

# **SOYBEAN VARIETY TESTS IN TENNESSEE**

**2005**

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

**[http://taes.tennessee.edu/researchprograms/Variety\\_trials/](http://taes.tennessee.edu/researchprograms/Variety_trials/)  
and  
[www.utcrops.com](http://www.utcrops.com)**

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## County Standard Soybean Tests

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<b>Matutrity Group III</b>	<b>Cooperator(s)</b>	<b>Agent</b>
Coffee	L.A. Teal	Dean Northcut
Dyer	Alan Burchfiel	Tim Campbell
Gibson	Denton Clay Parkins	Philip Shelby
Hardin	Karl Forsbach	Marcus McLemore
Henry	Don Norwood	Ken Goddard
Lake	Keiser Farms	Greg Allen
Lauderdale	Phillip Smith	Jerry Parker
Madison	Alan Ewell	Bill Wyatt
Obion	Kenneth & Blake Cheatham	Tim Smith
Weakley	Brian Garner	Jeff Lannom
<b>Maturity Group IV Early (4.0 - 4.5)</b>		
Ballard, KY	Foster Farms	Bob Middleton
Coffee	L.A. Teal	Dean Northcutt
Dyer	Mike Underwood	Tim Campbell
Gibson	Denton Clay Parkins	Philip Shelby
Haywood	King Farms	Tracey Sullivan
Henry	David & Finis Wilson	Ken Goddard
Lake	David Keefe	Greg Allen
Lauderdale	Chris Peyton & Scott Mathis	Jerry Parker
Lawrence	Bent Larson	Calvin Bryant
Montgomery	Douglas Watkins & Lewis Collins	Rusty Evans
Obion	Paul Albright	Tim Smith
Weakley	David Oliver	Jeff Lannom
<b>Maturity Group IV Late (4.6 - 4.9)</b>		
Carroll	Moore Farms	Steve Burgess
Coffee	L.A. Teal	Dean Northcutt
Crockett	Mac Summerlin	Richard Buntin
Dyer	Mike Underwood	Tim Campbell
Fulton, Ky	Jimmy Hutchison	Ben Mullins
Gibson	Denton Clay Parkins	Philip Shelby
Lake	Jon Dickey	Greg Allen
Lauderdale	Scott Mathis & Chris Peyton	Jerry Parker
McCracken, Ky	Lester & Tracy Sullivan	Bob Middleton
Obion	Billy Sellers	Tim Smith
Weakley	Ronnie Yeargin	Jeff Lannom
<b>Maturity Group V Early (5.0 – 5.5.)</b>		
Carlisle, Ky	Curtsinger Farms	Bob Middleton
Dyer	Alan Sims	Tim Campbell
Gibson	Denton Clay Parkins	Philip Shelby
Hardin	Karl Forsbach	Marcus McLemore
Lake	Terry Petty	Greg Allen
Lauderdale	Rob Reviere	Jerry Parker
REC Milan	Blake Brown, Jimmy McClure, Jason Williams, Angela Thompson	
Obion	William & Bill Thompson	Tim Smith
UT Martin Farm	Charlie Rowlett	Richard Joost
Weakley	Luke Cochran	Jeff Lannom

## Table of Contents

Experimental Procedures.....	5
Interpretation of data.....	5
Results.....	6
Location information from Research and Education Centers where the soybean variety tests were conducted in 2005.....	7
Roundup Ready Maturity Group III Soybean Tests.....	8
Roundup Ready Early Maturity Group IV Soybean Tests (4.0 – 4.5).....	15
Roundup Ready Late Maturity Group IV Soybean Tests (4.6 – 4.9).....	25
Roundup Ready Early Maturity Group V Soybean Tests (5.0 – 5.5).....	36
Roundup Ready Late Maturity Group V Soybean Tests (5.6 – 5.9).....	47
Conventional Maturity Group IV and V Soybean Tests.....	52
Systemic Insecticide Seed Treatment Comparison Tests.....	57
Soybean Characteristics.....	59

# PERFORMANCE OF SOYBEAN VARIETIES IN TENNESSEE

## RESEARCH & EDUCATION CENTERS AND COUNTY STANDARD TESTS

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2005

### 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 each REC location 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 each of the locations were sprayed with a foliar fungicide approximately one month after planting, and again approximately 21 days later as a preventative treatment for soybean rust. Soybean rust was not observed at any of the REC locations. 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 Corn Tests were conducted in several counties in Tennessee, and a few in West Kentucky. The number of counties depended on the test (e.g., 10-12). The County Standard Tests were divided into **RR3, RR4 early (relative maturity 4.0-4.5), RR4 late (RM 4.6-4.9), and RR5 early (RM 5.0-5.5)**. Each variety was evaluated in a large strip-plot at each location, thus each county test was considered as one replication of the test in calculating the overall average yield and in conducting the statistical analysis to determine significant differences. At each location, plots were planted, sprayed, fertilized, and harvested with the equipment used in the cooperating producer's farming operation. The width and length of strip-plots were different in each county; however, within a location in a county, the strips were trimmed on the ends so that the lengths were the same for each variety, or if the lengths were different then the harvested length was measured for each variety and appropriate harvested area adjustments were made to determine the yield per acre.

### Interpretation of Data

The tables on the following pages have been prepared with the entries listed in order of performance, the highest-yielding entry being listed first. **All yields presented have been adjusted to 13% moisture.** At the bottom of the tables, **LSD** values stand for **Least Significant Difference**. The mean yields of any two varieties being compared must differ by at least the amount shown (minimum) to be considered different in yielding ability at the 5% level of probability of significance. For example, given that the LSD for a test is 8.0 bu/a and the mean

yield of Variety A was 30 bu/a and the mean yield of Variety B was 35 bu/a, then the two varieties are not statistically different in yield because the difference of 5 bu/a is less than the minimum of 8 bu/a required for them to be significant. Similarly, if the average yield of Variety C was 43 bu/a then it is significantly higher yielding than both Variety B ( $43 - 35 = 8 \text{ bu/a} = \text{LSD of } 8$ ) and Variety A ( $43 - 30 = 13 \text{ bu/a} > \text{LSD of } 8$ ).

Also, the **coefficient of variation (C.V.)** values are shown at the bottom of each table. This value is a measure of the error variability found within each experiment. It is the percentage that the square root of error mean square 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 thirty nine soybean varieties were evaluated in the 2005 **Research & Education Center (REC)** tests in Tennessee. There were 28 varieties in the RR3, 50 in the RR4E, 72 in the RR4L, 49 in the RR5E, 19 in the RR5L, and 21 in the conventional MG5 test. Additionally, 7 varieties that were treated with *Cruiser* (a systemic insecticide seed treatment) were included in the RR3 (3), RR4E (1), and RR4L (3) tests (Tables 50 and 51). The **County Standard (CS)** tests involved 80 varieties total, consisting of a RR3 test (19 varieties at 10 locations), a RR4E test (19 varieties at 12 locations), a RR4L test (27 varieties at 11 locations), and a RR5E test (15 varieties at 10 locations). In addition to Tennessee counties, the County Standard tests involved four counties in Western Kentucky (Ballard, Carlisle, Fulton, and McCracken). **Tables 2-51** contain data on yield and agronomic traits such as maturity, plant height, lodging, shattering, seed quality, seed protein and oil content. **Table 52** lists the names and descriptive characteristics of the varieties included in the experiment station tests in 2004.

**Growing Season:** The 2005 season was characterized by several timely rainfall events during critical parts of the growing season. Rainfall events were prompted by hurricane aftermaths (especially Dennis, Katrina, and Rita) passing through the state. Daytime temperatures were high (several 90+ F days) during flowering and seed fill periods at all locations. The State soybean yield average is projected at 38 bu/a. This figure is ~ 3 bu/a above the historical state average, but is 4 bu/a below the 2004 record yields.

**Weather Data:** The 2005 rainfall and temperature data during the growing season for the different experiment station locations are posted on the variety test web site:  
[http://taes.tennessee.edu/researchprograms/Variety\\_trials](http://taes.tennessee.edu/researchprograms/Variety_trials)

**Disease Ratings:** Ratings on variety reactions to frogeye leaf spot, stem canker, and SDS are presented in **Tables 9, 18, 27, 36** (data provided by Dr. Melvin Newman, professor, Dept. of Entomology and Plant Pathology, UT).

**Table 1. Location information from research centers where the soybean variety tests were conducted in 2005.**

<b>Research Center</b>	<b>Location</b>	<b>Planting Date</b>	<b>Harvest Date</b>	<b>Seeding Rate</b>	<b>Soil Type</b>
<b>Roundup Ready Maturity Group III</b>					
Highland Rim	Springfield	5/25/2005	10/14/2005	175000	Dickson Silt Loam
Knoxville	Knoxville	5/6/2005	9/30/2005	175000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	5/17/2005	9/23/2005	175000	Loring Silt Loam
Milan (Non Irrigated)	" "	5/17/2005	9/23/2005	175000	Grenada, Routon Silt Loam
Middle TN (Irrigated)	Spring Hill	5/12/2005	9/15/2005	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/9/2005	9/15/2005	175000	" " "
<b>Roundup Ready Maturity Group Early IV (4.0 - 4.5)</b>					
Ames	Grand Junction	5/3/2005	10/7/2005	175000	Lexington Silt Loam
Highland Rim	Springfield	6/1/2005	10/18/2005	175000	Mountview Silt Loam
Knoxville	Knoxville	5/6/2005	9/30/2005	175000	Sequatchie Fine Sandy Loam
Plateau	Crossville	5/13/2005	10/3/2005	175000	Hendon Silt Loam
Milan (Irrigated)	Milan	5/17/2005	9/28/2005	175000	Loring Silt Loam
Milan (Non Irrigated)	" "	5/17/2005	9/23/2005	175000	Grenada, Routon Silt Loam
Middle TN (Irrigated)	Spring Hill	5/12/2005	10/10/2005	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/9/2005	10/10/2005	175000	" " "
<b>Roundup Ready Maturity Group Late IV (4.6 - 4.9)</b>					
Ames	Grand Junction	5/3/2005	10/8/2005	175000	Lexington Silt Loam
Highland Rim	Springfield	6/17/2005	10/19/2005	175000	Dickson Silt Loam
Knoxville	Knoxville	5/6/2005	10/12/2005	175000	Sequatchie Fine Sandy Loam
Plateau	Crossville	5/13/2005	10/18/2005	175000	Hendon Silt Loam
Milan (Irrigated)	Milan	5/17/2005	10/4/2005	175000	Loring Silt Loam
Milan (Non Irrigated)	" "	5/17/2005	10/3/2005	175000	Grenada, Routon Silt Loam
Middle TN (Irrigated)	Spring Hill	5/12/2005	10/11/2005	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/9/2005	10/11/2005	175000	" " "
<b>Roundup Ready Maturity Group Early V (5.0 - 5.5)</b>					
Ames	Grand Junction	5/3/2005	11/3/2005	175000	Lexington Silt Loam
Highland Rim	Springfield	5/25/2005	10/27/2005	175000	Sango Silt Loam
Knoxville	Knoxville	5/6/2005	10/18/2005	175000	Sequatchie Fine Sandy Loam
Milan (Irrigated)	Milan	5/17/2005	10/31/2005	175000	Calloway, Loring, Henry Silt Loam
Milan (Non Irrigated)	" "	5/17/2005	11/3/2005	175000	Grenada, Routon Silt Loam
Middle TN (Irrigated)	Spring Hill	5/12/2005	10/27/2005	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/9/2005	10/27/2005	175000	" " "
<b>Roundup Ready Maturity Group Late V (5.6 - 5.9)</b>					
Ames	Grand Junction	5/3/2005	11/3/2005	175000	Lexington Silt Loam
Highland Rim	Springfield	5/25/2005	10/27/2005	175000	Sango Silt Loam
Knoxville	Knoxville	5/6/2005	10/18/2005	175000	Etowah Silt Loam
Milan (Irrigated)	Milan	5/18/2005	11/4/2005	175000	Loring, Henry Silt Loam
Milan (Non Irrigated)	" "	5/17/2005	11/3/2005	175000	Grenada, Routon Silt Loam
Middle TN (Irrigated)	Spring Hill	5/12/2005	10/31/2005	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/9/2005	10/31/2005	175000	" " "
<b>Conventional Maturity Groups IV and V</b>					
Highland Rim	Springfield	5/25/2005	10/19/2005	175000	Dickson Silt Loam
Knoxville	Knoxville	5/6/2005	10/10/2005	175000	Etowah Silt Loam
Milan (Irrigated)	Milan	5/18/2005	10/31/2005	175000	Loring Silt Loam
Milan (Non Irrigated)	" "	5/17/2005	11/3/2005	175000	Grenada, Routon Silt Loam
Middle TN (Irrigated)	Spring Hill	5/12/2005	10/31/2005	175000	Maury Silt Loam
Middle TN (Non Irrigated)	" "	5/9/2005	10/31/2005	175000	" " "

**Table 2. Mean yields † of 28 Maturity Group III Roundup Ready soybean varieties evaluated in six environments in Tennessee during 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=6)	Spring			Milan		
			Knoxville	Hill		Irr.	Non-Irr.	
		-----bu/a-----						
FFR	3990 RR	53 ± 1	63	41	39	51	63	61
Delta King	DK XTJ 638 (RR)	53 ± 1	46	36	46	53	73	62
Progeny	3805 RR	52 ± 1	47	34	46	49	70	65
Dyna-Gro	33A37 (RR)	51 ± 1	59	38	42	47	60	62
Progeny	3905 RR	51 ± 1	56	41	42	46	59	61
Delta King	DK 3967 (RR)	51 ± 1	58	34	42	49	58	62
Pioneer	93M90 (RR)	50 ± 1	47	38	39	44	75	55
Garst	3960 RR/N	50 ± 1	51	36	41	48	64	57
Dyna-Gro	3373N RR	49 ± 1	52	42	45	47	55	56
Golden Harvest	H-3945 RR	49 ± 1	50	39	46	45	58	57
Asgrow	AG3906 (RR)	49 ± 1	62	34	37	47	57	58
Terral	TV 39RS31 (RR)	49 ± 1	46	36	38	47	64	63
Asgrow	AG3802 (RR)	49 ± 1	62	29	36	43	66	57
Dyna-Gro	3392N RR	48 ± 1	58	32	43	45	62	52
N.K. Brand	S 39-Q4 (RR)	48 ± 1	47	33	37	51	66	57
Vigoro	V39N4RR	48 ± 1	51	41	40	41	59	53
DeKalb	DKB 36-52 (RR)	48 ± 1	51	35	40	46	59	55
USG	7393nRR	48 ± 1	49	35	45	44	60	53
Delta Grow	3950 RR	47 ± 1	52	39	45	48	58	43
Delta King	DK 3968 (RR)	47 ± 1	45	41	44	48	53	53
Delta King	DK XTJ 635 (RR)	47 ± 1	44	39	42	45	57	54
N.K. Brand	S 37-N4 (RR)	46 ± 1	46	36	40	40	53	62
Progeny	3900 RR	46 ± 1	45	34	42	46	61	47
FFR	3883 RR	46 ± 1	45	45	34	50	54	48
D & PL	DP 3861 RR	46 ± 1	55	35	34	42	53	56
Excel Brand	8398N RR	46 ± 1	51	34	38	41	57	53
Vigoro	X831064 (RR)	46 ± 1	59	34	34	36	56	54
Vigoro	V382NRR	43 ± 1	47	30	39	40	55	44
<b>Average (bu/a)</b>		<b>48</b>	<b>52</b>	<b>37</b>	<b>40</b>	<b>46</b>	<b>60</b>	<b>55</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>12</b>	<b>8</b>	<b>5</b>	<b>7</b>	<b>8</b>	<b>10</b>
<b>C.V. (%)</b>		<b>10.8</b>	<b>13.6</b>	<b>13.5</b>	<b>7.9</b>	<b>9.0</b>	<b>8.0</b>	<b>11.6</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 28 Maturity Group III Roundup Ready soybean varieties evaluated in six environments in Tennessee during 2005.**

Brand	Variety ‡	Avg. Yield	Moisture §	Lodging	Height	Maturity	Shattering	Leaf Retention	Seed Quality	Protein	Oil
		± Std Err. (n=6)	(n=6)	(n=3)	(n=6)	(n=6)	(n=4)	(n=1)	(n=4)	(n=4)	(n=4)
		bu/a	%	Score	in.	DAP	-----Score-----		%	%	
FFR	3990 RR	53 ± 1	14.7	3.2	38	121	1.0	1.5	2.1	39.6	22.5
Delta King	DK XTJ 638 (RR)	53 ± 1	14.2	2.2	36	124	1.0	4.0	3.0	39.8	22.5
Progeny	3805 RR	52 ± 1	13.7	2.3	36	123	1.0	5.0	2.7	39.9	22.4
Dyna-Gro	33A37 (RR)	51 ± 1	15.9	2.8	36	120	1.0	1.0	2.2	41.0	21.8
Progeny	3905 RR	51 ± 1	14.3	2.4	39	119	1.0	1.5	2.4	40.8	22.3
Delta King	DK 3967 (RR)	51 ± 1	14.5	2.5	39	120	1.0	1.0	2.5	40.6	22.6
Pioneer	93M90 (RR)	50 ± 1	13.3	2.2	39	123	1.0	1.5	2.4	40.2	22.1
Garst	3960 RR/N	50 ± 1	14.7	2.3	39	122	1.0	2.5	1.8	40.7	22.2
Dyna-Gro	3373N RR	49 ± 1	14.2	2.8	37	120	1.0	1.5	2.0	41.1	22.0
Golden Harvest	H-3945 RR	49 ± 1	14.1	2.3	36	119	1.0	1.5	1.8	39.7	22.8
Asgrow	AG3906 (RR)	49 ± 1	14.6	2.1	35	125	1.0	1.0	2.0	38.5	23.7
Terral	TV 39RS31 (RR)	49 ± 1	14.1	2.2	39	124	1.0	3.0	2.3	40.1	21.9
Asgrow	AG3802 (RR)	49 ± 1	15.1	2.3	39	121	1.0	1.0	2.2	39.9	21.9
Dyna-Gro	3392N RR	48 ± 1	14.8	3.2	40	120	1.0	1.0	2.4	40.1	23.0
N.K. Brand	S 39-Q4 (RR)	48 ± 1	14.6	2.7	36	123	1.0	3.5	2.7	40.8	22.0
Vigoro	V39N4RR	48 ± 1	14.2	3.1	38	124	1.0	4.5	3.0	39.8	22.9
DeKalb	DKB 36-52 (RR)	48 ± 1	13.6	2.8	36	120	1.0	2.0	2.1	41.6	21.3
USG	7393nRR	48 ± 1	14.7	3.2	37	125	1.0	4.5	2.7	40.2	22.6
Delta Grow	3950 RR	47 ± 1	14.3	3.0	37	126	1.0	4.0	2.8	40.4	22.5
Delta King	DK 3968 (RR)	47 ± 1	13.9	2.1	35	122	1.1	1.5	1.8	40.1	22.7
Delta King	DK XTJ 635 (RR)	47 ± 1	14.1	2.8	36	122	1.0	2.5	2.4	40.8	22.1
N.K. Brand	S 37-N4 (RR)	46 ± 1	14.7	2.6	40	127	1.0	5.0	3.2	41.5	21.3
Progeny	3900 RR	46 ± 1	14.7	3.1	38	127	1.0	5.0	2.9	40.1	22.7
FFR	3883 RR	46 ± 1	13.8	3.2	36	125	1.0	1.5	2.0	39.9	22.6
D & PL	DP 3861 RR	46 ± 1	14.2	2.9	35	119	1.0	1.0	1.8	40.6	21.9
Excel Brand	8398N RR	46 ± 1	14.0	2.6	35	123	1.0	3.0	2.6	40.3	21.9
Vigoro	X831064 (RR)	46 ± 1	13.7	2.6	40	121	1.0	1.5	2.4	39.8	22.8
Vigoro	V382NRR	43 ± 1	13.7	3.2	39	121	1.0	2.0	2.5	39.7	22.5

† 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 12 Maturity Group III Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2004 - 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=12)	Spring Hill			Milan		
			Knoxville	Irr.	Non-Irr.	Springfield	Irr.	Non-Irr.
-----bu/a-----								
Asgrow	AG3906 (RR)	57 ± 1	68	49	52	46	63	63
N.K. Brand	S 39-Q4 (RR)	55 ± 1	64	50	45	55	61	56
Asgrow	AG3802 (RR)	55 ± 1	69	47	41	52	64	56
Pioneer	93M90 (RR)	55 ± 1	63	45	48	50	69	52
USG	7393nRR	53 ± 1	65	47	47	43	62	57
Vigoro	V39N4RR	53 ± 1	65	48	45	45	65	53
Dyna-Gro	33A37 (RR)	52 ± 1	63	48	44	45	59	53
D & PL	DP 3861 RR	51 ± 1	65	47	42	45	56	53
Delta King	DK 3968 (RR)	51 ± 1	56	47	50	51	50	53
Delta Grow	3950 RR	51 ± 1	63	49	45	46	56	48
Progeny	3900 RR	51 ± 1	62	46	45	42	59	51
Vigoro	V382NRR	50 ± 1	62	44	41	44	59	50
<b>Average (bu/a)</b>		<b>53</b>	<b>64</b>	<b>47</b>	<b>45</b>	<b>47</b>	<b>60</b>	<b>54</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>9</b>	<b>7</b>	<b>5</b>	<b>11</b>	<b>8</b>	<b>9</b>
<b>C.V. (%)</b>		<b>10.8</b>	<b>9.3</b>	<b>10.6</b>	<b>8.3</b>	<b>15.7</b>	<b>9.1</b>	<b>11.2</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 5. Mean yields † and agronomic characteristics of 12 Maturity Group III Roundup Ready soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2004 - 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=12)	Moisture § (n=12)	Lodging (n=7)	Height (n=12)	Maturity (n=12)	Seed			
							Shattering (n=10)	Quality (n=8)	Protein (n=8)	Oil (n=8)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Asgrow	AG3906 (RR)	57 ± 1	14.6	1.9	36	123	1.0	2.2	38.7	23.1
N.K. Brand	S 39-Q4 (RR)	55 ± 1	14.8	2.6	37	121	1.0	2.4	40.1	21.9
Asgrow	AG3802 (RR)	55 ± 1	15.0	2.1	40	122	1.0	2.3	40.0	21.5
Pioneer	93M90 (RR)	55 ± 1	14.3	1.9	40	122	1.0	2.4	39.6	22.1
USG	7393nRR	53 ± 1	14.7	3.1	37	125	1.0	2.7	39.7	22.7
Vigoro	V39N4RR	53 ± 1	14.7	3.0	38	124	1.0	2.9	39.4	22.8
Dyna-Gro	33A37 (RR)	52 ± 1	15.5	2.9	36	119	1.0	2.3	40.4	21.7
D & PL	DP 3861 RR	51 ± 1	14.6	3.1	36	119	1.0	2.0	40.1	21.9
Delta King	DK 3968 (RR)	51 ± 1	14.1	1.8	36	120	1.0	2.0	39.4	22.5
Delta Grow	3950 RR	51 ± 1	14.6	2.9	37	125	1.0	2.7	39.7	22.7
Progeny	3900 RR	51 ± 1	14.7	3.3	38	125	1.0	2.8	39.7	22.6
Vigoro	V382NRR	50 ± 1	14.4	3.1	40	119	1.0	2.4	39.2	22.3

† 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.

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 seven Maturity Group III Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2003 - 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=18)	Spring Hill			Milan		
			Knoxville	Irr.	Non-Irr.	Springfield	Irr.	Non-Irr.
N.K. Brand	S 39-Q4 (RR)	57 ± 1	65	54	50	54	60	57
USG	7393nRR	56 ± 1	66	50	49	47	63	59
Pioneer	93M90 (RR)	55 ± 1	68	49	48	48	67	53
Progeny	3900 RR	53 ± 1	64	50	48	46	60	53
D & PL	DP 3861 RR	53 ± 1	66	50	48	44	57	53
Vigoro	V382NRR	52 ± 1	64	48	46	46	59	51
Delta King	DK 3968 (RR)	52 ± 1	59	48	53	46	53	55
<b>Average (bu/a)</b>		<b>54</b>	<b>65</b>	<b>50</b>	<b>49</b>	<b>47</b>	<b>60</b>	<b>54</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>11</b>	<b>8</b>	<b>9</b>
<b>C.V. (%)</b>		<b>10.2</b>	<b>8.6</b>	<b>9.4</b>	<b>8.5</b>	<b>15.1</b>	<b>8.8</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 7. Mean yields † and agronomic characteristics of seven Maturity Group III Roundup Ready soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2003 - 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=18)	Moisture § (n=18)	Lodging (n=9)	Height (n=18)	Maturity (n=18)	Shattering (n=16)	Late	Seed	Protein (n=12)	Oil (n=12)
								Shattering (n=1)	Quality (n=12)		
		bu/a	%	Score	in.	DAP		Score		%	%
N.K. Brand	S 39-Q4 (RR)	57 ± 1	14.8	2.5	35	120	1.0	2.0	2.4	40.4	21.3
USG	7393nRR	56 ± 1	14.6	2.9	35	123	1.0	2.0	2.6	39.6	22.2
Pioneer	93M90 (RR)	55 ± 1	14.4	1.9	38	121	1.0	3.0	2.4	39.7	21.6
Progeny	3900 RR	53 ± 1	14.6	3.1	36	123	1.0	1.5	2.6	39.7	22.1
D & PL	DP 3861 RR	53 ± 1	14.7	2.9	34	118	1.0	1.5	2.0	40.7	21.0
Vigoro	V382NRR	52 ± 1	14.4	2.9	38	119	1.0	2.0	2.3	39.2	21.9
Delta King	DK 3968 (RR)	52 ± 1	14.2	1.7	34	118	1.0	3.0	2.1	39.5	22.0

† 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.

Late Shattering notes taken in 2003 at Knoxville - 184 days after planting, 49 days after normal harvest.

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

Protein & Oil on dry weight basis.

**Table 8. Yields † of 19 Maturity Group III Roundup Ready soybean varieties in ten County Standard Tests in Tennessee during 2005**

MS	Brand/Variety	Avg.											
		Yield	Moisture ‡	Coffee <i>f</i>	Dyer <i>fi</i>	Gibson <i>fi</i>	Hardin <i>f</i>	Henry	Lake <i>f</i>	Lauderdale <i>fi</i>	Madison	Obion <i>f</i>	Weakley <i>f</i>
		bu/a	%	5/17 §	5/5	5/10	5/9	5/11	4/27	4/27	4/25	5/7	5/5
A	*Asgrow AG3906	54.6	14.2	61.1	46.2	64.2	41.3	66.5	48.3	44.9	62.3	67.4	43.5
AB	**Pioneer 93M90	53.8	12.9	62.2	43.4	66.5	43.8	70.2	34.5	36.9	69.4	66.1	44.6
AB	Progeny 3900 [Cruiser]	52.9	13.2	63.4	45.9	58.1	50.4	67.8	44.8	37.7	60.9	60.7	39.5
ABC	Golden Harvest H-3945	52.8	13.0	63.0	43.1	57.7	45.5	67.7	42.5	47.9	60.9	59.8	40.3
ABCD	*DeKalb DKB38-52	52.3	13.1	60.3	50.3	57.9	51.3	65.2	38.6	39.2	61.2	57.6	41.2
ABCDE	Dyna-Gro DG3373NRR	51.9	13.8	63.8	46.2	57.0	50.0	66.8	25.5	43.5	60.0	65.9	40.3
ABCDE	Progeny 3900	51.6	13.1	62.6	44.5	62.1	48.8	70.1	38.3	35.7	57.2	60.7	35.7
ABCDEF	Vigoro V39N4RR	51.1	13.1	59.6	44.7	58.9	47.0	65.3	37.4	40.7	56.7	61.6	39.0
ABCDEF	*DeKalb DKB36-52	50.9	12.6	55.9	47.0	52.1	52.3	65.8	38.1	38.6	60.0	59.2	39.8
BCDEF	Golden Harvest H-3606	50.6	12.7	56.3	46.7	51.5	53.2	63.5	35.2	48.5	45.5	60.7	45.0
BCDEF	Merschman Washington IXRR	50.4	13.0	62.9	45.6	59.9	45.0	64.8	34.2	40.6	47.2	64.0	40.1
BCDEF	Croplan RC3624	50.4	12.4	51.0	45.9	43.5	50.0	68.2	42.0	46.0	52.2	65.3	39.4
BCDEF	Excel 8398NRR	50.3	12.9	61.4	39.5	52.1	50.7	66.7	38.0	43.1	44.6	63.2	43.5
CDEF	Hornbeck 3824	49.0	17.0	54.4	46.8	54.7	44.9	66.3	35.3	39.7	50.9	59.8	37.3
DEF	Deltapine DP3861	48.9	13.3	56.6	45.8	51.2	47.0	61.9	34.1	46.9	47.7	61.6	36.2
DEF	Armor GPX3930	48.8	13.1	56.8	42.4	52.2	35.1	64.1	31.2	49.0	58.3	61.6	37.0
EF	FFR 3883	48.1	14.5	51.2	44.1	47.9	40.8	65.3	34.4	33.0	70.5	58.8	34.7
EF	AgVenture 6361	48.1	13.1	47.9	42.7	57.5	39.6	58.0	36.7	41.6	55.5	61.5	39.6
F	NK Brand S39-Q4	47.4	13.0	56.8	40.7	54.2	48.4	56.4	31.6	40.5	50.2	61.7	34.1
<b>Average</b>		<b>50.7</b>		<b>58.3</b>	<b>44.8</b>	<b>55.7</b>	<b>46.6</b>	<b>65.3</b>	<b>36.9</b>	<b>41.8</b>	<b>56.4</b>	<b>61.9</b>	<b>39.5</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 2004, 2003, and/or 2002.

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 19 Maturity Group III Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests during 2005.**

MS	Brand/Variety	CST Avg. Yield (n=10)	Moisture ‡	----- Research and Education Center at Milan -----					Sprayed ¶ Yield	Unsprayed Yield
				SDS	Frogeye	Stem Canker	2005	2005		
		bu/a	%	2003 / 2004 / 2005	2003 / 2004 / 2005	2003 / 2004 / 2005	2005	2005		
A	*Asgrow AG3906	54.6	14.2	/ 1.3 /	/ 5.0 / 5.0	---	39.1	31.0		
AB	**Pioneer 93M90	53.8	12.9	1.0 / 0.3 /	3.0 / 3.0 / 6.0	---	46.8	37.6		
AB	Progeny 3900 [Cruiser]	52.9	13.2	---	---	---	---	---		
ABC	Golden Harvest H-3945	52.8	13.0	4.0 / 1.7 /	3.0 / 4.7 / 3.0	---	37.3	40.7		
ABCD	*DeKalb DKB38-52	52.3	13.1	/ 2.3 /	/ 4.0 / 6.0	---	44.0	42.5		
ABCDE	Dyna-Gro DG3373NRR	51.9	13.8	7.0 / 2.3 /	0.0 / 0.7 / 5.0	0.0 (02)	37.4	35.9		
ABCDE	Progeny 3900	51.6	13.1	---	/ / 6.0	---	42.7	30.3		
ABCDEF	Vigoro V39N4RR	51.1	13.1	/ 2.0 /	/ 6.7 / 6.0	---	44.2	35.9		
ABCDEF	*DeKalb DKB36-52	50.9	12.6	/ 0.3 /	/ 3.3 / 4.0	---	39.3	33.9		
BCDEF	Golden Harvest H-3606	50.6	12.7	---	/ / 5.0	---	34.7	31.7		
BCDEF	Merschman Washington I.	50.4	13.0	/ 2.7 /	/ 5.3 / 7.0	---	---	---		
BCDEF	Croplan RC3624	50.4	12.4	---	/ / 3.0	---	40.0	34.6		
BCDEF	Excel 8398NRR	50.3	12.9	---	/ / 7.0	---	---	---		
CDEF	Hornbeck 3824	49.0	17.0	---	/ / 5.0	---	---	---		
DEF	Deltapine DP3861	48.9	13.3	/ 2.7 /	/ 0.0 / 3.0	---	---	---		
DEF	Armor GPX3930	48.8	13.1	---	/ / 5.0	---	---	---		
EF	FFR 3883	48.1	14.5	---	/ / 4.0	---	38.9	27.6		
EF	AgVenture 6361	48.1	13.1	---	/ / 7.0	---	---	---		
F	NK Brand S39-Q4	47.4	13.0	3.0 / 1.3 /	4.0 / 6.7 / 6.0	1.3 (02)	35.2	27.2		
<b>Average</b>		<b>50.7</b>					<b>40.0</b>	<b>34.1</b>		

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

¶ Sprayed plots at Milan treated with Headline SBR @ 7.8 oz./Acre in 20 gpa at R3 growth stage.

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

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 2004, 2003, and/or 2002.

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

**Table 10. Overall average yields † and moistures ‡ of 11 Maturity Group III Roundup Ready soybean varieties evaluated in County Standard Tests (n=10) and Research and Education Centers (n=6) in Tennessee in 2005.**

Brand	Variety	County Standard Trials		Research and Education Center Trials	
		Avg. Yield	Moisture	Avg. Yield	Moisture
		bu/a	%	bu/a	%
Asgrow	AG3906 (RR)	55	14.2	49	14.6
Pioneer	93M90 (RR)	54	12.9	50	13.3
Golden Harvest	H-3945 RR	53	13.0	49	14.1
Dyna-Gro	3373N RR	52	13.8	49	14.2
Progeny	3900 RR	52	13.1	46	14.7
Vigoro	V39N4RR	51	13.1	48	14.2
DeKalb	DKB 36-52 (RR)	51	12.6	48	13.6
Excel Brand	8398N RR	50	12.9	46	14.0
D & PL	DP 3861 RR	49	13.3	46	14.2
FFR	3883 RR	48	14.5	46	13.8
N.K. Brand	S 39-Q4 (RR)	47	13.0	48	14.6
<b>Average (bu/a)</b>		<b>51</b>	<b>13.3</b>	<b>48</b>	<b>14.1</b>

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

**Table 11. Mean yields † of 50 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in eight environments in Tennessee during 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=8)	Knoxville		Spring Hill		Springfield		Milan		Ames
			Crossville	Irr.	Non-Irr.	Irr.	Non-Irr.	Irr.	Non-Irr.		
Progeny	4401 RR	52 ± 1	55	60	42	38	51	57	67	43	
Vigoro	V44N6RR	52 ± 1	63	58	39	41	51	55	67	38	
Delta Grow	4460 RR	51 ± 1	66	57	38	36	50	56	69	38	
DeKalb	DKB 44-51 (RR)	51 ± 1	62	61	37	36	50	60	61	42	
Progeny	4405 RR	51 ± 1	66	58	39	37	55	51	62	40	
Morsoy	RT 4485N (RR)	51 ± 1	68	52	40	40	58	56	62	32	
Delta King	DK XTJ 6D44 (RR)	50 ± 1	66	51	40	37	52	46	68	44	
Steyer	4420 RR Scn	50 ± 1	63	53	40	40	53	55	64	35	
D & PL	DP 4331 RR	50 ± 1	60	63	34	35	45	53	67	43	
Trisler Seed	Trisoy 4557RR (CN)	50 ± 1	62	57	39	36	52	46	68	39	
Dyna-Gro	37A44 (RR)	50 ± 1	64	51	40	37	53	55	64	36	
Progeny	4205 RR	50 ± 1	61	56	46	41	47	54	66	28	
Vigoro	V442NRR	50 ± 1	58	59	39	36	49	59	64	35	
Dyna-Gro	3443N RR	50 ± 1	57	64	35	37	45	55	67	39	
Golden Harvest	H-4534 RR	50 ± 1	60	57	36	35	49	60	65	34	
Midwest Premium Genetics	MPV 4404nRR	49 ± 1	61	58	38	33	45	60	67	34	
USG	7440nRR	49 ± 1	57	57	40	37	46	54	68	37	
Garst	4512 RR/N	49 ± 1	58	56	45	35	42	52	64	42	
Dyna-Gro	35B40 (RR)	49 ± 1	65	56	37	37	51	51	59	37	
Pioneer	94M30 (RR)	49 ± 1	57	61	36	39	45	58	60	38	
Delta Grow	4150 RR	49 ± 1	58	56	42	42	48	49	66	30	
Armor	44-R4 (RR)	49 ± 1	59	57	38	35	50	54	60	38	
Asgrow	AG4503 (RR)	48 ± 1	59	55	38	40	51	51	54	40	
USG	7443nRR	48 ± 1	57	66	37	36	48	51	55	34	
FFR	4545 RR	48 ± 1	62	53	43	37	48	47	61	33	
Delta King	DK XTJ 640 (RR)	48 ± 1	56	50	40	39	48	55	56	41	
USG	7423nRS	48 ± 1	58	58	40	34	50	47	58	36	
USG	7455nRR	48 ± 1	61	56	40	34	49	47	62	31	
Vigoro	V41N6RR (X340078)	48 ± 1	58	58	36	38	45	55	53	37	
N.K. Brand	S 43-B1 (RR)	48 ± 1	60	48	35	36	44	57	64	37	
Vigoro	V42N3RR	47 ± 1	60	61	42	36	44	48	58	31	
Armor	GP 422 (RR)	47 ± 1	60	52	35	38	50	43	63	37	
Armor	42-B2 (RR)	47 ± 1	61	60	35	35	47	50	63	27	
Morsoy	RT 4480N (RR)	47 ± 1	55	58	37	35	43	50	61	36	
Excel Brand	8427N RR	47 ± 1	56	54	41	32	47	53	56	37	
USG	7415nRR	47 ± 1	61	59	33	38	50	40	60	34	
FFR	4455 RR	47 ± 1	52	53	47	44	44	46	51	36	

**Table 11 (continued)**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=8)	Knoxville	Crossville	Spring Hill		Springfield	Milan		Ames
					Irr.	Non-Irr.		Irr.	Non-Irr.	
-----bu/a-----										
Asgrow	AG4404 (RR)	47 ± 1	64	53	39	32	45	47	59	34
Pioneer	94M50 (RR)	46 ± 1	55	53	38	34	47	45	62	34
Excel Brand	8430NN RR STS	46 ± 1	60	52	36	39	48	49	50	34
Delta King	DK 4566 (RR)	46 ± 1	59	62	36	30	43	47	59	32
Excel Brand	8448N RR	46 ± 1	53	59	38	34	45	52	55	32
Hornbeck	HBK R 4623 (RR)	45 ± 1	52	51	36	32	41	61	55	33
D & PL	DP 4546 RR	45 ± 1	53	50	36	39	50	46	54	31
Progeny	4315 RR	44 ± 1	61	53	33	35	45	42	57	27
USG	7434nRR	44 ± 1	57	51	40	34	48	51	55	19
Hornbeck	HBK R 3824 (RR)	44 ± 1	55	56	34	33	43	40	58	32
Terral	TV 45R14 (RR)	43 ± 1	55	52	36	35	43	43	53	29
Delta Grow	4250 RR	43 ± 1	60	52	33	30	44	52	53	20
D & PL	DPX 1908 RR	41 ± 1	51	47	33	31	41	46	54	24
<b>Average (bu/a)</b>		<b>48</b>	<b>59</b>	<b>56</b>	<b>38</b>	<b>36</b>	<b>48</b>	<b>51</b>	<b>61</b>	<b>35</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>6</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>12</b>	<b>9</b>	<b>11</b>
<b>C.V. (%)</b>		<b>10.9</b>	<b>6.3</b>	<b>8.6</b>	<b>11.9</b>	<b>10.7</b>	<b>11.6</b>	<b>14.3</b>	<b>9.5</b>	<b>17.3</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 12. Mean yields † and agronomic characteristics of 50 Early Maturity Group IV Roundup Ready soybean varieties evaluated in eight environments in Tennessee during 2005.**

Brand	Variety ‡	Avg. Yield	Moisture §	Lodging	Height	Maturity	Shattering	Seed	Protein	Oil
		± Std Err. (n=8)	(n=8)	(n=3)	(n=7)	(n=7)	(n=5)	Quality (n=4)	(n=4)	(n=4)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Progeny	4401 RR	52 ± 1	15.0	1.9	41	130	1.0	2.3	38.6	23.5
Vigoro	V44N6RR	52 ± 1	13.9	2.6	42	128	1.0	2.3	39.9	22.3
Delta Grow	4460 RR	51 ± 1	14.7	2.4	43	128	1.0	2.5	40.2	22.2
DeKalb	DKB 44-51 (RR)	51 ± 1	14.8	2.1	40	129	1.0	2.1	38.7	23.5
Progeny	4405 RR	51 ± 1	14.3	2.6	44	127	1.0	2.4	40.0	22.0
Morsoy	RT 4485N (RR)	51 ± 1	14.4	2.6	42	129	1.0	2.4	39.9	22.5
Delta King	DK XTJ 6D44 (RR)	50 ± 1	14.2	2.6	42	129	1.0	2.3	39.9	22.4
Steyer	4420 RR Scn	50 ± 1	13.8	2.6	44	128	1.0	2.3	40.1	22.2
D & PL	DP 4331 RR	50 ± 1	14.3	2.2	39	129	1.0	2.1	38.6	23.6
Trisler Seed	Trisoy 4557RR (CN)	50 ± 1	14.1	2.3	43	128	1.0	2.3	39.9	22.4
Dyna-Gro	37A44 (RR)	50 ± 1	14.1	2.7	42	128	1.0	2.6	39.7	22.5
Progeny	4205 RR	50 ± 1	13.7	2.4	40	128	1.0	1.6	40.7	22.2
Vigoro	V442NRR	50 ± 1	15.7	1.8	40	129	1.0	2.1	38.1	23.9
Dyna-Gro	3443N RR	50 ± 1	14.6	2.1	40	129	1.0	2.2	38.6	23.6
Golden Harvest	H-4534 RR	50 ± 1	14.1	2.1	40	129	1.0	2.0	38.6	23.5
Midwest Premium Genetics	MPV 4404nRR	49 ± 1	15.2	2.3	40	130	1.0	2.3	38.6	23.6
USG	7440nRR	49 ± 1	15.1	2.2	40	130	1.0	2.0	38.7	23.6
Garst	4512 RR/N	49 ± 1	14.7	2.2	39	129	1.0	2.1	38.8	23.4
Dyna-Gro	35B40 (RR)	49 ± 1	13.9	2.4	39	129	1.0	1.9	40.5	22.0
Pioneer	94M30 (RR)	49 ± 1	13.7	2.4	38	131	1.0	2.4	41.7	22.2
Delta Grow	4150 RR	49 ± 1	13.8	2.3	39	129	1.0	1.8	41.2	21.8
Armor	44-R4 (RR)	49 ± 1	14.8	1.9	39	130	1.0	2.1	38.6	23.6
Asgrow	AG4503 (RR)	48 ± 1	15.2	2.2	39	130	1.0	2.0	39.2	23.5
USG	7443nRR	48 ± 1	14.7	2.2	38	131	1.0	2.4	40.3	22.5
FFR	4545 RR	48 ± 1	16.1	2.9	38	132	1.0	2.7	40.2	21.8
Delta King	DK XTJ 640 (RR)	48 ± 1	14.3	2.4	39	129	1.0	1.9	40.9	21.8
USG	7423nRS	48 ± 1	13.8	2.3	35	128	1.0	2.0	39.3	22.5
USG	7455nRR	48 ± 1	13.5	2.2	44	128	1.0	2.1	39.6	22.3
Vigoro	V41N6RR (X340078)	48 ± 1	15.1	2.3	38	130	1.0	2.2	39.7	22.7
N.K. Brand	S 43-B1 (RR)	48 ± 1	14.3	2.2	37	128	1.0	2.5	40.3	21.7
Vigoro	V42N3RR	47 ± 1	14.5	2.4	34	129	1.0	2.4	39.7	22.4
Armor	GP 422 (RR)	47 ± 1	15.8	2.6	39	128	1.0	2.1	38.6	23.0
Armor	42-B2 (RR)	47 ± 1	15.5	1.7	38	126	1.0	2.3	39.5	22.4
Morsoy	RT 4480N (RR)	47 ± 1	14.8	2.1	40	131	1.0	2.1	38.3	23.7
Excel Brand	8427N RR	47 ± 1	14.1	1.9	33	128	1.0	2.3	39.4	22.7
USG	7415nRR	47 ± 1	14.9	2.3	38	128	1.0	2.1	39.9	22.9
FFR	4455 RR	47 ± 1	15.4	2.6	42	131	1.0	2.1	40.7	22.3

**Table 12 (continued)**

Brand	Variety ‡	Avg. Yield	Moisture §	Lodging	Height	Maturity	Shattering	Seed	Protein	Oil
		± Std Err. (n=8)	(n=8)	(n=3)	(n=7)	(n=7)	(n=5)	Quality (n=4)	(n=4)	(n=4)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Asgrow	AG4404 (RR)	47 ± 1	14.8	2.1	38	129	1.0	2.0	40.5	21.8
Pioneer	94M50 (RR)	46 ± 1	15.3	2.3	36	130	1.0	2.5	40.6	22.4
Excel Brand	8430NN RR STS	46 ± 1	15.0	2.0	39	129	1.0	2.3	40.8	22.1
Delta King	DK 4566 (RR)	46 ± 1	14.1	2.2	43	128	1.0	2.4	39.7	22.5
Excel Brand	8448N RR	46 ± 1	14.0	2.4	34	128	1.0	2.7	39.9	22.3
Hornbeck	HBK R 4623 (RR)	45 ± 1	14.6	2.3	42	129	1.0	2.0	40.9	22.7
D & PL	DP 4546 RR	45 ± 1	15.3	2.6	42	132	1.0	1.9	41.6	22.0
Progeny	4315 RR	44 ± 1	14.7	3.1	41	127	1.0	2.0	39.7	22.5
USG	7434nRR	44 ± 1	13.7	2.2	34	129	1.0	2.6	39.7	22.4
Hornbeck	HBK R 3824 (RR)	44 ± 1	15.1	3.2	40	129	1.0	2.2	38.9	23.0
Terral	TV 45R14 (RR)	43 ± 1	14.6	2.6	43	129	1.0	1.9	40.7	22.2
Delta Grow	4250 RR	43 ± 1	14.6	2.6	41	128	1.0	2.0	39.2	22.9
D & PL	DPX 1908 RR	41 ± 1	14.4	2.4	39	130	1.0	2.0	41.4	21.8

† 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).

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 eight environments (n=16) in Tennessee for two years, 2004 - 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=16)	Knoxville	Crossville	Spring Hill		Springfield	Milan		Ames
					Irr.	Non-Irr.		Irr.	Non-Irr.	
-----bu/a-----										
Progeny	4401 RR	61 ± 1	65	68	54	47	62	72	65	55
USG	7440nRR	60 ± 1	66	65	56	51	59	68	65	55
D & PL	DP 4331 RR	59 ± 1	65	69	49	47	58	69	63	55
Midwest Premium Genetics	MPV 4404nRR	59 ± 1	67	66	50	49	58	70	62	49
Dyna-Gro	3443N RR	59 ± 1	63	66	51	50	57	66	61	55
Vigoro	V442NRR	58 ± 1	66	66	48	47	61	67	60	51
Garst	4512 RR/N	58 ± 1	63	61	56	50	58	61	61	52
Vigoro	V42N3RR	57 ± 1	65	64	53	57	53	60	60	48
USG	7434nRR	57 ± 1	64	59	57	57	55	64	59	41
USG	7443nRR	57 ± 1	62	65	53	51	60	55	59	50
D & PL	DP 4546 RR	55 ± 1	62	55	52	47	54	61	57	47
Hornbeck	HBK R 4623 (RR)	53 ± 1	56	59	45	47	54	65	54	45
N.K. Brand	S 43-B1 (RR)	53 ± 1	63	51	43	41	54	63	59	47
Terral	TV 45R14 (RR)	51 ± 1	57	55	52	44	55	50	54	41
<b>Average (bu/a)</b>		<b>57</b>	<b>63</b>	<b>62</b>	<b>51</b>	<b>49</b>	<b>57</b>	<b>64</b>	<b>60</b>	<b>49</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>6</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>13</b>	<b>9</b>	<b>10</b>
<b>C.V. (%)</b>		<b>10.3</b>	<b>6.4</b>	<b>8.3</b>	<b>10.2</b>	<b>11.2</b>	<b>9.9</b>	<b>13.7</b>	<b>9.6</b>	<b>13.0</b>

† All yields are adjusted to 13% moisture.

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

**Table 14. Mean yields † and agronomic characteristics of 14 Early Maturity Group IV Roundup Ready soybean varieties evaluated in eight environments (n=16) in Tennessee for two years, 2004 - 2005.**

Brand	Variety ‡	Avg. Yield					Seed			
		± Std Err. (n=16)	Moisture § (n=16)	Lodging (n=7)	Height (n=15)	Maturity (n=14)	Shattering (n=12)	Quality (n=8)	Protein (n=8)	Oil (n=8)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Progeny	4401 RR	61 ± 1	14.2	2.0	42	129	1.0	2.1	38.5	23.2
USG	7440nRR	60 ± 1	14.3	2.0	41	130	1.0	2.0	38.6	23.2
D & PL	DP 4331 RR	59 ± 1	13.8	1.7	40	129	1.0	2.0	38.5	23.2
Midwest Premium Genetics	MPV 4404nRR	59 ± 1	14.4	1.9	41	129	1.0	2.1	38.2	23.3
Dyna-Gro	3443N RR	59 ± 1	14.0	1.8	41	129	1.0	2.1	38.5	23.2
Vigoro	V442NRR	58 ± 1	14.6	1.6	40	128	1.0	2.0	38.0	23.4
Garst	4512 RR/N	58 ± 1	14.1	1.9	39	129	1.0	2.0	38.8	23.1
Vigoro	V42N3RR	57 ± 1	14.0	1.7	33	127	1.0	2.4	39.3	22.4
USG	7434nRR	57 ± 1	13.5	1.7	33	128	1.0	2.6	39.4	22.5
USG	7443nRR	57 ± 1	14.0	1.8	38	130	1.0	2.3	39.6	22.6
D & PL	DP 4546 RR	55 ± 1	14.6	2.8	42	131	1.0	2.0	41.2	21.8
Hornbeck	HBK R 4623 (RR)	53 ± 1	14.1	2.3	41	129	1.0	2.0	40.6	22.5
N.K. Brand	S 43-B1 (RR)	53 ± 1	13.7	2.3	37	127	1.0	2.6	40.0	21.6
Terral	TV 45R14 (RR)	51 ± 1	14.0	2.7	43	129	1.0	2.0	40.4	22.1

† 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).

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 eight environments (n=24) in Tennessee for three years, 2003 - 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=24)	Spring Hill							Ames
			Knoxville	Crossville	Irr.	Non-Irr.	Springfield	Milan		
-----bu/a-----										
Progeny	4401 RR	62 ± 1	69	63	57	51	61	73	66	56
Dyna-Gro	3443N RR	61 ± 1	69	62	54	53	60	69	65	56
Garst	4512 RR/N	61 ± 1	68	59	62	52	63	66	62	55
D & PL	DP 4331 RR	61 ± 1	70	64	52	49	61	69	65	57
USG	7440nRR	61 ± 1	68	61	55	47	62	69	65	57
Vigoro	V442NRR	59 ± 1	71	63	50	46	61	69	60	55
Vigoro	V42N3RR	57 ± 1	62	59	53	54	54	64	62	47
N.K. Brand	S 43-B1 (RR)	54 ± 1	64	51	47	43	56	64	60	47
Hornbeck	HBK R 4623 (RR)	53 ± 1	58	57	45	45	56	64	54	46
<b>Average (bu/a)</b>		<b>59</b>	<b>67</b>	<b>60</b>	<b>53</b>	<b>49</b>	<b>59</b>	<b>67</b>	<b>62</b>	<b>53</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>7</b>	<b>8</b>	<b>11</b>	<b>8</b>	<b>9</b>
<b>C.V. (%)</b>		<b>9.8</b>	<b>6.1</b>	<b>8.3</b>	<b>10.9</b>	<b>10.9</b>	<b>9.3</b>	<b>11.9</b>	<b>9.2</b>	<b>11.6</b>

**Table 16. Mean yields † and agronomic characteristics of nine Early Maturity Group IV Roundup Ready soybean varieties evaluated in eight environments (n=24) in Tennessee for three years, 2003 - 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=24)	Moisture § (n=24)	Lodging (n=10)	Height (n=23)	Maturity (n=22)	Shattering (n=20)	Seed		
								Quality (n=14)	Protein (n=14)	Oil (n=14)
-----bu/a-----										
-----Score-----										
Progeny	4401 RR	62 ± 1	14.1	1.9	40	128	1.0	2.2	38.7	22.3
Dyna-Gro	3443N RR	61 ± 1	14.1	1.7	39	128	1.0	2.2	38.5	22.4
Garst	4512 RR/N	61 ± 1	14.1	1.7	38	128	1.0	2.2	38.9	22.2
D & PL	DP 4331 RR	61 ± 1	14.0	1.7	38	128	1.0	2.2	38.8	22.3
USG	7440nRR	61 ± 1	14.4	1.8	39	129	1.0	2.2	38.4	22.5
Vigoro	V442NRR	59 ± 1	14.5	1.6	39	128	1.0	2.1	38.0	22.7
Vigoro	V42N3RR	57 ± 1	13.9	1.5	32	127	1.0	2.5	39.2	21.7
N.K. Brand	S 43-B1 (RR)	54 ± 1	13.8	2.0	36	126	1.0	2.6	40.2	20.6
Hornbeck	HBK R 4623 (RR)	53 ± 1	13.9	2.2	41	128	1.0	2.0	40.8	21.6

† 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).

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 19 Early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties in 12 County Standard Tests in Tennessee and West Kentucky during 2005.**

MS	Brand/Variety	Avg.		(KY)											
		Yield	Moisture ‡	Ballard	Coffee <i>f</i>	Dyer <i>f</i>	Gibson <i>fi</i>	Haywood <i>fi</i>	Henry <i>fi</i>	Lake	Lauderdale <i>fi</i>	Lawrence <i>f</i>	Montgomery	Obion <i>f</i>	Weakley <i>fi</i>
		bu/a	%	5/21 §	5/18	5/11	5/10	5/12	5/13	5/16	5/12	6/23	6/23	5/21	5/10
A	Merschman Rocky	55.6	13.0	48.9	67.4	62.5	56.1	35.0	81.0	50.0	51.7	53.1	45.5	62.6	53.8
AB	*Morsoy RT4480N	54.7	12.7	48.3	61.0	61.8	63.4	33.8	80.1	50.3	34.1	52.2	49.1	67.2	55.3
AB	**Vigoro V42N3RR	54.5	12.7	49.5	57.8	56.4	65.2	33.4	83.2	51.9	47.2	58.0	43.8	53.9	54.0
ABC	**DeKalb DKB44-51	54.3	12.9	49.4	62.3	58.1	57.3	25.3	78.2	58.2	48.6	50.4	51.3	62.1	50.6
ABCD	Pioneer 94M50	53.9	12.5	45.9	60.1	68.4	64.2	36.5	77.4	55.7	36.9	47.3	41.1	58.9	54.1
ABCD	FFR 4545	53.8	12.8	47.9	64.9	61.6	60.3	39.5	73.9	57.7	46.9	47.2	43.7	54.3	47.9
ABCDE	*Golden Harvest H-4534	53.1	12.6	53.6	62.8	60.4	58.0	27.2	75.0	54.1	47.4	53.5	42.9	51.9	50.0
ABCDE	Progeny 4401	52.8	13.1	46.8	68.1	61.2	57.4	23.8	79.4	45.0	47.4	51.1	50.2	51.9	51.2
ABCDE	Asgrow AG4404	52.1	12.4	48.7	66.3	58.9	64.3	25.7	76.1	49.6	42.2	43.7	41.1	54.0	54.4
ABCDE	Croplan RC4444	52.0	12.4	45.2	61.1	53.2	61.5	37.2	76.6	51.4	34.5	52.7	39.5	57.6	53.8
BCDEF	Pioneer 94M30	51.9	12.8	47.2	64.0	61.6	62.7	38.9	75.9	46.6	28.4	43.5	43.8	58.7	51.7
BCDEF	Deltapine DP4331	51.5	12.5	51.8	60.5	57.7	59.7	26.7	78.8	43.1	41.8	50.1	42.2	56.4	48.9
BCDEF	AgVenture 40J4	51.2	12.6	45.0	54.9	54.3	63.8	27.5	80.3	40.8	44.0	55.7	34.2	62.2	51.9
CDEF	*Armor 44-R5	50.8	12.5	40.7	60.6	57.2	55.7	22.5	79.4	48.2	46.7	53.7	37.4	58.0	49.1
DEF	USG 7443nRR	50.5	12.8	53.9	64.3	66.8	62.0	23.8	77.2	41.3	31.5	44.1	40.3	54.3	46.1
DEF	Excel 8448NRR	50.3	12.8	43.6	55.0	61.9	56.9	32.2	81.7	47.7	45.4	44.0	35.3	51.3	47.9
EFG	Deltapine DP4546	49.8	12.5	39.0	51.9	59.9	56.6	38.9	71.5	53.9	30.0	50.2	42.2	54.1	48.9
FG	USG 7434nRR	48.3	13.2	43.8	61.0	57.7	52.4	20.5	71.3	52.5	42.6	48.5	38.5	48.6	42.7
G	Adler 398RRN	46.1	12.9	42.2	63.1	48.5	57.5	33.5	74.7	39.5	28.6	40.4	31.0	54.3	40.4
	<b>AVERAGE</b>	<b>52.0</b>		<b>46.9</b>	<b>61.4</b>	<b>59.4</b>	<b>59.7</b>	<b>30.6</b>	<b>77.5</b>	<b>49.3</b>	<b>40.8</b>	<b>49.5</b>	<b>41.7</b>	<b>56.4</b>	<b>50.1</b>

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Planting date.

*f, fi* = County location names followed by *anf* 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 2004, 2003, and/or 2002.

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 19 early Maturity Group IV (4.0 - 4.5) Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests during 2005.**

MS	Brand/Variety	CST Avg. Yield (n=12) bu/a	Moisture ‡ %	----- Research and Education Center at Milan -----					
				Disease			Trial Yield 2005	Sprayed ¶ Yield 2005	Unsprayed Yield 2005
				SDS	Frogeye	Stem Canker			
A	Merschman Rocky	55.6	13.0	---	---	---	---	---	---
AB	*Morsoy RT4480N	54.7	12.7	/ 1.7 /	/ 7.0 / 6.0	/ 2.7 /	27.3	---	---
AB	**Vigoro V42N3RR	54.5	12.7	5.0 / 1.7 /	0.0 / 0.3 / 1.0	/ 0.0 /	47.0	44.1	40.2
ABC	**DeKalb DKB44-51	54.3	12.9	1.0 / 0.0 /	8.0 / 6.0 / 6.0	/ 4.0 /	30.1	61.0	37.5
ABCD	Pioneer 94M50	53.9	12.5	---	/ / 1.0	---	47.6	45.9	45.0
ABCD	FFR 4545	53.8	12.8	---	/ / 7.0	---	37.0	54.8	30.6
ABCDE	*Golden Harvest H-4534	53.1	12.6	2.0 / 0.0 /	7.0 / 5.7 / 6.0	5.3 / 4.0 /	31.5	49.0	36.5
ABCDE	Progeny 4401	52.8	13.1	---	/ / 7.0	---	33.6	50.0	29.3
ABCDE	Asgrow AG4404	52.1	12.4	---	/ / 4.0	---	33.0	43.9	26.6
ABCDE	Croplan RC4444	52.0	12.4	---	/ / 7.0	---	38.2	47.4	34.5
BCDEF	Pioneer 94M30	51.9	12.8	---	/ / 3.0	---	40.9	51.9	42.4
BCDEF	Deltapine DP4331	51.5	12.5	/ 0.7 /	/ 8.0 / 5.0	/ 2.3 /	36.4	---	---
BCDEF	AgVenture 40J4	51.2	12.6	---	/ / 1.0	---	39.8	---	---
CDEF	*Armor 44-R5	50.8	12.5	6.0 / 4.0 /	0.0 / 0.0 / 1.0	/ 0.0 /	42.0	---	---
DEF	USG 7443nRR	50.5	12.8	---	/ / 0.0	---	46.6	---	---
DEF	Excel 8448NRR	50.3	12.8	---	/ / 1.0	---	49.0	---	---
EFG	Deltapine DP4546	49.8	12.5	/ 0.7 /	/ 3.0 / 2.0	/ 0.3 /	37.2	48.0	38.8
FG	USG 7434nRR	48.3	13.2	---	/ / 1.0	---	34.1	---	---
G	Adler 398RRN	46.1	12.9	---	/ / 6.0	---	22.7	---	---
<b>Average</b>		<b>52.0</b>						<b>49.6</b>	<b>36.1</b>

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

¶ Sprayed plots at Milan treated with Headline SBR @ 7.8 oz./Acre in 20 gpa at R3 growth stage.

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

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 2004, 2003, and/or 2002.

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

**Table 19. Overall average yields † and moistures ‡ of 14 Early Maturity Group IV Roundup Ready soybean varieties evaluated in County Standard Tests (n=12) and Research and Education Centers (n=8) in Tennessee in 2005.**

Brand	Variety	County Standard Trials		Research and Education Center Trials	
		Avg. Yield	Moisture	Avg. Yield	Moisture
		bu/a	%	bu/a	%
Morsoy	RT 4480N (RR)	55	12.7	47	14.8
Vigoro	V42N3RR	55	12.7	47	14.5
DeKalb	DKB 44-51 (RR)	54	12.9	51	14.8
Pioneer	94M50 (RR)	54	12.5	46	15.3
FFR	4545 RR	54	12.8	48	16.1
Golden Harvest	H-4534 RR	53	12.6	50	14.1
Progeny	4401 RR	53	13.1	52	15.0
Asgrow	AG4404 (RR)	52	12.4	47	14.8
Pioneer	94M30 (RR)	52	12.8	49	13.7
D & PL	DP 4331 RR	52	12.5	50	14.3
USG	7443nRR	51	12.8	48	14.7
Excel Brand	8448N RR	50	12.8	46	14.0
D & PL	DP 4546 RR	50	12.5	45	15.3
USG	7434nRR	48	13.2	44	13.7
<b>Average (bu/a)</b>		<b>52</b>	<b>12.7</b>	<b>48</b>	<b>14.7</b>

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.



**Table 20. Mean yields † of 72 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in eight environments in Tennessee during 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=8)	Knoxville	Crossville	Spring Hill			Milan		Ames
					Irr.	Non-Irr.	Springfield	Irr.	Non-Irr.	
Progeny	4805 RR	53 ± 1	59	56	54	52	29	65	54	57
Dyna-Gro	36Y48 (RR / STS)	53 ± 1	63	53	44	62	25	75	58	41
Morsoy	RTS 4955N (RR)	52 ± 1	62	50	49	53	26	74	56	50
Trisler Seed	Trisoy 4858RR (CN)	52 ± 1	54	55	57	55	24	65	58	49
Asgrow	AG4903 (RR)	52 ± 1	59	52	53	50	28	78	55	38
Vigoro	V48N5RR	50 ± 1	46	43	48	58	28	72	52	56
Hornbeck	HBK R 4724 (RR)	50 ± 1	56	47	43	46	20	77	68	45
Adler	492 RRN	50 ± 1	61	52	47	56	28	60	52	41
Delta King	DK 4866 (RR)	50 ± 1	57	55	42	44	20	71	62	47
Delta Grow	4960 RR	50 ± 1	57	42	54	50	28	59	55	51
N.K. Brand	S 49-Q9 (RR)	49 ± 1	57	42	53	52	20	76	58	38
Delta King	DK XTJ 6L49 (RR)	49 ± 1	60	50	49	51	26	60	51	48
Vigoro	V50N6RR (X340079)	49 ± 1	61	48	54	57	20	67	44	41
Asgrow	AG4703 (RR)	49 ± 1	61	52	51	41	22	68	59	40
Schillinger Seed	495 RC	49 ± 1	59	50	51	55	29	62	45	42
Dyna-Gro	35Z49 (RR)	49 ± 1	59	47	49	52	24	68	50	44
Hornbeck	HBK R 4924 (RR)	49 ± 1	61	40	48	55	28	67	54	39
FFR	4712 RR	49 ± 1	53	45	47	52	29	63	58	43
Armor	ARX F47105	48 ± 1	57	50	51	51	16	69	55	38
Asgrow	AG4801 (RR)	48 ± 1	60	50	53	43	24	55	55	46
Steyer	4700 RR Scn	48 ± 1	57	54	45	49	17	61	57	43
Delta King	DK XTJ 650 (RR)	48 ± 1	51	43	55	40	17	78	63	36
Hornbeck	HBK R 4820 (RR)	48 ± 1	50	51	48	49	23	70	52	39
Vigoro	V49N6RR	47 ± 1	55	51	52	61	27	50	43	40
Golden Harvest	H-4878 RR	47 ± 1	57	45	50	55	24	58	42	49
FFR	4925 RR	47 ± 1	53	48	42	48	25	68	60	36
Delta King	DK XTJ 6G51 (RR)	47 ± 1	54	52	43	49	26	55	59	38
Midwest Premium Genetics	MPV 4905nRR	47 ± 1	58	42	42	54	26	68	51	37
FFR	4705 RR	47 ± 1	53	45	46	53	26	60	54	40
Delta King	DK 4667 (RR)	47 ± 1	58	35	38	42	22	76	55	52
USG	7484nRR	47 ± 1	54	45	47	46	22	63	56	45
Pioneer	94M80 (RR)	47 ± 1	53	46	47	46	21	69	54	39
TN Exp	TN02-05 RR	47 ± 1	50	46	47	46	24	58	61	42
Morsoy	RT 4914N (RR)	47 ± 1	61	48	48	49	23	57	43	44
Morsoy	RT 4665N (RR)	47 ± 1	60	39	50	48	20	70	53	32
USG	7475nRR	46 ± 1	48	46	46	41	17	80	56	38
Morsoy	RT 4993N (RR)	46 ± 1	55	37	46	46	23	68	55	42
USG	7494nRR	46 ± 1	54	40	38	50	25	62	56	46

Table 20 (continued)

Brand	Variety ‡	Avg. Yield ± Std Err. (n=8)	Knoxville	Crossville	Spring Hill		Springfield	Milan		Ames
					Irr.	Non-Irr.		Irr.	Non-Irr.	
			-----bu/a-----							
Terral	TV 48R43 (RR)	46 ± 1	54	41	39	46	16	64	59	50
Excel Brand	8493N RR	46 ± 1	61	50	44	46	21	60	44	43
FFR	4891 RR	46 ± 1	51	49	41	62	27	55	47	36
Delta Grow	4840 RR	46 ± 1	53	39	49	46	24	64	49	45
Delta Grow	4860 RR	46 ± 1	54	46	51	45	22	57	53	41
Delta Grow	4970 RR	46 ± 1	60	47	47	49	21	41	54	48
Armor	47-G7 (RR)	46 ± 1	55	45	46	41	22	61	53	44
USG	7482nRR	46 ± 1	53	47	44	48	24	57	55	37
D & PL	DP 4724 RR	46 ± 1	57	48	50	45	21	55	53	37
Delta King	DK 4967 (RR)	45 ± 1	48	45	47	50	22	58	56	38
Delta King	DK 4461 (RR)	45 ± 1	57	50	41	37	24	63	50	41
Schillinger Seed	476 RC	45 ± 1	56	43	49	49	29	49	45	43
Pioneer	94B73 (RR)	45 ± 1	58	48	41	46	18	60	47	44
Terral	TVX 46R203 (RR)	45 ± 1	50	43	42	48	20	65	50	41
Progeny	4804 RR	45 ± 1	53	36	42	44	22	67	50	46
Terral	TVX 46R223 (RR)	45 ± 1	53	47	42	49	21	61	47	40
Delta King	DK XTJ 648 (RR)	45 ± 1	49	49	39	43	24	65	51	40
Excel Brand	8499N RR	45 ± 1	54	54	45	46	19	58	45	37
Morsoy	RT 4802N (RR)	45 ± 1	54	49	48	42	20	63	53	31
MO Exp	S03-166 RR	45 ± 1	54	39	49	50	28	54	47	37
Progeny	4949 RR	45 ± 1	55	45	48	51	21	56	39	41
Adler	462 RRN	45 ± 1	58	45	44	35	19	62	55	40
Armor	GP 470 (RR)	45 ± 1	47	42	47	36	25	72	50	38
Terral	TVX 46R213 (RR)	44 ± 1	52	41	40	48	25	64	48	38
Armor	GP 474 (RR)	44 ± 1	52	37	48	38	18	56	49	57
Progeny	4615 RR	44 ± 1	60	36	43	46	17	59	52	41
USG	7499nRR	44 ± 1	55	38	50	52	23	50	49	37
Vigoro	V46N6RR (X240101)	44 ± 1	54	43	46	44	18	61	49	37
USG	7466nRR	44 ± 1	53	39	40	41	20	65	58	36
Trisler Seed	Trisoy 4838RR (CN)	44 ± 1	54	40	41	43	18	61	53	38
Delta Grow	4660 RR	43 ± 1	57	38	43	37	24	58	54	39
Terral	TV 48R14 (RR)	43 ± 1	50	46	44	47	20	56	48	32
Armor	ARX F47205	43 ± 1	52	39	47	44	21	47	44	48
Delta King	DK 4763 (RR)	42 ± 1	57	43	43	36	19	52	42	42
<b>Average (bu/a)</b>		<b>47</b>	<b>55</b>	<b>46</b>	<b>46</b>	<b>48</b>	<b>23</b>	<b>63</b>	<b>52</b>	<b>42</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>4</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>11</b>	<b>7</b>	<b>15</b>	<b>10</b>	<b>13</b>
<b>C.V. (%)</b>		<b>13.2</b>	<b>7.5</b>	<b>8.5</b>	<b>12.1</b>	<b>13.9</b>	<b>19.2</b>	<b>14.9</b>	<b>12.4</b>	<b>17.9</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 21. Mean yields † and agronomic characteristics of 72 Late Maturity Group IV Roundup Ready soybean varieties evaluated in eight environments in Tennessee in 2005.**

Brand	Variety ‡	Avg. Yield	Moisture § (n=8)	Lodging (n=6)	Height (n=7)	Maturity (n=7)	Shattering (n=5)	Seed	Protein (n=4)	Oil (n=4)
		± Std Err. (n=8)						Quality (n=4)		
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Progeny	4805 RR	53 ± 1	15.8	1.9	39	134	1.0	2.5	39.9	21.8
Dyna-Gro	36Y48 (RR / STS)	53 ± 1	15.9	2.0	40	136	1.0	2.5	40.8	22.5
Morsoy	RTS 4955N (RR)	52 ± 1	15.5	2.2	40	134	1.0	2.4	40.7	22.5
Trisler Seed	Trisoy 4858RR (CN)	52 ± 1	15.8	1.8	39	135	1.0	2.5	39.9	21.8
Asgrow	AG4903 (RR)	52 ± 1	15.4	1.6	37	133	1.0	2.2	39.1	22.7
Vigoro	V48N5RR	50 ± 1	17.8	1.8	42	139	1.0	2.6	39.6	22.5
Hornbeck	HBK R 4724 (RR)	50 ± 1	15.2	1.7	42	132	1.1	2.3	40.0	21.7
Adler	492 RRN	50 ± 1	15.7	2.0	39	134	1.0	2.5	39.7	21.8
Delta King	DK 4866 (RR)	50 ± 1	14.3	1.9	37	130	1.0	2.3	39.6	21.8
Delta Grow	4960 RR	50 ± 1	16.6	2.2	38	138	1.0	2.5	42.7	20.9
N.K. Brand	S 49-Q9 (RR)	49 ± 1	15.1	1.6	41	133	1.0	2.2	40.5	21.4
Delta King	DK XTJ 6L49 (RR)	49 ± 1	15.9	1.8	39	135	1.0	2.7	39.8	21.8
Vigoro	V50N6RR (X340079)	49 ± 1	16.6	1.8	43	137	1.0	2.6	38.7	23.0
Asgrow	AG4703 (RR)	49 ± 1	15.5	1.7	35	129	1.0	2.0	40.0	21.9
Schillinger Seed	495 RC	49 ± 1	15.9	2.8	42	137	1.0	2.7	41.6	21.2
Dyna-Gro	35Z49 (RR)	49 ± 1	16.5	1.9	42	136	1.0	2.5	39.9	22.2
Hornbeck	HBK R 4924 (RR)	49 ± 1	16.0	2.0	43	135	1.0	2.4	39.5	22.5
FFR	4712 RR	49 ± 1	15.8	2.3	42	132	1.0	2.7	40.3	22.0
Armor	ARX F47105	48 ± 1	15.3	1.8	36	134	1.0	2.7	39.4	22.5
Asgrow	AG4801 (RR)	48 ± 1	15.5	1.5	36	132	1.0	2.4	39.6	22.7
Steyer	4700 RR Scn	48 ± 1	15.0	1.7	39	128	1.0	2.3	38.2	23.6
Delta King	DK XTJ 650 (RR)	48 ± 1	15.3	1.6	41	133	1.1	2.5	39.9	21.5
Hornbeck	HBK R 4820 (RR)	48 ± 1	15.4	1.6	40	133	1.0	2.3	39.5	22.5
Vigoro	V49N6RR	47 ± 1	15.6	2.4	42	136	1.0	2.6	40.9	21.3
Golden Harvest	H-4878 RR	47 ± 1	15.7	2.6	40	137	1.0	2.7	41.1	21.4
FFR	4925 RR	47 ± 1	15.6	2.0	40	136	1.0	2.6	41.4	21.7
Delta King	DK XTJ 6G51 (RR)	47 ± 1	16.3	1.8	42	136	1.0	2.4	39.2	22.8
Midwest Premium Genetics	MPV 4905nRR	47 ± 1	15.1	2.8	38	130	1.0	2.4	39.8	22.1
FFR	4705 RR	47 ± 1	15.2	1.8	36	132	1.0	2.2	41.0	21.2
Delta King	DK 4667 (RR)	47 ± 1	15.3	2.4	40	130	1.0	2.1	39.1	22.2
USG	7484nRR	47 ± 1	14.8	2.7	36	131	1.0	2.6	39.7	22.0
Pioneer	94M80 (RR)	47 ± 1	14.6	2.1	40	131	1.0	2.1	41.0	21.8
TN Exp	TN02-05 RR	47 ± 1	15.5	2.3	44	135	1.0	2.2	40.2	21.9
Morsoy	RT 4914N (RR)	47 ± 1	15.1	2.7	40	136	1.0	2.6	41.0	21.4
Morsoy	RT 4665N (RR)	47 ± 1	15.1	2.9	42	129	1.0	2.5	39.0	22.3
USG	7475nRR	46 ± 1	15.9	1.6	41	133	1.1	2.5	39.9	21.5
Morsoy	RT 4993N (RR)	46 ± 1	15.9	2.7	37	130	1.0	2.5	39.4	22.0
USG	7494nRR	46 ± 1	14.4	2.6	37	129	1.0	2.5	40.2	21.8

**Table 21 (continued)**

Brand	Variety ‡	Avg. Yield	Moisture § (n=8)	Lodging (n=6)	Height (n=7)	Maturity (n=7)	Shattering (n=5)	Seed	Protein (n=4)	Oil (n=4)
		± Std Err. (n=8)						Quality (n=4)		
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Terral	TV 48R43 (RR)	46 ± 1	14.9	2.8	37	130	1.0	2.6	40.0	21.8
Excel Brand	8493N RR	46 ± 1	14.9	2.1	40	133	1.0	2.3	41.1	21.6
FFR	4891 RR	46 ± 1	15.9	2.0	40	136	1.0	2.3	40.0	22.3
Delta Grow	4840 RR	46 ± 1	14.6	3.1	37	130	1.0	2.4	39.9	21.8
Delta Grow	4860 RR	46 ± 1	14.4	2.1	37	131	1.0	2.2	41.7	21.8
Delta Grow	4970 RR	46 ± 1	16.3	2.4	40	137	1.0	3.0	41.6	21.1
Armor	47-G7 (RR)	46 ± 1	15.2	2.0	38	129	1.0	2.5	41.2	21.4
USG	7482nRR	46 ± 1	14.5	1.9	38	130	1.0	2.0	41.6	21.7
D & PL	DP 4724 RR	46 ± 1	14.7	2.1	37	130	1.0	2.5	41.7	21.7
Delta King	DK 4967 (RR)	45 ± 1	15.4	2.1	38	131	1.0	2.1	41.7	21.7
Delta King	DK 4461 (RR)	45 ± 1	14.5	1.6	38	129	1.0	2.3	39.1	23.3
Schillinger Seed	476 RC	45 ± 1	15.7	2.8	42	135	1.0	2.0	39.8	21.8
Pioneer	94B73 (RR)	45 ± 1	13.9	2.3	39	128	1.0	2.3	40.4	22.8
Terral	TVX 46R203 (RR)	45 ± 1	15.0	2.3	43	134	1.0	2.1	40.9	22.3
Progeny	4804 RR	45 ± 1	15.1	2.9	36	131	1.0	2.3	39.9	21.9
Terral	TVX 46R223 (RR)	45 ± 1	14.9	2.0	43	134	1.0	1.9	40.8	22.4
Delta King	DK XTJ 648 (RR)	45 ± 1	15.3	2.8	41	130	1.0	2.3	40.7	22.2
Excel Brand	8499N RR	45 ± 1	15.1	2.0	38	132	1.0	2.5	39.5	22.6
Morsoy	RT 4802N (RR)	45 ± 1	14.9	2.3	38	130	1.0	2.0	41.3	22.0
MO Exp	S03-166 RR	45 ± 1	15.4	2.1	38	133	1.0	2.5	40.6	21.9
Progeny	4949 RR	45 ± 1	16.0	2.4	41	138	1.0	2.7	40.6	22.3
Adler	462 RRN	45 ± 1	15.8	2.0	36	128	1.0	2.1	39.9	22.4
Armor	GP 470 (RR)	45 ± 1	15.0	1.7	43	132	1.0	2.4	41.6	21.1
Terral	TVX 46R213 (RR)	44 ± 1	15.0	2.3	43	134	1.0	2.1	40.7	22.5
Armor	GP 474 (RR)	44 ± 1	14.6	2.9	37	130	1.0	2.5	39.5	21.9
Progeny	4615 RR	44 ± 1	14.8	2.8	41	129	1.0	2.2	38.6	22.5
USG	7499nRR	44 ± 1	15.1	1.8	40	134	1.0	2.3	40.9	21.7
Vigoro	V46N6RR (X240101)	44 ± 1	14.7	1.9	36	128	1.0	2.4	39.7	22.3
USG	7466nRR	44 ± 1	15.0	2.3	40	129	1.0	2.3	38.7	22.4
Trisler Seed	Trisoy 4838RR (CN)	44 ± 1	14.4	1.9	37	129	1.0	2.2	41.6	21.8
Delta Grow	4660 RR	43 ± 1	15.2	2.7	40	129	1.0	2.5	39.2	22.1
Terral	TV 48R14 (RR)	43 ± 1	15.6	1.9	39	133	1.0	2.0	41.0	21.9
Armor	ARX F47205	43 ± 1	15.6	1.8	39	132	1.0	2.3	40.2	22.4
Delta King	DK 4763 (RR)	42 ± 1	15.3	1.9	36	131	1.0	2.7	41.9	21.1

† 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.

Protein & Oil on dry weight basis.

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 22. Mean yields † of 29 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in eight environments (n=16) in Tennessee for two years, 2004 - 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=16)	bu/a							
			Knoxville	Crossville	Spring Hill		Springfield	Milan		Ames
					Irr.	Non-Irr.		Irr.	Non-Irr.	
Asgrow	AG4903 (RR)	62 ± 1	66	53	70	64	49	86	61	51
N.K. Brand	S 49-Q9 (RR)	58 ± 1	65	44	60	61	44	78	64	47
Hornbeck	HBK R 4724 (RR)	57 ± 1	64	53	54	56	36	83	65	46
Hornbeck	HBK R 4924 (RR)	57 ± 1	67	41	58	59	38	77	59	53
Asgrow	AG4801 (RR)	56 ± 1	66	55	64	53	40	65	57	51
Hornbeck	HBK R 4820 (RR)	56 ± 1	61	54	59	56	40	74	59	49
Delta Grow	4960 RR	56 ± 1	59	49	64	57	37	68	60	56
Delta King	DK 4461 (RR)	56 ± 1	66	51	55	55	40	70	60	52
Vigoro	V48N5RR	56 ± 1	55	53	52	62	41	75	51	58
Delta Grow	4970 RR	56 ± 1	64	50	63	61	33	60	59	55
Pioneer	94B73 (RR)	54 ± 1	63	52	51	62	35	66	53	51
Delta King	DK 4967 (RR)	54 ± 1	57	47	64	60	34	67	57	44
Midwest Premium Genetics	MPV 4905nRR	54 ± 1	64	42	55	59	35	70	55	49
Progeny	4949 RR	53 ± 1	64	51	63	57	35	60	52	48
USG	7482nRR	53 ± 1	60	47	56	60	35	67	57	44
Delta Grow	4840 RR	53 ± 1	59	39	57	56	32	73	53	52
USG	7484nRR	53 ± 1	61	43	57	57	30	68	58	47
Terral	TV 48R14 (RR)	53 ± 1	58	42	58	63	32	71	53	45
D & PL	DP 4724 RR	53 ± 1	62	48	60	54	34	63	53	46
Morsoy	RT 4993N (RR)	53 ± 1	61	41	57	55	37	67	53	49
FFR	4891 RR	53 ± 1	56	49	51	61	33	66	54	49
Trisler Seed	Trisoy 4838RR (CN)	52 ± 1	62	42	57	55	31	71	59	43
USG	7494nRR	52 ± 1	62	40	50	56	37	67	57	49
Armor	47-G7 (RR)	52 ± 1	59	46	55	54	36	69	49	50
Delta Grow	4860 RR	52 ± 1	58	45	60	56	33	64	53	47
Armor	GP 474 (RR)	52 ± 1	58	40	62	50	29	70	50	56
USG	7499nRR	51 ± 1	59	42	57	56	36	60	52	47
Progeny	4804 RR	51 ± 1	58	36	53	52	32	72	53	51
Delta King	DK 4763 (RR)	51 ± 1	63	46	56	48	35	63	47	47
<b>Average (bu/a)</b>		<b>54</b>	<b>61</b>	<b>46</b>	<b>58</b>	<b>57</b>	<b>36</b>	<b>69</b>	<b>56</b>	<b>49</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>6</b>	<b>6</b>	<b>9</b>	<b>10</b>	<b>8</b>	<b>13</b>	<b>10</b>	<b>10</b>
<b>C.V. (%)</b>		<b>11.7</b>	<b>7.0</b>	<b>9.1</b>	<b>10.4</b>	<b>12.8</b>	<b>15.3</b>	<b>12.6</b>	<b>12.2</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 23. Mean yields † and agronomic characteristics of 29 Late Maturity Group IV Roundup Ready soybean varieties evaluated in eight environments (n=16) in Tennessee for two years, 2004 - 2005.**

Brand	Variety ‡	Avg. Yield	Moisture §	Lodging	Height	Maturity	Shattering	Seed	Protein	Oil
		± Std Err. (n=16)	(n=16)	(n=14)	(n=15)	(n=14)	(n=12)	Quality (n=8)	(n=8)	(n=8)
		bu/a	%	Score	in.	DAP	-----Score-----		%	%
Asgrow	AG4903 (RR)	62 ± 1	14.4	2.0	38	134	1.0	2.1	38.9	22.4
N.K. Brand	S 49-Q9 (RR)	58 ± 1	14.2	2.0	42	135	1.0	2.1	40.4	21.0
Hornbeck	HBK R 4724 (RR)	57 ± 1	14.7	2.0	43	134	1.0	2.3	39.3	21.4
Hornbeck	HBK R 4924 (RR)	57 ± 1	14.8	2.5	45	136	1.0	2.1	39.3	22.2
Asgrow	AG4801 (RR)	56 ± 1	14.4	1.8	37	133	1.0	2.2	39.5	22.4
Hornbeck	HBK R 4820 (RR)	56 ± 1	14.5	1.9	40	133	1.0	2.1	39.3	22.2
Delta Grow	4960 RR	56 ± 1	16.1	2.1	39	140	1.0	1.9	42.1	20.9
Delta King	DK 4461 (RR)	56 ± 1	14.0	1.9	40	131	1.0	2.1	38.9	22.9
Vigoro	V48N5RR	56 ± 1	15.9	2.0	41	136	1.0	2.3	39.3	22.6
Delta Grow	4970 RR	56 ± 1	14.9	2.5	42	137	1.0	2.5	41.1	21.2
Pioneer	94B73 (RR)	54 ± 1	13.6	2.4	40	129	1.0	2.1	40.0	22.6
Delta King	DK 4967 (RR)	54 ± 1	14.2	2.3	39	133	1.0	2.1	41.4	21.5
Midwest Premium Genetics	MPV 4905nRR	54 ± 1	14.1	2.8	38	131	1.0	2.3	39.6	21.8
Progeny	4949 RR	53 ± 1	14.6	2.4	42	137	1.0	2.4	40.3	22.1
USG	7482nRR	53 ± 1	13.8	2.1	39	132	1.0	2.1	41.5	21.4
Delta Grow	4840 RR	53 ± 1	14.0	2.9	38	131	1.0	2.2	39.8	21.4
USG	7484nRR	53 ± 1	14.0	2.8	37	131	1.0	2.3	39.5	21.6
Terral	TV 48R14 (RR)	53 ± 1	14.6	2.2	40	133	1.0	2.0	40.3	22.0
D & PL	DP 4724 RR	53 ± 1	14.1	2.2	38	131	1.0	2.2	41.3	21.5
Morsoy	RT 4993N (RR)	53 ± 1	14.6	2.8	38	131	1.0	2.3	39.4	21.6
FFR	4891 RR	53 ± 1	14.3	2.2	42	136	1.0	2.1	39.7	22.3
Trisler Seed	Trisoy 4838RR (CN)	52 ± 1	13.8	2.1	38	131	1.0	2.1	41.5	21.5
USG	7494nRR	52 ± 1	13.9	2.7	38	131	1.0	2.3	40.1	21.5
Armor	47-G7 (RR)	52 ± 1	14.3	2.2	38	131	1.0	2.4	41.0	21.2
Delta Grow	4860 RR	52 ± 1	13.8	2.2	37	132	1.0	2.1	41.4	21.5
Armor	GP 474 (RR)	52 ± 1	14.1	2.8	38	131	1.0	2.3	39.5	21.6
USG	7499nRR	51 ± 1	14.2	2.1	41	134	1.0	2.2	40.4	21.6
Progeny	4804 RR	51 ± 1	14.0	2.7	38	131	1.0	2.2	39.8	21.5
Delta King	DK 4763 (RR)	51 ± 1	14.3	2.2	38	132	1.0	2.6	41.3	21.0

† 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).

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

Protein & Oil on dry weight basis.

**Table 24. Mean yields † of 16 Late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in eight environments (n=24) in Tennessee for three years, 2003 - 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=24)	Knoxville	Crossville	Spring Hill		Springfield	Milan		Ames
					Irr.	Non-Irr.		Irr.	Non-Irr.	
-----bu/a-----										
N.K. Brand	S 49-Q9 (RR)	59 ± 1	66	47	62	60	49	76	64	49
Delta King	DK 4461 (RR)	58 ± 1	68	52	57	56	49	69	61	55
Delta Grow	4960 RR	56 ± 1	52	50	56	59	46	66	63	57
Hornbeck	HBK R 4820 (RR)	56 ± 1	62	54	55	52	47	70	57	50
FFR	4891 RR	55 ± 1	60	50	55	61	42	65	58	53
Delta King	DK 4967 (RR)	55 ± 1	59	49	64	59	41	64	59	47
Armor	47-G7 (RR)	55 ± 1	62	49	58	55	45	68	54	50
Trisler Seed	Trisoy 4838RR (CN)	55 ± 1	63	46	60	58	39	69	59	45
Pioneer	94B73 (RR)	55 ± 1	63	54	53	54	41	64	55	52
D & PL	DP 4724 RR	55 ± 1	61	49	62	56	44	63	55	46
Morsoy	RT 4993N (RR)	54 ± 1	63	44	56	54	46	65	55	51
Delta Grow	4860 RR	54 ± 1	60	48	60	57	42	60	55	48
Armor	GP 474 (RR)	54 ± 1	64	43	60	50	40	66	53	53
Delta King	DK 4763 (RR)	53 ± 1	63	49	55	50	44	60	53	47
USG	7499nRR	52 ± 1	64	45	57	50	44	60	51	48
USG	7482nRR	52 ± 1	62	49	52	53	42	63	55	43
<b>Average (bu/a)</b>		<b>55</b>	<b>62</b>	<b>48</b>	<b>58</b>	<b>55</b>	<b>44</b>	<b>65</b>	<b>57</b>	<b>50</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>6</b>	<b>6</b>	<b>9</b>	<b>10</b>	<b>8</b>	<b>12</b>	<b>9</b>	<b>10</b>
<b>C.V. (%)</b>		<b>11.2</b>	<b>6.7</b>	<b>9.1</b>	<b>11.0</b>	<b>12.3</b>	<b>12.7</b>	<b>12.1</b>	<b>11.3</b>	<b>13.4</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 25. Mean yields † and agronomic characteristics of 16 Late Maturity Group IV Roundup Ready soybean varieties evaluated in eight environments (n=24) in Tennessee for three years, 2003 - 2005.**

Brand	Variety ‡	Avg. Yield				Seed				
		± Std Err. (n=24)	Moisture § (n=24)	Lodging (n=18)	Height (n=23)	Maturity (n=22)	Shattering (n=20)	Quality (n=14)	Protein (n=14)	Oil (n=14)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
N.K. Brand	S 49-Q9 (RR)	59 ± 1	14.4	1.9	40	134	1.0	2.1	40.5	20.2
Delta King	DK 4461 (RR)	58 ± 1	13.9	1.9	40	130	1.0	2.2	38.9	22.2
Delta Grow	4960 RR	56 ± 1	17.9	2.4	39	139	1.0	2.1	42.1	20.0
Hornbeck	HBK R 4820 (RR)	56 ± 1	14.2	1.8	38	132	1.0	2.3	39.4	21.4
FFR	4891 RR	55 ± 1	14.2	2.3	41	134	1.0	2.2	39.5	21.6
Delta King	DK 4967 (RR)	55 ± 1	13.9	2.2	38	132	1.0	2.0	41.6	20.7
Armor	47-G7 (RR)	55 ± 1	14.2	2.0	37	130	1.0	2.5	41.2	20.3
Trisler Seed	Trisoy 4838RR (CN)	55 ± 1	13.6	2.1	37	130	1.0	2.0	41.7	20.7
Pioneer	94B73 (RR)	55 ± 1	13.6	2.3	39	129	1.0	2.1	40.5	21.7
D & PL	DP 4724 RR	55 ± 1	13.8	2.2	37	131	1.0	2.1	41.6	20.6
Morsoy	RT 4993N (RR)	54 ± 1	14.3	2.7	37	130	1.0	2.2	39.9	20.6
Delta Grow	4860 RR	54 ± 1	13.6	2.1	37	131	1.0	2.0	41.5	20.7
Armor	GP 474 (RR)	54 ± 1	14.2	2.9	37	131	1.0	2.3	40.0	20.6
Delta King	DK 4763 (RR)	53 ± 1	14.1	2.0	37	131	1.0	2.5	41.5	20.2
USG	7499nRR	52 ± 1	14.0	2.0	41	133	1.0	2.3	40.3	20.8
USG	7482nRR	52 ± 1	13.6	2.0	37	131	1.0	2.0	41.4	20.7

† 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).

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 27 Late Maturity Group IV (4.6-4.9) Roundup Ready soybean varieties in 11 County Standard Tests in Tennessee and Kentucky during 2005.**

MS	Brand/Variety	Avg.		(KY)										
		Yield	Moisture ‡	Carroll <i>fi</i>	Coffee <i>f</i>	Crockett <i>f</i>	Dyer <i>f</i>	Fulton <i>fi</i>	Gibson <i>fi</i>	Lake <i>fi</i>	Lauderdale <i>fi</i>	McCracken	Obion <i>f</i>	Weakley <i>fi</i>
		bu/a	%	5/25 §	5/18	5/20	5/11	6/21	5/11	5/13	5/12	6/17	5/18	5/18
A	USG 7475RR	58.7	12.5	61.5	71.5	72.3	68.2	42.1	67.9	55.5	45.6	57.4	61.4	42.4
AB	Asgrow AG4703	58.5	12.7	64.7	68.5	72.4	61.1	41.5	67.7	61.0	34.2	63.2	63.0	46.7
AB	*Asgrow AG4903	58.5	12.2	60.7	70.4	64.6	59.8	43.6	69.0	50.7	48.9	60.8	64.5	50.8
ABC	Stine 4842-4	58.3	12.3	61.1	69.7	64.9	64.7	40.8	62.7	59.1	42.2	62.4	65.2	48.1
ABCD	*Progeny 4804	57.5	12.9	43.1	68.5	56.6	66.2	41.9	70.0	62.7	52.1	60.7	63.6	46.8
ABCD	AgVenture 46J5	57.4	12.4	65.8	70.6	65.2	68.5	34.5	63.7	61.8	42.8	56.5	56.1	46.2
ABCD	Excel 8493NRR	57.3	12.0	60.4	67.6	65.0	64.7	41.6	63.2	58.5	34.7	59.6	65.9	49.0
ABCD	Dyna-Gro DG3481NRR	57.3	12.0	62.6	69.1	64.8	64.0	39.1	64.4	55.9	42.2	60.2	61.5	46.3
ABCD	Golden Harvest H-4878	57.0	13.2	59.8	66.5	62.0	62.1	36.0	65.5	58.5	48.6	60.0	60.4	47.6
ABCDE	*Delta King 4866	56.9	12.3	67.5	69.3	61.2	64.0	37.9	63.4	61.1	39.8	54.2	61.0	46.3
ABCDE	NK Brand S49-Q9	56.9	12.7	54.2	70.8	61.8	62.9	42.5	66.7	54.8	48.1	61.7	61.9	40.2
ABCDEF	**Delta King 4967	56.7	12.0	63.0	67.2	66.1	64.0	31.3	63.3	48.8	51.6	59.8	60.5	48.6
ABCDEF	Hornbeck 4724	56.7	12.6	61.0	69.1	63.3	67.9	37.8	67.5	42.5	41.6	57.5	64.5	51.1
ABCDEF	Merschman Dallas	56.4	12.5	61.8	66.6	60.0	64.4	40.7	60.4	57.7	39.9	62.8	58.9	47.0
ABCDEF	Hornbeck 4924	56.3	12.5	53.0	66.4	67.8	58.2	43.4	63.7	58.4	43.9	58.3	63.1	42.6
ABCDEF	Delta Grow DG4860	56.2	12.1	60.5	70.1	57.3	65.7	39.0	65.6	54.8	41.3	55.3	59.6	49.3
ABCDEF	***Pioneer 94B73	56.1	12.6	66.7	65.0	61.2	58.9	33.8	64.1	65.1	38.6	57.9	60.1	45.9
ABCDEF	Adler 462RRN	56.0	12.4	66.7	68.0	58.8	60.8	38.2	64.2	62.4	33.7	57.8	53.7	51.7
ABCDEF	Morsoy RT4802N	55.8	12.0	50.1	69.4	58.6	66.7	43.8	63.4	57.4	39.7	58.4	55.9	50.5
ABCDEF	Armor 47-G7	55.8	12.6	67.2	69.1	65.1	63.0	36.9	66.9	56.3	33.8	53.0	61.3	41.2
ABCDEF	Delta King 4461	55.8	12.4	59.4	71.4	56.2	61.0	37.9	64.6	58.5	45.8	54.1	59.0	45.4
BCDEF	DeKalb DKB46-51	55.1	12.4	63.2	73.0	59.8	63.6	31.4	67.0	60.3	36.5	47.3	57.9	46.5
CDEF	Deltapine DP4724	54.8	12.2	57.9	67.9	60.0	65.6	34.9	61.8	55.3	43.6	54.2	61.5	39.9
DEF	*Croplan RC4842	54.4	12.1	65.1	70.1	59.4	62.6	37.6	63.1	50.4	31.2	60.4	51.5	46.6
DEF	*USG 7482nRR	54.3	12.0	43.8	70.6	59.4	61.3	38.2	58.9	52.7	46.2	57.8	61.4	47.1
EF	Pioneer 94M80	53.4	12.1	50.5	66.8	61.6	58.5	31.9	63.9	51.7	44.8	53.5	57.5	46.4
F	Vigoro V48N5RR	53.3	12.7	46.7	66.2	58.1	58.7	38.2	67.0	60.2	26.2	59.4	59.6	45.5
	<b>Average</b>	<b>56.34</b>		<b>59.2</b>	<b>68.9</b>	<b>62.4</b>	<b>63.2</b>	<b>38.4</b>	<b>64.8</b>	<b>56.7</b>	<b>41.4</b>	<b>57.9</b>	<b>60.4</b>	<b>46.5</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 2004, 2003, and/or 2002.

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 27 late Maturity Group IV (4.6 - 4.9) Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests (CST) during 2005.**

MS	Brand/Variety	----- Research and Education Center at Milan -----							
		CST	Moisture ‡	Disease			Sprayed ¶	Unsprayed	
		Avg. Yield (n=11)		SDS	Frogeye	Stem Canker			Trial Yield
		bu/a	%	2003 / 2004 / 2005	2003 / 2004 / 2005	2003 / 2004 / 2005	2005	2005	2005
A	USG 7475RR	58.7	12.5	---	/ / 6.0	---	42.6	---	---
AB	Asgrow AG4703	58.5	12.7	---	/ / 8.0	---	30.9	50.6	37.1
AB	*Asgrow AG4903	58.5	12.2	/ 0.3 /	/ 5.0 / 7.0	/ 3.0 /	38.8	57.6	35.5
ABC	Stine 4842-4	58.3	12.3	---	/ /	---	---	---	---
ABCD	*Progeny 4804	57.5	12.9	/ 1.0 /	/ 6.7 / 6.0	/ 0.0 /	42.7	49.1	34.5
ABCD	AgVenture 46J5	57.4	12.4	---	/ / 2.0	---	48.0	---	---
ABCD	Excel 8493NRR	57.3	12.0	---	/ / 4.0	---	42.1	---	---
ABCD	Dyna-Gro DG3481NRR	57.3	12.0	---	/ / 3.0	---	43.3	46.8	42.0
ABCD	Golden Harvest H-4878	57.0	13.2	---	/ / 0.0	---	47.7	42.8	42.7
ABCDE	*Delta King 4866	56.9	12.3	/ 0.0 /	/ 7.3 / 10.0	/ 4.7 /	24.2	56.8	33.4
ABCDE	NK Brand S49-Q9	56.9	12.7	5.0 / 0.7 /	7.0 / 7.7 / 4.0	0.0 / 0.3 /	39.1	---	---
ABCDEF	**Delta King 4967	56.7	12.0	4.0 / 2.0 /	3.0 / 3.7 / 3.0	? / 0.0 /	39.2	---	---
ABCDEF	Hornbeck 4724	56.7	12.6	---	/ / 8.0	---	44.5	---	---
ABCDEF	Merschman Dallas	56.4	12.5	1.0 / 2.0 /	2.0 / 3.0 / 3.0	? / 0.0 /	43.3	---	---
ABCDEF	Hornbeck 4924	56.3	12.5	---	/ / 5.0	---	39.1	---	---
ABCDEF	Delta Grow DG4860	56.2	12.1	---	/ / 3.0	---	41.1	---	---
ABCDEF	***Pioneer 94B73	56.1	12.6	5.0 / 3.0 /	1.0 / 0.0 / 0.0	1.3 / 0.0 /	50.3	54.0	38.3
ABCDEF	Adler 462RRN	56.0	12.4	---	/ / 8.0	---	25.5	---	---
ABCDEF	Morsoy RT4802N	55.8	12.0	---	/ / 3.0	---	44.3	46.9	38.6
ABCDEF	Armor 47-G7	55.8	12.6	? / 0.0 /	5.0 / 7.0 / 8.0	? / 5.7 /	41.0	53.0	41.9
ABCDEF	Delta King 4461	55.8	12.4	---	/ / 9.0	---	39.7	52.5	34.4
BCDEF	DeKalb DKB46-51	55.1	12.4	/ 6.7 /	/ 6.0 / 7.0	/ 0.0 /	37.1	42.9	30.7
CDEF	Deltapine DP4724	54.8	12.2	/ 2.7 /	/ 2.3 / 2.0	/ 0.0 /	45.3	44.7	38.0
DEF	*Croplan RC4842	54.4	12.1	4.0 / 1.3 /	2.0 / 3.3 / 3.0	? / 0.0 /	46.1	51.4	32.6
DEF	*USG 7482nRR	54.3	12.0	4.0 / 0.7 /	3.0 / 3.7 / 2.0	? / 0.0 /	41.1	49.2	40.1
EF	Pioneer 94M80	53.4	12.1	---	/ / 3.0	---	41.9	49.3	43.9
F	Vigoro V48N5RR	53.3	12.7	/ 5.7 /	/ 2.0 / 3.0	/ 0.0 /	41.0	44.1	39.3
<b>Average (bu/a)</b>		<b>56.3</b>					<b>49.5</b>	<b>37.7</b>	

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

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

¶ Sprayed plots at Milan treated with Headline SBR @ 7.8 oz./Acre in 20 gpa at R3 growth stage.

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

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 2004, 2003, and/or 2002.

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

**Table 28. Overall average yields † and moistures ‡ of 21 Late Maturity Group IV Roundup Ready soybean varieties evaluated in County Standard Tests (n=11) and Research and Education Centers (n=8) in Tennessee in 2005.**

Brand	Variety	County Standard Trials		Research and Education Center Trials	
		Avg. Yield	Moisture	Avg. Yield	Moisture
		bu/a	%	bu/a	%
USG	7475nRR	59	12.5	46	15.9
Asgrow	AG4703 (RR)	59	12.7	49	15.5
Asgrow	AG4903 (RR)	59	12.2	52	15.4
Progeny	4804 RR	58	12.9	45	15.1
Excel Brand	8493N RR	57	12.0	46	14.9
Golden Harvest	H-4878 RR	57	13.2	47	15.7
Delta King	DK 4866 (RR)	57	12.3	50	14.3
N.K. Brand	S 49-Q9 (RR)	57	12.7	49	15.1
Delta King	DK 4967 (RR)	57	12.0	45	15.4
Hornbeck	HBK R 4724 (RR)	57	12.6	50	15.2
Hornbeck	HBK R 4924 (RR)	56	12.5	49	16.0
Delta Grow	4860 RR	56	12.1	46	14.4
Pioneer	94B73 (RR)	56	12.6	45	13.9
Adler	462 RRN	56	12.4	45	15.8
Armor	47-G7 (RR)	56	12.6	46	15.2
Delta King	DK 4461 (RR)	56	12.4	45	14.5
Morsoy	RT 4802N (RR)	56	12.0	45	14.9
D & PL	DP 4724 RR	55	12.2	46	14.7
USG	7482nRR	54	12.0	46	14.5
Pioneer	94M80 (RR)	53	12.1	47	14.6
Vigoro	V48N5RR	53	12.7	50	17.8
<b>Average (bu/a)</b>		<b>56</b>	<b>12.4</b>	<b>47</b>	<b>15.2</b>

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

**Table 29. Mean yields † of 49 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Spring Hill			Springfield	Milan		Ames
			Knoxville	Irr.	Non-Irr.		Irr.	Non-Irr.	
Dyna-Gro	33X55 (RR)	59 ± 2	56	53	60	56	60	76	50
Delta King	DK 5567 (RR)	57 ± 2	57	54	59	57	54	61	59
Delta King	DK 55T6 (RR)	57 ± 2	53	56	60	55	52	65	55
USG	540nRR	56 ± 2	50	59	55	55	58	72	46
Delta King	DK 5366 (RR)	56 ± 2	48	53	56	57	62	67	52
Morsoy	RT 5553N (RR)	56 ± 2	55	57	58	53	57	69	46
TN Exp	TN05-547 RR	56 ± 2	53	61	52	58	57	63	51
Progeny	5105 RR	55 ± 2	60	54	51	52	55	68	48
Terral	TV 55R15 (RR)	55 ± 2	47	54	58	54	45	66	62
Armor	54-03 (RR / STS)	55 ± 2	51	53	47	53	59	64	56
Delta Grow	5460 RR	54 ± 2	58	56	60	58	42	58	48
FFR	5033 RR	53 ± 2	58	59	53	53	51	61	38
USG	7553nRS (STS)	53 ± 2	54	46	53	55	48	66	50
Progeny	5250 RR	53 ± 2	55	57	51	46	48	60	54
Midwest Premium Genetics	MPV 5505nRR (STS)	53 ± 2	56	47	41	56	55	60	53
Asgrow	AG5501 (RR)	53 ± 2	56	50	35	60	61	60	46
Armor	53-K3 (RR)	53 ± 2	62	45	48	61	41	62	49
USG	510nRR	52 ± 2	52	52	47	59	54	56	48
MO Exp	S03-383 RR	52 ± 2	46	50	51	50	58	69	44
Delta King	DK 5066 (RR)	52 ± 2	63	50	60	48	49	60	36
Delta King	DK 5466 (RR)	52 ± 2	49	51	54	50	56	56	48
Dyna-Gro	33B52 (RR)	52 ± 2	55	55	56	48	49	56	45
Armor	GP 530 (RR)	52 ± 2	51	52	46	48	56	64	46
Terral	TV 52R14 (RR)	52 ± 2	52	50	51	53	41	64	53
Delta Grow	5160 RR	52 ± 2	61	48	45	48	67	57	36
Hornbeck	HBK R 5525 (RR)	51 ± 2	55	50	44	45	55	69	42
USG	7515nRR	51 ± 2	61	49	52	53	49	63	32
Delta King	DK 5161 (RR)	51 ± 2	53	58	55	49	40	58	43
Delta Grow	5260 RR	51 ± 2	52	53	54	57	38	59	41
Delta Grow	5560 RR	50 ± 2	55	52	50	51	50	49	46
Vigoro	X250036 (RR)	50 ± 2	56	52	32	53	55	58	46
USG	7505nRR	50 ± 2	55	53	52	59	52	49	33
Armor	GP 513 (RR)	50 ± 2	54	55	50	50	41	62	37
Progeny	5115 RR	50 ± 2	55	48	49	59	43	57	36
Garst	5412 RR/STS/N	49 ± 2	52	53	56	50	47	57	27
Progeny	5005 RR	49 ± 2	58	53	31	52	58	57	33
Asgrow	AG5301 (RR)	48 ± 2	49	48	35	48	58	60	41

**Table 29 (continued)**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Knoxville	Spring Hill		Springfield	Milan		Ames
				Irr.	Non-Irr.		Irr.	Non-Irr.	
Vigoro	V51N6RR	48 ± 2	55	52	32	58	44	58	38
Vigoro	V52N3RR	48 ± 2	56	41	27	51	52	59	49
Golden Harvest	H-5053 RR	48 ± 2	53	51	43	52	40	63	33
FFR	5225 RR	47 ± 2	48	47	47	53	36	58	42
D & PL	DP 5414 RR	47 ± 2	44	48	39	53	48	54	44
Excel Brand	8520N RR	47 ± 2	53	49	35	46	43	61	42
FFR	RT 5485 (RR)	47 ± 2	48	46	53	52	39	59	33
Hornbeck	HBK R 5324 (RR)	46 ± 2	51	43	43	51	43	50	43
Excel Brand	8509N RR	46 ± 2	61	49	34	53	47	43	36
Hornbeck	HBK R 5425 (RR)	45 ± 2	55	48	41	51	36	52	32
Pioneer	95M30 (RR)	41 ± 2	48	40	33	46	37	45	40
Vigoro	V55N5RR	40 ± 2	51	35	29	42	49	43	31
<b>Average (bu/a)</b>		<b>51</b>	<b>54</b>	<b>51</b>	<b>47</b>	<b>53</b>	<b>50</b>	<b>60</b>	<b>44</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>4</b>	<b>6</b>	<b>10</b>	<b>7</b>	<b>8</b>	<b>16</b>	<b>10</b>	<b>13</b>
<b>C.V. (%)</b>		<b>12.6</b>	<b>6.6</b>	<b>12.2</b>	<b>9.2</b>	<b>9.2</b>	<b>19.6</b>	<b>10.5</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 30. Mean yields † and agronomic characteristics of 49 Early Maturity Group V Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2005.**

Brand	Variety ‡	Avg. Yield					Seed			
		± Std Err. (n=7)	Moisture § (n=7)	Lodging (n=4)	Height (n=6)	Maturity (n=6)	Shattering (n=4)	Quality (n=4)	Protein (n=4)	Oil (n=4)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
Dyna-Gro	33X55 (RR)	59 ± 2	14.0	2.3	40	148	1.0	1.9	41.9	21.4
Delta King	DK 5567 (RR)	57 ± 2	13.8	2.5	37	152	1.0	1.8	40.6	21.3
Delta King	DK 55T6 (RR)	57 ± 2	13.7	2.5	39	153	1.0	2.2	39.8	22.0
USG	540nRR	56 ± 2	13.8	2.2	39	150	1.0	2.2	40.6	21.4
Delta King	DK 5366 (RR)	56 ± 2	13.7	3.3	40	151	1.0	2.0	40.2	21.5
Morsoy	RT 5553N (RR)	56 ± 2	14.3	2.6	42	151	1.0	1.8	40.2	22.3
TN Exp	TN05-547 RR	56 ± 2	13.9	2.3	41	153	1.0	2.0	41.3	21.0
Progeny	5105 RR	55 ± 2	13.8	2.8	40	140	1.1	2.4	41.1	22.4
Terral	TV 55R15 (RR)	55 ± 2	13.6	2.8	41	150	1.0	1.8	40.4	21.3
Armor	54-03 (RR / STS)	55 ± 2	13.5	1.9	37	151	1.0	2.0	39.9	21.7
Delta Grow	5460 RR	54 ± 2	13.4	2.0	38	151	1.0	1.7	40.5	21.4
FFR	5033 RR	53 ± 2	14.5	2.3	39	143	1.0	2.2	42.7	20.8
USG	7553nRS (STS)	53 ± 2	13.6	2.0	39	151	1.0	2.0	39.8	21.7
Progeny	5250 RR	53 ± 2	14.3	2.4	37	152	1.0	2.3	39.8	21.9
Midwest Premium Genetics	MPV 5505nRR (STS)	53 ± 2	13.5	1.8	38	150	1.0	2.1	40.1	21.6
Asgrow	AG5501 (RR)	53 ± 2	14.4	1.9	39	149	1.0	2.0	40.8	21.5
Armor	53-K3 (RR)	53 ± 2	14.0	2.2	35	150	1.0	1.7	39.4	22.4
USG	510nRR	52 ± 2	13.8	2.0	39	148	1.0	2.3	40.5	21.3
MO Exp	S03-383 RR	52 ± 2	14.3	2.4	44	150	1.0	3.0	41.8	21.1
Delta King	DK 5066 (RR)	52 ± 2	14.2	2.8	41	142	1.0	2.4	41.3	22.3
Delta King	DK 5466 (RR)	52 ± 2	14.2	3.0	37	151	1.0	1.8	40.0	21.9
Dyna-Gro	33B52 (RR)	52 ± 2	14.0	3.6	36	148	1.0	1.8	39.3	22.6
Armor	GP 530 (RR)	52 ± 2	13.4	2.0	41	148	1.0	2.1	43.3	20.3
Terral	TV 52R14 (RR)	52 ± 2	14.0	2.9	40	146	1.0	1.7	41.3	21.7
Delta Grow	5160 RR	52 ± 2	14.4	4.3	41	141	1.1	2.3	40.6	22.7
Hornbeck	HBK R 5525 (RR)	51 ± 2	14.1	2.3	40	151	1.0	2.4	40.1	22.0
USG	7515nRR	51 ± 2	13.9	3.0	42	141	1.0	2.4	40.9	22.5
Delta King	DK 5161 (RR)	51 ± 2	13.8	3.4	35	149	1.0	2.1	39.5	22.4
Delta Grow	5260 RR	51 ± 2	14.1	2.6	39	148	1.0	1.6	41.5	21.6
Delta Grow	5560 RR	50 ± 2	14.1	2.5	38	149	1.0	2.0	42.7	20.7
Vigoro	X250036 (RR)	50 ± 2	13.7	2.5	40	146	1.0	2.4	38.3	22.5
USG	7505nRR	50 ± 2	14.1	3.6	43	142	1.0	3.0	42.1	21.0
Armor	GP 513 (RR)	50 ± 2	13.7	3.0	35	148	1.0	2.1	39.3	22.4
Progeny	5115 RR	50 ± 2	14.5	2.6	43	142	1.0	2.4	39.6	22.8
Garst	5412 RR/STS/N	49 ± 2	14.2	3.0	37	150	1.0	1.9	40.3	22.1
Progeny	5005 RR	49 ± 2	13.8	3.7	41	141	1.0	2.8	41.9	21.1
Asgrow	AG5301 (RR)	48 ± 2	14.4	1.9	38	147	1.0	1.8	40.2	21.6

**Table 30 (continued)**

Brand	Variety ‡	Avg. Yield	Moisture §	Lodging	Height	Maturity	Shattering	Seed	Protein	Oil
		± Std Err. (n=7)	(n=7)	(n=4)	(n=6)	(n=6)	(n=4)	Quality (n=4)	(n=4)	(n=4)
		bu/a	%	Score	in.	DAP	-----Score-----		%	%
Vigoro	V51N6RR	48 ± 2	13.9	2.0	34	150	1.0	2.4	41.2	21.9
Vigoro	V52N3RR	48 ± 2	14.4	2.2	35	151	1.0	2.5	40.1	21.8
Golden Harvest	H-5053 RR	48 ± 2	14.1	3.4	39	139	1.0	2.8	41.2	21.4
FFR	5225 RR	47 ± 2	14.1	2.3	40	146	1.0	2.1	42.0	20.8
D & PL	DP 5414 RR	47 ± 2	14.4	2.5	42	147	1.0	1.8	43.0	20.2
Excel Brand	8520N RR	47 ± 2	14.6	2.3	37	145	1.0	2.1	41.2	21.6
FFR	RT 5485 (RR)	47 ± 2	14.6	2.4	41	150	1.0	2.1	41.5	21.1
Hornbeck	HBK R 5324 (RR)	46 ± 2	13.8	3.0	36	144	1.0	2.2	41.0	22.2
Excel Brand	8509N RR	46 ± 2	14.1	3.2	40	141	1.0	2.9	42.1	20.9
Hornbeck	HBK R 5425 (RR)	45 ± 2	13.9	2.5	42	150	1.0	2.4	40.2	22.3
Pioneer	95M30 (RR)	41 ± 2	13.8	2.9	37	146	1.0	2.0	40.5	21.3
Vigoro	V55N5RR	40 ± 2	13.9	2.6	37	140	1.0	2.7	40.4	22.6

† 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.

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 26 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2004 - 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=14)	Knoxville	Spring Hill		Springfield	Milan		Ames
				Irr.	Non-Irr.		Irr.	Non-Irr.	
Morsoy	RT 5553N (RR)	63 ± 1	64	64	67	55	66	61	61
Armor	54-03 (RR / STS)	62 ± 1	62	59	60	65	67	54	66
Delta King	DK 55T6 (RR)	61 ± 1	58	61	67	53	67	57	67
Delta Grow	5460 RR	61 ± 1	64	62	67	64	57	54	61
USG	540nRR	61 ± 1	61	63	58	55	67	63	60
USG	7553nRS (STS)	60 ± 1	63	58	63	60	57	59	61
Midwest Premium Genetics	MPV 5505nRR (STS)	59 ± 1	63	54	56	63	63	57	61
Delta King	DK 5366 (RR)	59 ± 1	53	59	62	51	63	57	67
FFR	5033 RR	58 ± 1	60	64	62	55	58	53	54
Dyna-Gro	33B52 (RR)	58 ± 1	53	63	66	50	55	52	64
Progeny	5250 RR	57 ± 1	59	60	61	48	53	51	66
Asgrow	AG5501 (RR)	57 ± 1	60	59	52	56	59	53	57
USG	510nRR	56 ± 1	58	57	55	59	56	53	56
Armor	GP 513 (RR)	56 ± 1	56	60	61	49	55	53	59
Asgrow	AG5301 (RR)	56 ± 1	58	56	48	55	65	50	58
Delta Grow	5260 RR	55 ± 1	54	60	56	53	53	54	57
Vigoro	V52N3RR	55 ± 1	61	52	50	53	59	49	60
Delta King	DK 5161 (RR)	55 ± 1	54	63	63	47	48	49	58
Terral	TV 55R15 (RR)	54 ± 1	49	53	56	46	54	58	63
Vigoro	V55N5RR	53 ± 1	63	53	51	47	60	46	55
FFR	RT 5485 (RR)	53 ± 1	56	55	64	50	52	52	45
FFR	5225 RR	53 ± 1	52	58	56	52	49	51	55
D & PL	DP 5414 RR	53 ± 1	50	55	52	51	56	50	56
Hornbeck	HBK R 5324 (RR)	51 ± 1	56	54	52	48	50	42	58
Golden Harvest	H-5053 RR	50 ± 1	59	53	48	44	46	52	46
Garst	5412 RR/STS/N	49 ± 1	50	58	58	45	44	45	43
<b>Average (bu/a)</b>		<b>56</b>	<b>58</b>	<b>58</b>	<b>58</b>	<b>53</b>	<b>57</b>	<b>53</b>	<b>58</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>4</b>	<b>7</b>	<b>8</b>	<b>8</b>	<b>10</b>	<b>14</b>	<b>9</b>	<b>9</b>
<b>C.V. (%)</b>		<b>11.5</b>	<b>7.8</b>	<b>9.6</b>	<b>9.3</b>	<b>13.5</b>	<b>16.1</b>	<b>12.4</b>	<b>11.1</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 26 Early Maturity Group V Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2004 - 2005.**

Brand	Variety ‡	Avg. Yield	Moisture §	Lodging	Height	Maturity	Seed			
		± Std Err. (n=14) bu/a	(n=14) %	(n=10) Score Lodg	(n=12) in. Hgt	(n=12) DAP Mat	Shattering (n=10) -----Score----- Shatt	Quality (n=8) Squal	Protein (n=8) Prot	Oil (n=8) Oil
Morsoy	RT 5553N (RR)	63 ± 1	14.6	2.5	42	149	1.0	2.0	40.2	22.1
Armor	54-03 (RR / STS)	62 ± 1	13.6	1.8	38	149	1.0	2.0	40.0	21.4
Delta King	DK 55T6 (RR)	61 ± 1	14.1	2.4	40	152	1.0	2.2	39.5	21.7
Delta Grow	5460 RR	61 ± 1	13.6	1.8	39	150	1.0	1.8	40.2	21.3
USG	540nRR	61 ± 1	13.9	2.0	39	149	1.0	2.2	40.3	21.5
USG	7553nRS (STS)	60 ± 1	13.6	1.8	39	149	1.0	2.0	39.7	21.5
Midwest Premium Genetics	MPV 5505nRR (STS)	59 ± 1	13.6	1.7	39	149	1.0	2.1	39.9	21.3
Delta King	DK 5366 (RR)	59 ± 1	14.1	3.4	39	150	1.0	2.2	40.1	21.4
FFR	5033 RR	58 ± 1	14.9	2.1	39	142	1.0	2.0	42.0	21.0
Dyna-Gro	33B52 (RR)	58 ± 1	14.3	3.4	36	147	1.0	2.2	39.5	22.4
Progeny	5250 RR	57 ± 1	14.4	2.3	36	151	1.0	2.5	39.7	21.8
Asgrow	AG5501 (RR)	57 ± 1	14.4	1.9	40	148	1.0	2.1	40.6	21.4
USG	510nRR	56 ± 1	13.7	1.8	40	146	1.0	2.2	40.4	21.1
Armor	GP 513 (RR)	56 ± 1	14.1	3.0	35	147	1.0	2.3	39.5	22.1
Asgrow	AG5301 (RR)	56 ± 1	14.6	2.0	38	147	1.0	1.8	40.0	21.4
Delta Grow	5260 RR	55 ± 1	14.2	2.8	39	147	1.0	1.9	41.3	21.5
Vigoro	V52N3RR	55 ± 1	14.4	2.1	36	150	1.0	2.6	39.5	22.0
Delta King	DK 5161 (RR)	55 ± 1	13.9	3.4	35	147	1.0	2.3	39.4	22.3
Terral	TV 55R15 (RR)	54 ± 1	14.1	3.0	42	148	1.0	2.0	40.3	21.1
Vigoro	V55N5RR	53 ± 1	14.1	2.3	40	143	1.0	2.5	40.1	22.3
FFR	RT 5485 (RR)	53 ± 1	14.6	2.4	40	146	1.0	2.1	41.1	21.1
FFR	5225 RR	53 ± 1	14.4	2.1	40	145	1.0	2.1	41.3	20.7
D & PL	DP 5414 RR	53 ± 1	14.7	2.7	43	147	1.0	1.8	42.5	20.2
Hornbeck	HBK R 5324 (RR)	51 ± 1	13.9	2.4	37	143	1.0	2.2	40.8	22.0
Golden Harvest	H-5053 RR	50 ± 1	14.0	2.9	40	139	1.0	2.8	40.6	21.6
Garst	5412 RR/STS/N	49 ± 1	14.3	3.0	37	146	1.0	2.3	40.1	22.1

† 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).

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 16 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in seven environments (n=21) in Tennessee for three years, 2003 - 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=21)	Spring Hill						
			Knoxville	Irr.	Non-Irr.	Springfield	Milan		Ames
-----bu/a-----									
Morsoy	RT 5553N (RR)	63 ± 1	66	62	65	58	66	61	65
Delta Grow	5460 RR	63 ± 1	64	61	64	65	63	57	64
USG	7553nRS (STS)	61 ± 1	64	57	62	58	60	59	64
USG	540nRR	60 ± 1	64	58	58	54	65	62	62
Delta King	DK 5366 (RR)	59 ± 1	55	58	62	54	63	58	64
Asgrow	AG5501 (RR)	59 ± 1	64	60	55	58	61	55	61
Asgrow	AG5301 (RR)	58 ± 1	57	58	56	57	65	54	61
Progeny	5250 RR	58 ± 1	59	59	61	52	56	54	65
USG	510nRR	58 ± 1	58	54	57	60	59	54	60
Dyna-Gro	33B52 (RR)	57 ± 1	50	62	63	52	57	54	63
Armor	GP 513 (RR)	57 ± 1	51	61	63	51	58	55	62
Delta Grow	5260 RR	56 ± 1	56	58	56	55	56	53	60
Vigoro	V52N3RR	56 ± 1	63	51	54	52	60	49	61
FFR	5225 RR	55 ± 1	54	56	58	55	53	52	57
FFR	RT 5485 (RR)	55 ± 1	57	55	62	54	56	52	48
D & PL	DP 5414 RR	54 ± 1	51	53	54	54	59	50	60
<b>Average (bu/a)</b>		<b>58</b>	<b>58</b>	<b>58</b>	<b>59</b>	<b>56</b>	<b>60</b>	<b>55</b>	<b>61</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>7</b>	<b>8</b>	<b>7</b>	<b>9</b>	<b>12</b>	<b>8</b>	<b>8</b>
<b>C.V. (%)</b>		<b>10.5</b>	<b>8.2</b>	<b>9.3</b>	<b>8.6</b>	<b>11.8</b>	<b>13.9</b>	<b>11.1</b>	<b>9.8</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 16 Early Maturity Group V Roundup Ready soybean varieties evaluated in seven environments (n=21) in Tennessee for three years, 2003 - 2005.**

Brand	Variety ‡	Avg. Yield	Moisture § (n=21)	Lodging (n=15)	Height (n=19)	Maturity (n=19)	Shattering (n=17)	Seed Quality (n=13)	Protein (n=13)	Oil (n=13)	SDS		
		± Std Err. (n=21)									DI (n=1)	DS (n=1)	DX (n=1)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	%	0 - 9	index	
Morsoy	RT 5553N (RR)	63 ± 1	14.6	2.2	43	147	1.0	2.0	40.2	21.2	23.3	1.3	4.1
Delta Grow	5460 RR	63 ± 1	13.6	1.6	38	148	1.0	1.8	39.9	20.5	86.7	1.7	17.0
USG	7553nRS (STS)	61 ± 1	13.6	1.6	39	147	1.0	1.9	39.5	20.7	83.3	2.0	18.9
USG	540nRR	60 ± 1	13.9	1.7	39	147	1.0	2.1	40.0	20.7	56.7	1.3	9.6
Delta King	DK 5366 (RR)	59 ± 1	14.1	3.1	39	148	1.0	2.0	39.8	20.5	76.7	1.0	8.5
Asgrow	AG5501 (RR)	59 ± 1	14.3	1.8	40	147	1.0	2.1	40.5	20.5	63.3	1.3	10.4
Asgrow	AG5301 (RR)	58 ± 1	14.6	1.8	38	145	1.0	1.7	39.7	20.7	66.7	2.7	20.4
Progeny	5250 RR	58 ± 1	14.4	2.1	37	148	1.0	2.3	39.8	20.8	83.3	2.0	18.5
USG	510nRR	58 ± 1	13.8	1.6	40	145	1.0	2.2	40.3	20.3	83.3	2.0	19.3
Dyna-Gro	33B52 (RR)	57 ± 1	14.2	3.4	36	145	1.0	2.1	39.4	21.6	100.0	3.0	33.3
Armor	GP 513 (RR)	57 ± 1	14.2	3.0	35	145	1.0	2.2	39.4	21.4	93.3	4.0	41.1
Delta Grow	5260 RR	56 ± 1	14.2	2.6	38	145	1.0	1.8	41.2	20.7	73.3	2.0	16.3
Vigoro	V52N3RR	56 ± 1	14.4	1.9	36	147	1.0	2.3	39.5	21.0	43.3	1.3	5.9
FFR	5225 RR	55 ± 1	14.4	1.8	41	143	1.0	2.0	41.1	19.9	80.0	2.0	17.8
FFR	RT 5485 (RR)	55 ± 1	14.6	2.1	39	145	1.0	2.0	41.0	20.2	56.7	1.7	12.2
D & PL	DP 5414 RR	54 ± 1	14.7	2.5	43	146	1.0	1.8	42.6	19.2	90.0	2.0	20.0

† 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).

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.

DI = disease incidence = percentage of plants with symptoms

DS = disease severity = score of leaf chlorosis and necrosis; 0 = no symptoms; 9 = plant death before normal defoliation due to senescence.

DX = disease index = (DI x DS / 9); ratings were made at approximately R6 when green pods with seed have reached full size.

**Table 35. Yields † of 15 Early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties in ten County Standard Tests in Tennessee and West Kentucky during 2005.**

MS	Brand/Variety	Avg. Yield bu/a	Moisture ‡ %	(KY)				Milan REC			UTM		
				Carlisle 6/6 §	Dyer 6/18	Gibson <i>fi</i> 5/12	Hardin 6/22	Lake 5/17	Lauderdale <i>f</i> 5/17	Gibson <i>fi</i> 5/10	Obion <i>f</i> 5/23	Weakley <i>f</i> 5/27	Weakley 5/25
A	**Vigoro V52N3RR	51.3	11.7	56.3	28.8	57.6	51.1	42.3	40.4	57.2	56.3	58.2	64.8
AB	Armor 54-03	50.4	11.4	54.8	29.8	62.9	56.9	42.5	34.3	58.5	56.8	55.3	51.8
AB	*Delta King 5567	50.2	11.9	55.1	32.4	59.7	54.3	47.0	40.3	52.5	57.7	55.3	48.2
AB	**Progeny 5250	50.0	11.7	56.2	29.3	63.8	49.3	46.8	40.2	62.2	55.6	55.3	41.4
ABC	Deltapine DP5634	49.5	11.6	57.6	36.0	58.8	55.6	48.8	25.8	54.4	53.8	55.5	48.9
ABC	Merschman Rushmore	49.4	11.5	58.7	27.8	59.2	54.3	45.4	38.2	47.0	52.7	55.3	55.4
ABC	*Dyna-Gro 33B52	49.4	11.4	51.7	29.2	62.6	52.3	45.0	36.7	51.4	58.4	49.9	56.5
ABC	*Golden Harvest H-5053	49.3	11.9	60.5	30.0	57.8	52.6	45.8	30.6	53.4	56.2	52.6	54.1
ABC	*FFR 5033	49.0	11.8	52.1	35.4	59.1	56.5	50.8	31.3	47.7	53.1	47.2	56.4
ABC	TN05-548	48.8	11.6	52.3	28.6	62.9	57.3	36.3	38.6	52.8	57.7	52.6	49.0
ABC	Stine 5142-4	48.8	11.7	54.2	26.7	60.4	51.1	47.0	34.5	54.3	55.4	49.6	54.7
ABC	Vigoro V55N5RR	48.0	11.8	54.6	27.8	60.1	52.6	42.7	26.9	58.2	52.9	52.3	52.4
BC	TN05-547	47.3	11.4	52.8	30.8	60.4	53.7	32.7	36.5	58.1	58.5	46.7	43.2
CD	Morsoy RT5553	46.2	11.7	50.0	24.3	55.9	49.5	40.1	32.5	55.7	54.2	49.6	50.4
D	Croplan RC5332	43.9	11.6	47.9	24.0	56.1	48.0	41.9	33.8	46.8	51.6	49.6	39.2
<b>Average (bu/a)</b>		<b>48.8</b>		<b>54.3</b>	<b>29.4</b>	<b>59.8</b>	<b>53.0</b>	<b>43.7</b>	<b>34.7</b>	<b>54</b>	<b>55.4</b>	<b>52.3</b>	<b>51.1</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 2004, 2003, and/or 2002.

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

UTM = University of Tennessee at Martin

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

**Table 36. Yields † and disease ratings § of 15 early Maturity Group V (5.0 - 5.5) Roundup Ready soybean varieties evaluated in Tennessee County Standard Tests (CST) during 2005.**

MS	Brand/Variety	----- Research and Education Center at Milan -----					Disease Trial Yield
		CST Avg. Yield (n=11)	Moisture ‡	SDS	Frogeye	Stem Canker	
		bu/a	%	2003 / 2004 / 2005	2003 / 2004 / 2005	2003 / 2004 / 2005	2005
A	**Vigoro V52N3RR	51.3	11.7	3.0 / 4.7 /	6.0 / 5.3 / 7.0	/ 0.0 /	40.1
AB	Armor 54-03	50.4	11.4	---	/ / 9.0	---	41.2
AB	*Delta King 5567	50.2	11.9	/ 2.0 /	/ 2.3 / 5.0	/ 0.0 /	45.9
AB	**Progeny 5250	50.0	11.7	2.0 / 4.7	5.0 / 6.3 / 8.0	/ 0.0 /	32.5
ABC	Deltapine DP5634	49.5	11.6	1.0 / 2.3 /	1.0 / 0.0 /	0.0 / 0.3 /	---
ABC	Merschman Rushmore	49.4	11.5	---	---	---	---
ABC	*Dyna-Gro 33B52	49.4	11.4	/ 5.0 /	/ 1.0 / 1.0	/ 0.0 /	41.3
ABC	*Golden Harvest H-5053	49.3	11.9	/ 2.7 /	/ 6.7 / 9.0	/ 0.0 /	40.3
ABC	*FFR 5033	49.0	11.8	/ 5.7 /	/ 1.7 / 3.0	/ 0.0 /	40.9
ABC	TN05-548	48.8	11.6	---	---	---	---
ABC	Stine 5142-4	48.8	11.7	---	---	---	---
ABC	Vigoro V55N5RR	48.0	11.8	---	/ / 2.0	---	40.2
BC	TN05-547	47.3	11.4	---	---	---	---
CD	Morsoy RT5553	46.2	11.7	---	/ / 7.0	---	42.5
D	Croplan RC5332	43.9	11.6	---	/ / 0.0	---	38.8
<b>Average (bu/a)</b>		<b>48.8</b>					<b>40.5</b>

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

§ Disease ratings for SDS, Frogeye Leaf Spot & Stem Canker 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.

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 2004, 2003, and/or 2002.

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

**Table 37. Overall average yields † and moistures ‡ of 12 Early Maturity Group V Roundup Ready soybean varieties evaluated in County Standard Tests (n=10) and Research and Education Centers (n=7) in Tennessee in 2005.**

Brand	Variety	County Standard Trials		Research and Education Center Trials	
		Avg. Yield	Moisture	Avg. Yield	Moisture
		bu/a	%	bu/a	%
Vigoro	V52N3RR	51	11.7	48	14.4
Armor	54-03 (RR / STS)	50	11.4	55	13.5
Delta King	DK 5567 (RR)	50	11.9	57	13.8
Progeny	5250 RR	50	11.7	53	14.3
D & PL	DP 5634 RR	50	11.6	48	11.5
Dyna-Gro	33B52 (RR)	49	11.4	52	14.0
Golden Harvest	H-5053 RR	49	11.9	48	14.1
FFR	5033 RR	49	11.8	53	14.5
TN Exp	TN05-548 RR	49	11.6	51	11.7
Vigoro	V55N5RR	48	11.8	40	13.9
TN Exp	TN05-547 RR	47	11.4	56	13.9
Morsoy	RT 5553N (RR)	46	11.7	56	14.3
<b>Average (bu/a)</b>		<b>49</b>	<b>11.7</b>	<b>51</b>	<b>13.7</b>

† Yields have been adjusted to 13% moisture.

‡ Moisture at harvest.

**Table 38. Mean yields † of 19 Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=7)	Spring Hill				Milan		Ames
			Knoxville	Irr.	Non-Irr.	Springfield	Irr.	Non-Irr.	
-----bu/a-----									
D & PL	DP 5915 RR	53 ± 1	25	59	60	50	67	65	46
FFR	5663 RR	53 ± 1	28	58	57	56	58	59	57
Progeny	5605 RR	53 ± 1	23	56	60	54	63	67	47
Dyna-Gro	36N57 (RR)	52 ± 1	27	55	54	58	61	64	47
TN Exp	TN05-548 RR	51 ± 1	32	59	55	55	50	61	47
Delta King	DK 5967 (RR)	51 ± 1	29	65	55	57	42	66	45
Delta Grow	5830 RR	51 ± 1	26	57	58	52	56	64	44
TN Exp	TN02-134 RR	51 ± 1	26	57	63	49	51	66	45
Progeny	5622 RR	51 ± 1	28	59	63	59	41	61	44
Asgrow	AG5905 (RR)	50 ± 1	26	57	59	55	54	52	50
Progeny	5660 RR	50 ± 1	25	55	63	54	48	60	47
Asgrow	AG5605 (RR)	50 ± 1	26	55	58	56	53	59	40
Dyna-Gro	3562N RR	49 ± 1	27	51	62	51	52	58	46
Dyna-Gro	3583N RR	49 ± 1	28	55	62	55	41	62	38
D & PL	DP 5634 RR	48 ± 1	25	52	61	49	56	55	35
Delta Grow	5630 RR	47 ± 1	26	47	55	52	50	55	40
Delta Grow	5650 RR	46 ± 1	28	57	53	50	43	52	38
D & PL	DP 5808 RR	45 ± 1	23	51	57	43	47	53	43
Asgrow	AG5702 (RR)	45 ± 1	25	49	66	51	42	43	37
<b>Average (bu/a)</b>		<b>50</b>	<b>27</b>	<b>55</b>	<b>59</b>	<b>52</b>	<b>52</b>	<b>59</b>	<b>45</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>4</b>	<b>9</b>	<b>9</b>	<b>8</b>	<b>10</b>	<b>10</b>	<b>10</b>
<b>C.V. (%)</b>		<b>10.6</b>	<b>7.3</b>	<b>10.1</b>	<b>9.3</b>	<b>8.9</b>	<b>11.9</b>	<b>9.9</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 39. Mean yields † and agronomic characteristics of 19 Late Maturity Group V Roundup Ready soybean varieties evaluated in seven environments in Tennessee during 2005.**

Brand	Variety ‡	Avg. Yield		Moisture §	Lodging	Height	Maturity	Shattering	Seed		
		± Std Err.	(n=7)						Quality	Protein	Oil
		(n=7)	(n=7)	(n=5)	(n=6)	(n=6)	(n=4)	(n=4)	(n=4)	(n=4)	
		bu/a	%	Score	in.	DAP	-----Score-----	%	%		
D & PL	DP 5915 RR	53 ± 1	11.8	1.9	43	161	1.0	2.2	41.4	20.8	
FFR	5663 RR	53 ± 1	12.0	2.3	37	149	1.0	2.2	42.2	20.6	
Progeny	5605 RR	53 ± 1	11.7	2.0	42	158	1.0	2.2	39.2	21.9	
Dyna-Gro	36N57 (RR)	52 ± 1	11.7	2.4	37	150	1.0	2.1	41.9	20.8	
TN Exp	TN05-548 RR	51 ± 1	11.7	2.0	43	154	1.0	2.1	41.7	20.6	
Delta King	DK 5967 (RR)	51 ± 1	11.7	2.3	41	154	1.0	2.5	40.4	21.5	
Delta Grow	5830 RR	51 ± 1	11.8	2.3	42	157	1.0	2.2	39.3	21.8	
TN Exp	TN02-134 RR	51 ± 1	12.0	1.9	39	149	1.0	2.1	41.3	20.5	
Progeny	5622 RR	51 ± 1	11.7	2.1	42	152	1.0	2.5	40.3	21.4	
Asgrow	AG5905 (RR)	50 ± 1	12.0	1.8	46	152	1.0	2.0	40.6	21.6	
Progeny	5660 RR	50 ± 1	11.9	2.7	44	156	1.0	2.4	40.9	21.2	
Asgrow	AG5605 (RR)	50 ± 1	11.5	1.6	38	149	1.0	2.3	40.7	21.2	
Dyna-Gro	3562N RR	49 ± 1	12.1	2.9	38	155	1.0	2.6	40.2	21.1	
Dyna-Gro	3583N RR	49 ± 1	11.7	2.2	42	152	1.0	2.6	40.3	21.5	
D & PL	DP 5634 RR	48 ± 1	11.5	2.0	43	152	1.0	2.2	41.1	21.0	
Delta Grow	5630 RR	47 ± 1	12.0	2.4	43	155	1.0	2.3	41.0	20.9	
Delta Grow	5650 RR	46 ± 1	11.8	2.5	41	153	1.0	2.6	41.4	20.9	
D & PL	DP 5808 RR	45 ± 1	11.6	2.6	45	149	1.0	2.1	40.9	20.5	
Asgrow	AG5702 (RR)	45 ± 1	11.9	1.9	40	147	1.0	2.4	41.8	21.4	

† 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.

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 12 Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2004 - 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=14)	Knoxville	Spring Hill		Springfield	Milan		Ames
				Irr.	Non-Irr.		Irr.	Non-Irr.	
-----bu/a-----									
Asgrow	AG5905 (RR)	59 ± 1	60	64	62	48	60	54	64
D & PL	DP 5915 RR	58 ± 1	50	65	66	44	65	61	57
Delta King	DK 5967 (RR)	58 ± 1	57	67	62	51	54	53	62
FFR	5663 RR	58 ± 1	46	65	65	50	58	56	63
Progeny	5622 RR	58 ± 1	52	67	68	52	52	52	61
Asgrow	AG5605 (RR)	56 ± 1	55	59	60	50	59	56	55
D & PL	DP 5634 RR	55 ± 1	54	58	63	45	60	52	55
Dyna-Gro	3583N RR	54 ± 1	54	59	66	48	50	48	55
Delta Grow	5650 RR	54 ± 1	55	62	62	46	52	46	56
Dyna-Gro	3562N RR	53 ± 1	49	54	60	44	56	47	60
Progeny	5660 RR	53 ± 1	48	60	61	44	50	49	57
Delta Grow	5630 RR	52 ± 1	49	53	59	44	52	47	56
<b>Average (bu/a)</b>		<b>56</b>	<b>52</b>	<b>61</b>	<b>63</b>	<b>47</b>	<b>56</b>	<b>52</b>	<b>58</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>9</b>	<b>8</b>	<b>8</b>	<b>6</b>	<b>13</b>	<b>10</b>	<b>8</b>
<b>C.V. (%)</b>		<b>10.5</b>	<b>8.8</b>	<b>8.5</b>	<b>8.8</b>	<b>9.0</b>	<b>14.9</b>	<b>13.6</b>	<b>8.3</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 12 Late Maturity Group V Roundup Ready soybean varieties evaluated in seven environments (n=14) in Tennessee for two years, 2004 - 2005.**

Brand	Variety ‡	Avg. Yield					Seed			
		± Std Err. (n=14)	Moisture § (n=14)	Lodging (n=11)	Height (n=12)	Maturity (n=12)	Shattering (n=10)	Quality (n=8)	Protein (n=8)	Oil (n=8)
		bu/a	% Moist	Score Lodg	in. Hgt	DAP Mat	-----Score----- Shatt	Squal	% Prot	% Oil
Asgrow	AG5905 (RR)	59 ± 1	13.6	1.7	44	153	1.0	2.2	40.7	21.3
D & PL	DP 5915 RR	58 ± 1	13.1	2.1	41	158	1.0	2.2	41.7	20.5
Delta King	DK 5967 (RR)	58 ± 1	13.3	2.2	40	154	1.0	2.3	40.4	21.2
FFR	5663 RR	58 ± 1	13.4	2.2	35	149	1.0	2.6	42.0	20.6
Progeny	5622 RR	58 ± 1	13.3	2.1	41	153	1.0	2.4	40.4	21.2
Asgrow	AG5605 (RR)	56 ± 1	13.0	1.4	37	149	1.0	2.2	40.7	21.1
D & PL	DP 5634 RR	55 ± 1	13.4	2.3	40	151	1.0	2.4	41.1	20.9
Dyna-Gro	3583N RR	54 ± 1	13.4	2.1	40	152	1.0	2.4	40.2	21.3
Delta Grow	5650 RR	54 ± 1	13.4	2.6	40	152	1.0	2.4	41.7	20.6
Dyna-Gro	3562N RR	53 ± 1	13.3	3.1	37	154	1.0	2.7	40.8	20.7
Progeny	5660 RR	53 ± 1	13.3	3.0	41	154	1.0	2.4	40.9	20.9
Delta Grow	5630 RR	52 ± 1	13.4	2.8	41	154	1.0	2.3	41.0	20.8

† 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).

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 nine Late Maturity Group V (5.6 - 5.9) Roundup Ready soybean varieties evaluated in seven environments (n=21) in Tennessee for three years, 2003 - 2005**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=21)	Spring Hill			Milan		Ames	
			Knoxville	Irr.	Non-Irr.	Springfield	Irr.		Non-Irr.
-----bu/a-----									
Delta King	DK 5967 (RR)	61 ± 1	58	67	68	54	59	57	64
Asgrow	AG5605 (RR)	59 ± 1	60	61	63	51	61	60	60
D & PL	DP 5915 RR	59 ± 1	53	64	68	47	62	61	61
D & PL	DP 5634 RR	58 ± 1	58	62	64	49	60	53	59
Dyna-Gro	3583N RR	57 ± 1	56	59	70	51	52	54	59
Progeny	5660 RR	56 ± 1	54	60	64	48	51	56	60
Delta Grow	5650 RR	56 ± 1	55	62	62	48	53	50	59
Delta Grow	5630 RR	54 ± 1	53	57	61	45	51	53	59
Dyna-Gro	3562N RR	54 ± 1	51	55	58	45	56	50	61
<b>Average (bu/a)</b>		<b>57</b>	<b>55</b>	<b>61</b>	<b>64</b>	<b>49</b>	<b>56</b>	<b>55</b>	<b>60</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>10</b>	<b>8</b>	<b>8</b>	<b>6</b>	<b>11</b>	<b>8</b>	<b>10</b>
<b>C.V. (%)</b>		<b>10.2</b>	<b>10.7</b>	<b>8.4</b>	<b>8.6</b>	<b>8.2</b>	<b>13.3</b>	<b>10.4</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 43. Mean yields † and agronomic characteristics of nine Late Maturity Group V Roundup Ready soybean varieties evaluated in seven environments (n=21) in Tennessee for three years, 2003 - 2005.**

Brand	Variety ‡	Avg. Yield ± Std Err. (n=21)	Moisture § (n=21)	Lodging (n=17)	Height (n=19)	Maturity (n=18)	Shattering (n=17)	Seed Quality (n=13)	Protein (n=13)	Oil (n=13)	SDS		
											DI (n=1)	DS (n=1)	DX (n=1)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	%	0 - 9	index	
Delta King	DK 5967 (RR)	61 ± 1	13.2	2.1	40	152	1.0	2.1	39.8	20.5	100.0	2.7	29.6
Asgrow	AG5605 (RR)	59 ± 1	13.0	1.5	37	147	1.0	2.1	40.1	20.5	66.7	1.7	13.0
D & PL	DP 5915 RR	59 ± 1	13.1	2.2	40	155	1.0	2.1	41.4	19.8	63.3	1.3	8.9
D & PL	DP 5634 RR	58 ± 1	13.2	2.4	40	149	1.0	2.2	40.7	20.0	76.7	1.3	11.9
Dyna-Gro	3583N RR	57 ± 1	13.2	1.9	40	150	1.0	2.2	39.6	20.6	96.7	3.0	32.2
Progeny	5660 RR	56 ± 1	13.3	2.8	41	152	1.0	2.2	40.3	20.2	93.3	2.0	20.7
Delta Grow	5650 RR	56 ± 1	13.3	2.6	40	150	1.0	2.2	41.2	20.0	93.3	2.7	27.8
Delta Grow	5630 RR	54 ± 1	13.3	2.8	41	152	1.0	2.2	40.3	20.2	90.0	1.7	16.7
Dyna-Gro	3562N RR	54 ± 1	13.3	3.0	37	151	1.0	2.5	40.1	20.1	73.3	1.3	11.5

† 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).

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

Protein & Oil on dry weight basis.

Frogeye = 1 to 5 scale; where 1 = < 5% of leaf surfaces containing spots; 5 = 95%+ of leaf surfaces containing spots.

DI = disease incidence = percentage of plants with symptoms.

DS = disease severity = score of leaf chlorosis and necrosis; 0 = no symptoms; 9 = plant death before normal defoliation due to senescence.

DX = disease index = (DI x DS / 9); ratings were made at approximately R6 when green pods with seed have reached full size.

**Table 44. Mean yields † of 21 Maturity Group IV and V Conventional soybean varieties evaluated in six environments in Tennessee during 2005.**

Brand	Variety	Avg. Yield ± Std Err. (n=6)	Knoxville	Spring Hill		Springfield	Milan	
				Irr.	Non-Irr.		Irr.	Non-Irr.
-----bu/a-----								
<i>Maturity Group V</i>								
USG	5601T	55 ± 1	36	58	66	37	72	62
AR	Ozark	55 ± 1	30	54	66	38	77	65
MO Exp	S00-9970-09	53 ± 1	37	55	67	38	63	56
USG	5002T	52 ± 1	35	60	62	37	60	60
TN Exp	TN02-283	52 ± 1	36	55	68	36	64	55
VA	Teejay	52 ± 1	37	56	62	37	71	48
NC Exp	N00-506	52 ± 1	28	50	69	36	68	59
NC	Holladay	51 ± 1	29	51	61	37	62	66
MO	Anand	51 ± 1	39	55	61	32	61	56
VA	Hutcheson	48 ± 1	28	51	63	33	65	50
USDA-ARS	82181	48 ± 1	28	54	64	36	57	51
USDA-ARS	82154	48 ± 1	29	55	65	37	57	44
USDA-ARS	JTN-5203	44 ± 1	38	54	54	23	58	36
USDA-ARS	JTN-033	41 ± 1	28	49	48	31	49	44
<i>Maturity Group IV</i>								
MO Exp	S00-9925-10	53 ± 1	41	57	57	38	65	61
Progeny	4910	48 ± 1	37	44	51	34	70	52
AR	UA 4805	47 ± 1	32	50	57	37	63	45
TN Exp	TN02-225	47 ± 1	34	50	61	28	59	50
TN Exp	TN00-60	46 ± 1	31	54	56	37	50	47
TN Exp	TN02-226	45 ± 1	34	49	59	28	57	46
MD Exp	MD 96-5722	38 ± 1	33	40	48	14	55	36
<b>Average (bu/a)</b>		<b>48</b>	<b>33</b>	<b>52</b>	<b>61</b>	<b>34</b>	<b>62</b>	<b>52</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>5</b>	<b>8</b>	<b>10</b>	<b>8</b>	<b>8</b>	<b>10</b>
<b>C.V. (%)</b>		<b>9.8</b>	<b>8.9</b>	<b>9.6</b>	<b>7.4</b>	<b>13.9</b>	<b>7.8</b>	<b>11.3</b>

† All yields are adjusted to 13% moisture.

**Table 45. Mean yields † and agronomic characteristics of 21 Maturity Group IV and V Conventional soybean varieties evaluated in six environments in Tennessee during 2005.**

Brand	Variety	Avg. Yield		Moisture ‡	Lodging	Height	Maturity	Shattering	Seed		
		± Std Err.	(n=6)						Quality	Protein	Oil
		(n=6)	(n=6)	(n=3)	(n=6)	(n=6)	(n=4)	(n=4)	(n=4)	(n=4)	
		bu/a	%	Score	in.	DAP	-----Score-----	%	%		
<i>Maturity Group V</i>											
USG	5601T	55 ± 1	12.9	2.1	37	148	1.0	2.2	42.0	20.5	
AR	Ozark	55 ± 1	13.8	2.6	36	147	1.0	2.5	40.5	21.1	
MO Exp	S00-9970-09	53 ± 1	13.7	2.5	36	148	1.0	2.4	41.2	20.9	
USG	5002T	52 ± 1	13.6	2.1	29	147	1.0	2.5	40.7	21.8	
TN Exp	TN02-283	52 ± 1	13.4	1.8	32	148	1.0	2.4	40.7	20.6	
VA	Teejay	52 ± 1	13.5	2.7	35	146	1.0	2.5	41.2	21.2	
NC Exp	N00-506	52 ± 1	13.6	2.6	34	150	1.0	2.8	39.4	22.7	
NC	Holladay	51 ± 1	13.7	2.4	31	143	1.0	2.5	38.4	22.3	
MO	Anand	51 ± 1	13.3	1.8	32	148	1.0	2.5	40.3	21.6	
VA	Hutcheson	48 ± 1	13.4	2.9	35	147	1.0	2.3	40.5	21.6	
USDA-ARS	82181	48 ± 1	13.4	2.4	33	146	1.0	2.5	41.6	20.4	
USDA-ARS	82154	48 ± 1	12.9	2.7	33	144	1.0	2.3	41.2	21.0	
USDA-ARS	JTN-5203	44 ± 1	13.1	1.6	31	147	1.0	2.2	40.4	21.6	
USDA-ARS	JTN-033	41 ± 1	13.5	1.9	28	147	1.0	1.9	41.6	21.3	
<i>Maturity Group IV</i>											
MO Exp	S00-9925-10	53 ± 1	13.2	3.3	33	143	1.0	2.5	40.4	21.6	
Progeny	4910	48 ± 1	12.8	2.8	40	144	1.0	2.9	40.0	22.1	
AR	UA 4805	47 ± 1	13.3	2.9	32	143	1.0	2.3	42.3	20.3	
TN Exp	TN02-225	47 ± 1	12.9	2.3	33	143	1.0	2.6	41.6	21.0	
TN Exp	TN00-60	46 ± 1	13.6	3.3	36	145	1.0	3.0	39.6	22.4	
TN Exp	TN02-226	45 ± 1	13.5	1.8	31	141	1.0	2.4	39.3	21.1	
MD Exp	MD 96-5722	38 ± 1	13.0	3.0	39	145	1.0	3.9	42.5	21.0	

† All yields are adjusted to 13% moisture.

‡ Average moisture at harvest.

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

Maturity = days after planting (DAP).

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

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 11 Maturity Group IV and V Conventional soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2004 - 2005.**

Brand	Variety	Avg. Yield ± Std Err. (n=12)	Knoxville	Spring Hill		Springfield	Milan	
				Irr.	Non-Irr.		Irr.	Non-Irr.
-----bu/a-----								
<i>Maturity Group V</i>								
AR	Ozark	60 ± 1	51	65	73	40	73	57
USG	5601T	59 ± 1	59	66	70	42	64	56
MO Exp	S00-9970-09	57 ± 1	60	63	63	45	63	50
VA	Teejay	56 ± 1	58	61	58	43	63	51
USG	5002T	55 ± 1	53	67	66	39	55	52
MO	Anand	55 ± 1	59	63	58	40	57	53
NC	Holladay	54 ± 1	52	62	67	40	51	54
VA	Hutcheson	50 ± 1	51	53	58	36	55	46
<i>Maturity Group IV</i>								
Progeny	4910	52 ± 1	56	57	54	37	62	48
TN Exp	TN00-60	52 ± 1	56	61	62	39	46	50
MO Exp	S00-9925-10	52 ± 1	50	57	56	45	50	53
<b>Average (bu/a)</b>		<b>55</b>	<b>55</b>	<b>61</b>	<b>62</b>	<b>40</b>	<b>58</b>	<b>52</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>6</b>	<b>7</b>	<b>9</b>	<b>7</b>	<b>12</b>	<b>9</b>
<b>C.V. (%)</b>		<b>10.6</b>	<b>7.7</b>	<b>7.8</b>	<b>8.3</b>	<b>12.5</b>	<b>14.1</b>	<b>12.4</b>

† All yields are adjusted to 13% moisture.

**Table 47. Mean yields † and agronomic characteristics of 11 Maturity Group IV and V Conventional soybean varieties evaluated in six environments (n=12) in Tennessee for two years, 2004 - 2005.**

Brand	Variety	Avg. Yield	Moisture ‡ (n=12)	Lodging (n=9)	Height (n=12)	Maturity (n=12)	Shattering (n=10)	Seed	Protein (n=8)	Oil (n=8)
		± Std Err. (n=12)						Quality (n=8)		
		bu/a	%	Score	in.	DAP	-----Score-----	%		
			Moist	Lodg	Hgt	Mat	Shatt	Squal	Prot	Oil
<i>Maturity Group V</i>										
AR	Ozark	60 ± 1	14.0	2.5	36	145	1.0	2.2	40.6	20.9
USG	5601T	59 ± 1	13.1	2.0	37	149	1.0	2.3	42.4	20.4
MO Exp	S00-9970-09	57 ± 1	13.7	2.0	36	146	1.0	2.7	41.3	20.9
VA	Teejay	56 ± 1	13.8	2.1	35	143	1.0	2.3	40.9	21.2
USG	5002T	55 ± 1	13.7	2.3	31	146	1.0	2.6	41.1	21.7
MO	Anand	55 ± 1	13.8	1.8	33	148	1.0	2.5	40.6	21.4
NC	Holladay	54 ± 1	13.7	2.2	31	143	1.0	2.5	38.8	22.0
VA	Hutcheson	50 ± 1	13.6	2.6	35	146	1.0	2.4	40.7	21.5
<i>Maturity Group IV</i>										
Progeny	4910	52 ± 1	13.1	2.2	41	141	1.0	2.9	40.5	21.9
TN Exp	TN00-60	52 ± 1	13.4	2.5	38	142	1.0	3.0	40.0	22.2
MO Exp	S00-9925-10	52 ± 1	13.4	3.0	33	141	1.0	2.6	40.8	21.2

† 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).

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 six Maturity Group IV and V Conventional soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2003 - 2005.**

Brand	Variety	Avg. Yield ± Std Err. (n=18)	Knoxville	Spring Hill		Springfield	Milan	
				Irr.	Non-Irr.		Irr.	Non-Irr.
-----bu/a-----								
<i>Maturity Group V</i>								
USG	5601T	61 ± 1	67	62	68	47	63	56
MO	Anand	57 ± 1	61	59	61	45	61	56
USG	5002T	57 ± 1	59	61	65	44	58	55
NC	Holladay	57 ± 1	60	59	67	46	55	55
VA	Hutcheson	54 ± 1	62	55	61	40	57	50
<i>Maturity Group IV</i>								
Progeny	4910	55 ± 1	65	58	56	42	61	49
<b>Average (bu/a)</b>		<b>57</b>	<b>62</b>	<b>59</b>	<b>63</b>	<b>44</b>	<b>59</b>	<b>54</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>3</b>	<b>8</b>	<b>7</b>	<b>8</b>	<b>7</b>	<b>10</b>	<b>8</b>
<b>C.V. (%)</b>		<b>10.0</b>	<b>8.7</b>	<b>8.4</b>	<b>7.5</b>	<b>11.1</b>	<b>12.5</b>	<b>11.6</b>

† All yields are adjusted to 13% moisture.

**Table 49. Mean yields † and agronomic characteristics of six Maturity Group IV and V Conventional soybean varieties evaluated in six environments (n=18) in Tennessee for three years, 2003 - 2005.**

Brand	Variety	Avg. Yield ± Std Err. (n=18)	Moisture ‡ (n=18)	Lodging (n=12)	Height (n=18)	Maturity (n=18)	Shattering (n=16)	Seed		
								Quality (n=12)	Protein (n=12)	Oil (n=12)
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
<i>Maturity Group V</i>										
USG	5601T	61 ± 1	13.2	1.9	37	148	1.0	2.1	42.1	19.7
MO	Anand	57 ± 1	13.8	1.7	33	148	1.0	2.5	40.3	20.7
USG	5002T	57 ± 1	13.7	2.1	31	145	1.0	2.4	40.6	21.1
NC	Holladay	57 ± 1	13.9	2.2	31	143	1.0	2.5	38.7	21.1
VA	Hutcheson	54 ± 1	13.5	2.6	36	145	1.0	2.2	40.3	21.0
<i>Maturity Group IV</i>										
Progeny	4910	55 ± 1	13.3	2.2	41	140	1.1	2.8	40.5	21.0

† All yields are adjusted to 13% moisture.

‡ Average moisture at harvest.

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

Maturity = days after planting (DAP).

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 seven soybean varieties between seed treated or untreated with a systemic insecticide, evaluated in six to eight environments in Tennessee during 2005.**

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=6)</i>											
Asgrow	AG3906 (RR) Cruiser	54	---	40	39	50	59	57	---	50	<b>+1</b>
Asgrow	AG3906 (RR)	62	---	34	37	47	57	58	---	49	
Vigoro	V39N4RR (Cruiser)	55	---	39	40	42	58	49	---	47	<b>-1</b>
Vigoro	V39N4RR	51	---	41	40	41	59	53	---	48	
FFR	3990 RR (Cruiser)	48	---	37	34	43	59	50	---	45	<b>-8</b>
FFR	3990 RR	63	---	41	39	51	63	61	---	53	
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>12</b>		<b>8</b>	<b>5</b>	<b>7</b>	<b>8</b>	<b>10</b>		<b>3</b>	
<b>C.V. (%)</b>		<b>13.6</b>		<b>13.5</b>	<b>7.9</b>	<b>9.0</b>	<b>8.0</b>	<b>11.6</b>		<b>10.8</b>	
<i>Maturity Group IV Early (n=8)</i>											
Vigoro	V442NRR (Cruiser)	58	63	38	40	52	51	69	38	51	<b>+1</b>
Vigoro	V442NRR	58	59	39	36	49	59	64	35	50	
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>6</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>12</b>	<b>9</b>	<b>11</b>	<b>3</b>	
<b>C.V. (%)</b>		<b>6.3</b>	<b>8.6</b>	<b>11.9</b>	<b>10.7</b>	<b>11.6</b>	<b>14.3</b>	<b>9.5</b>	<b>17.3</b>	<b>10.9</b>	
<i>Maturity Group IV Late (n=8)</i>											
Asgrow	AG4903 (RR) Cruiser	62	53	49	46	33	74	52	40	51	<b>-1</b>
Asgrow	AG4903 (RR)	59	52	53	50	28	78	55	38	52	
FFR	4705 RR (Cruiser)	55	45	45	49	28	59	48	43	46	<b>-1</b>
FFR	4705 RR	53	45	46	53	26	60	54	40	47	
FFR	4925 RR (Cruiser)	55	46	43	50	27	53	53	34	45	<b>-2</b>
FFR	4925 RR	53	48	42	48	25	68	60	36	47	
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>7</b>	<b>6</b>	<b>9</b>	<b>11</b>	<b>7</b>	<b>15</b>	<b>10</b>	<b>13</b>	<b>4</b>	
<b>C.V. (%)</b>		<b>7.5</b>	<b>8.5</b>	<b>12.1</b>	<b>13.9</b>	<b>19.2</b>	<b>14.9</b>	<b>12.4</b>	<b>17.9</b>	<b>13.2</b>	
<b>Average -- Treated Seed (bu/a)</b>		<b>55</b>	<b>51</b>	<b>42</b>	<b>42</b>	<b>39</b>	<b>59</b>	<b>54</b>	<b>39</b>	<b>48</b>	<b>-1</b>
<b>Average -- Untreated Seed (bu/a)</b>		<b>57</b>	<b>51</b>	<b>42</b>	<b>43</b>	<b>38</b>	<b>63</b>	<b>58</b>	<b>37</b>	<b>49</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 seven soybean varieties between seed treated or untreated with a systemic insecticide, evaluated in six to eight environments in Tennessee during 2005.**

Brand	Variety	Avg. Yield	Moisture ‡	Lodging	Height	Maturity	Shattering	Seed	Protein	Oil
		± Std Err.						Quality		
		bu/a	%	Score	in.	DAP	-----Score-----	%	%	
<i>Maturity Group III (n=6)</i>										
Asgrow	AG3906 (RR) Cruiser	50	14.7	2.3	36	125	1.0	2.4	39.3	23.1
Asgrow	AG3906 (RR)	49	14.6	2.1	35	125	1.0	2.0	38.5	23.7
Vigoro	V39N4RR (Cruiser)	47	14.3	2.9	37	124	1.0	2.5	39.6	22.8
Vigoro	V39N4RR	48	14.2	3.1	38	124	1.0	3.0	39.8	22.9
FFR	3990 RR (Cruiser)	45	14.2	3.1	38	122	1.0	2.0	39.2	22.6
FFR	3990 RR	53	14.7	3.2	38	121	1.0	2.1	39.6	22.5
<i>Maturity Group IV Early (n=8)</i>										
Vigoro	V442NRR (Cruiser)	51	15.3	2.0	40	129	1.0	2.4	38.4	23.8
Vigoro	V442NRR	50	15.7	1.8	40	129	1.0	2.1	38.1	23.9
<i>Maturity Group IV Late (n=8)</i>										
Asgrow	AG4903 (RR) Cruiser	51	15.0	1.6	37	134	1.0	2.2	39.3	22.6
Asgrow	AG4903 (RR)	52	15.4	1.6	37	133	1.0	2.2	39.1	22.7
FFR	4705 RR (Cruiser)	46	15.3	1.5	37	133	1.0	2.1	40.6	21.1
FFR	4705 RR	47	15.2	1.8	36	132	1.0	2.2	41.0	21.2
FFR	4925 RR (Cruiser)	45	15.5	1.8	40	135	1.0	2.8	40.3	22.0
FFR	4925 RR	47	15.6	2.0	40	136	1.0	2.6	41.4	21.7

† All yields are adjusted to 13% moisture.

‡ Average moisture at harvest.

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

Maturity = days after planting (DAP).

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

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 52. Characteristics of soybean varieties evaluated in Tennessee during 2005.

Brand	Variety	2005 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Adler	462 RRN	R4L	4.6	RR	R 3	---	---	---	LT	P
Adler	492 RRN	R4L	4.9	RR	R 3	---	---	---	LT	P
AR	Ozark	CV5	5.2	---	3	R	---	R	G	P
AR	UA 4805	CV4	4.8	---	---	---	---	---	G	P
Armor	42-B2 (RR)	R4E	4.2	RR	3	MR	M	M	T	P
Armor	44-R4 (RR)	R4E	4.4	RR	3, MR 9, 14	MR	MR	MS	G	P
Armor	47-G7 (RR)	R4L	4.7	RR	3,6,14	M	M	MS	B	W
Armor	53-K3 (RR)	R5E	5.3	RR	3,6,14	R	MR	M	G	P
Armor	54-03 (RR / STS)	R5E	5.5	RR / STS	---	---	---	---	G	W
Armor	ARX F47105	R4L	4.7	RR	---	---	---	---	G	P
Armor	ARX F47205	R4L	4.7	RR	---	---	---	---	T	P
Armor	GP 422 (RR)	R4E	4.2	RR	---	R	---	MR	T	P
Armor	GP 470 (RR)	R4L	4.7	RR	---	R	---	MR	T	P
Armor	GP 474 (RR)	R4L	4.7	RR	---	M	---	MS	G	P
Armor	GP 513 (RR)	R5E	5.2	RR	---	MR	---	R	G	W
Armor	GP 530 (RR)	R5E	5.3	RR	---	R	---	MR	T	W
Asgrow	AG3802 (RR)	RR3	3.8	RR	R 3	---	---	---	G	P
Asgrow	AG3906 (RR)	RR3	3.9	RR	MR 3	---	---	---	T	P
Asgrow	AG3906 (RR) Cruiser	RR3	3.9	RR	MR 3	---	---	---	T	P
Asgrow	AG4404 (RR)	R4E	4.4	RR	MR 3	---	---	---	T	W
Asgrow	AG4503 (RR)	R4E	4.5	RR	S	---	---	---	T	W
Asgrow	AG4703 (RR)	R4L	4.7	RR	S	---	---	---	LT	P
Asgrow	AG4801 (RR)	R4L	4.8	RR	R 3	---	---	---	T	W
Asgrow	AG4903 (RR)	R4L	4.9	RR	S	---	---	---	LT	P
Asgrow	AG4903 (RR) Cruiser	R4L	4.9	RR	S	---	---	---	LT	P
Asgrow	AG5301 (RR)	R5E	5.3	RR	MR 3, 5, 14	---	---	---	G	W
Asgrow	AG5501 (RR)	R5E	5.5	RR	R 3, MR 14	---	---	---	G	P
Asgrow	AG5605 (RR)	R5L	5.6	RR	R 3, MR 14	---	---	---	G	P
Asgrow	AG5702 (RR)	R5L	5.7	RR	R 3	---	---	---	G	P
Asgrow	AG5905 (RR)	R5L	5.9	RR	R 3	---	---	---	G	W
D & PL	DP 3861 RR	RR3	3.8	RR	3	R	MR	R	G	P
D & PL	DP 4331 RR	R4E	4.3	RR	MR 3	MR	R	R	T	P
D & PL	DP 4546 RR	R4E	4.5	RR	None	R	MR	R	T	W
D & PL	DP 4724 RR	R4L	4.7	RR	3	R	R	R	T	P
D & PL	DP 5414 RR	R5E	5.4	RR	3	R	MR	R	T	W
D & PL	DP 5634 RR	R5L	5.6	RR	1,3	R	MR	R	T	W
D & PL	DP 5808 RR	R5L	5.8	RR	3	R	S	MR	T	W
D & PL	DP 5915 RR	R5L	5.9	RR	3	R	R	R	T	W
D & PL	DPX 1908 RR	R4E	4.1	RR	---	R	R	MR	T	W
DeKalb	DKB 36-52 (RR)	RR3	3.6	RR	R 3	---	---	---	G	P

Table 52 (continued)

Brand	Variety	2005 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
DeKalb	DKB 44-51 (RR)	R4E	4.4	RR	MR 3	---	---	---	LT	P
Delta Grow	3950 RR	RR3	3.9	RR	1, 3	MR	MR	M	T	P
Delta Grow	4150 RR	R4E	4.1	RR	3	M	MR	M	T	W
Delta Grow	4250 RR	R4E	4.2	RR	3	MR	M	M	T	P
Delta Grow	4460 RR	R4E	4.4	RR	3, 14	M	MR	MR	T	P
Delta Grow	4660 RR	R4L	4.6	RR	3, 14	MR	MR	MR	T	P
Delta Grow	4840 RR	R4L	4.8	RR	3, 14	M	M	MR	T	P
Delta Grow	4860 RR	R4L	4.8	RR	3, 14	MR	MR	M	T	P
Delta Grow	4960 RR	R4L	4.9	RR	3,14	R	MR	MR	G	P
Delta Grow	4970 RR	R4L	4.9	RR	3, 14	R	M	MR	T	P
Delta Grow	5160 RR	R5E	5.1	RR	3	MR	M	MR	G	P
Delta Grow	5260 RR	R5E	5.2	RR	3,14	MR	MS	MS	G	W
Delta Grow	5460 RR	R5E	5.4	RR	3,14	M	MR	M	G	W
Delta Grow	5560 RR	R5E	5.5	RR	3, 14	MR	MR	R	G	W
Delta Grow	5630 RR	R5L	5.6	RR	3,6,14	S	R	R	G	W
Delta Grow	5650 RR	R5L	5.6	RR	3,14	MS	MR	R	G	W
Delta Grow	5830 RR	R5L	5.8	RR	---	---	---	---	G	W
Delta King	DK 3967 (RR)	RR3	3.8	RR	R 3, MR 14	---	---	---	T	P
Delta King	DK 3968 (RR)	RR3	3.9	RR	---	---	---	---	G	W
Delta King	DK 4461 (RR)	R4L	4.6	RR	R 5, MR 2, 6	MR	MR	MR	LT	P
Delta King	DK 4566 (RR)	R4E	4.5	RR	R 3	R	---	---	T	P
Delta King	DK 4667 (RR)	R4L	4.6	RR	---	---	---	---	T	P
Delta King	DK 4763 (RR)	R4L	4.7	RR	R 3, MR 5	MS	S	MR	T	W
Delta King	DK 4866 (RR)	R4L	4.8	RR	MR 3	MR	MR	MS	T	P
Delta King	DK 4967 (RR)	R4L	4.9	RR	R 3, MR 6,14	R	MR	MR	T	P
Delta King	DK 5066 (RR)	R5E	5.0	RR	R 3, MR 14	---	---	---	T	P
Delta King	DK 5161 (RR)	R5E	5.1	RR	MR 3,14	R	MS	MR	G	W
Delta King	DK 5366 (RR)	R5E	5.3	RR	MR 3,14	MS	MR	MR	G	P
Delta King	DK 5466 (RR)	R5E	5.4	RR	---	---	---	---	G	W
Delta King	DK 5567 (RR)	R5E	5.5	RR	MR 3	R	R	MR	G	W
Delta King	DK 55T6 (RR)	R5E	5.5	RR	MR 3, 14	MR	MS	MR	G	W
Delta King	DK 5967 (RR)	R5L	5.9	RR	MR 3,14	MR	MS	MR	G	W
Delta King	DK XTJ 635 (RR)	RR3	3.5	RR	---	---	---	---	T	P
Delta King	DK XTJ 638 (RR)	RR3	3.8	RR	---	---	---	---	T	P
Delta King	DK XTJ 640 (RR)	R4E	4.0	RR	R 3, MR 14	---	---	---	T	W
Delta King	DK XTJ 648 (RR)	R4L	4.8	RR	---	---	---	---	T	W
Delta King	DK XTJ 650 (RR)	R4L	4.9	RR	---	---	---	---	T	P
Delta King	DK XTJ 6D44 (RR)	R4E	4.4	RR	R 3	---	---	---	T	P
Delta King	DK XTJ 6G51 (RR)	R4L	4.9	RR	R 3, MR 14	---	---	---	T	P
Delta King	DK XTJ 6L49 (RR)	R4L	4.9	RR	MR 3	---	---	---	T	P

Table 52 (continued)

Brand	Variety	2005 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Dyna-Gro	3373N RR	RR3	3.7	RR	R 3, MR 14	MR	MR	MR	G	P
Dyna-Gro	3392N RR	RR3	3.9	RR	R 3, MR 14	---	MR	---	T	P
Dyna-Gro	33A37 (RR)	RR3	3.7	RR	R 3, MR 14	MR	MR	MR	G	P
Dyna-Gro	33B52 (RR)	R5E	5.2	RR	MR 3,14	R	MR	MR	G	W
Dyna-Gro	33X55 (RR)	R5E	5.5	RR	R 3, MR 14	MR	MR	R	T	P
Dyna-Gro	3443N RR	R4E	4.4	RR	MR 3,14	MR	MR	MS	T	P
Dyna-Gro	3562N RR	R5L	5.6	RR	MR 3,14	MS	MR	MR	G	W
Dyna-Gro	3583N RR	R5L	5.9	RR	R 3, MR 14	MR	MR	MR	G	W
Dyna-Gro	35B40 (RR)	R4E	4.0	RR	R 3, MR 14	MR	MR	MR	T	W
Dyna-Gro	35Z49 (RR)	R4L	4.9	RR	R 3, MR 14	R	R	MR	G	P
Dyna-Gro	36N57 (RR)	R5L	5.7	RR	R 3, MS 14	MR	MR	MR	T	P
Dyna-Gro	36Y48 (RR / STS)	R4L	4.8	RR/STS	R 3, MR 14	MR	MS	MS	G	P
Dyna-Gro	37A44 (RR)	R4E	4.4	RR	R 3, MR 14	MR	MR	MR	LT	P
Excel Brand	8398N RR	RR3	3.9	RR	R 3, MR 14	---	MR	---	T	W
Excel Brand	8427N RR	R4E	4.2	RR	R 3, MR 14	---	MR	---	T	P
Excel Brand	8430NN RR STS	R4E	4.3	RR/STS	R 3, MR 14	---	MR	---	T	W
Excel Brand	8448N RR	R4E	4.4	RR	R 3, MR 14	MR	MR	R	T	P
Excel Brand	8493N RR	R4L	4.9	RR	R 3, MR 14	MR	MR	---	T	P
Excel Brand	8499N RR	R4L	4.9	RR	R 3, MR 14	---	MR	MR	T	P
Excel Brand	8509N RR	R5E	5.0	RR	R 3, MR 14	MR	MR	R	T	P
Excel Brand	8520N RR	R5E	5.2	RR	R 3, MR 14	---	MR	---	T	P
FFR	3883 RR	RR3	3.8	RR	MR 3	MR	R	M	T	W
FFR	3990 RR	RR3	3.9	RR	MR 3	MR	R	---	LT	W
FFR	3990 RR (Cruiser)	RR3	3.9	RR	MR 3	MR	R	---	LT	W
FFR	4455 RR	R4E	4.4	RR	3	R	MR	MR	T	W
FFR	4545 RR	R4E	4.5	RR	MR	R	R	S	LT	W
FFR	4705 RR	R4L	4.7	RR	MR	MR	R	R	T	W
FFR	4705 RR (Cruiser)	R4L	4.7	RR	MR	MR	R	R	T	W
FFR	4712 RR	R4L	4.7	RR	MR 3,14	MR	R	VS	LT	P
FFR	4891 RR	R4L	4.8	RR	R 3	MR	R	VS	LT	P
FFR	4925 RR	R4L	4.9	RR	3, 14	MR	MS	MS	LT	P
FFR	4925 RR (Cruiser)	R4L	4.9	RR	3, 14	MR	MS	MS	LT	P
FFR	5033 RR	R5E	5.0	RR	3,14	R	S	MS	G	P
FFR	5225 RR	R5E	5.2	RR	3,14	MR	R	R	T	P
FFR	5663 RR	R5L	5.6	RR	3, 14	R	R	R	T	P
FFR	RT 5485 (RR)	R5E	5.3	RR	3,14	MR	R	R	T	P
Garst	3960 RR/N	RR3	3.9	RR	3, 14	---	---	---	T	P
Garst	4512 RR/N	R4E	4.5	RR	3	R	R	R	T	P
Garst	5412 RR/STS/N	R5E	5.4	RR/STS	3,14	---	---	---	G	W
Golden Harvest	H-3945 RR	RR3	3.9	RR	---	---	MR	---	LT	P

Table 52 (continued)

Brand	Variety	2005 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Golden Harvest	H-4534 RR	R4E	4.5	RR	MR 3, 14	---	MR	---	LT	P
Golden Harvest	H-4878 RR	R4L	4.8	RR	3	---	R	---	LT	P
Golden Harvest	H-5053 RR	R5E	5.0	RR	R 3, MR 14	---	MS	---	LT	P
Hornbeck	HBK R 3824 (RR)	R4E	4.0	RR	---	R	MR	MS	LT	P
Hornbeck	HBK R 4623 (RR)	R4E	4.5	RR	R 3, MR 14	R	MR	R	T	P
Hornbeck	HBK R 4724 (RR)	R4L	4.7	RR	S	R	R	MS	LT	P
Hornbeck	HBK R 4820 (RR)	R4L	4.8	RR	S	S	MR	MR	LT	W
Hornbeck	HBK R 4924 (RR)	R4L	4.9	RR	3, MR 14	R	R	S	LT	P
Hornbeck	HBK R 5324 (RR)	R5E	5.3	RR	R3, MR 14	R	S	MS	T	P
Hornbeck	HBK R 5425 (RR)	R5E	5.4	RR	R 3	R	MS	VS	G	W
Hornbeck	HBK R 5525 (RR)	R5E	5.5	RR	R 3, MR 14	R	---	---	T	P
MD Exp	MD 96-5722	CV4	4.3	---	None	---	---	---	G	P
Midwest Premium Genetics	MPV 4404nRR	R4E	4.4	RR	MR 3, MR 14	R	R	R	LT	P
Midwest Premium Genetics	MPV 4905nRR	R4L	4.9	RR	3	R	R	R	LT	P
Midwest Premium Genetics	MPV 5505nRR (STS)	R5E	5.5	RR/STS	MR 3	R	R	R	G	W
MO	Anand	CV5	5.6	---	2,3,14,5	R	R	R	T	P
MO Exp	S00-9925-10	CV4	4.9	---	1,2,3,5,14	MR	MR	MR	T	W
MO Exp	S00-9970-09	CV5	5.5	---	1,2,3,5,14	MR	MR	MR	T	P
MO Exp	S03-166 RR	R4L	4.8	RR	R 3	R	MR	MR	T	W
MO Exp	S03-383 RR	R5E	5.3	RR	R 3, 14	R	MR	MR	T	W
Morsoy	RT 4480N (RR)	R4E	4.4	RR	MR 3,14	R	R	MS	LT	P
Morsoy	RT 4485N (RR)	R4E	4.4	RR	R3, MR 14	R	R	R	LT	P
Morsoy	RT 4665N (RR)	R4L	4.6	RR	R3, MR 14	R	R	R	LT	P
Morsoy	RT 4802N (RR)	R4L	4.8	RR	MR 3,14	R	R	R	T	P
Morsoy	RT 4914N (RR)	R4L	4.9	RR	R 3	R	R	R	LT	P
Morsoy	RT 4993N (RR)	R4L	4.9	RR	R 3,14	R	R	MS	LT	P
Morsoy	RT 5553N (RR)	R5E	5.5	RR	R 3, MR 14	R	R	R	G	W
Morsoy	RTS 4955N (RR)	R4L	4.9	RR	R 3, MR 14	R	R	MR	G	P
N.K. Brand	S 37-N4 (RR)	RR3	3.7	RR	3, 14	S	MR	---	T	W
N.K. Brand	S 39-Q4 (RR)	RR3	3.9	RR	---	R	MR	---	LT	P
N.K. Brand	S 43-B1 (RR)	R4E	4.3	RR	3,14	R	R	---	T	P
N.K. Brand	S 49-Q9 (RR)	R4L	4.9	RR	3, 9, 14	R	R	---	G	P
NC	Holladay	CV5	5.3	---	S	MS	MR	R	G	P
NC Exp	N00-506	CV5	5.0	---	---	---	---	---	G	P
Pioneer	93M90 (RR)	RR3	3.9	RR	3	---	---	R	G	P
Pioneer	94B73 (RR)	R4L	4.7	RR	---	---	---	R	LT	P
Pioneer	94M30 (RR)	R4E	4.3	RR	3	---	R	R	T	W
Pioneer	94M50 (RR)	R4E	4.5	RR	3	---	---	R	T	W
Pioneer	94M80 (RR)	R4L	4.8	RR	3	---	R	---	T	W
Pioneer	95M30 (RR)	R5E	5.3	RR	3	R	---	R	T	W

Table 52 (continued)

Brand	Variety	2005 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Progeny	4910	CV4	4.9	---	R 3,MR 14	MR	M	MR	LT	S
Progeny	3805 RR	RR3	3.8	RR	---	---	MR	MR	LT	P
Progeny	3900 RR	RR3	3.9	RR	R 3, MR 14	---	MR	MR	LT	P
Progeny	3905 RR	RR3	3.9	RR	R 3, MR 14	---	R	MR	T	P
Progeny	4205 RR	R4E	4.2	RR	R 3, MR 14	M	MR	R	T	P
Progeny	4315 RR	R4E	4.3	RR	MR 3	---	MR	MR	LT	S
Progeny	4401 RR	R4E	4.4	RR	MR 3,14	MR	MR	R	LT	P
Progeny	4405 RR	R4E	4.4	RR	R 3, MR 14	M	MR	R	LT	P
Progeny	4615 RR	R4L	4.6	RR	R 3, MR 14	M	MR	MR	LT	P
Progeny	4804 RR	R4L	4.8	RR	R 3	M	R	MR	LT	P
Progeny	4805 RR	R4L	4.8	RR	MR 3	R	MS	MR	LT	P
Progeny	4949 RR	R4L	4.9	RR	---	M	R	R	T	W
Progeny	5005 RR	R5E	5.0	RR	R 3, MR 14	M	MS	MR	LT	P
Progeny	5105 RR	R5E	5.1	RR/STS	R 3, MR 14	MR	R	T	G	P
Progeny	5115 RR	R5E	5.1	RR	R 3	M	MR	MR	LT	P
Progeny	5250 RR	R5E	5.2	RR	R 3, MR 14	S	R	R	T	W
Progeny	5605 RR	R5L	5.6	RR	MR 3	M	R	R	G	W
Progeny	5622 RR	R5L	5.6	RR	R 3, MR 14	S	MS	MS	G	P
Progeny	5660 RR	R5L	5.6	RR	R 3, MR 14	S	MS	MR	G	P
Schillinger Seed	476 RC	R4L	4.7	RR	R 3	---	---	---	G	P
Schillinger Seed	495 RC	R4L	4.9	RR	R 3	R	S	R	LT	P
Steyer	4420 RR Scn	R4E	4.4	RR	3,14	MR	MR	MR	LT	P
Steyer	4700 RR Scn	R4L	4.7	RR	3,14	MS	MR	MS	T	P
Terral	TV 39RS31 (RR)	RR3	3.9	RR	R 3,14	---	MR	MR	G	P
Terral	TV 45R14 (RR)	R4E	4.5	RR	---	R	---	R	T	P
Terral	TV 48R14 (RR)	R4L	4.8	RR	R3	R	---	R	T	P
Terral	TV 48R43 (RR)	R4L	4.8	RR	R 3	---	MR	MR	T	P
Terral	TV 52R14 (RR)	R5E	5.2	RR	R 3, MR 14	MR	M	MR	G	W
Terral	TV 55R15 (RR)	R5E	5.5	RR	MR 3,14	MS	---	MR	G	P
Terral	TVX 46R203 (RR)	R4L	4.6	RR	MR 1, 3	R	---	R	T	W
Terral	TVX 46R213 (RR)	R4L	4.6	RR	---	---	---	---	T	W
Terral	TVX 46R223 (RR)	R4L	4.6	RR	---	---	---	---	T	W
TN Exp	TN00-60	CV4	4.8	---	---	R	---	---	G	P
TN Exp	TN02-05 RR	R4L	4.8	RR	---	---	---	---	T	P
TN Exp	TN02-134 RR	R5L	5.6	RR	---	---	---	---	T	W
TN Exp	TN02-225	CV4	4.9	---	2,3,5,14	---	---	---	T	W
TN Exp	TN02-226	CV4	4.8	---	2,3,5,14	---	---	---	T	P
TN Exp	TN02-283	CV5	5.8	---	2,3,5,14	---	---	---	T	P
TN Exp	TN05-547 RR	R5E	5.5	RR	---	R	---	---	G	W
TN Exp	TN05-548 RR	R5L	5.6	RR	---	R	---	---	G	W

Table 52 (continued)

Brand	Variety	2005 Test	Relative Maturity	Herbicide Tolerance	SCN Resistance	Stem Canker	SDS	Frogeye	Flower Color	Pubescence Color
Trisler Seed	Trisoy 4557RR (CN)	R4E	4.5	RR	R 3	S	R	S	LT	P
Trisler Seed	Trisoy 4838RR (CN)	R4L	4.8	RR	MR 14	S	S	S	T	P
Trisler Seed	Trisoy 4858RR (CN)	R4L	4.8	RR	MR 3	S	MR	MR	T	W
USDA-ARS	82154	CV5	5.5	---	3	R	MR	R	G	W
USDA-ARS	82181	CV5	5.5	---	R 3, MR 14	R	MR	R	T	P
USDA-ARS	JTN-033	CV5	5.5	---	3, 14	R	R	R	G	P
USDA-ARS	JTN-5203	CV5	5.6	---	2, 3, 14	R	R	R	G	W
USG	5002T	CV5	5.0	---	---	R	MR	R	T	W
USG	510nRR	R5E	5.1	RR	MR 3,14	R	MR	MR	G	P
USG	540nRR	R5E	5.4	RR	MR 3, 14	R	R	---	T	W
USG	5601T	CV5	5.6	---	---	R	MR	MR	G	W
USG	7393nRR	RR3	3.9	RR	R 3, MR 14	R	MR	S	LT	P
USG	7415nRR	R4E	4.1	RR	MR 3	---	MR	---	LT	P
USG	7423nRS	R4E	4.2	RR/STS	R 3, MR 14	R	MR	R	T	P
USG	7434nRR	R4E	4.3	RR	R3	---	R	---	T	P
USG	7440nRR	R4E	4.4	RR	MR 3,14	R	MR	MR	LT	P
USG	7443nRR	R4E	4.3	RR	MR 3, 14	S	MR	R	T	W
USG	7455nRR	R4E	4.5	RR	R 3, MR 14	---	MR	MR	LT	P
USG	7466nRR	R4L	4.6	RR	R 3, MR 14	---	MR	---	LT	P
USG	7475nRR	R4L	4.7	RR	---	R	---	MR	LT	P
USG	7482nRR	R4L	4.8	RR	R 3, MR 14	S	MR	R	T	P
USG	7484nRR	R4L	4.8	RR	R3, MR 14	---	MR	MR	LT	P
USG	7494nRR	R4L	4.9	RR	R3, 14	---	MR	---	LT	P
USG	7499nRR	R4L	4.9	RR	R 3, MR 14	R	MR	S	T	W
USG	7505nRR	R5E	5.0	RR	R 3	---	---	---	LT	P
USG	7515nRR	R5E	5.1	RR	R 3, MR 14	---	MR	MS	G	P
USG	7553nRS (STS)	R5E	5.5	RR/STS	MR 3,14	R	MR	MR	G	W
VA	Hutcheson	CV5	5.7	---	S	R	MR	MS	G	W
VA	Teejay	CV5	5.3	---	---	R	---	---	G	P
Vigoro	V382NRR	RR3	3.8	RR	MR 3	MR	MS	R	G	P
Vigoro	V39N4RR	RR3	3.9	RR	R3, MR14	---	MR	MS	LT	P
Vigoro	V39N4RR (Cruiser)	RR3	3.9	RR	R3, MR14	---	MR	MS	LT	P
Vigoro	V41N6RR (X340078)	R4E	4.1	RR	MR 3	---	R	---	LT	P
Vigoro	V42N3RR	R4E	4.2	RR	R 3,MR 14	MR	MR	R	T	P
Vigoro	V442NRR	R4E	4.4	RR	MR 3,14	MS	MR	MS	LT	P
Vigoro	V442NRR (Cruiser)	R4E	4.4	RR	MR 3,14	MS	MR	MS	LT	P
Vigoro	V44N6RR	R4E	4.4	RR	R 3, MR 14	MR	MR	MR	LT	P
Vigoro	V46N6RR (X240101)	R4L	4.6	RR	R 3, MR 14	MR	MR	MR	LT	P
Vigoro	V48N5RR	R4L	4.8	RR	R3	---	MS	MR	T	P
Vigoro	V49N6RR	R4L	4.9	RR	R 3	---	MR	MR	LT	P



**Table 52 (continued)**

<b>Brand</b>	<b>Variety</b>	<b>2005 Test</b>	<b>Relative Maturity</b>	<b>Herbicide Tolerance</b>	<b>SCN Resistance</b>	<b>Stem</b>			<b>Flower Color</b>	<b>Pubescence Color</b>
						<b>Canker</b>	<b>SDS</b>	<b>Frogeye</b>		
<b>Vigoro</b>	<b>V50N6RR (X340079)</b>	<b>R4L</b>	<b>4.9</b>	<b>RR</b>	<b>R 3</b>	<b>MR</b>	<b>MR</b>	<b>MR</b>	<b>LT</b>	<b>P</b>
<b>Vigoro</b>	<b>V51N6RR</b>	<b>R5E</b>	<b>5.2</b>	<b>RR</b>	<b>R 3</b>	<b>R</b>	<b>MS</b>	<b>MR</b>	<b>G</b>	<b>W</b>
<b>Vigoro</b>	<b>V52N3RR</b>	<b>R5E</b>	<b>5.2</b>	<b>RR</b>	<b>MR 3,14</b>	<b>MS</b>	<b>MR</b>	<b>MS</b>	<b>T</b>	<b>W</b>
<b>Vigoro</b>	<b>V55N5RR</b>	<b>R5E</b>	<b>5.5</b>	<b>RR</b>	<b>R3, MR 14</b>	<b>MS</b>	<b>MR</b>	<b>MR</b>	<b>G</b>	<b>W</b>
<b>Vigoro</b>	<b>X250036 (RR)</b>	<b>R5E</b>	<b>5.3</b>	<b>RR</b>	<b>R 3, MR 14</b>	<b>MR</b>	<b>MS</b>	<b>MR</b>	<b>T</b>	<b>P</b>
<b>Vigoro</b>	<b>X831064 (RR)</b>	<b>RR3</b>	<b>3.8</b>	<b>RR</b>	<b>R 3, MR 14</b>	<b>---</b>	<b>MR</b>	<b>---</b>	<b>T</b>	<b>P</b>

RR = Contains a gene for tolerance to glyphosate herbicide; STS = tolerance to sulfonyleurea 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