS 798R2	Commercial check	Commercial		RR2	
5	G12-6543	G00-3213(3) x [G00-3209 x G01-PR68]	Zenglu Li	F5d		
6	G13-2114R2	G09PR-54457R2 x {G00-3213(4) x [G00-3209 x G01-PR68]}	Zenglu Li	F5d		
7	G13-2369R2	AU02-3104 x G00-3213(3)RR2Y	Zenglu Li	F6d		
8	G13-3461R2	NCC02-307 x (G3213 x RR2Y)	Zenglu Li	F7d		
9	G14-3268R2	N05-7432 x G00-3213(3)RR2Y	Zenglu Li	F6d		
10	G14-4316R2	N05-7462 x G00-3880(3)RR2Y	Zenglu Li	F6d		
11	G14-4396R2	N06-7564 x G00-3213(3)RR2Y	Zenglu Li	F6d		
12	G15PRLL-953	NCC06-899 x [G00-3213(2) x A5547-127 Liberty]	Zenglu Li	F6d	LL	
13	N14-8537	NMS4-44-329 x N7103	Carter	F4		25% Soja PI 366122

†Conv= Conventional(non-transgenic), LL= Liberty Link®, RR1= Roundup Ready®, and RR2=Roundup Ready 2 Yield® RRX= Roundup Ready 2 Xtend®

‡AA= modified amino acids, DNC= Do not cross with this, FLS= Frogeye leaf spot resistance, LJ= Long juvenile, LN= low linolenic acid, LP= low phytate, HO= high olelic acid, HOLN= high oleic acid/low linolenic acid, SCN= Soybean cyst nematode resistance, SR= Soybean rust resistance, and STS= sulfonylurea tolerant

TABLE 139 - GENERAL SUMMARY OF PERFORMANCE
UNIFORM TEST VIII 2018

STRAIN/		AVG.	YIELD†			PROTEIN‡			OIL‡		
VARIETY	RANK	RANK	2018	17-18	16-18	2018	17-18	16-18	2018	17-19	16-18
AGS828RR	13	10	37.3	42.5	43.4	36.7	36.4	36.6	19.4	19.2	18.9
N8001	8	8	45.6	46.5	45.1	36.7	36.9	36.9	18.8	18.2	18.1
N8002	7	6	47.6	49.3	47.7	36.2	36.2	36.4	19.1	18.8	18.5
AGS 798R2	9	8	44.4	.	.	36.7	.	.	19.5	.	.
G12-6543	11	9	41.4	43.1	44.7	36.2	36.3	36.4	20.3	19.8	19.7
G13-2114R2	5	6	48.9	49.8	.	36.0	36.1	.	19.6	19.0	.
G13-2369R2	12	9	40.8	43.4	.	36.7	36.6	.	19.6	19.3	.
G13-3461R2	4	5	49.4	48.9	.	36.3	35.5	.	19.7	19.3	.
G14-3268R2	6	6	48.3	.	.	35.9	.	.	19.2	.	.
G14-4316R2	2	4	50.9	.	.	33.5	.	.	20.6	.	.
G14-4396R2	1	4	52.3	.	.	37.2	.	.	18.3	.	.
G15PRLL-953	3	5	50.7	.	.	34.6	.	.	20.7	.	.
N14-8537	10	10	43.9	45.0	.	37.8	37.6	.	18.2	18.1	.
Mean	.	.	46.3	.	.	36.2	.	.	19.5	.	.
LSD(0.05)	.	.	6.6	.	.	0.7	.	.	0.3	.	.
CV(%)	.	.	17.2	.	.	1.8	.	.	1.6	.	.

† Data not included in mean: 2018 - Not applicable
2017 - Clemson, SC
2016 - Warsau, VA

‡ Protein percentage and oil percentage reported on a 13% moisture basis beginning in 2015.

TABLE 140 - GENERAL SUMMARY OF PERFORMANCE -Part 2
UNIFORM TEST VIII 2018

STRAIN/ VARIETY	MEAL PRO %	MAT INDEX	LOD	HT	SEED QUALITY	SEED SIZE	FL. COLOR	PUB. COLOR	POD COLOR
AGS828RR	49.5	0	3	29	2.2	14.2			
N8001	49.1	0	3	33	2.3	15.9	P	G	
N8002	48.6	2	3	31	2.1	15.2	P	G	T
AGS 798R2	49.5	0	3	29	2.3	15.4			
G12-6543	49.3	-5	2	34	2.2	14.3	W	T	T
G13-2114R2	48.7	-4	2	33	2.3	17.3	P	T	T
G13-2369R2	49.6	-4	3	34	2.6	14.3	W	T	T
G13-3461R2	49.1	-5	2	31	2.3	16.3	P	T	T
G14-3268R2	48.3	-2	2	31	2.4	15.4	W	T	T
G14-4316R2	45.9	-1	3	34	2.4	16.9	W	T	T
G14-4396R2	49.5	-6	3	33	2.4	15.6	W	T	T
G15PRLL-953	47.4	-2	3	32	1.9	15.1	W	G	T
N14-8537	50.3	1	3	32	2.6	10.2	P	T	
Mean	48.8	-2	3	32	2.3	15.1			
LSD(0.05)	0.8	3	0	2	0.4	0.9			
CV(%)	1.5	165	23	10	19.0	7.2			

TABLE 141 - GENERAL SUMMARY OF PEST REACTION
UNIFORM TEST VIII 2018

STRAIN/	SCN Cyst Score (1-5 Scale)†			PRK	SRK	SC	SC
VARIETY	Race 1	Race 3	Race 5	GA	GA	RATING	SCORE
AGS828RR	.	2	3	2.0	1.0	R	1.0
N8001	.	4	4	2.8	1.3	S	5.0
N8002	.	2	4	4.8	4.0	MS	4.0
AGS 798R2	.	.	1	1.3	1.3	R	1.0
G12-6543	.	1	4	1.3	1.0	MS	4.0
G13-2114R2	.	2	4	1.0	1.0	R	1.0
G13-2369R2	.	1	4	2.3	1.0	SS	3.0
G13-3461R2	.	2	4	3.3	1.0	MS	4.0
G14-3268R2	.	4	4	1.0	1.5	MS	4.0
G14-4316R2	.	3	4	1.0	1.0	S	5.0
G14-4396R2	.	4	5	1.0	1.0	S	5.0
G15PRLL-953	.	2	4	1.0	1.3	MS	4.0
N14-8537	.	4	4	1.8	1.0	R	1.0

†The race 1, 3, and 5 SCN populations used in these tests were typed as HG (*Heterodera glycines*) Type 2.5.7, HG Type 5.7, and HG Type 2.5.7, respectively. Reaction to the cultivar Pickett was used to distinguish between race 1 and race 5 SCN populations.

TABLE 142 - SEED YIELD (BUSHELS PER ACRE)
UNIFORM TEST VIII 2018 †

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Clayton, NC	Clemson, SC	Fairhope, AL	Florence, SC	Kinston, NC
AGS828RR	55.5	43.1	36.5	20.9	30.0	42.5	18.9
N8001	53.3	45.6	35.8	49.9	58.8	39.0	24.8
N8002	59.3	47.5	35.7	59.8	64.4	45.1	28.5
AGS 798R2	57.7	42.7	34.9	37.9	49.3	51.5	26.7
G12-6543	17.9	41.6	27.2	47.2	62.7	50.2	30.6
G13-2114R2	51.0	47.5	36.9	45.2	62.0	57.1	30.5
G13-2369R2	30.3	37.4	27.3	41.1	57.1	50.5	29.1
G13-3461R2	47.9	50.7	33.5	59.7	66.4	53.0	31.5
G14-3268R2	55.9	51.1	34.5	50.0	59.0	49.9	29.2
G14-4316R2	68.7	52.2	35.0	54.6	63.6	49.7	33.1
G14-4396R2	69.1	55.7	36.9	53.0	63.2	61.8	28.4
G15PRLL-953	59.9	48.0	34.5	48.9	63.5	55.0	24.2
N14-8537	50.2	39.9	32.2	52.1	55.2	49.4	25.4
Mean	52.0	46.4	33.9	47.7	58.1	50.4	27.8
LSD(0.05)	9.4	7.3	6.3	5.5	10.7	5.3	6.1
CV(%)	10.8	9.3	10.7	6.6	11.0	6.3	12.7

† Data not included in mean: 2018 - Not applicable

TABLE 142 - SEED YIELD (BUSHELS PER ACRE) (continued)
UNIFORM TEST VIII 2018 †

STRAIN/ VARIETY	*Plains, GA*	*Tifton, GA*	*Test Mean*
AGS828RR	38.9	50.1	37.3
N8001	42.1	60.9	45.6
N8002	42.3	45.3	47.6
AGS 798R2	40.5	58.7	44.4
G12-6543	49.4	45.4	41.4
G13-2114R2	48.0	61.6	48.9
G13-2369R2	51.8	42.7	40.8
G13-3461R2	50.9	51.6	49.4
G14-3268R2	50.7	54.6	48.3
G14-4316R2	48.0	53.3	50.9
G14-4396R2	38.7	63.9	52.3
G15PRLL-953	53.8	68.2	50.7
N14-8537	39.5	51.0	43.9
Mean	45.7	54.4	46.3
LSD(0.05)	7.7	8.9	6.6
CV(%)	10.0	9.8	17.2

† Data not included in mean: 2018 - Not applicable

TABLE 143 - RELATIVE MATURITY (DAYS EARLIER (-) OR LATER (+) THAN ENTRY 1)
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Clayton, NC	Clemson, SC	Fairhope, AL	Florence, SC	Kinston, NC
AGS828RR	10/26	11/1	11/10	11/7	10/25	11/6	11/4
N8001	-7	3	4	0	1	0	2
N8002	-5	3	4	1	3	1	4
AGS 798R2	-6	2	4	0	1	-2	3
G12-6543	-17	-11	-2	-5	-2	-5	4
G13-2114R2	-13	-7	-3	-7	-2	-2	0
G13-2369R2	-14	-8	0	-3	0	-4	2
G13-3461R2	-15	-9	-3	-7	0	-5	0
G14-3268R2	-12	-9	1	-1	6	-4	3
G14-4316R2	-9	-8	0	-3	3	2	3
G14-4396R2	-13	-9	-4	-5	-2	-7	0
G15PRLL-953	-13	-7	3	-3	2	-2	4
N14-8537	-1	2	4	1	-5	2	3
Mean	-10	-5	1	-2	0	-2	2
LSD(0.05)	1	1	2	5	8	3	2
CV(%)	5	11	252	121	1211	91	42

TABLE 143 - RELATIVE MATURITY (continued)
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	*Tifton, GA*	*Test Mean*
AGS828RR	10/14	10/31
N8001	-1	0
N8002	3	2
AGS 798R2	1	0
G12-6543	-4	-5
G13-2114R2	2	-4
G13-2369R2	-5	-4
G13-3461R2	-4	-5
G14-3268R2	0	-2
G14-4316R2	4	-1
G14-4396R2	-7	-6
G15PRLL-953	2	-2
N14-8537	5	1
Mean	0	-2
LSD(0.05)	.	3
CV(%)	0	165

TABLE 144 - PLANT HEIGHT (INCHES)
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Clayton, NC	Clemson, SC	Fairhope, AL	Florence, SC	Kinston, NC
AGS828RR	34	35	.	28	26	26	
N8001	31	36	.	30	31	35	32
N8002	36	37	.	28	33	26	27
AGS 798R2	33	35	.	30	28	28	21
G12-6543	39	40	.	33	30	33	33
G13-2114R2	39	39	.	32	29	29	34
G13-2369R2	34	39	.	34	31	35	31
G13-3461R2	35	35	.	33	31	27	25
G14-3268R2	35	37	.	28	29	27	32
G14-4316R2	35	37	.	31	37	35	30
G14-4396R2	33	37	.	31	34	31	26
G15PRLL-953	36	34	.	31	30	26	28
N14-8537	37	33	.	30	32	28	25
Mean	35	36	.	31	31	30	29
LSD(0.05)	6	4	.	4	6	4	.
CV(%)	10	7	.	7	11	7	.

TABLE 144 - PLANT HEIGHT (INCHES) (continued)
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	*Plains, GA*	*Tifton, GA*	*Test Mean*
AGS828RR	28	31	29
N8001	35	33	33
N8002	30	32	31
AGS 798R2	30	28	29
G12-6543	34	33	34
G13-2114R2	33	33	33
G13-2369R2	35	33	34
G13-3461R2	29	30	31
G14-3268R2	31	29	31
G14-4316R2	38	31	34
G14-4396R2	36	30	33
G15PRLL-953	37	31	32
N14-8537	35	31	32
Mean	33	31	32
LSD(0.05)	4	3	2
CV(%)	8	6	10

TABLE 145 - PLANT LODGING (1-5)
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Clayton, NC	Clemson, SC	Fairhope, AL	Florence, SC	Kinston, NC
AGS828RR	4.0	3.0	2.0	3.3	3.3	3.7	2.0
N8001	4.0	2.7	2.3	3.7	3.7	2.7	2.3
N8002	3.3	2.0	2.3	3.7	3.7	2.3	2.0
AGS 798R2	3.0	2.7	2.0	2.7	3.3	2.3	2.0
G12-6543	2.0	2.0	2.0	3.3	2.7	2.3	2.3
G13-2114R2	2.0	2.0	1.5	3.3	3.0	1.7	2.0
G13-2369R2	3.3	3.0	2.0	3.0	3.3	2.3	2.5
G13-3461R2	2.3	2.3	2.0	3.3	3.0	1.7	2.0
G14-3268R2	1.7	2.3	2.5	3.3	2.7	2.3	2.3
G14-4316R2	2.3	3.0	2.5	3.3	3.3	3.0	2.5
G14-4396R2	3.3	3.3	2.0	4.0	4.0	3.7	2.3
G15PRLL-953	3.0	3.0	2.0	4.0	3.3	3.0	2.0
N14-8537	4.0	3.0	2.3	4.0	4.0	4.0	2.0
Mean	2.9	2.6	2.1	3.5	3.3	2.7	2.2
LSD(0.05)	0.9	0.9	0.5	1.2	0.8	0.8	0.7
CV(%)	18.9	20.0	11.0	21.2	14.4	18.8	13.4

TABLE 145 - PLANT LODGING (1-5) (continued)
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	Plains, GA	Tifton, GA	Test Mean
AGS828RR	3.0	2.3	3.0
N8001	3.0	1.7	2.9
N8002	2.0	2.7	2.7
AGS 798R2	2.7	2.0	2.5
G12-6543	3.3	1.7	2.4
G13-2114R2	3.0	1.0	2.2
G13-2369R2	2.7	2.3	2.7
G13-3461R2	2.0	1.0	2.2
G14-3268R2	2.0	1.0	2.2
G14-4316R2	2.7	2.0	2.7
G14-4396R2	2.3	1.7	3.0
G15PRLL-953	2.7	2.3	2.8
N14-8537	2.7	3.0	3.2
Mean	2.6	1.9	2.7
LSD(0.05)	0.8	0.6	0.4
CV(%)	19.4	20.2	22.6

TABLE 146 - SEED QUALITY (1-5)
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Clayton, NC	Clemson, SC	Fairhope, AL	Florence, SC	Kinston, NC
AGS828RR	2.8	2.0	.	.	2.7	1.0	.
N8001	2.7	2.2	.	.	3.3	1.0	.
N8002	2.7	2.0	.	.	2.7	1.0	.
AGS 798R2	2.8	2.3	.	.	2.7	1.0	.
G12-6543	2.8	1.7	.	.	3.0	1.0	.
G13-2114R2	2.3	2.2	.	.	3.3	1.0	.
G13-2369R2	3.3	2.3	.	.	3.3	1.0	.
G13-3461R2	2.3	1.7	.	.	4.0	1.0	.
G14-3268R2	2.5	2.3	.	.	3.7	1.0	.
G14-4316R2	2.7	2.0	.	.	3.7	1.0	.
G14-4396R2	2.5	2.2	.	.	4.0	1.0	.
G15PRLL-953	2.5	1.8	.	.	2.0	1.0	.
N14-8537	2.3	2.3	.	.	4.7	1.0	.
Mean	2.6	2.1	.	.	3.3	1.0	.
LSD(0.05)	0.5	0.5	.	.	1.0	.	.
CV(%)	11.9	13.5	.	.	17.8	0.0	.

TABLE 146 - SEED QUALITY (1-5) (continued)
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	Plains, GA	Tifton, GA	Test Mean
AGS828RR	2.7	1.8	2.2
N8001	2.7	2.0	2.3
N8002	2.2	2.2	2.1
AGS 798R2	2.3	2.5	2.3
G12-6543	2.3	2.7	2.2
G13-2114R2	2.7	2.3	2.3
G13-2369R2	3.0	2.8	2.6
G13-3461R2	2.5	2.3	2.3
G14-3268R2	2.3	2.5	2.4
G14-4316R2	2.8	2.5	2.4
G14-4396R2	2.3	2.7	2.4
G15PRLL-953	2.0	2.2	1.9
N14-8537	2.3	2.8	2.6
Mean	2.5	2.4	2.3
LSD(0.05)	0.4	0.5	0.4
CV(%)	9.0	11.5	18.9

TABLE 147 - SEED SIZE (GRAMS PER 100 SEED)
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	*Athens, GA(A)*	*Athens, GA(B)*	*Clayton, NC*	*Clemson, SC*	*Fairhope, AL*	*Florence, SC*	*Kinston, NC*
AGS828RR	14.4	13.0	15.3	.	15.0	14.2	.
N8001	16.6	15.1	17.5	.	18.0	14.6	14.1
N8002	15.8	14.9	17.5	.	16.3	13.7	12.9
AGS 798R2	16.6	14.3	16.9	.	15.0	15.0	15.4
G12-6543	12.1	12.7	15.4	.	17.4	13.6	15.8
G13-2114R2	15.8	15.6	17.8	.	20.2	17.0	17.5
G13-2369R2	13.8	12.9	15.7	.	17.2	14.2	14.8
G13-3461R2	15.7	15.4	17.3	.	17.4	15.6	15.9
G14-3268R2	14.6	15.6	15.2	.	18.4	13.7	15.9
G14-4316R2	15.9	14.7	17.6	.	18.8	17.3	17.1
G14-4396R2	16.9	15.0	16.0	.	17.9	14.1	15.3
G15PRLL-953	14.2	13.6	15.7	.	17.0	13.9	14.4
N14-8537	10.3	8.9	10.9	.	11.1	10.4	11.1
Mean	14.8	14.0	16.1	.	16.9	14.4	15.0
LSD(0.05)	1.3	1.3	.	.	1.9	0.8	.
CV(%)	5.2	5.7	.	.	6.8	3.2	.

TABLE 147 - SEED SIZE (GRAMS PER 100 SEED) (continued)
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	Plains, GA	Tifton, GA	Test Mean
AGS828RR	13.9	13.7	14.2
N8001	14.6	16.1	15.9
N8002	15.8	14.5	15.2
AGS 798R2	14.6	15.4	15.4
G12-6543	14.6	13.5	14.3
G13-2114R2	16.3	17.9	17.3
G13-2369R2	13.9	12.5	14.3
G13-3461R2	16.7	16.7	16.3
G14-3268R2	15.6	14.1	15.4
G14-4316R2	16.4	17.5	16.9
G14-4396R2	14.8	14.5	15.6
G15PRLL-953	14.9	16.9	15.1
N14-8537	9.4	10.1	10.2
Mean	14.7	14.9	15.1
LSD(0.05)	1.2	1.1	0.9
CV(%)	4.6	4.4	7.2

TABLE 148 - OIL (%)†
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Clayton, NC	Clemson, SC	Fairhope, AL	Florence, SC	Kinston, NC	Plains, GA	Tifton, GA	Test Mean
AGS828RR	19.8	19.3	18.9	.	19.7	19.4	18.8	20.2	.	19.4
N8001	18.8	18.5	18.0	.	19.1	18.6	18.7	19.8	.	18.8
N8002	19.2	18.6	18.4	.	19.0	19.4	19.0	19.9	.	19.1
AGS 798R2	19.9	19.2	18.6	.	19.8	19.7	19.1	20.3	.	19.5
G12-6543	20.1	20.0	19.5	.	20.8	20.8	19.7	21.4	.	20.3
G13-2114R2	19.6	19.5	18.7	.	20.0	20.1	18.7	20.7	.	19.6
G13-2369R2	19.9	19.2	18.5	.	19.9	19.6	19.1	20.9	.	19.6
G13-3461R2	19.6	20.0	18.5	.	20.1	20.1	19.3	20.1	.	19.7
G14-3268R2	19.2	19.2	18.7	.	19.2	19.3	18.6	20.2	.	19.2
G14-4316R2	20.7	20.4	19.4	.	21.2	20.8	20.0	21.6	.	20.6
G14-4396R2	18.2	18.4	17.6	.	18.5	18.5	18.1	18.9	.	18.3
G15PRLL-953	21.0	20.3	19.4	.	21.0	20.7	20.2	22.0	.	20.7
N14-8537	18.6	17.5	17.9	.	18.3	18.3	18.7	17.9	.	18.2
Mean	19.6	19.2	18.6	.	19.7	19.6	19.1	20.3	.	19.5
LSD(0.05)	.	.	.	.	.	.	.	.	.	0.3
CV(%)	.	.	.	.	.	.	.	.	.	1.6

†Oil percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 149 - PROTEIN (%)†
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Clayton, NC	Clemson, SC	Fairhope, AL	Florence, SC	Kinston, NC	Plains, GA	Tifton, GA	Test Mean
AGS828RR	35.7	37.2	37.6	.	37.7	36.1	36.9	35.7	.	36.7
N8001	36.5	37.2	37.3	.	37.8	36.4	36.2	35.6	.	36.7
N8002	35.9	37.1	36.5	.	37.7	36.2	35.2	34.8	.	36.2
AGS 798R2	35.7	37.2	38.1	.	37.4	35.9	36.3	36.1	.	36.7
G12-6543	36.3	36.6	37.4	.	37.1	34.0	36.7	35.2	.	36.2
G13-2114R2	36.5	35.8	36.6	.	37.3	34.6	36.5	35.0	.	36.0
G13-2369R2	36.5	37.2	37.1	.	37.7	36.3	35.8	36.0	.	36.7
G13-3461R2	36.8	35.8	37.9	.	36.3	34.8	36.1	36.5	.	36.3
G14-3268R2	35.6	36.0	35.7	.	38.3	34.9	36.0	35.0	.	35.9
G14-4316R2	34.1	33.5	34.4	.	33.5	33.2	33.5	32.5	.	33.5
G14-4396R2	37.3	37.2	36.7	.	38.6	36.4	37.0	37.4	.	37.2
G15PRLL-953	34.2	34.8	35.8	.	35.1	34.6	34.8	32.8	.	34.6
N14-8537	36.9	37.9	37.7	.	38.6	37.6	37.3	38.9	.	37.8
Mean	36.0	36.4	36.8	.	37.2	35.5	36.0	35.5	.	36.2
LSD(0.05)	.	.	.	.	.	.	.	.	.	0.7
CV(%)	.	.	.	.	.	.	.	.	.	1.8

†Protein percentage reported on a 13% moisture basis beginning in 2015.

TABLE 150 - ESTIMATED MEAL PROTEIN (%)
UNIFORM GROUP VIII 2017

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Clayton, NC	Clemson, SC	Fairhope, AL	Florence, SC	Kinston, NC	Plains, GA	Tifton, GA	Test Mean
AGS828RR	48.4	50.0	50.3	.	51.0	48.7	49.4	48.7	.	49.5
N8001	48.8	49.6	49.5	.	50.8	48.6	48.3	48.3	.	49.1
N8002	48.3	49.5	48.7	.	50.6	48.9	47.2	47.2	.	48.6
AGS 798R2	48.4	50.1	50.9	.	50.7	48.7	48.8	49.2	.	49.5
G12-6543	49.3	49.7	50.5	.	50.9	46.6	49.6	48.6	.	49.3
G13-2114R2	49.4	48.4	48.9	.	50.7	47.1	48.8	47.9	.	48.7
G13-2369R2	49.5	50.1	49.4	.	51.2	49.1	48.1	49.5	.	49.6
G13-3461R2	49.8	48.6	50.5	.	49.3	47.3	48.6	49.7	.	49.1
G14-3268R2	47.9	48.5	47.7	.	51.5	47.0	48.0	47.7	.	48.3
G14-4316R2	46.7	45.8	46.4	.	46.2	45.6	45.5	45.1	.	45.9
G14-4396R2	49.6	49.6	48.4	.	51.5	48.5	49.1	50.1	.	49.5
G15PRLL-953	47.0	47.5	48.3	.	48.3	47.4	47.3	45.7	.	47.4
N14-8537	49.3	50.0	49.9	.	51.4	50.0	49.9	51.5	.	50.3
Mean	48.6	49.0	49.2	.	50.3	48.0	48.3	48.4	.	48.8
LSD(0.05)	.	.	.	.	.	.	.	.	.	0.8
CV(%)	.	.	.	.	.	.	.	.	.	1.5

SUMMARY OF SEED FATTY ACIDS (%)
UNIFORM TEST VIII 2018 †

STRAIN/ VARIETY	Palmitic Acid	Stearic Acid	Oleic Acid	Linoleic Acid	Linolenic Acid
AGS828RR	11.0	3.8	24.0	54.0	6.8
N8001	13.0	3.5	18.0	57.0	8.9
N8002	12.0	3.2	19.0	58.0	7.6
AGS 798R2	12.0	3.9	23.0	54.0	6.7
G12-6543	12.0	3.2	20.0	58.0	7.0
Mean	12.0	3.5	21.0	56.0	7.4
LSD(0.05)	0.3	0.2	2.0	1.5	0.6
CV(%)	2.1	5.7	8.9	2.4	6.8

†Fatty acid percentage in seed oil reported beginning in 2017.

SEED PALMITIC ACID (%)
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Clayton, NC	Fairhope, AL	Florence, SC	Kinston, NC	Plains, GA	Test Mean
AGS828RR	12.1	12.2	11.1	11.1	11.3	11.0	11.6	11.5
N8001	13.5	13.0	12.5	13.1	12.1	12.5	12.9	12.8
N8002	12.6	12.8	11.3	11.9	12.0	11.7	11.9	12.0
AGS 798R2	12.7	12.3	12.2	12.2	12.1	11.5	12.5	12.2
G12-6543	12.2	11.7	11.3	11.3	11.4	11.1	11.7	11.6
Mean	12.6	12.4	11.7	11.9	11.8	11.6	12.1	12.0
LSD(0.05)	.	.	.	.	.	.	.	0.3
CV(%)	.	.	.	.	.	.	.	2.1

SEED STEARIC ACID (%)
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Clayton, NC	Fairhope, AL	Florence, SC	Kinston, NC	Plains, GA	Test Mean
AGS828RR	4.2	4.7	3.3	3.3	3.6	3.6	3.8	3.8
N8001	3.5	3.8	3.1	3.4	3.6	3.1	3.7	3.5
N8002	3.5	3.6	2.7	2.8	3.4	3.1	3.2	3.2
AGS 798R2	4.2	5.0	3.6	3.6	3.8	3.6	3.8	3.9
G12-6543	3.5	3.8	3.1	2.8	3.3	2.9	3.2	3.2
Mean	3.8	4.2	3.2	3.2	3.5	3.3	3.6	3.5
LSD(0.05)								0.2
CV(%)								5.7

SEED OLEIC ACID (%)
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Clayton, NC	Fairhope, AL	Florence, SC	Kinston, NC	Plains, GA	Test Mean
AGS828RR	21.4	21.5	23.7	31.5	22.7	24.7	23.9	24.2
N8001	18.8	18.3	18.2	16.0	16.9	16.7	17.7	17.5
N8002	19.1	19.1	21.7	19.1	17.6	16.7	18.8	18.9
AGS 798R2	23.0	23.3	23.8	22.3	22.0	23.6	22.6	22.9
G12-6543	19.4	20.1	19.8	21.8	19.1	18.4	21.1	19.9
Mean	20.3	20.5	21.4	22.2	19.6	20.0	20.8	20.7
LSD(0.05)	.	.	.	.	.	.	.	2.0
CV(%)	.	.	.	.	.	.	.	8.9

SEED LINOLEIC ACID (%)
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Clayton, NC	Fairhope, AL	Florence, SC	Kinston, NC	Plains, GA	Test Mean
AGS828RR	53.9	54.8	55.1	48.9	55.1	53.8	54.3	53.7
N8001	55.4	56.4	57.4	58.4	59.0	57.7	57.0	57.3
N8002	57.1	57.1	56.8	59.7	59.7	59.9	58.0	58.3
AGS 798R2	53.0	52.0	53.9	55.7	55.6	54.3	54.6	54.2
G12-6543	57.3	56.9	58.4	57.9	59.5	60.0	57.7	58.2
Mean	55.3	55.4	56.3	56.1	57.8	57.1	56.3	56.3
LSD(0.05)	.	.	.	.	.	.	.	1.5
CV(%)	.	.	.	.	.	.	.	2.4

SEED LINOLENIC ACID (%)
UNIFORM GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Athens, GA(B)	Clayton, NC	Fairhope, AL	Florence, SC	Kinston, NC	Plains, GA	Test Mean
AGS828RR	8.4	6.8	6.8	5.2	7.3	7.0	6.3	6.8
N8001	8.9	8.5	8.9	9.0	8.4	10.0	8.6	8.9
N8002	7.7	7.5	7.5	6.5	7.3	8.6	8.1	7.6
AGS 798R2	7.1	7.4	6.6	6.2	6.5	6.9	6.5	6.7
G12-6543	7.5	7.5	7.3	6.1	6.8	7.6	6.4	7.0
Mean	7.9	7.5	7.4	6.6	7.3	8.0	7.2	7.4
LSD(0.05)	.	.	.	.	.	.	.	0.6
CV(%)	.	.	.	.	.	.	.	6.8

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TABLE 151 - PARENTAGE OF ENTRIES
PRELIMINARY GROUP VIII 2018

Ent	Strain/Variety	Parentage	Source	Fn	Trans-genic†	Special Traits‡
1	AGS828RR	Commercial check	Commercial		RR1	
2	N8001	N7001 x Cook	Carter			25% PI 416937
3	N8002	N7001 x Cook	Carter			25% PI 471938, 12.5% PI 416937
4	AGS 798R2	Commercial check	Commercial		RR2	
5	G13-2693R2	AU02-3104 x G00-3213(3)R2	Zenglu Li	F6d	RR2	
6	G14-1581R2	G10PR-10R2 x G10PR-56389R2	Zenglu Li	F5d	RR2	
7	G14-1751R2	G10PR-10R2 x G10PR-56389R2	Zenglu Li	F5d	RR2	
8	G15-1465R2	G10PR-56248R2 x G10PR-10R2	Zenglu Li	F6d	RR2	
9	G15-2239R2	NCCO4-619 x G09PR-54329R2	Zenglu Li	F7d	RR2	
10	G15-4717R2	G09PR-54329R2 x N02-7084	Zenglu Li	F7d	RR2	
11	G15-6612	N05-7432 x NMS4-1-77	Zenglu Li	F5d		
12	G15LL-9179	NCC06-899 x [G00-3213(2) x A5547-127 Liberty]	Zenglu Li	F6d	LL	
13	G15LL-9205	NCC06-899 x [G00-3213(2) x A5547-127 Liberty]	Zenglu Li	F6d	LL	
14	N16-9171	N7103 x NMS5-48-2-75	Carter	F4		25% Soja PI 366122

†Conv= Conventional(non-transgenic),LL= Liberty Link®, RR1= Roundup Ready®,RR2= Roundup Ready 2 Yield®
RRX= Roundup Ready 2 Xtend®
‡AA= modified amino acids, DNC= Do not cross with this, FLS= Frogeye leaf spot resistance, LJ= Long juvenile,
LN= low linolenic acid, LP= low phytate, HO= high oleic acid, HOLN= high oleic acid/low linolenic acid,
SCN= Soybean cyst nematode resistance, SR= Soybean rust resistance,
and STS= sulfonylurea tolerant

TABLE 152 - GENERAL SUMMARY OF PERFORMANCE
PRELIMINARY TEST VIII 2018

STRAIN/	*SEED*		*AVG.*	*MAT.*			*SCN Cyst Score (1-5)‡*			*SC*	*SC*
VARIETY	*YIELD†*	*RANK*	*RANK*	*INDEX*	*LOD*	*HT*	*Race 1*	*Race 3*	*Race 5*	*RATING*	*SCORE*
AGS828RR	37.3	14	13	0	3.0	31	4	3	5	R	1
N8001	43.3	6	8	3	2.8	38	5	3	5	R	1
N8002	45.8	2	5	4	2.9	33	5	3	4	MS	4
AGS 798R2	44.5	4	7	0	2.7	33	4	1	2	R	1
G13-2693R2	42.9	10	8	-11	3.1	37	5	3	4	SS	3
G14-1581R2	43.0	8	7	-5	2.1	37	4	1	3	MS	4
G14-1751R2	43.2	7	6	-8	2.7	40	4	3	5	SS	3
G15-1465R2	44.1	5	7	-3	2.4	36	4	1	3	R	1
G15-2239R2	40.2	13	10	-9	2.9	35	4	1	5	SS	3
G15-4717R2	41.1	12	8	-6	2.5	39	1	1	2	R	1
G15-6612	42.9	9	8	-3	2.7	37	5	3	4	S	5
G15LL-9179	45.8	1	5	0	2.6	36	4	1	5	SS	3
G15LL-9205	42.7	11	7	-7	3.0	36	5	2	5	MS	4
N16-9171	44.9	3	7	0	2.5	32	5	1	5	R	1
Mean	43.0	.	.	-3	2.7	36	.	.	.		.
LSD(0.05)	6.2	.	.	4	0.6	3	.	.	.		.
CV(%)	13.0	.	.	98	21.5	8	.	.	.		.

† Data not included in mean: Not applicable

‡The race 1, 3, and 5 SCN populations used in these tests were typed as HG (Heterodera glycines) Type 2.5.7, HG Type 5.7, and HG Type 2.5.7, respectively.

Reaction to the cultivar Pickett was used to distinguish between race 1 and race 5 SCN populations.

TABLE 153 - GENERAL SUMMARY OF PERFORMANCE (continued)
PRELIMINARY TEST VIII 2018

STRAIN/ VARIETY	SEED QUALITY	SEED SIZE	PROTEIN§ %	OIL§ %	MEAL PRO%	FL COLOR	PUB. COLOR	POD COLOR
AGS828RR	2.1	14.5	37.0	18.8	49.5			
N8001	2.1	16.0	36.8	18.3	49	P	G	
N8002	2.0	15.7	36.6	18.7	48.9	P	G	T
AGS 798R2	2.1	15.5	36.3	19.5	49			
G13-2693R2	2.6	14.4	36.4	20.3	49.7	W	T	T
G14-1581R2	2.2	12.5	37.1	17.8	49	P	T	T
G14-1751R2	2.6	14.8	36.8	19.1	49.5	P	T	T
G15-1465R2	2.0	14.7	35.1	19.6	47.5	W	T	T
G15-2239R2	2.3	14.0	36.3	19.0	48.7	W	T	T
G15-4717R2	2.5	15.4	37.4	18.4	49.9	P	T	T
G15-6612	2.2	15.0	36.8	19.0	49.4	W	G	T
G15LL-9179	2.2	16.4	35.3	20.5	48.2	W	T	T
G15LL-9205	2.1	13.3	35.3	20.8	48.4	W	G	T
N16-9171	1.8	10.2	39.0	17.2	51.3	W	T	
Mean	2.2	14.5	36.6	19.1	49.1			
LSD(0.05)	0.4	1.1	1.0	0.5	1.2			
CV(%)	13.4	6.8	2.1	2.1	1.9			

§Protein percentage and oil percentage are reported on a 13% moisture basis beginning in 2015.

TABLE 154 - SEED YIELD (BUSHELS PER ACRE)
PRELIMINARY GROUP VIII 2018 †

STRAIN/ VARIETY	Athens, GA(A)	Clayton, NC	Florence, SC	Kinston, NC	Plains, GA	Test Mean
AGS828RR	47.6	34.4	35.7	28.4	41.1	37.3
N8001	59.2	32.7	46.8	33.7	44.3	43.3
N8002	61.3	38.7	46.8	37.6	44.5	45.8
AGS 798R2	57.3	41.6	48.1	31.8	43.6	44.5
G13-2693R2	54.9	39.0	44.6	35.8	39.9	42.9
G14-1581R2	54.0	35.5	42.5	38.2	45.0	43.0
G14-1751R2	55.1	37.1	43.3	34.1	46.2	43.2
G15-1465R2	54.2	39.1	43.2	40.6	43.2	44.1
G15-2239R2	47.7	35.0	38.7	33.1	46.6	40.2
G15-4717R2	40.3	35.3	51.5	32.2	46.2	41.1
G15-6612	51.6	42.0	43.6	34.0	43.4	42.9
G15LL-9179	63.9	39.9	42.5	37.7	44.9	45.8
G15LL-9205	37.0	34.6	53.1	36.3	52.3	42.7
N16-9171	66.7	36.6	41.1	34.4	45.7	44.9
Mean	53.6	37.2	44.4	34.8	44.8	43.0
LSD(0.05)	8.3	6.3	4.7	4.7	4.5	6.2
CV(%)	9.2	9.2	6.3	7.8	6.0	13.0

† Data not included in mean: Not applicable

TABLE 155 - RELATIVE MATURITY (DAYS EARLIER (-) OR LATER (+) THAN ENTRY 1)
PRELIMINARY GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Clayton, NC	Florence, SC	Kinston, NC	Plains, GA	Test Mean
AGS828RR	10/27	11/7	11/9	11/4	.	11/4
N8001	-1	8	1	3	.	3
N8002	0	7	2	5	.	4
AGS 798R2	-8	6	-1	3	.	0
G13-2693R2	-17	-11	-11	-4	.	-11
G14-1581R2	-12	0	-8	0	.	-5
G14-1751R2	-17	-8	-5	-2	.	-8
G15-1465R2	-10	-1	-3	0	.	-3
G15-2239R2	-16	-7	-9	-3	.	-9
G15-4717R2	-15	-4	-5	1	.	-6
G15-6612	-2	-1	-6	-1	.	-3
G15LL-9179	-1	2	-4	2	.	0
G15LL-9205	-16	-4	-6	0	.	-7
N16-9171	-1	2	-2	3	.	0
Mean	-8	-1	-4	0	.	-3
LSD(0.05)	1	5	2	2	.	4
CV(%)	6	291	35	279	.	98

TABLE 156 - PLANT HEIGHT (INCHES)
PRELIMINARY GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Clayton, NC	Florence, SC	Kinston, NC	Plains, GA	Test Mean
AGS828RR	32		29	.	29	31
N8001	36	41	35	.	40	38
N8002	35	36	31	.	33	33
AGS 798R2	35	34	33	.	31	33
G13-2693R2	36	37	37	.	38	37
G14-1581R2	42	37	33	.	37	37
G14-1751R2	38	44	37	.	42	40
G15-1465R2	38	37	31	.	36	36
G15-2239R2	34	37	32	.	36	35
G15-4717R2	35	45	37	.	39	39
G15-6612	35	42	34	.	39	37
G15LL-9179	36	39	32	.	37	36
G15LL-9205	34	42	29	.	39	36
N16-9171	31	34	32	.	33	32
Mean	36	39	33	.	36	36
LSD(0.05)	5	7	4	.	3	3
CV(%)	8	8	6	.	5	8

TABLE 157 - PLANT LODGING (1-5)
PRELIMINARY GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Clayton, NC	Florence, SC	Kinston, NC	Plains, GA	Test Mean
AGS828RR	3		3	2	3	3
N8001	3	2	4	2	3	3
N8002	3	3	3	2	3	3
AGS 798R2	2	3	3	3	3	3
G13-2693R2	3	4	3	2	4	3
G14-1581R2	2	3	2	2	2	2
G14-1751R2	3	3	3	2	3	3
G15-1465R2	3	2	3	2	2	2
G15-2239R2	3	3	3	2	4	3
G15-4717R2	2	2	4	2	2	3
G15-6612	3	3	3	2	2	3
G15LL-9179	3	3	3	2	2	3
G15LL-9205	3	3	3	3	3	3
N16-9171	3	3	2	3	2	3
Mean	3	3	3	2	3	3
LSD(0.05)	1	1	1	1	1	1
CV(%)	20	22	17	13	17	22

TABLE 158 - SEED QUALITY (1-5)
PRELIMINARY GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Clayton, NC	Florence, SC	Kinston, NC	Plains, GA	Test Mean
AGS828RR	2.8	.	1.0	.	2.5	2.1
N8001	2.7	.	1.0	.	2.7	2.1
N8002	2.5	.	1.0	.	2.5	2.0
AGS 798R2	2.7	.	1.0	.	2.7	2.1
G13-2693R2	3.0	.	1.0	.	3.7	2.6
G14-1581R2	2.7	.	1.0	.	2.8	2.2
G14-1751R2	3.0	.	1.0	.	3.8	2.6
G15-1465R2	2.5	.	1.0	.	2.5	2.0
G15-2239R2	2.8	.	1.0	.	3.2	2.3
G15-4717R2	3.0	.	1.0	.	3.5	2.5
G15-6612	2.7	.	1.0	.	2.8	2.2
G15LL-9179	2.5	.	1.0	.	3.0	2.2
G15LL-9205	2.7	.	1.0	.	2.7	2.1
N16-9171	2.3	.	1.0	.	2.2	1.8
Mean	2.7	.	1.0	.	2.9	2.2
LSD(0.05)	0.3	.	.	.	0.4	0.4
CV(%)	7.3	.	0.0	.	8.4	13.4

TABLE 159 - SEED SIZE (GRAMS PER 100 SEED)
PRELIMINARY GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Clayton, NC	Florence, SC	Kinston, NC	Plains, GA	Test Mean
AGS828RR	14.5	.	14.9	13.0	14.9	14.5
N8001	17.9	16.1	15.8	13.4	16.0	16.0
N8002	15.6	15.8	15.9	14.0	16.4	15.7
AGS 798R2	15.4	.	16.1	14.4	15.5	15.5
G13-2693R2	13.6	14.6	14.7	15.3	14.3	14.4
G14-1581R2	11.7	14.4	12.6	13.1	11.5	12.5
G14-1751R2	14.5	15.1	15.3	15.1	14.4	14.8
G15-1465R2	13.7	15.2	16.0	15.1	13.6	14.7
G15-2239R2	13.4	13.6	14.8	14.0	14.2	14.0
G15-4717R2	14.1	.	16.0	15.3	15.9	15.4
G15-6612	14.8	16.7	15.0	13.8	14.8	15.0
G15LL-9179	17.8	17.4	15.8	14.9	15.9	16.4
G15LL-9205	13.2	13.8	14.1	11.2	13.4	13.3
N16-9171	9.9	10.1	11.0	10.3	9.9	10.2
Mean	14.3	14.8	14.8	13.8	14.3	14.5
LSD(0.05)	1.6	.	0.9	.	1.0	1.1
CV(%)	6.8	.	3.7	.	4.3	6.8

TABLE 160 - OIL (%)†
PRELIMINARY GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Clayton, NC	Florence, SC	Kinston, NC	Plains, GA	Test Mean
AGS828RR	19.6	17.6	18.3	18.4	20.4	18.8
N8001	18.9	16.5	18.3	18.3	19.5	18.3
N8002	19.1	17.7	18.8	18.5	19.4	18.7
AGS 798R2	19.7	18.3	19.5	19.5	20.3	19.5
G13-2693R2	20.4	19.0	20.5	20.3	21.6	20.3
G14-1581R2	18.5	16.7	17.7	17.4	18.6	17.8
G14-1751R2	19.9	17.4	18.7	19.0	20.7	19.1
G15-1465R2	20.1	18.7	20.0	19.0	20.4	19.6
G15-2239R2	19.8	18.2	18.7	17.9	20.3	19.0
G15-4717R2	19.1	17.8	18.6	18.3	18.2	18.4
G15-6612	19.2	17.9	19.2	19.2	19.6	19.0
G15LL-9179	20.6	19.2	20.5	20.4	21.7	20.5
G15LL-9205	21.0	19.1	20.8	21.0	22.2	20.8
N16-9171	17.9	16.6	16.8	17.2	17.6	17.2
Mean	19.6	17.9	19.0	18.9	20.0	19.1
LSD(0.05)	.	.	.	.	.	0.5
CV(%)	.	.	.	.	.	2.1

†Oil percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 161 - PROTEIN (%)†
PRELIMINARY GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Clayton, NC	Florence, SC	Kinston, NC	Plains, GA	Test Mean
AGS828RR	36.4	38.3	37.7	36.9	35.7	37.0
N8001	36.1	39.3	36.9	36.1	35.7	36.8
N8002	36.0	38.2	36.3	36.6	36.0	36.6
AGS 798R2	35.5	37.8	36.6	35.5	36.0	36.3
G13-2693R2	35.8	38.2	35.9	35.6	36.7	36.4
G14-1581R2	35.4	39.3	37.5	37.1	36.1	37.1
G14-1751R2	36.2	38.8	37.3	37.1	34.9	36.8
G15-1465R2	34.4	35.9	34.5	36.2	34.5	35.1
G15-2239R2	34.9	37.9	36.8	37.8	34.3	36.3
G15-4717R2	38.4	37.5	37.5	38.4	35.4	37.4
G15-6612	37.1	38.7	37.0	36.0	35.5	36.8
G15LL-9179	34.6	37.0	35.1	35.3	34.4	35.3
G15LL-9205	35.4	38.2	34.7	34.0	34.0	35.3
N16-9171	37.8	39.9	39.5	39.0	39.0	39.0
Mean	36.0	38.2	36.7	36.5	35.6	36.6
LSD(0.05)	.	.	.	.	.	1.0
CV(%)	.	.	.	.	.	2.1

†Protein percentage is reported on a 13% moisture basis beginning in 2015.

TABLE 162 - ESTIMATED MEAL PROTEIN (%)
PRELIMINARY GROUP VIII 2018

STRAIN/ VARIETY	Athens, GA(A)	Clayton, NC	Florence, SC	Kinston, NC	Plains, GA	Test Mean
AGS828RR	49.2	50.5	50.2	49.2	48.7	49.5
N8001	48.3	51.1	49.1	48.1	48.2	49.0
N8002	48.4	50.4	48.6	48.8	48.5	48.9
AGS 798R2	48.0	50.3	49.4	47.9	49.2	49.0
G13-2693R2	48.9	51.3	49.0	48.5	50.8	49.7
G14-1581R2	47.1	51.3	49.4	48.9	48.1	49.0
G14-1751R2	49.1	51.0	49.8	49.8	47.8	49.5
G15-1465R2	46.8	47.9	46.9	48.7	47.1	47.5
G15-2239R2	47.3	50.3	49.2	50.1	46.7	48.7
G15-4717R2	51.6	49.6	50.1	51.0	47.0	49.9
G15-6612	49.9	51.3	49.7	48.4	47.9	49.4
G15LL-9179	47.4	49.8	48.0	48.2	47.8	48.2
G15LL-9205	48.7	51.2	47.7	46.8	47.5	48.4
N16-9171	50.0	52.0	51.6	51.2	51.4	51.3
Mean	48.6	50.6	49.2	49.0	48.3	49.1
LSD(0.05)	.	.	.	.	.	1.2
CV(%)	.	.	.	.	.	1.9