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Soybean Variety Performance Tests in Tennessee 2012

AgResearch and Education Centers and County Standard Tests

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Variety test results are posted online at http://varietytrials.tennessee.edu, http://www.utcrops.com and https://utextension.tennessee.edu/publications.

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2012 County Standard Tests -- Soybean Cooperators and Agents

Group III	**Cooperator(s)**	**Agent**
Coffee	L.A. Teal & Mike England	Steve Harris
Dyer	Alan Burchfield	Tim Campbell
Franklin	Mike Robinson	Ed Burns/Creig Kimbro
Fulton, KY	Johnson Linder	Ben Mullins/Cam Kenimer
Gibson	Denton Clay Parkins	Philip Shelby
Henry	David & Finis Wilson	Ranson Goodman
Lake	Jack Haynes	Greg Allen
Madison	Matt Griggs	Jake Mallard
Obion	Kenneth & Blake Cheatham	Tim Smith
Weakley	Jay Yeargin	Jeff Lannom

Group IV Early		
Coffee	L.A. Teal & Mike England	Steve Harris
Dyer	Mike Underwood	Tim Campbell
Franklin	Mike Robinson	Ed Burns/Creig Kimbro
Fulton, KY	Johnson Linder	Ben Mullins/Cam Kenimer
Gibson	Denton Clay Parkins	Philip Shelby
Henry	David & Finis Wilson	Ranson Goodman
Hickman	Clint & Claude Callicott	Troy Dugger
Humphreys	Lee Uptain	Jerri Lynn Sims
Lake	Jon Dickey	Greg Allen
Lauderdale	Bill Sumrow	J. C. Dupree
McCracken, KY	Brent Sullivan	Bob Middleton
Obion	Kenneth & Blake Cheatham	Tim Smith
Robertson	Samuel Osborne	Paul Hart
Weakley	J.D. McDaniel	Jeff Lannom

Group IV Late		
Benton	Andy & Mike Fitchpatrick	Jeff Roach
Coffee	L.A. Teal & Mike England	Steve Harris
Decatur	Stacy Vise	Amanda Mathenia
Dyer	Mike Underwood	Tim Campbell
Fayette	Joseph McNabb	Jeff Via
Franklin	Mike Robinson	Ed Burns/Creig Kimbro
Fulton, KY	Mark Yaussi	Cam Kenimer/Ben Mullins
Gibson	Denton Clay Parkins	Philip Shelby
Giles	Brian Flowers	Kevin Rose
Henry	David & Finis Wilson	Ranson Goodman
Lake	Jon Dickey	reg Allen
Lauderdale	Cliff Sweat	J. C. Dupree
Madison	Matt Griggs	Jake Mallard
Marion	Dewey & Randy Gilliam	Jared Goad
McCracken, KY	Lester & Tracy Sullivan	Bob Middleton
Montgomery	Steve Joiner/Michael Suiter	Rusty Evans
Obion	Kenneth & Blake Cheatham	Tim Smith
Perry	Terry Skelton	Amanda Mathenia

2012 County Standard Tests -- Soybean Cooperators and Agents

Group IV Late	**Cooperator(s)**	**Agent**
Robertson	Samuel Osborne	Paul Hart
Weakley	Brian Garner	Jeff Lannom

Group V Early

Carlisle, KY	Curtsinger Farms	Bob Middleton
Coffee	L.A. Teal & Mike England	Steve Harris
Crockett	Stoney Hargett	Richard Buntin
Dyer	Mike Underwood	Tim Campbell
Fayette	Lee Graves	Jeff Via
Franklin	Tracy & Kary Robinson	Ed Burns/Creig Kimbro
Gibson	Denton Clay Parkins	Philip Shelby
Lake	Jack Haynes	Greg Allen
Lauderdale	Justin Brown	J. C. Dupree
Obion	Bill Thompson	Tim Smith
Shelby	Jerry Tolbert	Becky Muller

Liberty Link MG4 Late (4.6 – 4.9)

Crockett	Mac Summerlin	Richard Buntin
Dyer	Tommy Cross	Tim Campbell
Franklin	Fred Warmbrod	Ed Burns/Creig Kimbro
Fulton, KY	Johnson Linder	Cam Kenimer/Ben Mullins
Gibson	Denton Clay Parkins	Philip Shelby
Lake 1	Jon Dickey	Greg Allen
Lake 2	Keith Hulme	Greg Allen
MREC	Dr. Blake Brown	Dr. Angela McClure
Obion	Bill Sellers	Tim Smith
Shelby	Scott Johnson	Becky Muller

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PERFORMANCE OF SOYBEAN VARIETIES IN TENNESSEE

AGRESEARCH AND EDUCATION CENTERS AND COUNTY STANDARD TESTS

Experimental Procedures

AgResearch and Education Center Tests: All soybean variety trials were conducted in each of the physiographic regions of the state. Tests were conducted at the Ames Plantation (Grand Junction), Highland Rim (Springfield), East Tennessee (Knoxville), and Milan (Milan), AgResearch and Education Centers (REC). Three of the Roundup Ready tests (RR4 early, RR4 late, RR5 early) and two Liberty Link tests (LL4, LL5) were also planted at the Agricenter International Research Center (Memphis), but were not harvested due to local flooding issues. Duplicate plantings of all nine tests **[Maturity Group 3 Roundup Ready (i.e., RR3), RR4 early (relative maturity 4.0– 4.5), RR4 late (RM 4.6-4.9) RR5 early (RM 5.0-5.5), RR5 late (RM 5.6-5.9), Liberty Link LL4 (RM 4.0 – 4.9), LL5 (RM 5.0 – 5.9), Conventional CV4 (RM 4.0 – 4.9), and CV5 (RM 5.0 – 5.9)** were made at the Milan and Highland Rim centers for performance testing with and without irrigation.

The plot size at all Ag locations was two rows, 30 feet in length with 30 inch row spacings. All varieties were planted at approximately 8 seeds per foot of row (i.e., approximately 140,000 seed per acre REC tests). Plots were replicated three times at each location in a randomized complete block design. Plots at Milan and Springfield were sprayed with a foliar fungicide approximately one month after planting, and again approximately 21 days later as a preventative treatment for fungal diseases such as soybean rust. Soybean rust was not detected in Tennessee this year. Because of the large number of varieties in some tests and the field variation at each location, an incomplete block design was imposed *ex post facto* prior to data analysis in order to reduce the within-block field variability and the experimental error.

Genetics and Seed Treatments: Seed of all varieties included in the REC tests were treated with one or more fungicides plus an insecticide. Research has shown that seed treatments can influence yield, therefore **the yields of varieties reported herein are the combined result of the genetic potential of the varieties plus the seed treatment "packages."** The seed treatments that were included on each variety were determined by the company or organization and are listed in Table 69. Many soybean varieties are now being marketed with combinations of fungicide and insecticides on the seed, similar to corn. A decision was made to test the varieties in the UT soybean performance tests with the seed treatments so the results would be comparable to what producers could expect from seed they purchase.

County Standard Tests: The County Standard Soybean Tests were conducted in 18 counties in Tennessee and three in Western Kentucky. The number of county locations depended on the test (e.g., 6 - 20). The County Standard Tests were divided into **RR3, RR4 early (relative maturity 4.0-4.5), RR4 late (RM 4.6-4.9), RR5 early (RM 5.0-5.5) and a Liberty Link (RM 4) test.** Each variety was evaluated in a large strip-plot at each location, thus each county test was considered as one replication of the test in calculating the overall average yield and in conducting the statistical analysis to determine significant differences. At each location, plots were planted, sprayed, fertilized and harvested with the equipment used in the cooperating producer's farming operation. The width and length of strip-plots were different in each county; however, within a location in a county, the strips were trimmed on the ends so that the lengths were the same for each variety, or if the lengths were different then the harvested length was measured for each variety and appropriate harvested area adjustments were made to determine the yield per acre.

Interpretation of Data

The tables on the following pages have been prepared with the entries listed in order of performance, the highest-yielding entry being listed first. **All yields presented have been adjusted to 13 percent moisture.** At the bottom of the tables, **LSD** values stand for **Least Significant Difference**. The mean yields of any two varieties being compared must differ by at least the amount shown (minimum) to be considered different in yielding ability at the 5 percent level of probability of significance. For example, given that the LSD for a test is 8.0 bu/a and the mean yield of Variety A was 30 bu/a and the mean yield of Variety B was 35 bu/a, then the two varieties are not statistically different in yield because the difference of 5 bu/a is less than the minimum of 8 bu/a required for them to be significant. Similarly, if the average yield of Variety C was 43 bu/a then it is significantly higher yielding than both Variety B (43 - 35 = 8 bu/a = LSD of 8) and Variety A (43 - 30 = 13 bu/a > LSD of 8).

Also, the **coefficient of variation (C.V.)** values are shown at the bottom of each table. This value is a measure of the error variability found within each experiment. It is the percentage that the error variation is of the overall test mean yield at that location. For example, a C.V. of 10 percent indicates that the size of the error variation is about 10 percent of the size of the test mean. Similarly, a C.V. of 30 percent indicates that the size of the error variation is nearly one-third as large as the test mean. A goal in conducting each yield test is to keep the C.V. as low as possible, preferably below 20 percent.

RESULTS

Yield and Agronomic Traits. Two hundred and forty-two soybean varieties were evaluated in the 2012 **AgResearch and Education Center (REC)** tests in Tennessee. There were six varieties in the RR3, 34 in the RR4E, 76 in the RR4L, 46 in the RR5E, 14 in the RR5L, 14 in the LL4, 23 in the LL5, 10 CV4, and 22 in the CV5 test. The **County Standard tests (CST)** involved 79 varieties total, consisting of a RR3 test (seven varieties at 10 locations), a RR4E test (18 varieties at 14 locations), a RR4L test (29 varieties at 17 locations), a RR5E test (15 varieties at 10 locations) and a Liberty Link MG4 test (10 varieties at 10 locations). In addition to 19 Tennessee counties, the County Standard Tests involved three counties in Western Kentucky (Carlisle, Fulton and McCracken). **Tables 2-68** contain data on yield and agronomic traits such as maturity, plant height, lodging, shattering, seed quality, seed protein and oil content. Due to favorable rainfall events later in the growing season, yields in the irrigated vs. nonirrigated tests were similar (or less) for MG4 LL (Table 44), MG5 LL (Table 53), MG4 Conventional (Table 59), and MG5 Conventional varieties (Table 63). For some of the MG4 and MG5 LL varieties, the yields were lower in irrigated than in nonirrigated tests. Some of the yield reductions were likely due to susceptibility to SDS and stem canker. Symptoms of both diseases were prevalent in LL varieties (especially in MG4) in the irrigated tests in early September, but not in the nonirrigated tests. Disease severity ratings were not taken prior to harvest. **Table 69** lists the names and the companies descriptive characteristics of the varieties included in the REC tests in 2012. **Table 70** contains the contact information for each soybean seed company with entries in the 2012 REC tests.

Growing Season: The 2012 growing season was characterized by a warmer that usual spring followed by hot, dry drought conditions which persisted through most of the vegetative growth stages for soybeans. This was particularly true during the months of June and July when daily temperatures above 100 were common. The early, warm spring and associated early wheat harvest allowed planting ahead of the normal pace. Field conditions were predominately hotter and drier than normal with few fields receiving limited to moderate rainfall through July. Widespread precipitation received in mid-July through August coupled with lower temperatures were beneficial to the state's soybean crop. The crop was rated at 65 percent good to excellent in early October when harvesting began. Harvesting conditions were very favorable for soybeans this season and more than 90 percent of the state's crop was harvested by early November. According to the Tennessee Agricultural Statistics Service, producers planted 1.26 million acres this year, a decrease of 30,000 from 2011. Acreage harvested for grain is projected to be 1.22 million, down 40,000 acres from last season. Soybean production for 2012 is projected to be 43.9 million bushels, an increase of nine percent from the previous year. The state soybean yield average is projected to be 36.0 bu/a, 4 bushels above the 2011 yield.

CST Disease and SCN Ratings: Ratings on variety reactions to frogeye leaf spot, stem canker, and SDS are presented in **Tables 9, 18, 27, 36 and 51** (data provided by Dr. Melvin Newman and Dr. Heather Young-Kelly, Dept. of Entomology and Plant Pathology, UT). Soybean cyst nematode (races 2, 3, and 5) ratings in these tables provided by Dr. Pat Donald, USDA-ARS, Jackson, Tenn.

Table 1. Location information from research centers where the soybean variety tests were conducted in 2012.

AgResearch Center	Location	Planting Date	Harvest Date	Seeding Rate	Soil Type
Roundup Ready Maturity Group III					
Highland Rim (Irrigated)	Springfield	5/2/2012	9/25/2012	140000	Sango Silt Loam
Highland Rim (Non Irrigated)	"	5/2/2012	10/4/2012	140000	Dickson Silt Loam
Knoxville	Knoxville	5/3/2012	9/252012	140000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	5/29/2012	10/4/2012	140000	Grenada Silt Loam
Milan (Non Irrigated)	"	5/15/2012	10/4/2012	140000	Grenada Silt Loam
Roundup Ready Maturity Group Early IV (4.0 - 4.5)					
Ames	Grand Junction	5/1/2012	9/20/2012	140000	Lexington Silt Loam
Highland Rim (Irrigated)	Springfield	5/2/2012	9/25/2012	140000	Sango Silt Loam
Highland Rim (Non Irrigated)	"	5/2/2012	10/4/2012	140000	Dickson Silt Loam
Knoxville	Knoxville	5/3/2012	10/3/2012	140000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	5/29/2012	10/16/2012	140000	Grenada Silt Loam
Milan (Non Irrigated)	"	5/15/2012	10/8/2012	140000	Grenada Silt Loam
Roundup Ready Maturity Group Late IV (4.6 - 4.9)					
Ames	Grand Junction	5/1/2012	9/20/2012	140000	Lexington Silt Loam
Highland Rim (Irrigated)	Springfield	5/2/2012	10/5/2012	140000	Sango Silt Loam
Highland Rim (Non Irrigated)	"	5/2/2012	10/9/2012	140000	Dickson Silt Loam
Knoxville	Knoxville	5/3/2012	10/4/2012	140000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	5/29/2012	10/25/2012	140000	Grenada Silt Loam
Milan (Non Irrigated)	"	5/15/2012	10/11/2012	140000	Grenada Silt Loam
Roundup Ready Maturity Group Early V (5.0 - 5.5)					
Ames	Grand Junction	5/2/2012	10/8/2012	140000	Lexington Silt Loam
Highland Rim (Irrigated)	Springfield	5/2/2012	10/24/2012	140000	Sango Silt Loam
Highland Rim (Non Irrigated)	"	5/2/2012	10/30/2012	140000	Dickson Silt Loam
Knoxville	Knoxville	5/3/2012	10/16/2012	140000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	5/29/2012	10/29/2012	140000	Grenada Silt Loam
Milan (Non Irrigated)	"	5/17/2012	10/24/2012	140000	Grenada Silt Loam
Roundup Ready Maturity Group Late V (5.6 - 5.9)					
Ames	Grand Junction	5/2/2012	10/9/2012	140000	Lexington Silt Loam
Highland Rim (Irrigated)	Springfield	5/2/2012	10/23/2012	140000	Sango Silt Loam
Highland Rim (Non Irrigated)	"	5/2/2012	10/29/2012	140000	Dickson Silt Loam
Knoxville	Knoxville	5/3/2012	10/16/2012	140000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	5/29/2012	10/25/2012	140000	Grenada Silt Loam
Milan (Non Irrigated)	"	5/17/2012	10/24/2012	140000	Grenada Silt Loam
Liberty Link Maturity Group IV (4.0 - 4.9)					
Ames	Grand Junction	5/1/2012	9/21/2012	140000	Lexington Silt Loam
Highland Rim (Irrigated)	Springfield	5/2/2012	10/10/2012	140000	Sango Silt Loam
Highland Rim (Non Irrigated)	"	5/2/2012	10/9/2012	140000	Dickson Silt Loam
Knoxville	Knoxville	5/3/2012	10/3/2012	140000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	5/30/2012	10/16/2012	140000	Memphis Silt Loam
Milan (Non Irrigated)	"	5/17/2012	10/24/2012	140000	Grenada Silt Loam
Liberty Link Maturity Group V (5.0 - 5.9)					
Ames	Grand Junction	5/1/2012	10/8/2012	140000	Lexington Silt Loam
Highland Rim (Irrigated)	Springfield	5/3/2012	10/23/2012	140000	Sango Silt Loam
Highland Rim (Non Irrigated)	"	5/2/2012	10/29/2012	140000	Dickson Silt Loam
Knoxville	Knoxville	5/3/2012	10/12/2012	140000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	5/30/2012	10/25/2012	140000	Memphis Silt Loam
Milan (Non Irrigated)	"	5/17/2012	10/24/2012	140000	Grenada Silt Loam

Table 1. (continued)

Conventional Maturity Group IV (4.0 - 4.9)					
Highland Rim (Irrigated)	Springfield	5/3/2012	10/10/2012	140000	Sango Silt Loam
Highland Rim (Non Irrigated)	"	5/2/2012	10/29/2012	140000	Dickson Silt Loam
Knoxville	Knoxville	5/3/2012	10/3/2012	140000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	5/30/2012	10/16/2012	140000	Memphis Silt Loam
Milan (Non Irrigated)	"	5/17/2012	10/11/2012	140000	Grenada Silt Loam
Conventional Maturity Group V (5.0 - 5.9)					
Highland Rim (Irrigated)	Springfield	5/3/2012	10/23/2012	140000	Sango Silt Loam
Highland Rim (Non Irrigated)	"	5/2/2012	10/29/2012	140000	Dickson Silt Loam
Knoxville	Knoxville	5/3/2012	10/12/2012	140000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	5/30/2012	10/25/2012	140000	Memphis Silt Loam
Milan (Non Irrigated)	"	5/17/2012	10/24/2012	140000	Grenada Silt Loam

Table 2. Mean yields † of six Maturity Group III Roundup Ready soybean varieties evaluated in five environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=5)	Knoxville	Springfield		Milan	
				Irr.	Non-Irr.	Irr.	Non-Irr.
		----------	----------	bu/a	----------	----------	----------
Armor	X1302-3 (RR2Y)	66 ± 1	86	68	54	61	60
Armor	39-R16 (RR)	62 ± 1	61	56	57	75	63
Terral-REV Brand	38R10 (RR)	61 ± 1	62	59	57	67	61
NK	S 39-U2 (RR2Y)	60 ± 1	69	56	48	64	61
Armor	X1301 (RR2Y)	56 ± 1	56	54	50	64	58
Warren/Dairyland	DSR-3980/R2Y	54 ± 1	58	54	49	60	50
Average (bu/a)		**61**	**67**	**59**	**53**	**66**	**58**
L.S.D.$_{.05}$ (bu/a)		**4**	**9**	**10**	**14**	**8**	**4**
C.V. (%)		**8.9**	**7.8**	**10.1**	**14.6**	**6.7**	**4.1**

Table 3. Mean yields † and agronomic characteristics of six Maturity Group III Roundup Ready soybean varieties evaluated in five environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=5)	Moisture § (n=5)	Lodging (n=4)	Height (n=5)	Maturity (n=5)	Shattering (n=3)	Seed Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-------- Score --------		%	%
Armor	X1302-3 (RR2Y)	66 ± 1	13.9	1.3	33	132	1.0	3.7	40.1	21.8
Armor	39-R16 (RR)	62 ± 1	14.5	1.5	38	130	1.0	4.5	42.4	21.0
Terral-REV Brand	38R10 (RR)	61 ± 1	13.4	2.1	39	130	1.0	4.0	42.2	21.7
NK	S 39-U2 (RR2Y)	60 ± 1	13.2	1.8	35	130	1.0	4.0	41.2	22.0
Armor	X1301 (RR2Y)	56 ± 1	13.1	1.4	36	127	1.0	4.0	41.9	20.9
Warren/Dairyland	DSR-3980/R2Y	54 ± 1	13.9	1.6	35	130	1.0	4.5	44.6	20.1
	Average	**61**	**13.7**	**1.6**	**36**	**130**	**1.0**	**4.1**	**42.1**	**21.3**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest.

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5=95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Table 4. Mean yield † of two Maturity Group III Roundup Ready soybean variety evaluated in five environments (n=10) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=10)	Knoxville	Springfield Irr.	Springfield Non-Irr.	Milan Irr.	Milan Non-Irr.
		bu/a					
Terral-REV Brand	38R10 (RR)	54 ± 1	65	50	42	64	50
NK	S 39-U2 (RR2Y)	53 ± 1	73	48	35	60	50
Average (bu/a)		**54**	**69**	**49**	**39**	**62**	**50**
L.S.D.$_{.05}$ (bu/a)		**3**	**8**	**8**	**11**	**6**	**5**
C.V. (%)		**8.9**	**7.3**	**10.0**	**16.1**	**6.0**	**6.2**

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (RR), then it is not part of the variety name.

Table 5. Mean yield † and agronomic characteristics of two Maturity Group III Roundup Ready soybean variety evaluated in five environments (n=10) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=10)	Moisture § (n=10)	Lodging (n=6)	Height (n=10)	Maturity (n=10)	Shattering (n=6)	Seed Quality (n=2)	Protein (n=2)	Oil (n=2)	Frogeye (n=1)
		bu/a	%	Score	in.	DAP	------ Score -------		%	%	Score
Terral-REV Brand	38R10 (RR)	54 ± 1	13.0	2.2	39	125	1.0	2.8	40.7	22.4	1.0
NK	S 39-U2 (RR2Y)	53 ± 1	13.4	2.0	35	126	1.0	2.9	39.9	22.3	1.5
	Average	**54**	**13.2**	**2.1**	**37**	**126**	**1.0**	**2.9**	**40.3**	**22.4**	**1.3**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5=95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 8/22/11.

Table 6. Mean yield † of one Maturity Group III Roundup Ready soybean variety evaluated in five environments (n=15) in Tennessee for two years, 2010 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=15)	Knoxville	Springfield		Milan	
				Irr.	Non-Irr.	Irr.	Non-Irr.
		---bu/a---					
Terral-REV Brand	38R10 (RR)	48 ± 1	55	41	34	63	48
Average (bu/a)		**48**	**55**	**41**	**34**	**63**	**48**
L.S.D.$_{.05}$ (bu/a)		**3**	**9**	**8**	**9**	**5**	**6**
C.V. (%)		**10.0**	**10.1**	**12.1**	**16.2**	**5.6**	**8.5**

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (RR), then it is not part of the variety name.

Table 7. Mean yield † and agronomic characteristics of one Maturity Group III Roundup Ready soybeana variety evaluated in five environments (n=15) in Tennessee for two years, 2010 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=15)	Moisture § (n=15)	Lodging (n=9)	Height (n=15)	Maturity (n=13)	Shattering (n=8)	Leaf Retention (n=1)	Seed Quality (n=3)	Protein (n=3)	Oil (n=3)	Frogeye (n=1)
		bu/a	%	Score	in.	DAP	----------	Score	----------	%	%	Score
Terral-REV Brand	38R10 (RR)	48 ± 1	13.3	1.9	37	125	1.1	4.3	3.4	41.3	22.4	1.0
	Average	**48**	**13.3**	**1.9**	**37**	**125**	**1.1**	**4.3**	**3.4**	**41.3**	**22.4**	**1.0**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5=95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 8/22/11.

Table 8. Yields † of seven Maturity Group III Roundup Ready soybean varieties in 10 County Standard Tests in Tennessee & Kentucky during 2012.

MS	Brand/Variety	Avg. Yield	Moisture ‡	Coffee	Dyer	Franklin	(KY) Fulton	Gibson	Henry	Lake	Madison	Obion	Weakley
		bu/a	%	5/15 §	4/24	4/24	5/15	4/24	4/30	5/23	4/18	4/18	5/9
A	*Terral REV-38R10	51.6	12.7	72.0	29.2	61.6	51.3	45.5	54.2	64.0	54.5	39.7	44.3
A	NK Brand S39-U2 RR2Y	51.5	13.1	71.8	28.4	60.4	53.4	38.4	54.3	65.8	59.2	41.1	42.0
AB	Warren/Dairyland 3980 R2Y	49.0	12.7	69.8	31.4	56.0	47.8	42.2	56.0	62.7	47.7	39.3	37.3
B	Asgrow AG3932 GENRR2Y	48.0	13.0	61.1	27.8	61.5	35.0	43.8	60.2	57.2	53.4	39.3	40.3
B	Dyna-Gro 32RY39 RR2Y/STS	47.9	13.0	73.4	27.1	50.7	35.8	44.2	52.7	60.4	53.4	40.9	40.7
B	Armor 39-R16 RR2/STS	47.5	13.0	75.9	27.0	55.2	38.0	43.6	56.9	56.9	51.1	31.3	39.1
B	Asgrow AG3731 GENRR2Y	47.4	12.0	63.0	28.5	57.1	47.4	40.9	58.5	60.8	46.3	36.5	35.0
	Average (bu/a)	**49.0**	**12.8**	**69.6**	**28.5**	**57.5**	**44.1**	**42.7**	**56.1**	**61.1**	**52.2**	**38.3**	**39.8**

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Planting date.

Each variety was evaluated in a large strip-plot at each loction, thus each county test was considered as one replication of the test in calculating the average yield and in conducting the statistical analysis to determine significant differences (MS).

Variety denoted with an asterisk (*) was in the top performing group in 2011.

MS= Varieties with any MS letter in common are not statistically different at the 5% level of probability.

Data provided by Robert C. Williams, Ext. Area Specialist, Grain Crops, and the extension agents in the counties shown above.

Table 9. Yields † and disease ratings § of seven Maturity Group III Roundup Ready soybean varieties evaluated in 10 Tennessee and Kentucky County Standard Tests during 2012.

		CST Avg.		------- AgResearch and Education Center at Milan -------						
MS	Brand/Variety	Yield (n=10)	Moisture ‡	Frogeye	Stem Canker	Treated ¶ Yield	Untreated Yield	SCN Race 2	SCN Race 3	SCN Race 5
		bu/a	%	2012	2012	bu/a	bu/a	2012	2012	2012
A	*Terral REV-38R10	51.6	12.7	0.0	0.0	38.4	40.3	HS	MS	HS
A	NK Brand S39-U2 RR2Y	51.5	13.1	2.8	0.0	40.6	37.0	HS	MS	HS
AB	Warren/Dairyland 3980 R2Y	49.0	12.7	1.8	0.0	35.9	38.4	HS	MS	HS
B	Asgrow AG3932 GENRR2Y	48.0	13.0	2.3	7.0	26.4	26.1	HS	MS	HS
B	Dyna-Gro 32RY39 RR2Y/STS	47.9	13.0	3.0	0.0	42.0	40.9	HS	S	HS
B	Armor 39-R16 RR2/STS	47.5	13.0	2.3	0.0	40.7	37.1	HS	MR	HS
B	Asgrow AG3731 GENRR2Y	47.4	12.0	3.3	0.0	37.2	37.8	HS	MR	HS
	Average (bu/a)	**49.0**	**12.8**			**37.3**	**36.8**			

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Disease ratings (of unsprayed plots) for Frogeye Leaf Spot and Stem Canker are from 0-10, where 0=no disease & 10=maximum level of disease or plant death.

¶ Sprayed plots at Milan treated with Headline @ 6 oz./Acre tank mixed with Topgaurd @ 6 oz./Acre + 1% Induce at 20 gpa at R3 growth stage.

Disease ratings and yield data compiled by Dr. Melvin Newman and Dr. Heather Young-Kelly from replicated plots at the AgResearch and Education Center at Milan.

SCN ratings; HS = highly susceptible, S = susceptible, MS = moderately susceptible, MR = moderately resistant R = resistant.

Race 2 (HG Type 1.2.5.7); Race 3 (HG Type 7); Race 5 (HG Type 2.5.7)

SCN Greenhouse Ratings compiled by Dr. Pat Donald, Research Plant Path., USDA-ARS, West Tennessee AgResearch and Education Center.

MS= Varieties with one or more letters in common are not statistically different at the .05 level of probability.

Variety denoted with an asterisk (*) was in the top performing group in 2011.

Data provided by Robert C. Williams, Ext. Area Specialist, Grain Crops.

Table 10. Overall average yields † and moistures of four Maturity Group III Roundup Ready soybean varieties evaluated in County Standard Tests (n=10) and AgResearch and Education Centers (n=5) in Tennessee during 2012.

		Averages of CST & REC Tests		County Standard Trials		AgResearch and Education Center Trials	
Brand	**Variety ‡**	**Avg. Yield**	**Moisture**	**Avg. Yield**	**Moisture**	**Avg. Yield**	**Moisture**
		bu/a	%	bu/a	%	bu/a	%
Terral-REV Brand	38R10 (RR)	56	13.0	52	12.7	61	13.4
NK	S 39-U2 (RR2Y)	56	13.1	51	13.1	60	13.2
Armor	39-R16 (RR)	55	13.8	47	13.0	62	14.5
Warren/Dairyland	DSR-3980/R2Y	52	13.3	49	12.7	54	13.9
Average (bu/a)		**55**	**13.3**	**50**	**12.9**	**59**	**13.8**

† Yields have been adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 11. Mean yields † of 34 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in six environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Knoxville	Springfield Irr.	Springfield Non-Irr.	Milan Irr.	Milan Non-Irr.	Ames
				bu/a				
Steyer	4501 R2 (RR2Y)	68 ± 1	89	73	50	82	66	49
Progeny	4510 RY (RR2Y/STS)	66 ± 1	88	71	48	71	69	49
Croplan	R2C 4541 (RR2Y)	66 ± 1	87	64	49	82	63	49
Armor	44-R08 (RR2Y)	66 ± 1	88	74	48	74	63	48
Warren/Dairyland	DSR-4633/R2Y	66 ± 1	88	67	49	79	68	44
Warren/Dairyland	DST43-000/R2Y	65 ± 1	86	75	39	74	64	52
Steyer	4203 R2 (RR2Y)	65 ± 1	81	76	45	76	63	48
Dyna-Gro	31RY45 (RR2Y)	65 ± 1	87	66	44	76	69	48
Croplan	R2C 4391 (RR2Y)	65 ± 1	90	74	46	72	57	49
AGSouth Genetics	AGS 43R212 (RR2Y)	64 ± 1	78	69	44	84	66	44
Asgrow	AG4232 GENRR2Y (STS)	64 ± 1	83	60	44	83	63	52
Asgrow	AG4533 GENRR2Y (STS)	64 ± 1	80	71	49	77	61	46
Mycogen	5N451R2	64 ± 1	84	68	44	76	64	48
Dyna-Gro	39RY43 (RR2Y)	64 ± 1	82	74	38	77	64	48
Armor	X1303 (RR2Y/STS)	63 ± 1	77	66	40	88	63	46
AGSouth Genetics	AGS 45R212 (RR2Y)	63 ± 1	79	66	44	77	64	47
Progeny	4211 RY (RR2Y)	63 ± 1	85	73	43	69	58	50
Warren/Dairyland	DSR-4300 RR	63 ± 1	77	67	43	85	64	41
Schillinger Seed	457 RCP	62 ± 1	83	56	51	79	57	46
Beck's XL Brand	432NR (RR)	62 ± 1	79	68	40	75	66	43
NK	S 41-J6 (RR2Y)	62 ± 1	84	67	34	83	59	43
Asgrow	AG4433 GENRR2Y	62 ± 1	80	60	42	82	63	44
Morsoy Xtra	R2 44X82	62 ± 1	76	65	41	78	62	46
Armor	X1304 (RR2Y)	61 ± 1	73	70	44	73	61	48
Armor	X1302-4 (RR2Y)	61 ± 1	79	66	51	65	58	46
Terral-REV Brand	45R10 (RR)	61 ± 1	73	67	41	78	58	48
Armor	X1305 (RR2Y/STS)	61 ± 1	78	64	51	63	64	45
MO Exp	S08-X14117 (RR)	60 ± 1	73	65	44	75	57	46
Dyna-Gro	S44RS93 (RR2Y/STS)	60 ± 1	77	64	41	70	60	46
Beck's XL Brand	418NR (RR)	60 ± 1	73	67	43	73	58	44
Terral-REV Brand	44R22 (RR)	59 ± 1	75	57	42	68	63	49
Beck's XL Brand	444NR (RR)	58 ± 1	72	72	36	70	54	43
Warren/Dairyland	DSR-4343/R2Y	57 ± 1	79	59	39	66	53	45
TN Exp	TN09-47,083 (RR2Y)	56 ± 1	79	55	30	67	62	44
Average (bu/a)		**62**	**81**	**67**	**44**	**75**	**62**	**47**
L.S.D.$_{.05}$ (bu/a)		**3**	**7**	**10**	**8**	**10**	**6**	**4**
C.V. (%)		**7.5**	**5.2**	**9.2**	**11.2**	**7.8**	**5.8**	**5.5**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 12. Mean yields † and agronomic characteristics of 34 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in six environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Moisture § (n=6)	Lodging (n=4)	Height (n=6)	Maturity (n=5)	Shattering (n=3)	Seed Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-------- Score --------		%	%
Steyer	4501 R2 (RR2Y)	68 ± 1	14.2	1.7	40	137	1.0	2.2	39.9	21.7
Progeny	4510 RY (RR2Y/STS)	66 ± 1	13.8	1.8	39	137	1.0	2.0	39.8	21.6
Croplan	R2C 4541 (RR2Y)	66 ± 1	13.5	1.8	41	137	1.0	3.0	39.5	22.1
Armor	44-R08 (RR2Y)	66 ± 1	13.8	1.9	38	135	1.0	3.5	41.7	21.4
Warren/Dairyland	DSR-4633/R2Y	66 ± 1	13.5	1.7	41	136	1.0	2.7	39.3	22.3
Warren/Dairyland	DST43-000/R2Y	65 ± 1	13.7	1.8	37	134	1.0	3.2	41.1	21.8
Steyer	4203 R2 (RR2Y)	65 ± 1	13.5	1.8	38	134	1.0	2.3	40.2	22.0
Dyna-Gro	31RY45 (RR2Y)	65 ± 1	13.6	1.8	40	136	1.0	3.0	39.5	21.9
Croplan	R2C 4391 (RR2Y)	65 ± 1	13.5	1.8	38	134	1.0	3.2	40.8	22.1
AGSouth Genetics	AGS 43R212 (RR2Y)	64 ± 1	13.5	1.5	41	134	1.0	4.2	41.5	22.0
Asgrow	AG4232 GENRR2Y (STS)	64 ± 1	13.5	1.9	40	133	1.0	2.7	40.2	21.6
Asgrow	AG4533 GENRR2Y (STS)	64 ± 1	13.5	1.7	42	135	1.0	4.2	40.7	21.8
Mycogen	5N451R2	64 ± 1	13.6	1.7	40	135	1.0	2.7	39.0	22.3
Dyna-Gro	39RY43 (RR2Y)	64 ± 1	13.9	1.7	37	135	1.0	3.3	41.2	21.7
Armor	X1303 (RR2Y/STS)	63 ± 1	13.3	1.4	39	133	1.0	3.0	40.1	22.4
AGSouth Genetics	AGS 45R212 (RR2Y)	63 ± 1	13.7	1.6	43	136	1.0	3.5	39.8	22.4
Progeny	4211 RY (RR2Y)	63 ± 1	13.4	1.7	37	134	1.0	3.2	41.1	21.9
Warren/Dairyland	DSR-4300 RR	63 ± 1	13.4	2.0	39	133	1.0	3.3	40.2	22.6
Schillinger Seed	457 RCP	62 ± 1	13.3	1.9	46	136	1.0	2.8	40.3	22.6
Beck's XL Brand	432NR (RR)	62 ± 1	13.6	1.5	35	134	1.0	3.2	40.0	22.5
NK	S 41-J6 (RR2Y)	62 ± 1	13.5	1.6	39	134	1.0	3.3	40.9	22.0
Asgrow	AG4433 GENRR2Y	62 ± 1	13.6	1.5	41	134	1.0	3.0	40.7	21.5
Morsoy Xtra	R2 44X82	62 ± 1	13.2	1.2	38	133	1.0	3.0	40.4	21.8
Armor	X1304 (RR2Y)	61 ± 1	13.4	1.4	38	134	1.0	2.8	41.0	21.6
Armor	X1302-4 (RR2Y)	61 ± 1	13.2	1.6	34	134	1.0	2.7	39.7	22.3
Terral-REV Brand	45R10 (RR)	61 ± 1	13.8	1.8	45	134	1.0	2.7	40.1	22.1
Armor	X1305 (RR2Y/STS)	61 ± 1	13.5	1.4	35	134	1.0	3.2	40.3	22.3
MO Exp	S08-X14117 (RR)	60 ± 1	13.8	1.4	41	134	1.0	2.3	39.8	23.1
Dyna-Gro	S44RS93 (RR2Y/STS)	60 ± 1	13.5	1.5	35	134	1.0	3.2	40.1	22.2
Beck's XL Brand	418NR (RR)	60 ± 1	13.1	1.9	36	134	1.0	3.2	41.1	22.3
Terral-REV Brand	44R22 (RR)	59 ± 1	13.6	1.6	40	134	1.0	2.8	40.6	22.1
Beck's XL Brand	444NR (RR)	58 ± 1	13.7	1.8	39	134	1.0	3.2	41.2	22.2
Warren/Dairyland	DSR-4343/R2Y	57 ± 1	13.1	1.5	34	134	1.0	2.5	38.8	22.8
TN Exp	TN09-47,083 (RR2Y)	56 ± 1	18.2	1.9	53	142	1.0	3.2	39.8	22.3
	Average	**62**	**13.7**	**1.7**	**39**	**135**	**1.0**	**3.0**	**40.3**	**22.1**

† All yields are adjusted to 13% moisture. § Average moisture at harvest Maturity = days after planting (DAP). Protein & Oil on dry weight basis.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name. Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5=95+% of seed are diseased or have split seed coats.

Table 13. Mean yields † of 13 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=12)	Knoxville	Springfield		Milan		Ames
				Irr.	Non-Irr.	Irr.	Non-Irr.	
		bu/a						
Steyer	4501 R2 (RR2Y)	65 ± 1	85	79	45	75	53	53
Croplan	R2C 4541 (RR2Y)	62 ± 1	88	67	42	75	51	51
Progeny	4510 RY (RR2Y/STS)	62 ± 1	84	73	41	68	55	49
Armor	44-R08 (RR2Y)	61 ± 1	81	76	38	68	50	54
Croplan	R2C 4391 (RR2Y)	61 ± 1	82	76	39	67	46	55
Dyna-Gro	39RY43 (RR2Y)	60 ± 1	79	76	35	70	49	52
Progeny	4211 RY (RR2Y)	60 ± 1	82	77	38	62	48	52
Dyna-Gro	31RY45 (RR2Y)	60 ± 1	81	68	37	68	55	50
Asgrow	AG4232 GENRR2Y (STS)	60 ± 1	76	66	38	75	50	52
Warren/Dairyland	DSR-4300 RR	58 ± 1	71	68	39	74	50	47
Beck's XL Brand	432NR (RR)	57 ± 1	71	67	35	70	52	48
Terral-REV Brand	45R10 (RR)	56 ± 1	71	65	32	71	46	52
Terral-REV Brand	44R22 (RR)	54 ± 1	67	60	35	61	49	50
Average (bu/a)		**60**	**78**	**71**	**38**	**70**	**50**	**51**
L.S.D.$_{.05}$ (bu/a)		**3**	**9**	**9**	**7**	**8**	**6**	**5**
C.V. (%)		**8.4**	**7.8**	**8.5**	**11.7**	**7.6**	**7.9**	**6.8**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 14. Mean yields † and agronomic characteristics of 13 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=12)	Moisture § (n=12)	Lodging (n=7)	Height (n=11)	Maturity (n=10)	Shattering (n=6)	Seed Quality (n=2)	Protein (n=2)	Oil (n=2)	Frogeye (n=1)
		bu/a	%	Score	in.	DAP	------ Score -------		%	%	Score
Steyer	4501 R2 (RR2Y)	65 ± 1	13.7	1.8	40	135	1.0	2.0	39.9	21.9	3.2
Croplan	R2C 4541 (RR2Y)	62 ± 1	13.3	2.1	41	135	1.0	2.6	38.5	22.6	1.0
Progeny	4510 RY (RR2Y/STS)	62 ± 1	13.3	2.0	40	135	1.0	2.0	39.7	21.8	3.3
Armor	44-R08 (RR2Y)	61 ± 1	13.3	2.0	38	132	1.0	2.7	40.4	22.2	2.0
Croplan	R2C 4391 (RR2Y)	61 ± 1	12.9	2.0	39	132	1.0	3.0	39.8	22.5	1.2
Dyna-Gro	39RY43 (RR2Y)	60 ± 1	13.5	2.0	38	132	1.0	3.0	40.2	22.2	2.7
Progeny	4211 RY (RR2Y)	60 ± 1	13.1	1.9	38	132	1.0	2.9	40.1	22.5	2.0
Dyna-Gro	31RY45 (RR2Y)	60 ± 1	13.1	2.0	41	134	1.0	2.7	38.3	22.6	1.0
Asgrow	AG4232 GENRR2Y (STS)	60 ± 1	12.9	1.9	40	131	1.0	2.5	39.5	21.9	1.5
Warren/Dairyland	DSR-4300 RR	58 ± 1	12.7	2.3	40	131	1.0	2.9	40.2	22.6	2.8
Beck's XL Brand	432NR (RR)	57 ± 1	12.9	1.6	36	131	1.0	2.9	39.8	22.6	1.2
Terral-REV Brand	45R10 (RR)	56 ± 1	13.6	1.9	45	131	1.0	2.3	39.8	22.5	1.3
Terral-REV Brand	44R22 (RR)	54 ± 1	12.7	1.9	40	132	1.0	2.4	40.9	22.1	1.0
	Average	**60**	**13.2**	**2.0**	**40**	**133**	**1.0**	**2.6**	**39.8**	**22.3**	**1.9**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5 = 95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 8/22/11.

Table 15. Mean yields † of six Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2010 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=18)	Knoxville	Springfield Irr.	Springfield Non-Irr.	Milan Irr.	Milan Non-Irr.	Ames
		bu/a						
Steyer	4501 R2 (RR2Y)	58 ± 1	77	62	41	72	48	48
Progeny	4510 RY (RR2Y/STS)	57 ± 1	80	60	38	68	50	47
Warren/Dairyland	DSR-4300 RR	53 ± 1	64	56	37	68	48	45
Beck's XL Brand	432NR (RR)	53 ± 1	67	52	37	69	48	44
Terral-REV Brand	45R10 (RR)	51 ± 1	65	50	32	67	44	46
Terral-REV Brand	44R22 (RR)	50 ± 1	61	49	36	60	48	48
Average (bu/a)		**54**	**69**	**55**	**37**	**67**	**48**	**46**
L.S.D.$_{.05}$ (bu/a)		**3**	**8**	**8**	**8**	**7**	**5**	**5**
C.V. (%)		**9.1**	**8.2**	**9.2**	**15.2**	**7.6**	**7.7**	**7.9**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 16. Mean yields † and agronomic characteristics of six Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2010 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=18)	Moisture § (n=18)	Lodging (n=11)	Height (n=17)	Maturity (n=15)	Shattering (n=8)	Leaf Retention (n=1)	Seed Quality (n=3)	Protein (n=3)	Oil (n=3)	Frogeye (n=1)
		bu/a	%	Score	in.	DAP	Score			%	%	Score
Steyer	4501 R2 (RR2Y)	58 ± 1	13.5	1.7	39	132	1.0	1.5	2.1	40.4	21.8	3.2
Progeny	4510 RY (RR2Y/STS)	57 ± 1	13.2	1.8	39	132	1.0	1.2	2.1	40.2	21.8	3.3
Warren/Dairyland	DSR-4300 RR	53 ± 1	12.4	2.2	39	128	1.0	1.0	2.8	40.2	22.8	2.8
Beck's XL Brand	432NR (RR)	53 ± 1	12.7	1.5	34	128	1.0	1.7	2.9	40.4	22.4	1.2
Terral-REV Brand	45R10 (RR)	51 ± 1	13.2	1.7	44	129	1.1	1.7	2.6	40.5	22.5	1.3
Terral-REV Brand	44R22 (RR)	50 ± 1	12.8	1.7	38	129	1.0	1.0	2.4	41.2	22.1	1.0
	Average	**54**	**13.0**	**1.8**	**39**	**130**	**1.0**	**1.4**	**2.5**	**40.5**	**22.2**	**2.1**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5 = 95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 8/22/11.

Table 17. Yields † of 18 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties in 14 County Standard Tests in Tennessee and Kentucky during 2012.

MS	Brand/Variety	Avg. Yield	Moist‡	Coffee	Dyer	Franklin	(KY) Fulton	Gibson	Henry	Hickman	Humphreys	Lake	Lauderdale	(KY) McCracken	Obion	Robertson	Weakley
		bu/a	%	5/15 §	5/2	4/24	5/15	4/24	5/1	5/25	5/25	5/24	5/15	6/16	4/18	5/10	5/11
A	Asgrow AG4232 GENRR2Y/STS	59.6	12.2	76.3	48.1	74.1	51.0	51.0	69.5	70.2	52.9	51.6	71.0	42.2	66.8	77.1	33.4
AB	Armor 44-R08 RR2Y	58.8	12.7	76.2	44.0	71.1	53.6	49.7	76.9	67.4	56.4	50.8	66.7	40.1	62.1	80.4	27.2
ABC	Steyer 4203 R2	57.3	12.7	73.3	40.0	64.6	57.2	52.8	76.5	71.7	53.9	52.5	59.9	42.1	59.3	66.5	32.4
ABC	*Armor 46-R64 RR2Y	57.3	12.2	75.6	49.2	67.9	55.8	56.0	75.4	65.5	64.7	54.7	55.0	37.9	53.9	64.1	25.9
ABC	*Progeny P4510 RY/STS	57.0	12.8	67.8	44.8	71.4	36.4	57.0	75.4	68.8	58.8	52.4	68.2	37.9	54.0	74.6	30.5
ABC	*Armor 46-R42 RR2Y	56.8	12.5	68.6	45.0	71.8	40.3	52.6	76.6	64.3	64.5	52.8	60.3	39.9	58.3	72.9	27.9
ABC	Mycogen 5N451 RR2Y	56.4	12.7	77.5	44.3	70.4	46.7	53.7	74.2	71.1	42.8	48.5	62.4	40.1	58.0	73.1	27.5
ABC	Croplan 4391 GENRR2Y	56.3	12.2	72.9	44.8	63.8	56.4	53.9	76.8	66.8	61.3	53.3	51.0	37.8	59.8	62.6	26.8
BCD	Dyna-Gro 39RY43 RR2Y	55.6	12.5	74.1	42.0	70.2	49.7	51.3	75.6	67.7	56.7	35.6	56.6	33.6	66.7	69.2	28.7
BCD	NK Brand S41-J6 RR2Y	55.4	12.4	67.3	51.8	68.6	60.3	51.7	66.6	67.0	58.5	47.5	58.4	39.7	58.6	56.2	23.6
CD	Dyna-Gro 31RY45 RR2Y	54.9	12.1	77.9	38.7	67.0	56.6	55.1	73.7	67.5	45.0	46.4	48.6	35.8	59.8	68.7	28.3
CD	Terral REV-44R22	54.4	11.8	67.2	42.8	71.4	56.6	52.3	69.4	60.5	53.4	47.5	54.9	35.3	54.0	69.2	27.4
CD	Croplan 4541 GENRR2Y	54.3	12.5	72.3	45.9	61.2	43.8	52.6	78.1	64.4	61.2	41.9	68.1	35.9	51.3	55.6	27.5
CD	LG Seeds C4411 R2	54.1	12.7	69.2	43.3	64.9	57.6	47.2	77.8	65.9	43.3	49.7	56.7	37.6	52.5	61.4	30.5
DE	Warren/Dairyland 4300 RR	52.4	12.1	73.6	43.1	58.3	49.9	53.7	72.9	67.2	50.5	30.6	54.5	37.9	50.3	64.7	26.0
DE	Warren/Dairyland 4343 R2Y	52.2	12.1	67.8	37.8	61.5	53.6	45.5	68.7	59.5	53.6	51.9	52.3	38.0	53.1	62.4	25.4
DE	Ag Venture 43A2 RR/STS	52.1	12.3	73.8	39.4	72.1	51.7	47.4	72.7	66.6	48.2	36.4	54.5	31.7	53.4	59.4	22.3
E	NK Brand S44-K7 RR/STS	50.4	12.2	65.8	42.1	65.9	47.7	47.7	68.6	55.1	51.9	47.8	42.7	37.9	49.8	59.0	23.1
	Average (bu/a)	**55.3**	**12.4**	**72.1**	**43.7**	**67.6**	**51.4**	**51.7**	**73.6**	**65.9**	**54.3**	**47.3**	**57.9**	**37.8**	**56.8**	**66.5**	**27.5**

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Planting date.

Each variety was evaluated in a large strip-plot at each loction, thus each county test was considered as one replication of the test in calculating the average yield and in conducting the statistical analysis to determine significant differences (MS).

Varieties denoted with an asterisk (*) were in the top performing group in 2011.

MS= Varieties with any MS letter in common are not statistically different at the 5% level of probability.

Data provided by Robert C. Williams, Ext. Area Specialist, Grain Crops, and the extension agents in the counties shown above.

Table 18. Yields † and disease ratings § of 18 early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in 14 Tennessee and Kentucky County Standard Tests during 2012.

		CST Avg. Yield		AgResearch and Education Center at Milan							
MS	Brand/Variety	(n=14)	Moisture ‡	Frogeye REC Milan/Dyersburg	Stem Canker	SDS	Treated ¶ Yield	Untreated Yield	Race 2	SCN Race 3	Race 5
		bu/a	%	2012	2012	2012	bu/a	bu/a	2012	2012	2012
A	Asgrow AG4232 GENRR2Y/STS	59.6	12.2	3.5 / 4.3	0.0	2.0	56.5	53.6	S	MR	HS
AB	Armor 44-R08 RR2Y	58.8	12.7	5.5 / 4.0	7.5	0.0	42.9	34.7	HS	MR	HS
ABC	Steyer 4203 R2	57.3	12.7	3.8 / 4.0	7.0	0.0	35.4	32.1	MS	S	HS
ABC	*Armor 46-R64 RR2Y	57.3	12.2	0.0 / 0.0	0.0	0.5	51.5	49.4	HS	MS	HS
ABC	*Progeny P4510 RY/STS	57.0	12.8	5.3 / 4.3	3.5	0.0	42.7	39.4	HS	HS	HS
ABC	*Armor 46-R42 RR2Y	56.8	12.5	4.5 / 4.3	0.0	0.3	46.1	46.9	HS	MS	HS
ABC	Mycogen 5N451 RR2Y	56.4	12.7	0.0 / 0.7	0.0	0.3	50.1	47.5	HS	HS	HS
ABC	Croplan 4391 GENRR2Y	56.3	12.2	3.8 / 4.2	7.8	0.0	41.4	33.1	HS	MS	HS
BCD	Dyna-Gro 39RY43 RR2Y	55.6	12.5	2.6 / 1.3	5.3	NA	NA	NA	S	MS	HS
BCD	NK Brand S41-J6 RR2Y	55.4	12.4	3.5 / 3.7	0.0	0.3	40.6	42.7	S	MS	HS
CD	Dyna-Gro 31RY45 RR2Y	54.9	12.1	0.0 / NA	0.0	0.0	42.0	47.2	HS	HS	HS
CD	Terral REV-44R22	54.4	11.8	0.0 / 0.0	0.0	0.0	45.9	41.7	HS	MS	HS
CD	Croplan 4541 GENRR2Y	54.3	12.5	0.0 / 0.0	0.0	0.0	48.0	49.0	HS	MS	HS
CD	LG Seeds C4411 R2	54.1	12.7	5.5 / 5.3	0.0	0.0	49.4	48.9	S	MR	HS
DE	Warren/Dairyland 4300 RR	52.4	12.1	8.0 / 6.3	0.0	0.0	40.6	38.2	HS	HS	HS
DE	Warren/Dairyland 4343 R2Y	52.2	12.1	0.0 / 0.3	0.0	0.0	44.6	43.6	HS	S	HS
DE	Ag Venture 43A2 RR/STS	52.1	12.3	0.0 / 0.0	0.0	0.0	47.5	45.4	HS	MR	HS
E	NK Brand S44-K7 RR/STS	50.4	12.2	NA	NA	NA	NA	NA	NA	NA	NA
	Average (bu/a)	**55.3**	**12.4**				**45.3**	**43.3**			

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Disease ratings for Frogeye, Stem Canker, and SDS are from 0-10, where 0=no disease & 10=maximum level of disease or plant death. SDS = Sudden Death Syndrome.

¶ Sprayed plots at Milan treated with Headline @ 6 oz./Acre tank mixed with Topgaurd @ 6 oz./Acre + 1% Induce at 20 gpa at R3 growth stage.

Disease ratings and yield data compiled by Dr. Melvin Newman and Dr. Heather Young-Kelly from replicated plots at the AgResearch and Education Center at Milan and Dyersburg.

SCN ratings; HS = highly susceptible, S = susceptible, MS = moderately susceptible, MR = moderately resistant, R = resistant.

Race 2 (HG Type 1.2.5.7); Race 3 (HG Type 7); Race 5 (HG Type 2.5.7)

SCN Greenhouse Ratings compiled by Dr. Pat Donald, Research Plant Path., USDA-ARS, West Tennessee AgResearch and Education Center.

MS= Varieties with one or more letters in common are not statistically different at the .05 level of probability.

Varieties denoted with an asterisk (*) were in the top performing group in 2011.

Data provided by Robert C. Williams, Ext. Area Specialist, Grain Crops.

Table 19. Overall average yields † and moistures of 13 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in County Standard Tests (n=14) and AgResearch and Education Centers (n=6) in Tennessee during 2012.

		Averages of CST & REC Tests		County Standard Trials		AgResearch and Education Center Trials	
Brand	**Variety ‡**	**Avg. Yield**	**Moisture**	**Avg. Yield**	**Moisture**	**Avg. Yield**	**Moisture**
		bu/a	%	bu/a	%	bu/a	%
Armor	44-R08 (RR2Y)	62	13.3	59	12.7	66	13.8
Asgrow	AG4232 GENRR2Y (STS)	62	12.9	60	12.2	64	13.5
Progeny	4510 RY (RR2Y/STS)	61	13.3	57	12.8	66	13.8
Steyer	4203 R2 (RR2Y)	61	13.1	57	12.7	65	13.5
Croplan	R2C 4391 (RR2Y)	61	12.8	56	12.2	65	13.5
Mycogen	5N451R2	60	13.1	56	12.7	64	13.6
Croplan	R2C 4541 (RR2Y)	60	13.0	54	12.5	66	13.5
Dyna-Gro	31RY45 (RR2Y)	60	12.8	55	12.1	65	13.6
Dyna-Gro	39RY43 (RR2Y)	60	13.2	56	12.5	64	13.9
NK	S 41-J6 (RR2Y)	59	13.0	55	12.4	62	13.5
Warren/Dairyland	DSR-4300 RR	58	12.8	52	12.1	63	13.4
Terral-REV Brand	44R22 (RR)	57	12.7	54	11.8	59	13.6
Warren/Dairyland	DSR-4343/R2Y	55	12.6	52	12.1	57	13.1
Average (bu/a)		**60**	**13.0**	**56**	**12.4**	**64**	**13.6**

† Yields have been adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 20. Mean yields † of 76 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in six environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Knoxville	Springfield		Milan		Ames
				Irr.	Non-Irr.	Irr.	Non-Irr.	
		----------bu/a----------						
Dyna-Gro	S48RS53 (RR2Y/STS)	73 ± 1	80	79	57	81	86	52
Delta Grow	4765 R2Y	72 ± 1	79	74	60	95	77	50
Morsoy Xtra	R2 47X12 (STS)	72 ± 1	81	80	61	87	75	49
Armor	X1307 (RR2Y/STS)	71 ± 1	81	74	61	84	76	49
Warren/Dairyland	DSR-4850/R2Y (STS)	71 ± 1	81	71	60	83	76	53
Asgrow	AG4832 GENRR2Y (STS)	68 ± 1	74	80	57	75	70	54
Caverndale Farms	CF 486 RR2Y/STSn	68 ± 1	83	75	64	68	73	48
Delta Grow	4925 R2Y	68 ± 1	76	70	57	78	75	50
Asgrow	AG4933 GENRR2Y	68 ± 1	75	74	63	77	67	48
Morsoy Xtra	R2 47X31	68 ± 1	74	78	65	77	62	49
Steyer	4802 R2 (RR2Y/STS)	68 ± 1	83	76	59	68	71	47
USG	74A92R (RR2Y)	68 ± 1	77	72	63	81	66	46
Asgrow	AG4632 GENRR2Y (STS)	67 ± 1	76	72	59	73	75	50
Delta Grow	4825 R2Y	67 ± 1	83	82	55	68	66	48
Morsoy Xtra	R2 46X29 (STS)	67 ± 1	75	72	59	72	73	50
Morsoy Xtra	R2 48X02	67 ± 1	75	84	54	75	65	47
Armor	48-R91 (RR2Y/STS)	67 ± 1	76	70	60	79	69	45
Hornbeck	HBK RY 4721 (RR2Y)	66 ± 1	72	73	55	82	68	47
Hornbeck	HBK RY 4620 (RR2Y/STS)	66 ± 1	75	74	63	71	69	44
Dyna-Gro	33RY47 (RR2Y/STS)	66 ± 1	70	74	55	78	69	48
Armor	47-R17 (RR2Y)	66 ± 1	76	75	53	80	63	48
USG	74A69R (RR2Y)	66 ± 1	75	65	64	74	68	48
TN Exp	TN09-48,552 (RR2Y)	65 ± 1	77	71	63	73	59	49
NK	S 49-F8 (RR)	65 ± 1	74	74	59	71	65	49
Progeny	4747 RY (RR2Y)	65 ± 1	71	73	57	73	69	47
Armor	48-R40 (RR2Y/STS)	65 ± 1	77	75	50	72	71	45
Morsoy Xtra	R2 48X00	65 ± 1	78	75	55	75	64	42
Armor	49-R56 (RR2Y)	65 ± 1	71	75	56	78	63	47
Delta Grow	4875 R2Y (STS)	65 ± 1	72	74	53	75	69	47
Delta Grow	4755 R2Y	65 ± 1	75	70	54	78	63	48
Progeny	4710 RY (RR2Y/STS)	65 ± 1	78	67	59	69	67	48
Armor	46-R64 (RR2Y)	65 ± 1	73	65	61	72	69	48
Armor	46-R42 (RR2Y)	65 ± 1	72	70	55	74	67	50
USG	74A91 (RR)	64 ± 1	77	71	60	64	67	48
Armor	X1312-4 (RR2Y)	64 ± 1	82	63	63	59	68	50
Progeny	4900 RY (RR2Y)	64 ± 1	75	66	60	70	65	48
USG	74B81R (RR2Y/STS)	64 ± 1	73	65	56	74	66	50
Steyer	4701 R2 (RR2Y)	64 ± 1	71	68	54	75	68	47
USG	74A79R (RR2Y/STS)	64 ± 1	72	66	64	71	67	43
Croplan	R2C 4801 (RR2Y)	64 ± 1	74	66	56	81	56	49
Progeny	4611 RY (RR2Y)	64 ± 1	76	65	56	71	68	46
Armor	X1311 (RR2Y)	63 ± 1	74	66	59	69	67	46
USG	74H92R (RR2Y)	63 ± 1	77	71	61	63	64	44
Terral-REV Brand	48R33 (RR)	63 ± 1	71	70	54	74	64	48
Terral-REV Brand	49R11 (RR)	63 ± 1	63	78	56	75	64	44
Mycogen	5N478R2	63 ± 1	72	62	55	77	67	47
Terral-REV Brand	49R54 (RR)	63 ± 1	72	60	58	76	68	46
Morsoy Xtra	R2 46X71	63 ± 1	71	68	58	69	65	47
MO Exp	S08-X2499 (RR)	63 ± 1	78	73	59	61	62	45
Steyer	4702 R2 (RR2Y)	63 ± 1	74	69	55	65	66	50
Croplan	R2C 4692 (RR2Y)	63 ± 1	77	63	65	65	60	47
Dyna-Gro	S47RY13 (RR2Y)	62 ± 1	72	68	52	67	64	48

Table 20 (continued)

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Knoxville	Springfield Irr.	Springfield Non-Irr.	Milan Irr.	Milan Non-Irr.	Ames
				bu/a				
Asgrow	AG4633 GENRR2Y	62 ± 1	64	69	55	72	63	49
Hornbeck	HBK R 4924 (RR)	62 ± 1	79	70	61	62	53	47
NK	S 46-T3 (RR)	62 ± 1	73	66	55	69	66	42
USG	74E88 (RR/STS)	62 ± 1	71	72	56	68	60	42
Schillinger Seed	4990 RC	61 ± 1	77	63	58	61	59	50
Terral-REV Brand	47R53 (RR)	61 ± 1	78	62	61	60	61	46
Terral-REV Brand	47R74 (RR)	61 ± 1	67	69	52	70	65	44
Terral-REV Brand	48R22 (RR)	61 ± 1	69	63	59	69	60	46
AGSouth Genetics	AGS 47R212 (RR)	61 ± 1	73	62	54	69	64	44
Armor	X1308 (RR2Y)	61 ± 1	73	64	56	67	56	48
Progeny	4920 RY (RR2Y)	61 ± 1	74	65	58	59	61	47
Caverndale Farms	CF E4612 RR2Yn	61 ± 1	65	55	59	77	63	45
Schillinger Seed	495 RC	61 ± 1	72	61	61	61	61	47
Warren/Dairyland	DSR-4810 RR	60 ± 1	74	67	52	62	60	48
Terral-REV Brand	49R43 (RR)	60 ± 1	65	59	57	69	65	46
Beck's XL Brand	495NR (RR)	60 ± 1	67	59	59	68	61	46
Terral-REV Brand	49R22 (RR)	60 ± 1	66	61	58	67	60	46
Terral-REV Brand	48R10 (RR)	59 ± 1	70	67	54	66	58	42
Delta Grow	4715 R2Y	59 ± 1	67	65	54	65	60	45
Beck's XL Brand	477NR (RR)	59 ± 1	70	54	54	70	61	46
Progeny	4814 RY (RR2Y)	59 ± 1	73	57	54	59	62	48
TN Exp	TN09-46,019 (RR2Y)	59 ± 1	70	58	48	73	61	42
Delta Grow	4880 RR	58 ± 1	69	64	55	54	57	48
Terral-REV Brand	46R73 (RR)	56 ± 1	60	58	47	67	63	42
Average (bu/a)		**64**	**74**	**69**	**57**	**72**	**66**	**47**
L.S.D.$_{.05}$ (bu/a)		**3**	**7**	**11**	**9**	**9**	**8**	**5**
C.V. (%)		**8.2**	**5.4**	**7.1**	**9.7**	**7.9**	**7.8**	**6.4**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 21. Mean yields † and agronomic characteristics of 76 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in six environments in Tennessee in 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Moisture § (n=6)	Lodging (n=4)	Height (n=6)	Maturity (n=5)	Shattering (n=3)	Seed Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-------- Score --------		%	%
Dyna-Gro	S48RS53 (RR2Y/STS)	73 ± 1	13.8	1.5	45	140	1.0	2.0	39.5	21.2
Delta Grow	4765 R2Y	72 ± 1	14.3	1.4	45	141	1.0	2.0	39.4	21.6
Morsoy Xtra	R2 47X12 (STS)	72 ± 1	14.9	1.5	45	140	1.0	2.2	39.8	21.4
Armor	X1307 (RR2Y/STS)	71 ± 1	15.0	1.6	44	141	1.0	2.7	39.8	21.3
Warren/Dairyland	DSR-4850/R2Y (STS)	71 ± 1	14.2	1.5	45	140	1.0	2.3	39.3	21.5
Asgrow	AG4832 GENRR2Y (ST	68 ± 1	13.3	1.7	46	139	1.0	2.5	39.4	22.3
Caverndale Farms	CF 486 RR2Y/STSn	68 ± 1	15.2	2.1	41	143	1.0	2.8	39.6	21.6
Delta Grow	4925 R2Y	68 ± 1	14.1	1.3	45	141	1.0	2.7	39.0	21.9
Asgrow	AG4933 GENRR2Y	68 ± 1	13.2	1.3	43	139	1.0	1.8	40.0	21.7
Morsoy Xtra	R2 47X31	68 ± 1	13.5	1.8	47	138	1.0	3.7	39.1	21.6
Steyer	4802 R2 (RR2Y/STS)	68 ± 1	14.6	2.2	40	140	1.0	2.8	39.3	21.9
USG	74A92R (RR2Y)	68 ± 1	14.4	1.7	44	141	1.0	2.3	39.0	22.0
Asgrow	AG4632 GENRR2Y (ST	67 ± 1	13.3	2.0	41	138	1.0	3.8	38.3	22.3
Delta Grow	4825 R2Y	67 ± 1	15.1	2.0	41	142	1.0	2.8	39.3	22.1
Morsoy Xtra	R2 46X29 (STS)	67 ± 1	13.5	1.8	40	138	1.0	2.0	39.2	21.8
Morsoy Xtra	R2 48X02	67 ± 1	13.4	1.6	41	138	1.1	2.3	39.2	22.5
Armor	48-R91 (RR2Y/STS)	67 ± 1	13.4	1.8	45	138	1.1	3.8	40.3	21.4
Hornbeck	HBK RY 4721 (RR2Y)	66 ± 1	13.6	1.8	46	138	1.0	3.3	39.1	21.8
Hornbeck	HBK RY 4620 (RR2Y/S	66 ± 1	13.4	2.3	40	139	1.0	2.0	38.8	22.3
Dyna-Gro	33RY47 (RR2Y/STS)	66 ± 1	13.1	1.8	46	138	1.0	3.3	39.6	21.8
Armor	47-R17 (RR2Y)	66 ± 1	13.6	1.8	41	137	1.0	2.5	39.1	22.0
USG	74A69R (RR2Y)	66 ± 1	13.2	1.6	39	138	1.0	1.8	39.3	21.9
TN Exp	TN09-48,552 (RR2Y)	65 ± 1	15.9	1.9	36	145	1.0	1.5	37.6	22.2
NK	S 49-F8 (RR)	65 ± 1	13.1	1.3	41	139	1.0	2.0	39.6	22.1
Progeny	4747 RY (RR2Y)	65 ± 1	13.1	1.5	41	138	1.0	2.2	38.8	22.6
Armor	48-R40 (RR2Y/STS)	65 ± 1	13.1	1.8	40	137	1.0	2.2	39.9	21.8
Morsoy Xtra	R2 48X00	65 ± 1	13.4	2.0	40	139	1.0	2.2	38.6	22.4
Armor	49-R56 (RR2Y)	65 ± 1	13.0	1.7	37	139	1.0	2.8	40.0	22.0
Delta Grow	4875 R2Y (STS)	65 ± 1	13.3	1.9	45	138	1.0	3.0	38.4	21.8
Delta Grow	4755 R2Y	65 ± 1	13.1	1.6	42	138	1.0	3.0	39.7	22.6
Progeny	4710 RY (RR2Y/STS)	65 ± 1	13.3	1.8	41	139	1.0	2.3	39.1	22.2
Armor	46-R64 (RR2Y)	65 ± 1	13.1	1.9	42	138	1.0	3.0	38.6	22.4
Armor	46-R42 (RR2Y)	65 ± 1	13.1	1.2	38	136	1.0	2.8	39.1	22.5
USG	74A91 (RR)	64 ± 1	13.7	2.0	43	139	1.0	2.0	38.4	22.6
Armor	X1312-4 (RR2Y)	64 ± 1	16.1	1.8	40	142	1.0	3.7	40.5	21.6
Progeny	4900 RY (RR2Y)	64 ± 1	13.4	1.5	37	139	1.0	2.5	39.6	22.3
USG	74B81R (RR2Y/STS)	64 ± 1	13.3	1.8	46	139	1.0	3.2	40.3	22.4

Table 21 (continued)

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Moisture § (n=6)	Lodging (n=4)	Height (n=6)	Maturity (n=5)	Shattering (n=3)	Seed Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-------- Score --------		%	%
Steyer	4701 R2 (RR2Y)	64 ± 1	12.8	1.8	40	136	1.0	3.3	39.2	22.1
USG	74A79R (RR2Y/STS)	64 ± 1	13.4	1.8	37	139	1.0	2.7	38.8	22.3
Croplan	R2C 4801 (RR2Y)	64 ± 1	13.3	1.9	45	138	1.0	2.7	38.8	21.9
Progeny	4611 RY (RR2Y)	64 ± 1	13.0	2.0	41	137	1.0	2.8	38.0	22.8
Armor	X1311 (RR2Y)	63 ± 1	13.7	1.9	40	141	1.0	1.3	39.9	21.8
USG	74H92R (RR2Y)	63 ± 1	13.9	1.9	41	141	1.0	2.2	40.4	21.8
Terral-REV Brand	48R33 (RR)	63 ± 1	12.8	2.0	44	136	1.0	2.5	39.4	22.8
Terral-REV Brand	49R11 (RR)	63 ± 1	12.8	1.5	40	136	1.0	3.5	42.3	22.4
Mycogen	5N478R2	63 ± 1	13.3	1.7	45	138	1.0	3.3	38.8	22.1
Terral-REV Brand	49R54 (RR)	63 ± 1	13.2	2.0	46	139	1.0	3.8	40.7	21.9
Morsoy Xtra	R2 46X71	63 ± 1	13.2	1.8	41	136	1.0	3.0	38.2	22.7
MO Exp	S08-X2499 (RR)	63 ± 1	14.5	1.8	46	141	1.0	2.3	37.2	23.2
Steyer	4702 R2 (RR2Y)	63 ± 1	13.0	1.5	42	138	1.0	2.8	39.5	22.7
Croplan	R2C 4692 (RR2Y)	63 ± 1	13.0	1.8	41	137	1.0	2.7	37.9	23.3
Dyna-Gro	S47RY13 (RR2Y)	62 ± 1	13.4	1.6	43	137	1.0	2.7	39.2	22.5
Asgrow	AG4633 GENRR2Y	62 ± 1	13.0	1.3	38	136	1.0	2.8	38.2	22.1
Hornbeck	HBK R 4924 (RR)	62 ± 1	14.2	2.0	47	143	1.0	2.0	38.8	22.3
NK	S 46-T3 (RR)	62 ± 1	12.9	2.5	44	136	1.0	2.5	37.8	23.2
USG	74E88 (RR/STS)	62 ± 1	13.0	1.8	43	137	1.0	2.8	39.4	23.5
Schillinger Seed	4990 RC	61 ± 1	15.7	2.4	45	144	1.0	1.5	39.4	22.1
Terral-REV Brand	47R53 (RR)	61 ± 1	12.7	2.3	42	136	1.0	2.2	39.0	24.0
Terral-REV Brand	47R74 (RR)	61 ± 1	13.2	1.5	40	136	1.0	2.2	41.7	22.1
Terral-REV Brand	48R22 (RR)	61 ± 1	12.9	2.0	42	138	1.0	2.2	39.0	22.1
AGSouth Genetics	AGS 47R212 (RR)	61 ± 1	13.2	1.8	41	137	1.0	2.5	38.1	23.0
Armor	X1308 (RR2Y)	61 ± 1	13.0	2.2	41	137	1.0	2.5	40.3	23.2
Progeny	4920 RY (RR2Y)	61 ± 1	13.5	2.0	41	140	1.0	2.0	40.2	21.7
Caverndale Farms	CF E4612 RR2Yn	61 ± 1	13.1	1.5	44	137	1.0	3.8	39.0	22.9
Schillinger Seed	495 RC	61 ± 1	14.3	2.9	48	140	1.0	2.3	40.9	21.2
Warren/Dairyland	DSR-4810 RR	60 ± 1	13.1	2.1	44	137	1.0	1.8	40.0	22.3
Terral-REV Brand	49R43 (RR)	60 ± 1	13.0	1.8	43	137	1.0	3.3	39.7	23.2
Beck's XL Brand	495NR (RR)	60 ± 1	12.9	2.3	42	137	1.0	3.0	40.3	22.8
Terral-REV Brand	49R22 (RR)	60 ± 1	13.2	2.0	45	140	1.0	1.8	39.7	21.3
Terral-REV Brand	48R10 (RR)	59 ± 1	13.1	1.8	41	138	1.0	3.0	38.3	22.4
Delta Grow	4715 R2Y	59 ± 1	13.0	1.8	43	136	1.0	3.5	39.1	22.7
Beck's XL Brand	477NR (RR)	59 ± 1	13.0	1.9	43	136	1.0	3.2	38.7	22.9

Table 21 (continued)

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Moisture § (n=6)	Lodging (n=4)	Height (n=6)	Maturity (n=5)	Shattering (n=3)	Seed Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-------- Score --------		%	%
Progeny	4814 RY (RR2Y)	59 ± 1	13.3	2.0	41	137	1.0	3.0	37.3	23.2
TN Exp	TN09-46,019 (RR2Y)	59 ± 1	15.2	1.5	38	141	1.0	1.8	37.3	22.0
Delta Grow	4880 RR	58 ± 1	13.2	2.5	42	139	1.0	2.7	41.1	21.9
Terral-REV Brand	46R73 (RR)	56 ± 1	12.8	1.9	43	136	1.0	3.0	39.6	23.3
	Average	**64**	**13.6**	**1.8**	**42**	**139**	**1.0**	**2.6**	**39.3**	**22.3**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle >45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5=95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Table 22. Mean yields † of 32 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=12)	Knoxville	Springfield Irr.	Springfield Non-Irr.	Milan Irr.	Milan Non-Irr.	Ames
		bu/a						
Morsoy Xtra	R2 47X31	59 ± 1	72	60	49	72	52	49
Asgrow	AG4632 GENRR2Y (STS)	59 ± 1	75	55	44	69	59	51
Asgrow	AG4832 GENRR2Y (STS)	59 ± 1	70	62	46	70	55	51
Armor	48-R40 (RR2Y/STS)	58 ± 1	79	58	43	64	58	46
Armor	48-R91 (RR2Y/STS)	58 ± 1	71	55	48	72	55	47
Dyna-Gro	33RY47 (RR2Y/STS)	58 ± 1	69	58	43	70	56	49
Hornbeck	HBK RY 4620 (RR2Y/STS)	57 ± 1	72	58	47	67	53	46
Progeny	4611 RY (RR2Y)	57 ± 1	74	54	41	69	55	50
Delta Grow	4875 R2Y (STS)	57 ± 1	71	58	40	70	54	49
Progeny	4710 RY (RR2Y/STS)	57 ± 1	73	55	47	64	56	47
Steyer	4701 R2 (RR2Y)	57 ± 1	72	52	43	68	54	51
Terral-REV Brand	48R33 (RR)	57 ± 1	70	56	42	70	52	49
Morsoy Xtra	R2 48X00	56 ± 1	73	57	46	65	51	47
Morsoy Xtra	R2 46X71	56 ± 1	74	53	46	66	52	47
Croplan	R2C 4801 (RR2Y)	56 ± 1	71	53	42	73	49	49
USG	74A79R (RR2Y/STS)	56 ± 1	69	52	48	66	54	48
TN Exp	TN09-48,552 (RR2Y)	56 ± 1	68	55	48	66	49	49
Warren/Dairyland	DSR-4810 RR	55 ± 1	73	54	42	60	51	50
Terral-REV Brand	49R11 (RR)	55 ± 1	62	56	43	67	52	49
Terral-REV Brand	47R53 (RR)	55 ± 1	71	51	49	58	50	50
Beck's XL Brand	477NR (RR)	55 ± 1	69	46	45	66	52	48
USG	74A91 (RR)	55 ± 1	66	54	45	60	52	50
USG	74E88 (RR/STS)	54 ± 1	65	56	43	64	48	47
Schillinger Seed	495 RC	53 ± 1	65	52	48	61	49	45
Terral-REV Brand	49R43 (RR)	53 ± 1	62	48	46	66	52	46
Hornbeck	HBK R 4924 (RR)	53 ± 1	73	55	44	57	45	45
Terral-REV Brand	48R22 (RR)	53 ± 1	66	53	43	62	47	48
Terral-REV Brand	48R10 (RR)	53 ± 1	68	54	43	61	48	45
Delta Grow	4880 RR	53 ± 1	68	54	43	52	50	49
Terral-REV Brand	49R22 (RR)	53 ± 1	65	50	45	62	50	44
Beck's XL Brand	495NR (RR)	52 ± 1	60	49	46	66	49	45
Schillinger Seed	4990 RC	52 ± 1	70	51	43	57	50	44
Average (bu/a)		**56**	**70**	**54**	**45**	**65**	**52**	**48**
L.S.D.$_{.05}$ (bu/a)		**3**	**8**	**9**	**8**	**8**	**7**	**5**
C.V. (%)		**9.0**	**7.6**	**11.5**	**11.2**	**7.9**	**8.3**	**7.7**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 23. Mean yields † and agronomic characteristics of 32 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=12)	Moisture § (n=12)	Lodging (n=6)	Height (n=11)	Maturity (n=10)	Shattering (n=6)	Seed Quality (n=2)	Protein (n=2)	Oil (n=2)	Frogeye (n=1)
		bu/a	%	Score	in.	DAP	------ Score -------		%	%	Score
Morsoy Xtra	R2 47X31	59 ± 1	13.0	1.9	44	137	1.0	3.6	38.8	21.7	1.2
Asgrow	AG4632 GENRR2Y (STS)	59 ± 1	13.0	2.1	40	137	1.0	3.1	37.6	22.4	1.0
Asgrow	AG4832 GENRR2Y (STS)	59 ± 1	13.1	1.8	44	138	1.0	2.6	39.0	22.3	1.3
Armor	48-R40 (RR2Y/STS)	58 ± 1	12.6	2.0	39	136	1.0	2.0	39.4	21.9	3.2
Armor	48-R91 (RR2Y/STS)	58 ± 1	13.0	1.9	43	137	1.0	3.4	39.2	21.6	1.0
Dyna-Gro	33RY47 (RR2Y/STS)	58 ± 1	12.7	1.9	44	137	1.0	3.2	38.9	21.9	1.8
Hornbeck	HBK RY 4620 (RR2Y/STS)	57 ± 1	12.7	2.3	39	137	1.0	2.0	38.5	22.4	3.3
Progeny	4611 RY (RR2Y)	57 ± 1	12.7	2.0	40	136	1.0	2.6	37.6	22.8	1.0
Delta Grow	4875 R2Y (STS)	57 ± 1	12.8	2.1	44	136	1.0	3.2	38.4	21.9	1.3
Progeny	4710 RY (RR2Y/STS)	57 ± 1	12.9	1.8	39	137	1.0	1.9	39.2	22.3	2.0
Steyer	4701 R2 (RR2Y)	57 ± 1	12.4	1.8	39	135	1.0	2.8	38.6	22.2	1.0
Terral-REV Brand	48R33 (RR)	57 ± 1	12.4	2.0	43	134	1.0	2.4	38.5	22.9	1.0
Morsoy Xtra	R2 48X00	56 ± 1	12.6	2.1	39	137	1.0	2.3	38.6	22.5	2.3
Morsoy Xtra	R2 46X71	56 ± 1	12.6	1.9	40	135	1.0	2.8	37.4	22.8	1.0
Croplan	R2C 4801 (RR2Y)	56 ± 1	12.9	2.1	44	136	1.0	3.0	38.7	21.9	1.2
USG	74A79R (RR2Y/STS)	56 ± 1	12.6	2.0	37	137	1.0	2.4	38.7	22.3	3.0
TN Exp	TN09-48,552 (RR2Y)	56 ± 1	14.6	2.0	36	142	1.0	1.6	37.6	22.1	1.0
Warren/Dairyland	DSR-4810 RR	55 ± 1	12.6	2.4	42	137	1.0	2.2	40.2	22.1	1.0
Terral-REV Brand	49R11 (RR)	55 ± 1	11.7	1.6	39	135	1.0	2.9	42.2	22.0	1.3
Terral-REV Brand	47R53 (RR)	55 ± 1	12.1	2.4	41	136	1.0	2.3	39.2	23.9	1.0
Beck's XL Brand	477NR (RR)	55 ± 1	12.4	2.2	43	135	1.0	2.8	38.6	22.8	1.0
USG	74A91 (RR)	55 ± 1	13.3	2.1	42	139	1.0	2.1	39.0	22.3	2.0
USG	74E88 (RR/STS)	54 ± 1	12.3	1.7	42	135	1.0	2.5	39.0	23.8	2.3
Schillinger Seed	495 RC	53 ± 1	13.7	3.2	45	139	1.0	2.5	40.7	21.3	1.0
Terral-REV Brand	49R43 (RR)	53 ± 1	12.2	2.4	41	138	1.0	2.8	39.9	22.9	1.2
Hornbeck	HBK R 4924 (RR)	53 ± 1	13.8	2.3	46	140	1.0	1.9	38.3	22.6	1.0
Terral-REV Brand	48R22 (RR)	53 ± 1	12.0	2.2	40	137	1.0	2.2	39.0	21.9	1.3
Terral-REV Brand	48R10 (RR)	53 ± 1	12.5	1.9	40	136	1.0	2.5	38.3	22.5	2.0
Delta Grow	4880 RR	53 ± 1	12.5	2.9	41	138	1.0	2.6	41.3	21.5	1.0
Terral-REV Brand	49R22 (RR)	53 ± 1	12.5	2.2	44	137	1.0	1.7	39.7	21.2	1.5
Beck's XL Brand	495NR (RR)	52 ± 1	12.1	2.7	40	137	1.0	2.5	40.0	22.8	1.0
Schillinger Seed	4990 RC	52 ± 1	14.7	2.4	43	142	1.0	1.9	39.4	22.0	1.0
	Average	**56**	**12.8**	**2.1**	**41**	**137**	**1.0**	**2.5**	**39.0**	**22.3**	**1.5**

† All yields are adjusted to 13% moisture. ‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name. Maturity = days after planting (DAP).

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°. Protein & Oil on dry weight basis.

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered. § Average moisture at harvest

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5 = 95+% of seed are diseased or have split seed coats.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 9/1/11

Table 24. Mean yields † of 14 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2010 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=18)	Knoxville	Springfield		Milan		Ames
				Irr.	Non-Irr.	Irr.	Non-Irr.	
		---bu/a---						
Armor	48-R40 (RR2Y/STS)	55 ± 1	78	49	43	63	54	44
Hornbeck	HBK RY 4620 (RR2Y/STS)	54 ± 1	74	49	42	67	49	46
Hornbeck	HBK R 4924 (RR)	54 ± 1	78	48	45	61	44	48
USG	74A79R (RR2Y/STS)	54 ± 1	69	44	46	66	51	47
Warren/Dairyland	DSR-4810 RR	54 ± 1	75	47	43	60	49	49
Morsoy Xtra	R2 48X00	53 ± 1	71	49	43	64	47	45
USG	74A91 (RR)	52 ± 1	69	45	44	58	49	47
Terral-REV Brand	49R22 (RR)	51 ± 1	70	45	43	60	47	44
Schillinger Seed	495 RC	51 ± 1	67	46	47	57	46	45
Terral-REV Brand	48R22 (RR)	51 ± 1	68	45	41	60	47	45
Schillinger Seed	4990 RC	51 ± 1	72	45	39	57	48	45
Terral-REV Brand	49R11 (RR)	51 ± 1	61	46	39	65	50	44
Delta Grow	4880 RR	50 ± 1	67	46	43	51	47	47
Terral-REV Brand	48R10 (RR)	50 ± 1	70	46	38	59	45	41
Average (bu/a)		**52**	**71**	**46**	**43**	**61**	**48**	**46**
L.S.D.$_{.05}$ (bu/a)		**3**	**8**	**8**	**8**	**8**	**6**	**5**
C.V. (%)		**9.4**	**8.2**	**11.6**	**13.0**	**8.2**	**8.6**	**7.7**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 25. Mean yields † and agronomic characteristics of 14 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2010 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=18)	Moisture § (n=18)	Lodging (n=10)	Height (n=17)	Maturity (n=13)	Shattering (n=8)	Leaf Retention (n=2)	Seed Quality (n=3)	Protein (n=3)	Oil (n=3)	Frogeye (n=1)
		bu/a	%	Score	in.	DAP	----------	Score	----------	%	%	Score
Armor	48-R40 (RR2Y/STS)	55 ± 1	12.2	1.9	38	136	1.0	1.2	2.3	39.9	21.8	3.2
Hornbeck	HBK RY 4620 (RR2Y/STS)	54 ± 1	12.6	2.1	38	138	1.0	1.3	2.4	39.3	22.3	3.3
Hornbeck	HBK R 4924 (RR)	54 ± 1	13.9	2.3	45	140	1.0	1.5	2.0	38.7	22.6	1.0
USG	74A79R (RR2Y/STS)	54 ± 1	12.2	1.9	37	137	1.0	1.3	2.6	39.4	22.3	3.0
Warren/Dairyland	DSR-4810 RR	54 ± 1	12.4	2.2	41	136	1.0	1.1	2.4	39.9	22.3	1.0
Morsoy Xtra	R2 48X00	53 ± 1	12.5	2.0	38	138	1.0	1.3	2.7	39.3	22.4	2.3
USG	74A91 (RR)	52 ± 1	13.1	1.9	41	139	1.0	1.3	2.3	39.3	22.5	2.0
Terral-REV Brand	49R22 (RR)	51 ± 1	12.4	1.9	43	137	1.0	1.2	1.8	40.1	21.3	1.5
Schillinger Seed	495 RC	51 ± 1	14.1	2.9	44	138	1.0	1.1	2.7	41.2	21.3	1.0
Terral-REV Brand	48R22 (RR)	51 ± 1	11.4	2.0	39	136	1.0	1.0	2.3	39.4	22.1	1.3
Schillinger Seed	4990 RC	51 ± 1	14.8	2.4	42	141	1.0	1.3	2.1	39.7	21.9	1.0
Terral-REV Brand	49R11 (RR)	51 ± 1	11.6	1.4	38	136	1.0	1.1	3.1	42.0	22.2	1.3
Delta Grow	4880 RR	50 ± 1	12.3	2.6	40	137	1.0	1.2	2.7	41.7	21.5	1.0
Terral-REV Brand	48R10 (RR)	50 ± 1	12.2	1.7	39	136	1.0	1.2	2.6	38.6	22.8	2.0
	Average	**52**	**12.7**	**2.1**	**40**	**138**	**1.0**	**1.2**	**2.4**	**39.9**	**22.1**	**1.8**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5 = 95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 9/1/11.

Table 26. Yields † of 19 Late Maturity Group IV (4.6-4.9) Roundup Ready soybean varieties in 20 County Standard Tests in Tennessee and Kentucky during 2012.

MS	Brand/Variety	Avg. Yield	Moist‡	Coffee (KY)	Decatur	Dyer	Fayette	Franklin	Fulton (KY)	Gibson	Henry	Lake	Lauderdale	Madison	Marion	McCracken (KY)	Montgomery	Obion	Robertson	Weakley
		bu/a	%	5/15 §	5/30	5/3	6/14	5/16	5/15	4/24	6/15	5/24	5/15	4/25	4/23	6/6	6/11	4/18	6/20	6/6
A	Armor 47-R17 RR2Y	53.3	12.1	74.0	77.0	55.2	46.4	75.8	34.7	58.2	48.9	45.1	25.4	48.0	71.2	41.8	53.4	55.3	53.9	41.5
AB	Warren/Dairyland 4850 R2Y/STS	52.1	12.3	64.6	70.0	51.4	57.2	66.3	34.6	59.5	56.2	41.1	34.2	39.2	67.5	42.2	50.5	45.6	56.5	49.5
ABC	*Armor 48-R91 RR2Y/STS	51.6	12.1	70.4	73.3	51.9	56.2	67.4	38.3	63.1	54.3	30.5	27.8	54.3	63.4	38.0	39.1	58.2	46.8	44.4
ABC	Progeny P4710 RY/STS	51.5	11.8	58.2	59.7	49.2	55.8	67.3	40.4	62.9	51.1	42.4	33.2	63.3	72.6	38.7	34.1	46.0	53.8	46.7
ABCD	Hornbeck HBK R4924	50.9	12.2	64.5	57.9	54.5	51.0	62.8	45.4	62.8	47.8	40.9	32.6	58.5	64.3	36.6	41.7	49.6	48.7	45.7
ABCDE	**Schillinger 4990RC	50.6	12.3	67.2	64.7	55.4	39.5	65.0	41.6	64.1	48.0	46.9	25.3	58.0	66.5	41.0	31.8	58.5	43.1	43.7
ABCDEF	Croplan 4801S GENRR2Y/STS	50.4	12.2	66.5	71.4	53.7	49.3	70.6	29.5	55.1	51.7	36.3	26.7	48.9	73.4	38.2	40.6	50.8	51.5	43.5
ABCDEFG	Dyna-Gro 33RY47 RR2Y/STS	50.3	12.1	71.0	72.2	50.7	45.8	65.9	36.2	52.3	49.6	41.6	27.0	52.4	73.4	32.2	43.9	52.3	47.7	41.3
BCDEFG	NK Brand S49-F8 RR	50.1	12.2	66.2	62.3	49.2	45.7	64.9	39.6	60.2	52.4	38.8	27.5	60.5	73.1	37.0	29.6	48.6	49.6	46.0
BCDEFG	Mycogen 5N478 RR2Y	50.0	12.1	72.1	78.1	53.4	46.1	65.4	32.5	53.5	52.8	37.8	28.5	50.4	62.4	33.3	38.9	52.1	49.2	42.9
BCDEFGH	Warren/Dairyland 4633 R2Y	49.8	11.8	76.6	69.0	52.2	43.0	65.2	31.8	52.5	53.7	40.5	21.7	47.6	67.3	39.5	40.7	52.1	48.9	44.5
BCDEFGH	Asgrow AG4832 GENRR2Y/STS	49.7	12.5	65.9	67.6	48.7	46.9	63.9	40.0	54.7	49.0	38.4	20.0	51.5	67.5	40.6	43.8	47.1	52.4	46.2
BCDEFGH	Terral REV-48R33	49.6	11.7	71.2	67.7	49.7	48.8	59.9	37.6	58.3	48.7	39.9	31.4	52.1	65.2	32.8	38.5	53.5	47.2	41.7
BCDEFGH	Steyer 4701 R2	49.5	12.0	70.0	76.5	54.3	44.5	69.8	26.2	52.7	47.2	32.4	21.8	41.2	69.3	40.5	43.3	53.8	52.8	44.7
BCDEFGH	MorSoy RT46X29 RR2Y/STS	49.2	12.0	65.9	60.0	46.7	44.8	62.8	43.9	61.0	54.1	44.3	31.7	43.8	55.0	41.4	38.0	48.7	46.3	48.7
CDEFGH	Terral REV-49R22	49.1	11.8	61.6	69.9	48.7	48.0	62.1	35.8	57.8	50.3	39.5	27.5	51.3	57.5	40.3	37.3	56.0	46.5	44.9
CDEFGH	Asgrow AG4632 GENRR2Y/STS	49.1	11.9	67.3	67.0	50.2	57.1	69.6	27.8	56.5	50.5	40.1	23.1	47.8	68.0	33.6	38.5	41.4	49.4	46.3
CDEFGH	Ag Venture 47K7	48.9	11.8	67.6	65.2	49.9	39.4	64.9	39.9	57.3	54.0	33.0	25.2	57.0	62.7	37.3	36.2	45.7	52.9	42.5
CDEFGH	Hornbeck HBK RY4721	48.7	12.1	68.7	66.0	54.4	47.9	61.3	36.6	58.5	52.4	31.7	28.6	47.8	62.3	37.8	42.8	44.6	45.3	41.2
DEFGH	USG 74B81 R2Y	48.5	12.2	70.4	62.8	50.4	55.4	61.6	27.1	57.8	49.9	37.6	23.6	50.6	63.2	35.3	32.4	54.6	47.9	43.9
DEFGH	NK Brand S46-A1 RR2Y	48.4	11.9	66.5	72.8	46.3	46.0	62.3	38.1	56.1	49.8	29.1	25.4	49.3	55.4	42.5	41.7	58.1	40.0	43.3
DEFGH	LG Seeds C4625 R2	48.2	11.9	68.0	67.7	45.7	46.6	60.3	31.4	54.2	49.7	39.1	25.1	48.3	60.5	38.5	29.1	53.5	55.2	47.3
DEFGH	USG 74A79 R2Y/STS	48.2	12.5	65.9	67.5	48.1	42.1	61.4	42.7	50.6	49.2	39.0	31.0	50.5	64.4	40.7	31.8	52.2	44.0	38.7
EFGH	LG Seeds C4885 R2	47.6	12.7	71.5	66.4	53.8	40.1	56.6	35.1	50.7	50.0	35.6	28.1	43.0	65.9	33.9	35.1	42.7	57.3	43.9
FGH	Warren/Dairyland 4810 RR	47.6	12.0	59.3	68.1	50.3	48.3	55.3	34.7	56.5	47.6	39.4	26.8	43.9	64.5	36.4	39.5	48.6	47.6	42.4
FGH	Schillinger 478.RCS	47.6	11.9	70.0	71.6	47.2	43.0	63.0	35.9	55.2	49.8	33.5	26.1	41.9	64.0	34.4	31.9	51.4	46.7	43.3
GH	Croplan 4799S GENRR2Y/STS	47.3	11.9	68.7	54.3	47.4	32.2	58.4	41.6	56.1	55.0	31.4	25.3	57.0	56.1	40.3	39.5	44.7	52.1	45.0
H	Ag Venture 48K8	47.0	12.3	67.1	68.6	48.7	43.9	59.4	22.5	54.1	50.7	38.4	27.6	53.3	62.4	30.6	35.2	50.8	45.2	40.0
H	MorSoy RT46X71 RR2Y	46.8	11.9	67.6	57.9	49.0	41.4	57.0	27.8	54.8	48.9	39.1	32.9	59.9	60.6	34.8	34.5	47.9	36.1	45.6
	Average (bu/a)	**49.4**	**12.1**	**67.7**	**67.3**	**50.6**	**46.6**	**63.7**	**35.5**	**56.8**	**50.8**	**38.0**	**27.3**	**50.7**	**64.8**	**37.6**	**38.4**	**50.5**	**48.8**	**44.1**

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Planting date.

Each variety was evaluated in a large strip-plot at each loction, thus each county test was considered as one replication of the test in calculating the average yield and in conducting the statistical analysis to determine significant differences (MS).

Varieties denoted with an asterisk (*) and/or (**) were in the top performing group in 2011 and/or 2010, respectively.

MS= Varieties with any MS letter in common are not statistically different at the 5% level of probability.

Data provided by Robert C. Williams, Ext. Area Specialist, Grain Crops, and the extension agents in the counties shown above.

Table 27. Yields † and disease ratings § of 29 late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in 17 Tennessee and Kentucky County Standard Tests during 2012.

		CST Avg.		---------- AgResearch and Education Center at Milan ----------						
		Yield		Frogeye		Treated ¶	Untreated		SCN	
MS	Brand/Variety	(n=17)	Moisture ‡	REC Milan/ Dyersburg	Stem Canker	Yield	Yield	Race 2	Race 3	Race 5
		bu/a	%	2012	2012	bu/a	bu/a	2012	2012	2012
A	Armor 47-R17 RR2Y	53.3	12.1	0.0 / 0.0	0.3	50.8	47.9	S	MS	HS
AB	Warren/Dairyland 4850 R2Y/STS	52.1	12.3	NA	NA	NA	NA	NA	NA	NA
ABC	*Armor 48-R91 RR2Y/STS	51.6	12.1	0.3 / 0.0	0.0	45.0	45.8	HS	MR	HS
ABC	Progeny P4710 RY/STS	51.5	11.8	3.8 / 3.0	7.8	39.5	37.5	HS	HS	HS
ABCD	Hornbeck HBK R4924	50.9	12.2	3.3 / 4.7	0.0	45.8	42.2	HS	MS	HS
ABCDE	**Schillinger 4990RC	50.6	12.3	0.3 / 0.3	0.0	44.5	49.6	S	MR	HS
ABCDEF	Croplan 4801S GENRR2Y/STS	50.4	12.2	0.0 / 1.7	0.0	44.3	46.3	S	MS	HS
ABCDEFG	Dyna-Gro 33RY47 RR2Y/STS	50.3	12.1	0.3 / 0.0	0.0	45.1	46.7	HS	S	HS
BCDEFG	NK Brand S49-F8 RR	50.1	12.2	0.0 / 0.0	0.0	44.9	46.0	HS	MR	HS
BCDEFG	Mycogen 5N478 RR2Y	50.0	12.1	1.0 / 0.3	0.0	47.0	49.7	HS	MR	HS
BCDEFGH	Warren/Dairyland 4633 R2Y	49.8	11.8	0.0 / 0.0	0.0	48.0	50.5	S	HS	HS
BCDEFGH	Asgrow AG4832 GENRR2Y/STS	49.7	12.5	7.0 / 5.7	0.0	45.3	45.1	HS	MR	HS
BCDEFGH	Terral REV-48R33	49.6	11.7	0.0 / 0.0	0.0	42.5	44.0	HS	MS	HS
BCDEFGH	Steyer 4701 R2	49.5	12.0	0.0 / 1.0	0.0	47.9	47.4	MS	HS	HS
BCDEFGH	MorSoy RT46X29 RR2Y/STS	49.2	12.0	6.8 / 7.0	4.5	41.5	41.2	HS	S	HS
CDEFGH	Terral REV-49R22	49.1	11.8	4.8 / 2.7	0.0	43.3	41.7	S	MR	HS
CDEFGH	Asgrow AG4632 GENRR2Y/STS	49.1	11.9	0.0 / 0.3	0.0	44.9	47.8	HS	HS	HS
CDEFGH	Ag Venture 47K7	48.9	11.8	0.0 / 0.0	0.0	44.9	46.3	S	S	HS
CDEFGH	Hornbeck HBK RY4721	48.7	12.1	0.3 / 1.3	0.3	46.9	49.3	HS	S	HS
DEFGH	USG 74B81 R2Y	48.5	12.2	6.5 / 4.7	0.0	43.8	40.4	HS	MR	HS
DEFGH	NK Brand S46-A1 RR2Y	48.4	11.9	7.8 / 7.3	0.0	45.3	40.4	HS	MR	HS
DEFGH	LG Seeds C4625 R2	48.2	11.9	NA	NA	NA	NA	NA	NA	NA
DEFGH	USG 74A79 R2Y/STS	48.2	12.5	5.0 / 5.7	4.5	40.1	39.8	HS	HS	HS
EFGH	LG Seeds C4885 R2	47.6	12.7	7.3 / 4.7	0.0	48.9	42.9	HS	MS	HS
FGH	Warren/Dairyland 4810 RR	47.6	12.0	0.8 / 0.3	0.0	43.6	45.6	HS	S	HS
FGH	Schillinger 478.RCS	47.6	11.9	6.5 / 4.3	0.0	40.1	37.1	HS	MR	HS
GH	Croplan 4799S GENRR2Y/STS	47.3	11.9	3.8 / 6.0	2.5	40.0	44.3	HS	HS	HS
H	Ag Venture 48K8	47.0	12.3	0.0 / 0.0	0.0	42.6	46.3	S	MS	HS
H	MorSoy RT46X71 RR2Y	46.8	11.9	0.0 / 0.0	0.0	45.7	47.1	HS	MS	HS
	Average (bu/a)	**49.4**	**12.1**			**44.5**	**44.8**			

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Disease ratings for Frogeye Leaf Spot and Stem Canker are from 0-10, where 0=no disease & 10=maximum level of disease or plant death.

¶ Sprayed plots at Milan treated with Headline @ 6 oz./Acre tank mixed with Topgaurd @ 6 oz./Acre + 1% Induce at 20 gpa at R3 growth stage.

Disease ratings and yield data compiled by Dr. Melvin Newman and Dr. Heather Young-Kelly from replicated plots at the AgResearch and Education Center at Milan and Dyersburg.

SCN ratings; HS = highly susceptible, S = susceptible, MS = moderately susceptible, MR = moderately resistant R = resistant.

Race 2 (HG Type 1.2.5.7); Race 3 (HG Type 7); Race 5 (HG Type 2.5.7)

SCN Greenhouse Ratings compiled by Dr. Pat Donald, Research Plant Path., USDA-ARS, West Tennessee AgResearch and Education Center.

MS= Varieties with one or more letters in common are not statistically different at the .05 level of probability.

Varieties denoted with an asterisk (*) and/or (**) were in the top performing group in 2011 and/or 2010, respectively.

Data provided by Robert C. Williams, Ext. Area Specialist, Grain Crops.

Table 28. Overall average yields † and moistures of 21 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in County Standard Tests (n=17) and AgResearch and Education Centers (n=6) in Tennessee during 2012.

		Averages of CST & REC Tests		County Standard Trials		AgResearch and Education Center Trials	
Brand	**Variety ‡**	**Avg. Yield**	**Moisture**	**Avg. Yield**	**Moisture**	**Avg. Yield**	**Moisture**
		bu/a	%	bu/a	%	bu/a	%
Warren/Dairyland	DSR-4850/R2Y (STS)	62	13.3	52	12.3	71	14.2
Armor	47-R17 (RR2Y)	60	12.8	53	12.1	66	13.6
Armor	48-R91 (RR2Y/STS)	59	12.7	52	12.1	67	13.4
Asgrow	AG4832 GENRR2Y (STS)	59	12.9	50	12.5	68	13.3
Progeny	4710 RY (RR2Y/STS)	58	12.5	51	11.8	65	13.3
Dyna-Gro	33RY47 (RR2Y/STS)	58	12.6	50	12.1	66	13.1
Morsoy Xtra	R2 46X29 (STS)	58	12.7	49	12.0	67	13.5
Asgrow	AG4632 GENRR2Y (STS)	58	12.6	49	11.9	67	13.3
NK	S 49-F8 (RR)	58	12.6	50	12.2	65	13.1
Hornbeck	HBK RY 4721 (RR2Y)	57	12.9	49	12.1	66	13.6
Croplan	R2C 4801 (RR2Y)	57	12.8	50	12.2	64	13.3
Steyer	4701 R2 (RR2Y)	57	12.4	49	12.0	64	12.8
Mycogen	5N478R2	56	12.7	50	12.1	63	13.3
Hornbeck	HBK R 4924 (RR)	56	13.2	51	12.2	62	14.2
Terral-REV Brand	48R33 (RR)	56	12.3	50	11.7	63	12.8
USG	74B81R (RR2Y/STS)	56	12.8	48	12.2	64	13.3
USG	74A79R (RR2Y/STS)	56	13.0	48	12.5	64	13.4
Schillinger Seed	4990 RC	56	14.0	51	12.3	61	15.7
Morsoy Xtra	R2 46X71	55	12.6	47	11.9	63	13.2
Terral-REV Brand	49R22 (RR)	55	12.5	49	11.8	60	13.2
Warren/Dairyland	DSR-4810 RR	54	12.5	48	12.0	60	13.1
Average (bu/a)		**57.2**	**12.8**	**49.8**	**12.1**	**64.6**	**13.5**

† Yields have been adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 29. Mean yields † of 46 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in six environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Knoxville	Springfield Irr.	Springfield Non-Irr.	Milan Irr.	Milan Non-Irr.	Ames
				bu/a				
Asgrow	AG5233 GENRR2Y (STS)	68 ± 1	84	76	40	83	76	51
Dyna-Gro	S54RY43 (RR2Y)	68 ± 1	84	71	50	86	69	48
Armor	55-R22 (RR2Y)	67 ± 1	85	75	45	81	62	54
Armor	X1315 (RR2Y)	67 ± 1	88	72	54	73	67	47
Progeny	5412 RY (RR2Y)	67 ± 1	75	73	50	82	66	53
Terral-REV Brand	55R83 (RR)	66 ± 1	75	75	51	81	73	43
Hornbeck	HBK RY 5421 (RR2Y)	66 ± 1	87	74	49	71	67	47
Delta Grow	5475 R2Y	66 ± 1	82	72	49	75	69	49
Terral-REV Brand	55R53 (RR)	66 ± 1	83	77	54	70	68	45
USG	75Q52R (RR2Y)	66 ± 1	84	61	45	87	67	52
Asgrow	AG5533 GENRR2Y	65 ± 1	85	69	52	70	66	50
Warren/Dairyland	DSR-56-000/R2Y	65 ± 1	81	81	45	77	58	49
USG	75Q42R (RR2Y)	65 ± 1	80	78	50	64	64	52
Terral-REV Brand	53R23 (RR)	64 ± 1	78	78	45	72	66	44
Dyna-Gro	32RY55 (RR2Y)	64 ± 2	84	73	42	76	55	51
Asgrow	AG5532 GENRR2Y (STS)	63 ± 1	75	72	49	68	63	50
Croplan	R2C 5081 (RR2Y)	63 ± 1	84	62	54	70	60	46
Armor	X1314 (RR2Y)	62 ± 1	79	73	44	73	59	45
Armor	X1316 (RR2Y)	62 ± 1	81	71	44	74	60	43
Armor	53-R15 (RR2Y)	62 ± 1	80	68	43	71	58	50
MO Exp	S08-X6399 (RR)	62 ± 1	77	70	40	74	63	47
MO Exp	S08-X7279 (RR)	62 ± 1	82	74	45	65	57	46
Delta Grow	5275 R2Y	61 ± 1	78	72	47	63	59	50
Armor	X1313 (RR2Y)	61 ± 1	87	76	48	56	59	40
Asgrow	AG5332 GENRR2Y	61 ± 1	87	74	42	60	58	45
USG	7553nRS (RR/STS)	61 ± 1	75	72	47	68	60	45
Armor	53-R88 (RR2Y/STS)	61 ± 1	78	64	46	77	57	44
Progeny	5210 RY (RR2Y)	61 ± 1	76	74	47	62	55	50
NK	S 51-H9 (RR2Y)	60 ± 1	82	68	40	66	60	47
Armor	X1312-5 (RR2Y)	60 ± 1	82	72	46	59	55	48
Terral-REV Brand	51R53 (RR)	60 ± 1	72	68	43	72	59	49
Delta Grow	5175 R2Y	60 ± 1	84	62	46	62	60	47
Croplan	R2C 5371 (RR2Y)	59 ± 1	75	67	50	62	57	47
TN Exp	TN09-48,343 (RR2Y)	59 ± 1	70	69	47	60	65	45
Delta Grow	5160 RR/STS	59 ± 1	73	65	30	68	70	48
TN Exp	TN09-45,905 (RR2Y)	58 ± 1	77	70	40	56	64	43
Progeny	5111 RY (RR2Y)	58 ± 1	72	64	45	60	61	49
Schillinger Seed	5220 RC	58 ± 1	75	66	45	62	54	47
Terral-REV Brand	52R74 (RR)	58 ± 1	76	65	36	66	63	41
Terral-REV Brand	54R84 (RR)	58 ± 1	77	72	47	47	58	46
Asgrow	AG5232 GENRR2Y	58 ± 1	73	64	51	59	54	45
Hornbeck	HBK RY 5221 (RR2Y)	58 ± 1	74	61	39	72	61	40
USG	75U52R (RR2Y)	57 ± 1	75	68	47	49	57	46
TN Exp	TN09-45,309 (RR2Y)	57 ± 1	64	65	42	73	58	42
Hornbeck	HBK RY 5521 (RR2Y)	56 ± 1	71	64	39	64	57	42
AR	R04-1268RR	56 ± 1	70	62	41	62	56	46
Average (bu/a)		**62**	**79**	**70**	**46**	**68**	**61**	**47**
L.S.D..05 (bu/a)		**4**	**8**	**10**	**9**	**12**	**8**	**6**
C.V. (%)		**9.1**	**6.6**	**9.0**	**12.6**	**10.6**	**7.6**	**7.8**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 30. Mean yields † and agronomic characteristics of 46 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in six environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Moisture § (n=6)	Lodging (n=4)	Height (n=6)	Maturity (n=5)	Shattering (n=3)	Seed Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-------- Score --------		%	%
Asgrow	AG5233 GENRR2Y (ST	68 ± 1	11.8	2.0	41	147	1.0	3.5	39.5	21.7
Dyna-Gro	S54RY43 (RR2Y)	68 ± 1	12.1	1.8	41	153	1.0	2.2	40.8	20.8
Armor	55-R22 (RR2Y)	67 ± 1	12.2	2.0	42	154	1.0	1.8	39.3	21.2
Armor	X1315 (RR2Y)	67 ± 1	11.3	2.0	42	152	1.0	3.0	38.9	21.7
Progeny	5412 RY (RR2Y)	67 ± 1	11.3	1.7	42	151	1.0	3.0	38.8	21.8
Terral-REV Brand	55R83 (RR)	66 ± 1	11.5	1.6	41	152	1.0	2.0	38.5	22.5
Hornbeck	HBK RY 5421 (RR2Y)	66 ± 1	12.3	2.3	37	151	1.0	1.8	38.7	22.6
Delta Grow	5475 R2Y	66 ± 1	11.6	1.9	41	152	1.0	2.2	40.9	20.5
Terral-REV Brand	55R53 (RR)	66 ± 1	11.2	2.1	39	152	1.0	2.7	39.9	21.6
USG	75Q52R (RR2Y)	66 ± 1	11.9	2.0	45	153	1.0	2.7	38.4	22.1
Asgrow	AG5533 GENRR2Y	65 ± 1	11.4	2.2	45	151	1.0	1.8	37.2	23.1
Warren/Dairyland	DSR-56-000/R2Y	65 ± 1	11.8	2.3	54	154	1.0	2.3	40.8	20.8
USG	75Q42R (RR2Y)	65 ± 1	11.6	2.0	40	153	1.0	1.8	41.3	20.6
Terral-REV Brand	53R23 (RR)	64 ± 1	11.0	1.5	37	149	1.0	2.3	39.1	21.9
Dyna-Gro	32RY55 (RR2Y)	64 ± 2	11.5	1.9	40	153	1.0	2.2	38.4	21.6
Asgrow	AG5532 GENRR2Y (ST	63 ± 1	11.5	1.8	42	152	1.0	2.8	39.2	21.7
Croplan	R2C 5081 (RR2Y)	63 ± 1	12.0	1.7	42	148	1.0	1.7	38.1	22.5
Armor	X1314 (RR2Y)	62 ± 1	12.2	2.0	41	153	1.0	2.7	41.1	20.6
Armor	X1316 (RR2Y)	62 ± 1	11.6	1.9	40	152	1.0	3.0	39.4	20.6
Armor	53-R15 (RR2Y)	62 ± 1	12.0	2.3	38	152	1.0	1.8	38.2	21.9
MO Exp	S08-X6399 (RR)	62 ± 1	11.7	1.6	46	146	1.0	2.5	39.2	22.5
MO Exp	S08-X7279 (RR)	62 ± 1	11.3	1.7	48	151	1.0	2.3	38.1	22.8
Delta Grow	5275 R2Y	61 ± 1	12.4	2.3	38	151	1.0	1.8	37.7	22.3
Armor	X1313 (RR2Y)	61 ± 1	11.4	2.2	41	150	1.0	1.8	39.4	21.4
Asgrow	AG5332 GENRR2Y	61 ± 1	11.5	2.3	42	150	1.0	3.3	39.7	21.2
USG	7553nRS (RR/STS)	61 ± 1	11.0	1.9	40	152	1.0	2.2	39.8	21.6
Armor	53-R88 (RR2Y/STS)	61 ± 1	11.6	1.6	38	150	1.0	2.0	37.6	22.8
Progeny	5210 RY (RR2Y)	61 ± 1	12.1	2.0	38	151	1.0	1.8	38.4	22.0
NK	S 51-H9 (RR2Y)	60 ± 1	11.6	1.6	40	148	1.0	1.7	38.1	22.7
Armor	X1312-5 (RR2Y)	60 ± 1	11.9	1.9	41	148	1.0	3.5	40.6	21.1
Terral-REV Brand	51R53 (RR)	60 ± 1	12.0	2.0	40	147	1.0	2.0	40.3	22.7
Delta Grow	5175 R2Y	60 ± 1	11.9	2.2	42	150	1.0	2.5	39.4	21.4
Croplan	R2C 5371 (RR2Y)	59 ± 1	12.2	1.7	40	151	1.0	1.8	37.9	22.2
TN Exp	TN09-48,343 (RR2Y)	59 ± 1	11.8	2.1	35	147	1.0	2.0	39.6	21.2
Delta Grow	5160 RR/STS	59 ± 1	12.0	2.4	46	148	1.0	3.3	40.0	22.2
TN Exp	TN09-45,905 (RR2Y)	58 ± 1	11.3	2.3	39	150	1.0	3.0	38.9	21.5
Progeny	5111 RY (RR2Y)	58 ± 1	11.9	2.1	47	147	1.0	2.8	37.8	23.1

Table 30 (continued)

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Moisture § (n=6)	Lodging (n=4)	Height (n=6)	Maturity (n=5)	Shattering (n=3)	Seed Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-------- Score --------		%	%
Schillinger Seed	5220 RC	58 ± 1	11.7	2.0	44	149	1.0	3.0	40.1	21.9
Terral-REV Brand	52R74 (RR)	58 ± 1	11.3	1.8	43	146	1.0	2.7	40.6	21.7
Terral-REV Brand	54R84 (RR)	58 ± 1	11.7	2.5	37	150	1.0	1.8	39	22.3
Asgrow	AG5232 GENRR2Y	58 ± 1	11.5	2.0	37	150	1.0	2.0	39.1	21.2
Hornbeck	HBK RY 5221 (RR2Y)	58 ± 1	12.1	2.3	46	149	1.0	2.5	39.3	22.0
USG	75U52R (RR2Y)	57 ± 1	11.9	2.1	37	148	1.0	1.5	39.9	21.8
TN Exp	TN09-45,309 (RR2Y)	57 ± 1	11.6	1.6	36	151	1.0	1.8	38.4	21.7
Hornbeck	HBK RY 5521 (RR2Y)	56 ± 1	12.2	1.7	42	153	1.0	2.0	40.1	21.3
AR	R04-1268RR	56 ± 1	12.0	2.2	38	152	1.0	2.3	38.8	20.7
	Average	**62**	**11.7**	**2.0**	**41**	**150**	**1.0**	**2.3**	**39.2**	**21.8**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle >45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5=95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Table 31. Mean yields † of 13 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=12)	Knoxville	Springfield		Milan		Ames
				Irr.	Non-Irr.	Irr.	Non-Irr.	
		bu/a						
Armor	55-R22 (RR2Y)	61 ± 1	77	63	52	73	51	48
Terral-REV Brand	51R53 (RR)	59 ± 1	69	61	46	69	53	54
Armor	53-R88 (RR2Y/STS)	58 ± 1	67	61	57	72	50	43
Asgrow	AG5532 GENRR2Y (STS)	58 ± 1	72	64	52	62	53	48
Delta Grow	5275 R2Y	58 ± 1	66	65	50	67	53	47
Armor	53-R15 (RR2Y)	58 ± 1	76	59	45	68	51	49
USG	7553nRS (RR/STS)	58 ± 1	69	63	53	65	52	44
Schillinger Seed	5220 RC	57 ± 1	71	62	51	60	48	49
Asgrow	AG5332 GENRR2Y	57 ± 1	72	65	43	60	53	48
Progeny	5210 RY (RR2Y)	56 ± 1	67	65	51	62	47	46
Asgrow	AG5232 GENRR2Y	56 ± 1	71	57	52	62	50	44
Delta Grow	5160 RR/STS	55 ± 1	67	58	40	58	57	49
Progeny	5111 RY (RR2Y)	55 ± 1	68	58	45	60	51	45
Average (bu/a)		**57**	**70**	**62**	**49**	**64**	**51**	**47**
L.S.D.$_{.05}$ (bu/a)		**4**	**11**	**10**	**12**	**10**	**7**	**6**
C.V. (%)		**10.9**	**10.4**	**10.0**	**16.1**	**10.1**	**8.8**	**8.1**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 32. Mean yields † and agronomic characteristics of 13 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=12)	Moisture § (n=12)	Lodging (n=7)	Height (n=11)	Maturity (n=10)	Shattering (n=6)	Seed Quality (n=2)	Protein (n=2)	Oil (n=2)	Frogeye (n=1)
		bu/a	%	Score	in.	DAP	------ Score -------		%	%	Score
Armor	55-R22 (RR2Y)	61 ± 1	12.3	1.9	42	149	1.0	1.8	39.1	21.5	1.2
Terral-REV Brand	51R53 (RR)	59 ± 1	11.9	2.0	41	145	1.0	2.3	40.3	22.7	3.0
Armor	53-R88 (RR2Y/STS)	58 ± 1	12.1	1.7	39	146	1.0	1.9	37.7	22.9	1.3
Asgrow	AG5532 GENRR2Y (STS)	58 ± 1	11.6	1.8	42	148	1.0	2.4	39.4	21.7	3.5
Delta Grow	5275 R2Y	58 ± 1	12.7	2.7	39	148	1.0	1.9	38.1	22.3	1.0
Armor	53-R15 (RR2Y)	58 ± 1	12.6	2.6	39	148	1.0	2.0	38.3	22.2	1.0
USG	7553nRS (RR/STS)	58 ± 1	11.5	2.1	41	149	1.0	2.0	39.5	21.7	1.2
Schillinger Seed	5220 RC	57 ± 1	11.9	2.0	44	146	1.0	3.0	40.7	21.8	1.2
Asgrow	AG5332 GENRR2Y	57 ± 1	11.7	3.0	42	147	1.0	3.3	39.8	21.4	1.0
Progeny	5210 RY (RR2Y)	56 ± 1	12.4	2.4	39	147	1.0	1.8	38.2	22.3	1.0
Asgrow	AG5232 GENRR2Y	56 ± 1	11.7	2.0	38	146	1.0	2.0	38.8	21.7	1.0
Delta Grow	5160 RR/STS	55 ± 1	12.1	2.9	45	145	1.0	2.9	40.1	22.2	2.8
Progeny	5111 RY (RR2Y)	55 ± 1	12.0	2.1	45	144	1.0	2.5	38.0	22.9	1.0
	Average	**57**	**12.0**	**2.2**	**41**	**147**	**1.0**	**2.3**	**39.1**	**22.1**	**1.6**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5 = 95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 9/1/11.

Table 33. Mean yields † of four Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2010 - 2012.

		Avg. Yield ± Std Err.		Springfield		Milan		
Brand	**Variety ‡**	**(n=18)**	**Knoxville**	**Irr.**	**Non-Irr.**	**Irr.**	**Non-Irr.**	**Ames**
		----------	----------	----------	bu/a ----------	----------	----------	----------
Armor	53-R15 (RR2Y)	53 ± 1	75	48	34	63	48	47
Delta Grow	5275 R2Y	52 ± 1	63	54	38	67	50	41
Progeny	5210 RY (RR2Y)	51 ± 1	70	52	38	59	45	44
Delta Grow	5160 RR/STS	48 ± 1	65	48	29	56	49	43
Average (bu/a)		**51**	**68**	**51**	**35**	**61**	**48**	**44**
L.S.D.$_{.05}$ (bu/a)		**3**	**10**	**8**	**10**	**9**	**6**	**7**
C.V. (%)		**11.2**	**9.6**	**10.8**	**17.1**	**10.5**	**9.2**	**11.3**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 34. Mean yields † and agronomic characteristics of four Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2010 - 2012.

		Avg. Yield ± Std Err.	Moisture §	Lodging	Height	Maturity	Shattering	Leaf Retention	Seed Quality	Protein	Oil	Frogeye
Brand	**Variety ‡**	**(n=18)**	**(n=18)**	**(n=10)**	**(n=17)**	**(n=13)**	**(n=9)**	**(n=2)**	**(n=3)**	**(n=3)**	**(n=3)**	**(n=1)**
		bu/a	%	Score	in.	DAP	----------	Score	----------	%	%	Score
Armor	53-R15 (RR2Y)	53 ± 1	11.9	2.3	37	147	1.0	1.1	2.0	38.2	22.3	1.0
Delta Grow	5275 R2Y	52 ± 1	11.8	2.3	38	146	1.0	1.4	2.4	39.0	21.9	1.0
Progeny	5210 RY (RR2Y)	51 ± 1	12.0	2.1	38	146	1.0	1.4	1.8	38.0	22.4	1.0
Delta Grow	5160 RR/STS	48 ± 1	11.4	2.6	43	144	1.0	1.3	3.2	40.0	22.5	2.8
	Average	**51**	**11.8**	**2.3**	**39**	**146**	**1.0**	**1.3**	**2.4**	**38.8**	**22.3**	**1.5**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5 = 95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 9/1/11.

Table 35. Yields † of 15 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties in 10 County Standard Tests in Tennessee and Kentucky during 2012.

MS	Brand/Variety	Avg. Yield	Moist‡	KY Carlisle	Coffee	Crockett	Dyer	Fayette	Franklin	Gibson	Lake	Obion	Shelby
		bu/a	%	6/12 §	5/15	6/7	5/3	5/18	6/18	4/24	5/23	5/9	5/4
A	*Asgrow AG5332 GENRR2Y	55.4	12.0	50.4	78.2	61.5	47.9	42.3	70.1	65.2	61.0	40.0	37.8
AB	**MorSoy RT5429 RR	54.1	12.9	49.4	71.3	61.7	54.1	37.1	63.8	66.4	60.8	35.4	40.8
AB	MorSoy 54X41 RR2Y	53.8	15.2	53.9	66.2	65.0	57.1	37.8	52.5	71.9	59.3	31.2	43.0
ABC	*Armor 53-R15 RR2	53.5	12.6	53.4	62.5	58.9	51.4	41.1	54.7	63.5	63.9	39.1	47.0
ABC	Asgrow AG5532 GENRR2Y	53.1	12.7	43.4	72.5	65.7	55.0	31.8	61.6	69.5	58.6	29.9	42.6
ABC	Asgrow AG5632 GENRR2Y/STS	52.7	12.3	49.1	70.6	51.1	50.0	39.6	61.3	62.4	57.2	32.1	53.8
ABC	USG 75J50 R2Y	52.4	12.5	55.3	59.4	55.1	54.0	37.8	63.0	60.1	58.3	32.1	48.7
ABC	Croplan 5081 GENRR2Y	52.0	12.1	50.1	70.5	56.8	56.9	38.4	66.4	58.3	50.8	34.4	37.4
ABC	USG 75B21 R2Y	51.4	11.8	43.9	77.3	49.8	48.7	32.0	65.2	56.8	61.6	30.7	48.1
BC	Terral REV-51R53	50.9	12.2	45.0	74.7	58.4	51.1	36.1	57.3	66.0	60.7	26.3	33.2
BC	Progeny P5111 RY	50.8	12.5	55.7	74.4	52.2	49.6	37.0	60.5	56.3	52.6	25.1	44.4
BC	NK Brand S51-H9 RR2Y	50.7	12.1	53.0	72.2	54.9	49.4	36.8	57.2	59.4	53.3	31.8	39.4
BC	Schillinger 5220.RC	50.4	12.5	46.5	66.3	51.6	46.1	35.0	64.0	69.7	49.1	35.7	40.0
BC	Armor X1313 RR2	50.3	12.5	45.9	75.3	57.3	46.0	33.2	62.7	60.1	55.8	26.8	39.8
C	Hornbeck HBK RY5221	49.6	13.1	43.6	69.6	59.3	43.5	33.4	62.2	52.0	61.9	29.9	40.3
	Average (bu/a)	**52.1**	**12.6**	**49.2**	**70.7**	**57.3**	**50.7**	**36.6**	**61.5**	**62.5**	**57.7**	**32.0**	**42.4**

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Planting date.

Each variety was evaluated in a large strip-plot at each loction, thus each county test was considered as one replication of the test in calculating the average yield and in conducting the statistical analysis to determine significant differences (MS).

Varieties denoted with an asterisk (*) and/or (**) were in the top performing group in 2011 and/or 2010, respectively.

MS= Varieties with any MS letter in common are not statistically different at the 5% level of probability.

Data provided by Robert C. Williams, Ext. Area Specialist, Grain Crops, and the extension agents in the counties shown above.

Table 36. Yields † and disease ratings § of 15 early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in 10 Tennessee and Kentucky County Standard Tests during 2012.

		CST Avg. Yield		-------- AgResearch and Education Center at Milan ----------						
				Frogeye		Treated ¶	Untreated		SCN	
MS	Brand/Variety	(n=10)	Moisture ‡	REC Milan/Dyersburg	SDS	Yield	Yield	Race 2	Race 3	Race 5
		bu/a	%	2012	2012	bu/a	bu/a	2012	2012	2012
A	*Asgrow AG5332 GENRR2Y	55.4	12.0	3.0 / 7.0	0.3	44.7	36.5	HS	MS	HS
AB	**MorSoy RT5429 RR	54.1	12.9	0.3 / 0.0	2.5	40.8	38.9	HS	S	HS
AB	MorSoy 54X41 RR2Y	53.8	15.2	2.8 / 3.0	4.3	41.8	32.1	S	HS	HS
ABC	*Armor 53-R15 RR2	53.5	12.6	1.0 / 4.3	0.5	42.3	36.6	HS	MR	HS
ABC	Asgrow AG5532 GENRR2Y	53.1	12.7	4.0 / 5.7	2.0	41.6	27.1	S	MS	HS
ABC	Asgrow AG5632 GENRR2Y/STS	52.7	12.3	2.0 / 4.0	2.5	38.3	32.5	S	S	HS
ABC	USG 75J50 R2Y	52.4	12.5	4.0 / 3.0	1.5	40.6	31.5	S	HS	S
ABC	Croplan 5081 GENRR2Y	52.0	12.1	0.0 / 0.3	0.5	40.2	39.8	S	MR	HS
ABC	USG 75B21 R2Y	51.4	11.8	0.3 / 0.3	0.8	39.0	37.4	S	S	HS
BC	Terral REV-51R53	50.9	12.2	5.8 / 7.3	0.0	43.6	33.6	HS	S	HS
BC	Progeny P5111 RY	50.8	12.5	0.0 / 0.0	0.8	42.2	37.3	HS	MS	HS
BC	NK Brand S51-H9 RR2Y	50.7	12.1	0.0 / 0.3	0.0	42.8	37.7	HS	MS	HS
BC	Schillinger 5220.RC	50.4	12.5	2.8 / 5.0	0.8	35.4	29.9	HS	HS	HS
BC	Armor X1313 RR2	50.3	12.5	0.8 / 3.7	2.5	37.9	31.8	S	MS	HS
C	Hornbeck HBK RY5221	49.6	13.1	0.0 / 0.3	0.0	34.5	31.0	HS	HS	HS
	Average (bu/a)	**52.1**	**12.6**			**40.4**	**34.2**			

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Disease ratings for Frogeye Leaf Spot and SDS are from 0-10, where 0=no disease & 10=maximum level of disease or plant death. SDS = Sudden Death Syndrome.

¶ Sprayed plots at Milan treated with Headline @ 6 oz./Acre tank mixed with Topgaurd @ 6 oz./Acre + 1% Induce at 20 gpa at R3 growth stage.

Disease ratings and yield data compiled by Dr. Melvin Newman and Dr. Heather Young-Kelly from replicated plots at the AgResearch and Education Center at Milan and Dyersburg.

SCN ratings; HS = highly susceptible, S = susceptible, MS = moderately susceptible, MR = moderately resistant R = resistant.

Race 2 (HG Type 1.2.5.7); Race 3 (HG Type 7); Race 5 (HG Type 2.5.7)

SCN Greenhouse Ratings compiled by Dr. Pat Donald, Research Plant Path., USDA-ARS, West Tennessee AgResearch and Education Center.

MS= Varieties with one or more letters in common are not statistically different at the .05 level of probability.

Varieties denoted with an asterisk (*) and/or (**) were in the top performing group in 2011 and/or 2010, respectively.

Data provided by Robert C. Williams, Ext. Area Specialist, Grain Crops.

Table 37. Overall average yields † and moistures of 10 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in County Standard Tests (n=10) and AgResearch and Education Centers (n=6) in Tennessee in 2012.

		Averages of CST & REC Tests		County Standard Trials		AgResearch and Education Center Trials	
Brand	**Variety ‡**	**Avg. Yield**	**Moisture**	**Avg. Yield**	**Moisture**	**Avg. Yield**	**Moisture**
		bu/a	%	bu/a	%	bu/a	%
Asgrow	AG5332 GENRR2Y	58	11.7	55	12.0	61	11.5
Asgrow	AG5532 GENRR2Y (STS)	58	12.1	53	12.7	63	11.5
Armor	53-R15 (RR2Y)	58	12.3	54	12.6	62	12.0
Croplan	R2C 5081 (RR2Y)	57	12.1	52	12.1	63	12.0
Armor	X1313 (RR2Y)	56	12.0	50	12.5	61	11.4
Terral-REV Brand	51R53 (RR)	55	12.1	51	12.2	60	12.0
NK	S 51-H9 (RR2Y)	55	11.8	51	12.1	60	11.6
Progeny	5111 RY (RR2Y)	54	12.2	51	12.5	58	11.9
Schillinger Seed	5220 RC	54	12.1	50	12.5	58	11.7
Hornbeck	HBK RY 5221 (RR2Y)	54	12.6	50	13.1	58	12.1
Average (bu/a)		**56**	**12.1**	**52**	**12.4**	**60**	**11.8**

† Yields have been adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 38. Mean yields † of 14 Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in six environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Knoxville	Springfield Irr.	Springfield Non-Irr.	Milan Irr.	Milan Non-Irr.	Ames
					bu/a			
Asgrow	AG5633 GENRR2Y	65 ± 2	75	75	51	75	64	49
Progeny	5655 RY (RR2Y)	64 ± 2	79	79	39	75	68	47
Progeny	5610 RY (RR2Y)	64 ± 2	80	76	38	72	69	48
Progeny	5711 RY (RR2Y)	63 ± 2	73	72	50	86	60	38
Asgrow	AG5732 GENRR2Y	62 ± 2	82	70	46	69	63	40
Terral-REV Brand	59R13 (RR)	60 ± 2	62	72	51	70	53	50
Asgrow	AG5632 GENRR2Y (STS)	59 ± 2	70	69	42	65	62	45
Terral-REV Brand	56R63 (RR)	59 ± 2	75	61	48	61	57	52
USG	Allen (RR)	59 ± 2	80	65	41	70	55	42
USG	75J62R (RR2Y/STS)	59 ± 2	80	70	42	67	51	43
Terral-REV Brand	57R21 (RR)	57 ± 2	74	61	42	66	56	44
Progeny	5811 RY (RR2Y)	57 ± 2	63	69	55	54	60	42
AR	R09-1607RR	57 ± 2	67	69	45	57	54	47
TN Exp	TN09-47,326 (RR2Y)	56 ± 2	79	56	41	58	62	40
Average (bu/a)		**60**	**74**	**69**	**45**	**67**	**60**	**44**
L.S.D.$_{.05}$ (bu/a)		**5**	**13**	**12**	**10**	**14**	**12**	**8**
C.V. (%)		**11.2**	**10.2**	**10.1**	**12.5**	**11.9**	**11.6**	**9.9**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 39. Mean yields † and agronomic characteristics of 14 Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in six environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Moisture § (n=6)	Lodging (n=4)	Height (n=5)	Maturity (n=5)	Shattering (n=3)	Seed Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-------- Score --------		%	%
Asgrow	AG5633 GENRR2Y	65 ± 2	11.6	1.8	41	158	1.0	3.2	38.5	21.2
Progeny	5655 RY (RR2Y)	64 ± 2	11.7	1.9	45	159	1.0	2.7	38.6	21.9
Progeny	5610 RY (RR2Y)	64 ± 2	13.0	1.9	41	160	1.0	2.8	39.0	21.1
Progeny	5711 RY (RR2Y)	63 ± 2	11.4	2.0	40	159	1.0	3.2	37.3	21.9
Asgrow	AG5732 GENRR2Y	62 ± 2	11.7	2.2	41	157	1.0	2.8	37.9	22.9
Terral-REV Brand	59R13 (RR)	60 ± 2	11.8	1.8	44	161	1.0	2.3	38.8	21.6
Asgrow	AG5632 GENRR2Y (STS)	59 ± 2	12.1	1.7	41	159	1.0	2.3	38.7	21.6
Terral-REV Brand	56R63 (RR)	59 ± 2	11.6	2.3	44	159	1.0	3.3	39.9	21.2
USG	Allen (RR)	59 ± 2	13.1	2.0	42	161	1.0	2.7	40.4	20.9
USG	75J62R (RR2Y/STS)	59 ± 2	12.8	2.3	56	159	1.0	3.3	41.5	20.3
Terral-REV Brand	57R21 (RR)	57 ± 2	12.8	2.2	48	159	1.0	3.2	39.1	22.1
Progeny	5811 RY (RR2Y)	57 ± 2	12.9	2.1	42	158	1.0	2.8	40.4	20.9
AR	R09-1607RR	57 ± 2	12.4	1.8	41	158	1.0	2.8	40.5	20.8
TN Exp	TN09-47,326 (RR2Y)	56 ± 2	14.8	2.2	43	162	1.0	3.8	38.4	21.7
	Average	**60**	**12.4**	**2.0**	**44**	**159**	**1.0**	**2.9**	**39.2**	**21.4**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle >45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5=95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Table 40. Mean yields † of six Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=12)	Knoxville	Springfield		Milan		Ames
				Irr.	Non-Irr.	Irr.	Non-Irr.	
		bu/a						
Progeny	5711 RY (RR2Y)	63 ± 1	82	65	59	78	53	41
Progeny	5655 RY (RR2Y)	61 ± 1	81	67	49	67	57	46
Progeny	5610 RY (RR2Y)	59 ± 1	71	68	47	67	56	43
USG	Allen (RR)	58 ± 1	81	58	51	66	49	41
Asgrow	AG5632 GENRR2Y (STS)	57 ± 1	72	65	48	59	52	42
Progeny	5811 RY (RR2Y)	54 ± 1	66	56	56	53	51	43
Average (bu/a)		**59**	**76**	**63**	**52**	**65**	**53**	**43**
L.S.D.$_{.05}$ (bu/a)		**4**	**12**	**11**	**8**	**10**	**9**	**7**
C.V. (%)		**10.9**	**10.6**	**11.5**	**9.5**	**10.8**	**11.2**	**9.7**

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (RR), then it is not part of the variety name.

Table 41. Mean yields † and agronomic characteristics of six Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=12)	Moisture § (n=12)	Lodging (n=5)	Height (n=11)	Maturity (n=10)	Shattering (n=6)	Seed Quality (n=2)	Protein (n=2)	Oil (n=2)	Frogeye (n=1)
		bu/a	%	Score	in.	DAP	Score		%	%	Score
Progeny	5711 RY (RR2Y)	63 ± 1	12.1	2.1	40	154	1.0	2.8	37.2	22.0	1.2
Progeny	5655 RY (RR2Y)	61 ± 1	12.1	1.7	43	153	1.0	2.7	38.1	22.1	1.5
Progeny	5610 RY (RR2Y)	59 ± 1	12.9	1.8	41	154	1.0	2.3	38.1	21.4	1.0
USG	Allen (RR)	58 ± 1	13.3	1.8	42	156	1.0	2.3	39.8	21.1	1.0
Asgrow	AG5632 GENRR2Y (STS)	57 ± 1	12.2	1.7	42	152	1.0	2.1	38.1	21.9	1.7
Progeny	5811 RY (RR2Y)	54 ± 1	12.6	2.0	41	152	1.0	2.5	39.9	21.0	1.0
	Average	**59**	**12.5**	**1.9**	**42**	**154**	**1.0**	**2.5**	**38.5**	**21.6**	**1.2**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5 = 95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 9/1/11.

Table 42. Mean yields † of two Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2010-2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=18)	Knoxville	Springfield Irr.	Springfield Non-Irr.	Milan Irr.	Milan Non-Irr.	Ames
		bu/a						
Progeny	5610 RY (RR2Y)	55 ± 1	76	55	40	65	51	43
USG	Allen (RR)	53 ± 1	82	48	42	64	43	39
Average (bu/a)		**54**	**79**	**52**	**41**	**65**	**47**	**41**
L.S.D.$_{.05}$ (bu/a)		**4**	**11**	**10**	**7**	**9**	**9**	**8**
C.V. (%)		**11.0**	**9.8**	**11.8**	**9.8**	**10.3**	**11.9**	**12.2**

Table 43. Mean yields † and agronomic characteristics of two Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2010 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=18)	Moisture § (n=18)	Lodging (n=9)	Height (n=16)	Maturity (n=15)	Shattering (n=9)	Leaf Retention (n=1)	Seed Quality (n=3)	Protein (n=3)	Oil (n=3)	Frogeye (n=1)
		bu/a	%	Score	in.	DAP	Score			%	%	Score
Progeny	5610 RY (RR2Y)	55 ± 1	12.0	1.8	39	150	1.0	1.2	2.3	38.1	21.7	1.0
USG	Allen (RR)	53 ± 1	13.0	1.8	40	153	1.0	1.7	2.2	39.8	21.2	1.0
	Average	**54**	**12.5**	**1.8**	**40**	**152**	**1.0**	**1.5**	**2.3**	**39.0**	**21.5**	**1.0**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5 = 95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 9/1/11.

Table 44. Mean yields † of 23 Maturity Group IV Liberty Link soybean varieties evaluated in six environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Knoxville	Springfield Irr.	Springfield Non-Irr.	Milan Irr.	Milan Non-Irr.	Ames
		----------bu/a----------						
GoSoy	4912 LL	61 ± 1	59	70	44	73	70	47
Halo	5:01 (LL)	60 ± 1	65	79	45	62	67	44
Delta Grow	4967 LL	60 ± 1	62	75	44	64	69	44
Progeny	4819 LL	57 ± 1	56	75	44	58	67	41
Dyna-Gro	S48LL23 (LL)	56 ± 1	57	68	49	54	66	45
Caverndale Farms	CF 485 LLn	56 ± 1	53	73	43	57	69	43
Halo	X478 (LL)	56 ± 1	58	68	45	56	65	41
GoSoy	4812 LL	55 ± 1	55	70	48	57	65	37
Progeny	4928 LL	55 ± 1	58	67	42	62	62	42
Caverndale Farms	CF 465 LLn	55 ± 1	58	65	43	55	64	45
Halo	4:94 (LL)	55 ± 1	59	72	44	54	60	40
Beck's	483NL (LL)	55 ± 1	59	62	45	62	64	38
Delta Grow	4867 LL	55 ± 1	54	72	43	49	70	40
Delta Grow	4990 LL	55 ± 1	55	70	44	52	60	46
USG	74G82L (LL)	54 ± 1	61	69	46	50	62	39
GoSoy	4711 LL	54 ± 1	58	60	42	58	64	42
Go-Soy	4910 LL	54 ± 1	59	65	42	48	67	43
Halo	4:95 (LL)	54 ± 1	57	63	42	60	62	39
Halo	X456 (LL)	54 ± 1	50	58	38	64	66	46
GoSoy	4411 LL	53 ± 1	53	60	42	56	68	43
USG	74G99L (LL)	53 ± 1	58	62	43	53	62	42
Beck's	456NL (LL)	53 ± 1	46	59	36	64	67	46
Halo	4:65 (LL)	53 ± 1	48	59	40	58	68	43
Average (bu/a)		**55**	**56**	**67**	**43**	**57**	**65**	**42**
L.S.D.$_{.05}$ (bu/a)		**3**	**6**	**11**	**8**	**13**	**6**	**4**
C.V. (%)		**9.5**	**6.8**	**10.3**	**10.9**	**13.4**	**5.9**	**6.2**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (LL), then it is not part of the variety name.

Table 45. Mean yields † and agronomic characteristics of 23 Maturity Group IV Liberty Link soybean varieties evaluated in six environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Moisture § (n=6)	Lodging (n=4)	Height (n=6)	Maturity (n=5)	Shattering (n=3)	Seed Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-------- Score --------		%	%
GoSoy	4912 LL	61 ± 1	17.4	2.2	46	147	1.0	1.8	37.0	23.6
Halo	5:01 (LL)	60 ± 1	16.4	2.0	46	146	1.0	2.0	36.4	23.7
Delta Grow	4967 LL	60 ± 1	15.3	2.2	45	146	1.0	2.0	36.7	23.4
Progeny	4819 LL	57 ± 1	13.3	2.7	40	141	1.0	3.3	38.6	23.2
Dyna-Gro	S48LL23 (LL)	56 ± 1	12.5	2.7	40	141	1.0	2.7	38.8	23.1
Caverndale Farms	CF 485 LLn	56 ± 1	13.9	2.8	40	141	1.0	3.3	38.8	23.2
Halo	X478 (LL)	56 ± 1	12.9	2.8	40	141	1.0	2.3	38.3	23.4
GoSoy	4812 LL	55 ± 1	13.7	2.7	40	141	1.0	2.7	38.0	23.6
Progeny	4928 LL	55 ± 1	14.5	1.9	43	144	1.0	2.0	38.1	22.6
Caverndale Farms	CF 465 LLn	55 ± 1	12.8	2.6	45	139	1.0	2.7	39.2	22.4
Halo	4:94 (LL)	55 ± 1	13.8	2.1	42	143	1.0	1.8	38.4	22.6
Beck's	483NL (LL)	55 ± 1	13.9	2.2	39	142	1.0	3.0	38.7	23.2
Delta Grow	4867 LL	55 ± 1	13.9	2.6	39	141	1.0	2.5	38.9	22.9
Delta Grow	4990 LL	55 ± 1	13.3	1.8	42	142	1.0	2.0	38.0	22.5
USG	74G82L (LL)	54 ± 1	13.6	3.2	39	141	1.0	3.0	38.6	23.3
GoSoy	4711 LL	54 ± 1	12.7	2.9	47	140	1.0	2.3	38.8	22.6
Go-Soy	4910 LL	54 ± 1	15.2	2.4	41	146	1.0	2.0	39.4	22.8
Halo	4:95 (LL)	54 ± 1	13.7	2.7	39	142	1.0	2.8	39.0	23.2
Halo	X456 (LL)	54 ± 1	12.6	2.2	41	137	1.0	4.5	40.6	22.6
GoSoy	4411 LL	53 ± 1	12.9	2.4	42	137	1.0	4.2	39.5	23.2
USG	74G99L (LL)	53 ± 1	13.3	2.3	43	143	1.0	2.0	38.2	22.6
Beck's	456NL (LL)	53 ± 1	12.7	2.0	40	139	1.0	4.5	41.4	22.3
Halo	4:65 (LL)	53 ± 1	13.0	2.2	42	137	1.0	4.3	41.7	22.3
	Average	**55**	**13.8**	**2.4**	**42**	**142**	**1.0**	**2.8**	**38.7**	**23.0**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle >45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5=95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Table 46. Mean yields † of six Maturity Group IV Liberty Link soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=10)	Knoxville	Springfield		Milan	
				Irr.	Non-Irr.	Irr.	Non-Irr.
		----------bu/a----------					
GoSoy	4411 LL	52 ± 1	54	56	37	58	56
Progeny	4928 LL	51 ± 1	52	59	35	56	53
Halo	4:94 (LL)	51 ± 1	52	60	38	52	52
Halo	4:65 (LL)	50 ± 1	51	54	37	56	54
USG	74G99L (LL)	50 ± 1	49	62	38	50	51
Beck's	456NL (LL)	50 ± 1	47	56	31	63	52
Average (bu/a)		**51**	**51**	**58**	**36**	**56**	**53**
L.S.D.$_{.05}$ (bu/a)		**4**	**7**	**11**	**8**	**10**	**5**
C.V. (%)		**10.2**	**8.6**	**11.5**	**13.5**	**10.8**	**5.9**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 47. Mean yields † and agronomic characteristics of six Maturity Group IV Liberty Link soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=10)	Moisture § (n=10)	Lodging (n=6)	Height (n=10)	Maturity (n=10)	Shattering (n=5)	Seed Quality (n=2)	Protein (n=2)	Oil (n=2)	Frogeye (n=1)
		bu/a	%	Score	in.	DAP	----------	Score -----	%	%	Score
GoSoy	4411 LL	52 ± 1	12.7	2.4	41	133	1.0	3.3	39.4	23.2	1.0
Progeny	4928 LL	51 ± 1	12.9	1.8	41	139	1.0	1.9	38.3	22.4	1.2
Halo	4:94 (LL)	51 ± 1	13.1	2.0	42	139	1.0	1.8	38.3	22.4	1.0
Halo	4:65 (LL)	50 ± 1	12.5	2.3	41	133	1.1	3.3	40.3	22.8	1.2
USG	74G99L (LL)	50 ± 1	13.9	2.1	42	140	1.0	2.0	38.1	22.7	1.2
Beck's	456NL (LL)	50 ± 1	13.1	2.1	40	134	1.0	3.5	40.5	22.4	1.0
	Average	**51**	**13.0**	**2.1**	**41**	**136**	**1.0**	**2.6**	**39.2**	**22.7**	**1.1**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5 = 95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 9/1/11.

Table 48. Mean yields † of four Maturity Group IV Liberty Link soybean varieties evaluated in five environments (n=15) in Tennessee for three years, 2010 - 2012.

Brand	Variety	Avg. Yield ± Std Err. (n=15)	Knoxville	Springfield		Milan	
				Irr.	Non-Irr.	Irr.	Non-Irr.
		----------	----------	bu/a	----------	----------	----------
Halo	4:65 (LL)	47 ± 1	47	48	33	54	52
Halo	4:94 (LL)	46 ± 1	50	51	33	48	47
USG	74G99L (LL)	46 ± 1	48	54	32	48	46
Progeny	4928 LL	46 ± 1	49	52	30	49	48
Average (bu/a)		**46**	**49**	**51**	**32**	**50**	**48**
L.S.D.$_{.05}$ (bu/a)		**4**	**6**	**9**	**8**	**11**	**4**
C.V. (%)		**11.2**	**8.5**	**11.7**	**15.1**	**13.2**	**6.1**

Table 49. Mean yields † and agronomic characteristics of four Maturity Group IV Liberty Link soybean varieties evaluated in five environments (n=15) in Tennessee for three years, 2010 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=15)	Moisture § (n=15)	Lodging (n=9)	Height (n=15)	Maturity (n=15)	Shattering (n=8)	Leaf Retention (n=2)	Seed Quality (n=3)	Protein (n=3)	Oil (n=3)	Frogeye (n=1)
		bu/a	%	Score	in.	DAP	----------	Score	----------	%	%	Score
Halo	4:65 (LL)	47 ± 1	12.2	2.1	41	131	1.1	1.2	3.2	40.3	23.0	1.2
Halo	4:94 (LL)	46 ± 1	12.6	1.9	41	136	1.0	1.3	2.0	38.9	22.3	1.0
USG	74G99L (LL)	46 ± 1	13.2	1.9	41	137	1.0	1.2	2.3	38.8	22.4	1.2
Progeny	4928 LL	46 ± 1	12.5	1.7	40	137	1.0	1.3	2.1	38.7	22.4	1.2
	Average	**46**	**12.6**	**1.9**	**41**	**135**	**1.0**	**1.3**	**2.4**	**39.2**	**22.5**	**1.2**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5 = 95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 9/1/11.

Table 50. Yields † of 10 Late Maturity Group IV (4.6 - 4.9) Liberty-Link (LL) soybean varieties in 10 County Standard Tests in Tennessee and Kentucky during 2012.

MS	Brand/Variety	Avg. Yield	Moist‡	Crockett	Dyer	Franklin	(KY) Fulton	Gibson	Lake (Dickey)	Lake (Hulme)	REC at Milan	Obion	Shelby
		bu/a	%	5/26 §	6/8	6/8	5/14	4/23	4/26	5/23	5/25	5/15	4/27
A	*Warren Seed Micah 4900LL	55.5	10.9	50.2	64.2	54.5	45.7	63.4	57.7	59.3	63.5	65.4	31.0
A	**Progeny 4928LL	55.3	10.9	56.3	58.6	63.7	51.0	55.3	50.0	66.9	62.4	64.2	25.0
AB	**USG 74G99LL	54.9	10.9	49.1	60.3	61.5	48.1	60.2	50.8	65.9	65.3	62.8	24.6
AB	Warren Seed Micah 4800LL	54.8	11.0	45.1	56.8	58.5	49.6	60.6	52.8	65.2	65.5	66.5	27.9
AB	*Stratton Seed Go-Soy 4910LL	54.4	11.6	49.7	65.1	60.8	47.6	59.6	50.3	57.9	63.8	58.9	30.1
ABC	*US Seeds Halo 4:94	53.7	11.0	40.1	60.6	60.6	48.7	59.7	50.7	60.8	63.2	65.9	26.7
BCD	Warren Seed Micah 4600LL	51.0	11.4	34.2	51.7	62.5	47.2	50.7	37.8	74.1	65.2	62.0	24.6
CD	Stratton Seed Go-Soy 4810LL	49.9	10.8	37.4	51.7	60.3	41.2	49.6	49.9	63.2	62.3	59.1	24.4
D	US Seeds Halo 4:65	49.3	10.9	41.0	49.2	53.7	44.1	47.5	34.9	73.4	68.4	57.7	22.9
D	Ag Venture 43A4 LL	46.8	12.1	38.6	50.2	56.9	41.6	38.4	34.0	70.1	62.2	56.0	20.5
	Average (bu/a)	**52.6**	**11.1**	**44.2**	**56.8**	**59.3**	**46.5**	**54.5**	**46.9**	**65.7**	**64.2**	**61.8**	**25.8**

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Planting date.

Each variety was evaluated in a large strip-plot at each loction, thus each county test was considered as one replication of the test in calculating the average yield and in conducting the statistical analysis to determine significant differences (MS).

Varieties denoted with an asterisks (*) and/or (**) were in the top performing group in 2011 and/or 2010, respectively.

MS= Varieties with any MS letter in common are not statistically different at the 5% level of probability.

Data provided by Robert C. Williams, Ext. Area Specialist, Grain Crops, and the extension agents in the counties shown above.

Table 51. Yields † and disease ratings § of 10 Late Maturity Group IV (4.6 - 4.9) Liberty Link (LL) soybean varieties evaluated in 10 Tennessee and Kentucky County Standard Tests during 2012.

		CST Avg. Yield	-- AgResearch and Education Center at Milan --							
MS	Brand/Variety	(n=10)	Moisture ‡	Frogeye	SDS	Treated ¶ Yield	Untreated Yield	Race 2	SCN Race 3	Race 5
		bu/a	%	2012	2012	bu/a	bu/a	2012	2012	2012
A	*Warren Seed Micah 4900LL	55.5	10.9	0.0	2.0	27.9	25.0	S	HS	HS
A	**Progeny 4928LL	55.3	10.9	0.0	2.0	27.9	28.4	HS	HS	S
AB	**USG 74G99LL	54.9	10.9	0.0	4.0	31.8	26.8	S	HS	S
AB	Warren Seed Micah 4800LL	54.8	11.0	0.0	5.0	28.8	26.5	S	HS	HS
AB	*Stratton Seed Go-Soy 4910LL	54.4	11.6	2.0	7.0	34.5	32.4	S	HS	HS
ABC	*US Seeds Halo 4:94	53.7	11.0	0.0	5.0	27.5	27.8	S	HS	S
BCD	Warren Seed Micah 4600LL	51.0	11.4	0.0	4.0	30.6	27.8	S	MS	HS
CD	Stratton Seed Go-Soy 4810LL	49.9	10.8	0.0	5.0	28.7	26.6	S	HS	HS
D	US Seeds Halo 4:65	49.3	10.9	0.0	4.0	34.0	31.5	MS	MS	S
D	Ag Venture 43A4 LL	46.8	12.1	0.0	3.0	24.3	24.0	HS	MS	S
	Average (bu/a)	**52.6**	**11.1**			**29.6**	**27.7**			

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Disease ratings for Frogeye Leaf Spot and SDS are from 0-10, where 0=no disease & 10=maximum level of disease or plant death. SDS = Sudden Death Syndrome.

¶ Sprayed plots at Milan treated with Headline @ 6 oz./Acre tank mixed with Topgaurd @ 6 oz./Acre + 1% Induce at 20 gpa at R3 growth stage.

Disease ratings and yield data compiled by Dr. Melvin Newman and Dr. Heather Young-Kelly from replicated plots at the AgResearch and Education Center at Milan.

SCN ratings; HS = highly susceptible, S = susceptible, MS = moderately susceptible, MR = moderately resistant R = resistant.

Race 2 (HG Type 1.2.5.7); Race 3 (HG Type 7); Race 5 (HG Type 2.5.7)

SCN Greenhouse Ratings compiled by Dr. Pat Donald, Research Plant Path., USDA-ARS, West Tennessee AgResearch and Education Center.

MS= Varieties with one or more letters in common are not statistically different at the .05 level of probability.

Varieties denoted with an asterisk (*) and/or (**) were in the top performing group in 2011 and/or 2010, respectively.

Data provided by Robert C. Williams, Ext. Area Specialist, Grain Crops.

Table 52. Overall average yields † and moistures of five Maturity Group IV Liberty Link soybean varieties evaluated in County Standard Tests (n=10) and AgResearch and Education Centers (n=6) in Tennessee in 2012.

		Averages of CST & REC Tests		County Standard Trials		AgResearch and Education Center Trials	
Brand	**Variety ‡**	**Avg. Yield**	**Moisture**	**Avg. Yield**	**Moisture**	**Avg. Yield**	**Moisture**
		bu/a	%	bu/a	%	bu/a	%
Progeny	4928 LL	55	12.7	55	10.9	55	14.5
Halo	4:94 (LL)	54	12.4	54	11.0	55	13.8
Go-Soy	4910 LL	54	13.4	54	11.6	54	15.2
USG	74G99L (LL)	54	12.1	55	10.9	53	13.3
Halo	4:65 (LL)	51	12.0	49	10.9	53	13.0
Average (bu/a)		**54**	**12.5**	**54**	**11.1**	**54**	**14.0**

† Yields have been adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 53. Mean yields † of 11 Maturity Group V Liberty Link soybean varieties evaluated in six environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Knoxville	Springfield Irr.	Springfield Non-Irr.	Milan Irr.	Milan Non-Irr.	Ames
				bu/a				
Halo	5:26 (LL)	58 ± 1	63	66	40	66	68	47
Halo	5:45 (LL)	58 ± 1	58	60	39	74	71	47
Halo	5:01 (LL)	57 ± 1	62	61	45	63	66	44
Progeny	5160 LL	57 ± 1	59	63	34	69	70	45
Halo	X55 (LL)	56 ± 1	57	52	31	79	73	45
Halo	5:25 (LL)	56 ± 1	61	58	37	65	66	48
GoSoy	5010 LL	55 ± 1	56	52	47	63	67	47
Progeny	5460 LL	55 ± 1	58	60	36	64	64	49
GoSoy	5410 LL	55 ± 1	59	65	42	57	62	44
Progeny	5960 LL	55 ± 1	57	56	37	72	67	39
Delta Grow	5461 LL	54 ± 1	61	54	42	61	64	44
Average (bu/a)		**56**	**59**	**59**	**39**	**67**	**67**	**45**
L.S.D.$_{.05}$ (bu/a)		**4**	**8**	**13**	**9**	**13**	**6**	**7**
C.V. (%)		**10.0**	**8.3**	**12.9**	**13.6**	**10.6**	**5.6**	**9.1**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 54. Mean yields † and agronomic characteristics of 11 Maturity Group V Liberty Link soybean varieties evaluated in six environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Moisture § (n=6)	Lodging (n=4)	Height (n=6)	Maturity (n=5)	Shattering (n=3)	Seed Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-------- Score --------		%	%
Halo	5:26 (LL)	58 ± 1	11.6	1.5	36	150	1.0	1.5	39.3	22.9
Halo	5:45 (LL)	58 ± 1	11.9	1.5	39	154	1.0	1.5	40.4	21.4
Halo	5:01 (LL)	57 ± 1	11.9	2.1	48	151	1.0	1.8	37.3	23.5
Progeny	5160 LL	57 ± 1	11.8	1.7	32	152	1.0	1.8	39.4	22.5
Halo	X55 (LL)	56 ± 1	12.2	1.5	38	155	1.0	1.7	40.4	21.4
Halo	5:25 (LL)	56 ± 1	11.7	1.8	32	152	1.0	1.8	39.5	22.4
GoSoy	5010 LL	55 ± 1	12.1	1.9	41	152	1.0	1.5	40.1	22.5
Progeny	5460 LL	55 ± 1	11.9	1.8	44	150	1.0	1.5	38.2	22.9
GoSoy	5410 LL	55 ± 1	12.0	1.8	44	149	1.0	1.8	37.8	23.3
Progeny	5960 LL	55 ± 1	12.2	1.3	38	156	1.0	1.8	40.2	21.7
Delta Grow	5461 LL	54 ± 1	12.2	1.9	44	149	1.0	1.7	38.1	22.9
	Average	**56**	**12.0**	**1.7**	**40**	**152**	**1.0**	**1.7**	**39.2**	**22.5**

† All yields are adjusted to 13% moisture. Protein & Oil on dry weight basis.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle >45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5=95+% of seed are diseased or have split seed coats.

Table 55. Mean yields † of five Maturity Group V Liberty Link soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=10)	Knoxville	Springfield		Milan	
				Irr.	Non-Irr.	Irr.	Non-Irr.
		---bu/a---					
Progeny	5160 LL	53 ± 1	50	60	32	64	60
Progeny	5960 LL	53 ± 1	52	54	35	69	56
Halo	5:25 (LL)	52 ± 1	52	54	36	62	58
Delta Grow	5461 LL	50 ± 1	53	54	32	56	56
Progeny	5460 LL	50 ± 1	52	56	29	58	53
Average (bu/a)		**52**	**52**	**56**	**33**	**62**	**57**
L.S.D.$_{.05}$ (bu/a)		**3**	**6**	**9**	**7**	**9**	**5**
C.V. (%)		**9.1**	**7.4**	**10.5**	**13.1**	**8.7**	**6.4**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 56. Mean yields † and agronomic characteristics of five Maturity Group V Liberty Link soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=10)	Moisture § (n=10)	Lodging (n=8)	Height (n=10)	Maturity (n=10)	Shattering (n=4)	Seed Quality (n=2)	Protein (n=2)	Oil (n=2)	Frogeye (n=1)
		bu/a	%	Score	in.	DAP	------ Score -------		%	%	Score
Progeny	5160 LL	53 ± 1	11.8	1.5	32	148	1.0	1.9	39.7	22.4	1.2
Progeny	5960 LL	53 ± 1	12.6	1.3	37	151	1.0	2.0	40.2	21.4	1.0
Halo	5:25 (LL)	52 ± 1	11.9	1.7	33	148	1.0	2.3	40.1	22.2	1.0
Delta Grow	5461 LL	50 ± 1	12.2	1.6	42	145	1.0	2.4	38.4	22.7	1.2
Progeny	5460 LL	50 ± 1	12.1	1.5	42	146	1.0	2.0	38.3	22.8	1.5
	Average	**52**	**12.1**	**1.5**	**37**	**148**	**1.0**	**2.1**	**39.3**	**22.3**	**1.2**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5 = 95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 9/1/11.

Table 57. Mean yields † of four Maturity Group V Liberty Link soybean varieties evaluated in five environments (n=15) in Tennessee for three years, 2010 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=15)	Knoxville	Springfield Irr.	Springfield Non-Irr.	Milan Irr.	Milan Non-Irr.
				bu/a			
Progeny	5960 LL	49 ± 1	49	49	31	68	48
Progeny	5160 LL	48 ± 1	46	51	28	61	53
Halo	5:25 (LL)	48 ± 1	50	48	30	60	50
Progeny	5460 LL	45 ± 1	47	50	26	55	47
Average (bu/a)		**48**	**48**	**50**	**29**	**61**	**50**
L.S.D.$_{.05}$ (bu/a)		**3**	**5**	**7**	**6**	**9**	**5**
C.V. (%)		**9.5**	**7.5**	**10.1**	**14.3**	**9.6**	**6.9**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 58. Mean yields † and agronomic characteristics of four Maturity Group V Liberty Link soybean varieties evaluated in five environments (n=15) in Tennessee for three years, 2010 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=15)	Moisture § (n=15)	Lodging (n=11)	Height (n=15)	Maturity (n=15)	Shattering (n=7)	Leaf Retention (n=1)	Seed Quality (n=3)	Protein (n=3)	Oil (n=3)	Frogeye (n=1)
		bu/a	%	Score	in.	DAP	Score			%	%	Score
Progeny	5960 LL	49 ± 1	11.8	1.2	36	146	1.0	1.2	1.8	39.9	21.6	1.0
Progeny	5160 LL	48 ± 1	11.1	1.5	31	144	1.0	1.3	2.1	40.0	22.4	1.2
Halo	5:25 (LL)	48 ± 1	11.2	1.6	32	144	1.0	2.0	2.1	40.4	22.2	1.0
Progeny	5460 LL	45 ± 1	11.5	1.5	41	141	1.0	1.3	2.2	38.5	22.8	1.5
	Average	**48**	**11.4**	**1.5**	**35**	**144**	**1.0**	**1.5**	**2.1**	**39.7**	**22.3**	**1.2**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5 = 95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 9/1/11.

Table 59. Mean yields † of 10 Maturity Group IV Conventional, Liberty Link, and Roundup Ready soybean varieties evaluated in five environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=5)	Knoxville	Springfield		Milan	
				Irr.	Non-Irr.	Irr.	Non-Irr.
		----------bu/a----------					
NC Exp	NCC06-148	67 ± 2	73	77	41	71	71
Croplan	R2C 4541 (RR CHECK)	65 ± 2	52	79	35	80	78
GoSoy	4411 (LL CHECK)	65 ± 2	61	76	39	72	76
NC Exp	NCC06-339	65 ± 2	71	70	44	65	71
Armor	49-C3 (CV4)	62 ± 2	68	62	42	62	77
USG	74A91 (RR Check)	62 ± 2	59	74	36	75	66
AR	R05-4114	62 ± 2	63	67	29	83	69
TN Exp	TN09-029	60 ± 2	56	71	34	66	72
TN Exp	TN09-016	57 ± 2	54	59	35	75	64
KS	K07-1633	44 ± 2	28	52	25	62	54
Average (bu/a)		**61**	**59**	**69**	**36**	**71**	**70**
L.S.D.$_{.05}$ (bu/a)		**5**	**8**	**18**	**8**	**14**	**11**
C.V. (%)		**11.8**	**7.6**	**15.4**	**13.3**	**11.1**	**9.3**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (LL), then it is not part of the variety name.

Table 60. Mean yields † and agronomic characteristics of 10 Maturity Group IV Conventional, Liberty Link, and Roundup Ready soybean varieties evaluated in five environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=5)	Moisture § (n=5)	Lodging (n=4)	Height (n=5)	Maturity (n=5)	Shattering (n=3)	Seed Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-------- Score --------		%	%
NC Exp	NCC06-148	67 ± 2	14.1	1.7	37	144	1.0	1.5	39.1	22.1
Croplan	R2C 4541 (RR CHECK)	65 ± 2	13.3	2.0	43	138	1.0	3.3	39.2	22.4
GoSoy	4411 (LL CHECK)	65 ± 2	12.8	2.2	42	136	1.2	3.8	39.3	23.4
NC Exp	NCC06-339	65 ± 2	13.1	1.7	35	144	1.0	2.0	38.1	21.9
Armor	49-C3 (CV4)	62 ± 2	13.6	2.4	38	145	1.0	2.0	38.8	21.9
USG	74A91 (RR Check)	62 ± 2	13.6	2.1	45	141	1.0	1.8	38.1	22.9
AR	R05-4114	62 ± 2	14.6	2.0	36	146	1.0	1.2	40.4	20.9
TN Exp	TN09-029	60 ± 2	13.3	1.6	37	142	1.0	1.5	38.8	21.0
TN Exp	TN09-016	57 ± 2	13.7	1.3	36	144	1.0	1.7	37.8	21.7
KS	K07-1633	44 ± 2	13.1	2.0	37	132	1.2	4.3	41.9	22.0
	Average	**61**	**13.5**	**1.9**	**39**	**141**	**1.0**	**2.3**	**39.2**	**22.0**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle >45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5=95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Table 61. Mean yields † of four Maturity Group IV Conventional and Roundup Ready soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=10)	Knoxville	Springfield		Milan	
				Irr.	Non-Irr.	Irr.	Non-Irr.
		----------bu/a----------					
NC Exp	NCC06-339	57 ± 1	56	65	37	63	61
USG	74A91 (RR Check)	53 ± 1	51	64	33	66	54
TN Exp	TN09-029	52 ± 1	47	63	34	62	56
TN Exp	TN09-016	51 ± 1	44	56	32	67	54
Average (bu/a)		**53**	**50**	**62**	**34**	**65**	**56**
L.S.D.$_{.05}$ (bu/a)		**4**	**7**	**13**	**8**	**9**	**6**
C.V. (%)		**11.3**	**9.6**	**13.9**	**15.6**	**9.3**	**7.9**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 62. Mean yields † and agronomic characteristics of four Maturity Group IV Conventional and Roundup Ready soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=10)	Moisture § (n=10)	Lodging (n=6)	Height (n=10)	Maturity (n=10)	Shattering (n=5)	Seed Quality (n=2)	Protein (n=2)	Oil (n=2)	Frogeye (n=1)
		bu/a	%	Score	in.	DAP	------ Score -------		%	%	Score
NC Exp	NCC06-339	57 ± 1	13.8	1.5	35	140	1.0	1.8	39.1	21.3	1.7
USG	74A91 (RR Check)	53 ± 1	13.5	2.1	42	138	1.0	2.2	39.2	22.2	3.0
TN Exp	TN09-029	52 ± 1	13.1	1.4	37	138	1.0	1.5	38.8	20.6	1.0
TN Exp	TN09-016	51 ± 1	14.3	1.3	36	139	1.0	1.5	39.0	21.1	1.0
	Average	**53**	**13.7**	**1.6**	**38**	**139**	**1.0**	**1.8**	**39.0**	**21.3**	**1.7**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5 = 95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 9/1/11.

Table 63. Mean yields † of 22 Maturity Group V Conventional, Liberty Link, and Roundup Ready soybean varieties evaluated in five environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=5)	Knoxville	Springfield		Milan	
				Irr.	Non-Irr.	Irr.	Non-Irr.
		----------bu/a----------					
MO Exp	S08-X17371	67 ± 2	67	72	38	85	73
VA	Glenn	65 ± 2	62	60	48	79	74
NC Exp	NCC06-579	64 ± 2	69	63	48	69	73
TN Exp	TN09-008	64 ± 2	68	70	47	68	68
AR	Osage	64 ± 2	66	71	43	74	67
TN Exp	TN11-5140	64 ± 2	72	62	42	67	75
USDA-TN	JTN-5203	63 ± 2	68	72	41	68	64
TN Exp	TN11-5054	63 ± 2	67	55	48	73	69
Asgrow	AG5532 (RR CHECK)	62 ± 2	63	66	45	77	59
NC Exp	NCC07-7714	61 ± 2	61	63	44	75	64
NC Exp	NCC07-7506	61 ± 2	62	68	46	68	62
NC Exp	NCC06-2188	61 ± 2	65	54	43	73	70
TN Exp	TN11-5087	60 ± 2	62	55	43	71	70
AR	UA 5612	60 ± 2	63	64	43	66	63
AR	Ozark	60 ± 2	61	60	38	73	67
Progeny	5960 (LL Check)	60 ± 2	51	62	48	74	62
USDA-TN	JTN-5110	59 ± 2	67	63	39	60	67
Armor	49-C3 (CV5)	59 ± 2	61	56	45	68	66
USDA-TN	JTN-4408	57 ± 2	65	58	42	55	66
USG	Allen (RR Check)	57 ± 2	57	56	42	64	66
USDA-TN	JTN-5108	56 ± 2	64	53	51	53	58
USDA-TN	JTN-4307	55 ± 2	60	51	42	60	62
Average (bu/a)		**61**	**64**	**62**	**44**	**69**	**67**
L.S.D.$_{.05}$ (bu/a)		**4**	**6**	**14**	**9**	**11**	**7**
C.V. (%)		**9.8**	**5.9**	**13.6**	**12.5**	**9.9**	**6.1**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 64. Mean yields † and agronomic characteristics of 22 Maturity Group V Conventional, Liberty Link, and Roundup Ready soybean varieties evaluated in five environments in Tennessee during 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=5)	Moisture § (n=5)	Lodging (n=4)	Height (n=5)	Maturity (n=5)	Shattering (n=3)	Seed Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-------- Score --------		%	%
MO Exp	S08-X17371	67 ± 2	12.5	2.2	44	152	1.0	2.0	37.3	23.1
VA	Glenn	65 ± 2	12.5	2.4	34	152	1.0	1.7	40.1	21.4
NC Exp	NCC06-579	64 ± 2	14.4	2.3	42	157	1.0	2.8	41.0	21.3
TN Exp	TN09-008	64 ± 2	12.1	2.0	36	153	1.0	1.7	37.7	22.1
AR	Osage	64 ± 2	11.5	1.9	34	152	1.0	1.7	41.6	21.1
TN Exp	TN11-5140	64 ± 2	14.3	2.4	40	158	1.0	2.3	39.6	22.5
USDA-TN	JTN-5203	63 ± 2	11.9	2.2	37	152	1.0	1.7	39.6	21.9
TN Exp	TN11-5054	63 ± 2	12.3	2.1	40	153	1.0	1.3	40.2	21.8
Asgrow	AG5532 (RR CHECK)	62 ± 2	11.9	2.2	39	153	1.0	1.7	39.1	22.0
NC Exp	NCC07-7714	61 ± 2	12.0	2.3	37	149	1.0	2.0	38.8	22.4
NC Exp	NCC07-7506	61 ± 2	12.2	2.9	36	151	1.0	1.5	39.3	22.4
NC Exp	NCC06-2188	61 ± 2	12.1	2.5	42	154	1.0	1.5	40.4	21.3
TN Exp	TN11-5087	60 ± 2	12.4	1.9	38	153	1.0	1.3	40.9	21.3
AR	UA 5612	60 ± 2	11.9	2.5	39	154	1.0	1.5	39.0	21.7
AR	Ozark	60 ± 2	14.0	2.0	37	152	1.0	1.2	38.6	22.2
Progeny	5960 (LL Check)	60 ± 2	11.9	1.7	38	156	1.0	1.5	40.1	21.4
USDA-TN	JTN-5110	59 ± 2	12.8	2.4	37	152	1.0	1.8	40.0	21.8
Armor	49-C3 (CV5)	59 ± 2	12.4	3.1	39	150	1.0	2.2	39.1	21.8
USDA-TN	JTN-4408	57 ± 2	11.6	2.7	39	149	1.0	2.0	40.2	21.6
USG	Allen (RR Check)	57 ± 2	13.3	2.3	40	157	1.0	1.8	40.1	21.6
USDA-TN	JTN-5108	56 ± 2	11.0	2.5	36	152	1.0	1.8	40.6	21.1
USDA-TN	JTN-4307	55 ± 2	12.0	2.3	40	149	1.0	1.3	40.3	21.9
	Average	**61**	**12.4**	**2.3**	**38**	**153**	**1.0**	**1.7**	**39.7**	**21.8**

† All yields are adjusted to 13% moisture. Protein & Oil on dry weight basis.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle >45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5=95+% of seed are diseased or have split seed coats.

Table 65. Mean yields † of 11 Maturity Group V Conventional and Roundup Ready soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=10)	Knoxville	Springfield		Milan	
				Irr.	Non-Irr.	Irr.	Non-Irr.
		----------bu/a----------					
NC Exp	NCC06-579	59 ± 1	62	62	43	70	62
AR	Osage	57 ± 1	57	64	37	69	59
NC Exp	NCC06-2188	57 ± 1	55	58	41	69	59
TN Exp	TN09-008	56 ± 1	55	60	37	67	60
VA	Glenn	56 ± 1	52	56	37	71	63
USG	Allen (RR Check)	55 ± 1	54	58	39	66	59
AR	UA 5612	55 ± 1	57	59	40	64	55
AR	Ozark	54 ± 1	53	60	33	66	58
USDA-TN	JTN-5203	54 ± 1	54	61	32	67	55
USDA-TN	JTN-5110	52 ± 1	55	56	33	59	57
USDA-TN	JTN-4408	51 ± 1	54	53	35	58	56
Average (bu/a)		**55**	**55**	**59**	**37**	**66**	**58**
L.S.D.$_{.05}$ (bu/a)		**3**	**5**	**10**	**7**	**9**	**6**
C.V. (%)		**9.2**	**6.2**	**11.6**	**12.7**	**8.8**	**6.5**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 66. Mean yields † and agronomic characteristics of 11 Maturity Group V Conventional and Roundup Ready soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2011 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=10)	Moisture § (n=10)	Lodging (n=8)	Height (n=10)	Maturity (n=10)	Shattering (n=4)	Seed Quality (n=2)	Protein (n=2)	Oil (n=2)	Frogeye (n=1)
		bu/a	%	Score	in.	DAP	------- Score -------		%	%	Score
NC Exp	NCC06-579	59 ± 1	14.0	1.9	41	152	1.0	2.6	40.8	21.1	2.2
AR	Osage	57 ± 1	12.0	1.5	33	147	1.0	1.9	42.2	20.8	1.2
NC Exp	NCC06-2188	57 ± 1	12.3	1.9	40	149	1.0	1.9	41.0	20.9	2.8
TN Exp	TN09-008	56 ± 1	12.5	1.6	36	149	1.0	2.2	38.2	21.6	1.0
VA	Glenn	56 ± 1	12.6	2.2	33	147	1.0	2.3	40.6	21.2	1.3
USG	Allen (RR Check)	55 ± 1	13.2	1.8	41	153	1.0	2.1	39.9	21.5	1.5
AR	UA 5612	55 ± 1	12.4	2.3	39	150	1.0	1.9	39.8	21.2	1.0
AR	Ozark	54 ± 1	13.5	2.0	37	147	1.0	1.8	39.0	21.9	1.0
USDA-TN	JTN-5203	54 ± 1	12.4	1.8	36	148	1.1	1.9	40.3	21.3	1.0
USDA-TN	JTN-5110	52 ± 1	12.7	1.9	36	148	1.0	1.8	40.1	21.6	1.2
USDA-TN	JTN-4408	51 ± 1	12.0	2.3	38	145	1.0	2.4	40.3	21.5	1.2
	Average	**55**	**12.7**	**1.9**	**37**	**149**	**1.0**	**2.1**	**40.2**	**21.3**	**1.4**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

§ Average moisture at harvest

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Maturity = days after planting (DAP).

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5 = 95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 9/1/11.

Table 67. Mean yields † of seven Maturity Group V Conventional soybean varieties and one Roundup Ready check evaluated in five environments (n=15) in Tennessee for three years, 2010 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=15)	Knoxville	Springfield Irr.	Springfield Non-Irr.	Milan Irr.	Milan Non-Irr.
				bu/a			
AR	Osage	53 ± 1	57	56	32	67	54
NC Exp	NCC06-2188	52 ± 1	53	52	35	69	52
AR	UA 5612	52 ± 1	58	53	36	66	48
USG	Allen (RR Check)	52 ± 1	55	51	34	68	50
VA	Glenn	51 ± 1	50	50	33	69	54
AR	Ozark	51 ± 1	53	52	30	67	52
TN Exp	TN09-008	50 ± 1	52	53	33	61	51
Average (bu/a)		**52**	**54**	**52**	**33**	**67**	**52**
L.S.D.$_{.05}$ (bu/a)		**3**	**5**	**8**	**6**	**9**	**5**
C.V. (%)		**9.6**	**6.8**	**11.2**	**13.8**	**9.6**	**6.9**

† All yields are adjusted to 13% moisture.

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 68. Mean yields † and agronomic characteristics of seven Maturity Group V Conventional soybean varieties and one Roundup Ready check evaluated in five environments (n=15) in Tennessee for three years, 2010 - 2012.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=15)	Moisture § (n=15)	Lodging (n=11)	Height (n=15)	Maturity (n=15)	Shattering (n=7)	Leaf Retention (n=1)	Seed Quality (n=3)	Protein (n=3)	Oil (n=3)	Frogeye (n=1)
		bu/a	%	Score	in.	DAP	Score			%	%	Score
AR	Osage	53 ± 1	11.3	1.4	32	144	1.0	2.0	2.1	42.2	21.0	1.2
NC Exp	NCC06-2188	52 ± 1	11.9	1.9	40	145	1.0	2.3	2.1	41.0	21.1	2.8
AR	UA 5612	52 ± 1	11.9	2.3	38	146	1.0	2.0	1.9	40.1	21.2	1.0
USG	Allen (RR Check)	52 ± 1	13.1	1.8	40	149	1.0	1.2	2.2	40.1	21.5	1.5
VA	Glenn	51 ± 1	12.1	2.2	32	143	1.0	1.3	2.1	40.6	21.5	1.3
AR	Ozark	51 ± 1	12.7	1.8	36	144	1.0	1.5	1.7	39.0	22.0	1.0
TN Exp	TN09-008	50 ± 1	12.0	1.7	35	145	1.0	1.7	2.0	38.3	21.9	1.0
	Average	**52**	**12.1**	**1.9**	**36**	**145**	**1.0**	**1.7**	**2.0**	**40.2**	**21.5**	**1.4**

† All yields are adjusted to 13% moisture. § Average moisture at harvest Maturity = days after planting (DAP).

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95+% of plants leaning at an angle ≥ 45°.

Shattering = 1 to 5 scale; where 1 = no shattering; 5 = 90+% of pods shattered.

Leaf Retention (at harvest) = 1 to 5 scale; where 1 = < 5% of plants holding leaves at harvest maturity; 5=95+% of plants holding leaves and green stems at harvest maturity.

Seed Quality = 1 to 5 scale; where 1 = < 5% of seeds showing disease or split seed coats; 5 = 95+% of seed are diseased or have split seed coats.

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing disease spots; 5 = 95% + of leaf surfaces containing disease spots. Ratings from Knoxville on 9/1/11.

Table 69. Characteristics of soybean varieties evaluated in Tennessee during 2012, as provided by the seed company.

Brand	Variety ‡	2012 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color	Seed Treatment
AGSouth Genetics	AGS 43R212 (RR2Y)	RR4E	4.3	RR2Y	3	R	MR	R	W	T	ApronMaxx/Cruiser
AGSouth Genetics	AGS 45R212 (RR2Y)	RR4E	4.5	RR2Y	3	R	MR	MR	W	T	ApronMaxx/Cruiser
AGSouth Genetics	AGS 47R212 (RR)	RR4L	4.7	RR1	3	R	MR	MR	P	LT	ApronMaxx/Cruiser
AR	R05-4114	CV4	4.9	---	---	---	---	---	P	G	Apron Maxx
AR	Osage	CV5	5.6	---	---	R	R	R	P	G	Apron Maxx
AR	Ozark	CV5	5.2	---	3	R	R	R	P	G	Apron Maxx
AR	UA 5612	CV5	5.6	---	---	R	---	---	P	G	Apron Maxx
AR	R04-1268RR	RR5E	5.4	RR	---	---	---	---	W	G	Apron Maxx
AR	R09-1607RR	RR5L	5.8	RR	---	---	---	---	P	G	Apron Maxx
Armor	49-C3 (CV4)	CV4	4.9	---	---	MR	R	R	W	T	ApronMaxx/Cruiser
Armor	49-C3 (CV5)	CV5	5.0	---	---	MR	R	R	W	T	ApronMaxx/Cruiser
Armor	39-R16 (RR)	RR3	3.9	RR2Y/STS	---	---	MR	MR	P	G	ApronMaxx/Cruiser
Armor	X1301 (RR2Y)	RR3	3.9	RR2Y	---	---	MR	---	P	LT	ApronMaxx/Cruiser
Armor	X1302-3 (RR2Y)	RR3	3.9	RR2Y	---	---	MR	---	W	G	ApronMaxx/Cruiser
Armor	44-R08 (RR2Y)	RR4E	4.4	RR2Y	---	M	MR	M	P	G	ApronMaxx/Cruiser
Armor	X1302-4 (RR2Y)	RR4E	4.0	RR2Y	---	---	MR	---	W	G	ApronMaxx/Cruiser
Armor	X1303 (RR2Y/STS)	RR4E	4.2	RR2Y/STS	---	MR	MR	MR	P	G	ApronMaxx/Cruiser
Armor	X1304 (RR2Y)	RR4E	4.4	RR2Y	---	R	MR	M	P	LT	ApronMaxx/Cruiser
Armor	X1305 (RR2Y/STS)	RR4E	4.4	RR2Y/STS	---	---	M	R	P	G	ApronMaxx/Cruiser
Armor	46-R42 (RR2Y)	RR4L	4.6	RR2Y	---	R	MR	MR	P	G	ApronMaxx/Cruiser
Armor	46-R64 (RR2Y)	RR4L	4.6	RR2Y	---	R	M	MR	P	LT	ApronMaxx/Cruiser
Armor	47-R17 (RR2Y)	RR4L	4.7	RR2Y	---	MR	MR	MR	P	G	ApronMaxx/Cruiser
Armor	48-R40 (RR2Y/STS)	RR4L	4.7	RR2Y/STS	---	R	M	MR	P	LT	ApronMaxx/Cruiser
Armor	48-R91 (RR2Y/STS)	RR4L	4.7	RR2Y/STS	---	R	M	MR	P	LT	ApronMaxx/Cruiser
Armor	49-R56 (RR2Y)	RR4L	4.9	RR2Y	---	MR	MR	MR	P	LT	ApronMaxx/Cruiser
Armor	X1307 (RR2Y/STS)	RR4L	4.8	RR2Y/STS	---	R	MR	MR	P	G	ApronMaxx/Cruiser
Armor	X1308 (RR2Y)	RR4L	4.8	RR2Y	---	---	M	---	P	LT	ApronMaxx/Cruiser
Armor	X1311 (RR2Y)	RR4L	4.9	RR2Y	---	MR	M	---	P	LT	ApronMaxx/Cruiser
Armor	X1312-4 (RR2Y)	RR4L	4.9	RR2Y	---	---	---	---	P	G	ApronMaxx/Cruiser
Armor	53-R15 (RR2Y)	RR5E	5.3	RR2Y	---	R	MR	MR	P	G	ApronMaxx/Cruiser
Armor	53-R88 (RR2Y/STS)	RR5E	5.4	RR2Y/STS	---	R	MR	M	P	G	ApronMaxx/Cruiser
Armor	55-R22 (RR2Y)	RR5E	5.5	RR2Y	---	R	MR	MR	P	G	ApronMaxx/Cruiser
Armor	X1312-5 (RR2Y)	RR5E	5.1	RR2Y	---	---	---	---	P	G	ApronMaxx/Cruiser
Armor	X1313 (RR2Y)	RR5E	5.3	RR2Y	---	R	M	MR	P	G	ApronMaxx/Cruiser
Armor	X1314 (RR2Y)	RR5E	5.4	RR2Y	---	R	M	MR	W	G	ApronMaxx/Cruiser
Armor	X1315 (RR2Y)	RR5E	5.4	RR2Y	---	R	M	M	W	G	ApronMaxx/Cruiser
Armor	X1316 (RR2Y)	RR5E	5.4	RR2Y	---	R	M	M	P	G	ApronMaxx/Cruiser
Asgrow	AG5532 (RR CHECK)	CV5	5.5	RR2Y/STS	S	MS	S	S	W	G	Acceleron
Asgrow	AG4232 GENRR2Y (STS)	RR4E	4.2	RR2Y/STS	R3	R	S	MR	P	LT	Acceleron
Asgrow	AG4433 GENRR2Y	RR4E	4.4	RR2Y	3	R	MR	S	---	LT	Acceleron
Asgrow	AG4533 GENRR2Y (STS)	RR4E	4.5	RR2Y/STS	3	R	MS	R	---	LT	Acceleron
Asgrow	AG4632 GENRR2Y (STS)	RR4L	4.6	RR2Y/STS	MR3	R	S	R	P	LT	Acceleron
Asgrow	AG4633 GENRR2Y	RR4L	4.6	RR2Y	3	R	MS	MS	---	LT	Acceleron

Table 69 (continued)

Brand	Variety ‡	2012 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color	Seed Treatment
Asgrow	AG4832 GENRR2Y (STS)	RR4L	4.8	RR2Y/STS	3	MS	S	MS	P	LT	Acceleron
Asgrow	AG4933 GENRR2Y	RR4L	4.9	RR2Y	3	R	R	S	---	G	Acceleron
Asgrow	AG5232 GENRR2Y	RR5E	5.2	RR2Y	R3	MS	S	MS	P	G	Acceleron
Asgrow	AG5233 GENRR2Y (STS)	RR5E	5.2	RR2Y/STS	3	R	R	S	---	LT	Acceleron
Asgrow	AG5332 GENRR2Y	RR5E	5.3	RR2Y	R3	R	S	R	P	T	Acceleron
Asgrow	AG5532 GENRR2Y (STS)	RR5E	5.5	RR2Y/STS	S	MS	S	S	W	G	Acceleron
Asgrow	AG5533 GENRR2Y	RR5E	5.5	RR2Y	3	R	MS	R	---	G	Acceleron
Asgrow	AG5632 GENRR2Y (STS)	RR5L	5.6	RR2Y/STS	R3	R	MS	S	W	G	Acceleron
Asgrow	AG5633 GENRR2Y	RR5L	5.6	RR2Y	S	R	MS	MS	---	T	Acceleron
Asgrow	AG5732 GENRR2Y	RR5L	5.7	RR2Y	S	MS	S	S	P	T	Acceleron
Beck's	456NL (LL)	LL4	4.5	LL	R3, MR14	MR	MR	MR	P	LT	Escalate
Beck's	483NL (LL)	LL4	4.8	LL	R 3, MR 14	---	---	---	---	---	Escalate
Beck's XL Brand	418NR (RR)	RR4E	4.1	RR	R 3, MR 14	---	---	---	---	---	Escalate
Beck's XL Brand	432NR (RR)	RR4E	4.3	RR	R3, MR14	MR	MR	MR	P	LT	Escalate
Beck's XL Brand	444NR (RR)	RR4E	4.4	RR	R 3, MR 14	---	---	---	---	---	Escalate
Beck's XL Brand	477NR (RR)	RR4L	4.7	RR	R3, MR14	MR	MR	MR	P	T	Escalate
Beck's XL Brand	495NR (RR)	RR4L	4.9	RR	R3, MR14	MR	MR	MR	W	T	Escalate
Caverndale Farms	CF 465 LLn	LL4	4.6	LL	3, 14	R	R	R	P	G	Ranconna,Metaxyl, Macho 600, Optomize 400
Caverndale Farms	CF 485 LLn	LL4	4.8	LL	3, 14	R	R	R	W	T	Ranconna,Metaxyl, Macho 600, Optomize 400
Caverndale Farms	CF 486 RR2Y/STSn	RR4L	4.8	RR2Y/STS	3, 14	R	R	R	W	T	Ranconna,Metaxyl, Macho 600, Optomize 400
Caverndale Farms	CF E4612 RR2Yn	RR4L	4.6	RR2Y	3, 14	R	R	R	W	T	Ranconna,Metaxyl, Macho 600, Optomize 400
Croplan	R2C 4541 (RR CHECK)	CV4	4.5	RR2Y	---	---	---	R	P	LT	Cruiser Maxx
Croplan	R2C 4391 (RR2Y)	RR4E	4.3	RR2Y	---	---	---	---	P	G	Cruiser Maxx
Croplan	R2C 4541 (RR2Y)	RR4E	4.5	RR2Y	---	---	---	R	P	LT	Cruiser Maxx
Croplan	R2C 4692 (RR2Y)	RR4L	4.6	RR2Y	---	---	---	---	---	---	Cruiser Maxx
Croplan	R2C 4801 (RR2Y)	RR4L	4.8	RR2Y	---	R	S	R	P	LT	Cruiser Maxx
Croplan	R2C 5081 (RR2Y)	RR5E	5.0	RR2Y	---	---	---	---	---	---	Cruiser Maxx
Croplan	R2C 5371 (RR2Y)	RR5E	5.3	RR2Y	---	---	---	---	---	---	Cruiser Maxx
Warren/Dairyland	DSR-3980/R2Y	RR3	3.9	RR2Y	3, 14	---	---	---	P	G	Cruiser Maxx
Warren/Dairyland	DSR-4300 RR	RR4E	4.3	RR	3, 14	---	---	---	P	T	Cruiser Maxx
Warren/Dairyland	DSR-4343/R2Y	RR4E	4.3	RR2Y	3	---	---	---	W	G	Cruiser Maxx
Warren/Dairyland	DSR-4633/R2Y	RR4E	4.3	RR2Y	3, 14	---	---	---	W	G	Cruiser Maxx
Warren/Dairyland	DST43-000/R2Y	RR4E	4.3	RR2Y	R3	---	---	---	P	G	Cruiser Maxx
Warren/Dairyland	DSR-4810 RR	RR4L	4.8	RR	R3	---	---	---	P	T	Cruiser Maxx
Warren/Dairyland	DSR-4850/R2Y (STS)	RR4L	4.8	RR2Y/STS	3, 14	---	---	---	P	G	Cruiser Maxx
Warren/Dairyland	DSR-56-000/R2Y	RR5E	5.3	RR2Y	3, 14	---	---	---	P	G	Cruiser Maxx
Delta Grow	4867 LL	LL4	4.8	LL	3, 14	---	R	---	W	T	Cruiser Maxx
Delta Grow	4967 LL	LL4	4.9	LL	3	---	R	---	W	T	Cruiser Maxx
Delta Grow	4990 LL	LL4	4.9	LL	3, 14	R	R	R	P	G	Cruiser Maxx
Delta Grow	5461 LL	LL5	5.4	LL	3, 14	R	R	R	P	T	Cruiser Maxx
Delta Grow	4715 R2Y	RR4L	4.7	RR2Y	3, 14	---	R	R	W	T	Cruiser Maxx
Delta Grow	4755 R2Y	RR4L	4.7	RR2Y	3, 14	MR	R	R	P	T	Cruiser Maxx
Delta Grow	4765 R2Y	RR4L	4.7	RR2Y	3, 14	R	R	R	W	T	Cruiser Maxx

Table 69 (continued)

Brand	Variety ‡	2012 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color	Seed Treatment
Delta Grow	4825 R2Y	RR4L	4.8	RR2Y	3, 14	R	MR	S	W	T	Cruiser Maxx
Delta Grow	4875 R2Y (STS)	RR4L	4.8	RR2Y/STS	3,14	R	S	R	P	T	Cruiser Maxx
Delta Grow	4880 RR	RR4L	4.8	RR	3, 9, 14	R	R	---	P	T	Cruiser Maxx
Delta Grow	4925 R2Y	RR4L	4.9	RR2Y	3, 14	R	MR	MR	P	T	Cruiser Maxx
Delta Grow	5160 RR/STS	RR5E	5.1	RR/STS	3, 6, 14	MR	MR	MR	P	G	Cruiser Maxx
Delta Grow	5175 R2Y	RR5E	5.1	RR2Y	3, 14	R	MR	MR	P	G	Cruiser Maxx
Delta Grow	5275 R2Y	RR5E	5.2	RR2Y	3, 14	R	S	R	P	G	Cruiser Maxx
Delta Grow	5475 R2Y	RR5E	5.4	RR2Y	3, 14	R	M	R	W	G	Cruiser Maxx
Dyna-Gro	S48LL23 (LL)	LL4	4.8	LL	3, 14	---	MR	---	W	T	Acceleron
Dyna-Gro	31RY45 (RR2Y)	RR4E	4.5	RR2Y	3,14	R	MS	R	P	LT	Acceleron
Dyna-Gro	39RY43 (RR2Y)	RR4E	4.3	RR2Y	3,14	S	MR	MS	P	G	Acceleron
Dyna-Gro	S44RS93 (RR2Y/STS)	RR4E	4.4	RR2Y/STS	3, 14	MR	MR	R	P	G	Acceleron
Dyna-Gro	33RY47 (RR2Y/STS)	RR4L	4.7	RR2Y/STS	3,14	R	MR	R	P	LT	Acceleron
Dyna-Gro	S47RY13 (RR2Y)	RR4L	4.7	RR2Y	3, 14	MR	MR	MR	P	LT	Acceleron
Dyna-Gro	S48RS53 (RR2Y/STS)	RR4L	4.8	RR2Y/STS	3, 14	R	MR	MR	P	G	Acceleron
Dyna-Gro	32RY55 (RR2Y)	RR5E	5.5	RR2Y	3, 14	R	MR	MR	P	G	Acceleron
Dyna-Gro	S54RY43 (RR2Y)	RR5E	5.4	RR2Y	3, 14	R	MR	MR	W	G	Acceleron
GoSoy	4411 (LL CHECK)	CV4	4.4	LL	3	MR	MR	MR	P	LT	Cruiser Maxx
GoSoy	4411 LL	LL4	4.4	LL	3	MR	MR	MR	P	LT	Cruiser Maxx
GoSoy	4711 LL	LL4	4.7	LL	3	---	MR	MR	P	G	Cruiser Maxx
GoSoy	4812 LL	LL4	4.8	LL	3	---	MR	---	W	T	Cruiser Maxx
GoSoy	4912 LL	LL4	4.9	LL	---	MS	---	MR	W	G	Cruiser Maxx
GoSoy	5010 LL	LL5	5.0	LL	3	MR	MR	MR	P	G	Cruiser Maxx
GoSoy	5410 LL	LL5	5.4	LL	3	MR	MR	MR	P	G	Cruiser Maxx
Go-Soy	4910 LL	LL4	4.9	LL	---	MR	MR	MS	P	G	Cruiser Maxx
Halo	4:65 (LL)	LL4	4.6	LL	MR 3	R	MR	R	P	LT	ApronMaxx/Cruiser
Halo	4:94 (LL)	LL4	4.9	LL	MR 3	R	MR	MR	P	G	ApronMaxx/Cruiser
Halo	X456 (LL)	LL4	4.5	LL	---	---	---	---	---	---	ApronMaxx/Cruiser
Halo	X478 (LL)	LL4	4.7	LL	---	---	---	---	---	---	ApronMaxx/Cruiser
Halo	4:95 (LL)	LL4	4.8	LL	---	---	---	---	---	---	ApronMaxx/Cruiser
Halo	5:01 (LL)	LL4	4.9	LL	---	---	---	---	---	---	ApronMaxx/Cruiser
Halo	5:25 (LL)	LL5	5.2	LL	MR 3	R	MR	MR	W	T	ApronMaxx/Cruiser
Halo	5:45 (LL)	LL5	5.4	LL	---	---	---	---	---	---	ApronMaxx/Cruiser
Halo	5:01 (LL)	LL5	5.0	LL	---	---	---	---	---	---	ApronMaxx/Cruiser
Halo	5:26 (LL)	LL5	5.1	LL	---	---	---	---	---	---	ApronMaxx/Cruiser
Halo	X55 (LL)	LL5	5.5	LL	---	---	---	---	---	---	ApronMaxx/Cruiser
Hornbeck	HBK R 4924 (RR)	RR4L	4.9	RR	R 3, MR 14	R	MR	MR	P	LT	Trilex 2000, Poncho Votivo
Hornbeck	HBK RY 4620 (RR2Y/STS)	RR4L	4.6	RR2Y/STS	---	MS	R	---	P	LT	Trilex 2000, Poncho Votivo
Hornbeck	HBK RY 4721 (RR2Y)	RR4L	4.7	RR2Y	---	R	MR	R	P	LT	Trilex 2000, Poncho Votivo
Hornbeck	HBK RY 5221 (RR2Y)	RR5E	5.2	RR2Y	R 3	R	---	R	P	G	Trilex 2000, Poncho Votivo
Hornbeck	HBK RY 5421 (RR2Y)	RR5E	5.4	RR2Y	MR 3	R	---	R	P	G	Trilex 2000, Poncho Votivo
Hornbeck	HBK RY 5521 (RR2Y)	RR5E	5.5	RR2Y	---	R	---	R	P	G	Trilex 2000, Poncho Votivo
KS	K07-1633	CV4	4.2	---	3, 14	S	S	S	W	---	ApronMaxx/Cruiser

Table 69 (continued)

Brand	Variety ‡	2012 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color	Seed Treatment
MO Exp	S08-X17371	CV5	5.1	---	---	---	---	---	W	T	Trilex, Gaucho
MO Exp	S08-X14117 (RR)	RR4E	4.3	RR	---	---	---	---	W	T	Trilex, Gaucho
MO Exp	S08-X2499 (RR)	RR4L	4.8	RR	---	---	---	---	P	T	Trilex, Gaucho
MO Exp	S08-X6399 (RR)	RR5E	5.1	RR	---	---	---	---	W	T	Trilex, Gaucho
MO Exp	S08-X7279 (RR)	RR5E	5.2	RR	---	---	---	---	W	T	Trilex, Gaucho
Morsoy Xtra	R2 44X82	RR4E	4.4	RR2Y	R 3, MR 14	R	R	MR	P	T	ApronMaxx/Cruiser
Morsoy Xtra	R2 46X29 (STS)	RR4L	4.6	RR2Y/STS	---	MS	R	MR	P	T	ApronMaxx/Cruiser
Morsoy Xtra	R2 46X71	RR4L	4.6	RR2Y	R 3, MR 14	R	MR	R	P	LT	ApronMaxx/Cruiser
Morsoy Xtra	R2 47X12 (STS)	RR4L	4.7	RR2Y/STS	R 3, MR 14	R	MR	R	P	G	ApronMaxx/Cruiser
Morsoy Xtra	R2 47X31	RR4L	4.7	RR2Y	R 3, MR 14	R	MR	R	P	T	ApronMaxx/Cruiser
Morsoy Xtra	R2 48X00	RR4L	4.8	RR2Y	---	MS	MR	MR	P	T	ApronMaxx/Cruiser
Morsoy Xtra	R2 48X02	RR4L	4.8	RR2Y	R 3, MR 14	MR	MR	MR	P	T	ApronMaxx/Cruiser
Mycogen	5N451R2	RR4E	4.5	RR2Y	3, 14	---	S	MR	---	G	Cruiser Maxx
Mycogen	5N478R2	RR4L	4.7	RR2Y	3, 14	---	S	R	---	T	Cruiser Maxx
NC Exp	NCC06-148	CV4	4.9	---	---	---	---	---	---	---	ApronMaxx/Cruiser
NC Exp	NCC06-339	CV4	4.9	---	---	---	---	---	P	T	ApronMaxx/Cruiser
NC Exp	NCC06-2188	CV5	5.6	---	---	---	---	---	W	G	ApronMaxx/Cruiser
NC Exp	NCC06-579	CV5	5.8	---	---	---	---	---	P	G	ApronMaxx/Cruiser
NC Exp	NCC07-7506	CV5	5.2	---	---	---	---	---	---	---	ApronMaxx/Cruiser
NC Exp	NCC07-7714	CV5	5.1	---	---	---	---	---	---	---	ApronMaxx/Cruiser
NK	S 39-U2 (RR2Y)	RR3	3.9	RR2Y	R3, MR 14	---	R	S	W	T	Cruiser Maxx
NK	S 41-J6 (RR2Y)	RR4E	4.1	RR2Y	---	---	M	MR	---	---	Cruiser Maxx
NK	S 46-T3 (RR)	RR4L	4.6	RR	---	R	M	R	---	T	Cruiser Maxx
NK	S 49-F8 (RR)	RR4L	4.9	RR	---	R	M	R	---	T	Cruiser Maxx
NK	S 51-H9 (RR2Y)	RR5E	5.1	RR2Y	---	---	M	R	---	G	Cruiser Maxx
Progeny	5960 (LL Check)	CV5	5.9	LL	---	MR	MR	MR	W	G	Poncho, Votivo
Progeny	4819 LL	LL4	4.8	LL	---	---	MR	---	W	T	Poncho, Votivo
Progeny	4928 LL	LL4	4.9	LL	MR3	R	---	MR	P	G	Poncho, Votivo
Progeny	5160 LL	LL5	5.1	LL	---	MR	MR	MR	W	T	Poncho, Votivo
Progeny	5460 LL	LL5	5.4	LL	---	MR	MS	MR	P	LT	Poncho, Votivo
Progeny	5960 LL	LL5	5.9	LL	---	MR	MR	MR	W	G	Poncho, Votivo
Progeny	4211 RY (RR2Y)	RR4E	4.2	RR2Y	---	---	MR	MR	P	G	Poncho, Votivo
Progeny	4510 RY (RR2Y/STS)	RR4E	4.5	RR2Y/STS	---	MS	R	S	P	LT	Poncho, Votivo
Progeny	4611 RY (RR2Y)	RR4L	4.6	RR2Y	---	R	MS	MR	P	LT	Poncho, Votivo
Progeny	4710 RY (RR2Y/STS)	RR4L	4.7	RR2Y/STS	---	MS	MS	MR	P	LT	Poncho, Votivo
Progeny	4747 RY (RR2Y)	RR4L	4.7	RR2Y	---	MR	MR	MR	P	LT	Poncho, Votivo
Progeny	4814 RY (RR2Y)	RR4L	4.8	RR2Y	---	---	MR	---	P	LT	Poncho, Votivo
Progeny	4900 RY (RR2Y)	RR4L	4.9	RR2Y	---	MR	MR	MR	P	LT	Poncho, Votivo
Progeny	4920 RY (RR2Y)	RR4L	4.9	RR2Y	3, 14	---	MS	---	P	LT	Poncho, Votivo
Progeny	5111 RY (RR2Y)	RR5E	5.1	RR2Y	3	MS	MS	MR	W	G	Poncho, Votivo
Progeny	5210 RY (RR2Y)	RR5E	5.2	RR2Y	R3, MR14	R	MS	MR	P	G	Poncho, Votivo
Progeny	5412 RY (RR2Y)	RR5E	5.4	RR2Y	R 3, MR 14	R	MS	MS	W	G	Poncho, Votivo
Progeny	5610 RY (RR2Y)	RR5L	5.6	RR2Y	R3, MR14	---	---	MS	P	G	Poncho, Votivo

Table 69 (continued)

Brand	Variety ‡	2012 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color	Seed Treatment
Progeny	5655 RY (RR2Y)	RR5L	5.6	RR2Y	3	MS	MS	MS	W	G	Poncho, Votivo
Progeny	5711 RY (RR2Y)	RR5L	5.7	RR2Y	---	MS	---	MS	P	T	Poncho, Votivo
Progeny	5811 RY (RR2Y)	RR5L	5.8	RR2Y	R 3	R	---	R	P	G	Poncho, Votivo
Schillinger Seed	457 RCP	RR4E	4.5	RR	3,14	R	S	---	P	T	Cruiser Maxx
Schillinger Seed	495 RC	RR4L	4.9	RR	3,14	R	S	R	P	LT	Cruiser Maxx
Schillinger Seed	4990 RC	RR4L	4.9	RR	3, 14	R	MR	MR	P	LT	Cruiser Maxx
Schillinger Seed	5220 RC	RR5E	5.2	RR	3, 14	R	---	---	W	LT	Cruiser Maxx
Steyer	4203 R2 (RR2Y)	RR4E	4.2	RR2Y	3, 14	S	S	S	---	G	Rancona, Metastar
Steyer	4501 R2 (RR2Y)	RR4E	4.5	RR2Y	3, 14	S	R	S	P	LT	Rancona, Metastar
Steyer	4701 R2 (RR2Y)	RR4L	4.7	RR2Y	3, 14	R	R	R	---	G	Rancona, Metastar
Steyer	4702 R2 (RR2Y)	RR4L	4.7	RR2Y	3, 14	R	R	R	---	LT	Rancona, Metastar
Steyer	4802 R2 (RR2Y/STS)	RR4L	4.8	RR2Y/STS	3, 14	R	R	S	---	LT	Rancona, Metastar
Terral-REV Brand	38R10 (RR)	RR3	3.8	RR	7	---	R	R	P	T	Cruiser Maxx
Terral-REV Brand	44R22 (RR)	RR4E	4.4	RR	3, 14	---	R	R	P	T	Cruiser Maxx
Terral-REV Brand	45R10 (RR)	RR4E	4.5	RR	3	R	R	S	P	T	Cruiser Maxx
Terral-REV Brand	46R73 (RR)	RR4L	4.6	RR	---	---	R	---	W	T	Cruiser Maxx
Terral-REV Brand	47R53 (RR)	RR4L	4.7	RR	3, 14	R	S	R	P	T	Cruiser Maxx
Terral-REV Brand	47R74 (RR)	RR4L	4.7	RR	---	---	R	---	---	T	Cruiser Maxx
Terral-REV Brand	48R10 (RR)	RR4L	4.8	RR	3	R	R	S	W	T	Cruiser Maxx
Terral-REV Brand	48R22 (RR)	RR4L	4.8	RR	3, 14	---	R	S	W	T	Cruiser Maxx
Terral-REV Brand	48R33 (RR)	RR4L	4.8	RR	3, 14	---	R	---	P	T	Cruiser Maxx
Terral-REV Brand	49R11 (RR)	RR4L	4.9	RR	3	R	R	S	W	T	Cruiser Maxx
Terral-REV Brand	49R22 (RR)	RR4L	4.9	RR	3, 14	---	R	---	P	T	Cruiser Maxx
Terral-REV Brand	49R43 (RR)	RR4L	4.9	RR	3, 14	R	R	S	W	T	Cruiser Maxx
Terral-REV Brand	49R54 (RR)	RR4L	4.9	RR	---	---	S	---	---	T	Cruiser Maxx
Terral-REV Brand	51R53 (RR)	RR5E	5.1	RR	3, 14	R	R	S	P	T	Cruiser Maxx
Terral-REV Brand	52R74 (RR)	RR5E	5.2	RR	---	R	R	---	---	T	Cruiser Maxx
Terral-REV Brand	53R23 (RR)	RR5E	5.3	RR	---	R	R	---	---	T	Cruiser Maxx
Terral-REV Brand	54R84 (RR)	RR5E	5.4	RR	---	R	---	---	---	T	Cruiser Maxx
Terral-REV Brand	55R53 (RR)	RR5E	5.5	RR	---	R	R	---	---	T	Cruiser Maxx
Terral-REV Brand	55R83 (RR)	RR5E	5.5	RR	---	R	R	---	---	G	Cruiser Maxx
Terral-REV Brand	56R63 (RR)	RR5L	5.6	RR	3, 14	R	R	R	W	G	Cruiser Maxx
Terral-REV Brand	57R21 (RR)	RR5L	5.7	RR	3	R	R	R	P	T	Cruiser Maxx
Terral-REV Brand	59R13 (RR)	RR5L	5.9	RR	---	R	R	---	---	G	Cruiser Maxx
TN Exp	TN09-016	CV4	4.9	---	3, 14	---	---	---	P	T	Cruiser Maxx
TN Exp	TN09-029	CV4	4.8	---	2, 3, 14	---	---	---	P	T	Cruiser Maxx
TN Exp	TN09-008	CV5	5.1	---	2, 14	---	---	---	P	T	Cruiser Maxx
TN Exp	TN11-5054	CV5	5.1	---	---	R	---	---	W	G	Cruiser Maxx
TN Exp	TN11-5087	CV5	5.0	---	---	R	---	---	W	G	Cruiser Maxx
TN Exp	TN11-5140	CV5	5.5	---	---	R	---	---	W	G	Cruiser Maxx
TN Exp	TN09-47,083 (RR2Y)	RR4E	4.5	RR2Y	---	---	---	---	P	T	Cruiser Maxx
TN Exp	TN09-46,019 (RR2Y)	RR4L	4.6	RR2Y	---	---	---	---	P	G	Cruiser Maxx
TN Exp	TN09-48,552 (RR2Y)	RR4L	4.9	RR2Y	---	---	---	---	P	T	Cruiser Maxx

Table 69 (continued)

Brand	Variety ‡	2012 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color	Seed Treatment
TN Exp	TN09-45,309 (RR2Y)	RR5E	5.3	RR2Y	---	---	---	---	P	T	Cruiser Maxx
TN Exp	TN09-45,905 (RR2Y)	RR5E	5.3	RR2Y	---	---	---	---	P	T	Cruiser Maxx
TN Exp	TN09-48,343 (RR2Y)	RR5E	5.1	RR2Y	---	---	---	---	P	G	Cruiser Maxx
TN Exp	TN09-47,326 (RR2Y)	RR5L	5.7	RR2Y	---	---	---	---	P	T	Cruiser Maxx
USDA-TN	JTN-4307	CV5	5.0	---	2, 3, 14	R	MS	R	P	T	ApronMaxx/Cruiser/Moly
USDA-TN	JTN-4408	CV5	5.0	---	MR 2, R 3	MS	MS	R	W	T	ApronMaxx/Cruiser/Moly
USDA-TN	JTN-5108	CV5	5.4	---	R 3, MR 5	R	R	MR	W	T	ApronMaxx/Cruiser/Moly
USDA-TN	JTN-5110	CV5	5.5	---	2, 3, 5	R	---	R	P	T	ApronMaxx/Cruiser/Moly
USDA-TN	JTN-5203	CV5	5.3	---	2, 3, 14	R	R	R	W	G	ApronMaxx/Cruiser/Moly
USG	74A91 (RR Check)	CV4	4.9	RR	---	---	MR	MR	P	LT	Cruiser Maxx
USG	Allen (RR Check)	CV5	5.6	RR	---	---	MR	MR	W	G	Cruiser Maxx
USG	74G82L (LL)	LL4	4.8	LL	---	---	MR	---	W	T	Cruiser Maxx
USG	74G99L (LL)	LL4	4.9	LL	---	---	---	R	P	G	Cruiser Maxx
USG	74A69R (RR2Y)	RR4L	4.6	RR2Y	---	MS	MR	MR	P	LT	Cruiser Maxx
USG	74A79R (RR2Y/STS)	RR4L	4.7	RR2Y/STS	---	MS	MR	---	P	LT	Cruiser Maxx
USG	74A91 (RR)	RR4L	4.9	RR	R 3, MR 14	---	MR	MR	P	LT	Cruiser Maxx
USG	74A92R (RR2Y)	RR4L	4.9	RR2Y	R 3, MR 14	R	MR	---	P	LT	Cruiser Maxx
USG	74B81R (RR2Y/STS)	RR4L	4.8	RR2Y/STS	R 3, MR 14	---	MS	---	P	LT	Cruiser Maxx
USG	74E88 (RR/STS)	RR4L	4.6	RR/STS	R 3, MR 14	---	MR	---	W	T	Cruiser Maxx
USG	74H92R (RR2Y)	RR4L	4.9	RR2Y	R 3, MR 14	---	---	---	P	LT	Cruiser Maxx
USG	7553nRS (RR/STS)	RR5E	5.5	RR/STS	MR 3, 14	R	MR	MR	W	G	Cruiser Maxx
USG	75Q42R (RR2Y)	RR5E	5.4	RR2Y	R 3, MR 14	R	MR	---	W	G	Cruiser Maxx
USG	75Q52R (RR2Y)	RR5E	5.5	RR2Y	R 3, MR 14	S	MR	---	W	G	Cruiser Maxx
USG	75U52R (RR2Y)	RR5E	5.5	RR2Y	R 3, MR 5	R	---	MR	P	G	Cruiser Maxx
USG	75J62R (RR2Y/STS)	RR5L	5.6	RR2Y/STS	R 3, MR 14	R	MR	---	W	G	Cruiser Maxx
USG	Allen (RR)	RR5L	5.6	RR	---	---	MR	MR	W	G	Cruiser Maxx
VA	Glenn	CV5	5.5	---	2,3	R	---	MR	W	T	Cruiser Maxx

RR / RR2Y = Contains a gene for tolerance to glyphosate herbicide; STS = tolerance to sulfonylurea class of herbicides; LL = contains a gene for tolerance to glufosinate herbicide.

R = resistant, MR = moderately resistant, MS = moderately susceptible, S = susceptible, VS = very susceptible.

Flower & Pubescence colors:P = purple, W = white, S = segregating, T = tawny, LT = light tawny, B = Brown, G = gray.

Most information supplied by companies.

RR3 = Roundup Ready 3
R4E = Roundup Ready Early Group 4
R4L = Roundup Ready Late Group 4
R5E = Roundup Ready Early Group 5
R5L = Roundup Ready Late Group 5

CV4 = Conventional Group 4 (with LL & RR Checks)
CV5 = Conventional Group 5 (with LL & RR Checks)
LL4 = Liberty Link Group 4
LL5 = Liberty Link Group 5

‡ If a trait appears inside parentheses i.e. (RR), then it is not part of the variety name.

Table 70. Contact information for soybean seed companies evaluated in yield tests in Tennessee during 2012.

Company	Contact	Phone	Email	Website	Address
Ag South Genetics	Stratton Seed Co.	800-264-4433	Jclements@agsouthgenetics.com	www.agsouthgenetics.com	1530 Hwy 79 South, Stuttgart, AR 72160
University of Arkansas	Pengyin Chen	479-575-7564	pchen@uark.edu		Dept of Crop, Soil & Env. Sciences 115 Plant Science Bldg Fayetteville, AK 72701
Armor Seed		877-336-2290		www.armorseed.com	2528 Alexander Drive, Jonesboro, AR 72401
	Lane Dill	901-233-0274	lanedill@armorseed.com		P.O. Box 178, Fisher, AR 72429
Asgrow (Monsanto)	Larry Ganann	901-326-7140	larry.w.ganann@monsanto.com	www.asgrowanddekalb.com	1404 Dexter Lake Dr., Apt 104, Cordova, TN 38016
Beck's Superior Hybrids (Beck's & XL Brand)		800-937-2325		www.beckshybrids.com	6767 East 276th Street, Atlanta, IN 46031
Caverndale Farms	Barry Welty	859-236-2150	bwelty@kywimax.com	www.caverndalefarms.com	1921 Bluegrass Pike, Danville, KY 40422
Croplan Genetics (Land o Lakes)	Jesse Witt Keith Saum Darrin Holder Jim Payne Eric Kennedy Matt Sowder	256-221-5932 731-610-7006 270-207-0190 901-652-0903 812-350-9025 901-355-7267	JBWitt@landolakes.com kdsaum@landolakes.com jpayne@ourcoop.com	www.croplangenetics.com www.ourcoop.com	Consolidated Ag Products (Agriliance) and Tennessee Farmers Co-op Locations
Dairyland Seed Co	Lanny Warren	731-234-2921	lanny.warren@charter.net	www.dairylandseed.com	208 South Thompson St., Union City, TN 38261
Delta Grow Seed	Lee Hughes	800-530-7933	leehughes19@hotmail.com	www.deltagrow.com	P O Box 219, England, AR 72046
Dyna-Gro (Crop Production Services)	Todd Theobald	731-885-1212	todd.theobald@cpsagu.com	www.dynagroseed.com	710 S. First Street, Union City, TN 38261
GoSoy (Stratton Seed Co.)	Jim Craig Scooter Hodges	870-673-4433	jcraig@strattonseed.com shodges@strattonseed.com	www.strattonseed.com	1530 Hwy 79 South, Stuttgart, AR 72160
Halo (US Seeds)	Jamie Boone	870-336-0111	jamieboone@usseeds.net		2528 Alexander Drive, Jonesboro, AR 72401
Hornbeck Seed Co	Monte Malone	870-946-2087	monty.malone@bayer.com	www.hbkseed.com	P O Box 472, 210 Drier Rd, DeWitt, AR 72042
Kansas State University	Bill Schapaugh	785-770-7906	wts@ksu.edu		Agronomy Department 2004 Throckmorton Manhattan, KS 66506
University of Missouri	Grover Shannon	573-379-5431	shannong@missouri.edu		University of Missouri, 147 State Hwy T Partageville, MO 63873
Morsoy Xtra (Cache River Valley Seed)	James Crawford	870-974-2310	jamesc@crvseed.com	www.crvseed.com	P.O. Box 10, Cash, AR 72421

Table 70 (continued)

Company	Contact	Phone	Email	Website	Address
Mycogen Seed	Ron Prinz	270-217-3383	rhprinz@dow.com	www.dowagro.com/mycogen	225 Peachtree Dr., Benton, KY 42025
NK Brand (Syngenta)	Mike Saxton	800-445-0956	mike.saxton@syngenta.com	www.nk-us.com	P.O. Box 959, Minneapolis, MN 55440
North Carolina State Univ.	Andrea Cardinal	919-513-0913	andrea_cardinal@ncsu.com		
Progeny (Erwin Keith Seed Inc)	Brian Murray	870-238-2079	bmurray@progenyag.com	www.progenyag.com	1529 Hwy 193, Wynne, AR 72396
Schillinger Genetics and eMerge Genetics	Jim Craig Cory Nikkel	800-264-4433 515-225-1166	jcraig@strattonseed.com cnikkiel@schillgen.com	www.eMergeGenetics.com	4401 Westown Parkway, Suite 225 West Des Moines, IA 50266
Steyer Seeds	Mike Phillips	859-516-3935	mikeandsteyer@gmail.com	www.steyerseeds.com	6154 N. Co. Rd. 33, Tiffin, OH 44883
University of Tennessee	Vince Pantalone	865-974-8801	vpantalo@utk.edu		Dept. of Plant Sciences, Ellington 252 2431 Joe Johnson Drive Knoxville, TN 37996-4561
Terral Seed Inc	Larry Mullen	318-282-3681	lmullen@terralseed.com	www.terralseed.com	P O Box 826, Lake Providence, LA 71254
USDA-ARS TN	Prakash Arelli	731-425-4736	parelli@ars.usda.gov		605 Airways Blvd, Jackson, TN 38301
Unisouth Genetics (USG)	Stacy Burwick David Fandrich Mark Huffstetler Trey Hurt Wes Miller Billy Sellers	800-505-3133 931-967-3377 731-235-2167 731-836-7574 731-536-6251 731-538-2990	sburwick@usgseed.com fandrichsupply@aol.com huffy1@crunet.com treyhurt@bellsouth.com wes@obiongrain.com	www.usgseed.com	3205-C Highway 46S, Dickson, TN 37055 Fandrich Supply Co, Belvidere, TN Huffstetler & Sons Seed Inc, Greenfield, TN Hurt Seed Co. Inc, Halls, TN Obion Grain Co. Inc, Obion, TN Sellers Seed, Obion, TN
Virginia Tech	Bruce Beahm	804-746-4884	bbeahm@rivnet.net	www.virginiacrop.org	Virginia Crop Improvement Assoc. P.O. Box 78 Mt. Holly, VA 22524

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