

# SOYBEAN VARIETY PERFORMANCE TESTS IN TENNESSEE

**2007**

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## 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](http://www.utcrops.com)**

## Acknowledgments

This research was funded by the Tennessee Agricultural Experiment Station and UT Extension with partial funding from participating companies.

We gratefully acknowledge the assistance of the following individuals in conducting these experiments:

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## 2007 County Standard Tests Soybean Plot Cooperators & Agents

### Group III

<u>Group III</u>	<b>Cooperator(s)</b>	<b>Agent</b>
Coffee	L.A. Teal	Dean Northcut
Dyer	Alan Burchfiel	Tim Campbell
Franklin	Mike Feller	Ed Burns
Fulton, KY (1)	Johnson Linder	Cam Kenimer/Ben Mullins
Fulton, KY (2)	Major Bros.	Cam Kenimer/Ben Mullins
Gibson	Blake Brown	Philip Shelby
Giles	J. Tucker	Kevin Rose
Hardin	Karl Forsbach	Marcus McLemore
Henry	Don Norwood	Ken Goddard
Lake	Keiser Farms	Greg Allen
Lauderdale	Phillip Smith	Jerry Parker
Obion	Kenneth & Blake Cheatham	Tim Smith
UT Martin	Richard Joost	Charlie Rowlett
Weakley	Gary & Gail Hall	Jeff Lannom

### Group IV Early

Coffee	L.A. Teal	Dean Northcutt
Dyer	Mike Underwood	Tim Campbell
Franklin	Terry Baggett	Ed Burns
Fulton, KY	Johnson Linder	Cam Kenimer/Ben Mullins
Henry	David & Finis Wilson	Ken Goddard
Lake	Terry Petty	Greg Allen
Lauderdale	Chris Peyton & Scott Mathis	Jerry Parker
Obion	Kenneth & Blake Cheatham	Tim Smith
UT Martin	Richard Joost	Charlie Rowlett
Weakley	Kenneth Wynia	Jeff Lannom

### Group IV Late

Carlisle, KY	Stermon Farms	Bob Middleton
Crockett	Mac Summerlin	Richard Buntin
Dyer	Mike Underwood	Tim Campbell
Franklin	Richard Atkinson	Ed Burns
Fulton, KY	Mark Yaussi	Cam Kenimer/Ben Mullins
Gibson	Lee & Jeff Asbridge	Philip Shelby
Haywood	John King	Tracey Sullivan
Lake	Jon Dickey	Greg Allen
Lauderdale	Chris Peyton & Scott Mathis	Jerry Parker
Obion	Kenneth & Blake Cheatham	Tim Smith
Weakley	Luke Cochran	Jeff Lannom

**Group V Early**

Carlisle, Ky

Dyer

Gibson (1)

Gibson (2)

Haywood

Lauderdale

MREC

Obion

Weakley

**Cooperator(s)**

Curtsinger Farms

Paul, Brian &amp; Gene Finley

Charles King

Buddy Sorrells

John King

Leslie Crook

Blake Brown, Jimmy McClure, Jason Williams, Angela Thompson

William &amp; Bill Thompson

Luke Cochran

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Bob Middleton

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Philip Shelby

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Jerry Parker

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# PERFORMANCE OF SOYBEAN VARIETIES IN TENNESSEE

## RESEARCH & EDUCATION CENTERS AND COUNTY STANDARD TESTS

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### 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) and at the 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 5 (RM 5.0-5.9)**] 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 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. The first detected instance of soybean rust in Tennessee was reported at the Milan REC location on October 3. This appearance of the disease occurred too late in the growing stages of most soybeans to be a serious threat. Several of the tests planted at the Middle Tennessee REC were discarded due to inconsistencies in the data. 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 13 counties in Tennessee, and 2 in West Kentucky. The number of counties depended on the test (e.g., 9-14). 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 ( $43 - 35 = 8$  bu/a = LSD of 8) and Variety A ( $43 - 30 = 13$  bu/a > LSD of 8).

Also, the **coefficient of variation (C.V.)** values are shown at the bottom of each table. This value is a measure of the error variability found within each experiment. It is the percentage that the error variation is of the overall test mean yield at that location. For example, a C.V. of 10% 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 ten soybean varieties were evaluated in the 2007 **Research & Education Center (REC)** tests in Tennessee. There were 17 varieties in the RR3, 39 in the RR4E, 70 in the RR4L, 56 in the RR5E, 12 in the RR5L, and 16 in the conventional MG5 test. Additionally, 10 varieties that were treated with *Cruiser or Gaucho* (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 78 varieties total, consisting of a RR3 test (12 varieties at 14 locations), a RR4E test (20 varieties at 10 locations), a RR4L test (28 varieties at 11 locations), and a RR5E test (18 varieties at 9 locations). In addition to 13 Tennessee counties, the County Standard Tests involved two counties in Western Kentucky (Carlisle and Fulton). **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 2007. **Table 57** contains the contact information for each soybean seed company with entries in the 2007 REC tests.

**Growing Season:** The 2007 growing season was one characterized by extremes. A late frost and very low temperatures in the first portion of April caused wheat and corn crop damage. The remainder of the season was characterized by record setting heat and drought which lowered yields. Daytime temperatures were high (several 100+ F days) during flowering and seed fill periods at some locations. Producers planted 990,000 acres this year, a 140,000 decrease from the previous year. Soybean production for 2007 is projected to be 19.8 million bushels, a decrease of 55 percent from 2006. The state soybean yield average is projected to be 20 bu/a, 19 bushels below 2006 yields.

**Table 1. Location information from research centers where the soybean variety tests were conducted in 2007.**

Research Center	Location	Planting Date	Harvest Date	Seeding Rate	Soil Type
<b>Roundup Ready Maturity Group III</b>					
Highland Rim	Springfield	5/15/2007	9/18/2007	175000	Dickson Silt Loam
Knoxville	Knoxville	4/25/2007	9/17/2007	175000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	5/22/2007	10/3/2007	175000	Loring, Grenada Silt Loam
Milan (Non Irrigated)	" "	5/21/2007	9/25/2007	175000	Grenada Silt Loam
Middle TN (Irrigated)	Spring Hill	5/11/2007	9/25/2007	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/10/2007	10/12/2007	175000	" " "
Plateau	Crossville	5/15/2007	11/7/2007	175000	Hendon Silt Loam
<b>Roundup Ready Maturity Group Early IV (4.0 - 4.5)</b>					
Ames	Grand Junction	5/2/2007	10/1/2007	175000	Lexington Silt Loam
Highland Rim	Springfield	5/15/2007	9/21/2007	175000	Dickson Silt Loam
Knoxville	Knoxville	4/25/2007	9/21/2007	175000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	5/22/2007	10/8/2007	175000	Loring, Grenada Silt Loam
Milan (Non Irrigated)	" "	5/21/2007	10/9/2007	175000	Grenada Silt Loam
Middle TN (Irrigated)	Spring Hill	5/11/2007	10/4/2007	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/10/2007	11/9/2007	175000	" " "
Plateau	Crossville	5/15/2007	11/6/2007	175000	Hendon Silt Loam
<b>Roundup Ready Maturity Group Late IV (4.6 - 4.9)</b>					
Ames	Grand Junction	5/2/2007	10/2/2007	175000	Lexington Silt Loam
Highland Rim	Springfield	5/21/2007	10/10/2007	175000	Dickson Silt Loam
Knoxville	Knoxville	4/25/2007	10/2/2007	175000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	5/22/2007	10/12/2007	175000	Loring Silt Loam
Milan (Non Irrigated)	" "	5/21/2007	10/29/2007	175000	Grenada Silt Loam
Middle TN (Irrigated)	Spring Hill	5/11/2007	10/15/2007	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/10/2007	11/12/2007	175000	" " "
Plateau	Crossville	5/15/2007	11/8/2007	175000	Hendon Silt Loam
<b>Roundup Ready Maturity Group Early V (5.0 - 5.5)</b>					
Ames	Grand Junction	5/2/2007	10/31/2007	175000	Lexington Silt Loam
Highland Rim	Springfield	5/21/2007	11/1/2007	175000	Dickson Silt Loam
Knoxville	Knoxville	4/25/2007	10/11/2007	175000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	5/22/2007	10/29/2007	175000	Loring, Henry Silt Loam
Milan (Non Irrigated)	" "	5/21/2007	11/9/2007	175000	Grenada Silt Loam
Middle TN (Irrigated)	Spring Hill	5/11/2007	11/5/2007	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/11/2007	11/9/2007	175000	" " "
<b>Roundup Ready Maturity Group Late V (5.6 - 5.9)</b>					
Ames	Grand Junction	5/2/2007	10/31/2007	175000	Lexington Silt Loam
Highland Rim	Springfield	5/21/2007	11/1/2007	175000	Dickson Silt Loam
Knoxville	Knoxville	4/25/2007	10/30/2007	175000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	5/22/2007	10/29/2007	175000	Loring, Henry Silt Loam
Milan (Non Irrigated)	" "	5/21/2007	11/9/2007	175000	Grenada Silt Loam
Middle TN (Irrigated)	Spring Hill	5/11/2007	11/8/2007	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/10/2007	11/9/2007	175000	" " "
<b>Conventional Maturity Groups IV and V</b>					
Highland Rim	Springfield	5/21/2007	11/1/2007	175000	Mountview Silt Loam
Knoxville	Knoxville	5/8/2007	10/4/2007	175000	Stasser Silt Loam
Milan (Irrigated)	Milan	5/23/2007	10/30/2007	175000	Loring, Henry Silt Loam
Milan (Non Irrigated)	" "	5/22/2007	11/9/2007	175000	Grenada Silt Loam
Middle TN (Irrigated)	Spring Hill	5/11/2007	11/5/2007	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/10/2007	not harvested	175000	" " "



**Table 2. Mean yields † of 17 Maturity Group III Roundup Ready soybean varieties evaluated in five environments Tennessee during 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=5)	Knoxville	Crossville	Springfield	Milan	
						Irr.	Non-Irr.
-----bu/a-----							
Delta & Pine Land	DP 3993 RR	30 ± 1	27	9	20	75	20
Hornbeck	HBK R 3824 (RR)	30 ± 1	25	9	23	72	18
Asgrow	AG3803 (RR)	29 ± 1	27	8	20	70	21
Southern Cross	Lucas (RR)	29 ± 1	33	9	19	64	19
N.K. Brand	S 38-D5 (RR)	28 ± 1	29	7	22	63	19
Vigoro	V39N8RR	28 ± 1	28	7	21	60	23
Vigoro	V39N7RR	27 ± 1	28	4	19	68	17
Asgrow	AG3906 (RR)	27 ± 1	25	9	20	63	18
Armor	39-K4 (RR)	27 ± 1	26	7	21	61	19
Asgrow	AG3603 (RR)	27 ± 1	27	7	18	64	17
Pioneer	93M90 (RR)	27 ± 1	25	8	18	64	19
USG	7393nRR	26 ± 1	27	8	20	56	19
Asgrow	AG3521V (RR)	25 ± 1	24	10	18	53	19
Progeny	3900 RR	23 ± 1	22	9	18	53	14
KS	KS 3406RR	23 ± 1	23	4	18	48	21
MO Exp	S03-051 RR	22 ± 1	24	6	13	60	9
FFR	3990 RR	22 ± 1	23	6	17	46	17
<b>Average (bu/a)</b>		<b>27</b>	<b>27</b>	<b>7</b>	<b>19</b>	<b>62</b>	<b>18</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>7</b>	<b>3</b>	<b>3</b>	<b>11</b>	<b>6</b>
<b>C.V. (%)</b>		<b>14.9</b>	<b>16.3</b>	<b>21.8</b>	<b>9.1</b>	<b>10.6</b>	<b>18.6</b>

† All yields are adjusted to 13% moisture.

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

**Table 3. Mean yields † and agronomic characteristics of 17 Maturity Group III Roundup Ready soybean varieties evaluated in five environments in Tennessee during 2007.**

Brand	Variety ‡	Avg. Yield	Moisture §	Lodging	Height	Maturity	Shattering	Leaf	Seed	Protein	Oil
		± Std Err.						Retention	Quality		
		(n=5)	(n=5)	(n=1)	(n=5)	(n=5)	(n=2)	(n=1)	(n=3)	(n=3)	(n=3)
		bu/a	%	Score	in.	DAP	-----Score-----			%	%
Delta & Pine Land	DP 3993 RR	30 ± 1	14.2	3.3	32	134	1.0	1.5	2.6	41.6	20.6
Hornbeck	HBK R 3824 (RR)	30 ± 1	16.5	3.0	33	135	1.0	2.7	2.4	39.5	21.6
Asgrow	AG3803 (RR)	29 ± 1	12.6	2.7	30	132	1.0	1.1	2.6	40.9	20.2
Southern Cross	Lucas (RR)	29 ± 1	12.3	2.7	30	131	1.0	1.2	2.4	40.6	20.1
N.K. Brand	S 38-D5 (RR)	28 ± 1	13.5	2.0	28	128	1.0	1.0	2.6	40.7	19.9
Vigoro	V39N8RR	28 ± 1	12.1	2.7	29	133	1.0	1.5	2.4	40.2	19.8
Vigoro	V39N7RR	27 ± 1	12.2	1.7	27	133	1.2	1.3	2.2	39.6	21.3
Asgrow	AG3906 (RR)	27 ± 1	13.3	3.3	28	134	1.0	1.3	3.0	40.4	21.4
Armor	39-K4 (RR)	27 ± 1	12.7	3.7	33	132	1.0	1.2	2.3	41.1	21.0
Asgrow	AG3603 (RR)	27 ± 1	13.0	2.0	30	131	1.0	1.1	2.7	41.8	19.4
Pioneer	93M90 (RR)	27 ± 1	11.9	2.0	32	131	1.3	1.5	2.3	41.8	20.3
USG	7393nRR	26 ± 1	12.4	3.3	29	136	1.0	1.2	2.6	40.2	22.4
Asgrow	AG3521V (RR)	25 ± 1	13.2	2.3	29	134	1.0	2.7	3.3	41.6	20.3
Progeny	3900 RR	23 ± 1	13.2	3.0	29	134	1.1	1.0	2.6	40.6	22.2
KS	KS 3406RR	23 ± 1	12.4	2.7	27	129	1.0	1.0	3.1	40.9	21.0
MO Exp	S03-051 RR	22 ± 1	13.3	3.0	34	132	1.0	2.3	2.2	41.3	21.1
FFR	3990 RR	22 ± 1	12.4	3.3	29	133	1.3	1.0	2.0	39.5	21.3
<b>Average</b>		<b>27</b>	<b>13.0</b>	<b>2.7</b>	<b>30</b>	<b>132</b>	<b>1.0</b>	<b>1.5</b>	<b>2.5</b>	<b>40.7</b>	<b>20.8</b>

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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 4. Mean yields † of seven Maturity Group III Roundup Ready soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2006 - 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=10)	Avg. Yield bu/a				
			Knoxville	Crossville	Springfield	Milan	
						Irr.	Non-Irr.
Hornbeck	HBK R 3824 (RR)	43 ± 1	47	36	36	61	33
Asgrow	AG3906 (RR)	41 ± 1	40	39	32	59	33
Vigoro	V39N7RR	40 ± 1	41	34	31	62	31
Pioneer	93M90 (RR)	39 ± 1	40	32	31	61	32
FFR	3990 RR	38 ± 1	40	36	29	51	32
Progeny	3900 RR	37 ± 1	37	34	31	54	30
USG	7393nRR	37 ± 1	39	32	32	54	29
<b>Average (bu/a)</b>		<b>39</b>	<b>41</b>	<b>35</b>	<b>32</b>	<b>58</b>	<b>32</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>7</b>	<b>6</b>	<b>4</b>	<b>7</b>	<b>6</b>
<b>C.V. (%)</b>		<b>9.4</b>	<b>10.1</b>	<b>10</b>	<b>7.2</b>	<b>8.4</b>	<b>10.5</b>

† 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 seven Maturity Group III Roundup Ready soybean varieties evaluated in five environments (n=10) in Tennessee for two years, 2006 - 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=10)	Moisture § (n=10)	Lodging (n=4)	Height (n=10)	Maturity (n=10)	Shattering (n=4)	Leaf	Seed	Protein (n=7)	Oil (n=7)
								Retention (n=2)	Quality (n=7)		
		bu/a	%	Score	in.	DAP		Score		%	%
Hornbeck	HBK R 3824 (RR)	43 ± 1	15.3	2.1	36	130	1.0	2.3	2.1	37.7	22.5
Asgrow	AG3906 (RR)	41 ± 1	13.7	1.7	31	128	1.0	1.4	2.6	39.0	22.7
Vigoro	V39N7RR	40 ± 1	12.9	1.2	29	129	1.1	1.8	2.1	39.1	21.8
Pioneer	93M90 (RR)	39 ± 1	12.6	1.3	34	126	1.2	1.8	2.2	40.3	21.4
FFR	3990 RR	38 ± 1	13.1	1.8	33	127	1.1	1.1	2.0	38.4	22.1
Progeny	3900 RR	37 ± 1	13.5	1.5	31	128	1.0	1.3	2.5	39.5	22.8
USG	7393nRR	37 ± 1	13.0	1.9	31	130	1.0	1.4	2.5	39.0	23.1
<b>Average</b>		<b>39</b>	<b>13.4</b>	<b>1.6</b>	<b>32</b>	<b>128</b>	<b>1.1</b>	<b>1.6</b>	<b>2.3</b>	<b>39.0</b>	<b>22.3</b>

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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 five Maturity Group III Roundup Ready soybean varieties evaluated in four environments (n=12) in Tennessee for three years, 2005 - 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=12)	Milan			
			Knoxville	Springfield	Irr.	Non-Irr.
Asgrow	AG3906 (RR)	46 ± 1	48	37	58	42
Pioneer	93M90 (RR)	46 ± 1	42	35	66	39
FFR	3990 RR	45 ± 1	48	36	55	42
USG	7393nRR	43 ± 1	42	36	56	37
Progeny	3900 RR	42 ± 1	40	36	57	36
<b>Average (bu/a)</b>		<b>44</b>	<b>44</b>	<b>36</b>	<b>58</b>	<b>39</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>4</b>	<b>9</b>	<b>5</b>	<b>7</b>	<b>8</b>
<b>C.V. (%)</b>		<b>10.0</b>	<b>11.7</b>	<b>8.3</b>	<b>8.2</b>	<b>11.5</b>

† 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 five Maturity Group III Roundup Ready soybean varieties evaluated in four environments (n=12) in Tennessee for three years, 2005 - 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=12)	Moisture § (n=12)	Lodging (n=7)	Height (n=12)	Maturity (n=12)	Shattering (n=6)	Leaf	Seed	Protein (n=11)	Oil (n=11)
								Retention (n=3)	Quality (n=11)		
		bu/a	%	Score	in.	DAP	Score		%	%	
Asgrow	AG3906 (RR)	46 ± 1	13.8	1.9	34	125	1.0	1.3	2.4	38.8	23.0
Pioneer	93M90 (RR)	46 ± 1	12.8	1.7	38	123	1.1	1.7	2.2	40.2	21.7
FFR	3990 RR	45 ± 1	13.5	2.4	36	124	1.1	1.2	2.1	38.9	22.3
USG	7393nRR	43 ± 1	13.2	2.5	34	127	1.0	2.0	2.6	39.4	22.9
Progeny	3900 RR	42 ± 1	13.7	2.2	34	127	1.0	2.0	2.7	39.7	22.8
<b>Average</b>		<b>44</b>	<b>13.4</b>	<b>2.1</b>	<b>35</b>	<b>125</b>	<b>1.0</b>	<b>1.6</b>	<b>2.4</b>	<b>39.4</b>	<b>22.5</b>

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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 12 Maturity Group III Roundup Ready soybean varieties in 14 County Standard Tests in Tennessee and Kentucky during 2007**

MS	Brand/Variety	Avg.	(KY)												UT Martin							
		Yield	Moisture ‡	Coffee	Dyer	f	Franklin	Fulton	Fulton	fi	Gibson	fi	Giles	fi	Hardin	Henry	fi	Lake	Lauderdale	fi	Obion	Weakley
		bu/a	%	5/8 §	4/27	4/30	6/7	5/14	4/30	5/10	5/7	5/20	5/6	5/1	5/10	5/7	5/7					
A	Asgrow AG3521V	32.4	11.4	24.5	37.7	18.3	42.2	58.0	27.0	20.7	24.9	31.9	38.7	25.5	44.8	38.5	21.5					
AB	*Crow's C 3817 R	31.6	11.1	20.7	42.1	19.2	40.0	58.1	21.9	22.5	13.9	23.2	32.4	23.9	53.6	50.1	20.9					
AB	***Asgrow AG3906	31.1	12.9	13.8	39.8	18.8	47.2	61.6	16.3	18.2	25.5	27.7	34.1	28.7	48.1	35.6	20.3					
ABC	Trisler T3874RR (CN)	30.4	11.2	20.2	42.3	14.6	26.5	60.2	21.3	20.9	17.4	20.1	39.3	25.9	48.6	44.6	23.7					
BCD	Vigoro V39N7 (Cruiser)	29.0	11.4	19.2	40.1	10.8	28.9	56.3	18.1	17.7	17.4	18.0	27.3	27.6	46.0	55.5	22.7					
BCD	NK Brand S38-D5	28.9	12.1	18.2	39.3	11.6	36.4	59.9	25.0	19.6	10.4	20.3	34.3	23.0	43.1	44.6	19.6					
CD	Armor 39-K4	27.8	11.3	19.3	38.3	15.0	29.1	55.2	19.6	16.6	12.2	24.0	28.6	23.0	39.2	50.6	19.0					
CD	Croplan RC3935	27.8	11.2	19.2	37.0	21.5	33.1	57.3	20.4	15.0	9.3	22.5	30.8	24.5	45.4	32.0	21.5					
D	*Progeny 3900	27.2	11.2	15.3	36.8	10.9	31.3	55.2	19.3	16.9	18.0	19.3	29.5	22.2	41.9	48.9	15.4					
D	Dairyland 8396 RR/STS	26.6	11.7	15.2	35.3	9.4	42.3	54.6	14.6	16.4	11.6	20.8	25.1	22.1	44.1	46.4	14.2					
D	Vigoro V39N7	26.3	11.0	17.9	37.8	12.7	28.0	54.1	16.2	17.2	9.9	16.4	26.9	23.6	44.9	42.1	21.2					
D	***Pioneer 93M90	26.2	10.9	18.9	39.1	11.4	27.3	49.6	18.9	18.8	8.7	24.0	34.3	21.3	42.9	29.2	21.8					
<b>Average</b>		<b>28.8</b>	<b>11.5</b>	<b>18.5</b>	<b>38.8</b>	<b>14.5</b>	<b>34.3</b>	<b>56.7</b>	<b>19.9</b>	<b>18.4</b>	<b>14.9</b>	<b>22.3</b>	<b>31.8</b>	<b>24.3</b>	<b>45.2</b>	<b>43.2</b>	<b>20.1</b>					

† 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 9. Yields † and disease ratings § of 12 Maturity Group III Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests during 2007.**

MS	Brand/Variety	CST	----- Research and Education Center at Milan -----							
		Avg. Yield (n=14)	Moisture ‡	SDS	Frogeye	Stem Canker	Anthracnose	Sprayed ¶ Yield	Unsprayed Yield	SCN Race 2
		bu/a	%	2004 / 06 / 07	2005 / 06 / 07	2007	2006 / 07	bu/a	bu/a	2007
A	Asgrow AG3521V	32.4	11.4	/ / 2.0	/ / 2.0	0.0	/ 8.0	58.2	46.0	S
AB	*Crow's C 3817 R	31.6	11.1	/ / 2.0	/ / 6.0	0.0	/ 8.0	75.1	60.9	S
AB	***Asgrow AG3906	31.1	12.9	1.3 / 1.0 / 2.0	5.0 / 4.0 / 3.0	0.0	7.0 / 6.0	72.2	51.1	S
ABC	Trisler T3874RR (CN)	30.4	11.2	/ / 0.0	/ / 6.0	0.0	/ 7.0	82.5	61.0	S
BCD	Vigoro V39N7 (Cruiser)	29.0	11.4	---	---	---	---	---	---	---
BCD	NK Brand S38-D5	28.9	12.1	/ / 2.0	/ / 1.0	0.0	/ 7.0	69.4	54.6	S
CD	Armor 39-K4	27.8	11.3	/ / 2.0	/ / 6.0	0.0	/ 6.0	69.4	46.0	MS
CD	Croplan RC3935	27.8	11.2	/ 0.3 / 0.0	/ 2.3 / 3.0	2.0	6.0 / 5.0	52.4	38.4	S
D	*Progeny 3900	27.2	11.2	/ 0.7 / 1.0	/ 5.3 / 4.0	0.0	9.3 / 8.0	73.7	49.4	S
D	Dairyland 8396 RR/STS	26.6	11.7	/ 1.0 / 0.0	/ 0.0 / 1.0	0.0	8.0 / 8.0	78.5	56.9	S
D	Vigoro V39N7	26.3	11.0	/ / 2.0	/ / 5.0	0.0	/ 7.0	63.9	50.9	S
D	***Pioneer 93M90	26.2	10.9	0.3 / 0.0 / 1.0	6.0 / 2.0 / 4.0	0.0	7.0 / 9.0	71.1	56.7	S
<b>Average</b>		<b>28.8</b>	<b>11.5</b>					<b>69.7</b>	<b>52.0</b>	

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

SCN ratings; S= susceptible to Race 2 (HG type 1.2.5.7), MS = moderately susceptible.

¶ Sprayed plots at Milan treated with Headline @ 6 oz./Acre + 0.25% Induce at 20 gpa at R3 growth stage.

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 2006, 2005, and/or 2004.

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

**Table 10. Overall average yields † and moistures ‡ of seven Maturity Group III Roundup Ready soybean varieties evaluated in County Standard Tests (n=14) and Research and Education Centers (n=5) in Tennessee in 2007.**

Brand	Variety	County Standard Trials		Research and Education Center Trials	
		Avg. Yield	Moisture	Avg. Yield	Moisture
		bu/a	%	bu/a	%
Asgrow	AG3521V (RR)	32	11.4	25	13.2
Asgrow	AG3906 (RR)	31	12.9	27	13.3
N.K. Brand	S 38-D5 (RR)	29	12.1	28	13.5
Armor	39-K4 (RR)	28	11.3	27	12.7
Progeny	3900 RR	27	11.2	23	13.2
Vigoro	V39N7RR	26	11.0	27	12.2
Pioneer	93M90 (RR)	26	10.9	27	11.9
<b>Average (bu/a)</b>		<b>29</b>	<b>11.6</b>	<b>26</b>	<b>12.8</b>

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

**Table 11. Mean yields † of 39 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in six environments Tennessee during 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err.				Milan		
		(n=6)	Knoxville	Crossville	Springfield	Irr.	Non-Irr.	Ames
-----bu/a-----								
Delta Grow	4470 RR/STS	36 ± 1	39	17	19	79	30	32
MO Exp	S04-6013 RR	34 ± 1	41	23	24	71	17	26
Southern Cross	Caleb (RR/STS)	33 ± 1	32	16	21	83	16	29
Croplan	RC 4417 (RR)	33 ± 1	36	17	22	77	18	26
Schillinger Seed	457 RCP	33 ± 1	36	22	20	67	23	27
MO Exp	S04-6008 RR	32 ± 1	39	20	20	67	20	26
Dyna-Gro	37A44 (RR)	32 ± 1	36	20	24	66	20	26
Pioneer	94M30 (RR)	32 ± 1	36	18	24	69	21	22
Morsoy	RT 4485N (RR)	32 ± 1	37	12	24	66	25	26
FFR	4526 RR	31 ± 1	35	18	19	76	16	24
Steyer	4430 RR Scn	31 ± 1	35	19	17	69	24	25
Vigoro	V42N7RS	31 ± 1	38	16	16	68	23	26
USG	74A45 (RR)	31 ± 1	34	17	20	67	19	26
MO Exp	S04-5969 RR	30 ± 1	32	16	19	72	19	25
Delta & Pine Land	DPX 4334 RR	30 ± 1	33	19	22	69	17	23
Vigoro	V43N8RR	30 ± 1	37	12	21	68	20	25
Dairyland	4300 RR	30 ± 1	36	13	17	79	18	19
Delta Grow	4150 RR	30 ± 1	37	14	18	70	21	23
Delta & Pine Land	DP 4450 RR	30 ± 1	39	16	21	65	17	24
Delta & Pine Land	DP 4546 RR	30 ± 1	35	12	23	63	22	26
Pioneer	94M50 (RR)	30 ± 1	34	18	17	59	23	26
Asgrow	AG4405 (RR)	30 ± 1	33	19	17	67	17	25
Delta Grow	4460 RR	30 ± 1	39	15	19	63	22	20
USG	7440nRR	29 ± 1	32	17	17	67	19	24
Morsoy	RTS 4556N (RR/STS)	29 ± 1	25	17	22	67	21	23
N.K. Brand	S 45-E5 (RR)	29 ± 1	30	17	19	66	21	21
Midwest Premium Genetics	MPV 4406nRR	29 ± 1	33	16	19	67	19	20
TN Exp	TN05-4715 RR	29 ± 1	37	16	22	52	21	24
Progeny	4507 RR	29 ± 1	26	15	20	67	19	23
Dairyland	8450 RR	29 ± 1	30	21	19	56	21	25
N.K. Brand	S 43-B1 (RR)	28 ± 1	26	10	19	75	18	22
Dyna-Gro	35D44 (RR)	28 ± 1	34	13	17	62	20	24
Asgrow	AG4103 (RR)	28 ± 1	29	13	20	69	17	20
Vigoro	V44N6RR	28 ± 1	31	14	19	62	18	23
KS	KS 4404RR	27 ± 1	26	15	20	59	20	23
Delta King	DK 4567 (RR)	27 ± 1	29	13	15	61	20	23
Armor	42-P7 (RR)	26 ± 1	29	14	14	63	17	21
Delta & Pine Land	DP 4112 RR/S	26 ± 1	28	13	21	57	20	18
USG	7443nRR	25 ± 1	25	16	17	53	19	20
<b>Average (bu/a)</b>		<b>30</b>	<b>33</b>	<b>16</b>	<b>20</b>	<b>67</b>	<b>20</b>	<b>24</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>10</b>	<b>7</b>	<b>6</b>
<b>C.V. (%)</b>		<b>13.4</b>	<b>10.4</b>	<b>17.0</b>	<b>13.2</b>	<b>9.5</b>	<b>21.7</b>	<b>14.7</b>

† All yields are adjusted to 13% moisture.

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



**Table 12. Mean yields † and agronomic characteristics of 39 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in six environments in Tennessee during 2007.**

Brand	Variety ‡	Avg. Yield	Moisture § (n=6)	Lodging (n=1)	Height (n=5)	Maturity (n=5)	Shattering (n=2)	Leaf	Seed	Protein (n=2)	Oil (n=2)
		± Std Err. (n=6)						Retention (n=2)	Quality (n=2)		
		bu/a	%	Score	in.	DAP	-----Score-----	%	%		
Delta Grow	4470 RR/STS	36 ± 1	12.8	2.3	29	138	1.0	1.7	2.3	40.5	20.6
MO Exp	S04-6013 RR	34 ± 1	13.5	2.3	33	137	1.0	1.8	2.0	38.1	22.8
Southern Cross	Caleb (RR/STS)	33 ± 1	13.2	3.3	29	138	1.0	2.2	2.4	40.3	21.1
Croplan	RC 4417 (RR)	33 ± 1	14.0	2.3	35	136	1.0	3.0	2.7	40.9	21.5
Schillinger Seed	457 RCP	33 ± 1	15.2	2.7	37	141	1.0	3.0	3.9	40.2	22.0
MO Exp	S04-6008 RR	32 ± 1	14.0	2.3	33	138	1.0	1.7	2.1	38.5	22.7
Dyna-Gro	37A44 (RR)	32 ± 1	15.3	2.7	34	136	1.0	2.6	2.9	40.2	20.9
Pioneer	94M30 (RR)	32 ± 1	13.0	2.7	32	138	1.0	3.6	2.7	42.7	20.2
Morsoy	RT 4485N (RR)	32 ± 1	13.6	3.3	35	136	1.0	2.5	2.2	39.8	21.1
FFR	4526 RR	31 ± 1	13.6	3.0	34	137	1.0	1.9	2.1	41.2	20.3
Steyer	4430 RR Scn	31 ± 1	13.0	3.3	28	137	1.0	1.8	2.1	39.6	20.8
Vigoro	V42N7RS	31 ± 1	14.0	2.7	31	135	1.0	2.7	2.6	41.7	20.6
USG	74A45 (RR)	31 ± 1	13.4	2.7	36	135	1.0	1.8	2.5	40.8	20.7
MO Exp	S04-5969 RR	30 ± 1	13.8	2.0	32	136	1.0	2.1	3.0	39.4	22.2
Delta & Pine Land	DPX 4334 RR	30 ± 1	13.5	2.7	35	138	1.0	2.6	2.7	41.3	21.3
Vigoro	V43N8RR	30 ± 1	13.3	2.3	36	135	1.0	2.5	2.2	40.7	21.7
Dairyland	4300 RR	30 ± 1	12.9	2.7	31	134	1.0	1.7	1.9	39.9	21.6
Delta Grow	4150 RR	30 ± 1	13.1	2.3	32	137	1.0	2.3	2.1	42.2	19.8
Delta & Pine Land	DP 4450 RR	30 ± 1	13.9	3.7	34	135	1.0	2.6	2.7	39.9	20.8
Delta & Pine Land	DP 4546 RR	30 ± 1	16.1	3.0	34	140	1.0	2.8	3.0	41.9	21.1
Pioneer	94M50 (RR)	30 ± 1	13.4	2.0	30	138	1.0	1.8	2.3	40.5	21.3
Asgrow	AG4405 (RR)	30 ± 1	13.9	3.3	30	137	1.0	2.0	2.0	41.2	20.2
Delta Grow	4460 RR	30 ± 1	13.5	2.7	34	136	1.0	2.1	2.3	40.2	20.8
USG	7440nRR	29 ± 1	13.3	2.0	33	135	1.0	1.4	2.3	39.1	22.2
Morsoy	RTS 4556N (RR/STS)	29 ± 1	13.7	3.0	30	139	1.0	2.1	2.0	40.4	20.9
N.K. Brand	S 45-E5 (RR)	29 ± 1	13.3	2.7	34	135	1.0	2.0	2.3	42.1	19.3
Midwest Premium Genetics	MPV 4406nRR	29 ± 1	13.6	3.0	36	136	1.0	2.9	2.5	39.9	20.7
TN Exp	TN05-4715 RR	29 ± 1	16.6	2.7	34	139	1.0	3.6	4.0	42.6	20.2
Progeny	4507 RR	29 ± 1	13.8	3.3	31	138	1.0	2.0	2.3	40.8	20.9
Dairyland	8450 RR	29 ± 1	14.3	2.7	28	139	1.0	2.6	2.4	39.5	22.3
N.K. Brand	S 43-B1 (RR)	28 ± 1	13.0	3.0	31	133	1.0	2.1	2.1	39.9	20.0
Dyna-Gro	35D44 (RR)	28 ± 1	13.1	3.0	31	136	1.0	1.7	1.8	41.3	20.1
Asgrow	AG4103 (RR)	28 ± 1	13.2	3.0	31	137	1.0	2.2	1.8	40.4	21.8
Vigoro	V44N6RR	28 ± 1	13.3	2.3	34	135	1.0	2.0	2.3	40.4	20.4
KS	KS 4404RR	27 ± 1	13.5	3.0	30	137	1.0	2.4	2.3	41.1	20.5
Delta King	DK 4567 (RR)	27 ± 1	13.4	3.0	30	136	1.0	2.3	2.5	40.7	20.7
Armor	42-P7 (RR)	26 ± 1	13.3	2.7	32	136	1.0	1.3	1.9	41.7	20.6

**Table 12 (continued)**

Brand	Variety ‡	Avg. Yield	Moisture § (n=6)	Lodging (n=1)	Height (n=5)	Maturity (n=5)	Shattering (n=2)	Leaf	Seed	Protein (n=2)	Oil (n=2)
		± Std Err. (n=6)						Retention (n=2)	Quality (n=2)		
		bu/a	%	Score	in.	DAP	-----Score-----			%	%
Delta & Pine Land	DP 4112 RR/S	26 ± 1	13.4	3.7	34	134	1.0	1.6	2.4	42.3	19.9
USG	7443nRR	25 ± 1	13.6	3.3	32	137	1.0	1.7	2.3	41.5	19.9
<b>Average</b>		<b>30</b>	<b>13.7</b>	<b>2.8</b>	<b>32</b>	<b>137</b>	<b>1.0</b>	<b>2.2</b>	<b>2.4</b>	<b>40.6</b>	<b>20.9</b>

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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 13. Mean yields † of 14 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2006 - 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=12)	Knoxville	Crossville	Springfield	Milan		Ames
						Irr.	Non-Irr.	
-----bu/a-----								
Morsoy	RT 4485N (RR)	42 ± 1	41	37	29	67	39	40
USG	74A45 (RR)	39 ± 1	33	37	28	68	35	36
Vigoro	V42N7RS	39 ± 1	36	41	23	65	38	30
Dyna-Gro	37A44 (RR)	39 ± 1	36	40	31	66	31	30
Vigoro	V44N6RR	39 ± 1	32	38	29	66	35	32
Delta Grow	4150 RR	39 ± 1	35	42	25	65	34	31
Delta Grow	4460 RR	38 ± 1	37	36	27	65	33	28
Delta & Pine Land	DP 4546 RR	37 ± 1	36	40	25	61	33	29
USG	7440nRR	37 ± 1	32	43	21	65	32	31
Dairyland	8450 RR	37 ± 1	33	43	28	56	34	30
Delta King	DK 4567 (RR)	36 ± 1	30	33	20	64	34	36
Asgrow	AG4103 (RR)	35 ± 1	29	36	24	65	32	26
USG	7443nRR	34 ± 1	26	40	24	56	33	25
Delta & Pine Land	DP 4112 RR/S	33 ± 1	26	36	25	57	29	21
<b>Average (bu/a)</b>		<b>37</b>	<b>33</b>	<b>39</b>	<b>26</b>	<b>63</b>	<b>34</b>	<b>30</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>6</b>	<b>6</b>	<b>4</b>	<b>8</b>	<b>6</b>	<b>7</b>
<b>C.V. (%)</b>		<b>10.3</b>	<b>10.8</b>	<b>9.4</b>	<b>10.2</b>	<b>7.8</b>	<b>11.4</b>	<b>13.6</b>

† All yields are adjusted to 13% moisture.

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

**Table 14. Mean yields † and agronomic characteristics of 14 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2006 - 2007.**

Brand	Variety ‡	Avg. Yield					Leaf		Seed		
		± Std Err. (n=12)	Moisture § (n=12)	Lodging (n=5)	Height (n=10)	Maturity (n=10)	Shattering (n=4)	Retention (n=2)	Quality (n=6)	Protein (n=6)	Oil (n=6)
		bu/a	%	Score	in.	DAP	-----Score-----		%	%	
Morsoy	RT 4485N (RR)	42 ± 1	13.7	2.1	37	132	1.0	2.5	2.4	39.5	22.0
USG	74A45 (RR)	39 ± 1	13.5	1.9	37	130	1.0	1.8	2.4	39.6	22.0
Vigoro	V42N7RS	39 ± 1	14.1	1.5	31	133	1.0	2.7	2.3	41.0	21.7
Dyna-Gro	37A44 (RR)	39 ± 1	14.7	1.8	36	132	1.0	2.6	2.5	38.6	22.2
Vigoro	V44N6RR	39 ± 1	13.5	1.6	36	131	1.0	2.0	2.5	39.3	22.0
Delta Grow	4150 RR	39 ± 1	13.3	1.5	33	132	1.0	2.3	2.2	40.4	21.6
Delta Grow	4460 RR	38 ± 1	13.8	2.0	36	132	1.0	2.1	2.4	38.8	22.0
Delta & Pine Land	DP 4546 RR	37 ± 1	15.1	2.2	36	134	1.0	2.8	2.4	40.9	21.6
USG	7440nRR	37 ± 1	13.8	1.4	34	131	1.0	1.4	2.3	38.1	23.3
Dairyland	8450 RR	37 ± 1	14.2	1.5	29	134	1.0	2.6	2.4	38.1	22.6
Delta King	DK 4567 (RR)	36 ± 1	14.0	1.6	31	132	1.0	2.3	2.5	40.1	22.0
Asgrow	AG4103 (RR)	35 ± 1	13.8	1.4	31	131	1.0	2.2	2.1	39.4	22.6
USG	7443nRR	34 ± 1	13.8	1.7	33	133	1.0	1.7	2.4	40.0	22.0
Delta & Pine Land	DP 4112 RR/S	33 ± 1	13.8	2.0	37	129	1.0	1.6	2.5	41.3	21.3
<b>Average</b>		<b>37</b>	<b>13.9</b>	<b>1.7</b>	<b>34</b>	<b>132</b>	<b>1.0</b>	<b>2.2</b>	<b>2.4</b>	<b>39.6</b>	<b>22.1</b>

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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 nine Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2005 - 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=18)	Milan					
			Knoxville	Crossville	Springfield	Irr.	Non-Irr.	Ames
			-----bu/a-----					
Morsoy	RT 4485N (RR)	46 ± 1	50	42	39	63	47	38
Vigoro	V44N6RR	44 ± 1	42	45	36	62	45	34
Dyna-Gro	37A44 (RR)	44 ± 1	45	44	38	62	42	32
Delta Grow	4460 RR	44 ± 1	47	43	34	62	45	31
USG	74A45 (RR)	43 ± 1	42	43	35	61	44	34
Delta Grow	4150 RR	43 ± 1	43	47	33	60	45	31
USG	7440nRR	43 ± 1	41	47	29	61	44	33
Delta & Pine Land	DP 4546 RR	41 ± 1	42	43	34	56	40	30
USG	7443nRR	40 ± 1	36	49	32	54	40	28
<b>Average (bu/a)</b>		<b>43</b>	<b>43</b>	<b>45</b>	<b>34</b>	<b>60</b>	<b>44</b>	<b>32</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>5</b>	<b>6</b>	<b>6</b>	<b>9</b>	<b>7</b>	<b>8</b>
<b>C.V. (%)</b>		<b>10.7</b>	<b>8.6</b>	<b>9.1</b>	<b>11.8</b>	<b>10.1</b>	<b>10.7</b>	<b>15.1</b>

**Table 16. Mean yields † and agronomic characteristics of nine Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2005 - 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=18)	Moisture § (n=18)	Lodging (n=8)	Height (n=15)	Maturity (n=15)	Shattering (n=7)	Leaf	Seed	Protein (n=10)	Oil (n=10)
								Retention (n=2)	Quality (n=10)		
								Score-----		%	%
Morsoy	RT 4485N (RR)	46 ± 1	13.8	2.3	39	131	1.0	2.5	2.4	39.6	22.2
Vigoro	V44N6RR	44 ± 1	13.6	2.0	38	130	1.0	2.0	2.4	39.5	22.1
Dyna-Gro	37A44 (RR)	44 ± 1	14.3	2.2	38	131	1.0	2.6	2.5	39.0	22.4
Delta Grow	4460 RR	44 ± 1	13.9	2.1	39	131	1.0	2.1	2.4	39.4	22.1
USG	74A45 (RR)	43 ± 1	13.4	2.0	40	130	1.0	1.8	2.3	39.6	22.1
Delta Grow	4150 RR	43 ± 1	13.6	1.8	35	131	1.0	2.3	2.1	40.7	21.7
USG	7440nRR	43 ± 1	13.9	1.7	36	131	1.0	1.4	2.2	38.3	23.4
Delta & Pine Land	DP 4546 RR	41 ± 1	14.9	2.3	39	133	1.0	2.8	2.2	41.2	21.8
USG	7443nRR	40 ± 1	13.8	1.9	35	132	1.0	1.7	2.4	40.1	22.2
<b>Average</b>		<b>43</b>	<b>13.9</b>	<b>2.0</b>	<b>38</b>	<b>131</b>	<b>1.0</b>	<b>2.1</b>	<b>2.3</b>	<b>39.7</b>	<b>22.2</b>

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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 20 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties in ten County Standard Tests in Tennessee and Kentucky during 2007.**

MS	Brand/Variety	Avg. Yield bu/a	Moisture ‡ %	Coffee 5/8 §	Dyer 5/9	(KY)					UT Martin		
						Franklin 5/8	Fulton 6/7	Henry 5/22	Lake 5/3	Lauderdale <i>fi</i> 5/13	Obion 5/11	Weakley 5/8	Weakley 5/17
A	Pioneer 94M30	34.2	12.0	19.2	53.9	13.7	37.2	20.6	33.7	36.2	62.9	42.6	22.3
AB	**Pioneer 94M50	33.8	12.6	18.3	58.1	8.9	46.0	14.5	31.2	34.7	57.6	46.8	21.7
ABC	Trisler T4030RR(CN)	32.6	12.2	17.4	51.5	8.7	32.1	38.1	20.6	36.6	58.2	46.1	17.2
ABCD	*Croplan RC4455	32.1	12.2	15.3	48.3	18.8	33.9	35.2	36.6	25.1	52.4	36.7	19.1
ABCD	Progeny 4405	31.8	11.8	16.1	51.6	17.2	42.6	32.4	21.6	35.1	63.3	20.6	17.4
ABCD	FFR 4526	31.5	12.5	20.8	49.1	13.4	35.1	13.2	20.7	41.4	53.4	49.9	18.3
ABCDE	Schillinger 457RC	30.5	13.2	13.4	54.9	16.2	40.0	18.9	29.4	22.3	51.9	43.9	14.2
ABCDEF	Morsoy RT4007	29.9	12.6	16.4	50.6	10.6	36.7	25.8	30.4	21.2	48.5	39.0	20.1
ABCDEF	Asgrow AG4405	29.7	12.6	13.1	48.3	11.3	34.7	25.1	18.1	36.7	49.6	38.9	21.6
ABCDEF	USG 74A45	29.3	12.1	14.6	49.0	15.3	34.3	24.3	26.9	39.6	51.3	21.0	16.7
BCDEF	Vigoro V44N6RR	28.9	12.3	14.2	48.3	17.8	41.6	20.1	21.9	32.9	57.1	21.3	14.2
BCDEF	Dairyland 8450N RR	28.8	12.5	10.9	55.9	15.8	35.8	13.7	14.5	35.4	57.8	30.1	17.8
CDEF	Crow's C4517R	28.6	12.6	14.8	53.8	13.7	38.9	16.6	27.4	21.2	44.7	41.8	13.7
CDEF	NK Brand S43-B1	27.8	12.8	15.8	43.9	11.6	33.6	17.1	23.0	27.3	49.7	40.2	16.2
DEF	*FFR 4545	27.4	14.0	13.3	54.5	19.1	41.1	12.1	17.5	26.2	56.4	21.4	12.8
DEF	Deltapine DP4112 RR/S	27.1	13.6	16.4	46.1	13.2	38.6	11.6	14.0	28.5	41.3	41.8	19.7
EF	Delta King DK4567	26.3	12.4	18.8	45.9	7.3	35.1	13.7	29.0	25.4	44.1	22.6	21.5
EF	**Vigoro V42N3RR	25.6	12.7	16.2	50.9	7.1	42.3	10.6	25.0	20.5	43.2	20.4	19.9
EF	AgVenture 44G5NRR	25.6	11.7	16.9	51.2	10.6	29.9	11.9	24.1	23.0	51.4	18.8	18.3
F	Armor 42-P7	25.4	13.3	16.2	50.1	9.0	32.7	11.5	24.5	21.9	52.0	20.9	14.9
<b>AVERAGE</b>		<b>29.4</b>	<b>12.6</b>	<b>15.9</b>	<b>50.8</b>	<b>13.0</b>	<b>37.1</b>	<b>19.4</b>	<b>24.5</b>	<b>29.6</b>	<b>52.3</b>	<b>33.2</b>	<b>17.9</b>

† 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 18. Yields † and disease ratings § of 20 early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests during 2007.**

MS	Brand/Variety	CST Avg. Yield (n=10) bu/a	Moisture ‡ %	----- Research and Education Center at Milan -----						
				SDS 2004 / 06 / 07	Frogeye 2005 / 06 / 07	Stem Canker 2007	Anthracnose 2006 / 07	Sprayed ¶ Yield bu/a	Unsprayed Yield bu/a	SCN Race 2 2007
A	Pioneer 94M30	34.2	12.0	/ / 0.0	/ / 1.0	0.0	/ 6.0	65.3	55.9	S
AB	**Pioneer 94M50	33.8	12.6	/ 0.3 / 1.0	1.0 / 0.0 / 0.0	0.0	6.0 / 6.0	60.1	54.2	S
ABC	Trisler T4030RR(CN)	32.6	12.2	/ / 1.0	/ / 5.0	0.0	/ 6.0	64.4	55.8	S
ABCD	*Croplan RC4455	32.1	12.2	/ 0.7 / 2.0	/ 3.7 / 3.0	0.0	7.7 / 7.0	63.1	52.3	S
ABCD	Progeny 4405	31.8	11.8	/ / 1.0	/ / 4.0	0.0	/ 8.0	63.1	49.9	S
ABCD	FFR 4526	31.5	12.5	/ / 1.0	/ / 2.0	0.0	/ 6.0	60.7	51.8	S
ABCDE	Schillinger 457RC	30.5	13.2	/ / 1.0	/ / 0.0	0.0	/ 6.0	61.2	53.3	S
ABCDEF	Morsoy RT4007	29.9	12.6	/ / 0.0	/ / 0.0	0.0	/ 8.0	57.1	55.2	S
ABCDEF	Asgrow AG4405	29.7	12.6	/ / 1.0	/ / 4.0	0.0	/ 7.0	55.8	48.6	S
ABCDEF	USG 74A45	29.3	12.1	/ / 1.0	/ / 2.0	0.0	/ 7.0	62.8	52.7	S
BCDEF	Vigoro V44N6RR	28.9	12.3	/ 0.7 / 2.0	/ 2.0 / 4.0	0.0	8.0 / 7.0	63.8	59.0	S
BCDEF	Dairyland 8450N RR	28.8	12.5	/ / 1.0	/ / 7.0	0.0	/ 6.0	51.9	38.4	S
CDEF	Crow's C4517R	28.6	12.6	/ / 1.0	/ / 3.0	0.0	/ 5.0	65.3	64.5	S
CDEF	NK Brand S43-B1	27.8	12.8	/ / 1.0	/ / 5.0	0.0	/ 6.0	58.3	50.4	S
DEF	*FFR 4545	27.4	14.0	/ 0.3 / 1.0	7.0 / 5.7 / 5.0	0.0	7.0 / 6.0	59.1	50.6	MS
DEF	Deltapine DP4112 RR/S	27.1	13.6	/ 2.0 / 1.0	/ 0.3 / 0.0	0.0	7.3 / 8.0	51.4	48.2	S
EF	Delta King DK4567	26.3	12.4	/ / 2.0	/ / 4.0	0.0	/ 6.0	63.0	52.3	S
EF	***Vigoro V42N3RR	25.6	12.7	1.7 / 0.3 / 1.0	1.0 / 0.0 / 0.0	0.0	6.3 / 6.0	63.9	58.7	S
EF	AgVenture 44G5NRR	25.6	11.7	/ / 1.0	/ / 0.0	0.0	/ 7.0	52.3	49.7	S
F	Armor 42-P7	25.4	13.3	/ / 1.0	/ / 3.0	0.0	/ 5.0	52.0	44.3	S
<b>Average</b>		<b>29.4</b>	<b>12.6</b>					<b>59.7</b>	<b>52.3</b>	

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

SCN ratings; S= susceptible to Race 2 (HG type 1.2.5.7), MS = moderately susceptible.

¶ Sprayed plots at Milan treated with Headline @ 6 oz./Acre + 0.37% Induce at 20 gpa at R3 growth stage.

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 2006, 2005, and/or 2004.

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

**Table 19. Overall average yields † and moistures ‡ of 12 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in County Standard Tests (n=10) and Research and Education Centers (n=6) in Tennessee in 2007.**

Brand	Variety	County Standard Trials		Research and Education Center Trials	
		Avg. Yield	Moisture	Avg. Yield	Moisture
		bu/a	%	bu/a	%
Pioneer	94M30 (RR)	34	12.0	32	13.0
Pioneer	94M50 (RR)	34	12.6	30	13.4
FFR	4526 RR	32	12.5	31	13.6
Schillinger Seed	457 RCP	31	13.2	33	15.2
Asgrow	AG4405 (RR)	30	12.6	30	13.9
USG	74A45 (RR)	29	12.1	31	13.4
Vigoro	V44N6RR	29	12.3	28	13.3
Dairyland	8450 RR	29	12.5	29	14.3
N.K. Brand	S 43-B1 (RR)	28	12.8	28	13.0
Delta & Pine Land	DP 4112 RR/S	27	13.6	26	13.4
Delta King	DK 4567 (RR)	26	12.4	27	13.4
Armor	42-P7 (RR)	25	13.3	26	13.3
<b>Average (bu/a)</b>		<b>29</b>	<b>12.7</b>	<b>29</b>	<b>13.6</b>

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.



**Table 20. Mean yields † of 70 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Spring Hill				Milan		Ames
			Knoxville	Crossville	Non-Irr.	Springfield	Irr.	Non-Irr.	
USG	74F96 (RR)	36 ± 1	42	25	31	21	68	30	34
USG	74A91 (RR)	36 ± 1	42	28	24	15	83	25	32
Delta Grow	4970 RR	35 ± 1	42	24	28	20	73	23	35
N.K. Brand	S 49-H7 (RR)	35 ± 1	39	30	29	16	73	23	32
Dyna-Gro	35Z49 (RR)	34 ± 1	39	24	31	21	71	21	35
Delta Grow	4960 RR	34 ± 1	47	24	27	20	64	28	31
Dairyland	8482 RR	34 ± 1	43	23	31	17	75	21	29
Hornbeck	HBK R 4924 (RR)	34 ± 1	44	27	27	18	68	21	32
Delta King	DK 4866 (RR/STS)	34 ± 1	41	28	24	16	75	21	32
Delta King	DK XTJ 847 (RR)	34 ± 1	41	21	27	20	73	18	36
TN Exp	TN03-012 RR	34 ± 1	41	22	17	20	73	27	35
Asgrow	AG4903 (RR/STS)	34 ± 1	38	26	26	23	75	18	29
Progeny	4906 RR	33 ± 1	40	25	27	19	65	24	34
Dyna-Gro	37P49 (RR)	33 ± 1	43	25	30	16	71	22	26
Croplan	RC 4955 (RR)	33 ± 1	35	25	29	17	70	25	30
Morsoy	RT 4914N (RR)	33 ± 1	41	27	21	18	67	24	32
Stine	4782-4 (RR/STS)	33 ± 1	30	26	26	17	83	20	28
Schillinger Seed	495 RC	33 ± 1	42	27	25	19	61	22	35
Delta King	DK 4968 (RR)	33 ± 1	40	29	23	17	67	22	30
Terral	TV 47R17 (RR)	32 ± 1	34	24	26	15	76	20	30
Progeny	4817 RR	32 ± 1	34	24	24	22	69	18	32
FFR	4767 RR	32 ± 1	41	28	19	14	79	16	26
Morsoy	RTS 4955N (RR/STS)	32 ± 1	38	23	23	19	64	22	35
Steyer	4910 RR Scn	32 ± 1	37	28	26	16	65	22	29
Delta King	DK XTJ 848 (RR)	32 ± 1	40	22	22	18	71	19	29
USG	7495nRS	32 ± 1	37	24	25	12	71	25	29
Southern Cross	Eli (RR/STS)	31 ± 1	32	24	21	16	81	20	26
Southern Cross	Hiram (RR)	31 ± 1	36	23	28	18	69	20	24
Delta & Pine Land	DP 4888 RR/S	31 ± 1	35	26	24	21	63	16	31
USG	7494nRR	31 ± 1	38	24	24	16	68	19	27
Midwest Premium Genetics	MPV 4905nRR	31 ± 1	40	27	26	15	65	16	28
Delta Grow	4840 RR	31 ± 1	42	23	22	16	65	19	29
Morsoy	RTS 4706N (RR/STS)	31 ± 1	33	23	23	16	76	19	25
Terral	TV 49R17 (RR)	31 ± 1	36	24	29	17	69	19	22
Hornbeck	HBK R 4727 (RR)	31 ± 1	37	22	20	13	79	12	31
Southern Cross	Galilee (RR)	30 ± 1	37	26	19	13	77	14	27
Armor	49-V6 (RR)	30 ± 1	38	25	25	15	68	18	24
Dyna-Gro	38X47 (RR)	30 ± 1	35	23	22	16	64	22	30

**Table 20 (continued)**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Spring Hill						
			Knoxville	Crossville	Non-Irr.	Springfield	Milan		Ames
			-----bu/a-----						
Delta Grow	4780 RR	30 ± 1	41	22	19	19	73	12	26
FFR	4886 RR/STS	30 ± 1	38	23	21	12	69	21	29
Morsoy	RT 4707N (RR)	30 ± 1	40	19	22	14	75	15	26
Dyna-Gro	32R46 (RR/STS)	30 ± 1	27	22	22	17	76	19	26
Progeny	4807 RR	30 ± 1	37	26	14	13	77	17	27
Delta & Pine Land	DP 4919 RR/S	30 ± 1	34	21	18	15	76	16	27
Dairyland	8474 RR	30 ± 1	36	20	22	13	69	21	27
Progeny	4706 RR	30 ± 1	34	18	26	15	72	13	31
Vigoro	V47N8RR	30 ± 1	39	20	21	13	76	14	24
Crow's	4815 R	30 ± 1	37	24	20	19	65	15	27
Progeny	4949 RR	29 ± 1	34	20	27	13	62	15	34
Vigoro	V49N6RR	29 ± 1	37	20	21	16	60	18	34
Croplan	RC 4757 (RR/STS)	29 ± 1	32	24	22	17	73	14	23
Steyer	4710 RR Scn	29 ± 1	36	28	20	12	71	13	24
Dyna-Gro	36Y48 (RR / STS)	29 ± 1	35	19	21	14	62	21	31
Armor	47-F8 (RR)	29 ± 1	27	20	28	12	78	16	23
Morsoy	RT 4806N (RR)	29 ± 1	35	19	20	15	77	13	25
Delta Grow	4770 RR	29 ± 1	35	21	24	16	72	13	23
Delta & Pine Land	DPX 4727 RR	28 ± 1	40	26	13	12	73	11	24
Schillinger Seed	XP49	28 ± 1	39	22	17	14	56	18	30
Dyna-Gro	37F46 (RR)	28 ± 1	40	23	21	14	63	12	24
Asgrow	AG4604 (RR/STS)	28 ± 1	33	19	22	12	73	11	26
Delta King	DK 4967 (RR)	28 ± 1	33	19	16	14	63	17	30
Asgrow	AG4605 (RR/STS)	28 ± 1	26	18	16	12	80	15	25
Delta King	DK 4763 (RR)	27 ± 1	35	23	15	17	61	15	27
USG	74A76 (RR)	27 ± 1	35	20	21	16	65	11	25
Pioneer	94M80 (RR)	27 ± 1	28	19	20	18	64	16	25
Delta King	DK 4667 (RR)	27 ± 1	44	20	26	11	53	12	23
Schillinger Seed	467 RCP	27 ± 1	31	22	10	13	75	10	26
Asgrow	AG4703 (RR)	27 ± 1	32	26	14	12	69	11	23
Delta & Pine Land	DP 4724 RR	26 ± 1	32	20	17	13	66	14	24
Delta Grow	4660 RR	26 ± 1	38	24	18	9	59	12	22
<b>Average (bu/a)</b>		<b>31</b>	<b>37</b>	<b>23</b>	<b>23</b>	<b>16</b>	<b>70</b>	<b>18</b>	<b>28</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>4</b>	<b>11</b>	<b>6</b>	<b>7</b>
<b>C.V. (%)</b>		<b>14.3</b>	<b>9.2</b>	<b>15.9</b>	<b>18.9</b>	<b>15.5</b>	<b>10.1</b>	<b>22.2</b>	<b>15.4</b>

† All yields are adjusted to 13% moisture.

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

**Table 21. Mean yields † and agronomic characteristics of 70 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in seven environments in Tennessee in 2007.**

Brand	Variety ‡	Avg. Yield		Moisture §	Lodging	Height	Maturity	Shattering	Leaf	Seed	Protein	Oil
		± Std Err.	(n=7)						Retention	Quality		
		(n=7)	(n=7)	(n=3)	(n=3)	(n=6)	(n=6)	(n=3)	(n=2)	(n=2)	(n=2)	(n=2)
		bu/a	%	Score	in.	DAP		-----Score-----		%	%	
USG	74F96 (RR)	36 ± 1	13.9	1.4	33	155	1.3	2.1	2.6	41.7	20.3	
USG	74A91 (RR)	36 ± 1	13.5	1.6	33	159	1.1	2.8	3.3	41.3	20.4	
Delta Grow	4970 RR	35 ± 1	13.0	1.9	35	155	1.6	2.1	2.5	42.2	20.3	
N.K. Brand	S 49-H7 (RR)	35 ± 1	13.3	1.4	36	157	1.2	2.3	1.8	41.9	20.5	
Dyna-Gro	35Z49 (RR)	34 ± 1	13.7	1.7	36	154	1.1	2.2	2.3	41.4	20.9	
Delta Grow	4960 RR	34 ± 1	14.1	1.9	36	158	1.4	1.8	2.5	43.0	20.7	
Dairyland	8482 RR	34 ± 1	12.9	1.3	34	156	1.3	2.5	2.5	40.3	21.6	
Hornbeck	HBK R 4924 (RR)	34 ± 1	13.1	1.8	37	153	1.3	2.3	2.5	41.2	20.8	
Delta King	DK 4866 (RR/STS)	34 ± 1	12.8	1.6	32	153	1.0	1.5	2.7	40.0	21.1	
Delta King	DK XTJ 847 (RR)	34 ± 1	12.7	1.6	32	154	1.2	1.6	1.9	42.5	20.9	
TN Exp	TN03-012 RR	34 ± 1	13.0	1.7	31	153	1.6	2.2	2.6	40.0	21.9	
Asgrow	AG4903 (RR/STS)	34 ± 1	13.4	1.8	32	157	1.0	2.0	2.3	41.8	21.1	
Progeny	4906 RR	33 ± 1	13.7	1.8	33	157	1.1	2.6	3.6	41.0	20.7	
Dyna-Gro	37P49 (RR)	33 ± 1	14.1	1.4	33	159	1.0	2.4	3.8	41.6	20.7	
Croplan	RC 4955 (RR)	33 ± 1	14.8	1.6	36	157	1.3	3.1	2.9	40.2	21.7	
Morsoy	RT 4914N (RR)	33 ± 1	13.5	2.1	36	155	1.6	2.1	2.5	42.0	20.3	
Stine	4782-4 (RR/STS)	33 ± 1	13.0	1.1	31	156	1.1	1.9	2.6	39.7	21.7	
Schillinger Seed	495 RC	33 ± 1	13.1	2.0	36	155	1.6	2.0	2.6	42.0	20.2	
Delta King	DK 4968 (RR)	33 ± 1	13.2	1.6	35	150	1.4	1.9	2.3	41.4	20.7	
Terral	TV 47R17 (RR)	32 ± 1	14.7	1.8	38	152	1.2	2.0	3.3	41.6	21.4	
Progeny	4817 RR	32 ± 1	12.7	2.3	32	153	1.4	1.9	2.3	40.9	20.8	
FFR	4767 RR	32 ± 1	12.9	1.6	34	155	1.0	2.9	2.8	42.1	20.3	
Morsoy	RTS 4955N (RR/STS)	32 ± 1	12.8	1.6	34	150	1.1	1.9	2.4	41.8	21.8	
Steyer	4910 RR Scn	32 ± 1	14.3	1.4	36	156	1.3	2.8	2.8	40.2	21.6	
Delta King	DK XTJ 848 (RR)	32 ± 1	12.7	1.9	37	151	1.2	2.1	2.3	40.5	21.7	
USG	7495nRS	32 ± 1	13.6	1.8	33	155	1.2	2.0	2.6	42.1	21.4	
Southern Cross	Eli (RR/STS)	31 ± 1	12.7	1.4	30	152	1.2	1.4	2.3	39.0	22.0	
Southern Cross	Hiram (RR)	31 ± 1	12.7	1.4	31	155	1.3	2.3	2.2	40.3	21.3	
Delta & Pine Land	DP 4888 RR/S	31 ± 1	13.1	1.8	36	157	1.4	2.5	2.5	41.1	21.0	
USG	7494nRR	31 ± 1	12.7	1.9	33	154	1.2	1.9	3.1	41.5	20.2	
Midwest Premium Genetics	MPV 4905nRR	31 ± 1	12.8	2.1	34	151	1.3	1.8	2.9	41.2	20.3	
Delta Grow	4840 RR	31 ± 1	12.8	2.0	32	152	1.3	1.8	2.9	40.9	20.5	
Morsoy	RTS 4706N (RR/STS)	31 ± 1	13.1	1.1	30	153	1.0	1.6	2.3	39.0	22.0	
Terral	TV 49R17 (RR)	31 ± 1	13.1	1.3	39	154	1.3	1.9	2.7	43.1	20.2	
Hornbeck	HBK R 4727 (RR)	31 ± 1	12.9	1.6	34	154	1.0	2.6	2.8	42.1	20.4	
Southern Cross	Galilee (RR)	30 ± 1	12.7	1.6	34	155	1.0	2.4	2.5	40.9	20.5	
Armor	49-V6 (RR)	30 ± 1	13.1	1.4	34	154	1.4	2.0	2.1	41.4	21.1	
Dyna-Gro	38X47 (RR)	30 ± 1	13.6	1.9	31	152	1.1	1.6	2.1	41.7	20.3	

**Table 21 (continued)**

Brand	Variety ‡	Avg. Yield					Leaf	Seed	Protein	Oil	
		± Std Err.	Moisture §	Lodging	Height	Maturity	Shattering	Retention			Quality
		(n=7)	(n=7)	(n=3)	(n=6)	(n=6)	(n=3)	(n=2)	(n=2)	(n=2)	(n=2)
		bu/a	%	Score	in.	DAP	-----Score-----		%	%	
Delta Grow	4780 RR	30 ± 1	12.6	1.6	33	156	1.0	2.8	2.7	41.5	20.5
FFR	4886 RR/STS	30 ± 1	13.3	1.7	34	154	1.1	1.9	2.6	42.2	21.6
Morsoy	RT 4707N (RR)	30 ± 1	13.1	1.6	35	156	1.0	2.4	2.5	41.1	20.4
Dyna-Gro	32R46 (RR/STS)	30 ± 1	13.0	1.2	28	153	1.2	1.5	2.2	39.2	21.8
Progeny	4807 RR	30 ± 1	12.5	1.8	34	155	1.2	2.5	2.5	41.3	20.2
Delta & Pine Land	DP 4919 RR/S	30 ± 1	12.9	2.0	38	156	1.4	2.1	2.3	41.4	20.7
Dairyland	8474 RR	30 ± 1	12.9	1.6	30	155	1.2	2.0	2.4	40.6	21.2
Progeny	4706 RR	30 ± 1	12.5	1.8	36	149	1.2	1.5	1.8	41.2	20.4
Vigoro	V47N8RR	30 ± 1	12.4	1.4	34	153	1.1	2.2	2.4	41.0	20.3
Crow's	4815 R	30 ± 1	12.6	1.8	33	151	1.0	1.7	2.3	42.2	20.2
Progeny	4949 RR	29 ± 1	13.2	1.8	34	158	1.6	2.3	2.5	41.2	21.2
Vigoro	V49N6RR	29 ± 1	13.0	1.6	35	153	1.6	1.8	2.5	41.7	20.3
Croplan	RC 4757 (RR/STS)	29 ± 1	12.8	1.3	29	154	1.0	1.7	2.4	39.2	21.9
Steyer	4710 RR Scn	29 ± 1	12.4	1.6	34	155	1.1	2.5	2.6	41.2	20.3
Dyna-Gro	36Y48 (RR / STS)	29 ± 1	13.6	1.7	34	155	1.1	2.0	2.8	42.6	21.4
Armor	47-F8 (RR)	29 ± 1	13.2	1.4	28	153	1.2	1.6	1.9	38.6	22.0
Morsoy	RT 4806N (RR)	29 ± 1	12.3	1.6	35	150	1.1	1.6	2.0	41.2	20.5
Delta Grow	4770 RR	29 ± 1	12.5	1.9	35	152	1.3	1.5	2.2	41.1	20.5
Delta & Pine Land	DPX 4727 RR	28 ± 1	12.3	1.6	34	153	1.1	2.3	2.6	41.7	20.3
Schillinger Seed	XP49	28 ± 1	12.8	1.9	35	152	1.4	1.8	2.1	41.4	20.7
Dyna-Gro	37F46 (RR)	28 ± 1	12.6	2.3	34	150	1.3	1.6	2.5	40.8	20.0
Asgrow	AG4604 (RR/STS)	28 ± 1	13.0	1.6	35	152	1.2	2.5	2.3	40.9	21.0
Delta King	DK 4967 (RR)	28 ± 1	12.6	1.6	32	150	1.3	1.5	2.1	42.2	21.1
Asgrow	AG4605 (RR/STS)	28 ± 1	13.6	1.6	29	151	1.2	1.7	2.7	40.2	21.3
Delta King	DK 4763 (RR)	27 ± 1	12.3	1.8	31	152	1.2	1.7	2.3	42.5	20.6
USG	74A76 (RR)	27 ± 1	12.8	1.7	35	151	1.3	1.6	2.2	41.2	20.4
Pioneer	94M80 (RR)	27 ± 1	12.6	1.8	37	153	1.6	1.8	2.1	42.0	20.7
Delta King	DK 4667 (RR)	27 ± 1	12.6	2.2	36	147	1.2	1.3	2.6	40.4	20.4
Schillinger Seed	467 RCP	27 ± 1	12.2	1.9	31	148	1.7	2.2	2.4	39.9	20.4
Asgrow	AG4703 (RR)	27 ± 1	13.8	1.7	28	150	1.1	2.1	2.2	41.4	20.1
Delta & Pine Land	DP 4724 RR	26 ± 1	12.3	1.6	32	150	1.2	1.5	2.0	42.0	21.2
Delta Grow	4660 RR	26 ± 1	12.9	2.1	34	147	1.3	1.3	2.7	39.9	20.2
<b>Average</b>		<b>31</b>	<b>13.0</b>	<b>1.7</b>	<b>34</b>	<b>153</b>	<b>1.3</b>	<b>2.0</b>	<b>2.5</b>	<b>41.2</b>	<b>20.8</b>

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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 22. Mean yields † of 42 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2006 - 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=12)		Spring Hill		Milan		
		Knoxville	Crossville	Non-Irr.	Springfield	Irr.	Non-Irr.	
-----bu/a-----								
Morsoy	RT 4914N (RR)	47 ± 1	62	43	38	25	70	44
Asgrow	AG4903 (RR/STS)	47 ± 1	58	46	36	28	74	38
USG	74A91 (RR)	47 ± 1	59	44	35	22	80	40
Delta King	DK 4866 (RR/STS)	47 ± 1	60	48	37	22	75	38
Dyna-Gro	37P49 (RR)	47 ± 1	61	46	40	23	71	39
Morsoy	RTS 4955N (RR/STS)	46 ± 1	59	45	38	23	69	43
Progeny	4906 RR	46 ± 1	60	48	37	24	68	39
Schillinger Seed	495 RC	45 ± 1	60	41	40	26	65	39
Delta Grow	4970 RR	45 ± 1	60	40	39	25	69	37
USG	7495nRS	45 ± 1	58	44	37	20	72	39
Delta Grow	4960 RR	45 ± 1	62	41	37	25	63	40
USG	74F96 (RR)	45 ± 1	59	41	39	27	66	38
Croplan	RC 4955 (RR)	45 ± 1	56	42	38	22	71	39
Morsoy	RTS 4706N (RR/STS)	44 ± 1	55	41	34	22	73	37
Delta King	DK 4968 (RR)	44 ± 1	58	41	36	26	64	38
Midwest Premium Genetics	MPV 4905nRR	44 ± 1	58	42	35	22	67	37
FFR	4886 RR/STS	44 ± 1	59	42	34	20	69	39
TN Exp	TN03-012 RR	44 ± 1	56	41	35	23	68	40
Delta Grow	4770 RR	44 ± 1	53	41	37	24	69	37
Armor	49-V6 (RR)	43 ± 1	55	41	35	23	69	37
Dyna-Gro	36Y48 (RR / STS)	43 ± 1	57	40	34	20	67	39
Dyna-Gro	35Z49 (RR)	43 ± 1	58	33	38	25	68	35
Terral	TV 47R17 (RR)	43 ± 1	54	39	37	20	70	37
Hornbeck	HBK R 4924 (RR)	43 ± 1	61	36	35	23	66	36
Progeny	4706 RR	43 ± 1	50	43	37	22	69	35
Delta & Pine Land	DP 4919 RR/S	43 ± 1	54	39	35	21	72	34
Terral	TV 49R17 (RR)	42 ± 1	55	40	38	22	64	36
Dyna-Gro	32R46 (RR/STS)	42 ± 1	50	38	33	20	74	38
Vigoro	V49N6RR	42 ± 1	55	40	34	26	62	34
USG	7494nRR	42 ± 1	54	37	31	23	69	35
Asgrow	AG4703 (RR)	41 ± 1	50	46	27	21	69	33
Delta King	DK 4667 (RR)	41 ± 1	61	35	38	19	59	34
Morsoy	RT 4806N (RR)	41 ± 1	55	39	31	24	67	31
Progeny	4949 RR	41 ± 1	55	40	39	20	62	30
USG	74A76 (RR)	41 ± 1	53	40	31	23	66	33
Delta Grow	4840 RR	41 ± 1	57	34	35	22	62	33
Dyna-Gro	37F46 (RR)	40 ± 1	60	35	31	21	63	32
Delta Grow	4660 RR	40 ± 1	58	37	33	18	64	33
Pioneer	94M80 (RR)	40 ± 1	48	38	32	22	65	33
Delta & Pine Land	DP 4724 RR	40 ± 1	52	37	32	18	66	32
Delta King	DK 4763 (RR)	39 ± 1	53	38	30	23	61	31
Delta King	DK 4967 (RR)	39 ± 1	51	34	32	20	60	36
<b>Average (bu/a)</b>		<b>43</b>	<b>56</b>	<b>40</b>	<b>35</b>	<b>22</b>	<b>67</b>	<b>36</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>5</b>	<b>9</b>	<b>6</b>
<b>C.V. (%)</b>		<b>10.3</b>	<b>7.1</b>	<b>10.4</b>	<b>12.6</b>	<b>13.9</b>	<b>9.2</b>	<b>10.9</b>

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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 six environments (n=12) in Tennessee for two years, 2006 - 2007.**

Brand	Variety ‡	Avg. Yield		Lodging	Height	Maturity	Shattering	Leaf	Seed	Protein	Oil
		± Std Err.	Moisture §					Retention	Quality		
		(n=12)	(n=12)	(n=7)	(n=12)	(n=12)	(n=6)	(n=2)	(n=6)	(n=6)	(n=6)
		bu/a	%	Score	in.	DAP	-----Score-----		%	%	
Morsoy	RT 4914N (RR)	47 ± 1	14.2	2.3	39	145	1.3	2.1	2.1	41.1	20.7
Asgrow	AG4903 (RR/STS)	47 ± 1	14.0	1.6	34	145	1.0	2.0	1.9	39.1	22.0
USG	74A91 (RR)	47 ± 1	13.7	1.5	35	146	1.1	2.8	2.1	39.2	21.5
Delta King	DK 4866 (RR/STS)	47 ± 1	13.1	1.5	34	142	1.0	1.5	2.2	38.7	21.3
Dyna-Gro	37P49 (RR)	47 ± 1	13.9	1.4	35	145	1.0	2.4	2.3	39.3	21.7
Morsoy	RTS 4955N (RR/STS)	46 ± 1	13.7	1.8	37	141	1.1	1.9	2.0	39.8	22.4
Progeny	4906 RR	46 ± 1	13.8	1.6	35	145	1.1	2.6	2.1	39.1	21.9
Schillinger Seed	495 RC	45 ± 1	13.7	2.1	38	144	1.3	2.0	2.2	40.8	20.9
Delta Grow	4970 RR	45 ± 1	13.9	2.1	37	144	1.3	2.1	2.3	39.6	21.2
USG	7495nRS	45 ± 1	14.2	1.8	36	144	1.1	2.0	2.1	39.9	22.3
Delta Grow	4960 RR	45 ± 1	14.9	2.0	37	146	1.2	1.8	1.7	41.0	20.9
USG	74F96 (RR)	45 ± 1	14.2	1.6	35	145	1.2	2.1	2.1	39.0	21.2
Croplan	RC 4955 (RR)	45 ± 1	15.3	1.8	39	146	1.2	3.1	2.4	38.3	22.4
Morsoy	RTS 4706N (RR/STS)	44 ± 1	13.9	1.1	31	143	1.0	1.6	2.1	37.6	22.6
Delta King	DK 4968 (RR)	44 ± 1	14.0	1.6	36	141	1.2	1.9	1.7	39.4	21.1
Midwest Premium Genetics	MPV 4905nRR	44 ± 1	13.2	1.9	35	140	1.2	1.8	2.5	39.4	21.3
FFR	4886 RR/STS	44 ± 1	13.9	2.0	36	144	1.1	1.9	2.1	40.2	22.1
TN Exp	TN03-012 RR	44 ± 1	14.1	1.8	32	144	1.3	2.2	1.8	37.3	22.3
Delta Grow	4770 RR	44 ± 1	13.6	2.0	37	140	1.2	1.5	2.0	38.9	21.5
Armor	49-V6 (RR)	43 ± 1	13.9	1.5	36	143	1.2	2.0	1.7	40.5	21.5
Dyna-Gro	36Y48 (RR / STS)	43 ± 1	13.8	1.9	37	144	1.1	2.0	2.1	40.0	22.2
Dyna-Gro	35Z49 (RR)	43 ± 1	14.3	1.8	37	144	1.1	2.2	2.0	39.1	21.6
Terral	TV 47R17 (RR)	43 ± 1	15.6	2.2	41	143	1.1	2.0	2.4	39.1	21.9
Hornbeck	HBK R 4924 (RR)	43 ± 1	14.0	2.0	39	144	1.2	2.3	2.0	39.0	21.7
Progeny	4706 RR	43 ± 1	13.5	1.7	36	139	1.1	1.5	1.9	39.3	21.5
Delta & Pine Land	DP 4919 RR/S	43 ± 1	13.4	1.8	39	144	1.2	2.1	2.1	39.6	21.5
Terral	TV 49R17 (RR)	42 ± 1	13.8	1.8	42	144	1.2	1.9	2.1	41.4	20.6
Dyna-Gro	32R46 (RR/STS)	42 ± 1	13.9	1.2	30	142	1.1	1.5	1.9	37.4	22.6
Vigoro	V49N6RR	42 ± 1	13.9	2.0	37	143	1.3	1.8	2.2	40.4	21.0
USG	7494nRR	42 ± 1	13.6	1.8	35	142	1.1	1.9	2.4	39.0	21.5
Asgrow	AG4703 (RR)	41 ± 1	14.3	1.4	31	140	1.1	2.1	2.0	39.9	21.1
Delta King	DK 4667 (RR)	41 ± 1	13.5	2.4	38	138	1.1	1.3	2.3	38.4	21.4
Morsoy	RT 4806N (RR)	41 ± 1	13.3	1.9	37	139	1.1	1.6	1.9	39.1	21.5
Progeny	4949 RR	41 ± 1	13.6	1.7	37	146	1.3	2.3	2.2	39.8	21.8
USG	74A76 (RR)	41 ± 1	13.7	1.6	36	139	1.2	1.6	1.9	39.0	21.5
Delta Grow	4840 RR	41 ± 1	13.5	2.0	34	142	1.2	1.8	2.3	38.6	21.6
Dyna-Gro	37F46 (RR)	40 ± 1	13.1	2.0	37	139	1.2	1.6	2.2	38.3	21.4

**Table 23 (continued)**

Brand	Variety ‡	Avg. Yield	Moisture §	Lodging	Height	Maturity	Shattering	Leaf Retention	Seed Quality	Protein	Oil
		± Std Err. (n=12)	(n=12)	(n=7)	(n=12)	(n=12)	(n=6)	(n=2)	(n=6)	(n=6)	(n=6)
		bu/a	%	Score	in.	DAP	-----Score-----		%	%	
Delta Grow	4660 RR	40 ± 1	13.7	2.0	38	138	1.2	1.3	2.3	38.2	21.4
Pioneer	94M80 (RR)	40 ± 1	12.9	1.7	39	142	1.3	1.8	2.1	40.2	21.5
Delta & Pine Land	DP 4724 RR	40 ± 1	13.2	1.6	34	140	1.1	1.5	1.8	40.7	21.6
Delta King	DK 4763 (RR)	39 ± 1	13.5	1.7	34	140	1.1	1.7	2.0	40.7	21.3
Delta King	DK 4967 (RR)	39 ± 1	13.5	1.6	34	140	1.2	1.5	1.9	41.0	21.5
<b>Average</b>		<b>43</b>	<b>13.8</b>	<b>1.8</b>	<b>36</b>	<b>143</b>	<b>1.1</b>	<b>1.9</b>	<b>2.1</b>	<b>39.5</b>	<b>21.6</b>

† All yields are adjusted to 13% moisture.

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

§ Average moisture at harvest

Maturity = days after planting (DAP).

Protein & Oil on dry weight basis.

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.

**Table 24. Mean yields † of 22 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2005 - 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=18)	Knoxville		Spring Hill		Milan	
			Knoxville	Crossville	Non-Irr.	Springfield	Irr.	Non-Irr.
-----bu/a-----								
Asgrow	AG4903 (RR/STS)	49 ± 1	58	48	41	28	75	44
Morsoy	RTS 4955N (RR/STS)	48 ± 1	60	46	43	24	71	47
Delta King	DK 4866 (RR/STS)	48 ± 1	59	50	39	21	74	46
Dyna-Gro	36Y48 (RR / STS)	47 ± 1	59	44	43	22	70	45
Morsoy	RT 4914N (RR)	47 ± 1	62	45	42	24	65	44
Schillinger Seed	495 RC	47 ± 1	60	44	45	27	64	41
Delta Grow	4960 RR	46 ± 1	60	42	41	26	62	45
Midwest Premium Genetics	MPV 4905nRR	46 ± 1	58	42	42	24	67	42
Hornbeck	HBK R 4924 (RR)	45 ± 1	61	37	42	25	66	42
Delta Grow	4970 RR	45 ± 1	60	42	42	24	60	43
Dyna-Gro	35Z49 (RR)	45 ± 1	58	37	43	25	68	40
Asgrow	AG4703 (RR)	44 ± 1	54	48	32	21	69	42
Vigoro	V49N6RR	44 ± 1	55	43	43	26	58	37
USG	7494nRR	44 ± 1	54	38	37	24	67	42
Delta King	DK 4667 (RR)	43 ± 1	60	35	39	20	65	41
Pioneer	94M80 (RR)	43 ± 1	50	41	37	22	66	40
Delta Grow	4840 RR	42 ± 1	56	36	38	23	62	39
Progeny	4949 RR	42 ± 1	55	42	43	21	60	33
Delta & Pine Land	DP 4724 RR	42 ± 1	54	41	36	19	62	39
Delta Grow	4660 RR	42 ± 1	57	37	34	20	62	40
Delta King	DK 4967 (RR)	41 ± 1	50	38	38	21	60	42
Delta King	DK 4763 (RR)	40 ± 1	55	39	32	22	58	35
<b>Average (bu/a)</b>		<b>45</b>	<b>57</b>	<b>42</b>	<b>40</b>	<b>23</b>	<b>65</b>	<b>41</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>6</b>	<b>6</b>	<b>8</b>	<b>5</b>	<b>11</b>	<b>7</b>
<b>C.V. (%)</b>		<b>11.3</b>	<b>7.2</b>	<b>9.7</b>	<b>13.4</b>	<b>15.9</b>	<b>11.1</b>	<b>11.9</b>

† All yields are adjusted to 13% moisture.

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



**Table 25. Mean yields † and agronomic characteristics of 22 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2005 - 2007.**

Brand	Variety ‡	Avg. Yield	Moisture § (n=18)	Lodging (n=12)	Height (n=18)	Maturity (n=18)	Shattering (n=10)	Leaf	Seed	Protein (n=10)	Oil (n=10)
		± Std Err. (n=18)						Retention (n=2)	Quality (n=10)		
		bu/a	%	Score	in.	DAP	-----Score-----	%	%		
Asgrow	AG4903 (RR/STS)	49 ± 1	14.3	1.7	35	141	1.0	2.0	2.0	39.1	22.3
Morsoy	RTS 4955N (RR/STS)	48 ± 1	14.0	2.0	38	139	1.0	1.9	2.2	40.2	22.4
Delta King	DK 4866 (RR/STS)	48 ± 1	13.2	1.8	35	138	1.0	1.5	2.2	39.0	21.5
Dyna-Gro	36Y48 (RR / STS)	47 ± 1	14.4	2.0	38	142	1.0	2.0	2.3	40.3	22.3
Morsoy	RT 4914N (RR)	47 ± 1	14.3	2.5	39	142	1.2	2.1	2.3	41.1	21.0
Schillinger Seed	495 RC	47 ± 1	14.2	2.4	39	142	1.2	2.0	2.4	41.1	21.0
Delta Grow	4960 RR	46 ± 1	15.3	2.1	37	144	1.1	1.8	2.1	41.7	20.9
Midwest Premium Genetics	MPV 4905nRR	46 ± 1	13.5	2.3	36	137	1.1	1.8	2.5	39.6	21.6
Hornbeck	HBK R 4924 (RR)	45 ± 1	14.6	2.0	41	141	1.1	2.3	2.2	39.2	22.1
Delta Grow	4970 RR	45 ± 1	14.4	2.3	38	142	1.2	2.1	2.5	40.4	21.1
Dyna-Gro	35Z49 (RR)	45 ± 1	14.9	1.8	39	142	1.0	2.2	2.2	39.4	21.9
Asgrow	AG4703 (RR)	44 ± 1	14.5	1.6	32	136	1.0	2.1	2.0	39.9	21.4
Vigoro	V49N6RR	44 ± 1	14.2	2.2	39	141	1.2	1.8	2.4	40.6	21.1
USG	7494nRR	44 ± 1	13.8	2.2	35	138	1.1	1.9	2.5	39.5	21.6
Delta King	DK 4667 (RR)	43 ± 1	14.0	2.4	39	136	1.1	1.3	2.2	38.7	21.7
Pioneer	94M80 (RR)	43 ± 1	13.3	1.9	39	138	1.2	1.8	2.1	40.5	21.6
Delta Grow	4840 RR	42 ± 1	13.6	2.4	35	138	1.1	1.8	2.3	39.1	21.7
Progeny	4949 RR	42 ± 1	14.2	2.1	38	144	1.2	2.3	2.4	40.1	22.0
Delta & Pine Land	DP 4724 RR	42 ± 1	13.5	1.8	35	137	1.1	1.5	2.1	41.1	21.6
Delta Grow	4660 RR	42 ± 1	13.8	2.3	38	135	1.1	1.3	2.4	38.6	21.7
Delta King	DK 4967 (RR)	41 ± 1	13.9	1.8	35	137	1.1	1.5	2.0	41.2	21.6
Delta King	DK 4763 (RR)	40 ± 1	13.9	1.9	34	137	1.1	1.7	2.3	41.2	21.2
<b>Average</b>		<b>45</b>	<b>14.1</b>	<b>2.1</b>	<b>37</b>	<b>139</b>	<b>1.1</b>	<b>1.8</b>	<b>2.2</b>	<b>40.1</b>	<b>21.6</b>

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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 11 County Standard Tests in Tennessee and Kentucky during 2007.**

MS	Brand/Variety	Avg. Yield bu/a	Moisture ‡ %	(KY)			(KY)							
				5/29 §	4/30	5/9	Franklin <i>fi</i>	Fulton <i>fi</i>	Gibson	Haywood	Lake	Lauderdale <i>fi</i>	Obion	Weakley
A	Armor 47-F8	44.2	12.3	38.2	24.1	58.4	71.1	57.2	46.2	13.8	24.1	41.0	60.6	51.4
AB	*Dyna-Gro 36Y48 (RR/STS)	44.0	12.9	49.8	31.8	60.5	73.0	58.8	43.8	12.1	21.3	36.8	60.4	36.1
AB	AgVenture 47G7	43.7	12.2	53.9	19.9	59.0	77.5	60.5	41.8	11.2	30.1	40.5	58.0	28.4
AB	*FFR 4886 (RR/STS)	43.6	13.1	34.9	37.4	56.0	73.0	57.5	46.4	12.9	22.7	39.4	60.4	39.2
AB	Croplan RC4955	43.6	13.4	49.6	35.3	52.8	59.9	51.2	48.3	16.3	21.7	42.4	64.9	36.9
ABC	*Vigoro V49N6RR	43.5	12.9	40.6	42.4	53.5	78.0	36.1	46.4	20.3	23.6	45.4	48.1	44.2
ABCD	TN03-012	42.7	14.1	42.3	33.0	50.6	60.2	42.9	48.6	25.1	25.4	43.0	54.7	44.2
ABCD	Asgrow AG4605 (RR/STS)	42.7	12.4	42.3	28.9	58.9	61.7	52.5	47.6	11.0	29.8	49.9	55.1	31.4
ABCD	*Schillinger 495RC	42.3	12.8	35.2	36.2	55.9	69.9	41.3	49.0	17.6	24.3	30.0	53.6	53.0
ABCD	Stine 4782-4 RR/STS	42.1	12.3	46.2	27.5	63.3	57.0	36.3	39.4	13.3	30.0	36.0	70.3	43.6
ABCD	Asgrow AG4903 (RR/STS)	42.0	12.3	32.8	31.0	53.4	60.1	53.0	50.4	14.0	22.8	48.3	59.7	36.9
ABCD	USG 7495nRS	41.8	12.8	44.8	26.7	56.0	62.7	35.6	48.4	17.1	20.4	42.9	62.7	42.9
ABCD	Armor 49-V6	41.7	12.3	40.4	25.0	52.4	59.4	55.4	50.0	11.1	22.5	45.7	53.8	42.5
ABCD	USG 74A91	41.6	12.3	40.7	25.1	52.9	73.5	38.8	47.0	16.5	19.3	47.6	57.3	38.6
ABCD	Crow's C4815R	41.4	12.4	43.5	30.0	55.2	57.3	52.9	37.8	10.3	27.0	33.6	58.2	49.7
ABCD	Morsoy RT4914N	41.3	13.4	30.1	46.5	49.6	71.0	52.9	46.9	14.1	25.0	30.5	52.0	35.7
ABCD	NK Brand S49-Q9	40.8	13.1	38.5	39.1	50.7	58.4	52.4	36.4	12.7	22.1	43.9	59.3	34.9
ABCD	Dairyland 8474	40.3	12.2	35.3	37.1	55.1	52.9	56.5	42.3	11.0	23.9	36.8	59.8	32.6
ABCD	Morsoy RT4706N (RR/STS)	40.3	12.1	40.3	23.6	63.5	59.6	57.6	37.0	13.4	24.0	28.8	66.4	28.8
ABCD	Progeny 4906	40.2	12.2	33.1	34.6	51.8	71.6	41.4	42.3	17.4	22.5	35.8	55.7	35.8
ABCD	*Delta King DK4968	40.1	12.4	42.8	41.7	53.3	64.9	53.3	42.0	7.7	21.6	26.8	50.8	36.6
ABCD	Asgrow DKB46-51	40.0	12.4	43.7	31.5	54.8	67.0	47.6	34.0	11.1	30.8	36.8	50.7	32.0
ABCD	Dyna-Gro 32R46 (RR/STS)	39.9	12.0	39.4	19.5	56.8	64.9	57.6	35.6	11.3	21.6	36.7	62.3	33.6
ABCD	Asgrow AG4703	39.6	12.3	44.1	27.7	49.1	55.8	52.4	44.9	9.9	24.5	44.2	54.0	29.6
ABCD	Delta King DK4866 (RR/STS)	39.3	11.8	47.2	30.2	52.0	61.2	52.8	37.7	10.9	26.2	23.1	56.8	33.7
BCD	Deltapine DP4919 RR/S	39.1	10.7	43.1	35.1	49.3	65.8	50.0	36.7	8.9	22.5	28.5	61.0	29.5
CD	Trisler T4760RR (CN)	38.5	11.6	45.0	41.9	58.3	51.6	31.1	41.8	11.6	27.1	33.3	54.3	27.8
D	Pioneer 94M80	37.7	11.1	33.4	33.6	53.4	68.4	37.2	33.6	10.9	21.4	40.0	50.8	32.2
<b>Average</b>		<b>41.36</b>	<b>12.4</b>	<b>41.1</b>	<b>32.0</b>	<b>54.9</b>	<b>64.6</b>	<b>49.0</b>	<b>42.9</b>	<b>13.3</b>	<b>24.2</b>	<b>38.1</b>	<b>57.6</b>	<b>37.2</b>

† 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 2007.**

MS	Brand/Variety	CST Avg.		----- Research and Education Center at Milan -----						
		Yield (n=11)	Moisture ‡	SDS	Frogeye	Stem Canker	Anthracnose	Sprayed ¶ Yield	Unsprayed Yield	SCN Race 2
		bu/a	%	2004 / 06 / 07	2005 / 06 / 07	2007	2006 / 07	bu/a	bu/a	2007
A	Armor 47-F8	44.2	12.3	/ / 0.0	/ / 0.0	0.0	/ 5.0	56.4	53.4	S
AB	*Dyna-Gro 36Y48 (RR/STS)	44.0	12.9	/ 0.7 / 0.0	/ 5.3 / 7.0	0.0	6.3 / 5.0	54.9	48.3	S
AB	AgVenture 47G7	43.7	12.2	/ / 0.0	/ / 0.0	0.0	/ 7.0	55.2	48.1	S
AB	*FFR 4886 (RR/STS)	43.6	13.1	/ 0.3 / 0.0	/ 3.3 / 6.0	0.0	6.3 / 5.0	51.1	48.4	S
AB	Croplan RC4955	43.6	13.4	/ 0.3 / 0.0	/ 8.3 / 7.0	0.0	6.3 / 4.0	52.4	42.7	MS
ABC	*Vigoro V49N6RR	43.5	12.9	/ 2.0 / 3.0	/ 0.0 / 0.0	0.0	7.0 / 5.0	49.0	47.1	S
ABCD	TN03-12	42.7	14.1	/ / 0.0	/ / 1.0	0.0	/ 4.0	55.2	47.1	S
ABCD	Asgrow AG4605 (RR/STS)	42.7	12.4	/ / 0.0	/ / 4.0	0.0	/ 7.0	50.2	42.5	S
ABCD	*Schillinger 495RC	42.3	12.8	/ 1.0 / 4.0	/ 0.0 / 0.0	0.0	6.0 / 5.0	49.5	43.9	S
ABCD	Stine 4782-4 RR/STS	42.1	12.3	/ / 0.0	/ / 0.0	0.0	/ 5.0	62.8	55.9	S
ABCD	Asgrow AG4903 (RR/STS)	42.0	12.3	0.3 / 0.0 / 0.0	7.0 / 6.0 / 6.0	0.0	5.3 / 4.0	54.6	44.9	S
ABCD	USG 7495nRS	41.8	12.8	/ / 0.0	/ / 8.0	0.0	/ 4.0	56.1	49.4	S
ABCD	Armor 49-V6	41.7	12.3	/ / 1.0	/ / 6.0	0.0	/ 4.0	56.6	41.6	S
ABCD	USG 74A91	41.6	12.3	/ / 1.0	/ / 5.0	0.0	/ 4.0	52.2	48.6	S
ABCD	Crow's C4815R	41.4	12.4	/ / 0.0	/ / 3.0	0.0	/ 4.0	50.3	42.0	S
ABCD	Morsoy RT4914N	41.3	13.4	/ / 3.0	/ / 0.0	0.0	/ 4.0	51.0	54.3	S
ABCD	NK Brand S49-Q9	40.8	13.1	0.7 / 0.7 / 1.0	4.0 / 3.3 / 3.0	0.0	6.7 / 4.0	54.2	41.3	S
ABCD	Dairyland 8474	40.3	12.2	/ / 1.0	/ / 4.0	0.0	/ 5.0	54.8	46.6	S
ABCD	Morsoy RT4706N (RR/STS)	40.3	12.1	/ / 0.0	/ / 0.0	0.0	/ 5.0	56.0	46.3	S
ABCD	Progeny 4906	40.2	12.2	/ / 0.0	/ / 6.0	0.0	/ 4.0	61.2	51.2	---
ABCD	*Delta King DK4968	40.1	12.4	/ 2.7 / 3.0	/ 0.0 / 0.0	0.0	7.7 / 6.0	47.9	44.3	S
ABCD	Asgrow DKB46-51	40.0	12.4	/ / 0.0	/ / 4.0	0.0	/ 5.0	53.2	48.3	S
ABCD	Dyna-Gro 32R46 (RR/STS)	39.9	12.0	/ / 0.0	/ / 0.0	0.0	/ 6.0	64.2	49.8	S
ABCD	Asgrow AG4703	39.6	12.3	/ 0.3 / 0.0	8.0 / 5.7 / 8.0	0.0	6.3 / 4.0	54.2	42.2	S
ABCD	Delta King DK4866 (RR/STS)	39.3	11.8	0.0 / 0.0 / 0.0	10.0 / 8.0 / 8.0	0.0	7.3 / 6.0	55.5	47.4	S
BCD	Deltapine DP4919 RR/S	39.1	10.7	/ 0.3 / 0.0	/ 4.0 / 6.0	0.0	7.0 / 5.0	51.8	47.1	S
CD	Trisler T4760RR (CN)	38.5	11.6	/ / 0.0	/ / 0.0	0.0	/ 6.0	62.3	54.0	S
D	Pioneer 94M80	37.7	11.1	/ 0.0 / 0.0	3.0 / 1.0 / 2.0	0.0	6.0 / 5.0	46.7	39.6	S
<b>Average (bu/a)</b>		<b>41.4</b>	<b>12.4</b>					<b>54.3</b>	<b>47.0</b>	

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Disease ratings; S= susceptible to Race 2 (HG type 1.2.5.7), MS = moderately susceptible.

¶ Sprayed plots at Milan treated with Headline @ 6 oz./Acre + 0.37% Induce at 20 gpa at R3 growth stage.

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

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 2006, 2005, and/or 2004.

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=11) and Research and Education Centers (n=7) in Tennessee in 2007.**

Brand	Variety	County Standard Trials		Research and Education Center Trials	
		Avg. Yield	Moisture	Avg. Yield	Moisture
		bu/a	%	bu/a	%
Armor	47-F8 (RR)	44	12.3	29	13.2
Dyna-Gro	36Y48 (RR / STS)	44	12.9	29	13.6
FFR	4886 RR/STS	44	13.1	30	13.3
Croplan	RC 4955 (RR)	44	13.4	33	14.8
Vigoro	V49N6RR	44	12.9	29	13.0
TN Exp	TN03-012 RR	43	14.1	34	13.0
Asgrow	AG4605 (RR/STS)	43	12.4	28	13.6
Schillinger Seed	495 RC	42	12.8	33	13.1
Stine	4782-4 (RR/STS)	42	12.3	33	13.0
Asgrow	AG4903 (RR/STS)	42	12.3	34	13.4
USG	7495nRS	42	12.8	32	13.6
Armor	49-V6 (RR)	42	12.3	30	13.1
USG	74A91 (RR)	42	12.3	36	13.5
Crow's	4815 R	41	12.4	30	12.6
Morsoy	RT 4914N (RR)	41	13.4	33	13.5
Dairyland	8474 RR	40	12.2	30	12.9
Morsoy	RTS 4706N (RR/STS)	40	12.1	31	13.1
Progeny	4906 RR	40	12.2	33	13.7
Delta King	DK 4968 (RR)	40	12.4	33	13.2
Dyna-Gro	32R46 (RR/STS)	40	12.0	30	13.0
Asgrow	AG4703 (RR)	40	12.3	27	13.8
Delta King	DK 4866 (RR/STS)	39	11.8	34	12.8
Delta & Pine Land	DP 4919 RR/S	39	10.7	30	12.9
Pioneer	94M80 (RR)	38	11.1	27	12.6
<b>Average (bu/a)</b>		<b>41</b>	<b>12.4</b>	<b>31</b>	<b>13.3</b>

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

**Table 29. Mean yields † of 56 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in five environments in Tennessee during 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=5)	Knoxville	Springfield	Milan		Ames
					Irr.	Non-Irr.	
Delta King	DK 52K6 (RR)	44 ± 1	48	17	76	44	36
Schillinger Seed	557 RC	42 ± 2	48	12	61	48	40
Delta Grow	5450 RR	42 ± 1	43	16	64	40	47
Delta King	DK 5366 (RR)	42 ± 1	45	15	57	49	40
Delta King	DK 5567 (RR)	40 ± 1	51	14	62	42	33
FFR	5663 RR	40 ± 1	45	15	64	43	36
Armor	54-O3 (RR)	39 ± 2	43	17	66	38	33
Dyna-Gro	33P54 (RR)	38 ± 1	38	14	65	34	40
TN Exp	TN04-593 RR	38 ± 1	40	15	55	46	34
USG	7553nRS	38 ± 1	40	15	59	41	35
Midwest Premium Genetics	MPV 5505nRR (STS)	38 ± 2	39	10	67	36	36
Asgrow	AG5501 (RR)	38 ± 1	41	13	59	39	36
Asgrow	AG5301 (RR)	37 ± 1	39	15	62	38	32
Dyna-Gro	33X55 (RR)	37 ± 2	32	13	60	42	38
Hornbeck	HBK R 5525 (RR)	37 ± 1	39	15	57	39	34
N.K. Brand	S 52-F2 (RR)	37 ± 1	44	13	51	41	35
Dyna-Gro	33B52 (RR)	36 ± 1	38	13	54	39	37
Progeny	5507 RR	36 ± 1	42	9	59	37	33
USG	75J32 (RR)	36 ± 1	37	10	60	38	34
FFR	5116 RR/STS	36 ± 1	40	12	62	34	31
Hornbeck	HBK RS 5227 (RR)	36 ± 1	39	12	62	37	28
Delta King	DK 5161 (RR)	35 ± 1	38	15	49	42	32
Pioneer	95M30 (RR)	35 ± 1	40	15	54	36	32
USG	75M16 (RR)	35 ± 2	37	17	53	39	30
Progeny	5407 RR	35 ± 1	36	17	62	32	29
Midwest Premium Genetics	MPV 5407nRR	35 ± 1	36	14	70	30	27
KS	KS 5507RR	35 ± 1	54	14	45	29	33
Croplan	RC 5007 (RR/STS)	35 ± 2	42	14	55	36	28
Delta King	DK 5368 (RR)	35 ± 1	42	17	40	38	36
Dyna-Gro	32A53 (RR)	35 ± 1	43	12	51	34	33
Midwest Premium Genetics	MPV 5308nRR	34 ± 1	47	14	57	31	23
Delta Grow	5300 RR	34 ± 1	41	13	53	35	29
Dyna-Gro	31R54 (RR/STS)	34 ± 1	39	14	48	31	38
Dairyland	8512 RR	34 ± 1	32	17	62	26	31
Delta King	DK XTJ 851 (RR)	33 ± 1	39	15	49	33	31
Hornbeck	HBK R 5226 (RR)	33 ± 1	39	18	41	34	35
USG	75J47 (RR)	33 ± 2	35	13	45	31	40

**Table 29 (continued)**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=5)	Knoxville	Springfield	Milan		Ames
					Irr.	Non-Irr.	
					-----bu/a-----		
Armor	52-U2 (RR)	33 ± 1	32	17	56	32	27
Delta Grow	5470 RR	33 ± 1	32	15	58	30	29
Vigoro	V51N7RS	33 ± 1	34	16	50	37	26
Midwest Premium Genetics	MPV 5408nRR	33 ± 1	42	13	41	32	35
Delta & Pine Land	DP 5115 RR/S	32 ± 2	34	11	59	29	28
Delta & Pine Land	DP 5335 RR/S	32 ± 1	34	13	56	30	29
Southern Cross	Damascus (RR/STS)	32 ± 2	37	6	58	32	26
Progeny	5307 RR	31 ± 1	31	11	63	27	26
USG	7515nRS	31 ± 1	37	6	62	28	23
Progeny	5115 RR	31 ± 1	36	11	48	30	29
Delta King	DK 5068 (RR)	31 ± 1	37	10	50	30	27
Delta & Pine Land	DP 5414 RR	30 ± 2	32	14	54	28	23
Delta King	DK 5066 (RR)	30 ± 1	33	8	60	26	24
Delta Grow	5160 RR/STS	29 ± 2	34	9	54	27	22
Progeny	5207 RR	29 ± 1	34	7	54	24	24
Dairyland	8509 RR	29 ± 1	33	12	47	28	23
Dyna-Gro	39F51 (RR)	28 ± 1	24	10	54	24	26
Delta Grow	5270 RR	28 ± 2	30	9	49	22	27
Progeny	5107 RR	27 ± 1	30	8	47	26	26
<b>Average (bu/a)</b>		<b>35</b>	<b>38</b>	<b>13</b>	<b>56</b>	<b>34</b>	<b>31</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>4</b>	<b>9</b>	<b>5</b>	<b>14</b>	<b>6</b>	<b>7</b>
<b>C.V. (%)</b>		<b>14.7</b>	<b>12.1</b>	<b>20.5</b>	<b>14.8</b>	<b>10.4</b>	<b>12.8</b>

† All yields are adjusted to 13% moisture.

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

**Table 30. Mean yields † and agronomic characteristics of 56 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in five environments in Tennessee during 2007.**

Brand	Variety †	Avg. Yield	Moisture § (n=5)	Lodging (n=2)	Height (n=4)	Maturity (n=3)	Shattering (n=2)	Leaf	Seed	Protein (n=2)	Oil (n=2)
		± Std Err. (n=5)						Retention (n=1)	Quality (n=2)		
		bu/a	%	Score	in.	DAP	-----Score-----	%	%		
Delta King	DK 52K6 (RR)	44 ± 1	13.7	1.8	36	159	1.0	1.1	1.6	45.2	19.5
Schillinger Seed	557 RC	42 ± 2	14.0	1.7	36	159	1.0	1.2	2.0	44.2	19.5
Delta Grow	5450 RR	42 ± 1	16.7	1.9	35	165	1.0	1.3	2.3	43.0	19.9
Delta King	DK 5366 (RR)	42 ± 1	14.6	2.6	39	159	1.0	1.0	1.8	44.1	19.5
Delta King	DK 5567 (RR)	40 ± 1	14.2	2.1	33	159	1.0	1.2	1.8	43.6	20.0
FFR	5663 RR	40 ± 1	15.8	2.5	35	160	1.0	1.0	2.1	44.7	19.7
Armor	54-O3 (RR)	39 ± 2	14.2	1.8	34	155	1.0	1.1	2.1	42.7	20.5
Dyna-Gro	33P54 (RR)	38 ± 1	16.1	1.5	32	161	1.0	1.8	3.3	42.5	20.9
TN Exp	TN04-593 RR	38 ± 1	14.5	2.1	37	153	1.0	1.0	1.4	41.5	20.1
USG	7553nRS	38 ± 1	13.7	1.6	36	155	1.0	1.1	2.2	42.9	20.4
Midwest Premium Genetics	MPV 5505nRR (STS)	38 ± 2	14.1	1.6	36	152	1.0	1.1	2.1	42.9	20.5
Asgrow	AG5501 (RR)	38 ± 1	15.9	2.2	38	160	1.0	1.2	2.3	43.6	19.6
Asgrow	AG5301 (RR)	37 ± 1	14.4	1.7	35	153	1.0	1.3	1.9	42.9	20.4
Dyna-Gro	33X55 (RR)	37 ± 2	14.7	1.4	35	158	1.0	1.1	1.9	45.8	19.3
Hornbeck	HBK R 5525 (RR)	37 ± 1	14.9	1.8	38	157	1.0	1.0	2.6	44.4	19.5
N.K. Brand	S 52-F2 (RR)	37 ± 1	13.7	2.0	35	155	1.0	1.1	2.0	44.3	19.9
Dyna-Gro	33B52 (RR)	36 ± 1	14.2	2.4	35	155	1.0	1.0	2.1	43.1	20.2
Progeny	5507 RR	36 ± 1	16.0	1.8	32	162	1.0	1.5	3.2	42.7	20.5
USG	75J32 (RR)	36 ± 1	14.4	1.3	37	156	1.0	1.1	2.6	43.8	19.8
FFR	5116 RR/STS	36 ± 1	13.9	2.2	36	152	1.0	1.2	2.0	42.4	20.4
Hornbeck	HBK RS 5227 (RR)	36 ± 1	13.8	2.1	36	156	1.0	1.1	1.8	42.7	20.1
Delta King	DK 5161 (RR)	35 ± 1	14.2	2.3	33	152	1.0	1.2	2.1	42.6	20.7
Pioneer	95M30 (RR)	35 ± 1	13.5	1.8	38	154	1.0	1.1	1.9	43.4	19.7
USG	75M16 (RR)	35 ± 2	13.7	1.8	36	154	1.0	1.2	1.8	44.3	19.2
Progeny	5407 RR	35 ± 1	14.8	1.7	38	160	1.0	1.7	3.3	43.6	20.4
Midwest Premium Genetics	MPV 5407nRR	35 ± 1	15.1	1.9	40	161	1.0	2.2	3.3	43.8	20.2
KS	KS 5507RR	35 ± 1	15.6	2.6	34	158	1.0	1.1	2.5	41.5	19.6
Croplan	RC 5007 (RR/STS)	35 ± 2	14.6	2.2	36	154	1.0	1.1	2.0	43.1	19.8
Delta King	DK 5368 (RR)	35 ± 1	13.8	3.0	36	156	1.0	1.1	2.0	44.4	19.2
Dyna-Gro	32A53 (RR)	35 ± 1	14.3	2.1	35	153	1.0	1.0	2.2	45.0	19.2
Midwest Premium Genetics	MPV 5308nRR	34 ± 1	13.8	2.4	41	155	1.2	1.1	2.5	42.1	20.9
Delta Grow	5300 RR	34 ± 1	14.0	2.2	35	151	1.0	1.3	2.3	43.8	19.6
Dyna-Gro	31R54 (RR/STS)	34 ± 1	14.5	1.9	35	158	1.0	1.2	2.0	46.2	18.6
Dairyland	8512 RR	34 ± 1	15.0	1.5	39	162	1.0	1.7	3.5	43.5	20.3
Delta King	DK XTJ 851 (RR)	33 ± 1	14.4	2.5	36	151	1.0	1.2	2.0	43.0	20.4
Hornbeck	HBK R 5226 (RR)	33 ± 1	14.2	2.6	36	156	1.0	1.0	1.8	44.0	19.6
USG	75J47 (RR)	33 ± 2	16.3	1.7	32	158	1.0	1.4	2.9	41.8	21.2

**Table 30 (continued)**

Brand	Variety ‡	Avg. Yield	Moisture §	Lodging	Height	Maturity	Shattering	Leaf	Seed	Protein	Oil
		± Std Err. (n=5)						Retention	Quality		
		bu/a	%	Score	in.	DAP	-----Score-----	Score	%	%	
Armor	52-U2 (RR)	33 ± 1	14.4	1.7	34	151	1.0	1.3	2.1	43.1	20.4
Delta Grow	5470 RR	33 ± 1	15.2	1.5	36	163	1.0	1.8	3.4	43.7	20.5
Vigoro	V51N7RS	33 ± 1	14.1	2.3	38	155	1.1	1.2	1.8	42.3	20.6
Midwest Premium Genetics	MPV 5408nRR	33 ± 1	14.0	3.6	36	153	1.0	1.1	2.4	43.6	20.1
Delta & Pine Land	DP 5115 RR/S	32 ± 2	14.4	1.8	40	154	1.0	1.2	2.6	43.9	20.0
Delta & Pine Land	DP 5335 RR/S	32 ± 1	14.8	1.8	36	157	1.1	1.2	3.3	43.2	20.9
Southern Cross	Damascus (RR/STS)	32 ± 2	15.4	2.0	36	146	1.3	1.0	3.5	44.3	19.8
Progeny	5307 RR	31 ± 1	13.5	2.3	37	147	1.7	1.0	2.9	43.5	20.6
USG	7515nRS	31 ± 1	14.3	2.2	36	147	1.4	1.0	3.2	43.9	21.2
Progeny	5115 RR	31 ± 1	14.6	2.2	38	154	1.1	1.1	3.2	42.3	21.6
Delta King	DK 5068 (RR)	31 ± 1	14.4	2.0	34	151	1.1	1.1	3.8	44.2	20.5
Delta & Pine Land	DP 5414 RR	30 ± 2	15.6	2.0	40	157	1.0	1.0	2.4	46.1	18.0
Delta King	DK 5066 (RR)	30 ± 1	14.5	2.0	35	147	1.2	1.0	3.5	45.1	20.7
Delta Grow	5160 RR/STS	29 ± 2	14.3	2.3	35	146	1.2	1.0	3.4	44.5	20.9
Progeny	5207 RR	29 ± 1	15.0	2.0	36	147	1.5	1.0	3.4	41.4	22.1
Dairyland	8509 RR	29 ± 1	14.4	2.6	38	145	1.6	1.0	2.8	43.4	20.6
Dyna-Gro	39F51 (RR)	28 ± 1	15.4	1.8	35	145	1.9	1.0	3.3	41.3	22.3
Delta Grow	5270 RR	28 ± 2	14.1	1.8	35	144	1.7	1.0	3.0	42.0	22.0
Progeny	5107 RR	27 ± 1	14.0	2.4	35	149	1.2	1.3	2.7	43.8	20.6
<b>Average</b>		<b>35</b>	<b>14.6</b>	<b>2.0</b>	<b>36</b>	<b>154</b>	<b>1.1</b>	<b>1.2</b>	<b>2.5</b>	<b>43.5</b>	<b>20.2</b>

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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 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, 2006 - 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=10)			Milan		Ames
		Knoxville	Springfield	Irr.	Non-Irr.		
		-----bu/a-----					
Delta King	DK 52K6 (RR)	52 ± 1	61	36	71	52	40
Delta King	DK 5567 (RR)	50 ± 1	63	32	66	50	40
FFR	5663 RR	49 ± 1	63	31	63	52	38
Armor	54-O3 (RR)	48 ± 1	56	35	65	50	36
Delta King	DK 5366 (RR)	48 ± 1	58	31	57	53	41
USG	7553nRS	47 ± 1	56	30	66	50	33
Delta Grow	5300 RR	47 ± 1	56	32	63	48	35
FFR	5116 RR/STS	47 ± 1	54	32	65	48	33
Midwest Premium Genetics	MPV 5505nRR (STS)	46 ± 1	55	31	69	47	30
Hornbeck	HBK R 5525 (RR)	46 ± 1	57	29	60	48	36
Dyna-Gro	33X55 (RR)	46 ± 1	51	29	64	50	36
USG	75J32 (RR)	46 ± 1	53	30	66	48	32
Delta King	DK 5066 (RR)	45 ± 1	50	30	66	45	35
USG	75M16 (RR)	45 ± 1	54	32	62	50	27
USG	7515nRS	45 ± 1	54	29	68	45	29
Delta Grow	5160 RR/STS	45 ± 1	53	31	61	46	33
Midwest Premium Genetics	MPV 5407nRR	45 ± 1	52	31	70	42	29
Dairyland	8512 RR	44 ± 1	49	30	70	40	31
Progeny	5115 RR	44 ± 1	52	32	57	44	32
Vigoro	V51N7RS	43 ± 1	52	31	63	44	28
Delta King	DK 5161 (RR)	43 ± 1	52	29	50	50	34
Dyna-Gro	32A53 (RR)	43 ± 1	55	28	55	43	34
Delta & Pine Land	DP 5115 RR/S	43 ± 1	51	25	63	42	32
Delta Grow	5470 RR	43 ± 1	46	34	61	44	29
Armor	52-U2 (RR)	43 ± 1	50	32	59	42	29
Pioneer	95M30 (RR)	43 ± 1	55	25	53	47	33
Delta King	DK 5368 (RR)	42 ± 1	56	26	48	44	38
Hornbeck	HBK R 5226 (RR)	41 ± 1	56	28	49	39	34
Dyna-Gro	33B52 (RR)	41 ± 1	53	26	51	45	31
Delta & Pine Land	DP 5414 RR	41 ± 1	50	28	57	38	30
<b>Average (bu/a)</b>		<b>45</b>	<b>54</b>	<b>30</b>	<b>61</b>	<b>46</b>	<b>33</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>7</b>	<b>6</b>	<b>11</b>	<b>6</b>	<b>6</b>
<b>C.V. (%)</b>		<b>11.3</b>	<b>8.1</b>	<b>13.9</b>	<b>12.1</b>	<b>9.0</b>	<b>13.1</b>

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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, 2006 - 2007.**

Brand	Variety ‡	Avg. Yield		Moisture §	Lodging	Height	Maturity	Shattering	Leaf	Seed	Protein	Oil
		± Std Err.	(n=10)						(n=10)	(n=6)		
		bu/a	%	Score	in.	DAP	-----Score-----		%	%		
Delta King	DK 52K6 (RR)	52 ± 1	14.4	1.9	37	152	1.0	1.1	1.7	41.3	20.9	
Delta King	DK 5567 (RR)	50 ± 1	14.6	2.2	35	152	1.0	1.2	1.5	40.3	20.9	
FFR	5663 RR	49 ± 1	15.2	2.6	34	152	1.0	1.0	1.7	41.8	20.4	
Armor	54-O3 (RR)	48 ± 1	14.1	1.6	35	150	1.0	1.1	1.6	39.4	21.2	
Delta King	DK 5366 (RR)	48 ± 1	14.7	2.9	39	151	1.0	1.0	1.4	40.1	20.8	
USG	7553nRS	47 ± 1	13.8	1.4	37	149	1.0	1.1	1.6	38.9	21.5	
Delta Grow	5300 RR	47 ± 1	14.6	2.0	36	146	1.0	1.3	1.7	40.0	21.0	
FFR	5116 RR/STS	47 ± 1	14.1	1.9	37	145	1.0	1.2	1.6	39.5	21.2	
Midwest Premium Genetics	MPV 5505nRR (STS)	46 ± 1	13.9	1.4	36	147	1.0	1.1	1.6	39.0	21.6	
Hornbeck	HBK R 5525 (RR)	46 ± 1	14.9	2.1	38	151	1.0	1.0	1.9	39.6	21.0	
Dyna-Gro	33X55 (RR)	46 ± 1	15.0	1.7	37	151	1.0	1.1	2.1	41.1	20.9	
USG	75J32 (RR)	46 ± 1	14.4	1.6	38	148	1.0	1.1	1.9	39.9	21.0	
Delta King	DK 5066 (RR)	45 ± 1	14.6	2.0	38	141	1.1	1.0	2.4	40.9	22.0	
USG	75M16 (RR)	45 ± 1	14.2	2.0	37	147	1.1	1.2	1.4	38.9	21.2	
USG	7515nRS	45 ± 1	14.5	2.1	39	141	1.2	1.0	2.3	40.3	22.2	
Delta Grow	5160 RR/STS	45 ± 1	14.4	2.2	39	141	1.1	1.0	2.3	40.4	22.1	
Midwest Premium Genetics	MPV 5407nRR	45 ± 1	14.8	1.8	44	152	1.0	2.2	2.4	40.0	21.3	
Dairyland	8512 RR	44 ± 1	15.0	1.8	42	152	1.0	1.7	2.9	40.8	21.0	
Progeny	5115 RR	44 ± 1	14.6	1.9	42	145	1.1	1.1	2.4	38.6	22.4	
Vigoro	V51N7RS	43 ± 1	14.5	2.2	39	148	1.0	1.2	1.6	39.5	21.4	
Delta King	DK 5161 (RR)	43 ± 1	14.4	2.6	34	146	1.0	1.2	1.6	39.5	21.7	
Dyna-Gro	32A53 (RR)	43 ± 1	14.6	2.4	36	148	1.0	1.0	1.8	40.6	21.0	
Delta & Pine Land	DP 5115 RR/S	43 ± 1	15.0	1.8	43	147	1.0	1.2	2.3	40.3	21.5	
Delta Grow	5470 RR	43 ± 1	15.2	1.9	42	154	1.0	1.8	2.7	40.7	21.1	
Armor	52-U2 (RR)	43 ± 1	14.6	1.9	34	144	1.0	1.3	1.5	39.7	21.3	
Pioneer	95M30 (RR)	43 ± 1	13.8	2.2	38	148	1.0	1.1	1.7	39.8	20.7	
Delta King	DK 5368 (RR)	42 ± 1	14.5	3.0	36	149	1.0	1.1	1.7	40.6	20.7	
Hornbeck	HBK R 5226 (RR)	41 ± 1	14.5	2.6	35	149	1.0	1.0	1.6	40.1	21.0	
Dyna-Gro	33B52 (RR)	41 ± 1	14.4	2.5	35	148	1.0	1.0	1.4	38.8	21.8	
Delta & Pine Land	DP 5414 RR	41 ± 1	15.2	2.3	41	149	1.0	1.0	2.1	41.3	19.6	
<b>Average</b>		<b>45</b>	<b>14.5</b>	<b>2.1</b>	<b>38</b>	<b>148</b>	<b>1.0</b>	<b>1.2</b>	<b>1.9</b>	<b>40.1</b>	<b>21.2</b>	

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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 15 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in five environments (n=15) in Tennessee for three years, 2005 - 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err.		Milan			
		(n=15)	Knoxville	Springfield	Irr.	Non-Irr.	Ames
		-----bu/a-----					
Delta King	DK 5567 (RR)	52 ± 1	61	40	62	53	46
Armor	54-O3 (RR)	51 ± 1	55	41	63	55	42
Delta King	DK 5366 (RR)	51 ± 1	55	39	59	58	45
Dyna-Gro	33X55 (RR)	50 ± 1	53	38	62	58	41
Midwest Premium Genetics	MPV 5505nRR (STS)	50 ± 1	56	39	64	51	37
USG	7553nRS	50 ± 1	55	38	60	55	39
Hornbeck	HBK R 5525 (RR)	49 ± 1	57	35	59	55	38
Delta Grow	5160 RR/STS	48 ± 1	56	37	63	50	34
Delta King	DK 5066 (RR)	47 ± 1	54	36	60	50	36
USG	7515nRS	47 ± 1	56	37	62	51	30
Progeny	5115 RR	46 ± 1	53	41	52	49	34
Delta King	DK 5161 (RR)	45 ± 1	52	36	47	53	37
Dyna-Gro	33B52 (RR)	44 ± 1	53	33	51	49	35
Delta & Pine Land	DP 5414 RR	43 ± 1	48	37	54	44	35
Pioneer	95M30 (RR)	43 ± 1	52	32	48	46	35
<b>Average (bu/a)</b>		<b>48</b>	<b>54</b>	<b>37</b>	<b>58</b>	<b>52</b>	<b>38</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>4</b>	<b>6</b>	<b>6</b>	<b>12</b>	<b>7</b>	<b>8</b>
<b>C.V. (%)</b>		<b>12.1</b>	<b>7.6</b>	<b>11.8</b>	<b>14.1</b>	<b>9.7</b>	<b>15.8</b>

† All yields are adjusted to 13% moisture.

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

**Table 34. Mean yields † and agronomic characteristics of 15 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in five environments (n=15) in Tennessee for three years, 2005 - 2007.**

Brand	Variety ‡	Avg. Yield	Moisture § (n=15)	Lodging (n=9)	Height (n=12)	Maturity (n=11)	Shattering (n=7)	Leaf	Seed	Protein (n=10)	Oil (n=10)
		± Std Err. (n=15)						Retention (n=1)	Quality (n=10)		
		bu/a	%	Score	in.	DAP	-----Score-----	%	%		
Delta King	DK 5567 (RR)	52 ± 1	14.0	2.4	36	151	1.0	1.2	1.6	40.5	21.1
Armor	54-O3 (RR)	51 ± 1	13.6	1.8	36	150	1.0	1.1	1.8	39.6	21.4
Delta King	DK 5366 (RR)	51 ± 1	14.1	3.1	40	151	1.0	1.0	1.7	40.2	21.1
Dyna-Gro	33X55 (RR)	50 ± 1	14.3	2.1	39	150	1.0	1.1	2.0	41.4	21.1
Midwest Premium Genetics	MPV 5505nRR (STS)	50 ± 1	13.4	1.6	37	148	1.0	1.1	1.8	39.4	21.6
USG	7553nRS	50 ± 1	13.4	1.7	38	149	1.0	1.1	1.7	39.3	21.6
Hornbeck	HBK R 5525 (RR)	49 ± 1	14.3	2.3	39	151	1.0	1.0	2.1	39.8	21.4
Delta Grow	5160 RR/STS	48 ± 1	14.1	3.2	40	142	1.1	1.0	2.3	40.5	22.4
Delta King	DK 5066 (RR)	47 ± 1	14.1	2.4	39	141	1.0	1.0	2.4	41.0	22.1
USG	7515nRS	47 ± 1	14.0	2.5	41	141	1.1	1.0	2.4	40.5	22.3
Progeny	5115 RR	46 ± 1	14.2	2.3	43	144	1.0	1.1	2.4	39.0	22.5
Delta King	DK 5161 (RR)	45 ± 1	13.9	3.1	34	147	1.0	1.2	1.8	39.5	21.9
Dyna-Gro	33B52 (RR)	44 ± 1	13.9	2.9	36	148	1.0	1.0	1.6	39.0	22.2
Delta & Pine Land	DP 5414 RR	43 ± 1	14.6	2.5	42	149	1.0	1.0	1.9	42.1	19.9
Pioneer	95M30 (RR)	43 ± 1	13.5	2.6	38	147	1.0	1.1	1.8	40.1	20.9
<b>Average</b>		<b>48</b>	<b>14.0</b>	<b>2.4</b>	<b>39</b>	<b>147</b>	<b>1.0</b>	<b>1.1</b>	<b>2.0</b>	<b>40.1</b>	<b>21.6</b>

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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 nine County Standard Tests in Tennessee and Kentucky during 2007.**

MS	Brand/Variety	Avg. Yield bu/a	Moisture ‡ %	(KY)						Milan REC		
				Carlisle 5/26 §	Dyer 5/21	Gibson 6/18	Gibson 5/14	Haywood 5/17	Lauderdale 5/22	Gibson 5/15	Obion 6/7	Weakley 5/23
A	*USG Allen	41.3	16.0	63.1	53.0	37.0	41.1	32.2	29.7	33.5	35.6	46.1
AB	Delta King DK52K6	40.0	15.3	62.4	49.7	40.1	30.1	30.7	35.7	27.2	36.4	47.4
AB	***Delta King DK5567	39.9	16.0	67.4	50.5	34.1	37.8	34.5	33.6	27.4	34.2	39.9
ABC	**Armor 54-O3	39.2	13.9	61.6	52.5	31.0	25.7	28.1	34.6	27.1	30.8	61.8
ABC	Ag Genetics South AGS 568	38.2	15.8	56.5	41.0	44.3	34.7	33.9	35.0	28.5	35.2	34.9
ABC	Dyna-Gro 33X55	38.0	15.6	56.7	51.6	33.2	34.1	26.4	31.5	26.5	37.6	44.8
BCD	**Dyna-Gro 33B52	35.6	13.3	56.7	46.0	36.5	22.8	26.5	33.5	28.4	27.8	42.1
CD	Pioneer 95M30	35.4	15.1	51.4	47.2	31.1	23.2	31.7	29.8	19.2	31.7	53.3
CD	Schillinger 557RC	35.3	15.2	56.9	54.1	41.0	17.3	21.5	30.0	23.9	31.9	41.3
DE	Stine 5482-4 RR/STS	33.3	15.4	54.1	47.8	39.1	22.3	20.4	28.7	24.4	31.7	31.3
EF	Vigoro V51N7RS	30.3	14.3	45.3	42.7	30.8	16.9	20.8	29.5	24.6	30.1	32.4
EFG	FFR 5116 (RR/STS)	30.2	14.1	46.5	37.8	30.1	18.2	29.2	27.8	20.6	34.3	27.3
EFG	Armor 52-U2	29.9	14.0	50.9	44.2	27.2	18.8	16.4	29.4	18.4	30.2	33.6
EFG	Dairyland 8512	29.7	14.6	44.5	37.8	30.8	19.0	19.3	27.1	19.5	31.3	38.5
FG	Progeny 5115	28.5	13.5	50.6	37.8	33.6	18.8	14.5	22.6	15.7	28.3	34.2
FG	Deltapine DP5115 RR/S	26.8	13.5	48.2	27.5	30.0	15.0	17.9	25.9	18.3	30.3	28.5
FG	Delta King DK5066	25.9	14.1	53.6	27.5	27.4	15.1	10.1	19.2	12.1	34.5	33.4
G	Dairyland 8509	25.8	13.6	54.0	21.8	34.2	16.1	14.6	25.9	14.9	26.0	24.6
<b>Average</b>		<b>33.5</b>	<b>14.6</b>	<b>54.5</b>	<b>42.8</b>	<b>34.0</b>	<b>23.7</b>	<b>23.8</b>	<b>29.4</b>	<b>22.8</b>	<b>32.1</b>	<b>38.6</b>

† 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 2006, 2005, and/or 2004.

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 2007.**

MS	Brand/Variety	CST Avg. Yield (n=9) bu/a	Moisture ‡ %	----- Research and Education Center at Milan -----						Sprayed ¶ Yield bu/a	Unsprayed Yield bu/a	SCN Race 2 2007
				SDS	Frogeye	Stem Canker	Anthracnose	2004 / 06 / 07	2005 / 06 / 07			
A	*USG Allen	41.3	16.0	/ / 1.0	/ / 5.0	0.0	/ 3.0	58.9	49.4	S		
AB	Delta King DK52K6	40.0	15.3	/ / 0.0	/ / 0.0	0.0	/ 2.0	62.5	51.4	S		
AB	***Delta King DK5567	39.9	16.0	2.0 / 0.7 / 1.0	5.0 / 0.0 / 3.0	0.0	3.0 / 4.0	58.4	48.5	S		
ABC	**Armor 54-O3	39.2	13.9	/ 0.3 / 0.0	9.0 / 4.0 / 8.0	0.0	4.0 / 4.0	64.1	53.1	S		
ABC	Ag Genetics South AGS 568	38.2	15.8	/ / 1.0	/ / 0.0	0.0	/ 2.0	61.0	52.8	S		
ABC	Dyna-Gro 33X55	38.0	15.6	/ 0.3 / 0.0	/ 0.0 / 0.0	0.0	2.0 / 3.0	56.7	54.9	S		
BCD	**Dyna-Gro 33B52	35.6	13.3	5.0 / 1.0 / 1.0	1.0 / 0.0 / 1.0	0.0	5.0 / 5.0	45.4	40.9	S		
CD	Pioneer 95M30	35.4	15.1	/ 1.0 / 1.0	/ 0.7 / 0.0	0.0	5.3 / 5.0	49.0	43.7	S		
CD	Schillinger 557RC	35.3	15.2	/ / 1.0	/ / 5.0	0.0	/ 3.0	55.1	44.6	S		
DE	Stine 5482-4 RR/STS	33.3	15.4	/ / 2.0	/ / 1.0	0.0	/ 5.0	54.9	47.1	---		
EF	Vigoro V51N7RS	30.3	14.3	---	---	---	---	---	---	---		
EFG	FFR 5116 (RR/STS)	30.2	14.1	/ / 0.0	/ / 5.0	0.0	/ 6.0	48.7	41.7	S		
EFG	Armor 52-U2	29.9	14.0	/ / 1.0	/ / 0.0	0.0	/ 4.0	57.7	51.8	S		
EFG	Dairyland 8512	29.7	14.6	/ / 0.0	/ / 0.0	0.0	/ 3.0	53.4	40.6	S		
FG	Progeny 5115	28.5	13.5	/ 1.0 / 1.0	/ 8.7 / 9.0	0.0	3.0 / 2.0	47.3	41.3	MS		
FG	Deltapine DP5115 RR/S	26.8	13.5	/ 0.0 / 0.0	/ 6.0 / 8.0	0.0	3.7 / 2.0	50.7	40.7	S		
FG	Delta King DK5066	25.9	14.1	/ / 1.0	/ / 8.0	0.0	/ 3.0	44.4	36.1	S		
G	Dairyland 8509	25.8	13.6	/ 2.0 / 1.0	/ 0.7 / 1.0	0.0	4.7 / 5.0	40.5	35.8	S		
<b>Average (bu/a)</b>		<b>33.5</b>	<b>14.6</b>					<b>53.5</b>	<b>45.6</b>			

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

SCN ratings; S= susceptible to Race 2 (HG type 1.2.5.7), MS = moderately susceptible.

¶ Sprayed plots at Milan treated with Headline @ 6 oz./Acre + 0.37% Induce at 20 gpa at R3 growth stage.

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 2006, 2005, and/or 2004.

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

**Table 37. Overall average yields † and moistures ‡ of 16 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in County Standard Tests (n=9) and Research and Education Centers (n=5) in Tennessee in 2007.**

Brand	Variety	County Standard Trials		Research and Education Center Trials	
		Avg. Yield	Moisture	Avg. Yield	Moisture
		bu/a	%	bu/a	%
USG	Allen	41	16.0	38	13.1
Delta King	DK 52K6 (RR)	40	15.3	44	13.7
Delta King	DK 5567 (RR)	40	16.0	40	14.2
Armor	54-O3 (RR)	39	13.9	39	14.2
Dyna-Gro	33X55 (RR)	38	15.6	37	14.7
Dyna-Gro	33B52 (RR)	36	13.3	36	14.2
Pioneer	95M30 (RR)	35	15.1	35	13.5
Schillinger Seed	557 RC	35	15.2	42	14.0
Vigoro	V51N7RS	30	14.3	33	14.1
FFR	5116 RR/STS	30	14.1	36	13.9
Armor	52-U2 (RR)	30	14.0	33	14.4
Dairyland	8512 RR	30	14.6	34	15.0
Progeny	5115 RR	28	13.5	31	14.6
Delta & Pine Land	DP 5115 RR/S	27	13.5	32	14.4
Delta King	DK 5066 (RR)	26	14.1	30	14.5
Dairyland	8509 RR	26	13.6	29	14.4
<b>Average (bu/a)</b>		<b>33</b>	<b>14.5</b>	<b>36</b>	<b>14.2</b>

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

**Table 38. Mean yields † of 12 Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Knoxville	Spring Hill		Springfield	Milan		Ames
				Irr.	Non-Irr.		Irr.	Non-Irr.	
-----bu/a-----									
Dyna-Gro	33C59 (RR)	40 ± 1	35	42	44	12	60	44	40
Progeny	5706 RR	39 ± 1	50	40	36	12	61	38	37
USG	Allen	38 ± 1	46	46	36	11	55	42	33
Delta & Pine Land	DP 5915 RR	38 ± 1	47	36	37	13	61	40	32
Delta & Pine Land	DP 5634 RR	38 ± 1	48	40	27	12	64	43	30
Dyna-Gro	36N57 (RR)	37 ± 1	42	47	35	12	51	41	33
Dyna-Gro	3583 (RR)	35 ± 1	39	46	30	12	50	38	33
Progeny	5622 RR	34 ± 1	41	41	27	12	47	37	35
Delta & Pine Land	DP 5914 RR	33 ± 1	36	34	29	8	60	31	30
Dyna-Gro	34J56 (RR)	32 ± 1	30	33	31	12	51	36	33
Dyna-Gro	SX06856	31 ± 1	34	39	22	10	50	35	25
Delta & Pine Land	DP 5808 RR	30 ± 1	33	28	35	8	44	35	29
<b>Average (bu/a)</b>		<b>36</b>	<b>41</b>	<b>41</b>	<b>33</b>	<b>11</b>	<b>55</b>	<b>38</b>	<b>33</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>7</b>	<b>16</b>	<b>9</b>	<b>3</b>	<b>13</b>	<b>7</b>	<b>7</b>
<b>C.V. (%)</b>		<b>15.9</b>	<b>10.4</b>	<b>23.6</b>	<b>15.5</b>	<b>16.9</b>	<b>13.6</b>	<b>10.5</b>	<b>12.5</b>

† All yields are adjusted to 13% moisture.

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



**Table 39. Mean yields † and agronomic characteristics of 12 Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2007.**

Brand	Variety ‡	Avg. Yield	Moisture §	Lodging	Height	Maturity	Shattering	Leaf Retention	Seed Quality	Protein	Oil
		± Std Err. (n=7)	(n=7)	(n=2)	(n=6)	(n=5)	(n=4)	(n=1)	(n=2)	(n=2)	(n=2)
		bu/a	%	Score	in.	DAP	-----Score-----			%	%
Dyna-Gro	33C59 (RR)	40 ± 1	13.1	2.3	34	166	1.3	1.0	1.7	42.7	19.6
Progeny	5706 RR	39 ± 1	13.0	2.7	34	169	1.3	1.0	1.6	43.3	20.2
USG	Allen	38 ± 1	13.1	1.9	35	168	1.3	1.0	1.8	42.5	19.8
Delta & Pine Land	DP 5915 RR	38 ± 1	13.2	1.9	36	169	1.3	1.0	1.8	43.3	20.0
Delta & Pine Land	DP 5634 RR	38 ± 1	12.8	2.2	36	164	1.2	1.0	1.7	43.2	19.9
Dyna-Gro	36N57 (RR)	37 ± 1	12.9	2.8	32	164	1.4	1.0	2.3	44.8	19.9
Dyna-Gro	3583 (RR)	35 ± 1	13.0	2.3	35	168	1.3	1.1	1.9	41.9	20.6
Progeny	5622 RR	34 ± 1	13.2	1.8	35	166	1.4	1.2	1.8	42.1	20.5
Delta & Pine Land	DP 5914 RR	33 ± 1	12.9	1.2	34	168	1.3	1.2	2.0	44.7	19.4
Dyna-Gro	34J56 (RR)	32 ± 1	12.6	2.0	38	163	1.5	1.0	1.8	44.7	18.8
Dyna-Gro	SX06856	31 ± 1	13.0	3.0	32	165	1.4	1.0	2.2	42.0	21.0
Delta & Pine Land	DP 5808 RR	30 ± 1	12.7	3.8	38	164	1.3	1.0	1.8	42.9	19.2
<b>Average</b>		<b>36</b>	<b>13.0</b>	<b>2.3</b>	<b>35</b>	<b>166</b>	<b>1.3</b>	<b>1.0</b>	<b>1.9</b>	<b>43.2</b>	<b>19.9</b>

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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 40. Mean yields † of seven Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2006 - 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=14)	Spring Hill			Milan		Ames	
			Knoxville	Irr.	Non-Irr.	Springfield	Irr.		Non-Irr.
-----bu/a-----									
USG	Allen	46 ± 1	49	52	44	31	58	50	40
Delta & Pine Land	DP 5915 RR	45 ± 1	50	48	44	27	61	47	36
Delta & Pine Land	DP 5634 RR	44 ± 1	51	48	38	26	63	48	33
Dyna-Gro	36N57 (RR)	43 ± 1	45	54	41	28	52	49	34
Dyna-Gro	3583 (RR)	43 ± 1	45	51	40	30	50	47	35
Delta & Pine Land	DP 5914 RR	41 ± 1	40	47	40	29	55	45	32
Dyna-Gro	34J56 (RR)	39 ± 1	36	43	39	29	51	44	33
<b>Average (bu/a)</b>		<b>43</b>	<b>45</b>	<b>49</b>	<b>41</b>	<b>29</b>	<b>56</b>	<b>47</b>	<b>35</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>6</b>	<b>11</b>	<b>6</b>	<b>4</b>	<b>11</b>	<b>8</b>	<b>6</b>
<b>C.V. (%)</b>		<b>11.9</b>	<b>8.9</b>	<b>14.7</b>	<b>9.8</b>	<b>8.9</b>	<b>13.3</b>	<b>10.2</b>	<b>11.3</b>

† 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 seven Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2006 - 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=14)	Moisture § (n=14)	Lodging (n=8)	Height (n=12)	Maturity (n=11)	Shattering (n=9)	Leaf	Seed	Protein (n=6)	Oil (n=6)
								Retention (n=1)	Quality (n=6)		
		bu/a	%	Score	in.	DAP	-----Score-----		%	%	
USG	Allen	46 ± 1	13.9	1.6	37	157	1.1	1.0	1.7	40.3	20.5
Delta & Pine Land	DP 5915 RR	45 ± 1	14.0	1.8	38	157	1.1	1.0	2.5	40.5	20.7
Delta & Pine Land	DP 5634 RR	44 ± 1	13.5	2.1	39	153	1.1	1.0	1.8	40.1	20.8
Dyna-Gro	36N57 (RR)	43 ± 1	13.7	2.0	34	153	1.2	1.0	2.0	41.5	20.7
Dyna-Gro	3583 (RR)	43 ± 1	13.8	1.8	37	157	1.1	1.1	1.6	39.0	21.5
Delta & Pine Land	DP 5914 RR	41 ± 1	13.7	1.4	36	155	1.1	1.2	1.9	41.0	20.5
Dyna-Gro	34J56 (RR)	39 ± 1	13.3	2.0	41	153	1.3	1.0	1.7	40.5	20.2
<b>Average</b>		<b>43</b>	<b>13.7</b>	<b>1.8</b>	<b>38</b>	<b>155</b>	<b>1.1</b>	<b>1.0</b>	<b>1.9</b>	<b>40.4</b>	<b>20.7</b>

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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 four Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments (n=21) in Tennessee for three years, 2005 - 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=21)	Knoxville	Spring Hill		Springfield	Milan		Ames
				Irr.	Non-Irr.		Irr.	Non-Irr.	
Delta & Pine Land	DP 5915 RR	47 ± 1	41	52	49	34	63	53	39
Dyna-Gro	36N57 (RR)	46 ± 1	39	54	45	38	55	54	39
Delta & Pine Land	DP 5634 RR	45 ± 1	43	49	46	34	60	50	34
Dyna-Gro	3583 (RR)	45 ± 1	40	52	47	38	47	52	36
<b>Average (bu/a)</b>		<b>46</b>	<b>41</b>	<b>52</b>	<b>47</b>	<b>36</b>	<b>56</b>	<b>52</b>	<b>37</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>6</b>	<b>10</b>	<b>7</b>	<b>5</b>	<b>10</b>	<b>8</b>	<b>7</b>
<b>C.V. (%)</b>		<b>11.3</b>	<b>9.1</b>	<b>12.9</b>	<b>9.6</b>	<b>9.2</b>	<b>12.8</b>	<b>10.2</b>	<b>12.2</b>

† 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 four Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments (n=21) in Tennessee for three years, 2005 - 2007.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=21)	Moisture § (n=21)	Lodging (n=17)	Height (n=18)	Maturity (n=18)	Shattering (n=4)	Leaf	Seed	Protein (n=12)	Oil (n=12)
								Retention (n=1)	Quality (n=2)		
Delta & Pine Land	DP 5915 RR	47 ± 1	13.3	1.8	40	158	1.1	1.0	2.4	40.9	20.7
Dyna-Gro	36N57 (RR)	46 ± 1	13.0	2.2	35	152	1.1	1.0	2.0	41.7	20.7
Delta & Pine Land	DP 5634 RR	45 ± 1	12.9	2.1	40	153	1.1	1.0	1.9	40.5	20.9
Dyna-Gro	3583 (RR)	45 ± 1	13.1	2.0	39	155	1.1	1.1	2.0	39.5	21.5
<b>Average</b>		<b>46</b>	<b>13.1</b>	<b>2.0</b>	<b>38</b>	<b>155</b>	<b>1.1</b>	<b>1.0</b>	<b>2.1</b>	<b>40.6</b>	<b>21.0</b>

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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 16 Maturity Group IV and V Conventional soybean varieties evaluated in four environments in Tennessee during 2007.**

Brand	Variety	Avg. Yield ± Std Err. (n=4)	Knoxville	Springfield	Milan	
					Irr.	Non-Irr.
-----bu/a-----						
<i>Maturity Group V</i>						
USG	5601T	41 ± 1	27	22	59	54
AR	Ozark	39 ± 1	32	20	57	47
AR	R98-1821	38 ± 1	26	15	64	47
MO	Anand	37 ± 1	27	16	56	49
VA	V98-2711	36 ± 1	21	18	63	43
VA	V98-9005	35 ± 1	24	14	64	37
USDA-ARS	JTN-5107	34 ± 1	31	20	46	38
USG	5002T	34 ± 1	25	17	50	42
KS	KS 5004N	34 ± 1	22	21	54	38
TN Exp	TN03-234	28 ± 1	23	18	38	34
<i>Maturity Group IV</i>						
TN Exp	TN02-275	37 ± 1	24	14	62	50
TN Exp	TN04-124	37 ± 1	22	26	62	40
USDA-ARS	JTN-4607	33 ± 1	29	17	46	40
AR	UA 4805	31 ± 1	23	17	45	37
Southern Cross	Benjamin	28 ± 1	22	13	53	26
KS	KS 4607	23 ± 1	18	13	43	18
<b>Average (bu/a)</b>		<b>34</b>	<b>25</b>	<b>17</b>	<b>54</b>	<b>40</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>6</b>
<b>C.V. (%)</b>		<b>10.8</b>	<b>14.5</b>	<b>20.3</b>	<b>7.9</b>	<b>8.5</b>

† All yields are adjusted to 13% moisture.

**Table 45. Mean yields † and agronomic characteristics of 16 Maturity Group IV and V Conventional soybean varieties evaluated in four environments in Tennessee during 2007.**

Brand	Variety	Avg. Yield	Moisture ‡ (n=4)	Lodging (n=2)	Height (n=4)	Maturity (n=4)	Shattering (n=2)	Leaf	Seed	Protein (n=2)	Oil (n=2)
		± Std Err. (n=4)						Retention (n=1)	Quality (n=2)		
		bu/a	%	Score	in.	DAP	-----Score-----		%	%	
<i>Maturity Group V</i>											
USG	5601T	41 ± 1	14.6	2.1	36	150	1.3	1.6	2.2	42.6	20.6
AR	Ozark	39 ± 1	15.8	1.9	35	152	1.1	1.3	1.9	41.9	20.7
AR	R98-1821	38 ± 1	17.7	1.5	31	151	1.3	1.4	2.5	44.3	20.4
MO	Anand	37 ± 1	13.2	1.4	31	151	1.3	2.0	2.0	42.3	21.1
VA	V98-2711	36 ± 1	14.4	2.3	32	150	1.3	1.5	1.9	42.8	20.7
VA	V98-9005	35 ± 1	14.3	1.9	32	150	1.3	1.5	2.8	44.7	19.8
USDA-ARS	JTN-5107	34 ± 1	14.7	2.3	35	152	1.2	2.3	2.3	42.4	20.9
USG	5002T	34 ± 1	13.6	1.9	32	153	1.3	1.8	2.8	42.8	21.5
KS	KS 5004N	34 ± 1	13.5	2.2	36	148	1.3	1.7	1.8	42.9	21.1
TN Exp	TN03-234	28 ± 1	14.2	2.5	36	147	1.3	1.2	2.1	43.2	21.9
<i>Maturity Group IV</i>											
TN Exp	TN02-275	37 ± 1	14.0	1.6	34	150	1.3	1.3	2.2	41.3	20.8
TN Exp	TN04-124	37 ± 1	12.9	1.8	36	148	1.3	1.7	1.9	43.4	20.8
USDA-ARS	JTN-4607	33 ± 1	13.1	2.2	36	147	1.3	1.7	2.3	44.5	20.0
AR	UA 4805	31 ± 1	13.5	2.5	31	146	1.3	1.8	1.9	43.4	19.8
Southern Cross	Benjamin	28 ± 1	14.0	1.9	34	138	1.4	1.0	2.6	41.2	22.1
KS	KS 4607	23 ± 1	13.6	1.6	31	147	1.4	1.2	2.8	45.1	20.0
<b>Average</b>		<b>34</b>	<b>14.2</b>	<b>2.0</b>	<b>34</b>	<b>149</b>	<b>1.3</b>	<b>1.6</b>	<b>2.2</b>	<b>43.1</b>	<b>20.7</b>

† 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 46. Mean yields † of five Maturity Group IV and V Conventional soybean varieties evaluated in four environments (n=8) in Tennessee for two years, 2006 - 2007.**

Brand	Variety	Avg. Yield ± Std Err. (n=8)	Knoxville	Springfield	Milan	
					Irr.	Non-Irr.
-----bu/a-----						
<i>Maturity Group V</i>						
USG	5601T	47 ± 1	36	30	67	55
MO	Anand	45 ± 1	40	28	57	53
AR	Ozark	43 ± 1	38	29	57	49
USG	5002T	42 ± 1	34	26	58	49
<i>Maturity Group IV</i>						
AR	UA 4805	37 ± 1	31	27	46	46
<b>Average (bu/a)</b>		<b>43</b>	<b>36</b>	<b>28</b>	<b>57</b>	<b>51</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>6</b>
<b>C.V. (%)</b>		<b>10.4</b>	<b>13.3</b>	<b>14.1</b>	<b>8.0</b>	<b>8.9</b>

† All yields are adjusted to 13% moisture.

**Table 47. Mean yields † and agronomic characteristics of five Maturity Group IV and V Conventional soybean varieties evaluated in four environments (n=8) in Tennessee for two years, 2006 - 2007.**

Brand	Variety	Avg. Yield ± Std Err. (n=8)	Moisture ‡ (n=8)	Lodging (n=5)	Height (n=8)	Maturity (n=8)	Shattering (n=4)	Leaf	Seed	Protein (n=6)	Oil (n=6)
								Retention (n=1)	Quality (n=6)		
		bu/a	%	Score	in.	DAP	-----Score-----		%	%	
<i>Maturity Group V</i>											
USG	5601T	47 ± 1	14.6	2.3	38	148	1.1	1.6	1.8	41.1	20.8
MO	Anand	45 ± 1	14.2	1.7	31	150	1.1	2.0	1.9	39.9	21.4
AR	Ozark	43 ± 1	15.5	2.4	35	149	1.0	1.3	1.6	39.7	20.9
USG	5002T	42 ± 1	14.3	2.2	32	150	1.1	1.8	2.1	40.0	21.9
<i>Maturity Group IV</i>											
AR	UA 4805	37 ± 1	14.2	2.5	31	145	1.1	1.8	1.7	41.2	20.3
<b>Average</b>		<b>43</b>	<b>14.5</b>	<b>2.2</b>	<b>33</b>	<b>148</b>	<b>1.1</b>	<b>1.7</b>	<b>1.8</b>	<b>40.4</b>	<b>21.1</b>

† All yields are adjusted to 13% moisture.

‡ 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 48. Mean yields † of five Maturity Group IV and V Conventional soybean varieties evaluated in four environments (n=12) in Tennessee for three years, 2005 - 2007.**

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	33	69	57
AR	Ozark	46 ± 1	35	32	63	55
MO	Anand	45 ± 1	40	29	59	54
USG	5002T	44 ± 1	35	30	58	53
<i>Maturity Group IV</i>						
AR	UA 4805	40 ± 1	31	30	52	46
<b>Average (bu/a)</b>		<b>45</b>	<b>35</b>	<b>31</b>	<b>60</b>	<b>53</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>C.V. (%)</b>		<b>10.4</b>	<b>11.4</b>	<b>14.2</b>	<b>7.9</b>	<b>10.3</b>

† All yields are adjusted to 13% moisture.

**Table 49. Mean yields † and agronomic characteristics of five Maturity Group IV and V Conventional soybean varieties evaluated in four environments (n=12) in Tennessee for three years, 2005 - 2007.**

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=10)	Oil (n=10)
								Retention	Quality		
		bu/a	%	Score	in.	DAP	-----Score-----	-----	-----	%	%
<i>Maturity Group V</i>											
USG	5601T	48 ± 1	13.8	2.2	37	148	1.1	1.6	2.0	41.5	20.7
AR	Ozark	46 ± 1	14.6	2.5	35	148	1.0	1.3	2.0	40.0	21.0
MO	Anand	45 ± 1	13.6	1.8	32	149	1.1	2.0	2.1	40.1	21.5
USG	5002T	44 ± 1	13.8	2.2	31	149	1.1	1.8	2.3	40.2	21.8
<i>Maturity Group IV</i>											
AR	UA 4805	40 ± 1	13.6	2.6	31	144	1.1	1.8	2.0	41.7	20.3
<b>Average</b>		<b>45</b>	<b>13.9</b>	<b>2.2</b>	<b>33</b>	<b>147</b>	<b>1.1</b>	<b>1.7</b>	<b>2.1</b>	<b>40.7</b>	<b>21.1</b>

† 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 five to seven environments in Tennessee during 2007.**

Brand	Variety ‡	Knoxville	Crossville	Spring Hill		Springfield	Milan		Ames	Avg. Yield <sup>†</sup>	Avg. Yield Difference
				Irr.	Non-Irr.		Irr.	Non-Irr.			
<i>Maturity Group III (n=5)</i>											
Asgrow	AG3906 (RR) Cruiser	33	10	---	---	20	60	16	---	28	<b>+1</b>
Asgrow	AG3906 (RR)	25	9	---	---	20	63	18	---	27	
Vigoro	V39N7RR (Cruiser)	28	7	---	---	19	62	16	---	27	<b>0</b>
Vigoro	V39N7RR	28	4	---	---	19	68	17	---	27	
	<b>L.S.D.<sub>.05</sub> (bu/a)</b>	<b>7</b>	<b>3</b>	---	---	<b>3</b>	<b>11</b>	<b>6</b>	---	<b>3</b>	
	<b>C.V. (%)</b>	<b>16.3</b>	<b>21.8</b>	---	---	<b>9.1</b>	<b>10.6</b>	<b>18.6</b>	---	<b>14.9</b>	
<i>Maturity Group IV Early (n=6)</i>											
Progeny	4507 RR (Cruiser)	32	17	---	---	23	77	21	30	33	<b>+4</b>
Progeny	4507 RR	26	15	---	---	20	67	19	23	29	
Vigoro	V44N6RR (Cruiser)	37	13	---	---	18	71	14	23	29	<b>+1</b>
Vigoro	V44N6RR	31	14	---	---	19	62	18	23	28	
	<b>L.S.D.<sub>.05</sub> (bu/a)</b>	<b>6</b>	<b>5</b>	---	---	<b>4</b>	<b>10</b>	<b>7</b>	<b>6</b>	<b>3</b>	
	<b>C.V. (%)</b>	<b>10.4</b>	<b>10.4</b>	---	---	<b>13.2</b>	<b>9.5</b>	<b>21.7</b>	<b>14.7</b>	<b>13.4</b>	
<i>Maturity Group IV Late (n=7)</i>											
Asgrow	AG4903 (RR) Cruiser	37	23	---	32	22	79	20	33	35	<b>+1</b>
Asgrow	AG4903 (RR)	38	26	---	26	23	75	18	29	34	
Delta King	DK 4667 (RR) (Cruiser)	40	21	---	19	10	62	10	22	26	<b>-1</b>
Delta King	DK 4667 (RR)	44	20	---	26	11	53	12	23	27	
	<b>L.S.D.<sub>.05</sub> (bu/a)</b>	<b>6</b>	<b>6</b>	---	<b>7</b>	<b>4</b>	<b>11</b>	<b>6</b>	<b>7</b>	<b>3</b>	
	<b>C.V. (%)</b>	<b>9.2</b>	<b>15.9</b>	---	<b>18.9</b>	<b>15.5</b>	<b>10.1</b>	<b>22.2</b>	<b>15.4</b>	<b>14.3</b>	



**Table 50 (continued)**

<i>Maturity Group V Early (n=5)</i>											
Delta King	DK 5567 (RR) (Cruiser)	50	---	---	---	16	69	40	36	42	<b>+2</b>
Delta King	DK 5567 (RR)	51	---	---	---	14	62	42	33	40	
USG	7553nRS (Cruiser)	42	---	---	---	15	65	38	40	40	<b>+2</b>
USG	7553nRS	40	---	---	---	15	59	41	35	38	
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>9</b>	---	---	---	<b>5</b>	<b>14</b>	<b>6</b>	<b>7</b>	<b>4</b>	
<b>C.V. (%)</b>		<b>12.1</b>	---	---	---	<b>20.5</b>	<b>14.8</b>	<b>10.4</b>	<b>12.8</b>	<b>14.7</b>	
<i>Maturity Group V Late (n=7)</i>											
USG	Allen (Cruiser)	46	---	51	43	10	60	41	34	41	<b>+3</b>
USG	Allen	46	---	46	36	11	55	42	33	38	
Progeny	5706 RR (Cruiser)	49	---	46	37	13	54	38	34	39	<b>0</b>
Progeny	5706 RR	50	---	40	36	12	61	38	37	39	
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>7</b>	---	<b>16</b>	<b>9</b>	<b>3</b>	<b>13</b>	<b>7</b>	<b>7</b>	<b>3</b>	
<b>C.V. (%)</b>		<b>10.4</b>	---	<b>23.6</b>	<b>15.5</b>	<b>11</b>	<b>13.6</b>	<b>10.5</b>	<b>12.5</b>	<b>15.9</b>	
<b>Average -- Treated Seed (bu/a)</b>		<b>39</b>	<b>15</b>	<b>49</b>	<b>33</b>	<b>16</b>	<b>66</b>	<b>25</b>	<b>32</b>	<b>34</b>	<b>+1</b>
<b>Average -- Untreated Seed (bu/a)</b>		<b>38</b>	<b>15</b>	<b>43</b>	<b>31</b>	<b>16</b>	<b>63</b>	<b>26</b>	<b>30</b>	<b>33</b>	

† All yields are adjusted to 13% moisture.

‡ If a RR appears inside parentheses (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 five to seven environments in Tennessee during 2007.**

Brand	Variety	Avg. Yield bu/a	Moisture ‡ %	Lodging Score	Height in.	Maturity DAP	Shattering -----Score-----	Leaf	Seed	Protein %	Oil %
								Retention	Quality		
<i>Maturity Group III (n=5)</i>											
Asgrow	AG3906 (RR) Cruiser	28	13.2	3.0	30	133	1.1	1.3	3.0	40.5	21.1
Asgrow	AG3906 (RR)	27	13.3	3.3	28	134	1.0	1.3	3.0	40.4	21.4
Vigoro	V39N7RR (Cruiser)	27	12.4	1.0	27	132	1.0	1.4	2.1	39.7	21.2
Vigoro	V39N7RR	27	12.2	1.7	27	133	1.2	1.3	2.2	39.6	21.3
<i>Maturity Group IV Early (n=6)</i>											
Progeny	4507 RR (Cruiser)	33	13.6	2.3	33	138	1.0	2.6	2.5	40.5	20.9
Progeny	4507 RR	29	13.8	3.3	31	138	1.0	2.0	2.3	40.8	20.9
Vigoro	V44N6RR (Cruiser)	29	12.7	3.0	35	135	1.0	2.3	2.3	40.4	20.4
Vigoro	V44N6RR	28	13.3	2.3	34	135	1.0	2.0	2.3	40.4	20.4
<i>Maturity Group IV Late (n=7)</i>											
Asgrow	AG4903 (RR) Cruiser	35	13.2	1.3	34	157	1.0	2.6	2.5	42.1	20.8
Asgrow	AG4903 (RR)	34	13.4	1.8	32	157	1.0	2.0	2.3	41.8	21.1
Delta King	DK 4667 (RR) (Cruiser)	26	12.5	1.9	36	150	1.2	1.5	2.7	40.0	20.3
Delta King	DK 4667 (RR)	27	12.6	2.2	36	147	1.2	1.3	2.6	40.4	20.4
<i>Maturity Group V Early (n=5)</i>											
Delta King	DK 5567 (RR) (Cruiser)	42	15.6	2.0	36	157	1.0	1.4	1.9	43.7	20.0
Delta King	DK 5567 (RR)	40	14.2	2.1	33	159	1.0	1.2	1.8	43.6	20.0
USG	7553nRS (Cruiser)	40	13.7	1.7	36	156	1.0	1.0	1.9	43.0	20.3
USG	7553nRS	38	13.7	1.6	36	155	1.0	1.1	2.2	42.9	20.4
<i>Maturity Group V Late (n=7)</i>											
USG	Allen (Cruiser)	41	13.0	1.8	37	168	1.2	1.0	1.8	42.2	20.0
USG	Allen	38	13.1	1.9	35	168	1.3	1.0	1.8	42.5	19.8
Progeny	5706 RR (Cruiser)	39	13.0	2.7	36	169	1.4	1.0	1.9	43.3	20.1
Progeny	5706 RR	39	13.0	2.7	34	169	1.3	1.0	1.6	43.3	20.2

† 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 seven soybean varieties between seed treated or untreated with a systemic insecticide, evaluated in 10 to 14 environments in Tennessee for two years (2006 - 2007).**

Brand	Variety ‡	Knoxville	Crossville	Spring Hill		Springfield	Milan		Ames	Avg. Yield <sup>†</sup>	Avg. Yield Difference
				Irr.	Non-Irr.		Irr.	Non-Irr.			
<i>Maturity Group III (n=10)</i>											
Asgrow	AG3906 (RR) Cruiser	48	38	---	---	32	60	33	---	42	+1
Asgrow	AG3906 (RR)	40	39	---	---	32	59	33	---	41	
	<b>L.S.D.<sub>.05</sub> (bu/a)</b>	<b>7</b>	<b>6</b>	---	---	<b>4</b>	<b>7</b>	<b>6</b>	---	<b>3</b>	
	<b>C.V. (%)</b>	<b>10.1</b>	<b>10.0</b>	---	---	<b>7.2</b>	<b>8.4</b>	<b>10.5</b>	---	<b>9.4</b>	
<i>Maturity Group IV Early (n=12)</i>											
Vigoro	V44N6RR (Cruiser)	35	39	---	---	26	71	34	33	40	+1
Vigoro	V44N6RR	32	38	---	---	29	66	35	32	39	
	<b>L.S.D.<sub>.05</sub> (bu/a)</b>	<b>6</b>	<b>6</b>	---	---	<b>4</b>	<b>8</b>	<b>6</b>	<b>7</b>	<b>3</b>	
	<b>C.V. (%)</b>	<b>10.8</b>	<b>9.4</b>	---	---	<b>10.2</b>	<b>7.8</b>	<b>11.4</b>	<b>13.6</b>	<b>10.3</b>	
<i>Maturity Group IV Late (n=12)</i>											
Asgrow	AG4903 (RR) Cruiser	60	43	---	41	26	75	40	---	48	+1
Asgrow	AG4903 (RR)	58	46	---	36	28	74	38	---	47	
				---					---		
Delta King	DK 4667 (RR) (Cruiser)	60	37	---	33	19	64	34	---	41	0
Delta King	DK 4667 (RR)	61	35	---	38	19	59	34	---	41	
	<b>L.S.D.<sub>.05</sub> (bu/a)</b>	<b>6</b>	<b>6</b>	---	<b>7</b>	<b>5</b>	<b>9</b>	<b>6</b>	---	<b>3</b>	
	<b>C.V. (%)</b>	<b>7.1</b>	<b>10.4</b>	---	<b>12.6</b>	<b>13.9</b>	<b>9.2</b>	<b>10.9</b>	---	<b>10.3</b>	
<i>Maturity Group V Early (n=10)</i>											
Delta King	DK 5567 (RR) (Cruiser)	64	---	---	---	33	70	52	40	52	+2
Delta King	DK 5567 (RR)	63	---	---	---	32	66	50	40	50	
USG	7553nRS (Cruiser)	61	---	---	---	30	68	46	37	48	+1
USG	7553nRS	56	---	---	---	30	66	50	33	47	
	<b>L.S.D.<sub>.05</sub> (bu/a)</b>	<b>7</b>	---	---	---	<b>6</b>	<b>11</b>	<b>6</b>	<b>6</b>	<b>3</b>	
	<b>C.V. (%)</b>	<b>8.1</b>	---	---	---	<b>13.9</b>	<b>12.1</b>	<b>9.0</b>	<b>13.1</b>	<b>11.3</b>	
<i>Maturity Group V Late (n=14)</i>											
USG	Allen (Cruiser)	49	---	57	46	30	62	51	41	48	+2
USG	Allen	49	---	52	44	31	58	50	40	46	
	<b>L.S.D.<sub>.05</sub> (bu/a)</b>	<b>6</b>	---	<b>11</b>	<b>6</b>	<b>4</b>	<b>11</b>	<b>8</b>	<b>6</b>	<b>3</b>	
	<b>C.V. (%)</b>	<b>8.9</b>	---	<b>14.7</b>	<b>9.8</b>	<b>8.9</b>	<b>13.3</b>	<b>10.2</b>	<b>11.3</b>	<b>11.9</b>	
<b>Average -- Treated Seed (bu/a)</b>		<b>54</b>	<b>39</b>	<b>57</b>	<b>40</b>	<b>28</b>	<b>67</b>	<b>42</b>	<b>38</b>	<b>46</b>	<b>+2</b>
<b>Average -- Untreated Seed (bu/a)</b>		<b>51</b>	<b>39</b>	<b>52</b>	<b>40</b>	<b>29</b>	<b>64</b>	<b>41</b>	<b>36</b>	<b>44</b>	

† All yields are adjusted to 13% moisture.

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

**Table 53. Comparisons of overall mean yields and agronomic characteristics of seven soybean varieties between seed treated or untreated with a systemic insecticide, evaluated in 10 to 14 environments in Tennessee for two years (2006 - 2007).**

Brand	Variety	Avg. Yield bu/a	Moisture ‡ %	Lodging Score	Height in.	Maturity DAP	Shattering -----Score-----	Leaf	Seed	Protein %	Oil %
								Retention	Quality		
<i>Maturity Group III (n=10)</i>											
Asgrow	AG3906 (RR) Cruiser	42	13.3	1.6	32	128	1.0	1.3	2.8	39.3	22.4
Asgrow	AG3906 (RR)	41	13.7	1.7	31	128	1.0	1.4	2.6	39.0	22.7
<i>Maturity Group IV Early (n=12)</i>											
Vigoro	V44N6RR (Cruiser)	40	13.3	2.0	37	132	1.0	2.3	2.5	39.4	21.9
Vigoro	V44N6RR	39	13.5	1.6	36	131	1.0	2.0	2.5	39.3	22.0
<i>Maturity Group IV Late (n=12)</i>											
Asgrow	AG4903 (RR) Cruiser	48	13.9	1.5	35	145	1.0	2.6	2.0	39.2	21.9
Asgrow	AG4903 (RR)	47	14.0	1.6	34	145	1.0	2.0	1.9	39.1	22.0
Delta King	DK 4667 (RR) (Cruiser)	41	13.4	2.1	38	139	1.1	1.5	2.3	38.4	21.3
Delta King	DK 4667 (RR)	41	13.5	2.4	38	138	1.1	1.3	2.3	38.4	21.4
<i>Maturity Group V Early (n=10)</i>											
Delta King	DK 5567 (RR) (Cruiser)	52	15.1	2.3	37	151	1.0	1.4	1.5	40.4	20.8
Delta King	DK 5567 (RR)	50	14.6	2.2	35	152	1.0	1.2	1.5	40.3	20.9
USG	7553nRS (Cruiser)	48	13.8	1.6	37	150	1.0	1.0	1.7	38.9	21.5
USG	7553nRS	47	13.8	1.4	37	149	1.0	1.1	1.6	38.9	21.5
<i>Maturity Group V Late (n=14)</i>											
USG	Allen (Cruiser)	48	13.8	1.6	39	157	1.1	1.0	1.7	40.3	20.6
USG	Allen	46	13.9	1.6	37	157	1.1	1.0	1.7	40.3	20.5

† 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 54. Yield comparisons of two soybean varieties between seed treated or untreated with a systemic insecticide, evaluated in 12 or 18 environments in Tennessee for three years (2005 - 2007).**

Brand	Variety ‡	Knoxville	Crossville	Spring Hill		Springfield	Milan		Ames	Avg. Yield <sup>†</sup>	Avg. Yield Difference
				Irr.	Non-Irr.		Irr.	Non-Irr.			
<i>Maturity Group III (n=12)</i>											
Asgrow	AG3906 (RR) Cruiser	50	---	---	---	38	60	41	---	47	+1
Asgrow	AG3906 (RR)	48	---	---	---	37	58	42	---	46	
	<b>L.S.D.<sub>.05</sub> (bu/a)</b>	<b>9</b>	---	---	---	<b>5</b>	<b>7</b>	<b>8</b>	---	<b>4</b>	
	<b>C.V. (%)</b>	<b>11.7</b>	---	---	---	<b>8.3</b>	<b>8.2</b>	<b>11.5</b>	---	<b>10.0</b>	
<i>Maturity Group IV Late (n=18)</i>											
Asgrow	AG4903 (RR) Cruiser	61	47	---	43	28	75	44	---	49	0
Asgrow	AG4903 (RR)	58	48	---	41	28	75	44	---	49	
	<b>L.S.D.<sub>.05</sub> (bu/a)</b>	<b>6</b>	<b>6</b>	---	<b>8</b>	<b>5</b>	<b>11</b>	<b>7</b>	---	<b>3</b>	
	<b>C.V. (%)</b>	<b>7.2</b>	<b>9.7</b>	---	<b>13.4</b>	<b>15.9</b>	<b>11.1</b>	<b>11.9</b>	---	<b>11.3</b>	
<b>Average -- Treated Seed (bu/a)</b>		<b>55</b>	<b>47</b>	---	<b>43</b>	<b>33</b>	<b>67</b>	<b>42</b>	---	<b>48</b>	<b>0</b>
<b>Average -- Untreated Seed (bu/a)</b>		<b>53</b>	<b>48</b>	---	<b>41</b>	<b>33</b>	<b>67</b>	<b>43</b>	---	<b>48</b>	

† All yields are adjusted to 13% moisture.

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

**Table 55. Comparisons of overall mean yields and agronomic characteristics of two soybean varieties between seed treated or untreated with a systemic insecticide, evaluated in 12 or 18 environments in Tennessee for three years (2005 - 2007).**

Brand	Variety	Avg. Yield bu/a	Moisture ‡ %	Lodging Score	Height in.	Maturity DAP	Leaf		Seed Quality	Protein %	Oil %
							Shattering	Retention Score			
<i>Maturity Group III (n=12)</i>											
Asgrow	AG3906 (RR) Cruiser	47	13.5	1.9	35	125	1.0	1.6	2.7	39.3	22.7
Asgrow	AG3906 (RR)	46	13.8	1.9	34	125	1.0	1.3	2.4	38.8	23.0
<i>Maturity Group IV Late (n=18)</i>											
Asgrow	AG4903 (RR) Cruiser	49	13.9	1.5	36	141	1.0	2.6	2.1	39.3	22.2
Asgrow	AG4903 (RR)	49	14.3	1.7	35	141	1.0	2.0	2.0	39.1	22.3

† 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 56. Characteristics of soybean varieties evaluated in Tennessee during 2007, as provided by the seed company.

Brand	Variety	2007 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
AR	UA 4805	CV4	4.8	---	---	R	R	R	P	G
AR	Ozark	CV5	5.2	---	3	R	R	R	P	G
AR	R98-1821	CV5	5.6	---	---	R	R	R	P	G
Armor	39-K4 (RR)	RR3	3.9	RR	M 3	R	M	M	P	T
Armor	42-P7 (RR)	R4E	4.2	RR	R3	R	MR	MR	P	T
Armor	47-F8 (RR)	R4L	4.7	RR	R 3, MR 14	R	MR	MR	P	G
Armor	49-V6 (RR)	R4L	4.9	RR	MR 3	R	M	M	P	T
Armor	52-U2 (RR)	R5E	5.2	RR	MR 3,14	R	M	MR	W	G
Armor	54-O3 (RR)	R5E	5.4	RR	MR 3, 14	MR	MR	MS	W	G
Asgrow	AG3521V (RR)	R4E	3.5	RR	MR 3	---	MS	---	P	G
Asgrow	AG3603 (RR)	RR3	3.6	RR	MR 3	---	MS	---	P	T
Asgrow	AG3803 (RR)	RR3	3.8	RR	R 3	MR	MS	---	P	G
Asgrow	AG3906 (RR)	RR3	3.9	RR	MR 3, 14	MR	MS	MR	P	T
Asgrow	AG3906 (RR) Cruiser	RR3	3.9	RR	MR 3, 14	MR	MS	MR	P	T
Asgrow	AG4103 (RR)	R4E	4.1	RR	MR 3	MR	MR	MS	W	G
Asgrow	AG4405 (RR)	R4E	4.4	RR	R 3	MR	MR	MS	P	G
Asgrow	AG4604 (RR/STS)	R4L	4.6	RR/STS	R 3, MR 14	MR	MR	MR	P	T
Asgrow	AG4605 (RR/STS)	R4L	4.6	RR/STS	MR 3	---	---	---	P	LT
Asgrow	AG4703 (RR)	R4L	4.7	RR	MR 3	MR	MR	MS	P	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	AG5301 (RR)	R5E	5.3	RR	MR 3, 5, 14	MR	MS	MS	W	G
Asgrow	AG5501 (RR)	R5E	5.5	RR	R 3, MR 14	MR	MR	MR	P	G
Croplan	RC 4417 (RR)	R4E	4.4	RR	R 3	S	R	R	P	T
Croplan	RC 4757 (RR/STS)	R4L	4.7	RR/STS	R 3	S	R	R	S	LT
Croplan	RC 4955 (RR)	R4L	4.9	RR	R3	R	R	S	P	LT
Croplan	RC 5007 (RR/STS)	R5E	5.0	RR/STS	R 3	R	R	R	W	G
Crow's	4815 R	R4L	4.8	RR	R 3, MR 14	---	---	---	W	T
Dairyland	4300 RR	R4E	4.3	RR	MR 3	---	MR	---	P	T
Dairyland	8450 RR	R4E	4.5	RR	---	---	MR	---	W	T
Dairyland	8474 RR	R4L	4.7	RR	MR 3	---	MR	---	W	T
Dairyland	8482 RR	R4L	4.8	RR	---	---	---	---	W	T
Dairyland	8509 RR	R5E	5.0	RR	MR 3	---	MR	---	P	T
Dairyland	8512 RR	R5E	5.2	RR	MR 3,14	---	MR	---	W	T
Delta & Pine Land	DP 3993 RR	RR3	3.9	RR	R 3, MR 14	R	MR	S	P	G
Delta & Pine Land	DP 4112 RR/S	R4E	4.1	RR/STS	---	R	MR	R	P	T
Delta & Pine Land	DPX 4334 RR	R4E	4.3	RR	3	---	MR	MR	P	T
Delta & Pine Land	DP 4450 RR	R4E	4.4	RR	MR 1, 14, R 3	R	MR	MR	P	T
Delta & Pine Land	DP 4546 RR	R4E	4.5	RR	None	R	MR	MR	W	T
Delta & Pine Land	DP 4724 RR	R4L	4.7	RR	R 3, MR 14	R	R	R	P	T

Table 56 (continued)

Brand	Variety	2006 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Delta & Pine Land	DPX 4727 RR	R4L	4.7	RR	3	---	MR	MR	P	T
Delta & Pine Land	DP 4888 RR/S	R4L	4.8	RR/STS	---	R	MR	MR	W	T
Delta & Pine Land	DP 4919 RR/S	R4L	4.9	RR/STS	---	R	R	R	W	T
Delta & Pine Land	DP 5115 RR/S	R5E	5.1	RR/STS	---	R	R	MR	W	T
Delta & Pine Land	DP 5335 RR/S	R5E	5.1	RR/STS	---	R	MR	MR	W	T
Delta & Pine Land	DP 5414 RR	R5E	5.4	RR	3	R	MR	R	W	T
Delta & Pine Land	DP 5634 RR	R5L	5.6	RR	R 1,3 MR 5	R	MR	MR	W	T
Delta & Pine Land	DP 5808 RR	R5L	5.8	RR	R 3, MR 1	R	MR	MR	W	T
Delta & Pine Land	DP 5914 RR	R5L	5.9	RR	R 3, MR 14	R	MR	MR	P	T
Delta & Pine Land	DP 5915 RR	R5L	5.9	RR	R 3, MR 14	MR	MR	MR	W	T
Delta Grow	4150 RR	R4E	4.1	RR	3,6	MR	MR	---	W	T
Delta Grow	4460 RR	R4E	4.4	RR	3, 14	MR	MR	---	S	T
Delta Grow	4470 RR/STS	R4E	4.4	RR/STS	R 3	MR	MR	---	P	T
Delta Grow	4660 RR	R4L	4.6	RR	3	MR	MR	---	P	T
Delta Grow	4770 RR	R4L	4.7	RR	3	R	MR	---	W	T
Delta Grow	4780 RR	R4L	4.7	RR	R 3	MR	MR	---	P	T
Delta Grow	4840 RR	R4L	4.8	RR	2,3,9,14	MR	MS	---	P	T
Delta Grow	4960 RR	R4L	4.9	RR	3,6,9	MR	M	---	P	G
Delta Grow	4970 RR	R4L	4.9	RR	3, 14	R	MR	M	P	T
Delta Grow	5160 RR/STS	R5E	5.1	RR/STS	3, 14	MR	MR	---	P	G
Delta Grow	5270 RR	R5E	5.2	RR	3, 14	R	MR	---	P	T
Delta Grow	5300 RR	R5E	5.3	RR	3,5,9	MR	MR	---	W	G
Delta Grow	5450 RR	R5E	5.4	RR	2,3,14	---	---	---	W	G
Delta Grow	5470 RR	R5E	5.4	RR	3, 14	MR	M	---	W	T
Delta King	DK 4567 (RR)	R4E	4.5	RR	R 3, MR 14	MR	MR	MR	W	T
Delta King	DK 4667 (RR)	R4L	4.6	RR	R 3, MR 14	MR	MR	MR	P	LT
Delta King	DK 4667 (RR) (Cruiser)	R4L	4.6	RR	R 3, MR 14	MR	MR	MR	P	LT
Delta King	DK 4763 (RR)	R4L	4.7	RR	R 3, MR 5	MS	MS	MR	W	T
Delta King	DK XTJ 847 (RR)	R4L	4.7	RR	R 3	---	MS	MR	P	LT
Delta King	DK 4866 (RR/STS)	R4L	4.8	RR/STS	MR 3	MR	MR	MS	P	LT
Delta King	DK XTJ 848 (RR)	R4L	4.8	RR	R 3, MR 14	MR	MS	MS	P	LT
Delta King	DK 4967 (RR)	R4L	4.9	RR	R 3, MR 6,14	MR	MR	MR	P	T
Delta King	DK 4968 (RR)	R4L	4.9	RR	R 3	MR	MS	MR	P	G
Delta King	DK 5066 (RR)	R5E	5.0	RR	R 3, MR 14	R	MR	MR	P	G
Delta King	DK 5068 (RR)	R5E	5.0	RR	---	MR	MS	MS	W	G
Delta King	DK 5161 (RR)	R5E	5.1	RR	MR 3,14	R	MS	MR	W	G
Delta King	DK XTJ 851 (RR)	R5E	5.1	RR	R 3, MR 14	MR	MS	MR	P	G
Delta King	DK 52K6 (RR)	R5E	5.2	RR	R 3, MR 14	R	MR	R	P	T
Delta King	DK 5366 (RR)	R5E	5.3	RR	MR 3,14	MS	MR	MR	P	G
Delta King	DK 5368 (RR)	R5E	5.3	RR	---	MR	MS	MR	P	T

Table 56 (continued)

Brand	Variety	2006 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Delta King	DK 5567 (RR)	R5E	5.5	RR	MR 3	R	MR	MR	W	G
Delta King	DK 5567 (RR) (Cruiser)	R5E	5.5	RR	MR 3	R	MR	MR	W	G
Dyna-Gro	35D44 (RR)	R4E	4.4	RR	---	---	---	---	W	T
Dyna-Gro	37A44 (RR)	R4E	4.4	RR	R 3, MR 6,14	MR	MR	MR	P	T
Dyna-Gro	32R46 (RR/STS)	R4L	4.6	RR/STS	R3, MR 6,14	R	MR	MR	P	LT
Dyna-Gro	37F46 (RR)	R4L	4.6	RR	R3, MR14	MR	MR	MR	P	LT
Dyna-Gro	38X47 (RR)	R4L	4.7	RR	R 3	R	MR	MR	P	T
Dyna-Gro	36Y48 (RR / STS)	R4L	4.8	RR/STS	R 3,6 MR 14	MR	MR	MS	P	G
Dyna-Gro	35Z49 (RR)	R4L	4.9	RR	R 3,6 MR 14	R	R	MR	P	G
Dyna-Gro	37P49 (RR)	R4L	4.9	RR	MS 3, 14	MS	MR	MR	P	T
Dyna-Gro	39F51 (RR)	R5E	5.1	RR	R 3, MR 14	MR	MR	R	P	T
Dyna-Gro	33B52 (RR)	R5E	5.2	RR	MR 3,14	MR	MR	MR	W	G
Dyna-Gro	32A53 (RR)	R5E	5.3	RR	MR 3, 14	R	MR	MR	P	T
Dyna-Gro	31R54 (RR/STS)	R5E	5.4	RR/STS	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	33X55 (RR)	R5E	5.5	RR	R 3 MR 6,14	MR	MR	R	P	T
Dyna-Gro	34J56 (RR)	R5L	5.6	RR	R 3,6,14	MR	MR	MR	P	T
Dyna-Gro	SX06856	R5L	5.6	RR	MR 3	R	MR	MR	W	G
Dyna-Gro	36N57 (RR)	R5L	5.7	RR	MR 2,3	MR	MR	MR	P	T
Dyna-Gro	33C59 (RR)	R5L	5.9	RR	R 3 MR 1,14	MR	MR	MR	W	G
Dyna-Gro	3583 (RR)	R5L	5.9	RR	R 3,6 MR 14	MR	MR	MR	W	G
FFR	3990 RR	RR3	3.9	RR	MR 3	MR	R	S	W	LT
FFR	4526 RR	R4E	4.5	RR	MR 3,14	M	MR	R	P	LT
FFR	4767 RR	R4L	4.7	RR	R 3	MR	M	MR	P	T
FFR	4886 RR/STS	R4L	4.8	RR/STS	MR 3, 14	MR	MR	MR	P	G
FFR	5116 RR/STS	R5E	5.1	RR/STS	R 3	MR	MR	R	W	G
FFR	5663 RR	R5E	5.5	RR	R 3, 14	R	R	R	P	T
Hornbeck	HBK R 3824 (RR)	RR3	3.9	RR	MS 3	R	MR	M	P	LT
Hornbeck	HBK R 4727 (RR)	R4L	4.7	RR	R 3	MR	MR	---	P	T
Hornbeck	HBK R 4924 (RR)	R4L	4.9	RR	R 3, MR 14	R	R	S	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 4404RR	R4E	4.4	RR	---	---	---	---	P	T
KS	KS 4607	CV5	4.6	---	---	---	---	---	P	T
KS	KS 5004N	CV5	5.0	---	3	---	---	---	W	G
KS	KS 5507RR	R5E	5.5	RR	1,2,3,4,14	---	---	---	P	G
Midwest Premium Genetics	MPV 4406nRR	R4E	4.4	RR	3,14	M	R	R	P	T
Midwest Premium Genetics	MPV 4905nRR	R4L	4.9	RR	3, Root knot	R	R	R	P	T



Table 56 (continued)

Brand	Variety	2006 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Midwest Premium Genetics	MPV 5308nRR	R5E	5.3	RR	1,2,3,5,6,9,14	MR	MR	R	P	T
Midwest Premium Genetics	MPV 5407nRR	R5E	5.4	RR	3,14	R	R	R	W	T
Midwest Premium Genetics	MPV 5408nRR	R5E	5.4	RR	3, Root knot	R	R	R	P	T
Midwest Premium Genetics	MPV 5505nRR (STS)	R5E	5.5	RR/STS	3	R	R	R	W	G
MO	Anand	CV5	5.6	---	2,3,14,5	R	R	R	P	T
MO Exp	S03-051 RR	RR3	3.9	RR	MR 3	R	MR	---	W	T
MO Exp	S04-5969 RR	R4E	4.5	RR	MR 3	MR	MR	---	P	LT
MO Exp	S04-6008 RR	R4E	4.5	RR	MR 3	MR	MR	---	P	LT
MO Exp	S04-6013 RR	R4E	4.5	RR	MR 3	MR	MR	---	P	LT
Morsoy	RT 4485N (RR)	R4E	4.4	RR	3,14	R	R	R	P	T
Morsoy	RTS 4556N (RR/STS)	R4E	4.5	RR/STS	3,14	MS	MS	R	P	T
Morsoy	RT 4707N (RR)	R4L	4.7	RR	3	MR	R	MR	P	T
Morsoy	RTS 4706N (RR/STS)	R4L	4.7	RR/STS	R 3	R	R	R	P	G
Morsoy	RT 4806N (RR)	R4L	4.8	RR	3, 14	R	MR	R	P	T
Morsoy	RT 4914N (RR)	R4L	4.9	RR	R 3	MR	R	R	P	T
Morsoy	RTS 4955N (RR/STS)	R4L	4.9	RR/STS	3,14	R	R	MS	P	G
N.K. Brand	S 38-D5 (RR)	RR3	3.8	RR	3,14	---	M	MR	W	LT
N.K. Brand	S 43-B1 (RR)	R4E	4.3	RR	R 3, MR 14	R	MR	MR	P	T
N.K. Brand	S 45-E5 (RR)	R4E	4.5	RR	3,14	R	MS	S	W	T
N.K. Brand	S 49-H7 (RR)	R4L	4.9	RR	R 3, MR 1	R	MS	S	W	T
N.K. Brand	S 52-F2 (RR)	R5E	5.2	RR	3	MR	MS	MR	P	T
Pioneer	93M90 (RR)	RR3	3.9	RR	3,14	---	MR	MR	P	G
Pioneer	94M30 (RR)	R4E	4.3	RR	3,14	---	MR	R	W	T
Pioneer	94M50 (RR)	R4E	4.5	RR	3,14	---	MS	R	W	T
Pioneer	94M80 (RR)	R4L	4.8	RR	3,14	MR	R	MR	W	T
Pioneer	95M30 (RR)	R5E	5.3	RR	3,14	R	---	R	W	T
Progeny	3900 RR	RR3	3.9	RR	R 2,3,5 MR 14	R	R	T	P	LT
Progeny	4507 RR	R4E	4.5	RR	---	---	---	---	P	LT
Progeny	4507 RR (Cruiser)	R4E	4.5	RR	---	---	---	---	P	LT
Progeny	4706 RR	R4L	4.7	RR	R 3, MR 14	T	T	R	P	T
Progeny	4807 RR	R4L	4.8	RR	---	---	---	---	P	T
Progeny	4817 RR	R4L	4.8	RR	---	---	---	---	P	T
Progeny	4906 RR	R4L	4.9	RR	---	T	R	R	P	T
Progeny	4949 RR	R4L	4.9	RR	S	R	T	R	W	T
Progeny	5107 RR	R5E	5.1	RR	---	---	---	---	P	T
Progeny	5115 RR	R5E	5.1	RR	R 3	R	R	R	P	LT
Progeny	5207 RR	R5E	5.2	RR	---	---	---	---	P	T
Progeny	5307 RR	R5E	5.3	RR	---	---	---	---	P	T
Progeny	5407 RR	R5E	5.4	RR	---	---	---	---	P	T
Progeny	5507 RR	R5E	5.5	RR	---	---	---	---	P	G

Table 56 (continued)

Brand	Variety	2006 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Progeny	5622 RR	R5L	5.6	RR	R 2,3,6,9 MR 14	T	T	T	W	G
Progeny	5706 RR	R5L	5.7	RR	R 3, MR 14	R	R	S	W	G
Progeny	5706 RR (Cruiser)	R5L	5.7	RR	R 3, MR 14	R	R	S	W	G
Schillinger Seed	457 RCP	R4E	4.5	RR	R 3	R	MR	R	P	T
Schillinger Seed	467 RCP	R4L	4.6	RR	MR 3	R	MR	R	P	LT
Schillinger Seed	495 RC	R4L	4.9	RR	R 3	R	MR	R	P	LT
Schillinger Seed	XP49	R4L	4.9	RR	R 3	R	R	R	P	LT
Schillinger Seed	557 RC	R5E	5.5	RR	R 3	R	R	R	P	G
Southern Cross	Lucas (RR)	RR3	3.8	RR	3,14	R	R	R	P	G
Southern Cross	Benjamin	CV5	4.3	---	3,14	R	R	R	W	T
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
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 Scn	R4E	4.4	RR	3,14	MR	MR	MR	P	T
Steyer	4710 RR Scn	R4L	4.7	RR	3,14	MR	MR	MR	P	T
Steyer	4910 RR Scn	R4L	4.9	RR	3,14	MR	MR	MR	P	LT
Stine	4782-4 (RR/STS)	R4L	4.7	RR/STS	3,4	R	---	---	S	T
Terral	TV 47R17 (RR)	R4L	4.7	RR	R 3, 14	R	---	R	P	G
Terral	TV 49R17 (RR)	R4L	4.9	RR	R 3, 14	R	---	R	W	T
TN Exp	TN05-4715 RR	R4E	4.5	RR	---	---	---	---	P	T
TN Exp	TN03-012 RR	R4L	4.8	RR	---	---	---	---	P	G
TN Exp	TN02-275	CV5	4.9	---	3,5,14	---	---	---	P	T
TN Exp	TN04-124	CV5	4.9	---	---	---	---	---	W	T
TN Exp	TN03-234	CV5	5.2	---	---	---	---	---	P	G
TN Exp	TN04-593 RR	R5E	5.5	RR	---	---	---	---	W	G
USDA-ARS	JTN-4607	CV5	4.8	---	3,5	---	---	---	W	T
USDA-ARS	JTN-5107	CV5	5.1	---	3	R	---	---	W	G
USG	7393nRR	RR3	3.9	RR	R 3, MR 14	R	MR	---	P	LT
USG	7443nRR	R4E	4.3	RR	MR 3	---	R	---	W	T
USG	7440nRR	R4E	4.4	RR	MR 3,14	R	MR	MR	P	LT
USG	74A45 (RR)	R4E	4.4	RR	---	---	---	---	P	G
USG	74A76 (RR)	R4L	4.7	RR	MR 3,14	---	MR	MR	P	LT
USG	7494nRR	R4L	4.9	RR	R3, 14	---	MR	---	P	LT
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	---	P	LT
USG	5002T	CV5	5.0	---	---	R	MR	R	W	T
USG	7515nRS	R5E	5.1	RR/STS	R 3, MR 14	---	MR	---	P	G

**Table 56 (continued)**

<b>Brand</b>	<b>Variety</b>	<b>2006 Test</b>	<b>Relative Maturity</b>	<b>Herbicide Tolerance</b>	<b>SCN Resistance</b>	<b>Stem Canker</b>	<b>SDS</b>	<b>Frogeye</b>	<b>Flower Color</b>	<b>Pubescence Color</b>
USG	75M16 (RR)	R5E	5.1	RR	R 3	MR	---	MR	W	G
USG	75J32 (RR)	R5E	5.3	RR	MR 3,14	R	MR	MR	P	G
USG	75J47 (RR)	R5E	5.4	RR	---	R	---	R	P	G
USG	7553nRS	R5E	5.5	RR/STS	MR 3, R 14	R	---	MR	W	G
USG	7553nRS (Cruiser)	R5E	5.5	RR/STS	MR 3, R 14	R	---	MR	W	G
USG	5601T	CV5	5.6	---	---	R	MR	MR	W	G
USG	Allen	R5L	5.6	RR	---	R	MR	MR	W	G
USG	Allen (Cruiser)	R5L	5.6	RR	---	R	MR	MR	W	G
VA	V98-2711	CV5	5.4	---	2,3	---	---	---	G	W
VA	V98-9005	CV5	5.4	---	---	---	---	---	T	P
Vigoro	V39N7RR	RR3	3.9	RR	MR 3	MR	MR	MR	W	G
Vigoro	V39N7RR (Cruiser)	RR3	3.9	RR	MR 3	MR	MR	MR	W	G
Vigoro	V39N8RR	RR3	3.9	RR	R 3, MR 14	---	MR	---	P	T
Vigoro	V42N7RS	R4E	4.2	RR/STS	R 3, MR 14	R	MS	MS	W	T
Vigoro	V43N8RR	R4E	4.3	RR	R 3	MR	MR	R	P	T
Vigoro	V44N6RR	R4E	4.4	RR	R 3, MR 14	MR	M	MR	P	LT
Vigoro	V44N6RR (Cruiser)	R4E	4.4	RR	R 3, MR 14	MR	M	MR	P	LT
Vigoro	V47N8RR	R4L	4.7	RR	R 3	R	MR	MR	P	T
Vigoro	V49N6RR	R4L	4.9	RR	MR 3	R	MS	MR	P	LT
Vigoro	V51N7RS	R5E	5.1	RR/STS	R 3	MR	MR	MR	W	G

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

R4E = Roundup Ready Early Group 4

R4L = Roundup Ready Late Group 4

R5E = Roundup Ready Early Group 5

R5L = Roundup Ready Late Group 5

CV4, CV5 = Conventional Group 4 & 5

**Table 57. Contact information for soybean seed companies evaluated in yield tests in Tennessee during 2007.**

Company	Contact	Phone	Email	Web site	Address
University of Arkansas	Pengyin Chen	479-575-7564	<a href="mailto:tishibi@uark.edu">tishibi@uark.edu</a>		Dept of Crop, Soil & Env. Sciences 115 Plant Science Bldg Fayetteville, AK 72701
Monsanto (Asgrow)		800-335-2676		<a href="http://www.asgrow.com">www.asgrow.com</a>	
Cullum Seeds (Armor, Delta King)	Jeff Pangle Jimmy Wray	877-822-7333 870-552-3098 270-832-3843	<a href="mailto:jeffpangle@cullumseeds.com">jeffpangle@cullumseeds.com</a> <a href="mailto:jimmywray@jwrayseeds.com">jimmywray@jwrayseeds.com</a>	<a href="http://www.armorbeans.com">www.armorbeans.com</a>	P.O. Box 178, Fisher, AR 72429 6497 Turner Landing Rd., LaCenter, KY 42056
Croplan Genetics/Land o Lakes	Will Huckon John Patterson	931-231-6791 931-273-3590		<a href="http://www.croplangenetics.com">www.croplangenetics.com</a>	Ethridge, TN Manchester, TN
Crow's Hybrid Corn Company	Carl Gardner	731-431-6839	<a href="mailto:carl.gardner@crowshybrid.com">carl.gardner@crowshybrid.com</a>	<a href="http://www.crowshybrid.com">www.crowshybrid.com</a>	3395 Leatherwood Rd, Williamsport, TN 38487
Dairyland Seed Co	Lanny Warren	731-234-2921	<a href="mailto:lanny.warren@charter.net">lanny.warren@charter.net</a>	<a href="http://www.dairylandseed.com">www.dairylandseed.com</a>	208 South Thompson St., Union City, TN 38261
Delta Grow Seed	Lee Hughes	800-530-7933	<a href="mailto:leehughes19@hotmail.com">leehughes19@hotmail.com</a>	<a href="http://www.deltagrow.com">www.deltagrow.com</a>	P O Box 219, England, AR 72046
Delta and Pine Land Co.	John Haubold David Roberts	731-234-4854 662-257-5527		<a href="http://www.deltaandpine.com">www.deltaandpine.com</a>	
United Agri Products (Dyna-Gro)	Larry Stauber	901-277-3261	<a href="mailto:larry.stauber@uap.com">larry.stauber@uap.com</a>	<a href="http://www.dynagroseed.com">www.dynagroseed.com</a>	57 Germantown Ct Suite 200, Cordova, TN 38018
Tennessee Farmers Coop	Jim Payne Chris Morris	901-652-0903 615-218-7963	<a href="mailto:jpayne@ourcoop.com">jpayne@ourcoop.com</a>	<a href="http://www.ourcoop.com">www.ourcoop.com</a>	West TN East & Middle TN
Hornbeck Seed Co	James Thomas	870-946-2087	<a href="mailto:jthomas@hbkseed.com">jthomas@hbkseed.com</a>	<a href="http://www.hbkseed.com">www.hbkseed.com</a>	P O Box 472, 210 Drier Rd, DeWitt, AR 72042
Kansas State University	Bill Schapaugh	785-770-7906	<a href="mailto:wts@ksu.edu">wts@ksu.edu</a>		Agronomy Department 2004 Throckmorton Manhattan, KS 66506
University of Missouri	Grover Shannon	573-379-5431	<a href="mailto:shannong@missouri.edu">shannong@missouri.edu</a>		
Midwest Premium Genetics (MPV Brand)	Mark Turner (Turner Seeds Inc)	615-641-7333		<a href="http://www.m-pride.com">www.m-pride.com</a>	P O Box 739, Laverge, TN 37086-0739
Cache River Valley Seed (Morsoy)	Andy Morris James Crawford	901-674-0768 870-974-2310		<a href="http://www.crvseed.com">www.crvseed.com</a>	Highway 226 East, Cash, AR 72421 Cash, AR 72421
Syngenta (NK Brand)		763-593-7333		<a href="http://www.nk-us.com">www.nk-us.com</a>	7500 Olson Memorial Hwy, Golden Valley, MN 55427
Pioneer Hi-Bred Int.	Michael Hughes	800-331-2475	<a href="mailto:michael.hughes@pioneer.com">michael.hughes@pioneer.com</a>	<a href="http://www.pioneer.com">www.pioneer.com</a>	7501 Memorial Pkwy SW Suite 205, Huntsville, AL 35802
Erwin Keith Seed Inc (Progeny)	Larry Moss	901-233-2345	<a href="mailto:larry@progenyag.com">larry@progenyag.com</a>	<a href="http://www.progenyag.com">www.progenyag.com</a>	1529 Hwy 193, Wynne, AR 72396
Schillinger Seed Inc	Jim Craig Scooter Hodges	800-264-4433		<a href="http://www.schillingerseed.com">www.schillingerseed.com</a>	P O Box 1088, Stuttgart, AR 72160

**Table 57 (continued)**

<b>Company</b>	<b>Contact</b>	<b>Phone</b>	<b>Email</b>	<b>Web site</b>	<b>Address</b>
Miles Farm Supply (Southern Cross)	Scott Janes	270-926-2420	<a href="mailto:scojan@milesnmore.com">scojan@milesnmore.com</a>	<a href="http://www.milesnmore.com">www.milesnmore.com</a>	P O Box 22879, Owensboro, KY 42304
Steyer Seeds	Phil Coffman Tom Jones Joe Steyer	270-832-7362 270-213-0020 800-231-4274	<a href="mailto:joesteyer@yahoo.com">joesteyer@yahoo.com</a>	<a href="http://www.steyerseeds.com">www.steyerseeds.com</a>	Clay, KY Sebree, KY 6154 N. Co. Rd. 33, Tiffin, OH 44883
Stine	Stratton Seed Co.	870-673-4433		<a href="http://www.stinseed.com">www.stinseed.com</a>	P O Box 1088, Stuttgart, AR 72160
University of Tennessee	Vince Pantalone	865-974-8801	<a href="mailto:vpantalo@utk.edu">vpantalo@utk.edu</a>		Dept. of Plant Sciences, Ellington 252 2431 Joe Johnson Drive Knoxville, TN 37996-4561
Terral Seed Inc	Larry Mullen	318-559-2840	<a href="mailto:terralseed@terralseed.com">terralseed@terralseed.com</a>	<a href="http://www.terralseed.com">www.terralseed.com</a>	P O Box 826, Lake Providence, LA 71254
USDA-ARS	Prakash Arelli	731-425-4741	<a href="mailto:parelli@ars.usda.gov">parelli@ars.usda.gov</a>		605 Airways Blvd, Jackson, TN 38301
Unisouth Genetics (USG)	Stacy Burwick	615-242-3397	<a href="mailto:sburwick@usgseed.com">sburwick@usgseed.com</a>	<a href="http://www.usgseed.com">www.usgseed.com</a>	2640-C Nolensville Rd., Nashville, TN 37211
Crop Production Services (Vigoro)	Steve Johnson	731-885-5121	<a href="mailto:sjohnson@agriumretail.com">sjohnson@agriumretail.com</a>	<a href="http://www.vigorseeds.com">www.vigorseeds.com</a>	530 N. Fifth St/ P O Box 40, Union City, TN 38281
Virginia Tech	David Whitt	804-746-4884	<a href="mailto:dwhitt@vt.edu">dwhitt@vt.edu</a>	<a href="http://www.virginiacrop.org">www.virginiacrop.org</a>	Virginia Crop Improvement Assoc. 9142 Atlee Station Rd Mechanicsville, VA 23116