

SOYBEAN VARIETY PERFORMANCE TESTS IN TENNESSEE

2008

RESEARCH & EDUCATION CENTERS AND COUNTY STANDARD TESTS

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Variety test results are posted on UT's website at:

**<http://varietytrials.tennessee.edu/>
and
www.utcrops.com**

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Franklin	Larry Williams	Ed Burns
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Fulton, KY (2)	Major Bros.	Cam Kenimer
Gibson	Denton Clay Parkins	Philip Shelby
Henry	David & Finis Wilson	Staci Foy
Lake	Keiser Farms	Greg Allen
Obion	Kenneth & Blake Cheatham	Tim Smith
Weakley	Gary & Gail Hall	Jeff Lannom

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Franklin	Larry Williams	Ed Burns
Fulton, KY (1)	Johnson Linder	Ben Mullins
Fulton, KY (2)	Major Bros	Cam Kenimer
Gibson	Denton Clay Parkins	Philip Shelby
Henry	David & Finis Wilson	Staci Foy
Lake	Jon Dickey	Greg Allen
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Franklin	Bobby Woodall	Ed Burns
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Gibson	Denton Clay Parkins	Philip Shelby
Graves, KY	Stermon Farms	Bob Middleton
Hardin	Gerry Lambert	Marcus McLemore
Haywood	John King	Tracey Sullivan
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Group V Early

Coffee
Crockett
Dyer
Franklin
Gibson
Haywood
Lake
Lauderdale
Lincoln
Obion
UT Martin
Weakley
WTREC

Cooperator(s)

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Denton Clay Parkins
John King
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Scott Mathis & Chris Peyton
Tommy & Jared Bradley
William & Bill Thompson
Charlie Rowlett
Brian Garner
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Agent

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Table of Contents

Experimental Procedures.....	6
Interpretation of data.....	6
Results.....	7
Location information from Research and Education Centers where the soybean variety tests were conducted in 2007.....	9
Roundup Ready Maturity Group III Soybean Tests.....	10
Roundup Ready Early Maturity Group IV Soybean Tests (4.0 – 4.5).....	17
Roundup Ready Late Maturity Group IV Soybean Tests (4.6 – 4.9).....	27
Roundup Ready Early Maturity Group V Soybean Tests (5.0 – 5.5).....	41
Roundup Ready Late Maturity Group V Soybean Tests (5.6 – 5.9).....	52
Conventional Maturity Group IV and V Soybean Tests.....	56
Systemic Insecticide Seed Treatment Comparison Tests.....	61
Soybean Characteristics.....	68
Seed Company Contact Information.....	75

PERFORMANCE OF SOYBEAN VARIETIES IN TENNESSEE

RESEARCH & EDUCATION CENTERS AND COUNTY STANDARD TESTS

Experimental Procedures

Research & 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), Middle TN (Spring Hill), Milan (Milan), and Plateau (Crossville) Research & Education Centers (REC). Duplicate plantings of all six 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) and Conventional (RM 4.6 - 5.9)**] were made at the Milan and Middle Tennessee RECs for performance testing with and without irrigation.

The plot size at most REC locations was two rows, 30 feet in length. All varieties were planted at approximately 10 seeds per foot of row (i.e., approximately 175,000 seed per acre). 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 detected in Tennessee again this year in early October but the appearance of the disease occurred too late in the growing stages of most soybeans to be a serious threat. 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.

County Standard Tests: The County Standard Soybean Tests were conducted in 17 counties in Tennessee, and 3 in West Kentucky. The number of counties depended on the test (e.g., 10-17). The County Standard Tests were divided into **RR3, RR4 early (relative maturity 4.0-4.5), RR4 late (RM 4.6-4.9), and RR5 early (RM 5.0-5.5)**. 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% 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% 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 ($43 - 35 = 8 \text{ bu/a} = \text{LSD of } 8$) and Variety A ($43 - 30 = 13 \text{ bu/a} > \text{LSD of } 8$).

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% indicates that the size of the error variation is about 10% of the size of the test mean. Similarly, a C.V. of 30% 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%.

RESULTS

Yield and Agronomic Traits. Two hundred and fifty eight soybean varieties were evaluated in the 2008 **Research & Education Center (REC)** tests in Tennessee. There were 19 varieties in the RR3, 42 in the RR4E, 84 in the RR4L, 67 in the RR5E, 21 in the RR5L, and 25 in the conventional MG4/MG5 test. Additionally, 10 varieties that were treated with *Cruiser* (a systemic insecticide seed treatment) were included in the RR3 (2), RR4E (2), RR4L (2), RR5E (2), and RR5L (2) tests (Tables 50-55). The **County Standard tests (CST)** involved 64 varieties total, consisting of a RR3 test (4 varieties at 10 locations), a RR4E test (14 varieties at 14 locations), a RR4L test (28 varieties at 17 locations), and a RR5E test (18 varieties at 13 locations). In addition to 17 Tennessee counties, the County Standard Tests involved three counties in Western Kentucky (Fulton, Graves, and McCracken). **Tables 2 - 55** contain data on yield and agronomic traits such as maturity, plant height, lodging, shattering, seed quality, seed protein and oil content. **Table 56** lists the names and the companies descriptive characteristics of the varieties included in the REC tests in 2008. **Table 57** contains the contact information for each soybean seed company with entries in the 2008 REC tests.

Growing Season: The 2008 growing season was characterized by hot, dry conditions overall but somewhat improved compared to last year's record drought. Daytime temperatures were high (several 100+ F days) during flowering and seed fill periods at some locations. Widespread and scattered rainfall from remnants of Tropical Storm Fay in late August and Hurricane Ike in late September were beneficial to late maturing varieties. The late rainfall gave way to dry weather during October allowing producers to finish harvest in a timely manner. Producers planted 1.46 million acres this year, a record one year increase of 450,000 acres from planting in 2007. Soybean production for 2008 is projected to be 45.5 billion bushels, an increase of 26.1 million bushels from the previous year. The state soybean yield average is projected to be 31 bu/a, 12 bushels above 2007 yields.

Insecticide Seed Treatments: In order to evaluate the effects of seed that had been treated with a systemic insecticide such as Cruiser versus seed that had not been treated, ten varieties (two from each maturity group) were evaluated in the Research and Education Center tests in 2008. Dyna-Gro V39N8RR, Asgrow AG3906, Progeny 4508RR, Dyna-Gro V44N9RS, Asgrow AG4903, USG 74F96, Delta King DK52-K6, USG 7553nRS, Progeny 5706RR and USG Allen were planted at each location with and without the systemic insecticide 'Cruiser' seed treatment. All plot seed were treated with a fungicide. The Cruiser insecticide seed treatments resulted in fairly consistent yield increases among varieties and REC locations. There were statistically significant yield increases for only two of the ten varieties (Dyna-Gro V39N8RR and USG Allen) that had been treated with Cruiser as compared to the non-Cruiser treated seed across locations.

The ten varieties treated with Cruiser averaged a statistically significant 3 bu/a increase across all locations as compared to the non-Cruiser treated seed (Table 50). This differs slightly from the rather inconsistent responses obtained in previous year's studies of systemic insecticide treated seed in this program.

Disease Ratings: Ratings on variety reactions to SDS, frogeye leaf spot, and anthracnose, are presented in **Tables 9, 18, 27, 36** (data provided by Dr. Melvin Newman, professor, Dept. of Entomology and Plant Pathology, UT). Soybean cyst nematode (races 2, 3, and 14) ratings in these tables provided by Dr. Pat Donald, USDA-ARS, Jackson, TN.

Table 1. Location information from research centers where the soybean variety tests were conducted in 2008.

Research Center	Location	Planting Date	Harvest Date	Seeding Rate	Soil Type
Roundup Ready Maturity Group III					
Highland Rim	Springfield	5/13/2008	10/1/2008	175000	Hamblen Silt Loam
Knoxville	Knoxville	5/2/2008	9/19/2008	175000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	6/3/2008	10/1/2008	175000	Grenada Silt Loam
Milan (Non Irrigated)	" "	6/2/2008	10/1/2008	175000	Grenada Silt Loam
Middle TN (Irrigated)	Spring Hill	5/23/2008	10/3/2008	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/20/2008	10/2/2008	175000	" " "
Plateau	Crossville	5/20/2008	10/20/2008	175000	Lilly Silt Loam
Roundup Ready Maturity Group Early IV (4.0 - 4.5)					
Ames	Grand Junction	5/1/2008	10/14/2008	175000	Lexington Silt Loam
Highland Rim	Springfield	5/13/2008	10/1/2008	175000	Sango Silt Loam
Knoxville	Knoxville	5/2/2008	9/29/2008	175000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	6/3/2008	10/6/2008	175000	Grenada Silt Loam
Milan (Non Irrigated)	" "	6/2/2008	10/1/2008	175000	Grenada Silt Loam
Middle TN (Irrigated)	Spring Hill	5/23/2008	10/27/2008	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/21/2008	10/29/2008	175000	" " "
Plateau	Crossville	5/20/2008	10/20/2008	175000	Lilly Silt Loam
Roundup Ready Maturity Group Late IV (4.6 - 4.9)					
Ames	Grand Junction	5/1/2008	10/15/2008	175000	Lexington Silt Loam
Highland Rim	Springfield	5/19/2008	10/8/2008	175000	Sango Silt Loam
Knoxville	Knoxville	5/2/2008	10/6/2008	175000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	6/3/2008	10/6/2008	175000	Grenada Silt Loam
Milan (Non Irrigated)	" "	6/2/2008	10/6/2008	175000	Grenada Silt Loam
Middle TN (Irrigated)	Spring Hill	5/23/2008	10/30/2008	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/21/2008	11/3/2008	175000	" " "
Plateau	Crossville	5/20/2008	11/5/2008	175000	Lilly Silt Loam
Roundup Ready Maturity Group Early V (5.0 - 5.5)					
Ames	Grand Junction	5/1/2008	10/15/2008	175000	Lexington Silt Loam
Highland Rim	Springfield	5/13/2008	11/2/2008	175000	Stasser Silt Loam
Knoxville	Knoxville	5/6/2008	10/13/2008	175000	Etowah Silt Loam
Milan (Irrigated)	Milan	6/3/2008	10/14/2008	175000	Loring, Grenada Silt Loam
Milan (Non Irrigated)	" "	6/2/2008	10/14/2008	175000	Grenada Silt Loam
Middle TN (Irrigated)	Spring Hill	5/22/2008	10/30/2008	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/30/2008	11/4/2008	175000	" " "
Roundup Ready Maturity Group Late V (5.6 - 5.9)					
Ames	Grand Junction	5/1/2008	10/15/2008	175000	Lexington Silt Loam
Highland Rim	Springfield	5/13/2008	11/3/2008	175000	Stasser Silt Loam
Knoxville	Knoxville	5/2/2008	10/22/2008	175000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	6/3/2008	10/22/2008	175000	Loring, Grenada Silt Loam
Milan (Non Irrigated)	" "	6/2/2008	10/22/2008	175000	Grenada Silt Loam
Middle TN (Irrigated)	Spring Hill	5/22/2008	11/1/2008	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/20/2008	11/4/2008	175000	" " "
Conventional Maturity Groups IV and V					
Highland Rim	Springfield	5/19/2008	10/23/2008	175000	Mountview Silt Loam
Knoxville	Knoxville	5/6/2008	10/14/2008	175000	Etowah Silt Loam
Milan (Irrigated)	Milan	6/4/2008	10/22/2008	175000	Loring, Henry Silt Loam
Milan (Non Irrigated)	" "	6/5/2008	10/13/2008	175000	Grenada Silt Loam
Middle TN (Irrigated)	Spring Hill	5/22/2008	11/3/2008	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/20/2008	11/5/2008	175000	" " "

Table 2. Mean yields † of 19 Maturity Group III Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Spring Hill					Milan	
			Knoxville	Crossville	Irr.	Non-Irr.	Springfield	Irr.	Non-Irr.
			-----bu/a-----						
MO Exp	S04-3924 RR	49 ± 1	70	30	61	28	56	62	37
NK	S 39-A3 Brand (RR)	48 ± 1	72	23	55	32	48	59	45
Dyna-Gro	31J39 (RR)	47 ± 1	65	27	58	34	55	58	35
Progeny	3906 RR	46 ± 1	65	24	55	29	51	63	38
Hornbeck	HBK R 3927 (RR)	46 ± 1	54	35	58	30	54	56	38
Hornbeck	HBK R 3824 (RR)	46 ± 1	60	27	51	36	48	58	40
MO Exp	S04-20912 RR	45 ± 1	67	23	54	26	53	57	36
Croplan	RC 3897 RR	44 ± 1	65	26	47	23	51	60	37
Armor	ARX 938 (RR)	44 ± 1	65	12	47	25	57	62	38
Armor	38-G2 (RR)	43 ± 1	58	25	52	26	49	60	35
Dyna-Gro	V39N8RR	43 ± 1	63	26	45	23	48	59	37
Asgrow	AG3906 (RR)	42 ± 1	60	16	50	26	54	58	32
TN Exp	TN06-15RR	42 ± 1	58	31	47	27	48	50	34
TN Exp	TN07-220RR	41 ± 1	58	27	47	24	51	49	34
Southern Cross	Lucas (RR)	40 ± 1	56	28	42	21	42	55	36
AgVenture	36P1NRR	39 ± 1	58	20	50	21	40	55	31
TN Exp	TN07-167RR	39 ± 1	53	26	49	23	46	45	32
TN Exp	TN05-3745RR	39 ± 1	62	17	48	20	39	45	38
KS	KS 3406RR	37 ± 1	47	18	43	24	41	54	35
Average (bu/a)		44	62	25	51	26	49	56	37
L.S.D._{.05} (bu/a)		3	9	12	9	4	7	7	6
C.V. (%)		10.5	8.5	26.9	10.4	9.8	8.7	7.3	9.3

† 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 3. Mean yields † and agronomic characteristics of 19 Maturity Group III Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2008.

Brand	Variety ‡	Avg. Yield	Moisture §	Lodging	Height	Maturity	Shattering	Seed			
		± Std Err. (n=7)						(n=7)	(n=4)	(n=7)	(n=7)
		bu/a	%	Score	in.	DAP	-----	Score	-----	%	%
MO Exp	S04-3924 RR	49 ± 1	12.2	1.6	32	125	1.1	2.3	37.8	21.4	
NK	S 39-A3 Brand (RR)	48 ± 1	11.9	2.1	31	124	1.1	2.7	37.3	22.5	
Dyna-Gro	31J39 (RR)	47 ± 1	15.3	2.3	35	128	1.0	3.2	37.5	22.8	
Progeny	3906 RR	46 ± 1	11.7	1.8	34	125	1.0	2.5	39.5	21.7	
Hornbeck	HBK R 3927 (RR)	46 ± 1	12.2	2.3	39	126	1.1	2.0	39.5	22.3	
Hornbeck	HBK R 3824 (RR)	46 ± 1	14.5	2.3	35	128	1.0	2.8	37.4	23.2	
MO Exp	S04-20912 RR	45 ± 1	12.4	1.9	33	126	1.1	2.8	38.8	22.0	
Croplan	RC 3897 RR	44 ± 1	11.7	1.8	34	127	1.1	2.2	39.2	21.6	
Armor	ARX 938 (RR)	44 ± 1	11.8	1.5	28	122	1.2	3.0	37.8	21.9	
Armor	38-G2 (RR)	43 ± 1	11.8	1.7	33	121	1.3	2.5	40.3	21.1	
Dyna-Gro	V39N8RR	43 ± 1	11.8	1.5	31	127	1.0	2.0	39.2	21.1	
Asgrow	AG3906 (RR)	42 ± 1	12.1	1.5	30	127	1.0	2.5	38.0	23.4	
TN Exp	TN06-15RR	42 ± 1	11.7	2.7	37	124	1.3	2.8	38.4	23.2	
TN Exp	TN07-220RR	41 ± 1	12.1	2.3	34	120	1.1	2.0	36.4	22.8	
Southern Cross	Lucas (RR)	40 ± 1	11.2	1.7	32	122	1.2	2.3	39.8	21.3	
AgVenture	36P1NRR	39 ± 1	11.8	1.3	29	121	1.2	3.0	37.4	22.6	
TN Exp	TN07-167RR	39 ± 1	11.4	3.0	35	124	1.5	2.8	38.7	22.6	
TN Exp	TN05-3745RR	39 ± 1	11.5	2.3	31	120	1.0	1.8	36.4	22.9	
KS	KS 3406RR	37 ± 1	11.8	1.5	30	119	1.3	3.0	39.9	22.5	
Average		44	12.2	2.0	33	124	1.1	2.5	38.4	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 4. Mean yields † of five Maturity Group III Roundup Ready soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2007 - 2008.

Brand	Variety ‡	Avg. Yield ± Std Err.				Milan	
		(n=10)	Knoxville	Crossville	Springfield	Irr.	Non-Irr.
-----bu/a-----							
Hornbeck	HBK R 3824 (RR)	38 ± 1	43	18	36	65	29
Dyna-Gro	V39N8RR	37 ± 1	45	16	35	60	30
Southern Cross	Lucas (RR)	36 ± 1	45	18	31	60	28
Asgrow	AG3906 (RR)	36 ± 1	43	13	37	61	25
KS	KS 3406RR	31 ± 1	35	11	29	51	28
Average (bu/a)		36	42	15	33	59	28
L.S.D._{.05} (bu/a)		3	8	8	5	8	5
C.V. (%)		11.9	10.6	30	9.6	9.1	11.9

† 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 yields † and agronomic characteristics of five Maturity Group III Roundup Ready soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2007 - 2008.

Brand	Variety ‡	Avg. Yield ± Std Err.				Moisture § (n=10)	Lodging (n=5)	Height (n=10)	Maturity (n=10)	Shattering (n=4)	Leaf	Seed	Protein (n=4)	Oil (n=4)
		(n=10)	(n=10)	(n=10)	(n=10)						Retention (n=1)	Quality (n=4)		
		bu/a		%	Score	in.	DAP	-----Score-----		%	%			
Hornbeck	HBK R 3824 (RR)	38 ± 1	15.8	2.5	34	131	1.0	2.7	2.5	39.0	22.0			
Dyna-Gro	V39N8RR	37 ± 1	11.8	1.7	30	129	1.0	1.5	2.3	39.9	20.1			
Southern Cross	Lucas (RR)	36 ± 1	11.7	1.9	31	127	1.1	1.2	2.4	40.4	20.4			
Asgrow	AG3906 (RR)	36 ± 1	12.5	1.8	30	130	1.0	1.3	2.9	39.7	22.0			
KS	KS 3406RR	31 ± 1	11.8	1.8	29	125	1.1	1.0	3.0	40.7	21.4			
Average		36	12.7	1.9	31	128	1.1	1.5	2.6	39.9	21.2			

† 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.

Table 6. Mean yields † of two Maturity Group III Roundup Ready soybean varieties evaluated in five environments (n=15) in Tennessee for three years, 2006 - 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=15)	Knoxville	Crossville	Springfield	Milan	
						Irr.	Non-Irr.
-----bu/a-----							
Hornbeck	HBK R 3824 (RR)	44 ± 1	52	33	40	60	35
Asgrow	AG3906 (RR)	42 ± 1	47	31	39	59	33
Average (bu/a)		43	49	32	40	59	34
L.S.D._{.05} (bu/a)		3	7	8	5	7	6
C.V. (%)		9.8	9.5	13.5	8.1	8.1	10.2

† All yields are adjusted to 13% moisture.

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

Table 7. Mean yields † and agronomic characteristics of two Maturity Group III Roundup Ready soybean varieties evaluated in five environments (n=15) in Tennessee for three years, 2006 - 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=15)	Moisture § (n=15)	Lodging (n=8)	Height (n=15)	Maturity (n=15)	Shattering (n=6)	Leaf Retention (n=2)	Seed Quality (n=8)	Protein (n=8)	Oil (n=8)
Hornbeck	HBK R 3824 (RR)	44 ± 1	15.3	2.2	36	129	1.0	2.3	2.2	37.6	22.6
Asgrow	AG3906 (RR)	42 ± 1	13.0	1.6	31	128	1.0	1.4	2.6	38.9	22.8
Average		43	14.2	1.9	34	128	1.0	1.8	2.4	38.3	22.7

† 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

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°.

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.

Table 8. Yields † of four Maturity Group III Roundup Ready soybean varieties in ten County Standard Tests in Tennessee and Kentucky during 2008.

MS	Brand/Variety	Avg. Yield bu/a	Moisture ‡ %	Coffee 5/13 §	Dyer 4/29	Franklin 5/5	(KY)	(KY)	Gibson 5/21	Henry 5/6	Lake 5/24	Obion 5/19	Weakley 6/9
							Linder Farm Fulton 6/7	Major Farm Fulton 7/18					
A	Dyna-Gro V39N8RR	44.7	10.0	25.7	42.7	29.0	30.8	47.3	46.4	56.7	63.7	59.7	44.8
AB	NK S39-A3 Brand	44.2	10.5	25.4	41.2	29.3	25.9	40.4	46.3	59.8	68.7	58.5	46.5
AB	****Asgrow AG3906	44.0	10.4	21.0	42.9	27.4	27.3	36.4	43.8	62.5	71.0	63.6	43.7
B	Armor 38-G2	42.2	10.0	23.9	40.1	26.1	28.1	36.7	42.7	53.6	65.9	61.7	42.9
Average (bu/a)		43.7	10.2	24.0	41.7	28.0	28.0	40.2	44.8	58.2	67.3	60.9	44.5

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Planting date.

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 average yield and in conducting the statistical analysis to determine significant differences (MS).

Variety denoted with asterisks (****) was in the top performing group in 2007, 2006, 2005, and 2004.

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 four Maturity Group III Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests during 2008.

MS	Brand/Variety	CST	----- Research and Education Center at Milan -----								
		Avg. Yield (n=10)	Moisture ‡	SDS	Frogeye	Anthracnose	Sprayed ¶ Yield	Unsprayed Yield	SCN - 2007 #		
		bu/a	%	2006 / 07 / 08	2006 / 07 / 08	2006 / 07	bu/a	bu/a	Race 2	Race 3	Race 14
A	Dyna-Gro V39N8RR	44.7	10.0	/ /	/ /	/	---	---	S	---	---
AB	NK Brand S39-A3	44.2	10.5	/ / 0.0	/ / 4.3	/ 5.3	47.8	44.9	S	---	---
AB	****Asgrow AG3906	44.0	10.4	2.0 / 0.0 / 0.0	4.0 / 3.0 / 4.0	6.0 / 2.0	52.3	49.3	S	R	S
B	Armor 38-G2	42.2	10.0	/ / 0.0	/ / 4.0	/ 4.3	49.8	43.7	S	---	---
Average (bu/a)		43.7	10.2				50.0	46.0			

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Disease ratings for SDS, Frogeye Leaf Spot, and Anthracnose 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 + 0.25% Induce at 20 gpa at R3 growth stage.

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

Complete 2008 SCN ratings available Feb. 2009.

Disease ratings compiled by Dr. Melvin Newman from replicated plots at the Research and Education Center at Milan.

SCN Greenhouse Ratings compiled by Dr. Pat Donald, Research Plant Path., USDA-ARS, West TN REC.

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 2004 - 2007.

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 Research and Education Centers (n=7) in Tennessee in 2008.

Brand	Variety	County Standard Trials		Research and Education Center Trials	
		Avg. Yield	Moisture	Avg. Yield	Moisture
		bu/a	%	bu/a	%
Dyna-Gro	V39N8RR	45	10.0	43	11.8
NK	S 39-A3 Brand (RR)	44	10.5	48	11.9
Asgrow	AG3906 (RR)	44	10.4	42	12.1
Armor	38-G2 (RR)	42	10.0	43	11.8
Average (bu/a)		44	10.2	44	11.9

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

Table 11. Mean yields † of 42 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in eight environments in Tennessee during 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=8)	Knoxville		Spring Hill			Milan		Ames
			Crossville	Irr.	Non-Irr.	Springfield	Irr.	Non-Irr.		
Hornbeck	HBK R 4527 (RR)	50 ± 1	69	38	52	39	46	65	37	52
Morsoy	RT 4485N (RR)	50 ± 1	72	42	49	29	48	68	37	52
Delta Grow	4460 RR	49 ± 1	67	39	52	31	47	66	42	51
TN Exp	TN05-8733RR	49 ± 1	70	38	49	39	52	60	40	47
Dairyland	4500 RR STS	49 ± 1	75	43	46	25	45	66	45	47
FFR	4526 RR	48 ± 1	66	38	50	29	48	67	40	49
Armor	42-M1 (RR)	48 ± 1	72	32	47	30	49	62	44	49
Asgrow	DP 4546 RR	48 ± 1	73	39	52	29	45	61	36	48
USG	74A45 (RR)	48 ± 1	65	34	47	32	51	59	39	55
Morsoy	RTS 4488N (RR/STS)	48 ± 1	73	34	47	24	44	66	41	51
Dyna-Gro	36C44 (RR)	47 ± 1	71	35	51	22	40	64	42	54
Steyer	4430 RR	47 ± 1	71	38	45	28	45	65	44	42
Dyna-Gro	37A44 (RR)	47 ± 1	67	35	49	31	47	59	37	53
USG	74H48 (RR/STS)	47 ± 1	72	33	54	26	39	65	40	46
Southern Cross	Caleb (RR/STS)	47 ± 1	72	39	47	21	44	66	42	43
Schillinger Seed	457 RCP	47 ± 1	68	32	39	36	51	61	42	44
Trisler Seed	Trisoy 4586RR (CN) STS	47 ± 1	69	32	49	27	41	59	41	55
Croplan	RC 4455 RR	47 ± 1	62	34	49	24	49	64	41	50
Midwest Premium Genetics	MPV 4406nRR	46 ± 1	72	39	34	27	47	65	40	48
Progeny	4408 RR/STS	46 ± 1	70	40	49	21	41	62	42	45
Dairyland	4300 RR	46 ± 1	67	30	49	28	43	64	41	48
Progeny	4508 RR	46 ± 1	72	30	41	28	47	63	41	47
Asgrow	AG4303 (RR)	46 ± 1	69	31	49	24	38	63	43	49
Delta Grow	4470 RR/STS	45 ± 1	70	36	53	28	41	59	39	38
Delta Grow	4150 RR	45 ± 1	72	37	39	29	46	55	37	46
Crow's	C 4519 R (STS)	44 ± 1	78	35	31	25	44	66	36	40
Croplan	RC 4417 (RR)	44 ± 1	67	25	45	23	44	60	40	45
Pioneer	94Y20 (RR)	43 ± 1	68	30	38	23	41	66	40	41
Armor	44-K6 (RR)	43 ± 1	69	26	48	22	35	63	40	43
Dyna-Gro	V42N9RS	43 ± 1	62	33	42	24	42	61	39	43
Terral	TV 45R18 (RR)	43 ± 1	61	37	44	22	40	60	40	42
Dyna-Gro	V44N9RS	43 ± 1	64	34	37	24	36	66	41	41
Progeny	4206 RR	43 ± 1	66	31	41	19	44	58	39	43
NK	S 45-E5 Brand (RR)	42 ± 1	55	30	43	25	44	59	37	44
Progeny	4405 RR	42 ± 1	63	35	37	28	45	56	36	39
Midwest Premium Genetics	MPG 4509nRR/STS	42 ± 1	64	33	38	21	41	60	40	39
AgVenture	42P2NRRSTS	42 ± 1	66	32	31	21	40	60	39	45

Table 11 (continued)

Brand	Variety ‡	Avg. Yield ± Std Err. (n=8)	Knoxville Crossville		Spring Hill		Springfield	Milan		Ames
					Irr.	Non-Irr.		Irr.	Non-Irr.	
TN Exp	TN07-162RR	41 ± 1	58	41	37	30	44	49	36	36
Dyna-Gro	V40N8RS	41 ± 1	60	35	36	23	37	59	38	41
TN Exp	TN07-217RR	41 ± 1	55	30	41	21	42	57	37	43
TN Exp	TN07-266RR	39 ± 1	50	37	46	26	36	46	31	43
Pioneer	94M50 (RR)	39 ± 1	63	27	29	20	39	54	36	45
Average (bu/a)		45	67	34	44	26	44	61	40	46
L.S.D._{.05} (bu/a)		3	8	9	10	7	5	7	4	6
C.V. (%)		9.7	6.9	16.0	13.8	15.2	7.6	6.6	6.9	8.5

† 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 42 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in eight environments in Tennessee during 2008.

Brand	Variety ‡	Avg. Yield	Moisture § (n=8)	Lodging (n=4)	Height (n=8)	Maturity (n=8)	Shattering (n=4)	Seed		
		± Std Err. (n=8)						Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Hornbeck	HBK R 4527 (RR)	50 ± 1	13.0	2.0	37	136	1.1	1.5	40.3	21.4
Morsoy	RT 4485N (RR)	50 ± 1	12.4	2.0	37	134	1.4	1.5	38.1	22.8
Delta Grow	4460 RR	49 ± 1	12.2	2.0	39	132	1.5	1.8	37.8	22.8
TN Exp	TN05-8733RR	49 ± 1	13.1	2.2	37	137	1.0	2.2	37.7	23.4
Dairyland	4500 RR STS	49 ± 1	12.4	2.1	33	134	1.4	1.8	37.9	22.9
FFR	4526 RR	48 ± 1	12.4	1.9	34	137	1.3	1.8	38.0	22.3
Armor	42-M1 (RR)	48 ± 1	12.6	1.5	29	135	1.3	2.2	37.7	22.9
Asgrow	DP 4546 RR	48 ± 1	12.5	2.5	37	137	1.3	1.5	40.4	22.1
USG	74A45 (RR)	48 ± 1	12.4	2.0	38	132	1.4	1.7	37.8	22.8
Morsoy	RTS 4488N (RR/STS)	48 ± 1	12.5	1.1	28	134	1.4	1.8	38.2	22.7
Dyna-Gro	36C44 (RR)	47 ± 1	12.2	1.3	29	132	1.4	2.0	37.2	23.0
Steyer	4430 RR	47 ± 1	12.3	1.3	28	135	1.3	1.7	37.7	23.0
Dyna-Gro	37A44 (RR)	47 ± 1	12.7	1.8	36	134	1.4	2.0	37.7	23.0
USG	74H48 (RR/STS)	47 ± 1	12.3	2.1	33	135	1.3	1.8	38.3	22.9
Southern Cross	Caleb (RR/STS)	47 ± 1	12.1	1.1	28	134	1.5	1.7	37.2	22.9
Schillinger Seed	457 RCP	47 ± 1	12.7	2.2	38	136	1.4	1.8	36.8	23.9
Trisler Seed	Trisoy 4586RR (CN) STS	47 ± 1	12.2	1.3	28	132	1.5	1.8	38.0	22.5
Croplan	RC 4455 RR	47 ± 1	12.3	2.2	36	134	1.4	1.7	37.6	23.0
Midwest Premium Genetics	MPV 4406nRR	46 ± 1	12.3	1.6	37	135	1.4	2.0	37.9	22.8
Progeny	4408 RR/STS	46 ± 1	12.3	1.2	28	133	1.5	1.8	37.6	22.7
Dairyland	4300 RR	46 ± 1	12.1	1.8	31	134	1.3	1.5	39.3	22.1
Progeny	4508 RR	46 ± 1	12.5	1.6	33	135	1.3	1.7	36.0	24.5
Asgrow	AG4303 (RR)	46 ± 1	12.1	1.3	28	133	1.6	1.8	37.6	22.8
Delta Grow	4470 RR/STS	45 ± 1	12.5	1.2	28	137	1.3	1.8	37.4	22.9
Delta Grow	4150 RR	45 ± 1	12.4	1.7	32	136	1.2	1.8	39.5	22.1
Crow's	C 4519 R (STS)	44 ± 1	12.1	1.9	32	134	1.7	1.8	38.2	23.1
Croplan	RC 4417 (RR)	44 ± 1	12.4	2.0	37	133	1.6	1.7	37.9	22.7
Pioneer	94Y20 (RR)	43 ± 1	12.2	2.1	33	132	1.4	2.0	38.1	23.1
Armor	44-K6 (RR)	43 ± 1	12.4	1.5	28	131	1.7	2.0	37.6	22.6
Dyna-Gro	V42N9RS	43 ± 1	12.2	1.2	30	131	1.6	2.3	37.1	22.7
Terral	TV 45R18 (RR)	43 ± 1	11.8	1.8	36	133	1.4	1.5	38.3	23.2
Dyna-Gro	V44N9RS	43 ± 1	12.3	1.2	28	131	1.6	1.7	37.5	22.7
Progeny	4206 RR	43 ± 1	12.3	1.4	30	134	1.5	2.2	37.2	23.3
NK	S 45-E5 Brand (RR)	42 ± 1	12.2	1.6	34	134	1.3	2.0	39.3	21.8
Progeny	4405 RR	42 ± 1	12.8	2.1	37	134	1.3	2.0	38.0	22.8
Midwest Premium Genetics	MPG 4509nRR/STS	42 ± 1	12.3	1.2	28	132	1.6	2.0	37.6	22.5
AgVenture	42P2NRRSTS	42 ± 1	12.4	1.4	29	137	1.3	2.0	38.6	22.7

Table 12 (continued)

Brand	Variety ‡	Avg. Yield	Moisture § (n=8)	Lodging (n=4)	Height (n=8)	Maturity (n=8)	Shattering (n=4)	Seed		
		± Std Err. (n=8)						Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
TN Exp	TN07-162RR	41 ± 1	12.1	3.2	37	136	1.2	2.3	37.6	24.5
Dyna-Gro	V40N8RS	41 ± 1	12.4	1.4	32	133	1.6	2.0	38.1	23.0
TN Exp	TN07-217RR	41 ± 1	12.2	3.1	34	131	1.3	1.8	36.0	22.0
TN Exp	TN07-266RR	39 ± 1	12.4	2.5	34	134	1.1	1.7	40.7	23.0
Pioneer	94M50 (RR)	39 ± 1	12.2	1.5	29	135	1.2	2.2	39.2	22.7
Average		45	12.4	1.8	33	134	1.4	1.9	38.0	22.8

† 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 13. Mean yields † of 16 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2007 - 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=12)	Knoxville	Crossville	Springfield	Milan		Ames
						Irr.	Non-Irr.	
			-----bu/a-----					
Morsoy	RT 4485N (RR)	42 ± 1	54	27	36	67	31	39
Southern Cross	Caleb (RR/STS)	42 ± 1	52	27	33	75	29	36
Delta Grow	4470 RR/STS	42 ± 1	54	26	30	69	35	35
FFR	4526 RR	41 ± 1	50	28	34	72	28	37
Schillinger Seed	457 RCP	41 ± 1	52	27	36	64	33	36
Steyer	4430 RR	41 ± 1	53	29	31	67	34	33
Delta Grow	4460 RR	41 ± 1	53	27	33	64	32	35
Dyna-Gro	37A44 (RR)	41 ± 1	52	27	35	62	29	39
USG	74A45 (RR)	41 ± 1	50	25	36	63	29	41
Midwest Premium Gen	MPV 4406nRR	40 ± 1	53	27	33	66	29	34
Asgrow	DP 4546 RR	40 ± 1	54	26	34	62	29	37
Croplan	RC 4417 (RR)	40 ± 1	52	21	33	69	29	35
Dairyland	4300 RR	40 ± 1	51	22	30	71	30	34
Delta Grow	4150 RR	40 ± 1	54	25	32	63	29	35
NK	S 45-E5 Brand (RR)	37 ± 1	43	24	31	63	29	33
Pioneer	94M50 (RR)	37 ± 1	48	22	28	56	30	36
Average (bu/a)		40	52	26	33	66	30	36
L.S.D._{.05} (bu/a)		3	6	7	5	8	6	6
C.V. (%)		10.3	8.2	17.4	9.3	8.3	11.9	10.6

† 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.

Table 14. Mean yields † and agronomic characteristics of 16 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2007 - 2008.

Brand	Variety ‡	Avg. Yield	Moisture § (n=12)	Lodging (n=4)	Height (n=11)	Maturity (n=11)	Shattering (n=4)	Leaf	Seed	Protein (n=3)	Oil (n=3)
		± Std Err. (n=12)						Retention (n=2)	Quality (n=3)		
		bu/a	%	Score	in.	DAP	-----Score-----		%	%	
Morsoy	RT 4485N (RR)	42 ± 1	13.0	2.5	36	134	1.0	2.5	1.9	39.3	21.6
Southern Cross	Caleb (RR/STS)	42 ± 1	12.6	1.7	28	134	1.0	2.2	2.2	39.2	21.7
Delta Grow	4470 RR/STS	42 ± 1	12.6	1.5	29	135	1.0	1.7	2.1	39.4	21.3
FFR	4526 RR	41 ± 1	13.0	2.2	34	134	1.0	1.9	2.0	40.1	20.9
Schillinger Seed	457 RCP	41 ± 1	13.8	2.5	38	136	1.0	3.0	3.2	39.1	22.6
Steyer	4430 RR	41 ± 1	12.6	1.8	28	134	1.0	1.8	1.9	39.0	21.6
Delta Grow	4460 RR	41 ± 1	12.7	2.2	37	132	1.0	2.1	2.2	39.4	21.5
Dyna-Gro	37A44 (RR)	41 ± 1	14.0	2.1	36	133	1.0	2.6	2.6	39.4	21.6
USG	74A45 (RR)	41 ± 1	12.8	2.2	38	132	1.0	1.8	2.2	39.8	21.4
Midwest Premium Genetics	MPV 4406nRR	40 ± 1	12.9	2.1	37	133	1.0	2.9	2.3	39.2	21.4
Asgrow	DP 4546 RR	40 ± 1	14.2	2.7	36	136	1.0	2.8	2.5	41.4	21.4
Croplan	RC 4417 (RR)	40 ± 1	13.2	2.2	36	131	1.0	3.0	2.3	39.9	21.9
Dairyland	4300 RR	40 ± 1	12.5	2.2	31	132	1.0	1.7	1.8	39.7	21.7
Delta Grow	4150 RR	40 ± 1	12.6	1.9	32	135	1.0	2.3	2.0	41.3	20.6
NK	S 45-E5 Brand (RR)	37 ± 1	12.6	2.0	34	131	1.0	2.0	2.2	41.2	20.1
Pioneer	94M50 (RR)	37 ± 1	12.7	1.7	30	133	1.0	1.8	2.2	40.1	21.8
Average		40	13.0	2.1	34	134	1.0	2.3	2.2	39.8	21.5

† 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.

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, 2006 - 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=18)	Knoxville	Crossville	Springfield	Milan		Ames
						Irr.	Non-Irr.	
-----bu/a-----								
Morsoy	RT 4485N (RR)	46 ± 1	51	38	35	67	38	44
USG	74A45 (RR)	43 ± 1	44	36	36	65	37	42
Delta Grow	4460 RR	42 ± 1	47	37	33	65	36	36
Dyna-Gro	37A44 (RR)	42 ± 1	47	38	36	64	33	37
Delta Grow	4150 RR	42 ± 1	47	40	32	62	35	36
Asgrow	DP 4546 RR	42 ± 1	48	40	32	61	34	35
Average (bu/a)		43	47	38	34	64	36	39
L.S.D._{.05} (bu/a)		2	6	7	4	7	5	6
C.V. (%)		9.6	9.0	11.5	9.0	7.5	9.9	11.5

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, 2006 - 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=18)	Moisture § (n=18)	Lodging (n=8)	Height (n=16)	Maturity (n=16)	Shattering (n=6)	Leaf	Seed	Protein (n=7)	Oil (n=7)
								Retention (n=2)	Quality (n=7)		
		bu/a	%	Score	in.	DAP	-----Score-----	-----	-----	%	%
Morsoy	RT 4485N (RR)	46 ± 1	13.2	2.1	37	132	1.0	2.5	2.3	39.3	22.2
USG	74A45 (RR)	43 ± 1	13.1	2.0	38	130	1.0	1.8	2.3	39.3	22.1
Delta Grow	4460 RR	42 ± 1	13.2	2.0	37	131	1.0	2.1	2.3	38.7	22.2
Dyna-Gro	37A44 (RR)	42 ± 1	14.0	1.9	36	131	1.0	2.6	2.4	38.5	22.3
Delta Grow	4150 RR	42 ± 1	13.0	1.6	33	132	1.0	2.3	2.2	40.2	21.7
Asgrow	DP 4546 RR	42 ± 1	14.2	2.3	37	134	1.0	2.8	2.3	40.9	21.7
Average		43	13.4	2.0	36	132	1.0	2.4	2.3	39.5	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.

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.

Table 17. Yields † of 14 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties in 14 County Standard Tests in Tennessee and Kentucky during 2008.

MS	Brand/Variety	Avg.				(KY)	(KY)								Milan REC		
		Yield bu/a	Moist‡ %	Coffee 5/13 §	Dyer 5/23	Franklin 5/5	Linder 6/7	Major 7/18	Gibson 5/21	Henry 5/6	Lake 5/6	Lauderdale 6/2	McCracken 5/20	Obion 5/19	Gibson 6/4	Tipton 6/3	Weakley 6/9
A	Armor 42-M1	54.7	11.0	29.2	66.8	37.6	38.6	46.9	45.5	59.5	65.3	61.9	53.0	80.9	60.9	69.8	50.5
AB	Trisoy T4475RR(CN)	53.8	10.8	26.2	69.5	36.9	40.2	50.7	41.3	57.7	61.3	62.7	54.3	82.2	59.4	62.5	48.2
ABC	Dyna-Gro 37A44	53.0	10.7	26.0	71.3	31.9	34.7	53.4	42.6	52.2	53.9	64.0	59.6	81.5	58.0	62.9	49.7
ABC	*USG 74A45	52.5	10.5	27.0	67.6	31.7	26.8	48.4	47.4	56.5	62.9	65.5	57.6	77.3	58.2	62.9	45.2
ABCD	Asgrow AG4005	52.2	10.3	28.9	65.4	31.2	39.6	44.4	40.3	63.4	43.5	63.2	58.5	78.3	58.2	63.0	52.6
BCD	Dairyland 4300 RR	51.4	10.3	25.5	68.5	31.1	27.9	44.6	48.8	58.7	50.6	60.9	50.8	79.2	59.7	61.9	51.6
BCD	FFR 4526	51.2	10.7	28.8	61.3	31.6	28.4	43.5	46.6	59.4	60.6	63.5	47.6	78.9	58.4	62.8	45.2
CDE	Dyna-Gro V44N9RS	51.0	10.5	24.5	67.0	31.7	32.9	44.0	38.8	53.0	51.9	69.3	52.2	77.1	58.6	65.6	47.8
CDEF	Schillinger 457RC	50.5	10.4	33.7	61.9	32.2	36.5	43.9	46.3	56.7	53.6	59.3	41.4	75.3	56.3	64.7	45.0
DEFG	Steyer 4430	49.7	11.0	25.2	71.2	25.2	27.2	42.8	46.6	51.5	54.9	65.1	50.3	75.5	57.2	57.7	45.2
DEFG	Morsoy RTs4556N(RR/STS)	49.6	10.7	27.8	60.8	29.4	31.5	46.0	43.5	55.5	50.8	59.9	44.8	79.9	58.1	65.4	41.5
EFG	Trisoy T4275RR(CN)	48.5	10.8	25.5	68.3	32.7	27.2	42.5	46.3	48.7	43.7	62.5	46.0	72.5	54.6	58.8	50.5
FG	Steyer 4040	48.4	10.5	26.3	63.7	30.3	28.6	39.6	43.0	58.5	43.5	61.1	55.2	71.8	52.6	56.4	46.5
G	Asgrow DKB42-51	47.8	10.4	26.9	63.8	29.5	28.4	39.2	40.1	54.4	47.5	63.3	49.9	70.5	54.7	57.3	43.4
Average (bu/a)		51.0	10.6	27.2	66.2	31.6	32.0	45.0	44.1	56.1	53.1	63.0	51.5	77.2	57.5	62.3	47.3

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Planting date.

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 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 2007.

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 14 early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests during 2008.

MS	Brand/Variety	CST	----- Research and Education Center at Milan -----								
		Avg. Yield (n=14)	Moisture ‡	SDS	Frogeye	Anthracnose	Sprayed ¶ Yield	Unsprayed Yield	SCN - 2007 #		
		bu/a	%	2006 / 07 / 08	2006 / 07 / 08	2007 / 08	bu/a	bu/a	Race 2	Race 3	Race 14
A	Armor 42-M1	54.7	11.0	/ / 0.3	/ / 0.0	/ 2.7	59.3	55.7	S	---	---
AB	Trisoy T4475RR(CN)	53.8	10.8	/ / 0.3	/ / 3.7	/ 4.0	66	57.8	S	---	---
ABC	Dyna-Gro 37A44	53.0	10.7	/ / 1.3	/ / 3.7	/ 5.3	63.7	56.9	S	---	---
ABC	*USG 74A45	52.5	10.5	/ 1.0 / 1.7	/ 2.0 / 2.3	7.0 / 5.0	65.8	57.0	S	R	S
ABCD	Asgrow AG4005	52.2	10.3	/ / 0.0	/ / 1.0	/ 3.0	54.0	51.5	S	---	---
BCD	Dairyland 4300 RR	51.4	10.3	/ / 0.0	/ / 6.0	/ 4.7	52.4	51.4	S	---	---
BCD	FFR 4526	51.2	10.7	/ 1.0 / 0.0	/ 2.0 / 1.7	6.0 / 3.7	60.6	65.8	S	MR	S
CDE	Dyna-Gro V44N9RS	51.0	10.5	---	---	---	---	---	---	---	---
CDEF	Schillinger 457RC	50.5	10.4	/ 1.0 / 0.3	/ 2.0 / 0.3	7.0 / 3.7	58.9	46.9	S	R	S
DEFG	Steyer 4430	49.7	11.0	/ / 0.0	/ / 0.0	/ 3.0	55.0	49.4	S	---	---
DEFG	Morsoy RTs4556N(RR/STS)	49.6	10.7	/ / 0.0	/ / 5.7	/ 3.3	59.4	53.7	S	---	---
EFG	Trisoy T4275RR(CN)	48.5	10.8	/ / 0.0	/ / 6.7	/ 2.7	59.9	57.3	S	---	---
FG	Steyer 4040	48.4	10.5	/ / 0.0	/ / 6.7	/ 3.7	49.6	44.3	S	---	---
G	Asgrow DKB42-51	47.8	10.4	/ / 0.0	/ / 2.7	/ 3.7	51.1	41.0	S	---	---
Average (bu/a)		51.0	10.6				58.1	53.0			

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Disease ratings for SDS, Frogeye Leaf Spot, and Anthracnose 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 + 0.25% Induce at 20 gpa at R3 growth stage.

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

Complete 2008 SCN ratings available Feb. 2009.

Disease ratings compiled by Dr. Melvin Newman from replicated plots at the Research and Education Center at Milan.

SCN Greenhouse Ratings compiled by Dr. Pat Donald, Research Plant Path., USDA-ARS, West TN REC.

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 2007.

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

Table 19. Overall average yields † and moistures ‡ of eight Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in County Standard Tests (n=14) and Research and Education Centers (n=8) in Tennessee in 2008.

Brand	Variety	County Standard Trials		Research and Education Center Trials	
		Avg. Yield	Moisture	Avg. Yield	Moisture
		bu/a	%	bu/a	%
Armor	42-M1 (RR)	55	11.0	48	12.6
Dyna-Gro	37A44 (RR)	53	10.7	47	12.7
USG	74A45 (RR)	53	10.5	48	12.4
Dairyland	4300 RR	51	10.3	46	12.1
FFR	4526 RR	51	10.7	48	12.4
Dyna-Gro	V44N9RS	51	10.5	43	12.3
Schillinger Seed	457 RCP	50	10.4	47	12.7
Steyer	4430 RR	50	11.0	47	12.3
Average (bu/a)		52	10.6	47	12.4

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

Table 20. Mean yields † of 84 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in eight environments in Tennessee during 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=8)	Knoxville	Crossville	Spring Hill			Milan		Ames
					Irr.	Non-Irr.	Springfield	Irr.	Non-Irr.	
Delta Grow	4975 LA RR	59 ± 1	85	39	65	48	53	69	50	61
Hornbeck	HBK R 4924 (RR)	59 ± 1	85	38	69	43	58	77	42	57
Progeny	4908 RR	56 ± 1	90	38	63	42	63	68	42	45
Dairyland	8482 RR	56 ± 1	85	34	68	43	62	72	44	40
Progeny	4906 RR	56 ± 1	87	37	66	43	59	59	44	51
Morsoy	RTS 4955N (RR/STS)	56 ± 1	89	31	59	42	60	66	45	54
Dyna-Gro	37P49 (RR)	56 ± 1	75	40	70	37	67	65	42	49
USG	74A91 (RR)	55 ± 1	82	34	65	42	55	70	45	51
Dyna-Gro	36Y48 (RR / STS)	55 ± 1	81	37	66	40	59	69	39	52
Morsoy	RT 4914N (RR)	55 ± 1	73	37	65	43	61	58	45	55
Delta Grow	4780 RR	55 ± 1	83	29	65	36	55	68	46	54
USG	74T98 (RR)	54 ± 1	62	38	68	49	58	62	42	56
Asgrow	AG4907 (RR)	54 ± 1	82	46	62	37	58	67	43	40
NK	S 49-H7 Brand (RR)	54 ± 1	60	41	64	50	60	70	41	47
USG	7495nRS	54 ± 1	81	36	59	39	58	64	44	50
Terral	TV 49R27 (RR)	54 ± 1	65	37	68	44	62	58	47	48
MO Exp	S05-4604 RR	53 ± 1	71	32	61	43	53	71	41	53
FFR	4886 RR/STS	53 ± 1	81	34	61	36	56	65	43	45
Progeny	4606 RR/STS	53 ± 1	71	40	63	36	54	70	40	47
Asgrow	AG4903 (RR/STS)	53 ± 1	72	37	62	40	60	62	42	46
Delta Grow	4970 RR	53 ± 1	66	34	68	43	62	54	48	46
Morsoy	RT 4888N (RR)	52 ± 1	87	32	62	37	59	63	36	43
Pioneer	94Y90 (RR)	52 ± 1	70	40	66	37	59	62	40	44
Midwest Premium Genetics	MPG 4907nRR/STS	52 ± 1	84	40	54	35	55	65	42	43
NK	S 46-U6 Brand (RR)	52 ± 1	69	33	62	40	60	61	39	53
Armor	48-J3 (RR)	52 ± 1	62	38	66	37	53	62	44	55
Morsoy	RT 4707N (RR)	52 ± 1	80	36	61	35	55	59	44	46
Trisler Seed	Trisoy 4984RR (CN)	52 ± 1	83	35	65	37	55	55	38	46
Morsoy	RTS 4706N (RR/STS)	52 ± 1	77	30	57	39	64	64	40	44
USG	74G78 (RR)	52 ± 1	70	25	64	33	58	73	42	49
Hornbeck	HBK R 4727 (RR)	51 ± 1	77	33	67	33	51	62	44	45
USG	74E88 (RR/STS)	51 ± 1	73	34	60	39	57	55	41	51
Delta Grow	4820 RR	51 ± 1	66	32	58	42	60	62	42	49
Asgrow	DK4866 (RR/STS)	51 ± 1	80	36	56	31	58	64	41	44
Terral	TV 47R17 (RR)	51 ± 1	68	34	60	44	57	67	36	42
Armor	47-F8 (RR)	51 ± 1	81	28	59	36	53	63	42	45
Progeny	4807 RR	51 ± 1	76	32	62	35	55	59	41	45
NK	S 49-W6 Brand (RR)	51 ± 1	64	26	66	50	55	61	40	43

Table 20 (continued)

Brand	Variety ‡	Avg. Yield ± Std Err. (n=8)	Knoxville		Spring Hill			Milan		Ames
			Crossville	Irr.	Non-Irr.	Springfield	Irr.	Non-Irr.		
Asgrow	DP 4888 RR/S	51 ± 1	70	35	58	33	58	70	41	40
Progeny	4718 RR	51 ± 1	73	34	60	34	57	57	42	48
Progeny	4918 RR	51 ± 1	80	35	64	38	57	49	38	43
Dyna-Gro	32R46 (RR/STS)	51 ± 1	73	30	68	39	51	66	37	39
Dyna-Gro	32P48 (RR)	50 ± 1	79	33	59	36	57	56	38	44
Crow's	C 4820 R (STS)	50 ± 1	79	33	60	37	49	60	39	46
Croplan	RC 4955 (RR)	50 ± 1	67	38	60	33	56	58	39	52
TN Exp	TN05-4507RR	50 ± 1	74	30	58	36	60	59	41	46
Midwest Premium Genetics	MPG X48-3nRR	50 ± 1	79	35	56	31	50	62	40	50
Asgrow	AG4606 (RR/STS)	50 ± 1	74	43	57	30	55	54	40	47
Dyna-Gro	V49N6RR	50 ± 1	66	37	56	36	58	54	45	48
Midwest Premium Genetics	MPG 4909nRR	50 ± 1	81	33	62	29	55	57	42	39
Delta Grow	4770 RR	50 ± 1	73	31	62	33	54	60	40	45
Croplan	RC 4877 RR	50 ± 1	73	32	62	34	58	54	38	46
Trisler Seed	Trisoy 4788RR (CN) STS	50 ± 1	73	28	57	30	52	63	42	50
Terral	TV 49R17 (RR)	49 ± 1	69	35	55	37	52	64	42	41
Pioneer	94Y70 (RR)	49 ± 1	72	36	57	34	54	60	43	39
USG	74A76 (RR)	49 ± 1	65	33	54	32	54	66	42	48
Asgrow	AG4705 (RR)	49 ± 1	70	39	55	30	52	57	40	49
TN Exp	TN06-118RR	49 ± 1	53	37	61	47	56	64	40	35
USG	7482nRR	49 ± 1	71	33	57	33	52	60	40	46
USG	74F96 (RR)	49 ± 1	64	33	58	38	60	57	38	45
Dyna-Gro	V47N8RR	49 ± 1	71	31	59	28	60	58	41	45
Asgrow	AG4703 (RR)	49 ± 1	64	24	61	35	54	64	43	47
Southern Cross	Eli (RR/STS)	49 ± 1	72	32	55	33	59	59	38	44
Progeny	4949 RR	49 ± 1	76	33	56	40	53	52	38	42
Asgrow	AG4605 (RR/STS)	49 ± 1	65	28	62	29	53	66	40	48
Dairyland	8474 RR	49 ± 1	81	31	56	38	53	59	34	39
USG	74A88 (RR)	49 ± 1	78	21	54	42	54	57	40	42
Schillinger Seed	495 RC	48 ± 1	67	33	67	37	53	53	41	36
Southern Cross	Galilee (RR)	48 ± 1	70	31	60	28	58	54	41	41
Terral	TV 47R18 (RR)	48 ± 1	66	35	55	38	51	60	37	43
Pioneer	94Y60 (RR)	48 ± 1	82	31	52	22	51	62	47	39
Armor	ARX 4717 (RR)	48 ± 1	62	33	60	30	55	59	38	47
Terral	TV 49R19 (RR)	48 ± 1	60	32	58	34	53	56	40	47
Morsoy	RTS 4556N (RR/STS)	47 ± 1	74	30	55	29	53	56	39	42
Steyer	4620 RR/STS	47 ± 1	76	23	52	31	49	62	41	45
Dyna-Gro	V47N9RS	47 ± 1	68	34	55	30	52	52	41	45
Progeny	4706 RR	46 ± 1	67	31	55	29	47	59	38	44

Table 20 (continued)

Brand	Variety ‡	Avg. Yield ± Std Err. (n=8)	Knoxville	Crossville	Spring Hill		Springfield	Milan		Ames
					Irr.	Non-Irr.		Irr.	Non-Irr.	
-----bu/a-----										
Great Heart	GT-462CRR	46 ± 1	62	33	51	32	55	55	42	35
Terral	TV 46R19 (RR)	45 ± 1	59	28	57	35	51	53	37	41
Schillinger Seed	478 RCS	45 ± 1	66	29	57	30	49	57	35	37
Midwest Premium Genetics	MPG 4705nRR	45 ± 1	57	30	52	26	57	49	44	44
Southern Cross	Rufus (RR/STS)	45 ± 1	68	32	58	26	50	53	38	34
Stine	4782-4 (RR/STS)	44 ± 1	69	27	51	30	54	56	34	34
Southern Cross	Hiram (RR)	44 ± 1	68	33	40	34	55	50	33	37
Average (bu/a)		51	73	34	60	36	56	61	41	46
L.S.D._{.05} (bu/a)		3	10	9	10	7	8	8	5	9
C.V. (%)		9.9	8.5	15.3	10.2	11.6	8.5	8.3	7.6	11.6

† 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.

Table 21. Mean yields † and agronomic characteristics of 84 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in eight environments in Tennessee in 2008.

Brand	Variety ‡	Avg. Yield	Moisture § (n=8)	Lodging (n=4)	Height (n=8)	Maturity (n=8)	Shattering (n=4)	Seed	Protein (n=1)	Oil (n=1)
		± Std Err. (n=8)						Quality (n=1)		
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Delta Grow	4975 LA RR	59 ± 1	12.6	1.8	37	142	1.1	2.0	39.0	22.5
Hornbeck	HBK R 4924 (RR)	59 ± 1	12.3	2.0	39	144	1.3	2.0	39.6	22.1
Progeny	4908 RR	56 ± 1	12.2	2.1	36	144	1.3	2.2	40.0	22.0
Dairyland	8482 RR	56 ± 1	11.6	2.1	36	144	1.3	2.3	39.8	21.8
Progeny	4906 RR	56 ± 1	12.0	2.1	36	141	1.3	2.2	39.1	22.5
Morsoy	RTS 4955N (RR/STS)	56 ± 1	12.4	2.0	36	143	1.3	2.3	40.0	22.8
Dyna-Gro	37P49 (RR)	56 ± 1	12.3	1.9	35	143	1.0	2.0	39.1	22.5
USG	74A91 (RR)	55 ± 1	12.0	1.9	35	143	1.2	1.8	39.0	22.2
Dyna-Gro	36Y48 (RR / STS)	55 ± 1	12.7	2.1	36	144	1.3	2.0	40.0	22.7
Morsoy	RT 4914N (RR)	55 ± 1	12.5	2.1	39	145	1.3	2.3	40.4	21.5
Delta Grow	4780 RR	55 ± 1	11.8	1.9	36	142	1.2	2.3	38.3	22.5
USG	74T98 (RR)	54 ± 1	12.6	2.0	31	142	1.3	2.3	38.0	22.1
Asgrow	AG4907 (RR)	54 ± 1	12.2	2.1	37	141	1.3	2.2	38.0	22.4
NK	S 49-H7 Brand (RR)	54 ± 1	12.1	1.7	37	146	1.3	1.8	39.1	22.0
USG	7495nRS	54 ± 1	12.5	2.2	36	140	1.4	2.7	39.9	22.5
Terral	TV 49R27 (RR)	54 ± 1	13.0	2.4	39	143	1.3	2.3	39.9	21.7
MO Exp	S05-4604 RR	53 ± 1	12.3	1.9	39	147	1.3	2.3	40.3	21.2
FFR	4886 RR/STS	53 ± 1	12.8	2.3	36	143	1.3	2.2	39.9	22.7
Progeny	4606 RR/STS	53 ± 1	12.5	1.2	30	141	1.3	2.2	37.1	23.6
Asgrow	AG4903 (RR/STS)	53 ± 1	12.3	1.6	34	142	1.3	2.2	38.7	22.5
Delta Grow	4970 RR	53 ± 1	12.5	2.5	40	143	1.4	2.0	39.9	21.6
Morsoy	RT 4888N (RR)	52 ± 1	11.7	1.9	35	142	1.3	2.3	39.3	21.3
Pioneer	94Y90 (RR)	52 ± 1	11.9	1.7	37	141	1.1	2.2	38.6	22.0
Midwest Premium Genetics	MPG 4907nRR/STS	52 ± 1	12.3	2.0	36	142	1.3	2.2	40.0	22.7
NK	S 46-U6 Brand (RR)	52 ± 1	12.3	1.8	37	144	1.2	2.3	38.8	21.9
Armor	48-J3 (RR)	52 ± 1	12.0	2.0	34	142	1.2	2.3	39.9	22.0
Morsoy	RT 4707N (RR)	52 ± 1	11.5	1.9	36	145	1.3	2.0	38.3	22.1
Trisler Seed	Trisoy 4984RR (CN)	52 ± 1	12.1	1.9	35	142	1.3	2.2	39.6	21.4
Morsoy	RTS 4706N (RR/STS)	52 ± 1	11.9	1.3	30	145	1.2	2.2	37.0	23.4
USG	74G78 (RR)	52 ± 1	11.9	1.3	30	143	1.1	2.2	37.1	23.5
Hornbeck	HBK R 4727 (RR)	51 ± 1	11.8	1.8	35	144	1.3	1.7	37.8	22.6
USG	74E88 (RR/STS)	51 ± 1	11.8	1.6	36	141	1.5	1.8	38.1	23.6
Delta Grow	4820 RR	51 ± 1	12.0	1.7	31	141	1.3	2.5	39.9	22.0
Asgrow	DK4866 (RR/STS)	51 ± 1	11.7	1.8	35	140	1.2	2.5	38.7	21.5
Terral	TV 47R17 (RR)	51 ± 1	14.6	2.5	40	145	1.3	2.8	38.8	22.3
Armor	47-F8 (RR)	51 ± 1	12.5	1.3	30	142	1.1	2.3	37.1	23.5
Progeny	4807 RR	51 ± 1	12.0	1.9	34	143	1.2	2.0	38.0	22.2
NK	S 49-W6 Brand (RR)	51 ± 1	12.9	2.0	39	144	1.1	1.7	39.1	22.0

Table 21 (continued)

Brand	Variety ‡	Avg. Yield				Seed				
		± Std Err. (n=8)	Moisture § (n=8)	Lodging (n=4)	Height (n=8)	Maturity (n=8)	Shattering (n=4)	Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Asgrow	DP 4888 RR/S	51 ± 1	11.6	2.2	38	142	1.4	2.0	39.1	22.0
Progeny	4718 RR	51 ± 1	12.1	1.6	32	141	1.3	2.3	39.8	21.8
Progeny	4918 RR	51 ± 1	11.7	2.0	34	141	1.3	2.2	39.3	21.4
Dyna-Gro	32R46 (RR/STS)	51 ± 1	12.0	1.3	30	142	1.1	1.8	37.2	22.9
Dyna-Gro	32P48 (RR)	50 ± 1	11.8	1.8	34	143	1.1	2.2	39.9	21.3
Crow's	C 4820 R (STS)	50 ± 1	12.0	1.4	34	141	1.5	2.3	38.0	23.8
Croplan	RC 4955 (RR)	50 ± 1	12.3	2.0	39	143	1.2	2.3	37.5	23.5
TN Exp	TN05-4507RR	50 ± 1	12.1	2.0	36	142	1.3	2.3	39.1	21.4
Midwest Premium Genetics	MPG X48-3nRR	50 ± 1	11.9	1.8	34	138	1.3	2.0	36.8	24.1
Asgrow	AG4606 (RR/STS)	50 ± 1	12.0	1.4	32	139	1.5	2.3	37.8	23.8
Dyna-Gro	V49N6RR	50 ± 1	12.3	2.4	38	141	1.3	2.7	40.2	21.5
Midwest Premium Genetics	MPG 4909nRR	50 ± 1	11.7	1.9	35	142	1.3	2.0	39.2	21.3
Delta Grow	4770 RR	50 ± 1	11.7	2.1	36	138	1.3	2.2	38.4	22.0
Croplan	RC 4877 RR	50 ± 1	11.9	1.8	35	144	1.3	2.0	37.8	22.4
Trisler Seed	Trisoy 4788RR (CN) S	50 ± 1	12.1	1.3	33	139	1.5	2.0	38.0	23.4
Terral	TV 49R17 (RR)	49 ± 1	12.5	2.1	43	143	1.3	2.3	40.7	21.3
Pioneer	94Y70 (RR)	49 ± 1	11.8	2.1	35	140	1.4	2.3	37.3	23.3
USG	74A76 (RR)	49 ± 1	11.8	2.1	35	138	1.3	2.3	38.7	21.7
Asgrow	AG4705 (RR)	49 ± 1	11.6	2.2	35	142	1.5	2.2	39.0	23.2
TN Exp	TN06-118RR	49 ± 1	12.6	1.8	32	143	1.1	2.7	37.6	22.5
USG	7482nRR	49 ± 1	11.7	2.0	33	141	1.3	1.8	40.4	21.7
USG	74F96 (RR)	49 ± 1	12.7	1.7	36	142	1.2	1.8	37.7	22.4
Dyna-Gro	V47N8RR	49 ± 1	11.6	1.8	35	142	1.3	1.8	37.4	22.5
Asgrow	AG4703 (RR)	49 ± 1	11.7	1.6	31	141	1.1	2.0	38.7	21.8
Southern Cross	Eli (RR/STS)	49 ± 1	12.5	1.1	29	142	1.3	2.2	37.0	23.6
Progeny	4949 RR	49 ± 1	12.2	2.2	37	145	1.3	2.3	39.6	22.2
Asgrow	AG4605 (RR/STS)	49 ± 1	11.8	1.4	30	140	1.5	2.0	37.8	22.8
Dairyland	8474 RR	49 ± 1	12.2	1.8	32	142	1.4	2.0	38.9	22.3
USG	74A88 (RR)	49 ± 1	11.9	1.9	35	142	1.1	2.3	39.7	21.2
Schillinger Seed	495 RC	48 ± 1	12.1	2.2	38	141	1.5	2.3	40.2	21.5
Southern Cross	Galilee (RR)	48 ± 1	12.0	1.7	35	142	1.2	2.2	38.1	22.5
Terral	TV 47R18 (RR)	48 ± 1	11.7	2.4	38	143	1.3	3.0	40.6	20.8
Pioneer	94Y60 (RR)	48 ± 1	11.7	1.6	32	142	1.4	2.3	41.1	21.7
Armor	ARX 4717 (RR)	48 ± 1	12.3	1.2	30	141	1.3	2.7	39.0	22.8
Terral	TV 49R19 (RR)	48 ± 1	12.0	1.5	34	145	1.1	2.0	37.6	23.6
Morsoy	RTS 4556N (RR/STS)	47 ± 1	11.7	1.5	33	140	1.5	2.0	38.9	22.1
Steyer	4620 RR/STS	47 ± 1	12.3	1.5	33	140	1.5	2.3	38.1	23.7
Dyna-Gro	V47N9RS	47 ± 1	12.0	1.3	33	139	1.5	2.3	38.0	23.7
Progeny	4706 RR	46 ± 1	12.1	2.2	34	138	1.2	2.3	37.9	22.3

Table 21 (continued)

Brand	Variety ‡	Avg. Yield	Moisture § (n=8)	Lodging (n=4)	Height (n=8)	Maturity (n=8)	Shattering (n=4)	Seed	Protein (n=1)	Oil (n=1)
		± Std Err. (n=8)						Quality (n=1)		
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Great Heart	GT-462CRR	46 ± 1	12.1	2.2	34	138	1.3	2.2	38.2	22.3
Terral	TV 46R19 (RR)	45 ± 1	11.9	2.0	35	139	1.2	2.2	37.4	23.2
Schillinger Seed	478 RCS	45 ± 1	11.9	1.9	32	141	1.6	2.0	39.0	21.9
Midwest Premium Genetics	MPG 4705nRR	45 ± 1	11.8	1.8	33	143	1.3	2.5	40.0	21.5
Southern Cross	Rufus (RR/STS)	45 ± 1	11.6	1.3	32	139	1.4	2.0	38.1	23.4
Stine	4782-4 (RR/STS)	44 ± 1	12.5	1.4	28	142	1.3	1.5	36.8	23.5
Southern Cross	Hiram (RR)	44 ± 1	12.4	1.8	31	142	1.3	1.8	38.6	22.0
Average		51	12.1	1.8	35	142	1.3	2.2	38.8	22.4

† 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.

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 42 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2007 - 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=14)	bu/a						
			Knoxville	Crossville	Spring Hill Non-Irr.	Springfield	Milan Irr. Non-Irr.		Ames
Hornbeck	HBK R 4924 (RR)	46 ± 1	65	33	35	38	72	31	45
USG	74A91 (RR)	45 ± 1	62	31	33	35	77	35	41
Dairyland	8482 RR	44 ± 1	64	28	37	39	73	32	35
Progeny	4906 RR	44 ± 1	64	31	35	39	62	34	42
NK	S 49-H7 Brand (RR)	44 ± 1	49	35	40	38	71	32	39
Morsoy	RTS 4955N (RR/STS)	43 ± 1	63	27	32	39	65	33	45
Dyna-Gro	37P49 (RR)	43 ± 1	59	32	33	41	68	32	37
USG	74T98 (RR)	43 ± 1	52	30	33	39	67	34	46
Morsoy	RT 4914N (RR)	43 ± 1	57	32	32	40	62	35	43
Delta Grow	4970 RR	43 ± 1	54	29	35	41	63	35	40
USG	7495nRS	42 ± 1	59	30	32	35	68	34	40
Asgrow	AG4903 (RR/STS)	42 ± 1	55	32	33	41	68	30	38
Asgrow	DK4866 (RR/STS)	42 ± 1	60	32	27	37	69	31	38
Armor	48-J3 (RR)	42 ± 1	52	29	32	37	68	31	45
USG	74F96 (RR)	42 ± 1	53	29	34	41	63	34	39
Delta Grow	4780 RR	42 ± 1	62	26	28	37	70	29	40
Dyna-Gro	36Y48 (RR / STS)	42 ± 1	58	28	30	36	66	30	42
Croplan	RC 4955 (RR)	41 ± 1	51	32	31	36	64	32	41
Terral	TV 47R17 (RR)	41 ± 1	51	29	35	36	72	28	36
Morsoy	RTS 4706N (RR/STS)	41 ± 1	55	26	31	40	70	30	35
FFR	4886 RR/STS	41 ± 1	60	29	28	34	67	32	37
Morsoy	RT 4707N (RR)	41 ± 1	60	27	29	34	67	29	36
Asgrow	DP 4888 RR/S	40 ± 1	52	30	29	39	67	29	36
Hornbeck	HBK R 4727 (RR)	40 ± 1	57	28	27	32	70	28	38
Terral	TV 49R17 (RR)	40 ± 1	53	30	33	34	66	31	31
Southern Cross	Eli (RR/STS)	40 ± 1	52	28	27	37	70	29	35
Progeny	4807 RR	40 ± 1	56	29	24	34	68	29	36
Armor	47-F8 (RR/STS)	39 ± 1	54	24	32	33	70	29	34
Dyna-Gro	V49N6RR	39 ± 1	51	29	28	37	57	31	41
Schillinger Seed	495 RC	39 ± 1	54	30	31	36	57	31	35
Dyna-Gro	32R46 (RR/STS)	39 ± 1	50	26	31	34	71	28	32
Dairyland	8474 RR	39 ± 1	58	26	30	33	64	27	33
Progeny	4949 RR	39 ± 1	55	27	33	33	57	27	38
Dyna-Gro	V47N8RR	39 ± 1	55	25	24	36	67	27	35
Delta Grow	4770 RR	38 ± 1	54	26	28	35	66	26	34
Southern Cross	Galilee (RR)	38 ± 1	54	29	24	36	65	28	34
Stine	4782-4 (RR/STS)	38 ± 1	49	27	28	36	69	27	31
USG	74A76 (RR)	38 ± 1	50	27	26	35	65	27	36
Southern Cross	Hiram (RR)	38 ± 1	52	28	31	36	60	27	31
Progeny	4706 RR	37 ± 1	51	25	27	31	65	25	37
Asgrow	AG4605 (RR/STS)	37 ± 1	46	23	23	33	73	28	36
Asgrow	AG4703 (RR)	37 ± 1	48	25	25	33	66	27	35
Average (bu/a)		41	55	28	30	36	67	30	38
L.S.D._{.05} (bu/a)		3	7	7	6	6	9	5	7
C.V. (%)		11.4	8.9	15.6	14.1	10.2	9.4	11.7	12.9

† 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 23. Mean yields † and agronomic characteristics of 42 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2007 - 2008.

Brand	Variety ‡	Avg. Yield				Maturity	Shattering	Leaf	Seed	Protein	Oil
		± Std Err.	Moisture §	Lodging	Height			Retention	Quality		
		(n=14)	(n=14)	(n=6)	(n=13)	(n=13)	(n=6)	(n=2)	(n=3)	(n=3)	(n=3)
		bu/a	%	Score	in.	DAP	-----Score-----		%	%	
Hornbeck	HBK R 4924 (RR)	46 ± 1	12.7	2.0	38	147	1.3	2.3	2.3	40.7	21.2
USG	74A91 (RR)	45 ± 1	12.7	1.8	34	149	1.1	2.8	2.8	40.5	21.0
Dairyland	8482 RR	44 ± 1	12.2	1.9	36	149	1.3	2.5	2.4	40.1	21.7
Progeny	4906 RR	44 ± 1	12.8	2.0	34	148	1.1	2.6	3.1	40.3	21.3
NK	S 49-H7 Brand (RR)	44 ± 1	12.7	1.6	37	150	1.2	2.3	1.8	41.0	21.0
Morsoy	RTS 4955N (RR/STS)	43 ± 1	12.6	1.9	35	146	1.2	1.9	2.4	41.2	22.1
Dyna-Gro	37P49 (RR)	43 ± 1	13.1	1.8	34	149	1.0	2.4	3.2	40.8	21.3
USG	74T98 (RR)	43 ± 1	12.8	1.9	31	147	1.4	2.2	2.5	39.3	22.0
Morsoy	RT 4914N (RR)	43 ± 1	13.0	2.2	38	149	1.4	2.1	2.4	41.4	20.7
Delta Grow	4970 RR	43 ± 1	12.7	2.4	38	148	1.4	2.1	2.3	41.4	20.7
USG	7495nRS	42 ± 1	13.1	2.1	35	146	1.3	2.0	2.6	41.4	21.8
Asgrow	AG4903 (RR/STS)	42 ± 1	12.8	1.8	33	148	1.1	2.0	2.3	40.7	21.5
Asgrow	DK4866 (RR/STS)	42 ± 1	12.2	1.8	34	145	1.1	1.5	2.6	39.6	21.2
Armor	48-J3 (RR)	42 ± 1	12.3	1.9	33	146	1.2	1.6	2.1	41.7	21.3
USG	74F96 (RR)	42 ± 1	13.3	1.6	35	147	1.3	2.1	2.3	40.4	21.0
Delta Grow	4780 RR	42 ± 1	12.1	1.8	35	147	1.1	2.8	2.6	40.5	21.2
Dyna-Gro	36Y48 (RR / STS)	42 ± 1	13.2	2.0	35	149	1.2	2.0	2.5	41.8	21.8
Croplan	RC 4955 (RR)	41 ± 1	13.5	1.9	38	149	1.3	3.1	2.7	39.2	22.4
Terral	TV 47R17 (RR)	41 ± 1	14.6	2.1	39	148	1.3	2.0	3.2	40.6	21.7
Morsoy	RTS 4706N (RR/STS)	41 ± 1	12.4	1.3	30	148	1.1	1.6	2.3	38.4	22.4
FFR	4886 RR/STS	41 ± 1	13.1	2.1	35	148	1.1	1.9	2.4	41.4	22.0
Morsoy	RT 4707N (RR)	41 ± 1	12.3	1.8	35	149	1.1	2.4	2.3	40.2	20.9
Asgrow	DP 4888 RR/S	40 ± 1	12.3	2.0	37	148	1.4	2.5	2.3	40.4	21.3
Hornbeck	HBK R 4727 (RR)	40 ± 1	12.3	1.8	35	147	1.1	2.6	2.4	40.7	21.1
Terral	TV 49R17 (RR)	40 ± 1	12.7	1.8	41	147	1.3	1.9	2.6	42.3	20.6
Southern Cross	Eli (RR/STS)	40 ± 1	12.6	1.3	29	146	1.2	1.4	2.2	38.3	22.5
Progeny	4807 RR	40 ± 1	12.2	1.9	34	147	1.2	2.5	2.3	40.2	20.9
Armor	47-F8 (RR/STS)	39 ± 1	12.8	1.4	29	146	1.2	1.6	2.1	38.1	22.5
Dyna-Gro	V49N6RR	39 ± 1	12.6	2.0	36	146	1.4	1.8	2.6	41.2	20.7
Schillinger Seed	495 RC	39 ± 1	12.6	2.2	37	147	1.4	2.0	2.5	41.4	20.6
Dyna-Gro	32R46 (RR/STS)	39 ± 1	12.5	1.3	30	146	1.2	1.5	2.1	38.6	22.2
Dairyland	8474 RR	39 ± 1	12.5	1.8	31	147	1.2	2.0	2.3	40.0	21.6
Progeny	4949 RR	39 ± 1	12.7	2.1	36	150	1.4	2.3	2.4	40.6	21.6
Dyna-Gro	V47N8RR	39 ± 1	11.9	1.7	35	146	1.2	2.2	2.2	39.8	21.0
Delta Grow	4770 RR	38 ± 1	12.1	2.1	35	143	1.3	1.5	2.2	40.2	21.0
Southern Cross	Galilee (RR)	38 ± 1	12.2	1.7	35	147	1.1	2.4	2.4	39.9	21.1
Stine	4782-4 (RR/STS)	38 ± 1	12.7	1.3	30	148	1.2	1.9	2.2	38.7	22.3

Table 23 (continued)

Brand	Variety ‡	Avg. Yield	Moisture §	Lodging	Height	Maturity	Shattering	Leaf Retention	Seed Quality	Protein	Oil
		± Std Err. (n=14)	(n=14)	(n=6)	(n=13)	(n=13)	(n=6)	(n=2)	(n=3)	(n=3)	(n=3)
		bu/a	%	Score	in.	DAP	-----Score-----		%	%	
USG	74A76 (RR)	38 ± 1	12.3	1.9	35	143	1.3	1.6	2.2	40.3	20.9
Southern Cross	Hiram (RR)	38 ± 1	12.4	1.7	31	147	1.3	2.3	2.1	39.7	21.5
Progeny	4706 RR	37 ± 1	12.2	2.0	35	142	1.2	1.5	2.0	40.1	21.0
Asgrow	AG4605 (RR/STS)	37 ± 1	12.6	1.5	29	144	1.3	1.7	2.4	39.4	21.8
Asgrow	AG4703 (RR)	37 ± 1	12.7	1.7	30	144	1.1	2.1	2.1	40.5	20.7
Average		41	12.6	1.8	34	147	1.2	2.1	2.4	40.3	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.

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.

Table 24. Mean yields † of 26 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2006 - 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=18)	Spring Hill				Milan	
			Knoxville	Crossville	Non-Irr.	Springfield	Irr.	Non-Irr.
-----bu/a-----								
USG	74A91 (RR)	49 ± 1	67	40	37	33	77	41
Dyna-Gro	37P49 (RR)	49 ± 1	66	44	39	37	69	40
Morsoy	RT 4914N (RR)	49 ± 1	65	41	40	37	66	44
Morsoy	RTS 4955N (RR/STS)	49 ± 1	69	40	39	35	68	43
Progeny	4906 RR	49 ± 1	69	44	39	36	65	40
Asgrow	AG4903 (RR/STS)	49 ± 1	62	43	37	39	70	40
Asgrow	DK4866 (RR/STS)	48 ± 1	67	44	35	34	71	39
USG	7495nRS	48 ± 1	66	41	38	33	69	40
Hornbeck	HBK R 4924 (RR)	48 ± 1	69	37	37	34	70	38
Delta Grow	4970 RR	47 ± 1	62	38	40	38	64	41
Morsoy	RTS 4706N (RR/STS)	47 ± 1	62	38	36	36	70	38
FFR	4886 RR/STS	47 ± 1	66	39	35	32	67	40
Dyna-Gro	36Y48 (RR / STS)	47 ± 1	65	39	36	33	68	39
USG	74T98 (RR)	46 ± 1	58	40	39	35	66	41
USG	74F96 (RR)	46 ± 1	60	39	39	38	63	38
Schillinger Seed	495 RC	46 ± 1	62	39	39	35	61	39
Croplan	RC 4955 (RR)	46 ± 1	60	40	37	33	66	39
Terral	TV 47R17 (RR)	46 ± 1	59	38	39	32	69	37
Delta Grow	4770 RR	45 ± 1	60	38	35	34	66	38
Terral	TV 49R17 (RR)	45 ± 1	60	38	37	32	64	38
Dyna-Gro	32R46 (RR/STS)	45 ± 1	58	35	35	31	72	38
Dyna-Gro	V49N6RR	44 ± 1	59	39	35	37	60	38
Progeny	4949 RR	44 ± 1	62	38	39	31	59	33
USG	74A76 (RR)	44 ± 1	57	38	31	34	66	36
Progeny	4706 RR	43 ± 1	56	39	34	30	66	36
Asgrow	AG4703 (RR)	43 ± 1	55	39	30	32	68	36
Average (bu/a)		46	62	40	37	34	67	39
L.S.D._{.05} (bu/a)		3	7	7	6	5	8	5
C.V. (%)		10.0	7.8	11.9	12.3	10.9	8.9	9.8

† 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 25. Mean yields † and agronomic characteristics of 26 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2006 - 2008.

Brand	Variety ‡	Avg. Yield					Leaf		Seed		
		± Std Err. (n=18)	Moisture § (n=18)	Lodging (n=10)	Height (n=18)	Maturity (n=18)	Shattering (n=9)	Retention (n=2)	Quality (n=7)	Protein (n=7)	Oil (n=7)
		bu/a	%	Score	in.	DAP	-----Score-----		%	%	
USG	74A91 (RR)	49 ± 1	13.0	1.7	35	144	1.1	2.8	2.1	39.2	21.6
Dyna-Gro	37P49 (RR)	49 ± 1	13.3	1.6	36	144	1.0	2.4	2.2	39.3	21.8
Morsoy	RT 4914N (RR)	49 ± 1	13.7	2.3	39	145	1.3	2.1	2.2	41.0	20.8
Morsoy	RTS 4955N (RR/STS)	49 ± 1	13.2	1.9	37	142	1.1	1.9	2.1	39.8	22.5
Progeny	4906 RR	49 ± 1	13.1	1.8	35	144	1.1	2.6	2.1	39.1	22.0
Asgrow	AG4903 (RR/STS)	49 ± 1	13.4	1.7	34	144	1.0	2.0	1.9	39.0	22.1
Asgrow	DK4866 (RR/STS)	48 ± 1	12.6	1.7	35	141	1.0	1.5	2.2	38.7	21.3
USG	7495nRS	48 ± 1	13.6	2.0	36	142	1.2	2.0	2.2	39.9	22.3
Hornbeck	HBK R 4924 (RR)	48 ± 1	13.4	2.1	39	143	1.2	2.3	2.0	39.1	21.8
Delta Grow	4970 RR	47 ± 1	13.4	2.4	38	143	1.3	2.1	2.2	39.7	21.2
Morsoy	RTS 4706N (RR/STS)	47 ± 1	13.1	1.2	31	143	1.1	1.6	2.1	37.5	22.7
FFR	4886 RR/STS	47 ± 1	13.5	2.1	36	144	1.1	1.9	2.1	40.2	22.1
Dyna-Gro	36Y48 (RR / STS)	47 ± 1	13.4	2.0	37	144	1.1	2.0	2.1	40.0	22.3
USG	74T98 (RR)	46 ± 1	13.6	1.9	32	143	1.3	2.2	1.9	37.4	22.3
USG	74F96 (RR)	46 ± 1	13.7	1.7	36	143	1.2	2.1	2.1	38.9	21.4
Schillinger Seed	495 RC	46 ± 1	13.1	2.2	38	143	1.3	2.0	2.2	40.7	21.0
Croplan	RC 4955 (RR)	46 ± 1	14.2	1.9	39	145	1.2	3.1	2.4	38.2	22.6
Terral	TV 47R17 (RR)	46 ± 1	15.3	2.3	41	144	1.2	2.0	2.5	39.1	22.0
Delta Grow	4770 RR	45 ± 1	12.9	2.1	37	139	1.2	1.5	2.0	38.9	21.6
Terral	TV 49R17 (RR)	45 ± 1	13.3	1.9	42	143	1.2	1.9	2.2	41.3	20.7
Dyna-Gro	32R46 (RR/STS)	45 ± 1	13.2	1.2	30	142	1.1	1.5	1.9	37.3	22.6
Dyna-Gro	V49N6RR	44 ± 1	13.2	2.1	38	142	1.3	1.8	2.3	40.3	21.0
Progeny	4949 RR	44 ± 1	13.1	1.9	37	146	1.3	2.3	2.2	39.8	21.9
USG	74A76 (RR)	44 ± 1	12.9	1.8	36	138	1.2	1.6	1.9	39.0	21.5
Progeny	4706 RR	43 ± 1	12.9	1.9	36	138	1.1	1.5	2.0	39.1	21.6
Asgrow	AG4703 (RR)	43 ± 1	13.4	1.5	31	140	1.0	2.1	2.0	39.7	21.2
Average		46	13.4	1.9	36	143	1.2	2.0	2.1	39.3	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.

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.

Table 26. Yields † of 28 Late Maturity Group IV (4.6-4.9) Roundup Ready soybean varieties in 17 County Standard Tests in Tennessee and Kentucky during 2008.

MS	Brand/Variety	Avg.		(KY)							(KY)							UT Martin		
		Yield	Moist‡	Coffee	Crockett	Dyer	Fayette	Franklin	Fulton	Gibson	Graves	Hardin	Haywood	Henry	Lake	Lauderdale	Montgomery	Obion	Weakley	Weakley
		bu/a	%	5/1 §	6/1	5/23	5/21	6/7	6/5	5/21	6/6	5/29	6/6	6/24	5/5	5/31	7/2	5/19	5/21	6/5
A	Armor 48J3	55.1	11.2	39.7	64.7	65.0	64.7	45.4	58.1	47.2	49.3	48.2	66.2	28.7	66.1	68.0	35.8	77.1	70.9	41.1
AB	Dyna-Gro 37P49	52.8	11.1	35.4	61.6	62.3	70.5	46.5	57.7	42.1	42.3	52.0	60.0	22.0	53.5	65.4	40.6	79.0	67.2	39.5
ABC	Morsoy RTs4955N (RR/STS)	52.5	12.6	40.6	57.9	62.8	77.7	44.0	60.9	44.9	42.4	49.2	48.7	27.0	55.4	61.2	31.9	74.8	64.9	47.9
ABC	Dairyland 8482 RR	52.0	11.4	37.2	61.3	55.1	75.0	40.2	61.2	45.6	37.3	48.3	52.3	24.3	54.9	63.8	35.6	75.1	74.1	43.2
BCD	NK S46-U6 Brand	52.0	11.3	35.4	60.4	63.8	69.8	42.8	59.5	41.8	43.3	49.2	62.3	26.8	51.7	60.4	27.7	79.1	70.1	39.1
BCD	Asgrow AG4903 (RR/STS)	51.9	11.7	44.0	54.7	59.4	66.0	37.6	60.7	43.6	42.3	49.0	47.1	25.2	70.4	54.9	37.7	78.0	73.7	37.6
BCDE	*FFR 4886 (RR/STS)	51.7	13.3	38.0	60.1	62.2	72.3	39.3	56.7	41.7	44.5	48.6	45.6	16.0	68.4	60.8	34.9	88.8	69.2	32.5
BCDE	*Dyna-Gro V49N6RR	51.7	12.1	44.6	63.8	60.1	76.9	39.4	57.2	46.2	48.2	49.2	48.2	17.8	55.5	58.0	31.9	70.7	70.2	41.3
BCDEF	Asgrow AG4703	51.4	11.0	35.4	61.1	63.5	63.0	37.7	62.1	42.5	44.5	48.1	59.6	24.2	59.7	59.6	28.9	78.8	70.0	36.0
BCDEF	Croplan RC 4877 (RR)	51.4	12.5	40.3	61.6	64.6	60.8	37.0	55.6	41.3	41.0	43.6	53.8	25.9	62.3	59.3	38.1	83.1	67.9	38.5
BCDEFG	Asgrow DK4866 (RR/STS)	51.0	10.8	36.0	62.7	61.4	66.4	37.3	61.5	40.9	41.4	42.8	44.6	27.9	56.2	61.2	32.7	83.2	68.0	42.9
BCDEFG	Stine 4782-4 (RR/STS)	50.9	11.4	32.5	60.4	59.9	80.0	41.7	63.8	43.4	38.4	44.4	39.1	23.9	52.0	70.8	32.5	80.7	61.9	40.0
BCDEFG	Schillinger 495RC	50.7	12.1	40.6	57.3	63.2	68.0	38.1	56.3	47.2	47.2	46.7	48.1	20.7	51.3	59.0	29.6	73.6	75.3	40.4
BCDEFG	USG 74A76	50.7	11.0	37.0	60.6	60.8	69.4	44.0	60.5	36.2	45.7	47.4	55.9	27.3	60.1	52.9	37.6	72.0	54.3	40.6
BCDEFG	Asgrow DKB46-51	50.6	11.1	32.2	59.2	61.9	61.2	40.9	56.3	38.7	43.4	47.8	59.1	26.4	57.5	62.7	38.0	76.6	68.3	30.5
BCDEFG	*Dyna-Gro 36Y48 (RR/STS)	50.4	12.8	40.6	62.7	65.0	73.1	34.2	57.2	38.9	43.3	48.5	44.9	14.9	59.9	58.4	37.6	71.8	68.0	37.1
BCDEFG	Trisoy T4760RR(CN)	50.3	11.0	34.1	51.9	58.3	79.6	37.6	62.9	45.7	36.1	39.8	53.4	20.8	54.0	65.1	31.5	74.2	68.2	42.2
BCDEFG	Great Heart GT467CRR	50.3	11.1	29.7	57.4	64.9	59.1	37.7	57.7	41.2	44.5	46.9	65.1	22.2	47.7	56.7	29.7	78.2	67.8	48.2
BCDEFG	Progeny 4906	50.2	11.2	38.3	55.2	62.6	76.9	42.9	56.7	38.7	42.2	42.5	49.0	21.5	57.3	66.9	28.3	76.3	61.4	36.2
BCDEFG	Asgrow DP4888 (RR/STS)	50.0	11.0	34.2	63.7	60.1	64.0	34.7	57.5	44.0	38.8	45.7	53.9	24.2	53.0	61.0	34.1	77.4	65.2	38.1
BCDEFG	USG 74T98	49.9	12.5	51.3	61.1	54.1	62.6	38.2	51.0	38.2	37.5	48.9	40.2	27.1	61.1	53.4	30.4	73.1	74.8	44.6
BCDEFG	Dyna-Gro V47N8RR	49.8	12.0	35.9	47.7	65.2	71.8	43.8	57.5	43.1	44.9	49.6	46.5	20.7	53.6	60.0	27.6	76.2	62.2	40.9
CDEFG	Asgrow DP4724	49.5	10.8	30.0	60.9	58.6	59.2	38.1	57.4	42.9	38.8	49.2	52.2	20.5	51.5	54.1	33.6	76.4	72.1	46.7
DEFG	Dairyland 8474 RR	48.9	11.2	34.1	54.2	57.4	65.5	38.9	55.1	47.4	38.7	41.0	50.4	22.1	46.8	58.9	30.7	82.6	68.9	38.9
EFG	Armor 47-F8 (RR/STS)	48.7	11.5	37.2	52.3	59.4	52.9	42.1	63.3	37.7	39.7	50.7	52.4	20.5	53.4	47.9	42.5	78.0	64.7	33.7
FG	Progeny 4606	48.6	11.2	31.3	57.4	58.3	71.9	27.7	58.7	42.2	37.5	49.2	46.7	22.5	55.5	58.7	31.3	78.3	60.5	39.0
G	NK S49-H7 Brand	48.3	11.5	37.4	53.9	60.1	73.1	35.2	52.9	45.1	39.9	48.2	38.3	16.6	55.1	64.3	32.8	80.4	49.0	38.4
G	Asgrow AG4605 (RR/STS)	48.1	10.9	26.7	56.3	59.6	56.6	37.9	63.0	34.1	39.7	50.2	54.1	16.4	53.4	65.8	28.3	79.7	67.5	28.8
Average (bu/a)		50.7	11.5	36.8	58.6	61.1	68.1	39.3	58.5	42.2	41.9	47.3	51.4	22.6	56.3	60.3	33.3	77.6	67.0	39.4

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Planting date.

f, fi = County location names followed by an f or fi received a fungicide or fungicide/insecticide treatment at R3.

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 average yield and in conducting the statistical analysis to determine significant differences (MS).

Varieties denoted with an asterisk (*), (**), or (***) were in the top performing group in 2006, 2005, and/or 2004.

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 28 late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests (CST) during 2008

MS	Brand/Variety	CST Avg.		----- Research and Education Center at Milan -----							
		Yield (n=17)	Moisture ‡	SDS	Frogeye	Anthracnose	Sprayed ¶ Yield	Unsprayed Yield	SCN - 2007 #		
		bu/a	%	2006 / 07 / 08	2006 / 07 / 08	2007 / 08	bu/a	bu/a	Race 2 2007	Race 3 2007	Race 14 2007
A	Armor 48J3	55.1	11.2	/ / 0.7	/ / 2.3	/ 2.7	61.0	58.6	S	---	---
AB	Dyna-Gro 37P49	52.8	11.1	/ / 0.0	/ / 7.7	/ 3.3	65.3	60.2	S	---	---
ABC	Morsoy RTs4955N (RR/STS)	52.5	12.6	/ / 0.0	/ / 7.0	/ 3.3	57.3	55.6	S	---	---
ABC	Dairyland 8482 RR	52.0	11.4	/ / 0.3	/ / 5.0	/ 3.0	62.7	57.8	S	---	---
BCD	NK S46-U6 Brand	52.0	11.3	/ / 0.3	/ / 0.0	/ 6.0	57.1	51.1	S	---	---
BCD	Asgrow AG4903 (RR/STS)	51.9	11.7	0.0 / 0.0 / 0.0	6.0 / 6.0 / 5.3	4.0 / 2.7	57.8	53.3	S	S	S
BCDE	*FFR 4886 (RR/STS)	51.7	13.3	0.3 / 0.0 / 0.0	3.3 / 6.0 / 6.3	5.0 / 2.7	64.6	57.4	S	R	S
BCDE	*Dyna-Gro V49N6RR	51.7	12.1	2.0 / 3.0 / 0.3	0.0 / 0.0 / 0.0	5.0 / 4.0	61.7	60.8	S	MR	S
BCDEF	Asgrow AG4703	51.4	11.0	0.3 / 0.0 / 0.0	5.7 / 8.0 / 7.7	4.0 / 3.0	62.8	59.7	S	MS	S
BCDEF	Croplan RC 4877 (RR)	51.4	12.5	/ / 0.0	/ / 0.0	/ 2.0	61.5	55.8	S	---	---
BCDEFG	Asgrow DK4866 (RR/STS)	51.0	10.8	0.0 / 0.0 / 0.0	8.0 / 8.0 / 7.0	6.0 / 3.0	62.9	56.6	S	S	S
BCDEFG	Stine 4782-4 (RR/STS)	50.9	11.4	/ 0.0 / 0.0	10.0 / 0.0	5.0 / 3.0	60.7	62.4	S	MS	S
BCDEFG	Schillinger 495RC	50.7	12.1	1.0 / 4.0 / 0.7	0.0 / 0.0 / 0.3	5.0 / 3.0	61.1	60.4	S	R	S
BCDEFG	USG 74A76	50.7	11.0	/ / 0.0	/ / 3.0	/ 4.3	67.0	60.3	S	---	---
BCDEFG	Asgrow DKB46-51	50.6	11.1	/ 0.0 / 0.0	/ 4.0 / 5.3	5.0 / 2.7	68.3	64.7	S	R	S
BCDEFG	*Dyna-Gro 36Y48 (RR/STS)	50.4	12.8	0.7 / 0.0 / 0.0	5.3 / 7.0 / 6.0	5.0 / 3.3	61.4	60.5	S	R	S
BCDEFG	Trisoy T4760RR(CN)	50.3	11.0	/ / 0.0	/ / 0.0	/ 3.7	64.7	60.1	S	---	---
BCDEFG	Great Heart GT467CRR	50.3	11.1	/ / 0.0	/ / 8.0	/ 3.0	57.3	55.4	S	---	---
BCDEFG	Progeny 4906	50.2	11.2	/ 0.0 / 0.0	/ 6.0 / 4.3	4.0 / 2.0	64.2	63.0	S	---	---
BCDEFG	Asgrow DP4888 (RR/STS)	50.0	11.0	/ / 0.0	/ / 4.7	/ 4.0	61.6	59.8	S	---	---
BCDEFG	USG 74T98	49.9	12.5	/ / 0.0	/ / 0.0	/ 2.0	57.4	59.0	S	---	---
BCDEFG	Dyna-Gro V47N8RR	49.8	12.0	---	---	---	---	---	---	---	---
CDEFG	Asgrow DP4724	49.5	10.8	/ / 0.0	/ / 0.7	/ 2.7	55.8	55.0	S	---	---
DEFG	Dairyland 8474 RR	48.9	11.2	/ 1.0 / 0.0	/ 4.0 / 3.3	5.0 / 2.7	58.3	58.0	S	S	S
EFG	Armor 47-F8 (RR/STS)	48.7	11.5	/ 0.0 / 0.0	/ 0.0 / 0.0	5.0 / 3.0	59.3	61.6	S	S	S
FG	Progeny 4606	48.6	11.2	/ / 0.0	/ / 0.3	/ 2.7	56.1	56.2	S	---	---
G	NK S49-H7 Brand	48.3	11.5	/ / 0.0	/ / 5.3	/ 2.3	58.5	52.3	S	---	---
G	Asgrow AG4605 (RR/STS)	48.1	10.9	/ 0.0 / 0.0	/ 4.0 / 5.0	7.0 / 4.0	59.7	61.3	S	MR	S
Average (bu/a)		50.7	11.5				61.0	58.4			

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

Complete 2008 SCN ratings available Feb. 2009.

§ Disease ratings for SDS, Frogeye Leaf Spot, and Anthracnose 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 + 0.25% Induce at 20 gpa at R3 growth stage.

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

Disease ratings compiled by Dr. Melvin Newman from replicated plots at the Research and Education Center at Milan.

SCN Greenhouse Ratings compiled by Dr. Pat Donald, Research Plant Path., USDA-ARS, West TN REC.

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 2007.

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

Table 28. Overall average yields † and moistures ‡ of 24 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in County Standard Tests (n=17) and Research and Education Centers (n=8) in Tennessee in 2008.

Brand	Variety	County Standard Trials		Research and Education Center Trials	
		Avg. Yield	Moisture	Avg. Yield	Moisture
		bu/a	%	bu/a	%
Armor	48-J3 (RR)	55	11.2	52	12.0
Dyna-Gro	37P49 (RR)	53	11.1	56	12.3
Morsoy	RTS 4955N (RR/STS)	52	12.6	56	12.4
Dairyland	8482 RR	52	11.4	56	11.6
NK	S 46-U6 Brand (RR)	52	11.3	52	12.3
Asgrow	AG4903 (RR/STS)	52	11.7	53	12.3
FFR	4886 RR/STS	52	13.3	53	12.8
Dyna-Gro	V49N6RR	52	12.1	50	12.3
Asgrow	AG4703 (RR)	51	11.0	49	11.7
Croplan	RC 4877 RR	51	12.5	50	11.9
Stine	4782-4 (RR/STS)	51	11.4	44	12.5
Schillinger Seed	495 RC	51	12.1	48	12.1
USG	74A76 (RR)	51	11.0	49	11.8
Asgrow	DK4866 (RR/STS)	51	10.8	51	11.7
Dyna-Gro	36Y48 (RR / STS)	50	12.8	55	12.7
Progeny	4906 RR	50	11.2	56	12.0
Asgrow	DP 4888 RR/S	50	11.0	51	11.6
USG	74T98 (RR)	50	12.5	54	12.6
Dyna-Gro	V47N8RR	50	12.0	49	11.6
Dairyland	8474 RR	49	11.2	49	12.2
Armor	47-F8 (RR)	49	11.5	51	12.5
Progeny	4606 RR/STS	49	11.2	53	12.5
NK	S 49-H7 Brand (RR)	48	11.5	54	12.1
Asgrow	AG4605 (RR/STS)	48	10.9	49	11.8
Average (bu/a)		51	11.6	52	12.1

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

Table 29. Mean yields † of 67 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Spring Hill						Milan		Ames
			Knoxville	Irr.	Non-Irr.	Springfield	Irr.	Non-Irr.			
Trisler Seed	Trisoy 5484RR (CN)	54 ± 1	27	52	52	68	76	46	58		
Morsoy	RT 5388N (RR)	53 ± 1	30	52	51	68	73	45	56		
FFR	5663 RR	53 ± 1	33	54	50	71	61	41	60		
NK	S 52-F2 Brand (RR)	53 ± 1	33	57	46	70	56	44	62		
TN Exp	TN06-140RR	53 ± 1	37	46	47	70	68	45	54		
Terral	TV 55R15 (RR)	53 ± 1	33	54	54	67	60	47	53		
Dyna-Gro	35F55 (RR)	52 ± 1	34	56	52	62	53	46	64		
Delta Grow	5555 RR	52 ± 1	43	56	53	66	57	37	52		
Terral	TV 54R28 (RR)	52 ± 1	32	61	48	60	60	45	57		
Delta Grow	5450 RR	52 ± 1	43	44	44	70	64	42	56		
Dyna-Gro	33X55 (RR)	52 ± 1	31	50	48	67	64	40	61		
Hornbeck	HBK R 5525 (RR)	51 ± 1	31	53	46	69	60	39	60		
Asgrow	AG5304 (RR/STS)	51 ± 1	29	54	49	60	66	49	50		
Dyna-Gro	33P54 (RR)	51 ± 1	33	50	53	64	61	46	50		
Asgrow	AG5503 (RR)	50 ± 1	28	54	44	65	63	44	54		
Progeny	5408 RR	50 ± 1	31	44	41	68	65	45	57		
Dyna-Gro	31R54 (RR)	50 ± 1	30	51	47	63	63	41	55		
Delta King	DK 52-K6 (RR)	50 ± 1	31	47	45	67	61	41	55		
Delta Grow	5300 RR	50 ± 1	32	48	44	68	55	45	54		
Progeny	5308 RR/STS	49 ± 1	28	51	45	61	65	44	52		
Armor	55-A5 (RR)	49 ± 1	26	48	46	65	60	43	59		
Morsoy	RT 5288N (RR)	49 ± 1	36	50	49	64	52	40	55		
TN Exp	TN06-117RR	49 ± 1	27	53	50	62	60	44	49		
USG	7553nRS	49 ± 1	27	45	40	75	64	41	51		
Armor	53-Z5 (RR)	49 ± 1	22	51	51	62	64	44	47		
Croplan	RC 5222 RR	49 ± 1	27	56	45	65	56	41	53		
Asgrow	AG5504 (RR/STS)	49 ± 1	25	49	46	63	61	45	53		
USG	75Z38 (RR)	49 ± 1	34	50	50	64	49	40	55		
Delta Grow	5570 RR STS	49 ± 1	34	46	46	62	55	42	56		
Progeny	5218 RR	49 ± 1	30	52	48	68	52	37	53		
Morsoy	RT 5168N (RR)	48 ± 1	23	54	39	64	60	44	54		
Delta Grow	5280 RR	48 ± 1	34	48	40	68	51	41	56		
MO Exp	S05-4678 RR	48 ± 1	23	59	44	56	56	40	59		
Croplan	RC 5437 RR/STS	48 ± 1	32	48	44	60	58	45	49		
Progeny	5108 RR	48 ± 1	26	54	46	61	54	46	50		
Hornbeck	HBK R 5226 (RR)	48 ± 1	36	55	40	70	46	32	57		
Dyna-Gro	33B52 (RR)	48 ± 1	28	45	48	64	52	41	55		

Table 29 (continued)

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Spring Hill				Milan		Ames
			Knoxville	Irr.	Non-Irr.	Springfield	Irr.	Non-Irr.	
Crow's	C 5417 R (STS)	48 ± 1	29	50	39	66	58	41	52
Eagle	ES 5555 RR	48 ± 1	21	45	50	66	56	39	56
Delta Grow	5470 RR	47 ± 1	31	53	44	53	59	39	53
Midwest Premium Genetics	MPG 5308nRR	47 ± 1	40	50	38	61	51	42	48
KS	KS 5507NRR	47 ± 1	32	44	48	63	54	43	45
Midwest Premium Genetics	MPG 5505nRR (STS)	47 ± 1	25	55	40	69	59	40	40
KS	KS 5306NRR	47 ± 1	39	44	40	63	45	40	55
Hornbeck	HBK RS 5227 (RR)	46 ± 1	27	46	42	63	56	41	50
Progeny	5107 RR	46 ± 1	25	52	48	53	52	39	55
Dyna-Gro	V54N8RS	46 ± 1	32	49	36	56	59	43	49
Schillinger Seed	557 RC	46 ± 1	29	37	34	67	64	45	48
Pioneer	95Y20 (RR)	46 ± 1	32	51	33	69	50	41	48
USG	75K38 (RR/STS)	46 ± 1	26	44	44	52	60	41	53
Progeny	5208 RR	46 ± 1	21	40	37	67	58	44	54
Delta Grow	5170 RR	46 ± 1	17	53	35	64	57	43	51
Progeny	5115 RR	46 ± 1	23	49	38	59	53	45	53
USG	75J32 (RR)	46 ± 1	28	47	37	63	53	43	48
Dairyland	8512 RR	45 ± 1	20	50	39	57	60	42	48
USG	7515nRS	45 ± 1	8	51	42	61	56	46	51
Dyna-Gro	V51N7RS	45 ± 1	29	42	36	63	59	42	45
Midwest Premium Genetics	MPG 5407nRR	45 ± 1	20	53	36	57	62	40	47
USG	75J47 (RR)	45 ± 1	28	38	44	61	54	40	48
Delta Grow	5160 RR/STS	45 ± 1	13	42	39	61	57	44	56
Asgrow	DK5068 (RR)	44 ± 1	20	51	33	64	55	45	43
Dairyland	8509 RR	44 ± 1	15	49	43	61	47	44	53
Terral	TV 52R28 (RR)	44 ± 1	32	38	41	50	54	42	52
TN Exp	TN06-116RR	44 ± 1	26	41	37	63	51	42	49
USG	75J18 (RR)	43 ± 1	13	47	37	64	53	41	48
Great Heart	GT-502CRR	41 ± 1	12	43	29	54	58	43	45
Southern Cross	Damascus (RR/STS)	39 ± 1	17	33	28	56	53	43	43
Average (bu/a)		48	28	49	43	63	58	42	53
L.S.D._{.05} (bu/a)		3	7	11	8	9	7	7	8
C.V. (%)		10.6	15.8	14.1	11.2	8.5	7.5	9.7	9.7

† 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 30. Mean yields † and agronomic characteristics of 67 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2008.

Brand	Variety ‡	Avg. Yield					Seed			
		± Std Err. (n=7)	Moisture § (n=7)	Lodging (n=5)	Height (n=7)	Maturity (n=7)	Shattering (n=3)	Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Trisler Seed	Trisoy 5484RR (CN)	54 ± 1	12.4	1.5	34	148	1.0	1.8	40.6	21.1
Morsoy	RT 5388N (RR)	53 ± 1	12.6	1.3	35	147	1.0	1.7	40.5	21.6
FFR	5663 RR	53 ± 1	12.6	2.0	32	147	1.1	2.3	42.0	20.5
NK	S 52-F2 Brand (RR)	53 ± 1	12.9	1.7	32	146	1.1	2.0	42.8	20.2
TN Exp	TN06-140RR	53 ± 1	12.6	1.4	34	146	1.2	2.0	40.8	20.6
Terral	TV 55R15 (RR)	53 ± 1	12.8	2.3	37	149	1.0	2.0	42.7	19.4
Dyna-Gro	35F55 (RR)	52 ± 1	12.8	1.9	38	147	1.0	2.0	42.5	19.8
Delta Grow	5555 RR	52 ± 1	12.9	1.7	38	148	1.1	1.8	41.4	20.2
Terral	TV 54R28 (RR)	52 ± 1	12.8	1.8	36	146	1.4	1.5	43.2	20.2
Delta Grow	5450 RR	52 ± 1	13.3	1.3	34	152	1.1	2.2	41.3	20.2
Dyna-Gro	33X55 (RR)	52 ± 1	12.9	1.5	35	149	1.3	1.7	43.0	20.5
Hornbeck	HBK R 5525 (RR)	51 ± 1	13.3	1.5	34	148	1.2	2.0	41.5	21.0
Asgrow	AG5304 (RR/STS)	51 ± 1	12.7	1.2	30	150	1.1	2.8	40.3	21.3
Dyna-Gro	33P54 (RR)	51 ± 1	12.6	1.2	31	148	1.3	2.3	39.9	21.7
Asgrow	AG5503 (RR)	50 ± 1	12.7	1.3	34	144	1.1	2.3	38.4	22.7
Progeny	5408 RR	50 ± 1	12.7	1.3	34	148	1.2	1.8	40.4	21.6
Dyna-Gro	31R54 (RR)	50 ± 1	12.5	1.4	33	148	1.2	1.5	42.3	20.6
Delta King	DK 52-K6 (RR)	50 ± 1	13.4	1.6	35	149	1.3	1.5	43.0	20.3
Delta Grow	5300 RR	50 ± 1	12.5	1.4	34	147	1.3	1.8	40.8	20.7
Progeny	5308 RR/STS	49 ± 1	12.9	1.4	34	148	1.2	1.8	41.8	20.6
Armor	55-A5 (RR)	49 ± 1	13.3	1.3	28	149	1.3	3.3	41.2	19.5
Morsoy	RT 5288N (RR)	49 ± 1	13.0	1.7	32	146	1.7	2.3	42.1	20.6
TN Exp	TN06-117RR	49 ± 1	12.8	1.5	31	145	1.4	2.5	40.1	21.1
USG	7553nRS	49 ± 1	12.1	1.4	34	146	1.0	2.0	41.6	21.4
Armor	53-Z5 (RR)	49 ± 1	12.6	1.3	31	147	1.0	1.5	39.5	22.1
Croplan	RC 5222 RR	49 ± 1	12.6	1.6	34	147	1.0	2.0	42.2	20.7
Asgrow	AG5504 (RR/STS)	49 ± 1	12.4	1.2	31	148	1.0	2.2	40.3	21.1
USG	75Z38 (RR)	49 ± 1	13.1	2.0	31	146	1.2	2.2	41.6	20.7
Delta Grow	5570 RR STS	49 ± 1	12.7	1.3	34	147	1.3	1.7	42.7	20.4
Progeny	5218 RR	49 ± 1	13.0	1.9	32	146	1.4	2.2	41.6	20.9
Morsoy	RT 5168N (RR)	48 ± 1	12.4	1.4	36	143	1.9	3.7	41.1	21.8
Delta Grow	5280 RR	48 ± 1	13.2	2.3	31	147	1.4	2.3	41.6	21.0
MO Exp	S05-4678 RR	48 ± 1	12.4	1.4	39	144	1.6	3.0	41.5	21.3
Croplan	RC 5437 RR/STS	48 ± 1	12.8	1.4	34	148	1.4	1.8	42.6	20.3
Progeny	5108 RR	48 ± 1	12.6	1.6	42	143	1.8	2.5	42.8	20.5
Hornbeck	HBK R 5226 (RR)	48 ± 1	13.1	2.5	31	147	1.3	2.2	42.0	20.6
Dyna-Gro	33B52 (RR)	48 ± 1	12.3	1.6	31	145	1.0	1.5	39.2	22.1

Table 30 (continued)

Brand	Variety ‡	Avg. Yield					Seed			
		± Std Err. (n=7)	Moisture § (n=7)	Lodging (n=5)	Height (n=7)	Maturity (n=7)	Shattering (n=3)	Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Crow's	C 5417 R (STS)	48 ± 1	12.6	1.5	33	147	1.3	2.0	43.4	20.1
Eagle	ES 5555 RR	48 ± 1	12.3	1.7	31	145	1.3	2.3	41.1	21.4
Delta Grow	5470 RR	47 ± 1	13.2	1.7	40	148	1.4	3.2	41.6	21.1
Midwest Premium Genetics	MPG 5308nRR	47 ± 1	12.9	1.8	34	147	1.4	3.0	40.2	21.5
KS	KS 5507NRR	47 ± 1	13.0	1.4	30	148	1.3	2.3	38.9	20.5
Midwest Premium Genetics	MPG 5505nRR (STS)	47 ± 1	12.2	1.4	34	147	1.1	1.8	39.6	21.9
KS	KS 5306NRR	47 ± 1	12.6	1.7	35	147	1.0	2.3	41.5	19.0
Hornbeck	HBK RS 5227 (RR)	46 ± 1	12.4	1.3	32	147	1.4	1.8	40.8	20.8
Progeny	5107 RR	46 ± 1	12.7	1.6	37	144	1.4	2.7	41.7	21.2
Dyna-Gro	V54N8RS	46 ± 1	12.8	1.5	33	147	1.3	1.8	44.1	20.0
Schillinger Seed	557 RC	46 ± 1	12.3	1.4	31	148	1.2	2.2	41.5	20.6
Pioneer	95Y20 (RR)	46 ± 1	12.6	1.3	33	147	1.1	2.5	43.2	20.2
USG	75K38 (RR/STS)	46 ± 1	12.9	1.4	39	148	1.6	3.7	41.6	21.2
Progeny	5208 RR	46 ± 1	12.4	1.4	34	144	1.6	2.5	39.5	22.5
Delta Grow	5170 RR	46 ± 1	12.2	1.1	30	143	1.7	2.8	38.1	22.2
Progeny	5115 RR	46 ± 1	12.9	1.3	38	143	1.4	2.7	40.2	22.3
USG	75J32 (RR)	46 ± 1	12.2	1.3	33	147	1.2	2.7	41.9	20.2
Dairyland	8512 RR	45 ± 1	12.7	1.5	40	147	1.6	3.0	41.4	21.5
USG	7515nRS	45 ± 1	12.2	1.5	36	142	2.5	2.8	39.8	22.9
Dyna-Gro	V51N7RS	45 ± 1	12.2	1.5	33	146	1.3	2.2	40.7	20.9
Midwest Premium Genetics	MPG 5407nRR	45 ± 1	12.6	1.5	40	146	1.8	3.5	40.5	22.2
USG	75J47 (RR)	45 ± 1	12.4	1.3	34	146	1.3	2.5	41.4	20.3
Delta Grow	5160 RR/STS	45 ± 1	12.6	1.5	36	142	2.4	2.5	40.0	22.6
Asgrow	DK5068 (RR)	44 ± 1	12.4	1.6	36	143	1.8	3.3	41.0	21.9
Dairyland	8509 RR	44 ± 1	12.3	1.8	37	142	2.5	2.5	40.2	21.4
Terral	TV 52R28 (RR)	44 ± 1	12.9	2.5	37	147	1.4	1.8	42.5	19.2
TN Exp	TN06-116RR	44 ± 1	12.4	1.6	32	144	1.4	2.5	38.6	21.6
USG	75J18 (RR)	43 ± 1	12.3	1.1	30	142	2.0	3.2	38.6	22.4
Great Heart	GT-502CRR	41 ± 1	12.4	2.0	35	141	2.3	3.2	38.5	21.6
Southern Cross	Damascus (RR/STS)	39 ± 1	12.3	1.4	36	142	1.8	2.5	39.7	22.8
Average		48	12.7	1.6	34	146	1.4	2.3	41.1	21.0

† 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

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°.

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 30 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2007 - 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=10)			Milan		Ames
		Knoxville	Springfield	Irr.	Non-Irr.		
		-----bu/a-----					
Delta Grow	5450 RR	48 ± 1	43	43	64	41	51
Delta King	DK 52-K6 (RR)	48 ± 1	39	42	68	42	46
FFR	5663 RR	47 ± 1	39	43	62	42	48
Schillinger Seed	557 RC	46 ± 1	39	40	62	46	44
NK	S 52-F2 Brand (RR)	45 ± 1	38	42	53	43	48
USG	7553nRS	45 ± 1	33	45	61	41	43
Dyna-Gro	33X55 (RR)	45 ± 1	32	40	62	41	49
Dyna-Gro	33P54 (RR)	44 ± 1	36	39	63	40	45
Hornbeck	HBK R 5525 (RR)	44 ± 1	35	42	58	39	47
Delta Grow	5300 RR	43 ± 1	37	40	54	40	42
Dyna-Gro	33B52 (RR)	42 ± 1	33	39	53	40	46
Dyna-Gro	31R54 (RR)	42 ± 1	34	38	56	36	46
Midwest Premium Genetics	MPG 5505nRR (STS)	42 ± 1	32	39	63	38	38
Hornbeck	HBK RS 5227 (RR)	42 ± 1	33	38	59	39	39
Midwest Premium Genetics	MPG 5308nRR	41 ± 1	43	37	54	36	36
USG	75J32 (RR)	41 ± 1	32	37	56	40	41
KS	KS 5507NRR	41 ± 1	43	39	49	36	39
Hornbeck	HBK R 5226 (RR)	41 ± 1	37	44	44	33	46
Midwest Premium Genetics	MPG 5407nRR	40 ± 1	28	35	66	35	37
Dyna-Gro	V51N7RS	40 ± 1	31	39	55	39	35
Delta Grow	5470 RR	40 ± 1	32	34	59	34	41
Dairyland	8512 RR	40 ± 1	26	37	61	34	40
USG	75J47 (RR)	40 ± 1	32	37	49	36	44
Progeny	5115 RR	39 ± 1	30	35	50	37	41
Asgrow	DK5068 (RR)	38 ± 1	29	37	52	37	35
Delta Grow	5160 RR/STS	38 ± 1	24	35	56	36	39
USG	7515nRS	38 ± 1	22	34	59	37	37
Southern Cross	Damascus (RR/STS)	37 ± 1	27	31	55	38	35
Dairyland	8509 RR	36 ± 1	24	36	47	36	38
Progeny	5107 RR	36 ± 1	27	31	50	33	40
Average (bu/a)		42	33	38	57	38	42
L.S.D._{.05} (bu/a)		3	7	7	10	6	7
C.V. (%)		11.5	14.0	10.8	11.4	10.0	10.9

† 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 32. Mean yields † and agronomic characteristics of 30 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2007 - 2008.

Brand	Variety ‡	Avg. Yield		Moisture §	Lodging	Height	Maturity	Shattering	Leaf	Seed	Protein	Oil
		± Std Err.	(n=10)						(n=10)	(n=5)		
		bu/a	%	Score	in.	DAP	-----Score-----		%	%		
Delta Grow	5450 RR	48 ± 1	15.5	1.7	35	157	1.0	1.3	2.3	42.4	20.0	
Delta King	DK 52-K6 (RR)	48 ± 1	13.8	1.8	36	151	1.0	1.1	1.6	44.4	19.8	
FFR	5663 RR	47 ± 1	14.3	2.4	34	150	1.0	1.0	2.2	43.8	20.0	
Schillinger Seed	557 RC	46 ± 1	13.2	1.7	34	150	1.0	1.2	2.1	43.0	19.9	
NK	S 52-F2 Brand (RR)	45 ± 1	13.4	1.8	34	147	1.0	1.1	2.0	43.8	20.0	
USG	7553nRS	45 ± 1	13.0	1.6	36	148	1.0	1.1	2.1	42.5	20.7	
Dyna-Gro	33X55 (RR)	45 ± 1	13.9	1.6	36	151	1.0	1.1	1.8	44.8	19.7	
Dyna-Gro	33P54 (RR)	44 ± 1	14.5	1.4	32	151	1.0	1.8	2.9	41.6	21.2	
Hornbeck	HBK R 5525 (RR)	44 ± 1	14.2	1.8	37	150	1.0	1.0	2.4	43.3	20.1	
Delta Grow	5300 RR	43 ± 1	13.4	1.9	35	147	1.0	1.3	2.1	42.7	20.0	
Dyna-Gro	33B52 (RR)	42 ± 1	13.2	2.0	34	147	1.0	1.0	1.9	41.4	21.0	
Dyna-Gro	31R54 (RR)	42 ± 1	13.5	1.8	35	150	1.0	1.2	1.8	44.7	19.3	
Midwest Premium Genetics	MPG 5505nRR (STS)	42 ± 1	13.2	1.6	35	146	1.0	1.1	2.0	41.6	21.0	
Hornbeck	HBK RS 5227 (RR)	42 ± 1	13.2	1.8	35	148	1.0	1.1	1.8	42.0	20.3	
Midwest Premium Genetics	MPG 5308nRR	41 ± 1	13.6	2.2	38	148	1.1	1.1	2.7	41.5	21.1	
USG	75J32 (RR)	41 ± 1	13.4	1.5	35	148	1.0	1.1	2.6	43.2	20.0	
KS	KS 5507NRR	41 ± 1	14.4	2.0	33	150	1.0	1.1	2.4	40.5	19.9	
Hornbeck	HBK R 5226 (RR)	41 ± 1	13.8	2.7	34	148	1.0	1.0	1.9	43.3	19.9	
Midwest Premium Genetics	MPG 5407nRR	40 ± 1	13.9	1.7	41	149	1.3	2.2	3.4	42.6	21.0	
Dyna-Gro	V51N7RS	40 ± 1	13.2	2.0	36	147	1.1	1.2	1.9	41.8	20.7	
Delta Grow	5470 RR	40 ± 1	14.4	1.8	39	152	1.0	1.8	3.3	43.0	20.7	
Dairyland	8512 RR	40 ± 1	14.0	1.6	40	150	1.0	1.7	3.3	42.8	20.7	
USG	75J47 (RR)	40 ± 1	14.4	1.6	34	149	1.0	1.4	2.8	41.7	20.9	
Progeny	5115 RR	39 ± 1	13.8	1.8	39	144	1.1	1.1	3.0	41.7	21.8	
Asgrow	DK5068 (RR)	38 ± 1	13.4	2.0	36	142	1.6	1.1	3.6	43.0	21.0	
Delta Grow	5160 RR/STS	38 ± 1	13.4	2.0	37	140	1.9	1.0	3.0	42.5	21.6	
USG	7515nRS	38 ± 1	13.3	2.0	37	140	2.1	1.0	3.1	42.5	21.8	
Southern Cross	Damascus (RR/STS)	37 ± 1	13.9	1.8	37	141	1.4	1.0	3.1	42.3	21.1	
Dairyland	8509 RR	36 ± 1	13.4	2.4	38	140	2.2	1.0	2.7	42.3	20.9	
Progeny	5107 RR	36 ± 1	13.5	2.1	37	143	1.4	1.3	2.7	43.1	20.8	
Average		42	13.7	1.9	36	147	1.2	1.2	2.5	42.7	20.6	

† 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.

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.

Table 33. Mean yields † of 17 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in five environments (n=15) in Tennessee for three years, 2006 - 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=15)	Knoxville	Springfield	Milan		Ames
					Irr.	Non-Irr.	
-----bu/a-----							
Delta King	DK 52-K6 (RR)	52 ± 1	51	47	68	48	45
FFR	5663 RR	51 ± 1	53	44	62	48	45
USG	7553nRS	49 ± 1	46	45	66	47	39
Dyna-Gro	33X55 (RR)	48 ± 1	44	42	64	47	44
Delta Grow	5300 RR	48 ± 1	48	44	61	47	41
Hornbeck	HBK R 5525 (RR)	48 ± 1	49	42	60	45	44
Midwest Premium Genetics	MPG 5505nRR (STS)	46 ± 1	45	44	65	45	33
USG	75J32 (RR)	46 ± 1	45	41	61	46	37
Delta Grow	5160 RR/STS	45 ± 1	40	41	60	45	41
Midwest Premium Genetics	MPG 5407nRR	45 ± 1	41	39	67	42	35
USG	7515nRS	45 ± 1	38	40	64	45	37
Dyna-Gro	V51N7RS	45 ± 1	44	41	62	43	33
Dairyland	8512 RR	45 ± 1	39	39	67	41	37
Progeny	5115 RR	45 ± 1	43	41	56	45	39
Delta Grow	5470 RR	44 ± 1	41	40	60	42	37
Hornbeck	HBK R 5226 (RR)	44 ± 1	49	42	48	37	42
Dyna-Gro	33B52 (RR)	43 ± 1	45	39	52	44	39
Average (bu/a)		46	45	42	61	45	39
L.S.D._{.05} (bu/a)		3	7	7	9	6	7
C.V. (%)		10.6	10.1	10.9	10.7	9.3	11.5

† 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 34. Mean yields † and agronomic characteristics of 17 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in five environments (n=15) in Tennessee for three years, 2006 - 2008.

Brand	Variety ‡	Avg. Yield	Moisture § (n=15)	Lodging (n=9)	Height (n=13)	Maturity (n=11)	Shattering (n=6)	Leaf	Seed	Protein (n=7)	Oil (n=7)
		± Std Err. (n=15)						Retention (n=1)	Quality (n=7)		
		bu/a	%	Score	in.	DAP	-----Score-----	%	%		
Delta King	DK 52-K6 (RR)	52 ± 1	14.2	1.9	37	149	1.0	1.1	1.7	41.5	20.8
FFR	5663 RR	51 ± 1	14.4	2.5	34	149	1.0	1.0	1.8	41.8	20.4
USG	7553nRS	49 ± 1	13.3	1.5	36	147	1.0	1.1	1.6	39.2	21.5
Dyna-Gro	33X55 (RR)	48 ± 1	14.4	1.7	37	149	1.0	1.1	2.0	41.4	20.8
Delta Grow	5300 RR	48 ± 1	14.0	1.9	36	145	1.0	1.3	1.7	40.1	20.9
Hornbeck	HBK R 5525 (RR)	48 ± 1	14.4	2.0	37	149	1.0	1.0	1.9	39.9	21.0
Midwest Premium Genetics	MPG 5505nRR (STS)	46 ± 1	13.4	1.5	35	146	1.0	1.1	1.7	39.1	21.6
USG	75J32 (RR)	46 ± 1	13.7	1.6	37	146	1.0	1.1	2.0	40.2	20.9
Delta Grow	5160 RR/STS	45 ± 1	13.8	2.1	39	139	1.5	1.0	2.4	40.3	22.2
Midwest Premium Genetics	MPG 5407nRR	45 ± 1	14.1	1.7	43	148	1.1	2.2	2.6	40.1	21.4
USG	7515nRS	45 ± 1	13.7	2.0	39	139	1.6	1.0	2.4	40.2	22.3
Dyna-Gro	V51N7RS	45 ± 1	13.8	2.1	37	146	1.0	1.2	1.7	39.7	21.3
Dairyland	8512 RR	45 ± 1	14.3	1.8	42	148	1.0	1.7	2.9	40.9	21.1
Progeny	5115 RR	45 ± 1	14.1	1.8	41	142	1.1	1.1	2.4	38.7	22.4
Delta Grow	5470 RR	44 ± 1	14.7	1.9	42	150	1.0	1.8	2.8	40.8	21.1
Hornbeck	HBK R 5226 (RR)	44 ± 1	14.2	2.6	34	147	1.0	1.0	1.6	40.4	21.0
Dyna-Gro	33B52 (RR)	43 ± 1	13.7	2.2	34	146	1.0	1.0	1.4	38.9	21.9
Average		46	14.0	1.9	38	146	1.1	1.2	2.0	40.2	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.

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.

Table 35. Yields † of 18 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties in 13 County Standard Tests in Tennessee during 2008.

MS	Brand/Variety	Avg. Yield bu/a	Moist‡ %	Coffee 5/13 §	Crockett 7/1	Dyer 6/21	Franklin 6/7	Gibson 5/21	Haywood 6/6	Lake 6/2	Lauderdale 6/12	Lincoln 5/12	Obion 6/19	UT Martin		West TN
														Weakley 6/12	Weakley 6/12	REC Madison 6/26
A	Dairyland 8509	45.2	11.5	46.2	35.1	51.3	44.2	46.6	44.5	41.0	67.3	50.0	42.7	36.5	43.5	38.6
AB	Armor 55-A5	44.6	13.7	45.4	38.4	46.7	36.8	42.6	52.1	43.9	72.6	46.0	35.4	29.3	41.1	49.3
ABC	Stine 5482-4 RR/STS	44.4	11.9	44.6	32.0	54.0	35.2	44.9	45.3	46.8	68.4	50.9	39.8	31.4	36.4	47.5
ABCD	Dairyland 8512	43.5	11.3	41.5	25.5	55.4	35.0	41.0	41.1	49.3	64.0	55.1	41.2	34.4	41.5	40.1
ABCD	**USG Allen	43.4	12.1	41.4	37.5	47.7	45.8	42.9	38.0	51.2	61.7	49.8	41.0	28.2	39.0	39.7
ABCD	Dyna-Gro V51N7RS	43.4	11.0	43.1	30.1	60.7	29.7	42.5	52.9	43.0	67.0	49.3	38.2	29.5	41.5	36.2
ABCDE	***Dyna-Gro 33B52	42.9	11.6	40.3	32.3	57.3	37.5	44.7	42.9	46.1	64.9	46.9	39.4	32.6	36.7	35.5
ABCDE	Armor 53-Z5 RR/STS	42.8	11.0	43.5	35.8	59.2	29.1	43.0	43.7	41.9	58.8	51.0	40.8	24.4	44.1	41.5
ABCDE	Schillinger 557RC	42.8	11.3	44.6	36.0	53.5	39.5	43.1	46.7	46.4	62.3	49.6	41.8	26.4	40.2	25.8
ABCDE	Asgrow DK5068	42.7	11.4	40.6	32.2	44.3	39.4	46.7	55.8	37.0	65.5	42.0	41.0	31.4	43.9	35.6
ABCDE	Asgrow DP5335 RR/STS	42.7	11.3	41.8	30.8	56.8	43.4	44.8	45.1	39.7	63.6	42.5	37.8	29.2	41.5	37.9
BCDEF	Delta King DK52K6	41.5	12.1	42.1	33.1	58.5	34.3	38.3	45.2	43.1	59.9	50.7	37.6	24.3	37.4	35.6
CDEF	Great Heart GT502CRR	41.4	11.3	41.4	29.7	53.6	32.8	44.9	47.1	37.9	65.4	35.1	39.9	31.1	37.8	42.0
CDEF	FFR 5663	41.4	11.8	41.9	37.4	53.2	34.6	38.9	45.2	43.4	52.2	47.4	36.7	30.5	40.8	36.6
DEF	Ag Genetics South AGS 568	41.1	12.5	42.4	31.8	47.0	35.1	36.2	55.3	41.9	53.8	45.7	39.8	32.3	37.3	36.3
DEF	Asgrow DP5634 RR/STS	41.1	11.6	41.2	35.1	51.1	35.9	37.7	51.6	42.2	55.4	50.8	33.7	28.4	34.0	37.0
EF	NK S56-D7	39.9	12.3	42.1	31.9	54.8	31.9	40.7	36.3	32.6	61.6	46.3	35.2	29.3	40.2	36.0
F	Dyna-Gro 33X55	38.6	12.5	30.1	29.0	48.8	33.9	38.8	39.1	39.0	58.8	50.8	39.1	26.3	40.3	27.8
Average (bu/a)		42.4	11.8	41.9	33.0	53.0	36.3	42.1	46.0	42.6	62.4	47.8	38.9	29.7	39.8	37.7

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Planting date.

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 average yield and in conducting the statistical analysis to determine significant differences (MS).

Varieties denoted with an asterisk (*), (**), or (***) were in the top performing group in 2007, 2006, and/or 2005, respectively.

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

Milan REC = Research and Education Center at Milan

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 18 early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests (CST) during 2008.

MS	Brand/Variety	CST Avg. Yield (n=13)	Moisture ‡	----- Research and Education Center at Milan -----						SCN - 2007 #		
				SDS	Frogeye	Anthracnose	Sprayed ¶ Yield	Unsprayed Yield	Race 2	Race 3	Race 14	
		bu/a	%	2006 / 07 / 08	2006 / 07 / 08	2007 / 08	bu/a	bu/a	2007	2007	2007	
A	Dairyland 8509	45.2	11.5	/ 1.0 / 0.0	/ 5.0 / 1.7	3.0 / 3.7	47.2	44.2	S	MR	S	
AB	Armor 55-A5	44.6	13.7	/ / 0.0	/ / 0.0	/ 2.3	44.0	44.3	S	---	---	
ABC	Stine 5482-4 RR/STS	44.4	11.9	/ 2.0 / 0.3	/ 1.0 / 0.0	5.0 / 2.7	43.3	39.6	S	---	---	
ABCD	Dairyland 8512	43.5	11.3	/ 0.0 / 0.7	/ 0.0 / 0.0	3.0 / 2.7	43.2	41.0	S	MR	S	
ABCD	**USG Allen	43.4	12.1	/ 1.0 / 1.0	/ 5.0 / 3.0	3.0 / 2.3	42.5	39.4	S	S	S	
ABCD	Dyna-Gro V51N7RS	43.4	11.0	---	---	---	---	---	---	---	---	
ABCDE	***Dyna-Gro 33B52	42.9	11.6	1.0 / 1.0 / 1.0	0.0 / 1.0 / 0.0	5.0 / 2.3	43.5	40.9	S	S	S	
ABCDE	Armor 53-Z5 RR/STS	42.8	11.0	/ / 0.0	/ / 0.0	/ 2.3	41.3	40.7	S	---	---	
ABCDE	Schillinger 557RC	42.8	11.3	/ 1.0 / 1.0	/ 5.0 / 3.3	3.0 / 2.3	42.9	37.8	S	R	S	
ABCDE	Asgrow DK5068	42.7	11.4	/ / 0.8	/ / 10.0	/ 4.3	44.6	39.7	S	---	---	
ABCDE	Asgrow DP5335 RR/STS	42.7	11.3	/ / 0.3	/ / 7.3	/ 2.7	41.1	38.1	S	---	---	
BCDEF	Delta King DK52K6	41.5	12.1	/ 0.0 / 0.3	/ 0.0 / 0.0	2.0 / 2.7	41.9	38.2	S	R	S	
CDEF	Great Heart GT502CRR	41.4	11.3	/ / 0.0	/ / 6.0	/ 5.0	45.5	42.1	S	---	---	
CDEF	FFR 5663	41.4	11.8	/ / 0.0	/ / 0.0	/ 2.0	42.7	36.5	S	---	---	
DEF	Ag Genetics South AGS 568	41.1	12.5	/ 1.0 / 0.3	/ 0.0 / 0.0	2.0 / 3.8	41.3	40.6	S	R	S	
DEF	Asgrow DP5634 RR/STS	41.1	11.6	/ / 0.0	/ / 0.7	/ 2.3	40.8	37.9	S	---	---	
EF	NK S56-D7	39.9	12.3	/ / 1.0	/ / 4.7	/ 3.3	43.8	41.4	S	---	---	
F	Dyna-Gro 33X55	38.6	12.5	0.3 / 0.0 / 0.7	0.0 / 0.0 / 0.0	3.0 / 2.3	40.3	35.7	S	R	S	
Average (bu/a)		42.4	11.8				42.9	39.9				

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Disease ratings for SDS, Frogeye Leaf Spot, and Anthracnose 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 + 0.25% Induce at 20 gpa at R3 growth stage.

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

Complete 2008 SCN ratings available Feb. 2009.

Disease ratings compiled by Dr. Melvin Newman from replicated plots at the Research and Education Center at Milan.

SCN Greenhouse Ratings compiled by Dr. Pat Donald, Research Plant Path., USDA-ARS, West TN REC.

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

Varieties denoted with an asterisk (**) or (***) were in the top performing group in 2007, 2006, and/or 2005.

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

Table 37. Overall average yields † and moistures ‡ of 15 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in County Standard Tests (n=13) and Research and Education Centers (n=7) in Tennessee in 2008.

Brand	Variety	County Standard Trials		Research and Education Center Trials	
		Avg. Yield	Moisture	Avg. Yield	Moisture
		bu/a	%	bu/a	%
Dairyland	8509 RR	45	11.5	44	12.3
Armor	55-A5 (RR)	45	13.7	49	13.3
Dairyland	8512 RR	43	11.3	45	12.7
USG	Allen	43	12.1	54	12.5
Dyna-Gro	V51N7RS	43	11.0	45	12.2
Dyna-Gro	33B52 (RR)	43	11.6	48	12.3
Armor	53-Z5 (RR)	43	11.0	49	12.6
Schillinger Seed	557 RC	43	11.3	46	12.3
Asgrow	DK5068 (RR)	43	11.4	44	12.4
Delta King	DK 52-K6 (RR)	42	12.1	50	13.4
Great Heart	GT-502CRR	41	11.3	41	12.4
FFR	5663 RR	41	11.8	53	12.6
Asgrow	DP 5634 RR	41	11.6	54	12.5
NK	S 56-D7 (RR)	40	12.3	49	12.8
Dyna-Gro	33X55 (RR)	39	12.5	52	12.9
Average (bu/a)		42	11.8	48	12.6

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

Table 38. Mean yields † of 21 Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Knoxville	Spring Hill		Springfield	Milan		Ames
				Irr.	Non-Irr.		Irr.	Non-Irr.	
-----bu/a-----									
Asgrow	AG5606 (RR)	59 ± 1	84	59	46	63	57	44	58
Morsoy	RT 5688N (RR)	58 ± 1	71	58	53	59	63	46	54
USG	75Z98 (RR)	57 ± 1	80	49	51	56	61	47	57
Delta Grow	5970 RR	57 ± 1	86	45	40	59	60	39	68
Terral	TV 59R16 (RR)	56 ± 1	62	55	55	59	61	45	58
Dyna-Gro	32B57 (RR)	56 ± 1	80	51	45	62	62	35	57
Progeny	5706 RR	56 ± 1	83	46	43	62	57	40	59
NC Exp	NCC04-8020R	55 ± 1	68	47	44	59	66	46	55
USG	Allen	54 ± 1	73	43	40	61	63	44	56
Dyna-Gro	3583 (RR)	54 ± 1	62	52	46	59	56	47	57
Progeny	5650 RR	54 ± 1	75	48	43	53	58	40	63
Asgrow	DP 5634 RR	54 ± 1	82	51	44	55	54	36	57
TN Exp	TN06-137RR	54 ± 1	80	40	38	58	60	50	50
Asgrow	AG5605 (RR/STS)	53 ± 1	73	34	37	66	59	44	55
Dyna-Gro	33C59 (RR)	52 ± 1	72	47	48	52	55	43	51
NC Exp	NCC04-8610R	52 ± 1	58	43	46	62	59	41	57
Progeny	5622 RR	52 ± 1	60	45	43	58	65	40	54
NC Exp	NCC04-9589R	51 ± 1	70	46	39	62	59	35	48
AR	R04-1276RR	51 ± 1	67	42	44	58	53	38	56
NK	S 56-D7 (RR)	49 ± 1	62	40	45	53	48	39	58
Delta Grow	5630 RR	47 ± 1	63	34	40	56	54	32	52
Average (bu/a)		54	73	47	44	59	58	41	57
L.S.D._{.05} (bu/a)		3	11	13	6	8	7	7	9
C.V. (%)		10.1	9.4	16.4	8.3	8.5	7.3	9.2	9.7

† 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 39. Mean yields † and agronomic characteristics of 21 Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2008.

Brand	Variety ‡	Avg. Yield					Seed			
		± Std Err. (n=7)	Moisture § (n=7)	Lodging (n=6)	Height (n=7)	Maturity (n=7)	Shattering (n=2)	Quality (n=1)	Protein (n=1)	Oil (n=1)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Asgrow	AG5606 (RR)	59 ± 1	12.6	2.0	37	154	1.4	1.8	39.1	21.1
Morsoy	RT 5688N (RR)	58 ± 1	12.6	2.1	35	154	1.3	1.7	40.6	20.6
USG	75Z98 (RR)	57 ± 1	12.5	2.0	35	155	1.1	1.8	40.8	20.5
Delta Grow	5970 RR	57 ± 1	12.6	1.7	36	156	1.2	1.8	40.6	20.9
Terral	TV 59R16 (RR)	56 ± 1	12.5	2.0	36	154	1.1	1.7	40.3	20.7
Dyna-Gro	32B57 (RR)	56 ± 1	12.5	1.7	35	153	1.3	2.0	38.8	22.6
Progeny	5706 RR	56 ± 1	12.8	1.6	36	157	1.3	2.0	40.7	20.8
NC Exp	NCC04-8020R	55 ± 1	12.3	1.5	35	155	1.3	1.7	40.1	21.5
USG	Allen	54 ± 1	12.5	1.7	37	154	1.3	2.0	40.8	20.7
Dyna-Gro	3583 (RR)	54 ± 1	12.8	1.6	36	157	1.2	2.2	40.0	21.1
Progeny	5650 RR	54 ± 1	12.5	2.3	37	156	1.2	1.8	37.6	21.9
Asgrow	DP 5634 RR	54 ± 1	12.5	2.3	37	154	1.3	1.5	39.6	21.2
TN Exp	TN06-137RR	54 ± 1	12.5	1.3	32	154	1.4	2.0	39.5	20.9
Asgrow	AG5605 (RR/STS)	53 ± 1	12.1	1.5	33	154	1.3	1.7	39.1	21.5
Dyna-Gro	33C59 (RR)	52 ± 1	12.9	1.9	34	156	1.2	1.7	40.8	20.4
NC Exp	NCC04-8610R	52 ± 1	12.5	1.6	33	153	1.2	1.7	40.2	21.3
Progeny	5622 RR	52 ± 1	12.6	1.7	36	155	1.2	2.2	39.4	21.5
NC Exp	NCC04-9589R	51 ± 1	12.9	1.4	33	153	1.0	1.0	40.7	20.2
AR	R04-1276RR	51 ± 1	12.5	1.7	37	154	1.3	2.0	40.3	20.8
NK	S 56-D7 (RR)	49 ± 1	12.8	2.2	36	153	1.3	1.8	39.7	20.8
Delta Grow	5630 RR	47 ± 1	12.4	2.0	35	155	1.2	1.7	39.2	21.5
Average		54	12.6	1.8	35	154	1.2	1.8	39.9	21.1

† 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.

Table 40. Mean yields † of six Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2007 - 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=14)	Spring Hill			Milan		Ames	
			Knoxville	Irr.	Non-Irr.	Springfield	Irr.		Non-Irr.
-----bu/a-----									
Progeny	5706 RR	47 ± 1	67	43	39	37	59	39	48
USG	Allen	46 ± 1	59	44	38	36	59	43	45
Dyna-Gro	33C59 (RR)	46 ± 1	53	45	46	32	57	44	45
Asgrow	DP 5634 RR	46 ± 1	65	46	36	33	59	39	43
Dyna-Gro	3583 (RR)	45 ± 1	51	49	38	36	53	42	45
Progeny	5622 RR	43 ± 1	50	43	35	35	56	39	45
Average (bu/a)		46	57	45	39	35	57	41	45
L.S.D._{.05} (bu/a)		3	9	13	7	6	9	6	8
C.V. (%)		11.7	9.7	19.1	10.8	9.8	10.0	9.8	10.4

† 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 seven environments (n=14) in Tennessee for two years, 2007 - 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=14)	Moisture § (n=14)	Lodging (n=8)	Height (n=13)	Maturity (n=12)	Shattering (n=6)	Leaf	Seed	Protein (n=3)	Oil (n=3)
								Retention (n=1)	Quality (n=3)		
		bu/a	%	Score	in.	DAP	-----Score-----		%	%	
Progeny	5706 RR	47 ± 1	12.9	1.9	35	162	1.3	1.0	1.7	42.4	20.4
USG	Allen	46 ± 1	12.8	1.8	36	160	1.3	1.0	1.8	41.9	20.1
Dyna-Gro	33C59 (RR)	46 ± 1	13.0	2.0	34	160	1.2	1.0	1.7	42.0	19.8
Asgrow	DP 5634 RR	46 ± 1	12.6	2.2	36	158	1.2	1.0	1.6	42.0	20.3
Dyna-Gro	3583 (RR)	45 ± 1	12.9	1.8	35	161	1.2	1.1	2.0	41.2	20.8
Progeny	5622 RR	43 ± 1	12.9	1.7	35	160	1.3	1.2	1.9	41.2	20.8
Average		46	12.9	1.9	35	160	1.2	1.0	1.8	41.8	20.4

† 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.

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.

Table 42. Mean yields † of three Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments (n=21) in Tennessee for three years, 2006 - 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=21)	Knoxville	Spring Hill		Springfield	Milan		Ames
				Irr.	Non-Irr.		Irr.	Non-Irr.	
USG	Allen	49 ± 1	57	49	43	41	60	48	45
Asgrow	DP 5634 RR	47 ± 1	62	49	40	36	60	44	41
Dyna-Gro	3583 (RR)	46 ± 1	51	51	42	40	52	47	42
Average (bu/a)		48	57	50	42	39	57	46	43
L.S.D._{.05} (bu/a)		3	8	11	6	5	9	7	7
C.V. (%)		11.0	9.4	15.4	9.2	8.9	11.1	10.0	10.5

† All yields are adjusted to 13% moisture.

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

Table 43. Mean yields † and agronomic characteristics of three Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments (n=21) in Tennessee for three years, 2006 - 2008.

Brand	Variety ‡	Avg. Yield ± Std Err. (n=21)	Moisture § (n=21)	Lodging (n=14)	Height (n=19)	Maturity (n=18)	Shattering (n=11)	Leaf	Seed	Protein (n=7)	Oil (n=7)
								Retention	Quality		
		bu/a	%	Score	in.	DAP	-----Score-----	-----Score-----	%	%	
USG	Allen	49 ± 1	13.5	1.7	37	156	1.2	1.0	1.7	40.3	20.6
Asgrow	DP 5634 RR	47 ± 1	13.2	2.2	38	153	1.1	1.0	1.7	40.0	20.8
Dyna-Gro	3583 (RR)	46 ± 1	13.5	1.8	37	157	1.1	1.1	1.7	39.1	21.4
Average		48	13.4	1.9	37	155	1.1	1.0	1.7	39.8	20.9

† 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.

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.

Table 44. Mean yields † of 25 Maturity Group IV and V Conventional soybean varieties evaluated in six environments in Tennessee during 2008.

Brand	Variety	Avg. Yield ± Std Err. (n=6)	Spring					
			Knoxville	Hill		Springfield	Milan	
				Irr.	Non-Irr.		Irr.	Non-Irr.
-----bu/a-----								
<i>Maturity Group V</i>								
NC Exp	NCC04-1555	52 ± 1	34	72	47	51	78	33
AR	Osage	52 ± 1	33	74	50	43	69	40
USG	5601T	51 ± 1	37	65	44	52	75	35
AR	Ozark	51 ± 1	29	73	48	47	70	37
AR	R01-976	50 ± 1	35	74	46	46	64	33
NC Exp	N02-417	49 ± 1	26	77	45	39	73	31
VA	V98-2711	48 ± 1	31	66	39	50	71	33
USG	5002T	47 ± 1	30	74	40	40	61	38
VA	V98-9005	47 ± 1	25	72	43	46	61	34
KS	KS 5004N	46 ± 1	22	67	40	47	69	33
MO	Jake	46 ± 1	31	70	38	44	63	32
USDA-ARS	JTN-5203	46 ± 1	30	68	38	43	64	34
NC Exp	NCC02-22219	46 ± 1	29	67	44	46	59	31
VA	V01-2245	45 ± 1	35	66	50	38	52	32
MO	Stoddard	45 ± 1	31	65	40	49	53	32
USDA-ARS	JTN-5108	44 ± 1	45	64	34	44	49	31
USDA-ARS	JTN-5308	42 ± 1	35	56	35	42	52	31
USDA-ARS	JTN-5207	39 ± 1	33	57	39	36	45	28
TN Exp	TN03-217	39 ± 1	16	55	40	45	53	23
<i>Maturity Group IV</i>								
TN Exp	TN04-124	46 ± 1	29	67	38	44	66	33
AR	R00-1194F	44 ± 1	25	65	40	39	61	35
AR	UA 4805	44 ± 1	24	67	44	33	59	34
USDA-ARS	JTN-4507	41 ± 1	28	57	36	42	54	29
KS	KS 4607	33 ± 1	8	47	16	37	59	32
USG	440nSTS	28 ± 1	6	45	11	23	53	28
Average (bu/a)		45	28	66	40	43	61	33
L.S.D._{.05} (bu/a)		3	6	9	9	13	8	5
C.V. (%)		11.8	12.5	8.4	14.5	18.3	8.1	8.7

† All yields are adjusted to 13% moisture.

Table 45. Mean yields † and agronomic characteristics of 25 Maturity Group IV and V Conventional soybean varieties evaluated in six environments in Tennessee during 2008.

Brand	Variety	Avg. Yield	Moisture ‡ (n=6)	Lodging (n=5)	Height (n=6)	Maturity (n=6)	Shattering (n=4)	Seed	Protein (n=1)	Oil (n=1)
		± Std Err. (n=6)						Quality (n=1)		
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
<i>Maturity Group V</i>										
NC Exp	NCC04-1555	52 ± 1	12.6	1.5	31	147	1.0	1.8	40.8	21.1
AR	Osage	52 ± 1	12.9	1.4	30	146	1.3	2.2	43.8	19.8
USG	5601T	51 ± 1	12.7	1.5	35	148	1.0	2.0	42.2	20.8
AR	Ozark	51 ± 1	13.4	1.7	33	146	1.3	1.8	41.3	20.9
AR	R01-976	50 ± 1	13.4	1.3	32	148	1.2	2.0	42.1	20.9
NC Exp	N02-417	49 ± 1	13.3	1.3	31	148	1.1	2.3	40.0	22.3
VA	V98-2711	48 ± 1	12.8	1.7	29	145	1.3	2.0	41.2	21.5
USG	5002T	47 ± 1	13.0	1.5	28	146	1.2	2.7	40.9	22.4
VA	V98-9005	47 ± 1	12.8	1.5	29	147	1.3	2.5	44.0	20.7
KS	KS 5004N	46 ± 1	13.0	1.4	32	145	1.2	2.0	40.4	22.6
MO	Jake	46 ± 1	13.4	1.5	32	145	1.3	2.0	42.4	21.3
USDA-ARS	JTN-5203	46 ± 1	12.8	1.5	31	147	1.4	2.3	41.5	21.5
NC Exp	NCC02-22219	46 ± 1	12.9	2.0	33	146	1.3	2.8	44.4	20.4
VA	V01-2245	45 ± 1	13.1	1.5	33	148	1.3	2.2	41.0	21.5
MO	Stoddard	45 ± 1	12.8	1.9	28	144	1.3	2.3	41.7	21.6
USDA-ARS	JTN-5108	44 ± 1	12.2	2.3	32	145	1.3	2.2	43.1	19.5
USDA-ARS	JTN-5308	42 ± 1	12.6	2.4	35	146	1.2	1.8	41.9	20.2
USDA-ARS	JTN-5207	39 ± 1	12.7	2.2	38	146	1.5	2.3	44.7	20.2
TN Exp	TN03-217	39 ± 1	12.6	1.6	25	146	1.3	1.5	44.7	18.4
<i>Maturity Group IV</i>										
TN Exp	TN04-124	46 ± 1	12.1	1.3	33	143	1.3	2.0	41.8	21.7
AR	R00-1194F	44 ± 1	13.0	1.2	33	145	1.2	2.5	40.0	22.0
AR	UA 4805	44 ± 1	12.8	1.3	29	144	1.3	2.0	42.4	20.4
USDA-ARS	JTN-4507	41 ± 1	12.9	1.4	34	144	1.3	1.5	44.4	20.7
KS	KS 4607	33 ± 1	12.4	1.3	29	140	2.4	3.8	45.4	19.3
USG	440nSTS	28 ± 1	12.6	1.4	33	140	3.0	4.0	41.7	21.7
Average		45	12.8	1.6	32	145	1.4	2.3	42.3	20.9

† All yields are adjusted to 13% moisture.

‡ 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 nine Maturity Group IV and V Conventional soybean varieties evaluated in four environments (n=8) in Tennessee for two years, 2007 - 2008.

Brand	Variety	Avg. Yield ± Std Err. (n=8)	Knoxville	Springfield	Milan	
					Irr.	Non-Irr.
-----bu/a-----						
<i>Maturity Group V</i>						
USG	5601T	45 ± 1	32	37	67	45
AR	Ozark	42 ± 1	31	33	64	42
VA	V98-2711	41 ± 1	26	34	67	38
VA	V98-9005	38 ± 1	25	30	63	36
KS	KS 5004N	38 ± 1	22	34	62	35
USG	5002T	38 ± 1	27	29	56	40
<i>Maturity Group IV</i>						
TN Exp	TN04-124	40 ± 1	25	35	64	36
AR	UA 4805	34 ± 1	24	25	52	36
KS	KS 4607	28 ± 1	13	25	51	25
Average (bu/a)		38	25	31	61	37
L.S.D._{.05} (bu/a)		3	5	10	7	5
C.V. (%)		12.1	13.2	19.8	8.0	8.6

† All yields are adjusted to 13% moisture.

Table 47. Mean yields † and agronomic characteristics of nine Maturity Group IV and V Conventional soybean varieties evaluated in four environments (n=8) in Tennessee for two years, 2007 - 2008.

Brand	Variety	Avg. Yield	Moisture ‡ (n=8)	Lodging (n=5)	Height (n=8)	Maturity (n=8)	Shattering (n=4)	Leaf	Seed	Protein (n=3)	Oil (n=3)
		± Std Err. (n=8)						Retention (n=1)	Quality (n=3)		
		bu/a	%	Score	in.	DAP	-----Score-----		%	%	
<i>Maturity Group V</i>											
USG	5601T	45 ± 1	13.6	1.8	35	145	1.1	1.6	2.1	42.4	20.7
AR	Ozark	42 ± 1	14.5	1.8	34	145	1.0	1.3	1.9	41.8	20.7
VA	V98-2711	41 ± 1	13.5	2.2	31	143	1.1	1.5	1.9	42.4	20.9
VA	V98-9005	38 ± 1	13.5	1.8	31	144	1.1	1.5	2.7	44.5	20.0
KS	KS 5004N	38 ± 1	13.1	1.8	33	142	1.1	1.7	1.9	42.1	21.6
USG	5002T	38 ± 1	13.2	1.8	30	145	1.1	1.8	2.8	42.3	21.7
<i>Maturity Group IV</i>											
TN Exp	TN04-124	40 ± 1	12.5	1.6	34	141	1.1	1.7	1.9	42.9	21.1
AR	UA 4805	34 ± 1	13.1	1.9	30	141	1.1	1.8	1.9	43.0	20.0
KS	KS 4607	28 ± 1	12.9	1.5	31	138	2.1	1.2	3.2	45.2	19.8
Average		38	13.3	1.8	32	143	1.2	1.6	2.3	43.0	20.7

† All yields are adjusted to 13% moisture.

‡ 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.

Table 48. Mean yields † of four Maturity Group IV and V Conventional soybean varieties evaluated in four environments (n=12) in Tennessee for three years, 2006 - 2008.

Brand	Variety	Avg. Yield ± Std Err. (n=12)	Knoxville	Springfield	Milan	
					Irr.	Non-Irr.
-----bu/a-----						
<i>Maturity Group V</i>						
USG	5601T	48 ± 1	36	38	69	48
AR	Ozark	44 ± 1	35	35	61	45
USG	5002T	42 ± 1	33	31	59	46
<i>Maturity Group IV</i>						
AR	UA 4805	38 ± 1	28	29	51	42
Average (bu/a)		43	33	33	60	45
L.S.D._{.05} (bu/a)		3	6	9	7	5
C.V. (%)		11.5	13.0	17.8	8.1	8.9

† All yields are adjusted to 13% moisture.

Table 49. Mean yields † and agronomic characteristics of four Maturity Group IV and V Conventional soybean varieties evaluated in four environments (n=12) in Tennessee for three years, 2006 - 2008.

Brand	Variety	Avg. Yield ± Std Err. (n=12)	Moisture ‡ (n=12)	Lodging (n=8)	Height (n=12)	Maturity (n=12)	Shattering (n=6)	Leaf	Seed	Protein (n=7)	Oil (n=7)
								Retention (n=1)	Quality (n=7)		
		bu/a	%	Score	in.	DAP	-----Score-----			%	%
<i>Maturity Group V</i>											
USG	5601T	48 ± 1	13.9	2.0	36	146	1.1	1.6	1.8	41.3	20.8
AR	Ozark	44 ± 1	14.7	2.2	34	145	1.0	1.3	1.6	39.9	20.9
USG	5002T	42 ± 1	13.8	2.0	30	146	1.1	1.8	2.2	40.1	21.9
<i>Maturity Group IV</i>											
AR	UA 4805	38 ± 1	13.7	2.1	30	142	1.1	1.8	1.8	41.4	20.3
Average		43	14.0	2.1	33	145	1.1	1.6	1.9	40.6	21.0

† All yields are adjusted to 13% moisture.

‡ 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.

Table 50. Yield comparisons of 10 soybean varieties between seed treated or untreated with a systemic insecticide, evaluated in seven to eight environments in Tennessee during 2008.

Brand	Variety ‡	Knoxville	Crossville	Spring Hill		Springfield	Milan		Ames	Avg. Yield [†]	Avg. Yield Difference
				Irr.	Non-Irr.		Irr.	Non-Irr.			
<i>Maturity Group III (n=7)</i>											
Dyna-Gro	V39N8RR (Cruiser)	69	27	51	29	53	59	41	---	47	+4
Dyna-Gro	V39N8RR	63	26	45	23	48	59	37	---	43	
Asgrow	AG3906 (RR) Cruiser	69	15	58	25	52	54	36	---	44	+2
Asgrow	AG3906 (RR)	60	16	50	26	54	58	32	---	42	
	L.S.D._{.05} (bu/a)	9	12	9	4	7	7	6	---	3	
	C.V. (%)	8.5	26.9	10.4	9.8	8.7	7.3	9.3	---	10.5	
<i>Maturity Group IV Early (n=8)</i>											
Progeny	4508 RR (Cruiser)	70	33	47	31	49	62	42	50	48	+2
Progeny	4508 RR	72	30	41	28	47	63	41	47	46	
Dyna-Gro	V44N9RS (Cruiser)	75	27	45	22	38	65	42	45	45	+2
Dyna-Gro	V44N9RS	64	34	37	24	36	66	41	41	43	
	L.S.D._{.05} (bu/a)	8	9	10	7	5	7	4	6	3	
	C.V. (%)	6.9	16.0	13.8	15.2	7.6	6.6	6.9	8.5	9.7	
<i>Maturity Group IV Late (n=8)</i>											
Asgrow	AG4903 (RR/STS) Cruiser	78	41	63	45	59	65	44	46	55	+2
Asgrow	AG4903 (RR/STS)	72	37	62	40	60	62	42	46	53	
USG	74F96 (RR) Cruiser	64	29	57	42	60	63	40	46	50	+1
USG	74F96 (RR)	64	33	58	38	60	57	38	45	49	
	L.S.D._{.05} (bu/a)	10	9	10	7	8	8	5	9	3	
	C.V. (%)	8.5	15.3	10.2	11.6	8.5	8.3	7.6	11.6	9.9	

Table 50 (continued)

<i>Maturity Group V Early (n=7)</i>												
Delta King	DK 52-K6 (RR)	Cruiser	38	---	54	50	67	59	42	54	52	+2
Delta King	DK 52-K6	(RR)	31	---	47	45	67	61	41	55	50	
USG	7553nRS	(Cruiser)	32	---	54	46	64	64	42	51	50	+1
USG	7553nRS		27	---	45	40	75	64	41	51	49	
L.S.D._{.05} (bu/a)			7	---	11	8	9	7	7	8	3	
C.V. (%)			15.8	---	14.1	11.2	8.5	7.5	9.7	9.7	10.6	
<i>Maturity Group V Late (n=7)</i>												
Progeny	5706 RR	(Cruiser)	90	---	48	43	56	60	42	62	57	+1
Progeny	5706 RR		83	---	46	43	62	57	40	59	56	
USG	Allen	(Cruiser)	65	---	53	44	61	64	46	64	57	+3
USG	Allen		73	---	43	40	61	63	44	56	54	
L.S.D._{.05} (bu/a)			11	---	13	6	8	7	7	9	3	
C.V. (%)			9.4	---	16.4	8.3	8.5	7.3	9.2	9.7	10.1	
Average -- Treated Seed (bu/a)			65	29	53	38	56	61	42	52	51	+3
Average -- Untreated Seed (bu/a)			61	29	47	35	57	61	40	50	48	

† 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 51. Comparisons of overall mean yields and agronomic characteristics of 10 soybean varieties between seed treated or untreated with a systemic insecticide, evaluated in seven to eight environments in Tennessee during 2008.

Brand	Variety	Avg. Yield bu/a	Moisture ‡ %	Lodging Score	Height in.	Maturity DAP	Shattering -----Score-----	Seed	Protein %	Oil %
								Quality		
<i>Maturity Group III (n=7)</i>										
Dyna-Gro	V39N8RR (Cruiser)	47	12.0	1.4	32	127	1.0	2.3	39.1	21.4
Dyna-Gro	V39N8RR	43	11.8	1.5	31	127	1.0	2.0	39.2	21.1
Asgrow	AG3906 (RR) Cruiser	44	11.9	1.7	30	127	1.1	2.2	37.6	23.6
Asgrow	AG3906 (RR)	42	12.1	1.5	30	127	1.0	2.5	38.0	23.4
<i>Maturity Group IV Early (n=8)</i>										
Progeny	4508 RR (Cruiser)	48	12.5	1.7	34	135	1.4	1.8	36.3	24.5
Progeny	4508 RR	46	12.5	1.6	33	135	1.3	1.7	36.0	24.5
Dyna-Gro	V44N9RS (Cruiser)	45	12.2	1.2	29	131	1.8	1.8	37.4	22.8
Dyna-Gro	V44N9RS	43	12.2	1.2	30	131	1.6	2.3	37.1	22.7
<i>Maturity Group IV Late (n=8)</i>										
Asgrow	AG4903 (RR/STS) Cruiser	55	12.2	1.8	35	143	1.1	2.0	38.2	23.0
Asgrow	AG4903 (RR/STS)	53	12.3	1.6	34	142	1.3	2.2	38.7	22.5
USG	74F96 (RR) Cruiser	50	13.0	1.7	38	142	1.3	2.0	37.7	22.4
USG	74F96 (RR)	49	12.7	1.7	36	142	1.2	1.8	37.7	22.4
<i>Maturity Group V Early (n=7)</i>										
Delta King	DK 52-K6 (RR) Cruiser	52	13.2	1.5	36	150	1.3	1.7	42.9	20.4
Delta King	DK 52-K6 (RR)	50	13.4	1.6	35	149	1.3	1.5	43.0	20.3
USG	7553nRS (Cruiser)	50	12.2	1.5	37	148	1.1	2.2	40.6	21.2
USG	7553nRS	49	12.1	1.4	34	146	1.0	2.0	41.6	21.4
<i>Maturity Group V Late (n=7)</i>										
Progeny	5706 RR (Cruiser)	57	12.5	1.8	38	156	1.3	1.8	40.7	20.9
Progeny	5706 RR	56	12.8	1.6	36	157	1.3	2.0	40.7	20.8
USG	Allen (Cruiser)	57	12.2	1.8	38	154	1.1	2.2	40.3	21.1
USG	Allen	54	12.5	1.7	37	154	1.3	2.0	40.8	20.7

† All yields are adjusted to 13% moisture.

‡ Protein & Oil on dry weight basis.

‡ 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.

Table 52. Yield comparisons of five soybean varieties between seed treated or untreated with a systemic insecticide, evaluated in 10 to 14 environments in Tennessee for two years (2007 - 2008).

Brand	Variety ‡	Knoxville	Crossville	Spring Hill		Springfield	Milan		Ames	Avg. Yield [†]	Avg. Yield Difference
				Irr.	Non-Irr.		Irr.	Non-Irr.			
<i>Maturity Group III (n=10)</i>											
Asgrow	AG3906 (RR) Cruiser	51	13	---	---	36	57	26	---	37	+1
Asgrow	AG3906 (RR)	43	13	---	---	37	61	25	---	36	
	L.S.D._{.05} (bu/a)	8	8	---	---	5	8	5	---	3	
	C.V. (%)	10.6	30	---	---	9.6	9.1	11.9	---	11.9	
<i>Maturity Group IV Late (n=14)</i>											
Asgrow	AG4903 (RR/STS) Cruiser	57	32	---	39	40	72	32	39	45	+3
Asgrow	AG4903 (RR/STS)	55	32	---	33	41	68	30	38	42	
	L.S.D._{.05} (bu/a)	8	7	---	6	6	9	5	7	3	
	C.V. (%)	8.9	15.6	---	14.1	10.2	9.4	11.7	12.9	11.4	
<i>Maturity Group V Early (n=10)</i>											
USG	7553nRS (Cruiser)	37	---	---	---	39	64	40	45	45	0
USG	7553nRS	33	---	---	---	45	61	41	43	45	
	L.S.D._{.05} (bu/a)	7	---	---	---	7	10	6	7	3	
	C.V. (%)	14.0	---	---	---	10.8	11.4	10.0	10.9	11.5	
<i>Maturity Group V Late (n=14)</i>											
USG	Allen (Cruiser)	56	---	52	43	36	62	43	49	49	+3
USG	Allen	59	---	44	38	36	59	43	45	46	
Progeny	5706 RR (Cruiser)	70	---	47	40	34	57	40	48	48	+1
Progeny	5706 RR	67	---	43	39	37	59	39	48	47	
	L.S.D._{.05} (bu/a)	9	---	13	7	6	9	6	8	3	
	C.V. (%)	9.7	---	19.1	10.8	9.8	10.0	9.8	10.4	11.7	
Average -- Treated Seed (bu/a)		54	22	50	41	37	62	36	45	45	+2
Average -- Untreated Seed (bu/a)		51	22	44	37	39	62	36	43	43	

† 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 53. Comparisons of overall mean yields and agronomic characteristics of five soybean varieties between seed treated or untreated with a systemic insecticide, evaluated in 10 to 14 environments in Tennessee for two years (2007 - 2008).

Brand	Variety	Avg. Yield bu/a	Moisture ‡ %	Lodging Score	Height in.	Maturity DAP	Shattering	Leaf	Seed	Protein %	Oil %
								Retention	Quality		
								-----Score-----			
<i>Maturity Group III (n=10)</i>											
Asgrow	AG3906 (RR) Cruiser	37	12.3	2.0	31	130	1.1	1.3	2.8	39.8	21.7
Asgrow	AG3906 (RR)	36	12.5	1.8	30	130	1.0	1.3	2.9	39.7	22.0
<i>Maturity Group IV Late (n=14)</i>											
Asgrow	AG4903 (RR/STS) Cruiser	45	12.7	1.7	35	148	1.1	2.6	2.3	40.8	21.5
Asgrow	AG4903 (RR/STS)	42	12.8	1.8	33	148	1.1	2.0	2.3	40.7	21.5
<i>Maturity Group V Early (n=10)</i>											
USG	7553nRS (Cruiser)	45	13.1	1.7	37	149	1.0	1.0	2.0	42.1	20.7
USG	7553nRS	45	13.0	1.6	36	148	1.0	1.1	2.1	42.5	20.7
<i>Maturity Group V Late (n=14)</i>											
USG	Allen (Cruiser)	49	12.6	1.8	37	160	1	1	1.9	41.6	20.4
USG	Allen	46	12.8	1.8	36	160	1	1	1.8	41.9	20.1
Progeny	5706 RR (Cruiser)	48	12.7	2.0	37	162	1.4	1.0	1.9	42.4	20.4
Progeny	5706 RR	47	12.9	1.9	35	162	1.3	1.0	1.7	42.4	20.4

† All yields are adjusted to 13% moisture.

‡ 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.

Table 54. Yield comparisons of four soybean varieties between seed treated or untreated with a systemic insecticide, evaluated in 15 to 21 environments in Tennessee for three years (2006 - 2008).

Brand	Variety ‡	Knoxville	Crossville	Spring Hill		Springfield	Milan		Ames	Avg. Yield [†]	Avg. Yield Difference
				Irr.	Non-Irr.		Irr.	Non-Irr.			
<i>Maturity Group III (n=15)</i>											
Asgrow	AG3906 (RR) Cruiser	55	30	---	---	38	58	34	---	43	+1
Asgrow	AG3906 (RR)	47	31	---	---	39	59	33	---	42	
	L.S.D._{.05} (bu/a)	7	8	---	---	5	7	6	---	3	
	C.V. (%)	9.5	13.5	---	---	8.1	8.1	10.2	---	9.8	
<i>Maturity Group IV Late (n=18)</i>											
Asgrow	AG4903 (RR/STS) Cruiser	66	43	---	43	37	72	41	---	50	+1
Asgrow	AG4903 (RR/STS)	62	43	---	37	39	70	40	---	49	
	L.S.D._{.05} (bu/a)	7	7	---	6	5	8	5	---	3	
	C.V. (%)	7.8	11.9	---	12.3	10.9	8.9	9.8	---	10.0	
<i>Maturity Group V Early (n=15)</i>											
USG	7553nRS (Cruiser)	51	---	---	---	41	66	45	42	49	0
USG	7553nRS	46	---	---	---	45	66	47	39	49	
	L.S.D._{.05} (bu/a)	7	---	---	---	7	9	6	7	3	
	C.V. (%)	10.1	---	---	---	10.9	10.7	9.3	11.5	10.6	
<i>Maturity Group V Late (n=21)</i>											
USG	Allen (Cruiser)	54	---	56	45	40	62	49	49	51	+2
USG	Allen	57	---	49	43	41	60	48	45	49	
	L.S.D._{.05} (bu/a)	8	---	11	6	5	9	7	7	3	
	C.V. (%)	9.4	---	15.4	9.2	8.9	11.1	10.0	10.5	11.0	
Average -- Treated Seed (bu/a)		57	37	56	44	39	65	42	45	48	+1
Average -- Untreated Seed (bu/a)		53	37	49	40	41	64	42	42	47	

† 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 55. Comparisons of overall mean yields and agronomic characteristics of four soybean varieties between seed treated or untreated with a systemic insecticide, evaluated in 15 or 21 environments in Tennessee for three years (2006 - 2008).

Brand	Variety	Avg. Yield bu/a	Moisture ‡ %	Lodging Score	Height in.	Maturity DAP	Shattering	Leaf	Seed	Protein %	Oil %
								Retention	Quality		
								-----Score-----			
<i>Maturity Group III (n=15)</i>											
Asgrow	AG3906 (RR) Cruiser	43	12.7	1.6	32	128	1.1	1.3	2.7	39.1	22.6
Asgrow	AG3906 (RR)	42	13.0	1.6	31	128	1.0	1.4	2.6	38.9	22.8
<i>Maturity Group IV Late (n=18)</i>											
Asgrow	AG4903 (RR/STS) Cruiser	50	13.3	1.6	35	144	1.0	2.6	2.0	39.1	22.0
Asgrow	AG4903 (RR/STS)	49	13.4	1.7	34	144	1.0	2.0	1.9	39.0	22.1
<i>Maturity Group V Early (n=15)</i>											
USG	7553nRS (Cruiser)	49	13.4	1.6	38	148	1.0	1.0	1.8	39.2	21.4
USG	7553nRS	49	13.3	1.5	36	147	1.0	1.1	1.6	39.2	21.5
<i>Maturity Group V Late (n=21)</i>											
USG	Allen (Cruiser)	51	13.3	1.7	39	156	1.1	1.0	1.7	40.3	20.6
USG	Allen	49	13.5	1.7	37	156	1.2	1.0	1.7	40.3	20.6

† All yields are adjusted to 13% moisture.

‡ 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.

Table 56. Characteristics of soybean varieties evaluated in Tennessee during 2008, as provided by the seed company.

Brand	Variety	2008 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
AgVenture	36P1NRR	RR3	3.6	RR/STS	R3, MR14	S	R	R	P	T
AgVenture	42P2NRRSTS	R4E	4.2	RR/STS	R3, MR14	R	R	S	W	T
AR	UA 4805	CV4	4.8	---	---	R	R	R	P	G
AR	R00-1194F	CV4	4.9	---	---	---	---	---	W	G
AR	Ozark	CV5	5.2	---	3	R	R	R	P	G
AR	Osage	CV5	5.6	---	---	R	R	R	P	G
AR	R01-976	CV5	5.9	---	---	---	---	---	S	G
AR	R04-1276RR	R5L	5.9	RR	---	---	---	---	W	G
Armor	38-G2 (RR)	RR3	3.8	RR	R3, MR14	MR	M	M	P	G
Armor	ARX 938 (RR/STS)	RR3	3.8	RR/STS	R3, MR14	MR	M	M	W	G
Armor	42-M1 (RR)	R4E	4.2	RR	R3, MR14	R	MS	R	P	T
Armor	44-K6 (RR/STS)	R4E	4.4	RR/STS	R3, MR14	R	M	R	P	LT
Armor	47-F8 (RR/STS)	R4L	4.7	RR/STS	R 3, MR 14	R	MR	MR	P	G
Armor	ARX 4717 (RR)	R4L	4.7	RR	R3	R	MR	M	P	G
Armor	48-J3 (RR)	R4L	4.8	RR	R3, MR14	R	MR	MR	P	LT
Armor	53-Z5 (RR/STS)	R5E	5.3	RR/STS	R3, MR14, M2	R	MR	MS	W	G
Armor	55-A5 (RR)	R5E	5.5	RR	M3	R	MR	MR	W	B
Asgrow	AG3906 (RR)	RR3	3.9	RR	MR 3, 14	R	MS	MR	P	T
Asgrow	AG3906 (RR) Cruiser	RR3	3.9	RR	MR 3, 14	R	MS	MR	P	T
Asgrow	AG4303 (RR)	R4E	4.3	RR	MR	---	---	---	P	LT
Asgrow	AG4605 (RR/STS)	R4L	4.6	RR/STS	MR 3	R	MS	---	P	LT
Asgrow	AG4606 (RR/STS)	R4L	4.6	RR/STS	R3	MR	MS	MS	W	T
Asgrow	AG4703 (RR)	R4L	4.7	RR	MR 3	MR	MR	MS	P	LT
Asgrow	AG4705 (RR)	R4L	4.7	RR	R 1,3	MS	MS	---	W	LT
Asgrow	AG4903 (RR/STS)	R4L	4.9	RR/STS	S	MS	MR	MS	P	LT
Asgrow	AG4903 (RR/STS) Cruiser	R4L	4.9	RR/STS	S	MS	MR	MS	P	LT
Asgrow	AG4907 (RR)	R4L	4.9	RR	R3	MS	MS	---	P	LT
Asgrow	AG5304 (RR/STS)	R5E	5.3	RR/STS	---	MR	---	MR	P	LT
Asgrow	AG5503 (RR)	R5E	5.5	RR	S	MR	---	---	W	T
Asgrow	AG5504 (RR/STS)	R5E	5.5	RR/STS	S	S	---	---	P	G
Asgrow	AG5605 (RR/STS)	R5L	5.6	RR/STS	R 3, MR 14	MS	MR	MS	P	G
Asgrow	AG5606 (RR)	R5L	5.6	RR	R 1,3	R	---	R	W	T
Asgrow (prior Delta Pine)	DP 4546 RR	R4E	4.5	RR	S	R	MS	MR	W	T
Asgrow (prior Delta Pine)	DP 4888 RR/S	R4L	4.8	RR/STS	S	R	R	MR	W	T
Asgrow (prior Delta Pine)	DP 5634 RR	R5L	5.6	RR	R 1,3	R	MS	MR	W	T
Asgrow (prior Delta King)	DK4866 (RR/STS)	R4L	4.8	RR/STS	MR3	MS	MR	MS	P	LT
Asgrow (prior Delta King)	DK5068 (RR)	R5E	5	RR	S	MS	MS	MS	W	G
Croplan	RC 3897 (FILL)	RR3	3.8	RR	R3, MR14	---	R	S	P	G
Croplan	RC 3897 RR	RR3	3.8	RR	R3, MR14	---	R	S	P	G
Croplan	RC 4417 (RR)	R4E	4.4	RR	R 3	---	R	---	P	T

Table 56 (continued)

Brand	Variety	2008 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Croplan	RC 4455 RR	R4E	4.4	RR	R3, MR14	R	R	R	P	T
Croplan	RC 4877 RR	R4L	4.8	RR	R3	R	R	R	P	T
Croplan	RC 4955 (RR)	R4L	4.9	RR	R3	R	R	R	P	LT
Croplan	RC 5222 RR	R5E	5.2	RR	R3, MR14	R	R	R	W	T
Croplan	RC 5437 (FILL)	R5E	5.4	RR/STS	R3	R	R	R	W	T
Croplan	RC 5437 RR/STS	R5E	5.4	RR/STS	R3	R	R	R	W	T
Crow's	C 4519 R (STS)	R4E	4.5	RR/STS	3, 14	R	R	---	P	T
Crow's	C 4820 R (STS)	R4L	4.8	RR/STS	3, 14	R	R	MR	W	T
Crow's	C 5417 R (STS)	R5E	5.4	RR/STS	3, 14	R	R	R	W	T
Dairyland	4300 RR	R4E	4.3	RR	MR 3	---	---	---	P	T
Dairyland	4500 RR STS	R4E	4.5	RR/STS	3	---	---	---	P	T
Dairyland	8474 RR	R4L	4.7	RR	MR 3	---	---	---	W	T
Dairyland	8482 RR	R4L	4.8	RR	---	---	---	---	W	T
Dairyland	8509 RR	R5E	5.0	RR	MR 3	---	---	---	P	T
Dairyland	8512 RR	R5E	5.1	RR	MR 3,14	---	---	---	W	T
Delta Grow	4150 RR	R4E	4.1	RR	3,6	MR	MR	M	W	T
Delta Grow	4460 RR	R4E	4.4	RR	3, 6, 14	MR	MR	MR	S	T
Delta Grow	4470 RR/STS	R4E	4.4	RR/STS	3, 14	MR	MR	M	P	T
Delta Grow	4770 RR	R4L	4.7	RR	3	R	MR	MR	P	T
Delta Grow	4780 RR	R4L	4.7	RR	3	MR	MR	M	P	T
Delta Grow	4820 RR	R4L	4.8	RR	3, 14	MR	MR	MR	P	T
Delta Grow	4970 RR	R4L	4.9	RR	3	R	MR	M	P	T
Delta Grow	4975 LA RR	R4L	4.9	RR	S	MR	MR	MR	P	T
Delta Grow	5160 RR/STS	R5E	5.1	RR/STS	3, 14	MR	MR	M	P	G
Delta Grow	5170 RR	R5E	5.1	RR	3, 14	R	MR	MR	P	T
Delta Grow	5280 RR	R5E	5.2	RR	3, 14	M	MR	M	P	T
Delta Grow	5280 RR (FILL)	R5L	5.2	RR	3, 14	M	MR	M	P	T
Delta Grow	5300 RR	R5E	5.3	RR	3,5,9	MR	MR	MR	W	G
Delta Grow	5450 RR	R5E	5.4	RR	2,3,14	MR	MR	M	W	G
Delta Grow	5470 RR	R5E	5.4	RR	3, 14	MR	M	M	W	T
Delta Grow	5555 RR	R5E	5.5	RR	3, 5, 9, 14	MR	M	M	P	G
Delta Grow	5570 RR STS	R5E	5.5	RR/STS	3	MR	M	M	W	G
Delta Grow	5630 RR	R5L	5.6	RR	3,6,14	M	M	M	W	G
Delta Grow	5970 RR	R5L	5.9	RR	3, 14	MR	MR	M	W	G
Delta King (Cullum Seeds)	DK 52-K6 (RR/STS)	R5E	5.2	RR	R 3, MR 14	MS	MR	MR	P	T
Delta King (Cullum Seeds)	DK 52-K6(RR/STS)Cruiser	R5E	5.2	RR/STS	R 3, MR 14	MS	MR	MR	P	T
Dyna-Gro	31J39 (RR)	RR3	3.9	RR	S	R	R	MR	P	T
Dyna-Gro	V39N8RR	RR3	3.9	RR	R 3, MR 14	MR	R	MR	P	T
Dyna-Gro	V39N8RR (Cruiser)	RR3	3.9	RR	R 3, MR 14	MR	R	MR	P	T
Dyna-Gro	V40N8RS	R4E	4.0	RR/STS	R 3, MR 14	R	MR	MS	P	LT

Table 56 (continued)

Brand	Variety	2008 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Dyna-Gro	V42N9RS	R4E	4.2	RR/STS	R 3, MR 14	R	MS	R	P	LT
Dyna-Gro	36C44 (RR)	R4E	4.4	RR	R3, MR14	R	MR	R	P	T
Dyna-Gro	37A44 (RR)	R4E	4.4	RR	R 3, MR 6,14	MR	MR	MR	P	T
Dyna-Gro	V44N9RS	R4E	4.4	RR/STS	R 3, MR 14	R	MS	R	P	LT
Dyna-Gro	V44N9RS (Cruiser)	R4E	4.4	RR/STS	R 3, MR 14	R	MS	R	P	LT
Dyna-Gro	32R46 (RR/STS)	R4L	4.6	RR/STS	R3, MR 14	R	MR	MR	P	T
Dyna-Gro	V47N8RR	R4L	4.7	RR	R 3	R	MR	MR	P	T
Dyna-Gro	V47N9RS	R4L	4.7	RR/STS	R 3, MR 14	R	MR	MS	W	T
Dyna-Gro	32P48 (RR)	R4L	4.8	RR	R3, MR14	S	MR	MR	W	T
Dyna-Gro	36Y48 (RR / STS)	R4L	4.8	RR/STS	R 3, MR 14	MR	MR	MS	P	G
Dyna-Gro	37P49 (RR)	R4L	4.9	RR	MR 2	MS	MR	MR	P	T
Dyna-Gro	V49N6RR	R4L	4.9	RR	MR 3	R	MS	MR	P	LT
Dyna-Gro	V51N7RS	R5E	5.1	RR/STS	R 3	MR	MR	MR	W	G
Dyna-Gro	33B52 (RR)	R5E	5.2	RR	MR 3,14	MR	MR	MR	W	G
Dyna-Gro	31R54 (RR)	R5E	5.4	RR	R 3	MR	MR	MR	W	T
Dyna-Gro	33P54 (RR)	R5E	5.4	RR	R 3, MR 14	R	MR	R	P	G
Dyna-Gro	V54N8RS	R5E	5.4	RR/STS	R 3	MR	MR	MR	W	T
Dyna-Gro	33X55 (RR)	R5E	5.5	RR	R 3 MR 6,14	MR	MR	R	P	T
Dyna-Gro	35F55 (RR)	R5E	5.5	RR	R 1,3	MR	MR	MR	P	G
Dyna-Gro	32B57 (RR)	R5L	5.7	RR	MR 3	R	MR	MR	P	T
Dyna-Gro	3583 (RR)	R5L	5.8	RR	R 3, MR 14	MR	MR	MR	W	G
Dyna-Gro	33C59 (RR)	R5L	5.9	RR	R 3 MR 1,14	MR	MR	MR	W	G
Eagle	ES 5555 RR	R5E	5.4	RR	MR 6	R	---	---	P	T
FFR	4526 RR	R4E	4.5	RR	MR 3,14	MR	MR	R	P	LT
FFR	4886 RR/STS	R4L	4.8	RR/STS	R 3, 14	MR	MR	MR	P	G
FFR	5663 RR	R5E	5.5	RR	R 3, 14	R	R	R	P	T
Great Heart	GT-462CRR	R4L	4.6	RR	---	---	---	---	P	G
Great Heart	GT-502CRR	R5E	5	RR	---	---	---	---	W	G
Hornbeck	HBK R 3824 (RR)	RR3	3.9	RR	MS 3	R	MR	M	P	LT
Hornbeck	HBK R 3927 (RR)	RR3	3.9	RR	---	R	S	---	P	G
Hornbeck	HBK R 4527 (RR)	R4E	4.5	RR	---	R	MR	---	W	G
Hornbeck	HBK R 4727 (RR)	R4L	4.7	RR	R 3	MR	R	---	P	T
Hornbeck	HBK R 4924 (RR)	R4L	4.9	RR	R 3, MR 14	R	MR	MS	P	LT
Hornbeck	HBK R 5226 (RR)	R5E	5.2	RR	MR 3	R	MS	MR	P	T
Hornbeck	HBK RS 5227 (RR)	R5E	5.2	RR	R 3	MR	MR	---	W	G
Hornbeck	HBK R 5525 (RR)	R5E	5.5	RR	R 3, MR 14	R	MR	MR	P	T
KS	KS 3406RR	RR3	3.4	RR	---	---	---	---	P	T
KS	KS 4607	CV5	4.6	---	---	---	---	---	P	T
KS	KS 5004N	CV5	5.0	---	3	---	---	---	W	G
KS	KS 5306NRR	R5E	5.3	RR	2,3,4,14	---	---	---	P	T

Table 56 (continued)

Brand	Variety	2008 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
KS	KS 5507NRR	R5E	5.5	RR	2,3,4,14	---	---	---	P	G
Midwest Premium Genetics	MPV 4406nRR	R4E	4.4	RR	3	R	R	R	P	T
Midwest Premium Genetics	MPG 4509nRR/STS	R4E	4.5	RR/STS	3,14	R	R	R	P	T
Midwest Premium Genetics	MPG X48-3nRR	R4L	4.6	RR	3	MR	MR	---	P	LT
Midwest Premium Genetics	MPG 4705nRR	R4L	4.7	RR	3, 14	---	S	---	W	T
Midwest Premium Genetics	MPG 4907nRR/STS	R4L	4.9	RR/STS	3,14	R	R	R	P	G
Midwest Premium Genetics	MPG 4909nRR	R4L	4.9	RR	3,14	S	R	R	W	T
Midwest Premium Genetics	MPG 5308nRR	R5E	5.3	RR	2,3,5,6,9,14	R	R	R	P	T
Midwest Premium Genetics	MPG 5407nRR	R5E	5.4	RR	3,14	R	R	R	W	T
Midwest Premium Genetics	MPG 5505nRR (STS)	R5E	5.5	RR/STS	3	R	R	R	W	G
MO Exp	S04-20912 RR	RR3	3.9	RR	3, 14	R	MR	R	P	G
MO Exp	S04-3924 RR	RR3	3.9	RR	3, 14	R	MR	MS	P	G
MO Exp	S05-4604 RR	R4L	4.9	RR	3	R	MS	S	W	T
MO	Stoddard	CV5	5.1	---	1,2,3,5,14	R	MR	MR	W	T
MO	Jake	CV5	5.4	---	1,2,3,5,14	R	MR	MR	P	T
MO Exp	S05-4678 RR	R5E	5.4	RR	---	R	MS	S	W	T
Morsoy	RT 4485N (RR)	R4E	4.4	RR	R3, MR14	R	MR	R	P	T
Morsoy	RTS 4488N (RR/STS)	R4E	4.4	RR/STS	R3, MR14	R	MR	R	P	T
Morsoy	RTS 4556N (RR/STS)	R4L	4.6	RR/STS	R3, MR14	MS	MS	MS	P	T
Morsoy	RT 4707N (RR)	R4L	4.7	RR	3	R	MS	R	P	T
Morsoy	RTS 4706N (RR/STS)	R4L	4.7	RR/STS	R 3	R	R	R	S	G
Morsoy	RT 4888N (RR)	R4L	4.8	RR	R3, MR14	MS	R	MR	W	T
Morsoy	RT 4914N (RR)	R4L	4.9	RR	R3, MR14	MR	MS	MR	P	T
Morsoy	RTS 4955N (RR/STS)	R4L	4.9	RR/STS	R3, MR14	R	MR	MS	P	G
Morsoy	RT 5168N (RR)	R5E	5.1	RR	---	R	R	MS	W	G
Morsoy	RT 5288N (RR)	R5E	5.2	RR	MR 3,14	R	MR	MR	P	T
Morsoy	RT 5388N (RR)	R5E	5.3	RR	R3, MR14	R	MR	R	W	G
Morsoy	RT 5688N (RR)	R5L	5.6	RR	MR 3,14	MR	R	R	W	G
NC Exp	N02-417	CV5	5.0	---	---	---	---	---	P	G
NC Exp	NCC02-22219	CV5	5.5	---	---	---	---	---	P	G
NC Exp	NCC04-8020R	R5L	5.6	RR	---	---	---	---	S	G
NC Exp	NCC04-8610R	R5L	5.6	RR	---	---	---	---	W	G
NC Exp	NCC04-9589R	R5L	5.6	RR	---	---	---	---	W	G
NC Exp	NCC04-1555	CV5	5.7	---	---	---	---	---	P	T
NK	S 39-A3 Brand (RR)	RR3	3.9	RR	R 3, 14	---	R	S	W	LT
NK	S 45-E5 Brand (RR)	R4E	4.5	RR	3,14	R	MS	S	W	T
NK	S 46-U6 Brand (RR)	R4L	4.6	RR	R 3, 14	R	S	R	W	LT
NK	S 49-H7 Brand (RR)	R4L	4.9	RR	R 3, MR 14	R	MS	S	W	T
NK	S 49-W6 Brand (RR)	R4L	4.9	RR	R3	R	S	R	W	LT
NK	S 52-F2 Brand (RR)	R5E	5.2	RR	3	R	MS	R	P	T

Table 56 (continued)

Brand	Variety	2008 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
NK	S 56-D7 (RR)	R5L	5.6	RR	R 3,14	R	MS	MR	P	T
Pioneer	94Y20 (RR)	R4E	4.2	RR	3	---	MR	MR	W	T
Pioneer	94M50 (RR)	R4E	4.5	RR	3	MR	MS	R	W	T
Pioneer	94Y60 (RR)	R4L	4.6	RR	3	MR	MR	R	W	T
Pioneer	94Y70 (RR)	R4L	4.7	RR	3, 14	MR	MR	---	P	T
Pioneer	94Y90 (RR)	R4L	4.9	RR	8	R	MR	---	P	T
Pioneer	95Y20 (RR)	R5E	5.2	RR	8	R	MR	MR	P	T
Progeny	3906 RR	RR3	3.9	RR	---	---	MR	---	P	G
Progeny	4206 RR	R4E	4.1	RR	R 3, MR 14	R	T	MR	W	T
Progeny	4405 RR	R4E	4.4	RR	R 2 MR 3,14	T	R	T	P	T
Progeny	4408 RR/STS	R4E	4.4	RR/STS	R3, MR 14	R	MR	R	P	T
Progeny	4508 RR	R4E	4.5	RR	MR 3	MS	MR	MS	P	T
Progeny	4508 RR (Cruiser)	R4E	4.5	RR	MR 3	MS	MR	MS	P	T
Progeny	4606 RR/STS	R4L	4.6	RR/STS	R 3, MR 14	---	MR	R	P	T
Progeny	4706 RR	R4L	4.7	RR	R 3, MR 14	T	T	MR	P	T
Progeny	4718 RR	R4L	4.7	RR	R 3	R	MR	MR	P	T
Progeny	4807 RR	R4L	4.8	RR	R 3	MR	MR	MR	P	T
Progeny	4906 RR	R4L	4.9	RR	---	S	MR	MR	P	T
Progeny	4908 RR	R4L	4.9	RR	MR 3	MR	MR	MR	W	T
Progeny	4918 RR	R4L	4.9	RR	R 3, MR 14	S	MR	MR	W	T
Progeny	4949 RR	R4L	4.9	RR	S	MR	T	R	W	T
Progeny	5107 RR	R5E	5.1	RR	R 3	---	---	MR	P	T
Progeny	5108 RR	R5E	5.1	RR	R 3, MR 14	---	---	---	W	T
Progeny	5115 RR	R5E	5.1	RR	R 3	R	MR	MR	P	T
Progeny	5208 RR	R5E	5.2	RR	R 3, MR 14	---	---	---	W	T
Progeny	5218 RR	R5E	5.2	RR	MR 3	R	MR	MR	P	T
Progeny	5308 RR/STS	R5E	5.3	RR/STS	MR 3	MR	MR	MR	W	G
Progeny	5408 RR	R5E	5.4	RR	R 3, MR 14	MR	MR	MR	W	G
Progeny	5622 RR	R5L	5.6	RR	R 2,3,6,9 MR 14	T	T	T	W	G
Progeny	5650 RR	R5L	5.6	RR	R 3, MR 14	R	MR	R	W	G
Progeny	5706 RR	R5L	5.7	RR	R 3, MR 14	R	MR	MS	W	G
Progeny	5706 RR (Cruiser)	R5L	5.7	RR	R 3, MR 14	R	MR	MS	W	G
Schillinger Seed	457 RCP	R4E	4.5	RR	R 3	R	MR	R	P	T
Schillinger Seed	478 RCS	R4L	4.7	RR	3	R	R	R	P	LT
Schillinger Seed	495 RC	R4L	4.9	RR	R 3	R	MS	R	P	LT
Schillinger Seed	557 RC	R5E	5.5	RR	R 3	R	MR	R	W	G
Southern Cross	Lucas (RR)	RR3	3.8	RR	3,14	R	R	R	P	G
Southern Cross	Caleb (RR/STS)	R4E	4.4	RR/STS	3,14	R	R	R	P	T
Southern Cross	Eli (RR/STS)	R4L	4.7	RR/STS	3,14	R	S	R	S	T
Southern Cross	Galilee (RR)	R4L	4.7	RR	3	R	R	R	P	T

Table 56 (continued)

Brand	Variety	2008 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Southern Cross	Rufus (RR/STS)	R4L	4.7	RR/STS	3,14	R	R	S	W	T
Southern Cross	Hiram (RR)	R4L	4.9	RR	3	R	R	R	W	T
Southern Cross	Damascus (RR/STS)	R5E	5.0	RR/STS	3,14	R	R	S	P	G
Steyer	4430 RR	R4E	4.4	RR	MR 3,14	R	MR	MR	P	T
Steyer	4620 RR/STS	R4L	4.6	RR/STS	MR 3,14	R	MR	MR	W	T
Stine	4782-4 (RR/STS)	R4L	4.7	RR/STS	R 3,14	R	MR	R	S	T
Terral	TV 45R18 (RR)	R4E	4.4	RR	1, 5, 14	R	---	---	P	LT
Terral	TV 46R19 (RR)	R4L	4.6	RR	5, 14	R	---	---	W	T
Terral	TV 47R17 (RR)	R4L	4.7	RR	R 3, 14	R	---	R	P	G
Terral	TV 47R18 (RR)	R4L	4.7	RR	1, 5, 14	R	---	---	W	T
Terral	TV 49R17 (RR)	R4L	4.9	RR	R 3, 14	R	---	R	W	T
Terral	TV 49R19 (RR)	R4L	4.9	RR	1, 5, 14	R	---	---	W	T
Terral	TV 49R27 (RR)	R4L	4.9	RR	3	R	MR	R	P	LT
Terral	TV 52R28 (RR)	R5E	5.2	RR	1	R	---	---	P	G
Terral	TV 54R28 (RR)	R5E	5.4	RR	1	R	---	---	P	T
Terral	TV 55R15 (RR)	R5E	5.5	RR	1, 3	MR	---	R	P	G
Terral	TV 59R16 (RR)	R5L	5.9	RR	1, 3,14	R	---	MR	W	G
TN Exp	TN07-167RR	RR3	2.9	RR	---	---	---	---	W	T
TN Exp	TN07-220RR	RR3	3.7	RR	---	---	---	---	P	T
TN Exp	TN05-3745RR	RR3	3.9	RR	---	---	---	---	W	T
TN Exp	TN06-15RR	RR3	3.9	RR	---	---	---	---	P	G
TN Exp	TN07-162RR	R4E	4.0	RR	---	---	---	---	W	G
TN Exp	TN07-217RR	R4E	4.1	RR	---	---	---	---	P	T
TN Exp	TN07-266RR	R4E	4.1	RR	---	---	---	---	P	T
TN Exp	TN05-8733RR	R4E	4.5	RR	---	---	---	---	P	G
TN Exp	TN06-118RR	R4L	4.8	RR	---	---	---	---	P	G
TN Exp	TN04-124	CV5	4.9	---	---	---	---	---	W	T
TN Exp	TN05-4507RR	R4L	4.9	RR	---	---	---	---	P	T
TN Exp	TN06-116RR	R5E	5.2	RR	---	---	---	---	P	G
TN Exp	TN06-117RR	R5E	5.2	RR	---	---	---	---	P	G
TN Exp	TN06-140RR	R5E	5.4	RR	---	---	---	---	W	G
TN Exp	TN03-217	CV5	5.5	CONV	---	---	---	---	P	G
TN Exp	TN06-137RR	R5L	5.8	RR	---	---	---	---	W	G
Trisler Seed	Trisoy 4586RR (CN) STS	R4E	4.5	RR/STS	R 3, MR 14	R	MR	R	P	T
Trisler Seed	Trisoy 4788RR (CN) STS	R4L	4.7	RR/STS	MR 3	R	R	S	W	T
Trisler Seed	Trisoy 4984RR (CN)	R4L	4.9	RR	MR 3	S	MR	R	W	T
Trisler Seed	Trisoy 5484RR (CN)	R5E	5.4	RR	R 3, MR 14	R	R	R	W	G
USDA-ARS	JTN-4507	CV4	4.9	---	3	R	---	---	W	T
USDA-ARS	JTN-5308	CV5	5.3	---	3, 14	---	---	---	P	T
USDA-ARS	JTN-5108	CV5	5.5	---	3, MR 14	R	R	MS	W	T

Table 56 (continued)

Brand	Variety	2008 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
USDA-ARS	JTN-5203	CV5	5.6	---	2, 3, 5, 14	R	R	---	W	G
USDA-ARS	JTN-5207	CV5	5.6	---	3	MS	---	---	W	T
USG	440nSTS	CV4	4.4	STS	MR 3,14	---	MR	---	P	T
USG	74H48 (RR/STS)	R4E	4.4	RR/STS	MR 3	---	---	---	P	LT
USG	74A45 (RR)	R4E	4.5	RR	R3, MR 14	---	MR	MR	P	LT
USG	74A76 (RR)	R4L	4.7	RR	MR 3,14	---	MR	MR	P	LT
USG	74G78 (RR)	R4L	4.7	RR	R3, MR 14	R	MR	MR	S	LT
USG	7482nRR	R4L	4.8	RR	R 3, MR 14	---	MR	MR	P	T
USG	74A88 (RR)	R4L	4.8	RR	R3, MR 14	---	MR	MR	W	T
USG	74E88 (RR/STS)	R4L	4.8	RR/STS	R3, MR 14	---	MR	---	W	T
USG	7495nRS	R4L	4.9	RR/STS	R 3, MR 14	---	MR	---	P	G
USG	74A91 (RR)	R4L	4.9	RR	---	---	MR	MR	P	LT
USG	74F96 (RR)	R4L	4.9	RR	MR 3	R	MR	MR	P	LT
USG	74F96 (RR) Cruiser	R4L	4.9	RR	MR 3	R	MR	MR	P	LT
USG	74T98 (RR)	R4L	4.9	RR	MR 3, 14	---	R	---	P	G
USG	5002T	CV5	5.0	---	---	R	MR	R	W	T
USG	5002T (FILL)	CV5	5.0	---	---	R	MR	R	W	T
USG	7515nRS	R5E	5.1	RR/STS	R 3, MR 14	---	MR	---	P	G
USG	75J18 (RR)	R5E	5.1	RR	R3, MR 14	R	MR	R	P	T
USG	75J32 (RR)	R5E	5.3	RR	MR 3,14	R	MR	MR	P	G
USG	75K38 (RR/STS)	R5E	5.3	RR/STS	MR 3,14	---	MR	MR	W	T
USG	75Z38 (RR)	R5E	5.3	RR	MR 3	R	MS	MR	P	T
USG	75J47 (RR)	R5E	5.4	RR	R 3, MR 14	R	MR	R	P	G
USG	7553nRS	R5E	5.5	RR/STS	MR 3, R 14	R	MR	MR	W	G
USG	7553nRS (Cruiser)	R5E	5.5	RR/STS	MR 3, R 14	R	MR	MR	W	G
USG	5601T	CV5	5.6	---	---	---	MR	MR	W	G
USG	Allen	R5L	5.6	RR	---	---	MR	MR	W	G
USG	Allen (Cruiser)	R5L	5.6	RR	---	---	MR	MR	W	G
USG	75Z98 (RR)	R5L	5.9	RR	R 3, MR 1, 14	MR	MR	MR	W	G
VA	V01-2245	CV5	5.3	---	---	---	---	---	W	G
VA	V98-2711	CV5	5.4	---	2,3	---	---	---	G	W
VA	V98-9005	CV5	5.4	---	---	---	---	---	T	P

RR = Contains a gene for tolerance to glyphosate herbicide; STS = tolerance to sulfonylurea class of herbicides.

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

R5E = Roundup Ready Early Group 5

R4E = Roundup Ready Early Group 4

R5L = Roundup Ready Late Group 5

R4L = Roundup Ready Late Group 4

CV4, CV5 = Conventional Group 4 & 5

Table 57. Contact information for soybean seed companies evaluated in yield tests in Tennessee during 2008.

Company	Contact	Phone	Email	Web site	Address
AgVenture D&M	Gary Allerkamp Kenny Kingins	270-756-8783 270-293-5467	ageaav@aol.com kwkingins@yahoo.com	www.agventure.com	P.O. Box 794, Elizabethtown, KY 42702 6331 St. Rd. 121 S., Murray, KY 42071
University of Arkansas	Pengyin Chen	479-575-7564	tishibi@uark.edu		Dept of Crop, Soil & Env. Sciences 115 Plant Science Bldg Fayetteville, AK 72701
Monsanto (Asgrow)		800-335-2676		www.asgrow.com	
Cullum Seeds (Armor, Delta King)	Lane Dill Jimmy Wray	877-822-7333 901-233-0274 270-832-3843	lanedill@jwrayseeds.com jimmywray@jwrayseeds.com	www.cullumseeds.com	P.O. Box 178, Fisher, AR 72429 6497 Turner Landing Rd., LaCenter, KY 42056
Croplan Genetics/Land o Lakes	Jesse Witt Keith Saum Darrin Holder	256-221-5932 731-610-7006 270-207-0190	JBWitt@landolakes.com	www.croplangenetics.com	DSM Middle & East TN DSM West TN Agronomist
Crow's Hybrid Corn Company	Carl Gardner	731-431-6839	carl.gardner@crowshybrid.com	www.crowshybrid.com	3395 Leatherwood Rd, Williamsport, TN 38487
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
Crop Production Services (Dyna-Gro)	Brandon Sheridan Steve Johnson	901-277-3638 731-885-5121	brandon.sheridan@uap.com sjohnson@agriumretail.com	www.dynagroseed.com	57 Germantown Ct Suite 200, Cordova, TN 38018 530 N. Fifth St/ P O Box 40, Union City, TN 38281
Eagle Seed	Brad Doyle	970-684-7377	brad@eagleseed.com	www.eagleseed.com	8496 Swan Pond Rd, Weiner, AR 72479
Tennessee Farmers Coop (FFR)	Jim Payne Andy Rowsey Curtis Yates Bobby Hooper Chris Morris	901-652-0903 731-225-2032 865-567-8174 615-390-7587 615-218-7963	jpayne@ourcoop.com	www.ourcoop.com	West TN West TN East TN West & Middle TN East & Middle TN
Hornbeck Seed Co	James Thomas	870-946-2087	jthomas@hbkseed.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		
Midwest Premium Genetics (MPV Brand)	Mark Turner (Turner Seeds Inc)	615-641-7333		www.m-pride.com	P O Box 739, Laverne, TN 37086-0739
Cache River Valley Seed (Morsoy)	Andy Morris James Crawford	901-674-0768 870-974-2310		www.crvseed.com	Highway 226 East, Cash, AR 72421 Cash, AR 72421

Table 57 (continued)

Company	Contact	Phone	Email	Web site	Address
Syngenta (NK Brand)	Jameson Wade	270-293-7942		www.nk-us.com	7500 Olson Memorial Hwy, Golden Valley, MN 55427
North Carolina State Univ.	Andrea Cardinal Joe Burton	919-513-0913 919-513-1481	andrea_cardinal@ncsu.com joe_burton@ncsu.com		
Pioneer Hi-Bred Int.	Michael Hughes	800-331-2475	michael.hughes@pioneer.com	www.pioneer.com	700 Boulevard South, Suite 302, Huntsville, AL 35802
Erwin Keith Seed Inc (Progeny)	Brian Murray	870-238-2079	bmurray@progenyag.com	www.progenyag.com	1529 Hwy 193, Wynne, AR 72396
Schillinger Seed Inc	Jim Craig Cory Nikkel	800-264-4433 515-225-1166	cnikkel@schillingerseed.com	www.schillingerseed.com	P O Box 1088, Stuttgart, AR 72160
Miles Farm Supply (Southern Cross)	Scott Janes	888-786-4537	scojan@milesmore.com	www.milesmore.com	P O Box 22879, Owensboro, KY 42304
Steyer Seeds	Phil Coffman Tom Jones Joe Steyer	270-832-7362 270-213-0020 800-231-4274	joesteyer@yahoo.com	www.steyerseeds.com	Clay, KY Sebree, KY 6154 N. Co. Rd. 33, Tiffin, OH 44883
Stine	Stratton Seed Co.	870-673-4433	jcraig@strattonseed.com	www.stinseed.com	P O Box 1088, Stuttgart, AR 72160
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	318-559-2840	terralseed@terralseed.com	www.terralseed.com	P O Box 826, Lake Providence, LA 71254
Trisler Seeds Inc (Trisoy)	Derrel Wegner	270-853-2360	derrel.wegner@trisler.com	www.trisler.com	200 Sullivan Ave., Paducah, KY 42003
USDA-ARS	Prakash Arelli	731-425-4741	parelli@ars.usda.gov		605 Airways Blvd, Jackson, TN 38301
Unisouth Genetics (USG)	Stacy Burwick	615-242-3397	sburwick@usgseed.com	www.usgseed.com	2640-C Nolensville Rd., Nashville, TN 37211
Virginia Tech	David Whitt	804-746-4884	dwhitt@vt.edu	www.virginiacrop.org	Virginia Crop Improvement Assoc. 9142 Atlee Station Rd Mechanicsville, VA 23116